



DOWNTOWN
**11TH STREET
BIKEWAY**
CONCEPT DESIGN

STATE STREET TO RIVER STREET

December 2020

Prepared for:

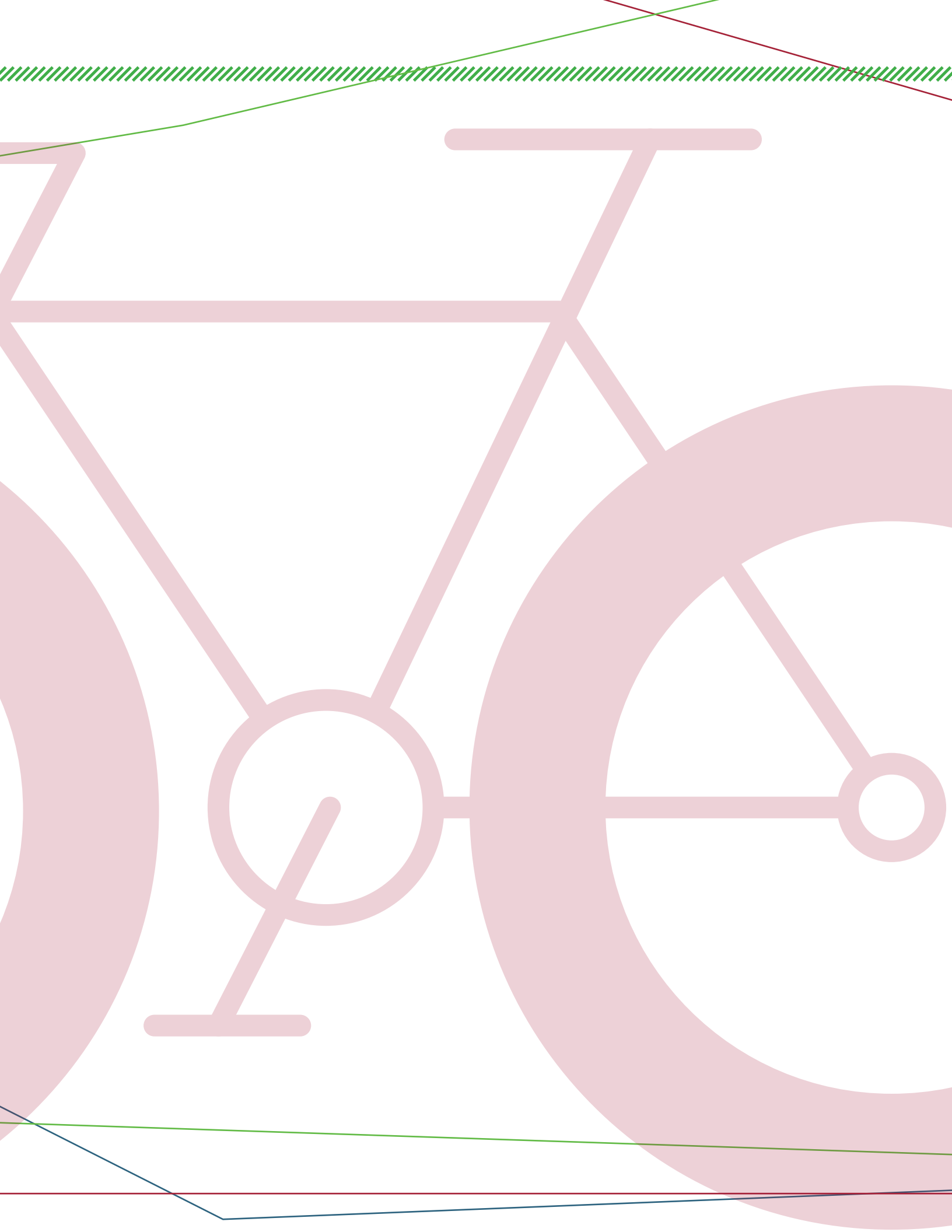
Capital City Development
Corporation
121 N 9th St, Suite 501
Boise, ID 83702
208.384.4264

City of Boise

150 North Capitol Blvd
Boise, ID 83702
208.608.7096

Prepared by:

Kittelson & Associates, Inc.
101 S. Capitol Boulevard,
Suite 600
Boise, Idaho 83702
208.338.2683





Acknowledgements

CAPITAL CITY DEVELOPMENT CORPORATION

Amy Fimbel, CCM
Doug Woodruff

CITY OF BOISE

Zach Piepmeyer, PE

ADA COUNTY HIGHWAY DISTRICT (ACHD)

Brooke Green, MBA, PCED
Ryan Head, AICP
Shawn Martin, PE
Tim Curns, PE

ACHD BICYCLE ADVISORY COMMITTEE

Cody Boyce
Gary Segers

IDAHO TRANSPORTATION DEPARTMENT (ITD)

Mariah Rutledge

KITTELSON & ASSOCIATES, INC.

Nick Foster, AICP, RSP – Consultant Project Manager
Elizabeth Flanagan, AICP
Hermanus Steyn, PrEng, PE
Sam Mantsch
Sonia Daleiden, PE, PTOE

PARAMETRIX

Michael Celt, PLS, CFedS



State Street to Camel's Back Park
- Being designed as part of the ACHD 11th Street Bikeway

11th Street / State Street
- Leading Bicycle/Pedestrian Interval (LBI/LPI)

State Street to Lee Street
Raised bike lanes







11th Street / Front Street:
- Leading Pedestrian/Bicycle Interval (LBI/LPI)

11th Street / Myrtle Street:
- Leading Bicycle/Pedestrian Interval (LBI/LPI)
- Wayfinding to Pioneer Pathway and Greenbelt

Lee Street to River Street
Short-term recommended design: Painted buffered bike lanes
Long-term recommended design: Raised bike lanes

11th / River Street
- Wayfinding to Greenbelt

South of River Street
- Future Greenbelt connection. This link is planned by CCDC but is not part of this project.

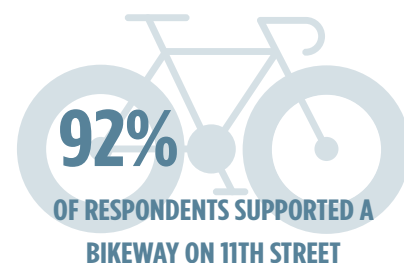
-  Raised Bike Lanes
  Landmarks
  Grocery
  School
  Parks/Open Space
-  Buffered Bike Lanes
-  Part of ACHD Bikeway Project

Project Description

The Capital City Development Corporation (CCDC) and City of Boise, in cooperation with Ada County Highway District (ACHD) and Idaho Transportation Department (ITD), have developed a bikeway concept design to improve safety and comfort on 11th Street in Downtown Boise from State Street to River Street. The bikeway will create a premier “ridge-to-river” bicycle connection between the Foothills, the Greenbelt, and Downtown Boise and will better connect customers and employees to downtown businesses.

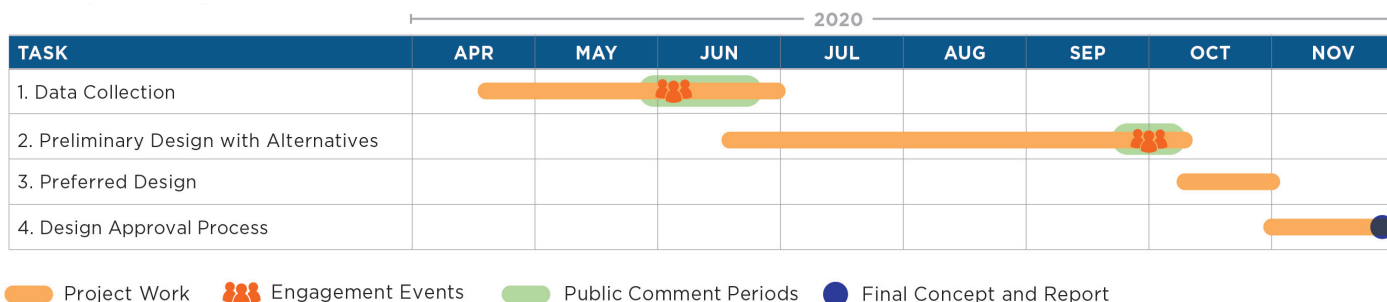
Why 11th Street?

11th Street provides the most complete connection from River Street (and the Greenbelt via the Pioneer Pathway) to Camel's Back Park. ACHD is currently designing the first portion of this connection from Camel's Back Park to State Street. In a public survey conducted by ACHD in November 2018, 92% of respondents supported a bikeway on 11th Street, with many respondents requesting an improved bikeway through downtown south of State Street. Based on public feedback, the Boise City Council and ACHD Commission directed that 11th Street from State Street to River Street be examined further for bikeway improvements.



Concept Development Process

The figure below illustrates the concept development process. The project team evaluated multiple alternatives to meet the project's goal of providing a low-stress bicycling experience to a range of people and to respond to public feedback from the first outreach effort. Two concepts were presented to the public in a second outreach effort. Feedback from the public and stakeholder agencies resulted in the selection of a refined final concept.



Outreach

The Downtown 11th Street Bikeway concept development process has engaged with residents, business and property owners, and street users to understand existing needs and desires along the corridor and has developed a bikeway concept for 11th Street from State Street to River Street that is inviting for all ages and abilities. The project team engaged regularly with an Interagency Advisory Team (IAT) made up of representatives from the City, CCDC, ACHD, and ITD.



Public comments were collected through the following means:

- Two rounds of questionnaires with 11th Street property and business owners (19 and 12 attendees respectively)
- Online survey #1 (268 respondents, including 7 responses from property/business owners)
- Online comment map (114 responses)
- Online open house with survey #2 (188 respondents, including 2 responses from property/business owners)
- Virtual public meeting with 18 attendees

PUBLIC FEEDBACK SUMMARY



In total, we received **619** Comments from **505** People

95%

of survey respondents want to see a bikeway project completed along 11th Street!

WHAT DOES A SUCCESSFUL OUTCOME FOR BUSINESS AND PROPERTY OWNERS LOOK LIKE?



Top priority: Improved bicycle safety on 11th Street



Tied for second: An aesthetically pleasing streetscape and maintaining motor vehicle parking



For business and property owners south of Myrtle Street, parking and loading space is a top priority



North of Myrtle Street, business and property owners want to see more people biking and walking past storefronts on 11th Street

WHAT DOES THE PUBLIC WANT TO SEE FOR BIKING ON 11TH STREET?



More separation from motor vehicles and more protection at intersections



Slower vehicle speeds

OF RESPONDENTS TO THE SECOND SURVEY & OPEN HOUSE

89% said that the raised bike lane would make biking on 11th Street more comfortable

82% would support constructing the raised bike lane option

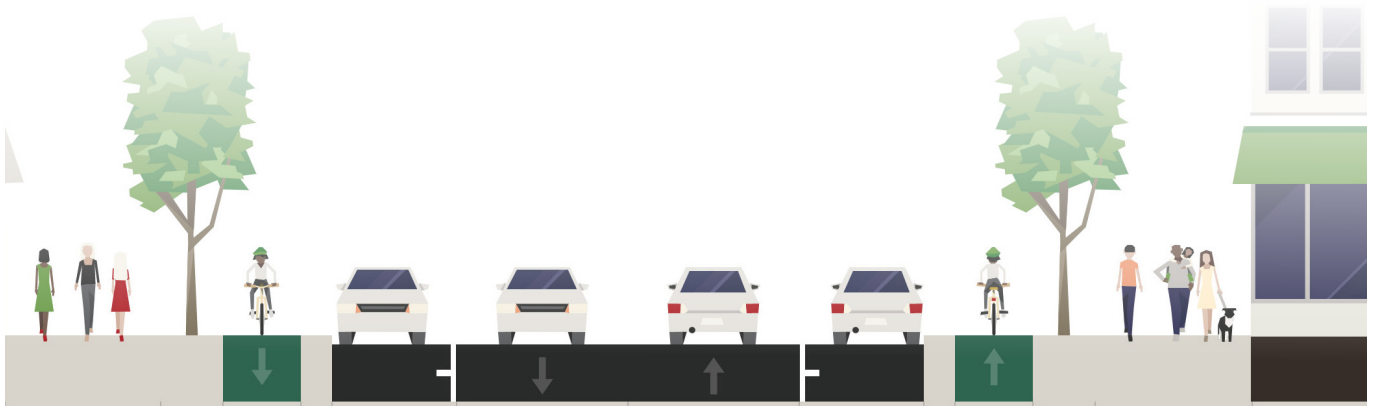


See outreach fact sheets in Appendices 3 and 6

Recommended Downtown 11th Street Bikeway Design

The recommended design for the Downtown 11th Street Bikeway is a raised bike lane. It will provide physical separation from motor vehicles and easier access for bicyclists to bicycle parking and businesses along the street. The design maintains on-street parking on both sides of the street. The recommended design also includes treatments that will improve safety and comfort at the intersections. The following sections present typical cross-sections along the corridor and concepts for the Front Street and Myrtle Street intersections.

STATE STREET TO FRONT STREET

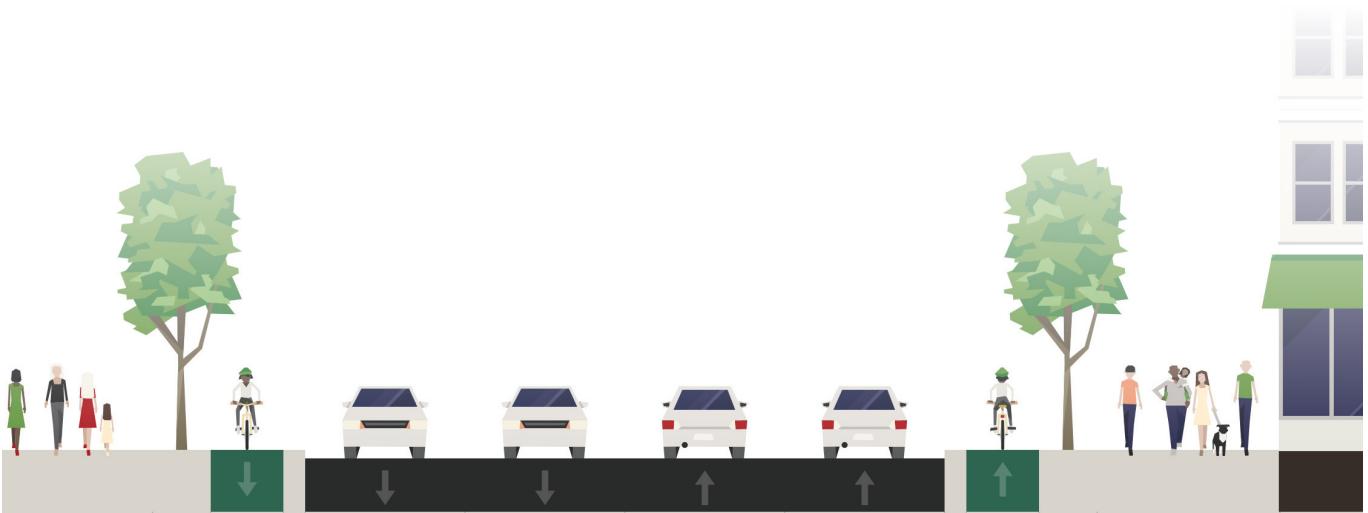


Typical cross section: Jefferson Street to Bannock Street facing north



Rendering of the view looking north from Main Street

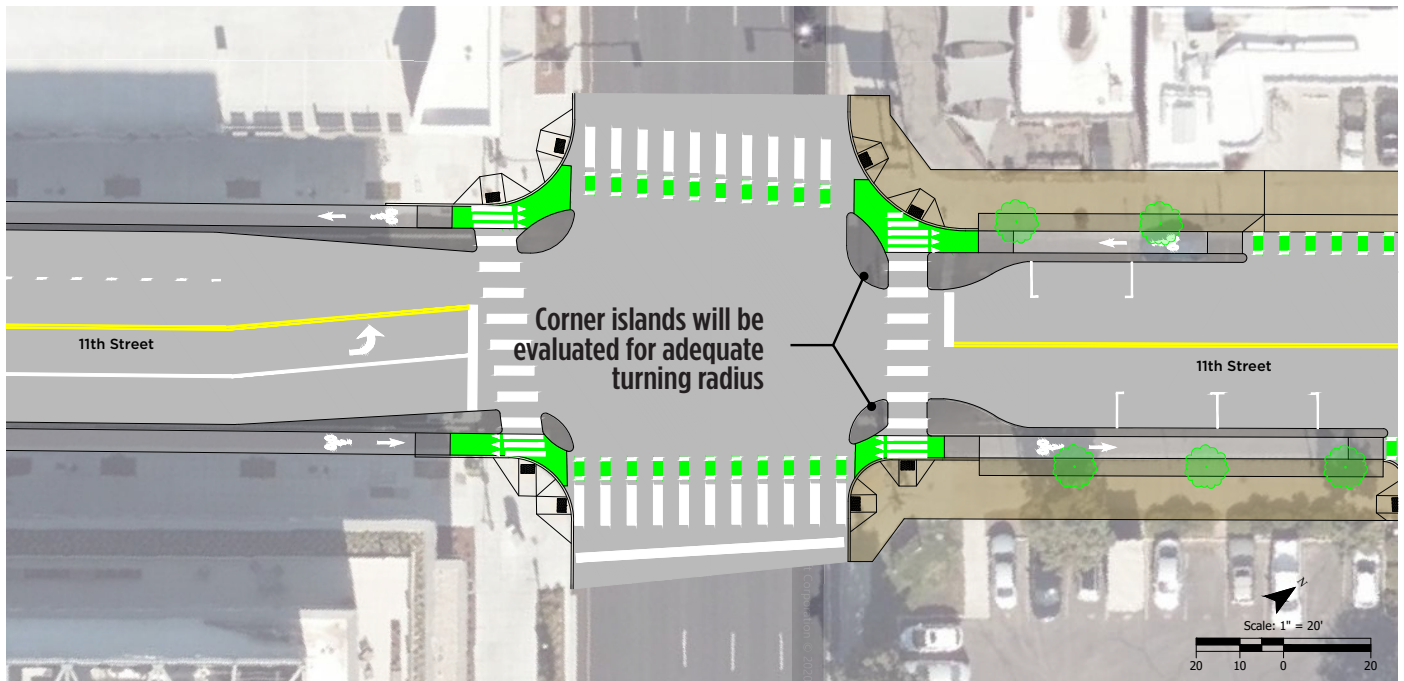
FRONT STREET TO MYRTLE STREET



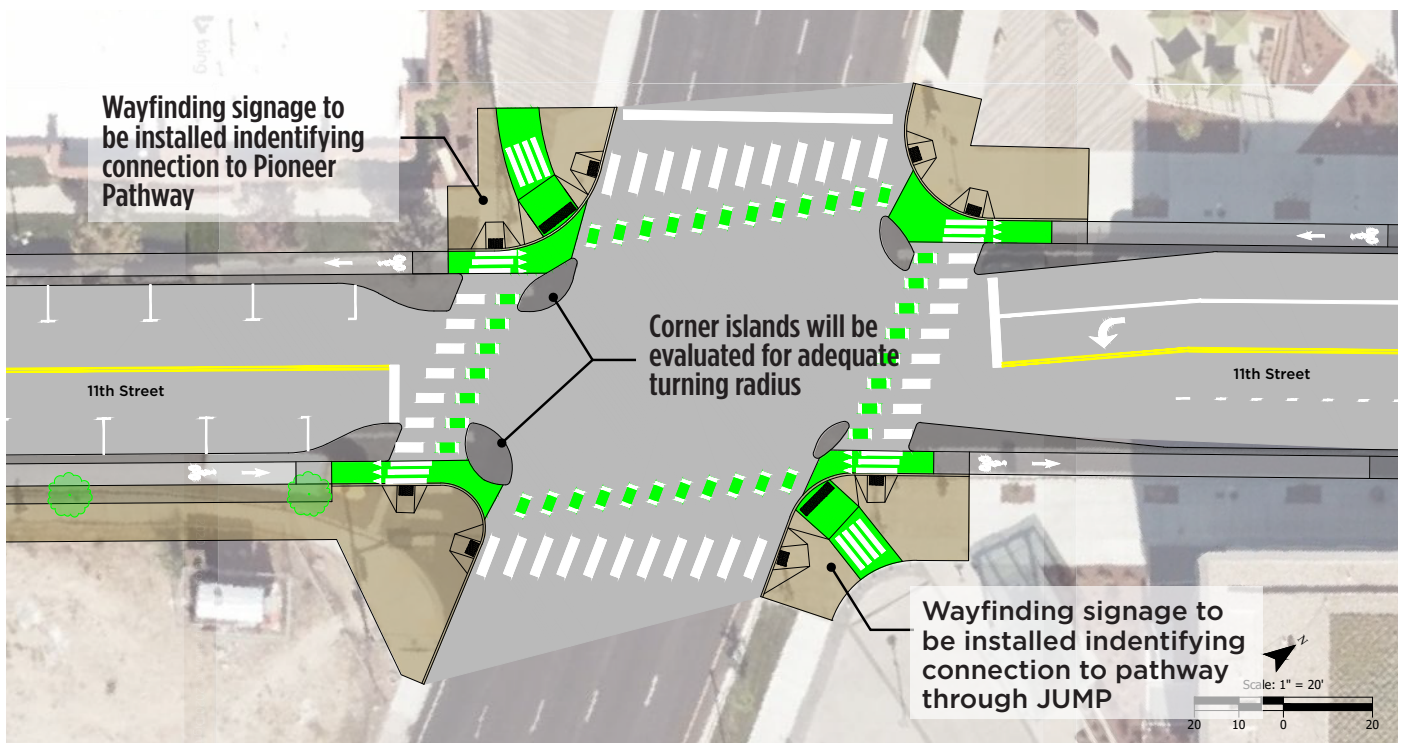
Typical cross section: Front Street to Myrtle Street facing north



Rendering of the view looking down on the 11th Street and Front Street intersection facing north

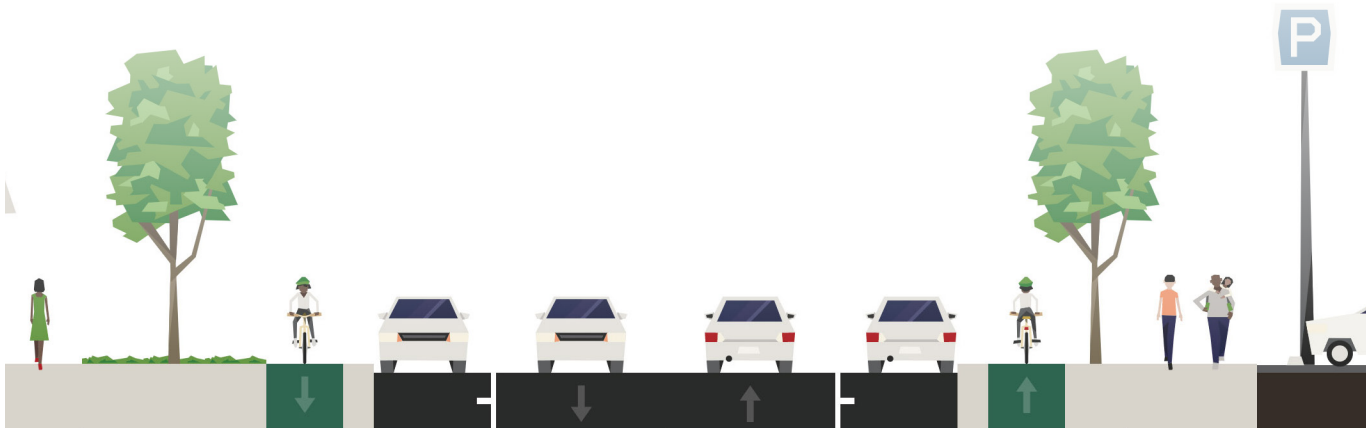


11th Street and Front Street intersection concept design



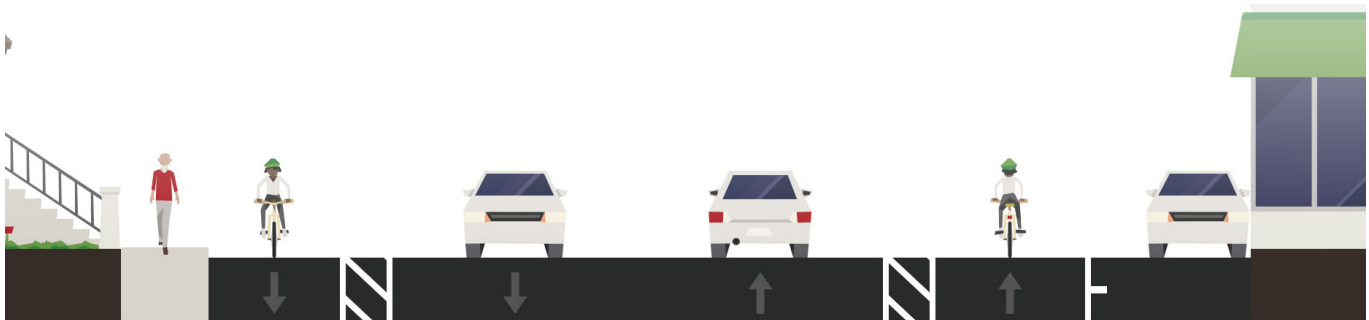
11th Street and Myrtle Street intersection concept design

MYRTLE STREET TO LEE STREET



Typical cross section: Myrtle Street to Lee Street facing north

LEE STREET TO RIVER STREET



*This is the short-term recommendation until properties redevelop
Typical cross section: Lee Street to River Street facing north*

Implementation Considerations

The Downtown 11th Street Bikeway Design will require on-going coordination with ACHD and ITD. The final design will need to address the following considerations:

- The corner refuge islands at the Front Street and Myrtle Street intersections will need to accommodate the turning radius of the appropriate design vehicles
- Maintenance requirements and agreements for corner islands at Front Street and Myrtle Street and the raised bike lanes
- Parking meter locations
- Opportunities for the bike lane to remain raised across alleys and driveways
- Tactile surface treatments to distinguish bike and pedestrian zones
- Wayfinding along the corridor
- Right-turn on red restrictions
- Accessible parking stall locations and design
- Stormwater design considerations (see below)
- Integration with ACHD maintenance project (see below)

Estimated Cost

Cost	CCDC Westside District	CCDC River Myrtle District	Total
Bikeway /Streetscaping	\$1,900,000	\$1,430,000	\$3,330,000
Design/Survey /Construction Management	\$420,000	\$320,000	\$740,000
Contingency	\$200,000	\$145,000	\$345,000
Total	\$2,520,000	\$1,895,000	\$4,415,000

STORMWATER DRAINAGE AND INTEGRATION WITH ACHD MAINTENANCE PROJECT

The existing stormwater drainage system consists of roadway curb and gutter with a series of curb inlets and catch basins where runoff is collected and piped underground to an off-site location. This concept report assumes the existing drainage system will be perpetuated via curb and gutter to the extent possible, and impacted structures, pipes, and manholes will be removed and relocated. The only additional detention/retention facilities included in this cost estimate are Silva Cells, a modular suspended pavement system. Constructing the raised bike lanes will require encroaching into the roadway, thus removing the curb, gutter, inlets, and pipes and installing new ones. There are approximately 23 catchment structures (inlets, catch basins, etc.) that will be impacted. The cost estimate includes work associated with removing and reinstalling these and their associated pipes. The cost estimate also includes Silva Cells where there are new trees; however, it is assumed that the Silva Cells will not have the capacity to handle the design stormwater events as standalone treatments. More detailed design of new drainage facilities and associated impacts to the existing facilities will be developed during final design of this project. Also, final design of the project may consider additional green stormwater features.

Typical Section Cross Slopes and Coordination with Planned ACHD Maintenance Project

The cost estimate assumes that sidewalk and bike lane cross slopes pitch toward the new curb and gutter within current Public Right of Way Accessibility Guidelines (PROWAG) tolerances, therefore, the new curb and gutter will be lower than it is today. A lower gutter line coupled with encroachment into the existing roadway can create steep roadway cross slopes. This estimate assumes that the new roadway slopes are addressed as part of ACHD's planned maintenance project on 11th Street, which includes reconstruction of 11th Street from State Street to Grove Street and asphalt replacement from Grove Street to Front Street and Myrtle Street to River Street. Patch backs will be needed to achieve tolerable cross slopes from Front Street to Myrtle Street. More detailed consideration of the typical section cross slopes and patch back limits will need to be developed during the final design phase of this project.



CONTACT INFORMATION

Amy Fimbel, Project Manager
Capital City Development Corporation
afimbel@ccdcboise.com
208-384-4264