

Urban High-Floor LRT in Edmonton Fact Sheet

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LRT Network Plan

The City of Edmonton is focused on expanding its Light Rail Transit (LRT) Network to encourage greater use of public transit, smart growth and more transit-oriented neighbourhoods. These goals are outlined in the City of Edmonton's *Strategic Plan* as well as its *Transportation Master Plan* and *Municipal Development Plan*.

In June 2009, City Council approved a long-term LRT Network Plan that defines the ultimate long-term future size, scale, and operation of the LRT system. The ultimate LRT network would have six lines extending to the Northwest, Northeast, East, Southeast, South, and the West.



Urban LRT

An important part of the LRT Network Plan is a change in approach to the overall system style. While the current LRT system can best be described as a “suburban” system, the LRT Network Plan calls for a change in approach to an urban LRT system. LRT 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.

LRT Network

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



LRT in Sacramento, 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 increases, 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.

Downtown to NAIT LRT



LRT on 105 Street (between 107 Avenue and 108 Avenue). A canopy is planned to preserve the large Elm trees on this street, and maintain the character of the existing residential community.



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

Edmonton's LRT system will include a mix of high-floor and low-floor vehicles that can be integrated flexibly and efficiently with other public transit choices. Transit riders will be able to change from one LRT route to another at key transfer stations located centrally, or by walking a short distance from one line to another downtown. Edmonton's LRT Network will be the central feature of an integrated transportation system, offering new, long-term infrastructure and high-capacity alternatives to the current limitations of passenger vehicle travel and traffic congestion.