

**Infrastructure Services Report to
Regular Meeting of Council
2025 January 28**

**ISC: UNRESTRICTED
C2025-0133**

Green Line Update - Verbal

PURPOSE

The Green Line LRT is a long-term investment in much needed transit infrastructure for the City of Calgary. With more than \$6 billion in funding commitments from the City of Calgary, Province of Alberta and Government of Canada, and almost \$1.4 billion spent to date on construction, vehicles, land and engineering/design, the City and Province have been working together on leveraging the investments made and maintaining the funding commitments for a reimagined Green Line since September 2024.

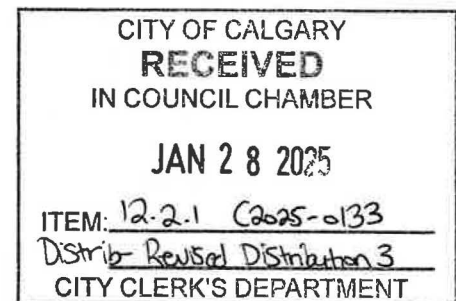
The City and Province share a common vision for a south-to-north Light Rail Transit (LRT) program in the City of Calgary that extends from Seton in the southeast through the downtown on 2 Street S.W. to 160 Avenue N.

The recommendations to Council reflects the shared interests, realized through the Reimagined Green Line Working Group, the significant investments (60% design and enabling construction) already made in the southeast, funding previously committed and an understanding that additional work is needed to progress the Downtown segment.

Approval of these recommendations will allow the City to submit an update to the approved 2021 Investing in Canada Infrastructure Program (ICIP) business case to the Province and Government of Canada, and pending their approval, proceed with main construction of the SE Segment, from Shepard to the Event Centre/Grand Central Station, concurrent to developing the Functional Plan for the Downtown Segment.

PREVIOUS COUNCIL DIRECTION

17 September 2024 – Regular Council (C2024-1048), 8 October 2024 – Council at Public Hearing (C2024-1140), 26 November 2024 – Regular Council (C2024-1292), and 17 December 2024 – Regular Council (C2024-1327), 14 January 2025 – Council at Public Hearing (C2025-0095).



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RECOMMENDATION(S):

1. Endorse the shared common vision between the City of Calgary and the Government of Alberta for a south-to-north Light Rail Transit (LRT) program in the City of Calgary that extends from 160th Avenue North through the downtown on 2 Street SW to Seton in the Southeast, which includes:
 - a. Connection to the Red and Blue Lines;
 - b. Connection to the new event centre; and
 - c. Allows for a future connection between south and north legs of the LRT.
2. Direct Administration to implement a concurrent development process for delivery of a south-to-north LRT program, as follows:
 - a. SE Segment: Shepard to Event Centre/Grand Central Station – Begin construction in 2025 and
 - b. Downtown Segment: Event Centre/Grand Central Station through Downtown – Begin Functional Plan in 2025.
3. Direct Administration to work with the Government of Alberta to submit an updated business case to the Government of Canada by February 14, 2025. The business case will be for the proposed concurrent development of the SE and Downtown Segments in order to secure the federal funding based on requirements of the Investing in Canada Infrastructure Program (ICIP) grant.
4. Upon confirmation of ICIP funding for the SE and Downtown Segments, direct Administration to begin construction in 2025 for all required project elements for an operational LRT system for the SE Segment, including but not limited to:
 - a. Track;
 - b. Stations;
 - c. LRT Systems;
 - d. Bridges;
 - e. Maintenance and storage facility; and
 - f. Delivery of the Light Rail Vehicles.
5. Direct Administration to immediately undertake the Functional Plan for the Downtown Segment of the LRT from Event Centre/Grand Central Station through Downtown. The Functional Plan will include but not be limited to:
 - a. Advancing design;
 - b. Validating the cost estimate;
 - c. Engagement and collaboration from stakeholders and community members;
 - d. Flooding and Stormwater impacts;
 - e. Noise and Vibration;
 - f. Property Impacts: access/egress and assessed value impacts;
 - g. Safety impacts: crime prevention through environmental design (CPTED) considerations;
 - h. Traffic modeling and traffic impacts; and

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i. Transit system underlying service impacts.

With reporting back directly to Council with the results of the Downtown Segment Functional Plan no later than the end of Q4 2026, with updates directly to Council quarterly or as required at the discretion of Administration.

6. Following the completion of the Downtown Segment Functional Plan work, including the validation of the Government of Alberta cost estimate, and with broad project support from Calgarians and Stakeholders, seek Council direction to initiate construction including enabling works in 2027.
7. Once construction on the Downtown Segment has been initiated, direct administration to undertake the Preliminary Design for the south-to-north LRT program from:
 - a. Shepard to Seton; and
 - b. Downtown to 160 Avenue North.
8. Direct Administration to collaborate with the Government of Alberta to establish a program governance and delivery oversight committee comprised of equal representation from the Government of Alberta and the City of Calgary.
9. Direct Administration to advise the Government of Canada and the Government of Alberta of Council's approval of the recommendations in this report.
10. Direct that the Confidential Distributions #1, #2 and #4, Distributions #3 and #5 and Closed Meeting discussions be held confidential pursuant to Sections 16 (Disclosure harmful to business interests of a third party), 17 (Disclosure harmful to personal privacy), 21 (Disclosure harmful to intergovernmental relations), 24 (Advice from officials), 25 (Disclosure harmful to economic and other interests of the public body) and 27 (Privileged Information) of the Freedom of Information and Protection of Privacy Act, to be reviewed by 31 December 2039.

CHIEF ADMINISTRATIVE OFFICER/GENERAL MANAGER COMMENTS

General Manager of Infrastructure Services, Michael Thompson, concurs with the content within this report.

HIGHLIGHTS

- On September 17, 2024, Council began the wind down of the Green Line LRT Program following the withdrawal of \$1.53B in provincial funding.
- Shortly thereafter, an interim agreement was reached between Council and the Province to restore provincial funding, continue to advance design beyond 60% in the southeast, retain the contract for the Light Rail Vehicles (LRV) and work together on a Reimagined Green Line, through a City/Provincial Working Group. These efforts would be concurrent to the Province's work to develop a new alignment for the Downtown Segment.

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- On December 13, 2024, Council received a Concept Plan for the Downtown Segment from the Province. At 5% design, the Concept Plan presented a number of alignment options that would allow Green Line to connect into the existing Red and Blue Lines while exploring different street and avenue configurations. In their summary, the Province concurred with the previous City decision that 2 Street S.W. was the best north-south route while identifying 10 Avenue as their preferred east-west route.
- The Province confirmed that additional work is required on the Downtown Segment. This work would include but not be limited to impact assessments to existing City and private infrastructure, public engagement, negotiations with CPKC and additional design and cost estimates. This work would be delivered through a Functional Plan.
- As design has progressed since October 2024 on the SE Segment, from Shepard to the Event Centre/Grand Central Station, and the extensive investments already completed in early works construction, it is on track for main construction to proceed in 2025.
- The concurrent development of the Functional Plan for the Downtown Segment and getting shovels in the ground on the SE Segment is the most practicable path forward towards delivering the Green Line for Calgarians leveraging investments to date and ensuring the previous funding commitments can be realized.
- The Green Line supports critical priorities of all orders of government including housing, affordability, and economic growth and provides long-term significant transportation, economic, social, and environmental benefits. Constructing the first almost 18kms of an overall 46km vision, from Shepard in the southeast and into the downtown, will build the backbone of the south-to-north LRT to connect our growing city and Calgarians.

DISCUSSION

Concurrent Development

Work on the Green Line LRT has been underway for a decade, completing planning and design to 60% and more than \$400 million in early works construction on the previously approved alignment, from Shepard to Eau Claire, with a 2 km tunnel to connect into the downtown. With the Concept Plan received from the Province in December 2024 for an alternate alignment into the downtown, the SE and Downtown Segments are at very different states of readiness.

Following the agreement through the Reimagined Green Line Working Group on October 10, 2024, design work has been able to progress beyond 60% on the SE Segment with the intention of getting shovels in the ground and beginning main construction as soon as practicably possible in 2025.

The costs and risks are known, the public have been engaged and the due diligence requirements has been satisfied for the SE Segment.

The need to connect into the Downtown is the catalyst to begin unlocking the long-term City-shaping benefits of the Green Line. To do that though, more work is needed to advance beyond a Concept Plan.

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The Province confirmed their expectation that these next steps would be undertaken. By beginning work immediately on a Functional Plan, the City and Province will deliver on these expectations by advancing design, validating cost estimates, evaluating the risks and potential impacts to existing City and private infrastructure, negotiate with third parties including property owners and CPKC, and undertake public engagement.

City requirements for informed decision-making have always included these components and been part of all current and previously completed infrastructure investments.

The Green Line LRT remains a critical priority for the City of Calgary and Calgarians and will have a significant benefit to mobility, housing and urban development, including:

- Improving mobility choices. By providing fast, frequent and reliable transit service that strategically connect communities, employment hubs and key destinations, with almost 55,000 riders on opening day, the Green Line LRT will save Calgarians time traveling to work, school and recreational activities.
- Catalyzing development. Within 800m of station areas, there is capacity to deliver 77,000 housing units, based on Calgary's current TOD density. However, given Calgary's explosive population growth and the pace of development experienced by other comparable cities upon completion of major transit infrastructure, over 114,000 new housing units could be unlocked with this investment
- Laying foundations for future expansion. By delivering the foundation that connects into the downtown, the final destination from origins in the southeast and north central Calgary, it enables incremental future expansion toward the overall 46km vision, as funding becomes available.
- Connecting the city. The Green Line is the next step for completing Calgary's rapid transit network providing seamless connectivity with the existing Red and Blue LRT lines and three MAX transit routes.

These benefits can only be realized by seizing opportunities that allow for the City to start building the Green Line LRT and keep building. Progressing the SE and Downtown Segments is that first opportunity.

EXTERNAL ENGAGEMENT AND COMMUNICATION

- | | |
|---|--|
| <input type="checkbox"/> Public engagement was undertaken | <input type="checkbox"/> Dialogue with interested parties was undertaken |
| <input checked="" type="checkbox"/> Public/interested parties were informed | <input type="checkbox"/> Public communication or engagement was not required |

The City of Calgary began engagement on the overall Green Line Program in 2013. In Fall 2024, public information sessions were held to share the 60% design of the SE Segment, and the basis of which design was progressing. The Government of Alberta and City met with select

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interested parties in November 2024 about the Downtown Segment. Public engagement for the Downtown is included in the Functional Plan deliverables.

IMPLICATIONS

Connecting the southeast into the downtown will result in outcomes which include social, environmental, and economic benefits for generations to come.

Social

Transit-oriented development (TOD) scoping and planning was conducted with Green Line's pre-design process and community-based visioning in 2015 and informed alignment decisions. Areas were identified based on those with the highest development potential and that could have multi-family developments and complete transit-oriented development by 2045.

Environmental

Investment in transit provides environmental benefits that extend beyond the reduction of GHG. Light Rail Transit (LRT) is energy efficient. At maximum passenger capacity, the LRT is 58 times more energy efficient than driving a car.

Improved, higher quality transit service and complete communities also attract higher levels of ridership, decreasing the environmental impacts associated with urban travel but also support compact growth which in turn provides health benefits. Reduction in greenhouse gases and social health benefits are therefore realized by maximizing transit investments.

Economic

Leveraging the transit investment maximizes the economic return through land use with the intent of providing new and redevelopment opportunities along the corridor. The land value uplift is anticipated to be between \$24.8B to \$36.3B, based on 2024 values. This reduces the fiscal impact of growth and promotes integrated and sustainable development.

The investment in transit provides the opportunity to attract global corporations in innovative industries to promote a diversified economy in Calgary. As a result, more population and activity generate sustained ridership and economic growth thereby creating a multiplier effect of the infrastructure investment.

Service and Financial Implications

Prior to beginning revenue service, the Green Line LRT will necessitate several changes to the local bus network to maximize the effectiveness of the LRT. This has been included in the Program budget.

Existing capital funding - base

Previously approved funding of \$2,200 million plus \$451 million in financing costs (EC2024-0809) will be used to construct the SE Segment, complete the Function Plan and support future construction of the Downtown Segment.

These funds are in addition to commitments from the Government of Canada (\$1,641 million) and the Province of Alberta (\$1,792 million).

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RISK

The Green Line LRT Program is a multi-billion transit investment that necessitates an ongoing thoughtful and diligent approach to identifying and managing risks throughout the entire Program lifecycle.

The overall Program risk assessment and mitigations have been completed for the SE Segment (EC2024-0871), and, through the Functional Plan, will be developed for the Downtown Segment.

\$4.65B of funding for Green Line has been committed through the Investing in Canada Infrastructure Program (ICIP). The Program closes on March 31, 2025 necessitating the urgent need to prepare and submit an update to the approved 2021 Federal Funding ICIP Business Case. The Update needs to be approved by both the Province of Alberta and Government of Canada in a very tight timeframe. The constraints have been discussed, and there is agreement that the Update would be submitted by February 14, 2025, and can be received concurrently to expedite the process.

Department Circulation

General Manager/Director	Department	Approve/Consult/Inform
David Duckworth	Chief Administrative Office	Approve
Stuart Dalgleish	Chief Operating Office	Approve
Michael Thompson	Infrastructure Services	Approve
Doug Morgan	Operational Services	Consult
Jill Floen	City Solicitor/ Law, Legislative Services & Security	Consult
Les Tochor	Corporate Planning & Financial Services	Consult
Debra Hamilton	Planning & Development Services	Inform
Katie Black	Community Services	Inform
Chris Arthurs	People, Innovation & Collaboration Services	Inform

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