

Valley Line West Light Rail Transit

Business Case Summary

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LRT DELIVERY
Integrated Infrastructure Services
City of Edmonton

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Overview

The appeal of living in West Edmonton is evident; there is an attractive mix of housing, new and revitalized commercial and retail centres, top-quality City services and a fantastic network of parks and recreational facilities. This makes it a popular place to live, work and play. The addition and prioritization of the Valley Line West extension reaffirms the City's desire to continue creating an intensified urban corridor, leveraging the ability of an LRT investment to further encourage vibrant, community-focused development and link West Edmonton communities with a reliable transit service.

As a major component of the overall Edmonton transit network, the delivery of this project will significantly enhance the lives of Edmontonians. It will reduce congestion, increase transit network capacity, transform surrounding communities, provide long-term environmental benefits and create job opportunities for Albertans and Canadians. This Business Case Summary for the Valley Line West extension provides an overview of the benefits it will bring to the region, Alberta and Canada as a whole.

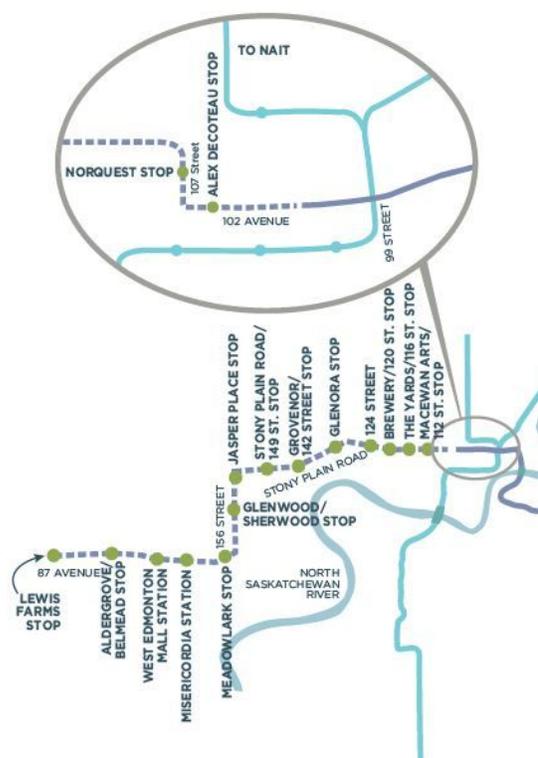
Background & Context

Valley Line West

The VLW extension will link West Edmonton communities with a reliable, premium transit service. The project is:

- 14 kilometre light rail extension
- Connects Edmonton City Centre to Lewis Farms
- 14 LRT stops and two elevated stations
- Five minute train headway

The VLW project is an extension of the currently under-construction Valley Line Southeast project.



Valley Line LRT

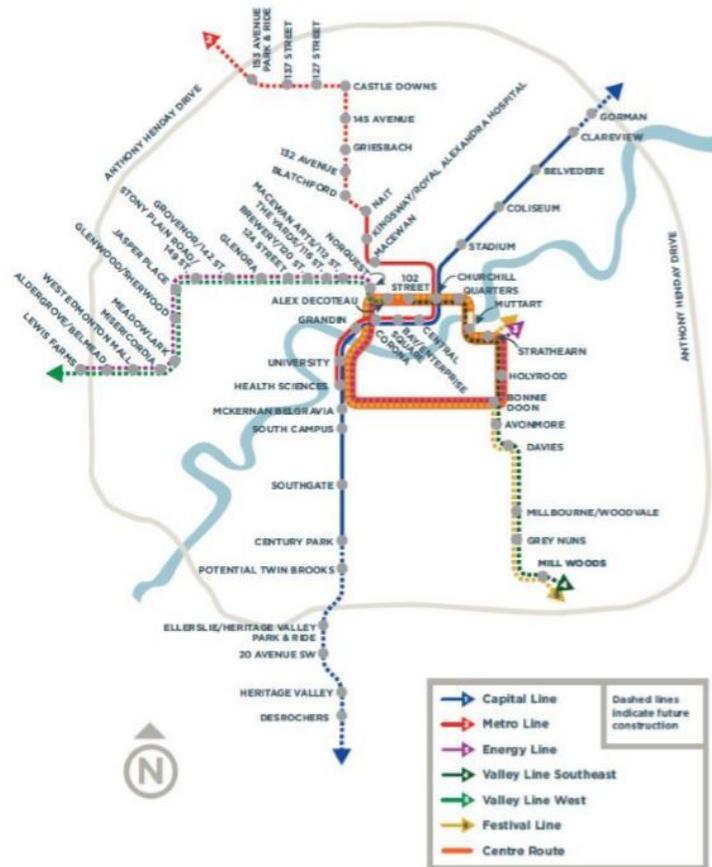
For the purpose of procurement and implementation, the Valley Line is being delivered in two phases - the Valley Line Southeast (VLSE) and the Valley Line West (VLW). When the two phases are completed, the project will be a 27-kilometre, low floor, urban style light rail transit (LRT) line operating from Mill Woods, in the City's southeast end, to Lewis Farms, at the City's western perimeter. The chosen "urban style" approach focuses on the benefits derived from smaller scale infrastructure and more frequent stops:

- Enabling enhanced user accessibility
- Facilitating a more human based connection to the community; and
- Promoting seamless integration into the urban environment

With confirmed investment, it will be the largest rapid transit investment in the City's history.

LRT Network

In 2009, the Edmonton Metropolitan Region Board, formerly known as the Capital Region Board, endorsed the Integrated Regional Transportation Plan (Master Plan); a plan designed to connect the Edmonton Metropolitan Region municipalities and set out principles to protect the environment, strengthen communities, minimize the regional footprint and increase regional economic development and transportation choices. The Master Plan identifies the LRT network as a critical component; delivering high



quality, fully accessible, safe, efficient and environmentally sustainable mode of transportation that maximizes passenger convenience and supports transit oriented land use policies. The Valley Line is one of the identified projects in the Master Plan.



**Rendering of Misericordia Station*

VLW Project Benefits

The investment in the Valley Line West extension will result in a number of benefits that will have a positive impact on commuters, communities, residents, businesses and the environment.

Transportation Benefits

Reduce Congestion



The VLW project will reduce congestion by moving people out of their cars and onto transit. It is anticipated that the Valley Line West will attract approximately 40,100 transit users on opening day, with ridership increasing over time.

Daily Ridership	Opening Day	20 Years
Valley Line West	40,100	58,900
Full Valley Line	78,500	128,900

Operating in its own right-of-way, the VLW will not only provide an efficient service for more people, but as roadway congestion increases in Edmonton, the LRT line will continue to

provide the same, consistent, quality journey time well into the future. Increasing transit ridership can also play an important role in reducing automobile-related collisions; changing land use and population density along the LRT corridor positively influence travel mode shift and access to LRT; fewer vehicle kilometers travelled can help decrease the likelihood of collisions particularly during the peak hours of commuter travel.

Improve Access



VLW will improve and increase travel from the region's western quadrant to the City's downtown core, providing greater transportation choice for the region's growing population. Additionally, it will provide greater access to and serve key landmarks such as Jasper Place, West Edmonton Mall and the Misericordia Hospital, as well as other businesses along the corridor.

In addition, the availability of affordable transportation will present better opportunities for lower-income populations, the elderly, disabled groups and youth -- providing them with greater access to medical facilities, public amenities, education institutions, employment opportunities and recreational facilities.

Provide Seamless Integration



People expect efficient and convenient access to transit systems, with adjacent amenities and pedestrian and cyclist infrastructure, including kiss and rides, convenient bus connections and park and rides. The VLW project will prioritize pedestrian movement and where possible, provide seamless integration to key cycling and pedestrian infrastructure to encourage greater use of the system and reduce



the need for travel by automobile. Developing a walkable and safe experience is vital to the users' experience in order to attract and promote spaces for people to work, live and interact.

Economic, Social and Environmental Benefits

Attract Employment and Create Jobs



The VLW project will generate direct jobs in design, construction, equipment, vehicle supply/installation and operations and maintenance; and will create indirect jobs with suppliers and services to the companies providing these elements. The expenditure of wages and salaries by these workers will support additional induced employment in a variety of goods and service industries. Altogether, project construction will result in **2,500** jobs over five years. Operations and maintenance will result in **425** jobs over thirty years.

Transform Communities



In order to maximize the effectiveness of investment in transit, the VLW will use an integrated approach to land use, enabling informed decisions that support an efficient, sustainable, compact and vibrant City. As set out by the City's Transit Oriented Development (TOD) guidelines, the VLW project will:

- Focus medium and higher-density residential and employment growth around LRT stations and ensure land use reflects the characteristics of surrounding areas
- Create a system that is safe and convenient for all modes of transportation, including pedestrians and cyclists
- Create a variety of public open spaces that will support existing and future population density



and activity around LRT platforms and station areas

- Create compact neighbourhoods that will bring together an appropriate mix of housing, jobs, shopping and services within convenient walking distance around transit stations
- Create opportunities for mixed-use developments that include affordable housing, encouraging a healthy labour market by attracting new workers to the City and providing opportunities for families to prosper and remain in neighbourhoods of their choice

Environmental Protection



Climate change is one of the fundamental issues of our time. The implementation of light rail transit provides opportunities to reduce automobile dependencies, thereby reducing harmful greenhouse gases. This will provide Albertans with cleaner air and a healthier environment. The integration of the VLW into communities will support and improve the quality of life and build healthy sustainable communities in Edmonton.

Through the efforts of integration, the VLW project is expected to reduce GHG emissions by **4,000** tonnes annually as a result of reducing automobiles and buses on roadways. In twenty years upon service commencement, year 2047, it is forecasted that the Valley Line West will reduce GHG emissions by approximately **15,000** tonnes.

Communications & Engagement

Edmontonians have played an essential role in the plan and design for the Valley Line LRT since 2008. Providing public experiences and perspectives has been vital to informing the development of VLW as LRT provides an important role in shaping and connecting the City.

Public input for the VLW began with the identification of the corridor in 2009 to the finalization of the concept plan



in 2011, the completion of the preliminary design in 2013, and through to the recent preliminary design update completed in 2018. Thousands of Edmontonians have been engaged through workshops, stakeholder interviews/meetings, questionnaires, online consultations and open houses.

A total of 17 formal drop-in sessions were held during the preliminary design phase in 2013 including on-site and online surveys, and over 50 formal meetings with community leagues, major businesses and key stakeholders/event groups. A total of 14 public engagements were held in 2017 with a combined attendance of 715 during the preliminary design review. In addition to informal meetings with community leagues, business associations and other key stakeholders, five formal public engagement events have occurred in 2018 to date, to continue sharing project information as designs continue to be updated.

Public Engagement

As the project proceeds, the City is committed to maintaining dialogue with communities and stakeholder groups through various forms of engagement such as community meetings, one-on-one discussions with businesses and property owners or presentations to business associations.

The City has also established five Citizen Working Groups along the Project's alignment as an ongoing commitment to public engagement. Citizen Working Groups are a major method of engaging with neighbouring communities during the updating of preliminary design, procurement, detailed design and construction of the VLW. The objectives for these committees are as follows:

- Build and maintain relationships and trust
- Facilitate information-sharing and dialogue
- Support the identification of issues, opportunities and concerns
- Seek opportunities to minimize and mitigate impacts

Indigenous Consultation

The Edmonton area resides within both Treaty 6 Territory and Region 4 of the Metis Nation of Alberta. The City is currently undertaking engagement with Indigenous communities on six LRT projects. The goal is to honour the importance of positive relationships within the

spirit of reconciliation. The process includes consultation, involvement, and ongoing communication through the design, procurement, construction, and operating and maintenance phases of the project.

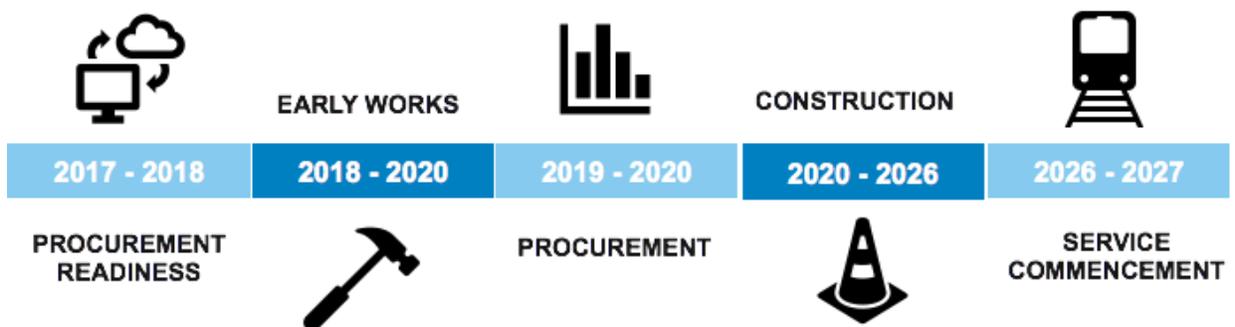
Innovation

A critical priority for the City is to design transit systems that are fully integrated into the communities they serve. Sustainable Urban Integration (SUI) was developed to focus the



integration of transit into the urban environment by providing safe, accessible and connected facilities. Building beyond just tracks and trains, the City aims to create neighbourhoods that are livable, pedestrian-friendly environments; ensuring that enhancements reflect the feel and character of each community along the LRT corridor. Additional features will include enhanced landscapes and hardscapes along the corridor that will create a natural environment incorporating organic material.

Project Timeline



*Timelines subject to change.



Valley Line West

Offering Premium, Reliable and Frequent Transit Service for Edmonton, Alberta