METROLINE NW LRT NAIT TO CAMPBELL ROAD



Edmonton

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All images and renderings are preliminary and subject to change. Final designs will be shared when complete.

METRO LINE NORTHWEST



Blatchford Gate Station

Welcome to the Metro Line Northwest: a high-floor, urban-style transit system that will help connect our city.

The Metro Line Northwest (NW) will extend the existing Metro Line north from the Northern Alberta Institute of Technology (NAIT) to the newly developing sustainable community of Blatchford and, eventually, to St. Albert. It's part of the City's vision to expand LRT service to all sectors of the city by 2040.

The Metro Line NW will be a high-floor style of train, with urban design features that will help it blend seamlessly into neighbourhoods. The Metro Line is about staying connected, with more frequent and more accessible stops that allow you to access communities along the line not just the hot spots. It's a line that lets you stop off at the local grocery store for essentials on the way home from work. Or visit friends in Blatchford or St. Albert, without having to drive. It's a line that brings you to classes at NAIT, or to the city's great festivals at Churchill Square.

It's a line that brings our city together...to create a community of communities.

LRT NETWORK PLAN

As Edmonton grows, our transportation needs are outpacing infrastructure capacity. LRT is a key part of Edmonton's mass transit network. It's a proven, high-capacity, efficient and environmentally friendly way to move people.

In June 2009, City Council adopted a long-term LRT Network Plan that defines the future size, scale and style of the regional LRT system. Eventually, the LRT network will have five lines extending to the northwest, northeast, southeast, south and west. The Metro Line NW extension is part of The City Plan's vision to expand mass transit to all sectors of the city.

The LRT Network Plan supports City Council's overarching policy direction by making major nodes (including the Centre City) the focal points of the LRT system.

For more information about mass transit, visit: edmonton.ca/masstransitplanning



THE PROJECT

Strategy

Concept



Where We Are Today

Build

The Metro Line North opened in 2015 and runs from Churchill LRT Station in downtown Edmonton northwest to NAIT.

The Metro Line Northwest is an 11 km extension from NAIT to St. Albert. It will extend from a new station at NAIT, north through Blatchford to connect to key activity centres along 113A Street and then west along 153 Avenue before ending at the Nakî Transit Centre & Park and Ride at Campbell Road.

The Metro Line Northwest expansion will occur in three phases:

Phase 1 – NAIT to Blatchford (under construction)

Phase 2 – Blatchford to Castle Downs

Phase 3 – Castle Downs to Nakî Transit Centre & Park and Ride

- HIGHLIGHTS
- Features nine stops.
- Includes an elevated bridge spanning the Yellowhead Trail and the CN Walker Yard.
- Connects with new Park & Ride location on Campbell Road.

- Provides an LRT link to major destinations; including NAIT, Royal Alexandra Hospital, Blatchford, Lauderdale off-leash dog park, Griesbach, Castle Downs YMCA and St. Albert.
- Trains will ultimately run every five minutes during peak hours.
- The Metro Line extension will combine both an urban- and suburban-style LRT.
- Trains will run with traffic in "urban-style" areas. The urban-style LRT that runs from NAIT to 153 Avenue is designed to fit seamlessly into neighbourhoods, with fewer barriers and a slower speed.
- The suburban-style LRT from Castle Downs Road to Campbell Road is designed to have more physical separations, including grade crossing warnings and a higher speed.



Operate

URBAN HIGH-FLOOR LRT

The LRT Network Plan calls for a change in approach to an "urban" LRT system. This design fits into neighbourhoods and promotes development, all while balancing mobility needs with traffic flow. The urban approach improves connections between the LRT and city life.

An urban LRT system means:

- Building smaller-scale stations that are spaced more closely together.
- Providing better links to a greater number of destinations, with more direct transit, pedestrian and cyclist connections.
- Reducing vehicle and traffic speeds in congested areas to support safe, pedestrian-friendly communities.
- Investing in landscaping, streetscaping and architectural features to improve visual appeal.

Bringing Urban LRT to Metro Line's High-Floor System

The Metro Line Northwest extension will combine both an urban and suburban style. Using a high-floor train, certain portions of the alignment will be incorporated into communities while other segments will travel through suburban areas.

With high-floor technology, most of the mechanical equipment is located at the bottom of the vehicle. The high-floor train operates similar to the low-floor style with the main difference being higher station platforms.



NAIT/Blatchford Market Station

The Metro Line extension will be mainly at street level, although going below or above ground will be required at busier intersections and for crossing over the CN Walker Rail Yard.

Sustainable Urban Integration

A major priority of the Metro Line project is to design a transit system that both meets the overall goals of LRT expansion and fully integrates into the communities it serves. After two years of public consultation, the City established a list of design guidelines that emphasizes Sustainable Urban Integration (SUI). The SUI guidelines look beyond the building of tracks and trains towards creating neighbourhoods that are safe, attractive and connected. This involves adding enhancements that reflect the feel and character of each of the communities along the LRT corridor.

METRO LINE NW BENEFITS



Blatchford Gate Station

As our city grows, so does its transportation needs. LRT is an

investment in Edmonton's future that will help ensure we meet the needs of a diverse, dynamic and growing population. The Metro Line Northwest extension will provide a number of benefits for commuters, communities, residents, businesses and the environment.

Transportation Benefits

 Reduce Congestion: The extension will help reduce travel times as the city grows and vehicle congestion increases. LRT is an important investment in our city's future and will give people more options for moving around the city. Integration: The Metro Line has been developed to provide seamless integration to key cycling and pedestrian infrastructure. It also links with Edmonton's bus network to connect transit users to the places where they live, work and play.

Community Benefits

- The project will foster compact neighbourhoods and include a variety of public open spaces that will support activity around LRT platforms and station areas.
- The Metro Line Northwest LRT will also create opportunities for mixed-use developments, encourage a healthy labour market by attracting new workers to the city, and provide opportunities for families to remain in neighbourhoods of their choice.

Economic Benefits

• Job Creation: The Metro Line Northwest LRT extension project has generated direct jobs in design, construction and equipment.

Environmental Benefits

• Reduced Emissions: The Metro Line Northwest project is expected to reduce greenhouse gas emissions by 1,300 tonnes annually.

BLATCHFORD



Located on the 536–acre former City Centre Airport site, Blatchford is an urban community designed to be a great neighbourhood for families, a catalyst for transformational land development and a path towards a more resilient future.

The Blatchford vision is about people, public spaces and active modes of transportation. This means integrating design choices that make it easy for residents and visitors to walk, cycle or hop on transit. The Metro LRT expansion in Blatchford will be at the heart of the community, helping to create a vibrant, higher-density neighbourhood that connects to the rest of Edmonton.

Blatchford will have two LRT stations – the first close to Blatchford's town centre and the NAIT campus, with a second station located farther north. Once the community is fully developed, a direct network of pathways, roads and parks will create a seamless experience to connect to the community's LRT stations.

Environment and Sustainability

The Metro Line is undertaking additional sustainable initiatives:

- Power for the two LRT stations in Blatchford will be supplied primarily by solar panels mounted on the canopies.
- The stations' utility buildings will be connected to the Blatchford community's District Energy Sharing System, which uses renewable energy sources for heating, cooling and producing hot water.



TRANSIT MALL



Blatchford Gate Station

The Metro Line Northwest expansion will include a unique 'transit mall' around the LRT line in Blatchford.

A transit mall is a street where vehicle traffic is prohibited (or greatly restricted) and only public transit, bicycles and pedestrians are allowed. This design supports the community's vision to create a place where people can easily choose sustainable ways to live. The transit mall design will feature:

- A separated commuter cycle track along the entire length of the LRT.
- Very few crossings for vehicle traffic, which will limit commute time and promote safety for pedestrians and cyclists.
- Public plazas next to the LRT stations that will add extra amenity space to the community.
- Treed boulevards along the length of the tracks, which will make the LRT corridor feel more like an active community street meant for walking and cycling.

PUBLIC ENGAGEMENT SUMMARY

Public engagement activities began in spring 2017 to obtain input for the final concept for the alignment and station design. This included building awareness about the Metro Line extension and the public's role in providing input to the alignment, station areas and connections to communities. Engagement on preliminary engineering began in fall 2017 and continued through 2018 when the preliminary designs were shared with Edmontonians for feedback. City Council approved the preliminary design in January 2019.

Metro Line Northwest LRT public engagement included:

- 10 public engagement events (750+ attendees)
- 4 public information sessions (600+ attendees)
- 1,200+ online survey respondents
- 13 individual stakeholder meetings
- 4 community pop-ups

Construction activities on the Metro Line to Blatchford started in summer 2020, with the extension expected to open in 2024/2025.

The City has completed preliminary design of Phase 2 and 3 of the LRT extension. Those projects will move forward when funding becomes available.

Indigenous Engagement

The North Saskatchewan River flows through many traditional Indigenous territories. The Edmonton area has been important to Indigenous Peoples since their arrival. That's why it's important that engagement activities for the Metro Line include the Indigenous Peoples for whom the entire Treaty Six territory has been, and continues to be, traditionally and historically significant. With this in mind, the City of Edmonton has been reaching out to 29 First Nations and Métis Nation communities and organizations to share information, arrange site visits, conduct ceremonies, and respond to questions, concerns and opportunities related to the Metro Line project. This Indigenous engagement process is continuing as the City of Edmonton strives to build and strengthen ongoing relationships with Alberta's Indigenous communities.



LRT station at the Nakî Transit Centre & Park and Ride

METRO LINE NORTHWEST EXTENSION – PUBLIC ENGAGEMENT TIMELINE

For more detailed information about the project, its phases and the history of public engagement, please visit 'Project History' at edmonton.ca/metronw



WHAT WE HEARD



What we heard and how we responded: As project engineering moved towards finalization, content from public engagement became more detailed and specific. In the preliminary design phase, the public drew attention to a number of matters, including:

Will the LRT cause traffic congestion? The extension will help reduce travel times as the city grows and vehicle congestion increases. LRT is an important investment in our City's future and will give us the ability to move more people efficiently through busy corridors.

How will the City manage non-residential parking in neighbourhoods? Edmonton's Parking Services is available to meet with neighbourhoods to discuss parking programs in response to concerns over existing or anticipated non-resident parking.

Will there be opportunities for additional Park & Ride locations? The City has developed a strategy and a set of guidelines that provide an evolving framework for future Park & Ride, including integrating Park & Ride with long-term, transit-oriented land use.

How was train speed evaluated? The Metro Line extension will combine both an urban- and suburban-style LRT. Utilizing a high-floor train, urban portions of the alignment will be incorporated into communities and have fewer barriers and slower speeds, while suburban segments will operate with more physical separations including grade crossing warnings and run at higher speeds.

How is the project team managing accessibility at stations and along the alignment? The City of Edmonton is committed to making Edmonton a more accessible city for all. Metro Line NW LRT stations will have accessible design features in accordance with the City's Accessibility for Persons with Disabilities policy. The goal of LRT is to create compact neighbourhoods with a mixture of residential, employment, recreational and business opportunities within convenient walking distance of transit. This will provide users with a number of transportation options. In addition, the project team engaged with the Accessibility Advisory Committee to improve ease of access to platforms for persons with mobility needs.

How is the safety of transit users, pedestrians and those in private vehicles being considered? The Metro Line LRT was designed to safely integrate with Edmonton's road network and provide safe and efficient pedestrian and cyclist connections, as well as transfers between transportation modes.

How did the project team evaluate grade separation at key

intersections? In June 2017, City Council approved a framework to evaluate intersections and determine if they required grade separation analysis. The Crossing Assessment Framework provides a consistent and objective process for determining the optimal configuration for LRT crossings and any adjacent LRT stations or stops. The Crossing Assessment Framework was used on the Metro Line and resulted in two trenched crossings where LRT travels just below grade through an underpass.

PUBLIC ART POLICY







CITY POSITION

Public art in Edmonton actively engages citizens and artistic leaders, connects communities and creates a sense of belonging, and builds memorable urban places, neighbourhood vibrancy, and a unique city identity.

The City of Edmonton allocates space for public art and provides funding for artwork under Policy C548D: Public Art to Enhance Edmonton's Public Realm. The Edmonton Arts Council (EAC) administers the Policy and is guided by *Connections & Exchanges: A 10–Year Plan to Transform Arts and Heritage in Edmonton.*

By investing in public art, the City of Edmonton also supports the local economy and helps build an attractive, healthy and thriving city where creative spaces emerge and art, design and culture flourish.

ABOUT THE PROJECT

The Metro Line Northwest (NW) presents opportunities for artists to create accessible artworks that reflect and celebrate the diversity, character and history of the communities it serves. Public art opportunities will include local, regional, national and international artists.

ABOUT THE PUBLIC ART SELECTION PROCESS

Commissions for public art are awarded through a selection process that may include artists, curators, the City of Edmonton and citizens. Criteria and parameters for each artwork opportunity are outlined in a Call for Artists. Indigenous, emerging and equity-seeking artists will be encouraged to apply to reflect the diverse nature of the communities served by the Metro Line NW.

MAP EXPLANATION AND DISCLAIMERS

PHASE 1:

NAIT to Blatchford (under construction)

PHASE 2:

Blatchford to Castle Downs

PHASE 3:

Castle Downs to Campbell Road

The following maps show stops, stations and the LRT route path along segments of the Metro Line Northwest. The maps represent Metro Line preliminary design from 2019. Detailed design on the Metro Line Northwest is ongoing and some elements may change from what is presently shown.

Tree placements may not be exactly as shown.

Utility Complex placements are part of ongoing design and should not be considered final.

For detailed section maps, visit edmonton.ca/metronw

LEGEND





NAIT/Blatchford Market Station

The Metro Line Northwest extension will start at NAIT/Blatchford Market Station.

This station will service Blatchford Town Centre – a central component of the Blatchford development. There is a central plaza space at the southeast side of NAIT/Blatchford Market Station. Pedestrian amenity spaces behind both northbound and southbound platforms are connected to pathways and passenger amenities.

There will be no roads next to the LRT tracks, giving way to an exclusive pedestrian plaza with landscaping and places to rest and relax.



This utility complex will store equipment to power the LRT system. It will feature LED-backlit glass panels, making it a prominent feature in the new NAIT/Blatchford Market plaza.



The LRT will continue north. An intersection at 118 Avenue will provide pedestrian and cyclist access into the Blatchford neighbourhood as well as access eastward towards NAIT campus. The access to NAIT will be through a greenway, providing a shared-use path with landscaping that will connect to the existing shared-use path along 118 Avenue in the Westwood / Spruce Avenue neighbourhoods.

BLATCHFORD 17



The LRT will continue north, with intersections located at 119 Avenue and 120 Avenue tying into future Blatchford development areas.



The LRT will continue north, with an intersection located at 122 Avenue tying into future Blatchford development areas.

BLATCHFORD



Blatchford Gate Station

The Blatchford site is one of the City of Edmonton's most important heritage areas. The former airfield played an integral role in transforming Edmonton from a town into a leading Canadian city. Throughout the community, Blatchford will recognize the important history of the airport while looking forward to its exciting future. Named in recognition of this history, the Blatchford Gate Station will service both commercial and residential areas, allowing residents and others to enjoy accessible and convenient transportation.



The LRT will continue north and begin to to ascend on a guideway and cross Yellowhead Trail and CN Walker Yard.

BLATCHFORD



Yellowhead Corridor West - Walker Bridge

There will be an elevated bridge crossing Yellowhead Trail and the CN Walker Yard. A bridge with a shared-use path provides a safe crossing for pedestrians and cyclists.

WALKER BRIDGE



Conceptual bridge rendering at the Yellowhead trail and CN Walker at the Yellowhead Trail and CN Walker Yard crossing from 129 Avenue looking south.



Lauderdale

The LRT will continue northwest towards 113A Street. An intersection at 129 Avenue will provide access into the nearby neighbourhoods of Lauderdale and Calder.

The Lauderdale off-leash area will include improvements such as a paved parking area, public washrooms, an exterior drinking fountain for dogs and enhanced landscaping.



Calder/Lauderdale

The LRT will continue north, with an intersection at 130 Avenue. The LRT runs parallel with a proposed shared-use path for pedestrians and cyclists that will provide a connection from the Lauderdale off-leash area north to Castle Downs Park.

This section of the Metro Line corridor will be one of the narrowest cross sections along the alignment. The service road between 131 Avenue and 132 Avenue is planned to be converted to standard roadway.



132 Avenue Station

The LRT continues north along 113A Street until it reaches 132 Avenue Station. The station is a split-platform configuration where the platforms are located on opposite sides of the intersection. This station will service Rosslyn School, the Canadian Islamic Centre as well as the mature neighbourhoods to the west.



Kensington/Rosslyn

The LRT continues north past Rosslyn Park. An intersection at 134 Avenue will provide access into the nearby Kensington and Rosslyn neighbourhoods. Streetside parking is provided in the southbound direction from 134 Avenue to 135 Avenue.



137 Avenue Station

The LRT will continue north until it reaches 137 Avenue Station. This station will help to service the rapidly growing southwest portion of the Griesbach community, where a mix of higher-density residential and commercial land uses are planned. Streetside parking is provided in the southbound direction from 135 Avenue to 136 Avenue.

The 137 Avenue Station will be a trenched station where the LRT travels just below ground through an underpass. A trenched station will help mitigate traffic impacts on 137 Avenue and allow pedestrians to access the station without having to cross the intersection. The map shows a future six-lane configuration of 137 Avenue running east-west.



Carlisle/Griesbach

The LRT will continue north along Castle Downs Road.

The LRT will travel below ground through an underpass at 139 Avenue and Castle Downs Road.



Carlisle/Griesbach

The LRT will continue north past the nearby neighbourhoods of Carlisle and Griesbach.



145 Avenue Station

The LRT will continue north until it reaches 145 Avenue Station. The station is a split-platform configuration where the platforms are located on opposite sides of the intersection. This station will service the Griesbach development, as well as the mature neighbourhoods of Carlisle and Caernarvon to the west.

145 AVENUE STATION



Caernarvon/Griesbach

The LRT will continue north along Castle Downs Road past the Caernarvon and Griesbach neighbourhoods.



Caernarvon/Griesbach

The LRT will continue north, with an intersection located at 152 Avenue/McCrae Avenue.

CAERNARVON/GRIESBACH



Castle Downs Station

The LRT will continue north along Castle Downs Road and then turn west at 153 Avenue. This crossing will occur at street level.

Having the LRT station at street level will maintain connectivity with the transit centre and provide safe and easy access for pedestrians and cyclists. The current ETS bus transit centre north of 153 Avenue will be relocated next to the LRT platform to make it easier to transfer between bus and LRT.



Dunluce/Caernarvon

The LRT will travel west heading past Castle Downs Park, transitioning from the north side of 153 Avenue to the centre of 153 Avenue.

DUNLUCE/CAERNARVON

Ν



Dunluce/Caernarvon

The LRT will continue west on 153 Avenue. An intersection at 121 Street will provide access into the nearby neighbourhoods of Dunluce and Caernarvon.


Dunluce/Caernarvon

The LRT will continue west along 153 Avenue.



127 Street Station

The LRT will continue west until it reaches 127 Street Station.

The 127 Street Station will be a trenched station where the LRT travels just below ground through an underpass. A trenched station will help mitigate traffic impacts at this intersection, which is important since 127 Street is a truck route and a connector to Anthony Henday Drive.



127 Street Station

There are two trenched LRT stations along the Metro Line NW corridor, located at 127 Street and 137 Avenue. Stairs and elevators will provide access to the station from the street level.



Oxford/Cumberland

The LRT will continue west along 153 Avenue past the Oxford and Cumberland neighbourhoods.



137 Street Station

The LRT will continue west until it reaches 137 Street Station. This station will service the neighbourhoods of Oxford and Carlton to the north, and Cumberland to the south.

137 STREET STATION



Carlton/Cumberland

The LRT will continue west along 153 Avenue past the Carlton and Cumberland neighbourhoods.



Rampart Industrial

The LRT will continue west with an underpass below the existing CN rail tracks and return to street level at the 142 Street intersection.

E RAMPART INDUSTRIAL



Rampart Industrial

The LRT will continue west to the developing Rampart industrial neighbourhood. To the south of 153 Avenue is the proposed Operations and Maintenance facility and Henry Singer Park.



Rampart Industrial

The LRT will continue west along 153 Avenue.



N

Roadway Sidewalk Shared Use Parth Boulevard Potential Noise Attenuation

Trackway – At Grade (Street Level)

> Trackway – Grade Separated

> > Trackway - Underground

Metro Line LRT – Station Platform

Metro Line LRT – Utility Complex

Signalized Constraints Signalized Intersection

Crossing Warning Pedestrian Crossing Bike Lane



Rampart Industrial

The LRT will continue west along 153 Avenue.



Campbell Road Station

The Metro Line Northwest LRT will end at the Nakî Transit Centre and Park & Ride, located at Campbell Road and 153 Avenue. The LRT stop will be integrated with the Park & Ride facility to allow transfers between Edmonton and St. Albert.



TO FIND OUT MORE ABOUT THE METRO LINE NORTHWEST LRT PROJECT

City of Edmonton Visit: edmonton.ca/metronw Email: lrtprojects@edmonton.ca

Call: LRT Projects Information Centre at 780–496–4874 (voicemail)