

PEOPLE. PLACES. PROGRESS.

## Division Street Corridor Development Plan

DivisionConnects Study Phase 1

Prepared for

Spokane Regional Transportation Council Spokane Transit Authority

May 2021

Prepared by

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- B. DivisionConnects Focus Group Findings Report
- C. DivisionConnects Social Pinpoint Summary
- D. DivisionConnects Online Open House Mailer
- E. Statistically Significant Survey Summary Presentation, February 2021
- F. Alternatives Evaluation Matrix
- G. Division Alternatives Modeling Technical Memo
- H. DivisionConnects: Active Transportation Technical Memo
- I. Relative Capital Cost Comparison for Division Street Corridor Study Technical Memo
- J. NEPA/SEPA Overview for DivisionConnects Transit Project Technical Memo
- K. Transit Sensitivity North of the "Y" Technical Memo

## **ACRONYMS AND ABBREVIATIONS**

ADA Americans with Disabilities Act
BAT business access and transit

BRT bus rapid transit

CIG Capital Investment Grant FTA Federal Transit Administration

HPT high performance transit
LPA Locally Preferred Alternative

NEPA National Environmental Policy Act

NSC North Spokane Corridor

SEPA State Environmental Policy Act

SRTC Spokane Regional Transportation Council

STA Spokane Transit Authority
TSP Transit Signal Priority

WSDOT Washington State Department of Transportation

## Why DivisionConnects?

DivisionConnects is a collaborative 2-year transportation and land use study led by Spokane Regional Transportation Council (SRTC) and Spokane Transit Authority (STA) in partnership with the City of Spokane, Spokane County, and WSDOT. The study is focused on opportunities and challenges that come with the planned completion of the North Spokane Corridor (NSC), which will offer a more desirable highway route for through-traffic that uses Division Street today, and implementation of bus rapid transit (BRT) along Division by STA. The first phase of the study focused on evaluation of BRT and other corridor transportation elements whereas Phase 2 will provide greater focus on land use, concluding in early 2022. With these significant system investments, it is essential to plan for the future and understand potential options for all modes of transportation. DivisionConnects opens a community conversation about what the future may look like for the Division corridor. The study segment is shown in Figure ES-1.

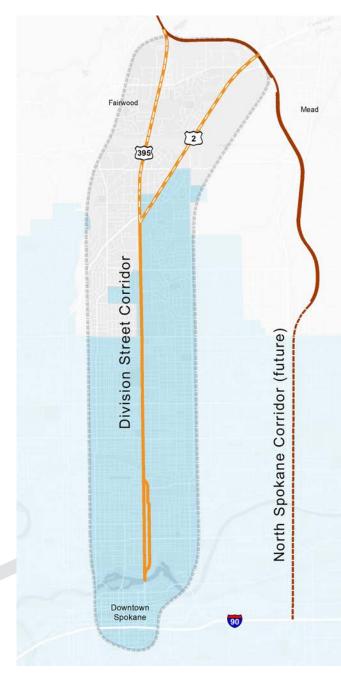


Figure ES-1. DivisionConnects Study Corridor

# Current State of the Corridor

Today, the corridor serves local and regional traffic, including freight, has the second highest ridership bus route in the system, and provides access from downtown Spokane to growing communities on the northern edge of Spokane. Within Washington, Division Street is a segment of the state highway system (US 2) that connects the western and eastern regions of the state. The study segment is also concurrent with US 395, which continues north to the Canadian border and south to California.









The Division corridor is developed with a diverse mix of land uses, from a dense, urban pattern in the south to more auto-oriented retail in the northern end. The corridor provides access to several neighborhoods on both sides of the roadway, all of which have their own unique character. Although sidewalks are present along much of the corridor, the traffic speeds and volumes often contribute to an uncomfortable environment for pedestrians and people using scooters and similar devices. Bicycles are prohibited in much of the corridor, and the lack of dedicated bicycle facilities discourages cyclists from using the roadway. Additional details about existing conditions can be found in the State of the Corridor Report.

## A Plan to Improve Bus Service

Connect Spokane, STA's vision and policy framework for evolution of the transit network, identifies Division Street as a future high performance transit (HPT) corridor. Specific assumptions were developed for this corridor, including rubber-tired electric-powered vehicles. The first phase of DivisionConnects evaluated options for development of BRT service on Division Street. The conclusion of this effort was selection of the future roadway cross-sections planned for the corridor.





## **Alternatives Considered**

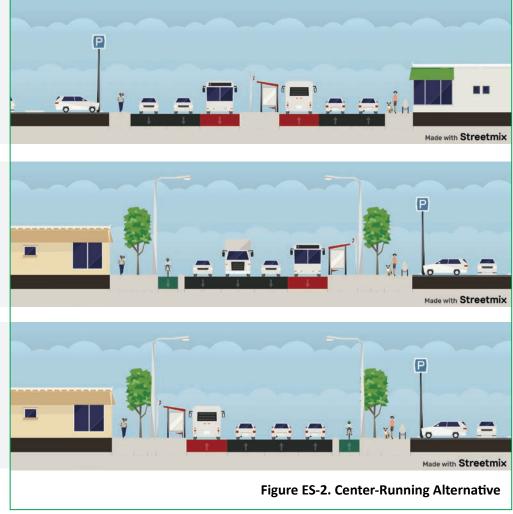
Collaboration with stakeholders was key in the process of identifying and evaluating the improvements needed to support future BRT service. Four alternatives, shown in Figures ES-2 through ES-5, were developed for public review and comment based on priorities and feedback provided through outreach efforts, with an emphasis on transit performance, mobility for all users, and implementation feasibility. Three alternatives assumed buses would run along existing outside curb lanes, while the remaining alternative envisioned buses traveling in dedicated lanes in the center of the roadway on Division Street north of Cleveland Avenue. Figure ES-6 summarizes the results of the evaluation.

## **Center-Running**

**Mainline**looking north

**Couplet: Division** looking north

Couplet: Ruby looking north



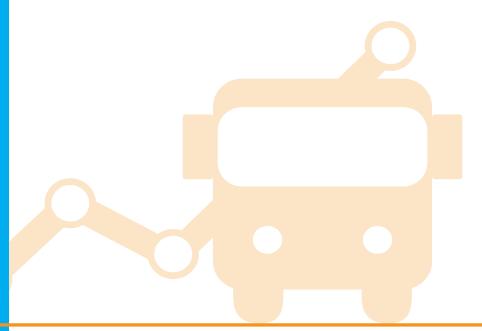


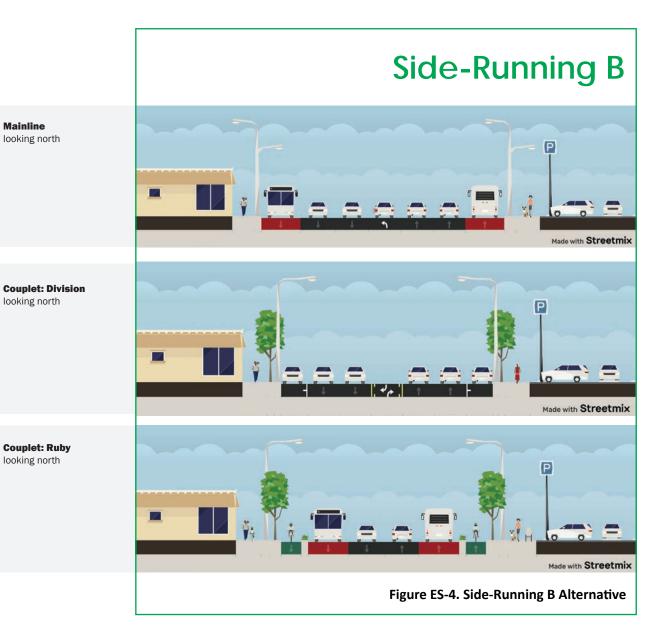
**Mainline** looking north

**Couplet: Division** looking north

**Couplet: Ruby** looking north

## Side-Running A P Made with Streetmix P Made with Streetmix Made with Streetmix Figure ES-3. Side-Running A Alternative







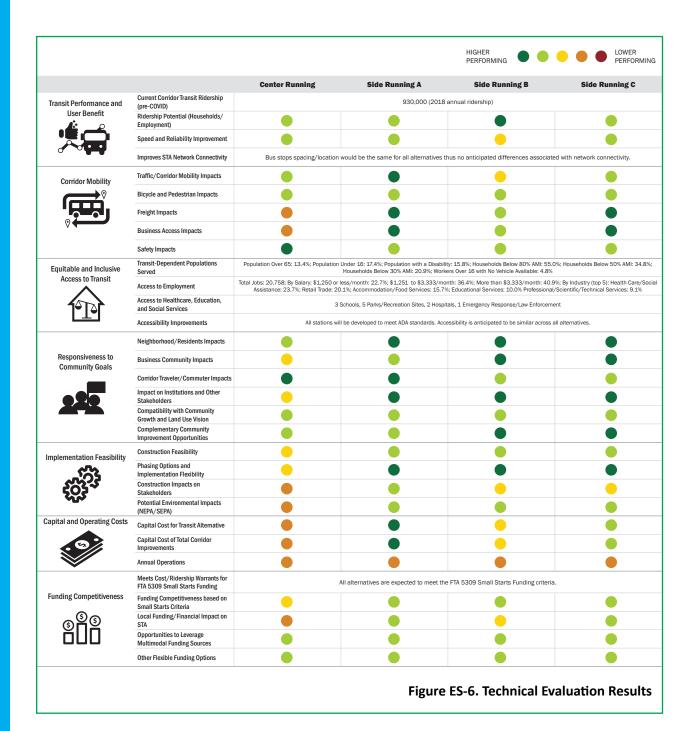
**Mainline** looking north

**Couplet: Division** looking north

**Couplet: Ruby** looking north

# Side-Running C P Made with Streetmix lade with Streetmix Made with Streetmix Figure ES-5. Side-Running C Alternative





## A Vision for the Future

After presenting to the community, including an online open house, and receiving feedback from the study steering committee and partner agencies, Side-Running C Alternative was selected by the STA Board of Directors as the preferred option (known as the Locally Preferred Alternative, or LPA) for future development of the corridor. This vision will be used to guide preliminary design work and will also be used by STA to support efforts to secure grant funding for corridor development. One important element that will be evaluated further in future project phases is the configuration of protected bicycle facilities along Ruby Street.

## What's Next?

Adoption of the LPA represents a key milestone in the planning of BRT on Division Street. STA will lead the effort to develop final designs, perform environmental reviews, and construct improvements along the corridor and facilitate adoption of the LPA into the Metropolitan Transportation Plan. Outreach to the community will continue as the project is further defined and potential impacts are better understood. The next phase of DivisionConnects will include evaluation of land use and additional transportation elements to further expand the community conversation about the future of the corridor.





#### 1. INTRODUCTION

#### 1.1 Project Purpose and Description

The Division Street Corridor Study (Study), undertaken from December 2019 to April 2021, evaluated the future of transportation along this important corridor in Spokane. It represents the first phase of a broader land use and transportation study known as DivisionConnects. DivisionConnects is scheduled to continue evaluation of land use and additional transportation elements beginning in April 2021. The Study is a coordinated effort between the Spokane Regional Transportation Council (SRTC), Spokane Transit Authority (STA), the City of Spokane, Spokane County, and the Washington State Department of Transportation (WSDOT). STA, SRTC, and WSDOT provided funding for the project.

Today, the corridor serves local and regional traffic, has the second highest ridership bus route in the system, and provides access along a diverse mix of land uses, from urban downtown Spokane to auto-oriented retail and growing communities on the northern edge of Spokane. With the North Spokane Corridor (NSC) highway project scheduled for completion by 2029, agency partners, businesses, residents, and the broader community anticipate changes to travel patterns on Division Street and are looking to evaluate the future of the corridor. The key elements of this Study were as follows:

- Examining opportunities and identifying a preferred concept for rubber-tired high performance transit (HPT) in the corridor as identified in STA's Transit Development Plan as bus rapid transit (BRT)
- Developing options for all modes of travel in the corridor
- Engaging with the community on potential changes to the corridor

As the DivisionConnects study continues into Phase 2, key elements will include the following:

- Recommending capital projects and implementation plans
- Identifying opportunities for future changes to land uses along the corridor
- Engaging with the community on potential changes to the corridor

#### 1.2 Purpose of This Plan

This Corridor Development Plan sets the foundation for future development of Division Street as an HPT corridor. It summarizes the alternatives evaluation process undertaken to identify a Locally Preferred Alternative (LPA) for development of future BRT service on Division Street and describes future steps required to realize the vision contained therein. This plan is meant to serve as a resource when pursuing grant funding, as it contains data and analysis that describes future performance of BRT service on Division Street. It can also be used to guide preliminary design efforts in the next phase of project development because the LPA serves as a high-level description of the future roadway cross-sections planned for the corridor.

While focused on transit, the LPA also identifies the preferred active transportation alternative for the corridor; however, the specific design of bicycle facilities will be determined in a future phase of project development.

<sup>&</sup>lt;sup>1</sup> Connect Spokane, STA's comprehensive plan for public transportation defines high performance transit as "a network of corridors providing all-day, two-way, reliable, and frequent service which offers competitive speeds to the private automobile and features improved amenities for passengers. The HPT Network defines a system of corridors for heightened and longterm operating and capital investments."

#### 2. PROJECT BACKGROUND

#### 2.1 Study Corridor

The Division Street Corridor study area (study area) is located along Division Street/US Highway 2 (US 2) in the City of Spokane and parts of unincorporated Spokane County. The study area begins in the north at US Highway 395 (US 395) and continues south through the intersection of Division Street and Newport Highway (commonly referred to as the "Y"), across the Spokane River, through downtown to the medical district. The highway is a National Highway of Significance, a State Highway of Significance, and a major state freight corridor. The corridor roughly follows the current Route 25 alignment, whose southern terminus is the STA Plaza in downtown Spokane and northern terminus is at the Hastings Park and Ride, providing access to the following neighborhoods:

- Shiloh Hills
- North Hill
- Nevada Heights
- Emerson/Garfield
- Logan
- Riverside
- East Central

The study area includes the area within 0.75 mile of either side of Division Street, which encompasses Hamilton Street to the east and Monroe Street to the west. The study area was defined to be purposely broad to understand the function, role, and interactions of adjacent streets, highways, land uses, and community character.

The study area includes Ruby Street from River Drive to Cleveland Avenue. Division Street and Ruby Street are one-way streets from River Drive to Cleveland Avenue, forming a couplet through this section of the study corridor. For purposes of this study, the two-way section of Division Street north of Cleveland Avenue is referred to as the Mainline, while the two one-way streets between River Drive to Cleveland Avenue are referred to as the Couplet. The study corridor is shown in Figure 2-1.

#### 2.2 The North Spokane Corridor

As noted previously, this study was initiated, in part, to address the anticipated changes to traffic on Division Street upon completion of the NSC highway project. Located approximately 2.3 miles east of Division Street and scheduled for completion in 2029, the NSC will be a new WSDOT limited-access highway running approximately parallel to Division Street. Once completed, it will become the primary north-south route between north Spokane and Interstate 90. The study's technical analysis assumed future completion of the NSC.

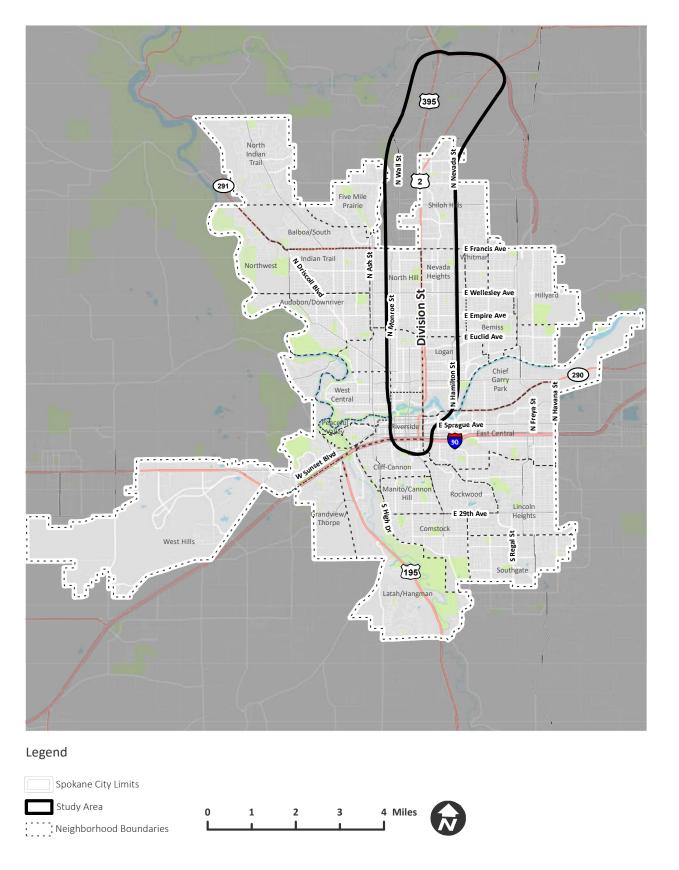


Figure 2-1. Division Street Corridor Study Area

#### 2.3 Existing Conditions

#### 2.3.1 Traffic

As the highest volume and primary north-south street in Spokane, Division Street plays a key role in the region's transportation network and economy, providing access to thousands of homes, jobs, and services. Division Street carries approximately 50,000 vehicles on an average weekday. Weekday traffic shows distinct peaks in each direction, corresponding with the morning and evening commutes.

Division Street today is a multi-lane urban arterial in most of the study area. In downtown, the study area includes one-way east-west arterial streets that intersect with Division Street. The Mainline generally has three general purpose travel lanes in each direction and a center median lane with designated left-turn pockets at intersections and some driveways. North of Lyons Avenue, there are long segments of two-way center turn lanes. The cross-section tapers down to two general purpose travel lanes in each direction north of the Y. Both streets in the couplet have four general purpose travel lanes.

#### 2.3.2 Transit

Frequent bus service is provided in the study area by Spokane Transit, with Route 25 Division (Route 25) providing frequent bus service along Division Street. Service is provided from 5:00 a.m. to midnight on weekdays and Saturdays and from 7:30 a.m. to 8:30p.m. on Sundays.

Route 25 begins at the Hastings Park and Ride in the north and terminates in downtown Spokane at the STA Plaza in the south. This route is just over 9 miles long and intersects with several other bus routes. Key transfer locations to other bus services are located at:

- The Hastings Park and Ride (Routes 124/662)
- Hawthorne Road/Newport Highway (Route 28)
- Francis Avenue (Route 27)
- Wellesley Avenue (Route 33)
- Indiana Avenue (Route 27)
- Mission Avenue (Route 39)
- Spokane Falls Boulevard (Routes 26, 28, and 29)
- Downtown Spokane/The Plaza (multiple)

The majority of STA's routes serve downtown Spokane and the STA Plaza, which allows for transfers from Route 25 to almost every route in the system. Route 25 intersects with all frequent routes in STA's network. The Hastings Park and Ride at the northern end of the corridor is heavily used, with up to 85 percent utilization in the fall, winter, and spring. There are 28 northbound stops and 30 southbound stops located along Route 25.

Route 25 has the second highest ridership of any route in STA's system, with almost 3,000 daily riders and nearly one million annual rides prior to the COVID-19 pandemic. Thousands of people are using transit every day in the corridor, including transfers to and from other routes. While vehicle traffic in the corridor shows high southbound and northbound volumes during the morning and evening peak periods, transit ridership shows strong all-day ridership in addition to peak hour commuter travel. Ridership steadily increases throughout the day until it peaks around 3:00 p.m. then declines gradually through the late afternoon and evening. Transit riders are likely using the bus for a wide variety of trip purposes.

#### 2.3.3 Active Transportation

Generally, there are sidewalks present on at least one side of most streets in the study area, and most of Division Street has sidewalks present. The sidewalk network in the study area is largely complete within the City of Spokane, with more network gaps in unincorporated Spokane County. A majority of the corridor north of the Spokane River is characterized by frequent driveways and long distances between pedestrian crossings, creating an uncomfortable environment for pedestrians. The pedestrian environment on Division Street is influenced by high traffic volumes, speeds, and proximity of curbside sidewalks to traffic. Downtown Spokane is walkable, with wide sidewalks.

Bike lanes are not present on Division Street in any part of the study corridor, and cyclists are prohibited from using most of Division Street. Parallel streets, such as Howard, Wall, and Addison, have bike lanes or shared roadway designations that provide north-south connections for cyclists in the study area, though most of these are 0.33 to 0.5 mile away from Division Street. There are no bicycle facilities on the Division Street bridge crossing the Spokane River, and riders must use off-street bridges to the east or west or ride on the sidewalk of the bridge. Downtown Spokane has some dedicated cycling facilities.

There are several designated shared roadways in the corridor as well, including Empire Avenue, North Foothills Drive, and Mission Avenue, which provide east-west connections for cyclists. However, these roadways exhibit high traffic volumes and speeds and are not comfortable as a shared facility for most cyclists. North-south cycling routes parallel to Division Street are generally complete but are multiple blocks away, limiting comfortable and direct cyclist access to businesses, transit, and residences along the corridor. A lack of bicycle parking and storage at destinations also discourages cycling.

#### 2.3.4 Safety

As with many principal arterials, Division Street crashes frequently occur at intersections. Rear-end crashes, which tend to happen at intersections, comprised 43 percent of total crash types along Division Street from 2015 to 2019. Crashes associated with vehicles entering at an angle, which can be from a driveway or intersection, are also frequent. With high speeds and volumes, these patterns are typical for a large urban arterial.

Between 2015-2019, there were more than 2,000 collisions recorded, of which 39 involved severe injuries or fatalities. Of those 39 collisions involving severe injury or fatalities, 21 involved a person walking and 4 involved a person riding a bicycle.

#### 2.3.5 Demographics

The study area is diverse and, as compared to the greater Spokane region, is characterized by a greater number of vulnerable populations who experience greater mobility challenges and are more likely to use and rely on transit. SRTC defines vulnerable populations as the following groups:

- Low income
- · Racial and ethnic minorities
- Households without access to a vehicle
- Those with limited English proficiency
- Older adults (age 65+)
- Youth (age <18)</li>
- Veterans
- Persons with disabilities

#### 2.3.6 Land Use

Land uses in the study area exhibit an urban to suburban to near-rural gradient from the southern end of the corridor in downtown Spokane north to the intersection with US 395 in unincorporated Spokane County. In general, the southern end of the study area is urban and characterized by a mix of land uses, transitioning north of the Spokane River to more auto-oriented commercial uses. North of Indiana Avenue, Division Street is consistently lined with retail and commercial uses, with small lot single-family homes behind. North of Euclid Avenue, land use is characterized by more suburban land uses, including single-family residential, pockets of multifamily housing, big-box commercial, strip malls, and offices. There are two city parks abutting the west side of Division Street between Garland and Empire Avenues and Francis Avenue—B.A. Clark Park and the larger Franklin Park. Areas further north are characterized by strip malls and big-box retail, large parking lots, frequent driveway accesses along arterials, and low-density land uses. There are many parking lots along the corridor north of the Spokane River.

#### 2.3.7 Historic and Cultural Resources

There are many historic buildings and several historic districts present in the corridor, as well as many potential historic resources that have not been inventoried. Based on the study area location in the historic range of the Spokane Tribe of Indians, archaeological resources may also be present in the corridor. Further work to understand the full scope of cultural resources in the corridor is needed to understand how corridor improvements may or may not affect resources.

A more detailed description of existing conditions in the study area are described in the State of the Corridor Report found in Appendix A.

#### 3. PUBLIC ENGAGEMENT

Public engagement was undertaken with a variety of groups during various stages of the project. The process to solicit feedback was deliberately structured to ensure a broad cross-section of input from stakeholders of all types. Public involvement for the study pivoted to exclusive use of virtual strategies as social distancing was mandated for most of 2020 and early 2021 because of the COVID-19 pandemic.

#### 3.1 Advisory Committees

#### 3.1.1 Steering Committee

The Steering Committee was an advisory body composed of elected officials and leadership representing the project sponsors. Formation of the steering committee was approved by the SRTC Board in March 2020. The role of committee members was to identify areas of concern and provide insight and feedback as the study progressed. They were also responsible for providing recommendations on milestone decisions associated with the project and reporting back to their respective constituencies, including the STA and SRTC Boards. Membership on the committee included:

- Commissioner Al French Spokane County
- Councilmember Kate Burke City of Spokane
- Councilmember Candace Mumm City of Spokane
- Councilmember Tim Hattenburg City of Spokane Valley
- E. Susan Meyer CEO, STA
- Mike Gribner Regional Administrator, WSDOT Eastern Region

#### 3.1.2 Agency Team

An Agency Team was established to provide technical guidance to the SRTC and STA Project Managers and consultant team. Team members were tasked with providing feedback on study deliverables and public outreach strategies and helping to coordinate on the study process and schedule. The Agency Team was composed of technical staff from the project partners. Representatives to the Agency Team included:

- Char Kay WSDOT Eastern Region Planning and Strategic Community Partnerships Director
- Greg Figg WSDOT Eastern Region Development Services Manager
- Bonnie Gow WSDOT Eastern Region Senior Transportation Planning Specialist
- Louis Meuler City of Spokane, Interim Director, Planning Services
- Kara Mowery Frashefski City of Spokane, Assistant Planner
- Inga Note City of Spokane Integrated Capital Management, Senior Traffic Planning Engineer
- Colin Quinn-Hurst City of Spokane, Assistant Planner
- Kevin Picanco City of Spokane Integrated Capital Management, Senior Engineer
- Shauna Harshman City Council Manager of Neighborhood Connectivity Initiatives
- Barry Greene Spokane County Public Works, Transportation/Development Services Engineer
- Jami Hayes Spokane County Public Works, Senior Project Manager

#### 3.2 Focus Groups

As a part of broader public outreach and community engagement efforts, the project team conducted two focus groups to engage the public in conversation about the future of the Division corridor. Focus group participants were selected through extensive online research and telephone outreach, with an aim to collect contact information for all neighborhood groups, churches, schools, nonprofit/social service organizations, government organizations, business development organizations and private businesses along the Division corridor. In total, 14 people participated in the two focus groups meetings held October 7th and 8th, 2020. The DivisionConnects Focus Group Findings Report (Appendix B) summarizes the feedback received at the meetings.

#### 3.3 Property Owner Interviews

The project team conducted one-on-one interview with several persons who own and/or manage property along the corridor. Property owners were selected for interviews through a review of tax lot records as well as through recommendations from Steering Committee members and other stakeholders.

#### 3.4 Online and Social Media Activities

#### 3.4.1 Project Website

As the project began, a website was established to be the primary portal for distributing online information about the project. Hosted by SRTC, the divisionconnects.org website provided information, such as the purpose of the project, opportunities for public involvement, and links to online engagement activities, to interested parties. It included a link to the project schedule, contact information for the project manager, and the name of the project partners.

#### 3.4.2 Questionnaire #1

As the first broader public engagement activity, a Survey Monkey questionnaire was developed, and a link to it was provided on the project website. It asked questions about how respondents traveled on Division Street and their perceptions of safety and function of the corridor. The questionnaire also asked respondents to choose from potential future improvements they would like to see. Opened on April 10, 2020, the questionnaire closed on August 14, 2020, with 456 total respondents.

#### 3.4.3 Social Pinpoint

Social Pinpoint is an interactive community engagement tool used by the project team to solicit input from community members regarding their thoughts and perceptions about traveling along Division Street. The site was active from September 9, 2020, through October 15, 2020. Social Pinpoint allows community members to drop a "pin" on a map location and provide a comment associated with that "pin." The "pin" choices provided were biking, bus, scooter, walking, vehicle (driving/freight), and "I go here/important place." There were over 1,500 visits to the site, with over 600 unique users leaving more than 400 comments. The DivisionConnects Social Pinpoint Summary (Appendix C) provides map images from the site and summarizes the comments provided.

#### 3.4.4 Online Open House (ESRI StoryMap)

STA and SRTC hosted an online open house presented as an ESRI StoryMap from January 20 to February 28, 2021, with a virtual "in-person" event on February 11, 2021. The online open house provided an overview of the project, the BRT alternatives approved by the Steering Committee, technical findings produced by the study, and a questionnaire about the alternatives. Approximately 150 people provided comments during the time the open house was live. Fifteen people attended the virtual event on February 11, where staff provided a project overview followed by a question and answer session with attendees.

#### 3.4.5 Social Media

Information about the project was provided via the standard social media channels used by SRTC and STA, including Facebook, Twitter, Instagram, and LinkedIn. Community groups were also engaged to post notices via their existing social media channels.

#### 3.4.6 Electronic Newsletters

The DivisionConnects project was featured in electronic newsletters distributed by STA as well as the weekly Community Update newsletter distributed by the City of Spokane

#### 3.5 Other Activities

#### 3.5.1 Corridor Mailer

A postcard directing people to the project website and the online Open House described in Section 3.4.4 was sent out to residences and businesses along the Division corridor in mid-January 2021. Over 3,500 postcards were mailed. A copy of the mailer is included in Appendix D.

#### 3.5.2 Print Media

The DivisionConnects project was featured twice in the weekly "Getting There" column on the front page of the Spokesman-Review. The project was profiled in April 2020 with the launch of the website, State of the Corridor report, and first questionnaire. The project was profiled again in February 2021 to coincide with the launch of the Online Open House, the virtual open house event, and the opportunity for public review of the four alternatives. In addition, the project was featured in an article that appeared in the Spokane Journal of Business in October 2020.

#### 3.5.3 Statistically Significant Survey

In mid-February 2021, Moore Information Group, under contract with the project team, conducted 250 telephone interviews to solicit feedback associated with opinions and use of Division Street. Questions addressed travel on Division Street, including frequency, mode, and safety. Participants were asked about the need for improvements along Division Street and how they thought completion of the North Spokane Corridor will impact Division Street. When asked about improving the quality of bus service along Division Street, 63 percent of respondents stated it was important or very important to them. The primary reason provided for improving bus service was that public transportation is inherently important. Participants were also asked about improving bus service reliability, and 66 percent of respondents identified it as important or very important to them. Reliability and reducing traffic were the main reasons given for the importance of reliable bus service. A presentation summarizing the results of this survey are included as Appendix E.

#### 4. EVALUATION PROCESS

#### 4.1 Transit Framework Overview

On July 22, 2020, the Steering Committee approved a transit framework to guide the evaluation process. As noted previously, one of the foundational ideas of this study is the corridor will be served by HPT/BRT, thus it was important to establish a process that would facilitate evaluation of different transit options in the broader context of the overall project. The transit framework was developed to define broad criteria that would highlight distinctions between the alternatives and incorporate community and stakeholder feedback.

The transit framework included seven metrics, summarized below. Each metric was evaluated using multiple measures. A broader description of the measures for each metric used to analyze and compare the alternatives is included in Chapter 5-1.

- Transit Performance and User Benefit: Measures potential for bus ridership based on household and employment density near the study corridor, the anticipated speed and reliability benefits of the alternative, and the potential for the alternative to improve rider connectivity to the broader STA network.
- **Corridor Mobility:** Examines the impacts of the alternatives to general purpose traffic, bicyclists and pedestrians, freight, and business access, and assess safety impacts.
- Equitable and Inclusive Access to Transit: Assesses the potential for the alternatives to serve traditionally transit-dependent populations; provide access to employment, healthcare, education, and social services; and provide accessibility improvements.
- Responsiveness to Community Goals: Using feedback gathered through community engagement efforts, this metric analyzes the impacts of the alternatives to neighborhoods, residents, businesses, travelers on the corridors, institutions, and other stakeholders. It also evaluates compatibility with the land use vision for the community and how well the alternatives complement community improvement opportunities.
- Implementation Feasibility: Compares the relative ease associated with implementing the alternatives, including construction feasibility and phasing options, construction impacts on stakeholders, and potential environmental impacts.
- Capital and Operating Costs: Compares the relative capital and operating costs of the alternatives.
- Funding Competitiveness: Evaluates the potential for STA to secure federal grant funding and the relative
  financial impacts to the agency based on total project costs. It also examines the potential of securing
  grant funding for associated elements of corridor development, including nonmotorized improvements,
  stormwater management, safety, and paving improvements.

#### 4.2 Alternatives Selection Process

The alternatives selected for evaluation were determined through a multi-level screening process that began with identification of a large field of options that incorporated a variety of potential improvements for the corridor, including bus running way options, nonmotorized facilities, and general purpose traffic lane configurations. These "building blocks" were combined to create a variety of preliminary scenarios for changes to the study corridor. These scenarios were developed to be distinct from one another and represent a wide spectrum of options for consideration. Bus running way options included exclusive bus lanes running along curb lanes or within the center of the roadway, business access and transit (BAT) lanes, and travel with general purpose traffic and no exclusivity. The eight preliminary scenarios included combinations of improvements that could be accommodated within the existing right-of-way as well as those that would require acquisition of additional property. They also incorporated a variety of options for location of bicycle facilities as improvements that could be developed along the Mainline, within the Couplet, or off-corridor. The scenarios included the combinations summarized in Table 4-1.

**Table 4-1. Preliminary Scenarios Description** 

		MAINLINE	COLIDIET			
		IVIAINLINE	COUPLET			
Preliminary Scenario	Bus Lane Configuration	Number of General Purpose Lanes (per direction)	Active Transportation Facilities	Bus Lane Configuration	Number of General Purpose Lanes (per direction)	Active Transportation Facilities
A	Center-running dedicated lanes	2 through lanes; left turns permitted at signalized intersections only	Existing sidewalks	Left side BAT lanes	3 through lanes	Existing sidewalks
В	Center-running dedicated lanes	2 through lanes; left turns permitted at signalized intersections only	Existing sidewalks Protected bike lanes on both sides of the street	Left side BAT lanes	3 through lanes	Existing sidewalks Right-side protected bike lanes
С	Center-running dedicated lanes	2 through lanes; left turns permitted at signalized intersections only	Existing sidewalks	Left side BAT lanes	3 through lanes	Existing sidewalks Right-side protected bike lanes
D	Right side-running BAT lanes	1 through lane with left turn pockets at intersections	Existing sidewalks Southbound bike lane and northbound cycle track	Right side BAT lanes	2 through lanes and on-street parking on Division Street 3 through lanes on Ruby Street	Existing sidewalks Two-way, right-side cycle track on Ruby Street
E	Right side-running BAT lanes	2 through lanes with left-turn pockets at intersections	Existing sidewalks	Right side BAT lanes	3 through lanes	Existing sidewalks  Left-side protected bike lanes
F	Right side-running BAT lanes	2 through lanes with left-turn pockets at intersections	Existing sidewalks	Right side- running BAT lanes on Ruby Street (assumed conversion of both streets in the Couplet to two- way operations)	2 through lanes and on-street parking on Division Street 1 through lane on Ruby Street	Existing sidewalks Two-way left side cycle track on Ruby Street
G	Right side-running BAT lanes	2 through lanes with left-turn pockets at intersections	Existing sidewalks	Left side-running BAT lanes	3 through lanes	Existing sidewalks  Left-side protected bike lanes
Н	Combination of center-running and right side-running BAT lanes	2 through lanes; left turns permitted from center-running lanes	Existing sidewalks	Combination of left and right side- running BAT lanes	3 through lanes	Existing sidewalks
I	Right side-running BAT lanes	2 through lanes with left-turn pockets at intersections	Existing sidewalks	Right side BAT lanes	2 through lanes and on-street parking on Division Street 3 through lanes on Ruby Street	Two-way, right-side cycle track on Ruby Street

Once developed, the preliminary scenarios were evaluated for performance. General categories of analysis included right-of-way needs, impacts to travel times, and estimated bus operations impacts. This analysis was predominantly qualitative and meant to compare and highlight differences among the scenarios. The preliminary scenarios and the evaluation results, shown in Figure 4-1, were presented to the Steering Committee for review and comment. The Steering Committee selected several scenarios, including modified versions of the preliminary scenarios, for further refinement and additional analysis. Analysis of the secondary scenarios followed a process similar to that for the preliminary scenarios and the Steering Committee selected four alternatives for final evaluation. The final evaluation also included evaluation of a No-Build alternative. Figure 4-2 provides a visualization of the alternatives screening and selection process.

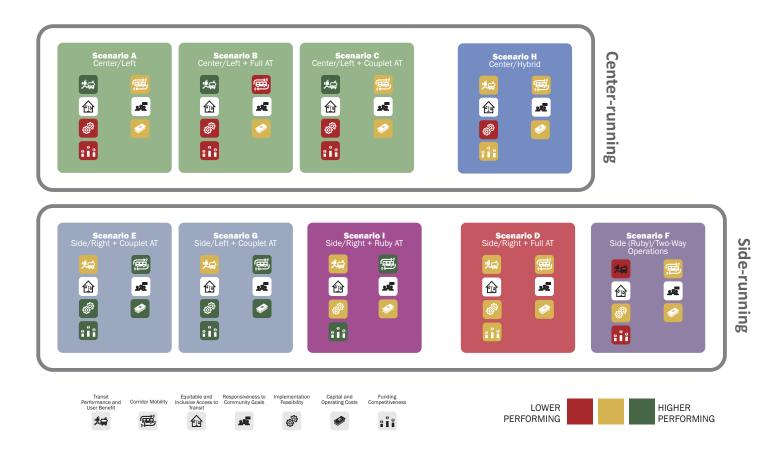


Figure 4-1. Preliminary Scenario Evaluation Results

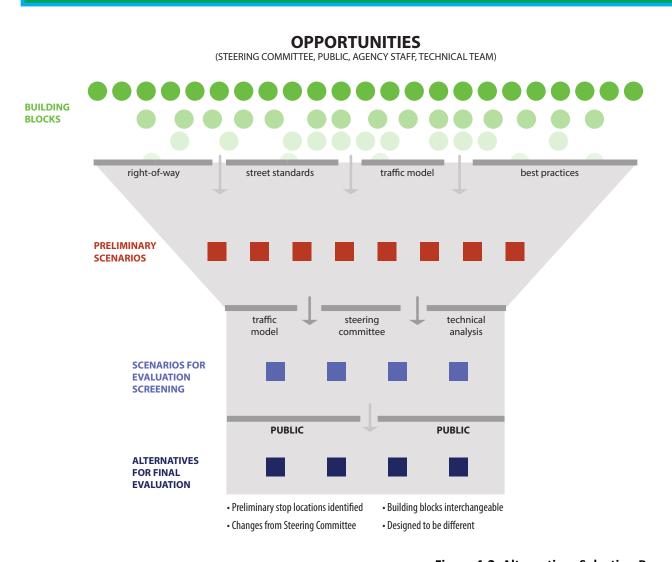


Figure 4-2. Alternatives Selection Process

#### 4.3 Methods and Assumptions Common to All Evaluation Metrics

Evaluation of the four final alternatives employed a variety of customized methods and assumptions associated with the criteria described for the Transit Framework. However, the following methods and assumptions were universally applied to the alternatives to ensure an "apples-to-apples" comparison across all alternatives.

- Unless otherwise noted, the study corridor transit alternatives were evaluated from the Spokane River to the Y termini. Routing through downtown Spokane and north of the Y was not identified prior to beginning the alternatives evaluation process. There were no variations of the study corridor alignment.
- For all alternatives, an off-corridor, parallel facility was assumed for bicycle transportation along the
  Mainline. The location, type, and design of this facility was undetermined during the analysis process and
  will be identified during a future phase of project development for this corridor.
- The same stop spacing pattern was assumed for all alternatives. Impacts associated with development of stations for the different configurations (center-running and side-running lanes) will vary and these were considered and noted when applicable.

#### 5. ALTERNATIVES DESCRIPTION

As noted in Chapter 3, four alternatives were selected for technical analysis and evaluation. Table 5-1 summarizes the various elements of the alternatives, including the existing roadway cross-sections, which reflect the No-Build alternative. Figure 5-1 through Figure 5-5 illustrate the cross-sections of the alternatives.

**Table 5-1. Alternatives Description** 

		COUPLET				
ALTERNATIVE	Bus Lane Configuration	Number of General Purpose Lanes (per direction)	Active Transportation Facilities	Bus Lane Configuration	Number of General Purpose Lanes (per direction)	Active Transportation Facilities
No Build	None	3 through lanes with left turn pockets at intersections	Existing sidewalks	None	4 through lanes	Existing sidewalks
Center-running	Center-running dedicated lanes	2 through lanes; left turns permitted at signalized intersections only	Existing sidewalks along the Mainline and the Couplet Assumes off- corridor bicycle facility and completion of sidewalk gaps or widening where feasible, without right-of-way acquisitions	Left side BAT lanes	3 through lanes	Protected Bike lanes
Side-running A	Right side- running BAT lanes	2 through lanes with left turn pockets at intersections	Existing sidewalks along the Mainline and the Couplet Assumes off-corridor bicycle facility and completion of sidewalk gaps or widening where feasible, without right-of-way acquisitions	Right side BAT lanes	3 through lanes	Protected bike lanes
Side-running B <sup>a</sup>	Right side- running BAT lanes	2 through lanes with left turn pockets at intersections	Existing sidewalks along the Mainline and the Couplet Assumes off- corridor bicycle facility and completion of sidewalk gaps or widening where feasible, without right-of-way acquisitions	Right side BAT lanes on Ruby Street only; no bus lanes on Division Street	2 through lanes; On Division Street, two-way center turn lane and on- street parking on both sides of the street	Protected bike lanes on Ruby Street only

		MAINLINE	COUPLET			
ALTERNATIVE	Bus Lane Configuration	Number of General Purpose Lanes (per direction)	Active Transportation Facilities	Bus Lane Configuration	Number of General Purpose Lanes (per direction)	Active Transportation Facilities
Side-running C	Right side- running BAT lanes	2 through lanes with left turn pockets at intersections	Existing sidewalks along the Mainline and the Couplet Assumes off- corridor bicycle facility and completion of sidewalk gaps or widening where feasible, without right-of-way acquisitions	Right side BAT lanes	2 through lanes; On-street parking on one side of Division Street	Two-way cycle track on Ruby Street only <sup>b</sup>

<sup>&</sup>lt;sup>a</sup> Alternative Side-Running B would convert the one-way streets in the Couplet to two-way streets.

<sup>&</sup>lt;sup>b</sup> This describes what was reviewed and commented on by the public. The two-way cycle track will be evaluated further to find the best solution for a protected facility.

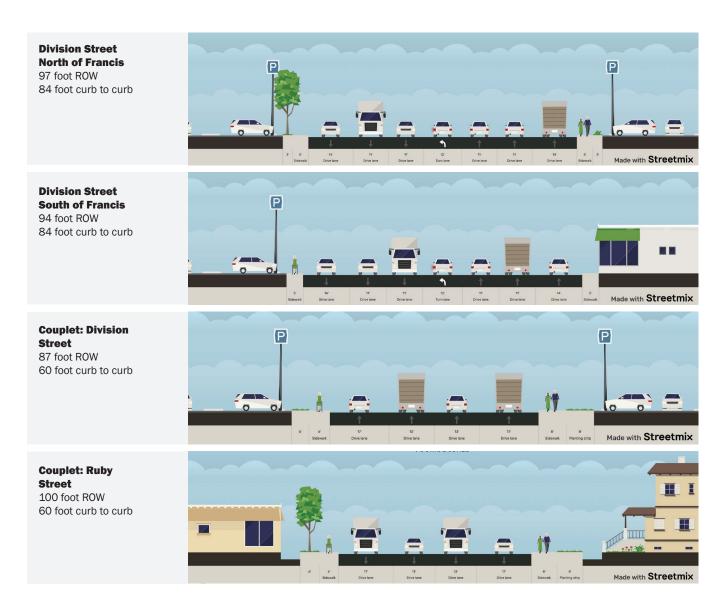


Figure 5-1. No-Build Alternative

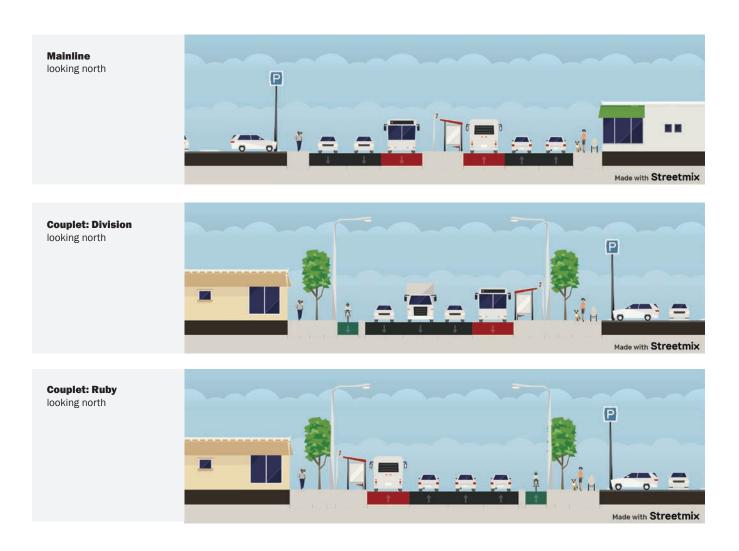


Figure 5-2. Center-Running Alternative

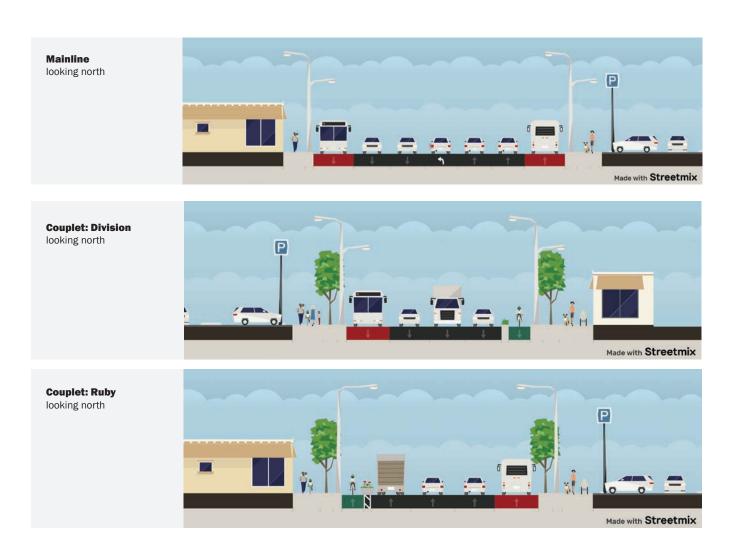


Figure 5-3. Side-Running A Alternative

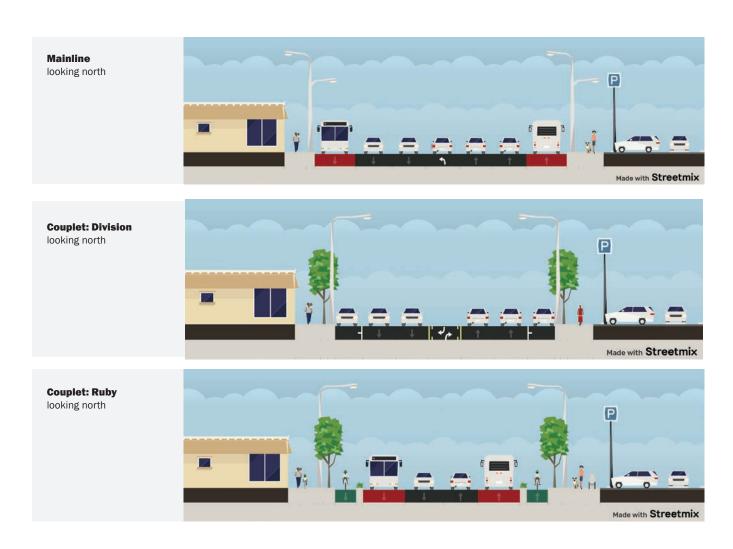


Figure 5-4. Side-Running B Alternative

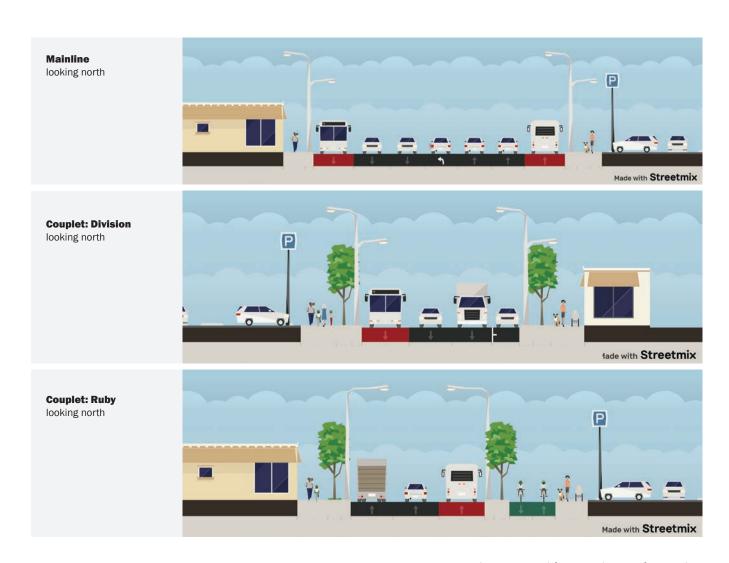


Figure 5-5. Side-Running C Alternative

#### 6. EVALUATION RESULTS

As noted in Chapter 1, seven metrics, each with multiple measures, were used to evaluate and compare the alternatives. The performance of the No-Build alternative was determined for each measure and served as a baseline against which the other alternatives were compared. The alternatives were also compared with each other, making the findings relative rather than absolute when compared with fixed quantities or values. Completion of the NSC was assumed when evaluating the performance of all alternatives. The following sections summarize the specific methods and assumptions applied as well as the key findings for each metric. Figure 6-1 summarizes the results of the alternatives evaluation. A detailed summary of the evaluation results can be found in Appendix F.

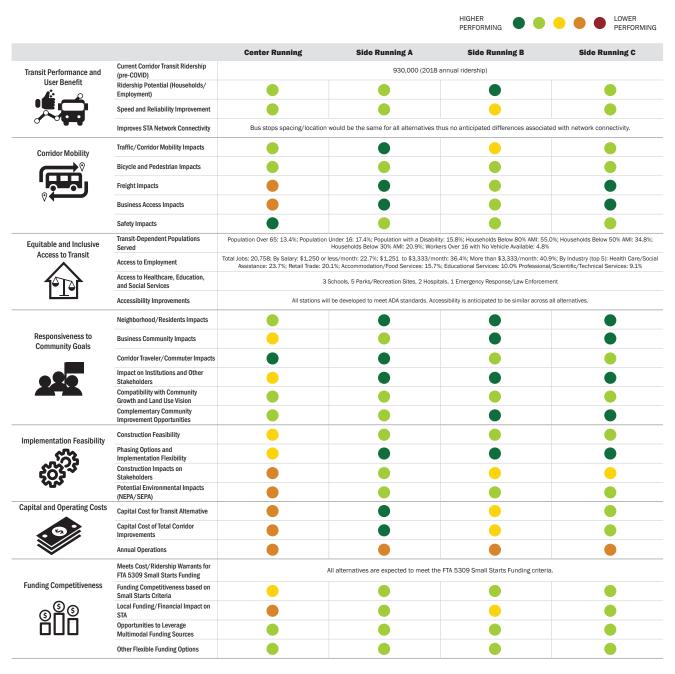


Figure 6- 1. Alternatives Technical Evaluation Results Summary

Several technical memos and reports were prepared during the alternatives evaluation process. These memos are included with this report as appendices and include:

- Appendix G: This memorandum provides a detailed description of the process used for the travel demand
  modeling that supported the alternatives analysis. The process of travel demand modeling provided forecast
  ridership, travel time and speed, traffic volumes, vehicle miles travelled, vehicle hours travelled, vehicle
  hours of delay, and locations of congestion.
- Appendix H: This report documents all existing forms of active transportation in the study area, including
  bicycles, walking, and scooters. It describes the goals and policies used to inform the alternatives analysis
  process applied in the selection of the LPA. The facilities to be implemented as part of the preferred concept
  are also described. This document establishes the active transportation conditions and describes the active
  transportation infrastructure proposed for each alternative.
- Appendix I: This technical memorandum compares the alternatives using range-of-magnitude costs. It summarizes the cost-estimate approach and provides backup documentation for the cost estimates. The construction costs along with associated project contingencies and known project costs are described.
- Appendix J: This technical memorandum provides an overview of existing environmental conditions within the study area and identifies the potential environmental impacts from the addition of BRT, including the capital investments assumed in the alternatives, in the Division Street corridor.

### 6.1 Transit Performance and User Benefit

#### 

Transit performance and user benefit was assessed using three measures.

- 1) Ridership potential: Estimated ridership was based on the forecast population and the number of households and jobs within 0.25 mile of the study corridor as well as on forecast ridership generated using travel demand model outputs.
- 2) Speed and reliability improvement: Forecast transit travel times for the AM and PM peak periods were generated using a travel demand model. Transit reliability was qualitatively assessed based on the transit lane configuration and on forecast levels and locations of congestion.
- 3) Improves STA network connectivity: Connectivity to the broader STA network was qualitatively assessed based on opportunities to make connections to other routes.

The primary differentiators for this metric were forecast ridership and changes to speed and reliability. Forecast daily ridership among the alternatives is expected to range from 5,325 to 5,550, with Side-Running B experiencing the highest ridership. Conversely, Side-Running B is expected to experience the slowest travel times during the AM and PM peak periods and the worst reliability, in part due to greater congestion associated with conversion of Ruby Street to two-way operations. Travel times and reliability for the remaining three alternatives were expected to be similar, with Center-Running expected to have the highest degree of reliability owing to the exclusive transit lanes.

Because the alignment was the same, there was no difference among the alternatives for the forecast population, households, or jobs. Similarly, the bus stop spacing and locations were assumed to be the same for all alternatives; thus, there were no anticipated differences associated with network connectivity.

## **6.2 Corridor Mobility**

#### **Performance summary:**

		Center Running	Side Running A	Side Running B	Side Running C
Corridor Mobility	Traffic/Corridor Mobility Impacts			0	
	Bicycle and Pedestrian Impacts				
	Freight Impacts		•	•	•
	Business Access Impacts		•	•	
	Safety Impacts				

Five measures were used to evaluate corridor mobility.

- 1) Traffic/corridor mobility impacts: These impacts were evaluated using intersection operations, the presence of nonmotorized facilities, and mobility for transit users. Future traffic operations were forecast using the travel demand model, and transit mobility was assessed based on bus-stop spacing and forecast improvements to transit speed and reliability.
- 2) Bicycle and pedestrian impacts: Rider comfort, separation from travel lanes, conflicts with vehicles, and opportunity to connect to the broader nonmotorized network were evaluated for this measure.
- 3) Freight impacts: Ability to make left turns, conflicts with bicycle facilities in the Couplet, and potential congestion were qualitatively considered for this measure.
- 4) Business access impacts: Similar to freight impacts, the opportunities for left turns were assessed when determining potential impacts to businesses. The presence of bicycle facilities as a means for nonmotorized travel to commercial establishments and on-street parking were also considered.
- 5) Safety impacts: The length of pedestrian crossings, potential for jaywalking, location and type of bicycle facilities in the Couplet, and the configuration of the bus running way were qualitatively considered when evaluating this measure.

Side-Running A performed the best for traffic mobility, experiencing the least amount of congestion and improved transit mobility. Forecast congestion along Ruby Street, a wider cross-section for pedestrians and cyclists on Division Street in the Couplet, and the lowest performing transit mobility contributed to Side-Running B being considered the lowest performing alternative for corridor mobility. There were no anticipated differences associated with active transportation in the Mainline, as all alternatives assumed off-corridor bike facilities.

Bicycle and pedestrian impacts were assessed based on the active transportation element included in the Couplet, as bicycle impacts would be the same in the Mainline across all alternatives. Pedestrian impacts between the Center-Running and the three side-running alternatives had different pros and cons but ultimately resulted in similar overall impacts to pedestrians. For example, Center-Running is likely to create a longer crossing distance at intersections with stations but would provide a pedestrian refuge at the station improving safety. The side-running alternatives may provide additional comfort for people using sidewalks by limiting traffic volumes in the curb lane. These nuances are described in greater detail in Appendix H.

Center-Running was anticipated to result in the greatest impacts to freight and businesses, primarily in association with limitations to left turns. The opportunities for left turns would be limited to signalized intersections only, and freight distributors would need to develop out-of-direction delivery plans. Although drivers might be able to make U-turns at signals to access businesses, there could be reluctance to do so because it adds travel time to trips. In the Mainline, no impacts were anticipated to freight or businesses compared with No-Build, as the left-turn opportunities would remain the same. Congestion associated with Side-Running B was noted as a potential impact to freight. Bicycle facilities in the Couplet were universally seen as a benefit to businesses, as they could encourage additional corridor person trips and patronage.

Center-Running was considered to have the greatest benefit to safety. The center platforms would reduce the crossing distance for pedestrians accessing the stations and would also present a barrier to left turns, thereby reducing the potential for T-bone vehicle collisions. It was noted that the potential for jaywalking might be greater with the Center-Running alternative, as riders may be more inclined to cross one direction of traffic (as opposed to both directions) when they see a bus coming. Side-running BAT lanes were seen as a positive, as they provide space for right-turning vehicles to accelerate or decelerate outside the flow of traffic, thereby reducing the potential for rear end collisions.

# 6.3 Equitable and Inclusive Access to Transit

#### **Performance summary:**

		Center Running	Side Running A	Side Running B	Side Running C
Equitable and Inclusive Access to Transit	Transit-Dependent Populations Served	Population Over 65: 13.4%; Population		ity: 15.8%; Households Below 80% AMI: 55. iers Over 16 with No Vehicle Available: 4.8%	
	Access to Employment	Total Jobs: 20,758; By Selany: \$1,250 or less/month: 22.7%; \$1,251 to \$3,333/month: 36.4%; More than \$3,333/month: 40.9%; By Industry (top 5): Health Care/So Assistance: 23.7%; Retail Trade: 20.1%; Accommodation/Food Services: 15.7%; Educational Services: 10.0% Professional/Scientific/Technical Services: 9.1%			
	Access to Healthcare, Education, and Social Services	3 Schools, 5 Parks/Recreation Sites, 2 Hospitals, 1 Emergency Response/Law Enforcement			
	Accessibility Improvements	All stations will be developed to meet ADA standards. Accessibility is anticipated to be similar across all alternatives.			

Equitable and inclusive access to transit was assessed using four measures.

- 1) Transit-dependent populations served: Traditionally, transit-dependent populations within 0.25 mile of the study corridor were calculated using 2019 U.S. Census Bureau, American Community Survey 5-Year Estimates. These included persons over 65 and under 16, persons with a disability, households below 80, 50, and 30 percent of the area median income, and workers over 16 with no vehicle available. Current populations distributions were used for this measure because forecasts are not available.
- 2) Access to employment: The existing distribution of jobs by salary and industry within 0.25 mile of the study corridor was calculated using the U.S. Census Bureau's OnTheMap Application and Origin-Destination Employment Statistics.
- 3) Access to healthcare, education, and social services: Existing schools, parks and recreation facilities, hospitals, and emergency response providers within 0.25 mile of the study corridor were inventoried.
- 4) Accessibility improvements: Each alternative was assessed for its potential to integrate accessibility improvements.

This metric was not a differentiator among the alternatives. Because all alternatives have the same alignment, there were no differences in the transit-dependent populations served or their access to employment, healthcare, education, and social services. It was assumed all alternatives would include development of stations that meet Americans with Disabilities Act (ADA) standards; thus, they were all assessed as having equal benefit.

# 6.4 Responsiveness to Community Goals

#### **Performance summary:**



Six metrics were used to evaluate responsiveness to community goals.

- 1) Neighborhood/residents impacts: This potential for impacts associated with issues such as access to and from neighborhoods or cut through traffic was assessed for this metric.
- 2) Business community impacts: This metric was used to evaluate the potential for changes to business access and visibility.
- 3) Corridor traveler/commuter impacts: This metric was used to evaluate potential impacts to users traveling through the corridor, with origins and destinations outside the study area.
- 4) Impact on institutions and other stakeholders: Similar to business community impacts, this metric was used to evaluate the potential for changes to business access and visibility.
- 5) Compatibility with community growth and land use visions: The degree to which the alternative aligns with the City and County comprehensive plans was assessed for this metric.
- 6) Complementary community improvement options: This metric facilitated evaluation of how well the alternative supports or aligns with planned community improvements.

Center-Running presented the greatest impacts to neighborhoods, residents, the business community, and institutions, which was primarily attributed to restrictions associated with left turns. No alternative showed major impacts to corridor travelers or commuters, although Center-Running and Side-Running A performed better than the other two alternatives, primarily because they would maintain three general purpose lanes through the couplet. Side-Running B showed minor congestion on Ruby.

All alternatives were compatible with the local visions for growth. Side-Running B and C offered the best opportunities for community improvement and transformation in the couplet, mostly in association with changes to Ruby Street. The bicycle facilities on Ruby Street included in Side-Running B and C present good opportunities to connect with the nonmotorized entrance to Gonzaga University at Boone Street. In addition, Side-Running C offers opportunities for green stormwater infrastructure and additional urban design features on both Ruby and Division through the couplet.

# 6.5 Implementation Feasibility

#### Performance summary:



Implementation feasibility was assessed using four measures.

- 1) Construction feasibility: This analysis focused on the approval process for permitting each alternative, right-of-way acquisition needs, and ease of construction.
- 2) Phasing options and implementation flexibility: The potential for constructing each alternative in phases was evaluated for this measure.
- 3) Construction impacts on stakeholders: Roadway closures and the associated impacts to business access were analyzed for this measure.
- 4) Potential environmental impacts: This evaluation compared the various environmental impacts that could occur as a result of construction and operation of the alternatives. Environmental impacts focused on those required to be addressed under the National Environmental Policy Act (NEPA) and the Washington State Environmental Policy Act (SEPA).

Center-Running was found to be the most challenging to construct, as the configuration associated with center island stations is less familiar to WSDOT and may require coordination beyond that associated with more traditional roadway improvements. Additional right-of-way may be needed to accommodate boarding islands, and the associated modifications required for their development may trigger intersection improvements. Finally, center-running construction is often more complex and challenging as a result of maintaining traffic on both sides of the construction zone, siting locations for lay-down and materials storage, and the need for workers to cross travel lanes to access the construction zone. The side-running alternatives were determined to be equally feasible and less complicated than Center-Running.

As with construction feasibility, Center-Running was the lowest performing alternative for this measure because the opportunity to phase construction is more limited than that for the side-running alternatives. This is primarily due to the temporary lane configurations that would be needed to transition between cross-sections with center-running bus lanes and those without. Phasing is more easily accomplished with side-running BAT lanes, with construction possible on a block-by-block basis.

Side-Running A was found to have the fewest construction impacts to stakeholders, as roadway closures could focus on a single side of the street at a given time and construction could be phased in small segments. Side-Running B would be somewhat more complicated to reintroduce two-way operations in the couplet. Side-Running C would be somewhat impactful because of the narrowing of the curb-to-curb space on the Ruby side of the Couplet, which would likely require regrading the roadway and could lengthen the construction schedule. Center-Running presented the greatest impacts to businesses, as left turn access to businesses could be restricted during construction.

The environmental impacts of the alternatives were found to be comparable for most categories. Center-Running would require greater property acquisitions and a project footprint that is greater than the existing right-of-way at more locations, resulting in it being assessed as the lowest performing alternative. It was noted conversion of the Couplet as part of Side-Running B would require greater modification to the existing environment.

# 6.6 Capital and Operating Costs

#### **Performance summary:**



Capital and operating costs were assessed using three measures.

- 1) Capital cost for the transit alternative: Planning-level capital costs associated with the transit component of the alternative, including stations, running way, and signal modifications, were calculated and compared.
- 2) Capital cost of total corridor improvements: The costs associated with all improvements of the alternative, including active transportation, were calculated and compared.
- 3) Annual operations: Relative transit operations and maintenance costs were qualitatively compared.

Center-Running presented the highest capital cost both for the transit alternative and total corridor improvements. This is primarily attributed to the additional right-of-way needed at intersections to accommodate the center stations, as well as the associated sidewalk improvements and roadway channelization in the Mainline. Conversion of the Couplet to two-way streets would require revisions to all signalized intersections as well as additional pavement work, resulting in an overall higher cost for Side-Running B. The comparison of the alternatives for the transit alternative only matched that of the total cost, as the roadway costs for each alternative are inextricably tied with the transit running-way choice, with Center-Running being the highest cost and Side-Running A being the lowest.

All alternatives were expected to have comparable annual operating costs, thus, there was no differentiation among them.

# **6.7 Funding Competitiveness**

#### Performance summary:



Funding competitiveness was assessed using five measures.

- 1) Meets cost/ridership warrants for Federal Transit Administration (FTA) 5309 Small Starts funding: The extent of transit priority treatment, improvements to speed and reliability, quantity and design of station shelters, and amenities and branding of fleet were examined for this measure.
- 2) Funding competitiveness based on Small Starts criteria: The anticipated cost/benefit ratio (project cost compared with transit performance) was qualitatively estimated for each alternative.
- 3) Local funding/financial impact on STA: This measure was assessed as a qualitative comparison of the total project cost and potential for grant funding for each alternative to arrive at a relative resulting funding requirement for STA (local match). The resulting costs to STA were compared among the alternatives.
- 4) Opportunities to leverage multimodal funding sources: The competitiveness of funding opportunities for nonmotorized improvements was assessed for this measure.
- 5) Other flexible funding options: This measure evaluated the elements of each alternative other than transit and multimodal improvements that would be eligible for grant funding.

All alternatives would provide comparable levels of investment into features associated with BRT, and it was assumed that each would comply with Small Starts requirements. Therefore, all alternatives are expected to meet the FTA 5309 Small Starts Funding criteria, and this was not a differentiator.

Because the alternatives were all expected to perform similarly, cost was the primary determinant associated with assessing funding competitiveness based on Small Starts criteria and financial impact to STA. As a result, Center-Running, which has the highest estimated cost, was judged to be the lowest performing alternative for both funding competitiveness based on Small Starts criteria as well as financial impacts to STA. Side-Running B was found to be lower performing than Side-Running A or C for financial impacts to STA due to higher project costs. Additionally, because transit service would not be provided on Division Street within the Couplet, improvements along that segment could not be constructed using Small Starts funding.

Similar to other metrics, the total project cost served as the main contributing factor for this analysis. Multimodal grant funding could be secured for the active transportation components. Since all alternatives include similar active transportation components, they all performed equally, and this was not found to be a differentiator. Similarly, the opportunity to leverage other flexible funding options performed equally across all alternatives.

# 7. LOCALLY PREFERRED ALTERNATIVE (LPA)

#### 7.1 Selection Process

Upon completion of all public engagement efforts, a draft recommendation was formulated for an LPA for BRT in the Division Street Corridor. The draft LPA reflected the cross-sections shown in Alternative Side-Running C and included the elements described in Table 7-1.

The draft LPA was presented to the STA Planning and Development Committee on March 3, 2021 and was subject to a public hearing before the STA Board of Directors on March 18, 2021. No members of the public testified at the public hearing, however, it was noted by project staff that public input received to date had been generally supportive of the project and the draft LPA reflected the elements that were noted as favorable by the public. The draft LPA was adopted as the final LPA by the STA Planning and Development Committee by resolution on March 5, 2021 and the STA Board of Directors on April 15, 2021.

Table 7-1. Locally Preferred Alternative for the Division Street Corridor

ELEMENT	DESCRIPTION
Mode	Fixed guideway BRT using zero-emission 60' buses <sup>a</sup>
Service Level	Weekdays: 10-minute frequency or better
	Nights and Weekends: 15-minute frequency during most hours of the span
Northern Termini	Short-term: Current Route 25 to Hastings Park and Ride
	Long-term: New transit center at Farwell and US2
Southern Termini	Spokane Central Business District near the STA Plaza
Alignment	Downtown: To be refined in Preliminary Engineering
	Couplet: Right-side along Ruby Street and Division Street
	Mainline: Right-side along Division Street
	North of "Y:" Short- and long-term phased approach
Station Locations	Major intersections and destinations. All stations will meet ADA accessibility requirements
System Operations	Operating techniques for speed and reliability, such as Transit Signal Priority (TSP), all-door boarding, and near-level platforms
Lane Configuration	Side-running, dedicated BAT lanes for a majority of the alignment, primarily between North River Drive and the "Y"
Other Multimodal Treatments	Protected bicycle facilities, including cycle tracks where practicable, along Ruby Street with pedestrian, ADA, and bicycle improvements throughout the corridor

<sup>&</sup>lt;sup>a</sup> As defined, the LPA is expected to qualify as a "fixed guideway BRT" under current federal law and FTA policy guidance. The current definition of fixed guideway BRT includes the following elements according to the Final Interim Policy Guidance for the FTA Capital Investment Grant Program, dated June 2016:

- 1. Over 50 percent of the route must operate in a separated right-of-way dedicated for transit use during peak periods. Other traffic can make turning movements through the separated right-of-way.
- 2. The route must have defined stations that are accessible for persons with disabilities, offer shelter from the weather, and provide information on schedules and routes.
- 3. The route must provide faster passenger travel times through congested intersections by using active signal priority in separated guideway, and either queue-jump lanes or active signal priority in non-separated guideway,
- 4. The route must provide short headway, bidirectional service for at least a fourteen-hour span of service on weekdays and a tenhour span of service on weekends. Short headway service on weekdays consists of either (a) fifteen-minute maximum headways throughout the day, or (b) ten-minute maximum headways during peak periods and twenty-minute maximum headways at all other times. Short headway service on weekends consists of thirty-minute maximum headways for at least ten hours a day.
- 5. The provider must apply a separate and consistent brand identity to stations and vehicles.

# 8. IMPLEMENTATION STEPS

Adoption of the LPA represents an important milestone in the planning of BRT on Division Street. It is anticipated the LPA will be refined through future project development phases as design for the corridor becomes more precise and continued outreach with the community is undertaken. Development improvements along the project corridor to support BRT service is expected to be a multi-year process that includes design, environmental evaluation, right-of-way acquisition, and construction. The following steps are planned to finalize and implement corridor improvements.

### 8.1 Transition of the corridor from local to BRT Service

Over the next few years, STA will be pursuing funding from FTA to implement the corridor-wide improvements needed to support future BRT service. In the intervening time, there may be opportunities to make investments that will enhance transit performance for Route 25. Any short-term improvements will need to be carefully designed to ensure they align with the LPA and can be incorporated into the broader corridor investments for BRT service. During the next phase of the DivisionConnects project, the project team will develop recommendations for specific short- and long-term improvements based on the LPA. Recommendations for short-term investments that may be installed by STA or other project partners are anticipated to include the following:

- · Filling sidewalk gaps
- Constructing improved pedestrian and bicycle crossings
- Installing ADA improvements
- Implementing safety improvements
- Developing off-corridor bicycle improvements in the Mainline

Additionally, it is anticipated STA will coordinate with the City of Spokane, Spokane County, and WSDOT to ensure private development does not preclude future development of BRT stations. These efforts may also include implementation of mechanisms to facilitate private development of improvements, such as sidewalks, to be compatible with future station design.

Long-term investments planned by STA that will be part of the BRT corridor improvements include the following:

- Constructing branded BRT stations
- Installing corridor-wide speed and reliability improvements, including BAT lanes, Transit Signal Priority (TSP), and queue jumps
- Constructing bicycle facilities in the Couplet

## 8.2 Securing FTA Funding

STA anticipates applying for and securing federal funding through FTA's Small Starts program to develop the Division Corridor BRT service. This is a multi-year process, the timeline for which can be influenced by a variety of factors including the availability of local funds to support project development or complexity of the project.

The first step of this process is to apply for Small Starts Project Development. This application must include a summary of project elements and a commitment of funding from the project sponsor to complete the Project Development phase. Upon approval of the application, FTA will provide the project sponsor a letter allowing entry into Project Development. During Project Development, the following actions must be completed:

- Select the LPA
- Adopt the LPA into the fiscally constrained Metropolitan Transportation Plan (Horizon 2040)
- Complete environmental evaluation under NEPA
- Develop sufficient information for FTA to develop a project rating including the following:
  - » A finance plan and 20-year cash flow
  - » Completed evaluation project templates with outputs from the regional model to calculate mobility improvements, environmental benefits, congestion relief, cost-effectiveness, economic development, and land use
  - » A cost estimate using Standard Cost Categories
  - » A detailed project schedule

Using the information listed above, FTA will rate the project and provide a recommendation for funding. Projects must receive a rating of medium or better to be recommended for funding as part of the Annual Report on Funding Recommendations, which is usually published in early February. Because the report is only issued once a year, it is important that applications for funding be submitted by August of the preceding year in order to be considered for funding as part of the budget the following February.

Once recommended for funding, the project sponsor must complete the following:

- Secure sufficient engineering and design to develop a firm and reliable cost, scope, and schedule for the project
- Obtain all non-Capital Investment Grant (CIG) funding commitments
- Secure all critical third-party agreements and permits
- Meet all FTA readiness requirements related to technical capacity, staffing, and oversight in order to submit an application for a construction grant agreement

Additionally, an application for a construction grant agreement must be submitted with the following materials:

- Updated project templates
- Updated finance plan with documentation that all non-CIG funding is committed
- Cost estimate in Standard Cost Categories format
- Cost and integrated project schedule to reflect level of design
- Contracting plans and documents
- Constructability Review and Value Engineering report
- Project Management Plans and subplans, including a risk and contingency management plan, a real estate acquisition management plan, and a safety and security management plan

Figure 8-1 displays the small starts process.

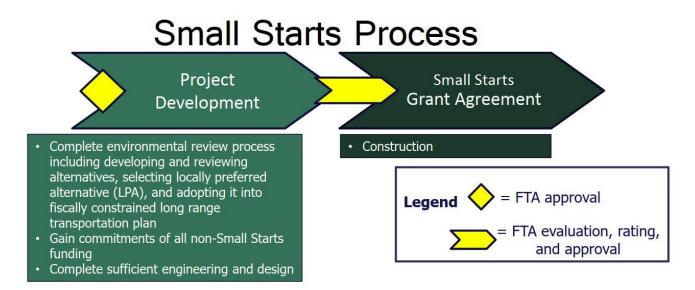


Figure 8-1. FTA Small Starts Process

## 8.3 Finalize Station Locations

The LPA includes preliminary station locations. During preliminary design, the station locations will be finalized based on multiple metrics including, but not necessarily limited to, the following:

- Proximity to transit transfer points
- Service to vulnerable populations
- Proximity to large transit-oriented origins and destinations, including high-density housing and large employers
- Minimize right-of-way acquisition needs and impacts to adjacent properties
- Minimize costs associated with station development (e.g., right-of-way, utility relocation, stormwater management requirements)
- Maximize transit performance (e.g., near-side stops if signal priority can be provided for buses)
- Minimize impacts to existing mature vegetation

# **8.4 Development of Transit Supportive Strategies**

As noted previously, the DivisionConnects study will assess multiple aspects of corridor development, including land uses along the corridor and transportation modes beyond transit, as part of future project phases. One of these efforts will be identification of strategies that will support and respond to the provision of HPT as well as reflect the land use vision along the corridor. Transit supportive strategies implemented along BRT corridors in other cities include:

- Incentives for development of high-density and/or affordable housing
- Implementation of zoning and design standards that encourage pedestrian-friendly development, such as bringing the "front door" of buildings to the sidewalk rather than allowing large parking lots at the front of parcels
- Incentives for development of commercial uses that are not traditionally auto-oriented
- Implementation of development standards that require the installation of nonmotorized transportation investments, such as sidewalks, street furniture, or bicycle facilities
- Implementation of development standards meant to enhance the pedestrian environment, such as minimization of driveway cuts and installation of street trees or other vegetation and lighting

## 8.5 Resolution of Outstanding Issues

During concept development for the LPA, several issues were identified for additional consideration and evaluation during preliminary design. The more prominent subjects are summarized in the following sections.

## 8.5.1 Intelligent transportation system infrasturcture

While the performance of transit and general purpose traffic was evaluated for the LPA, the conceptual design process did not include an in-depth analysis of TSPs, programming, or ownership. The corridor is a US highway and intersects with US 395 as well as State Route 291 at Francis Avenue. Signals along the study corridor may be owned and operated by WSDOT, the City of Spokane, or Spokane County. During the preliminary design process, the project team will determine the existing ownership and operations of signals to determine whether TSP can be installed in their current state or whether major reconstruction of all signals will be required to accommodate it.

## 8.5.2 Final northern and southern routing

Concept development for the corridor did not include a detailed analysis of the routing options for BRT service south of River Drive and through downtown Spokane or north of the Y. A brief analysis of transit sensitivity north of the Y, evaluating the potential ridership impacts associated with various routing and termini options, was performed as part of the first phase of DivisionConnects. A memo summarizing the results is include as Appendix K. Final routing alternatives for both the north and southern ends of the BRT route will be evaluated and determined during preliminary design.

## 8.5.3 Active transportation facilities in the Couplet

The LPA includes a two-way cycle track on the east side of Ruby Street as the active transportation element in the Couplet. During concept development and as part of adoption of the LPA, the specific configuration for the active transportation facility was noted as an issue for additional consideration and evaluation during preliminary design. As part of preliminary design, STA and project partners will evaluate additional options for bicycle facilities along Ruby Street, including one-way protected bike lanes and a two-way cycle track on the west side of the roadway, before determining the final alternative that best supports riders of all ages and abilities and reduces conflicts.

#### 8.5.4 Addressing safety issues

During concept development, the project team acknowledged the importance of improving safety for all users of the corridor. A comprehensive, corridor-wide safety analysis was not undertaken during the first phase of the DivisionConnects project but was identified as a critical area of focus for future phases. The project team plans to engage with partners to determine how safety issues will be assessed and addressed corridor wide.

## 8.5.5 Locations for additional crossings

Safe and convenient nonmotorized access to the corridor will contribute to the success of the future BRT service through increased ridership, passenger safety, and comfort. One mechanism available to improve access will be the development of additional nonmotorized crossings of the corridors with new fully signalized intersections, new pedestrian-only signals, or pedestrian refuges in center medians. The locations for new or improved crossings will be identified during preliminary design for the corridor. The City of Spokane has current plans for improved pedestrian crossings, and this will be coordinated with the BRT design.

# 9. APPENDICES

- A. DivisionConnects State of the Corridor Report
- B. DivisionConnects Focus Group Findings Report
- C. DivisionConnects Social Pinpoint Summary
- D. DivisionConnects Online Open House Mailer
- E. Statistically Significant Survey Summary Presentation, February 2021
- F. Alternatives Evaluation Matrix
- G. Division Alternatives Modeling Technical Memo
- H. DivisionConnects: Active Transportation Technical Memo
- I. Relative Capital Cost Comparison for Division Street Corridor Study Technical Memo
- J. NEPA/SEPA Overview for DivisionConnects Transit Project Technical Memo
- K. Transit Sensitivity North of the "Y" Technical Memo

