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## Presentation Overview

- ☐ Green Line Vision
- ☐ Delivering Green Line Stage 1
- ☐ Why update Stage 1 alignment?
  - ☐ Segment 2 & BRT Recommendations
  - ☐ What we shared in March
  - ☐ What we were still exploring
- ☐ Next Steps

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# Green Line Vision

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## Green Line Vision

A city shaping transit service that **improves mobility** choices for Calgarians, **connecting people and places**, and **enhancing the quality of life in the city**.

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## Green Line Vision

Green Line will serve 27 communities, across our city

- ✓ 46 kilometres of track
- ✓ 29 stations
- ✓ 220,000 – 240,000 trips per day
- ✓ 10 Transit Oriented Development station areas



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## Green Line will serve the mobility needs of our city

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# Green Line Vision

Green Line will connect into Calgary's growing rapid transit network



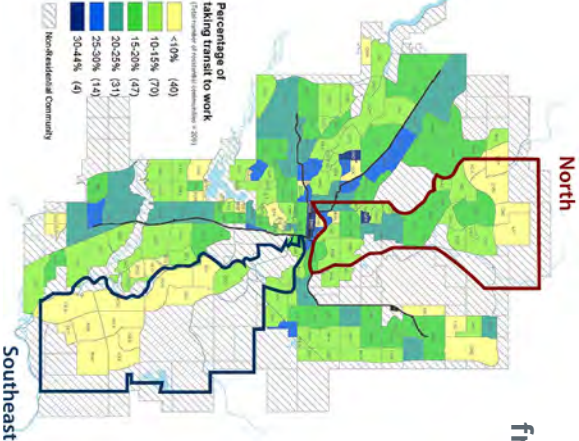


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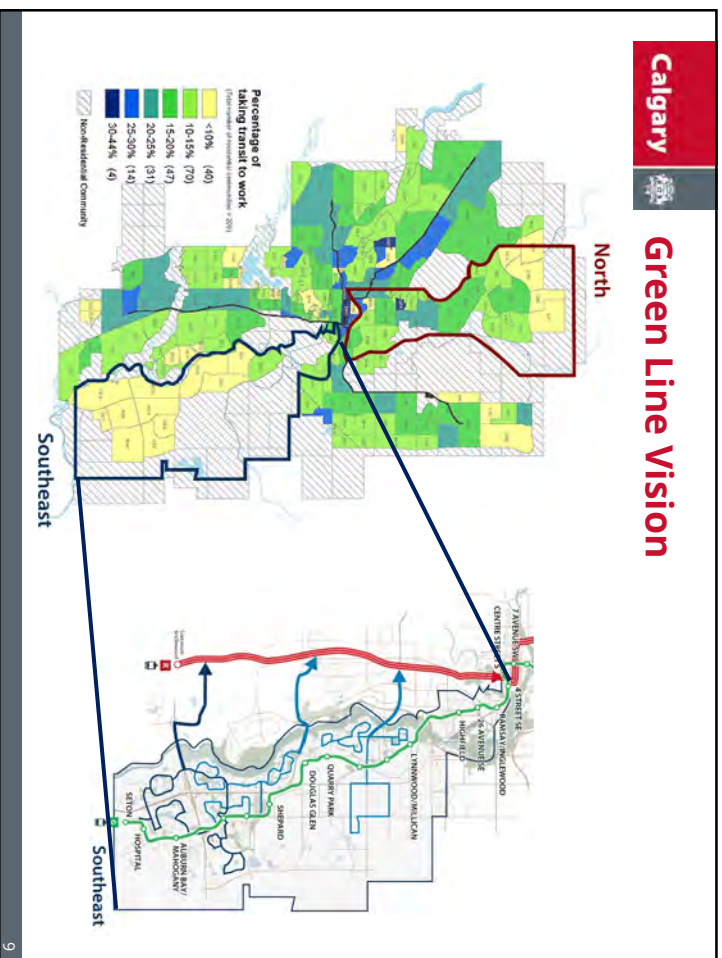
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# Green Line Vision

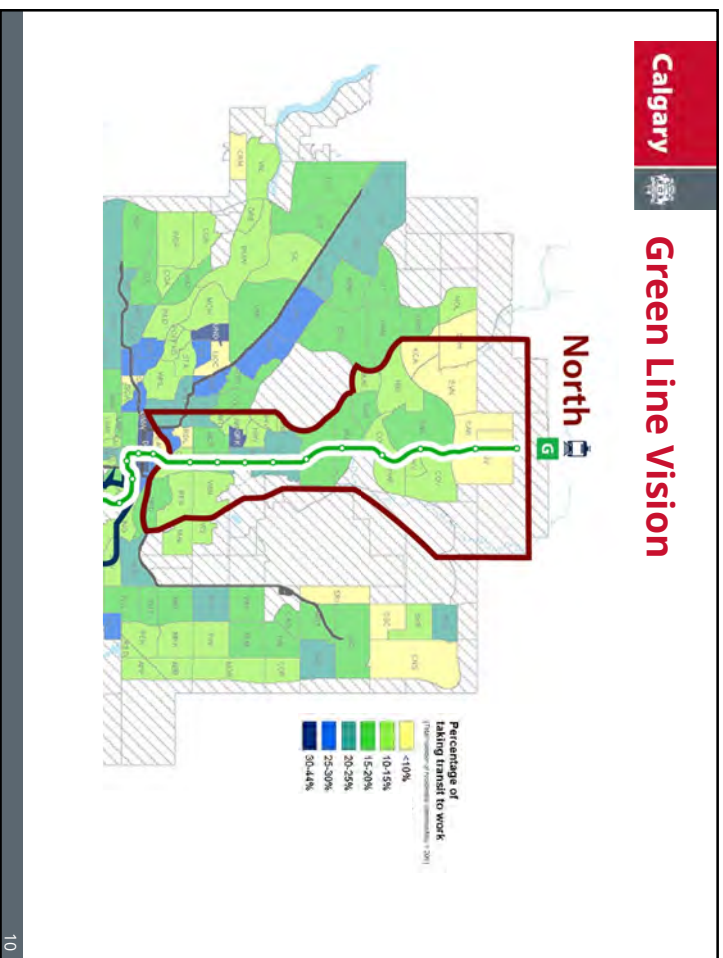
Green Line will deliver fast, frequent & reliable service to southeast & north central communities



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Green Line will be an important  
part of Calgary's economic  
recovery

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Moving forward with Green Line  
today readies Calgary for  
tomorrow's recovery

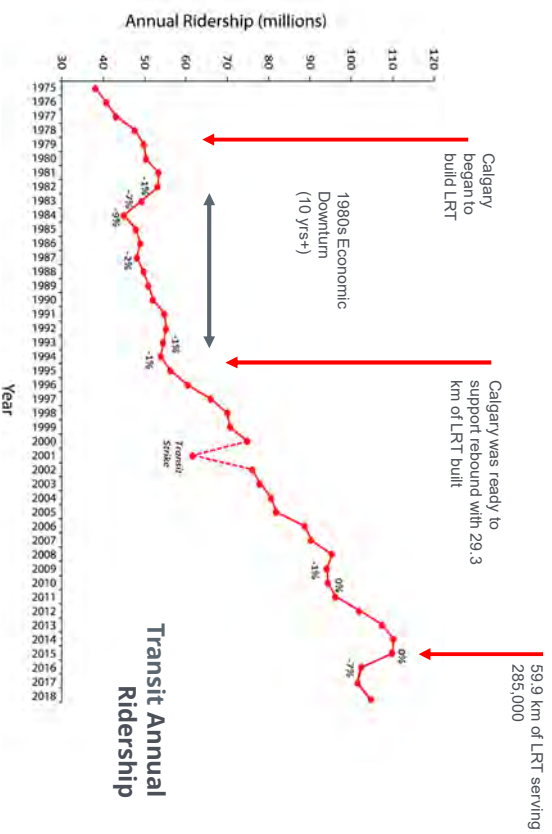
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## Green Line Vision



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# Green Line is a **long-term investment** in the growth and development of our city


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## Green Line Vision

Green Line will serve the transportation needs of our growing city




1981

592,000 residents  
273 km² of developed land



2001

875,000 residents  
400 km² of developed land



2015

1.23 million residents  
496 km² of developed land

Calgary's population and land area growth 1981-2015

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## Delivering Green Line Stage 1

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The City is **committed to delivering Stage 1** of the Green Line within our approved capital budget of \$4.9 billion

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## Delivering Green Line Stage 1

Like red and blue lines, Green Line will be built in stages, as funding becomes available

### Why Shepard to 16 Avenue N?


- ✓ Optimum LRT ridership
- ✓ Project readiness – land, planning & design
- ✓ Meets key pre-requisites:
  - Maintenance & Storage facility
  - Strategic network connections to downtown & MAX BRT
  - Easily expandable north & south



The map shows the proposed Green Line Stage 1 route from 16 Avenue N in the north to Shepard Avenue in the south. The route is highlighted in green and passes through several key locations including 20th Avenue, 14th Avenue, 10th Avenue, 8th Avenue, 6th Avenue, 4th Avenue, 2nd Avenue, Centre Street, Ramsay/Jinglewood, Highfield, 26th Avenue SE, OGDEN, South Hill, Quarry Park, Douglas Glen, and Shepard. A red bracket labeled 'Stage 1' spans the entire route.

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## Delivering Green Line Stage 1

Stage 1 will deliver the first 20 km of LRT track

- ❑ 20 km of LRT Track
- ❑ 15 Stations
- ❑ Opening day ridership: 65,000 daily trips
- ❑ Maintenance and storage facility at Shepard station
- ❑ 37 minute ride time (Shepard to 16 Avenue)



The map shows the proposed Green Line Stage 1 route from 16 Avenue N in the north to Shepard Avenue in the south. The route is highlighted in green and passes through several key locations including 20th Avenue, 14th Avenue, 10th Avenue, 8th Avenue, 6th Avenue, 4th Avenue, 2nd Avenue, Centre Street, Ramsay/Jinglewood, Highfield, 26th Avenue SE, OGDEN, South Hill, Quarry Park, Douglas Glen, and Shepard. A star at Shepard indicates the location of the Maintenance and Storage Facility.

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## Why update Stage 1 Alignment?

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Administration is **recommending an updated Stage 1 alignment** that can be constructed within budget, reduce construction risk and deliver best value to Calgarians

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## Why update Stage 1 alignment?

**Project budget:** Cost estimates exceeded project funding of \$4.9B by 10%

**Construction risk:** 7-8 story deep tunnel and stations were increasing construction cost and risk

**Customer Experience:** The depth of the stations would impact user experience making stations less convenient, comfortable and easy to navigate

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## What is the updated Stage 1 Alignment?

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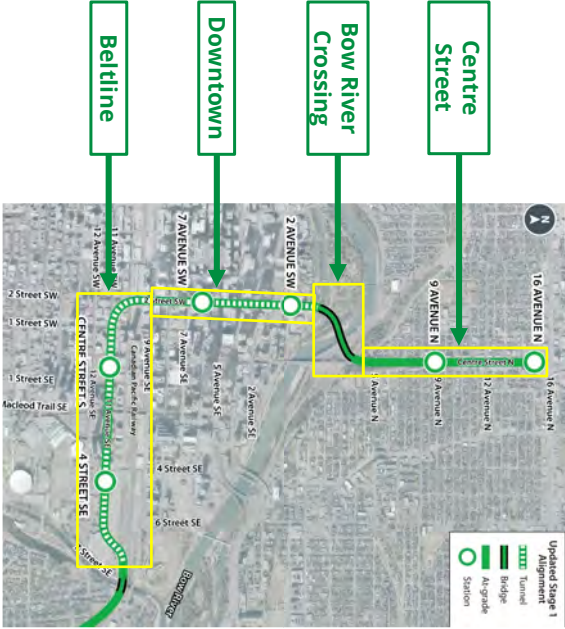
# Segment 2 - By Focus Area

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# Segment 2 - Focus Areas



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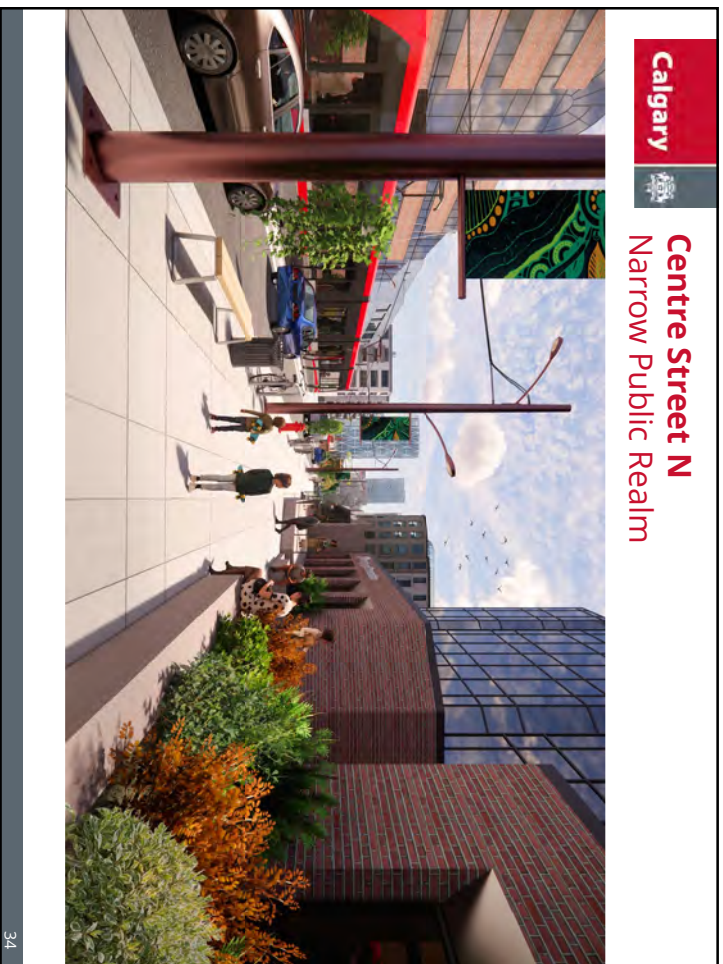
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## Centre Street N

What we were still exploring

### 9 Avenue Station

- Consideration to add station at 9 Avenue

### LRT Configuration

- Middle running vs curbside running

### Left Turn Movements

- Left turn lanes and potential turn restrictions

### BRT Priority

- BRT operating in LRT guideway, BRT lanes on Centre Street Bridge

### Additional Renderings

- Add winter and motorist perspective

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## Centre Street N


Addition of 9 Avenue N Station



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Centre Street N

LRT Configuration - Middle-Running

LRT running in the middle of Centre Street North


best balances:

- Community desire for pedestrian realm improvements, such as comfortable sidewalks and opportunities for street trees
- Safe movement of pedestrians, vehicles and LRT
- Access and circulation to businesses and into the community
- Efficient LRT operations, trains running up to the speed of traffic



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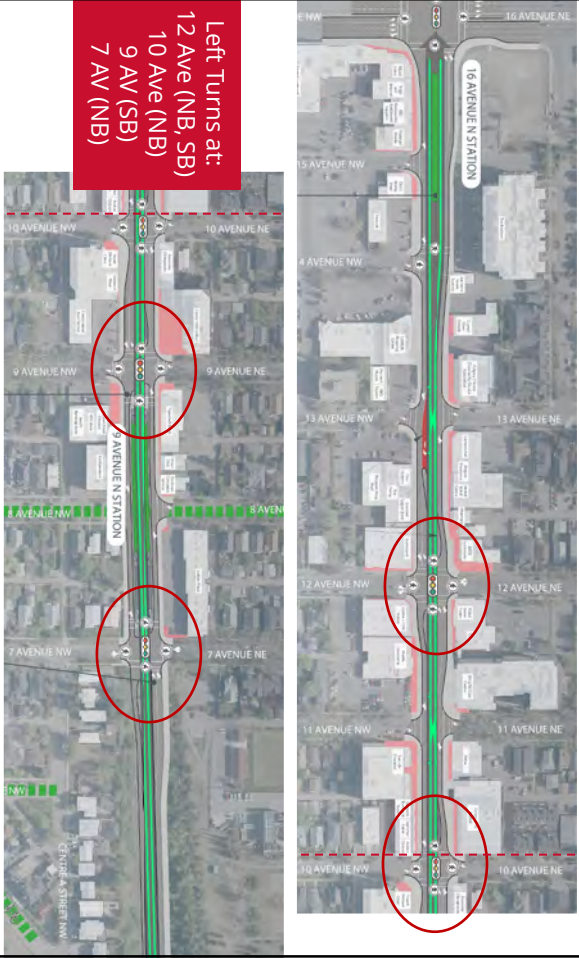
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Centre Street North

Left Turns

Left Turns at:  
12 Ave (NB, SB)  
10 Ave (NB)  
9 AV (SB)  
7 AV (NB)



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## Centre Street N BRT Priority & Centre Street Bridge



BRT to Operate within  
LRT Guideway &  
Dedicated Lanes on  
Centre Street Bridge



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## Centre Street N New render - 16 Avenue N Station (Winter)



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## Centre Street N

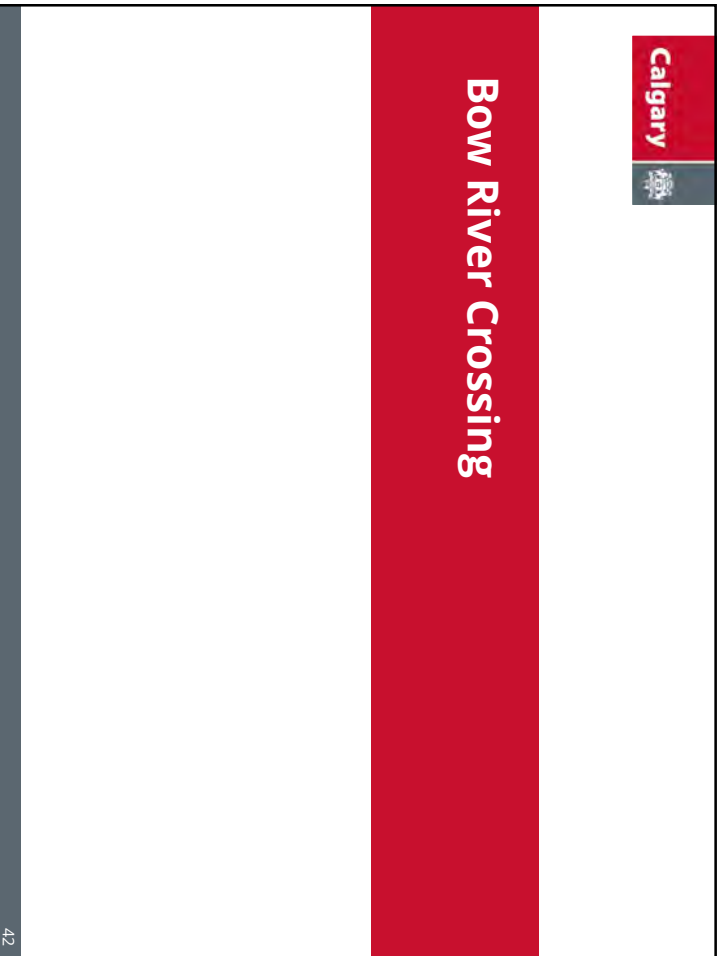
New render - Motorist Perspective



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## Bow River Crossing



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## Bow River Crossing

What we shared in March

### Bridge renderings – what it might look like

- Bridge Types Being Explored
- Renders from various viewpoints
- How bridge might land

### Environmental Considerations

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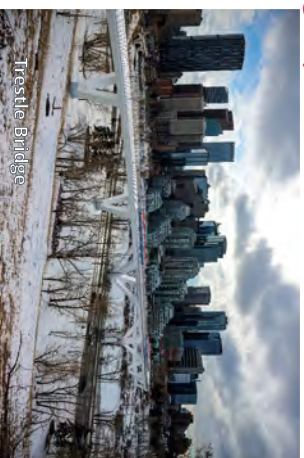


## Bow River Crossing

Bridge types being explored



Constant Depth Viaduct



Trestle Bridge





Tied Arch Bridge



Cable Stayed Bridge

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## Bow River Crossing

What we were still exploring

### Alignment Variations

- Shape of curve

### Multi-use Pathway



- Consideration to provide a multi-use pathway on the bridge

### Renderings

- Additional renderings from Prince's Island Park


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## Bow River Crossing

Alignment Variations



Example alignment variations that will be explored in next stage of planning

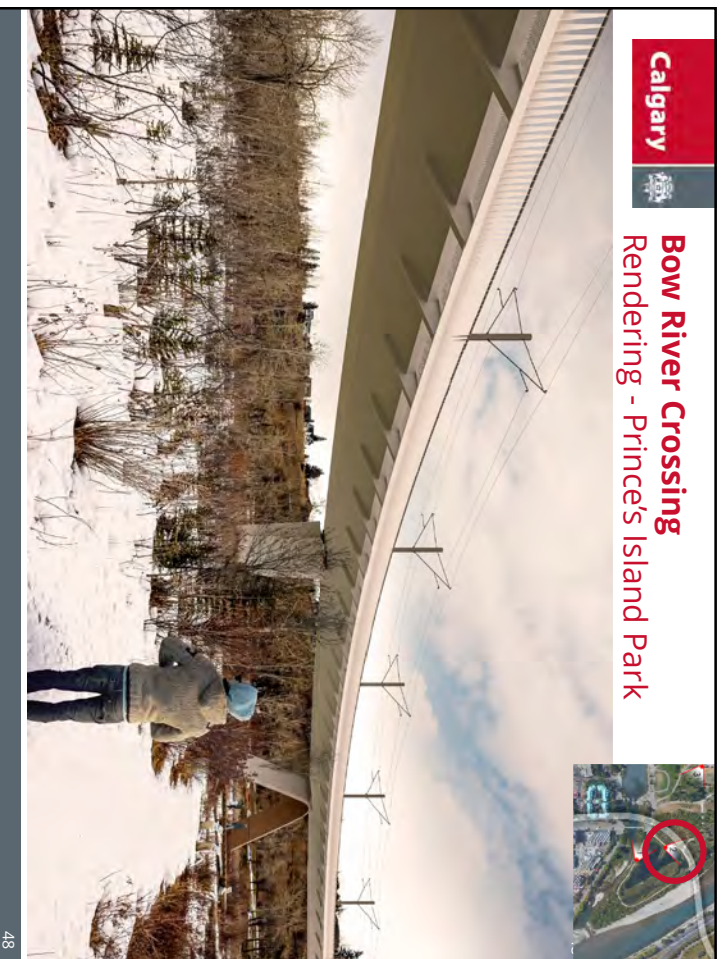
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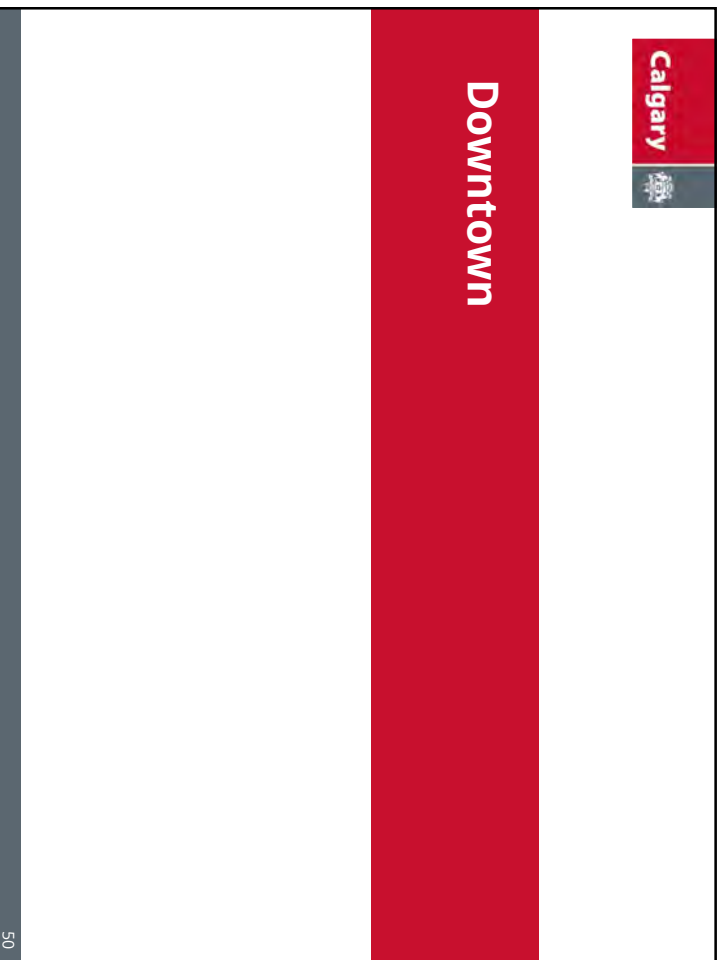
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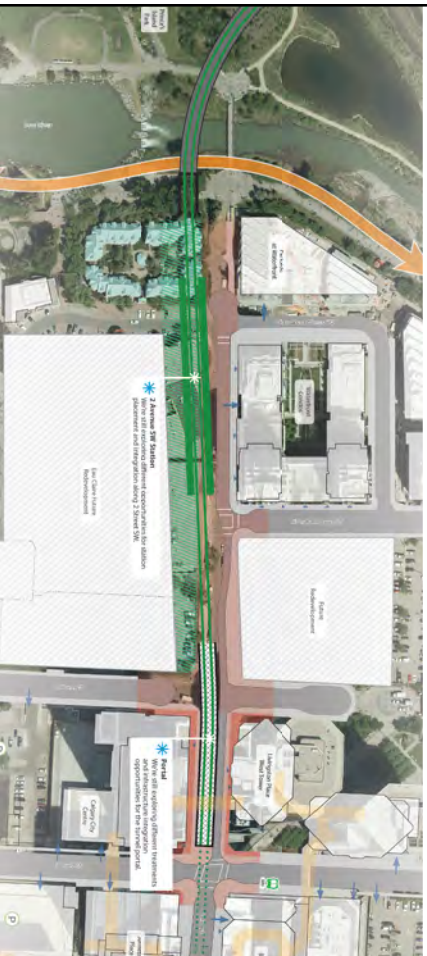
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## Downtown

### What we shared in March



Previous 2 Avenue SW Station –  
March 2020



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## Centre Street N

### What we were still exploring

#### 2 Avenue SW Station & Portal

- Opportunities to integrate into the Eau Claire Market re-development site

#### 7 Avenue Station

- Exploring opportunities to integrated

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**Downtown**  
Alignment

2 Avenue SW Station & portal integrated into Eau Claire Market Re-development Site

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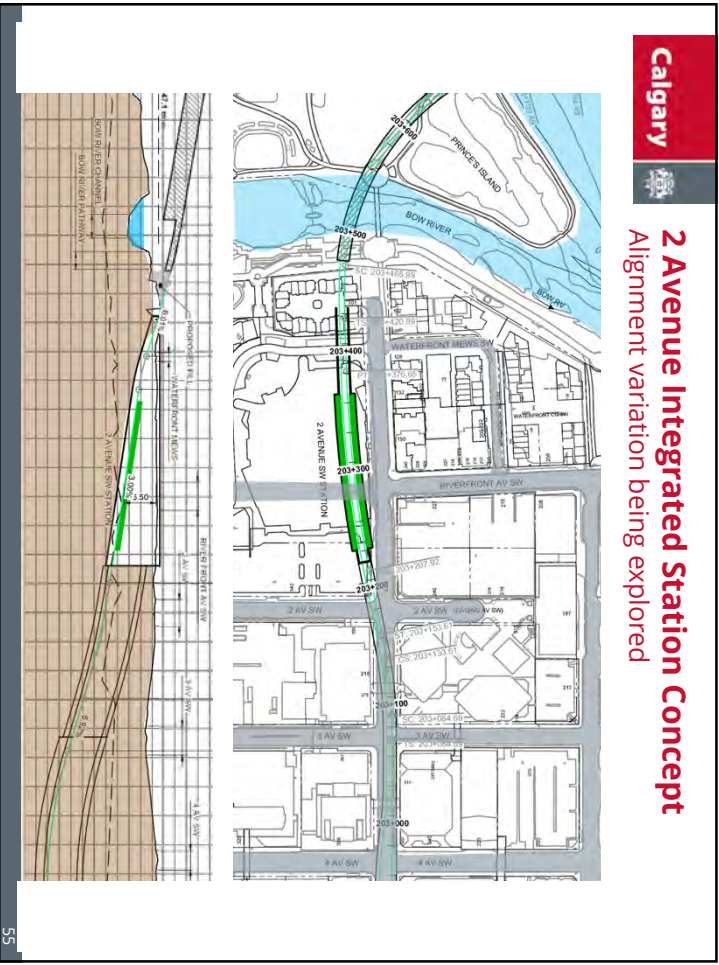
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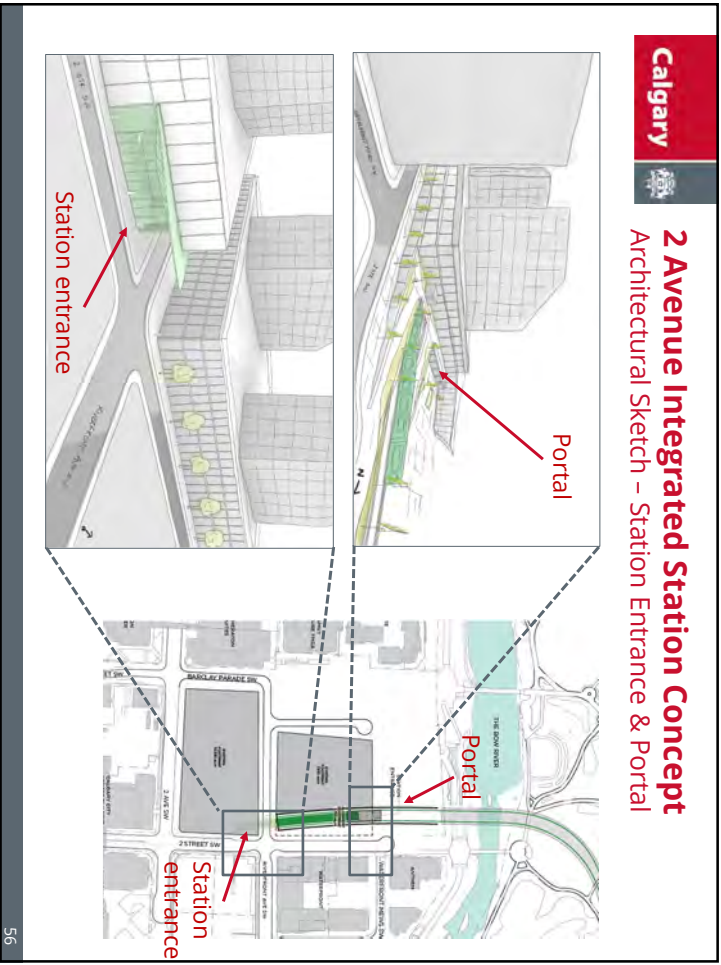
**2 Avenue Integrated Station Concept**  
Inspiration New Central Library

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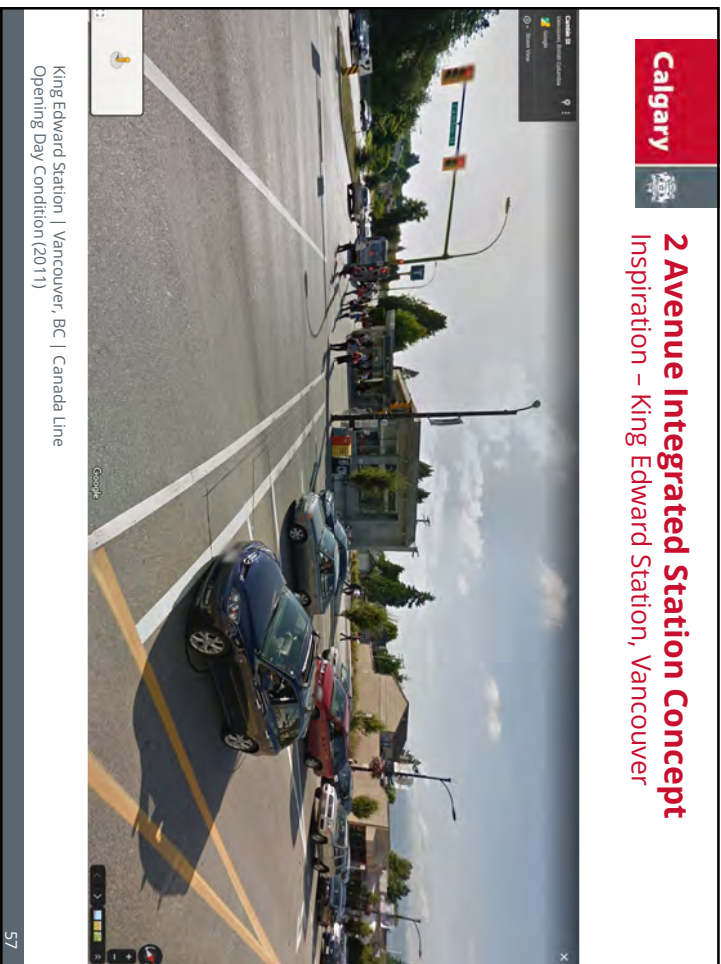
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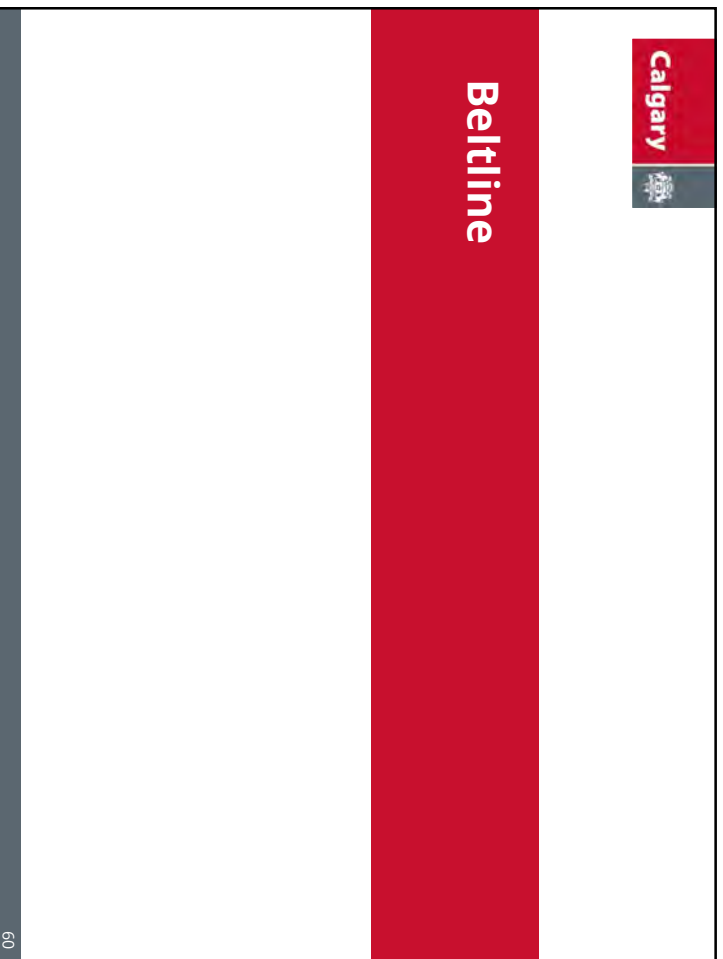


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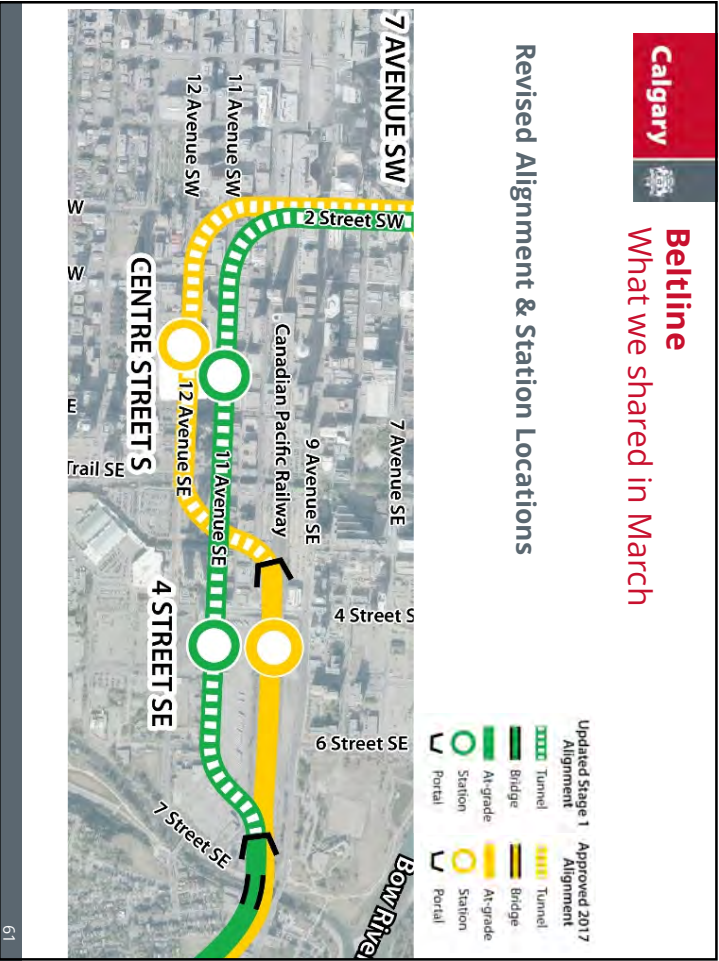




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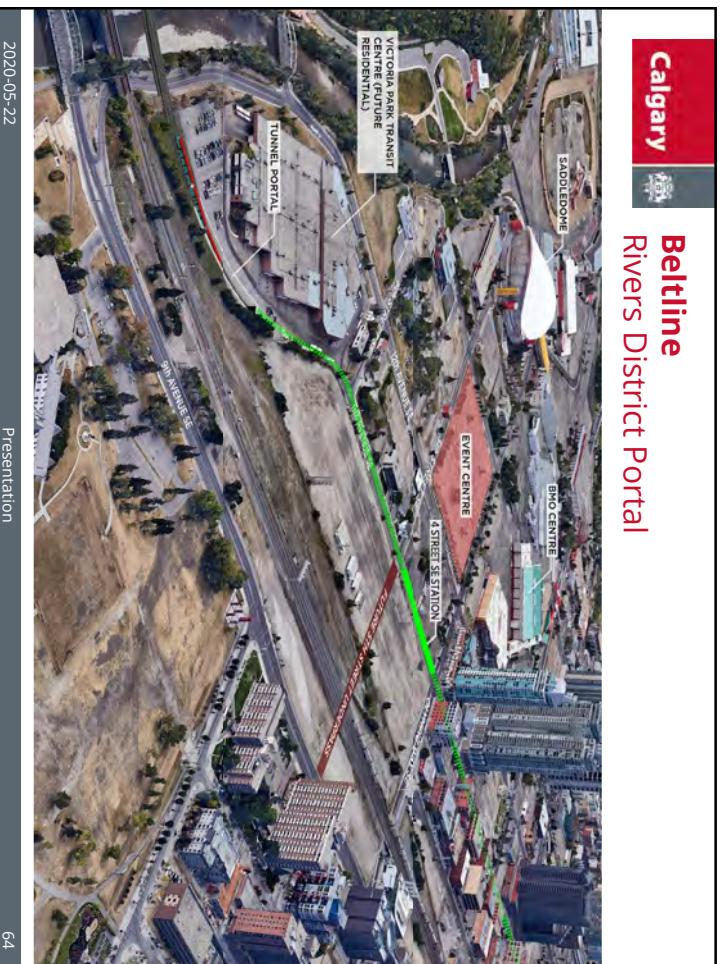


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# North Central BRT

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## North Central BRT

What we shared in March

**Improvements being considered:**

- Customer Service**  
Increase the clarity and comfort of the system
- Transit Priority**  
Measures that address the challenges of congestion and delay.




A map of the North Central BRT route in Calgary. The route is shown as a dashed line starting from 160 Avenue N, passing through 144 Avenue N, North Pointe, 96 Avenue N, Beddington, 64 Avenue N, McKnight Boulevard, 40 Avenue N, 28 Avenue N, 16 Avenue N, 9 Avenue N, 2 Avenue S, 7 Avenue SW, and 4 Street SE. The map includes a north arrow and labels for various streets and landmarks.

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# North Central BRT

## What we were working on

Shorten the bus loop at the North Pointe Park and Bloor lot.

Add queue jump at the intersection of Harvest Hills Blvd and 96 Avenue N.

Conduct detailed review of bus operations in this area, including the 78 Avenue bus terminal. Consider dedicated bus area.

Review the operation of existing queue jumps to identify further operational improvements.

Conduct detailed review of downtown bus operations, identify improvements. Consider dedicated peak hour bus lanes adjacent to the curbside bus stops.

160 AVENUE N

144 AVENUE N

NORTH POINTE

96 AVENUE N

REDDINGTON

64 AVENUE N

MANHART BOULEVARD

40 AVENUE N

28 AVENUE N

16 AVENUE N

9 AVENUE N

3 AVENUE SW


7 AVENUE SW

4 STREET SE

CENTRE STREETS

Add queue jump at the intersection of Harvest Hills Blvd and Country Hills Blvd.

Add a traffic signal at the bus stop for northbound buses to prioritize bus operations.


  
Add bus only curb lanes during peaks or all day.

BRT and Express buses to share the left right of way south of 13 Avenue N.

Create dedicated bus lanes in the middle of Centre Street bridge.

### Recommended general BRT improvements


- Provide improved customer amenities, including MAX BRT shelters
- Provide transit signal priority (TSP) at all signals along the route (currently just over 60% have TSP).
- Evaluate opportunities for on-board fare payment and all-door boarding.



Centre Street Bridge - BRT Lanes

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# Next Steps

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## Next Steps Green Line Committee

### Green Line Committee – June 1, 2020

The Green Line Committee meeting on June 1 will have a public feedback component.

To limit the spread of COVID-19 and to avoid mass gatherings, people can participate in the meeting virtually and by telephone.

- Written public submissions are due at 12 p.m. on May 25.
- Members of the public can sign up to speak at the meeting
- Public wishing to speak are invited to contact the City Clerks office by email at [publicsubmissions@calgary.ca](mailto:publicsubmissions@calgary.ca) to register and to receive further information.



## Next Steps Green Line Planning Work Program

