

## **NORTH CENTRAL LIGHT RAIL TRANSIT PLANNING**

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### **EXECUTIVE SUMMARY**

Calgary Transit has revisited the planned alignment of a future North Central LRT line. Based on this review of the Nose Creek route, consideration of operational impacts in the downtown, and opportunities presented by the future Southeast LRT, Calgary Transit is recommending evaluating plans for a centrally located North Central LRT (NC LRT) line by way of a two-phased study.

Phase 1 of the study would identify:

- A route for NC LRT;
- Station locations and amenities (e.g. bus terminals, park and ride lots, and opportunities for Transit Oriented Development);
- Bus BRT and LRT network connections, including a possible tie to the future SE LRT;
- LRT vehicle technology and right of way concepts (elevated, in-street, segregated right of way, etc);
- Ridership and traffic projections, and
- Projected high level costs and land implications.

Phase 2 would involve more detailed planning of the required infrastructure once Phase 1 is approved. Each phase of this study will take approximately two years and involve extensive public engagement.

### **ADMINISTRATION RECOMMENDATION(S)**

That the SPC on Transportation and Transit recommends that Council direct Administration to:

1. Conduct a route planning study as the first phase of a two-phase planning study based on The City's Sustainability Direction principles. This study will identify a route for NC LRT that also addresses ridership projections, vehicle and right of way technology, station locations and amenities, opportunities for transit oriented development (TOD), and projected capital and operating costs.
2. Report back to the SPC on Transportation and Transit no later than the end of 2014 with findings and recommendations from Phase 1 of the study.

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

At the 2006 April 10 Regular Meeting of Council, the Downtown LRT Feasibility Study (LPT2006-27) was approved. This report outlined a scenario for how the six legs of Calgary's long term LRT network could be connected to the downtown. The recommendation regarding NC LRT was that it would enter the downtown by sharing the current Northeast LRT right of way between the downtown and Zoo station. North of Zoo station, NC LRT would follow an alignment parallel to Nose Creek.

At the 2008 April 14 Combined Meeting of Council, the South Nose Creek Site Plan (LPT2008-16) was approved. This plan helped locate the new Telus World of Science facility and also included functional detail for three possible alignments for NC LRT parallel to Nose Creek between Memorial Drive and 8 Avenue NE.

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The Primary Transit Network in the Calgary Transportation Plan (approved in 2009) shows the alignment of NC LRT adjacent to Nose Creek south of Beddington Trail.

### **BACKGROUND**

Calgary Transit has identified several LRT network and operational issues associated with the Nose Creek alignment. An overview of these issues is provided in the Attachment "Review of Planning for North Central LRT". Calgary Transit has received input from Calgarians, particularly those living in north central Calgary that suggests a more centrally located route for NC LRT will better serve local communities and provide more opportunities for transit oriented development than a route that uses the Nose Creek valley. On this basis, Calgary Transit believes that there is merit in examining the feasibility and functionality of an LRT line that would be located more centrally within this corridor to connect between the established right of way north of Beddington Trail and the downtown. Since there is an existing approved alignment shown in the Calgary Transportation Plan and other City documents, Council endorsement is being sought to investigate in detail a new alignment. Based on the outcome of such a study, Administration will recommend whether the current approved alignment, or portions of it, should be abandoned.

### **INVESTIGATION: ALTERNATIVES AND ANALYSIS**

In 2011 May, Calgary Transit held a series of internal staff workshops and public open houses to obtain ideas and opinions from citizens and City staff regarding the concept of an LRT line located along the Nose Creek, Edmonton Trail or Centre Street N alignments. An online information and feedback process was conducted to invite responses to proposed NC LRT options and planning ideas. In total there were approximately 2,150 Calgarians who visited the open houses or provided online feedback. The response was generally positive and Calgary Transit was encouraged to conduct a new study to determine a route based on a more central LRT alignment involving either Centre Street N or Edmonton Trail.

Calgary Transit recommends that a detailed planning study be conducted to determine a more central alignment for NC LRT. It is proposed that the study be conducted in two phases. Phase 1 of the study would result in recommendations relating to:

- A route for NC LRT;
- Possible BRT and LRT network connections, including a possible tie to the future SE LRT;
- LRT vehicle technology and right of way concepts (elevated, in-street, segregated right of way, etc);
- Station locations and amenities (e.g. opportunities for TOD, bus terminals and park and ride lots)
- Ridership and traffic projections, and
- Projected high level costs and land implications.

This study could commence in late 2012 and be completed no later than the end of 2014. This length of time is required to address a number of anticipated issues and provide for extensive public engagement. Phase 1 would also help with the planning around the SE LRT, specifically whether a connection is possible and feasible.

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Approval of Phase 1 recommendations will be carried forward to a more detailed Phase 2 functional planning and staging plan that would determine:

- Land use planning associated with TOD opportunities.
- A horizontal and vertical profile of the alignment.
- A staging plan including short and medium term infrastructure to facilitate bus service or BRT improvements that can be converted for LRT.
- Plans for bus, pedestrian and cycling facilities at stations.
- Plans for park and ride facilities.
- Roadway modifications.
- Property requirements.
- Utility implications.
- Environmental impacts.
- High level capital and operating costs.

Upon completion of Phase 1 the timeline required to complete Phase 2 will be easier to predict. This more detailed planning stage of the study will also require extensive public input to determine how this facility can be integrated into existing communities and proposed development.

A high level overview of previous planning for NC LRT is provided in the Attachment "Review of Planning for North Central LRT".

### **Stakeholder Engagement, Research and Communication**

Public and internal engagement conducted in 2011 has identified a number of key values, expectations and issues related to this future LRT line. A community consultation team has been formed to follow up on the input received and to help guide the next phase of this potential study. Comprehensive public engagement will be a significant part of the planning for NC LRT.

### **Strategic Alignment**

Establishing a plan for NC LRT (including infrastructure for bus service improvements which can be converted to LRT) is critical to guide future land use and transportation decisions for north central Calgary.

The Calgary Transportation Plan and the Municipal Development Plan classify the south segments of Centre Street N and Edmonton Trail as future Urban Corridors. Land Use Planning and Policy has advised that a Centre Street N/Edmonton Trail land use study is being considered for inclusion in their 2012-2014 work plan. Planning for NC LRT will be closely aligned with this work.

Planning for NC LRT will follow the framework and principles outlined in The City's Sustainability Direction to guide integrated transportation and planning decisions related to the following six areas:

- Community well-being
- Economy

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- Sustainable environment
- Smart growth & mobility
- Financial capacity
- Sustainable corporation

### **Social, Environmental, Economic (External)**

Transit improvements in the north central corridor could provide significant social, environmental and economic benefits related to improved mobility, higher transit use and opportunities for transit oriented development.

### **Financial Capacity**

Phase 1 of this study can be funded through the 2012/2014 work program and budget.

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

There are no impacts to the current Calgary Transit operating budget related to this report. Route and functional planning studies are eligible for grants from the Province of Alberta (AMIP and CTF). An application for funding to include these studies will be made if approved by Council.

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

No capital funding has been identified for infrastructure or associated right-of-way to address transit corridor improvements in north central Calgary. The recommended study will identify staging options and estimated capital costs for inclusion in future Transportation Infrastructure Investment Plan (TIIP) funding processes. Capital expenditures are not anticipated in this business plan budget cycle.

### **Risk Assessment**

There is a risk of not achieving the long term transportation and land use goals for the north central area without a significant investment in high capacity public transit:

- Land use and transportation network decisions will be better aligned if a new plan for NC LRT is developed within the next two to three years as that aligns with the 2012/2014 work plan.
- The currently approved alignment for NC LRT along Nose Creek and plan to access the downtown via Northeast LRT has a lower capacity potential which limits the long term ridership potential of the area.

### **REASON(S) FOR RECOMMENDATION(S):**

Analysis and public input has suggested that a plan is required for a more central route alignment and staging options for a future NC LRT line. Such a plan is needed to inform transportation and land use decisions related to this corridor.

### **ATTACHMENT**

Review of Planning for North Central LRT (NC LRT)