

Moving the Green Line forward

As the city's largest job creation project, construction of Green Line Stage 1 will be a critical component of the COVID-19 recovery effort. We want to be ready when Calgary is ready.

Creating jobs for Calgary

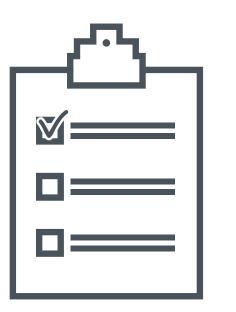


The Green Line LRT project generates jobs in the short-term and long-term. The Enabling Works program is keeping people working today and will continue to generate jobs between now and when the main construction is scheduled to start in 2021.



Construction of Stage 1 of the Green Line will create approximately 20,000 jobs (12,000 direct and 8,000 indirect).

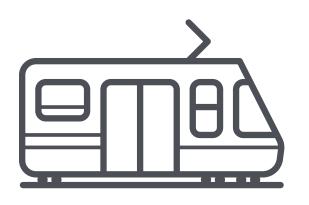
Ready for procurement



We have completed the evaluation of the responses to the Request for Qualifications for Segment 1 and will be announcing the shortlisted proponents in June 2020.



We are finalizing the Request for Proposals for Segment 1 and will be releasing this to the shortlisted proponents in July 2020.



We have previously shortlisted four proponents for the supply of our light rail vehicles (LRVs) for the Green Line and the Request for Proposals for these new low floor vehicles will be released to the successful proponents in June 2020.



Segment 1 station descriptions

Ramsay/Inglewood

Ramsay/Inglewood Station

This station will be an elevated "bridge" station located over 11 Street S.E., and will run parallel to the CP Rail bridge, that will serve the communities of Ramsay and Inglewood. There will be an at-grade access on the west end of the station, near Jefferies Park, and a station entrance building that will provide access to the elevated station platforms. The improvements to the station area will provide opportunities to improve connections between Ramsay and Inglewood, ensuring both communities benefit from the station. There will also be a small plaza incorporated for future community use.

While no park and ride or bus terminals are planned for this station, it

will be a transit hub that connects riders to our primary transit network and regional connections. It will be located close to the Downtown and a short walk to Riverwalk and the Elbow River Pathway.

Ramsay/Inglewood 26 Avenue S.E.

Shepard

26 Avenue S.E. Station

This station will be a partially elevated station. There will be a station entrance building to access elevated platforms on the north side, and at-grade station entrances on the south side. It will serve the community of Ramsay, the Dominion Bridge area, and approximately 7,600 new residents anticipated in the area. It will also provide Calgarians with another way to access Crossroads Market.

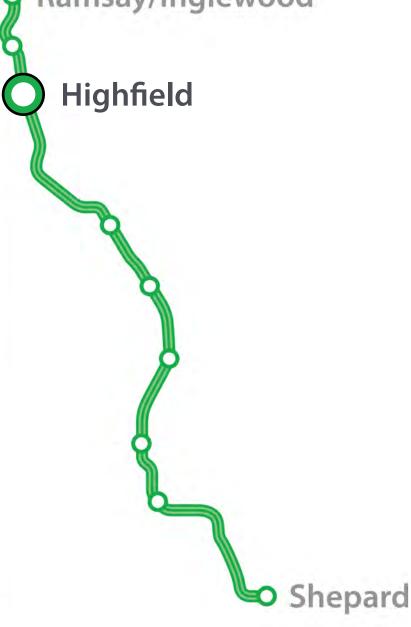
This station has been identified for transit-oriented development (TOD). It is ideally located to become a southern anchor for a future main street along 11 Street S.E.

While no Park and Ride or bus terminals are planned for this station, riders will be able to connect to and from bus routes in the area.

Highfield Station

Segment 1

Segment 1



This station will be in the centre of Calgary's original industrial district, on a former landfill that has been remediated.

The at-grade station will have a small bus terminal and station facilities and improved pedestrian and cycling connections. It will also serve as a transit hub, enabling riders to connect between the LRT and buses to get to jobs in the area.

The alignment will parallel the Canadian National Railway (CN) right-of-way, allowing transit to travel at higher speeds and decrease travel time. The station will primarily serve the people who work in the area, providing them with a reliable and affordable transportation option.



Segment 1 station descriptions

Ramsay/Inglewood

Lynnwood/Millican

Shepard

Lynnwood/Millican Station

This station will be located alongside Ogden Road S.E., just south of Millican Road S.E., next to Pop Davies Park. This station will serve the residents of Lynnwood/Millican and users of the soccer and baseball facilities at Pop Davies Park.

This station will function as a transit hub and include a bus terminal, Park and Ride, and re-organized parking for Pop Davies Park users.

Ramsay/Inglewood

Ogden Station

This station will be ideally located to serve the community of Ogden and is located at 72 Avenue, between Ogden Road and CP, where a transit plaza will serve as the entrance way to the at-grade station. The Green Line will run parallel to the CP right-of-way, on a separate corridor from vehicles, improving transit ride times and reliability.

The station will connect Green Line users to many nearby amenities including, the Victory Manor heritage building, the South East Calgary Community Resource Centre and George Moss Park. It will also connect Calgarians to industrial and commercial jobs.

South Hill Station

South Hill

Ramsay/Inglewood

The South Hill at-grade station will be a a major transit hub serving at least 8 routes and 30 buses accessing the station in the peak hours. It will also provide Calgarians with an additional option for travelling to jobs in the nearby commercial and industrial areas.



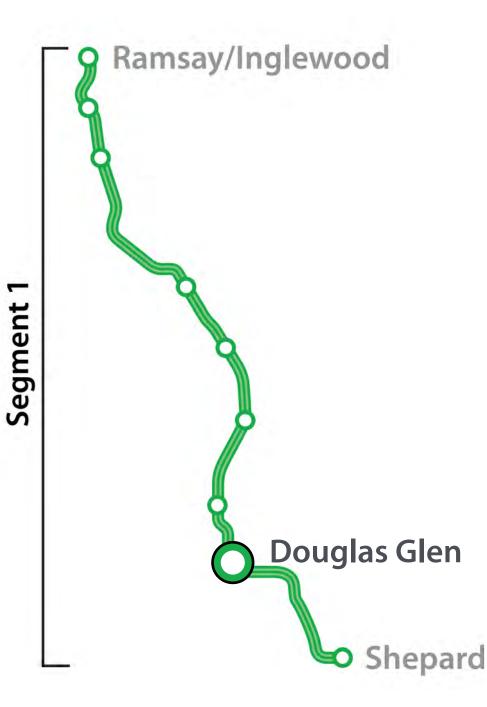
Segment 1 station descriptions

Ramsay/Inglewood

Quarry Park

Quarry Park Station

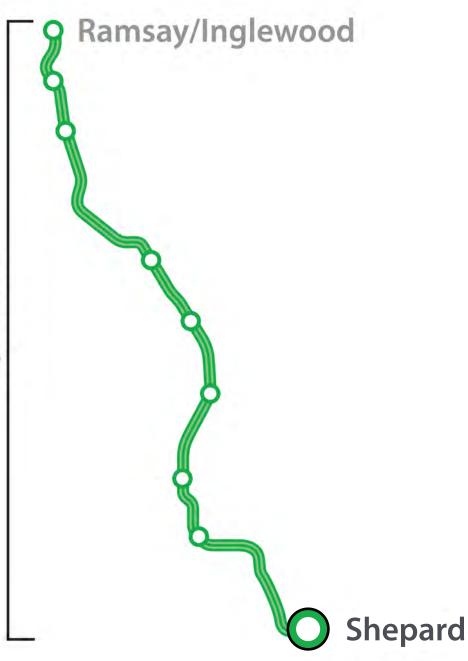
This at-grade station will serve the residential communities of Douglas Glen, Riverbend, and Quarry Park, and the commercial/retail centre in Quarry Park. The station will have a small bus terminal and improved pedestrian and cycling connections. There is also a proposed pedestrian crossing from the station across 24 Street S.E. leading to the new recreation centre and library. This station will also include a park and ride.



Douglas Glen Station

This at-grade station will be located on 114 Avenue S.E. between 27 Street and 29 Street. It is, and will continue to be, a major transit hub for BRT and local bus service, including a Park and Ride and bus terminals.

The Douglas Glen Station will serve the residential communities of Douglas Glen, Douglasdale and the commercial/industrial area to the east.



Shepard Station

This at-grade station is the terminal station, including a significant bus terminal facility. It will serve the residential community of Douglasdale to the west, and the new South Trail Crossing area. It will be located within walking distance of South Trail Crossing, a major shopping and entertainment destination in Southeast Calgary. It will be a transit hub with a Park and Ride, upgraded waiting and station facilities and improved pedestrian and cycling connections. The transit vehicle maintenance facility will be located immediately north of the station.



Green Line Stage 1 delivery model

Stage 1 of the Green Line will be delivered using a **Design-Build-Finance** (**DBF**) model. This was approved by Council in March 2018.

In a DBF model, design and construction are combined under one contract. This model provides better cost and schedule certainty, and transfers design and construction risks to Project Co (i.e., the successful proponent).

This means:

• Detailed design is part of Project Co's scope of work.

- The DBF model **uses stakeholder input upfront** to define the contract requirements. Project Co will use the technical and design requirements in the contract to develop the detailed design.
- This is different from The City of Calgary's typical delivery whereby the detailed design is completed prior to tendering the construction. Typically, stakeholder engagement may be carried out throughout the detailed design process that is managed by The City. However, in the DBF delivery model being used for Segment 1, engagement and project input is carried out prior to contract preparation and leads to a request for proposals (RFP). For segment 1, this engagement was completed between 2015-2018.

The images we use right now are not final and there may be some changes as the project team and successful design/build proponent work through the

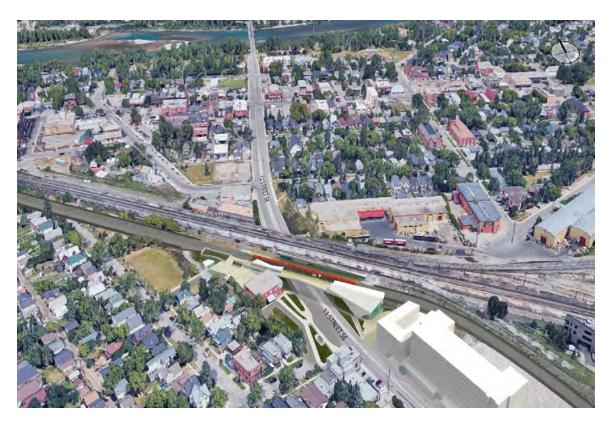
final design. The renderings on the following page show where stations will be located and how the stations could function.



Segment 1 station location renders



Ramsay/Inglewood

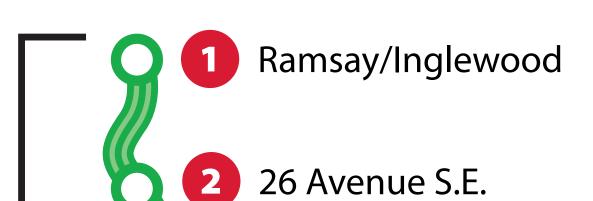






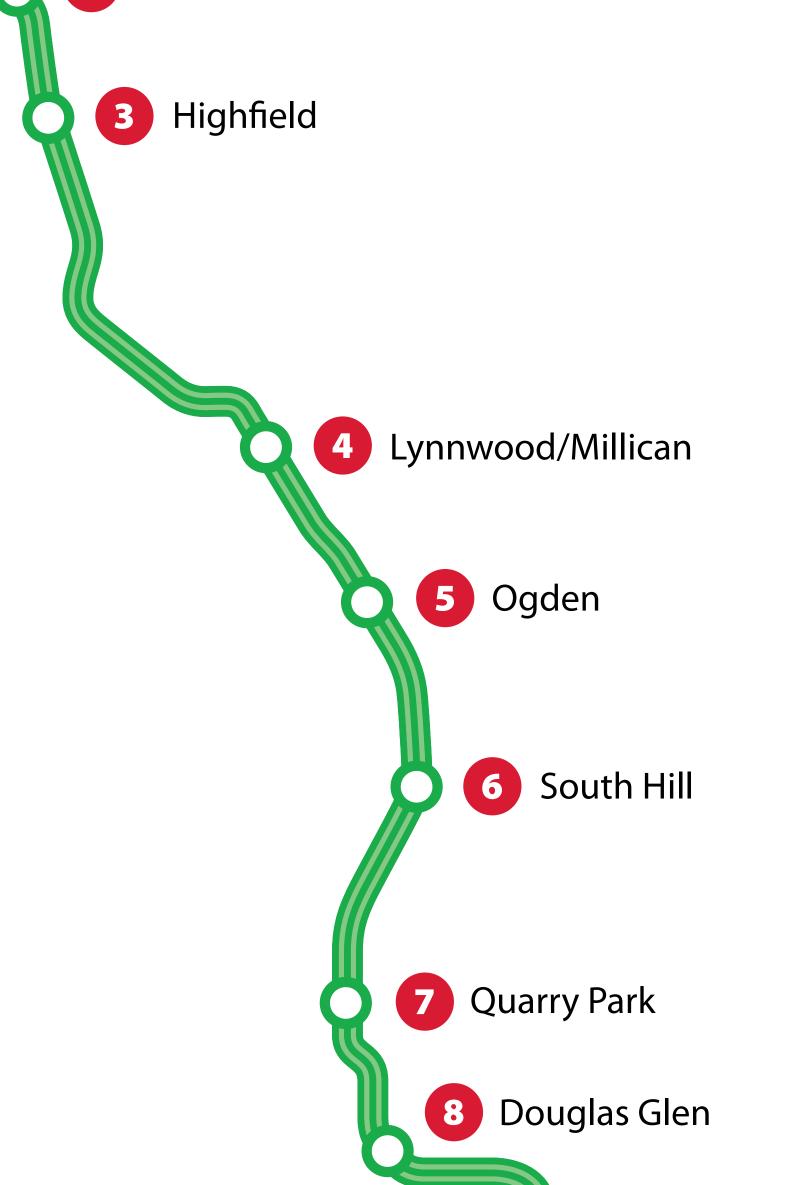


































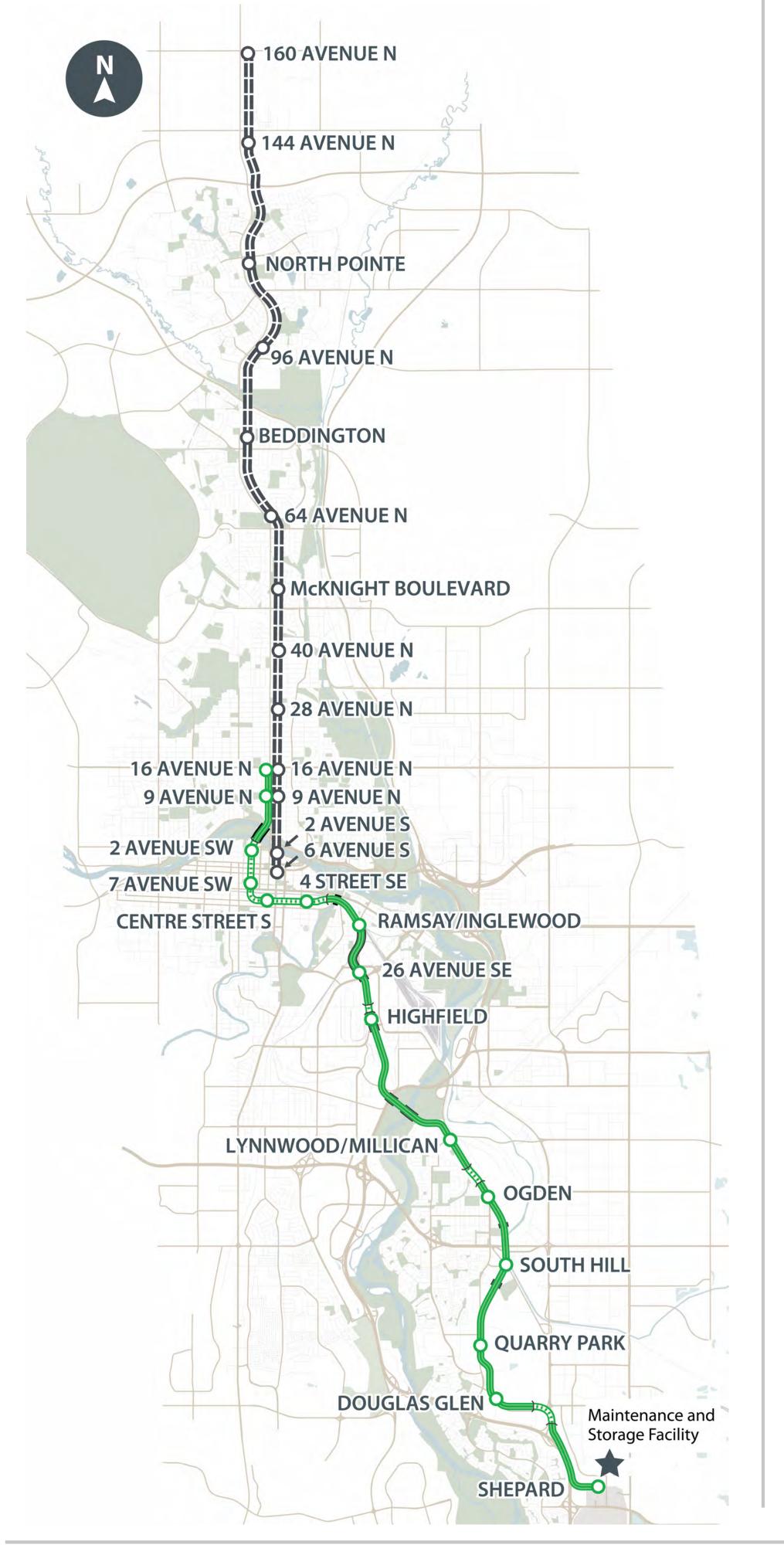
NOTE: The images used are not final changes may occur as the project team and successful design/build proponent work through the final design. These renderings depict where the station will be located and how the station could function.

Calgary

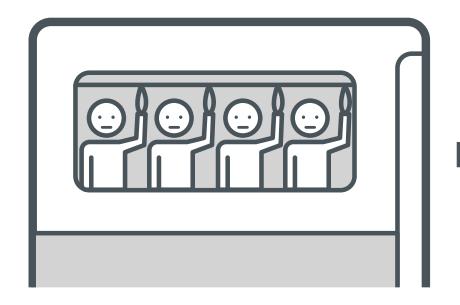
Green Line LRT Stage 1

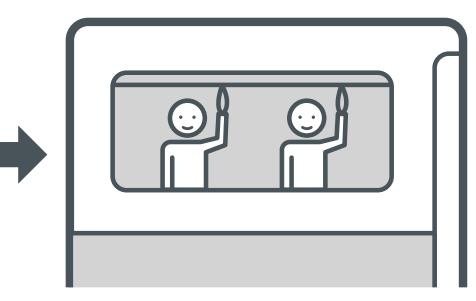
About Green Line Stage 1

The Green Line LRT will connect North Central Calgary to Southeast Calgary. Stage 1 of the Green Line LRT runs from 16 Avenue N to Shepard, with bus rapid transit (BRT) improvements connecting 6 Avenue S in Downtown to 160 Avenue N in the North.



Improving your commute





The Green Line will add a third LRT option to our city's transit network, which will redistribute the amount of people taking the current routes to work.

This is important as our population continues to grow; we already experience packed trains and buses, as well as congestion on our roads.

A transportation option that saves you money

A monthly transit pass costs \$109 for the average person, with low income options available for those who qualify. Owning a personal vehicle can be expensive and isn't an option for some Calgarians. Paying for parking can be very costly as well. For those who want to lower their monthly expenses, taking the train is a convenient and reliable option.



Making it easier to travel around Calgary

Many of us rely on public transit to get to our jobs, schools, shopping and grocery stores, and events around the city.

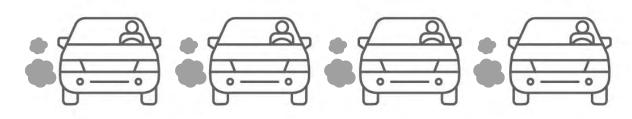
The Green Line will connect the North and Southeast of Calgary to the rest of our LRT and MAX networks, which will mean less transfers between buses and trains, and less time spent getting to more destinations.

Creating jobs

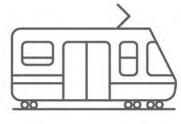


12,000 direct and 8,000 indirect, are projected to be created as a result of constructing Stage 1

Environmental benefits



6,000 cars can generate approximately **30,000** tonnes of carbon each year



The Green Line would lessen carbon emmissions by reducing the amount that our citizens drive. The Green Line will achieve **Envision Silver rating** for sustainable infrastructure.







Reliability 20 km of dedicated LRT track



Ride time

37 min

(16 Avenue N - Shepard)





Green Line LRT project milestones

1987-2012

Calgary

1987: Southeast Mass Transit **Corridor Study**

- **1999:** Southeast LRT **Functional Planning Study 1**
- 2002: Southeast LRT 52 Street **Functional Planning Study 2**

2013-2019

- **2013:** Council allocates \$52 million/year from 2015-2024 to build the Green Line (NCLRT and SETWAY)
- **2014:** Workplan for GLSE approved and recommendations for

- 2004: Southeast LRT Functional Planning Study 3
- 2006: Downtown LRT Feasibility Study
- **2009:** Southeast LRT near Quarry Park Study
- **2010:** Southeast LRT McKenzie Towne to Seton Functional Planning Study
- **2011:** Subway Vision: Working Paper 1: Tunnel Context
- **2012:** NC LRT Planning Begins and • **Council approves SETWAY**
- **2015:** Council Approves Green Line North (formerly setting Centre St N as the route) and GLSE engagement on final route recommendation
- **2016:** Downtown alignment approved and Beltline
- **2017:** Stage 1 of Green Line confirmed and Council approves long-term vision for Green Line from 160 Avenue N to Seton. Government of Alberta announces funding for stage 1 of the Green Line
- **2018:** DBF Delivery model approved by Council. Federal Government

NCLRT are presented to re-confirms funding commitment for alignment recommended Council Stage 1 **2019:** Funding agreement finalized by all three levels of government **Segment 2:** From 16 Avenue N to Elbow River **Segment 1:** From Elbow River to Shepard S.E. June 2017 to 2021 **June 2020** Enabling Works (e.g., moving utilities, etc.) The Green Line team will present our until LRT construction starts. recommendation for the updated Stage 1 alignment to the Green Line Committee and Council in June. **June 2020 Beginning in summer 2020** The Green Line team will present our Pending approval of the updated alignment, our recommendation for the updated Stage 1 next steps include: alignment to the Green Line Committee and Council in June.

- Conduct a mobility study for Centre Street area
- Stakeholder and public engagement on:
 - The design of public realm along Centre Street, 2 Street S.W., and 11 Avenue S
 - Design of bridge over the Bow River
- **Development of procurement documents**
- Release the request for proposal (RFP) for manufacturing the light rail vehicles (LRVs)

Pending approval of the updated alignment,

- Prepare the Segment 1 construction RFP for release to market in Q3 2020
- Finalize remaining land acquisition
- Continue with Enabling Works program

2021

Segment 1 DBF contract will be awarded.

May 2020 to 2021

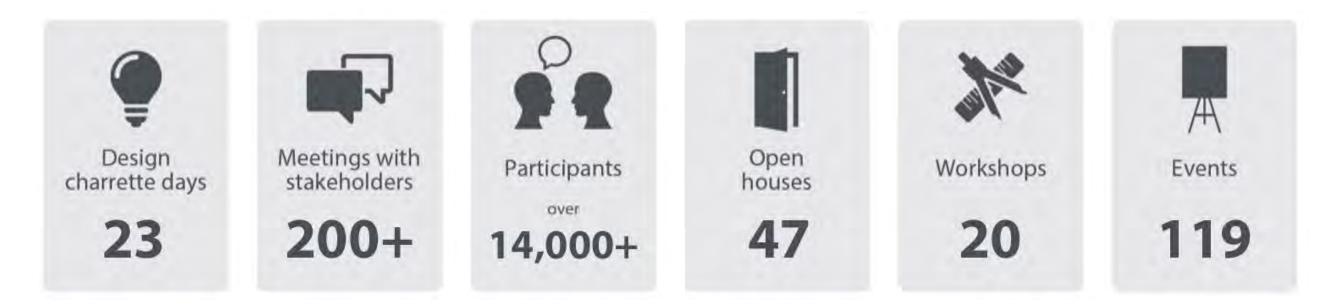
our next steps include:

2027

Opening day for Stage 1.

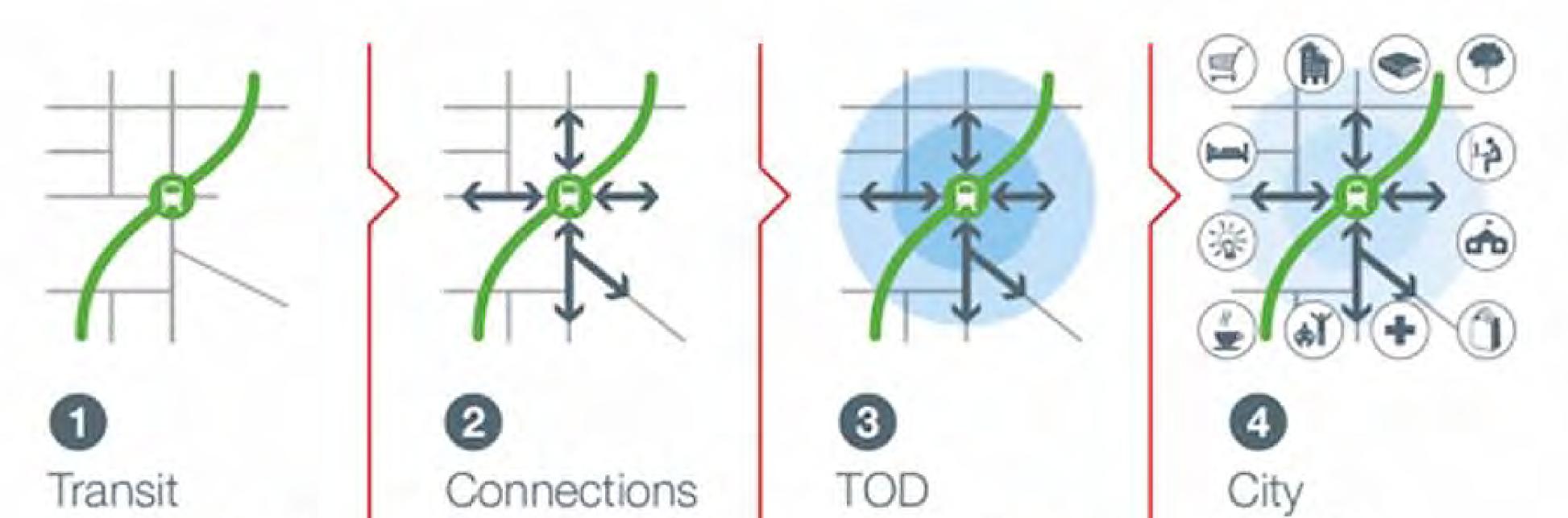
- Initiate land acquisition
- Initiate Enabling Works and utility relocation program

Stakeholder engagement





Realizing the long-term vision



infrastructure to stations supportive Shaping infrastructure

A layered approach

The Green Line will be realized in layers in order to achieve the projects final long-term vision. Delivery of Stage 1 includes the transit infrastructure and station connections. This means that Stage 1 lays the foundation for each layer that will be built over time. Decisions made today in the project will help guide future transit-oriented development (TOD)-supportive infrastructure and city shaping, through other corporate policies, plans or initiatives.



Has anything changed for Segment 1?

Since Council direction in July 2019, the project team has been evaluating the whole of Stage 1 to address concerns about customer experience, project budget, and construction risks. These risks have been addressed by making changes to the alignment in Segment 2, from 16 Avenue N to the Elbow River, adding a bridge over the Bow River instead of a tunnel, and finding efficiencies in other areas along Stage 1.

Through the review, Administration identified a series of cost and risk reduction measures, including:

- Replacing a parkade with a surface parking lot at the Shepard LRT station,
- Revising the LRT alignment at Barlow Trail and 114 Avenue S.E. from an underpass concept to an overpass concept,
- Raising the track profile through the Lynwood Ridge and former Imperial Oil Refinery lands to manage environmental risk during construction,
- Optimizing bus terminal and road layout at South Hill station, and
- Optimizing the size and scale of the LRT maintenance and storage facility.

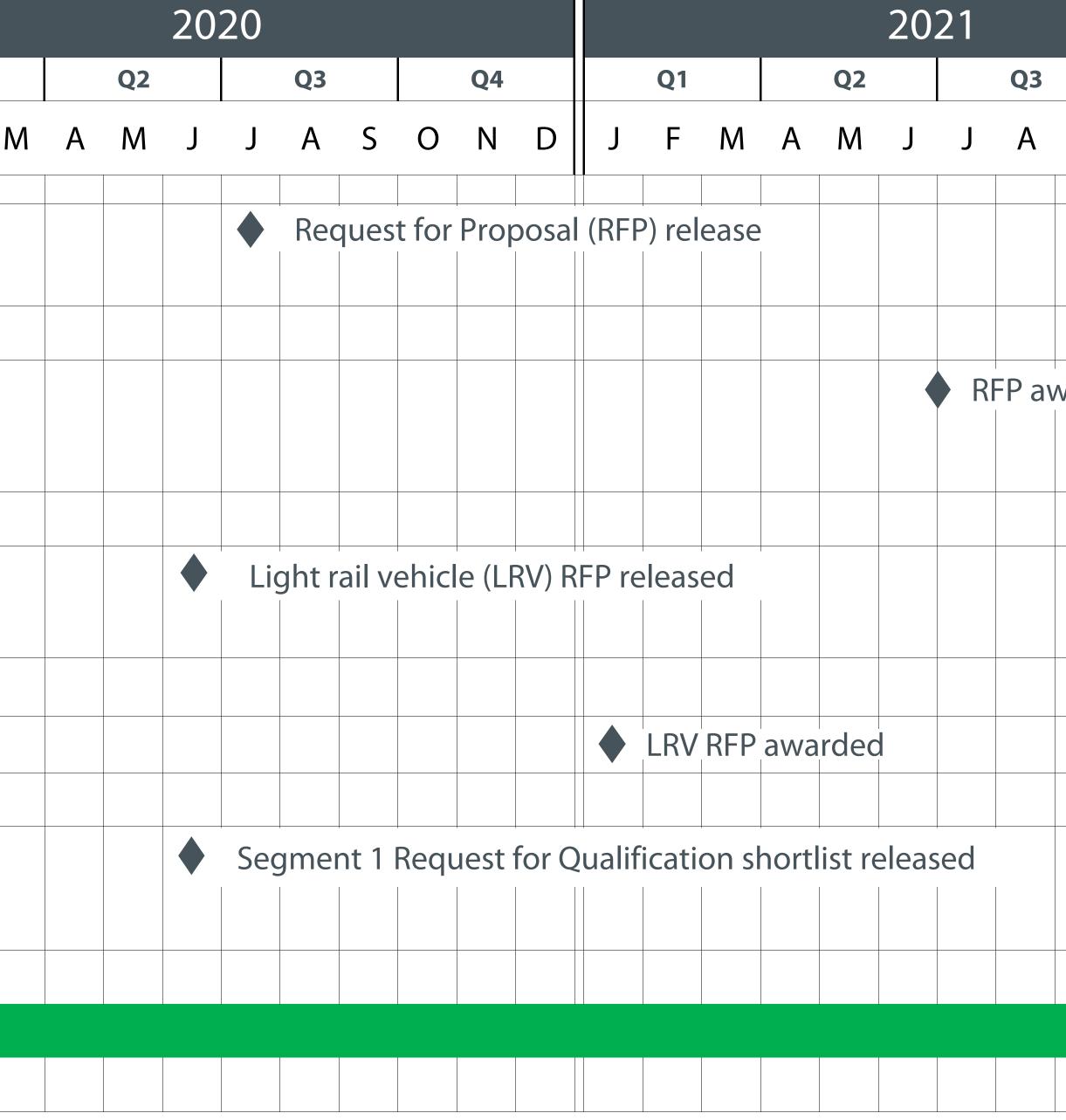
The project team will continue to seek out additional opportunities to further reduce costs in order to ensure the Green Line delivers the highest value project for Calgarians and taxpayers.



Next steps - Segment 1 (Elbow River to Shepard Station S.E.)

On June 1, 2020, Council will make a decision on the updated Stage 1 route. If approved, Segment 1 would continue with procurement.

		Q1		
	J	F	I	
Request for Proposal (RFP) for Segment 1 released to market				
RFP award and major construction start on LRT				
Light rail vehicle (LRV) RFP released to market				
LRV RFP awarded				
Segment 1 Request for Qualification shortlist released				
Enabling Works program				



				2022					
		Q4			Q1			Q2	
S	0	Ν	D	J	F	Μ	А	Μ	J
ward									



How to stay involved

As we continue with the planning process there will be additional opportunities for Calgarians to stay involved in the Green Line project.

Online Presentations – May 20 & 21, 2020

We will also be hosting a virtual presentation on the updated Stage 1 alignment. Mark your calendars for:

- Wednesday, May 20 12 p.m. to 1:30 p.m.
- Thursday, May 21 7 p.m. to 8:30 p.m.

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.

How to provide a public submission:

- Written public submissions are due at 12 p.m. on May 25.
 Use the <u>online form</u> to provide a written public submission.
- Members of the public can sign up to speak at the meeting until June 1, just so long as the item they want to speak to hasn't already passed.
- Public wishing to speak are invited to contact the City Clerk's Office by email at publicsubmissions@calgary.ca to register and to receive further information.