



Green Line will help shape **Calgary's** future.

Green Line Overview

The Green Line is The City of Calgary's next light rail transit (LRT) line and largest infrastructure investment in our city's history. With \$4.9 billion in commitments from the Government of Canada, Government of Alberta and City of Calgary, the approved Stage 1 alignment is ready for construction building the first phase from Shephard to Eau Claire.

Phase 1 of the Green Line LRT project is important to completing Calgary's rapid transit network providing seamless connectivity with the existing Red and Blue LRT lines and four MAX BRT routes. Calgarians will have fast, frequent and reliable transit service that connects communities, essential services and employment hubs across Calgary. Phase 1 builds the first 18km core of the long term 46km vision enabling future incremental expansion to realize the full benefits of the Green Line, including a future connection to Calgary International Airport and the Seton South Health Campus.

The Green Line Board is fully accountable for delivering the City's largest infrastructure investment on behalf of our funding partners and Calgarians. Reporting quarterly through the Priorities and Finance Committee the Board is made up of the City Manager and private citizens with expertise in governance, leadership, procurement, engineering design, construction, urban design and P3 transactions.

The business case for Green Line remains strong. The Board has undertaken due diligence on the cost and risk estimates and have confidence in the processes, data and estimates completed by the project team. The Board is firmly committed to managing costs and risks and should escalation costs and other risks not materialize, the Board will complete the Council-approved vision for Stage 1 and build from Eau Claire to 16 Avenue N. This phased construction is in line with Council's original direction to build the Green Line in a stage-gate project approach.

Construction of the Council approved Green Line Stage 1 project (Shephard to 16 Avenue N) is an important part of Calgary's economic recovery creating approximately 20,000 jobs. Our Enabling Works construction program has over 100 projects completed or underway and will continue to generate jobs between now and when the main construction begins.

The Green Line LRT supports long-term City of Calgary planning initiatives including Route Ahead, the Municipal Development Plan and Calgary Transportation Plan. A public transit network that connects Calgary's major employment hubs and residential areas is required in order to secure Calgary as the City of choice in Canada for the world's best entrepreneurs and to assist Calgary in recovering from the economic downturn with high levels of economic productivity.

2021 Spring Pulse Survey Results

- » 90% of Calgarians believe the Green Line LRT is important to the future of Calgary.
- » 91% agree that the Green Line LRT will enable Calgarians to better connect with people, places and services.
- » 89% of Calgarians agree that the Green Line LRT will be an important addition to Calgary's transportation network.

The City of Calgary surveys citizens about their opinions, preferences, and attitudes in order to help support data-driven City decision-making. The annual Spring Pulse Survey is one way Council and Administration can hear directly from citizens.

Stage 1 Quick Facts

Unprecedented investment from all orders of government
\$4.9B

Serve up to
65,000 LRT
customers daily

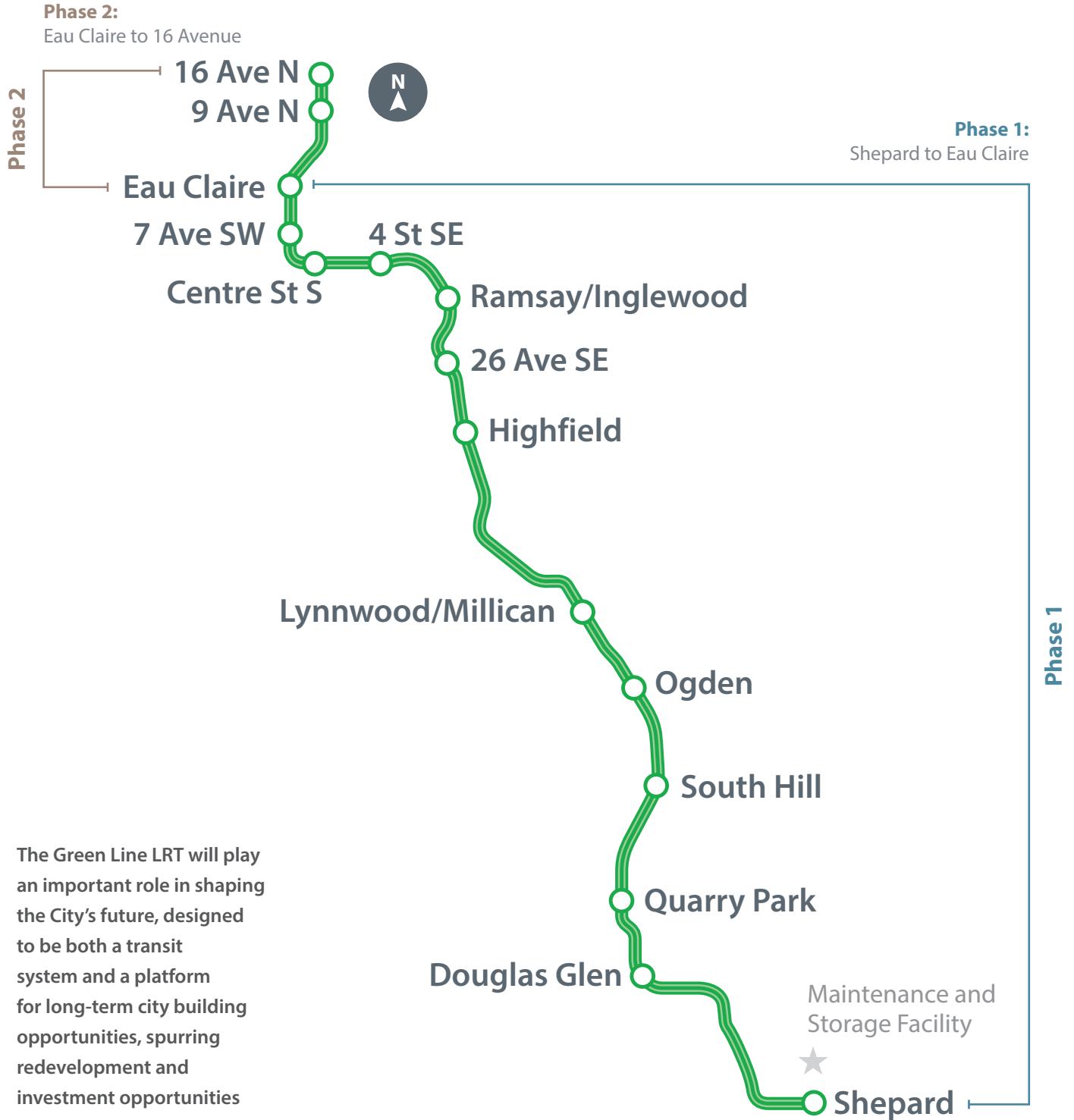
Generate
\$2.2B
in benefits to
Calgary

Create
\$2B
in potential property
value uplift by 2040

Create up to
20,000 jobs
both directly
and indirectly

Save up to
30,000 tonnes
of Greenhouse Gas
emissions a year

Green Line Stage 1 Map



The Green Line LRT will play an important role in shaping the City's future, designed to be both a transit system and a platform for long-term city building opportunities, spurring redevelopment and investment opportunities in Calgary businesses and communities.

Evolution of Green Line

The story of the Green Line LRT has evolved since 2011 with the help of Calgarians.

The need for an LRT line in southeast Calgary has been under consideration since the mid-1980s as communities in that area developed quickly. Rapid transit was envisioned for the north as early as 1967, and Centre Street N has evolved into the busiest bus rapid transit (BRT) corridor in the city.

See what milestones, public open houses and engagement sessions helped shaped the project.

2011

Nose Creek, Edmonton Trail, Centre Street N. Alignment Engagement

Around 2,150 Calgarians attended open houses. They explored the concept of an LRT line along Nose Creek, Edmonton Trail or Centre Street N.

2012

North Central LRT Alignment and Transit Oriented Development (TOD)

The North Central Planning Study looked into land use planning for TOD from 2012 to 2014. It showed communities would be better served if the North Central LRT was more centrally located.

2013

North Central Route planning Engagement

675 participants attended public engagement to help identify community traits and values based on feedback from 2011. They also reviewed alignment options and benefits of low-floor Light Rail Vehicles (LRVs).

2014

Alignment Development Engagement

Citizens in southeast and north Calgary were targeted for feedback on potential routes. This led to refining the southeast route and choosing the Centre Street N. alignment.

March 2014 – Notice of Motion to conduct TOD scoping and planning with the pre-design process and community-based visioning.

Transit Oriented Development (TOD) Background Research – Southeast

Green Line reviewed City policies, North American TOD best practices and conducted a GIS analysis of existing conditions and land use, which was used to help prioritize site selection.

Green Line estimated the long-term demand for multi-family housing. Potential for new office space and TOD was identified along the corridor.

2015

January 2015 – Council approved the route of the North Central LRT on Centre Street North.

Transit Oriented Development (TOD) Charrettes – Southeast

Three charrettes were held around TOD options and development concepts for five stations:

- South Hill
- Ogden
- Lynnwood/Millican
- 26 Avenue S.E.
- Ramsay/Inglewood

Citizen input helped clarify the scale and type of development for each station. Community issues and goals were worked into the conceptual designs, initial concepts and preferred development plan.

May 2015 – Notice of Motion to outline the project delivery model for the Green Line LRT.

December 2015 – Notice of Motion for municipal commitment (\$52 million for 10 years) to be extended to a 30-year period. The new total funding commitment would be \$1.56 billion. This decision was based on the federal government pledge through the Public Transit Fund. It relied on a provincial government funding commitment that was confirmed in 2017.

2016

Centre City and Beltline Engagement

Feedback was collected to evaluate the Centre City and Beltline routes. This helped City Council decide to build a tunnel through this section of the alignment. In December, route options were narrowed through the Beltline to the 12 Avenue S. corridor.

Transit Oriented Development (TOD) Market Analysis – North

Green Line estimated the long-term demand for different types of housing and office space. Implications for TOD options were identified along different parts of the corridor.

Transit Oriented Development (TOD) Charrettes – North

Three charrettes were held around development of Station Area Concept Plans for the north alignment:

- 64 Avenue N. station
- 40 Avenue N. station
- Along the corridor for 9, 16 and 28 Avenues.

The concept plans were used to develop Station Area Plans, Local Area Plans and Area Redevelopment Plans.

Transit Oriented Development (TOD) Background Research – North

Green Line reviewed City policies, North American TOD best practices and conducted a GIS analysis of existing conditions and land use, which was used to help prioritize site selection.

Refinement Engagement – North

Workshops were held in northern communities. Feedback showed how the Green Line could help:

- Build community
- Protect local businesses
- Optimize station locations
- Enable pedestrian and cycling access
- Deal with safety, traffic and parking issues

2017

Beltline Alignment Engagement

Engagement sessions were held on four alignment options for Victoria Park. The transition to 10 Avenue S.E. was selected to connect the Beltline to the Ramsay/Inglewood Station. This addressed traffic concerns and minimizes impacts to residential communities.

Green Line Urban Integration (GLUI) Framework

A 3-volume GLUI framework was developed that:

- Sets guiding principles for how the Green Line LRT will fit within the community
- Describes the look and feel of the LRT environments
- Details how to apply the urban integration framework

This framework will be used by contractors building the Green Line.

Framework for Transit Oriented Development (TOD) Implementation Strategy

The TOD Implementation framework outlined the proposed approach and outputs for the strategy. Among the nine objectives was a City-wide perspective on TOD implementation that was adopted as part of The City's TOD Program (presented to Council in 2019).

Green Line in My Community (GLIMC) Engagement

Citizens attended events for the north, southeast, City Centre and Beltline alignments and gave insight into:

- the thoughtful integration of Green Line into communities
- plans to improve community livability

Green Line LRT Report

The Building the Core report established Shepard. to 16 Avenue N. as Stage 1. This met criteria like:

- Stakeholder preparedness
- Sufficient functional and initial designs
- Procurement strategy aligned to the project objectives

City Shaping Framework

City Shaping is Layer 4 of the Green Line planning approach. The City Shaping framework outlined:

- Guiding principles
- Potential actions to improve quality of life for communities along the Green Line

The Integrated Transportation and Land Use Planning approach was shared at conferences in Canada, United States and Singapore.

June 2017 – Council approved Green Line LRT alignment and stations (160 Avenue N. to Seton).

July 2017 – Government of Alberta announced \$1.54B funding commitment.

2018

Green Line in My Community (GLIMC) Engagement

GLIMC open house and pop-up sessions gathered input on station designs:

- above-grade
- at-grade
- below-grade

They covered things like station look and feel, safety and security, and community experience. Input informed the Technical Performance Requirements (TPRs) for all stations.

May 2018 – Government of Canada announced \$1.53B funding commitment.

December 2018 – Notice of Motion to explore using Green Line public art funding to implement public gardens around Green Line stations.

2019

January 2019 – Funding agreement signed by the Government of Canada, the Government of Alberta and The City of Calgary.

Transit Oriented Development (TOD) Implementation Strategy

The TOD Implementation Strategy enables TOD to thrive in Calgary. It identified four key actions:

- Complete station area reviews
- Develop funding and investment tools
- Support the TOD policy
- Foster collaborative partnerships

Public Gardens Scoping Report

An informal Steering Committee helped develop a Public Gardens Scoping Report that sets a vision for:

- Adding greenery along the Green Line
- Promoting art
- Educating citizens
- Creating outstanding public spaces

Council approved development of a master plan for six public garden projects. These projects were based on the historic railway gardens concept.

July 2019 – Council approved the contracting strategy.

July 2019 – Notice of Motion to form an informal Public Gardens Committee. They will explore a modernizing traditional Railway Gardens and the feasibility of using the Public Art budget to integrate art as part of the public gardens.

2020

Business Support Program

Online engagement helped develop a Business Support Program. The goal is to help businesses and communities prepare for and manage the potential impacts of construction. A Business Insights Panel was recruited to advise on and share insights from the business community.

Updated Alignment Engagement

Stakeholders discussed challenges with the proposed Bow River tunnel and alignment changes. The Stage 1 alignment was updated to replace the tunnel with a bridge. The decision was made to construct Stage 1 in three segments:

- Segment 1: Shepard to Elbow River
- Segment 2A: 2 Avenue S.W. station to Elbow River
- Segment 2B: 16 Avenue N. to north of 2 Avenue S.W. station

June 2020 – Council approved the updated Stage 1 alignment.

July 2020 – Council approved the Green Line governance structure.

November 2020 – The TOD Implementation Framework received the Outstanding Planning for Human Settlements/Plan Making from the Commonwealth Association of Planners.



2021

Segment 2 Functional Plans

The updated Segment 2 Functional Plan was presented to the Green Line Committee on May 19, 2021 and was approved. They included:

- Functional plans for Beltline & Downtown and the Bow River bridge
- Crescent Heights plans
- Findings from North Central Mobility and Bus Rapid Transit (BRT) studies

Utility Relocation Project Announcement

The project to relocate utilities in east Beltline and Downtown will start. This project will make way for the main alignment construction of the tunnel, track and stations.

Green Line CEO

The Green Line Board appointed Darshpreet Bhatti as CEO of the Green Line LRT project effective August 16, 2021.

Green Line Board

The City announced a new Green Line Board, comprised of nine members, that will govern, oversee and deliver the Green Line LRT project.

Segment 2 Engagement

A variety of virtual engagement opportunities were conducted to help inform functional planning for project areas in segment 2 (4 Street S.E. to 16 Avenue North):

- Downtown and beltline
- Crescent Heights (Streetscape Masterplan for Centre Street North and Crescent Heights Mobility Study)
- North Central Mobility and Bus Rapid Transit (BRT) Studies
- Bow River LRT bridge

Government of Alberta Approves Green Line LRT Project

Following an extensive review of the overall Green Line LRT project, the Government of Alberta approved the redefined procurement strategy and federal funding business case. The Green Line will be constructed through a new phased approach, with the first phase building the LRT from Shepard to Eau Claire.