

Green Line Segment 2A
Downtown & Beltline

April 15, 2021 6:30 – 8 p.m.

In the spirit of reconciliation, we acknowledge that we live, work and play on the traditional territories of the Blackfoot Confederacy (Siksika, Kainai, Piikani), the Tsuut'ina, Stoney Nakoda(Chiniki, Bearspaw & Wesley First Nations), the Métis Nation (Region 3), and all people who make their homes in the Treaty 7 region of Southern Alberta.



### How to participate

# Questions and comments can be posted in the chat box of the Microsoft Teams live event

- Questions will be read by the moderator and answered by our presenters following the presentation
- No names will be used when questions or comments are read out during the session



#### IMPROVING USER EXPERIENCE

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### Today's agenda

- 1. Welcome and introductions
- 2. Green Line LRT project update
- 3. Functional planning and delivery model
- 4. Engagement journey
- 5. Segment 2A update
  - Elbow River LRT bridge
  - Beltline
  - Downtown
- 6. Next steps
- 7. Questions



# Green Line project update



### Long term vision

A city shaping transit service that improves mobility in communities in north and southeast Calgary, connecting people and places, and enhancing the quality of life in the city.

#### Once built out, the entire Green Line will:

- Serve Calgarians in 27+ communities
- Support over 220,000 to 240,000 trips per day
- Provide a future airport connection
- Support future Transit Oriented Development
   (TOD) in 10 stations areas
- Consist of 46 km of track
- Include 28 stations





### Updated Stage 1 alignment

#### Stage 1 is funded



Approval of stage 1 was a pivotal first step in achieving the vision of Green Line promised for Calgarians.

- **20,000** jobs
- 10,000 hours per day
- Connects communities





#### **Milestones**

- Enabling works / utility relocation program
  - Segment 1: 14 enabling works projects completed in 2020, including over 300 utility relocations
  - Segment 2: Construction management firm has been selected through procurement process for utility relocation program; Enabling works construction is scheduled to begin this year.
- Segment 2 functional planning

We are here

- Segment 2A (Downtown & Beltline area)
- Planning in Crescent Heights: Centre Street North Streetscape Masterplan and Crescent Heights Mobility Study
- North Central Bus Rapid Transit (BRT) Study
- North Central Mobility Study
- Bow River LRT bridge
- Centre Street South Public Realm Improvements



# Green Line functional planning and delivery model

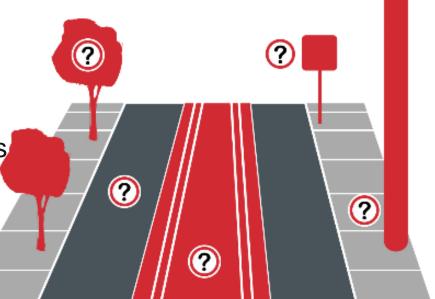




#### Segment 2 – Functional planning

 In segment 2 we are moving through a process called functional planning

 This is where we better understand the unique engineering requirements and any specific issues that need to be addressed to develop more detailed plans for the project



 The functional plan will be completed by spring 2021 and will set the stage for procurement in fall 2021



#### Design-Build-Finance

# DBF Design-Build-Finance

The City will be using a design-build-finance (DBF)
delivery model, which means that the detailed
design process is completed by the contractor



# **Engagement journey**

#### Calgary



# **Segment 2 – Public engagement**

Early 2020: Engagement for segment 2A (downtown/Beltline)

2020

November-December

2021

January-February

March-onwards



October

#### Inform

- Keep Calgarians up-to-date on Green Line planning initiatives through online events and electronic updates
- Host an online open house for projects impacting downtown in late-October
- Ensure previous public input informs our technical planning this fall



#### **Explore**

- Present ideas and considerations that will inform functional planning
- Gather input from Calgarians through online engagement



#### **Evaluate**

- Share what we've heard and how it informed proposed concepts
- Gather input to help us evaluate proposed concepts
- Host virtual engagement through online workshops and The City's Engage Portal



#### Reveal

- Share what we've heard and how it informed functional planning
- Develop and share final recommendations with Calgarians



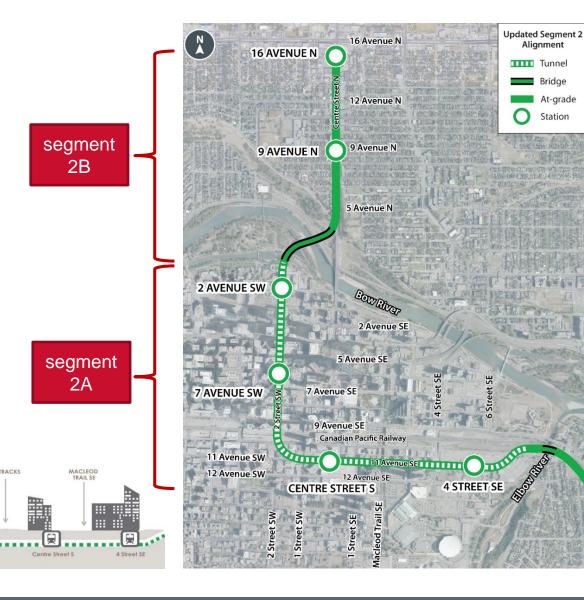
# **Green Line segment 2A**





### Segment 2 Alignment & stations

- Council approved updated stage 1 concept design in June 2020
- Administration has completed functional engineering plan & planning studies for segment 2



Alignment

At-grade

Station

Tunnel



# Segment 2 Alignment comparison

- Q: Complete a cost-benefit comparison based on the Council-approved evaluation criteria themes:
  - Mobility
  - Connectivity
- Development
- Environmental
- Cost and value
- Risk and constructability

for the 10 and 12 Avenue S. and 11 Avenue S. alignments if the risk adjusted cost estimate for the 10 and 12 Avenue S. alignment becomes less than or equal to the risk adjusted cost estimate for the 11 Avenue S. alignment

 Recommendation: Proceed with 2020 Council approved alignment in Beltline – 11 Avenue







# Elbow River bridge Planning and design objectives

Provide simple LRT bridge that does not compete with adjacent bridges

Incorporate principles of City of Calgary Downtown Underpass Urban Design Guidelines

Provide safe and comfortable pathway experience under and around the bridge

Provide opportunities to incorporate City Shaping / Urban Design elements into design

### Calgary

### **Elbow River bridge**

Context

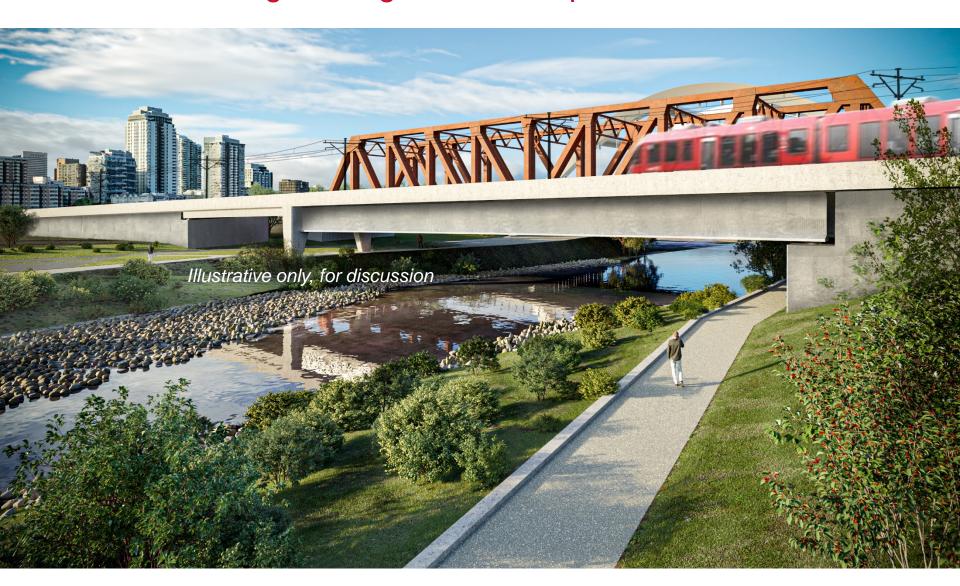






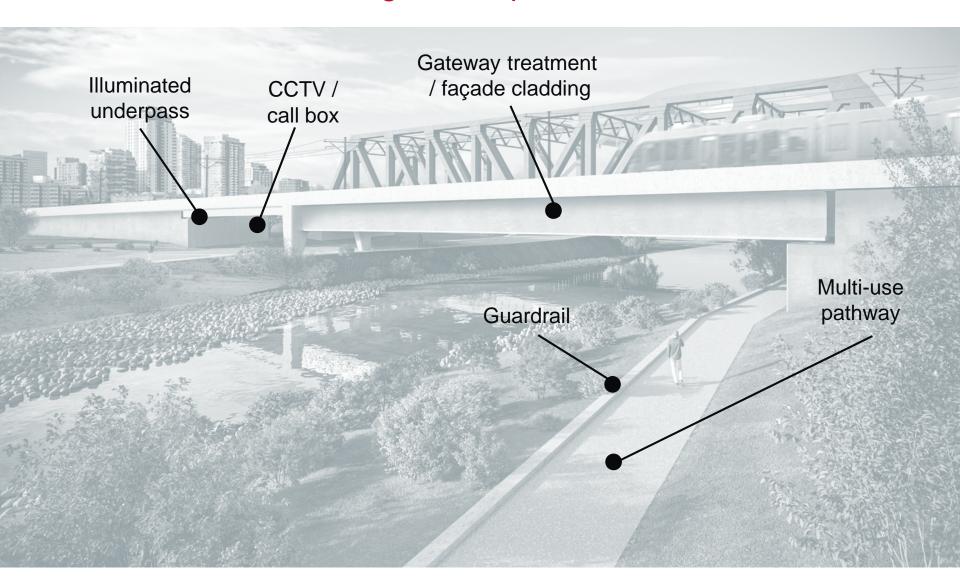
# **Elbow River bridge**

Engineering base concept





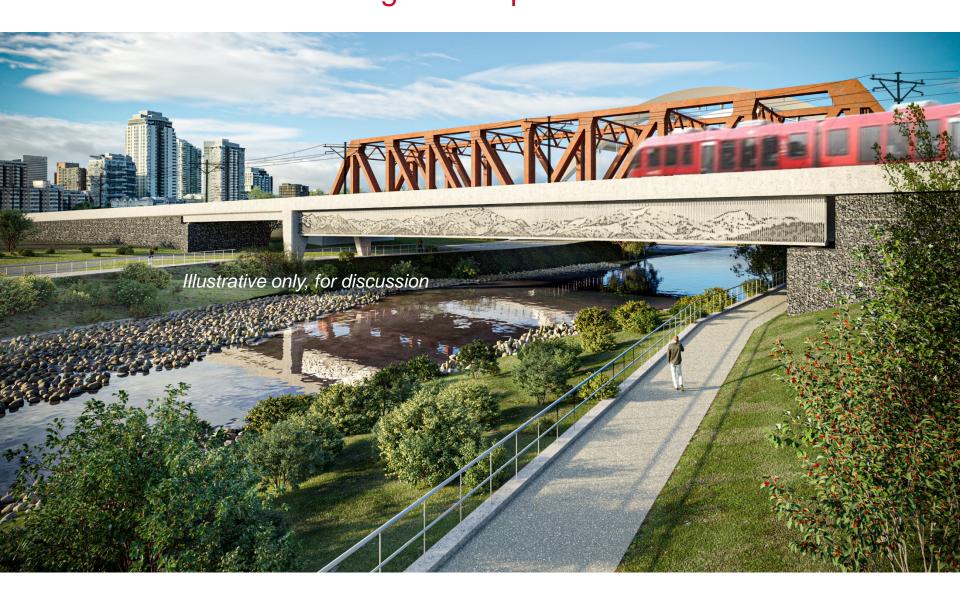
### Elbow River bridge Urban design concept



**Calgary** 



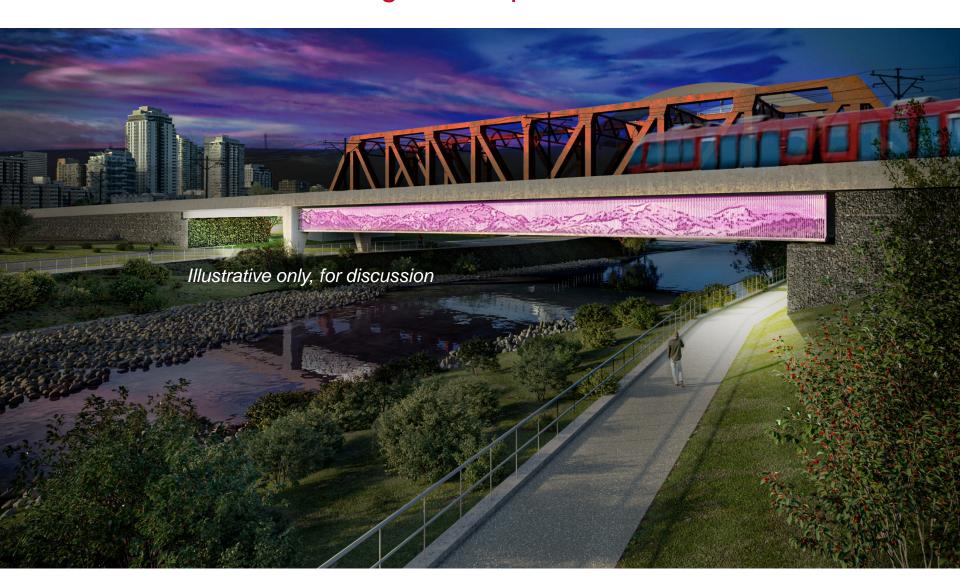
# Elbow River bridge Urban design concept





# Elbow River bridge

Urban design concept



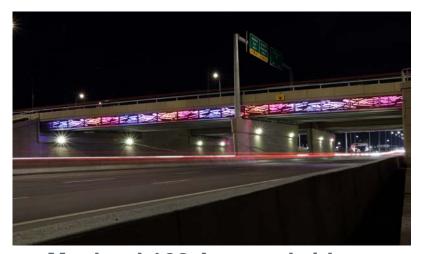




# Elbow River bridge Urban design precedents



Red Line
New Elbow River bridge



Macleod 162 Avenue bridge Illuminated facade

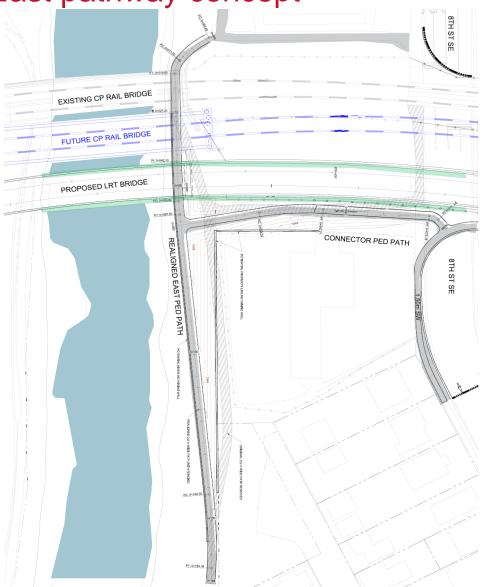


**Downtown underpasses**Illumination, CCTV & call boxes



**Elbow River bridge** 

East pathway concept







# Beltline Planning and design objectives

Minimize impacts to the mobility network

Minimize impacts to Stampede Park and existing residential & commercial properties

Locate station to support the vision of the Rivers District Masterplan

Explore opportunities to integrate station entrances into developments

Minimize disruption to Victoria Park Transit Centre operations Enable future development opportunities and unlock density potential



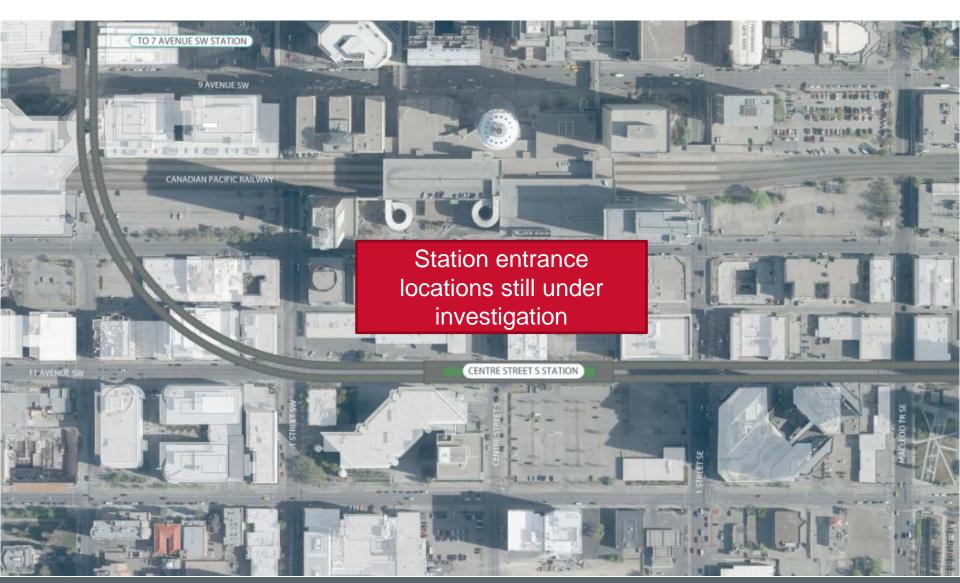
# **Beltline - East**Alignment & station location





#### **Beltline - West**

#### Alignment & station location







# Downtown Planning and design objectives

Integrate LRT infrastructure with adjacent development and the public realm

Minimize impacts to existing residential and commercial properties

Provide continued functionality and experience of the river pathway

Enable future development potential

Support continued vibrancy of cultural, social and community activities in the area

Minimize impacts to the mobility network





#### **Downtown**

### Alignment & 7 Avenue station

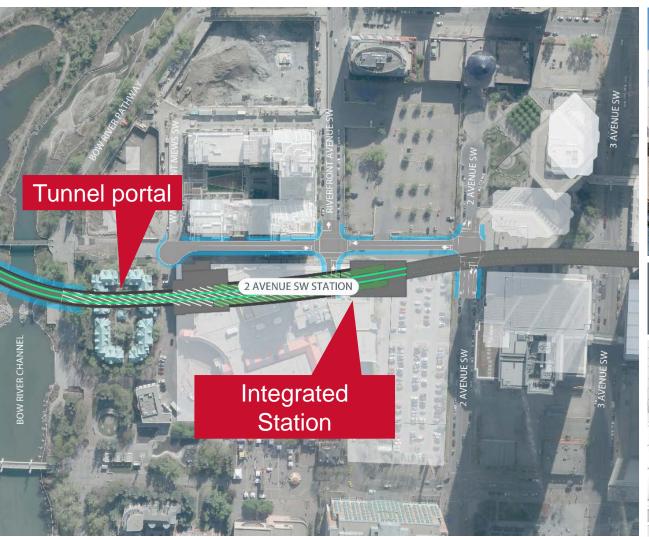






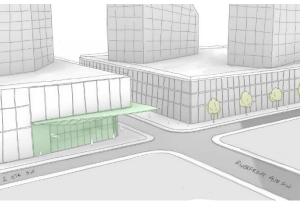
#### **Downtown**

### Alignment & 2 Avenue station





Integrated station inspiration & concept





# **Downtown**Eau Claire Landing



Birds eye view





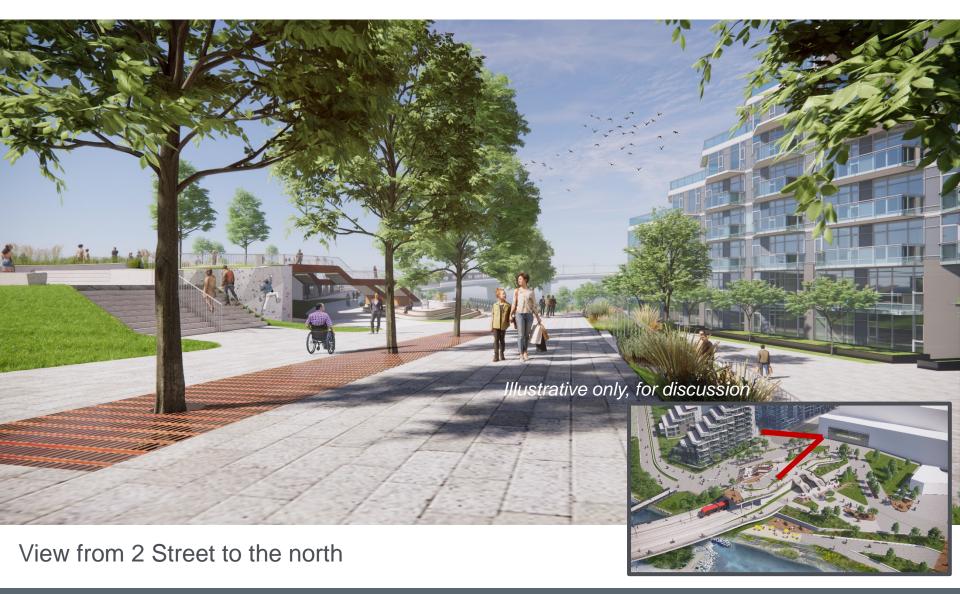
# **Downtown**Eau Claire Landing



V05



# **Downtown**Eau Claire Landing





# **Next steps**





# **Upcoming Events**

#### **Drop-in Sessions**

Opportunity to speak directly with project teams

Friday, April 16 from 11:00 am to 1:00 p.m.

#### **Planning in Crescent Heights Presentation**

Monday, April 19 from 6:30 to 8:00 p.m.

#### **Bow River LRT Bridge Presentation**

Tuesday, April 20 from 6:30 to 8:00 p.m.

#### **North Central Mobility & BRT Studies Presentation**

Wednesday, April 20 from 6:00 to 7:15 p.m.

#### Register at engage.calgary.ca/greenline





### **Next steps**

#### Procurement of DBF Contractor

Technical Performance Requirements

#### Utility relocation program

- Planning & detailed design scheduled to begin in spring 2021
- Construction scheduled to begin in fall 2021

#### Streetscape Master Plan for 2 Street S.W.

Stay tuned for future engagement in late 2021

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### **Business Support Program**

To help businesses and communities **prepare for** and **manage** the impacts of construction

- Business Insights Panel
- Report Back to Green Line Committee (June 2021)
- Utility Relocation Program (Fall 2021)
- Green Line Business Database

Visit <a href="https://greenlinebusiness.questionpro.ca/">https://greenlinebusiness.questionpro.ca/</a>

# IS YOUR BUSINESS BETWEEN 16 AVE N and 126 AVE SE?

Answer a short questionnaire to join our database of Green Line businesses. Sharing your information will help us plan for Stage 1 of construction.

Click here.



# **Questions?**

Post your questions and comments in the chat box of the Microsoft Teams live event



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# Thank you!

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