

Infrastructure Services Report to
Infrastructure and Planning Committee
2024 October 16

ISC: UNRESTRICTED
IP2024-0977

Biannual Infrastructure Insights Report – Q3 2024

PURPOSE

The Biannual Infrastructure Insights Report highlights infrastructure projects underway to build resiliency in Calgary and investments made to continuously improve and optimize service delivery and value for Calgarians. It also summarizes how we are responding to key challenges, such as the Bearspaw South Feeder Main Break, and how Capital Cost Escalation and Advance to Shovel Ready Funds are being allocated to advance council approved investments and accelerate early capital investment deliverables.

PREVIOUS COUNCIL DIRECTION

There is no previous Council direction on the Biannual Infrastructure Insights Report

RECOMMENDATIONS:

That the Infrastructure and Planning Committee recommend that Council:

1. Receive this report for the corporate record.
2. Direct that Confidential Attachment #3 be held confidential pursuant to Section 25 (Disclosure harmful to economic and other interests of a public body) of the *Freedom of Information and Protection of Privacy Act*, to be reviewed by 2034 October 16.

RECOMMENDATION OF THE INFRASTRUCTURE AND PLANNING COMMITTEE, 2024 OCTOBER 16:

That Council:

1. Receive this report for the Corporate Record; and
2. Direct that Confidential Attachment 3 be held confidential pursuant to Section 25 (Disclosure harmful to economic and other interests of a public body) of the *Freedom of Information and Protection of Privacy Act*, to be reviewed by 2034 October 16.

CHIEF ADMINISTRATIVE OFFICER/GENERAL MANAGER COMMENTS

The General Manager of Infrastructure Services, Michael Thompson, supports the recommendations in this report.

HIGHLIGHTS

- **The City is committed to building a resilient city that provides Calgarians with equitable access to the services they value.** Our response to the Bearspaw South Feeder Main Emergency, as well as the investments in the projects highlighted in this report demonstrate how we are increasing Calgary's environmental, social, and economic resilience.
- **As Calgary continues to quickly grow towards a city of two million, our infrastructure gap is also growing.** We are monitoring our assets closely and implementing actions to keep services affordable, available, and accessible for everyone.

Biannual Infrastructure Insights Report - Q3 2024

- **We are piloting and adopting new, innovative, and customer-focused approaches to construction in Calgary.** These initiatives aim to elevate the experience of Calgarians and businesses who are impacted by construction projects in the city, as well as the overall experience of people who use infrastructure services in the city.

DISCUSSION

This report provides Council and Calgarians with line of sight to Infrastructure Services' contributions to building a vibrant and resilient city for future generations in alignment with The City's and Council's Strategic Agenda. Through these works, we are enhancing Calgary's global reputation as one of the most livable cities in the world. Additional, detailed information is included as Attachment 1, Biannual Infrastructure Insights Report – Q3 2024. The associated presentation is included as Attachment 2.

Project Highlights

Five projects are highlighted in this report:

- **144 Avenue N.W. West Nose Creek Bridge:** We are accelerating community growth and home building in Sage Hill, Glacier Ridge, Moraine, Carrington, and Livingston, by providing improved transportation networks and facilitating east-west transit connectivity. Construction is underway with completion scheduled for this Fall.
- **Sunnyside Flood Barrier:** We are building a 1:100 level flood barrier to increase our flood resiliency while creating spaces that enhance connection along the Memorial Parkway Corridor. The 2.4 kilometer barrier is located along one of Calgary's most cherished corridors and will help us avoid the type of damage we witnessed from the 2013 flood. Construction is underway with completion set for Spring 2026.
- **Mission Bridge Rehabilitation:** We are rehabilitating one of the oldest concrete bridges in Alberta to improve mobility for pedestrians, cyclists, and motorists who live around the communities of Roxboro, Rideau, and the Mission District, and extend the lifespan of the bridge. Construction is underway and is expected to be completed in Winter 2025.
- **4 Avenue Flyover Rehabilitation:** We are rehabilitating the 4 Avenue Flyover to extend its lifespan. Our investment will ensure that the bridge continues to be functional, reliable, and in good condition for commuter use, currently around 29,000 vehicles per day. Construction is underway and is anticipated to be completed in Fall 2025.
- **Constellation Industrial Park:** We have launched Phase 1A of Constellation Industrial Park, a major initiative of The City of Calgary's Industrial Land Development Program. This will foster economic growth, employment opportunities, and community benefits by developing industrial lands for sale to end users and developers looking for shovel-ready and immediate development. This project will contribute significantly to the city's non-residential tax base and provide revenue that will help support and fund affordable housing in Calgary. The development is phased with remaining releases planned between 2026 and 2029.

Biannual Infrastructure Insights Report - Q3 2024

Navigating Challenges

Calgary continues to be one of the fastest growing cities in Canada. As of 2024 April 1, Calgary's population is estimated at 1,491,900, representing a population growth rate of 4.9 per cent since 2023 April. It is expected that Calgary's population will exceed the two million mark faster than anticipated.

As our population grows, the demand for services that our infrastructure provides grows. Our infrastructure gap, last estimated in the 2020 Infrastructure Status Report at over \$7 billion, is also growing. The gap is the difference between the required investment in assets to meet service levels, including preventative maintenance, and the financial resources available to address those needs. An update to the Infrastructure Status Report (ISR) is scheduled for early Q1 of 2025, providing the current status of municipal infrastructure and an updated estimate of the infrastructure gap.

We are also contending with inflationary pressures as several capital projects continue to experience cost escalations. The \$147 million Capital Cost Escalation fund approved by council in November 2023 has enabled the City to respond to cost escalations in a flexible manner, preventing significant delays, de-scoping, or cancellation on some projects. However, there are still several requests that remain unfunded. Administration is proposing additional contributions to the fund at Mid-Cycle Adjustments, as we continue to look for alternate funding sources to successfully deliver all capital investments.

On 2024 June 5, the Bearspaw South Feeder Main, one of The City's critical water infrastructure assets, suffered a catastrophic failure that led to over 30 days of city-wide service disruption. The City adopted a collaborative approach, involving industry partners, the private sector, and other agencies in responding to the emergency. This approach, combined with the water conservation efforts of Calgarians, allowed for the timely restoration of the feeder main, surpassing initial timelines. Our response to the feeder main break impacted our delivery on other capital projects. This impact is felt in terms of schedule delays and in some cases cost escalations. The list of projects impacted by our efforts to respond to the water emergency is detailed in Confidential Attachment 3.

Infrastructure Services is committed to improving the system redundancy for our water infrastructure. We are advancing several phased infrastructure projects, including:

- Design and construction of the North Calgary Water Servicing project.
- Design and construction of a new underground reservoir at Glenmore Water Treatment Plant.
- The South Calgary Water Servicing project - a new feeder main to move water to south Calgary from the Bearspaw Water Treatment Plant.

Delivering Great Service and Value for Calgarians

We are piloting different initiatives that aim to elevate the experience of Calgarians and businesses impacted by infrastructure construction projects. Key initiatives highlighted in this report include:

- Piloting a Business Support Grant to offset construction impacts on businesses in Marda Loop and Bridgeland and encourage patronage during construction. Approximately two-

Infrastructure Services Report to
Infrastructure and Planning Committee
2024 October 16

ISC: UNRESTRICTED
IP2024-0977

Biannual Infrastructure Insights Report - Q3 2024

thirds of the grants have been approved and over \$800,000 in grant monies have been provided directly to businesses.

- Coordinating across project teams to mitigate the impacts of overlapping construction projects in the Riley area. We are using innovative approaches to respond to the needs of the impacted communities, providing information on project details and outlining what they can expect as the projects advance to their various completions.
- Piloting an initiative that will help us understand the challenges Calgarians face during construction projects so that we can quickly prototype practical solutions and assess if overall experience is improved.

We are also deploying tools that will enable Calgarians to stay up to date with projects of interest, at their convenience. This interactive map offers comprehensive insights into select, ongoing infrastructure capital projects in an open and transparent way. The Appendix of Attachment 1 summarises the projects included and their associated budget and schedule status.

All these efforts exemplify our commitment to creating a citizen-centric and resilient city for now and for future generations. The outcomes of these work help build economic, social and climate resilience within Calgary and further Calgary's global positioning and reputation as one of the most livable cities in the world.

EXTERNAL ENGAGEMENT AND COMMUNICATION

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

The Biannual Infrastructure Insights Report is published for public use after the presentation to Council. Calgarians are able to access the report via calgary.ca/infrastructure-reports.

IMPLICATIONS

Social, Environmental and Economic Implications

This report includes a variety of infrastructure projects that are creating a more accessible and resilient city for future generations. These projects demonstrate the range of work we are undertaking across the department to improve our social, environmental, and economic resilience.

Service and Financial Implications

No anticipated financial impact

RISK

There are no risks associated with the recommendations.

**Infrastructure Services Report to
Infrastructure and Planning Committee
2024 October 16**

**ISC: UNRESTRICTED
IP2024-0977**

Biannual Infrastructure Insights Report - Q3 2024

ATTACHMENTS

1. Biannual Infrastructure Insights Report – Q3 2024
2. Biannual Infrastructure Insights Report Presentation
3. CONFIDENTIAL Infrastructure Services Project Impact due to the Bearspaw South Feeder Main Break

Department Circulation

General Manager/Director	Department	Approve/Consult/Inform
Michael Thompson	Infrastructure Services	Approve
Ryan Vanderputten	Infrastructure Services	Approve
Kerensa Fromherz	Infrastructure Services	Approve
Graham Duckworth	Infrastructure Services	Approve
Francois Bouchart	Infrastructure Services	Approve
Campbell Berry	Infrastructure Services	Approve
Kara Wolfe	Infrastructure Services	Approve
David Duckworth	Chief Administrative Officer	Inform
Stuart Dalgleish	Chief Operating Officer	Inform
Carla Male	Corporate Planning and Financial Services	Inform
Jill Floen	Law, Legislative Services and Security	Inform
Chris Arthurs	People Innovation and Collaboration Services	Inform
Doug Morgan	Operational Services	Inform
Katie Black	Community Services	Inform
Debra Hamilton	Planning and Development Services	Inform
Kyle Ripley	Operational Services	Inform
Nancy Mackay	Operational Services	Inform
Heather Johnson	Community Services	Inform
Teresa Goldstein	Planning and Development Services	Consult
Amit Patil	Corporate Planning and Financial Services	Consult
Les Tochor	Corporate Planning and Financial Services	Consult

Author: Afolabi Soaga, Infrastructure Services
City Clerks: C. Doi / C. Nelson