

Main Streets Program:

Montgomery Main Street: Bowness Road N.W. Streetscape Master Plan

Title: Main Streets Program

Montgomery Main Street: Bowness Road N.W. Streetscape Master Plan

Owner: Urban Strategy Implementation

Prepared by: Urban Systems Ltd.

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Web: www.calgary.ca/mainstreet

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1. Introduction



1.0 Introduction

Montgomery Main Street Bowness Road N.W. is, in many ways, in the heart of Montgomery. The Montgomery Main Street: Bowness Road N.W. Streetscape Master Plan (the Plan) is a high-level summary of the design. It is not intended to resolve every detail of the design, rather, it is a vision that has emerged through public and stakeholder engagement, technical analysis, a focus on placemaking and multi-modal transportation.

The Plan focuses on Bowness Road N.W. between 52 Street N.W. and 42 Street N.W. Segments of 43 Street N.W. and 46 Street N.W. have been considered to ensure Bowness Road N.W. is integrated into the community and the city at-large. It will also align with City plans and policies for placemaking, planning, transportation and infrastructure. The study area extent for the Plan is shown in **Figure 1**. Also shown in **Figure 1** are adjacent area projects by The City.



FIGURE 1. STUDY AREA

1.1 Background + Purpose of the Plan

1.1.1 Background

As part of the Main Streets program, Montgomery was one of Calgary's first Main Streets communities to go through land-use re-designation. The land use was re-designated in May 2017 for the area between Home Road N.W. and MacKay Road N.W., and between 16 Avenue N.W. and 19 Avenue N.W. **Figure 2** shows the amended land use plan in the Montgomery Area Redevelopment Plan (ARP), which can change over time. The dashed black line represents the Main Streets area.

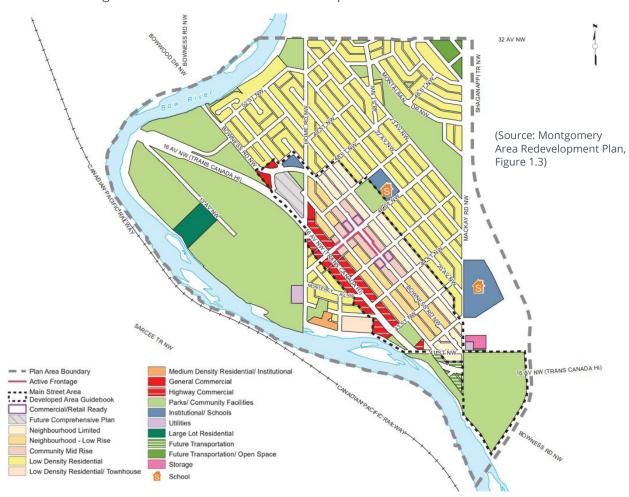


FIGURE 2. MONTGOMERY 2017 LAND USE PLAN

Land-use and policy plans are subject to changes, please refer to the most recent policy plans and land use districts for the most up to date information.

Following the land-use re-designation and as part of streetscape improvements, The City has committed funds to:

- Complete streetscape master plans for Bowness Road N.W. and 16 Avenue N.W.;
- Undertake public realm improvements along Bowness Road N.W. that balances community wants and needs, City Plans and Policies, and aims to remove impediments to redevelopment.

1.1.2 Purpose of Plan

The Plan proposes near-term solutions to priority issues that are affecting the community today, as well as illustrate a long-term vision for Bowness Road N.W. as a memorable destination, a living room and a hub for the community.

The design concept proposed in the Plan addresses all elements within the public right-of-way, as well as the interface between the street and adjacent buildings, parks and plazas.

This includes:

- · Placemaking and community identity;
- Vehicular circulation, traffic calming, transit, parking and property access;
- · Cyclist and pedestrian circulation;
- · Street trees and vegetation;
- · Utilities and infrastructure;
- · Street aesthetics and design intent; and
- Street programming, patios and parklets.

1.2 Related Plans, Policies + Parallel Projects

A detailed review of existing Plans and Policies was completed as part of the initial phase.

Highlights from the policy review at the time of this master plan include:

- Montgomery Area Redevelopment Plan (ARP) (2012, revised 2017)
 - Revitalize the Bowness Road N.W./46
 Street N.W. Commercial Area as a Mixed-Use Core;
 - Enhance the streetscape environment of Bowness Road N.W., include street trees;
 - · Address traffic safety and speed;

- Enhance and improve pedestrian and bicyclist pathways and corridors, integrating with existing transportation network; and,
- Explore removal of truck route designation on Bowness Road N.W.
- Montgomery Approved Land Use Zoning (May 2017)
 - New land uses allow for greater flexibility for mixed-use and housing options, as well as business opportunities in Montgomery. The 2017 land use designations include:
 - · Residential (R-CG);
 - · Multi-residential (M-CG, M-C1);
 - · Commercial (C-COR 2);
 - · General mixed use (MU-1); and,
 - · Active frontage mixed use district (MU-2).
- Complete Streets Policy and Guide (TP021, November 2014)
 - Implement street design that helps to create more liveable neighbourhoods and strives to accommodate all transportation modes including walking, cycling, transit and driving.
 - Importance of the appropriate public realm components for each road classification is emphasized and includes components like tree canopy, lighting, planting, sidewalk, multi-use pathways, site furniture, signage and transit shelters.
 - Bowness Road N.W. is a Neighbourhood Boulevard east of Home Road N.W., which serves to provide higher-capacity streets within communities and development areas where active modes and local commercial activity take precedence over private vehicle and goods movement activity.

- South Shaganappi Trail N.W. Corridor Study (March 2018)
 - · Short-term recommendations that include:
 - New traffic controls for 16 Avenue N.W. on- and off- ramps with northbound Bowness Road N.W.;
 - Re-alignment of 16 Avenue N.W. offramps to Shaganappi Trail N.W. and southbound Bowness Road N.W.; and,
 - Connecting missing links through a new multi-use pathway along the north and south sides of Bowness Road N.W. from 42 Street N.W. to Shaganappi Trail N.W.

- · Long-term recommendations that include:
 - Tight urban diamond interchange reconfiguration – removes the interchange ramps at Bowness Road N.W. and 16 Avenue N.W., with Bowness Road N.W. as an underpass; and,
 - New sidewalks and on-street bicycle lanes along the north and south sides of Bowness Road N.W. from 42 Street N.W. to MacKay Road N.W., and transitioning to sidewalks and multi-use facility with proposed parking lanes from MacKay Road to Shaganappi Trail N.W.

1.3 Master Planning Process

Main Streets Streetscape Master Plan projects follow a three phased approach, as shown in **Figure 3**; Discover (Phase 1), Explore (Phase 2) and Reveal (Phase 3).

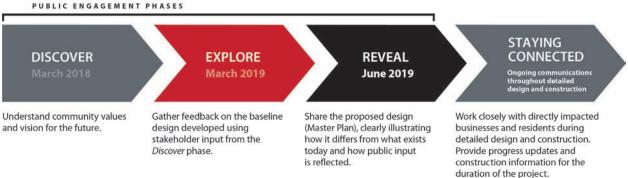


FIGURE 3. MONTGOMERY MAIN STREET: BOWNESS ROAD N.W. STREETSCAPE MASTER PLAN PROCESS

1.3.1 Discover

The Discovery phase centred on establishing a clear vision and objectives for the project. This was done by initially completing a comprehensive review of previous engagement findings from 2014 to 2016 to identify applicable stakeholder themes and values. This includes findings from the Main Streets / Land Use Re-designation engagement and other relevant area project engagements. Knowledge transfer of previous work was important to increase efficiency within the project.

It was important that stakeholders were reintroduced to the findings from previous engagements to demonstrate how the current streetscape work is building on what was heard in the past.

A detailed site analysis and policy review was also completed for the project area during this phase.

Following the background review, public and stakeholder engagement events for Montgomery Main Street Bowness Road N.W. were held in Winter and Spring 2018. The events provided opportunities to confirm previous findings, gather input on people's values and vision for Bowness Road N.W. and identify local context of issues and opportunities. The site analysis and data collection, combined with engagement findings, were used to refine the project vision and objectives and develop design strategies.

1.3.2 Explore

The Explore phase provided a baseline design concept and alternate design options that balanced the objectives identified during **Phase**1. Engagement during this phase focused on identifying opportunities to improve the baseline concept and evaluate options along the corridor based on stakeholder input, technical feasibility, pedestrian and cyclist connectivity, and transit and transportation network operations.

1.3.3 Reveal

In the Reveal phase, stakeholders were presented with the refined concept that was developed with input from the previous phases. Emphasis was placed on how stakeholder input influenced the design or why input could not be incorporated in some situations. Implementation options were also explored in this phase of the project.

1.4 Vision, Goals + Objectives

Montgomery has its own character and personality, distinct from any other community in Calgary. Its sense of place offers culture and diversity in a unique inner-city setting surrounded by nature. The community has enormous pride in their neighbourhood and a meaningful spirit of resilience. At the same time, the fact that Montgomery is a distinct community from Bowness is not well understood. One of the main priorities to residents is to clearly distinguish and express their own community identity.

This project is an opportunity to celebrate that identity by making Bowness Road N.W. as the heart of the community. This is clearly expressed in the **Plan's Vision - Montgomery's Road , where a street becomes a community**. This vision celebrates the community and is "uniquely Montgomery. The following (**Figure 4**) is a summary of the goals and objectives for the project as they relate to this vision.

Vision Statement:



Montgomery's Road – WHERE A STREET BECOMES A COMMUNITY





SOCIAL + HEALTHY LIFESTYLE

Goal: Create a family-friendly and safe street environment that focuses on promoting sense of community.

- Objective #1: Create more spaces and deliberate opportunities for gathering and social interaction.
- *Objective #2:* Integrate healthy planning principles and promote sustainability.
- Objective #3: Support community initiatives to create a strong identity.

MOBILITY + FUNCTIONALITY

Goal: Achieve a balance of multi-modal transportation options with a focus on pedestrian-friendly and inclusive design.

- Objective #4: Support connectivity to existing parks and Bow River.
- *Objective #5:* Maintain commercial zone parking.
- Objective #6: Increase level of accessibility through design components.

CHARACTER + IDENTITY

Goal: Create a street that establishes a unique sense of place and offers memorable experiences for both residents and visitors.

- Objective #7: Embrace neighbourhood history as a design vehicle to help define community identity.
- Objective #8: Enhance urban forest and create design balance through soft landscape components.

ECONOMIC

Goal: Street improvements promote economic vitality by encouraging redevelopment opportunities and promoting investment.

- Objective #9: Public realm improvements attract home buyers and local businesses and, in turn, positively influence property values.
- Objective #10: Montgomery becomes a recognized destination for all Calgarians to explore and experience, consequently providing support for local businesses.

FIGURE 4. MONTGOMERY MAIN STREET: BOWNESS ROAD N.W. VISION, GOALS + OBJECTIVES



2. Site Context



2.0 Understanding Bowness Road N.W.

The character of Bowness Road N.W. through Montgomery changes as you move from east to west. The West End, from west of 52 Street N.W. to 47 Street N.W., is bordered by recreational areas, natural parks and the river. The roadway also transitions from an Arterial Street to a Neighbourhood Boulevard in this section. The West End is also the gateway into Montgomery from the community of Bowness. It is characterized by detached homes, abundant park space, and distant views of the natural escarpment near Canada Olympic Park. The Core, between 47 Street N.W. to 44 Street N.W., is the transition between the residential and commercial areas. The right-of-way through this section is narrower, which presents a challenge to balancing the needs of pedestrians, cyclists, transit users and drivers, as well as creating social spaces and including street trees. The East End, from 44 Street N.W. through to MacKay Road N.W., is primarily residential with lower parking demand which provides opportunities for streetscape and landscaping enhancements. These three areas are shown in **Figure 5** below.

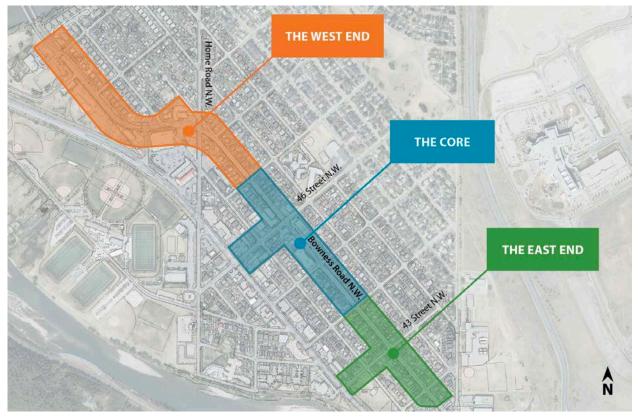


FIGURE 5. CHARACTER AREAS

A detailed review of the site context was completed as part of the Montgomery Main Street Bowness Road N.W. Background Report submitted to The City in June 2018. Further to this, a parking study was completed by The City of Calgary on June 20 and July 7, 2018. The following subsections provide an overview of the existing site context as it relates to the four overarching themes of the goals.

2.1 Social + Healthy Lifestyle

The residents and businesses of Montgomery are passionate about their neighbourhood and convey a sense of pride when they speak of their family-friendly, accessible and diverse community with a small-town feel. There exists a healthy respect for nature, an understanding of the unique site context in which they live, and an appreciation for the tremendous natural amenity value that is present around them in the form of usable open space. Residents have a strong sense of community and a desire for a higher level of public realm design that will connect people and places and promote social interaction.

Montgomery is also unique in that it is almost completely surrounded by natural open spaces. George Gell Park, Shouldice Park, the Bow River, Montalban Park and the south entrance to Bowmont Natural Environment Park form a unique perimeter of recreational green space around the neighbourhood. The community recognizes and appreciates the value associated with these natural amenities, especially the close proximity to the Bow River and the associated pathways. Trees are important to the community as both a functional component contributing to healthy lifestyles as well as to the aesthetic and character of the neighbourhood. The community has clearly articulated their desire to build on the already prevalent nature component of the community and increase the urban canopy.

Montgomery is also an active community. Many residents cycle, run and walk along the river valley, participate in informal and formal sports at the Shouldice Park facilities, and desire a more pedestrian and cyclist friendly Bowness Road N.W.

2.2 Mobility + Functionality

Bowness Road N.W. provides access for the residents of Montgomery, as well as other surrounding communities such as Varsity and Bowness. It also serves as a key connection to Skeletal and Arterial Roadways such as 16 Avenue N.W. and Shaganappi Trail N.W. The Complete Streets Policy and Guide provides strategic direction for how to safely accommodate all modes of transportation.

Bowness Road N.W. is classified as an Arterial Street from west of 52 Street N.W. to 48 Street N.W., and a Neighbourhood Boulevard from 48 Street N.W. to 42 Street N.W. Arterial Streets prioritize goods movements, cars and transit. They provide direct connections between multiple communities and major destinations. Neighbourhood Boulevards prioritize walking and cycling. Home Road N.W. and 46 Street N.W. are both classified as Collector Streets, which prioritize walking and cycling.

The Plan extent is focused from west of 49 Street N.W. through to 42 Street N.W. The Plan focuses on a universal design for building an accessible and inclusive environment throughout the corridor.

2.2.1 Pedestrian + Cyclist Circulation

There is an extensive connected network of existing sidewalks along both sides of Bowness Road N.W. and the cross streets. However, the sidewalks are narrow with no buffer from vehicle traffic. Pedestrian crossings of Bowness Road N.W. are controlled by pedestrian overhead flashers or signalized intersections for the area from 52 Street N.W. to 48 Street N.W. Crosswalks are marked at every intersection east of 48 Street N.W.

There are a number of bicycle facilities within Montgomery:

- Uni-directional bicycle lanes along Bowness Road N.W. west of the Bow River and along Home Road N.W.;
- Bi-directional multi-use facility along 52 Street N.W.:
- On-street signed bikeway along 43 Street N.W. and along MacKay Road N.W.; and,
- Multi-use pathways along the river connecting at 52 Street N.W. and at 43 Street N.W.

The Plan along Bowness Road N.W. would need to ensure connectivity with existing pedestrian and bicyclist networks and improving existing facilities.

2.2.2 Transit Circulation

Bowness Road N.W. currently services five transit routes, including a Bus Rapid Transit (BRT) route. The highest frequency transit route along Bowness Road is Route 1, which recently transitioned to the use of articulated buses. The BRT Route 305 provides service during the morning and afternoon peak hours. There are currently no transit routes along 46 Street N.W., but there are southbound routes along 48 Street N.W. (north of Bowness Road N.W.) and along 43 Street N.W. (south of Bowness Road N.W.). There are currently two timing points for transit, which are located west of Home Road N.W. on both the north and south sides of the road

2.2.3 Motor Vehicle Circulation

Bowness Road N.W. has approximately 16,000 vehicles per day west of Home Road N.W. and 13,000 vehicles per day east of Home Road N.W. The corridor is primarily one travel lane in each direction except between 49 Street N.W. and 48 Street N.W. where it is two travel lanes in each direction. The vehicle traffic currently moves well along the corridor with minimal delay. Some queues develop at the 49 Street N.W. and Home Road N.W. intersections.

2.2.4 Goods Movement

Bowness Road N.W. is currently designated as a truck route (as per the 2017 Calgary Truck Route Map); however, is not indicated as a Primary Goods Movement Route in the Calgary Transportation Plan (CTP). Other corridors in the area are designated for goods movements in the CTP, such as 16 Avenue N.W., which is currently identified as a Main Goods Movement Corridor, and Crowchild Trail, which is identified as a Supporting Goods Movement Corridor. The truck route designation does not align with the current designation of Bowness Road N.W. as a Neighbourhood Boulevard road classification east of Home Road N.W.

2.2.5 Access + Parking

There are a number of direct driveways to Bowness Road N.W., in particular the strip mall along the north side of Bowness Road N.W. between 46 Street N.W. and 45 Street N.W. The strip mall also has multiple landowners. Most residential uses do not have front garages except for a handful of older homes. All homes have access to laneways except for one parcel on the corner of 18 Avenue N.W. and Home Road N.W. Pedestrian movements along the sidewalk are currently interrupted by the accesses and can be difficult to maneuver for all abilities due to grade changes.

On-street parking is currently permitted along both sides of the corridor except for the section between 48 Street N.W. and 49 Street N.W., east and west of the project extents, and at transit stops. There are a number of residential permit and time limit parking restrictions near the commercial core. During the engagement held for the Master Plan, parking was identified as a key area of concern. This may have been motivated by the shortage of adequate parking for customers and employees of businesses in the community.

In order to better understand the impacts of various design treatments, the project undertook a parking study. In general, the results of the parking study suggest that the commercial area is more parked during the weekdays than the weekends. Within a block of the commercial area, the two-hour and unrestricted parking has high occupancy and in some areas is over utilized. However, some blocks that have residential permit-only parking near the commercial core are underutilized. At the west and east ends, the unrestricted residential parking is underutilized for both the weekdays and the weekends.

2.2.6 Rights-of-Way Property Line Setbacks

The Rights-of-Way Property Line Setbacks bylaw (1P2007, Part 3, Division 1) identifies a number of streets in the city where if redevelopment occurs, the building must be set back from the basic right-of-way plus the required setback indicated in the referenced bylaw. According to this bylaw, Bowness Road N.W. between MacKay Road N.W. and 48 Street N.W. has a basic rightof-way of 20.117 metres and a required setback of 1.50 metres on both sides for a required rightof-way of 23.177 metres. Prior to this basic rightof-way, the previous required setback was wider at 5.182 metres. The City had acquired land for this larger setback area on some properties along this corridor as they were redeveloping. As such, the west half of the commercial strip mall on the north side of Bowness Road N.W., east of 46 Street N.W., has a larger area of City owned lands. For the section between 48 Street N.W. and 51 Street N.W., the basic right-of-way is 20.117 metres and a required setback of 5.182 metres on both sides for a required right-of-way of 30.481 metres.

2.3 Character + Identity

The Bow Valley, where Montgomery is situated, has been occupied by native peoples since the end of the last ice age, around 10,500 years ago. Archaeological evidence shows that the Nitsitapii (Blackfoot) have been in the area for over a thousand years, with Stoney, Cree and TsuuT'ina peoples arriving from the sixteenth century onwards. Non-natives reached the region in the late 1700s, after which native populations began to decline rapidly due to epidemics and the decimation of the bison herds on which they depended. In 1877, the Blackfoot, Blood, Peigan, TsuuT'ina and Stoney First Nations signed Treaty 7, accepting to live on reserves that covered some of their traditional hunting grounds.

The area was settled by O.A. Critchley in the 1880s. In 1906, Critchley Ranch was purchased by James Shouldice and the community became known as Shouldice Terrace. In 1943, the post office had issues with the Town of Shouldice and Shouldice Terrace, and the community name was changed to Montgomery. In 1963, Montgomery was amalgamated by The City of Calgary.

Montgomery has a rich history that can still be seen throughout the community including the Community Centre, Terrace Road Elementary School and Hextall Bridge. Residents are proud of the heritage and have a connection to the past that is evident in their desire to recognize and integrate some of the original character and history into the public realm while creating a modern feeling.

The 16 Avenue N.W. corridor currently separates the community. A cohesive community design and theme would bring the two sides together. Streetscape elements including hardscaping and street trees were installed along 16 Avenue N.W. at the Home Road N.W. intersection as part of an intersection improvement project in 2018. However, the current state of the surface infrastructure creates a poor sense of identity with deteriorating sidewalks with a lack of curbs and gutters along various stretches, dated wooden power poles/above ground streetlight cables and cracking pavement. Few street trees exist within the road right-of-way.

2.4 Economic

The current uses along Bowness Road N.W. feature a mix of commercial, residential and park land uses. There are a number of commercial uses near Home Road and 49 Street N.W., and along 46 Street N.W. The split is approximately 33% of residential uses to 67% of non-residential uses.

The main commercial area along Bowness Road N.W. is from just west of 46 Street N.W. to 45 Street N.W. and consists primarily of singlestory neighbourhood commercial and retail businesses. The commercial buildings in this area were generally built in the 1960s, 70s and 80s, except for one more modern mixeduse development on the southwest corner of 45 Street N.W. and Bowness Road N.W. This development has ground floor retail businesses, residential units on the upper floors, and an upgraded public realm (i.e. street trees, wider sidewalks). A mixed-use redevelopment for the southeast corner of 45 Street N.W. is also currently in the planning stage. West of 46 Street N.W. on the north side, a single-use ground story professional building was also constructed in the past ten years, and has a surface parking lot fronting Bowness Road N.W.

The recently approved land use zoning will allow for future densification and mix of land uses from 47 Street N.W. to 44 Street N.W. as redevelopment occurs. The Business Improvement Association (BIA) is active and has a number of initiatives including a recent re-branding to "Montgomery on the Bow," and banners and hanging flower baskets on newer light standards from approximately 46 Street N.W. through to 49 Street N.W. The BIA has 115 diverse members and contains three distinct commercial areas.

The BIA objective and mandate is to represent members' businesses by promoting and enhancing their business district and developing a strong working relationship with The City.

Development activity has been trending upward in recent years, and is expected to continue as other established communities like Inglewood and Marda Loop are closer to full redevelopment. As Montgomery redevelops, the feel of the area may evolve differently than other areas in the city, given the presence of highway commercial uses with a more industrial character. This may result in interesting redevelopment opportunities and attract unique businesses to the area. The increase in population from the new land use will also attract new businesses to the area, and a vibrant, mixed-use neighbourhood is in the horizon for Montgomery.





3. Engagement



3.0 Engagement Feedback Summary: What We Heard

Public engagement is one of several factors influencing the Streetscape Master Plan. There are also applicable policies and standards to adhere to, like the Municipal Development Plan, Calgary Transportation Plan and Montgomery Area Redevelopment Plan, in addition to engineering considerations and accommodating the site conditions. Figure 6 provides an overview of the engagement process that was completed for the Montgomery Main Street Bowness Road NW Streetscape Master Plan.

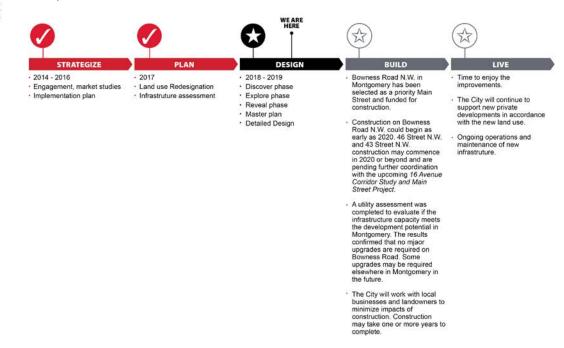


FIGURE 6. MAIN STREETS PROGRAM ENGAGEMENT PROCESS

3.1 Discover

The first public engagement opportunity for the project was a visioning session held on March 21, 2018 at the Montgomery Community Association. More than 160 people attended the event, and 21 feedback booklets were completed. People were also invited to provide input online at calgary.ca/engage from March 22 to April 4, 2018. In that time, 378 people visited the engage project page and of those, 111 provided feedback.



IMAGE 1. GRAPHIC RECORDING VISION FOR BOWNESS ROAD N.W.

Participants were asked to share their thoughts on community values and how they imagined Montgomery should look and feel in the future by selecting images and answering a number of questions. Various methods for collecting feedback were used, including a visual recorder.

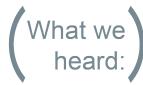
Image 1 illustrates a sample of graphic images recorded of the vision for Bowness Road N.W. during **Phase 1**.

Figure 7 is a summary of what was said:









Community History

57% of respondents said history was *very* or *somewhat important* to Montgomery's current and future identity

Community Values

Accessible, family friendly, natural and active



Street Character

Pedestrian friendly/walkable, trees/greenery and sense of community



Social Spaces

Family-friendly and include food and beverage businesses such as cafes, grocery stores and farmer's markets



Plants

People suggested that taller trees or greenery is better than low to reduce rodents, garbage and debris, and plants should provide separation/buffer from the road



Mobility – walking

Environment that encourages walking and greenery/aesthetics



Mobility – cycling

Safe, protected cycling facilities



Mobility - transit

Bus shelters



Mobility - driving

Reducing speed, maintaining parking and greenery and aesthetics



Features

The features respondents were most drawn to were signage / banners / gateways / placemaking and art or murals



Encouraging Safer Public Spaces

- Safer Spaces personal security as it relates to crime
- Transportation Safety pedestrian crossings and high speeds
- Personal Security undesirable behaviours (drinking in public, drugs, etc.)
- Improving Safety more lighting, slower speeds and more police presence / enforcement

FIGURE 7. DISCOVER PHASE ENGAGEMENT SUMMARY

The open house display boards, What We Heard summary and roll plot with public comments are available in **Appendix A**.

The first phase of engagement also included two stakeholder meetings held March 20, 2018 and June 20, 2018. Stakeholders included:

- Active / sustainable modes groups
- Advisory Committee on Accessibility
- Alberta Motor Transport Association
- BILD Calgary
- Calgary Board of Education Transportation
- Calgary River Valleys
- Community members representing senior and youth demographics
- Community Liaison Officer Calgary Police Service
- Livery Transport Advisory Committee
- Montgomery Community Association (MCA)
- Montgomery on the Bow Business Improvement Area (BIA)
- Neighbourhood Partnership Coordinator (The City of Calgary)

The March 20, 2018 and June 20, 2018 stakeholder meeting notes are available online through The City's website. One of the key outcome of the meetings were the desire for Montgomery to become a destination and not just a pass-through community.

3.2 Explore

The second phase of engagement asked participants to provide input on preliminary concepts and options. A drop-in Public Open House was held on March 13, 2019 at the Montgomery Community Association. Approximately 115 people attended (see Image 2), and nine feedback forms were completed. Participants could also provide input by writing their comments on sticky notes and placing them directly on the display boards and by placing sticker dots to indicate support for different options. Online feedback was accepted from March 13 to 28, 2019, and 29 people provided feedback.

Participants were asked to share their thoughts on whether the baseline design achieved the project goals and objectives, as well as whether they supported the baseline design. The open house display boards, What We Heard summary and roll plot with public comments are available in Appendix A.



IMAGE 2. **EXPLORE PUBLIC OPEN HOUSE**

Vision, Goals and Objectives

Here is a summary of the feedback, which is also illustrated in Figure 8. Does the overall baseline design (the West End, Core and East End) achieve the project objectives?

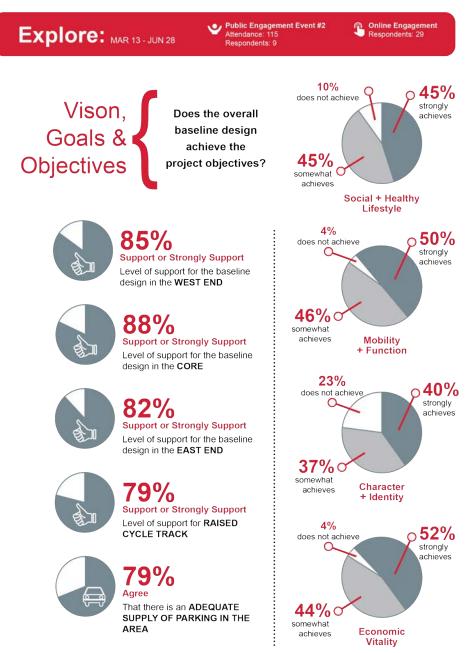


FIGURE 8. EXPLORE PHASE ENGAGEMENT SUMMARY

Most respondents supported the design concept. Several people mentioned they supported the bicycle facilities and a few said separated facilities would be even better. Others liked the design because it narrows the road and will slow traffic. A couple of people said pedestrian crossings in this area still need improvement.

People that supported a multi-use facility option stated that it was safer because it provided separation between people driving and people cycling. People that did not support the multi-use facility were generally not supportive of bicycle facilities on Bowness Road N.W. suggesting they should be on an alternative street or that they are not needed because of the close proximity of the Bow River Pathway. The City provided data that demonstrated high existing cyclists usage on Bowness Road N.W., and explained the need for connecting with the on-street facilities to the west.

3.3 Reveal

On June 12, 2019 the project team shared the final concept at a Public Open House at the Montgomery Community Association. Approximately 125 people attended and seven feedback forms were completed. Participants could also provide input by writing their comments on sticky notes and placing them directly on the materials or using sticker dots to indicate how well the final concept achieved the project objectives (see Image 3).

Online feedback was accepted from June 13 to 26, 2019 and 74 submissions were received. The open house boards, What We Heard summary and roll plot with public comments are available in Appendix A. Figure 9, on the following page, provides a summary of what was said.

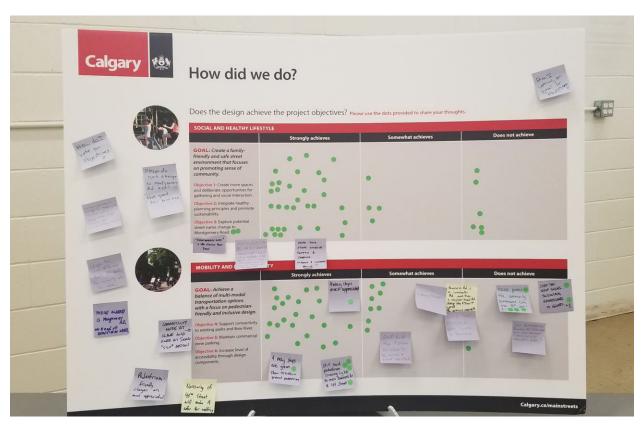


IMAGE 3. REVEAL PUBLIC OPEN HOUSE

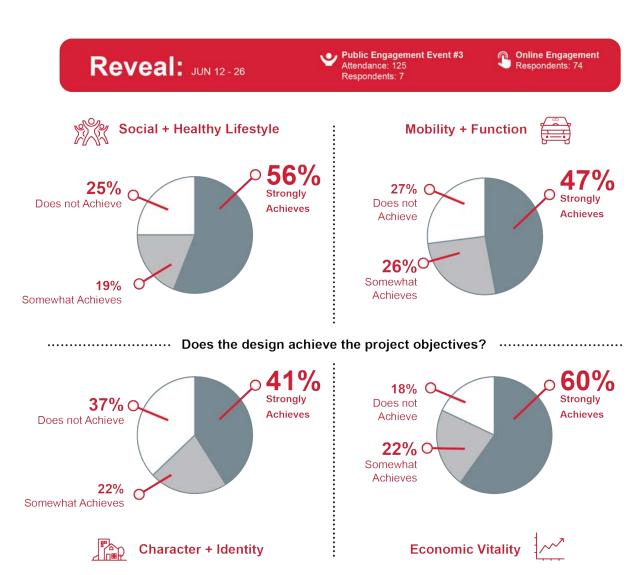


FIGURE 9. REVEAL PHASE ENGAGEMENT SUMMARY

The general themes of the participants who responded on how the design concept achieves the project objectives are described below.

Vision, Goals and Objectives

- Does the design achieve the project objectives of Social and Healthy Lifestyle?
 - · Respondents supportive of the design liked the trees and improvements for all modes.
 - · Respondents not supportive felt the design lacks gathering spaces, increases traffic congestion and are concerned about the expenditure.
- Does the design achieve the project objectives of Mobility and Function?
 - · Respondents who felt the design achieves the objectives said it was because the street will be multi-modal and accessible for all users.
 - Respondents who did not feel the design met the objectives did not support bike facilities and were concerned about increased congestion and necessity of the project during a difficult economic climate. Many concerns around congestion were expressed by residents outside Montgomery that rely on Bowness Road N.W. for daily commutes.
- Does the design achieve the project objectives of Character and Identity?
 - The most common sentiment from respondents was a desire for more trees.
 - · Some respondents said there wasn't enough detail on the plans to properly evaluate. The project team has advanced the design of social spaces in this report and will report back to the community on this.
- Does the design achieve the project objectives of Economic Vitality?
 - · Respondents who indicated the design strongly achieves the objectives believed it will generate investment by making the street and community more attractive and welcoming to businesses, pedestrians and cyclists.
 - · Respondents who indicated the design did not achieve the objectives cited concerns about congestion, parking supply, bike facilities and overall need for the project.





4. The Design

4.0 The Design

The Montgomery Bowness Road N.W. Streetscape Master Plan proposes a design which creates a place that will bring the community together, where people of all ages and ability can travel safely and comfortably. The design also aspires to reduce or mitigate conflict points between people using various travel modes while still accommodating traffic movements, accesses and loading.

The Design is shown in Figure 10 and enlargements of the Design area are included in Appendix B (Enlargements 1 to 12) and include the 46 Street N.W. and 43 Street N.W. connecting streets.

The Design considers the public feedback received through the three engagement phases, as summarized in Section 3 and in the What We Heard reports available online through The City's website. The Design also considers applicable policies and standards, technical analysis and the existing site conditions (see Figure 11). The Plan was further refined following the Reveal (Phase 3) engagement and reflects the feedback received from an internal Steering Committee meeting and subsequent design workshop. A summary of the feedback received from internal stakeholder (Steering Committee) has been compiled and will be tracked through the detailed design phase.

The Design consists of improvements that will be made to streetscaping and landscaping, the pedestrian corridor and crossings, bicycle facilities, and transit passenger waiting areas and transit vehicle movements. The design was developed to reflect the three distinct character areas: the West End, the Core, and the East End. Further details on the design features for each of these character areas are provided in the following **Sections 4.2**, **4.3** and **4.4**.



FIGURE 10. MONTGOMERY MAIN STREET BOWNESS ROAD N.W. STREETSCAPE MASTER PLAN

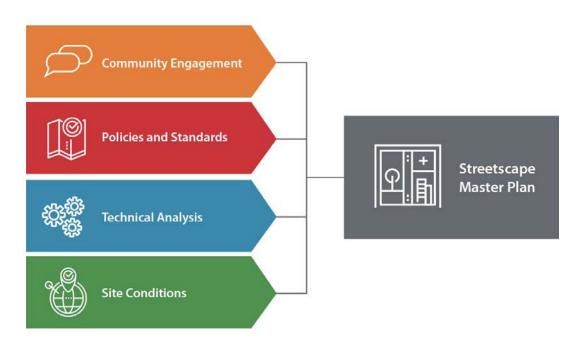


FIGURE 11. DESIGN CONSIDERATION AND INPUT STREAM



Please note perspectives are illustrative in nature only and are subject to change.

4.1 How the Design Achieves the Objectives

Table 1 provides an overview of the design intent and key considerations that went into the development of the concept, and how the four overarching goals are achieved. This is further described in the following subsections.

SOCIAL + HEALTHY LIFESTYLE

TABLE 1. CORRIDOR WIDE DESIGN HIGHLIGHTS

DESIGN FEATURES RATIONALE

- Create social spaces with seating and landscaping.
- Install new street trees, planters, benches and other amenities.
- Install new streetlighting.
- · Install gateway features.
- Add landscaping and public art element along retaining wall between 45 Street N.W. and 44 Street N.W.
- Increase space for people walking and cycling.
- · Enhance transit waiting areas by improving streetlighting, and highly visible shelters.

- To improve streetscaping and increase natural landscaping along Bowness Road N.W.
- To create an inclusive and family-friendly corridor.
- To increase and encourage pedestrian movements in the Plan area to create a sense of community and vibrancy.
- To reduce traffic congestion; health care costs; and emissions by providing options for people to choose between walking, cycling, transit and driving.
- To promote safety and security.
- To improve passenger comfort and safety while waiting.
- · To deter improper use of shelters.

MOBILITY + FUNCTIONALITY

DESIGN FEATURES RATIONALE

- Install curb extensions.
- · Reduce corner radius.
- Narrow travel lanes.
- Narrow roadway width.
- · Create parking pockets.
- Widen sidewalks.
- Provide separate facilities for pedestrians and bicyclists.
- Install multi-use facility along Bowness Road N.W.
- Provide separation or buffer from vehicle travel lanes.

- To slow vehicle traffic speeds traveling along Bowness Road N.W. and turning to and from the side streets.
- To restrict parking close to intersections and improve sightlines.
- To improve crossing opportunities for pedestrians.
- To improve the pedestrian walkability and comfort along Bowness Rd N.W., 43 Street N.W. and 46 Street N.W., by enhancing the environment and providing separation from the vehicle travel lanes.

MOBILITY + FUNCTIONALITY

DESIGN FEATURES

- Bypass bicycle facilities around transit stops (floating transit island).
- Apply higher visibility crosswalks and pavement markings.
- Reduce width of driveway crossings.
- Connect to existing pathways and bicycle facilities.
- Relocate transit stops at 51 Street N.W. for better access to crossing control and destinations.
- Protected intersections and corners at 49 Street N.W., Home Road N.W. and 46 Street N.W.
- Reallocate vehicle travel lanes along Bowness Road N.W. to better accommodate existing traffic movements at Home Road N.W.
- Install traffic priority signal and lane from 49 Street N.W. to Home Road N.W.
- Realign sidewalk at 49 Street N.W.
- Remove redundant westbound right turn access while still providing direct access for residents, and restrict left turning movements with centre median through intersection at 48 Street N.W.
- Upgrade traffic control at 52 Street N.W., 46 Street N.W., and 43 Street N.W.
- Install multi-use pathway along 46 Street N.W.
- Install angle parking along 46 Street N.W.
- Install Rectangular Rapid Flashing Beacons (RRFBs) at 45 Street N.W.
- Reduce grades going to the corners of 45 Street N.W. and 44 Street N.W. from the elevated sidewalk along the retaining wall.
- Install traffic calming measures along 43 Street N.W.
- Install new sidewalk along George Gell park.
- Install new multi-use path at The East End.

RATIONALE

- To improve safety and comfort of pedestrians, bicyclists and transit passengers by reducing conflicts and improve awareness at crossings, accesses and intersections.
- To improve safety and comfort for bicyclists of all ages and abilities by providing more protected facilities.
- To give priority in focused areas to bicyclists.
- To improve the pedestrian and bicycle network with better connection to destinations and existing facilities.
- To manage existing parking demand with adequate spaces.
- To provide additional parking in The Core.
- To reduce conflicts from vehicle traffic weaving between lanes.
- To provide clarity on vehicle turning movements at intersections.
- To improve traffic movements from Bowness Road N.W. to southbound on Home Road N.W.
- To improve transit movement and operations through the intersection.
- To provide clarity on vehicle turning movements at intersections due to the short spacing to Home Road N.W.
- To reduce delay and improve operation for side street traffic.

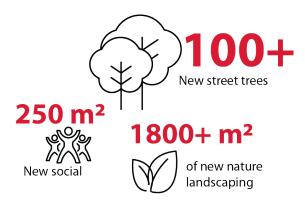
CHARACTER + IDENTITY	
DESIGN FEATURES	RATIONALE
 Install new street trees, planters, benches and other amenities. Install new streetlighting. Install gateway features. Improve hardscape treatment in The Core. Add landscaping and public art element along retaining wall between 45 Street N.W. and 44 Street N.W. 	 To improve streetscaping and increase natural landscaping along Bowness Road N.W. To create character, identity and gathering spaces. To create vibrant social spaces for patrons of the businesses to stay. To promote safety and security.
 Apply higher visibility crosswalks and pavement markings. 	

ECONOMIC	
DESIGN FEATURES	RATIONALE
 Install new street trees, planters, benches and other amenities. Install new streetlighting. Install gateway features. Improve hardscape treatment in The Core. Reconfigure parking lot for strip mall along north side Create social spaces at either ends of the existing commercial block Install angle parking along 46 Street N.W. Add landscaping and public art element along retaining wall between 45 Street N.W. and 44 Street N.W. 	 To improve streetscaping and increase natural landscaping along Bowness Road N.W. To create character, identity and gathering spaces. To create vibrant social spaces for patrons of the businesses to stay. To promote safety and security. To provide additional parking in The Core.

The following subsections provide an overview of the design intent and key considerations when developing the Plan, and how the four overarching goals are achieved.

4.1.1 Promotes Social + Healthy Lifestyle

As highlighted previously, one of the most valued amenities associated with Montgomery is the proximity to the Bow River and associated pathway system. In an effort to recognize and enhance this relationship to the river, the proposed streetscape design at the west end of the project incorporates a natural landscape design intended to provide a visual connection and extension of the river into the Montgomery neighbourhood. Trembling aspen prairie grasses and other native plant species combined with large boulders and a river rock mulch complete a design palette that presents a transitional landscape on both sides of Bowness Road while creating a soft but impactful entrance to the community of Montgomery from the west.



Aside from the clear need for upgraded infrastructure related to all modes of transportation, this transformation of Bowness Road N.W. is intended to raise the design value of the streetscape in order to create a street that is truly neighbourhood focused and people-centric, with an identity that is unique to Montgomery. To achieve a higher level of community focus, the revitalization of Bowness Road N.W. incorporates social gathering spaces of various scales to promote community interaction and establish a heightened sense of vibrancy within the context of the neighbourhood public realm. These spaces range from simple seating areas located throughout the residential zone in the open space created by parking pockets to a community gathering space of significant scale located near the east end of the strip mall at the corner of 45 Street N.W. This particular plaza is intended to function as a focal point for residents and visitors to come together at the centre of the community. Additional seating opportunities coupled with enhanced landscape are provided at key locations in the public realm along the entire length of the corridor.

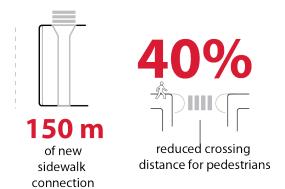
4.1.2 Improves Mobility + Functionality

Providing attractive and accessible multimodal transportation options will create viable alternatives to motor vehicle travel along the corridor.



PEDESTRIANS

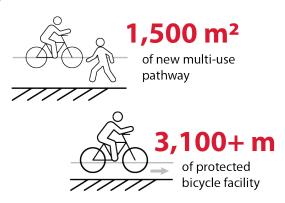
The pedestrian realm plays a critical role in how Main Streets function and feel, and it is important to consider universal design in the Design. Universal design refers to an inclusive and holistic approach that intends to create products, buildings and environments that are accessible and safe for everyone; regardless of age or the presence of a sensory, cognitive or physical disability, without adaptation or specialized design. This mandate is supported by The City of Calgary's Universal Design Handbook for building accessibility and inclusive environments, and the advisory committee on accessibility.



CYCLING

Bowness Road N.W. is an important part of the city-wide cycling network. Cycling facilities represent a small portion of the overall project budget but provide significant benefits for all citizens.

The bicycle facilities have been carefully designed to minimize the removal of existing trees and landscaping, maintain on-street parking where demand is highest and provide physical or textured separation between vehicles and pedestrians.



TRANSIT

Regular transit stops have been designed to stop in lane to ensure reliable run time of buses not needing to merge back into traffic. Transit stops that serves as timing points are designed with a separate bus layby to minimize disruptions to traffic. Passenger waiting area for transit stops will be widened to align with Calgary Transit standard specification. The larger waiting pad will allow for additional amenities such as shelter, seating and/or waste receptacle. Travel way for pedestrian and bicycle facilities is designed such that it goes behind the waiting area to mitigate potential conflicts with passengers in the waiting area.



SAFETY

Crime Prevention Through Environmental Design (CPTED) is a multi-disciplinary approach adopted by The City of Calgary and endorsed by The City's Universal Design Handbook. CPTED is based on the theory that people will be less likely to break the law if there is a possibility someone might be watching them.

The design concept in the Plan was reviewed from a CPTED perspective and collaboration with the Calgary Police Service Community Liaison Officer is planned to identify areas for improvement.



4.1.3 Establishes Character + Identity

Surrounded by open space and park amenities, the location of Montgomery presents a neighbourhood identity of its own. However, there is a need to capture a more defined sense of place through the built form and urban design associated with Bowness Road, a street that currently functions on a more ordinary level.

GATEWAYS

One of the inherent ways to create meaningful impact from a character perspective is the entrance monuments proposed at either end of the project corridor. These features offer a wonderful opportunity to incorporate Montgomery's heritage in a unique way. The distinctive structures intentionally replicate the form and materials of the Hextall Bridge, completed in 1911 as a means to connect streetcars across the Bow River. The bridge has since become a pedestrian and cycling only facility that provides direct access to Montgomery. The entrance monuments act as a reflection of history, present a worthy introduction to the community and add a creative component to the public realm that elevates the project's overall urban design value and helps tie the composition together at both ends of the project.



CROSSWALKS

Another design component that contributes to a higher level of identity are the proposed crosswalk patterns at significant intersections throughout the Bowness Road N.W. corridor. The unique patterns are representative of flowing water and provide additional visual connection to the Bow River.

PUBLIC ART

Community character will also be enhanced through the installation of panels that will be attached to the existing handrails associated with the retaining wall east of 45 Street N.W. The design of these panels continues the theme of natural landscape, depicting a pattern of plant forms to enhance a public realm space that otherwise lacks character.

STREET LIGHTS

The new streetlights along Bowness Road N.W. provides improved lighting for both the street and pedestrians. The streetlights in the Core will also provide opportunities for themed banners and hanging flower baskets, which will promote and unify the character of the street.



SITE FURNISHING

Site furniture such as benches, tree grates and bike racks will incorporate materials and colors to provide design value throughout the streetscape and highlight the individuality of Montgomery. Colourful banners will be added to the light poles as accents and will be an integral part of the overall character of the corridor.

4.1.4 Economic Vitality

The public realm improvements to the Bowness Road corridor are intended to increase the overall design value and user experience of the corridor resulting in enhanced vitality of existing businesses. In conjunction with future land use allowing for greater density, these improvements will be the catalyst for redevelopment and new business opportunities. As Montgomery evolves, it will take a different urban form that contributes to the reinvention and revitalization of the community and establishes this unique neighbourhood as a destination for residents and visitors.

4.1.5 Parking Management

Maintaining existing parking supply in the commercial area was important to ensure the vitality of the area. However, transportation mode choices will transition over time and lead to shifts in parking demand. Different parking management approaches can be used in the short term to balance the available space to meet existing demands. The project team carefully considered several factors when deciding how to balance the needs of adjacent residents and businesses, stakeholders and people traveling on Bowness Road N.W. The approach to parking management is consistent along the corridor.

SHORT-TERM APPROACH

On street parking along Bowness Road has been maintained as much as possible in the Master Plan redesign; however, there will be some stalls lost to make room for curb bulb outs, updated transit stops and other public realm improvements. Areas where parking has changed most significantly are areas where parking utilization was lowest.

For the Plan area from 52 Street N.W. to 42 Street N.W., there will be 99 fewer stalls along Bowness Road N.W. and two fewer stalls on the side streets. This total includes 15 fewer stalls along Bowness Road N.W. through the Core (46 Street N.W. to 44 Street N.W.) and a gain of two stalls on 46 Street N.W. The reconfiguration of the commercial surface lot on the north side of Bowness Road will result in a loss of 12 stalls, for a total loss of 27 stalls in the commercial area.

LONG-TERM APPROACH

Based on feedback provided during engagement and the results of the parking study, there is a need to re-balance residential permit parking and unrestricted/restricted parking in the Core area of the project. To offset losses of unrestricted and time restricted parking, a hybrid approach that combines short-term parking and residential permit parking will be implemented as part of a city-wide solution that is being proposed for our shared commercial and residential areas. It has been identified that the exclusivity of residential permit zones is limiting commercial access and flexibility that a commercial zone requires to thrive. The preferred approach is to combine short-term parking and residential permit parking into a hybrid parking zone for two to three blocks around a commercial node. This will restore the fluidity that is necessary where commercial streets blend with residential neighbourhoods.

4.2 The West End

The West End, from west of 52 Street N.W. to 47 Street N.W., is the west entranceway into the community. Providing visual and physical continuity from the Bow River and facilities west of the river is important in achieving the greater aspiration of creating Montgomery as a destination. The Design for the West End area are shown in Figures 12 and 13, where public realm and streetscape improvements include:

- Installing gateway and natural landscaping features to improve the character and identity of the community and enhance streetscaping.
- Upgrading the existing pedestrian overhead flashers at 52 Street N.W. to a half traffic signal to provide better protection for pedestrians and bicyclists crossing Bowness Road N.W. This strategy reduces impacts to motor vehicle traffic by grouping crossing events and limiting crossing events to only when pedestrians or cyclists are present.
- 3 Relocating the westbound transit stop at 51 Street N.W. to west of 52 Street N.W. to provide better access to key destinations such as the accessible playground, Shouldice Aquatic Centre and the river pathway.
- Adding curb extensions to reduce pedestrians and bicyclists crossing. The additional space also provides better opportunities for more soft landscaping, and directional ramps for pedestrians and bicyclists.
- 5 Providing marked crosswalks at 51 Street N.W. to enhanced crossing opportunities for pedestrians at better intervals.
- 6 Setting pedestrian and bicyclist crossings along the north side back by a vehicle length to allow for two stage crossings of motorists coming onto Bowness Road N.W. This also allows drivers to have a higher visibility past parked vehicles along the north side. Pedestrians are also better aligned with existing sidewalks and crossings can be combined with bicyclists.

- Providing safer protected bicycle facilities for directional travel along the north and south side of the Bowness Road N.W.
- Encouraging slower vehicle travel speed with narrower roadway and defined travel lanes.
- g Upgrading streetlights to provide consistent identity and character and improve comfort and safety in the evenings.
- 10 Narrowing widths of driveways to reduce conflict areas and better define crossing area.
- 11) Improving intersections to reduce conflicts by providing for full separation between pedestrians, bicyclists, transit and motorists.
- 12 Realigning sidewalk for better pedestrian flow.
- 13 Installing transit priority lane to reduce delay and improve transit flow to timing stops.
- 14 Enhancing transit waiting areas by improving streetlighting, additional seating and highly visible shelters to provide safer and more comfortable spaces for passengers at timing points.
- 15 Connecting to existing bicycle facilities to improve regional connectivity of bicycle network.
- 16 Restricting motor vehicle left turn movements to reduce conflict and congestions.



FIGURE 12. THE WEST END PLAN, 52 STREET N.W. TO 49 STREET N.W.

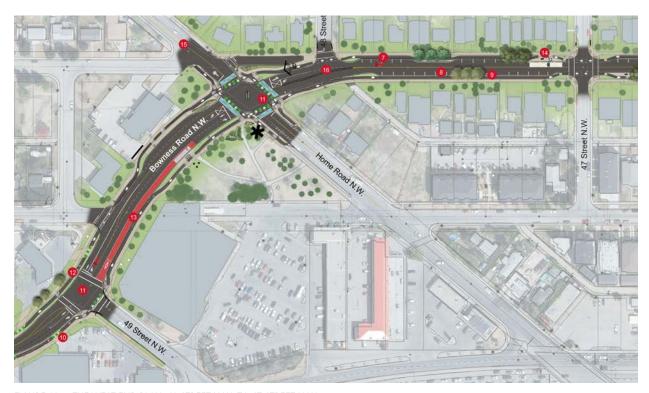


FIGURE 13. THE WEST END PLAN, 49 STREET N.W. TO 47 STREET N.W.

Please note perspectives are illustrative in nature only and are subject to change. The West End is primarily an Arterial Street and borders Shouldice Park along the south side and residential homes along the north side. The design maintains the natural landscaping, with the addition of street trees where feasible and landscape beds to enhance the retention of stormwater in the boulevard areas. The travel lanes are slightly wider at 3.5 metres through this section, and onstreet parking is maintained along the north side. A separated raised bicycle facility is proposed to reduce conflicts with motor vehicles and pedestrians.

The typical section from 52 Street N.W. to 47 Street N.W. is shown in Figures 14 and 15, and reflects the existing, interim and ultimate scenario respectively, as the right-of-way through this section is wider and can accommodate the Design.

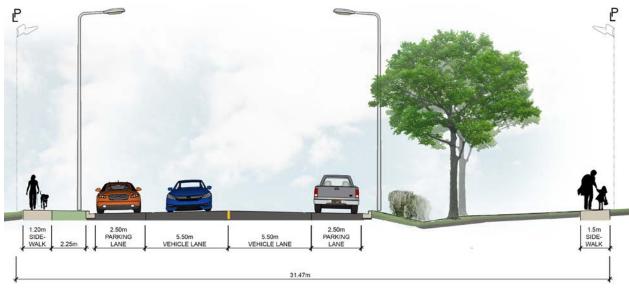


FIGURE 14. THE WEST END SECTION - EXISTING CONDITION

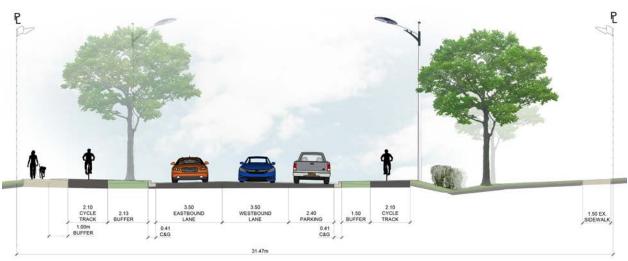


FIGURE 15. THE WEST END TYPICAL SECTION - INTERIM AND ULTIMATE

Please note perspectives are illustrative in nature only and are subject to change.

Figure 16 showcases the natural landscaping and gateway feature as you approach from the west. The gateway feature is a detailed element that will be finalized in collaboration with the community as it is an important aspect that sets the stage for the corridor and community and is something that the both the Community Association and Business Improvement Association are passionate about.



FIGURE 16. PERSPECTIVE A - WEST END GATEWAY

Please note perspectives are illustrative in nature only and are subject to change.

At 49 Street N.W. a westbound transit priority lane is included east of the intersection and carries through to the transit stop west of Home Road N.W. Consolidation of the westbound transit stops will allow for better integration of passenger waiting areas, as well as reduced conflict with traffic due to the Bowmont Civic building driveway closure to Bowness Road N.W.

Home Road N.W. is designed as a protected intersection providing separate facilities for pedestrians and bicyclists. The northwest corner radius has also been increased to accommodate for southbound transit vehicles turning right. The on-street bicycle lanes along Home Road N.W. will transition to an off-street protected bicycle facility through the intersection. A physical median restricting left turn conflicts will be installed on Bowness Road N.W. east of Home Road N.W. and will remove the potential congestion from eastbound traffic turning north on to 48 Street N.W.

Figure 17 showcases the landscape features and the separated pedestrian and bicyclist facilities at Home Road N.W.



FIGURE 17. PERSPECTIVE B - HOME ROAD N.W.

Please note perspectives are illustrative in nature only and are subject to change.

4.3 The Core

The Core, from 47 Street N.W. to 44 Street N.W., is the commercial and retail centre of the Main Street. Improving the streetscaping, comfort and safety of residents and visitors will ensure economic vitality of the area by encouraging them to stay and experience the space.

The design for the Core area is shown in Figures 18 and 19, where public realm and streetscape improvements include:

- Installing street trees, planters, benches and other amenities to improve the character and identity of the community and enhance streetscaping.
- 2 Upgrading new streetlights to provide consistent identity and character and improve comfort and safety in the evenings.
- Enhancing transit waiting areas by improving streetlighting, and highly visible shelters to provide safer and more comfortable spaces for passengers.
- Upgrading the existing pedestrian overhead flashers at 46 Street N.W. to a four-way stop control to improve traffic operation for the side street, and better crossing opportunities for pedestrians.
- 5 Adding curb extensions to reduce pedestrian and bicyclist crossing of the side street and Bowness Road N.W. The additional space also provides better opportunities for more soft landscaping, and directional ramps for pedestrians and bicyclists.
- 6 Enhancing crosswalks and bicycle crossing markings to improve visibility and accessibility.
- Adding a midblock crossing to provide more crossing opportunities and improve accessibility for pedestrians.

- 8 Providing safer protected bicycle facilities for directional travel along the north and south side of the Bowness Road N.W.
- Encouraging slower vehicle travel speed with narrower roadway and narrower travel lanes.
- Reducing number of driveways to reduce conflict areas.
- 11 Reconfiguring commercial parking lot to improve traffic flow and reduce conflicts with pedestrians and bicyclists.
- 12 Installing Rectangular Rapid Flashing Beacons (RRFBs) at 45 Street N.W. to provide safer crossing for pedestrians.
- 13 Relocating the westbound transit stop at 45 Street N.W. from far side to near side to provide space for a safer more comfortable passenger waiting area.
- 14 Adding landscaping and public art elements along retaining wall to improve aesthetics.
- 15 Reducing grades on elevated sidewalk ramps to improve accessibility.



FIGURE 18. THE CORE PLAN, 47 STREET N.W. TO 45 STREET N.W.



FIGURE 19. THE CORE PLAN, 45 STREET N.W. TO 44 STREET N.W.

Please note perspectives are illustrative in nature only and are subject to change.

The Core is a Neighbourhood Boulevard and borders commercial and retail businesses on both sides. The right-of-way is more constrained, but there is a 1.5-metre setback through this section. The design enhances the streetscape with the addition of street trees placed between the pedestrian realm and the bicycle facility to provide a natural separation. In the interim, the north side pedestrian zone is directly adjacent to the bicycle facility and parking is provided in a north commercial surface lot. The interim 2.0-metre bicycle facility along the north side includes a buffer to the motor vehicle travel lane. This will transition to replicate the south side in the ultimate design.

An existing water main runs along the north side of Bowness Road N.W., and the new street tree alignment will be placed 3.0-metre north of the water line. The travel lanes are 3.3-metre through this section, and on-street parking is maintained along the south side in the interim and both sides in the ultimate. Decorative crosswalks will be installed throughout the commercial area to provide enhanced crossings for pedestrians.

The cross-section from 47 Street N.W. to 44 Street N.W. varies widely. The typical section in the main commercial area between 46 Street N.W. and 45 Street N.W. is shown in Figures 20, 21 and 22, and reflect the existing, interim and ultimate scenario through the main commercial area.

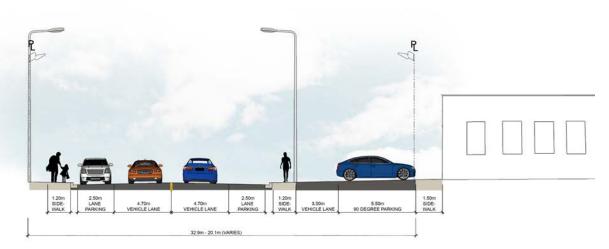


FIGURE 20. THE CORE (45 STREET TO 46 STREET N.W.) SECTION - EXISTING CONDITION

Please note perspectives are illustrative in nature only and are subject to change.

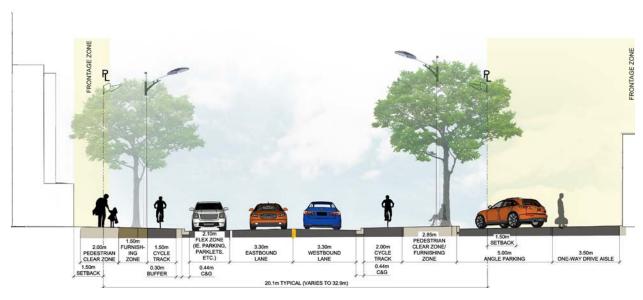


FIGURE 21. THE CORE (45 STREET TO 46 STREET N.W.) SECTION - INTERIM

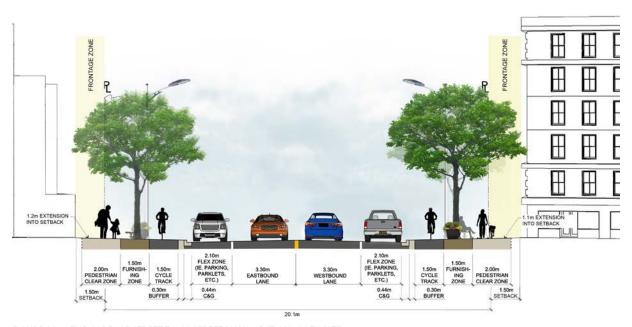


FIGURE 22. THE CORE (45 STREET TO 46 STREET N.W.) SECTION - ULTIMATE

Please note perspectives are illustrative in nature only and are subject to change.

A four-way stop will provide improved traffic operation for the side street, and better crossing opportunities for pedestrians. The intersection will also serve as a transition for bicyclists between the bi-directional multi-use pathway along the east side of 46 Street N.W. south of Bowness Road N.W. and the uni-directional bicycle boulevard north of Bowness Road N.W.

Figure 23 showcases the social spaces, amenities and facilities for pedestrians and bicyclists at the intersection of 46 Street N.W.



FIGURE 23. PERSPECTIVE C - 46 STREET N.W.

Please note perspectives are illustrative in nature only and are subject to change.

The 46 Street N.W. corridor is a key pedestrian connection to Terrace Road School on 20 Avenue N.W., the seniors complex on 19 Avenue N.W. and the south side of Montgomery. It is one of the few traffic controlled pedestrian crossing along 16 Avenue N.W. through the community.

The concept for 46 Street N.W. as shown in Figure 24, provides for more parking, and will offset some loss of supply along Bowness Road N.W. A multi-use pathway along the east side provides connection to 16 Avenue N.W. for both pedestrians and bicyclists. The four-way stop at Bowness Road N.W. will facilitate safe crossing for pedestrians and cyclists. It is proposed as a pilot, and will be monitored for effectiveness following installation. The east side connection aligns with the existing pedestrian overhead flashers at 16 Avenue N.W. Along the west side, the sidewalk is maintained, and the pedestrian realm will increase as redevelopment occurs. The intersection treatment at 46 Street N.W. and 16 Avenue N.W. will be determined as part of the 16 Avenue N.W. Corridor and Main Streets Study. Any changes to the intersection control will directly impact traffic patterns through the Plan area and will require coordination with detailed design of the Plan.

Figure 18 also illustrates the proposed reconfiguration of the commercial surface parking lot along the north side of Bowness Road N.W. between 46 Street N.W. and 45 Street N.W. The reconfiguration of the existing lot will provide for better traffic flow and fewer conflicts with pedestrians and bicyclists. To mitigate the change in parking supply, varying time limits could be applied to stalls within the surface lot to encourage turnover and accommodate for shortterm parking. By changing the parking lot layout, the development of two social plaza spaces on either end of the north block is possible.



FIGURE 24. 46 STREET N.W. DESIGN CONCEPT PLAN Please note perspectives are illustrative in nature only and are subject to change.

An enlargement of the potential plaza space on the east end at 45 Street N.W., as shown in **Figure 25**, provides spaces for patrons to enjoy and interact with others.



FIGURE 25. 45 STREET N.W. ENLARGEMENT

Please note perspectives are illustrative in nature only and are subject to change.

The westbound transit stop west of 45 Street N.W. will be relocated to the east side of the intersection to allow for a more accessible transit stop and reduced conflict with the commercial access.

Figure 26 showcases the regrading of the pedestrian ramp approach to the intersection, and the addition of public art and landscaping to improve the aesthetic of the retaining wall at 45 Street N.W.

The perspective also illustrates the relocated transit stop to the East of 45 Street N.W.



FIGURE 26. PERSPECTIVE D - 45 STREET N.W.

Please note perspectives are illustrative in nature only and are subject to change.

4.4 The East End

The East End, from 44 Street N.W. to 42 Street N.W., is the east entranceway into the community and a connection for all travel modes to regional networks such as the Bow River pathway, Shaganappi Trail N.W., 16 Avenue N.W. and Parkdale Boulevard N.W. This is a transition to a residential area, and adding design elements that will bring awareness to visitors that they are entering a community will be important for defining the space.

The Design for the East End is shown in **Figure 27**, where public realm and streetscape improvements include:

- Installing street trees, planters, benches and other amenities to improve the character and identity of the community and enhance streetscaping.
- 2 Upgrading new streetlights to provide consistent identity and character and improve comfort and safety in the evenings.
- 3 Adding curb extensions to reduce pedestrians and bicyclists crossing of the side street and Bowness Road N.W. The additional space also provides better opportunities for more soft landscaping, and directional ramps for pedestrians and bicyclists.
- . Enhancing crosswalks and bicycle crossing markings to improve visibility and accessibility.
- 5. Providing safer protected bicycle facilities for directional travel along the north and south side of the Bowness Road N.W.
- 6 Lencouraging slower vehicle travel speed with narrower roadway and narrower travel lanes.
- Creating parking pockets to manage existing parking demand in front of homes, but also to narrow the roadway and provide spaces for landscaping and amenities.

- 8 Upgrading the existing pedestrian overhead flashers at 43 Street N.W. to a half traffic signal to provide better protection for pedestrians and bicyclists crossing Bowness Road N.W. This strategy reduces impacts to motor vehicle traffic by grouping crossing events and limiting crossing events to only when pedestrians or cyclists are present. The traffic control will also facilitate the transition between the uni-directional and the bi-directional bicycle facility.
- 9 Connecting to existing bicycle facilities to improve regional connectivity of bicycle network.
- 10 Installing gateway and natural landscaping features to improve the character and identity of the community and enhance streetscaping.
- 11) Enhancing transit waiting areas by improving streetlighting, and highly visible shelters to provide safer and more comfortable spaces for passengers. Transit stop at 42 Street N.W. provides service to students from nearby school.



FIGURE 27. THE EAST END PLAN

Please note perspectives are illustrative in nature only and are subject to change.

The Neighbourhood Boulevard continues through the East End and borders primarily residential homes on both sides. Similar to the Core, the right-of-way is more constrained at 20.1 metres, but there is also a 1.5-metre setback through this section.

The design enhances the streetscape with the addition of street trees and are placed between the pedestrian realm and the bicycle facility along the north side to provide a natural separation. In order to avoid the existing water line that runs along the north side of Bowness Road N.W., the street trees will be placed approximately 3.0 metres north of the water line. Along the south side, the bicycle facility is adjacent to the pedestrian realm with a detectable textured surface separating the two spaces and as well as different finishing material.

In the interim, the sidewalk is 1.8-metre, but in the ultimate the sidewalk will widen into the setback by 0.2-metre to achieve a sidewalk width of 2.0-metre or more. The 3.3-metre travel lanes will continue through this section. On-street parking will be provided in parking pockets along the corridor.

The typical section from 44 Street N.W. to 42 Street N.W. is shown in Figures 28, 29 and 30 and reflects the existing conditions, interim and ultimate scenarios through the residential area.

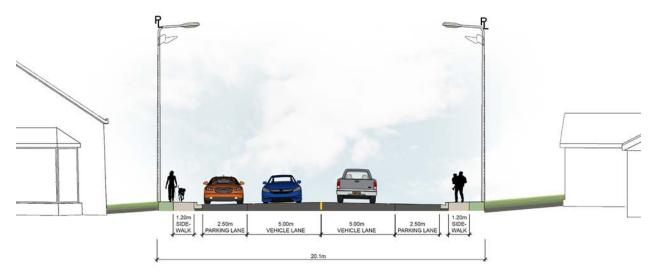


FIGURE 28. THE EAST END TYPICAL SECTION - EXISTING CONDITION

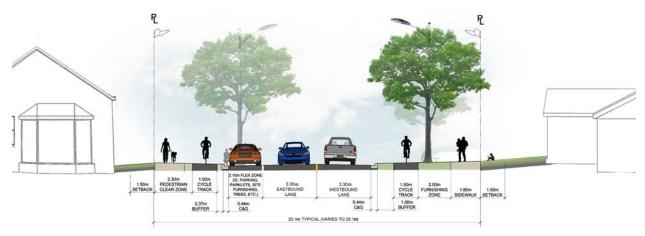


FIGURE 29. THE EAST END TYPICAL SECTION - INTERIM

Please note perspectives are illustrative in nature only and are subject to change.

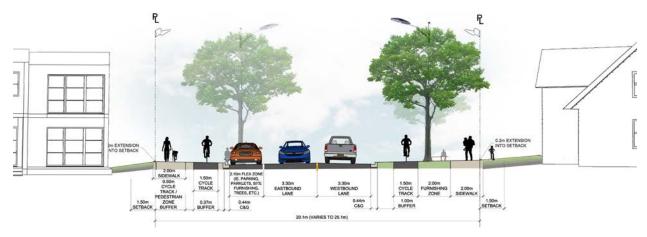


FIGURE 30. THE EAST END TYPICAL SECTION - ULTIMATE

Curb bulbs will serve to calm traffic speeds and also provide spaces for landscaping and social amenities. An enlargement of the social spaces in the curb bulbs is shown in Figure 31. The street trees and bicycle facility alignment are also shown.



FIGURE 31. TYPICAL RESIDENTIAL STREET ENLARGEMENT

Please note perspectives are illustrative in nature only and are subject to change.

Figure 32 showcases the typical cross section through the residential area where there are parking pockets, street trees and separate spaces for pedestrians and bicyclists.



FIGURE 32. PERSPECTIVE E - RESIDENTIAL AREA

Please note perspectives are illustrative in nature only and are subject to change.

The 43 Street N.W. corridor south from Bowness Road N.W. is a key connection for pedestrians and bicyclists connecting to the existing Bow River pathway, Edworthy Park and the south half of Montgomery across 16 Avenue N.W.

As part of the South Shaganappi Trail Corridor Study, three options were explored for the 43 Street N.W. corridor. The following three options were identified:

- Cul-de-sac at 16 Avenue N.W., restricting all motor vehicle traffic movement to 16 Avenue N.W.
- Directional diverter at 17 Avenue N.W., allowing only north-to-east and west-to-south movements.
- Right out only at 16 Avenue N.W, allowing only southbound-to-westbound movements onto 16 Avenue N.W.

All proposed options involve some form of motor vehicle traffic movement restrictions between 43 Street N.W. and 16 Avenue N.W. Implementation of any restriction on traffic movement would directly impact travel patterns and may adversely impact downstream corridors (ie. 44 Street N.W., 45 Street N.W., etc.). The South Shaganappi Trail Corridor Study focus was east of 42 Street N.W. and did not assess the potential down stream impact of these options on the community road network. The Shaganappi Trail Study instead focused on the direct impact for 43 Street N.W. and addressing immediate concerns related to 43 Street N.W. At the time of the Study, the 16 Avenue N.W. Corridor

and Main Streets Study and the Montgomery Main Street Bowness Road N.W. Streetscape Master Plan projects were in the early planning stages; therefore the Shaganappi Trail Study indicated that any 43 Street N.W. concerns would be resolved as part of these other two studies. Since then, the timing of these two studies did not align with each other, so further coordination will need to be completed during the 16 Avenue Corridor and Main Streets Study to ensure that the proposed concept options and network wide impact are considered.

As part of our initial assessment, 43 Street N.W. is a residential roadway and is planned to remain as such. However, it currently serves a transit route and also provides connection for heavy trucks between Bowness Road N.W. and 16 Avenue N.W. The design concept for the interim, as shown in Figure 33, is to implement a bicycle boulevard along the corridor through the use of enhanced pavement markings and installation of a traffic circle at 17 Avenue N.W. to reduce traffic speed and volumes.

In addition, a new sidewalk connection will be constructed alongside George Gell park on the east side of 43 Street N.W. Other potential interim improvements are temporary curb extensions to slow turning movements on and off of 43 Street N.W. and a connection along Bowness Road N.W. east through Shaganappi Trail N.W. to tie into the Bow River pathway, which would provide other options for pedestrian and bicyclist connections. Further details of this connection east are provided in **Section 5.0**.



Please note perspectives are illustrative in nature only and are subject to change.

FIGURE 33. 43 STREET N.W. DESIGN CONCEPT



APPENDIX A



APPENDIX B