

LONG-TERM LRT EXPANSION LRT NETWORK PLAN

In 2009, Edmonton City Council adopted a long-term LRT Network Plan that defines the future size, scale and operation of Edmonton’s LRT system.

The LRT Network Plan balances Edmonton’s long-term transportation needs with a commitment to grow green and create a compact, integrated urban environment featuring a high-quality, accessible transportation mode. Key directions within the plan include:

- Growth in outlying communities is unlikely to be sufficient to support LRT. Transit service to regional areas, where demand warrants, would be best provided in a different form such as bus rapid transit.
- LRT lines not tying into the existing LRT system will feature surface (street-level) operation and will provide convenient connections to the existing LRT system in multiple locations.
- An urban-system design should be pursued for any new LRT lines. Over time, changes should be expected on the existing LRT system to incorporate urban LRT characteristics, such as adding stations as redevelopment and ridership potential increase.
- Low-floor LRT technology should be adopted for any new LRT line that does not physically tie into the existing LRT system.
- Some sectors such as the West will require premium bus service to supplement LRT service.



URBAN LRT

While the current LRT system can best be described as a ‘suburban’ system, the LRT Network Plan calls for a change to adopt an urban style. The urban approach brings changes that improve connections between the LRT and city life.

An urban LRT system means:

- Building smaller scale stops that are spaced closer together than on the existing LRT system.
- Integrating 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 minimize intrusion and maximise openness of space to create a safe environment.
- Respecting communities. The LRT will 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.

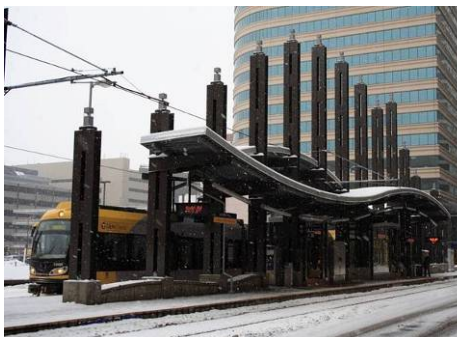


Low-floor LRT in Dublin

LOW-FLOOR URBAN LRT: SAME GREAT SERVICE, NEW PASSENGER EXPERIENCE

As the Southeast to West LRT line develops, new low-floor LRT technology will be used. Passengers will be able to connect to the high-floor LRT system, preserving the City’s ability to increase frequency of service on the existing system. Low-floor LRT will operate at street level, travelling at the speed of traffic. In areas between stops, it will function like any other part of the

Urban Low-Floor LRT in North America



Minneapolis



Portland



Phoenix

BRINGING URBAN LRT TO EDMONTON'S HIGH-FLOOR SYSTEM

Edmonton's current LRT vehicles use a high-floor technology. This technology will continue to be used on the Northeast, South and future Northwest LRT lines. However, changes can be expected over time on the existing LRT system to incorporate urban LRT characteristics, including adding stations as redevelopment and ridership potential increase. The North LRT to NAIT extension will incorporate some features of urban LRT by putting a greater emphasis on architectural features and urban design.

North LRT to NAIT



LRT on 105 Street between 107 Avenue and 108 Avenue. A canopy will preserve the large Elm trees on this street and help maintain the character of the existing residential community.



The MacEwan LRT Station will integrate pedestrian, cyclist and walk-up connections with high-density development. The public plaza areas surrounding the station will add new amenity space to the community.

Urban High-Floor LRT in North America



San Diego



Denver



Calgary

REGIONAL CONNECTIONS

LRT is a vital part of an overarching Regional Transit Plan. Logical end points for the LRT network may evolve over time; however, analysis considering long-term regional population and employment growth provides a good indication of the extent of each segment and logical destinations. A full build-out scenario of LRT to the entire region was reviewed. It was found that a region-wide LRT network is not practical because of limits to the length of LRT routes when considering vehicle speed, distance and infrastructure costs. Urban centres within the region that are a significant distance from Edmonton would be better served by other transit solutions, such as bus rapid transit and inter-municipal transit with interchange/transfer points to the LRT system.

TRANSPORTATION PRIORITIES

Expanding the LRT system is a key priority for the City in order to meet Edmonton’s transportation needs as it continues to grow. Completion on the North LRT to NAIT is expected by 2014. This line will link Churchill Station to stations at Grant MacEwan University, the Royal Alexandra Hospital/Kingsway Mall, and NAIT. The City’s next priority is preliminary engineering of the Southeast to West LRT from Mill Woods to Lewis Farms, which is anticipated to be completed in 2013.

ULTIMATE LRT NETWORK

The long-term LRT Network Plan calls for extensions of the existing line north to Gorman and south to Heritage Valley. New lines include northwest to the city limits and east towards Sherwood Park. A Central Area LRT Circulator between Downtown and high-activity areas near the University of Alberta and Old Strathcona completes the plan.

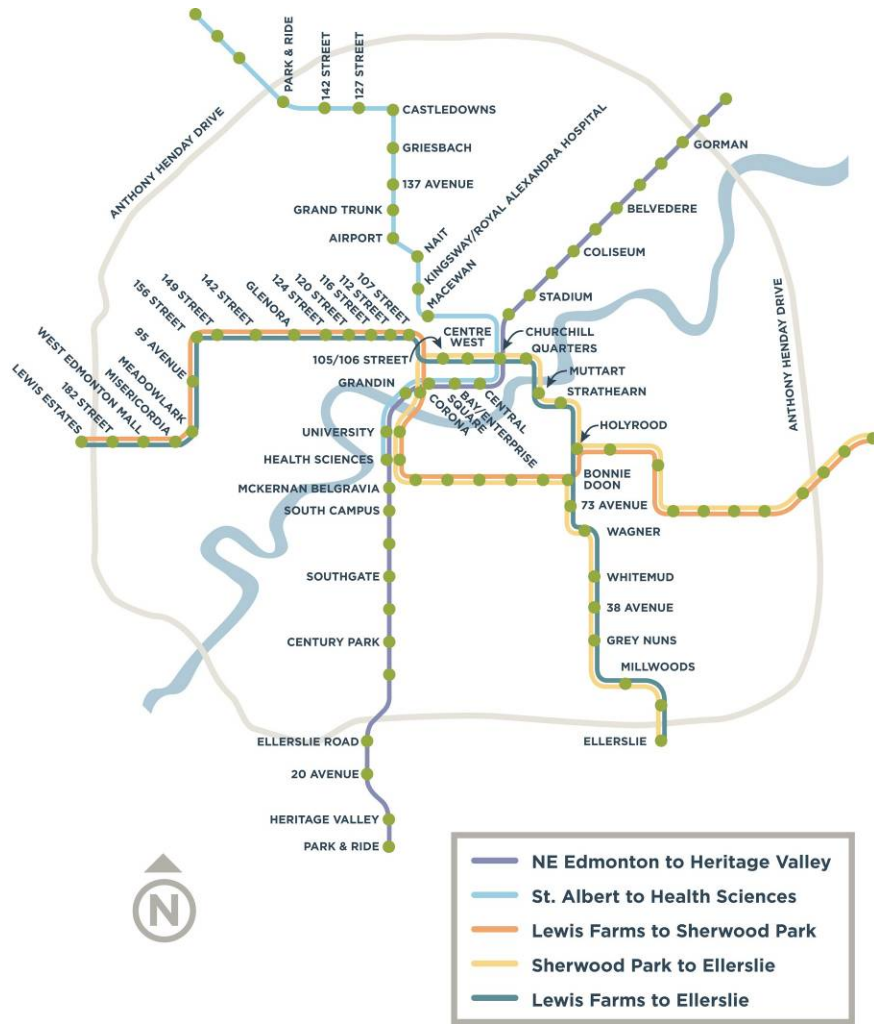


Figure illustrates the potential build out of Edmonton’s ultimate LRT network.

For more information visit www.edmonton.ca/LRTprojects, email LRTprojects@edmonton.ca or call 780-496-4874.