



Green Line Stage 1 Segment 2 Functional Planning

Final Engagement Summary
What We Heard & What We Did - Winter 2021

Executive summary

As part of Green Line's segment 2 functional planning, the project team completed an integrated communications and engagement program that provided citizens the opportunity to participate in meaningful engagement. We ensured coordination across all active projects as part of our segment 2 functional planning, including North Central Mobility & BRT Studies, Crescent Heights Mobility Study and Streetscape Master Plan for Centre Street North.

Engagement took place from October 2020 through to April 2021 and included two phases of engagement and one phase of information sharing. Throughout the project we engaged with residents and Calgarians at-large, Community Associations, Business Improvement Areas, local business owners, special interest groups and ward offices.

Our first phase of engagement included listening to Calgarians and exploring their ideas and challenges related to the various projects. The feedback from the first phase was used to inform initial concepts and ideas, which were presented back to the community for evaluation in our second phase of engagement. Our final phase included information sharing, reporting back on how community input has informed the final recommendations, and sharing the final project recommendations with the public before Green Line Committee.

We employed a variety of engagement and communications tactics, including a stakeholder working group, online surveys, virtual workshops, meetings and presentations, digital web-based open houses, in-community sounding boards, postcards and letters, signage, social media and email newsletters. We took extra care to ensure that our approach was meaningful, inclusive and removed barriers to participation, within the constraints of COVID-19 restrictions. This included the use of plain language and descriptive materials for those with low-vision, translated materials in simplified and traditional Chinese, the use of 311 for feedback and the piloting of new digital based tools to improve user experience.

Throughout the entire project, we held more than 46 public sessions and stakeholder meetings and conducted 13 online surveys. In total, at least 60,000 people were made aware of the project through our communications campaigns, we connected with more than 18,000 participants through our engagement opportunities (online portal and sessions) and received over 1,600 ideas and contributions across all phases.

At a high-level, some of the themes we heard through the engagement included a desire for an enhanced Bus Rapid Transit (BRT) service, concerns about the mobility network in the future, strong desire for a vibrant and walkable Centre Street North and concerns about impacts within Crescent Heights. We also received a mix of visions for the Bow River LRT bridge, that incorporates convenient access and viewpoints, while being designed in an environmentally sensitive way.

Project overview

In Segment 2 we have been 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 detailed functional plans for the project. Completing the functional plan for Segment 2 includes examining how the LRT will change travel patterns on Centre Street North and in surrounding communities, as well as what requirements LRT stations will have. It also includes a Streetscape Master Plan for Centre Street North, a BRT Study and planning the form and features of the new Bow River LRT Bridge.

The functional plan will contribute and inform the procurement process. To complete the functional planning for Segment 2, several different projects, studies and analysis needed to be completed for areas starting at the Elbow River, through the Beltline and Downtown, through Crescent Heights and north of 16 Avenue N to 160 Avenue N. These include environmental studies, access planning work, station location analysis, investigative drilling, structural design, mobility studies and much more.

The initiatives that were part of our segment two functional planning engagement include:

- North Central Mobility Study & Crescent Heights Mobility Study
- North Central BRT Study
- Streetscape Masterplan for Centre Street North
- Bow River LRT Bridge

Communications and engagement program overview

Functional planning confirms the specific engineering requirements and addresses technical issues, which help The City create 'reference concept designs' to inform the procurement process. Using The City's Engage Framework, engagement was conducted at a *Listen and Learn* level, allowing The City to provide information while better understanding Calgarians' views, plans, concerns, ideas and expectations.

Our engagement and communications process was designed as a multi-phased approach where we collected input and shared information at key intervals throughout the functional planning process, in total we had three phases of engagement and information sharing between October 2020 and April 2021. The City also created synergies across the entire project study area and where we found opportunities to align engagement opportunities based on geographic areas or by grouping similar projects together. This helped ensure we were reducing engagement fatigue and engaging with Calgarians in a way that was meaningful and relevant to them.

Engagement objectives

Our objectives in engaging Calgarians were:

- Build awareness and understanding of Green Line LRT segment two functional planning and the planning and delivery process
- Communicate to the public and stakeholders what items are open for public engagement and what is not in scope for engagement at this time
- Understand the interests of key stakeholders and mitigate concerns, where possible
- Ensure that stakeholders feel engaged and have reasonable opportunity to provide input into planning and concept development for the segment two functional plan

Respect for diversity, inclusion and culture

The engagement program was designed to be respectful of the diversity of people living, working and spending time in Calgary. To make the engagement as inclusive as possible, the following steps were taken to remove barriers to participation:

- To comply with the public health guidelines due to COVID-19, engagement was conducted virtually with an option to dial in to events or provide feedback by calling 311.
- To reach the primary audiences, including those that have limited access to computers/internet, printed materials were made available via postcards, Community Association toolkits, and local signage in Crescent Heights, Tuxedo Park, Renfrew, Chinatown and Centre Street N businesses and surrounding communities.
- To ensure virtual events were accessible we created an accessibility tip sheet for Microsoft Teams to help improve user experience and enable assistive technologies like auto translation, closed captioning and screen reader compatibility.
- All online materials were screened through an online readability checker to ensure materials were plain language and were provided at a grade 8 reading level.
- All promotional materials had notices in Traditional Chinese so that Chinese-speaking Calgarians could be aware of the engagement. They also had the option of calling 311 to have additional information translated.
- Business owner notifications for the businesses located on Centre Street were translated into traditional Chinese.
- The City of Calgary's online Engage Portal used different formats, including videos, maps, surveys and discussion boards, which allowed participants to engage based on their capacities and interests.
- An American Sign Language interpreter was provided at our stakeholder workshop to accommodate participants with hearing loss.
- All video presentations that were uploaded to YouTube had closed captioning and translation features enabled.
- All visuals used on our website and in our presentations were accompanied by descriptive text explanations for participants that were low-vision.
- Virtual events were designed to maximize information sharing and the opportunity for the public to provide feedback with the following approach:
 - Option to dial into meetings or call 311 to provide input, for those without access to a computer
 - Extensive question and answer sessions directly with project teams and subject matter experts
 - Evening and daytime events to accommodate different schedules
 - Events were recorded and posted online for those who couldn't attend at the scheduled times
- We piloted the use of a digital web-based open house to accommodate those that were unable to attend an event; this allowed participants to click through information panels and watch short videos describing the project and answering key project questions.

- We partnered with the library to add a link to the Engage Portal from their computers to reduce barriers to accessing technology. (However, due to the state of local emergency, the libraries were closed at the end of November.)

Better aligning the work of The City

During our engagement we looked to better serve citizens, communities, and customers through our program approach in a way that is cohesive, collaborative and integrated, and works together as “One” for “Calgary.” We ensured coordination and collaboration with other City departments and all of our functional planning projects to ensure a One City/ One Voice approach.

What did we do and who did we talk to?

Throughout the entire project, we held over 46 public sessions and stakeholder meetings, and conducted 13 online surveys. In total over 60,000 people were made aware of the project through our communications campaigns, we connected with over 18,000 participants through our engagement opportunities (online portal and sessions) and received over 1,600 ideas and contributions across all phases.

Phase 1: Explore		
The purpose of this phase was to introduce our projects and hear opportunities and challenges from Calgarians before concepts and plans were developed.		
Targeted stakeholder meetings		Metrics
Community Associations (CA) & Business Improvement Areas (BIAs) (6 meetings)	November – December 2020 Presentations and Q&A meeting extended to all CA/ BIAs within the entire project study area.	16 attendees
Public sessions		Metrics
Eau Claire Improvement Projects Virtual Presentations (3 sessions)	Oct. 24, 25 & 27, 2020 Presentations to share general updates on the projects and answer questions.	104 participants
Planning the Green Line Virtual Presentations (2)	Nov. 26 & 28, 2020 Presentations to introduce the functional planning projects and answer questions.	140 participants
Planning the Green Line Integrated Workshops (4 sessions)	Dec. 1, 2, 3 & 5, 2020 Workshops to foster discussion on the	45 participants

	opportunities and challenges related to each project.	
Online engagement		Metrics
Online Surveys (4)	Nov. 23 – Dec. 13, 2020 Online surveys by geographic zone area for the Streetscape Master Plan, Mobility and BRT Studies and a survey for the Bow River LRT Bridge.	7,892 page visits with 352 contributions from 80 contributors
Communications campaign		Metrics
Social Media	Facebook, Twitter and Instagram	9,000 clicks
E-newsletter (2 emails)	Subscriber based e-newsletter	3,666 subscribers
Mailed brochure	Mailed project update along the entire stage one alignment.	31,393 households
Postcards	Mailed postcard to households promoting engagement	12,000 households
Public information boards	Placed in Eau Claire, Crescent Heights and North Pointe	N/A
<p>Phase 2: Evaluate The purpose of this phase was to share initial ideas and concepts to reach citizens and collect feedback to evaluate them for further refinement before the creation of final proposed plan.</p>		
Targeted stakeholder meetings		Metrics
Community Associations (Communities north of 16 Avenue to 160 N)	Jan. 16, 2021 Update presentation and opportunities to answer questions.	10 attendees
Community Association & Business Improvement Area Meeting (Crescent Heights/ Tuxedo/ Renfrew)	Feb. 17, 2021 Update presentation and opportunities to answer questions.	13 attendees
Targeted Stakeholder Workshop (Special interest groups and organizations)	Feb. 24, 2021 Workshop with organizations and associations that represent different perspectives and stakeholder needs	24 attendees

Bridge Stakeholder Working Group (4 meetings)	Jan.20, Feb.16, Mar. 3 & Mar. 24, 2021 The Stakeholder Working Group received information on the concept development process, including the challenges to be addressed, what is possible to design or include in the concept, and the status of the project. Each meeting provided participants with opportunities to pose questions and to have discussions on any aspect of the bridge concept.	19 members
Tomorrow's Chinatown Advisory Group (2 meetings)	Jan. 18, 2021 Feb. 22, 2021 Presentation and discussion on the projects connected to Chinatown.	25 attendees 20 attendees
Public sessions		Metrics
North Central Mobility & BRT Virtual Open Houses (3 sessions)	Jan. 23 & 25 (lunch and evening), 2021 Drop-in sessions/ come and go style event on Microsoft Teams Meetings.	70 attendees
Planning in Crescent Heights Virtual Open Houses (2 sessions)	Feb. 18 & 23, 2021 Drop-in sessions/ come and go style event on Microsoft Teams Meetings.	103 attendees
Bow River LRT Bridge Virtual Presentation (1 session)	Feb.23, 2021 Presentation and Q&A on Microsoft Live Events.	65 attendees
Bow River LRT Bridge Virtual Open Houses (2 sessions)	Feb. 25, 2021 (lunch and evening) Drop-in sessions/ come and go style event on Microsoft Teams Meetings.	24 attendees
North Central Mobility & BRT Virtual Open Houses (3 sessions)	Mar. 16, 17 & 18, 2021 Drop-in sessions/ come and go style event on Microsoft Teams Meetings.	44 attendees

Online engagement		Metrics
North Central Mobility & BRT Online Presentation (YouTube)	Jan. 28 – Feb. 10, 2021 Detailed presentation posted online.	144 views
North Central Mobility & BRT Online Survey	Jan. 28 – Feb. 10, 2021 Survey to evaluate initial concepts for both the Mobility and BRT studies.	3,070 page visits with 183 contributors and 563 contributions.
Streetscape Master Plan for Centre St N Online Presentation (YouTube)	Feb.18 – Mar 2 Detailed presentation posted online.	110 views
Streetscape Master Plan for Centre St N Online Survey	Feb. 18 – Mar. 2, 2020 Survey to evaluate draft concepts for the Streetscape Master Plan.	409 page visits with 113 contributors and 113 contributions.
Crescent Heights Mobility Study Online Presentation (YouTube)	Feb. 18 – Mar. 2, 2021 Detailed presentation posted online.	78 views
Crescent Heights Mobility Study Online Survey	Feb.18 – Mar. 2, 2021 Survey to evaluate proposed mobility measures in Crescent Heights.	409 page visits with 82 contributors and 82 contributions.
Bow River LRT Bridge Online Survey	Feb. 18 – Mar. 2, 2021 Survey to evaluate design considerations for the Bow River bridge.	1,386 page visits, 216 contributors and 216 contributions.
North Central Mobility & BRT Online Survey (Phase 2B)	Mar. 15 – 25, 2021 Survey to evaluate refined concepts for both the Mobility and BRT studies.	1,147 page visits, 56 contributors and 111 contributions.

Communications campaign		Metrics
Social Media	Facebook, Twitter and Instagram	7,500 clicks
E-newsletter (4 emails)	Subscriber based e-newsletter	3,666 subscribers
Road Signs	Signs placed in high traffic areas promoting engagement	N/A
Mailed Postcards and Information Notices	Postcard/notices sent to households promoting engagement	32,000 households
Public information boards	Placed in Eau Claire, Crescent Heights and North Pointe	N/A
Community Posters	Placed in businesses on Centre Street	280 locations
Phase 3: Reveal		
<p>The purpose of this phase was to share final concepts and plans, and report back on what we have heard and how that has influenced our final proposed recommendations prior to committee.</p>		
Targeted stakeholder meetings		Metrics
Community Associations & Business Improvement Areas (2 sessions)	Apr 14 & 15, 2021 Update presentation and opportunity to answer questions for all CA's & BIA's in the project boundary areas.	23 attendees
Bridge Stakeholder Working Group (1 meeting)	Apr.7, 2021 Meeting to discuss final design concepts for the Bow River LRT Bridge.	19 members
Public sessions		Metrics
Segment 2A Virtual Presentation (1 session)	Apr 15, 2021 Project presentation and opportunity to ask questions.	71 attendees
Planning in Crescent Heights Virtual Presentation (1 session)	Apr.19, 2021 Project presentation and opportunity to ask questions.	71 attendees
Bow River LRT Bridge Virtual Presentation (1 session)	Apr. 20, 2021 Project presentation and opportunity to ask questions.	70 attendees

North Central Mobility & BRT Studies Virtual Presentation (1 session)	Apr. 21, 2021 Project presentation and opportunity to ask questions.	14 attendees
Planning the Green Line Virtual Open Houses (2 sessions)	Apr.16 & 22, 2021 Drop-in sessions to speak directly with project teams, learn more and ask questions.	April 16: 10 attendees April 22: 19 attendees
Online engagement		Metrics
Information sharing on the Engage Portal	Apr. 15 – 22, 2021	3,983 visitors
Communications campaign		Metrics
Social Media	Facebook, Twitter and Instagram	4,889 clicks
E-newsletter (2 emails)	Subscriber based e-newsletter	3,952 subscribers
Road Signs	Signs placed in high traffic areas promoting engagement	N/A
Radio ad	Radio ad on 660 News promoting engagement	44 spots on air
Community posters	Distributed to businesses along Centre Street N., as well as in Chinatown and Eau Claire	440 copies distributed

What did we hear and how was feedback considered?

Citizens provided diverse comments through all phases of engagement and the main themes identified by citizens across all phases have been highlighted in the chart below including a response from the project team on how this influenced or was considered in the final proposed plans. For detailed themes and verbatim comments, please review our phase by phase “what we heard” reports.

Phase 1: Explore	
What we heard (Issue or opportunity identified)	Response from the project team
BRT Enhancements. There was a keen interest in an improved Bus Rapid Transit service and station amenities.	This feedback, along with technical analyses of future traffic growth projections was used to develop ideas for improving future traffic conditions and BRT amenities and operations that were presented in phase two for evaluation.

<p>Mobility Network Concerns. There were various concerns shared about the mobility network including:</p> <ul style="list-style-type: none"> ○ Identification of daily travel routes for all transportation modes and improvements needed ○ Potential changes to the roadway, including potential loss of vehicular travel lanes ○ Impacts of cut-through traffic on the residential streets ○ Desire for more east-west connections for all transportation modes 	<p>This input was used to help inform hot spots and areas for improvement, that were further analysed through our technical analyses.</p> <p>With this feedback in mind, we presented ideas to improve corridors in phase two.</p>
<p>Streetscape Amenities. There was a strong desire for streetscape amenities and improvements that contribute to a more vibrant Centre Street and Crescent Heights community.</p>	<p>This input was used to put priority on elements such as creating a sense of place, ensuring pedestrian accessibility, safety, access to businesses and having trees and vegetation.</p> <p>We used input from the first phase of engagement to develop preliminary streetscape designs for Centre Street North which were presented for evaluation and feedback in phase two.</p>
<p>Vision for Bow River Bridge. There were a mix of visions shared for the new Bow River LRT Bridge, from distinctive to low-key, and desire for a multi-modal bridge that incorporates convenient access, viewpoints and that is designed in an environmentally sensitive way.</p>	<p>This input was used to inform our engagement processes, where we built on the feedback heard in our second phase to understand what will make the Bow River LRT bridge successful once built.</p>
<p>Phase 2: Evaluate</p>	
<p>What we heard (Issue or opportunity identified)</p>	<p>Response from the project team</p>
<p>Streetscape: General support for the initial concepts presented and continued desire for amenities and streetscape improvements that maintain neighbourhood character and contribute to a more vibrant Crescent Heights community:</p> <ul style="list-style-type: none"> ○ Access to retail and services, including outdoor seating ○ Safe and comfortable pedestrian realm with weather 	<p>Additional input and feedback during this phase helped us further prioritize amenities in specific areas of the corridor and were used to refine streetscape design concepts. The supported design approach reflected in the initial concepts were then applied throughout the corridor to develop the final proposed Streetscape Master Plan. Further engagement with the Crescent Heights CA and BIA and private landowners will be undertaken to explore additional placemaking, community identity and private-public urban realm</p>

<p>protection</p> <ul style="list-style-type: none"> ○ Preserving Crescent Heights' unique neighbourhood identity 	<p>improvement opportunities along the corridor.</p>
<p>Crescent Heights Mobility: Concerns about the impacts on mobility (daily travel) with changes to the roadway, including:</p> <ul style="list-style-type: none"> ○ Potential loss of vehicle travel lanes and access to the community ○ Concerns about changes to traffic calming ○ Mix of opinions on the interface parking policy. ○ Traffic impacts on nearby residential streets ○ Desire for more direct east-west cycling connections 	<p>Throughout engagement we have heard a mix of feedback on mobility within Crescent Heights and this input has been used to inform our study.</p> <p>At this time there are no immediate changes required for parking and traffic calming and no decisions have been made. The City will continue to work with the residents and businesses in the area to explore options that balance the needs of both community and businesses.</p>
<p>BRT Options: Preference for options that would provide fast and reliable BRT service during peak traffic hours.</p>	<p>We have incorporated all feedback to refine our proposed recommendations and have developed evaluation criteria based on input received.</p>
<p>Pathway Connections needed. For those who access transit, Calgarians wanted missing pathway connections to be completed within the community.</p>	<p>Through our study we have identified a number of improvements to the transportation network. The input received was used to inform connections that have been identified for future improvement.</p>
<p>Concerns around congestion & traffic flow on multiple travel routes</p>	<p>Through our study we have identified a number of improvements to the transportation network. The input received was used to inform corridors and intersections which we have identified for future improvement.</p>
<p>Improve mobility for people driving, walking and cycling by: - Enhancing walking and wheeling connections on main corridors - Mixed desires for bike lanes with some want improved bike connections and some want bike lanes removed - Want improved turning movements & signal timings at major intersections</p>	<p>Through our study we have identified a number of improvements to the transportation network. The input received was used to mobility connections which we have identified for future improvement.</p>
<p>Ranking of corridors according to which are most important: - Most important group</p>	<p>Through our study we have identified a number of improvements to the transportation</p>

<p>of corridors are Centre Street N, Edmonton Trail N.E. and 4 Street N.W. - Second most important group of corridors are 14 Street N.W., 30/32 Avenue N and 40/41 Avenue N - Least important corridor is McKnight Blvd N</p>	<p>network. A series of improvements have been proposed for the priority corridors noted through engagement.</p>
<p>Bow River LRT Bridge vision and measuring success</p> <ul style="list-style-type: none"> • Maintain multi-use pathways. • Make space for different travel modes. • Reduce impact on river flow, fit with natural surroundings (e.g. wetland, parkland). • Consider better/more natural ways to remediate the surrounding natural environment following construction • Maintain Prince's Island Park and Eau Claire Promenade for enjoyment and recreational uses. • Shifting travel modes, more people taking transit instead of driving. • Address vehicular traffic congestion. 	<ul style="list-style-type: none"> • Separation of pathway users, widths and connections will be explored in the next phase of design. • Bridge option with pier in river will not advance to next phase of design. • Alternative methods of riparian protection such as naturalization/habitat restoration will be considered in addition to traditional stone rip-rap (rocky material placed along shorelines).
<p>Bow River LRT Bridge form preference</p> <ul style="list-style-type: none"> • Preference for a low-profile bridge that spans the Bow River with a quiet design that includes an arch below the deck without a pier in the river. • A bridge that complements the existing built environment, highlights the natural environment, and maintains unobstructed views. • Environmental considerations (e.g., uninterrupted river flow is preferred (i.e., True Arch vs Viaduct with pier), minimizing impacts from piers, respecting wildlife habitat). 	<ul style="list-style-type: none"> • Bridge span for Bow River will not have a pier in water and will not have a negative impact to views. • Railing design for pathway users will consider views for all ages and abilities, while maintaining safety. • Pathways placed on outside of bridge to create a sleek and slender structure in profile. • Construction on Prince's Island park will minimize environmental impacts including wildlife, and mitigation and restoration following construction.
<p>Bow River LRT Bridge view preference</p> <ul style="list-style-type: none"> • Respondents preferred the below deck structure (True Arch form) mainly due to a perception of less impacted views, particularly to nearby residents. • Complement existing built environment (e.g., architecture, urban design, subtle) and the natural environment. • Respect the skyline, maintain unobstructed views of downtown skyline and valley. 	<ul style="list-style-type: none"> • Bridge form and main span design will consider minimizing impact to skyline. • Bridge will be designed to complement the architecture and urban design of the area as opposed to a negative impact. • Viewpoints along the pathway will be considered in the next phase of design. • Architectural design will be considered from all views and users in the area.

<ul style="list-style-type: none"> • Allow people to take photos and enjoy the skyline; cut-outs for viewing. • Opportunity to add a beautiful and iconic element; impressive from both above and below. 	
<p>Bow River LRT Bridge multi-use pathway</p> <ul style="list-style-type: none"> • Safety and accessibility was important especially related to the multi-use pathways. • Physically separated, dedicated and well-marked lanes for people walking and wheeling to avoid conflict; desire for separation between active modes and transit lanes. • Well lit, safe during the day and at night, security cameras. • No slip surface, free clear width, gentle slopes. • Generous width for pathways (e.g. 4 metres) to accommodate many active modes. • Incorporate elements for pleasant experience for active modes, e.g. plants, viewing bays, benches. 	<ul style="list-style-type: none"> • Separation of pathway users will be explored in the next phase of design • Requirements for lighting of the bridge and pathways, non-slip surface will be determined in next part of design • Each pathway on the bridge will include a clear width of 3-4m which exceeds the minimum in guidelines. • Additional features on the bridge including viewpoints and benches will be considered