### EXECUTIVE SUMMARY

Seventeenth Avenue S.E. between Stoney Trail and the east city limits (116 Street S.E.) will be the backbone of the transportation system within the Belvedere area as identified in The City's Belvedere Area Structure Plan (BASP). 17 Avenue S.E. will provide access to and within the area for all modes of travel and will also serve as an important component of The City's overall transportation system linking downtown Calgary with Stoney Trail S.E., the City of Chestermere and the Trans-Canada Highway.

The 17 Avenue S.E. Corridor Study (Stoney Trail to East City Limits) was initiated to ensure a logical transition from the corridor's existing rural state to a main street that supports the vision and role of the area. The study incorporates an inclusive assessment of all modes of travel and integration with future land uses. The main outcome of the study is a street design for the corridor that meets the needs of all modes and aligns with the area vision.

This report outlines the study process and presents the recommended corridor plans. A summary of the public engagement program undertaken as part of the study is included.

## ADMINISTRATION RECOMMENDATIONS

That the SPC on Transportation and Transit recommend that Council approve the 17 Avenue S.E. Corridor Study (Stoney Trail to East City Limits) recommendations and direct Administration to protect right-of-way for the ultimate corridor cross-section (as shown in Attachment 1, pages 32-45), in conjunction with development in the area.

## **RECOMMENDATION OF THE SPC ON TRANSPORTATION AND TRANSIT, DATED** 2016 OCTOBER 12:

That the Administration Recommendation contained in Report TT2016-0646 be approved.

# **PREVIOUS COUNCIL DIRECTION / POLICY**

The following motion arising was approved at the 2012 December 03 Combined Meeting of Council:

"MOTION ARISING, Moved by Alderman Chabot, Seconded by Alderman Mar, that with respect to Report PUD2012-0670, Council direct Administration to investigate the future rapid transit corridor design along 17 Avenue S.E., taking into consideration:

- a) Existing land use plans along the corridor;
- b) Known timing of development east of Stoney Trail;
- c) Previous transportation network planning work;
- d) Service plans involving Chestermere and Rocky View County; and
- e) Transit corridor plans east of Stoney Trail.

And further, to report back to Council via the SPC on Transportation and Transit at the March 20, 2013 meeting, with a potential scoping report to advance rapid transit plans along the corridor in conjunction with advancing the detailed design for the portion of the S.E. Transitway west of Hubalta Road, including an estimate of staff time and any budget requirements for external consultants as may be required."

At the 2013 April 08 Combined Meeting of Council, Council accepted for information Report TT2013-0236 which outlined the scope, schedule and anticipated costs of conducting the 17 Avenue S.E. Corridor Study (Stoney Trail to East City Limits).

## BACKGROUND

Seventeenth Avenue S.E. between Stoney Trail and the East City Limits (116 Street S.E.) is currently a rural highway in a greenfield area that is planned to transition to a productive and active urban corridor. In 2013, Council approved the Belvedere Area Structure Plan (ASP) to guide future development in the area. 17 Avenue S.E. plays a vital role in supporting this vision. The Belvedere ASP envisions this area to become a compact, vibrant community, with a population of 61,000 people and 14,000 opportunities for employment, supported by a connected, multimodal corridor on 17 Avenue S.E.

The Calgary Transportation Plan identifies the segment of 17 Avenue S.E. between Stoney Trail and 100 Street S.E. as a Parkway and the segment between 100 Street S.E. and 116 Street S.E. as an Urban Boulevard; both fall into the Liveable Streets categories of roadway classification. In addition, 17 Avenue S.E. has been designated as part of the Primary Cycling Network, the Primary Transit Network and a link in the Regional Transit Plan.

A transportation planning study was undertaken in 2011 for the section of 17 Avenue S.E. from Deerfoot Trail to Stoney Trail, which identified both Urban Boulevard and Parkway cross-sections with median dedicated transit lanes. Portions of this study segment have been funded and construction is expected to begin in 2017. In addition, the City of Chestermere has recently completed a corridor study for Chestermere Boulevard (17 Avenue S.E. east of City of Calgary limits) which identified a cross-section with median dedicated transit lanes. These adjacent studies bookend this project's study limits. Ultimately, the section of 17 Avenue S.E. in the Belvedere Area will be the final segment of a continuous urban street linking Calgary's city centre to Chestermere.

# INVESTIGATION: ALTERNATIVES AND ANALYSIS

The initial identification of project context and constraints, and early stakeholder engagement, provided the opportunity for some early decisions which helped guide the project outcomes. In the interests of maintaining consistency along the corridor from Deerfoot Trail to the City of Chestermere, median dedicated transit lanes were identified as the preferred method of providing a dedicated transit facility. In addition, it was decided that two vehicle lanes in each direction would provide the best balance of vehicle capacity and right-of-way use, while providing a consistent cross-section along the entire length of the 17 Avenue S.E. corridor.

Once these early project decisions were made, the project team focused on developing a toolbox of roadway elements that encompassed sidewalks, green boulevards, cycling facilities, parking opportunities and intersection configurations. Three corridor options were developed and shared with stakeholders and the public (see Attachment 1, pages 8-10). A Multiple Account Evaluation (MAE) and cost-benefit analysis were conducted to evaluate the options based on technical criteria such as the pedestrian environment, cycling facilities, transit integration, vehicle accommodation, goods movement, cost and social/environment factors. The result of the MAE and cost-benefit analysis indicated that Option 3 was preferred, which aligned with stakeholder and public feedback.

Option 3 consists of the following:

- Two vehicle lanes in each direction
- Dedicated median transit lanes
- Dedicated raised bikeway on each side of the corridor (at same level as sidewalk)
- On-street parking in Urban Boulevard section (100 Street S.E. to 116 Street S.E.)
- Wide sidewalks and green boulevard on each side of the corridor
- Narrowest right-of-way (48.4 m in Parkway segment, 51.5 m in Urban Boulevard segment)

The Parkway segment of the recommended option fits within the existing right-of-way; the Urban Boulevard segment will, on average, encroach over existing property lines by 1.0 m to 1.5 m on either side of the corridor. In some locations along the corridor, surplus right-of-way will be available. Required and surplus right-of-way is shown on Attachment 1, pages 32-45.

### Stakeholder Engagement, Research and Communication

The engagement process focused on consulting a broad range of stakeholders, including adjacent landowners, nearby community associations, government representatives and interest groups representing all transportation modes (walking, cycling, driving and taking transit). A Vision and Context Workshop was held early in the project process to introduce the study and identify stakeholder priorities, concerns and constraints. This early engagement event, together with technical analysis, helped identify project requirements such as number of vehicle lanes and transit accommodation.

An Options Development Workshop was then held to gather feedback on remaining roadway elements such as cycling facilities, pedestrian environment, on-street parking and the public realm. The feedback from the first two engagement events was used to develop three options which were then presented at a public open house as well as online.

Once the preferred corridor option was selected, the recommendations were made available to project stakeholders, with opportunities provided to meet with the project team. The recommendations were then disseminated to the broader public through email and website updates.

## **Strategic Alignment**

This study aligns with multiple policies, principles and key directions that form the basis of the Calgary Transportation Plan (CTP) and the Municipal Development Plan (MDP):

- CTP Sustainability Principle for Land Use and Mobility #2: Create walkable environments.
- CTP Sustainability Principle for Land Use and Mobility #9: Connect people, goods and services locally, regionally and globally.
- CTP Key Directions for Land Use and Mobility #5: Increase mobility choices.
- CTP Key Directions for Land Use and Mobility #7: Increase Complete Streets.
- CTP Transportation Goal #4: Enable public transit, walking and cycling as the preferred mobility choices for more people.

## Social, Environmental, Economic (External)

This report has been reviewed for alignment with The City of Calgary's Triple Bottom Line (TBL) Policy Framework. The following items are highlighted:

<u>Social:</u> Options were developed to enhance community connectivity, transit integration and active modes accessibility, with the aim of providing lower cost travel options for area residents.

<u>Environmental:</u> Provisions for walking and cycling along the corridor encourages active modes of transportation by providing a higher level of safety and comfort for pedestrians and cyclists. Increased proportions of walking and cycling along the corridor have a correlative reduction in Green House Gas (GHG) emissions and noise as well as supporting healthy travel options for short trips. Green boulevard space has been incorporated along the corridor.

<u>Economic (External)</u>: The recommended corridor plan has been developed to support transit and the development of the Belvedere Area, with the goal of moving people and goods efficiently via the provision of increased mobility choices.

### **Financial Capacity**

### **Current and Future Operating Budget:**

The operating budget will be higher than current costs as a result of the additional infrastructure. The additional operating cost of the proposed upgrades has not been quantified.

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

There are no capital budget expenditures triggered by the recommendations of this study. The study provides order of magnitude cost estimates for the ultimate corridor. The estimated cost of implementing the ultimate corridor plan is \$53 Million (2016 dollars). As 17 Avenue S.E. is an arterial-level street, improvements to the corridor will be implemented through agreements with adjacent developers which will set the east and west carriageways. The median transitway will be built at a future date by The City; this project is currently identified as a Long Term Project in RouteAhead and is not included in the current 10-year Investing in Mobility Plan.

#### **Risk Assessment**

Without approval of the recommended corridor plan, protection of land required for the corridor cannot occur. As well, The City will not be able to provide direction to area landowners regarding their commitments to the corridor upgrades. Significant costs could be incurred in the future should The City require commitment of the right-of-way after development has progressed.

## **REASONS FOR RECOMMENDATIONS:**

Identification of the ultimate corridor plan and right-of-way required will allow The City to work with adjacent landowners to progress the development of the Belvedere area while protecting for the ultimate transportation network needs.

### **ATTACHMENTS:**

1. 17 Avenue S.E. Corridor Study (Stoney Trail to East City Limit) Executive Summary