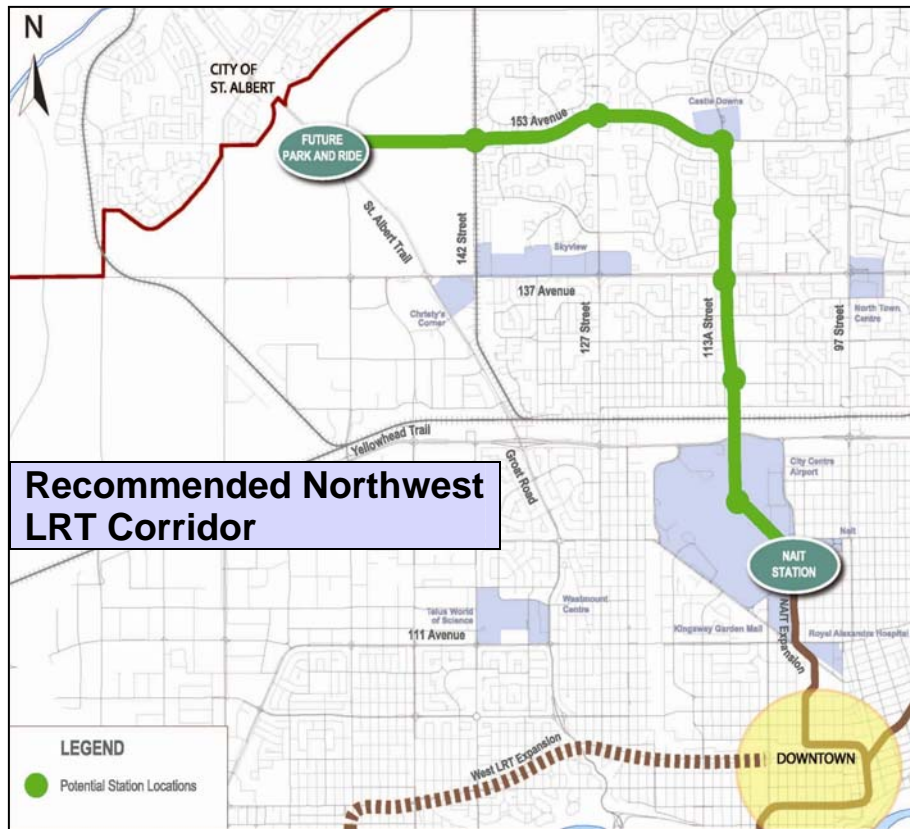


# Northwest LRT

## NAIT to Northwest Edmonton

www.edmonton.ca/LRTProjects

June 2010



### We're moving forward. Learn more.

The City of Edmonton is planning to extend the LRT from the planned NAIT station to the northwest city limits. Following an extensive corridor evaluation process, the 113A Street option has been identified as the recommended corridor that is most responsive to City Council approved evaluation criteria.

The recommended LRT corridor will be presented to City Council for approval following a public hearing on Tuesday, June 22, 2010.

### Highlights:

- Access to downtown in 18-24 minutes
- 42,000 – 45,000 future daily boardings
- Service to communities in northwest Edmonton including Grand Trunk, Castledowns and Greisbach
- Future park and ride facility at the city limits
- Feasible future connection to the City of St. Albert
- Estimated cost: \$1.1 billion.\*

*\*Excludes land costs. Detailed budget estimates to be refined and determined in subsequent engineering stages.*

No funding is currently in place to construct the Northwest LRT Line. Given the cost of the line, the City requires funding support from other orders of government.

## The Future of LRT in Edmonton

The City completed a comprehensive technical review of its approach to LRT system planning and operation. The LRT Network Plan was approved by City Council in June 2009, and includes direction to adopt an urban approach to the LRT system style.

### Urban LRT System

Urban LRT in Edmonton would continue to operate on dedicated right-of-way, with priority, so the trains do not mix with traffic or stop at intersections. However, the urban approach brings other changes that improve connections between the LRT and city life.

An Urban LRT system means:

- Building smaller scale stations that are spaced closer together than you see on the existing LRT system.
- Integrating the LRT with the surrounding area by providing better links to a greater number of destinations, and providing more direct transit, pedestrian and cyclist connections.
- Integrating visual elements that minimise intrusion and maximise openness of space to create a safe environment.
- Respecting communities. The LRT would operate with reduced speeds in congested areas, allowing LRT to fit and operate safely in pedestrian-oriented communities with reduced right-of-way and fewer barriers.
- Investing in aesthetics to fit within an urban environment. This includes features such as landscaping, streetscaping, and architectural features like street furniture. Opportunities to use embedded track instead of traditional rock ballast and railway ties will be explored to improve visual appeal.

### LRT Vehicles

As the City expands its LRT system, new LRT lines such as the West and Southeast LRT would use a new style of LRT vehicles. Low-floor vehicles were first introduced in the late 1980s and have since evolved to become an industry standard for LRT systems in Europe and North America.

Edmonton was the first city in North America to develop an LRT system. The Extensions to the existing LRT system, such as the Northwest LRT, would continue to use the high-floor LRT vehicles that were used at that time.

### High-Floor Urban LRT

High-floor LRT vehicles have been successfully integrated into urban settings in many large cities across North America and Europe. High-floor style operates much the same way as low-floor style with the main difference being the raised platforms/stations required.



*A high-floor LRT travels in downtown San Diego, California*



*A high-floor LRT station integrated into a building in downtown Calgary, Alberta*

## Bringing Urban LRT to Edmonton's High-Floor System

Over time, changes can be expected on the existing LRT system to incorporate urban LRT characteristics. There are opportunities to add stations to the existing line. As redevelopment and ridership potential increase, these opportunities will be pursued.

The Downtown to NAIT LRT extension will incorporate features of urban LRT. There is a greater emphasis on architectural features and urban design. As well, the City is in the process of refining its LRT design standards to develop urban design guidelines.

## Where does Route Selection fit in the big picture?

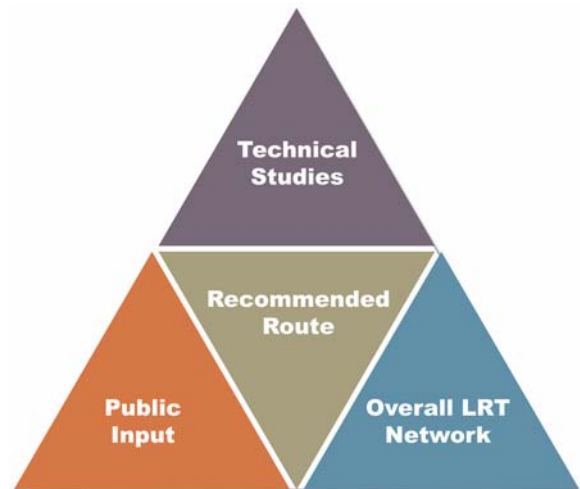
### It's part of an overall vision

The City of Edmonton's strategic vision calls for a more compact, livable and sustainable city, where people have an opportunity and choose to use alternative transportation modes. This is outlined in the City's Strategic Plan as well as in the Transportation Master Plan and Municipal Development Plan. Expanding the Light Rail Transit (LRT) network is one of the ways the City is planning to meet these objectives.

### It moves the project forward

A new LRT line is a significant infrastructure project. It can take several years to move through the planning and engineering stages.

We are now in the early stages of the Northwest LRT project and are seeking to identify the LRT corridor, so engineering and public consultation can continue with the goal of completing a full LRT Concept Plan by December 2011.



### Decision making

The project team and its technical studies were one piece in a triad of influences that would ultimately determine the Northwest LRT corridor recommended to City Council. The following three key inputs are considered:

- **Technical Studies** – The technical analysis process compares potential corridor options using an evaluation framework approved by City Council. This analysis includes key weighted criteria to consider benefits and design/construction challenges.
- **Public Input** – The public involvement process seeks local knowledge about the benefits and challenges with the corridors under consideration. This helps to ensure the full picture is considered within the evaluation framework.
- **LRT Network Plan** – The strategic plan provides policy direction to future growth of the Edmonton LRT system. The Northwest LRT is one component of this larger system.



## Recommended Northwest LRT Corridor

The Northwest LRT corridor proposal outlined in the following pages provides an overview of how the LRT could fit into the surrounding area.

### What is City Council reviewing now?

The Northwest LRT corridor recommendation seeks approval from City Council on the following:

- Defining a LRT Corridor running from the NAIT station at a point east of 109 Street N.W. near the south end of the NAIT campus, northwesterly through the Edmonton City Centre Airport lands, then northward with grade separation across Yellowhead Trail and the CN Rail Yard to 113 A Street N.W., proceeding north along 113 A Street N.W. to 153 Avenue N.W., then westward along 153 Avenue N.W. to the future Park and Ride site at approximately Campbell Road and Anthony Henday Drive.
- High-floor technology will be used on dedicated LRT right-of-way (separate from traffic), with LRT primarily operating at grade (street-level). LRT will only be elevated or underground in areas where it is required for technical reasons to protect traffic capacity on major goods corridors or to optimize engineering costs.

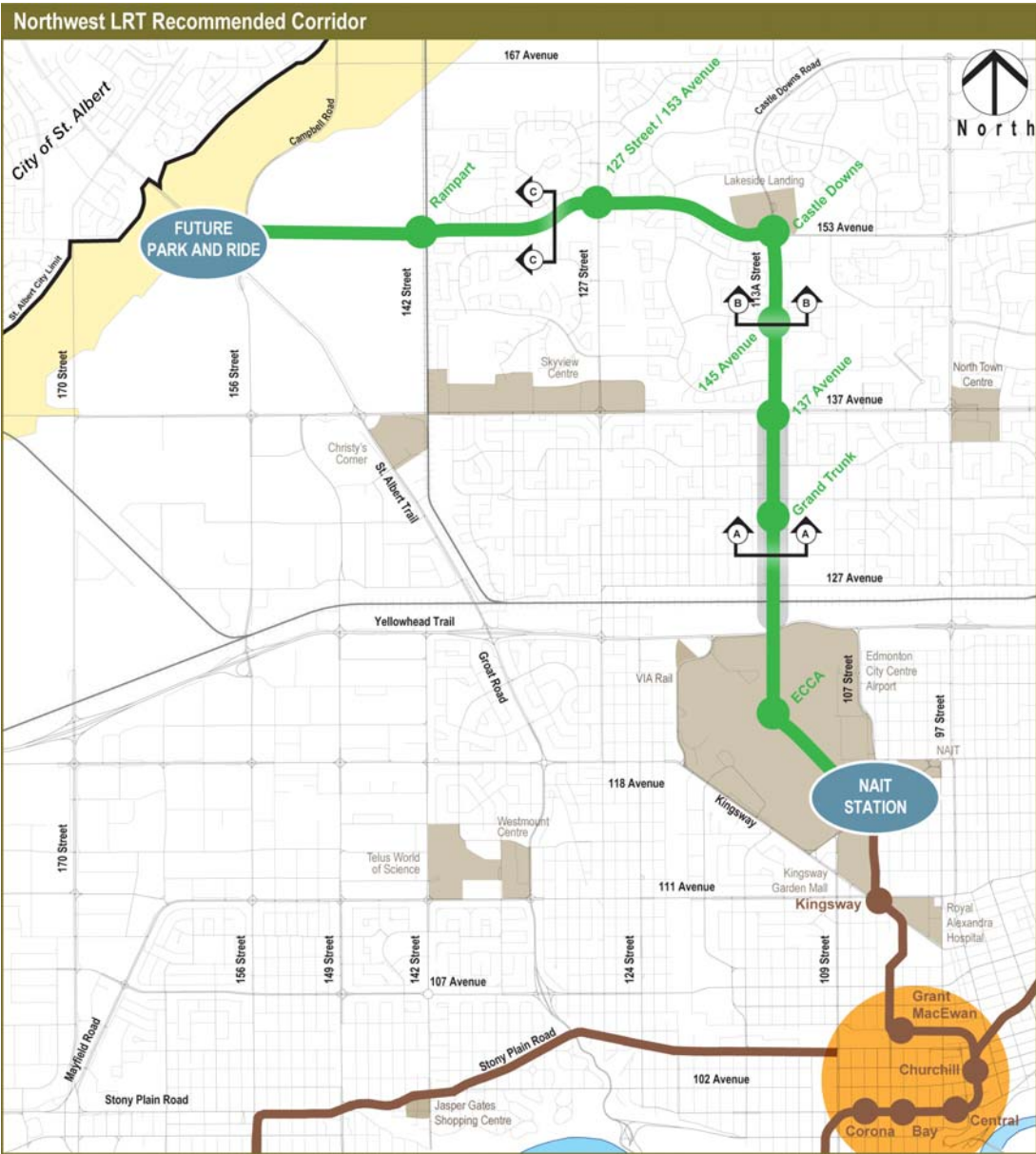
### If it's approved, what are the next steps?

Once a corridor is selected, additional engineering and public consultation will take place to review strategies to address local impacts and develop location-specific mitigations, including:

- Strategies to address impacts related to vehicle access to/from communities and businesses
- Locations and configurations of LRT stations, and connections for community and pedestrian access
- Defining the ultimate LRT alignment within the transportation right-of-way and developing mitigation strategies to address impacts on the overall traffic system network
- Minimizing property requirements, where possible while maximizing transit system ridership.

This work will take place over the course of the next year, ultimately leading to the presentation of an LRT Concept Plan to City Council in December 2011.

# Northwest LRT

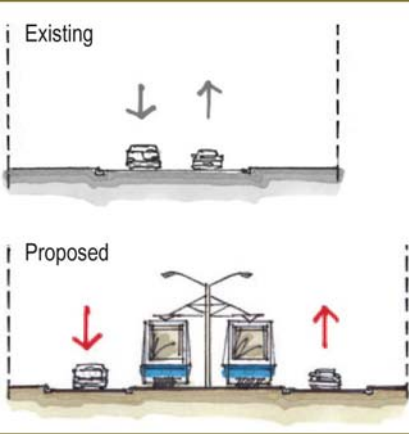


Legend	
	113A Street Corridor
	Station Location Under Study
	Constrained Right-of-Way
	Existing/Planned LRT
	Transportation/Utility Corridor
	Activity Centres
	Downtown

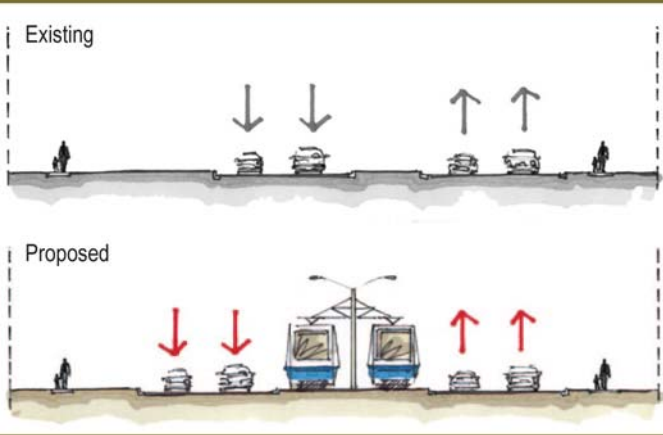
Constraints	
• Right of Way (amount of space available for LRT)	• Road Capacity
• Business Access	• On Street Parking
	• CN Rail Crossing

# Northwest LRT

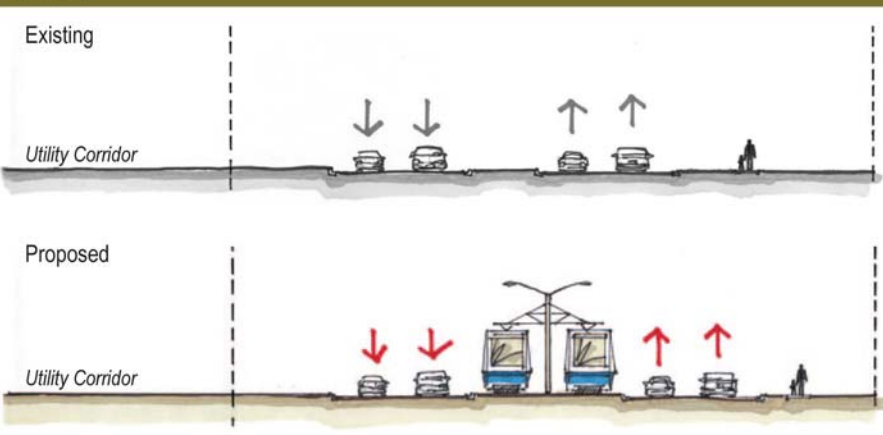
**A** Photo and Cross Section – 113A Street at 129 Avenue



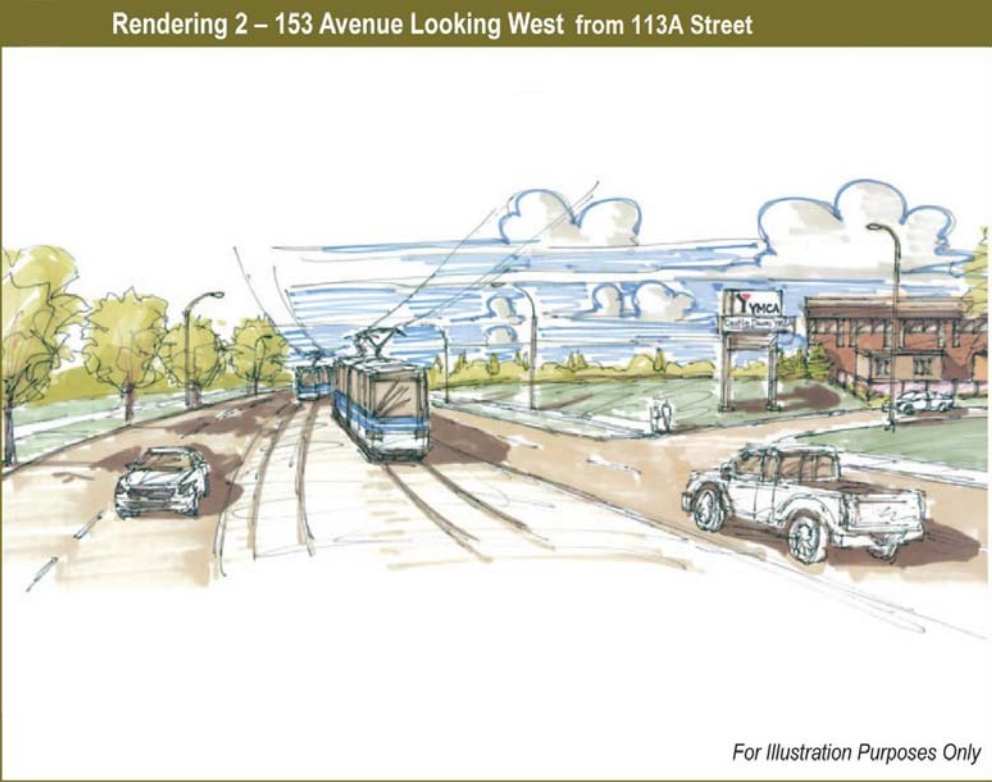
**B** Photo and Cross Section – 113A Street at 145 Avenue



**C** Photo and Cross Section – 153 Avenue at 129 Street



# Northwest LRT





## What happens next?

City Council will decide whether to approve the recommended Northwest LRT corridor.

## Public Hearing

Tuesday June 22, 2010  
9:30 a.m. – 5:30 p.m.  
Council Chambers  
2<sup>nd</sup> Floor, City Hall  
1 Sir Winston Churchill Square

Register to speak online at [www.edmonton.ca/meetings](http://www.edmonton.ca/meetings), or call the City Clerk's office at 780-496-8178.

Please note that if the hearing cannot be completed on June 22, it may be carried over to another date identified by City Council and will be advertised.

## Public Involvement

Over 1,300 people have participated in Northwest LRT public involvement activities to date, by attending workshops, responding to an online questionnaire, participating in interviews, and joining an online discussion forum.

## What we heard

LRT expansion has greater potential to serve both the region and the local population, as long as it serves key destinations including residential, commercial, and future development areas.

A comprehensive approach to planning is needed to:

- Minimize traffic congestion, which is already a key concern in the area
- Integrate and connect with other transportation modes
- Limit the impacts on properties and recreation areas
- Ensure security and safety

Reports with detailed information on the results of the public involvement process are available online.

## Find out more about the Northwest LRT project

- Visit [www.edmonton.ca/LRTProjects](http://www.edmonton.ca/LRTProjects)
- Call the LRT projects info line at 780-496-4874
- E-mail: [LRTprojects@edmonton.ca](mailto:LRTprojects@edmonton.ca)

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