

## Review of Planning for North Central LRT (NC LRT)

NC LRT is one of six lines identified for Calgary and right of way has been acquired north of Beddington Trail within the Harvest Hills Boulevard right of way. South of Beddington Trail, an alignment for NC LRT, identified in the mid 1980s and included in the Calgary Transportation Plan, could travel mainly within the Nose Creek Valley (parallel Deerfoot Trail and the Canadian Pacific Railway) – see Figure 1.

### The rationale for a Nose Creek LRT alignment included:

- It is capable of providing a rapid transit connection between the downtown and the developing communities in north central Calgary (North of Beddington Trail).
- Most of the right of way for this alignment is on City owned land.
- The line could serve the proposed future high speed rail station at 96 Avenue NE (Airport Trail) and the future Aurora Business Park development at 96 Avenue and Centre Street N.
- Potential station locations south of Beddington Trail could be served by major cross-town bus routes on 32 and 64 Avenues NE.
- The existing NE LRT track could be utilized to connect NC LRT with the downtown thus reducing infrastructure costs for this segment of the line.
- A right of way for exclusive LRT operation has not been reserved within the central portion of the line south of Beddington Trail. To achieve the benefits offered by LRT in its current context (speed, reliability, passenger capacity and comfort), it was concluded that there would be significant community and / or traffic impacts plus significant capital costs to establish a central LRT line.
- Building into the existing network leverages existing fleet and maintenance facilities.

### Disadvantages of a Nose Creek alignment for NC LRT

A number of disadvantages associated with a Nose Creek alignment for NC LRT have been identified. These include:

#### Land Use

- The line would not provide LRT service for most of the communities south of Beddington Trail.
- The Nose Creek valley is relatively isolated and access to stations in the valley would be distant for pedestrians, cyclists and difficult for buses due to the steep grades.
- There is no existing transit supportive land use within walking distance of this segment of the alignment.
- Opportunities for TOD are limited.
- The land required for the track, park and ride lots and bus terminals could negatively impact current park uses along certain sections.

#### LRT Network

- The combined volume of trains projected for NE, NC LRT and South lines would create an over capacity condition on 7 Avenue. The 8 Avenue subway would be required prior to construction of NC LRT to accommodate the South / NW LRT lines - a major capital cost.
- Northeast and West LRT will operate as a continuous service linked by 7 Avenue. Connecting NC LRT with the NE line would create a significant LRT service imbalance since the combined number of LRT trains travelling along the NC and NE lines will be about

double the number of trains required to serve the West LRT segment. There is no ability to short turn trains in the vicinity of the downtown so there would be significant long term operating cost implications.

- The NC connection to NE LRT east of the Zoo station involves tight curve geometry and steep grades. It is likely this connection could be a source of delays and be costly to maintain.
- Building onto the existing network eliminates the opportunity to utilize low flow vehicles.
- Would parallel the planned high speed rail line and existing CP Rail lines, complicating access for construction and subsequent maintenance.

#### Travel Speed

- A perceived advantage of the Nose Creek route, versus a route through the central portion of the corridor, is the ability to provide a quick connection between the outer north central communities and the downtown. However, closer review, shows that the travel time advantage may be negligible due a longer route length and potential delays that would be encountered operating along the shared segment of the NE line.

#### **Additional Options for NC LRT**

Based on this overview, Calgary Transit recommends examining additional options for the alignment of the south portion of NC LRT, including the downtown connection. Figure 2 illustrates the options that are recommended for more detailed analysis to determine an alignment for NC LRT.

Figure 1 - Proposed Concept for North Central LRT in Nose Creek Valley

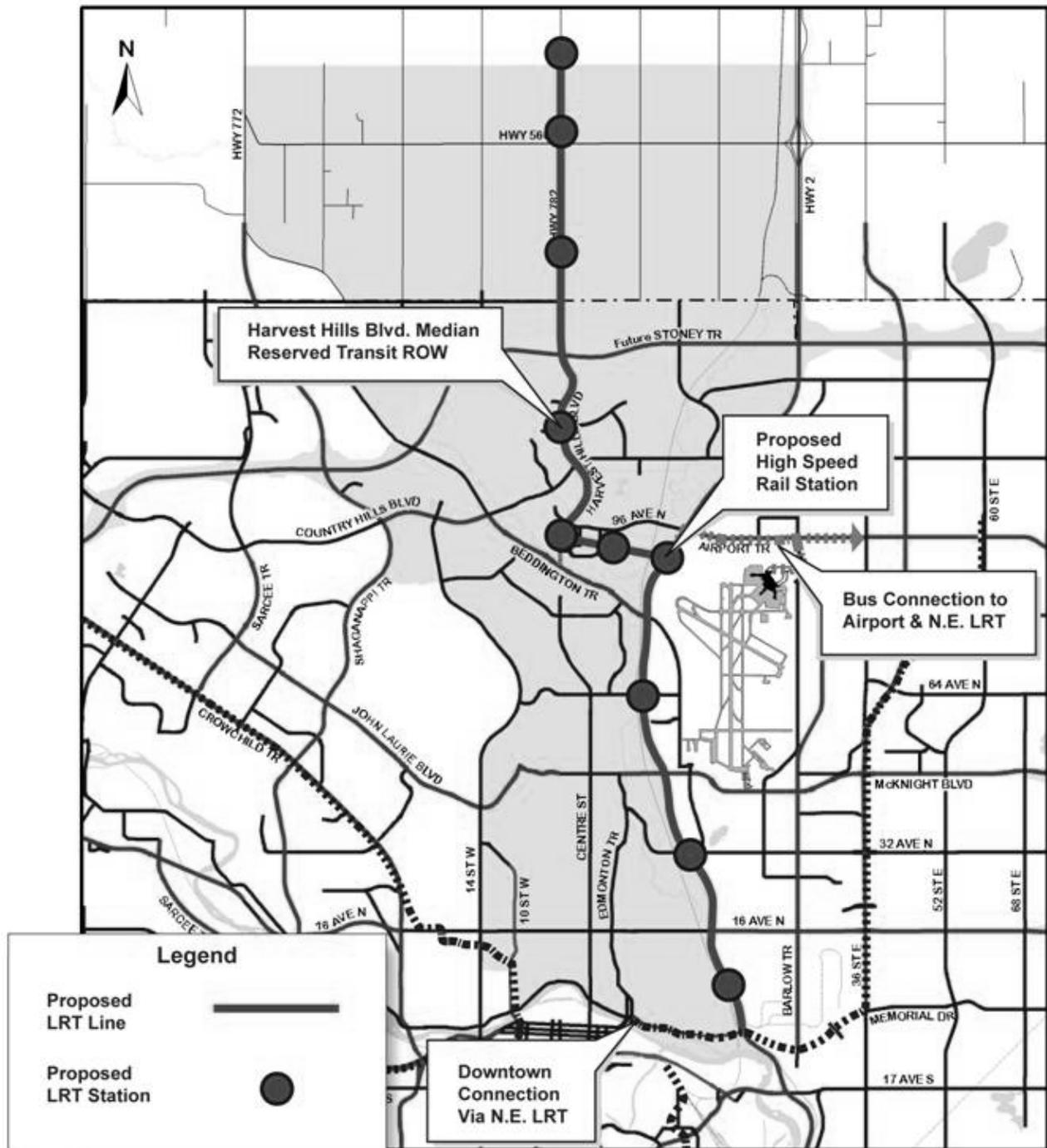
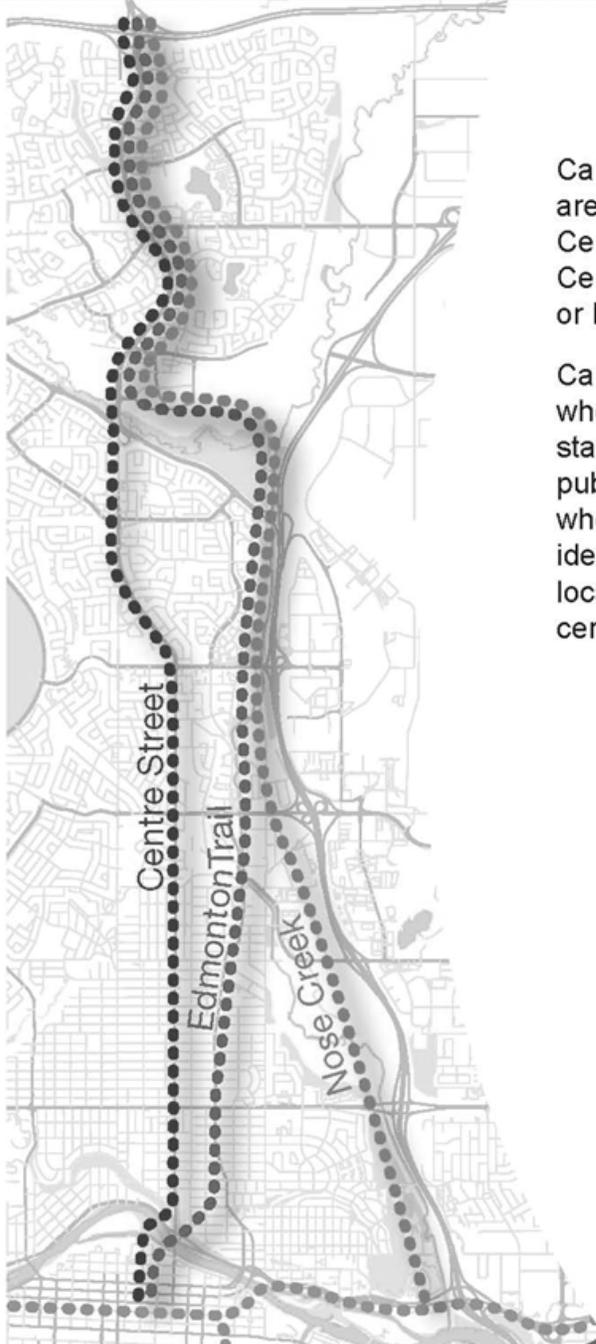


Figure 2 - Options for North Central LRT

# Where should the North Central LRT run?

North Central LRT  
OPEN HOUSE



Centre Street  
Edmonton Trail  
Nose Creek

Calgary Transit believes there are three options for the North Central LRT route; along: Centre Street, Edmonton Trail or Nose Creek (Deerfoot Trail).

Calgary Transit wants to hear where you would like the stations to be located so that public input can be considered when making decisions. Please identify possible station locations using the maps in the centre of the room.

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