APPENDIX A

DivisionConnects State of the Corridor Report

DIVISION CONNECTS

PEOPLE. PLACES. PROGRESS.

STATE OF THE CORRIDOR

April 28, 2020

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STATE OF THE CORRIDOR EXECUTIVE SUMMARY

Background

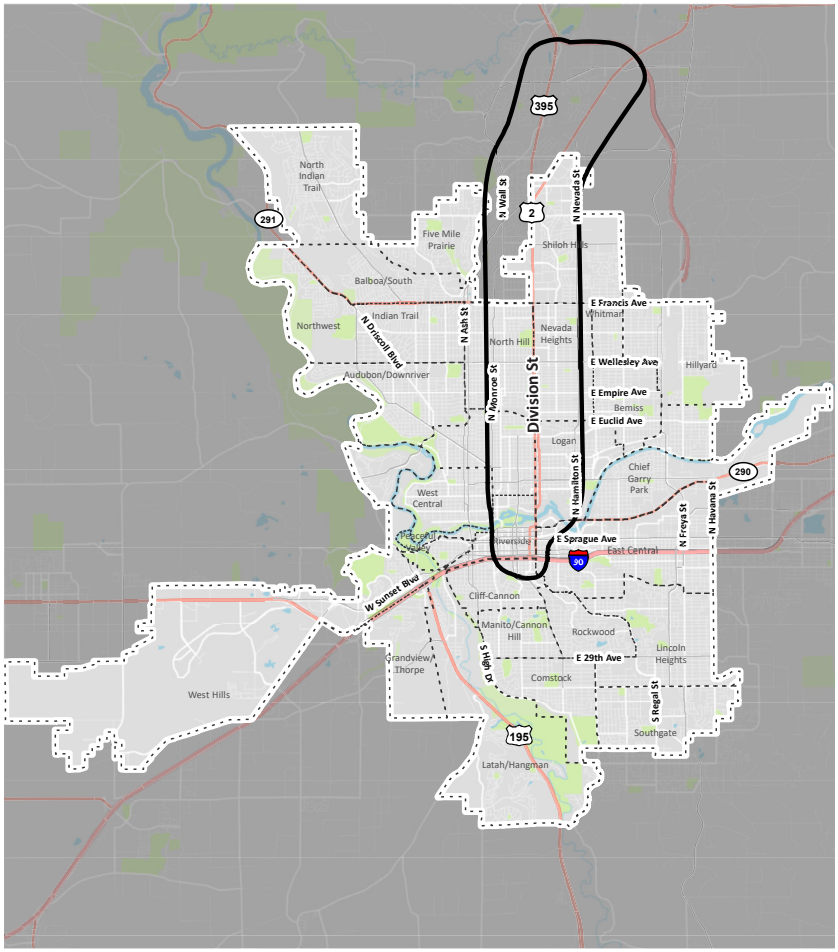
The Division Street Corridor Study is looking at the future of transportation and land use along this important street in Spokane. The Study is a coordinated effort between the Spokane Regional Transportation Council (SRTC), Spokane Transit Authority (STA), the City of Spokane, Spokane County, and the Washington State Department of Transportation (WSDOT).

Division Street/US2 is a state facility serving regional destinations and for a segment, serving as a local street. As a T2 freight corridor Division Street has a critical role providing north/south access supporting regional and local economic growth in conjunction with Interstate 90, a T1 freight corridor. The corridor today has the second highest-ridership bus route in the system, and provides access to a diverse mix of land uses: from urban downtown Spokane to auto-oriented retail and growing communities on the northern edge of Spokane and beyond including Deer Park, Newport, and the Kalispel Reservation. With the North Spokane Corridor highway project anticipated to be completed by 2029, agency partners, businesses, residents, and the broader community are looking to evaluate the future of the Division Street corridor. This report helps to tell the story of who's living and working along the corridor and how they are traveling on it today.

The key elements of this Study are:

- Examine opportunities and identify a preferred concept for rubber-tired high performance transit in the corridor as identified in STA's Transit Development Plan as Bus Rapid Transit (BRT);
- Develop options for all modes of travel in the corridor;
- Recommend capital projects implementation plans;
- Identify land use opportunities.

The study area is located along Division Street/US Highway 2 (US 2) in the City of Spokane and parts of unincorporated Spokane County and extends north through US 395 and the Newport Highway past the Y and will extend south to and through downtown to the medical district.



DIVISION STUDY EXECUTIVE SUMMARY

Key Findings

- Land uses in the corridor range from urban in downtown Spokane to suburban and rural at the north end of the corridor. Areas to the north are characterized by strip mall and big box retail and more single-family residential land uses.
- Vehicle traffic shows distinct morning southbound and evening northbound peaks. Daily transit ridership increases until it peaks around 3:00 PM, then declines steadily through the end of the day.
- STA Route 25 has nearly one million rides each year – the second highest ridership of any route in its system. The Hastings Park & Ride at the northern end of the corridor is heavily used, with up to 85 percent utilization during some months of the year.
- Compared to the greater region, there are higher numbers of vulnerable populations present who experience greater mobility challenges and are more likely to use and rely on transit.
- The sidewalk network in the study area is largely complete within the City of Spokane, with more network gaps further north in the corridor. The pedestrian environment on Division Street is impacted by high traffic volumes, speeds, and proximity of sidewalks to traffic.
- The cycling network is primarily developed on parallel local streets and has gaps at the Spokane River crossing and on Division Street.
- Over the last five years, there were more than 2,000 crashes recorded, of which 39 involved severe injuries or fatalities. 64 percent of these severe injuries and fatalities involved people walking or cycling.
- 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. Further work is needed to understand how corridor improvements may or may not affect historic resources.

What's Next?

This assessment of the "state of the corridor" provides a starting point for stakeholder discussion on the vision for transportation improvements and land use, including benefits and impacts to those who live, work, and travel in the study area. This assessment also informs next steps in the Study process, which include community outreach, stakeholder meetings, and a closer look at transit, transportation, and land use needs in the corridor.

1. INTRODUCTION AND KEY FINDINGS

The Division Street Corridor Study is looking at the future of transportation and land use along this important street in Spokane. 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 are providing funding for the project.

The corridor today serves local and regional traffic, has the second highest-ridership bus route in the system, and provides access to 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 highway project anticipated to be completed by 2029, agency partners, businesses, residents, and the broader community are looking to evaluate the future of the Division Street corridor. The key elements of this Study are:

- Examine opportunities and identify a preferred concept for rubber-tired high performance transit in the corridor as identified in STA's Transit Development Plan as Bus Rapid Transit (BRT);
- Develop options for all modes of travel in the corridor;
- Recommend capital projects and implementation plans;
- Identify land use opportunities.

This study helps to tell the story of who's living and working along the corridor and how they are traveling on it today. This assessment of the "state of the corridor" provides a starting point for stakeholder discussion on the vision for transportation improvements and land use, including benefits and impacts to those who live, work, and travel in the study area. Additionally, the description of land uses and corridor resources included in this memo will serve as a foundation for further analysis to inform decisions about the future.

1.1 Corridor Description

The study area is located along Division Street/US Highway 2 (US 2) in the City of Spokane and parts of unincorporated Spokane County and extends north through US 395 and the Newport Highway past the Y and will extend south to and 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 whose southern terminus is the STA Plaza in downtown Spokane and northern terminus at Hastings Park & Ride, providing access to the following neighborhoods:

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

The "Division Street Corridor" includes Division Street and the area immediately adjacent to the street. The corridor includes Ruby Street, the northbound leg of the Division Street couplet in the south part of the corridor. The broader "study area" includes the area within 3/4 mile either side of the corridor (a 10-15 minute walk).

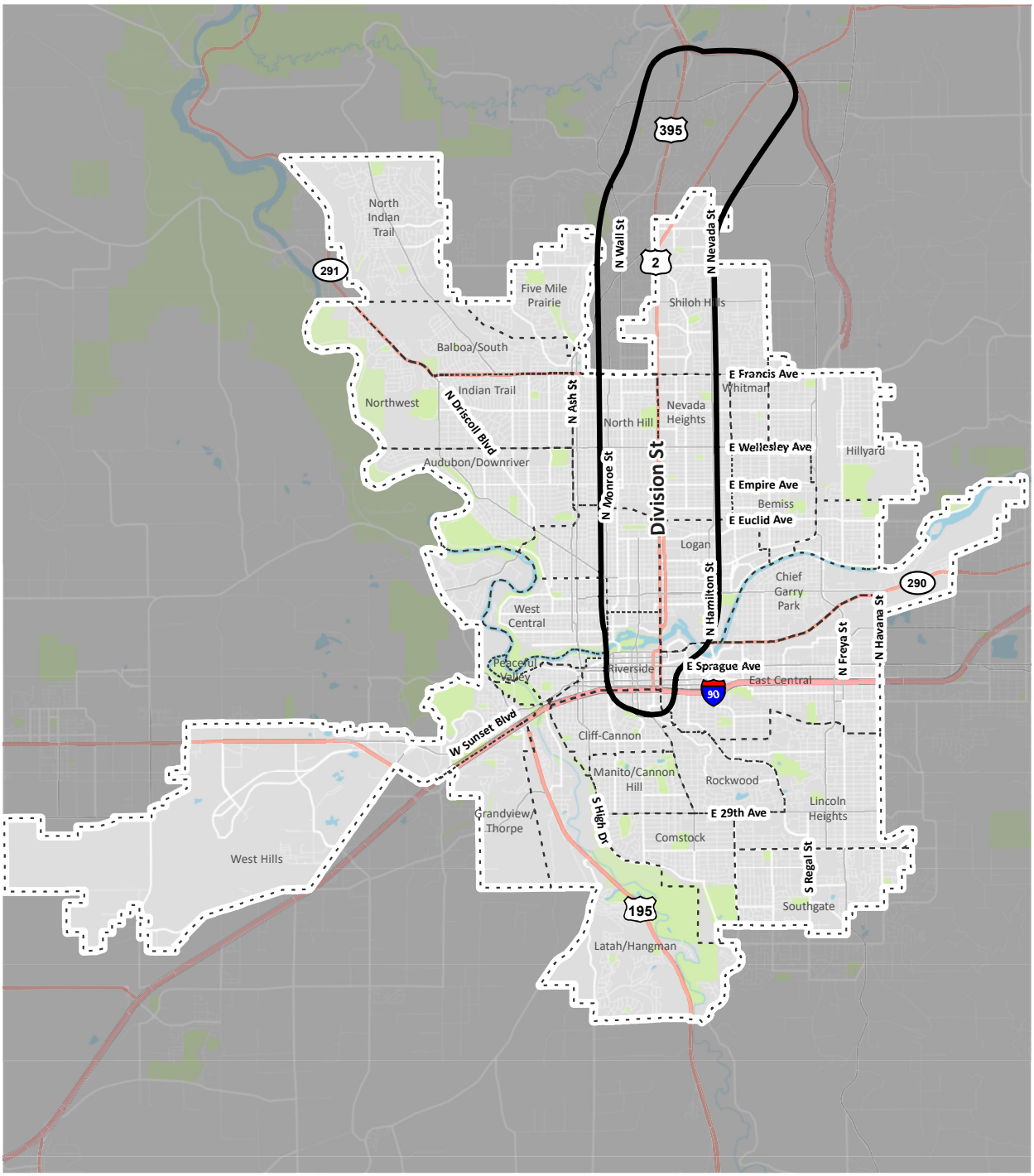
The study corridor includes the area within ¾ mile of either side of Division Street, which encompasses Hamilton Street to the east and Monroe Street to the west as shown in Figure 1a. STA Route 25 runs the entire length of the corridor. The study area is purposely broad to understand the function, role, and interactions of adjacent streets, highways, land uses, and community character. For the purpose of this study and to help with analysis and discussion of opportunities, challenges, and solutions, the corridor was divided into discrete segments as shown in Figure 1b. The segments include:

1. Medical District to the Spokane River
2. Spokane River to Euclid Avenue
3. Euclid Avenue to Francis Avenue
4. Francis Avenue to the Newport Highway (the "Y")
5. Newport Highway (the "Y") to SR 395, and SR 395 to North Spokane Corridor

Division Street History

Until the North Spokane Corridor opens fully, Division Street is the primary north-south corridor for moving people and goods in Spokane. The corridor has long attracted businesses, with numerous restaurants, shopping, and entertainment options available by the 1950's. The street has continued to evolve over the years, expanding to accommodate traffic growth and new business.

Figure 1a. Study Area

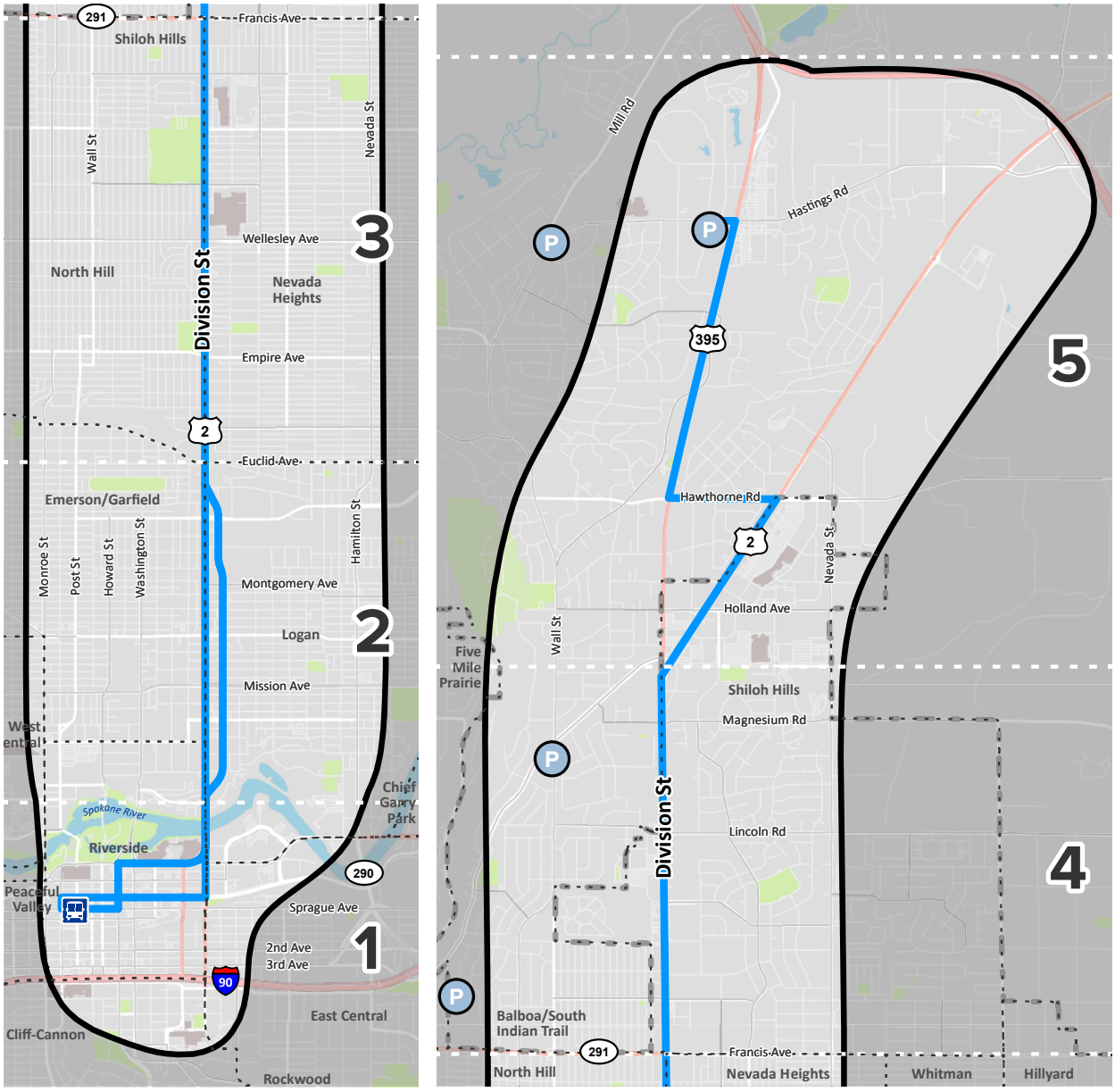


Legend

- Spokane City Limits
- Study Area
- Neighborhood Boundaries

0 1 2 3 4 Miles

Figure 1b. Study Area - Segments



Legend

- Park & Ride
- STA Plaza
- Division Line- STA Route 25
- Spokane City Limits
- Study Area
- Neighborhood Boundaries
- Study Segment Boundaries

0 0.25 0.5 1 Miles

1.2 Key Findings

Land uses in the corridor 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. Areas further north are characterized by strip mall and big box retail, large parking lots, frequent driveway accesses along arterials, and low-density land uses. The corridor north of Indiana Avenue is consistently lined with retail and commercial uses with small lot single family behind.

While vehicle traffic in the corridor shows high southbound and northbound volumes during the morning and evening peak periods, transit ridership shows less "9 to 5" commuter travel. Ridership steadily increases throughout the day until it peaks around 3:00 PM, then declines steadily through the late afternoon and evening. Transit riders are likely using the bus for a wide variety of trip purposes.

STA Route 25 has nearly one million rides each year – the second highest ridership of any route in its system. The Hastings Park & Ride at the northern end of the corridor is heavily used, with up to 85 percent utilization during some months of the year. Thousands of people are using transit every day in the corridor, including transfers to and from routes intersecting the corridor.

The corridor is characterized by a greater number of vulnerable populations as compared to the greater Spokane region, who experience greater mobility challenges and are more likely to use and rely on transit.

The sidewalk network in the study area is largely complete within the City of Spokane, with more network gaps in unincorporated Spokane County. The pedestrian environment on Division Street is impacted by high traffic volumes, speeds, and proximity of sidewalks to traffic.

The cycling network is primarily developed on parallel local streets and has gaps at the Spokane River crossing and on Division Street. Downtown Spokane is walkable, with wide sidewalks, and some dedicated cycling facilities.

On average, there are more than 50,000 vehicle trips on Division Street each day. Over the last five years, there were more than 2,000 collisions recorded, of which 39 involved severe injuries or fatalities. 64 percent of these severe injuries and fatalities involved people walking or cycling.

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, it is also likely that there are archaeological resources 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.

1.3 Plan and Study Review

The City of Spokane, STA, and other stakeholder agencies have plans that will influence future development along the study corridor. These plans will be built upon as this Study progresses. Some of the relevant plans and their implications include:

STA Moving Forward

STA has a plan for the future service network and is actively implementing projects to achieve that vision. A core component of STA's service vision is the High Performance Transit (HPT) network. As described in STA's Comprehensive Plan, Connect Spokane, "The HPT is 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 long-term operating and capital investments." The HPT network includes frequent and express service. A continuum of investment options allows STA to customize HPT service and capital improvements to suit the neighborhoods and passengers served.

Neighborhood Plans

There are seven recognized neighborhoods in the City of Spokane along or near the Study Area: Cliff/Cannon, East Central, Browne's Addition, Riverside, Peaceful Valley, West Central, Logan, Emerson-Garfield, North Hill, Nevada Heights, and Shiloh Hills. Division Street defines either the west or east boundary of each of these neighborhoods, except Shiloh Hills, which partially extends west of Division Street. Not every neighborhood has adopted a land use planning document. Those that have include:

- **East Central Neighborhood.** Division Street defines its western boundary. There is no specific discussion about Division Street.
- **Logan Neighborhood.** Division Street defines its western boundary. All transportation-related discussion involves Hamilton Street. The Logan Neighborhood Identity Plan was adopted specifically for the Hamilton Corridor.
- **Emerson-Garfield Neighborhood.** Division Street defines its eastern boundary. There is no specific discussion about Division Street character. The plan discusses pedestrian safety goals and priorities, corridor beautification goals, and alternative/public transportation goals such as complete streets, connectivity, transit facilities, and bicycle routes, along arterials within the neighborhood.

Comprehensive Plans

The following summarizes goals and policies relevant to the Division Street Study.

- **City of Spokane. Chapter 4, Transportation.** This chapter of the city's comprehensive plan outlines goals such as fostering livable streets, coordinating bicycle and pedestrian planning, increasing system efficiency, and providing transportation choices for residents. Other goals more specific to the Division corridor include:

  » Work with Spokane Transit to improve the transportation network, including the HPT.
  » Intelligent Transportation System (ITS) improvements.
  » Support Spokane Transit, including High Performance Transit Principals. Division Street is specifically mentioned relative to enhancing Route 25 to increase capacity, reliability and corridor amenities until "a study regarding how full High Performance Transit would be implemented.

- **Spokane County. Chapter 5, Transportation.** This chapter of the county's comprehensive plan is more general than the City's comprehensive plan. Specific goals and policies that specifically affect Division Street include:

  » T.3a. Provide a range of transportation choices within the Spokane Region.
  » T.3e Promote pedestrian and bicycle transportation countywide and increase safety, mobility and convenience for non- motorized modes of travel.
  » T.3e.2 Bicycle facilities should be designed where practical along arterials.

City of Spokane Bicycle Master Plan (2017)

The Bicycle Master Plan establishes policies and projects to support cycling in the City of Spokane. Policies and actions relevant to the study area include:

- Policy BMP 2, Action 2.1. Provide a high degree of separation between people riding bicycles and people driving cars on high traffic streets.
- Policy BMP 2, Action 2.3. Provide bicycle facilities on designated arterial streets.
- Policy BMP 2, Action 2.4. Right size roadways or reduce lane widths to accommodate bicycle facilities on streets with excess capacity.
- Policy BMP 2, Action 2.5. Improve bicycle safety and access at arterial roadway crossings.
- Policy BMP 2, Action 2.6. Provide bicycle turn pockets at key intersections, time traffic signals to facilitate safe crossings, explore innovative bicycle safety intersection design solutions.

City of Spokane Pedestrian Master Plan (2015)

This plan explores the quality of the existing walking experience and provides programmatic recommendations to improve pedestrian experience and safety. Division Street is identified as a pedestrian high priority zone and referenced as being dangerous to pedestrian crossings due to high traffic speeds. Pedestrian-related crashes on Division Street support this finding. The plan recommends pedestrian safety measures generally, but none specific to the Division Street Corridor.

Division Street Gateway Project (2015)

This document's primary purpose is to identify challenges and opportunities and recommend development strategies to enhance the Division Street corridor. It is broken into four segments: South of the river, Browne Street, Ruby Street north of the river, and Division Street north of the river (to Sharp Ave.). Specific goals and include:

- Goal 3.3 Strategy C: Provide strong multi-modal connectivity.
- Goal 3.4 Strategy D: Repurpose street ROW to enhance safety and comfort for all users.
- Goal 3.5 Strategy E: Integrate sustainable design practices.

The Plan incorporates prototypical street sections for each study segment. Construction on several projects that implement Plan recommendations have occurred since 2015 in downtown Spokane.

2. CORRIDOR DEMOGRAPHICS

The study area is diverse, with significant vulnerable populations present. Figures 2, 3, and 4 show the relative concentrations of people who do not own cars, have a disability, or are low-income. Notably, downtown Spokane has a high concentration of vulnerable populations, including low income households. The study area overall also has many racial and ethnic minority residents and concentrations of people with limited English proficiency. In several census tracts, more than 20 percent of the population are persons with disabilities.

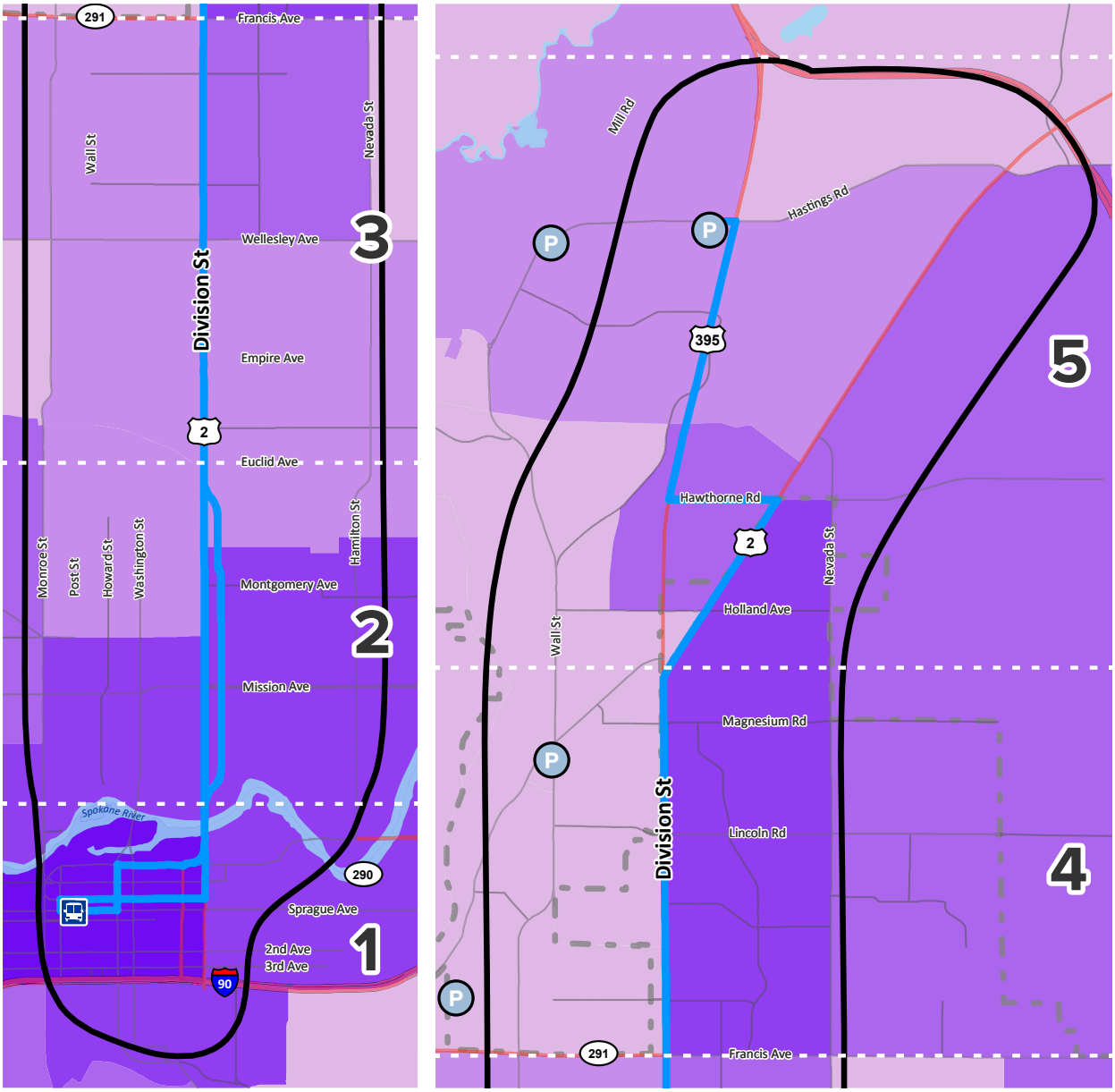
Demographic factors are important to understanding the travel needs of those living in the study area and inform discussion on land use needs. In general, low income households tend to use transit at a greater rate, while people with disabilities can experience substantial challenges in getting to bus stops or using active transportation. Those with limited English proficiency face barriers in accessing and using transit. Vulnerable populations will likely benefit from a range of housing types to meet diverse needs and a mix of retail and services that can be accessed without a car.

Vulnerable Populations

Some demographic groups experience greater mobility challenges and are more likely to be affected by changes along the Division Street corridor. 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 (LEP)
- Older adults (age 65+)
- Youth (age <18)
- Veterans
- Persons with disabilities

Figure 2. Car Ownership



Legend

Percent Population with No Vehicle

High

Low

Park & Ride

STA Plaza

Division Line- STA Route 25

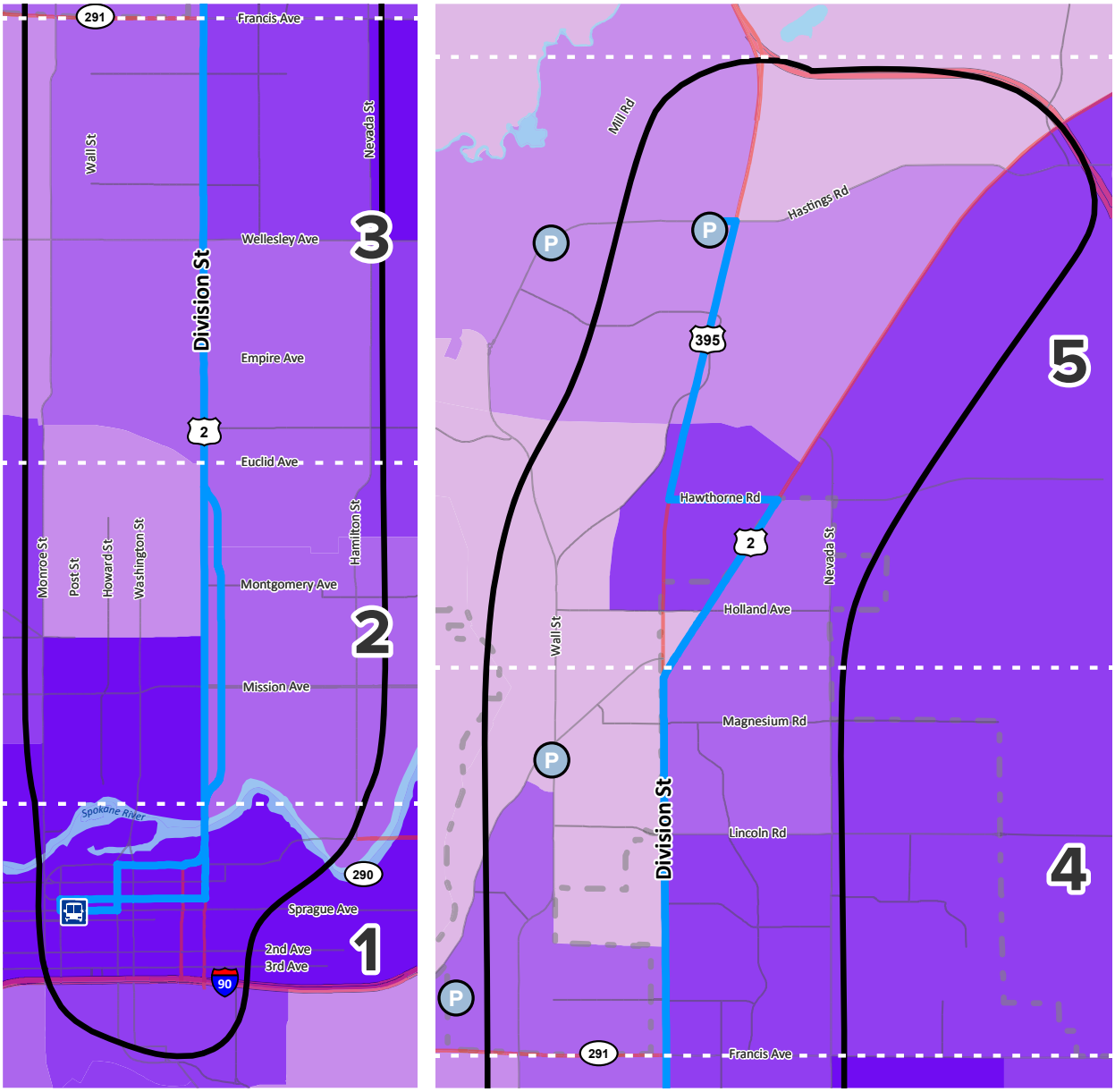
Spokane City Limits

Study Area

Study Segment Boundaries

0 0.25 0.5 1 Miles

Figure 3. Disability



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Percent Population with Disability

High

Low

Park & Ride

STA Plaza

Division Line- STA Route 25

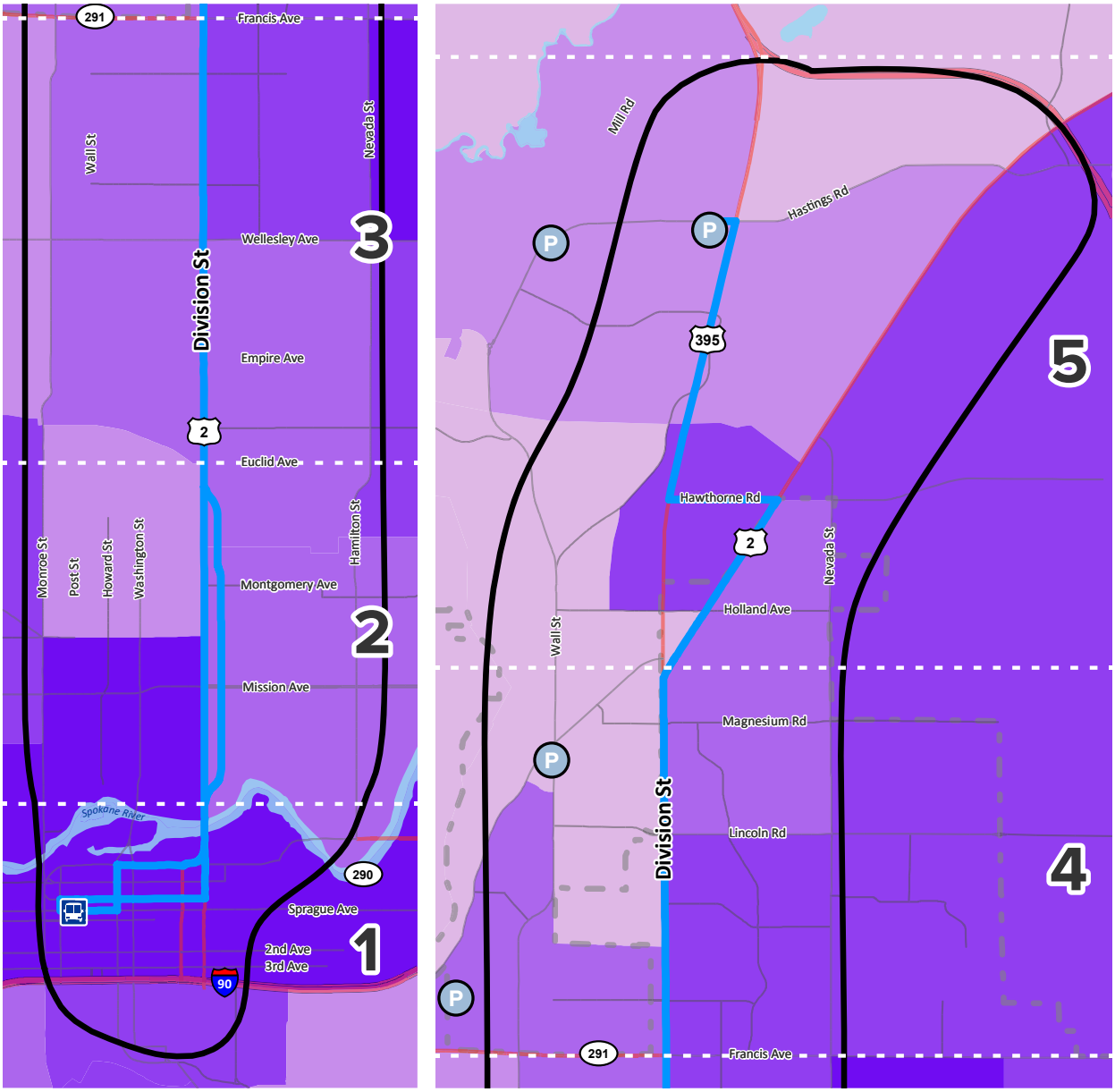
Spokane City Limits

Study Area

Study Segment Boundaries

0 0.25 0.5 1 Miles

Figure 4. Income



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Percent Population who are Low Income

High

Low

Park & Ride

STA Plaza

Division Line- STA Route 25

Spokane City Limits

Study Area

Study Segment Boundaries

0 0.25 0.5 1 Miles

3. EXISTING CONDITIONS

3.1 Land Use

Land uses in the study area are diverse. The changes span from urban downtown Spokane including parks and open space along the Spokane River, to suburban residential and commercial land uses further north. This section analyzes the land use context of the study area between Downtown Spokane and Division Street's intersection with the North Spokane Corridor.

Table 1 summarizes the land use and built environment context for each segment of the study area. The corridor exhibits a gradient of urban to suburban to near-rural land uses from south to north. 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. Outside of the downtown segment, the corridor may be uncomfortable for cyclists. Cyclists are precluded from using most of Division Street and need to travel up to 1/3 mile to access parallel bicycle facilities, making access to corridor destinations inconvenient. 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 many parking lots along the corridor north of the Spokane River.

Figure 5 shows household density in the study area (4 units/acre is approx. 10,000 sf parcels with one single family dwelling). Figures 6 and 7 display generalized current zoning and future land use designations in the study area.

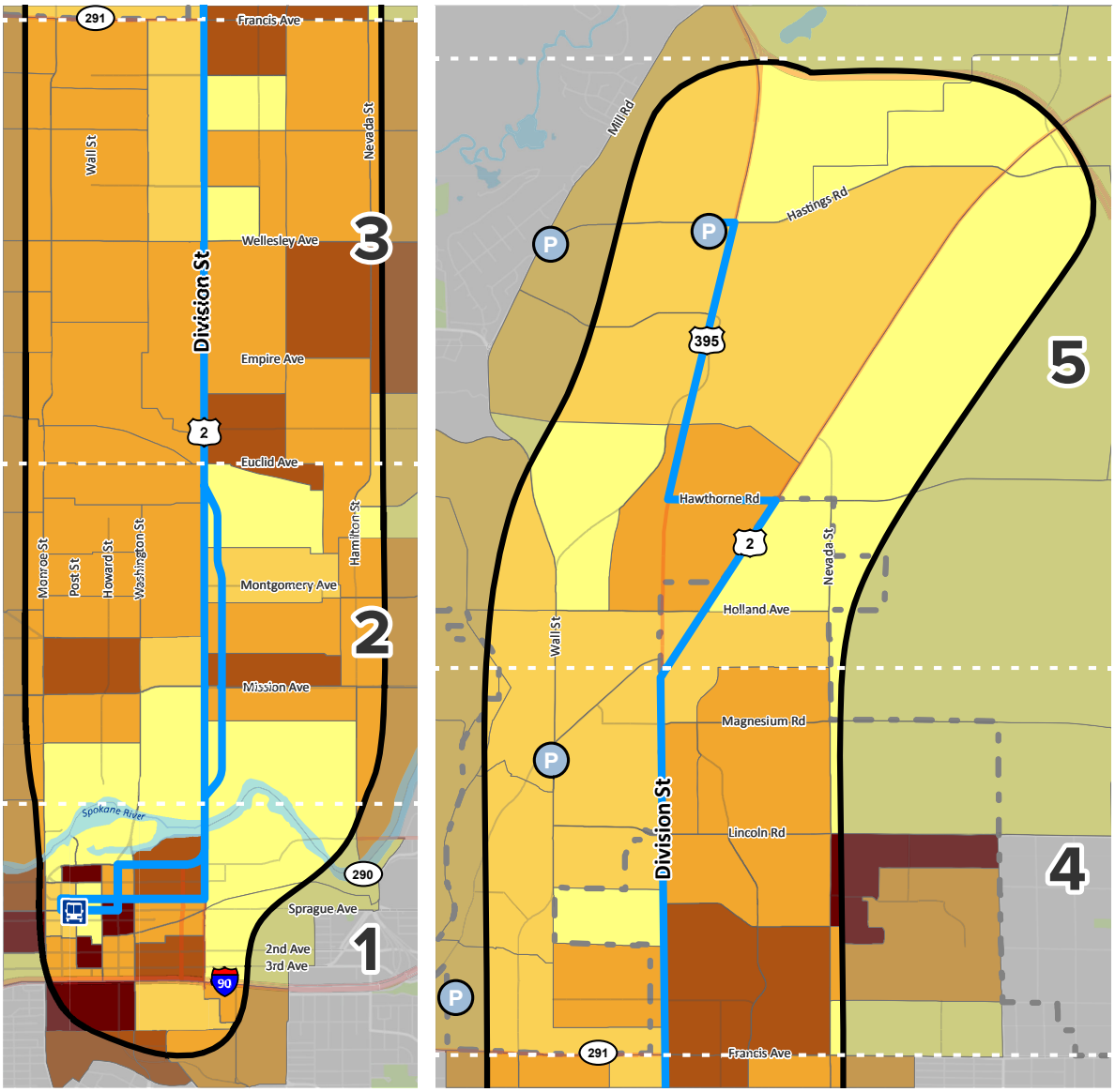
Table 1. Land Use Summary

Feature	1. STA Plaza to the Spokane River	2. Spokane River to Euclid Avenue	3. Euclid Avenue to Francis Avenue	4. Francis Avenue to Newport Highway "Y"	5. The "Y" to US 395
General Conditions	This section is in an urban environment and has the most land use diversity, density, and interaction with multiple transportation modes.	The Ruby/Division couplet creates one-way streets that serve a diverse area that transitions from a walkable urban core to less intense land uses in the northern part of the segment. The corridor becomes less pedestrian friendly and more auto-oriented.	This area completes the transition from urban to suburban development types, with a greater degree of auto-oriented development, wide streets, high speeds, and fewer pedestrian facilities (like sidewalks or marked crossings).	Suburban in nature, the Division corridor increases in speed and auto-orientation as the quality of pedestrian facilities decreases. The corridor here serves mainly chain, big box, and other large retail development. Multifamily residential is concentrated near Nevada Street immediately east of Division.	This section is suburban, verging on rural in locations. Shopping centers dot the corridor while single-family neighborhoods surround. There are long stretches with restricted access, making the Division corridor feel more like a highway here than in any other section. Nearby Whitworth University is a significant pedestrian generator.
Neighborhoods	• Riverside • East Central	• Riverside • Logan • Emerson/Garfield	• North Hill • Nevada Heights	• Shiloh Hills	• Shiloh Hills • Unincorporated Spokane County
Zoning	• Downtown Core • Downtown General • Downtown University	• Downtown General • Community Business • General Commercial	• General Commercial • Residential Single Family • Office • Office Retail • Center and Corridor Type 2	City: • General Commercial • Residential High Density County: • Low-Density Residential • Regional Commercial • Community Commercial • High Density Residential	County: • Low-Density Residential (large lot) • Regional Commercial • Community Commercial • Medium Density Residential • High Density Residential • Mixed Use
Land Use	• Downtown • Institutional • Conservation Open Space	• Downtown • General Commercial • Conservation Open Space • Institutional	Residential 4-10 • General Commercial • Office • Open Space • Center and Corridor Core Area	City: • General Commercial • Residential 15+ • Office • Residential 4-10 • Open Space County: • Low-Density Residential • Community Commercial • Regional Commercial • High Density Residential	City: • Residential 4-10 • Residential 15-30 • Neighborhood Retail • Mining • General Commercial • Mini Center • Light Industrial County: • Low-Density Residential • Urban Activity Center • Regional Commercial • Mixed Use • Medium Density Residential • High Density Residential
Driveways	Alley access points, few driveways	Frequent driveway access	Somewhat limited access	Somewhat limited access	Limited access
Parking	On-street, surface lots, parking garages.	No on-street parking on Division. Separate surface lots for businesses.	No on-street parking on Division. Separate surface lots for businesses. Northtown Mall has parking garages.	No on-street parking on Division. Separate surface lots for businesses.	No on-street parking on Division. Separate surface lots for businesses.
Speed Limit	30 mph	30 mph	35 mph	45 mph	50 mph
Sidewalks	Sidewalks with landscape buffers and on-street parking buffers present throughout on both sides of the street.	Ruby provides a landscape buffer between traffic and sidewalk while Division's sidewalks have no buffer.	Sidewalks abut the street. There is a landscape buffer in front of Northtown and Franklin Park.	Sidewalks abut the street. Sidewalk on west side missing between Magnesium and Stonewall.	Sidewalks abut street from Y to Hastings. Separated sidewalk/trail on the west side of the street north of Hastings Road.
Marked Crossings	Present at every intersection, some mid-block crossings.	At traffic lights and one High-Intensity Activated Crosswalk Beacon (HAWK) crossing at Ruby and Boone.	At traffic lights and some mid-block marked and signed crosswalks.	Few and far between, only at traffic lights.	Few and far between, only at traffic lights.

Table 1. Land Use Summary (continued)

Feature	1. STA Plaza to the Spokane River	2. Spokane River to Euclid Avenue	3. Euclid Avenue to Francis Avenue	4. Francis Avenue to Newport Highway "Y"	5. The "Y" to US 395
Building Massing	High building density with taller buildings and fewer surface parking lots.	Buildings in this area transition from higher densities in the southern portion to lower density in the northern portion. As development becomes more auto-oriented, parking lots and strip malls become more common.	Building massing transitions from smaller neighborhood retail development to large, big -box type development. Strip malls become more common and buildings get larger, though not taller, in the northern part of the segment. One exception is the Northtown Office Building, which stands out as a 9-story building amongst 1- and 2-story buildings.	Commercial buildings are large, consisting of strip malls and fast-food buildings. Large expanses of parking lots increase spaces between buildings, making development very low density.	Buildings are very low-density in this section. As the corridor reaches and then passes City limits, development becomes more rural in nature, while shopping centers maintain a strip-mall, suburban characteristic.
Building Placement	Oriented toward the street and sidewalk	Oriented toward street	Mix of orientations toward street and toward parking lots	Oriented toward parking lots	Oriented toward parking lots
Development Types	Urban, mixed use, multi-story	Neighborhood retail, strip mall, light industrial, some mixed use	Big Box, strip mall, neighborhood retail, single family homes, parks	Suburban, big box, strip mall	Suburban, big box, strip mall

Figure 5. Household Density



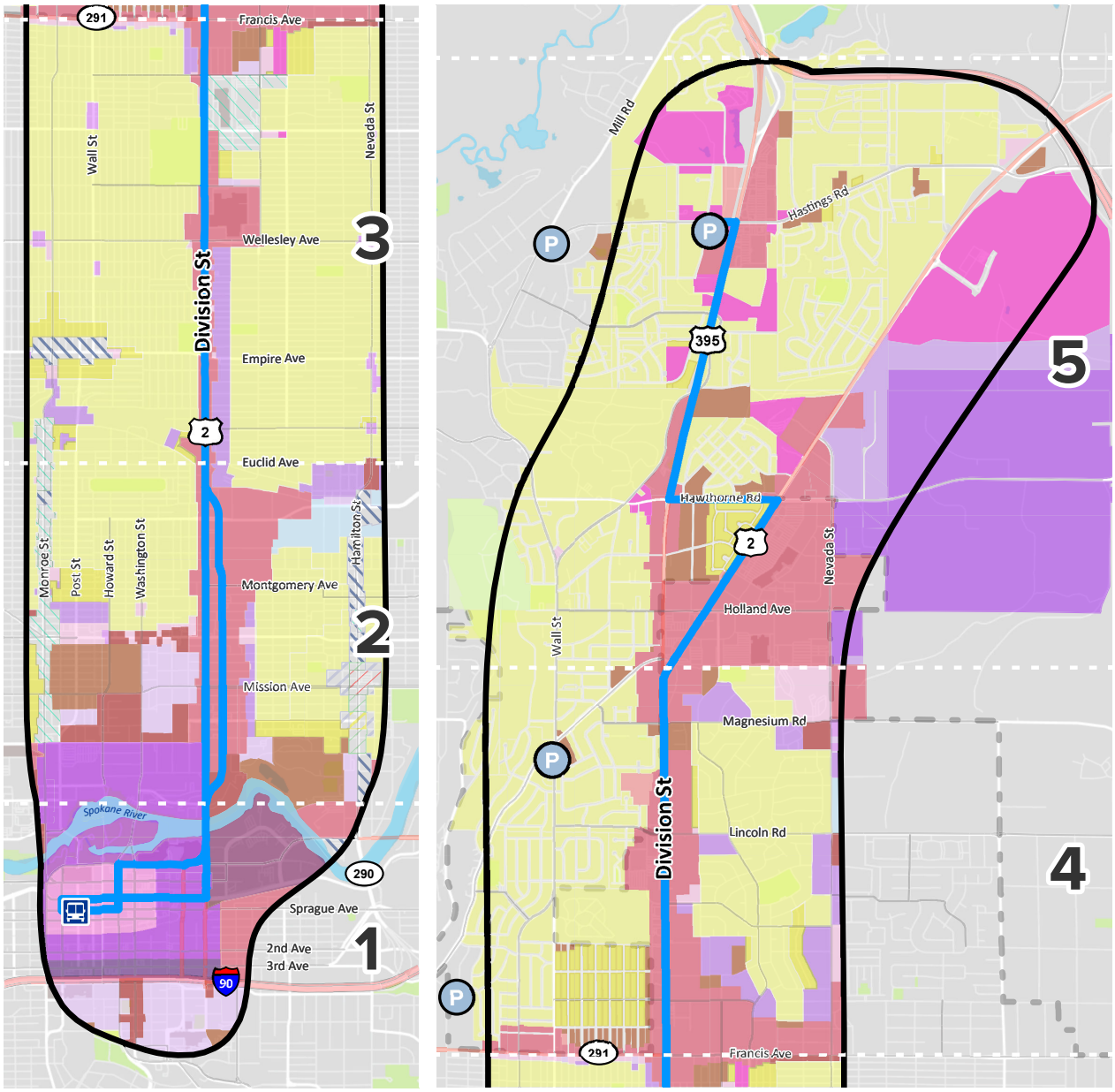
Legend

Units Per Acre
- <= 1
- 1- 3
- 3- 5
- 5- 8
- >8

- Park & Ride
- STA Plaza
- Division Line- STA Route 25
- Spokane City Limits
- Study Area
- Study Segment Boundaries

0 0.25 0.5 1 Miles

Figure 6. Current Zoning



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City of Spokane Zoning

- Residential Single-Family
- Residential Two-Family
- Residential High Density
- Residential Multifamily
- Center and Corridor Type 1
- Center and Corridor Type 2
- Context Area 1
- Context Area 2
- Context Area 3
- Context Area 4
- Community Business
- General Commercial
- Downtown Core
- Downtown General
- Downtown South
- Downtown University
- Mixed Use Transition
- Office
- Neighborhood Retail
- Office Retail
- Light Industrial

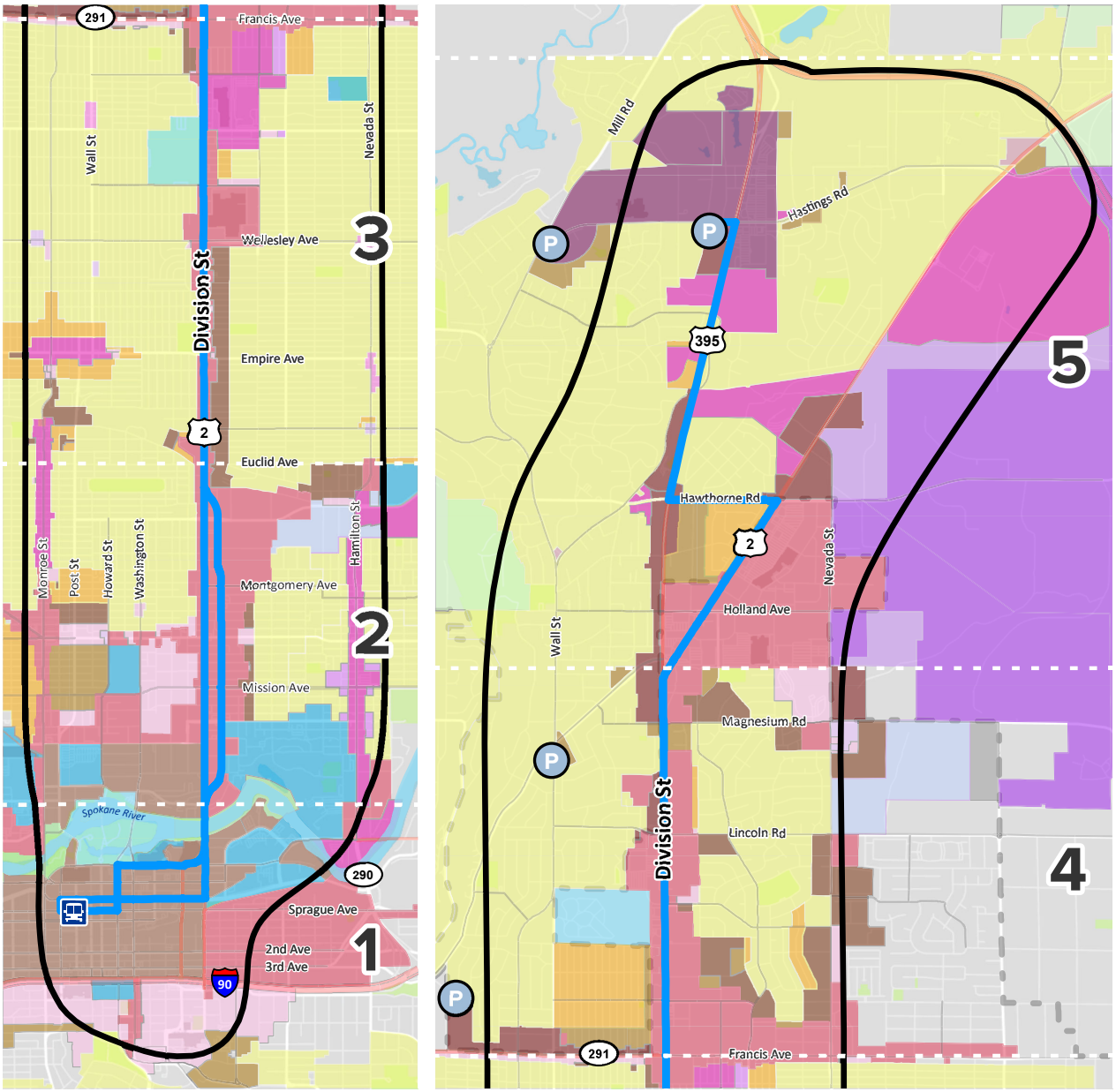
Spokane County Zoning

- Low Density Residential
- Medium Density Residential
- High Density Residential
- Neighborhood Commercial
- Community Commercial
- Regional Commercial
- Mixed Use
- Light Industrial
- Heavy Industrial
- Urban Reserve

- Park & Ride
- STA Plaza
- Division Line- STA Route 25
- Spokane City Limits
- Study Area
- Study Segment Boundaries

0 0.25 0.5 1 Miles

Figure 7. Comprehensive Plan Land Use Designations



Legend

City of Spokane Comprehensive Plan Land Use

- Conservation Open Space
- Open Space
- Residential 4-10
- Residential 10-20
- Residential 15+
- Residential 15-30
- Office
- Center and Corridor Core Area
- Center and Corridor Transition Area
- Neighborhood Retail
- Mini Center
- General Commercial
- Downtown
- Light Industrial
- Heavy Industrial
- Institutional

Spokane County Comprehensive Plan Land Use

- Low Density Residential
- Medium Density Residential
- High Density Residential
- Neighborhood Commercial
- Community Commercial
- Regional Commercial
- Mixed Use
- Urban Activity Center
- Light Industrial
- Heavy Industrial
- Urban Reserve

- Park & Ride
- STA Plaza
- Division Line- STA Route 25
- Spokane City Limits
- Study Area
- Study Segment Boundaries

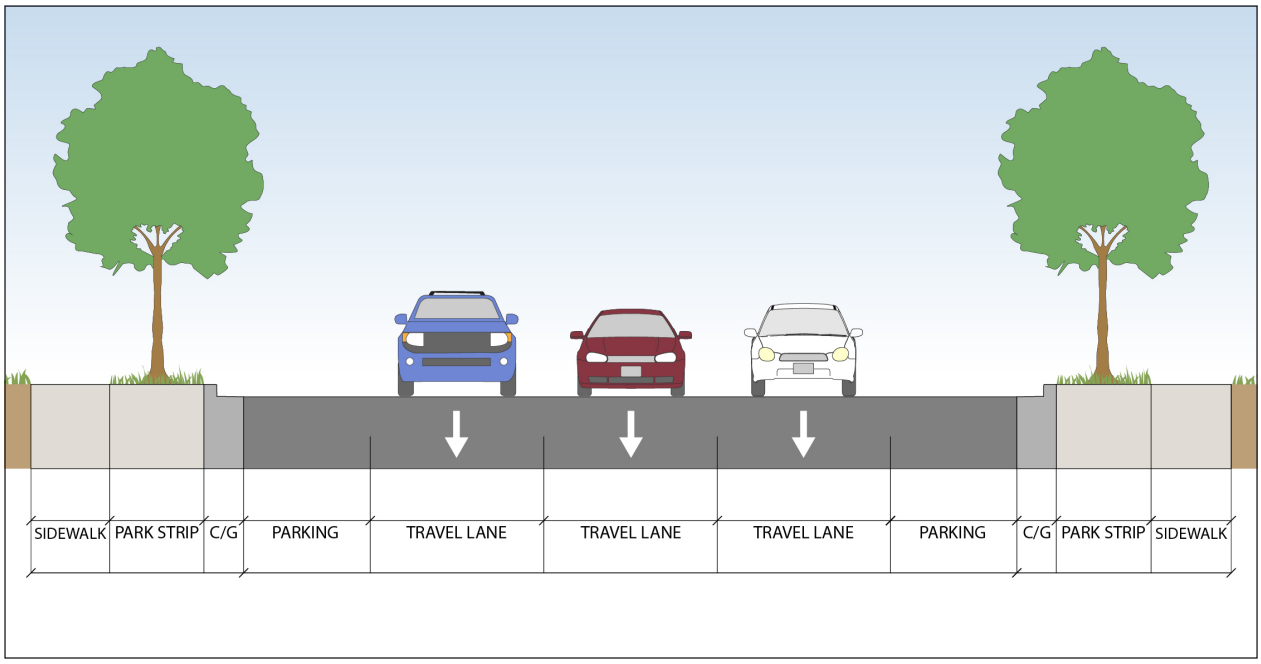
0 0.25 0.5 1 Miles

3.2 Transportation

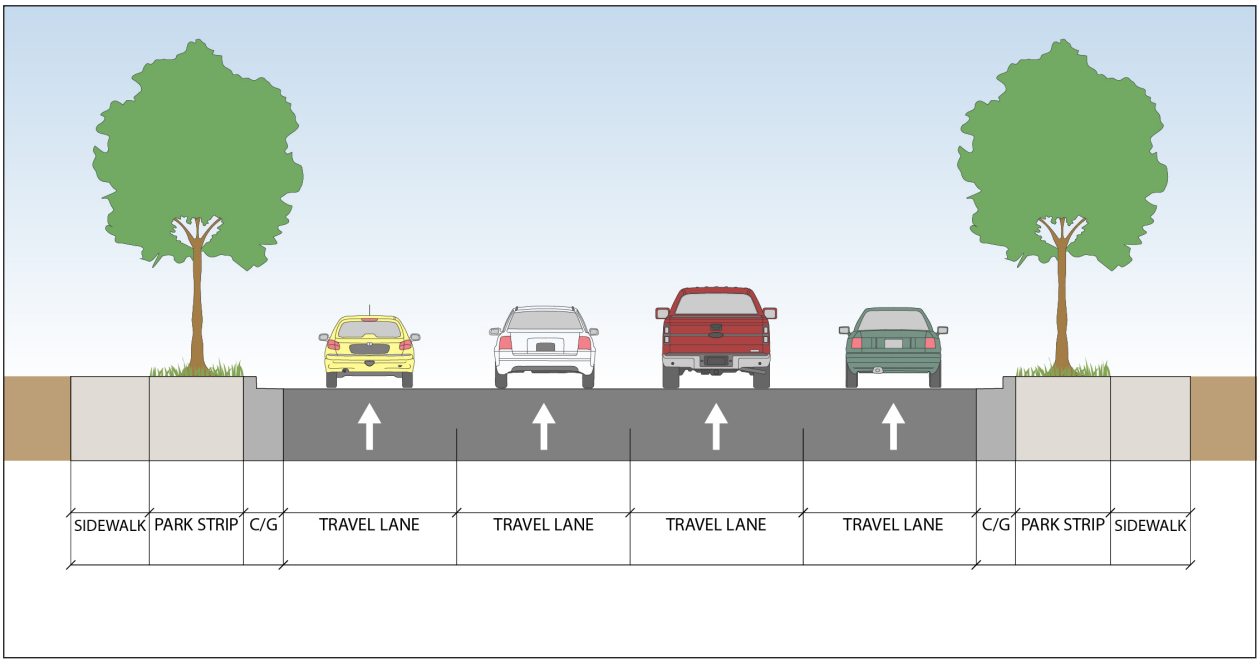
As the highest volume north-south street in Spokane, Division Street plays an important role in the transportation network and provides access to thousands of homes, jobs, and services. With average weekday vehicle trips exceeding 50,000, Division Street connects north Spokane to downtown, I-90, and the broader region, making it critical to the economic success of Spokane. From heavy freight and commuters to residents, Division Street serves a diverse set of travelers who use a wide range of modes including transit and scooters.

Division Street today is a multilane 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 following shows the typical streetscape on Division Street for each segment of the corridor:

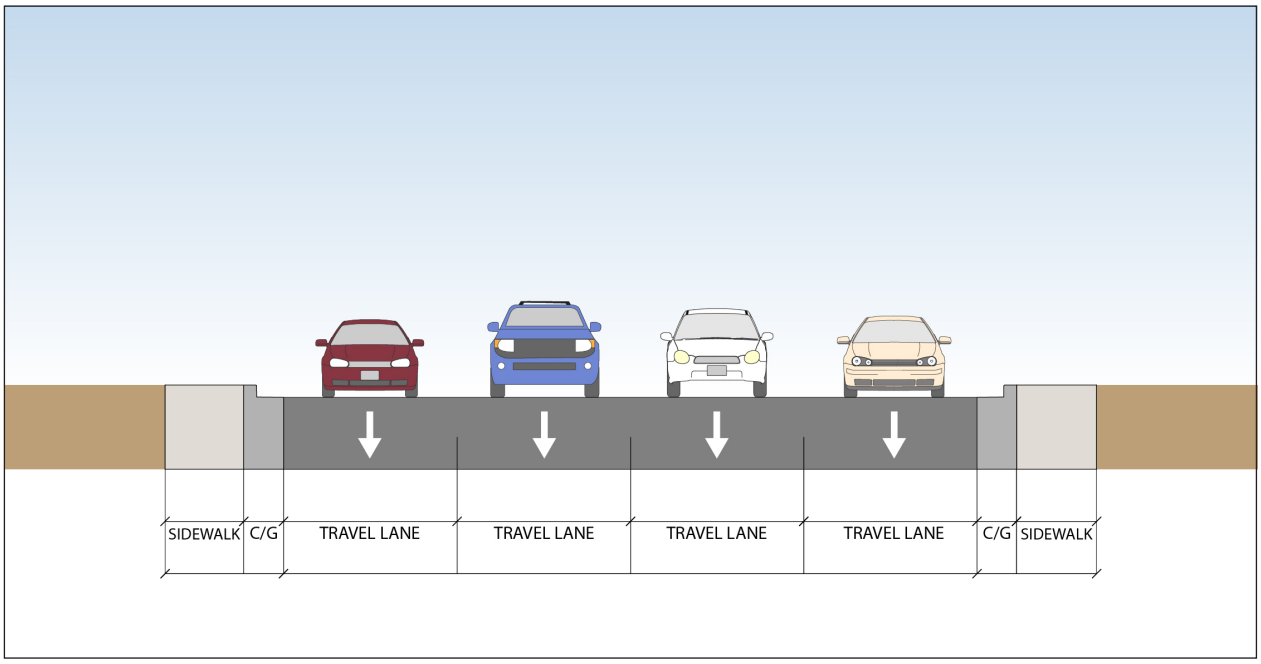
Segment 1. Browne/Division couplet south of the Spokane River - Both Directions



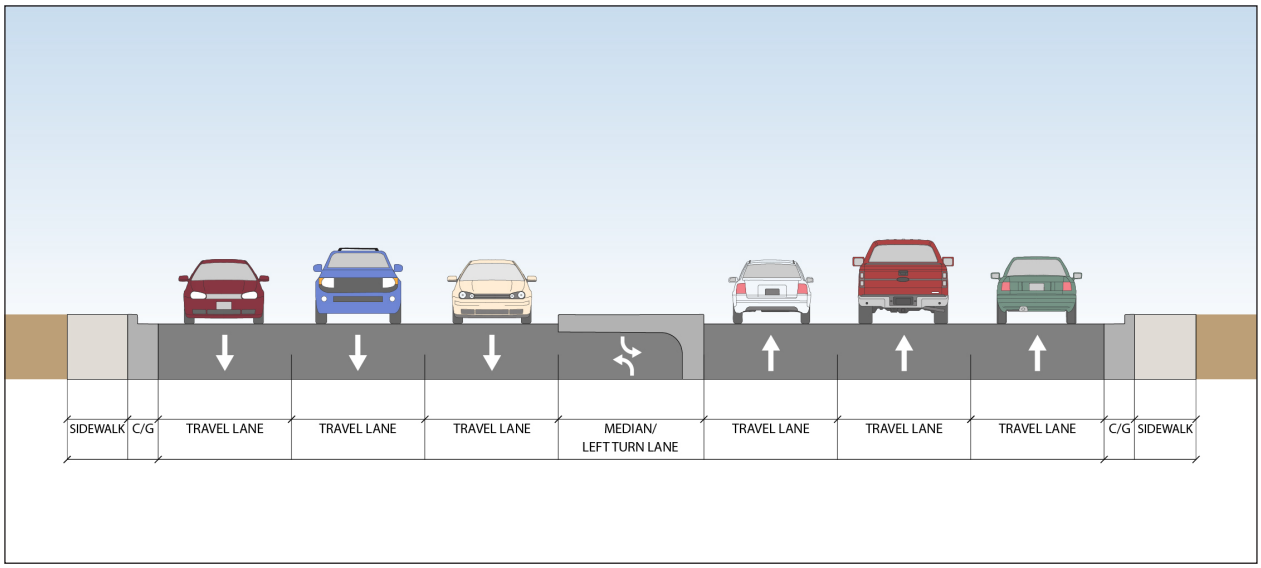
Segment 2. The Spokane River to Euclid Avenue - Northbound (Ruby Street)



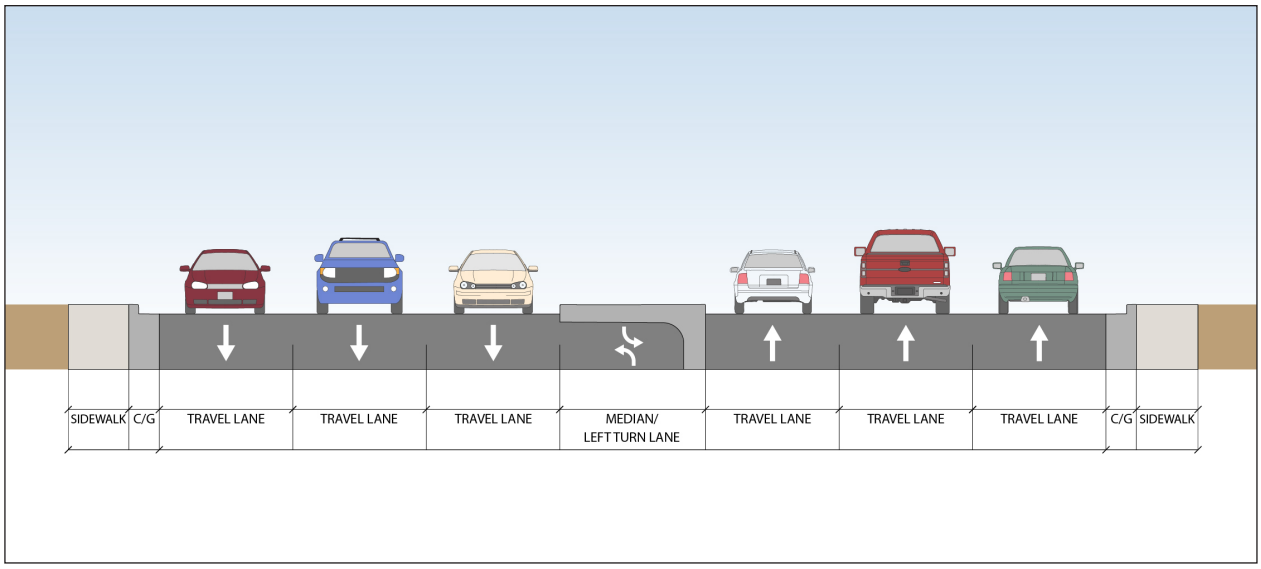
Segment 2. The Spokane River to Euclid Avenue - Southbound (Division Street)



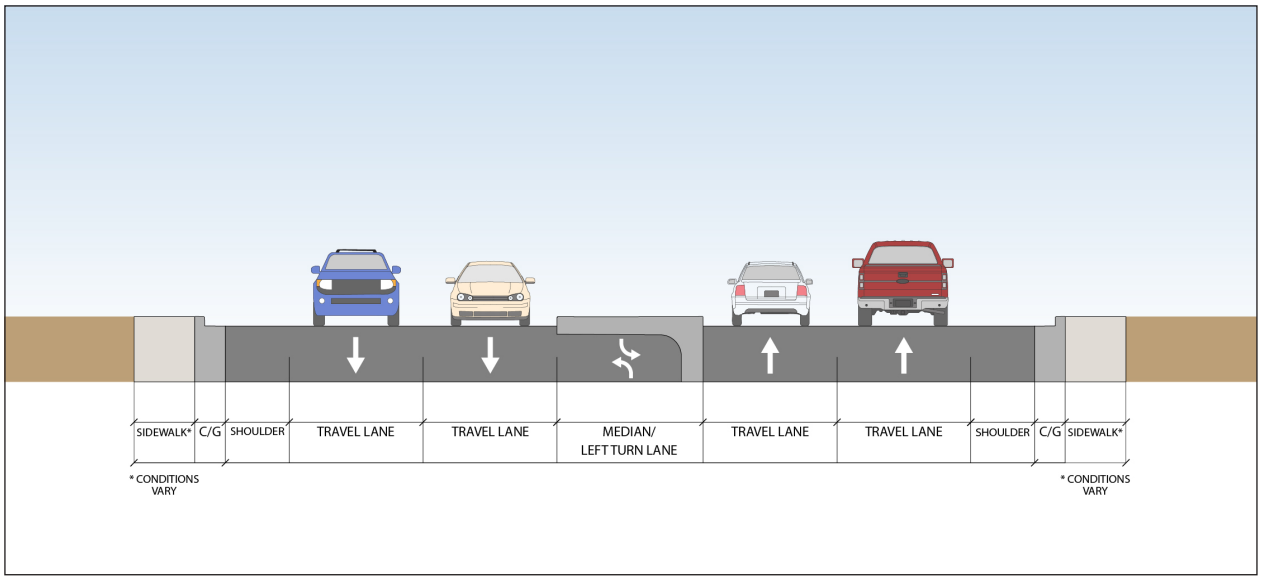
Segment 3. Euclid Avenue to Francis Avenue



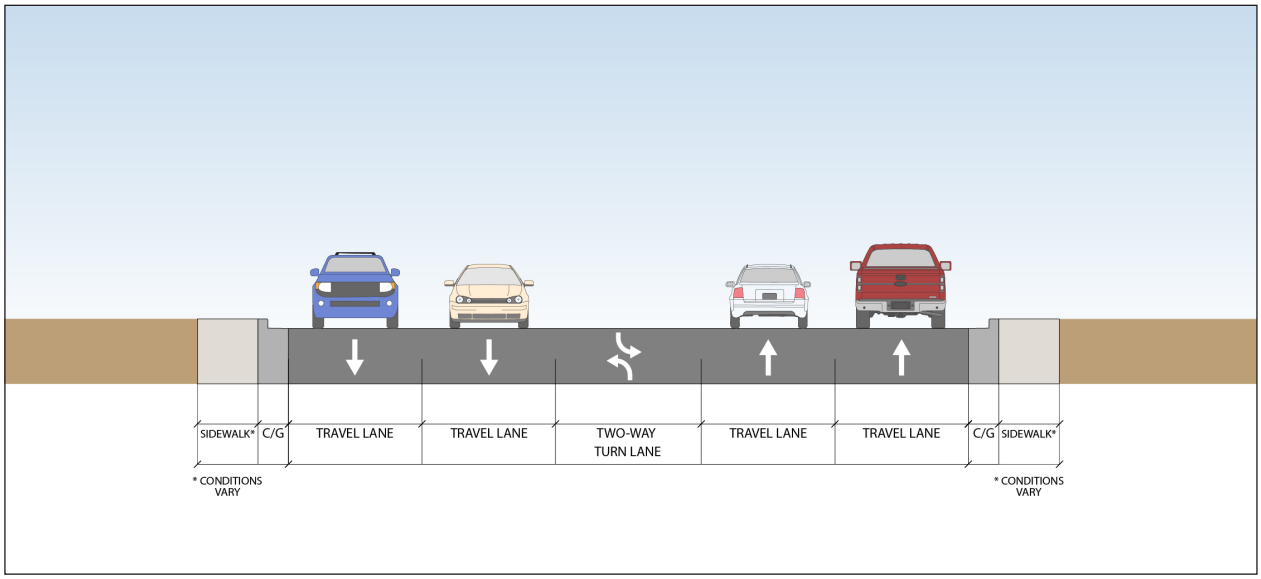
Segment 4. Francis Avenue to the Newport Highway (the "Y")



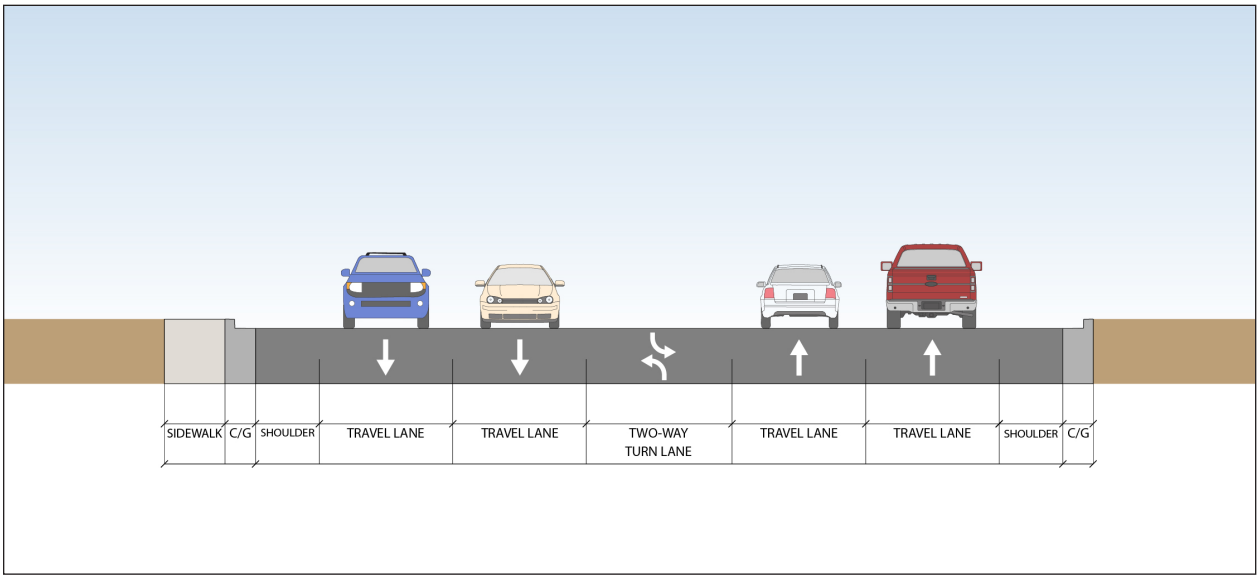
Segment 5. Newport Highway SR-2 (the "Y") to the North Spokane Corridor - Northbound



Segment 5. N Division SR-395 (the "Y") to the North Spokane Corridor - Southbound



Segment 6. US 395 from the "Y" to the North Spokane Corridor Interchange



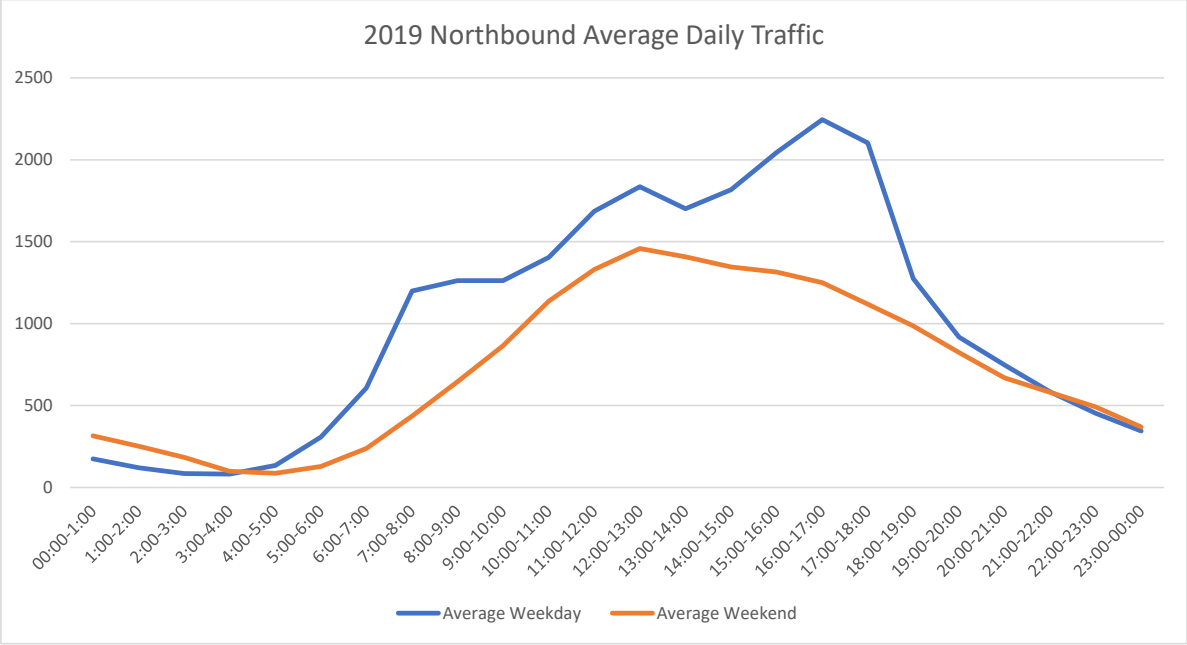
3.2.1 Traffic

Operations

As the primary north-south arterial for Spokane, Division plays a key role in the region's transportation network and the economy by moving people and goods where they need to go. Traffic is a concern as growth in the area continues ahead of capacity relief from the completion of the North Spokane Corridor. Overall, Division street carries high volumes of vehicle traffic: around 50,000 vehicles on the average weekday.

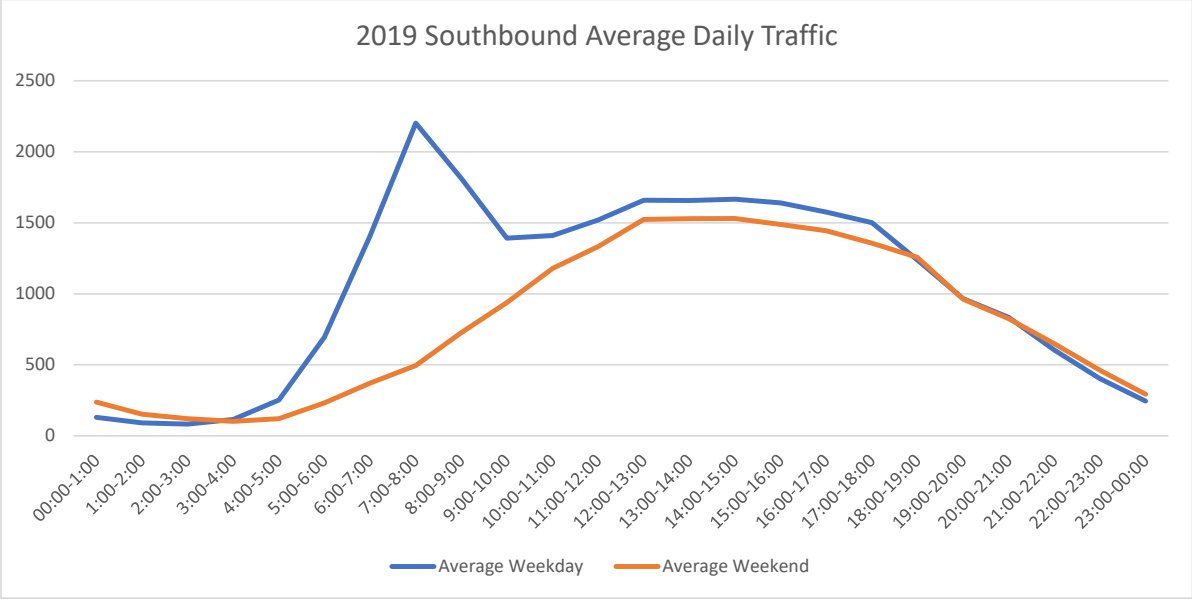
WSDOT has two permanent traffic recorders on US 2 just north of the intersection of North River Drive (northbound) and just south of Euclid Ave (southbound). Daily combined northbound and southbound volumes vary between 45,000 and 51,000 vehicle trips during weekdays and between 32,000 and 40,000 on weekends (depending on time of year). During the week, Friday tends to have the heaviest traffic (both north and southbound). Weekday traffic shows distinct peaks in each direction, corresponding with the morning and evening commutes (Figures 8 and 9).

Figure 8. 2019 Average Northbound Traffic in the Study Corridor on US 2



From WSDOT automatic traffic recorder data; December 2019 was not available as of this writing.

Figure 9. 2019 Average Southbound Traffic in the Study Corridor on US 2



From WSDOT automatic traffic recorder data; December 2019 was not available as of this writing.

Intelligent Transportation Systems (ITS)

ITS technologies help improve transportation safety and mobility. ITS involves the application of electronics, computers, software, technology, and advanced communications to more efficiently manage transportation systems. This section reviews existing ITS architecture in the corridor, organized by regional, corridor, and transit ITS architecture. The Division Street corridor today has a variety of existing ITS tools that could be leveraged by future transportation projects.

Regional

Metropolitan regions are required to set up regional ITS architecture programs to comply with federal rules. The Spokane Region ITS Architecture and associated plan, last updated in 2019, describes priorities for the region and project investments. The regional plan includes several investments relevant to the study corridor, including STA's plans for ITS enhancements to support high performance transit.

Division Corridor

The Spokane Region ITS Architecture contains a regional inventory of ITS. However, the inventory does not include sufficient detail to describe specifics of ITS located on or in the Division Street Corridor. It does refer to the following information:

- Traffic signal systems
- Traffic signal field equipment
- Other ITS field elements owned by the City of Spokane, Spokane County, and WSDOT

One of the major ITS inventory elements noted in the Spokane Region ITS Architecture is the Spokane Regional Transportation Management Center (SRTMC). The SRTMC is a multijurisdictional organization that coordinates ITS devices, including traffic signals, Closed Circuit Television (CCTV) Cameras, and Dynamic Message Signs (DMS) on or in the Division Street Corridor. The SRTMC is currently located in downtown Spokane.

Other ITS equipment in use in the corridor today include:

- Fiber optic communications infrastructure
- Traffic signal controllers
- Traffic signal control central system
- Advanced Traffic Signal Performance Measurement
- Closed Circuit Television Cameras
- Dynamic Message Signs
- Wi-Fi Readers
- Permanent Traffic Recorder Stations
- Intersection Traffic Count Data Aggregators
- Non-motorized traffic detection

Spokane Transit

STA also employs multiple ITS tools:

- Fare Payment Smart Card system
- Fixed Route and Paratransit Dispatch technology
- Vehicle-based technologies: Smart bus technologies including on-board fare boxes with smart card functionality; video and audio surveillance; automatic vehicle location (AVL) functionality; automated passenger counters; automated stop annunciation, smart bus infrastructure that supports future transit signal priority implementation. Paratransit vehicles have mobile data terminals for us in coordinating with dispatch.
- Real-Time Customer Information Systems
- Park & Ride Facilities: including ITS equipment such as security surveillance cameras, ticket vending machines, and real-time traveler information.

See Appendix D for more details on ITS infrastructure present in the corridor.

3.2.2 Transit

Service Network

STA provides transit service throughout Spokane County via fixed route service, paratransit, and flexible services, including a vanpool program for commuters including along and across the study area. Fixed route service includes frequent, express, basic, and shuttle routes, with headways summarized in Table 2.

Table 2. Headways by Service Type

	Headways (Minutes)			
Service Type	Weekday Peaks (AM and PM)	Weekday Mid Day	Weekday Night	Weekends
Frequent	15	15	30-60	30-60
Basic	30-60	30-60	60	30-60
Express	Varies based on routing	--	--	--
Shuttle	10-20	20	--	--

AM Peak: 5:00 am-8:00 am
PM Peak: 3:00 pm-6:00 pm
Mid Day: 8:00 am-3:00 pm
Night: 6:00 pm-midnight

Frequent bus service is provided along the project corridor from the Hastings Park & Ride in the north to downtown Spokane/The Plaza in the south by Route 25. Service is provided from 5:00 am to midnight on weekdays and Saturdays and from 7:30 am to 8:30 pm on Sundays. Route 25 serves as one of two frequent north-south transit lines in the City of Spokane.

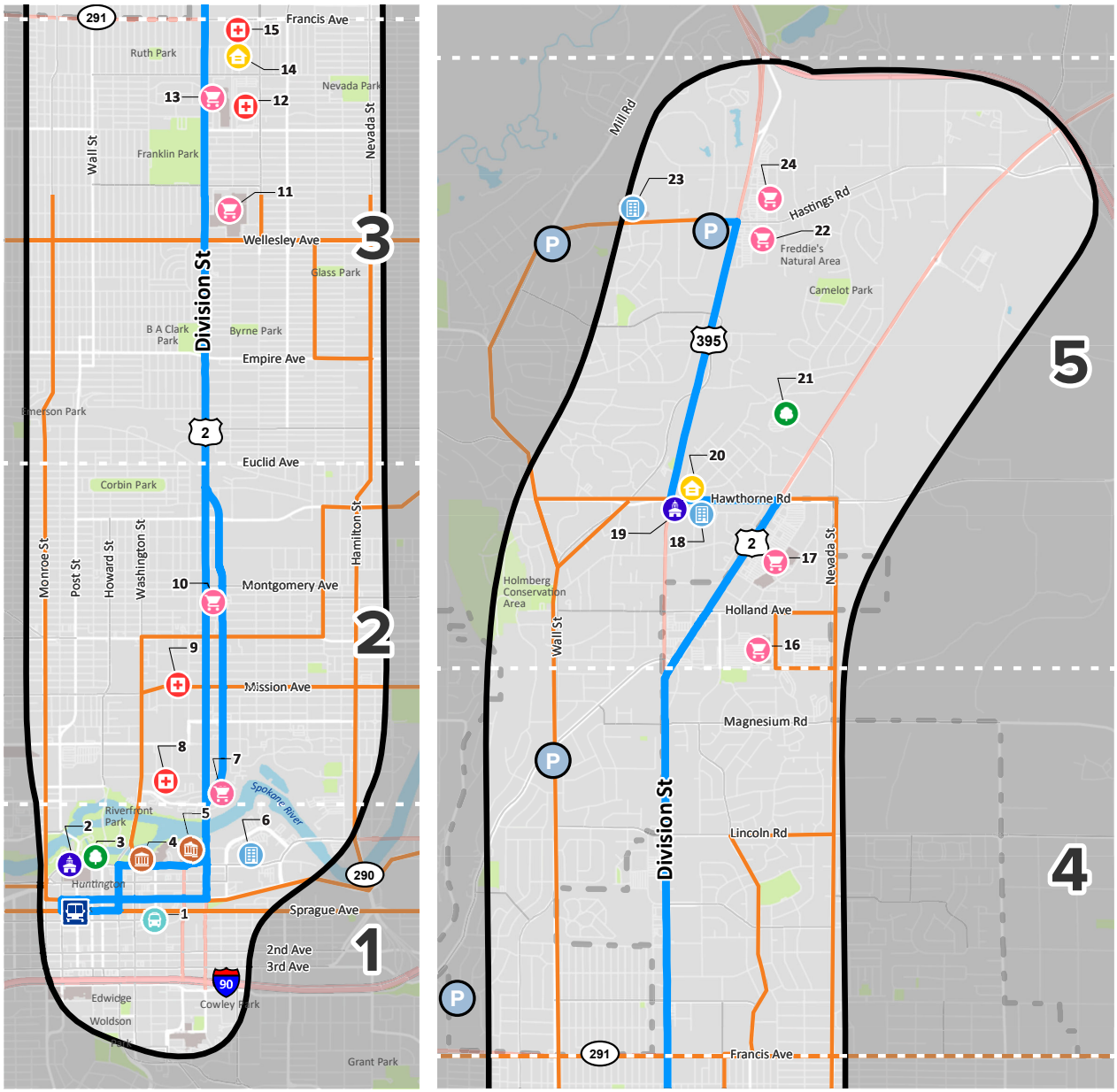
This route is just over 9 miles long and intersects with several other bus routes. Key transfer locations to other bus services are located at:

- The Hastings Park & 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)
- Trent Avenue (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.

Figure 10 displays the transit network, park and rides, and points of interest served by transit.

Figure 10. Points of Interest Near Route 25



Legend

Points of Interest

- Cultural
- Government
- Housing
- Institutional
- Medical
- Recreation
- Shopping Center
- Transit

- Park & Ride
- STA Plaza
- Division Line- STA Route 25
- Other STA Routes
- Spokane City Limits
- Study Area
- Neighborhood Boundaries
- Study Segment Boundaries

0 0.25 0.5 1 Miles

Table 3. Division Street Points of Interest

Spokane Division Street Points of Interest		
Number	**Name**	**Type**
1	Amtrak/Intercity Bus - Spokane Intermodal Center	Transit
2	Spokane City Hall	Government
3	Riverfront Park	Recreation
4	First Interstate Center For the Arts	Cultural
5	Spokane Convention Center	Cultural
6	WSU/EWU Spokane Campus	Institutional
7	ARC Thrift Store	Shopping Center
8	Kaiser Permanente Riverfront Clinic	Medical
9	Unify Community Health	Medical
10	Salvation Army Thrift Store	Shopping Center
11	Northtown Mall	Shopping Center
12	Holy Family Hospital	Medical
13	Franklin Park Commons	Shopping Center
14	Cherrywood Place Retirement	Housing
15	Spokane Urgent Care/CHAS	Medical
16	Walmart	Shopping Center
17	NorthPointe Shopping Center	Shopping Center
18	North Spokane Library	Institutional
19	Department of Licensing Northside	Government
20	Hawthorne Manor Aprtments	Housing
21	YMCA North	Recreation
22	Fred Meyer	Shopping Center
23	Mead High School	Institutional
24	Wandermere Mall	Shopping Center

STA serves 13 park & ride lots across its network. Four park & ride locations are in the vicinity of the project corridor, however only the Hastings Park & Ride is served by Route 25. Park & ride capacity and maximum utilization is summarized in Table 4. At some locations, utilization varies by time of year. The Hastings Park & Ride and Five Mile Park & Ride are both served by express routes to Eastern Washington University and exhibit lower utilization during the summer months. The Fairwood Park & Ride is considered an overflow lot for the Hastings Park & Ride. Data provided in the 2018 STA Annual Route and Passenger Facilities Performance Report and reflects the 85th percentile of weekday counts performed multiple days per week at peak.

Table 4. Study Area Park and Rides

	Routes Served	Auto Parking		Bicycle Parking	
Park & Ride		Spaces	Maximum Utilization	Lockers	Utilization
Hastings	25, 124, 662	135	85%	5	1
Fairwood*	124	200	<25%	0	N/A
County Homes*	124	50	40%	0	N/A
Five Mile	4, 22, 27, 662	99	70%	6	1

* *Cooperative park & ride – property owned by others*

Ridership and Operations

Nationwide, most public transit agencies have seen annual declines in ridership over the last four years. These declines are attributed to four main factors; erosion of time competitiveness, reduced affinity, erosion of cost competitiveness, and external factors[1]. Of these, Spokane's system is unlikely to be impacted by cost competitiveness because the region is less sensitive to fuel prices, but the system is impacted by the growing economy leading to vehicle purchases, and the establishment of multiple job centers outside of the downtown core.

Route 25 is one of STA's highest ridership routes, with more than 930,000 riders in 2018. From 2017 to 2018, ridership declined by more than 70,000, representing a 7.1 percent decrease in annual ridership. a mix of 40 foot coaches with 39 seat capacity and 60 foot coaches are used on this route.

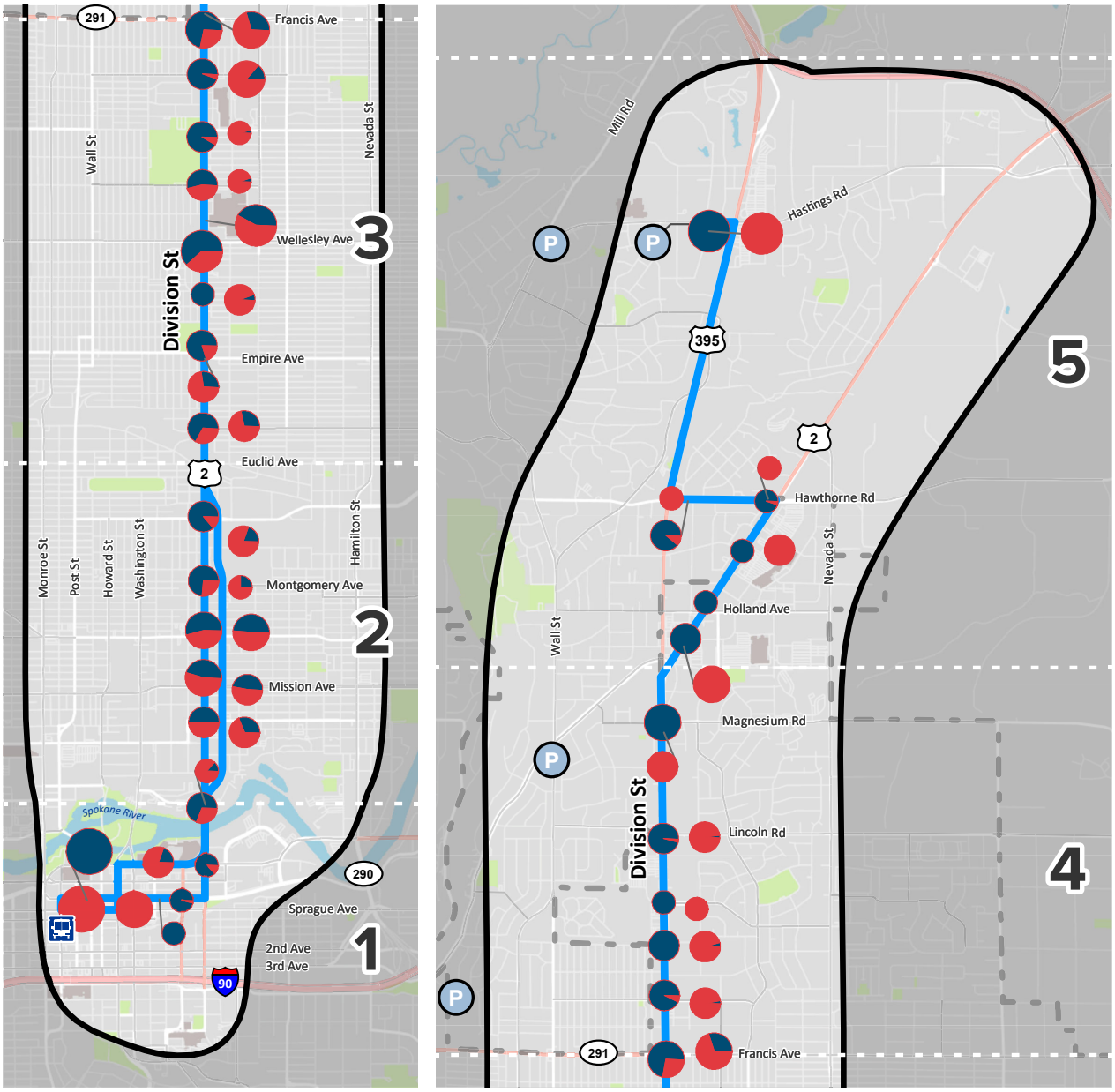
28 northbound stops and 30 southbound stops are located along Route 25. The location of stops and average daily ridership activity by stop is shown in Figure 11. Highest ridership stops with more than 100 combined boardings and alightings are summarized in Table 5. These stops are located at route termini and transfer points with other bus routes, as well as shopping centers. Figure 11 displays boardings and alightings by stop in the corridor.

Table 5. High Ridership Stops

	Average Weekday Boardings	Average Weekday Alightings
Northbound		
Plaza Zone 4*	935	0
Ruby @ Indiana*	64	62
Division @ Empire	35	68
Division @ Wellesley (Northtown)*	106	180
Division @ Francis*	48	81
Newport Highway @ N 9222	3	148
Hastings Park & Ride*	0	168
Southbound		
Hastings Park & Ride*	157	0
Division @ Dalke	100	23
Division @ Rowan (Franklin Park)	83	17
Division @ Hoffman	183	63
Plaza Zone 6	0	777

* *Transfer points for other bus routes*

Figure 11. Boardings and Alightings by Stop



Legend

Boarding %

Boardings

Alightings

The size of the circle indicates the relative number of boardings (larger circle indicates more boardings)

Park & Ride

STA Plaza

Division Line- STA Route 25

Spokane City Limits

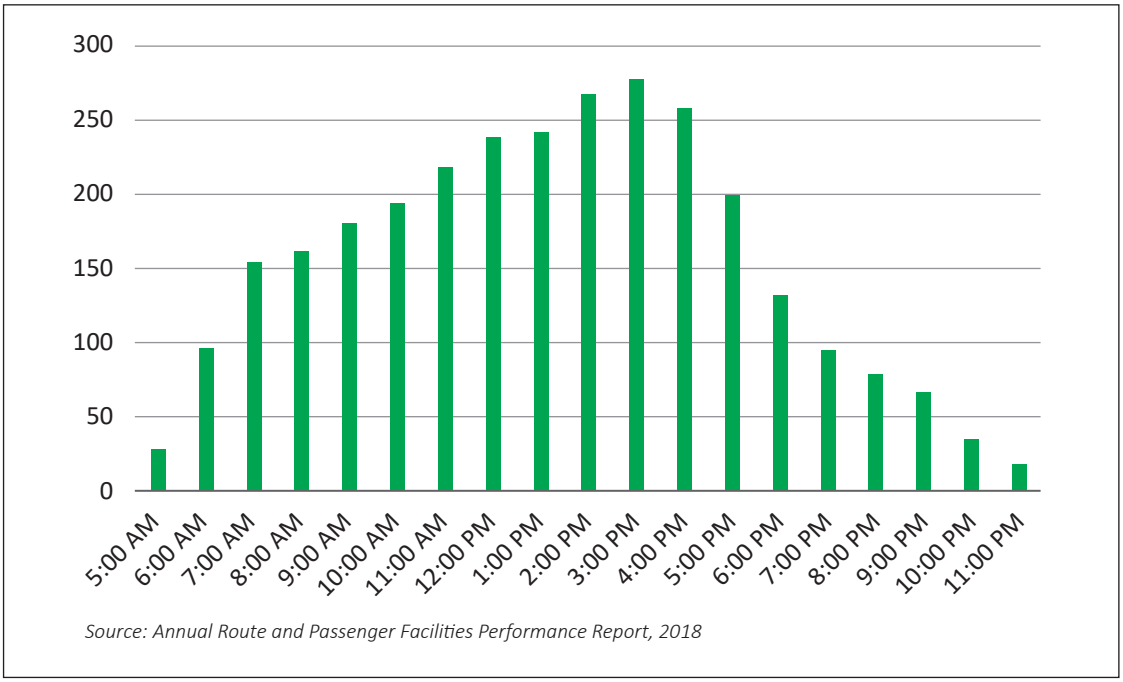
Study Area

Study Segment Boundaries

0 0.25 0.5 1Miles

High ridership stops include the endpoints, the Plaza and the Hastings Park and Ride. The concentration of retail and businesses clustered between Wellesley and Francis also show heavy use.
Route 25 has almost 3,000 daily riders, with just over 30 boardings per revenue hour. It experiences its highest average weekday ridership during the 3:00 pm hour. Figure 12 displays weekday ridership by time of day.

Figure 12. Average Weekday Ridership by Hour



Source: Annual Route and Passenger Facilities Performance Report, 2018

STA Riders

The 2018 passenger survey conducted by STA provides data on STA riders:

- 31% of respondents identified as racial or ethnic minorities;
- 47% of respondents qualified as low income as measured with respect to 2018 federal poverty guidelines, with 32% declaring annual household income of less than $12,140.00;
- A monthly transit pass was the most commonly used fare medium;
- 75% walked to the bus, with the typical respondent walking an average of five minutes to their stop, while 5% used a park and ride and 1% biked;
- 80% owned a smartphone.

Recent Projects and Future Vision

STA has begun to develop the infrastructure and implement service that is bringing the HPT network vision to life. Recent and upcoming projects include:

The City Line

The City Line will provide bus rapid transit service from Browne's Addition to Spokane Community College via Downtown Spokane and the University District. Scheduled to open 2022, this six-mile, electric bus service will provide over 1 million rides per year. Service investments will increase the span of service and provide for more frequent trips. New passenger amenities will include pre-board ticketing, level boarding, and improved stations with real-time signage and wayfinding.

The Monroe-Regal Line

Opened in 2019, the Monroe-Regal Line project included a suite of investments designed to improve passenger comfort and provide for faster and more reliable bus service. Changes along the corridor included ADA-accessible stations, new shelters, and distinctive branding, as well as some stop relocation. The project included construction of the new Moran Station Park & Ride at the southern end of the line. Service investments provided for headways every 15 minutes for at least 12 hours per day on weekdays, and at least every 30 minutes during evenings, weekends, and holidays. The Monroe-Regal Line runs 11.4 miles between the Five Mile Park & Ride to the Moran Station Park & Ride, providing connections to multiple neighborhoods including downtown Spokane, the Garland District, Kendall Yards, and Lincoln Heights. Additional improvements, including electronic fare collection, electric buses, and additional station amenities are scheduled for completion in 2020 and 2021.

What does High Performance Transit (HPT) mean in the Division Corridor?

"HPT" is a concept that includes a variety of service types and enhancements as compared to standard fixed route service. The Central City Line is the most robust implementation of HPT, with unique branding, substantial investment in stations, electric articulated buses not found elsewhere on the STA system, and features like level boarding at stations and very frequent service. The Monroe-Regal and Sprague Lines are more targeted HPT investments. They include new shelters and level boarding at certain high-use stops, additional amenities, and frequent service using standard STA fixed route vehicles. STA has identified the Division Corridor as HPT and determined that a center-running alignment should be evaluated, per the Transit Development Plan. The Division Corridor Study will explore a range of transit options in the corridor, including services similar to the Central City Line and more targeted investments like the Monroe-Regal and Sprague Lines.

The Sprague Line

Phase 1 of the Sprague Line was completed in 2017. Capital improvements included new station design to allow for faster boarding, shelters at high ridership locations, and access improvements for riders. The project also supported redevelopment efforts for Sprague Avenue. Phase 2 of this project, scheduled for completion by 2023, will provide additional amenities and infrastructure that improve reliability.

The Cheney Line

Enhanced service on the West Plains has begun between Cheney and Downtown Spokane, including frequency and extended service hours and customer amenities like the new West Plains Transit Center. Phase 2 will include HPT improvements scheduled for 2021.

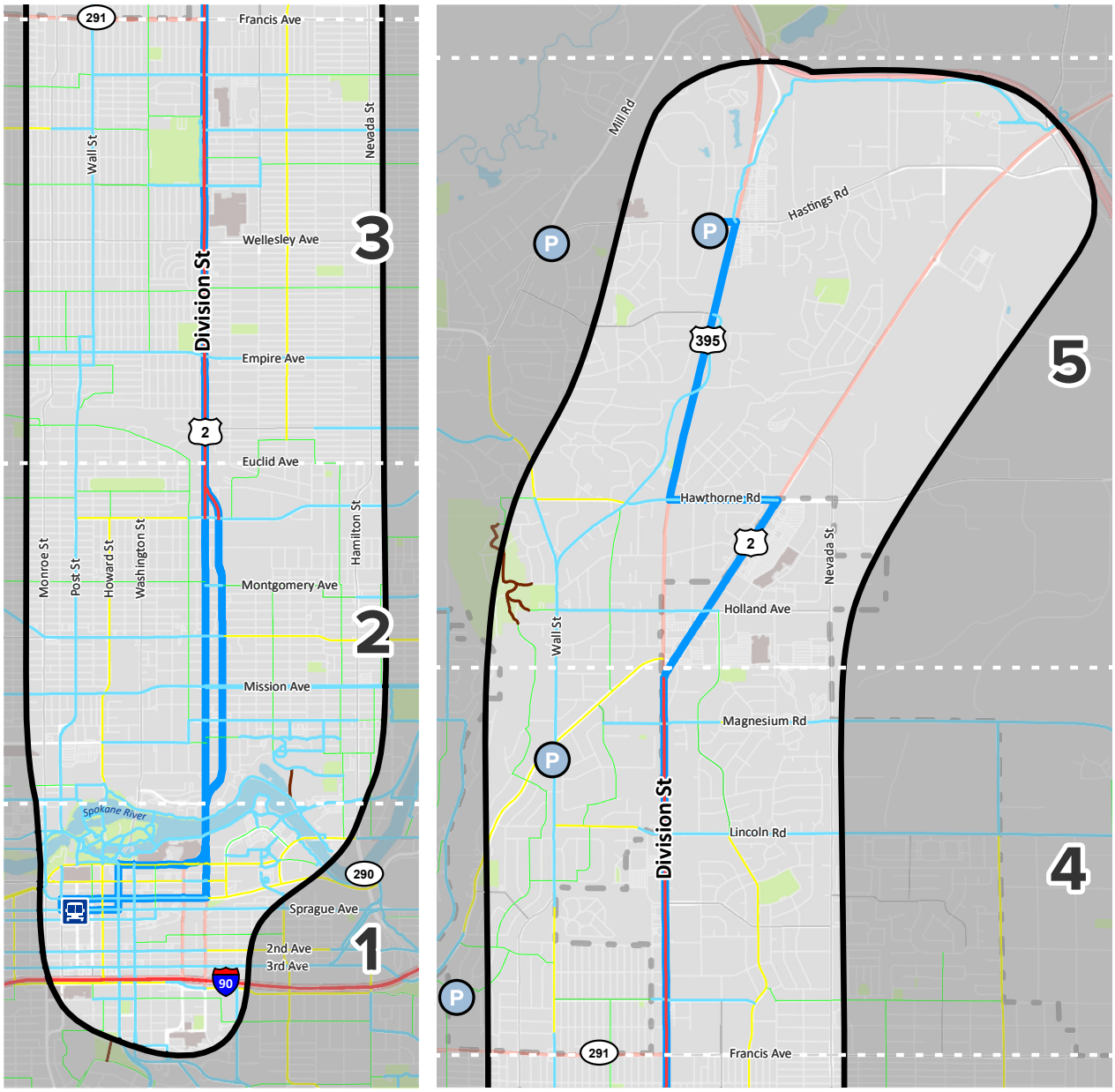
3.2.3 Active Transportation

The existing bicycle and pedestrian network is shown in Figure 13. Generally, there are sidewalks present on at least one side of most streets in the study area, with sidewalk coverage decreasing to the north in unincorporated Spokane County. Most of Division Street has sidewalks present, but the pedestrian environment may be stressful to due to high vehicle traffic volumes, and speeds. 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.

Bike lanes are not present on Division Street/US 2 in any part of the study corridor and bicycles are currently not allowed on the street. Parallel streets such as Howard, Wall, and Addison Streets have bike lanes or shared roadway designations that provide north-south connections for cyclists in the corridor, though most of these at 1/3 to 1/2 mile away from Division Street which limits directs access to destinations on Division. There are no bicycle facilities on the Division Street bridge crossing the Spokane River; riders must use off-street bridges to the east or west or could ride on the sidewalk of the bridge. 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. 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.

There are shared paths along the Spokane River in the southern segment of the study area, including the regional Centennial Trail. Downtown Spokane has a complete sidewalk network and bike facilities on some streets. Scootershare is a new service available in the City of Spokane, with scooter rentals possible in the corridor within the city limits.

Figure 13. Active Transportation Network



Legend

Active Transportation Path Type

- Prohibited
- Bike Friendly Route
- Bike Lane
- Shared Use Path
- Soft Surface Path

- Park & Ride
- STA Plaza
- Division Line- STA Route 25

- Spokane City Limits
- Study Area
- Study Segment Boundaries

0 0.25 0.5 1 Miles

3.2.4 Safety

Safety has two primary aspects that affect transportation corridors: the very real dangers of severe injury and death resulting from crashes, and perceived safety or risk that impacts the comfort of people using the street. There is also personal safety associated with crime that is discussed at the end of this section. Quantitative information from crash reports help transportation planners and engineers to make decisions about how to improve safety. While perceived safety can sometimes have a significant impact on how people use a corridor, perceptions are much harder to quantify. Based on studies in similar corridors, design and engineering solutions can be applied that increase comfort and consistency within the corridor.

Crashes

Crashes that are reported to authorities provide a good overview of safety along the corridor. Crash history from 2015-2019, as provided by WSDOT, was analyzed for this study.

As with many principal arterials, Division Street crashes frequently occur at intersections.

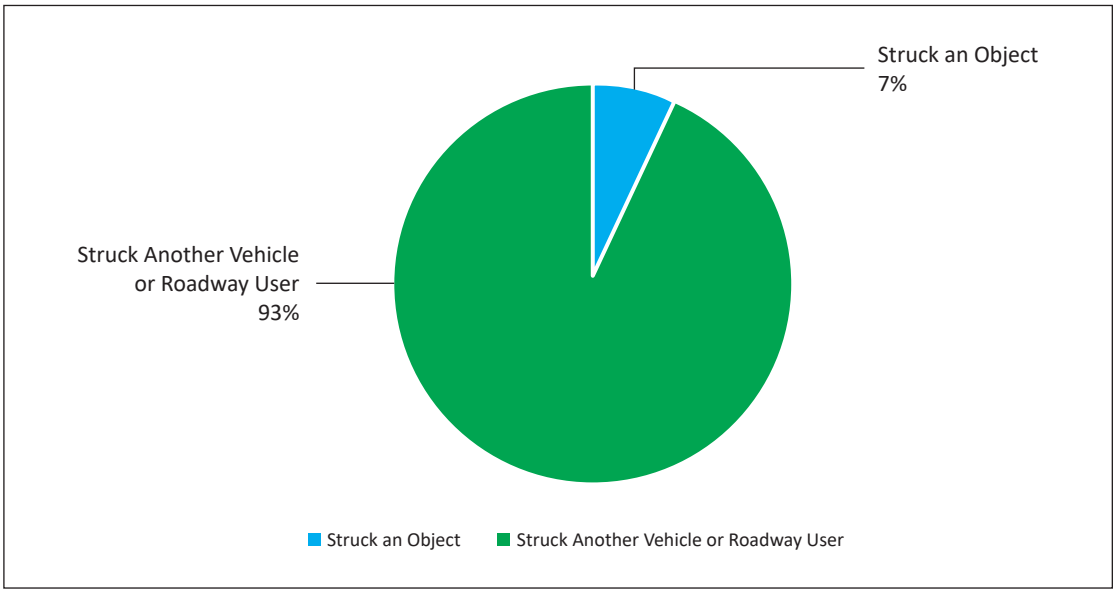
Key intersections with crashes from north to south are summarized in Table 6.

Table 6. Intersection Crashes

Intersection	Crash Count (2015-2019)
Hastings Road/SR 395	52
E Farwell Road/SR 2	50
Hawthorne Road/SR 385	42
N Country Homes Blvd.	78
Lincoln Road	87
Francis Avenue	64
Wellesley Avenue	74
Garland Avenue	52
Indiana Avenue	109
Mission Avenue	127
North River Drive	48

Crash types can also present a clearer picture of issues along the corridor. Common crashes types are displayed in Figure 14.

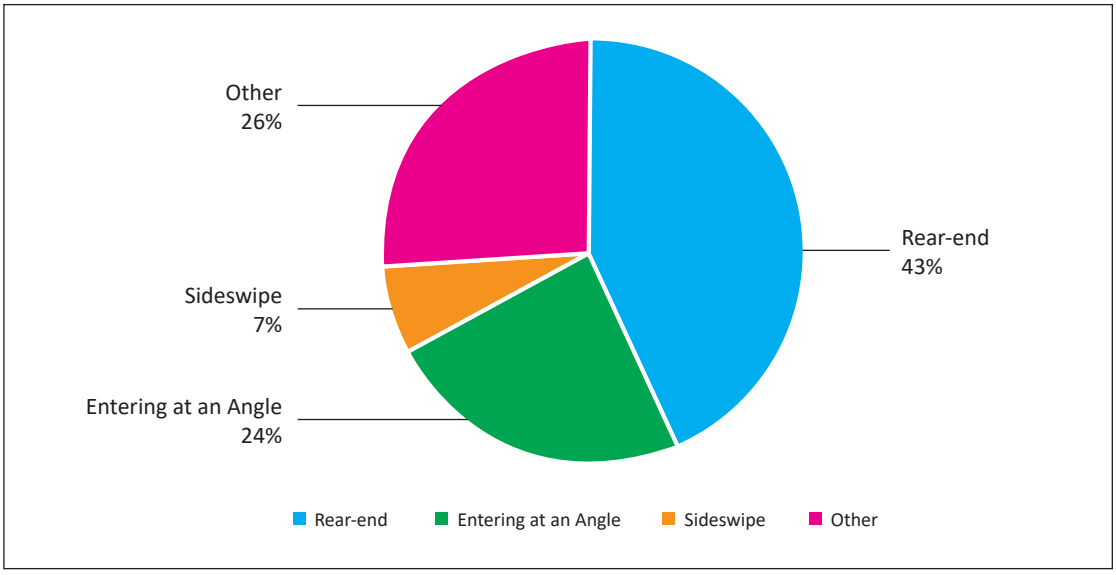
Figure 14. Crash Types



Crashes are most common between roadway users. Vehicle crashes with objects represent a small percentage of total crashes, which suggests that objects along the roadway are adequately set back from the curb and lane widths are sufficient for the typical speeds.

Figure 15 summarizes vehicle to vehicle crashes by type. Rear-end crashes, which tend to happen at intersections, comprise 43 percent of total crash types. 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.

Figure 15. Vehicle to Vehicle Crash Types



Contributing circumstances of the vehicle drivers behavior are also insightful. Based on WSDOT crash data, the top 3 contributing circumstances for Division Street are:

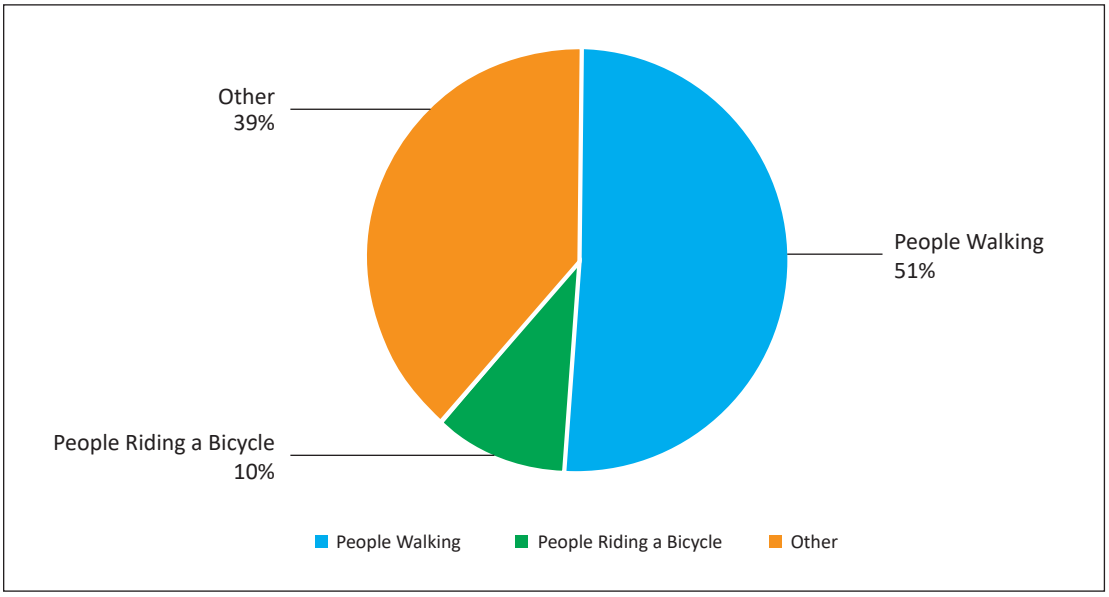
1. Inattention (418)
2. Follow too closely (418)
3. Did not grant right-of-way to vehicle (297)

These driver behaviors are difficult to modify. These contributing factors could be addressed through a number of safety countermeasures, including potential speed reductions.

Severe and Fatal Crashes

In the 5-year crash history for Division Street, there were 2,129 crashes recorded, of which 907 had an injury of some type. Of those injuries, 39 were listed as severe injury or fatalities with 21 involving a person walking and 4 involving a person riding a bicycle. These crashes are summarized in Figure 16. While bike and pedestrian related crashes accounted for 5 percent of total crashes, they accounted for 61 percent of severe injury and fatal crashes along Division Street.

Figure 16. Severe and Fatal Crashes



Crashes impact a community in multiple ways. Economic losses include property and job-loss due to injury, with the most significant being death or severe injury requiring admission to a hospital. The annual number of crashes have trended downward since 2016, as shown in Figure 17, but this is hard to measure without looking at a crash rate based on the volume of vehicles in the corridor. Tracking severe injury and fatal crashes shows some common trends. Air bags, seatbelts, and other technological improvements for vehicles have significantly reduced fatalities and severe injuries in vehicle to vehicle crashes. However, these vehicle safety improvements do not necessarily reduce crash incidence or severity with people walking or riding bicycles or scooters. Bike signals at intersections, separated cycling and walking infrastructure, and improved crossings can improve active transportation safety.

Figure 17. Crash Trends

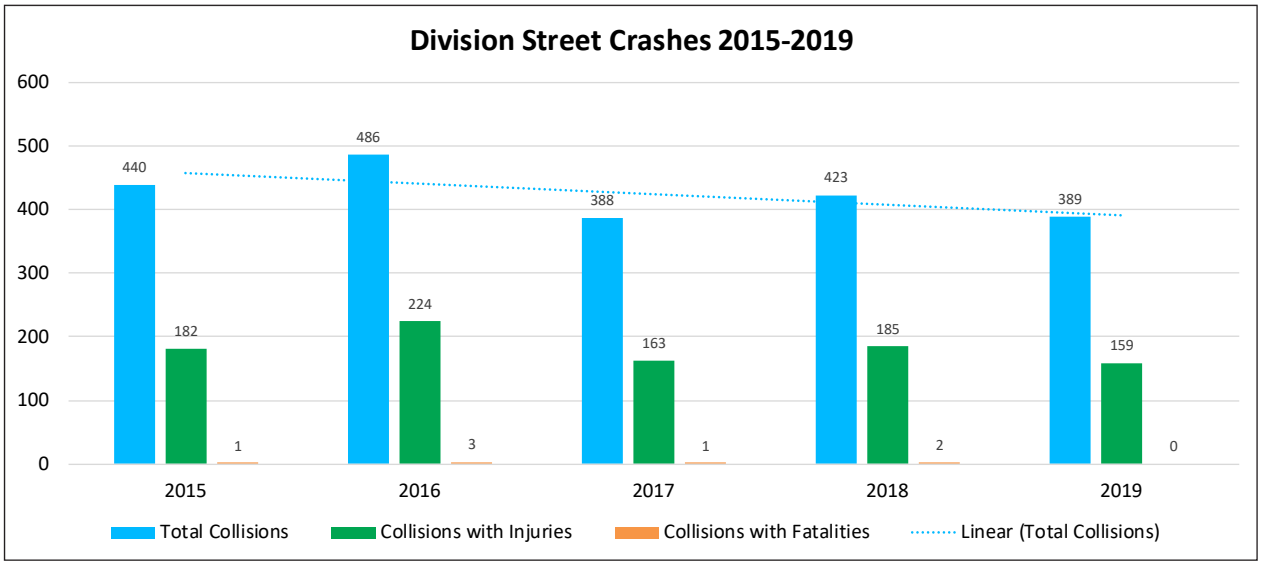


Figure 18. Vehicle to Pedestrian and Bike Collisions

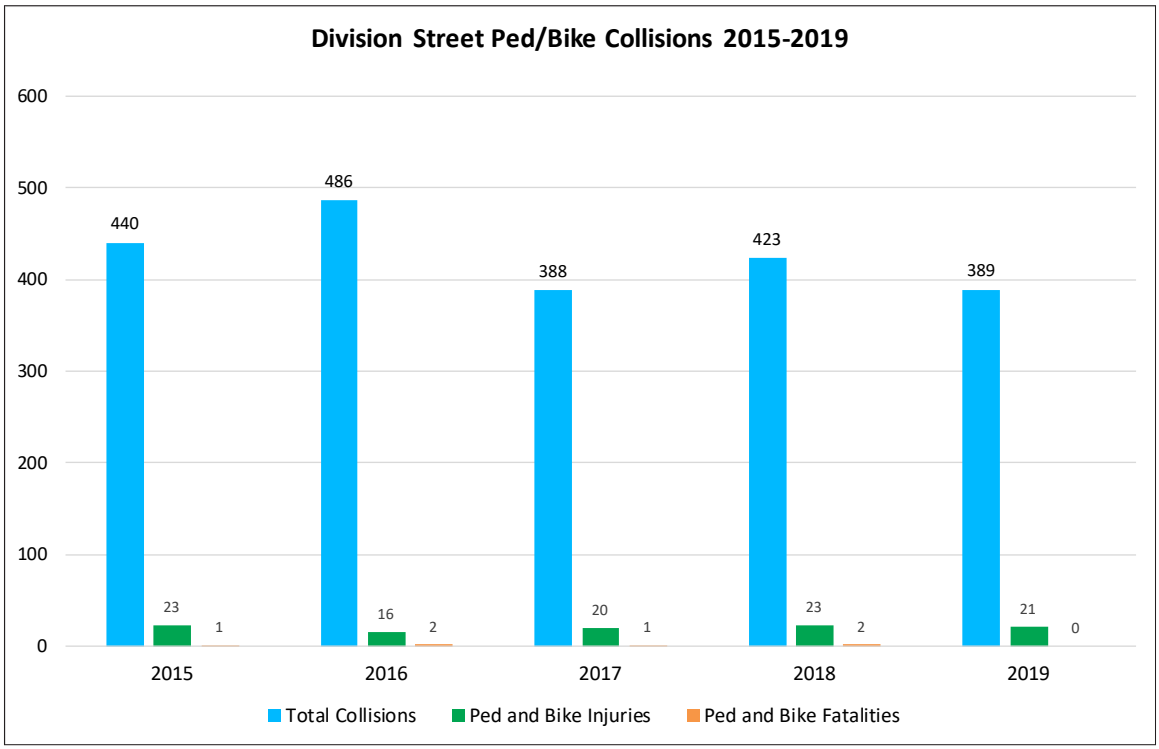
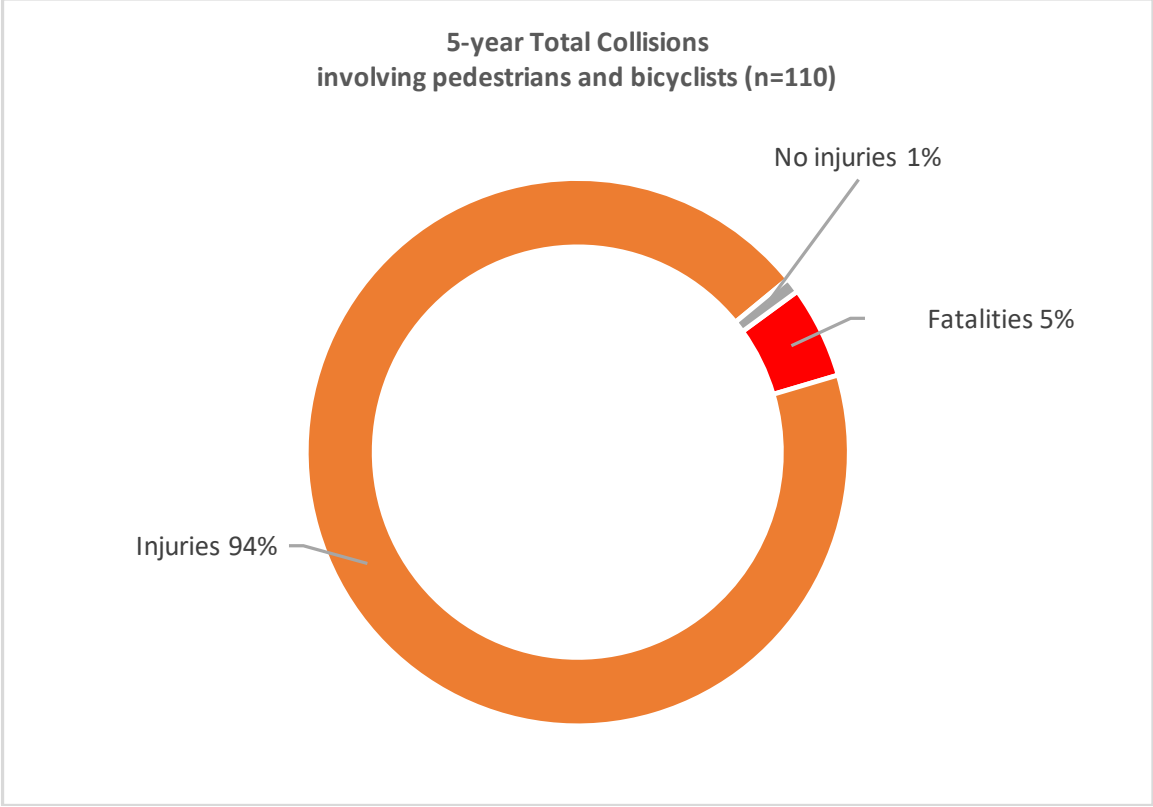


Figure 19. Pedestrian and Bike Collisions with Injuries



Perceived Safety

The perception of safety is a subjective and personal topic that is hard to quantify but can easily be collected through community surveys. Based on a 2016 survey of community perceptions of Spokane Transit, only 3% of respondents indicated improving safety on the transit system as a critical issue.

Division Street has several factors that diminish perceived safety, including pedestrian and bicycle comfort. These include:

- Vehicle speeds (both posted and actual) in excess of 30 MPH.
- Significant vehicle volumes (greater than 45,000 on weekdays and greater than 35,000 on weekends).
- Sidewalks along most of the corridor lack buffers from traffic (no landscape, hardscape, or parked vehicles).
- Bus stops lack shelter.
- Signalized crossings are spaced far apart (on average 1,200 to 2,000 feet).
- Some access driveways are wider than necessary, including some angled turns (slip-lanes) onto intersecting streets.
- Many retail buildings are set back from the roadway requiring people walking to navigate large parking areas and access lanes to patronize businesses.
- Multiple lanes and long crossing distances.

There are some improvements along Division Street that contribute to the basic pedestrian and wheelchair experience:

- Most above-ground utilities are located behind the sidewalk.
- Most bus stops have seating and garbage receptacles.
- Curb ramps are present at almost all intersections along the corridor and many appear to have been recently upgraded in compliance with the Americans with Disabilities Act (ADA).

Personal Safety

Division Street has two primary hot spots of crime, just west of the corridor in downtown Spokane and between Wellesley Avenue and Francis Avenue. The crimes are varied, but include aggravated assault and robbery. These types of crimes could have a significant impact on the comfort of all users of the roadway, particularly those on foot or bicycle.

Awareness of crime hot spots and additional security features such as monitored security cameras and use of crime prevention through environmental design (CPTED) can reduce risks and improve community safety.

3.3 Environmental Resources

3.3.1 Historic and Cultural Resources

As part of this study, a high-level review was performed to understand the presence of previously-recorded historic and cultural resources in the corridor. Archaeological and Historical Services at Eastern Washington University looked to existing literature and records within the study area to understand resources that may be present. For more background on the study, please see Appendix B.

Using state databases, a "high" to "very high" likelihood that prehistoric or historic-era cultural resources was found to exist in the corridor. The study area and vicinity is within land traditionally associated with bands of Salish-speaking Spokane (or Spokan) Indians. Archaeological sites associated with the development of the City of Spokane are also likely in the corridor. Traditional cultural properties (those sites with ongoing significance to Tribes as important locations supporting subsistence and spiritual activities) were not found in the study area.

State databases show sixteen previously-recorded archaeological sites within the study area, with almost all located south of the Spokane River. None of these sites are in the downtown Spokane segment of the corridor, though one historic-era archaeological site is approximately one-half block west of the segment.

Overall, historic built environment resources represent the majority of cultural resources in the corridor. A substantial number of resources are located close to Division Street or other important corridor streets. Additionally, there are many other potential historic built environment resources older than 50 years of age in the study area that will require future consideration.

Historic Districts

There are ten registered historic districts within the study corridor (Figure 18). There are several historic resources on the campus of Whitworth University that could represent a historic district in the future as well. Given their location, most districts would not be impacted by improvements to Division Street. However, potential impacts to East Downtown, the Spokane River, and Desmet Avenue cultural resources should be considered during future planning. These districts include:

East Downtown Historic District

The East Downtown Historic District contains historically significant commercial and warehouse buildings. Since the late nineteenth century, this section of Spokane has been a central part of the downtown's industrial and trade heritage. Several significant historic built environment resources are along the Transit Plaza to Spokane River segment.

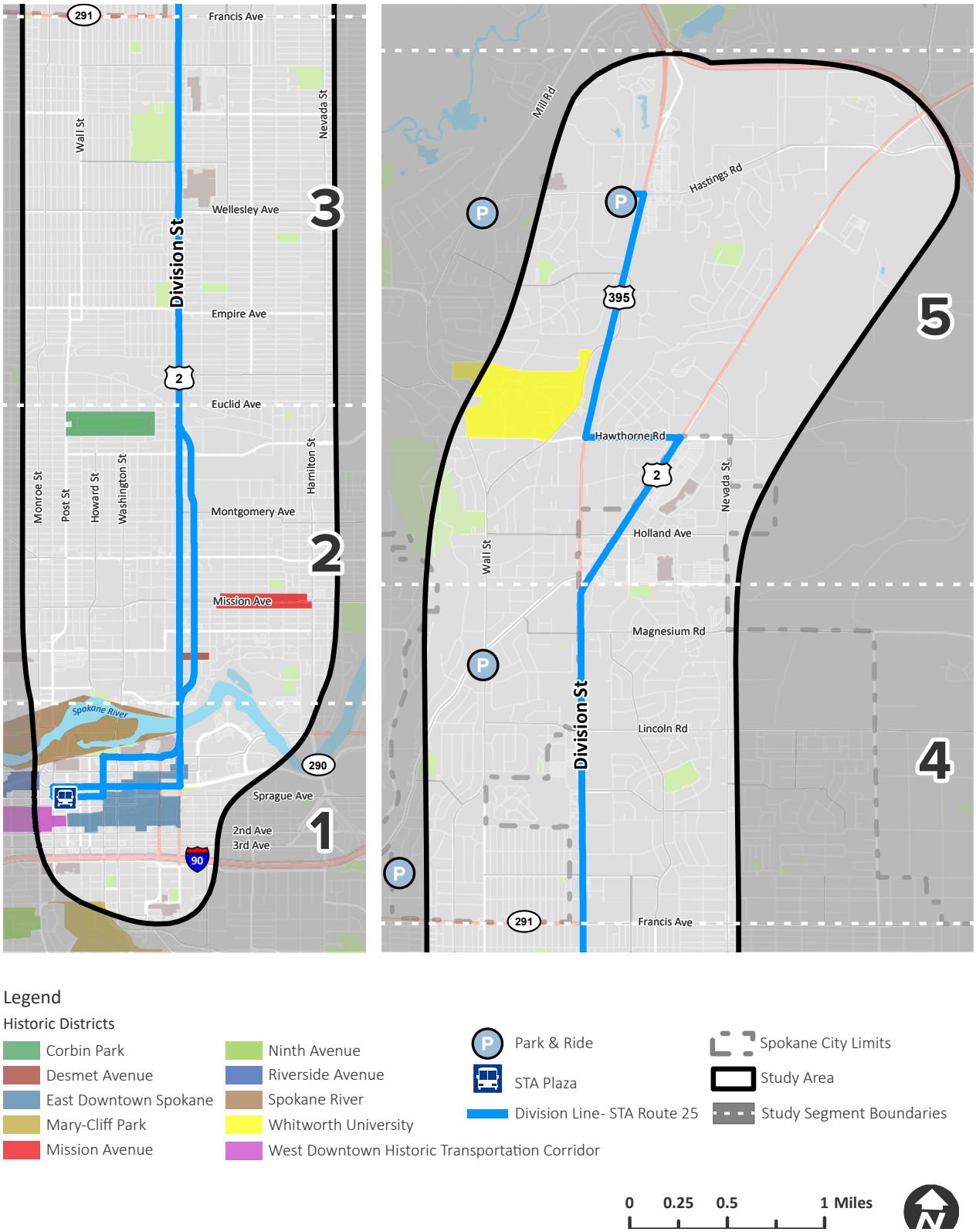
Spokane River District

Listed in the Washington Register in 1971, the district encompasses the Spokane River and its north and south banks. The district is north of the downtown study area, though the Division Street Bridge is within the district.

Desmet Avenue Warehouse Historic District

The Desmet Avenue Warehouse Historic District is north of the Spokane River. The small district is composed of six commercial buildings with significant associations to Spokane's historic-era commercial and industrial development along the Spokane River to Euclid segment.

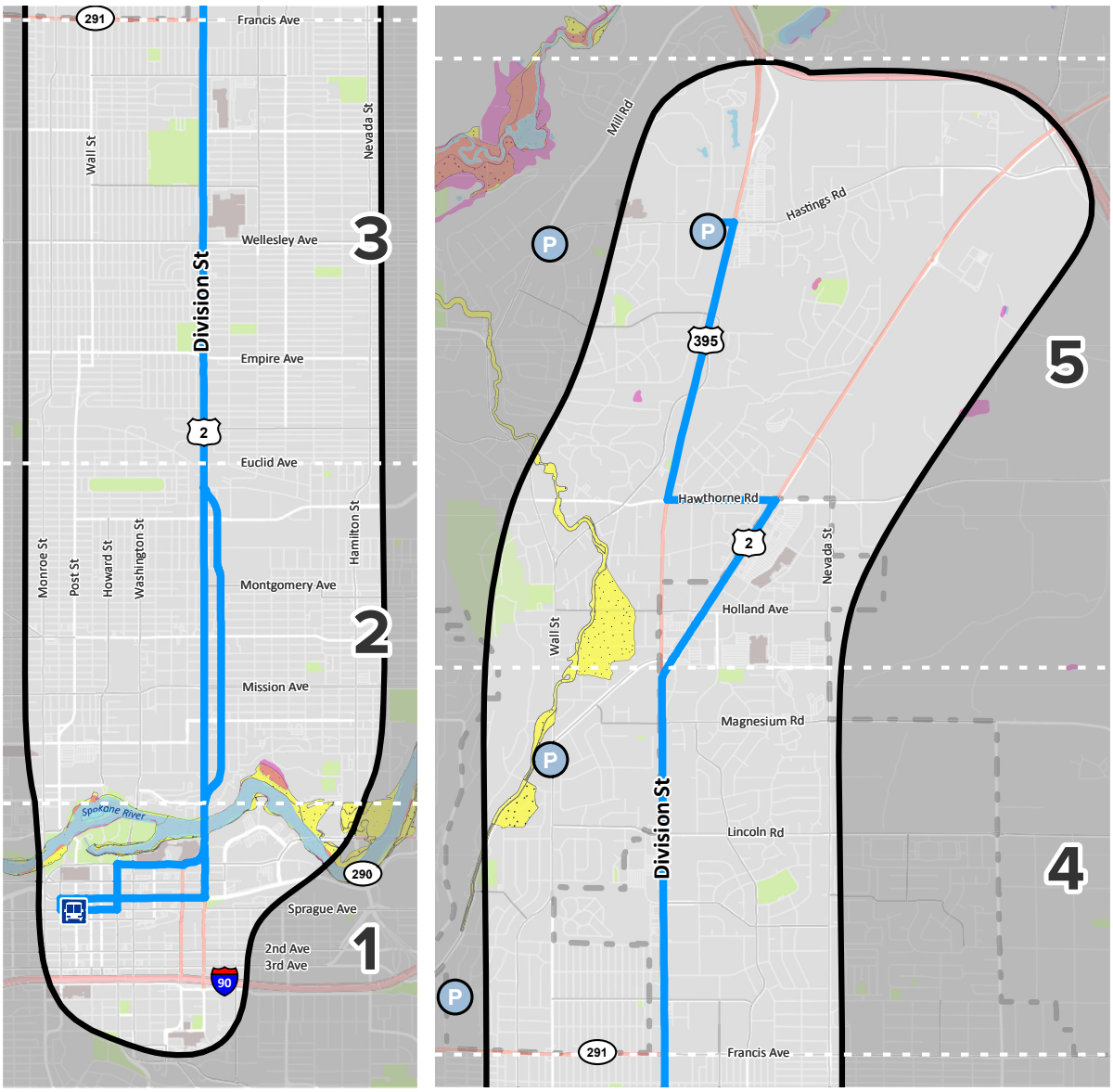
Figure 20. Historic Districts



3.3.2 Natural Environment

Notable environmental features in the corridor include the Spokane River and numerous parks and open spaces throughout the corridor. Figure 19 highlights some of the environmental features in the corridor that are important both as community assets and in understanding potential impacts of actions in the corridor.

Figure 21. Natural Environment Features



Legend

Natural Environment

- Park & Ride
- STA Plaza
- Division Line- STA Route 25
- Spokane City Limits
- Study Area
- Neighborhood Boundaries
- Study Segment Boundaries
- FEMA Flood Zone
- Wetland

0 0.25 0.5 1 Miles

APPENDIX A

ITS Infrastructure Technical Memorandum

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TECHNICAL MEMORANDUM

To:	Darby Watson, AICP Parametrix 719 2nd Avenue, Suite 200 Seattle, WA 98104	From:	Jennifer Martin Iteris, Inc. Spokane, WA
Date:	February 12, 2020		
RE:	Division Corridor Study Phase 1 Task 2: State of the Corridor Memo – Task G: Review and Describe ITS Infrastructure		

This memo summarizes the review of available Intelligent Transportation Systems (ITS) data readily available for the Division Corridor Study. ITS involves the application of electronics, computers, software, technology, and advanced communications to more efficiently manage transportation systems and mobile assets. The ITS for this study is summarized into three major categories:

- Regional ITS
- Division Street Corridor ITS
- Spokane Transit Agency ITS

1.0 REGIONAL ITS PLANNING AND IMPLEMENTATION

At a regional level, the ITS architecture that is known as the Spokane Region ITS Architecture, is essential to developing effective interagency coordination to deliver and operate technology related projects in the Spokane region. The Spokane Region ITS Architecture (included in Appendix B), provides the framework to ensure multijurisdictional agreement and technical integration during the implementation of ITS projects in the region. The Spokane Region ITS Architecture helps coordinate and prioritize ITS project planning among six partnering agencies within the Spokane region, and also considers many other stakeholders in the region. The Spokane Region ITS Architecture uses a six-year planning horizon. It was last updated in 2019, and covers the timeframe from 2019 to 2024.

A companion ITS Project Implementation Plan (included in Appendix B) has also been developed and was last updated in 2019. The ITS Project Implementation Plan has a three-year planning horizon. The 2019 update covers the timeframe from 2019 to 2021. The ITS Project Implementation Plan describes the operational priorities of the region for the near term in determining a 6 year investment plan for projects that will meet those operational priorities. The Implementation Plan is developed and updated with collaboration from all partner agencies and is used to advocate for revenue sources as they become available and as they support the purpose of advancing technology and improving operations within the Spokane Region.

2.0 DIVISION STREET CORRIDOR AREA

The Spokane Region ITS Architecture contains a regional inventory of ITS. However, the inventory is fairly high-level, and does not speak to any specifics of ITS located on or in the Division Street Corridor. It does refer to the following information:

- traffic signal systems,
- traffic signal field equipment, and
- other ITS field elements owned by the city of Spokane, Spokane County, and Washington State Department of Transportation (WSDOT).

One of the major ITS inventory elements noted in the Spokane Region ITS Architecture is the Spokane Regional Transportation Management Center (SRTMC). The SRTMC is a multijurisdictional enterprise, established by the signing of interlocal agreements, and consisting of six partner agencies including: City of Spokane (COS), City of Spokane Valley (CoSV), Spokane County, Spokane Transit Authority (STA), Washington State Department of Transportation (WSDOT), and Spokane Regional Transportation Council (SRTC). The SRTMC has control capabilities for WSDOT and certain local agency ITS devices, including traffic signals, Closed Circuit Television (CCTV) Cameras, and Dynamic Message Signs (DMS) on or in the Division Street Corridor. The SRTMC is currently located in downtown Spokane.

The Advanced Transportation Management System (ATMS) is a key hardware and software platform for TMC activities, including traffic signal control, and control of other ITS devices around the city and county. Additional functionality for ATMS is planned for the future.

The following paragraphs list and describe ITS field equipment located on or in the Division Street Corridor:

- **Fiber optic communications infrastructure:** Used primarily for communications between the SRTMC and ITS field elements located along the corridor. The fiber optic communications infrastructure is used for traffic signal interconnect – for communications from one traffic signal controller to another. This infrastructure also connects the city's traffic signal control central system to the traffic signal controllers in the Division Street Corridor. There is some interagency sharing of this infrastructure, including public safety agencies.
- **Traffic signal controllers:** The City of Spokane and WSDOT own and operate traffic signal controllers in the Division Street Corridor. Most of the controllers are older National Electrical Manufacturers Association (NEMA) controllers that the city is planning to upgrade sometime in the future. The local agencies and WSDOT would like to standardize on a single traffic signal controller in the region, if possible, to make interagency coordination and cooperation easier and more efficient.
- **Traffic signal control central system:** The city currently employs a central system called TACTICS. It is used for central control, monitoring, maintenance, and reporting on traffic signal operations. The city and the SRTMC both have access to the TACTICS system and can control, monitor, maintain, and produce reports in the TACTICS system from their respective management centers.
- **Advanced Traffic Signal Performance Measurement (ATSPM):** ATSPM has been deployed at a limited subset of intersections in the Division Street Corridor. ATSPM generates and collects high-resolution data by a data logger at each signalized intersection. The unprocessed data is sent to a central location where it is stored for later analysis. Just a few of the performance metrics monitored by the ATSPM systems include, vehicle approach delay, vehicle approach volumes, vehicle approach speeds, vehicle arrivals on red, and many, many more. ATSPM software is used to calculate signal performance measures and produce visual reports for staff and public consumption.
- **Closed Circuit Television (CCTV) Cameras:** CCTV cameras in the field communicate with a central video management system that allows traffic management personnel to pan, tilt, and zoom the

cameras from a central location. The primary use of the CCTV cameras and video management system is to monitor traffic flow, and to assist in incident response. Many of the existing cameras are analog, and the city and WSDOT are in the process of planning and implementing upgrades to more modern digital, Internet Protocol (IP) cameras.

- **Dynamic Message Signs (DMS):** A limited number of DMS are located on the Division Street Corridor. DMS are used to communicate information to en-route travelers. Typical information displayed on the DMS includes traffic and road conditions, closure and detour information, travel restrictions, incident information, and emergency alerts and driver advisories.
- **Wi-Fi Readers:** There are a limited number of Wi-Fi readers located along the Division Street Corridor. The Wi-Fi readers are used to detect Wi-Fi signals coming from smart phones, Wi-Fi equipped vehicles, and other Wi-Fi equipped devices passing the readers. Every Wi-Fi enabled device emits its own unique anonymous identifier known a Media Access Control (MAC) address. The readers and a central system use this information to calculate and store travel speeds and travel time data along the Corridor. Reports can be generated that produce travel speeds and travel time data for the last several months, day of the week, etc. and can be used to detect traffic trends.
- **Permanent Traffic Recorder (PTR) Stations:** WSDOT has a small number of PTR stations on Division Street. They measure mainline volumes only. Traffic count data is stored for later retrieval, reporting, and analysis.
- **Intersection Traffic Count Data Aggregators:** There are a small number of Traffic Count Data Aggregators located along the Division Street Corridor. The Data Aggregators interface to traffic signal controllers, and can provide real-time intersection data to the existing traffic signal control central system. They can also monitor traffic signal controller cabinet health and provide a Global Positioning System (GPS)-based time synchronization for traffic signal controllers.
- **Non-motorized traffic detection:** A small number of bike detection loops are located on side streets along the Division Street Corridor. The loops are used to detect bicycles at the intersection, and actuate the traffic signal to provide a green signal for the bicycle.

3.0 SPOKANE TRANSIT AUTHORITY (STA)

Spokane Transit Authority (STA) provides fixed route bus transit service to the Spokane area. STA also provides paratransit service to transit users whose disability prevents them from using the regular fixed route buses. STA utilizes a suite of technologies known as transit ITS to manage and monitor its bus operations. The following list describes transit ITS employed by STA to manage its bus fleets:

- **STA Fare Payment Smart Card:** A reloadable transit contactless fare card currently used for STA services. Includes electronic pass programs with local schools, colleges, universities, and employers.
- **STA Fixed Route Dispatch:** The dispatch center for STA fixed route vehicles that uses Computer-Aided Dispatch/Automatic Vehicle Location (CAD/AVL) software as well as voice and data communications to assist in transit operations.
- **Vehicle-based technologies – STA Fixed Route Vehicles:** Smart bus technologies including on-board fare boxes with smart card functionality; video and audio surveillance; automatic vehicle location (AVL) functionality; automated passenger counters; automated stop annunciation, smart bus infrastructure that supports future transit signal priority implementation.
- **STA Paratransit Dispatch:** The dispatch center for STA paratransit vehicles that uses computer assisted reservations/scheduling software to assist with operations.
- **Vehicle-based technologies – STA Paratransit Vehicles:** Paratransit vehicles for STA, which have mobile data terminals for coordinating with dispatch.

- **STA Real-Time Customer Information Systems:** Transit customer information system based on real-time information obtained from Smart Bus technologies, including electronic message signs at strategic locations, enhanced web and mobile applications, a real-time transit trip planner, and subscription-based transit information alerts.
- **STA Park and Ride Facilities:** Transit park-and-ride facilities, which are often key passenger hubs and include ITS equipment such as security surveillance cameras, ticket vending machines, and real-time traveler information.

4.0 DATA GAPS

There are no extensive data gaps for ITS in the Division Corridor required to complete the Status of the Corridor memorandum. During more detailed planning, and design, the ITS stakeholders in the region should perform a systems engineering a process to determine the best approach and solutions for any ITS improvements in the corridor. This will ensure that the corridor ITS improvements fit logically into the regional context.

APPENDIX B
Referenced Documents

City of Spokane

City of Spokane Pedestrian Plan
https://static.spokanecity.org/documents/projects/pedestrianplan/spokane-final-pedestrian-planadopted-2015-11-02.pdf

City of Spokane Bicycle Master Plan
https://static.spokanecity.org/documents/projects/bicycle-master-plan/2017-bicycle-master-plan.pdf

Division Street Gateway Study
https://static.spokanecity.org/documents/projects/main-avenue-streetscape/division-street-gateway-study.pdf

City of Spokane Comprehensive Plan
https://my.spokanecity.org/shapingspokane/comprehensive-plan/

North Hill Neighborhood Action Plan
https://static.spokanecity.org/documents/projects/north-hill/north-hill-final-draft-plan-2015-06-16.pdf

Shiloh Hills Neighborhood
https://shilohhills.spokaneneighborhoods.org/documents/

Nevada Heights Neighborhood
https://my.spokanecity.org/projects/nevada-lidgerwood/

Logan Neighborhood Identity Plan
https://static.spokanecity.org/documents/projects/logan/logan-identity-plan.pdf

Emerson-Garfield Neighborhood Action Plan
https://static.spokanecity.org/documents/projects/emersongarfield/emerson-garfield-final-plan-07-10-14.pdf

Riverside Neighborhood
https://my.spokanecity.org/neighborhoods/councils/riverside/

East Central Neighborhood Plan
https://static.spokanecity.org/documents/projects/tip/east-central-neighborhood-plan-update.pdf

City of Spokane Decorative Street Lighting Districts

Spokane Regional Transportation Council

Spokane Regional ITS Architecture, 2019
https://www.srtc.org/wp-content/uploads/2020/01/SpokaneRegionITSArchitecture2019_Final.pdf

Spokane Region ITS Project Implementation Plan, 2019-2021 Regional Priority ITS Project List

Spokane Transit Authority

Feb. 2020 Title VI of the Civil Rights Act Program
https://www.spokanetransit.com/files/content/2020_Title_VI_Plan_Working_Draft__wAttachments_Public-DraftREVISED.pdf

2018 Annual Route and Passenger Facilities Performance Report
https://www.spokanetransit.com/files/projects-plans/2018_Route_Report_Combined.pdf

APPENDIX C
Data and GIS Datasets

City of Spokane

- Division Street Turning Movement Counts, 2016
- City of Spokane Signal-Control Infrastructure for North Division Street
- City of Spokane Curb Lines and Parcel Boundaries
- City of Spokane Current Zoning, Comprehensive Planning, and Neighborhood Boundaries
- City of Spokane Bicycle and Pedestrian Data

Spokane County

- Spokane County Current Zoning, Comprehensive Planning
- Spokane County Curb Lines and Parcel Boundaries

Washington State Department of Transportation

- Division St. Five-year Crash Data
- Division St. 2019 Northbound and Southbound Traffic Statistics
- Division St. 2019 Northbound and Southbound Traffic Volumes
- Division St. to Montgomery Ave. Warrants, 2017 Letter to City of Spokane
- Division St. Monthly 2019 Traffic Statistics

Spokane Regional Transportation Council

- Transportation Barriers per Census Tracts
- Demography per Census Tracts
- Division Street Existing Conditions
- Lime Trip Data
- Natural Environment Data
- ITS Field Device Map
- Speed Limits
- Regional Bike Network
- WI-FI Travel Time and Speed Device Locations
- 2015 Model Files
- 2040 Model Files
- Regional Bike Network

Spokane Transit Authority

- 2018 25 Route Boarding Data
- Stop Amenities and ADA Survey
- Division Street Headways
- 2019 Lift Usage
- Sept. 2018 Route 25 Run Times
- Sept. 2019 Line
- Sept. 2019 Stops
- June-Sept. Youth Pass Data
- HPT Design Standards

APPENDIX B

DivisionConnects Focus Group Findings Report

Branding • Advertising • Digital
Public Relations • Social Change

TO: Jason Lien, SRTC & Mike Tressider, STA

FROM: Shireen Khinda & Christine Varela, DH

DATE: October 14, 2020

RE: DivisionConnects Focus Group Findings Report – Round 1

DivisionConnects Focus Group Findings Report – Round 1

INTRODUCTION

As a part of broader public outreach and community engagement efforts, the DivisionConnects project team conducted two focus groups to engage the public in conversation about the future of the Division corridor. The following is a brief memo report recapping round one of the DivisionConnects focus groups which took place on October 7th and 8th, 2020 via Zoom.

In total, there were 14 focus group participants. Their perspectives and feedback are reflected in this report throughout four sections for the project team's review and consideration:

- **Key context** – Page 2
  - Recruitment details
  - Travel habits
- **Potential improvements** – Page 3
  - Challenges
  - Improvement ideas
- **Aspects to maintain** – Page 8
- **Inspiration for the future of Division** – Page 9
  - Admire
  - Avoid

Additionally, this report includes an appendix with the following content:

- **Appendix** – Page 10
  - Focus group recruitment methodology
  - Participant demographics
  - Focus group discussion questions
    - Also includes quantitative data captured during Zoom Polls

KEY CONTEXT

Recruitment details

Focus group participants were recruited through diligent email and phone outreach efforts. After building a list of contacts and engaging almost 400 organizations along the Division corridor, including neighborhood groups, churches, schools, government organizations, business development organizations and private businesses, 15 individuals responded with interest in volunteering for a 90-minute virtual focus group via Zoom. Of the 15 respondents, 14 participants were able to attend.

Participants were informed that their feedback and ideas, as well as thoughts from our other focus group participants, will help inform proposed alternatives and shape the Division Street corridor. Participants were encouraged to provide honest, open feedback and represent not only their own interests, but also the interests of their customers, employees and stakeholders where relevant.

Additional focus group recruitment details and participant demographics are provided in the Appendix.

Travel habits

At the start of the focus group discussion, two quantitative questions were asked using a Zoom Poll feature to better understand the participants' travel habits. (Note: One participant had to leave the focus group early and their responses were not captured in the poll questions.)

For Question 1 regarding modes of transportation used when traveling along Division Street, all but one of the 13 focus group participants who took the poll indicated they drive a car alone along Division Street. Additionally, five participants indicated they walk along Division, four participants take a bus, two participants use a scooter and one participant bikes.

For Question 2 regarding why they travel along Division Street, all participants who took the poll (13 individuals) indicated they go shopping, run errands or recreate along Division Street. Almost half of the participants indicated they live or own property near Division Street.

Discussion questions and further quantitative data regarding travel habits are provided in the Appendix.

POTENTIAL IMPROVEMENTS

Overall, participants' feedback reflected an understanding that Division Street is not ideal for any specific mode of transportation – driving, transit, walking, biking or using a scooter.

In particular, **several challenges** were identified by participants, such as:

- Safety
    - Lack of space when walking, biking or using a scooter next to vehicle traffic lanes
        - One participant shared, "I will occasionally walk, and it often feels a bit crowded or frantic. I don't usually enjoy my experience walking on the sidewalk on Division."
        - Another shared, "A separation between the sidewalk and the road personally would feel safer."
    - Need for improved or increased number of crosswalks
        - One participant shared, "With the mall on Division, we feel there are issues of safety with jaywalking. There is no crosswalk at Wabash. We would value some other sort of crossing for pedestrians."
        - Another participant mentioned that crosswalks were potentially challenging to navigate for children and individuals with mobility issues.
        - Another participant commented that getting around Hawthorne and across the big crosswalks was challenging, especially when accessing transit or shops.
    - Lack of enforcement around vehicle speed limits, driving behavior (excessive lane changes)
        - One participant shared, "The Ruby kind of thing is funky. There are some blind spots."
        - Another shared, "South of the couplet, the car speeds there are high. Drivers are making decisions to improve their own position, and they are not looking for pedestrians, bikers. I don't think it's a matter of making the sidewalk better. It is the traffic that makes people feel unsafe."
    - Noisy, intimidating and not enjoyable to travel along regardless of the mode of transportation
        - One participant shared, "Division is hectic and only used to get somewhere rather than to enjoy."
        - Another shared, "There's no reason to go on Division unless to visit a specific business."

- Sharing roadways with large vehicles tight or dangerous
  - One participant shared, “People are panicking in small cars with large trucks and buses around them. People don’t drive by to see what is going on. They have their blinders on just trying to make it to their destination.”
  - Several participants echoed this sentiment.
- Crossing the intersection intimidating because of length or vehicles coming from several directions
  - One participant shared, “When you’re by the car wash, there’s not a lot of signage about what lane you need to be in. I would hate to be crossing there, it’s chaos.”
  - Another shared, “Wellesley and Francis are dangerous. It just feels unsafe as a driver and for the folks crossing and doing stuff.”
- North end of corridor particularly unsafe in inclement weather
  - One participant shared, “Wendle at the Y the traffic is very different. Coming down that hill can be quite dangerous. “
  - Another participant shared similar sentiments about the same location, saying “It’s really interesting going down that fast hill. Maybe there should be warnings to slow down in inclement weather.”

- <u>Physical appearance</u>
  - Lack of environmental niceties such as trees, shrubs, plants, benches
    - One participant shared, “I was thinking trees are appreciated but only early in their growth. Then they are impediments.”
  - Several empty lots or buildings considered unappealing
    - One participant shared, “Division feels sterile. Other corridors are more warm and pleasant looking.”
    - Another shared, “There are big lots, a sea of parking. Not a fan.”
  - Several businesses with uninspired facades
    - One participant shared, “Division is like a concrete jungle, there’s not a lot attractive. I travel mostly the north end of it. You don’t get a good feeling when you drive down it.”
  - Lack of appeal does not foster neighborhood feeling or desire to visit neighboring businesses
    - One participant shared, “When you’re on Division you don’t walk next door to neighboring businesses.”
    - Another shared, “It’s harmful for the community to not be able to access businesses on Division [through multiple modes].”
    - Another shared, “Division feels disconnected like you’re not driving through a neighborhood.”

- Speed & reliability
    - Division Street considered slow for car drivers & severely backed up during rush hours
    - Signal timings unideal for cars drivers, considered "off"
        - One participant shared, "From Wellesley headed north you can get backed up a lot. The signals aren't timed well."
        - Another shared, "I'm frustrated with light time for Francis."
    - Medians preventing left turns
        - One participant shared that making left turns on Division is a challenge. They shared their experiences with often having to go around parking lots to be able to get back onto Division in the direction they needed to because of permanent medians on Division.
        - Another shared, "Someone mentioned this earlier. There's a lack of left turns you can make. You have to go around the block several times to get where you need. It happens every time I'm on Division. I don't judge, I just go around the block."
    - Frequency of transit is considered slow
        - One participant shared, "Yes, we have an extremely enjoyable transit system and transit users, but transit is never fast enough. There is large room for growth in that sense. It's also a matter of equity." The participant's other comments echoed sentiments around improving reliability and accessibility so that those who rely on transit for getting to work, appointments or critical services can rely on it.
        - Another shared, "I value the transit in all directions. It's desirable, easy access. Should be frequent and timely."
        - Another participant who is a frequent transit rider shared, "I don't take the buses on Division because it takes longer than driving."
- Land use
    - Re-zoning along Division to promote growth and safety
        - One participant shared, "The corridor has general, commercial and retail. Make it better for diversity in construction."
        - Another shared, "The transition from large retail into neighborhoods on either sides of Division feels awkward."

Participants expressed the need for improvement on Division Street regardless of the mode of transportation they take.

Several **potential improvement ideas** were brainstormed by the participants, including:

- Safety
    - Increasing physical space between car lanes and sidewalks
        - One participant shared, "There needs to be separation for walking and biking from the cars."
        - Several participants in both focus groups echoed this sentiment.
- Biking
    - Adding bike lanes where possible on Division Street or neighboring north/south streets
        - One participant shared, "I would bike on Division if it was more biker friendly. In some areas it is illegal to bike. There are lots of east/west bikeways but perhaps all bikeways have to be off of Division."
- Physical appearance
    - Creating opportunities for green spaces, such as low shrubs, trees, etc.
        - One participant shared, "Trees would be a huge help. We feel the heat when we're walking. It's a really big deal for transit users. Make people who are depending on transportation comfortable and safe."
        - Another shared, "Developers are required to put a certain amount of trees in, but Spokane Police Department wants them removed so we don't have any line of sight issues. I am not a fan of street trees, but I'm all for shrubbery."
    - Considering aesthetics and nods to local culture through design when developing physical barriers, etc.
        - One participant asked, "Could we build nodes or key areas to make things more walkable and appealing?"
        - Another shared, "Maybe we could have a center green strip as a stopping point in a crosswalk so there is some relief."
        - Another shared, "We could use friendlier materials," regarding the use of more appealing, custom materials to create an inviting environment.
- Land use
    - Re-zoning at east/west connections to Division, so that large retailers are not backed up against residences
        - One participant shared, "Could there be more active, denser residential leading up to Division? Then things will develop more."
        - Another shared, "Allow for mid-level living instead of residential right next to busy streets and businesses."

- Transit use
    - Decreasing number of bus stops or considering dedicated bus lanes and/or signal priority to improve overall timeliness and traffic flow
        - One participant shared, "We can have dedicated bus lanes, but only with dedicated sidewalks."
    - Increasing frequency of buses or number of buses that serve the route
        - One participant noted, "The level of transit that exists on Division should be maintained but also improved if possible."
    - Improving accessibility of buses, including boarding platforms, benches, shelters, and physical location of stops
        - One participant shared, "On bus stops they should put coverings and awnings. There's only usually a bench and sign."
        - Another shared, "Maybe fewer stops, but more well identified safe stops might speed things up and also make it safer for kids and adults."
        - Two other participants shared sentiments around bus stop locations at the north end of Division. One said, "There are people who want to join the YMCA, but say 'I'm so far north and busing is my only option,' and they don't have the capacity to walk so far. The last bus stop is far away. We would have an interest in seeing that change so people have access to the YMCA and access to services that improve their health outcomes."
    - Creating more permanent structures for transit as a way to support business growth
        - One participant shared, "If you were building raised ramps and more permanent structures, developers would want to build on Divisions and tenants would stay because it's more established."
- Speed & reliability
    - Optimizing signal patterns and timings
        - One participant shared, "I think it's tough when you look at the traffic load on Division. One thing about Boise is a lot of the intersections have blinking yellow lights. If there's no traffic, people can actually turn. This could help traffic flow on Division."
        - Another echoed this sentiment, sharing, "They time their lights so well down there [in Boise]. It has ebbed in flowed on Division, but we don't have it right."

ASPECTS TO MAINTAIN

Participants also identified a few key aspects that they hoped would remain along Division Street, such as:

- Speed & reliability
    - The east/west connectivity
        - One participant shared, "It has good east/west connectivity. The roads/lanes are spaced well. You don't have to be on Division the entire way. You can save a lot of time coming up Hamilton/Nevada."
        - Another shared, "That is a good point. I want to echo that; the simplicity of getting onto and off of Division."
    - General reliability of transit and driving on the Division corridor
        - One participant shared, "My kids feel good about transit on Division. It is consistent, reliable."
        - Another shared, "Division feels efficient in a car. Gets you where you need to go. Works really well in the snow."
            - Others echoed the sentiment about Division being more reliable than other corridors in inclement weather.
        - One participant shared, "Division feels like a freight corridor. There are parts of Monroe or Maple/Ash where lane lines are so narrow, I barely fit in turn lanes with my truck. Division feels more open, doesn't have that problem."
- Business presence
    - Easy access and strong visibility
        - Another shared, "I would love to see improved access for everyone and more people able to travel to businesses along Division so there will be stronger businesses and less of the ugly, empty lots and buildings."
        - One participant shared, "Right now, signage is really good. You can see the businesses you've never been to. You can see them from quite a distance because of street level signage. Please take this into consideration if we think about bus only lanes, protected structures, to ensure visibility is as clear as it is now. Especially with how the traffic is, don't want to have to make a last minute jag over to where you need to get to."
        - One participant shared, "I appreciate it's relevance; Everyone knows where Division is, so it makes it easy to direct folks to 'by Division' or 'on Division'."

INSPIRATION

Participants shared a variety of domestic and international streets, corridors or aspects of transportation infrastructure that they **admired**. The common themes here were a desire to optimize speed and reliability, physical appearances and land use along the Division corridor.

- At least three participants mentioned Boise, as noted in previous statements above, specific to light-timings and aesthetics.
- One participant shared, "I love traveling on Monroe. I'm more inclined to pull over and park to make a quick stop and visit businesses."
- Another participant shared, "In Paris and Hong Kong, they have short shrubbery that help define where people should walk and cars should drive. Maybe to soften hardscape on Division this would be great. I'm all for more trees too to tick down the amount of concrete we have."
- One participant commented, "Cedar Avenue in Minneapolis parallels one of the light rail lines. When the light rail went in, there was a land use comprehensive plan to re-energize the area. They thought about how that was going to develop as they developed the light rail. I think they did a really good job."
- Another shared, "Canal Street in New Orleans is fairly wide like Division and has two lanes in each direction. Although it separates the French Quarter from the hotel district, it has a trolley in the middle and good connectivity."
- Another shared, "In Barcelona, there are walking areas in the center of very busy traffic lanes, but they are vey well protected. I felt safe and it seemed to work well for all modes."

Some participants shared thoughts about other corridors they wouldn't want Division to resemble, and want the project team to **avoid.**

- One participant shared, "I don't want it to look like Aurora Street in Seattle."
- Another echoed this, saying, "It has BRT, but the atmosphere is not any better."

APPENDIX A

Focus group recruitment methodology

In preparation for focus group participant recruitment, DH developed a list of 378 organizations whose physical address is located along the Division corridor, between Monroe and Division on the west, and between Nevada or Hamilton and Division on the east. These organizations included neighborhood groups, churches, schools, government organizations, business development organizations and private businesses nearby and along the corridor.

DH then engaged contacts at all 378 of these organizations via email and phone calls across a three-week period to share the opportunity to volunteer for DivisionConnects focus groups, and/or participate in other public feedback avenues. DH staff sent two rounds of emails to the organizations on the list. DH also conducted two rounds of outreach via phone to over a hundred organizations on the list for whom we did not initially secure an email address. When additional email addresses were secured, DH emailed these organizations and then followed up days later via email again.

As a result of these organic outreach efforts, just 15 individuals responded to a Doodle poll indicating their willingness and availability to participate. DH then was able to confirm 14 participants total; seven for the focus group on October 7th and seven for the focus group on October 8th. One participant had to leave the focus group early and their responses were not captured in the poll questions.

Initial outreach email

Hi there,
Hope you're well and staying healthy! I'm reaching out to you about DivisionConnects, a transportation and land use project focusing on the Division Corridor in Spokane.
As we envision the future of Division Street, we're seeking public feedback around how the highway can improve, what elements should remain the same and how Division can become more accessible for all modes of transportation in the long-term. This is an opportunity for community members and business owners to share their voices and present their needs so planning efforts include as many perspectives as possible.
There are multiple avenues available for community members like you to help shape the outcome of this project. Currently, we are seeking participants for virtual focus groups. These focus groups would be conducted in late September/early October and again in late October/ early November, and are a completely voluntary commitment to participate in two facilitated hour-and-a-half discussions with less than 10 other participants. If you are interested in participating, please fill out this Doodle Poll with your general availability. If you are selected to participate, we will follow up with additional details within the next two weeks.
If you'd rather provide written feedback, please follow the link to an Interactive Map/Questionnaire that will be available through the end of September. We appreciate any and all feedback as we embark on this effort.
Please let me know if you have any questions. I look forward to hearing from you!

Participant selection email

Hi there,
Thank you for your willingness to participate in the DivisionConnects study! We are excited to inform you that you have been selected as a focus group participant. We appreciate you previously providing your availabilities via Doodle, and we understand that your availabilities may have changed since then. In order to best schedule all participants, please email us identifying any of the following dates/times which you are NOT available by the end of day Thursday 10/1:

- *Monday Oct 5 from 2pm-3:30pm*
- *Monday Oct 5 from 3:30pm-5pm*
- *Weds Oct 7 from 3:30pm-5pm*
- *Thurs Oct 8 from 2pm-3:30pm*
- *Thurs Oct 8 from 5pm-6:30pm*

We will then communicate with you next week as to the final date/time of your focus group, as well as provide you with further meeting details and instructions. Thank you again for your time, and we look forward to hearing from you!

Participant confirmation email

Hi there,
Thank you for your quick response. We have scheduled you for a virtual focus group session via Zoom on Thursday, October 8th from 5-6:30pm. I will send a calendar invite your way to act as a placeholder for the focus group session.
Early next week, I will follow up with the Zoom meeting link.
In the meantime, please feel free to fill out this optional demographic survey: https://www.surveymonkey.com/r/3DN78TV. It should be quick, and the information collected will only be used to help inform our future outreach efforts.

Participant demographics

DH developed an optional, anonymous demographic SurveyMonkey survey to understand the makeup of our final focus group audience. DH then distributed this survey as participants were confirmed, as outlined in the participant confirmation email above.

The following demographic data represents seven of the 14 focus group participants. DH sent a reminder to the focus group participants to encourage completion of this survey, but does not anticipate that there will be 100% completion. If there are any additional participants in the survey, DH will provide updated results. Here are the current results:

Age

If making assumptions about the age of all focus group participants, representation amongst younger audiences was lacking.

ANSWER CHOICES	RESPONSES	
Under 18	0.00%	0
18-24	14.29%	1
25-34	0.00%	0
35-44	42.86%	3
45-54	28.57%	2
55-64	14.29%	1
65+	0.00%	0
TOTAL		7

Household income

If making assumptions about the estimated yearly household income of all focus group participants, their incomes were generally diverse but did not likely fall under $30,000.

ANSWER CHOICES	RESPONSES	
Under $15,000	0.00%	0
Between $15,000 and $29,999	0.00%	0
Between $30,000 and $49,999	28.57%	2
Between $50,000 and $74,999	0.00%	0
Between $75,000 and $99,999	0.00%	0
Between $100,000 and $150,000	28.57%	2
Over $150,000	42.86%	3
TOTAL		7

Ethnicity

If making assumptions about ethnic representation, the ethnicities of the focus group participants were predominantly White or Caucasian.

ANSWER CHOICES	RESPONSES	
White or Caucasian	100.00%	7
Black or African American	0.00%	0
Hispanic or Latino	0.00%	0
Asian or Asian American	0.00%	0
American Indian or Alaska Native	0.00%	0
Native Hawaiian or other Pacific Islander	0.00%	0
Another race	0.00%	0
Prefer not to say	0.00%	0
TOTAL		7

Gender

If making assumptions about gender identity, the genders of the focus group participants were equally balanced.

ANSWER CHOICES	RESPONSES	
Female	57.14%	4
Male	42.86%	3
Other	0.00%	0
TOTAL		7

Focus group discussion guide and questions

The following is a brief version of the focus group discussion guide and approved questions.

Let's get into the discussion part of our session. The questions I will ask will fall under 3 topic areas. We'll want to hear how you feel about Division now, or perhaps pre-COVID-19.
We'll also want you to keep in mind that we're planning for the future – ten years down the line. How do you imagine Spokane will be? How do you want the Division Street corridor to look and feel? Keep in mind SUBJECT MATTER EXPERT's notes about what we do and do not have control over, but please share ideas or inspiration you have.

Remember - we want your honest, candid thoughts and feedback today. The goal of this focus group is not group consensus. Speak out. If you are representing an organization, whether a small business, church, nonprofit, social service, government organization, school district, neighborhood council or larger business, we hope you bring that perspective, as well as needs of your customers, stakeholders and clientele to the table.

For our first two questions, we will be using the polling feature.

[Below are two questions that were asked using the Zoom Poll feature. Both questions allowed participants to select multiple answers. Quantitative data such as cumulative responses are indicated next to the response options.]

Question 1: What mode(s) of transportation do you use when traveling along the Division Street corridor?

a.) Take a bus (4 participants)
b.) Use a scooter (2 participants)
c.) Walk (5 participants)
d.) Bike (1 participant)
e.) Drive alone (12 participants)
f.) Drive with others or carpool (8 participants)

Question 2: Why do you travel along the Division Street corridor?

a.) I use Division to commute to/from work (3 participants)
b.) I go shopping/run errands/recreate along Division (13 participants)
c.) I live or own property near Division (6 participants)

For this next question, think about the primary way you travel along Division.

Question 3: If at all, how does traveling along Division feel? As you share, please also let us know what mode of transportation you use, as that can provide helpful context for us.
Probes: How else would you describe your experiences traveling along Division? Reliable/convenient, fast, enjoyable, safe?
Let's get into some future-focused questions now – think 10 years from now, how Spokane may be in the year 2030. To give you an idea of what 10 years ago can feel like, in Spokane 10 years ago, we were just breaking ground on the Kendall Yards construction, and Main Street in Downtown Spokane looked quite a bit different.

In 10 years, there may be technological advances we haven't thought about. Consider that the North Spokane Corridor may be completed too.

Question 4: What outcomes are most important for you/your organization to see in the Division Street corridor in the future?
Probes: Can you tell us more about that?

Question 5: What specific things, if any, about the Division Street corridor do you value?
Probes: Can you unpack that for us? Why do you feel this is important? What do you like about it?

Question 6: Which streets in Spokane or in other cities, if any, do you admire?
Probes: This doesn't have to be a wide or long corridor. It can even be a street you live on. Tell us more about that. What aspects do you like/dislike? How do you travel along that street?

Question 7: Is there anything you were hoping to discuss today that we've missed?

[Initiate closing/recap of focus group themes/next steps]

Thank you all for your engagement and willingness to share with the group today.
We appreciate hearing your thoughts about how you experience Division now, what you value about the corridor, and what your vision and hopes are for Division in the future.

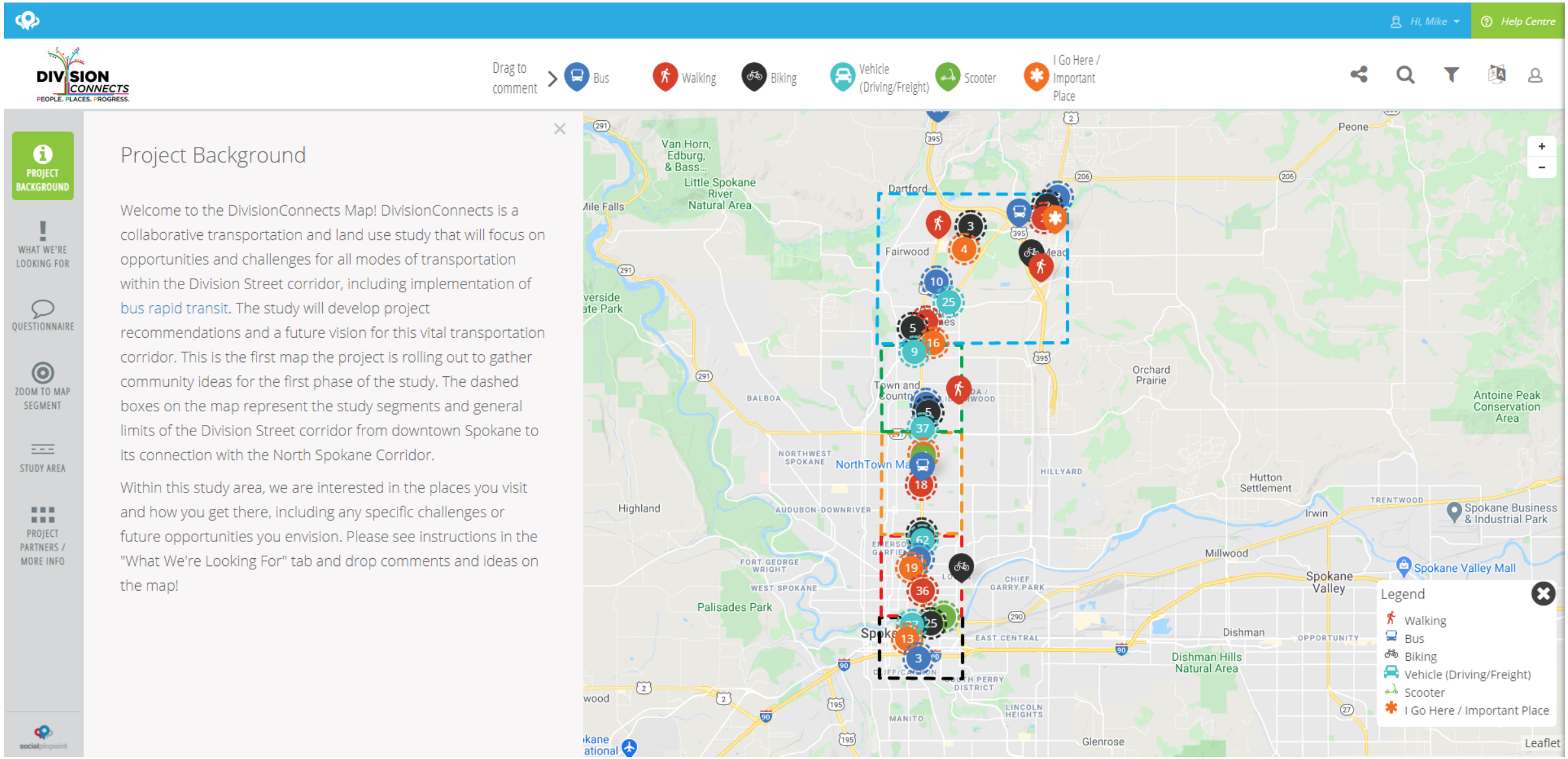
As I mentioned in the introduction, we are going to compile this group's feedback along with feedback from other focus group participants for the DivisionConnects project team.

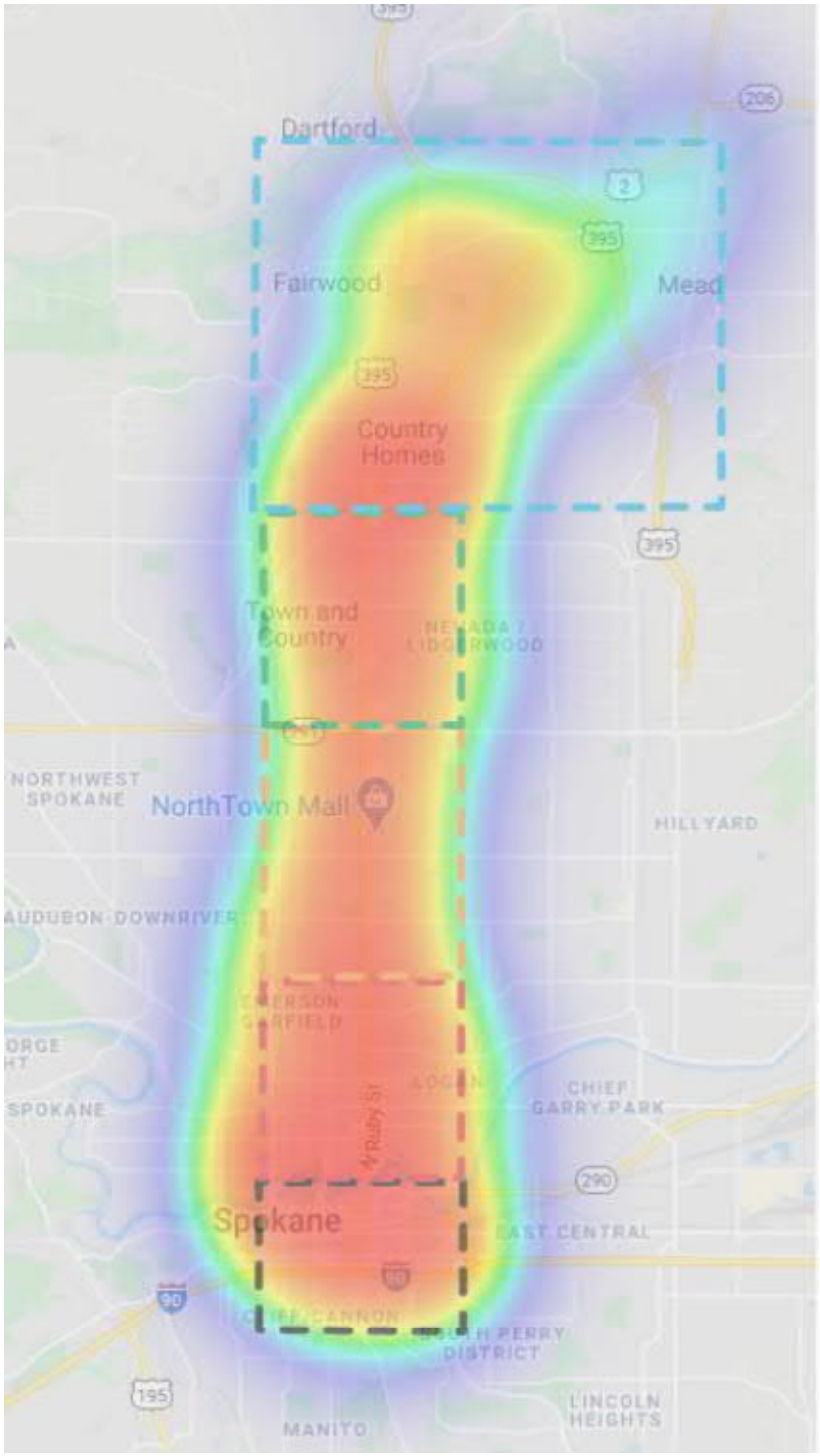
As our outreach coordinators may have shared with you and SUBJECT MATTER EXPERT mentioned earlier, we are looking forward to connecting with you again for another round of focus groups in early November. During those sessions we will get into more specifics regarding proposed changes to segments of the Division Street corridor and will seek your feedback on these transit alternatives. Our team will be reaching out to schedule these with you in the coming weeks.

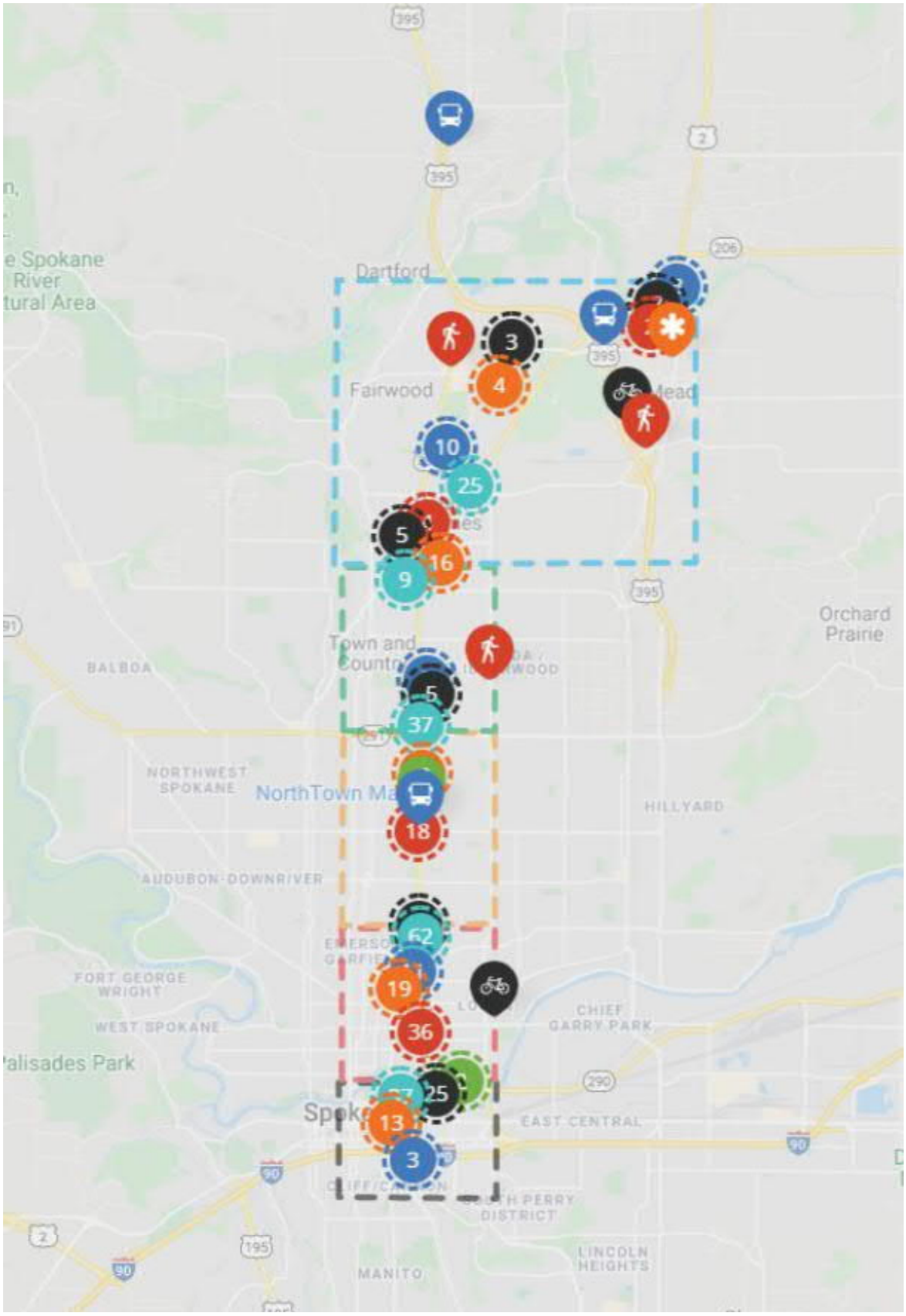
Thank you again for your time, and please reach out to us if you have any questions.

APPENDIX C

DivisionConnects Social Pinpoint Summary


Hi, Mike
Help Centre
DIVISION CONNECTS
PEOPLE. PLACES. PROGRESS.
Drag to comment
Bus
Walking
Biking
Vehicle (Driving/Freight)
Scooter
I Go Here / Important Place
PROJECT BACKGROUND
WHAT WE'RE LOOKING FOR
QUESTIONNAIRE
ZOOM TO MAP SEGMENT
STUDY AREA
PROJECT PARTNERS / MORE INFO
Project Background
Welcome to the DivisionConnects Map! DivisionConnects is a collaborative transportation and land use study that will focus on opportunities and challenges for all modes of transportation within the Division Street corridor, including implementation of bus rapid transit. The study will develop project recommendations and a future vision for this vital transportation corridor. This is the first map the project is rolling out to gather community ideas for the first phase of the study. The dashed boxes on the map represent the study segments and general limits of the Division Street corridor from downtown Spokane to its connection with the North Spokane Corridor.
Within this study area, we are interested in the places you visit and how you get there, including any specific challenges or future opportunities you envision. Please see instructions in the "What We're Looking For" tab and drop comments and ideas on the map!
Van Horn, Edburg, & Bass...
Little Spokane River Natural Area
Dartford
Fairwood
Peone
Orchard Prairie
Antoine Peak Conservation Area
Town and Country
BALBOA
NORTHWEST SPOKANE
NorthTown Ma
HILLYARD
Hutton Settlement
Highland
AUDUBON-DOWNRIVER
Irwin
TRENTWOOD
Spokane Business & Industrial Park
Millwood
Spokane Valley Mall
Spokane Valley
FORT GEORGE WRIGHT
WEST SPOKANE
Palisades Park
CHIEF GARRY PARK
EAST CENTRAL
Dishman
OPPORTUNITY
Dishman Hills Natural Area
PERRY DISTRICT
LINCOLN HEIGHTS
MANITO
Glenrose
Legend
Walking
Bus
Biking
Vehicle (Driving/Freight)
Scooter
I Go Here / Important Place
Leaflet
socialpinpoint


Dartford
Fairwood
Mead
Country Homes
Town and Country
NORTHWEST SPOKANE
NorthTown Mall
HILLYARD
AUDUBON-DOWNRIVER
CHIEF GARRY PARK
Spokane
EAST CENTRAL
MANITO
LINCOLN HEIGHTS
206
2
395
90
290
195


Dartford
Fairwood
Orchard Prairie
Town and Country
BALBOA
NORTHWEST SPOKANE
NorthTown Mall
HILLYARD
AUDUBON-DOWNRIVER
FORT GEORGE WRIGHT
WEST SPOKANE
CHIEF GARRY PARK
EAST CENTRAL
MANITO
LINCOLN HEIGHTS
Palisades Park
3
4
10
25
5
16
9
5
37
18
62
19
36
25
13
3

Type	Comment	Up Votes
Biking	Extend Children of the Sun trail north along US2 to the US2/SR206 vicinity. Work with WSDOT on feasibility.	4
Biking	Add a trailhead from the StoneHorse development to the Children of the Sun Trail	0
Biking	Add a trailhead to the Children of the Sun Trail at the Perry Street bridge. Increased access is key to increasing utilization of the trail.	0
Biking	Difficult intersection going Northbound	2
Biking	A crossing island here with bike/ped only through access would create a much safer crossing along Atlantic and would also solve problems with vehicles backing up into the intersection by eliminating left turns off of Indiana.	1
Biking	A crossing island here with bike/ped only through access would create a much safer crossing along Atlantic and would also solve problems with vehicles backing up into the intersection by eliminating left turns off of Buckeye.	0
Biking	The centennial trail changes drastically when it continues onto Upriver. It just becomes a bike lane. Cars continually drive in the bike lane there. It should have a barrier from cars.	6
Biking	This is a trail that goes underneath Hwy 395 that is accessible by both foot and bicycle. Many people use it because it give access to the Whitworth University fields and campus. I would hate to see this underpass access go away due to highway expansion.	2
Biking	Need a ped/bike connection between Pine and the Centennial Trail that doesn't involve a hotel parking lot	3
Biking	E Lincoln Rd could use some biking infrastructure. There is lots of population density near Nevada/Lincoln (apartments, condos, duplexes, etc.) that would use Lincoln to feed into the Division St. BRT	1
Biking	E Cozza Dr could use some biking infrastructure. There is lots of population density near Nevada/Cozza (apartments, condos, etc.) that would use Cozza to feed into the Division St. BRT	1
Biking	This stretch seems rather uneven for biking, there isnt clear routing from Ruby to nonartierial streets for any bike trip heading north from the university district. The cul de sac is unusable in the since it serves no real function for the community. It provides access to the residential units, but keeps the corner from being updated.	1
Biking	Needs to be a bicycling facility that goes up the ridge for bike traffic heading north (there is a large gap between Post and Division; bikes can take Mayfair/Lidgerwood, but for travel west of Division heading north/south, that requires crossing three major intersections unnecessarily)	5
Biking	Need for more east-west cycling connections on Indiana or in the immediate vicinity	6
Biking	add protected bike lanes	2
Biking	This section of Mission doesn't have bike lanes and vehicle speeds high. Hard to access businesses by bike	2
Biking	Atlantic to Mayfair is a major gap in the cycling network; most people cycling through this intersection use the very narrow sidewalk)	5
Biking	Cycling (and walking too) should be better accommodated on the Division St bridge	6
Biking	Post needs physically-protected dedicated right-of-way for people cycling to utilize the route as an access up the ridge to popular Garland District	5
Biking	Atlantic is a great north/south alternative to biking directly on Division/Ruby. The only challenges are at a few major intersections.	1
Biking	When biking to wheel sport, I find that I have to bike on the sidewalk to reach it. Crossing Division and Ruby on bike can be difficult at certain times of the day so I usually just cross at the lights.	3
Biking	Very difficult connection/road crossing to make on a bicycle	2
Biking	Bike lanes lake continuity across Division/Ruby couplet making east west travel along Sharp and Mission challenging. Very difficult to access businesses along corridor by bicycle	3
Biking	very challenging bicycle crossings between 3rd and MLK, particularly south of railroad tracks	5
Biking	Need for good biking connections between downtown and Southern U District / Sprague business district	2
Biking	Awkward area for biking	2
Biking	Sinto is a great east-west cycling route (very low traffic, good connectivity, decent number of nearby destinations), but needs crossing improvements at Division/Ruby	3
Biking	A connection exists to the Gonzaga campus from Division/North River through a series of parking lots. Would be great to have an official path through here with wayfinding.	5
Biking	Need for paved connection around here from the North Bank Trail heading north	1
Biking	Short-term project: traffic-calm Lidgerwood to make a north-south cycling route (taking advantage of the signalized crossing at Wellesley)	2
Biking	Crossing the street on either bicycle or on foot is scary, because traffic is moving so fast here. Need refuge or a crossing light.	3
Biking	Have you ever tried biking on Division Street? I doubt it! It would feel far safer to bike beside the freeway. There is no evidence that Northtown Mall even acknowledges cyclists or pedestrians. It is completely auto-oriented even though it is located in an increasingly urban area. There are SO many opportunities at Northtown Mall and the adjacent strip malls for redevelopment but only if there is quality public transit, cycling, and pedestrian access.	3
Biking	Short-term project: traffic-calm Queen to make it a better east-west cycling connection (to take advantage of the low traffic volumes and signalized intersection at Division)	2
Biking	This is a lower traffic connection east and westbound across the NDC. I prefer it to Mission, when riding my bike.	2
Biking	Crossing here is not easy for bikers, there should be some form of crossing or continuation of the green lane up cincinnati.	1
Biking	The stretch of Spokane Falls Blvd between Bernard and Pine is an uncomfortable gap in what would otherwise be a useful cycling connection between the U District and downtown	2
Biking	Bike connectivity to the North and West is poor from this location. Great multi-use path from the East abruptly ends here.	2
Biking	Poor bike connectivity between Ben Burr trail and Sprague Ave/South University District area. A connection here is needed.	2
Biking	Our brand-new multi-million dollar bridge is difficult to find and access from the northside	2
Biking	There's a sign in the middle of the sidewalk here that is difficult to bike/walk around. (Ben Burr trail from South transitions to sidewalk after bridge.) Trail needs widened here.	1

Type	Comment	Up Votes
Biking	Stairs leading to the Centennial Trail from Division need bike stairway channels on them so that one can easily roll a bike down the stair while walking alongside it down the steps.	3
Biking	Shopping superblock with poor access, especially via bike	5
Biking	Bridgeport is a low-traffic street and thus a good way to cross Division at a signalized intersection. However the queuing area is narrow and very close to traffic. The signal is short, and there need to be improvements to make the signal more accessible to people biking (better connection between Gray Ct and Bridgeport, indicator loops, etc.)	7
Biking	Trying to turn north (merging from North Country Homes Blvd on to 395 traveling north to E. HOLLAND AVE to cross over Newport Highway by Bicycle is at best poor. Users now are redirected to sidewalk because bicycle lane ends. Pedestrian signal at intersection is intermediate and when was the last time an auto user when turning had to get out of their car to access a beg button to activate a signal to turn?	1
Biking	Lyons is a potential east-west cycling and walking route alternative to ped/bike-unfriendly Francis, but needs upgrades (especially this intersection)	6
Biking	Add a separated trail/path for bikes and pedestrian/recreation along US-2 between Hawthorne and Farwell.	2
Biking	A widened sidewalk/sidepath along Division here would do a better job of connecting people from the bridge up to Atlantic, which makes a more comfortable north/south route.	1
Biking	It's difficult to bike to the farmer's market from eastbound 4th. You either have to take the lane on Browne for a block (scary!) or remember to hop on the sidewalk a block early (there's no curb cut at Browne) and ride on the sidewalk to 5th. Crossing Browne at 5th isn't the most fun either.	1
Biking	Montgomery is a low-traffic street, making it good for biking access (future greenway?) especially because it has signals for crossing Division and Ruby. However the signals could use upgrades to be more usable by bike traffic (indicator loops, dedicated bike signals allowing east-west movement at offset intersection on Division, protected intersections, dedicated right-of-way between Atlantic and Astor, etc)	6
Biking	Explore options for an off-street trail to connect Cora to Normandie. The hill creates a major break in connectivity that needs more options for permeability.	1
Biking	A crossing island here with bike/ped only through access would create a much safer crossing along Atlantic and would also solve problems with vehicles backing up into the intersection by eliminating left turns off of Mission.	1
Biking	Add an additional trailhead to the Children of the Sun Trail in southern the portions of Mead. Increased access is key to increasing utilization of the trail.	3
Biking	A roundabout here would be great.	0
Biking	Easier wayfinding or improved non motorized crossings and connections would be appreciated. The current system is not an enjoyable experience of getting from south to the north side.	0
Biking	Bike lane only on S side of Magnesium starting at Division. North side bike lane ends before Colton (S of Magnesium has a bike lanes; N of Magnesium is shared). The 2 westbound lanes (rt turn & straight/left turn) of Magnesium are too narrow to provide safe space for cyclist to continue straight across Division to Price Ave, particularly if necessary to wait at traffic signal. Once on Price, allows cyclist continuation through neighborhood to connect to Country Homes Blvd bike lanes.	0
Biking	Rowan east of Division listed as commuter/recreational route on SRTC bike map, but no connection across Division and to other side of Franklin Park to connect to Rowan Ave west. Only way across Division at Rowan/Division traffic signal is by using ped crossing which only goes to sidewalk in Franklin Park. The short segment bike path in park leading to and centered on intersection is terminated by a curb!	0
Biking	Wall St a primary N-S continuous bike route, but 35 mph, 4-lanes, no bike lanes until north of Whitworth Dr. Listed as a bike route on SRTC bike map.	0
Biking	Wall St a primary N-S continuous bike route, but 35 mph, 4-lanes, no bike lanes until north of Whitworth Dr. Listed as a bike route on SRTC bike map.	0
Biking	Wall St a primary N-S continous bike route. Bike lanes only from Francis to merge with Monroe. From there becomes 35 mph, 4-lane roadway with no bike lanes to just north of Whitworth Dr.	0
Biking	Market needs a grade-separated pedestrian and biking path to link up areas to the north of Deadman Creek with the Children of the Sun Trail and alternative transportation options into the City. I emphasize grade-separated for safety and comfort because the natural topography of the roadway means cars often fly by at 50+ MPH as they go through the dip.	4
Biking	Ban Bicycles from Division	1
Biking	A sidewalk separated from the roadway by a landscaped strip (like here in front of NorthTown) is very conducive to walking, biking, scootering, etc. The separation is great for comfort (less noise & wind turbulence from the road), safety (fast cars aren't zooming by within an arm's reach), functionality (when it rains, you won't get splashed, when it snows the median provides space for snow berm), etc. Needs more of urban feel though (planters vs grass, greater diversity of plantings)	1
Bus	Mead could use STA service. A potential route along Market, ending at a park and ride at US2/SR206. Probably also another route along Farwell connecting to the Hastings Park & Ride	0
Bus	Though this sits just outside the study area, US2/Mt. Spokane Park Drive is a very logical spot for a park and ride/transit center to serve northern Mead and Colbert.	0
Bus	A mid-hill transit stop (with accompanying crosswalk with HAWK beacon, or even a traffic signal) would be good to serve businesses on the hill.	0
Bus	Slightly out of the study area, but a park and ride/transit center/transit terminus here at Hatch road could serve the Midway community, and also enable the logical routing of new transit service north along US395, serving Wandermere Mall. Maybe this is a local shuttle route that provides connectivity to Division BRT which probably will terminate around Hastings/Farwell.	0

Type	Comment	Up Votes
Bus	Drive lanes along the Division/Ruby couplet are excessively wide. There's probably enough room for a dedicated bus lane.	2
Bus	Provide some sort of direct connection from North Division to the medical district w/o having to go through the Plaza (takes up a lot of time).	2
Bus	The NSC has been planned as a multi-modal corridor with future light rail. While light rail is likely several decades away, let's not lose sight of that plan when creating a new master plan for the Division St. Corridor. NSC/Farwell is a logical spot for a transit center and park and ride.	1
Bus	Proposing a new bus route, to run east/west on Farwell/Hastings, and turning north on Market Street in Mead, with a northern terminus at a new Park and Ride at US2/SR206. A new east/west route here will provide passenger feed from Mead/Colbert and denser residential development along Hastings to future Division St. BRT.	2
Bus	The Town and Country neighborhood has a hole in public transit. Other than the 124 North Express that only runs during peak hours, there is no bus service along Country Homes, Monroe, and Wall Street north of Francis. The addition of some local feeder routes here could connect this neighborhood with the Division St. BRT as well as Route 4 Monroe/Regal High Performance Transit Line.	0
Bus	Perhaps there would be an opportunity to add a local bus circulator route along E Cozza Dr to feed into the Division St. BRT. There is a high amount of population density near Nevada/Cozza (apartments, condos, etc.) that could use a local bus route on Cozza for this purpose.	0
Bus	Boosting bus frequency and enhancing the transit experience w/ more stop amenities along Francis Ave can provide critical volume of passenger feed to the Division St. BRT. An enhancing of bus service can also happen before BRT is implemented on Division. The current 30-minute frequencies along Francis won't properly support a high performance transit network.	0
Bus	Bolster transit frequencies and stop along Hawthorne to provide feed into the Division St. BRT whether that alignment ends up being along Division or along Newport Hwy. The success of BRT depends on providing feed into it. Enhanced transit along Hawthorne could also help provide more feed to #25 Division and its 60' buses even today, before BRT is implemented.	0
Bus	Reconfiguring the traffic signal at Newport Hwy/Hawthorne to add a transit-only signal that enables left turns from the far-right lane of northbound Newport Hwy could enable a northbound stop to be added here, serving Safeway, Best Buy, restaurants, etc. How it would work is that all four directions of traffic would receive a red light, allowing a bus to cut across the intersection with its own signal. Could be a good stopgap measure or permanent measure depending on the BRT alignment turns out	0
Bus	I ride the STA Bus from Clark Park to Downtown.	1
Bus	I get off the STA bus from Downtown at Garland.	0
Bus	Bus stops on Jackson are hard to access because there is a signal to cross Division/Ruby on North Foothills/Buckeye, but not at Jackson where the bus stop is actually located	2
Bus	This is a bus terminus point for several lines, including the express down Monroe Ave that we use during the week to and from work (when work at the office resumes). It is very difficult for cars to enter/exit to/from Hastings, the parking lot is too small, the entrance/exit to parking is narrow and awkward. There should be a dedicated drive-thru dropoff (Kiss And Ride, it's called back East) that funnels cars through without entering or obstructing parking.	0
Bus	This is also a bus stop/parking area in front of the shopping mall. It should be utilized FAR more than it is because of the space available. During summer on Tuesdays, it is very tightly packed due to the farmers market. In Winter, the idiot snowplow crews push ALL the snow INTO THE BUS PARKING AREA! Can you PLEASE enforce your rights to the space and maintain the safety of the area by keeping the snow berms OUT of here? This is just laziness by the mall owners and crews.	0
Bus	Large apartment complex, needing individual stop.	0
Bus	Rapid transit at this gateway to Whitworth campus is ESSENTIAL. Whitworth is currently a secluded community. However, they have plans to rebuild their gateway with higher density mixed-use development. Increasing the connection between students and downtown would be a boon for the city and the university.	1
Bus	Can we PLEASE add a park and ride BRT stop here? There are significant residential suburbs out here that have no option other than their car to get to work and many work downtown. Plus, there is plenty of available land adjacent to the Mead Airport.	1
Bus	I like the location of the stop at Jackson because Buckeye-Foothills is a very busy corner with lots of right turners. There should be a full shelter at the Southbound stop at Division and Buckeye, which is exposed to wind, sun, cold, and heat.	0
Bus	This bus stop (as should EVERY bus stop along Division) should have a PULL OUT lane.	2
Bus	Physical distance between bus stops for transfers between STA routes 25 and 33 is excessive and not ideal for transfers. Stops should be placed at the street corner. This will require a fundamental rethinking of Division from prioritizing automobile traffic (the root cause of the physical spread of the bus stops) to prioritizing transit vehicle traffic. BRT route on Division would benefit from convenient transfers onto 33 Wellesley.	3
Bus	Will need a lot of improvement on east/west connectivity for all modes (bus, walking, biking, scootering) in this area to connect the West Central and Emerson Garfield neighborhoods with Division St and its proposed BRT. Currently, there are not many bike routes except bike lanes on Maxwell Ave. There is also no east/west bus route that connects these neighborhoods to Division Street.	1
Bus	Spokane Transit should formalize a partnership with Walmart to enhance the bus stop amenities at Newport Hwy/Hoerner. Currently, the stops are on narrow sidewalks and lack shelters. There are also a lot of abandoned shopping carts due to the reality of Walmart being 1/3 mile from these stops. That's a long way walk w/ hands full of groceries, and possibly small children. Don't blame the customer for abandoning carts - help them out by providing a formal cart return at the bus stops.	1

Type	Comment	Up Votes
Bus	To keep transit stops located as close together as possible, it might be logical to place BRT stops on the left-most lane of both Division and Ruby and do left-hand side boarding along the couplet. It will save people who originate from either side of Division and Ruby from having to cross BOTH wide streets. The closer proximity also helps reinforce BRT's presence. Also, by having the BRT stops on the inside lanes, the cross routes (Mission, etc.) can stop mid-block and be located closer to BRT	2
Bus	add bus lanes until hastings	1
Bus	We really need a bus stop on each side of Division somewhere between North Foothills & Bridgeport. As a resident who lived off on Euclid and Division, working and carrying a toddler on the bus, it was dreadful to miss my stop or (many times, the driver would pass it) and have to walk up the hill with work bags, babe, groceries, and whatever else. I understand not pulling over on a slope, but maybe there is a workaround? Lots of residential area there full of low-income working families.	2
Bus	Could a Division St. BRT hypothetically bypass the Plaza and terminate just south of Sacred Heart at a transit exchange that would also be served by Route #4 Monroe/Regal? The City Line could provide the link between the Plaza and the Division St. BRT. Running the BRT south along Division and Browne toward Sacred Heart could add service to Downtown south of the railroad tracks. This area of Downtown has a lot of low-rise buildings that would be great for future development.	1
Bus	Have previously commented about redesign of Division Interchange to move WB on ramp east to Division (also removes low clearance on McClellan) and close WB off ramp, however, WB off could also be used for a transit ramp.	0
Bus	If signals are to remain, study conversion of either Ruby or Division (or both) to a two-way facility to use one lane for opposite direction bus lane. This would eliminate stops in the lane and drivers behind the bus switching lanes. (I have no idea if this works better than existing conditions)	0
Bus	Land swap the park-n-ride with the WSDOT facility. Bringing the park-n-ride closer to Division could provide better transit efficiency. It could eliminate the two left turns required at Hastings and Mayfair that route 25 currently takes. You could add a transit-only access roadway from Division along the south-side of the parcel and also add a transit signal to speed things up. More land is needed for a parking garage at the Hastings PnR. Proximity to Division also better serves Wandermere Mall.	1
Bus	There should be a transit hub that provides access to the Spokane Arena, new athletic facility, and destination playground at Riverfront Park. This could alleviate parking demands during events and reduce the need for such massive parking lots managed by Spokane PFD. Those lots are precious real estate that could be developed to a higher use in conjunction with a large shared garage.	1
Bus	As traffic on Division declines with the completion of the NSC, repurpose the right-hand lane of Division into a bus-only + right turns only lane. This is a good operational synergy to keep buses on time, and also not hold up too much traffic while buses are stopping/boarding. Of course, this strategy changes if BRT runs along a center alignment.	2
Bus	The right-hand turn lane south of Holland and merge lane north of Holland (both on northbound on Newport Hwy) prevents a northbound bus stop from being added near Newport Hwy/Holland. One resolution could be to move the traffic light on the NE corner of the intersection out of the way and provide a transit-only thru lane so that buses can make a stop here and continue north. However, if this converts to BRT, perhaps a center alignment of BRT lanes would resolve this.	1
Bus	This area is rapidly developing with the introduction of Costco and proximity to the North South Freeway. As it becomes a new commercial hub (sadly probably just big box stores and strip malls), a connection to BRT would encourage healthier and more rapid development.	1
Bus	The physical distance between bus stops here makes transfers between STA routes 25 and 27 a second class experience. For example, an eastbound Francis-to-southbound Division bus transfer requires an 800-foot long walk from Francis/Atlantic to Division/Dalke. To put it in perspective, the NorthTown Mall building is about 800 x 800 feet in dimension. Good performing transit needs very convenient and co-located transfer points.	3
I Go Here / Important Place	Entertainment and Dining is a major destination that could benefit from transit access along US395. Currently, a walk to the Hastings Park and Ride is far (half a mile)	1
I Go Here / Important Place	This stretch of Newport Hwy between Hawthorne and Farwell needs a fundamental rethinking of zoning policy. It's shaping up to be a suburban nightmare with strip malls, which is not conducive to multi-modal transportation nor high performance transit. Also, the clear cutting of the ponderosa pine is sad. This stretch of road used to be so scenic. Policy should require ponderosa pine to be maintained. Ponderosa pines are truly part of the character and feel of Spokane.	0
I Go Here / Important Place	Area needs better land-use/zoning policy to make bus rapid transit successful. Warehouses/mini-storage type buildings do not create much, if any, passenger demand for transit, and also detract from the urban character.	1
I Go Here / Important Place	Critical amenity: pharmacy	1
I Go Here / Important Place	The corner of Rowan and Division is a fantastic opportunity for a dense, mid-rise, mixed-use housing and retail project. Its location across from Franklin Park would make this a very desirable spot to live. It's nature as a parking lot is also conducive to land development. Division/Rowan also seems like a natural spot for a BRT stop, which would be great for a future transit oriented development taking the place of this parking lot.	1
I Go Here / Important Place	Beautiful overlook; would make for a good east-west greenway and improved accessibility from the east	1
I Go Here / Important Place	Union Stadium is a destination that could be served well by transit access into Mead, as well as multi-modal alternative transportation infrastructure.	1
I Go Here / Important Place	The Podium (SportsPlex) will be a destination for Spokane residents as well as out of town tourists. Upgrading Cataldo Avenue to have good urban connectivity with Division St. retail, dining, lodging and bus-rapid transit will pay dividends for the vitality of Spokane and the North Bank area.	0

Type	Comment	Up Votes
I Go Here / Important Place	Great site for zoning and land-use policy revision. To make bus-rapid transit successful, we need more residents living along Division Street. The parking lot of NorthPointe Plaza is a great development site for mixed-use, mid-rise, residential buildings and would go a long way to reducing the suburban feel of Newport Hwy.	0
I Go Here / Important Place	Bus Rapid Transit that runs on an extended schedule (20+ hours/day) could finally make taking transit a possibility for evening events at the Spokane Arena. Therefore, there should be an emphasis on providing convenient, safe, and comfortable connectivity between the Spokane Arena and Division Street. Combine that with the consideration of increased housing density along Division, a lot of people could benefit from an enhanced connection between Division and the Arena.	0
I Go Here / Important Place	North Bank area of Riverfront Park is being revitalized and activated. This will create new demand for better pedestrian and transit connectivity on the north side of the River, and create new demand for better connectivity along the east/west routes that connect the area with Division Street.	0
I Go Here / Important Place	The proposed Papillon Towers development and Division Street BRT can provide strong mutual benefits to one another if there is a clear, safe, and comfortable connection to Division Street from the North Bank area.	0
I Go Here / Important Place	Proposed Falls Tower development will be a major population center with residents needing connectivity to Division. Another reason why Cataldo Ave and/or North River Drive east/west axes need to be enhanced.	0
I Go Here / Important Place	We go to RiverPark Square to shop	0
I Go Here / Important Place	Great site for zoning and land-use policy revision. To make bus-rapid transit successful, we need more residents living along Division Street. The parking lot of this strip mall is a great development site for a mixed-use, mid-rise, residential building.	1
I Go Here / Important Place	I use the library on a weekly basis.	0
I Go Here / Important Place	We walk around Franklin Park almost every day. It's a very important location and a beautiful park for Spokane.	0
I Go Here / Important Place	Great site for zoning and land-use policy revision. To make bus-rapid transit successful, we need more residents living along Division Street. The parking lot of this strip mall is a great development site for a mixed-use, mid-rise, residential buidling.	2
I Go Here / Important Place	Really good restaurant; needs better access from the east	0
I Go Here / Important Place	Important amenity: hardware store	2
I Go Here / Important Place	Important amenity: Planned Parenthood	1
I Go Here / Important Place	Garland District: popular cluster of amenities for both residents and tourists	1
I Go Here / Important Place	Critical amenity: Greyhound and Amtrak Stations	1
I Go Here / Important Place	I visit the mall for work lunches plus shop at a few shops	0
I Go Here / Important Place	Mod pizza eat lunch there sometimes	0
I Go Here / Important Place	Downtown Public Library I work here	0
I Go Here / Important Place	Home Depot is a common destination.	1
I Go Here / Important Place	Winco is a common destination.	0
I Go Here / Important Place	Emergency medical services. Access 24 hrs a day.	1
I Go Here / Important Place	Critical amenity: grocery store	5
I Go Here / Important Place	Welcome to spokane. This off ramp is ugly. The burgers are good.	3
I Go Here / Important Place	Ugly. I am tired of looking at this blighted lot. I like the Screaming Yak though. It's a highlight compared to the rest.	0
I Go Here / Important Place	Important destination: Convention Center	1
I Go Here / Important Place	Main Ave between Browne and Division is an important destination (food co-op, lots of restaurants and other shops, co-working space) but is currently a gap in the cycling network, especially for westbound traffic. It would be nice if bus stops were closer, or at least had wayfinding directing to them	1
I Go Here / Important Place	Yoke's Fresh Market is a critical neighborhood amenity and needs good walking/cycling access and wayfinding from the bus stop	1
I Go Here / Important Place	Critical amenity (ethnic food shop)	1
I Go Here / Important Place	Important destination: city park	2
I Go Here / Important Place	Important destination: city park	1
I Go Here / Important Place	Critical amenity: grocery store	0
I Go Here / Important Place	Important amenity: shopping mall (and library)	1
I Go Here / Important Place	Critical amenity: grocery store	2
I Go Here / Important Place	Critical amenity: grocery store	2
I Go Here / Important Place	Popular restaurant for tourists (who don't want to wait in line at Frank's downtown)	1
I Go Here / Important Place	Important landmark/amenity: historic restaurant	0
I Go Here / Important Place	Critical destination: farmers market	1
I Go Here / Important Place	Critical amenity: grocery store	2
I Go Here / Important Place	Critical amenity (hardware store)	1
I Go Here / Important Place	Amenity (office supply store)	0
I Go Here / Important Place	Critical amenity: pharmacy	1
I Go Here / Important Place	Critical destination: Department of Licensing (DMV)	1
I Go Here / Important Place	Lots of restaurants, shops, and other amenities, all difficult/inconvenient to access except by motor vehicle	0
I Go Here / Important Place	We not only shop but have a membership to Blue Zoo and enjoy using the library there.	0
I Go Here / Important Place	We go to Riverfront Park for community activities, to view the river, and use the facilities	1
I Go Here / Important Place	We go here for soccer practices and soccer games	0
I Go Here / Important Place	Critical amenity - grocery store	0

Type	Comment	Up Votes
I Go Here / Important Place	Daily commute to work here. I drive on Division/Ruby every day, both south to reach here and north to return home. Please do not jeopardize my 10 minute commute with unnecessary changes.	0
I Go Here / Important Place	We go to the Arena for concerts and Chiefs hockey	0
I Go Here / Important Place	Great spot for some mixed use building with housing. Adding a transportation hub/large bus stop with a few intersections would make great use of the space as well.	2
I Go Here / Important Place	Fred Meyer/UPS store/Papa Murphys. I use ALL of these businesses, including the Fred Meyer Pharmacy, gas station and garden area. This is a twice a week stop minimum for us accessed in my car.	1
I Go Here / Important Place	Walmart is a common destination.	0
I Go Here / Important Place	Critical stop - hospital and clinic	1
I Go Here / Important Place	Critical and important place - Spokane County Library.	1
I Go Here / Important Place	Costco is a common destination	2
I Go Here / Important Place	Only 24 hr Northside emergency clinic, other than Holy Family. All residents between Deer Park and North Spokane would access this emergency clinic.	1
I Go Here / Important Place	Fire station	0
I Go Here / Important Place	Fire response	0
I Go Here / Important Place	The Division/Ruby Couplet is an outstanding opportunity to revise land-use policies to encourage dense, mixed use, residential/retail/office development. Increasing population density here will greatly increase the success of high performance transit by providing the ridership needed to make it successful. Portions of the corridor are already urban by nature (Kennedy apartments at Gonzaga, Ruby Suites lodging, 940 North student housing, etc.) so there is precedent for it.	3
I Go Here / Important Place	The Wonder Building employment and retail center and Division Street BRT can provide strong mutual benefits to one another if there is a clear, safe, and comfortable connection to Division Street from the North Bank area.	1
Scooter	Ban scooters from Division Ave	0
Scooter	scooters use sidewalks since nowhere else to go	1
Scooter	Sign blocking sidewalk, safety hazard to all users	1
Scooter	A sidewalk separated from the roadway by a landscaped strip (like here in front of NorthTown) is very conducive to walking, biking, scootering, etc. The separation is great for comfort (less noise & wind turbulence from the road), safety (fast cars aren't zooming by within an arm's reach), functionality (when it rains, you won't get splashed, when it snows the median provides space for snow berm), etc. Needs more of urban feel though (planters vs grass, greater diversity of plantings)	3
Vehicle (Driving/Freight)	Drive to Total Wine for drinks.	1
Vehicle (Driving/Freight)	Trying to turn left from Colfax onto Hawthorne can cause a major backup on Colfax. Traffic has become significantly heavier on Hawthorne.	1
Vehicle (Driving/Freight)	Why is the old Costco light still changing instantly for cars pulling up to N Division on Cozza? Costco is LONG GONE... change that timing, make cars at the minor intersection wait for more traffic to pass on Division.	2
Vehicle (Driving/Freight)	Stop for groceries and affordable tools	1
Vehicle (Driving/Freight)	Swap out green ball for green directional arrows for both EB and WB directions of the Division/Sprague signal, particularly EB since no turns are allowed.	0
Vehicle (Driving/Freight)	replace signal with roundabout, perhaps in alignment with Graves Rd.	0
Vehicle (Driving/Freight)	Replace signal with roundabout	0
Vehicle (Driving/Freight)	Replace signal with roundabout	0
Vehicle (Driving/Freight)	Drive to Papa Murphys	0
Vehicle (Driving/Freight)	Drive to Super Supplements for particular health products.	0
Vehicle (Driving/Freight)	A way to get to Highway 2 from Country Homes East bound.	1
Vehicle (Driving/Freight)	Drive here for groceries.	0
Vehicle (Driving/Freight)	Drive here for groceries.	0
Vehicle (Driving/Freight)	Replace signal with roundabout.	0
Vehicle (Driving/Freight)	As with Division/Queen, replace signal with roundabout to improve gap opportunities for all modes	0
Vehicle (Driving/Freight)	Roundabout at 4th/Division in conjunction with reconstruction of Division Interchange	0
Vehicle (Driving/Freight)	Trying to get to Rosauers from Colfax can be challenging due to the heavy traffic on Holland.	0
Vehicle (Driving/Freight)	This is a dangerous intersection. Many people use Holland as a cut through between the highways. People turn into Division from Holland very slowly, but the speed on Division there is 45.	0
Vehicle (Driving/Freight)	This are bottlenecks horribly at rush hour.	0
Vehicle (Driving/Freight)	Drive to Yokes weekly for groceries.	0
Vehicle (Driving/Freight)	This parking lot is strangely located, oversized, and doesn't seem to be usable for future businesses.	0
Vehicle (Driving/Freight)	Drive to family's house.	0
Vehicle (Driving/Freight)	Drive to Great Clips.	0
Vehicle (Driving/Freight)	Central and Division. Central is a 2 lane road, one lane E one lane W. There are always 4 cars at the street light without a turn lane or turn signal. Very busy intersection with the hospital and other medical services available in this area. Employees and patients.	0
Vehicle (Driving/Freight)	Drive to taco bell for food.	0
Vehicle (Driving/Freight)	Drive to Superior Court for work.	0
Vehicle (Driving/Freight)	Drive to Value Village to shop	0
Vehicle (Driving/Freight)	Drive to UGM Thrift to shop	0
Vehicle (Driving/Freight)	I Go to STCU fairly often	0
Vehicle (Driving/Freight)	Drive to Pho Van for pho take out.	0
Vehicle (Driving/Freight)	Drive to Maverik gas station for gas.	1
Vehicle (Driving/Freight)	Drive to Waffle's Plus for food.	0

Type	Comment	Up Votes
Vehicle (Driving/Freight)	Drive to Aloha Island Grill for food.	0
Vehicle (Driving/Freight)	Drive to Franklin Park urgent care for medical services.	0
Vehicle (Driving/Freight)	I use Division to get to and home from work	1
Vehicle (Driving/Freight)	I live on Bridgeport	0
Vehicle (Driving/Freight)	Drive to Guitar Center for audio equipment / musical instruments and accessories.	0
Vehicle (Driving/Freight)	Drive to Trader Joe's for groceries.	0
Vehicle (Driving/Freight)	Drive to Franklin Park for kids to play at playground.	0
Vehicle (Driving/Freight)	Drive to Garland Theater for movies.	0
Vehicle (Driving/Freight)	Drive to Gerardo's for food.	0
Vehicle (Driving/Freight)	Drive to Franz Bakery for bread.	0
Vehicle (Driving/Freight)	Drive to Sports Clips for haircuts.	0
Vehicle (Driving/Freight)	Drive to Merlyn's game shop for gifts/games/etc	0
Vehicle (Driving/Freight)	Drive to Discount Tire for new tires and seasonal tire changes.	0
Vehicle (Driving/Freight)	Drive to Home Depot for home improvement supplies and tools	1
Vehicle (Driving/Freight)	Drive to Wendys for food.	0
Vehicle (Driving/Freight)	Drive to Northwest Seed and Pet for gardening supplies.	0
Vehicle (Driving/Freight)	Drive to Tomato Street for food.	0
Vehicle (Driving/Freight)	Drive to Little Caesars for pizza.	0
Vehicle (Driving/Freight)	Drive to Spokane Discount for home goods.	0
Vehicle (Driving/Freight)	Drive to dentist's office	0
Vehicle (Driving/Freight)	There should be a turn signal on Queen at Queen and Division.	0
Vehicle (Driving/Freight)	Drive to ABC Storage for storage unit.	0
Vehicle (Driving/Freight)	Drive to McDonalds for food.	0
Vehicle (Driving/Freight)	Drive to hospital for medical care.	0
Vehicle (Driving/Freight)	Poor visibility, lots of people merging lanes, difficult to stop in time for people crossing at Pacific; would be better as a 2 or 3 lane street with fewer lanes to merge across to avoid an accidental trip onto the freeway	3
Vehicle (Driving/Freight)	Drive here for food	0
Vehicle (Driving/Freight)	Division should be considered a main arterial with at least 4 lanes (possibly more) as an avid driver there are times when traffic is backed up all 4 lanes from Sharp to North Foothills. This should be considered more of a highway. Versus added a light at every other street and causing more traffic stops seems it would hinder traffic versus help. With the streets that are now one lanes and were once two (Sprauge, Crestline, Indiana, Monroe and more) these are major traffic areas now.	0
Vehicle (Driving/Freight)	Drive to Denny's for diner food.	0
Vehicle (Driving/Freight)	Drive to Casual Friday for donuts.	0
Vehicle (Driving/Freight)	Drive to Tacos El Sol for tacos/mexican food.	0
Vehicle (Driving/Freight)	Dutch Bros is a huge TRAFFIC NIGHTMARE when cars stop ON DIVISION to wait for coffee. This needs to be cleaned up, or Dutch Bros moved to another location.	2
Vehicle (Driving/Freight)	Drive to Pita Pit for food	0
Vehicle (Driving/Freight)	Getting in and out of parking lot at North Division Bikes is sometimes very difficult due to high speed traffic coming up the hill (southbound).	0
Vehicle (Driving/Freight)	Drive to Wendy's for food.	0
Vehicle (Driving/Freight)	Drive to ATM in GESA bank building.	0
Vehicle (Driving/Freight)	Drive to Daily Dose coffee stand.	0
Vehicle (Driving/Freight)	We use this route to avoid the traffic and lights on Division when going to destinations north of the Y	0
Vehicle (Driving/Freight)	Drive to Dutch Bros.	0
Vehicle (Driving/Freight)	Drive to Zips.	0
Vehicle (Driving/Freight)	Drive to Jimmy Johns.	0
Vehicle (Driving/Freight)	Commute for work	0
Vehicle (Driving/Freight)	Used as alternative route to Northtown Square or STCU.	0
Vehicle (Driving/Freight)	Drive to Walgreens for prescriptions, photo orders, and other items.	0
Vehicle (Driving/Freight)	Turning from EB Cataldo to NB Ruby is very difficult due to cars flying around the blind curve on Ruby. Need some sort of traffic calming measure put in place here. That could also create an opportunity for a safe pedestrian crossing here.	1
Vehicle (Driving/Freight)	Roundabout interchange concept mentioned in other comment. Already modeled for volume projections.	0
Vehicle (Driving/Freight)	My business uses the Bank of America on Wellesley and Division	0
Vehicle (Driving/Freight)	Replace with roundabout to help clean up pedestrian trap area and address LT queue blocking NB through traffic.	0
Vehicle (Driving/Freight)	I do scary u-turns here after I get food at Arby's because it is impossible to turn left.	0
Vehicle (Driving/Freight)	Getting out of this lot and into a good lane is challenging.	0
Vehicle (Driving/Freight)	Getting into my lane is sometimes a challenge due to aggressive drivers.	0
Vehicle (Driving/Freight)	I never pick the right road here. If I want to go Greenbluff I took the wrong road. If I want to go to Newport or if I want to go to Costco I took the wrong road. Is there a better way to distinguish the two directions. I would like very different giant landmarks so I will remember which way to go.	0
Vehicle (Driving/Freight)	Drive to Bed Bath and Beyond for home decor / household goods.	1
Vehicle (Driving/Freight)	Do not reduce the number of traffic lanes for vehicles.	0
Vehicle (Driving/Freight)	We live a couple blocks from Division and during the summer we have noticed more vehicles (motorcycles and cars) and racing on Division. The noise from acceleration is very annoying especially after dark. These vehicles lack mufflers.	0
Vehicle (Driving/Freight)	Drive to Corbin Park for kids to play at playground.	0
Vehicle (Driving/Freight)	I drive from south Division to north Division when I am shopping and prefer the drive be unimpeded by "road diets", STA parking in a driving lane, and other slow downs.	0
Vehicle (Driving/Freight)	I have witnessed near accidents at this dangerous intersection. The plants and trees in the island are too tall to see oncoming traffic when you make a left turn.	0

Type	Comment	Up Votes
Vehicle (Driving/Freight)	Coming off the freeway, you are in 6 lanes. Suddenly the lanes merge to 4. It happens very suddenly without signage or warning. You have to make a quick decision to merge left or right, but there is usually another vehicle next to you. Even though I am aware it will happen, it stresses me out every time. Can't imagine being a new visitor to Spokane. I think the merge lane should be longer and with lane directions overhead. You have to merge left to go downtown and merge right to go north.	0
Vehicle (Driving/Freight)	I drive here a lot and this intersection is scary. People blow through the stop sign going 40-50 mph. I have almost been broadsided several times by drivers ignoring the stop sign and have witnessed others almost broadsided. Drivers going East from downtown to the freeway appear to be the primary problem. It is a busy 4 way stop that needs a roundabout or traffic signal.	0
Vehicle (Driving/Freight)	Gigantic suburban-style street-facing parking lot emphasizes automobile-oriented nature of the Division corridor	1
Vehicle (Driving/Freight)	Disappearance of right-turn lane causes sudden lane changes and confusion. Ruby is overbuilt and does not need four lanes anyway. Would make the driving experience much more pleasant to not need to merge across so many lanes.	1
Vehicle (Driving/Freight)	Drive to work.	0
Vehicle (Driving/Freight)	Drive to Riverfront Park with visitors, family, as a diversion, and for events.	0
Vehicle (Driving/Freight)	Drive to Chipotle for food	0
Vehicle (Driving/Freight)	Drive to Burger King for food and play area for kids.	0
Vehicle (Driving/Freight)	Drive to Office Depot for home office supplies.	0
Vehicle (Driving/Freight)	Drive to Starbucks for coffee.	0
Vehicle (Driving/Freight)	Drive to Clinkerdagger for food.	0
Vehicle (Driving/Freight)	Drive to Asian World Market for certain grocery items.	1
Vehicle (Driving/Freight)	Drive to Taco Time for food.	0
Vehicle (Driving/Freight)	Drive to Zips for food.	0
Vehicle (Driving/Freight)	Drive to McDonalds for food	0
Vehicle (Driving/Freight)	Drive to Thai Bamboo for thai food.	0
Vehicle (Driving/Freight)	Drive to Ruth Park for kids to play on playground.	0
Vehicle (Driving/Freight)	Drive to Jimmy John's for food	0
Vehicle (Driving/Freight)	Drive to Dutch Bros for coffee.	0
Vehicle (Driving/Freight)	Drive to Sonic.	0
Vehicle (Driving/Freight)	Drive to Carl's Jr.	0
Vehicle (Driving/Freight)	Drive to Pizza Pipeline.	0
Vehicle (Driving/Freight)	Drive to Salvation Army Thrift	0
Vehicle (Driving/Freight)	Drive to Mr. Car Wash for car cleaining	0
Vehicle (Driving/Freight)	Drive to Legion Building for work	0
Vehicle (Driving/Freight)	Drive to Senior Froggy for food.	0
Vehicle (Driving/Freight)	Drive to General Store for sporting goods.	2
Vehicle (Driving/Freight)	Drive to Autozone for auto parts and accessories.	0
Vehicle (Driving/Freight)	Drive to Staples for home office supplies.	0
Vehicle (Driving/Freight)	Drive to Jack in the Box for food.	0
Vehicle (Driving/Freight)	Drive to Northtown to shop at mall and take kids to play area.	1
Vehicle (Driving/Freight)	Drive to Starbucks for coffee.	0
Vehicle (Driving/Freight)	Drive to Natural Grocers for certain grocery items.	0
Vehicle (Driving/Freight)	Drive to Red Lion for bbq food.	0
Vehicle (Driving/Freight)	Drive to Hoffmans for musical instruments and sound equipment.	0
Vehicle (Driving/Freight)	Drive to Burlington for clothing.	0
Vehicle (Driving/Freight)	This intersection needs a NO U-TURN designation - it is used constantly throughout the day by people who cannot figure out how to get turned around to go to Starbucks! It is unbelievable how inconsiderate drivers are to residents trying to get out of the development.	0
Vehicle (Driving/Freight)	Drive to Lowes for home repair supplies	2
Vehicle (Driving/Freight)	Drive to Banner Bank for banking services and ATM	0
Vehicle (Driving/Freight)	Winchester MUST receive a NO LEFT TURN designation leaving the Camelot development! This is INCREDIBLY DANGEROUS, having cars block the view of oncoming Southbound traffic while waiting forever to turn left ACROSS THREE LANES OF 55mph TRAFFIC! There is even an alternative route (Winchester to Guenivere to Farwell/Hastings) that gets cars down the hill faster. SHUT THIS DANGEROUS LEFT TURN DOWN!	0
Vehicle (Driving/Freight)	Drive to Walmart for household goods	1
Vehicle (Driving/Freight)	Drive to Winco for Groceries.	1
Vehicle (Driving/Freight)	Drive to Domino's pizza for take out.	0
Vehicle (Driving/Freight)	Drive to Hobby Lobby for art supplies and home decor.	1
Vehicle (Driving/Freight)	Drive to MOD pizza for food.	0
Vehicle (Driving/Freight)	This left turn from Hwy 2 Northbound into Starbucks needs to DISAPPEAR. It is incredibly dangerous for people - drivers come to a near complete stop to enter the very short turn lane, then dash across the oncoming Southbound lanes with no regard for traffic coming at 45+mph. There is a TWO-LANE TURN LANE WITH A LIGHT at the main intersection... MAKE IT MANDATORY!	0
Vehicle (Driving/Freight)	Drive to church	0
Vehicle (Driving/Freight)	Drive to Taco Bell for food.	0
Vehicle (Driving/Freight)	Drive to Panera Bread for food	0
Vehicle (Driving/Freight)	Drive to Flamin' Joes for food.	0
Vehicle (Driving/Freight)	Drive to Walgreens for photo orders, medications, and other items.	0
Vehicle (Driving/Freight)	This left turn from Winchester to Hwy 2 Northbound should be CLOSED. It is a very dangerous situation to have cars blocking the view of oncoming Southbound traffic, then pulling across THREE LANES of 50mph traffic! Winchester to Guenivere to Farwell/Hastings gets cars down the hill faster - why not send cars THAT way? CLOSE THIS DANGEROUS LEFT TURN!	0
Vehicle (Driving/Freight)	Drive to Grocery Outlet for groceries.	1
Vehicle (Driving/Freight)	Drive to McDonalds for food.	1

Type	Comment	Up Votes
Vehicle (Driving/Freight)	Drive here for pediatric care.	0
Vehicle (Driving/Freight)	Drive to Dollar Tree for great deals	1
Vehicle (Driving/Freight)	Bi-monthly trips to Costco, may increase with expanding family in next 10 years.	0
Vehicle (Driving/Freight)	Large office building, many people commute to this location for work. Increased traffic in the area due to sports complex being build 4 blocks away.	0
Vehicle (Driving/Freight)	Drive here for Dilly Bars	1
Vehicle (Driving/Freight)	The redesign of this intersection Country Homes Blvd West crossing Wall is a MESS. The right lane should be RIGHT TURN onto Wall ONLY, the left lane is the straight-or-turn lane ONLY. Merging should begin WELL IN ADVANCE of Wall NOT AFTER TRAFFIC CROSSES! This just creates bottlenecks especially at rush hours.	1
Vehicle (Driving/Freight)	Drive to Pet Smart for pet needs.	0
Vehicle (Driving/Freight)	Drive to Target for home goods	0
Vehicle (Driving/Freight)	Drive to Michaels for art supplies and home decor.	1
Vehicle (Driving/Freight)	Allowing Chic Fill A to build a drive-thru here is a HUGE mistake. Traffic will come to an absolute STANDSTILL all the way back into the Y intersection and up the Division hill Northbound. There must be enforcement against drivers waiting in line on Hwy 2 to enter the parking lot.	3
Vehicle (Driving/Freight)	Drive here for Blizzards	0
Vehicle (Driving/Freight)	Please just delete and rebuild this whole cluster of an intersection...or at least make it easier to make a U-Turn on Sprague going e/b so that you can eventually get to Division going n/b.	0
Vehicle (Driving/Freight)	505 E. needs turn lane. Workers turn in and out all day. Westbound drivers speed and hit pedestrians crossing to Yokes. Eastbound drivers speed around corner and hit drivers turning left. Several of my coworkers had cars totaled while at full stop waiting to turn left. I was almost rear-ended by a semi but floored the gas to escape just in time. Very scary intersection for workers at this location. I know of one fatal ped accident here and several nonfatal car accidents.	1
Vehicle (Driving/Freight)	Remove slip lane	2
Vehicle (Driving/Freight)	Opps I am in the wrong lane. I am doomed.	1
Vehicle (Driving/Freight)	Have seen confused drivers at this intersection almost cause accidents if they try to go straight from the left lane while someone in right lane tries to turn left. Can be scary.	1
Vehicle (Driving/Freight)	replace signal with roundabout	0
Vehicle (Driving/Freight)	Study consolidation of access points and access design on the entire corridor. Poor driveway operations caused by parking lot design, sharp vertical grades, sharp radii, limited sight distance, etc. cause slower turning movements and impede throughput.	0
Vehicle (Driving/Freight)	Drive to work.	0
Vehicle (Driving/Freight)	Drive to Auntie's / Uncle's for games and gaming events.	0
Vehicle (Driving/Freight)	Drive downtown to mall for entertainment.	0
Vehicle (Driving/Freight)	We drive this route often to get to our Church Downtown and to access the freeway for work in Spokane Valley.	0
Vehicle (Driving/Freight)	Drive to IHOP for food.	0
Vehicle (Driving/Freight)	Drive to Arby's for food.	0
Vehicle (Driving/Freight)	Drive to Red Robin for food	0
Vehicle (Driving/Freight)	Drive to KFC for food.	0
Vehicle (Driving/Freight)	Drive to Jack in the Box for food.	1
Vehicle (Driving/Freight)	Drive to Costco for groceries and home supplies.	0
Vehicle (Driving/Freight)	Roundabout at Division/Spokane Falls could make it possible to remove the split signal phasing at Browne/Spokane Falls and reconstruct/shorten the ped crossing on the west side of Browne to one or two lanes max. The movement from Division to Spokane Falls could then be a separated right turn lane without a signalized movement. Sort of per the attached.	0
Walking	A pedestrian overpass could link both sides of Division, creating an enhanced and vibrant retail district around NorthTown. A pedestrian overpass could also provide access to high performance transit if a center-median alignment is chosen for BRT. A center-median alignment for BRT also provides the most flexibility for it to be upgraded to a rail-based transit later.	1
Walking	Convert Indiana, Mission, and Sharp on both Division and Ruby to directional roundabouts to assist with ped crossings and as a low-tech, no ongoing maintenance alternative to TSP.	0
Walking	Scary crossing	3
Walking	West edge of Franklin Park needs more porosity. Needs more pedestrian/bike access from side streets on the east side of Division. Make it more of an urban edge, especially if Division densifies due to bus rapid transit development. I envision an urban corridor where people can cross Division at almost every block since the North Spokane Corridor will greatly reduce traffic along Division.	2
Walking	Montgomery/Division signal does not meet vehicle warrants. Repurpose for ped/cyclist or replace with RRFB	0
Walking	Pedestrian overpasses to bridge across a behemoth roadway. Could also help speed up vehicle operations - both roads are so wide that the pedestrian signal needs to stay in walk-mode for a long time, which holds up vehicular traffic. The monstrosity of the roadway is also not conducive for comfortable walking/biking. An overpass could also plug right into a potential parking garage at the Hastings Park and Ride (assuming it's land swapped with the WSDOT facility)	1
Walking	Need for a bike/ped crossing improvement for access to Yokes	3
Walking	There is a trailhead here, but no connectivity via crosswalk to get to areas north of Farwell. Closest crosswalk is 500 feet away in the middle of a concrete jungle (highway interchange). Suggest adding a marked crosswalk here.	2
Walking	We often walk to Northtown mall. It's not uncommon for drivers to run the light at Queen and Division. Don't know if there's an answer to that, but it would be helpful.	0
Walking	Needs legal crossing	2
Walking	Market needs a grade-separated pedestrian and biking path to link up areas to the north of Deadman Creek with the Children of the Sun Trail and alternative transportation options into the City. I emphasize grade-separated because the natural topography of the roadway means cars often fly by at 50+ MPH as they go through the dip.	1

Type	Comment	Up Votes
Walking	Crossing improvement needed at Longfellow	4
Walking	I walk across Division at Garland to access the STA Bus. Pedestrians cross 7 lanes of traffic on Division. Turning vehicles to and from Garland can be aggressive and not yield to pedestrians. Pedestrian have to be extremely watchful for vehicles!	1
Walking	Roundabout provides improved crossing environment at this location between Wellesley and Garland	1
Walking	Difficult intersection; crossing times are short, requires pressing a "beg button," difficult to access crosswalk on bike, very little queuing space for people waiting to cross	3
Walking	I walk to here from where the 20/33 let's out across from the mall. Then walk all my groceries back to catch the return bus. There's no convenient way to transfer.	1
Walking	This is busy. I wish the crossing was beautiful, and helped people walking feel proud to be there. Right now it seems kinda shameful to be seen here.	2
Walking	Please ensure better Centennial Trail access by the Courtyard Marriott hotel, including wayfinding.	2
Walking	Major geological barrier and superblock; could use access route of some kind to fill in the wide gap between Post and Division	3
Walking	I walk to Yokes every week from the south for groceries. I like that I do not have to cross the large parking lot from this route, but cars will often speed along Jackson Avenue.	1
Walking	Not sure how this ended up after the Ruby River Hotel renovation, but it'd be great to have an official connection from the trail to NB Division Street to complete the set of trail-to-Division connections that exist at the other three access points to the Sam C. Guess Memorial Bridge.	2
Walking	Sidewalks are too narrow for pedestrians walking along Divsion.	3
Walking	Need accessible (ADA-compliant) ways to access ped/bike paths on both sides of the Division St Bridge from the North Bank Trail	2
Walking	Ped/bike crossing improvement needed here	2
Walking	This superblock needs access trails for people on bike/foot	1
Walking	Superblock; needs ped/bike improvements and wayfinding to make more accessible as a connection	3
Walking	Walking is unnecessarily banned in this vicinity	2
Walking	High-risk intersection for right-hooks (drivers often turn without watching for crossing ped/bike traffic)	2
Walking	The two-stage intersection across Spokane Falls Blvd is terrible. It can get dangerously crowded and is stupidly inconvenient and time-consuming. Very tempting to jaywalk.	3
Walking	Unpleasant, multi-stage intersection that takes forever to cross (and sometimes the crossing buttons don't work)	2
Walking	Walk to the local park, within blocks of home.	2
Walking	Crossing is needed in this area.	4
Walking	Same as the bicycle trail access underneath hwy 395. Even the Mead HS cross country team uses it as part of their training route.	1
Walking	Affordable apartments, with possible increased building across the street.	0
Walking	Let's get some flashing lights/bigger signs for peds trying to cross here and on Browne	2
Walking	There are currently zero marked/signalized crosswalks along this mile-long stretch of Division Street between the Y and Hawthorne. Would be great to have that changed. Several intersections are also marked "no pedestrians". Due to speed of Division, probably need HAWK beacons	2
Walking	Crossing improvement needed at Lacrosse	3
Walking	Snow and Ice removal along Division is a problem. Some business are good about removing snow and some are not. City Park's Dept is very good about removing snow in the Winter along Clark Park!	1
Walking	Bicycles and scooters use sidewalks because of lack of north south facilities making walking on the narrow sidewalks difficult	3
Walking	Complete the sidewalks on North River Drive so that people can access future BRT on Division from major destinations like the Centennial Hotel, the revitalized and activated North Bank area of Riverfront Park, and the new Podium/SportsPlex.	2
Walking	Poor wayfinding to the bridge from Centennial trail and other areas on campus	2
Walking	People walk here, eat, and drink here. I fear for their lives. The traffic off the interstate is really moving through here at a good clip.	2
Walking	A crosswalk here would be great. The intersection is closed to pedestrians today for safety reasons. However, Cataldo Ave. provides a great connection opportunity with Gonzaga and college-related housing on the east side of Ruby with the retail and destinations beyond (The Podium, Spokane Arena, RF Park North Bank, etc.) on the west side of Ruby. Cataldo is a very natural urban axis that deserves a proper pedestrian crossing. Need to solve the blind curve of Ruby to make this happen though.	1
Walking	Narrow sidewalk on Mission, not pleasant but important connection (due to signalized intersection across Division/Ruby)	3
Walking	Pedestrian traffic signal has too long of delays. Most pedestrians end up dashing across street instead of waiting for light	4
Walking	Would love to see one side of Division with a path for runners and bikes that makes new safe running routes around the Division area.	1
Walking	Getting from n/b Division St to the Convention Center/INB/etc is currently a bit tedious. You either have to go under the bridge and briefly onto Centennial Trail or go down to Spokane Falls, and through like 3 crosswalks to get there. Not sure what can be done but as of now it makes getting from the colleges/hotels/apartments to that area more difficult.	2
Walking	Vehicle traffic northbound on Division between the Sprague RR underpass and the river is very fast and aggressive. Traffic calming is needed here. We need people to feel safe moving by foot and by bike from the University District to downtown businesses. I've seen many near-collisions here from aggressive drivers not waiting for parallel parking, or pedestrian crossing. MLK and Riverside could be nice walking routes but crossing Division is a gauntlet.	3
Walking	This intersection is uncomfortable to cross as a pedestrian and cyclist. Not all cars stop when there are pedestrians waiting at the crosswalks. Sometimes two lanes will stop to let a pedestrian cross, but the third will not because they cannot see the pedestrian crossing the road. Most cars are also going too fast here and not expecting to need to stop. I've seen many cars have to swerve and change lines to prevent colliding with the car in front of them that has stoped to yield to pedestrians.	6
Walking	Standard should be reopened to public walking and cycling access	3

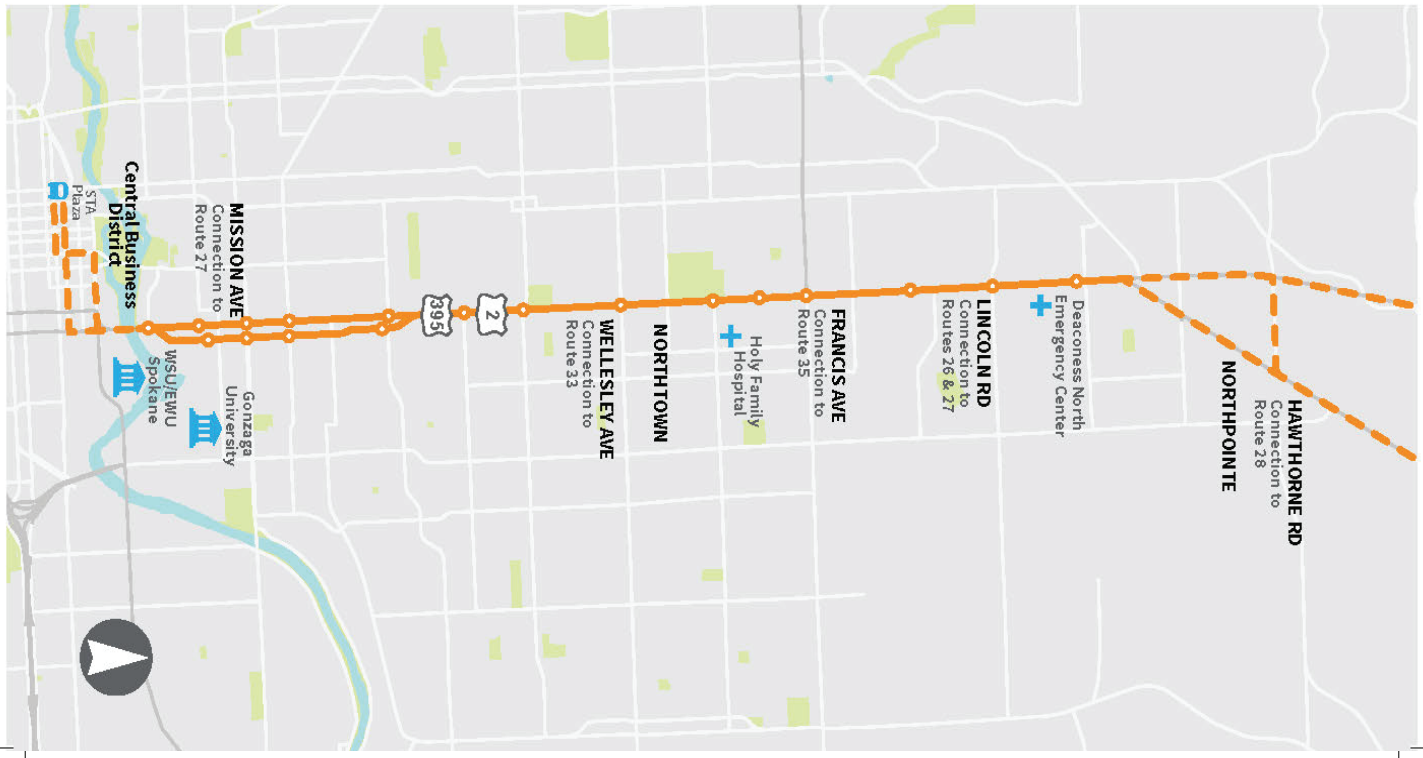
Type	Comment	Up Votes
Walking	West edge of Clark Playfield needs more porosity. Needs more pedestrian/bike access from side streets on the east side of Division. The fence needs to go. Make it more of an urban edge, especially if Division densifies due to bus rapid transit development. I envision an urban corridor where people can cross Division at almost every block since the North Spokane Corridor will greatly reduce traffic along Division.	3
Walking	The standard 6' wide sidewalk along the entirety of Division Street, without landscaping, and right up against the roadway is very unwelcoming and not conducive to active transportation. There are also a number of instances where there are light poles right in the middle of the sidewalk. Sidewalk needs landscaping and some sort of buffer from the roadway to encourage people to feel safe and comfortable walking, biking, and scootering along it.	5
Walking	Crossing improvement needed at Glass or Gordon	3
Walking	Entire stretch of Division between Wellesley and N. Foothills Drive needs more pedestrian crossings, preferably with HAWK beacons and pedestrian bulb outs. There is not much connectivity between the east and west sides of the street, which is not conducive for business nor high performance transit. If a transit user patronizes a business, they'll need to cross the street to head back the other way to get home on transit.	3
Walking	Large parking lots make it very unfriendly to pedestrians and don't give stores a front that people can really see a lot.	3
Walking	Holland to Magnesium corridor provides very few crossing opportunities to people on bike/foot. Many people just cross at random points during gaps in traffic.	6
Walking	Needs increased walkability access to all medical buildings within 5 block radius.	3
Walking	Needs to be better pedestrian infrastructure to safely cross Newport Hwy, just north of the Y. This will be critical for the success of transit as many bus riders go to Rosauers and Walmart to get groceries. Currently, riders are forced to jaywalk across Newport Hwy either on the way to the grocery store, or on the trip home.	2
Walking	Parksmith Drive could use some pedestrian and biking infrastructure. There is a trailhead for the Children of the Sun Trail here, but insufficient infrastructure to connect with it.	3
Walking	An urban design policy should be created that forbids blank, utilitarian walls (both screen walls, and businesses w/o storefronts) along the streets. Public buildings like a convention center should be no exception. It is a huge barrier (pun intended) to creating an inviting, safe, and comfortable pedestrian and biking experience. It's a very loud and inhospitable environment/experience walking alongside such conditions for extended lengths.	4
Walking	Build a second story wide pedestrian and bicycling path to connect downtown and kendall yards. People walking downtown can see this area but the only transportation style that is enjoyable with the current design is by car.	0
Walking	I walk between downtown and sharp avenue businesses occasionally. These are the closest fast food restaurants in this part of town when coming from downtown. A more comfortable experience on foot would be appreciated here, and could encourage convention center attendees to explore on the north side of the river if it was more approachable.	0
Walking	A sidewalk separated from the roadway by a landscaped strip (like here in front of NorthTown) is very conducive to walking, biking, scootering, etc. The separation is great for comfort (less noise & wind turbulence from the road), safety (fast cars aren't zooming by within an arm's reach), functionality (when it rains, you won't get splashed, when it snows the median provides space for snow berm), etc. Needs more of urban feel though (planters vs grass, greater diversity of plantings)	1

APPENDIX D

DivisionConnects Online Open House Mailer

DIVISION CONNECTS

THE FUTURE OF TRANSPORTATION ON ONE OF SPOKANE'S BUSIEST CORRIDORS



DIVISION CONNECTS

THE FUTURE OF TRANSPORTATION ON ONE OF SPOKANE'S BUSIEST CORRIDORS

Completion of the North Spokane Corridor (US395) provides an opportunity to reimagine the future of Division Street. DivisionConnects is a transportation and land use study and community conversation about Division Street and what it means to the greater Spokane region.

Join the conversation at divisionconnects.org

• Learn More • Request Information and Presentations •
• Share Feedback on Scenarios •

Save the date for an online open house
February 11, 2021
Details will be made available shortly on divisionconnects.org

Spokane Transit | SRTC | DIVISION CONNECTS PEOPLE. PLACES. PROGRESS.

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Spokane Transit
1230 W Boone Ave
Spokane WA, 99201

APPENDIX E

Statistically Significant Survey Summary Presentation, February 2021

Spokane County Area Residents

February 2021

MOORE INFORMATION GROUP

RESEARCH · ANALYSIS · RESULTS

Methodology

Sample

250 live interviews among a representative sample of adult residents age 18+ in select Spokane County Zip Codes.

Method

Landline and cell phone interviews conducted February 15-16, 2021.

Sampling Error

Plus or minus 6% at the 95% confidence level. The margin for error is higher for subgroups, such as gender or an individual age category.

Demographics

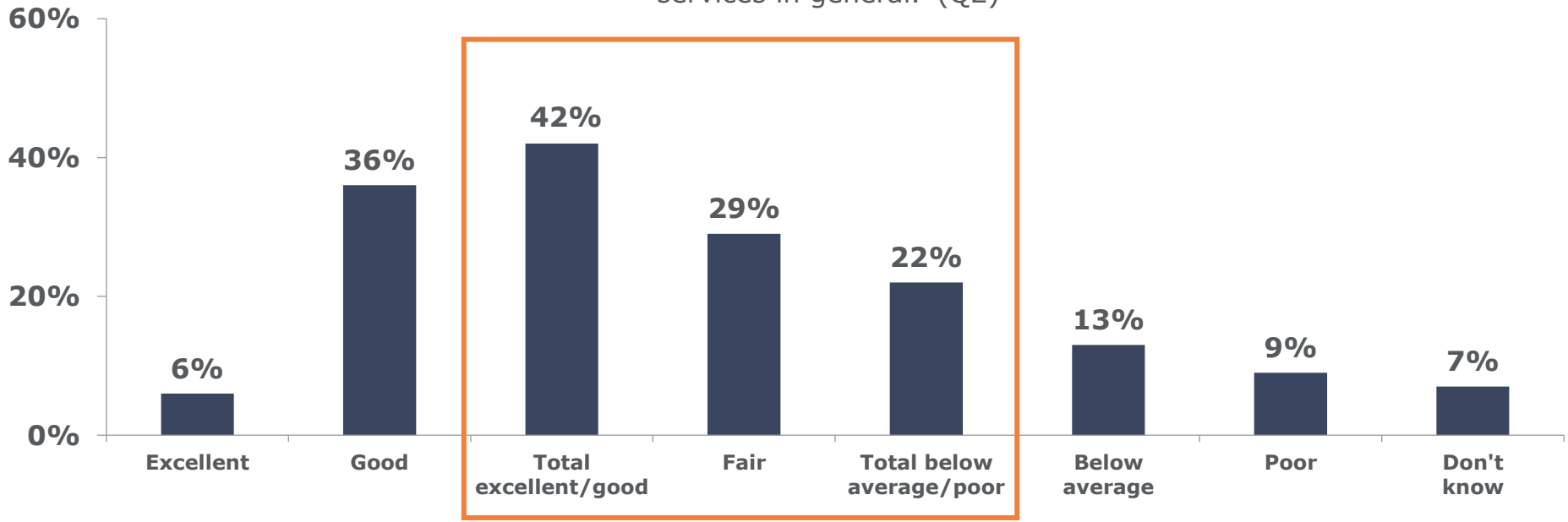
Gender		Age		Length of Residence	
Men	48%	18-34	28%	0-19 years	38%
Women	52%	35-54	32%	20+ years	59%
		55-64	18%		
		65+	22%		

Region with Zip Codes		
North	21%	99003,99005, 99006, 99009, 99021, 99026, 99110, 99148, 99208
South	23%	99004, 99020, 99023, 99031, 99037, 99203, 99212, 99223
East	22%	99016, 99019, 99025, 99206, 99216, 99217
West	34%	99001, 99011, 99022, 99201, 99202, 99204, 99205, 99207, 99218, 99224

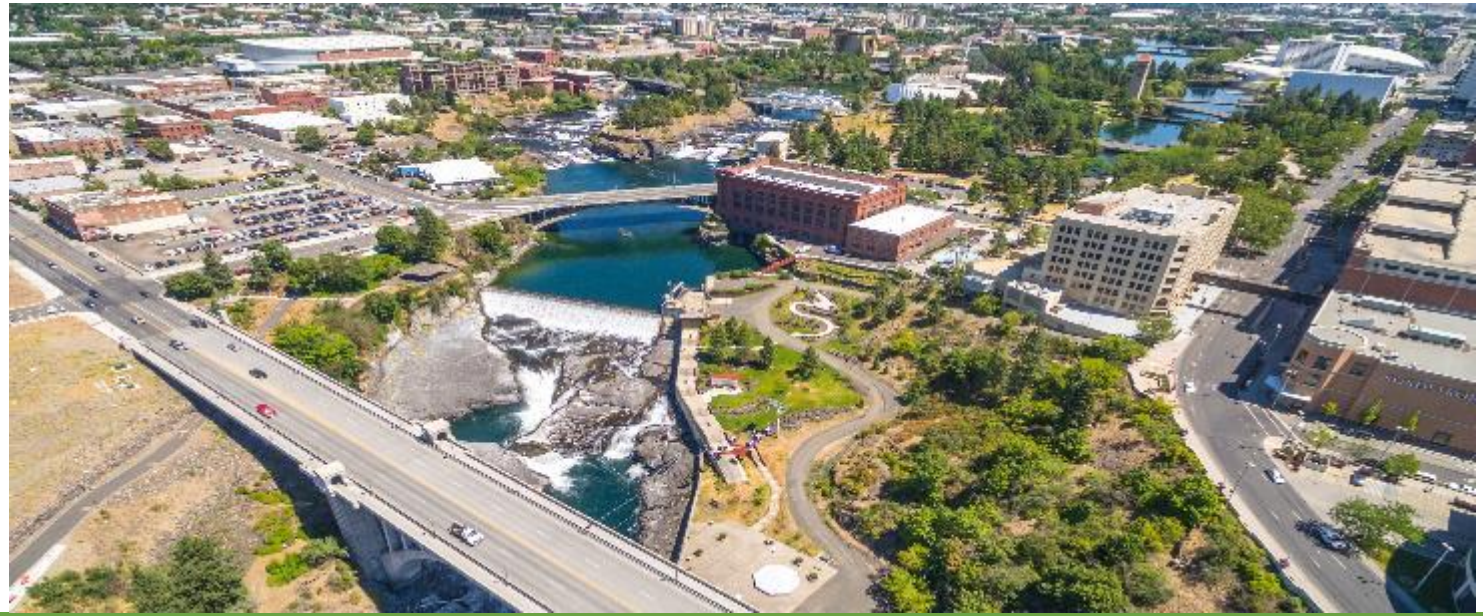
Community Transportation System Rating

Community Transportation System Rating

"How would you rate the quality of the transportation system in your own community, as excellent, good, fair, below average or poor? By transportation system I mean roads, highways, bridges, buses and transportation services in general." (Q2)



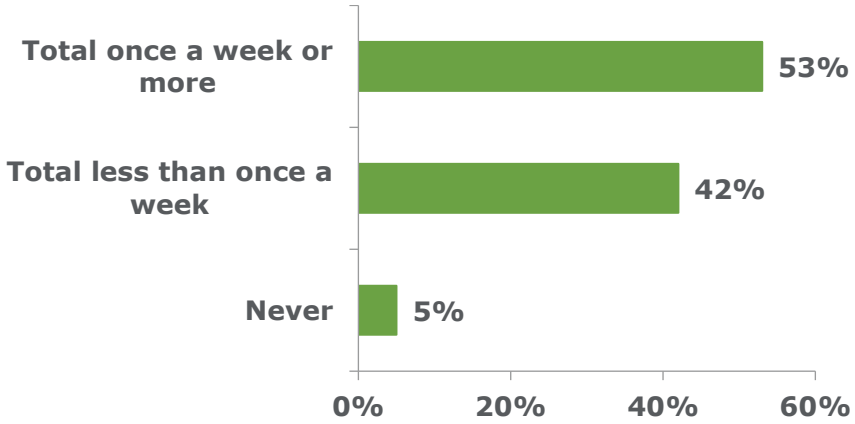
Older residents (age 65+) are more positive than younger residents (56% excellent/good for seniors vs. 38% for younger residents), while West area residents are not impressed (29% excellent/good, 37% below average/poor). But East, South and North area residents are positive and there are no differences in ratings by either gender or length of residence.



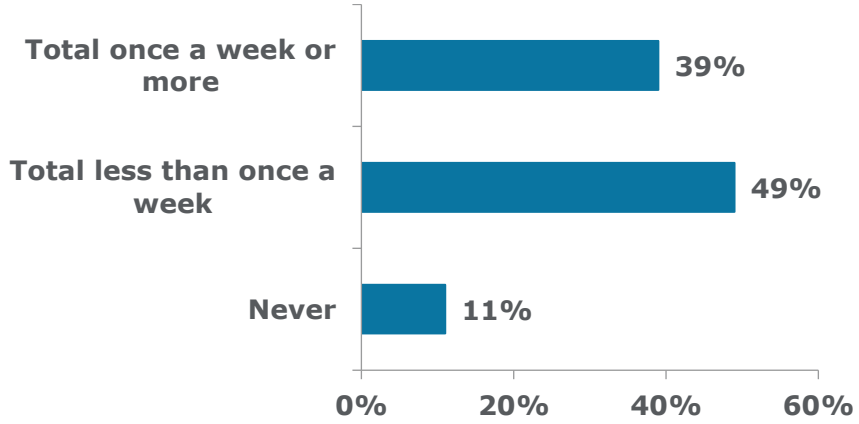
Division Street Usage

Travel on Division Street, Pre-COVID and Now

"Thinking back to before the COVID-19 pandemic, how often did you travel on Division Street?" (Q3)



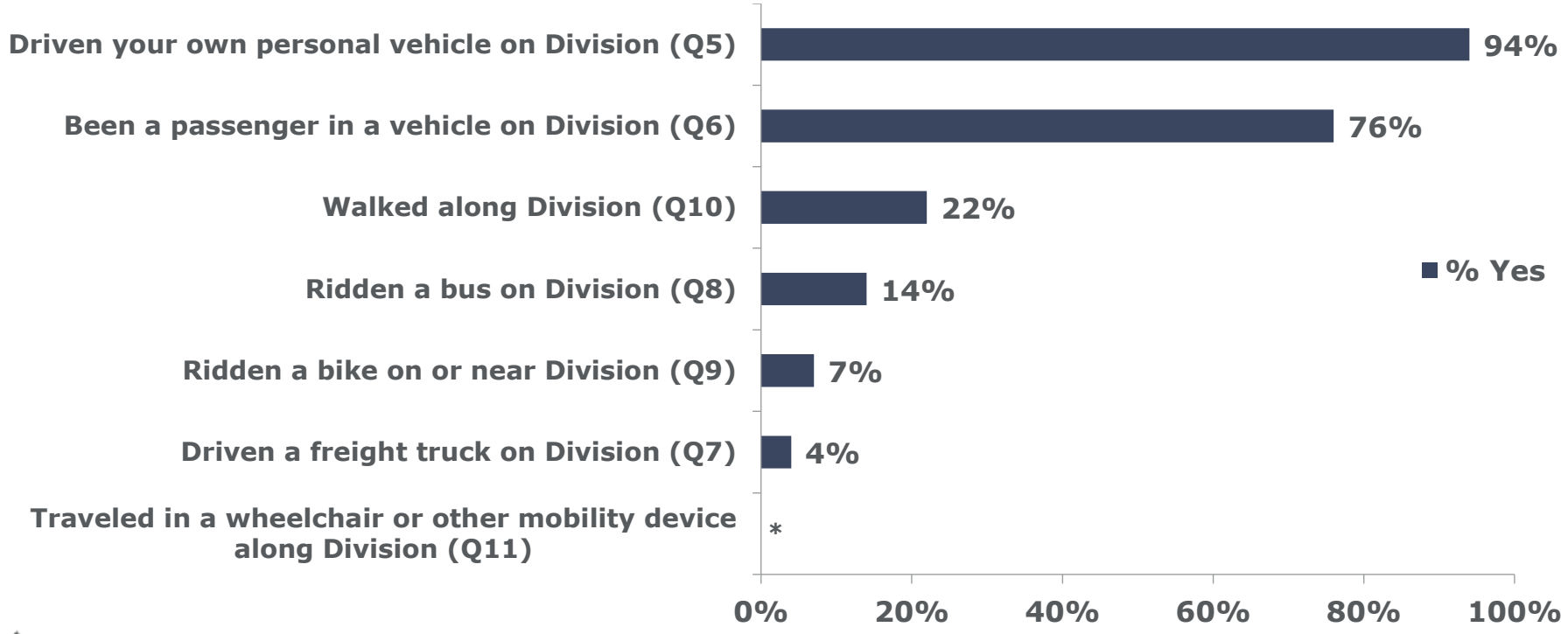
"And how about now, during the pandemic – how often do you travel on Division Street?" (Q4)



The pandemic has definitely impacted travel on Division Street. Before COVID, the most frequent Division Street users were those age 18-34 (65% traveling on Division at least once a week), while the least frequent were women age 55+ (38% traveling on Division at least once a week). Now, travel frequency is down across the board. Although younger residents age 18-34 are still the most likely to use Division Street, just 48% of them say they travel once a week or more (a 17% decline). By area, North and West area residents were, and remain, among the most likely to travel on Division Street.

Personal Travel on Division Street

"I'd like to ask you about your own personal travel on Division Street. Over the past two years, have you…"



* Less than one-half of one percent

Personal Travel on Division Street: *Key Subgroups*

		Region				Gender		Age				Length of Residence	
% Yes	All	North	South	East	West	Men	Women	18-34	35-54	55-64 (N=45)	65+	0-19 years	20+ years
Driven your own personal vehicle on Division (Q5)	94%	95%	95%	93%	95%	93%	96%	98%	97%	96%	84%	95%	94%
Been a passenger in a vehicle on Division (Q6)	76%	87%	73%	66%	77%	72%	79%	87%	77%	80%	55%	82%	71%
Walked along Division (Q10)	22%	21%	18%	22%	26%	24%	21%	26%	24%	27%	13%	27%	20%
Ridden a bus on Division (Q8)	14%	14%	13%	10%	17%	12%	15%	24%	12%	7%	8%	17%	12%
Ridden a bike on or near Division (Q9)	7%	2%	7%	5%	10%	7%	6%	8%	6%	9%	3%	8%	4%
Driven a freight truck on Division (Q7)	4%	4%	2%	2%	7%	5%	3%	2%	7%	7%	--	4%	4%
Traveled in a wheelchair or other mobility device along Division (Q11)	*	--	--	2%	--	1%	--	--	--	--	2%	--	1%

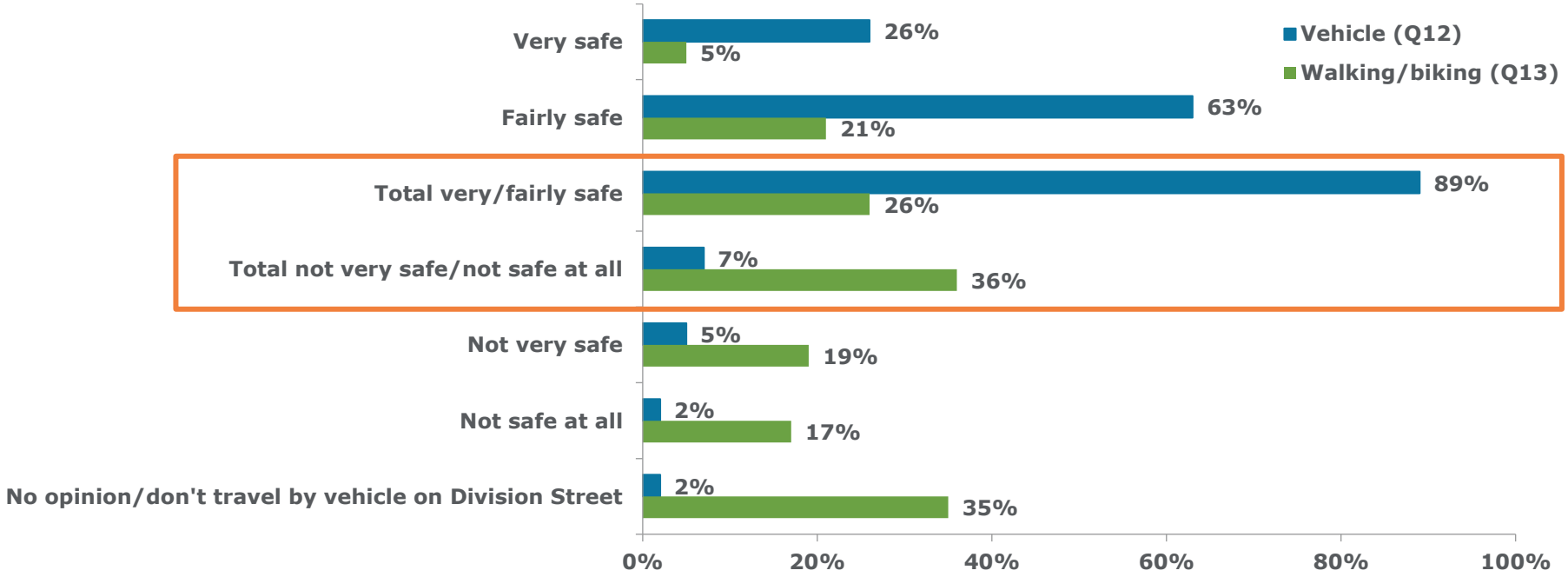
Seniors are among the least likely to have participated in any of the travel activities on Division Street. Residents age 18-34 are most likely to have ridden the bus on Division.

* Less than one-half of one percent

Division Street Safety and Improvements

Division Street Safety

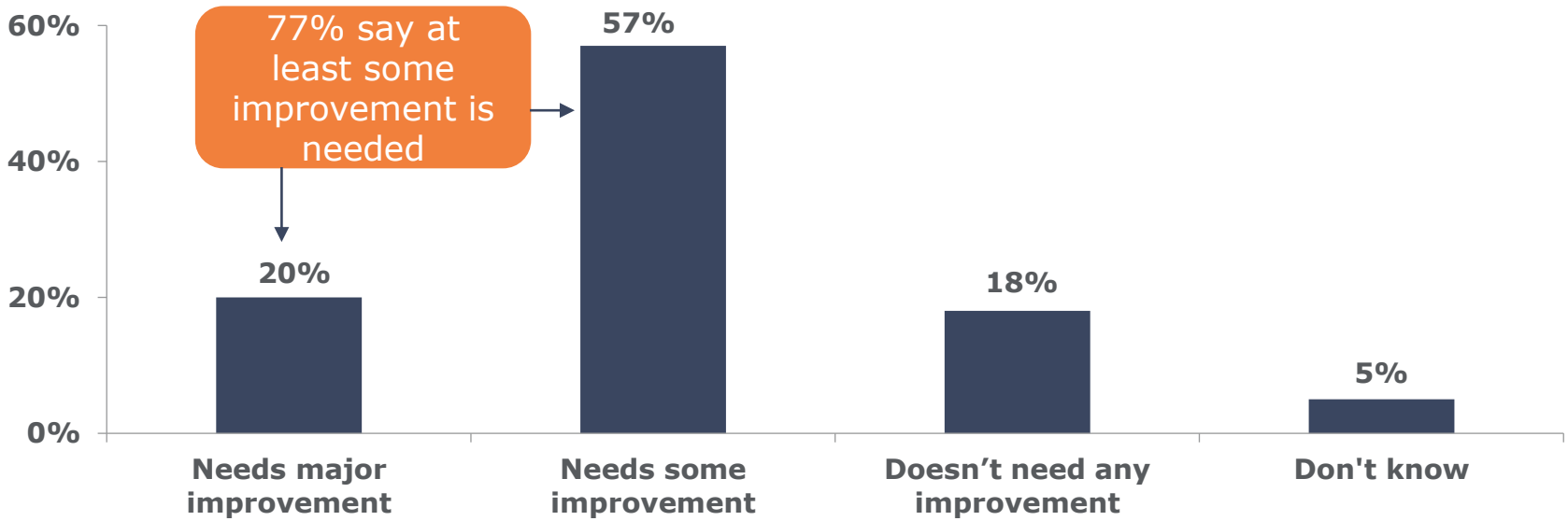
"How safe do you feel when traveling by vehicle on Division Street?" (Q12)
"And how safe do you feel when walking or biking on Division Street?" (Q13)



Travel by vehicle is deemed much safer than walking/biking – but still, just one-in-four (26%) feel "very" safe traveling by vehicle.
Feelings of safety generally erode with age, especially for walking/biking.

Vast Majority Says Division Street Needs Improvement

"Which one of the following best describes your opinion about travel along Division Street?" (Q14)



The N=44 respondents who say no improvements are necessary are more likely to be older males, long-time residents, say the system is already in good/excellent shape and feel safe driving on Division Street.

Improvement on Division Street: *Key Subgroups*

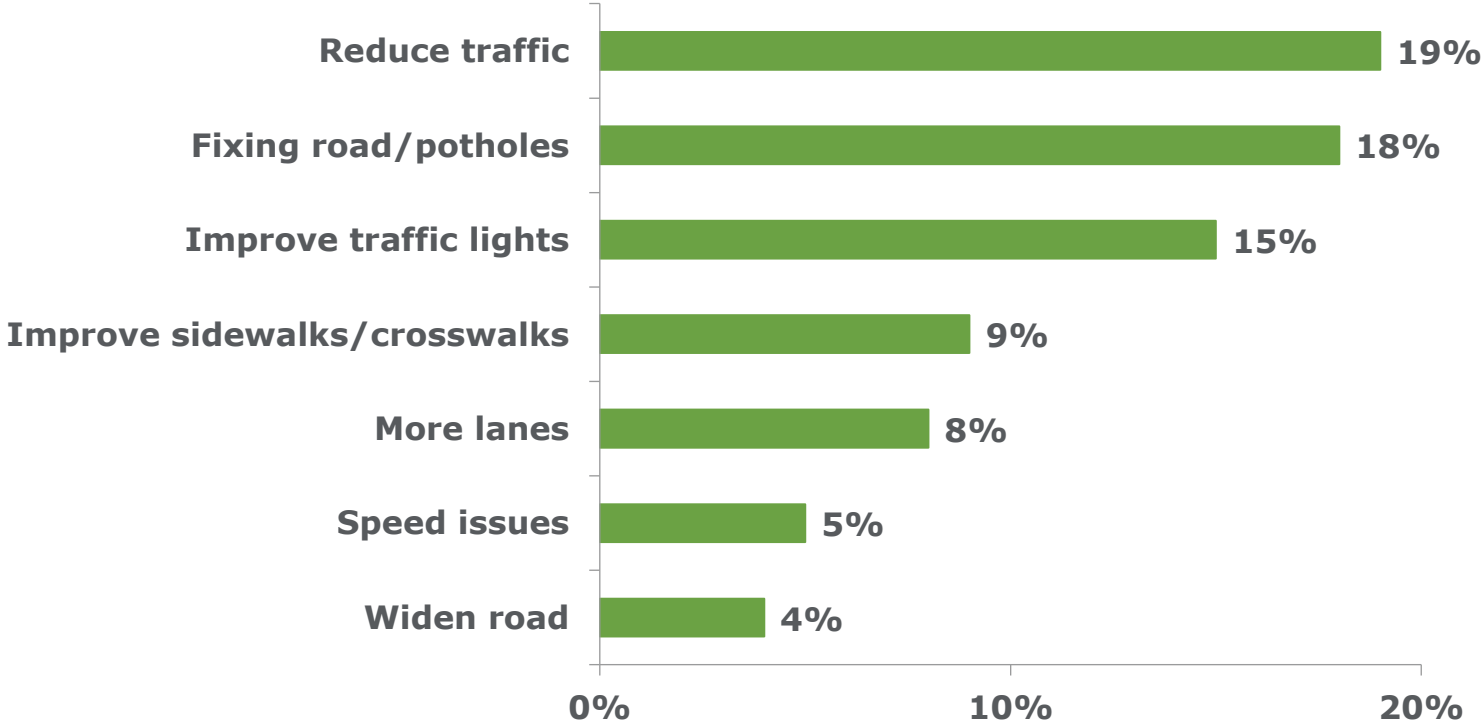
	% Total needs improvement
All residents	77%
Region	
North	73%
South	82%
East	76%
West	78%
Gender	
Men	74%
Women	80%
Age	
18-34	84%
35-54	81%
55-64 (N=45)	78%
65+	62%
Length of residence	
0-19 years	81%
20+ years	75%
Quality of transportation	
Excellent/good	64%
Fair	91%
Below average/poor	84%

	% Total needs improvement
Pre-COVID travel on Division	
Once a week or more	81%
Less frequently	74%
Safety traveling by vehicle on Division	
Safe	77%
Not safe (N=19)	89%
Safety walking/biking on Division	
Safe	74%
Not safe	92%

- **Residents age 18-64 are more likely to say improvements are needed.**
- **Those who give worse ratings to the community's transportation system are also more likely to say improvements are needed.**
- **Feelings of safety also influence perceptions of needed improvements.**

What Would Improve Travel on Division Street?

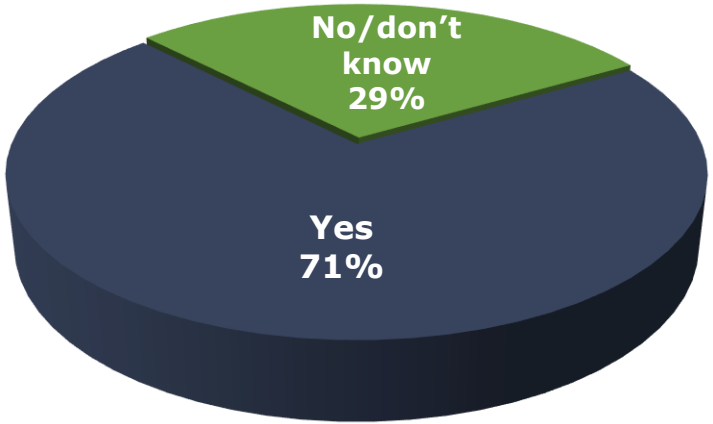
IF NEEDS IMPROVEMENT: "What, specifically, would improve travel on Division?" (Q15, N=193)



North Spokane Corridor Project

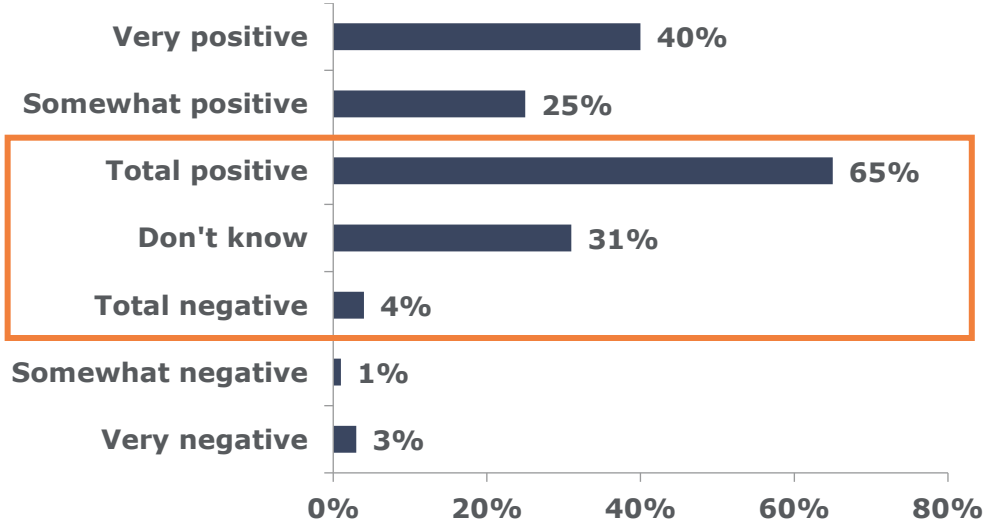
NSC Awareness and Impact

"Have you seen, read or heard anything about the North Spokane Corridor project, or NSC?" (Q16)



Older men are among the most aware (85% aware) along with long-time residents (80%).

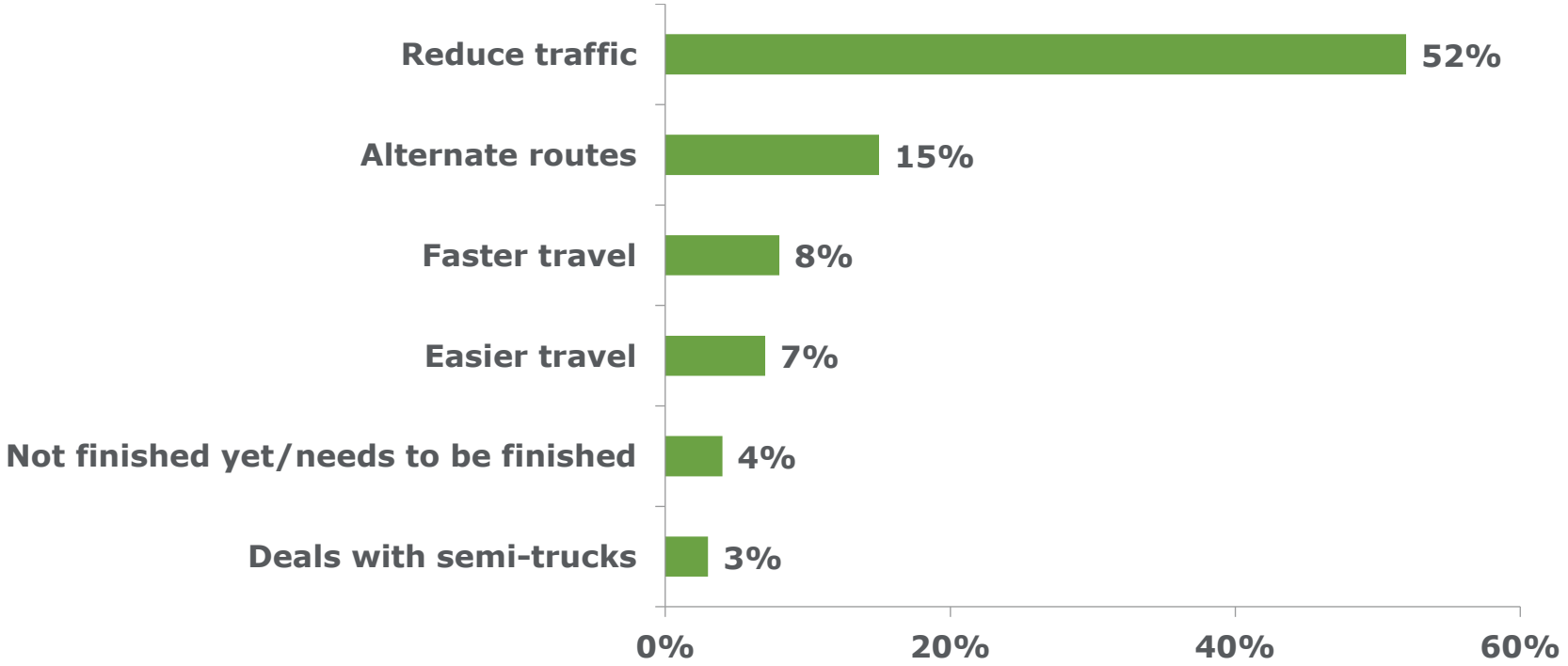
"Based on what you know or have heard, will the NSC project have a positive impact on the Division Corridor, or will it have a negative impact?" (Q17)



All key subgroups widely agree the NSC project's impact would be positive.

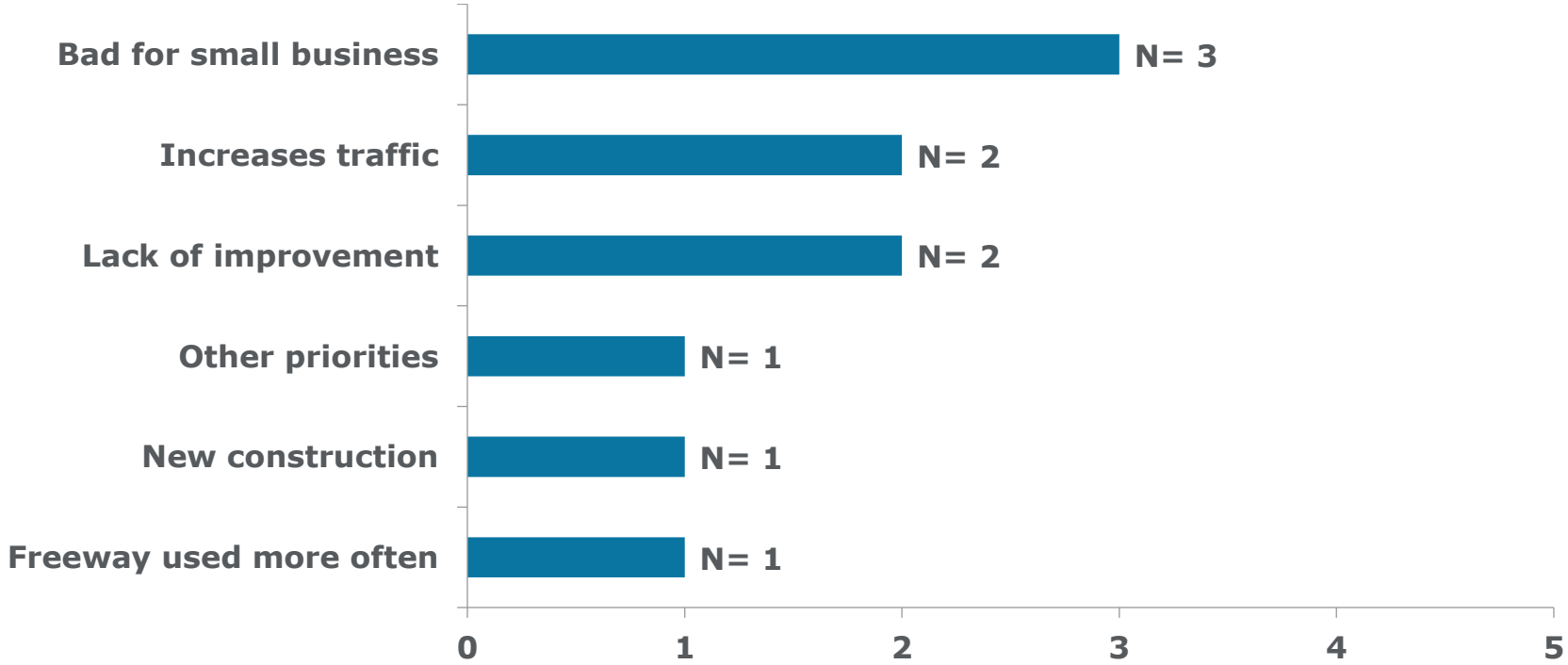
Why Would the Impact Be Positive?

IF POSITIVE: "Why do you say that?" (Q18, N=162)



Why Would the Impact Be Negative?

IF NEGATIVE: "Why do you say that?" (Q19, N=10)

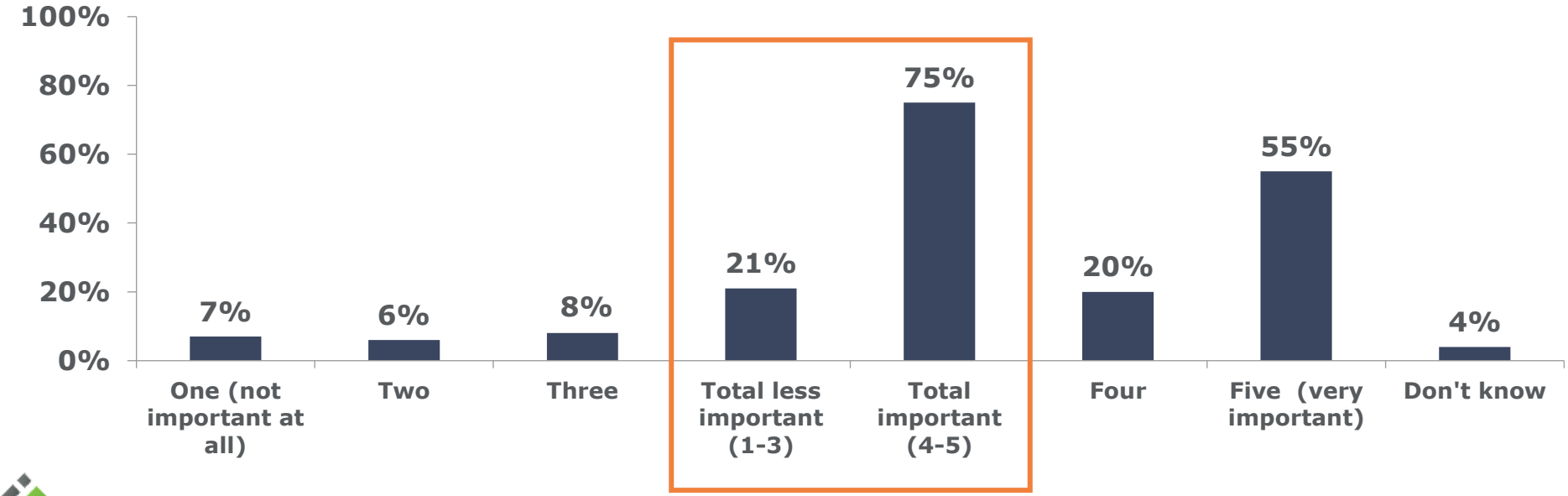


NSC Informational Statement

"The opening of the North Spokane Corridor is expected to change motor vehicle and freight traffic patterns on Division Street and other north-south arterials, providing an opportunity to look at how the Corridor itself and the surrounding neighborhoods might change over time to support local businesses, local vehicle trips, increased transit trips, and biking and walking. Local transportation agencies are currently in the middle of a study, DivisionConnects, that is looking at potential transportation and land use changes that might come about because of changes in travel behavior. One potential improvement to the Corridor would be implementing a Bus Rapid Transit project that would improve the amenities at all transit stops while enhancing the frequency and reliability of transit along the Corridor."

Improving Safety for Non-Car Drivers

"The current study is seeking to make Division Street more accessible and safe for people who may not be able to drive, because of age, disability or other factors. Accessibility and safety can be improved with safer and wider sidewalks, better lighting, more pedestrian crosswalks, and improved curb cuts. Using a five-point scale where five is very important and one is not important at all, in your opinion how important is it to improve the safety and accessibility of Division Street for people who do not drive the Corridor in a car?" (Q20)



NON-CAR DRIVER SAFETY: *KEY SUBGROUPS*

	Less important (1-3)	Important (4-5)	*Net important*
All residents	21%	75%	***+64%***
Region			
North	33%	66%	***+33%***
South	16%	80%	***+64%***
East	18%	76%	***+58%***
West	18%	77%	***+59%***
Gender			
Men	26%	67%	***+41%***
Women	16%	83%	***+67%***
Age			
18-34	15%	82%	***+67%***
35-54	21%	74%	***+53%***
55-64 (N=45)	29%	71%	***+42%***
65+	21%	71%	***+50%***
Length of residence			
0-19 years	15%	82%	***+67%***
20+ years	25%	71%	***+46%***
Quality of transportation			
Excellent/good	18%	76%	***+58%***
Fair	19%	80%	***+61%***
Below average/poor	24%	75%	***+51%***

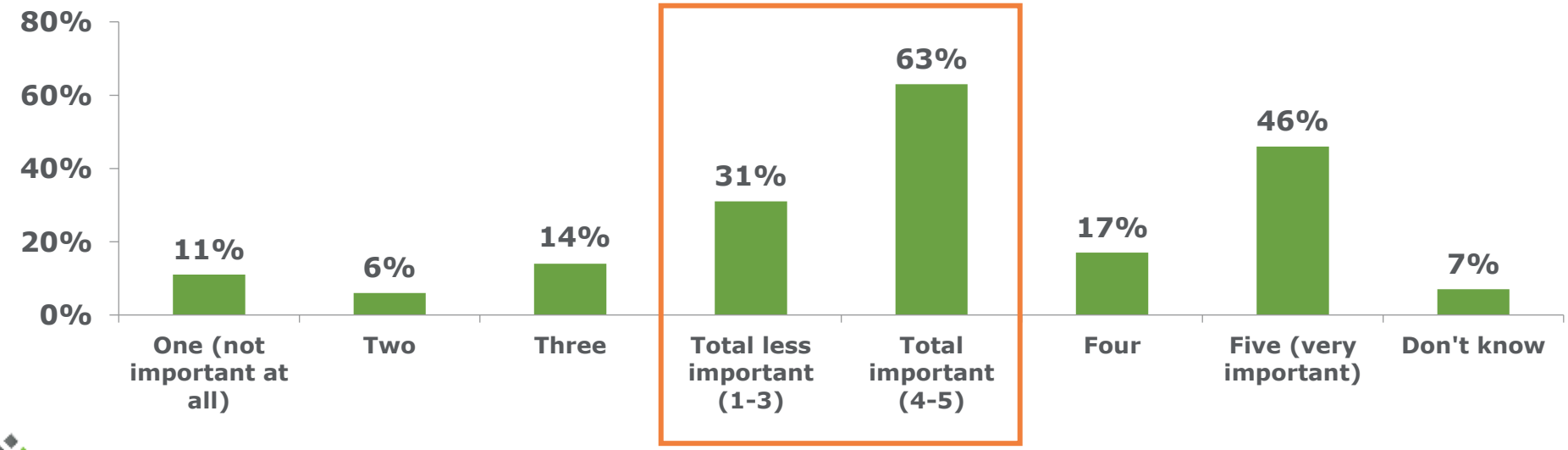
Women, younger residents and newer residents are among those most likely to say non-car driver safety is important. By area, North residents are most likely to say less important.

Non-Car Driver Safety: *Key Subgroups (2)*

	Less important (1-3)	Important (4-5)	*Net important*
All residents	21%	75%	***+64%***
Pre-COVID travel on Division			
Once a week or more	24%	73%	***+49%***
Less frequently	16%	78%	***+62%***
Safety traveling by vehicle on Division			
Safe	20%	76%	***+56%***
Not safe (N=19)	20%	74%	***+54%***
Safety walking/biking on Division			
Safe	22%	75%	***+53%***
Not safe	20%	77%	***+57%***
Improvement along Division?			
Needs major improvement	16%	82%	***+66%***
Needs some improvement	16%	81%	***+65%***
Needs no improvement (N=44)	42%	51%	***+9%***

Importance of Improving Quality of Bus Service

"Bus Rapid Transit, or BRT, seeks to improve the quality of bus service by enhancing bus stops with stations, shelters, improved lighting and signage. It also provides for more frequent bus service, with buses coming as much as twice as often as today, reducing the time passengers have to wait for the next stop. Using a five-point scale where five is very important and one is not important at all, in your opinion how important is it to improve the quality of bus service along Division Street?" (Q21)



Quality of Bus Service: *Key Subgroups*

	Less important (1-3)	Important (4-5)	*Net important*
All residents	31%	63%	***+32%***
Region			
North	43%	55%	***+12%***
South	24%	66%	***+42%***
East	21%	71%	***+50%***
West	34%	61%	***+27%***
Gender			
Men	38%	56%	***+18%***
Women	24%	70%	***+46%***
Age			
18-34	27%	69%	***+42%***
35-54	29%	64%	***+35%***
55-64 (N=45)	47%	51%	***+4%***
65+	24%	63%	***+39%***
Length of residence			
0-19 years	29%	71%	***+42%***
20+ years	32%	61%	***+29%***
Quality of transportation			
Excellent/good	30%	64%	***+34%***
Fair	30%	67%	***+37%***
Below average/poor	31%	59%	***+28%***

Women and newer residents are more likely than men and longer-term residents to say improving the quality of bus service is important. By area, North residents are most likely to say less important.

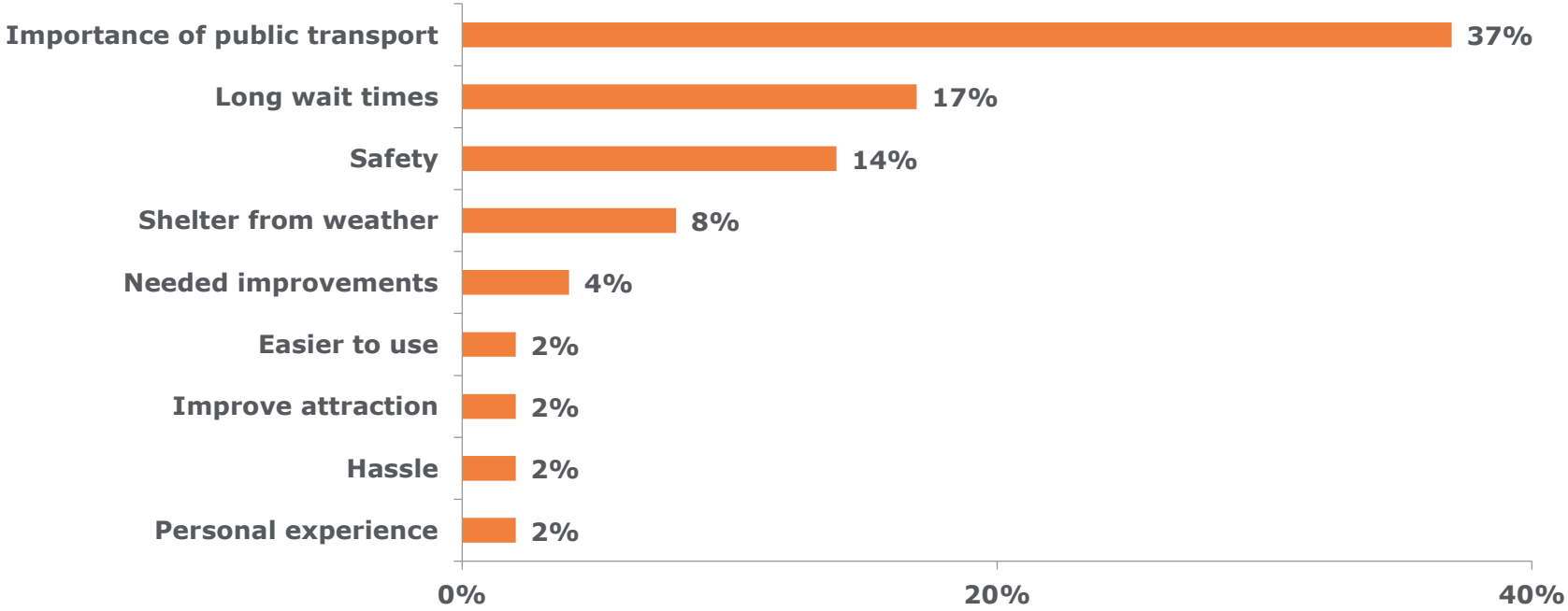
Quality of Bus Service: *Key Subgroups (2)*

	Less important (1-3)	Important (4-5)	*Net important*
All residents	31%	63%	***+32%***
Pre-COVID travel on Division			
Once a week or more	36%	62%	***+26%***
Less frequently	25%	65%	***+40%***
Safety traveling by vehicle on Division			
Safe	31%	63%	***+32%***
Not safe (N=19)	16%	74%	***+58%***
Safety walking/biking on Division			
Safe	33%	66%	***+33%***
Not safe	24%	70%	***+46%***
Improvement along Division?			
Needs major improvement	22%	72%	***+50%***
Needs some improvement	26%	71%	***+45%***
Needs no improvement (N=44)	59%	26%	***-33%***
Non-car driver safety			
Less important 1-3	78%	13%	***-65%***
Important 4-5	17%	80%	***+63%***

Major differences concerning the importance of bus service quality when it comes to thoughts on necessary improvements and non-car driver safety.

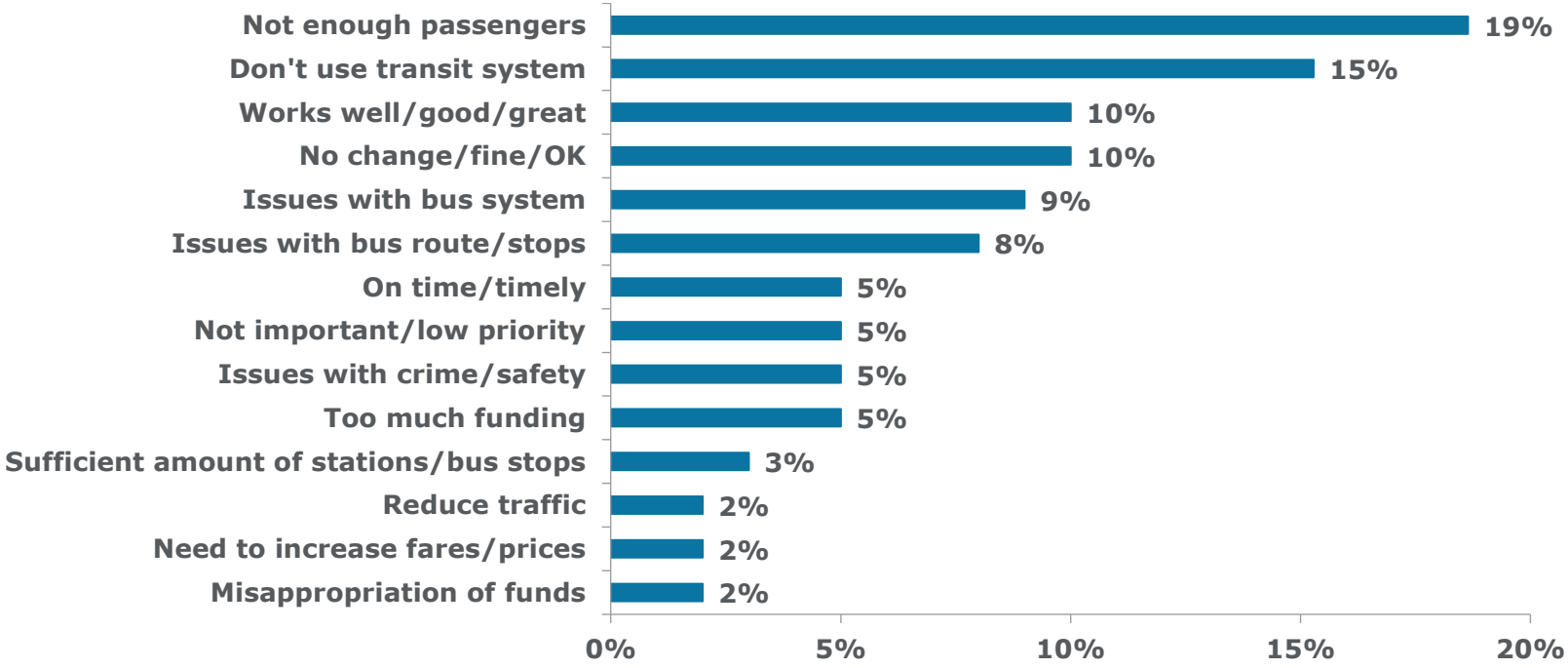
Reasons for High Importance of Quality Bus Service

IF MORE IMPORTANT: "Why do you give that rating?" (Q22.2, N=157)



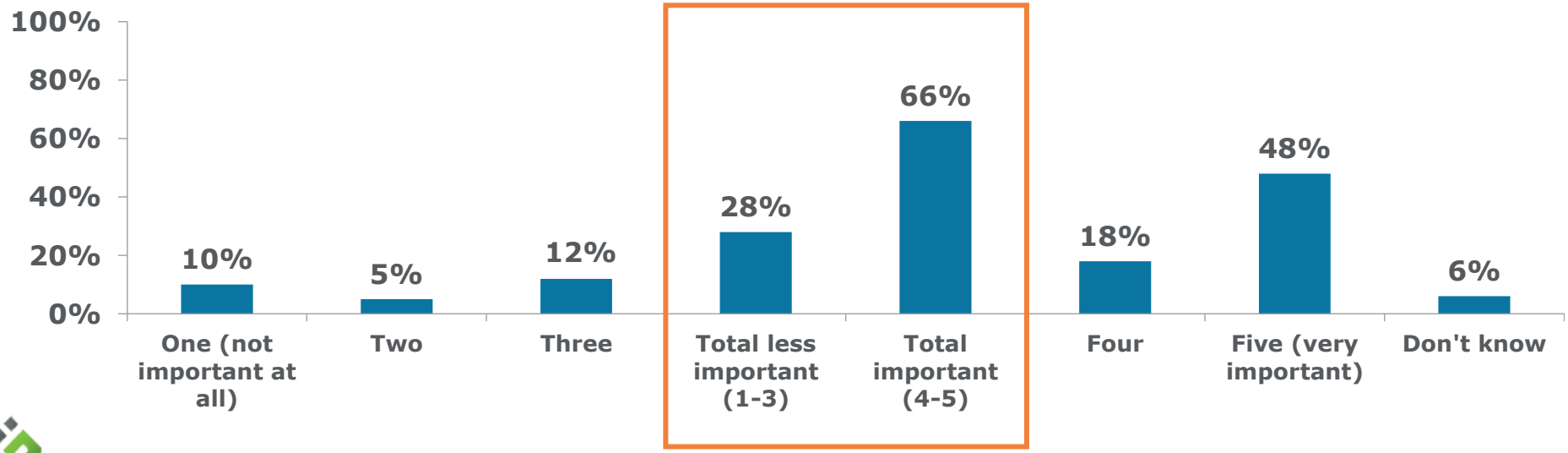
Reasons for Low Importance of Quality Bus Service

IF LESS IMPORTANT: "Why do you give that rating?" (Q22.1, N=41)



Importance of Improving Reliability of Bus Service

"Bus Rapid Transit, or BRT seeks to make bus service more reliable and quick, even during rush hour. Priority measures include traffic signal technology, lanes for buses and other changes to the roadway to make it easier for buses to move quickly. These improvements save time for passengers, making the bus more useful and more cost efficient. Using a five-point scale where five is very important and one is not important at all, in your opinion, how important is to improve reliability and quickness of buses along Division Street?" (Q23)



RELIABILITY OF BUS SERVICE: *KEY SUBGROUPS*

	Less important (1-3)	Important (4-5)	*Net important*
All residents	28%	66%	***+38%***
Region			
North	36%	64%	***+28%***
South	18%	75%	***+57%***
East	22%	71%	***+49%***
West	33%	59%	***+26%***
Gender			
Men	36%	57%	***+21%***
Women	20%	74%	***+54%***
Age			
18-34	26%	69%	***+43%***
35-54	25%	71%	***+46%***
55-64 (N=45)	42%	56%	***+14%***
65+	22%	63%	***+41%***
Length of residence			
0-19 years	24%	74%	***+50%***
20+ years	31%	63%	***+32%***
Quality of transportation			
Excellent/good	27%	67%	***+40%***
Fair	23%	69%	***+46%***
Below average/poor	30%	66%	***+36%***

As with quality of bus service, women and newer residents are more likely than men and longer-term residents to say improving the reliability of bus service is important. Regionally, South and East area residents are more likely than North or West residents to say important.

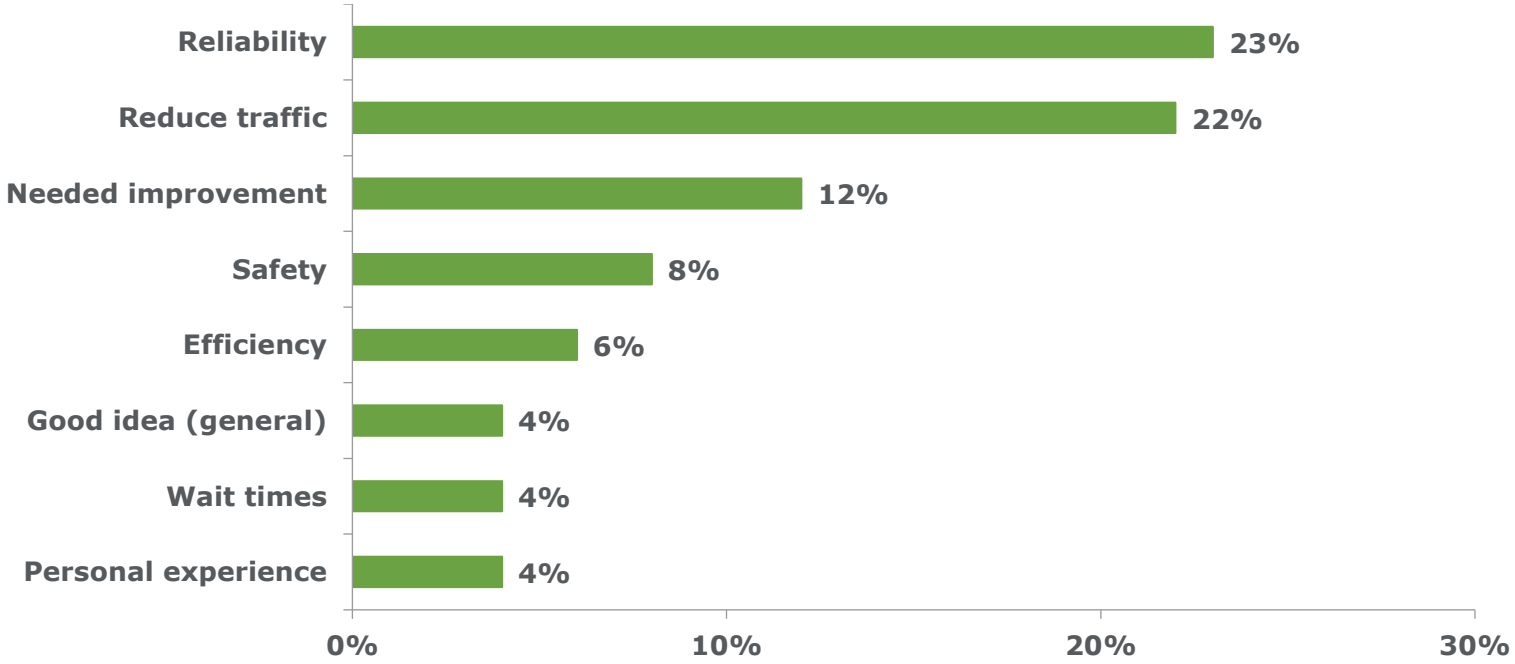
Reliability of Bus Service: *Key Subgroups (2)*

	Less important (1-3)	Important (4-5)	*Net important*
All residents	28%	66%	***+38%***
Pre-COVID travel on Division			
Once a week or more	32%	64%	***+32%***
Less frequently	25%	69%	***+44%***
Safety traveling by vehicle on Division			
Safe	28%	67%	***+39%***
Not safe (N=19)	21%	69%	***+48%***
Safety walking/biking on Division			
Safe	27%	69%	***+42%***
Not safe	27%	68%	***+41%***
Improvement along Division?			
Needs major improvement	28%	68%	***+40%***
Needs some improvement	22%	74%	***+52%***
Needs no improvement (N=44)	51%	38%	***-13%***
Improve quality of bus service			
Less important 1-3	68%	25%	***-43%***
Important 4-5	10%	88%	***+78%***

As with quality of bus service, there are wide differences on impressions of the importance of bus service reliability when it comes to thoughts on necessary improvements and quality of bus service.

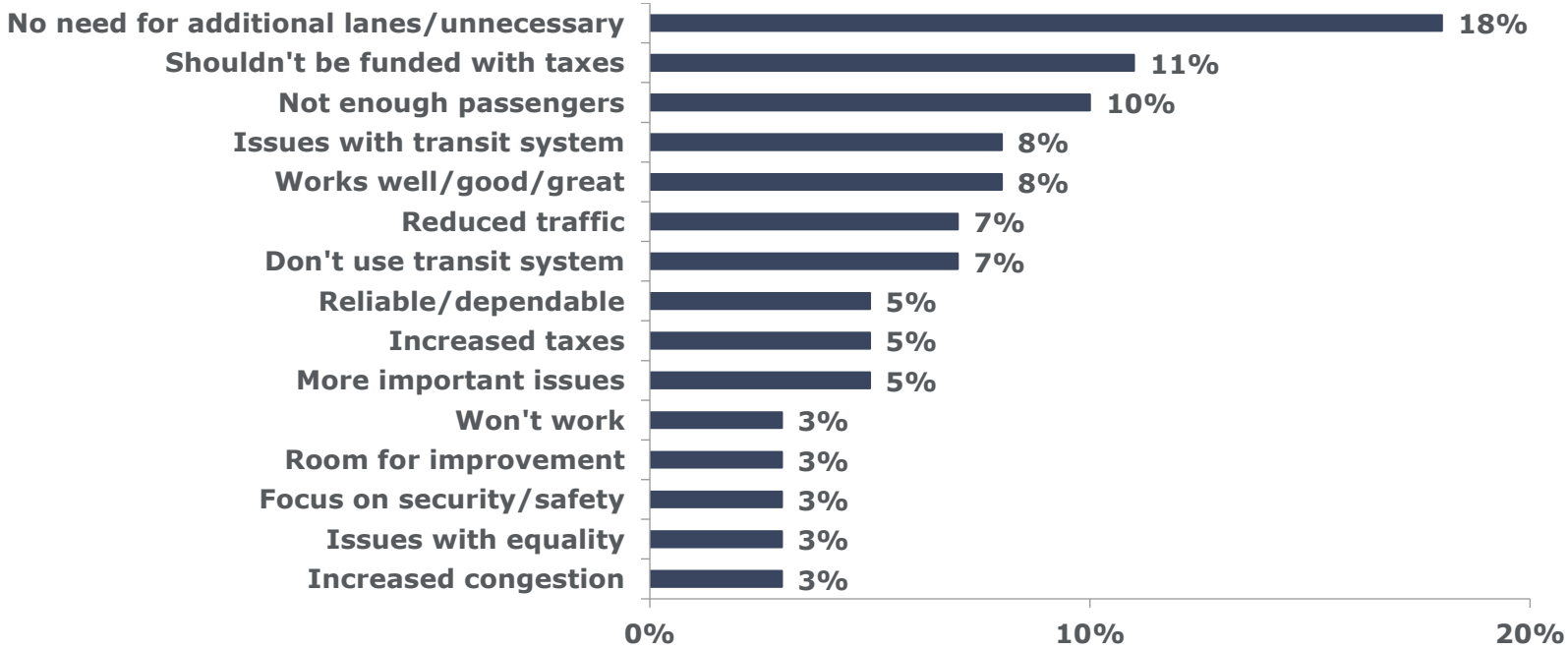
Reasons for High Importance of Reliable Bus Service

IF MORE IMPORTANT: "Why do you give that rating?" (Q24.2, N=165)

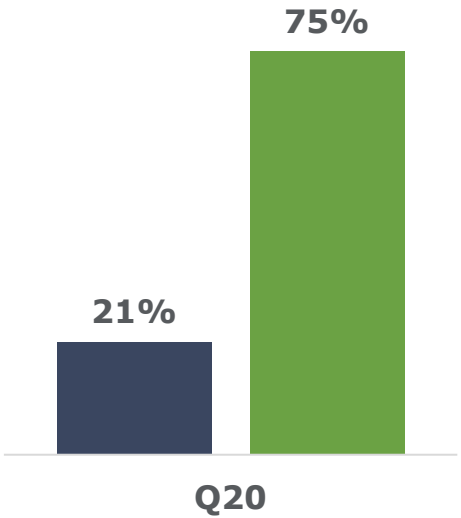


Reasons for Low Importance of Reliable Bus Service

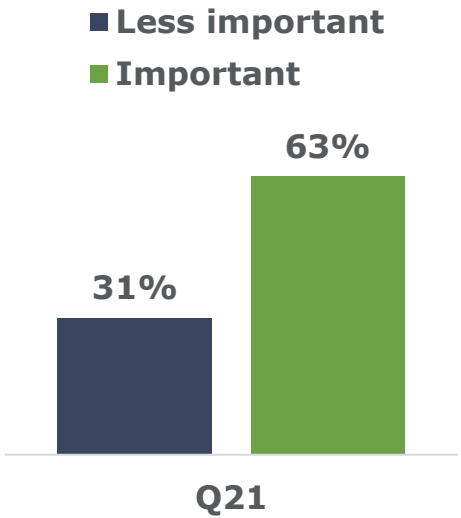
IF LESS IMPORTANT: "Why do you give that rating?" (Q24.1, N=39)



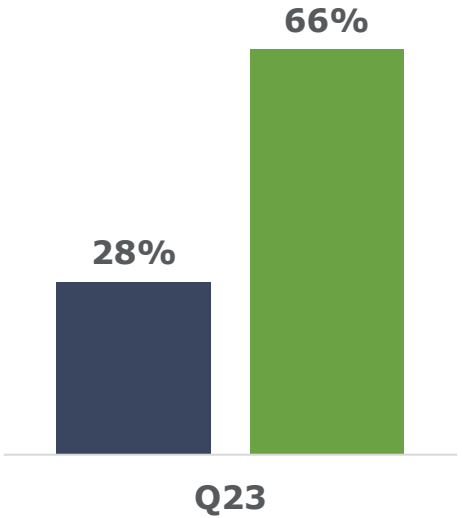
Importance Ratings Comparison: Safety Quality Bus Service – Reliable Bus Service



Safety for non-car drivers



Quality of bus service



Reliability of bus service

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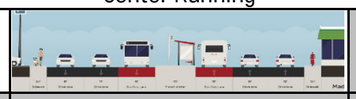
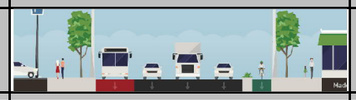
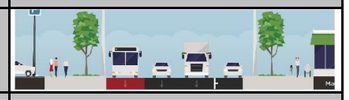
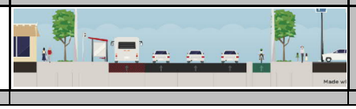
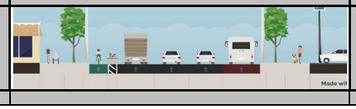
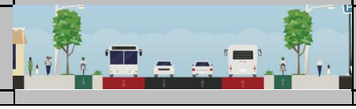
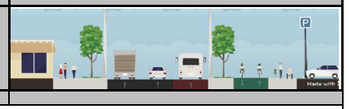
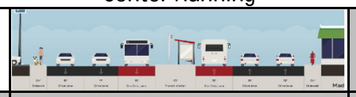
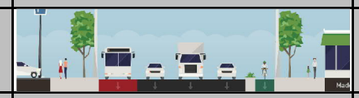
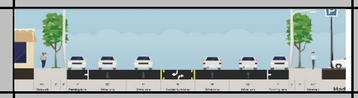
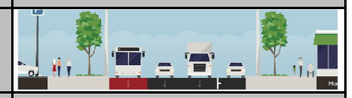
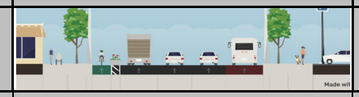
APPENDIX F
Alternatives Evaluation Matrix

Lowest Performing | Highest Performing

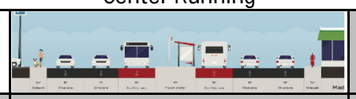
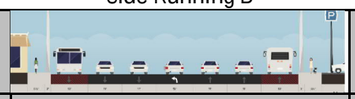
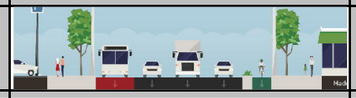
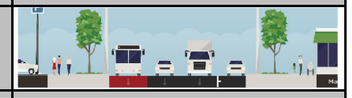
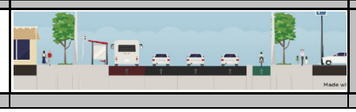
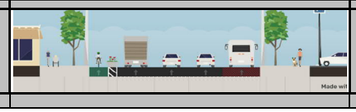
		No Build	Center Running	Side Running A	Side Running B	Side Running C	Overall notes
	Mainline	No Build					
	Division (Couplet)						
	Ruby (Couplet)						
METRICS							
Transit Performance and User Benefit	Current Corridor Transit Ridership (pre-COVID)	930,000 (2018 annual ridership)					Source: State of the Corridor memo
	Ridership Potential (Households/Employment)	Population: 15,362 Households: 6,092 Total Jobs: 20,758 Daily Boardings: 4,200 Ridership for the No Build on Route 25 is expected to operate at existing headways. The 2040 No Build boardings are an increase of approximately 35% over existing year boardings.	Population: 15,362 Households: 6,092 Total Jobs: 20,758 Daily Boardings: 5,350 Ridership for C1 on Route 25 is expected to increase approximately 28% above the No Build condition.	Population: 15,362 Households: 6,092 Total Jobs: 20,758 Daily Boardings: 5,350 Ridership for C1 on Route 25 is expected to increase approximately 28% above the No Build condition.	Population: 15,362 Households: 6,092 Total Jobs: 20,758 Daily Boardings: 5,550 Ridership for C1 on Route 25 is expected to increase approximately 32% above the No Build condition.	Population: 15,362 Households: 6,092 Total Jobs: 20,758 Daily Boardings: 5,325 Ridership for C1 on Route 25 is expected to increase approximately 28% above the No Build condition.	Source: 2019: U.S. Census Bureau, ACS 5-Year Estimates U.S. Census Bureau, OnTheMap Application and LEHD Origin-Destination Employment Statistics (Beginning of Quarter Employment, 2nd Quarter of 2002-2018) 1/4 mile study area buffer
	Speed and Reliability Improvement	PM Peak Hour Southbound Travel Time = 29.1 Min. PM Peak Hour Northbound Travel Time = 31.0 Min. 2040 No Build travel times nearly identical to existing year travel times. Transit reliability will continue to be impacted by current congestion levels, most notably traffic in the downtown area, the Y, and at major signalized intersections on the mainline.	PM Peak Hour Southbound Travel Time = 29.2 Min. PM Peak Hour Northbound Travel Time = 31.3 Min. Travel times consistent with No Build, adding less than 1 minute travel time in each direction in the PM peak hour. Highest level of potential transit reliability increase, due to protected center BRT running-way and use of BAT lanes on one way streets in the Division/Ruby couplet. Transit signal priority and/or queue jump treatments in the couplet will be instrumental in improving transit speed and reliability.	PM Peak Hour Southbound Travel Time = 29.3 Min. PM Peak Hour Northbound Travel Time = 31.1 Min. Travel times consistent with No Build, adding less than 1 minute travel time in each direction in the PM peak hour. Significant potential for transit reliability increase, due to use of BAT lanes on the Mainline and on one way streets in the Division/Ruby couplet. Transit signal priority and/or queue jump treatments will be instrumental in improving transit speed and reliability.	PM Peak Hour Southbound Travel Time = 29.5 Min. PM Peak Hour Northbound Travel Time = 32.5 Min. Travel times consistent with No Build, adding less than 1 minute travel time in the southbound direction, but adding more than a minute in the northbound direction in the PM peak hour. Moderate potential for transit reliability increase, due to use of BAT lanes on the Mainline and Ruby street. Higher levels of congestion and two-way operations on Ruby street may impact transit speeds if not counteracted with transit priority measures. Transit signal priority and/or queue jump treatments will be instrumental in improving transit speed and reliability.	PM Peak Hour Southbound Travel Time = 29.4 Min. PM Peak Hour Northbound Travel Time = 31.4 Min. Travel times consistent with No Build, adding less than 1 minute travel time in each direction in the PM peak hour. Significant potential for transit reliability increase, due to use of BAT lanes on the Mainline and on one way streets in the Division/Ruby couplet. Transit signal priority and/or queue jump treatments will be instrumental in improving transit speed and reliability.	
	Improves STA Network Connectivity	Connections to the existing STA network would remain the same	Bus stops spacing/location would be the same for all alternatives thus no anticipated differences associated with network connectivity				
	Traffic/Corridor Mobility Impacts	Congestion: The corridor operates at LOS A and B in the AM and PM peak hour. The congestion in the 2040 No Build is slightly less than or equal to the existing 2015 congestion, primarily due to the completion of NSC, reducing north-south vehicular trips throughout the region. One system bottleneck exists at the Maple Street bridge, identical to existing conditions.	Congestion: The majority of the corridor operates at LOS A and B conditions, similar to the No Build condition, with a small segment operating at LOS C between Lincoln and Wellesley near the "Y". Parallel north-south arterials operate similar to the No Build condition, and no new bottlenecks (LOS E or F) are introduced into the system. All alternatives provide for pedestrian facilities in the mainline and bicycle facilities in the couplet. Non-motorized mobility is anticipated to be the same across all alternatives Bus stops spacing/location would be the same for all alternatives. Transit mobility is greatest based on improvements to speed and reliability	Congestion: The corridor operates at LOS A and B conditions, identical to the No Build condition. Parallel north-south arterials operate similar to the No Build condition, and no new bottlenecks (LOS E or F) are introduced into the system. All alternatives provide for pedestrian facilities in the mainline and bicycle facilities in the couplet. Non-motorized mobility is anticipated to be the same across all alternatives Bus stops spacing/location would be the same for all alternatives. Transit mobility is significantly better than no build based on improvements to speed and reliability	Congestion: The majority of the corridor operates at LOS A and B conditions, similar to the No Build condition. However, Ruby Street experiences congestion levels between C and E throughout. Parallel north-south arterials operate similar to the No Build condition, with only a small LOS D introduced on Washington Street north of Spokane River. All alternatives provide for pedestrian facilities in the mainline and bicycle facilities in the couplet. Non-motorized mobility is anticipated to be the same across all alternatives Bus stops spacing/location would be the same for all alternatives. Transit mobility is better than no build but is less than other alternatives based on improvements to speed and reliability	Congestion: The majority of the corridor operates at LOS A and B conditions, similar to the No Build condition, with small sections of LOS C located on Ruby south of Indiana. Parallel north-south arterials operate similar to the No Build condition, and no new bottlenecks (LOS E or F) are introduced into the system. All alternatives provide for pedestrian facilities in the mainline and bicycle facilities in the couplet. Non-motorized mobility is anticipated to be the same across all alternatives Bus stops spacing/location would be the same for all alternatives. Transit mobility is significantly better than no build based on improvements to speed and reliability	
		Bicycles not currently allowed on Division Street	For all scenarios: All ages and abilities bicycle facility options for the mainline segment and in the "Y" route are in parallel corridors with connections to destinations on Division				

Lowest Performing | Highest Performing

		No Build	Center Running	Side Running A	Side Running B	Side Running C	Overall notes
	Mainline	No Build					
	Division (Couplet)						
	Ruby (Couplet)						
METRICS							
Corridor Mobility	Bicycle and Pedestrian Impacts	between Buckeye Avenue and the North Division 'Y' Alternate north-south corridors are beyond 1/3 miles from corridor Division Street and alternative bicycle routes higher stress facilities Sidewalks are present but some segments are in poor condition Curb ramps present at many intersections	Crossing distance to transit stops is reduced in the mainline Right side buffered bike lanes do not conflict with transit or left turning vehicles in the couplet More crossing upgrades compared to other scenarios due to center running BAT lanes in the mainline Potential for crossing against signal if bus approaching/is at median transit stop Connecting to transit requires bicycle users to cross street in the couplet Easy to connect bike lanes to rest of the network	Fast and fearless riders can use side running BAT lanes Side running BAT lanes provide separation from GP travel lanes Bike lanes do not conflict with transit in the couplet Left side bike lanes in the couplet are challenging to connect with rest of network Left side bike lanes in the couplet conflict with left turning vehicles	Fast and fearless riders can use side running BAT lanes Side running BAT lanes provide separation from GP travel lanes Cycle track in the couplet reduces out of direction travel and ROW needs Cycle track on Ruby requires special treatments at driveways and intersections Cycle track on Ruby corridor with high density of intersections/driveways and two vehicle travel not recommended Cycle track on Ruby challenging to connect to rest of network	Fast and fearless riders can use side running BAT lanes Side running BAT lanes provide separation from GP travel lanes Cycle track on Ruby reduces out of direction travel and ROW needs Cycle track on Ruby all ages and abilities facility in corridor with one-way travel Cycle track on Ruby requires special treatments at driveways and intersections	
	Freight Impacts	Freight access to properties is primarily limited to signalized intersections in the mainline south of Francis Freight access to properties is less restricted north of Francis due to the presence of a two-way center turn lane Freight has unlimited access to properties within the couplet The No Build alternative would not impact freight	Center running would reduce opportunities for left turns along the corridor except at signalized intersections, primarily impacting access north of Francis Large freight vehicles would be unable to make left turns at intersections, requiring modified routing	No anticipated impacts to freight along the mainline Cycle track/protected bike lane in the couplet may result in minor delays for ingress/egress at driveways	No anticipated impacts to freight along the mainline Cycle tracks on Ruby may result in minor delays for ingress/egress at driveways Congestion along Ruby may impact goods movement	No anticipated impacts to freight along the mainline Cycle tracks on Ruby may result in minor delays for ingress/egress at driveways	
	Business Access Impacts	Business access is primarily limited to signalized intersections in the mainline south of Francis Business access is less restricted north of Francis due to the presence of a two-way center turn lane Business access is unlimited within the couplet The No Build alternative would not impact business access	Center running would eliminate opportunities for left turns along the corridor except at signalized intersections. Drivers may be reluctant to make U-turns at intersections and double back to businesses Inclusion of bicycle facilities in the couplet could encourage additional business patronage by non-motorized users	No anticipated impacts to businesses along the mainline or in the couplet Cycle track/protected bike lane in the couplet may result in minor delays for ingress/egress at driveways Inclusion of bicycle facilities in the couplet could encourage additional business patronage by non-motorized users	No anticipated impacts to businesses along the mainline On-street parking on Division may provide for additional business access Cycle tracks in the couplet may result in minor delays for ingress/egress at driveways Inclusion of bicycle facilities in the couplet could encourage additional business patronage by non-motorized users	No anticipated impacts to businesses along the mainline or in the couplet On-street parking on Division may provide for additional business access Cycle tracks on Ruby may result in minor delays for ingress/egress at driveways Inclusion of bicycle facilities in the couplet could encourage additional business patronage by non-motorized users	
	Safety Impacts	Access management along the mainline would remain for vehicles under the No Build alternative Pedestrians must cross seven lanes of traffic in the mainline There are limited options for mid-block crossings in the mainline. Outside designated crossings, islands can be used for pedestrian refuge for jaywalkers. They are not ADA accessible. There would be no changes to channelization in the couplet under the No Build alternative Pedestrians must cross four lanes of traffic on couplet streets Pedestrian crossings are limited to signalized crossings in the couplet There are no opportunities for mid-block crossings in the couplet and no islands for pedestrian refuge by jaywalkers There are no dedicated facilities for bicycles in the mainline or couplet and cycling is not permitted on the sidewalks The No Build alternative would not impact safety. Increased traffic volumes could result in additional	Center running would reduce the length of pedestrian crossings to access the station Center running could increase the potential for jay walking, as riders may be more inclined to cross one direction of traffic (as opposed to both directions) when they see a bus coming Center running would eliminate center two-way left turn lane, reducing the potential for head-on and T-bone collisions Center running would eliminate opportunities for left turns along the corridor except at signalized intersections, reducing the potential for T-bone collisions BAT lanes in the couplet provide space for right-turning vehicles to accelerate/decelerate outside the flow of traffic Cycle tracks/protected bike lanes in the couplet match the direction of travel for vehicles	Mainline crossing is wide resulting in longest crossing times for pedestrians BAT lanes in the mainline and couplet provide space for right-turning vehicles to accelerate/decelerate outside the flow of traffic Cycle tracks/protected bike lanes in the couplet match the direction of travel for vehicles	Mainline crossing is wide resulting in longest crossing times for pedestrians BAT lanes in the mainline and on Ruby provide space for right-turning vehicles to accelerate/decelerate outside the flow of traffic Two-way cycle track on a two-way street is considered less safe than other alternatives, as it requires drivers to watch for cyclists in both directions Two-way center left turn lane on Division in the couplet could increase the potential for head-on and T-bone collisions Narrower cross-section on Ruby would reduce crossing times for pedestrians	Mainline crossing is wide resulting in longest crossing times for pedestrians BAT lanes in the mainline and couplet provide space for right-turning vehicles to accelerate/decelerate outside the flow of traffic Two-way cycle track on a one-way street may be less safe than bicycle facilities that match the flow of traffic, as it requires drivers to watch for cyclists in both directions	
	Transit-Dependent Populations Served	Population Over 65: 13.4% Population Under 16: 17.4% Population with a Disability: 15.8% Households Below 80% AMI: 55.0% Households Below 50% AMI: 34.8% Households Below 30% AMI: 20.9% Workers Over 16 with No Vehicle Available: 4.8%					Source: 2019: U.S. Census Bureau, ACS 5-Year Estimates AMI based on Spokane County 1/4 mile study area buffer

Lowest Performing | Highest Performing

Overall notes

		No Build	Center Running	Side Running A	Side Running B	Side Running C	
	Mainline	No Build					
	Division (Couplet)						
	Ruby (Couplet)						
METRICS							
Equitable and Inclusive Access to Transit	Access to Employment	Total Jobs: 20,758 By Salary: $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 and Social Assistance: 23.7% Retail Trade: 20.1% Accommodation and Food Services: 15.7% Educational Services: 10.0% Professional, Scientific, and Technical Services: 9.1%					Source: U.S. Census Bureau, OnTheMap Application and LEHD Origin-Destination Employment Statistics (Beginning of Quarter Employment, 2nd Quarter of 2002-2018) 1/4 mile study area buffer
	Access to Healthcare, Education, and Social Services	Schools (3): Evergreen Elementary Garfield Elementary Madison Elementary Parks/Recreation (5): B A Clyde Park Byrne Park Franklin Park Ruth Park Franklin Sports Complex Hospitals (2): Holy Family Hospital MultiCare Deaconess North Emergency Center Emergency Response/Law Enforcement (1): Fire Station 18					Source: City of Spokane/Spokane County
	Accessibility Improvements	Under the No Build alternative, accessibility at or to stops may be improved in conjunction with other public or private modifications to the right-of-way.	All stations will be developed to meet ADA standards Accessibility is anticipated to be similar across all alternatives				
Responsiveness to Community Goals	Neighborhood/Residents Impacts	n/a	STA/SRTC/Shireen	STA/SRTC/Shireen	STA/SRTC/Shireen	STA/SRTC/Shireen	
	Business Community Impacts	n/a	STA/SRTC/Shireen	STA/SRTC/Shireen	STA/SRTC/Shireen	STA/SRTC/Shireen	
	Corridor Traveler/Commuter Impacts	n/a	STA/SRTC/Shireen	STA/SRTC/Shireen	STA/SRTC/Shireen	STA/SRTC/Shireen	
	Impact on Institutions and Other Stakeholders	n/a	STA/SRTC/Shireen	STA/SRTC/Shireen	STA/SRTC/Shireen	STA/SRTC/Shireen	
	Compatibility with Community Growth and Land Use Vision	n/a	STA/SRTC/Shireen	STA/SRTC/Shireen	STA/SRTC/Shireen	STA/SRTC/Shireen	

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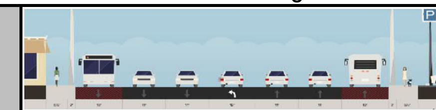
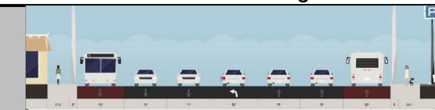
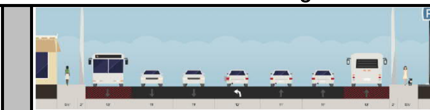
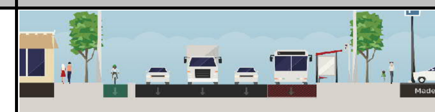
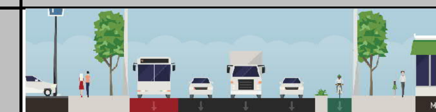
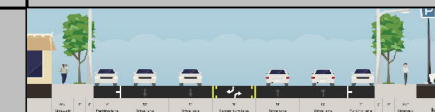
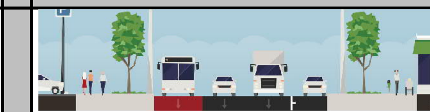
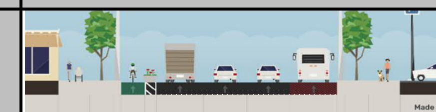
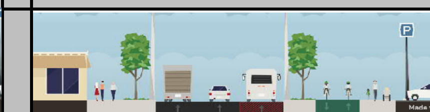
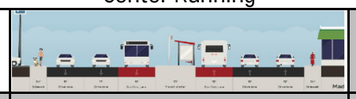
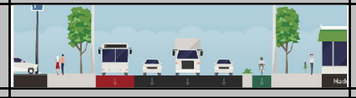
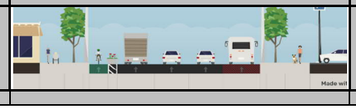
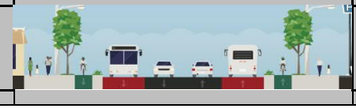
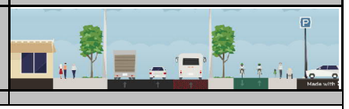
		No Build	Center Running	Side Running A	Side Running B	Side Running C	Overall notes
	Mainline	No Build					
	Division (Couplet)						
	Ruby (Couplet)						
METRICS							
	Complementary Community Improvement Opportunities	n/a	STA/SRTC/Shireen	STA/SRTC/Shireen	STA/SRTC/Shireen	STA/SRTC/Shireen	
Implementation Feasibility	Construction Feasibility	n/a	Center running BRT lanes may require additional coordination with WSDOT to complete approvals process May require additional ROW at boarding islands Potential intersection modifications to accommodate boarding islands may trigger roundabouts Center-running construction is often more complex and challenging due to maintaining traffic on both sides of the construction zone, lay-donw, materials and workers must cross travel lanes to access the construction zone	Side running BAT lanes are more common, which may simplify approvals process Typical construction zone access and traffic control easier than center-running	Side running BAT lanes are more common, which may simplify approvals process Converting roadway to two-way operations may require additional coordination Typical construction zone access and traffic control easier than center-running	Side running BAT lanes are more common, which may simplify approvals process Typical construction zone access and traffic control easier than center-running	
	Phasing Options and Implementation Flexibility	n/a	Phasing could be more challenging along mainline portion with center running BAT lanes	Phasing is possible and implementation is straightforward	Phasing is possible, couplet may be more challenging to implement	Phasing is possible, couplet may be more challenging to implement	
	Construction Impacts on Stakeholders	n/a	Construction would require partial roadway closures Construction area in center of the roadway will require additional safety considerations for construction crew Business access and left-turns could be restricted	Construction would require partial roadway closures There could be impacts to business access in active construction zones, likely focused on one side of street Construction is typically phased by block	Construction would require partial roadway closures There could be impacts to business access in active construction zones, likely focused on one side of street Construction is typically phased by block Cycle track construction may result in additional impacts to sidewalk in active construction areas	Construction would require partial roadway closures There could be impacts to business access in active construction zones, likely focused on one side of street Construction is typically phased by block Cycle track construction may result in additional impacts to sidewalk in active construction areas	
	Potential Environmental Impacts (NEPA/SEPA)	n/a	Center running BAT lanes would require greater acquisitions and project footprint outside of existing right-of-way, which could result in additional environmental impacts, and may have greater utility and construction impacts.		Converting the couplet from existing one-way to two-way may have greater impacts than the one-way couplet, because changing from the existing one-way configuration would require greater modification to the existing environment.		The potential feasibility of each alternative depends on how much of the project will be constructed outside of existing right-of-way, whether the project will affect any 4(f) properties, and whether the project will affect any hazardous materials sites.
Capital and Operating Costs	Capital Cost for Transit Alternative	n/a	Total project cost: $117 million Center running BAT lanes would require greater acquisitions and project footprint outside of existing right-of-way, and may have greater utility and construction impacts.	Total project cost: $105 million	Total project cost: $121 million Revising couplet to two-way traffic likely to cost more revising signalized intersections.	Total project cost: $114 million Narrower roadway section on Ruby could preserve existing features and save on capital costs.	
	Capital Cost of Total Corridor Improvements	n/a					
	Annual Operations	Neutral - consistent with current STA Moving Forward vision for service provision in the Division Corridor	Higher operations and maintenance costs compared to the baseline, due to the increase in Revenue Service Hours provided, increased fleet size, and facilities maintenance of dedicated transit running way, enhanced stations, and technology.	Higher operations and maintenance costs compared to the baseline, due to the increase in Revenue Service Hours provided, increased fleet size, and facilities maintenance of dedicated transit running way, enhanced stations, and technology.	Higher operations and maintenance costs compared to the baseline, due to the increase in Revenue Service Hours provided, increased fleet size, and facilities maintenance of dedicated transit running way, enhanced stations, and technology.	Higher operations and maintenance costs compared to the baseline, due to the increase in Revenue Service Hours provided, increased fleet size, and facilities maintenance of dedicated transit running way, enhanced stations, and technology.	

Lowest Performing | Highest Performing

		No Build	Center Running	Side Running A	Side Running B	Side Running C	Overall notes
	Mainline	No Build					
	Division (Couplet)						
	Ruby (Couplet)						
METRICS							
Funding Competitiveness	Meets Cost/Ridership Warrants for FTA 5309 Small Starts Funding	NA	Extent of transit priority treatment, improvement to speed and reliability quantity and design of station shelters and amenities and branding of fleet are expected to be the same for all alternatives, and that each would comply with Small Starts requirements. All alternatives are expected to meet the FTA 5309 Small Starts Funding criteria.				
	Funding Competitiveness based on Small Starts Criteria	NA	Expected higher cost alternative with similar transit performance outcomes as other alternatives, puts this alternative at a lower cost/benefit ratio than others, therefore a relative medium to low evaluation score in this analysis. Note: this does NOT equate to the FTA rating.	Expected lower cost and still maintains contiguous transit lane treatment to same extent as other alternatives. Even with the slight disbenefit of BAT lanes vs BUS only lanes, this is expected to perform similarly.	Expected higher (highest) cost alternative with similar transit performance outcomes as other alternatives, puts this alternative at a lower cost/benefit ratio than others, therefore a relative medium to low evaluation score in this analysis. Note: this does NOT equate to the FTA rating	Expected lowest cost for treatments in the couplet (needs confirmation) and similar transit performance.	
	Local Funding/Financial Impact on STA	Little to no additional impact, slight increase to operations cost if congestion and transit performance worsen over time without intervention.	Expected higher cost requires higher local match. Possible multimodal funding sources for this alternative are potentially lesser than other alternatives without a signature active transportation facility and/or narrowing for shorter crossing distances	Expected lower cost reduces local match relative to other alternatives. Possible multimodal funding sources for this alternative are potentially lesser than other alternatives without a signature active transportation facility and/or narrowing for shorter crossing distances.	Expected higher (highest) cost requires higher local match. Inclusion of signature cycle track facility may improve attractiveness for multimodal funding sources, but this could be offset by widening of Division in couplet portion.	Expected lowest cost reduces local match relative to other alternatives. Inclusion of signature cycle track facility may improve attractiveness for multimodal funding sources, as well as narrowing both Division and Ruby in the couplet section	
	Opportunities to Leverage Multimodal Funding Sources	Potential to add signal protected pedestrian crossings on mainline.	Extent of parallel route investments as part of this alternative are undetermined. Inclusion of protected cycle facilities in the couplet section and improved protected crossings of the mainline contribute to competitiveness for multimodal funding sources.	Extent of parallel route investments as part of this alternative are undetermined. Inclusion of protected cycle facilities in the couplet section and improved protected crossings of the mainline contribute to competitiveness for multimodal funding sources.	Extent of parallel route investments as part of this alternative are undetermined. Inclusion of cycle track in the couplet section and improved protected crossings of the mainline contribute to competitiveness for multimodal funding sources.	Extent of parallel route investments as part of this alternative are undetermined. Inclusion of cycle track in the couplet section and potential for shortened pedestrian crossings within the couplet contribute to competitiveness for multimodal funding sources.	
	Other Flexible Funding Options		potentially eligible for repavement, safety and stormwater improvement funding sources	potentially less competitive but still eligible for repavement, safety and stormwater improvement funding sources	potentially eligible for repavement (in the widened Division within the couplet), safety and stormwater improvement funding sources	potentially most competitive and eligible of, safety and stormwater improvement funding sources	

Methodologies: https://parametrix.sharepoint.com/:p:/r/sites/2941-001/_layouts/15/Doc.aspx?sourcedoc=%7B4B428046-88E1-4C54-888C-3831434DCC7B%7D&file=Transit%20Framework%20Criteria2020-05-01.pptx&action=edit&mobileredirect=true
Alternatives (Slide 22): https://parametrix.sharepoint.com/:p:/r/sites/2941-001/_layouts/15/Doc.aspx?sourcedoc=%7B862489D7-17AA-4881-914B-8C82922DA32A%7D&file=Steering%20Cmte%20010621%20presentation.pptx&action=edit&mobileredirect=true

APPENDIX G
Division Alternatives Modeling
Technical Memo

TECHNICAL MEMORANDUM

To:	Darby Watson Parametrix	From:	Jennifer Emerson-Martin, Iteris, Inc. Randy Knapick, IBI Group
Date:	March 29, 2021		
RE:	Alternatives Modeling Results and Analysis		

The purpose of this memorandum is to document the travel demand modeling process used to support the alternatives analysis for *Phase 1* of the Division Street Corridor Study. This memorandum documents the following:

- Methods and assumptions used for developing the travel model forecasts
- Detailed performance metric information
- Forecast analysis for each of the performance metrics
- A comparative analysis of each of the Build alternatives compared to the No Build condition

To ensure that the Division Street Corridor Study represents the most accurate regional background information and produces the most realistic forecasts, the project team coordinated with local agencies as follows:

- **Spokane Regional Transportation Council (SRTC):** The project team obtained the current 2015 and 2040 travel model files and met multiple times during the alternatives development process to discuss assumptions, model methodologies, and performance metrics analysis.
- **Spokane Transit Authority (STA):** The project team presented, and STA concurred with, background modeling assumptions for the 2040 model alternative to be used in the 2040 future year modeling (including the 2040 No Build alternative).
- **Washington State Department of Transportation (WSDOT):** The project team **o**btained network geometry and configuration for North Spokane Corridor (NSC), including adjacent ramps and local facilities, and met during the alternatives development process to discuss assumptions, model methodologies, and performance metrics analysis.

1 INTRODUCTION

The primary tool used in the analysis was the current SRTC Travel Model (for years 2015 and 2040). The SRTC model was used to forecast traffic volumes and transit ridership on Division Street and adjacent arterials within the Division Street Corridor Study project area. These travel model forecasts were used as inputs during the alternatives analysis, as a part of Phase 1 of the study. The study area includes the area within ¾ mile of either side of Division Street, which encompasses Hamilton Street to the east and Monroe Street to the west as illustrated in **Figure 1**.

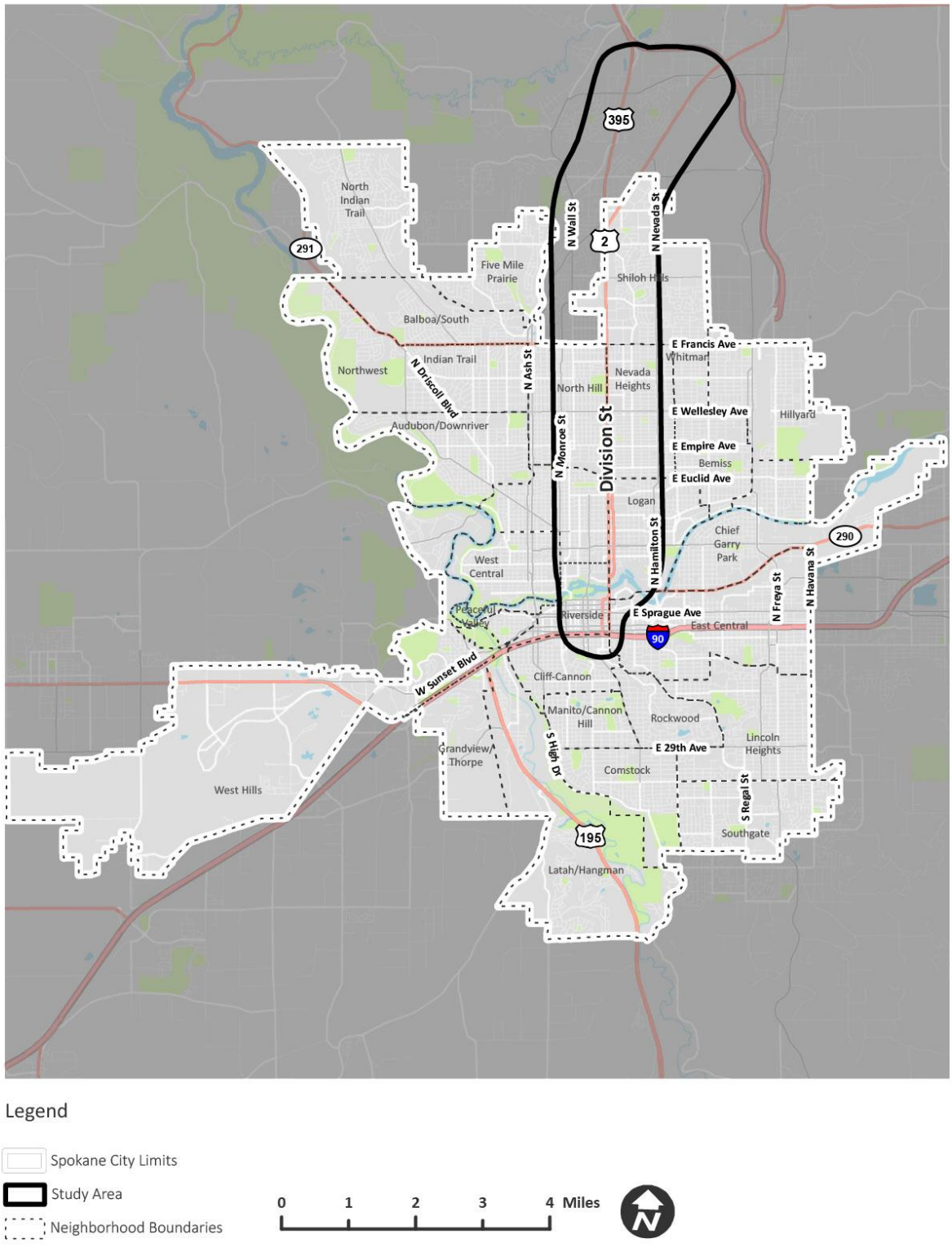
Four High-Performance Transit Build alternatives (Build alternatives) were developed and analyzed for the corridor. The Build alternatives are detailed as having sections for the *mainline*, which includes sections 3 and 4 from **Figure 1**. The *couplet* is illustrated in section 2 of **Figure 1**. The Build alternatives are described in **Table 1**, and a more detailed illustration is included in **Figure 2**.

Table 1 - Alternatives Description

Alternative	Mainline			Couplet		
	Bus Lane Configuration	Number of General Purpose Lanes	Activate Transportation Facilities	Bus Lane Configuration	Number of General Purpose Lanes	Activate Transportation Facilities
No Build	None	3 through lanes with left turn pockets at intersections	None	None	4 through lanes	None
Center-running	Center-running dedicated lanes	2 through lanes; left turns permitted at signalized intersections only	None; assumes off-corridor bicycle facility	Left side business access and transit (BAT) lanes	3 through lanes	Bike lanes
Side-running A	Right side-running BAT lanes	2 through lanes with left turn pockets at intersections	None; assumes off-corridor bicycle facility	Right side BAT lanes	3 through lanes	Protected bike lanes
Side-running B[a]	Right side-running BAT lanes	2 through lanes with left turn pockets at intersections	None; assumes off-corridor bicycle facility	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
Side-running C	Right side-running BAT lanes	2 through lanes with left turn pockets at intersections	None; assumes off-corridor bicycle facility	Right side BAT lanes	2 through lanes; On-street parking on one side of Division Street	Two-way cycle track on Ruby Street only

[a] Alternative Side-Running B would convert the one-way streets in the Couplet to two-way streets.

Figure 1: Study Area



Legend

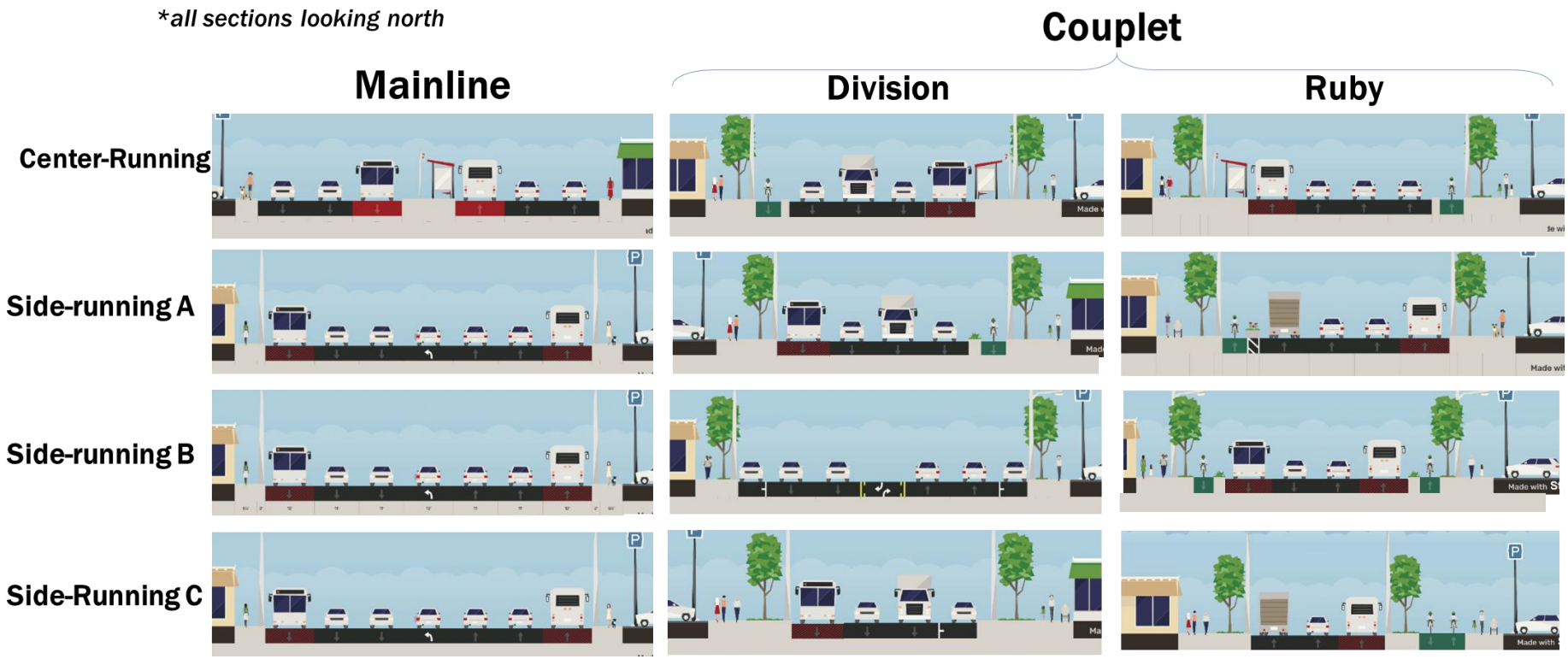
Spokane City Limits

Study Area

Neighborhood Boundaries

0 1 2 3 4 Miles

Figure 2: Alternative Roadway Configurations

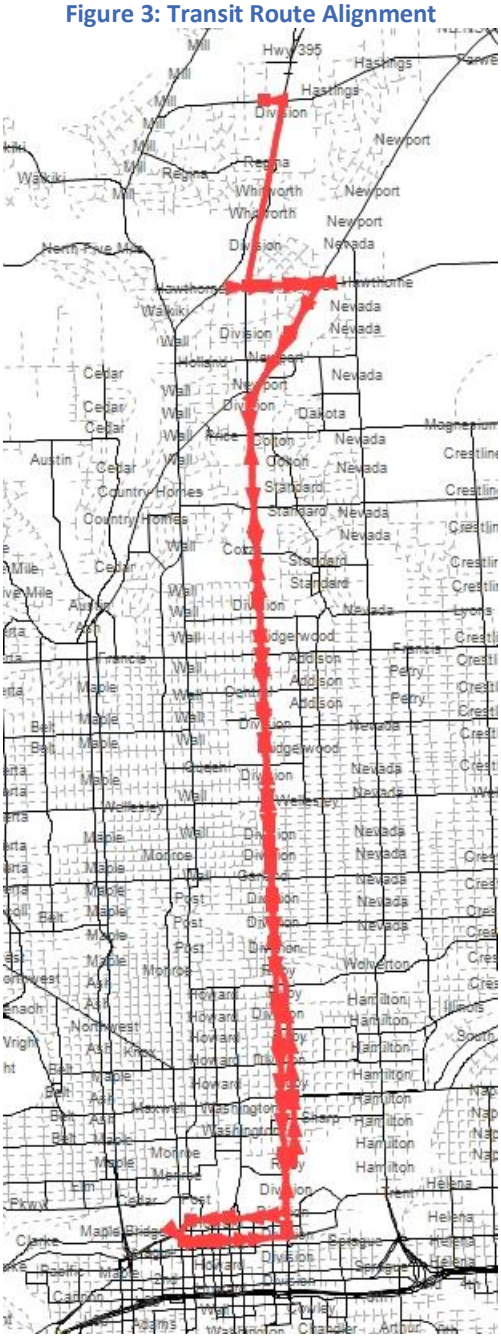


2 ASSUMPTIONS

For the four Build alternatives, it was assumed that all transit routes maintain the same headways throughout the day and have the same configurations north of the "Y" and south of the Spokane River. The headways used for the modeling effort represent the assumed typical weekday service.

All of the transit alternatives (including the No Build alternative) assume that all regional transit improvements assumed in the SRTC Metropolitan Transportation Plan (MTP) are included in the background conditions. Additionally, the alignment for all 2040 alternatives (including the No Build alternative) is identical to the existing conditions and is illustrated in **Figure 3**.

Figure 3: Transit Route Alignment



2.1 Build Alternatives: High-Performance Transit Service Plan

The headways for the High-Performance Build alternatives were assumed as typical weekday service. The Build alternatives service plan is consistent with the service plan of the future STA City Line bus rapid transit (BRT) (currently under construction), with a 19-hour service span from 5:00 AM to 12:00 PM.

Build alternative frequencies by time of day are:

- 5:00 AM to 6:00 AM (Early AM): 30 Minute Headways
- 6:00 AM to 8:30 AM (AM Peak): 7.5 Minute Headways
- 8:30 AM to 5:30 PM (Mid-Day): 10 Minute Headways
- 5:30 PM to 8:00 PM (PM Peak): 7.5 Minute Headways
- 8:00 PM to 11:00 PM (Evening): 15 Minute Headways
- 11:00 PM to 12:00 AM (Late PM): 30 Minute Headways

2.2 Mid-Block and Left Turn Access

One component of the operations that differs for each of the Build alternatives is the mid-block and left turns at intersections.

- For the BAT lane alternatives (Side-running A, Side-running B, and Side-running C) mid-block left-turn access is the same as the 2040 No Build alternative
- For the center-running alternative there would be no mid-block left turn access to adjacent properties, and left-turns and u-turns would only be allowed at five signalized intersections with Division Street: Empire Avenue/Garland Avenue, Wellesley Avenue, Francis Avenue, Lincoln Road, and Magnesium Road

It is important to note that the 2040 Build alternatives are based on an identical assumption for land use in the region, which results in identical person trips to and from each origin and destination. The VISUM travel demand model is a trip-based model, and not an economic model. This means that the sole purpose of the model is to assume identical economic activity while distributing trips using the most likely mode (e.g. vehicle, bus, walk) and path those trips will take. The mode and path are determined using a variety of data including travel time, travel cost, automobile maintenance cost, income of person, and other socioeconomic variabilities, although the travel time often is the highest weighted factor for determining travel path.

3 PERFORMANCE METRICS

Readily available performance metrics from the travel demand model were used to complete the alternatives analysis. Performance metrics were supported by information from the SRTC model, primarily related to transit speeds, ridership, and passenger delay. **Table 2** summarizes metrics used in the analysis and available data sources.

Table 2 – Division Corridor Transit Data Analysis Metrics

Metric	Description	Data Source(s)
Regional Travel Statistics	Average vehicle miles, vehicle hours, vehicle hours of delay, and overall average speed for the greater Spokane region as well as the study area	All data used in this analysis was obtained as direct output from the travel demand model
Mode Split	Comparison of drive alone person trips, shared-ride person trips, transit person trips, and non-motorized person trips in the Spokane region, including a comparison of the overall transit and non-motorized mode split	All data used in this analysis was obtained as direct output from the travel demand model
Screenline Comparison	A north-south travel comparison for four east-west screenlines drawn at different locations along the study corridor Vehicle travel for the AM peak period, PM peak period, and total average day were compiled Vehicle diversion between parallel north-south facilities was compared	All data used in this analysis was obtained as direct output from the travel demand model
Transit Ridership	A comparison of total regional transit ridership compared with Route 25 ridership	Existing ridership was obtained from STA Trapeze system/Automatic Passenger Counter (APC) data The change in ridership between future year alternatives was calculated from the travel demand model outputs and applied directly to the raw ridership data
Travel Time and Speed	Average inbound and outbound vehicular travel time and speeds on Division Street between the Plaza (assumed southern terminus) and the Hastings park and ride (assumed northern terminus) Travel time and speed were summarized by AM and PM peak periods and separated by direction of travel (inbound and outbound)	Existing travel time was obtained from WSDOT using bluetooth reader information The change in travel times between alternatives was calculated from the travel demand model outputs and applied directly to the raw WSDOT travel time data
Note: All analysis assumes a data sample from typical, pre-COVID operating conditions and ridership during the school year (e.g. October 2019)		

3.1 Regional Travel Statistics

Regional travel statistics are general measures used to compare vehicular travel in a large geography. For this analysis, two study areas were analyzed to calculate average weekday Vehicle Miles of Travel (VMT), Vehicle Hours of Travel (VHT), and Vehicle Hours of Delay (VHD). **Table 3** summarizes the regional and study area travel statistics for the existing conditions, the future year No Build conditions, and all four future year Build alternatives. As detailed in **Table 3**, the Build alternatives result in the following:

- A decrease in VMT of approximately 2 to 3 percent
- An increase in VHT by approximately 1 to 2 percent
- A decrease in VHD of approximately 0 to 2 percent

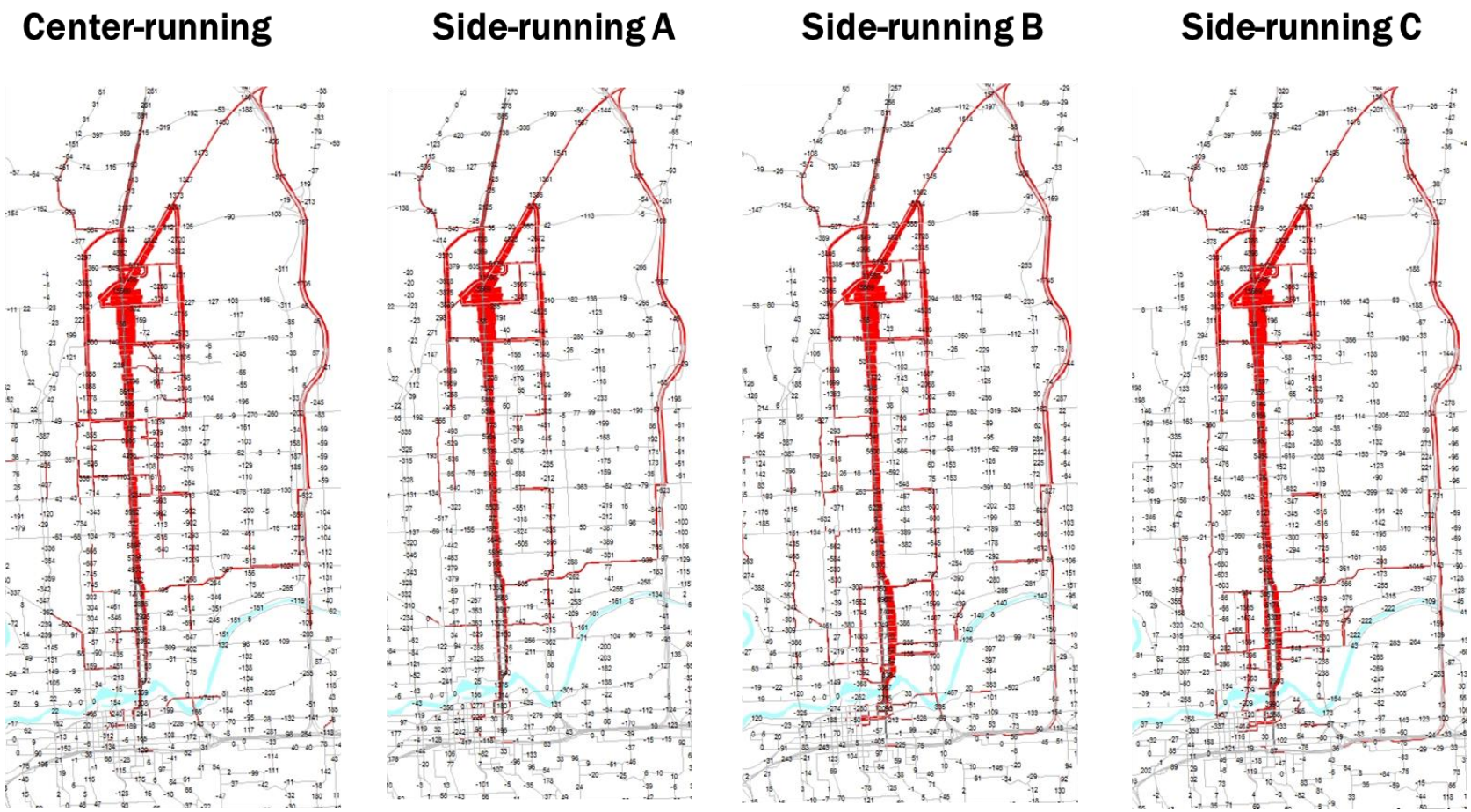
Table 3 – Regional Travel Statistics Comparison (Average Weekday)

Description	2015	2040				
	Existing	No Build	Center-running	Side-running A	Side-running B	Side-running C
Spokane Region						
VMT	8,891,938	11,159,329	11,173,277	11,135,833	11,150,509	11,142,415
VHT	235,588	295,733	296,367	295,496	295,934	295,865
VHD	63,164	69,638	69,402	69,170	69,266	69,088
Study Area[1]						
VMT	882,162	910,820	895,240	889,738	882,975	882,208
VHT	30,089	31,082	30,812	30,600	30,604	30,420
VHD	5,044	5,327	5,044	5,023	4,930	4,949
Change in VMT		3%	-2%	-2%	-3%	-3%
Change in VHT		3%	2%	2%	2%	1%
Change VHD		6%	0%	0%	-2%	-2%

Note: The No Build alternative is compared to the Existing conditions, and the 2040 Build alternatives are compared with the 2040 No Build.
[1]The study area statistical area includes the area within ¾ mile of either side of Division Street, which encompasses Hamilton Street to the east and Monroe Street to the west as illustrated in **Figure 1**.

To understand the difference in regional travel for the Build alternatives, difference plots were made to illustrate regional changes in vehicular travel. **Figure 4** illustrates a side-by-side comparison of the reduction in average daily traffic from the No Build alternative with each of the Build alternatives. The wider sections of red show where the No Build alternative has more traffic volume than the Build alternatives. In general, all of the Build alternatives show a reduction in vehicular traffic throughout the corridor, with a greater reduction in vehicle trips north of Francis Avenue. More detailed figures for each of the difference plots are included in **Attachment A** (Figures A1 through A4).

Figure 4: Build Alternative Average Daily Traffic Flow Difference Plots (Versus No Build)



3.2 Flow Bundle Analysis (No Build)

A flow bundle analysis was completed for the No Build alternative to illustrate general trip distribution throughout the region. The flow bundles illustrate the origins and destinations of trips through a specific location on the network. Flow bundles were developed for the following segments:

- Division Street and Ruby Street north of Mission Avenue
- Division Street north of Empire Avenue/Garland Avenue
- Division Street south of Lincoln Road
- Division Street north of Hawthorne Road

The flow bundle analysis for the AM and PM peak periods are illustrated in **Figure 5**, **Figure 6**, **Figure 7**, and **Figure 8**. Additionally, **Figure 9** illustrates the flow bundle analysis for any vehicles which travel through the entire corridor between the Spokane River and Hastings Road. **Figure 10** illustrates the flow bundle analysis for vehicles which travel on the North-South Corridor south of Francis Avenue. More detailed figures for each of the difference plots are included in **Attachment A** (Figures A5 through A16).

As illustrated in the flow bundle figures:

- For each of the segment locations, the PM peak period has a heavier traffic flow than the AM peak period
- For each of the segment locations, both the AM and PM peak periods show little traffic coming from/going to east on I-90, because within the model it is more efficient in 2040 to utilize the future North South Corridor for this movement.
- *Division Street and Ruby Street north of Mission Avenue*
    - Vehicular traffic in this segment comes from/goes to the north and south and west on I-90
    - Additional vehicles come from/go to Nevada Road north of Foothill Drive, as well as west on Francis Avenue, Wellesley Avenue, and Northwest Boulevard
- *Division Street north of Empire Avenue/Garland Avenue*
    - Vehicular traffic in this segment comes from/goes to the north and south, including west on I-90
    - Additional vehicles come from/go to the west on Francis Avenue and Wellesley Avenue
- *Division Street south of Lincoln Road*
    - Vehicular traffic in this segment comes from/goes to the north and south, as does a small amount of traffic west on I-90
    - The majority of vehicles appear to come from/goes to areas north of Francis Avenue, with some distribution around the Spokane River
- *Division Street north of Hawthorne Road*
    - Vehicular traffic in this segment comes from/go to the north and south
    - The majority of vehicles appear to come from/go to areas north of Francis Avenue, as well as to the west along Country Homes Boulevard and to the east along Nevada Street
- *Full Corridor Travel (Division Street/Ruby Street between Spokane River and Hastings Road)*
    - While there is vehicular traffic which completes the full length of trip along Division Street, it is still a minimal amount of vehicles when compared with select location trips as illustrated in Segment 3, Segment 4, Segment 5, and Segment 6 travel patterns
- *North-South Corridor Travel*
    - A significant amount of traffic from north Spokane (north of Francis Avenue) utilizes the North-South corridor for travel to/from east and west of Spokane via I-90
    - Additional traffic to/from downtown Spokane via 2nd Avenue utilizes the North-South corridor for travel through the region.

Figure 5: No Build AM/PM Peak Period Flow Bundle - North of Mission Avenue

AM Peak Period

PM Peak Period

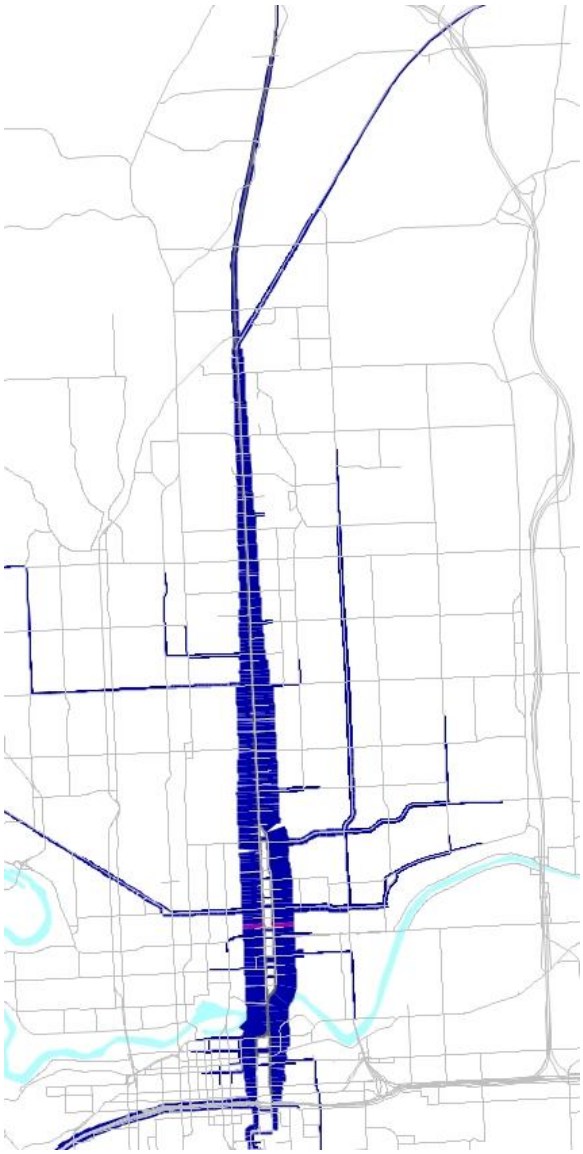


Figure 6: No Build AM/PM Peak Period Flow Bundle - North of Empire Avenue/Garland Avenue

AM Peak Period

PM Peak Period

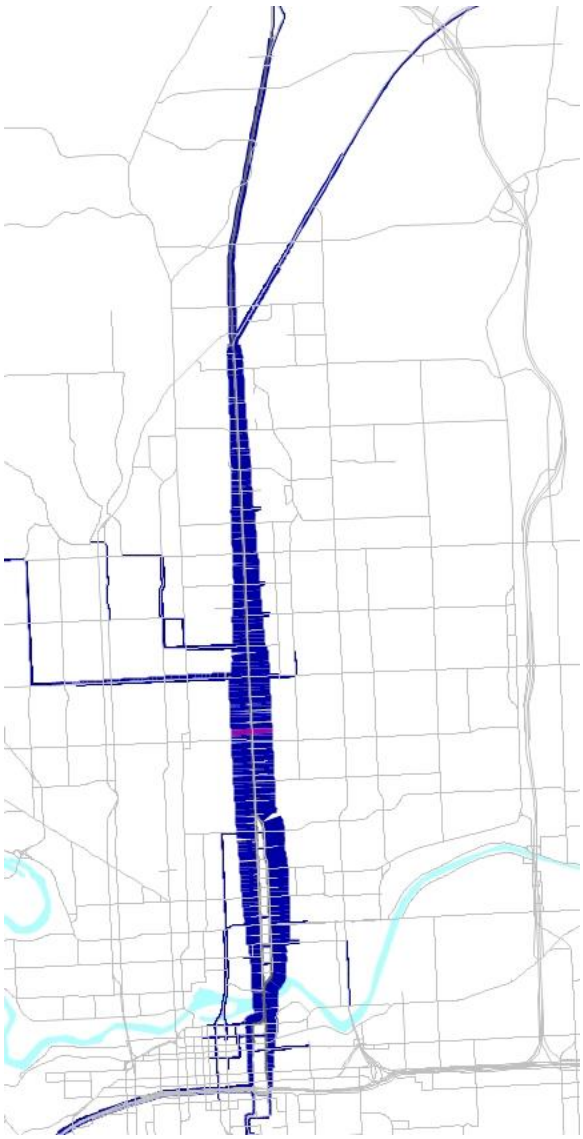


Figure 7: No Build AM/PM Peak Period Flow Bundle - South of Lincoln Road

AM Peak Period

PM Peak Period

Figure 8: No Build AM/PM Peak Period Flow - North of Hawthorne Road

AM Peak Period

PM Peak Period

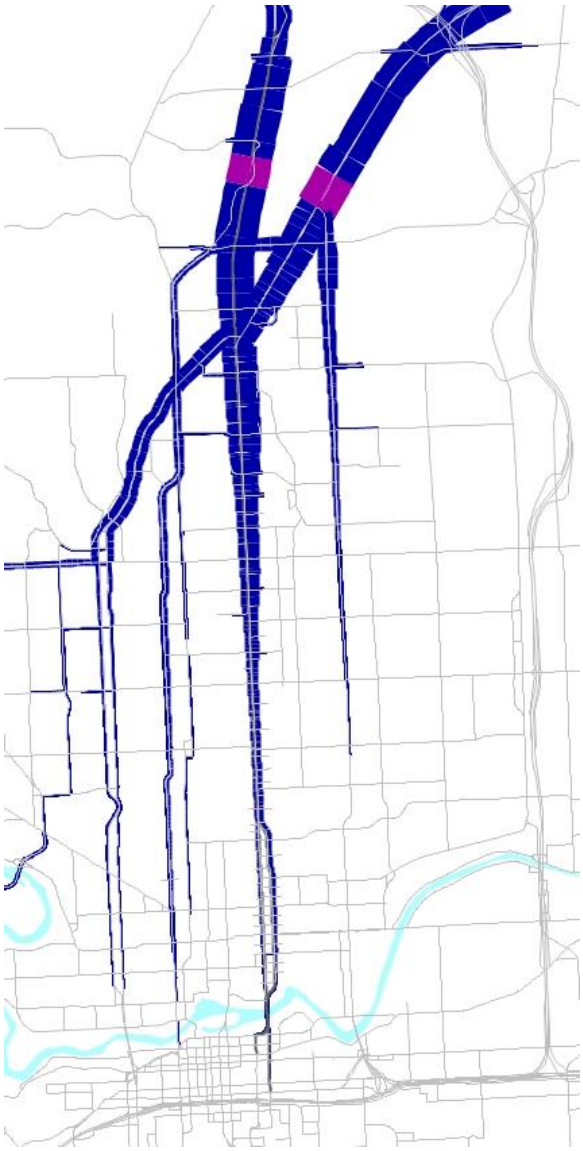


Figure 9: No Build AM/PM Peak Period Flow Bundle - Full Corridor Travel (Spokane River to Hastings Road)

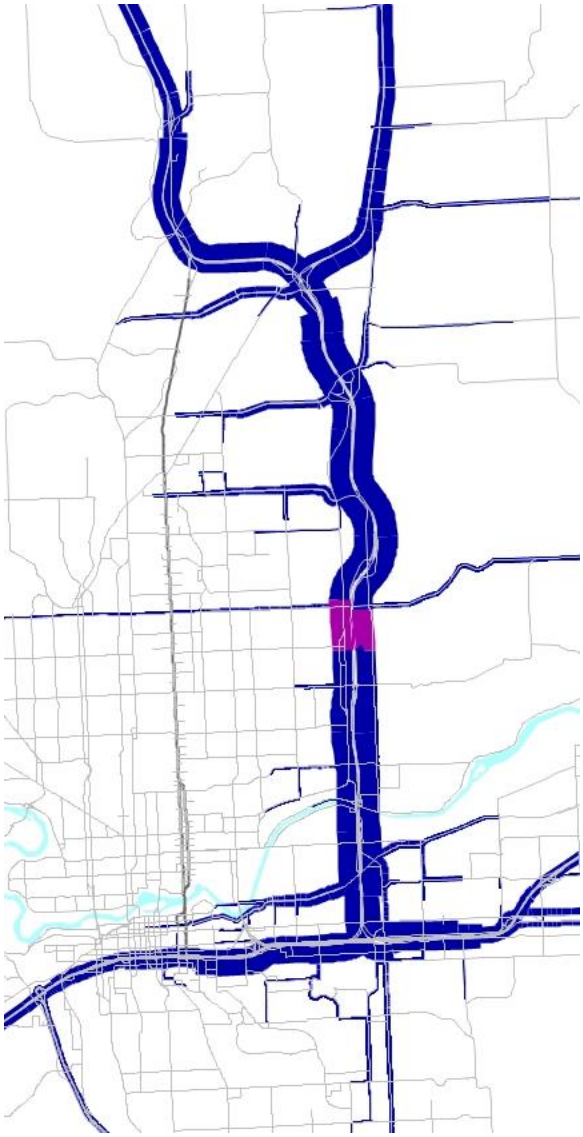
AM Peak Period

PM Peak Period

Figure 10: No Build AM/PM Peak Period Flow Bundle - North-South Corridor (South of Francis Avenue)

AM Peak Period

PM Peak Period



3.3 Regional Travel Congestion

Regional vehicle congestion was calculated to see the overall impact of each alternative on the roadways and travel patterns. Volume to Capacity (V/C) ratio and Level of Service (LOS) were calculated to identify the roadways that are forecast to perform poorly.

Figure 11 illustrates the regional comparison of PM peak period congestion for all future year alternatives. More detailed figures for each of the difference plots are included in **Attachment A** (Figures A17 through A21).

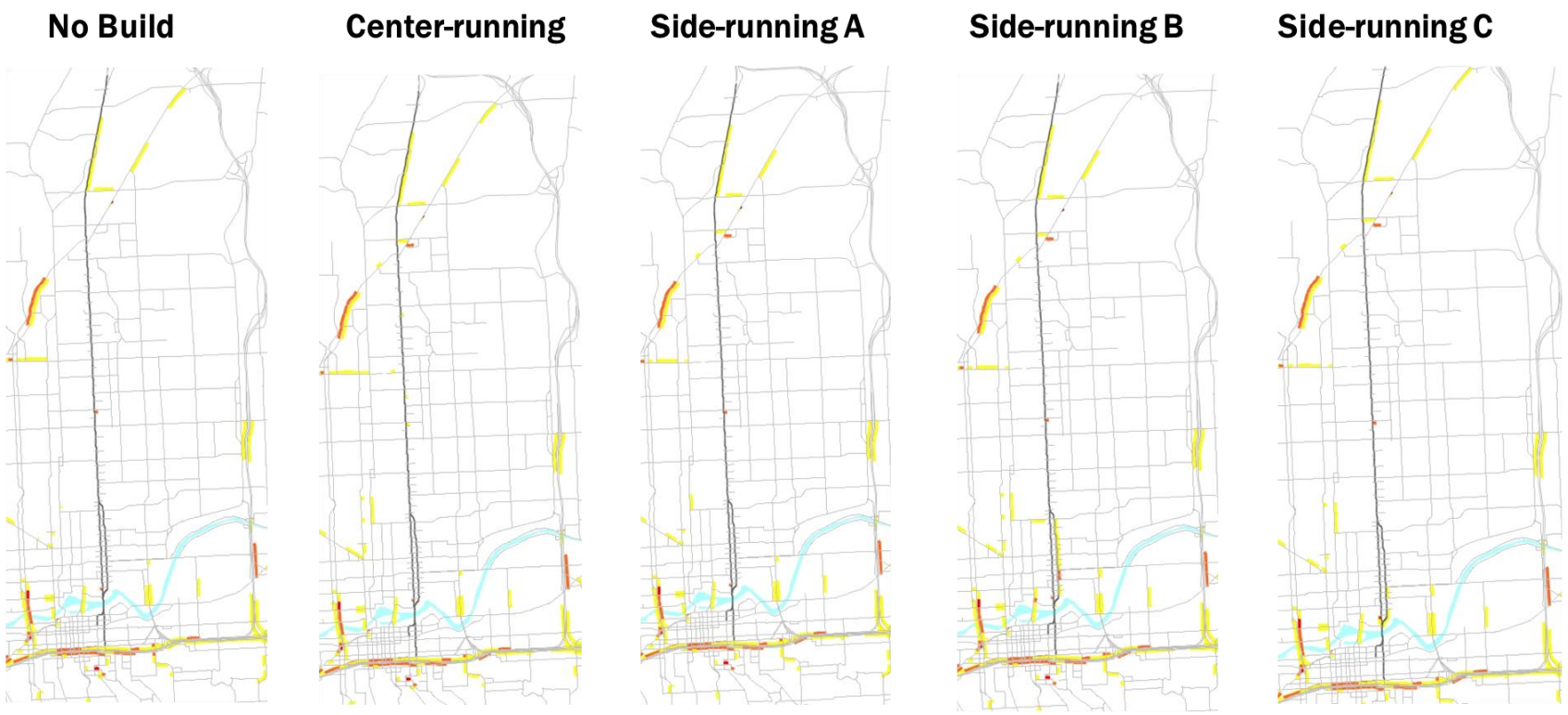
In all alternatives, including the No Build, roadway congestion includes:

- A bottleneck on the Maple Street Bridge north of the Spokane River
- Country Homes Boulevard is slightly congested west of Wall Street
- Minor congestion on parallel arterials around the Spokane River

In the Build alternatives, the following comparison is seen:

- Center-running, Side-running A, and Side-running C all present similar congestion levels across the region as the No Build alternative, with minor additional congestion on parallel arterials
- Side-running B shows an increase in congestion on Ruby Street throughout the couplet, as well as a new area of congestion on Washington Street north of the Spokane River

Figure 11: 2040 PM Peak Period Congestion Comparison



3.4 Mode Split

Mode split is the percentage of travelers using a particular mode (e.g. single-occupant vehicle, high-occupant vehicle, transit, or non-motorized). In this study, the transit and non-motorized mode split percentage is an important component in developing a sustainable transportation system. **Table 4** summarizes the transit and non-motorized mode splits for the existing conditions, the future year No Build conditions, and all four future year high-performing transit Build alternatives. As summarized in **Table 4:**

- Drive alone and shared-ride vehicular trips encompass most of the trips in the region
- Transit mode split is approximately 2 percent for each future year alternative, which is an increase of approximately 25 percent over the existing conditions
- Non-motorized mode split remains constant through all alternatives, which indicates that the travel demand model is not the best tool to be used to analyze non-motorized travel

Table 4 – Regional Travel Mode Split

Description	2015	2040				
	Existing	No Build	Center-running	Side-running A	Side-running B	Side-running C
Drive Alone Person Trips	1,079,270	1,321,740	1,321,570	1,321,260	1,321,420	1,321,120
Shared Ride Person Trips	1,268,760	1,563,470	1,563,020	1,563,470	1,562,670	1,565,190
Transit Person Trips	39,210	62,380	62,500	62,480	62,970	62,400
Non-Motorized Person Trips	158,420	195,110	195,380	195,420	195,500	194,730
Transit Mode Split	1.5%	2.0%	2.0%	2.0%	2.0%	2.0%
Non-Motorized Mode Split	6.2%	6.2%	6.2%	6.2%	6.2%	6.2%

Note: The travel statistics identified in this table are for the entire region, and not for the Route 25 study area, therefore the comparison between alternatives is relatively identical.

3.5 Transit Ridership

Transit ridership for the average weekday conditions was obtained from the travel demand model and compared to available Swiftly data. The transit ridership by direction for Route 25 is summarized in **Table 5**. As detailed in **Table 5**:

- The No Build alternative, which reflects baseline transit service improvements in the 2040 model, observes an increase in ridership of approximately 36 percent compared to existing conditions.
- The Build alternatives, with both physical transit running way improvements and enhanced High-Performance Transit service frequency and span, observe an increase in ridership of between 28 percent and 32 percent compared to the No Build alternative, and between 73 percent and 79 percent increase over existing conditions.
- Among the Build alternatives, the Side-running B alternative has the greatest increase ridership, with 32 percent over the No Build and 79 percent over existing conditions.
- All Build alternatives perform comparably with respect to total growth in ridership. The span of ridership difference among the alternatives is 175 riders, or about 3 percent of the average total daily projected ridership.

Table 5 – Average Daily Transit Ridership (Boardings)

Description	2015	2040				
	Existing	No Build	Center-running	Side-running A	Side-running B	Side-running C
Total System	34,958	54,774	56,594	56,049	56,594	56,594
Route 25 Outbound	1,468	2,107	2,655	2,646	2,725	2,652
Route 25 Inbound	1,614	2,080	2,705	2,709	2,783	2,683
Total Route 25 (Outbound + Inbound)	3,082	4,187	5,360	5,355	5,508	5,335
Total Growth in Ridership (vs. Existing)	--	36%	74%	74%	79%	73%
Total Growth in Ridership (vs. No Build)	-36%	--	28%	28%	32%	28%
Route 25 Percent of System	8.8%	7.6%	9.5%	9.6%	9.7%	9.4%

Note: One limitation to the transit ridership analysis was identified early in the process. The project team discussed a park and ride forecasting issue with SRTC related to model forecasts, because the modeled return park and ride trips appeared lower than expected, and in some cases zero. It was noted by SRTC that this model anomaly was a recognized issue and one that SRTC has discussed with PTV (the software developer). The recommendation was to consider post-processing the results for return trips, or to use the model as-is for relative comparison. For this analysis, the modeling team used the relative comparison of growth in boardings and did not post-processing return park and ride trips.

3.6 Travel Time and Speed

Travel times and speeds for the Division Street corridor were obtained from the travel demand model on a segment-by-segment basis, and then summed to the entire corridor. The travel times and speeds are summarized by direction and by analysis segment in **Table 6** (travel times) and **Table 7** (speeds). As detailed:

- The No Build average travel times for the corridor are equal to or less than the existing travel times
  - Northbound AM Peak Hour and southbound PM Peak Hour are equal to existing
  - Northbound PM Peak Hour and southbound AM Peak Hour are less than existing
- All Build alternatives have a slightly longer travel time than the No Build alternative
  - Northbound AM Peak Hour and Southbound AM Peak Hour travel times for the full corridor are greater than the No Build alternative by less than or equal to 1 minute
  - Northbound PM Peak Hour and southbound PM Peak Hour travel times for the full corridor are greater than the No Build alternative by less than or equal to 1.5 minutes
- The No Build average travel speeds for the corridor are equal to or slightly greater than the existing speeds
  - Northbound AM peak hour and southbound PM peak hour average travel speeds are identical to existing
  - Northbound PM peak hour and southbound AM peak hour average travel speeds are slightly greater than existing, but by less than 0.5 MPH
- All Build alternative travel speeds are slightly less than the No Build travel speed, with the Side-running B alternative operating at the slowest speeds overall

Table 6 – Average AM and PM Peak Hour Travel Time (Minutes) by Segment

Measure	2015	2040				
	Existing	No Build	Center-running	Side-running A	Side-running B	Side-running C
AM Peak Hour						
Northbound						
1. Riverside Avenue, Transit Plaza to Division Street	1.8	1.7	1.7	1.7	1.7	1.7
2. Division Street, 3rd Avenue to Spokane River	1.9	1.9	1.9	1.9	1.9	1.8
3. Division Street, Spokane River to Euclid Avenue	6.6	6.5	6.7	6.6	6.6	7.3
4. Division Street, Euclid Avenue to Francis Avenue	6.1	6.1	6.2	6.2	6.2	6.1
5. Division Street, Francis Avenue to Newport Highway ("Y")	3.9	4.1	4.2	4.2	4.2	4.2
6. Newport Highway, "Y" to North Spokane Corridor	6.7	6.7	6.7	6.7	6.7	6.6
Total Corridor	26.9	26.9	27.3	27.2	27.2	27.7
Southbound						
6. Newport Highway, North Spokane Corridor to "Y"	7.1	6.8	6.8	6.8	6.8	6.8
5. Division Street, "Y" to Francis Avenue	4.1	4.2	4.4	4.3	4.4	4.4
4. Division Street, Francis Avenue to Euclid Avenue	4.8	4.6	4.6	4.7	4.8	4.7
3. Division Street, Euclid Avenue to Spokane River	4.1	3.9	4.4	4.0	4.0	4.5
2. Division Street, Spokane River to Riverside Avenue	2.1	2.2	2.1	2.1	2.1	2.1
1. Riverside Avenue, Division Street to Transit Plaza	1.5	1.4	1.4	1.4	1.4	1.4
Total Corridor	23.7	23.1	23.7	23.4	23.5	23.8
PM Peak Hour						
Northbound						
1. Riverside Avenue, Transit Plaza to Division Street	2.2	2.0	2.0	2.0	2.0	2.0
2. Division Street, 3rd Avenue to Spokane River	2.2	2.2	2.2	2.2	2.2	2.1
3. Division Street, Spokane River to Euclid Avenue	6.3	6.2	6.4	6.3	6.3	7.7
4. Division Street, Euclid Avenue to Francis Avenue	7.3	7.2	7.2	7.3	7.2	7.2
5. Division Street, Francis Avenue to Newport Highway ("Y")	5.0	5.1	5.3	5.3	5.3	5.2
6. Newport Highway, "Y" to North Spokane Corridor	8.5	8.3	8.2	8.2	8.2	8.2
Total Corridor	31.4	31.0	31.4	31.3	31.2	32.5
Southbound						
6. Newport Highway, North Spokane Corridor to "Y"	8.9	8.9	8.9	8.9	8.9	8.9
5. Division Street, "Y" to Francis Avenue	5.2	5.5	5.5	5.5	5.6	5.6
4. Division Street, Francis Avenue to Euclid Avenue	6.2	6.1	6.2	6.2	6.2	6.2
3. Division Street, Euclid Avenue to Spokane River	4.7	4.6	4.8	4.7	4.7	4.9
2. Division Street, Spokane River to Riverside Avenue	2.4	2.4	2.4	2.4	2.4	2.4
1. Riverside Avenue, Division Street to Transit Plaza	1.8	1.6	1.6	1.6	1.6	1.6
Total Corridor	29.1	29.1	29.4	29.2	29.3	29.5

Table 7 – Average AM and PM Peak Hour Speed by Segment

Measure	2015	2040				
	Existing	No Build	Center-running	Side-running A	Side-running B	Side-running C
AM Peak Hour						
Northbound						
1. Riverside Avenue, Transit Plaza to Division Street	17.2	18.4	18.4	18.4	18.4	18.4
2. Division Street, 3rd Avenue to Spokane River	20.2	20.4	20.4	20.4	20.4	20.8
3. Division Street, Spokane River to Euclid Avenue	15.3	15.4	14.9	15.2	15.2	13.8
4. Division Street, Euclid Avenue to Francis Avenue	19.6	19.8	19.4	19.4	19.4	19.7
5. Division Street, Francis Avenue to Newport Highway ("Y")	27.5	25.8	25.5	25.5	25.5	25.5
6. Newport Highway, "Y" to North Spokane Corridor	27.5	27.5	27.5	27.5	27.5	27.5
Total Corridor	21.5	21.5	21.2	21.3	21.3	20.9
Southbound						
6. Newport Highway, North Spokane Corridor to "Y"	26.0	26.7	26.9	27.0	26.9	27.0
5. Division Street, "Y" to Francis Avenue	25.9	25.1	24.5	24.7	24.5	24.5
4. Division Street, Francis Avenue to Euclid Avenue	25.2	26.3	25.8	25.3	25.2	25.6
3. Division Street, Euclid Avenue to Spokane River	24.8	26.0	23.0	24.9	25.2	22.6
2. Division Street, Spokane River to Riverside Avenue	17.8	17.6	18.0	17.7	17.7	17.7
1. Riverside Avenue, Division Street to Transit Plaza	20.0	21.9	21.9	21.9	21.9	21.9
Total Corridor	24.5	25.1	24.4	24.7	24.7	24.3
PM Peak Hour						
Northbound						
1. Riverside Avenue, Transit Plaza to Division Street	14.2	15.1	15.0	15.0	15.0	15.1
2. Division Street, 3rd Avenue to Spokane River	17.2	17.3	17.6	17.3	17.4	18.0
3. Division Street, Spokane River to Euclid Avenue	16.0	16.3	15.6	16.0	16.0	13.1
4. Division Street, Euclid Avenue to Francis Avenue	16.5	16.7	16.6	16.5	16.6	16.7
5. Division Street, Francis Avenue to Newport Highway ("Y")	21.6	20.8	20.3	20.2	20.3	20.4
6. Newport Highway, "Y" to North Spokane Corridor	21.6	22.0	22.2	22.2	22.2	22.2
Total Corridor	18.5	18.7	18.5	18.5	18.5	17.8
Southbound						
6. Newport Highway, North Spokane Corridor to "Y"	20.5	20.6	20.6	20.6	20.6	20.6
5. Division Street, "Y" to Francis Avenue	20.5	19.6	19.2	19.5	19.2	19.2
4. Division Street, Francis Avenue to Euclid Avenue	19.4	19.6	19.4	19.4	19.4	19.4
3. Division Street, Euclid Avenue to Spokane River	21.6	21.9	20.9	21.4	21.5	20.5
2. Division Street, Spokane River to Riverside Avenue	16.0	15.8	16.0	15.9	15.9	15.9
1. Riverside Avenue, Division Street to Transit Plaza	17.5	18.8	18.8	18.8	18.8	18.8
Total Corridor	19.9	19.9	19.7	19.8	19.8	19.6

3.7 Screenline Comparison

A screenline comparison measures the combined travel which crosses the screenline. Four east-west screenlines were developed for this project to calculate total north-south regional travel. The four screenlines analyzed are illustrated in **Figure 12**. Detailed average daily north-south travel at the four project screenlines is summarized in **Table 8**. Additional detailed screenline supporting data is provided in **Attachment A** (Table A1).

As detailed in **Table 8**:

- Total Screenlines with North-South Corridor
    - When comparing the No Build alternative to the existing conditions, the overall north-south travel in the region grows by a combined average of 37 percent
    - When comparing the four Build alternatives to the No Build alternative, the overall north-south travel in the region for all alternatives remain nearly constant, with the 1 percent reduction for Build alternatives being directly related to shared-ride and mode shift to transit
- Total Screenlines without North-South Corridor
    - When comparing the No Build alternative to the existing conditions, the overall north-south travel on the combined parallel arterials reduces by a combined 7 percent, with some sections experiencing reduced average daily north-south travel by up to 12 percent (between Wellesley Avenue and Garland Avenue) and some sections remaining constant (between Lincoln Road and Francis Avenue)
    - When comparing the four Build alternatives to the No Build alternative, the overall north-south travel in the region for all alternatives illustrates an additional 1 to 3 percent reduction in trips, which is directly attributed to mode shift to transit as well as vehicular trip pattern shift onto a parallel arterial with available capacity
- Total Screenlines without North-South Corridor and without parallel arterials (Division Street/Ruby Street only)
    - When comparing the No Build to the existing conditions, overall average daily north-south traffic on Division Street/Ruby Street is reduced by a combined 8 percent
    - When comparing the four Build alternatives to the No Build alternative, Division Street/Ruby Street traffic is reduced by an average of 13-20 percent, with the greatest reduction on the screenline between Indiana Avenue and Maxwell Avenue in the Side-running B alternative of 30 percent

Figure 12: Screenline Locations

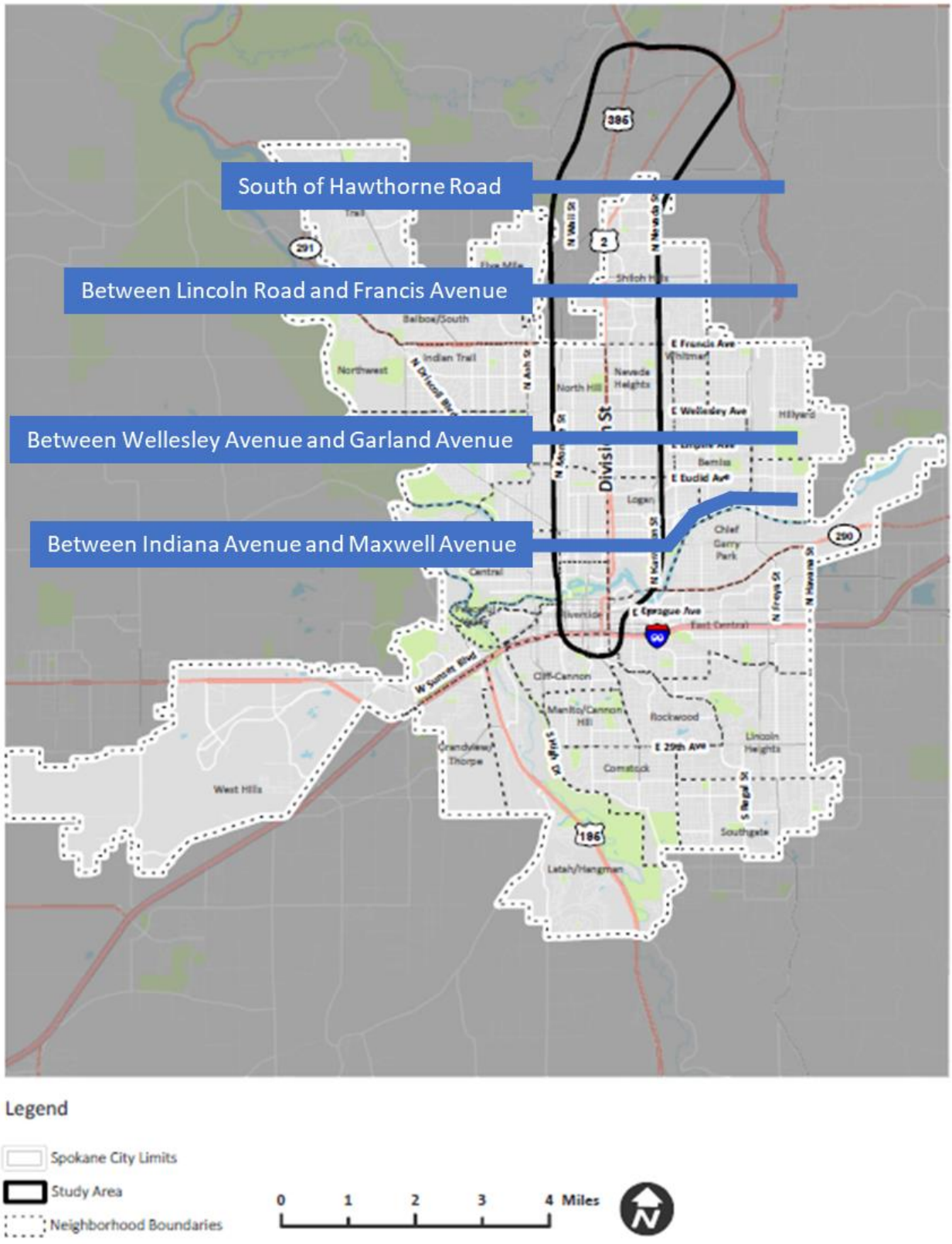


Table 8 – Average Daily Screenline Comparison

Measure	2015	2040				
	Existing	No Build	Center-running	Side-running A	Side-running B	Side-running C
Total Screenlines Including NSC						
South of Hawthorne Road	89,473	126,782	126,300	126,111	126,322	125,842
Between Lincoln Road and Francis Avenue	114,602	156,106	154,475	154,296	154,463	153,813
Between Wellesley Avenue and Garland Avenue	136,820	194,558	193,140	192,442	192,040	192,039
Between Indiana Avenue and Maxwell Avenue	195,749	256,612	255,428	254,753	253,294	253,426
Overall	536,644	734,058	729,343	727,602	726,119	725,120
South of Hawthorne Road		42%	0%	-1%	0%	-1%
Between Lincoln Road and Francis Avenue		36%	-1%	-1%	-1%	-1%
Between Wellesley Avenue and Garland Avenue		42%	-1%	-1%	-1%	-1%
Between Indiana Avenue and Maxwell Avenue		31%	0%	-1%	-1%	-1%
Overall		37%	-1%	-1%	-1%	-1%
Total Screenline Without NSC						
South of Hawthorne Road	78,895	74,665	73,587	73,567	73,644	73,252
Between Lincoln Road and Francis Avenue	104,024	103,989	101,762	101,752	101,785	101,223
Between Wellesley Avenue and Garland Avenue	136,820	119,913	117,910	117,483	116,687	116,802
Between Indiana Avenue and Maxwell Avenue	195,749	181,967	180,198	179,794	177,941	178,189
Overall	515,488	480,534	473,457	472,596	470,057	469,466
South of Hawthorne Road		-5%	-1%	-1%	-1%	-2%
Between Lincoln Road and Francis Avenue		0%	-2%	-2%	-2%	-3%
Between Wellesley Avenue and Garland Avenue		-12%	-2%	-2%	-3%	-3%
Between Indiana Avenue and Maxwell Avenue		-7%	-1%	-1%	-2%	-2%
Overall		-7%	-1%	-2%	-2%	-2%
Total Screenline Division Street/Ruby Street Only						
South of Hawthorne Road	22,861	21,718	21,002	21,094	21,152	21,126
Between Lincoln Road and Francis Avenue	41,652	38,473	29,857	32,438	32,263	32,001
Between Wellesley Avenue and Garland Avenue	38,202	34,602	27,572	28,123	26,813	27,211
Between Indiana Avenue and Maxwell Avenue	47,004	42,809	37,447	37,427	29,826	32,476
Overall	149,719	137,602	115,878	119,082	110,054	112,814
South of Hawthorne Road		-5%	-3%	-3%	-3%	-3%
Between Lincoln Road and Francis Avenue		-8%	-22%	-16%	-16%	-17%
Between Wellesley Avenue and Garland Avenue		-9%	-20%	-19%	-23%	-21%
Between Indiana Avenue and Maxwell Avenue		-9%	-13%	-13%	-30%	-24%
Overall		-8%	-16%	-13%	-20%	-18%

Note: The traffic flow volumes summarized are raw model volumes and not post-processed using existing count data.

While comparing the 2040 Build alternatives to 2040 No Build condition, a diversion of vehicular trips from Division Street to parallel arterials was observed. The diversion occurred because 1) when capacity is reduced on Division Street, some trips destined for locations not along Division Street modify their trip to a facility which has available capacity for additional trips and 2) the increase in transit services on Division Street attract person trips out of vehicles and onto busses further reducing the Division Street vehicular volume. Additionally, when comparing the No Build condition with the existing conditions, the development of the NSC changes the distribution of regional north-south travel. The total forecast volume on the NSC is expected to exceed the growth in north-south vehicle trips, thus reducing north-south travel on parallel arterials throughout Spokane, including Division Street, below existing conditions.

Table 9 provides daily traffic flows on all north-south arterials crossing each of the east-west screenlines. Existing

volumes that are greater than the future year volumes are shown in bold. Crossing the screenlines, Monroe Street, Division Street, Ruby Street, Hamilton Street, Perry Street, Nevada Street, Crestline Street, Market Street, and Green Street tend to have lower volumes in the future year alternatives.

Table 9 – Average Daily Arterial Diversion Comparison

Measure	2015	2040				
	Existing	No Build	Center-running	Side-running A	Side-running B	Side-running C
South of Hawthorne Road						
Wall	9,395	8,945	9,222	9,107	9,054	9,058
Division	29,142	26,995	25,746	26,030	26,054	25,839
Newport	22,861	21,718	21,002	21,094	21,152	21,126
Nevada	11,260	14,514	15,068	14,810	14,880	14,716
Market	6,237	2,493	2,549	2,526	2,504	2,513
NSC	10,578	52,117	52,713	52,544	52,678	52,590
Total Screenline Traffic	*89,473*	*126,782*	*126,300*	*126,111*	*126,322*	*125,842*
Total Screenline Traffic Growth (%)		*42%*	*0%*	*-1%*	*0%*	*-1%*
Total Screenline Arterial Traffic (Arterials Only - Without NSC)	*78,895*	*74,665*	*73,587*	*73,567*	*73,644*	*73,252*
Total Screenline Arterial Traffic Growth (%) (Arterials Only - Without NSC)		*-5%*	*-1%*	*-1%*	*-1%*	*-2%*
Total Screenline Change in Arterial Traffic		*(4,230)*	*(1,078)*	*(1,098)*	*(1,021)*	*(1,413)*
Between Lincoln Road and Francis Avenue						
Country Homes	18,293	19,149	19,556	19,329	19,624	19,573
Wall	14,565	14,885	16,995	18,473	16,680	16,714
Division	**41,652**	38,473	29,857	23,647	32,263	32,001
Standard	913	880	2,534	884	1,016	1,088
Nevada	11,040	11,131	13,304	14,159	12,612	12,291
Crestline	7,331	7,353	7,323	7,598	7,283	7,341
Market	**9,482**	6,750	6,793	7,036	6,883	6,777
Freya	748	5,368	5,400	5,371	5,424	5,438
NSC	10,578	52,117	52,713	54,983	52,678	52,590
Total Screenline Traffic	*114,602*	*156,106*	*154,475*	*154,296*	*154,463*	*153,813*
Total Screenline Traffic Growth (%)		*36%*	*-1%*	*-1%*	*-1%*	*-1%*
Total Screenline Arterial Traffic (Arterials Only - Without NSC)	*104,024*	*103,989*	*101,762*	*101,752*	*101,785*	*101,223*
Total Screenline Arterial Traffic Growth (%) (Arterials Only - Without NSC)		*0%*	*-2%*	*-2%*	*-2%*	*-3%*
Total Screenline Change in Arterial Traffic		*(35)*	*(2,227)*	*(2,237)*	*(2,204)*	*(2,766)*
Between Wellesley Avenue and Garland Avenue						
Maple	9,303	9,817	10,208	10,177	10,539	10,215
Ash	9,292	9,115	9,527	9,596	9,599	9,603
Monroe	17,700	17,081	17,914	18,056	17,903	17,920
Wall	6,827	6,373	7,013	7,088	7,073	7,030
Division	**38,202**	34,602	27,572	26,350	26,813	27,211
Addison	3,985	3,291	4,461	3,731	3,711	3,886
Nevada	**14,635**	12,654	13,616	13,528	13,575	13,507
Perry	**6,280**	5,422	5,659	5,672	5,704	5,566
Crestline	**7,622**	5,738	5,862	5,821	5,776	5,852
Market	**22,974**	15,820	16,078	16,576	15,994	16,012
NSC	-	74,645	75,230	76,253	75,353	75,237
Total Screenline Traffic	*136,820*	*194,558*	*193,140*	*192,442*	*192,040*	*192,039*
Total Screenline Traffic Growth (%)		*42%*	*-1%*	*-1%*	*-1%*	*-1%*

Measure	2015	2040				
	Existing	No Build	Center-running	Side-running A	Side-running B	Side-running C
Total Screenline Arterial Traffic (Arterials Only - Without NSC)	*136,820*	*119,913*	*117,910*	*117,483*	*116,687*	*116,802*
Total Screenline Arterial Traffic Growth (%) (Arterials Only - Without NSC)		*-12%*	*-2%*	*-2%*	*-3%*	*-3%*
Total Screenline Change in Arterial Traffic		*(16,907)*	*(2,003)*	*(2,430)*	*(3,226)*	*(3,111)*
Between Indiana Avenue and Maxwell Avenue						
Maple	14,880	15,783	15,918	15,992	16,190	16,049
Ash	15,534	15,942	16,222	16,208	16,279	16,318
Monroe	**20,748**	18,341	19,144	19,133	19,806	19,519
Post	9,371	9,451	10,075	9,878	10,408	10,213
Howard	2,373	2,477	2,554	2,551	3,186	3,000
Washington	15,275	15,494	16,146	16,115	17,492	17,084
Division	**24,587**	22,526	19,369	19,207	18,247	16,701
Ruby	**22,417**	20,283	18,078	17,388	11,579	15,775
Hamilton	**28,057**	24,624	25,071	25,132	26,258	25,718
Perry	**14,450**	12,414	12,839	12,803	13,719	13,137
Greene	**28,057**	24,632	24,782	24,640	24,777	24,675
NSC	-	74,645	75,230	76,253	75,353	75,237
Total Screenline Traffic	*195,749*	*256,612*	*255,428*	*254,753*	*253,294*	*253,426*
Total Screenline Traffic Growth (%)		*31%*	*0%*	*-1%*	*-1%*	*-1%*
Total Screenline Arterial Traffic (Arterials Only - Without NSC)	*195,749*	*181,967*	*180,198*	*179,794*	*177,941*	*178,189*
Total Screenline Arterial Traffic Growth (%) (Arterials Only - Without NSC)		*-7%*	*-1%*	*-1%*	*-2%*	*-2%*
Total Screenline Change in Arterial Traffic		*(13,782)*	*(1,769)*	*(2,173)*	*(4,026)*	*(3,778)*

Note: The traffic flow volumes summarized are raw model volumes and not post-processed using existing count data.

4 ALTERNATIVES ANALYSIS SUMMARY

Previous sections of this technical memo detailed various comparisons of future year alternatives. All conclusions and comparisons documented previously are summarized in this section. Notable comparisons include:

- Regional Travel Statistics (VMT, VHT, VHD)
    - All regional travel statistics are generally identical and consistent between alternatives, with a difference of less than 1 percent
- Study Area Travel Statistics (VMT, VHT, VHD)
    - The No Build alternative results in an increase in VMT, VHT, and VHD of 3 percent for the study area
    - The Build alternatives result in the following:
        - A decrease in VMT of approximately 2 to 3 percent
        - An increase in VHT by approximately 1 to 2 percent
        - A decrease in VHD of approximately 0 to 2 percent.
- Regional Traffic Flow Patterns at Select Locations (Flow Bundle Analysis)
    - For each of the segment locations, the PM peak period has a heavier traffic flow than the AM peak period
    - For each of the segment locations, both the AM and PM peak periods show little traffic coming from/going to east on I-90, because within the model it is more efficient in 2040 to utilize the future North South Corridor for this movement.
    - *Division Street and Ruby Street north of Mission Avenue*
        - Vehicular traffic in this segment comes from/goes to the north and south and west on I-90
        - Additional vehicles come from/go to Nevada Road north of Foothill Drive, as well as west on Francis Avenue, Wellesley Avenue, and Northwest Boulevard
    - *Division Street north of Empire Avenue/Garland Avenue*
        - Vehicular traffic in this segment comes from/goes to the north and south, including west on I-90
        - Additional vehicles come from/go to the west on Francis Avenue and Wellesley Avenue
    - *Division Street south of Lincoln Road*
        - Vehicular traffic in this segment comes from/goes to the north and south, as does a small amount of traffic west on I-90
        - The majority of vehicles appear to come from/goes to areas north of Francis Avenue, with some distribution around the Spokane River
    - *Division Street north of Hawthorne Road*
        - Vehicular traffic in this segment comes from/go to the north and south
        - The majority of vehicles appear to come from/go to areas north of Francis Avenue, as well as to the west along Country Homes Boulevard and to the east along Nevada Street
    - *Full Corridor Travel (Division Street/Ruby Street between Spokane River and Hastings Road)*
        - While there is vehicular traffic which completes the full length of trip along Division Street, it is still a minimal amount of vehicles when compared with select location trips as illustrated in Segment 3, Segment 4, Segment 5, and Segment 6 travel patterns
    - *North-South Corridor Travel*
        - A significant amount of traffic from north Spokane (north of Francis Avenue) utilizes the North-South corridor for travel to/from east and west of Spokane via I-90
        - Additional traffic to/from downtown Spokane via 2nd Avenue utilizes the North-South corridor for travel through the region.
- Traffic Congestion (V/C in the greater study area)
    - In all Build alternatives, including the No Build:
        - Roadway congestion is forecast on the Maple Street Bridge north of the Spokane River
        - Country Homes Boulevard is slightly congested west of Wall Street

        - Minor congestion is forecast on parallel arterials around the Spokane River
    - In the Build alternatives, the following comparison is seen:
        - Center-running, Side-running A, and Side-running C all present similar congestion levels across the region as the No Build alternative, with minor additional congestion on parallel arterials
        - Side-running B shows an increase in congestion on Ruby Street throughout the couplet, as well as a new area of congestion on Washington Street north of the Spokane River
- Transit and Non-Motorized Mode Split (Percentage of regional non-vehicular mode share)
    - Drive alone and shared-ride vehicular trips encompass most of the trips in the region
    - Transit mode split is approximately 2 percent for each future year alternative, which is an increase of approximately 25 percent over the existing conditions
    - Non-motorized mode split remains constant through all alternatives, which indicates that the travel demand model is not the best tool to be used to analyze non-motorized travel.
- Transit Ridership
    - The No Build alternative, which reflects baseline transit service improvements in the 2040 model, observes an increase in ridership of approximately 36 percent compared to existing conditions.
    - The Build alternatives, with both physical transit running way improvements and enhanced High-Performance Transit service frequency and span, observe an increase in ridership of between 28 percent and 32 percent compared to the No Build alternative (and between 73 percent and 79 percent increase over existing conditions).
    - Among the Build alternatives, the Side-running B Alternative has the greatest increase ridership, with 32 percent over the No Build and 79 percent over existing conditions.
    - All Build alternatives perform comparably with respect to total growth in ridership. The span of ridership difference among the alternatives is 175 riders, or about 3 percent of the average total daily projected ridership.
- Travel Time and Speed
    - The No Build travel times are equal to or less than the existing travel times
        - Northbound AM Peak Hour and southbound PM Peak Hour are equal to existing
        - Northbound PM Peak Hour and southbound AM Peak Hour are less than existing
    - All Build alternatives have a slightly longer travel time than the No Build alternative, with a difference of less than 3 minutes in all cases
        - Northbound AM Peak Hour and Southbound AM Peak Hour travel times for the full corridor are greater than the No Build alternative by less than or equal to 1 minute
        - Northbound PM Peak Hour and southbound PM Peak Hour travel times for the full corridor are greater than the No Build alternative by less than or equal to 1.5 minutes
    - The No Build average travel speeds for the corridor are equal to or slightly greater than the existing speeds
        - Northbound AM peak hour and southbound PM peak hour average travel speeds are identical to existing
        - Northbound PM peak hour and southbound AM peak hour average travel speeds are slightly greater than existing, but by less than 0.5 MPH
    - All Build alternative travel speeds are slightly less than the No Build travel speed, with the Side-running B alternative operating at the slowest speeds overall
- Total Screenline with North-South Corridor
    - When comparing the No Build alternative to the existing conditions, the overall north-south travel in the region grows by a combined average of 37 percent
    - When comparing the four Build alternatives to the No Build alternative, the overall north-south travel in the region for all alternatives remain nearly constant, with the 1 percent reduction for Build alternatives being directly related to shared-ride and mode shift to transit
- Total Screenline without North-South Corridor

    - When comparing the No Build alternative to the existing conditions, the overall north-south travel on the combined parallel arterials reduces by a combined 7 percent, with some sections experiencing reduced average daily north-south travel by up to 12 percent (between Wellesley Avenue and Garland Avenue) and some sections remaining constant (between Lincoln Road and Francis Avenue)
    - When comparing the four Build alternatives to the No Build alternative, the overall north-south travel in the region for all alternatives illustrates an additional 1 to 3 percent reduction in trips, which is directly attributed to mode shift to transit as well as vehicular trip pattern shift onto a parallel arterial with available capacity
- Total Screenline without North-South Corridor and without parallel arterials (Division Street/Ruby Street only)
    - When comparing the No Build to the existing conditions, overall average daily north-south traffic on Division Street/Ruby Street is reduced by a combined 8 percent
    - When comparing the four Build alternatives to the No Build alternative, Division Street/Ruby Street traffic is reduced by an average of 13-20 percent, with the greatest reduction on the screenline between Indiana Avenue and Maxwell Avenue in the Side-running B alternative of 30 percent

ATTACHMENT A – SUPPORT FIGURES

Figure A1: No Build versus Center-running Average Daily Traffic Flows (No Build Minus Build Center-running)

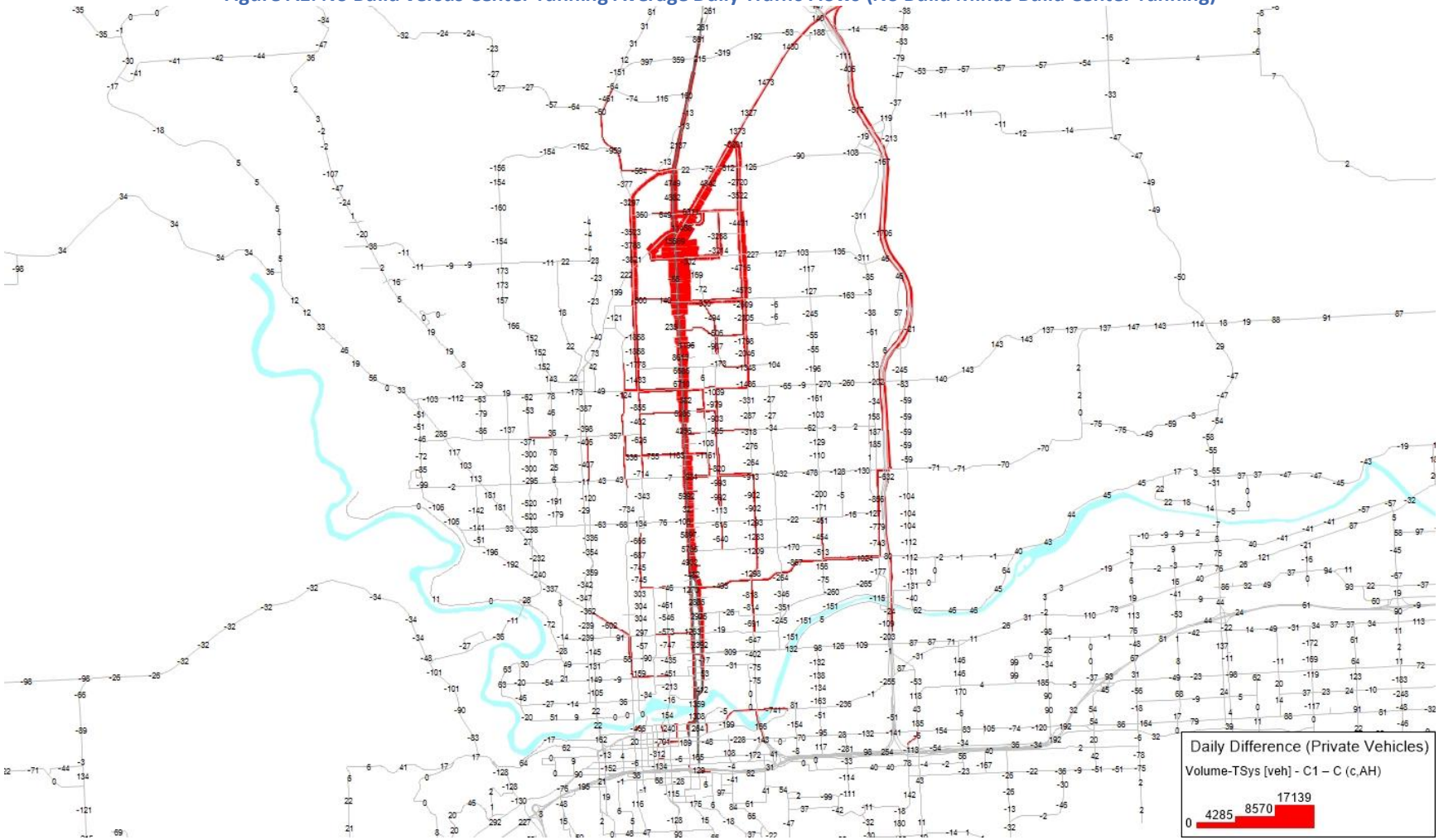


Figure A2: No Build versus Side-running A Average Daily Traffic Flows (No Build Minus Build Side Running A)

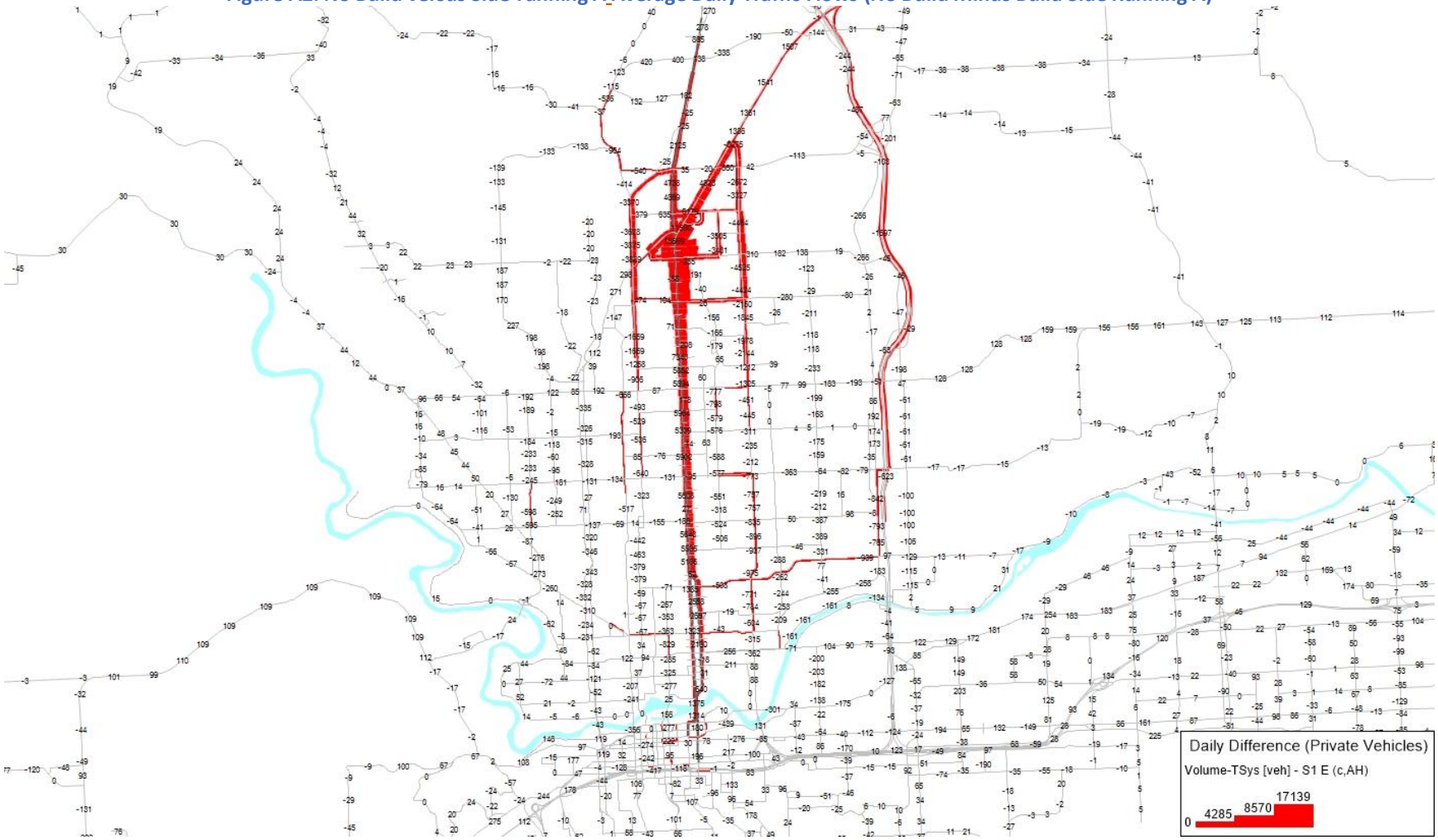


Figure A3: No Build versus Side Running B Average Daily Traffic Flows (No Build Minus Build Side Running B)

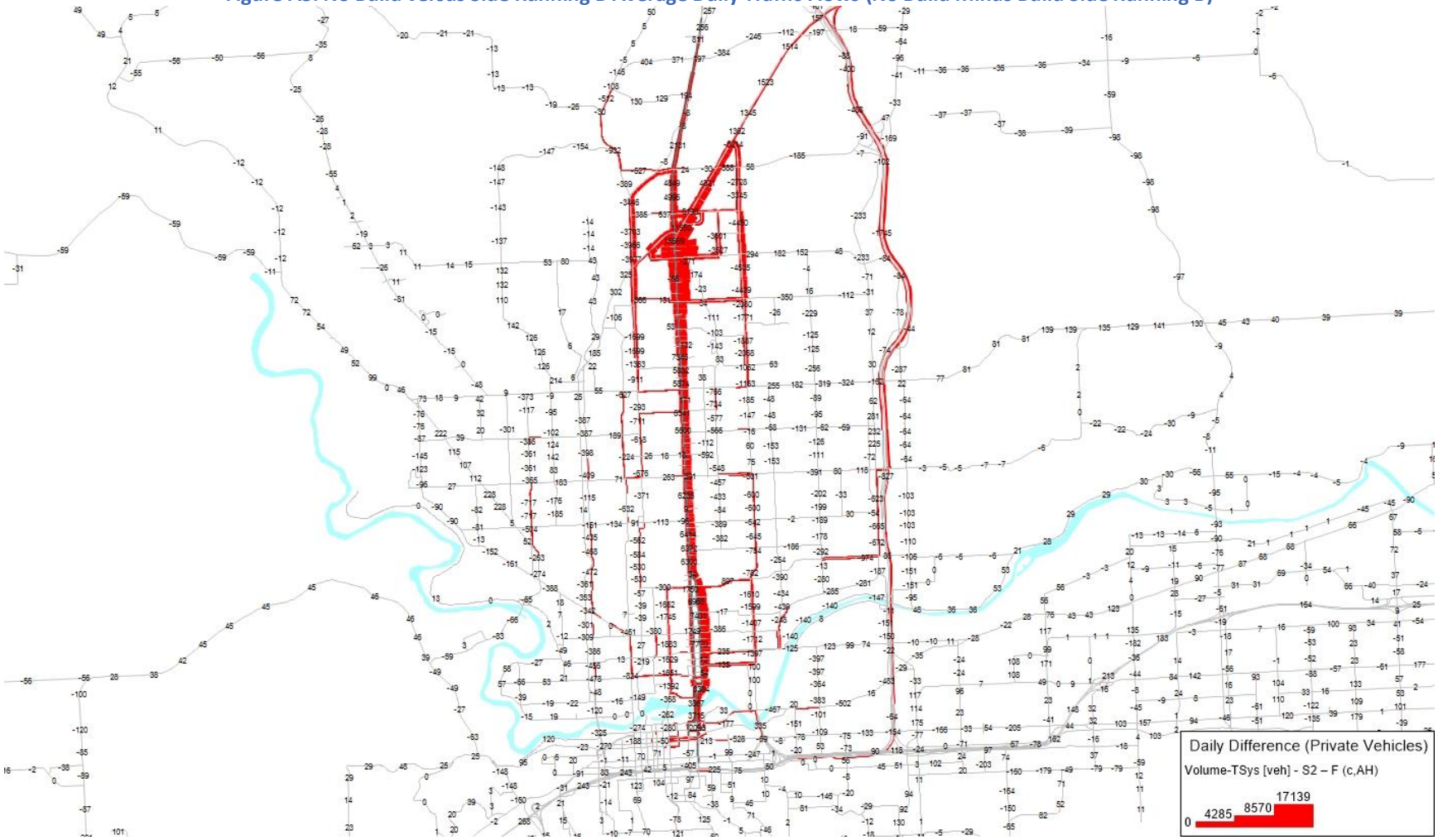


Figure A4: No Build versus Side Running C Average Daily Traffic Flows (No Build Minus Build Side Running C)

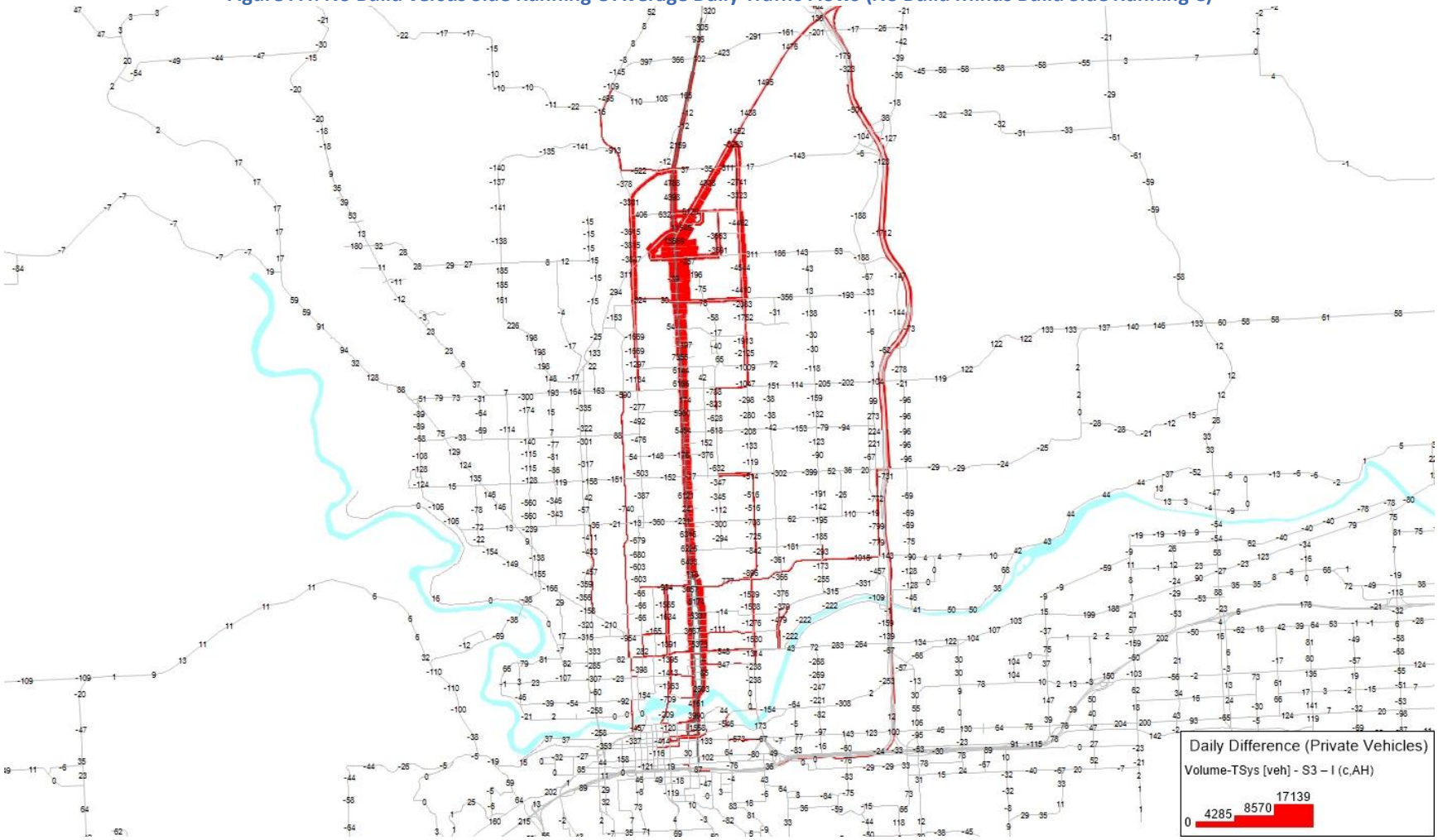


Figure A5: No Build AM Peak Period Flow Bundle for Segment 3 (North of Mission Avenue)

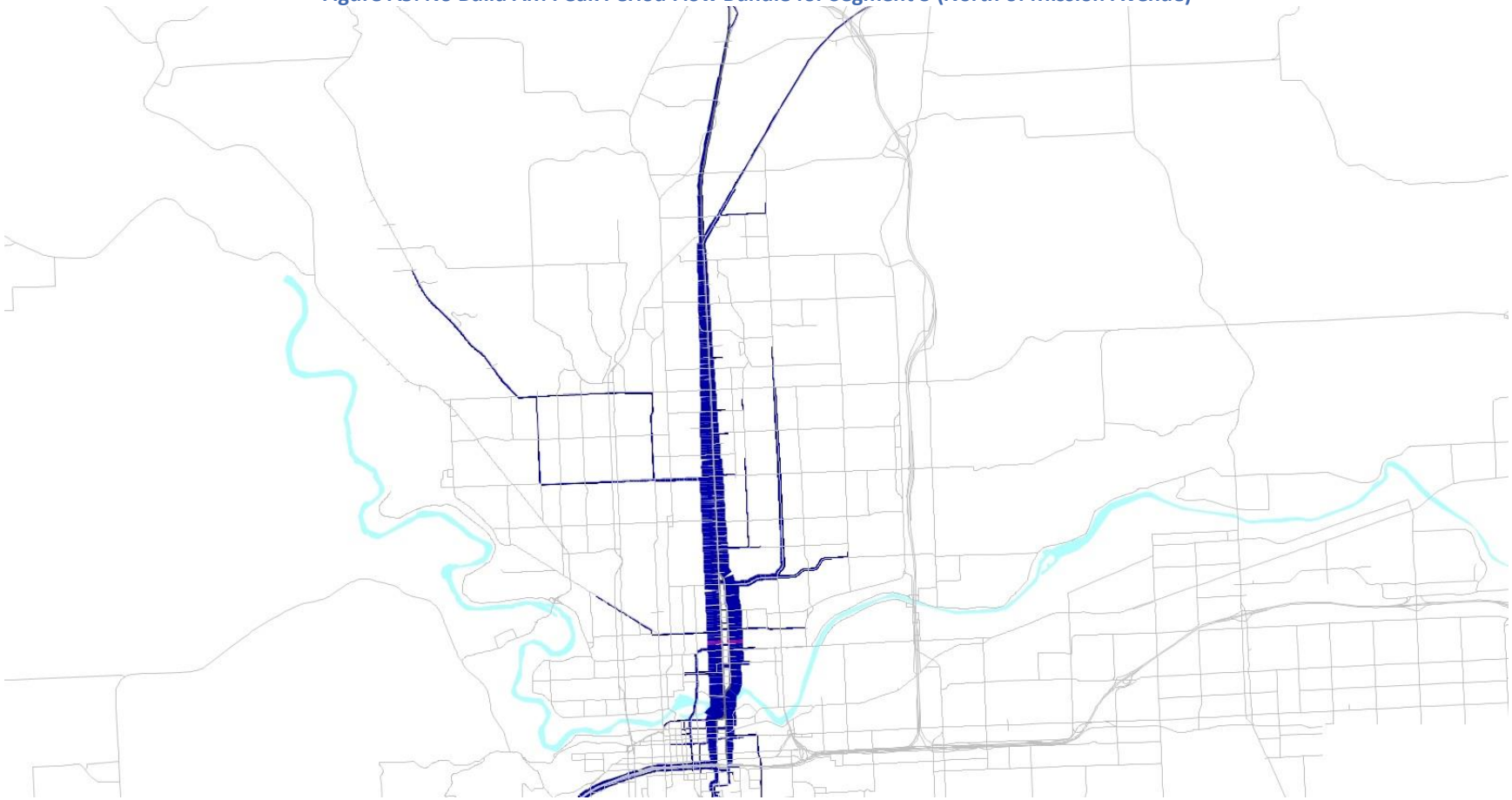


Figure A6: No Build PM Peak Period Flow Bundle for Segment 3 (North of Mission Avenue)

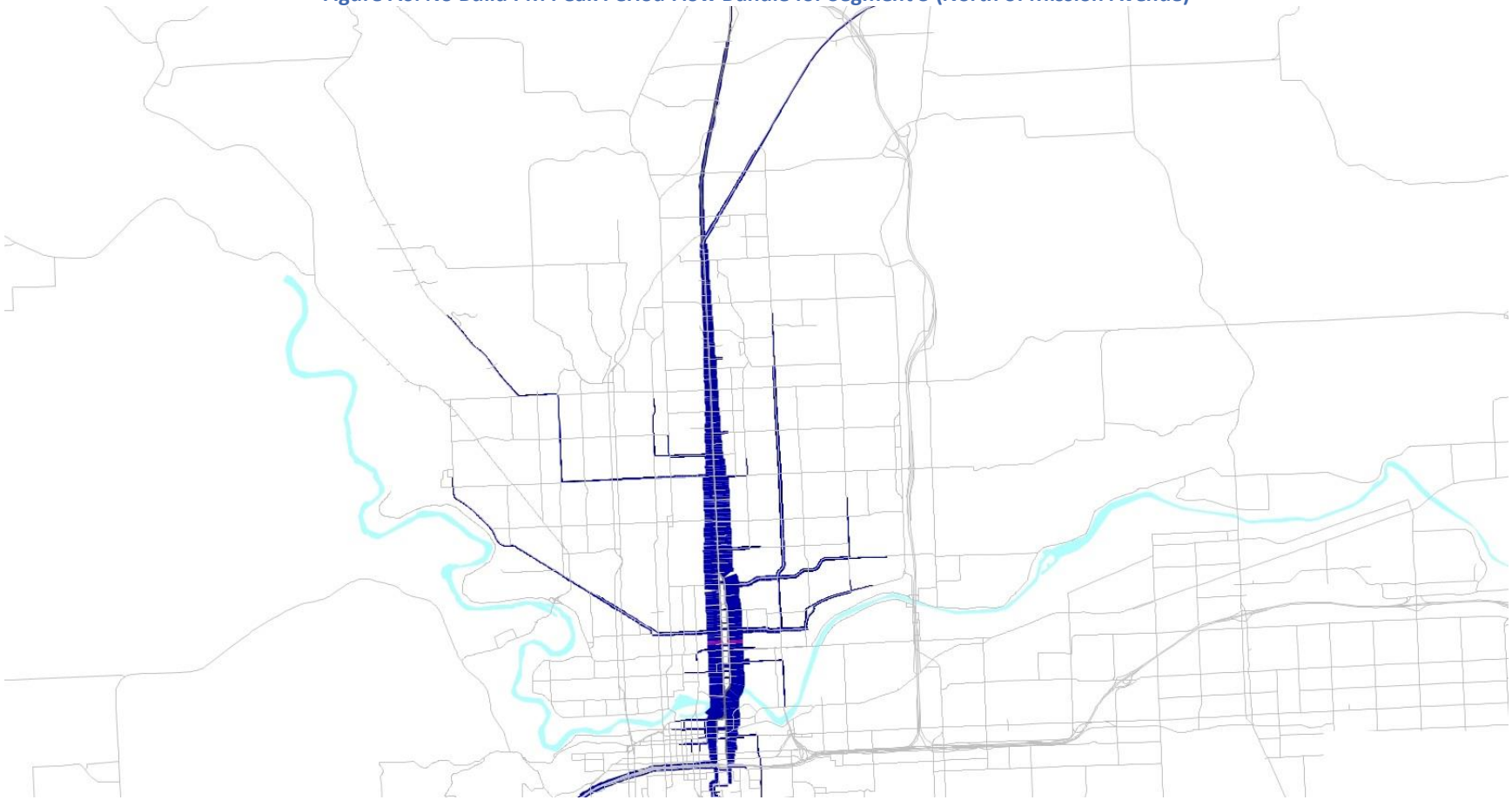


Figure A7: No Build AM Peak Period Flow Bundle for Segment 4 (North of Empire Avenue/Garland Avenue)

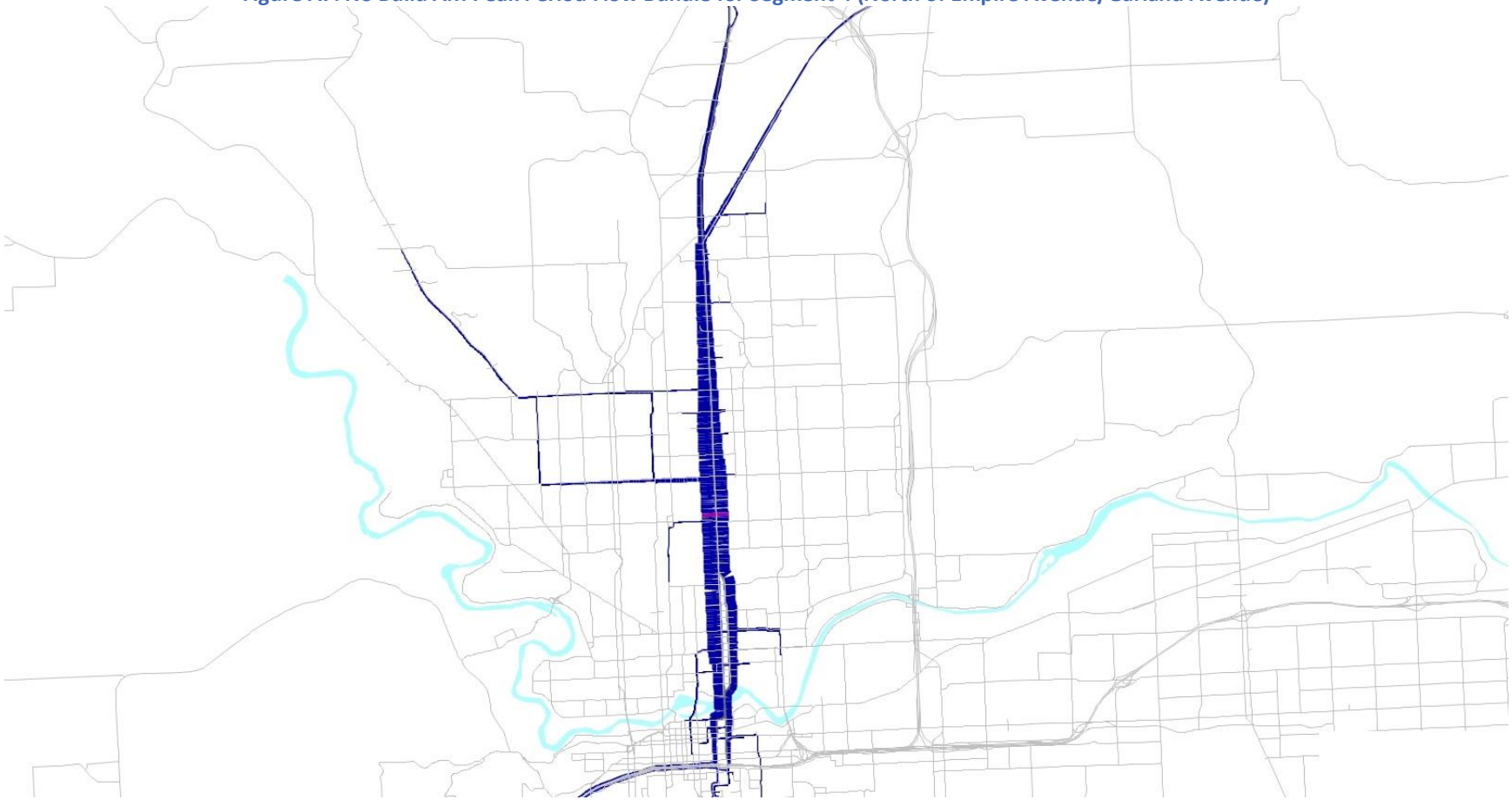


Figure A8: No Build PM Peak Period Flow Bundle for Segment 4 (North of Empire Avenue/Garland Avenue)

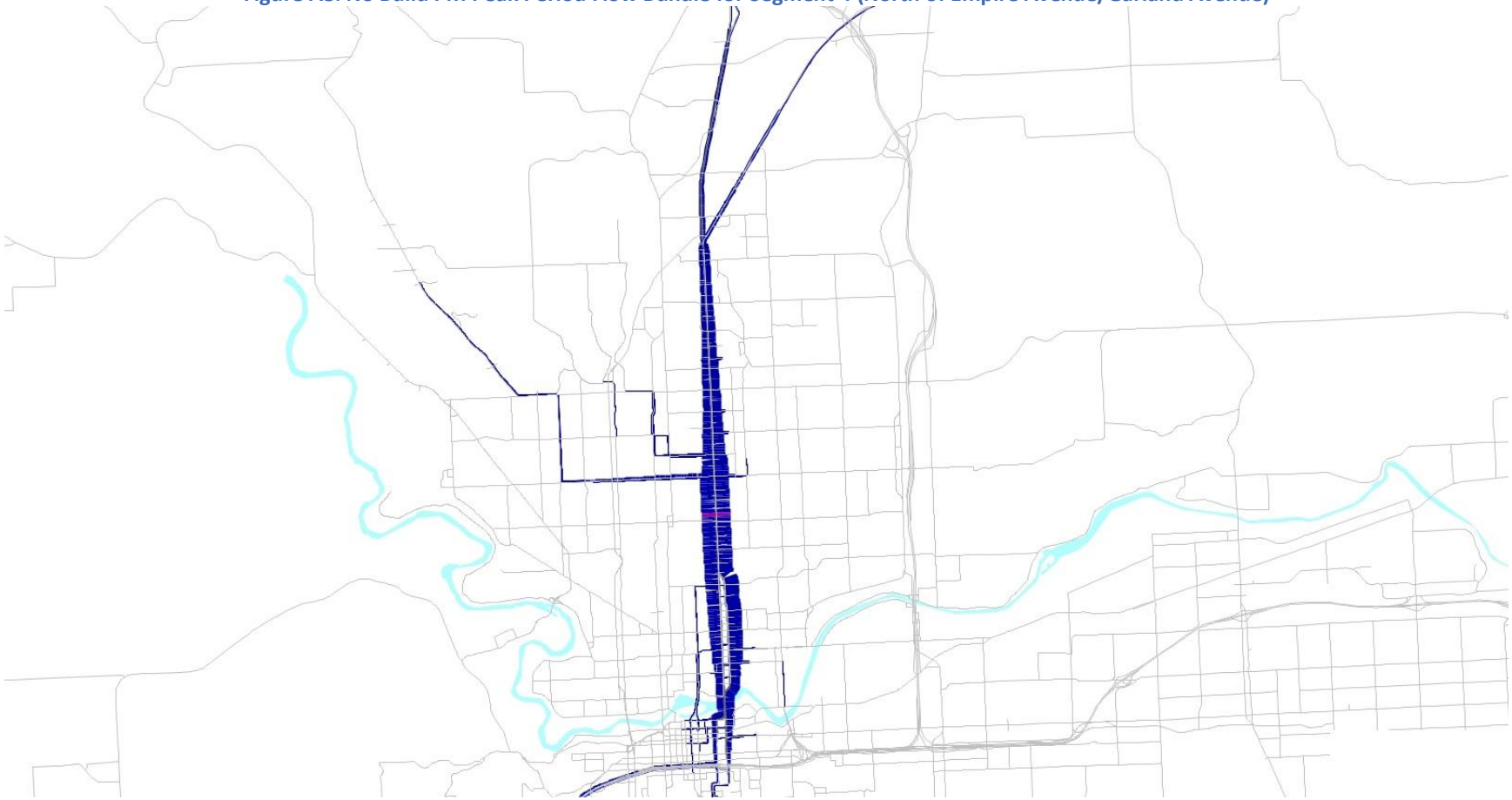


Figure A9: No Build AM Peak Period Flow Bundle for Segment 5 (South of Lincoln Road)

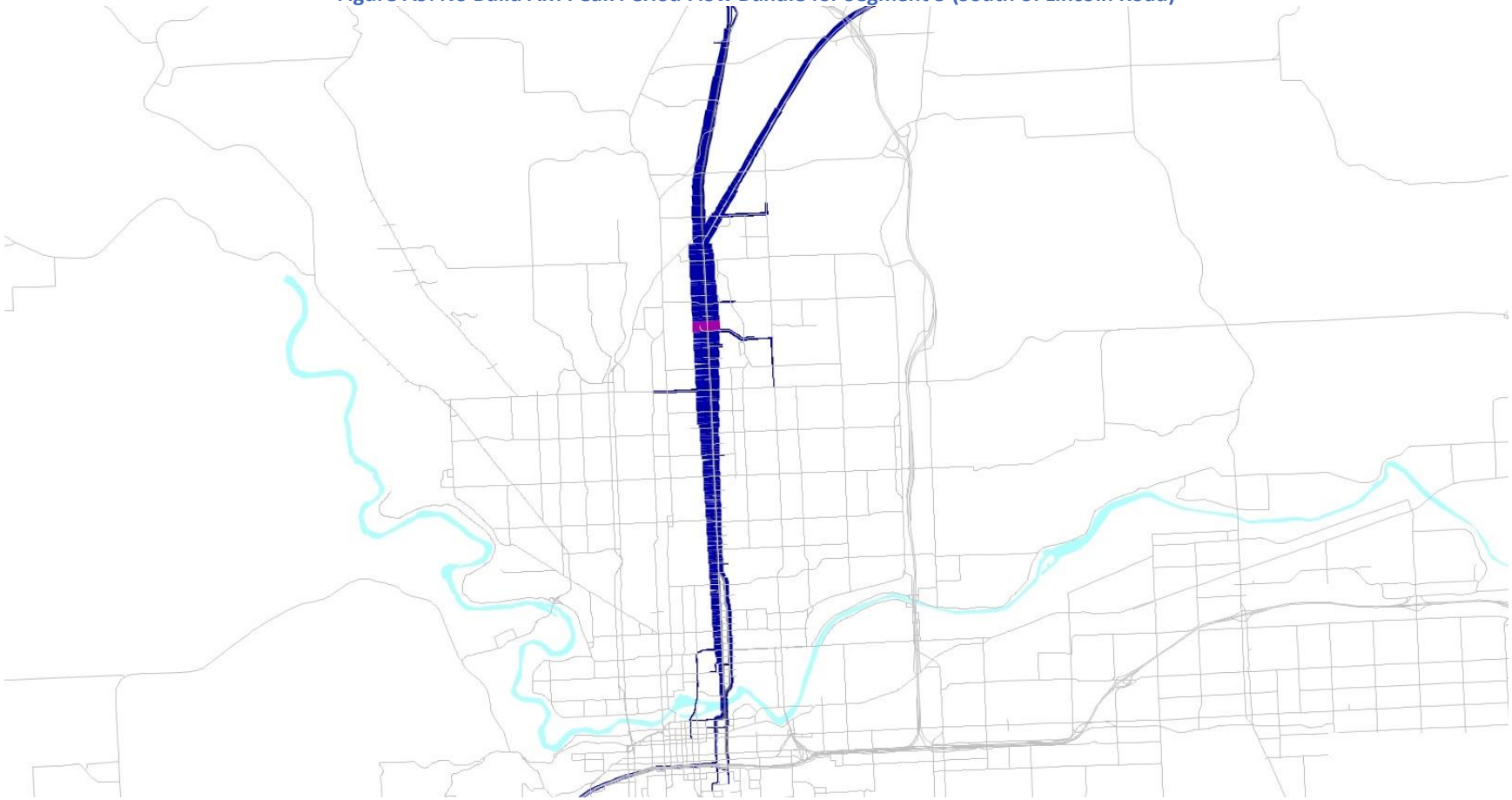


Figure A10: No Build PM Peak Period Flow Bundle for Segment 5 (South of Lincoln Road)

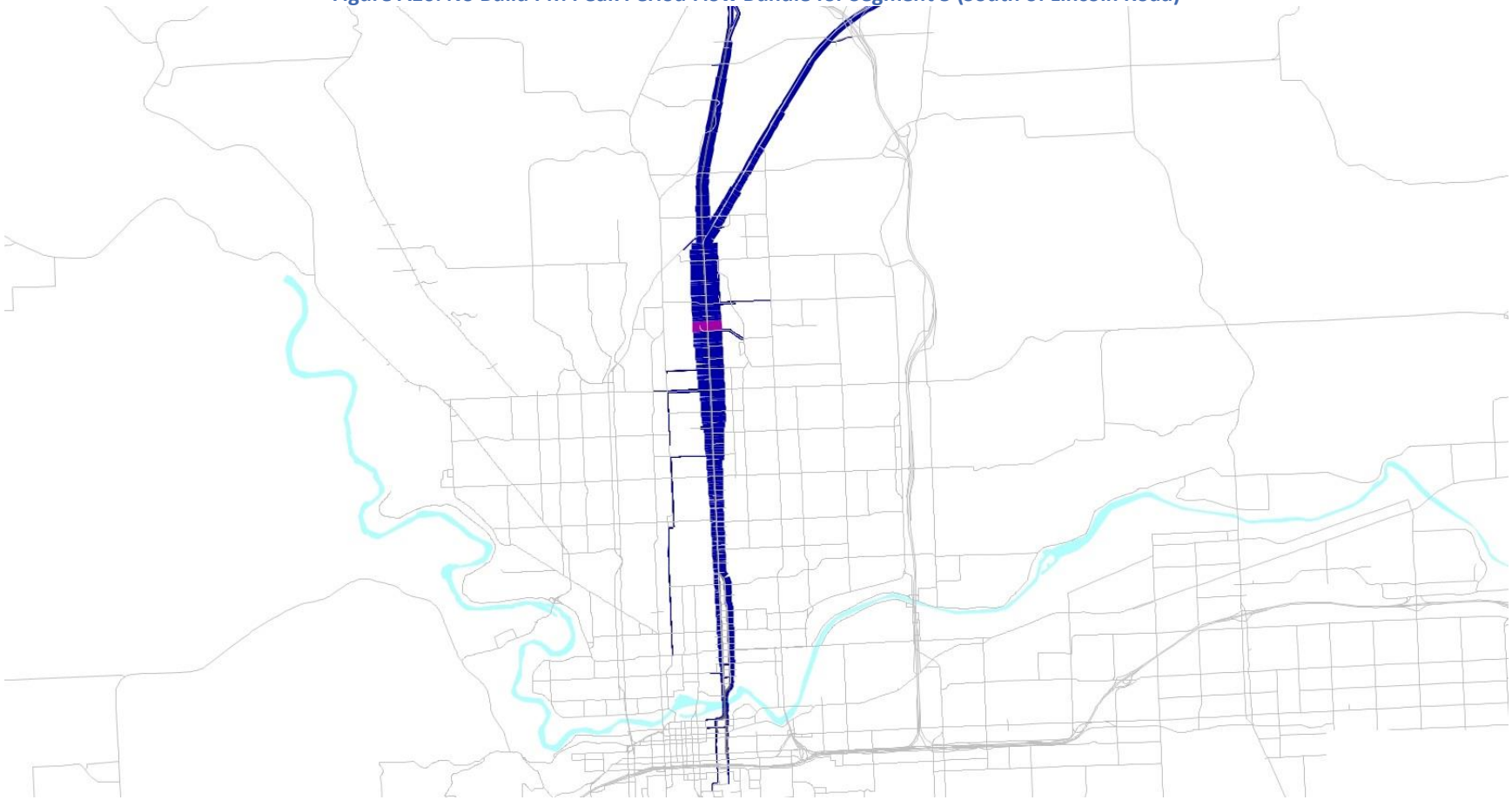


Figure A11: No Build AM Peak Period Flow Bundle for Segment 6 (North of Hawthorne Road)

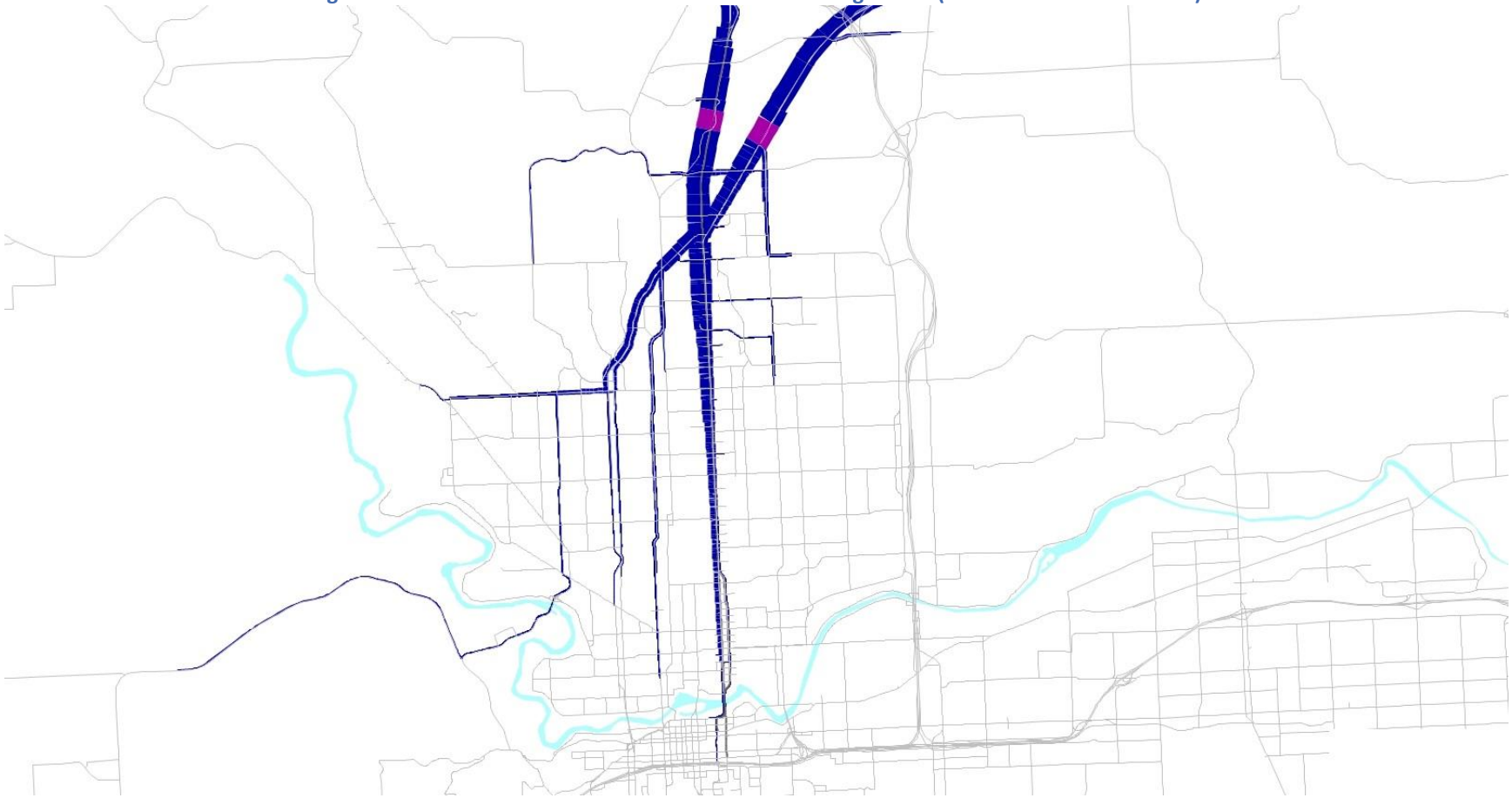


Figure A12: No Build PM Peak Period Flow Bundle for Segment 6 (North of Hawthorne Road)

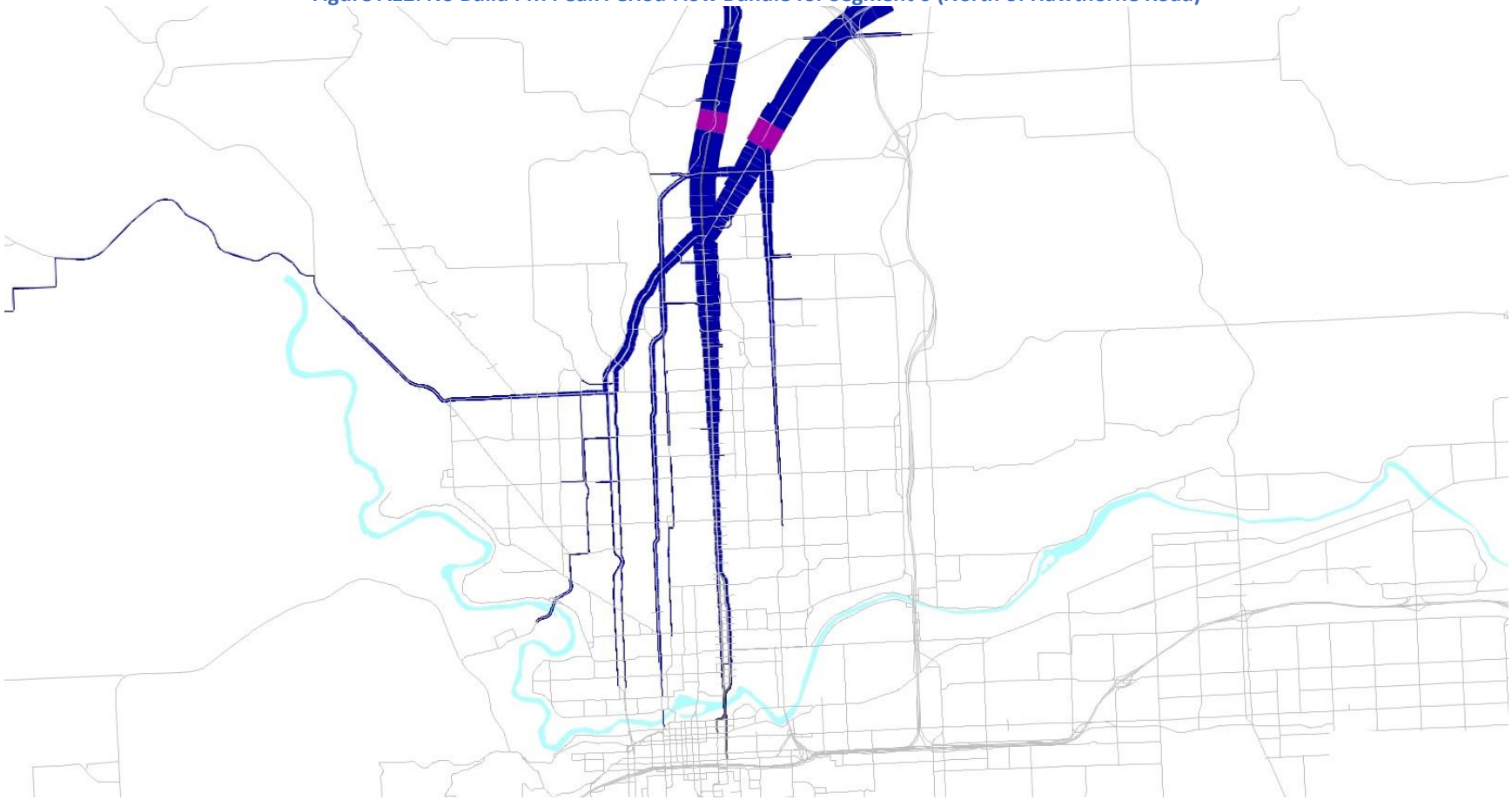


Figure A13: No Build AM Peak Period Flow Bundle for Full Corridor Travel (Spokane River to Hastings Road)

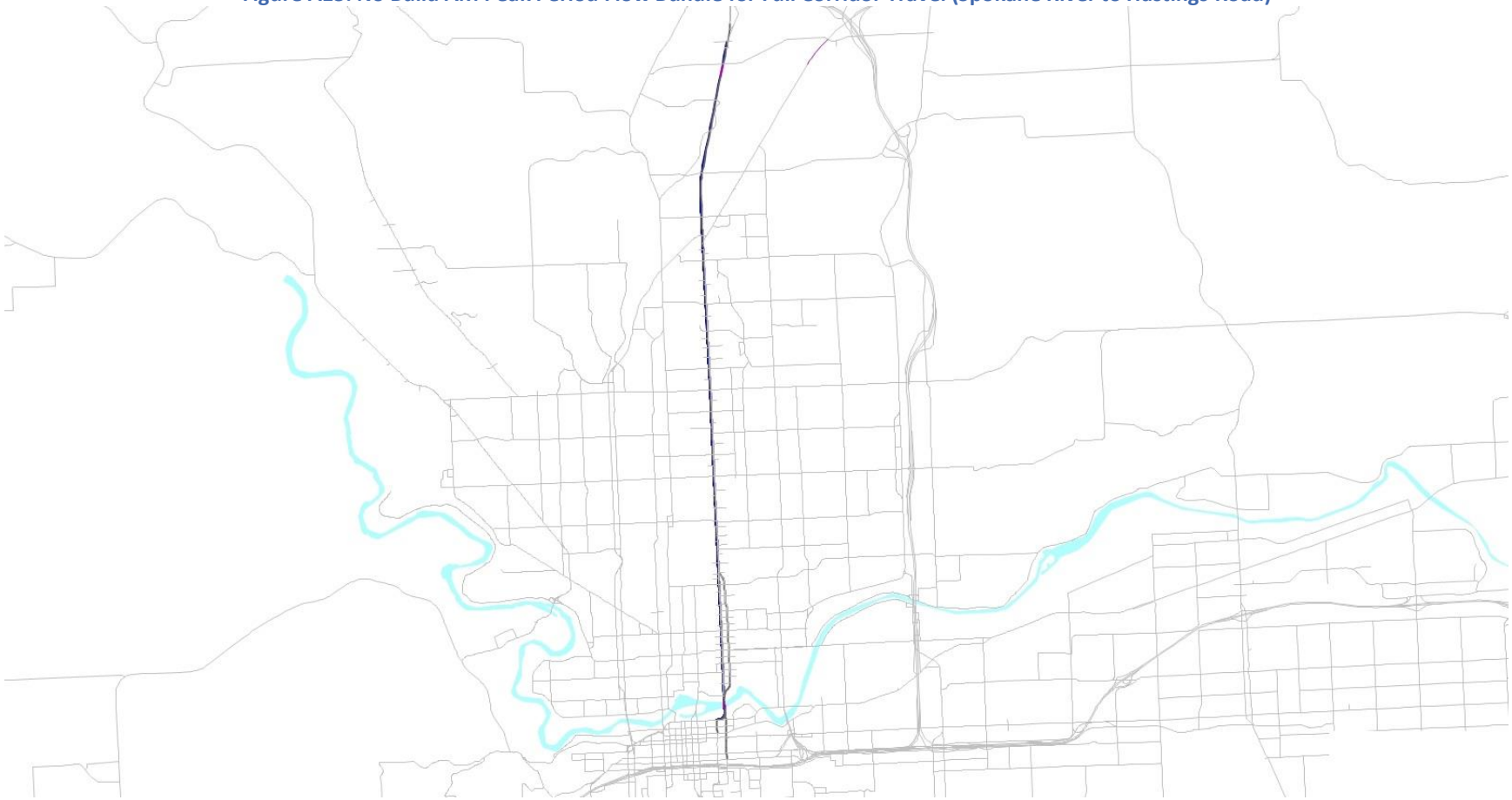


Figure A14: No Build PM Peak Period Flow Bundle for Full Corridor Travel (Spokane River to Hastings Road)

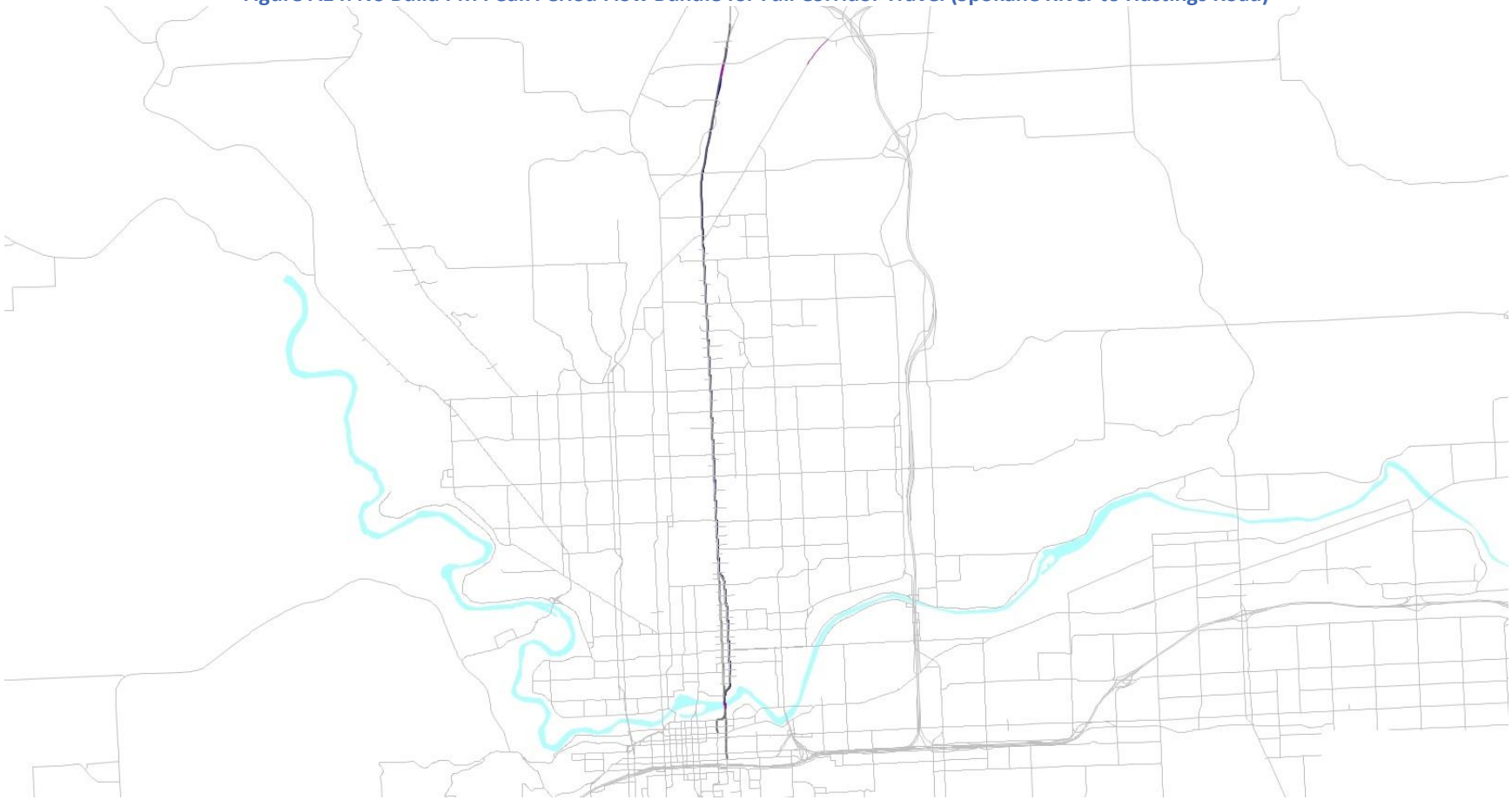


Figure A15: No Build AM Peak Period Flow Bundle for North-South Corridor Travel (South of Francis Avenue)

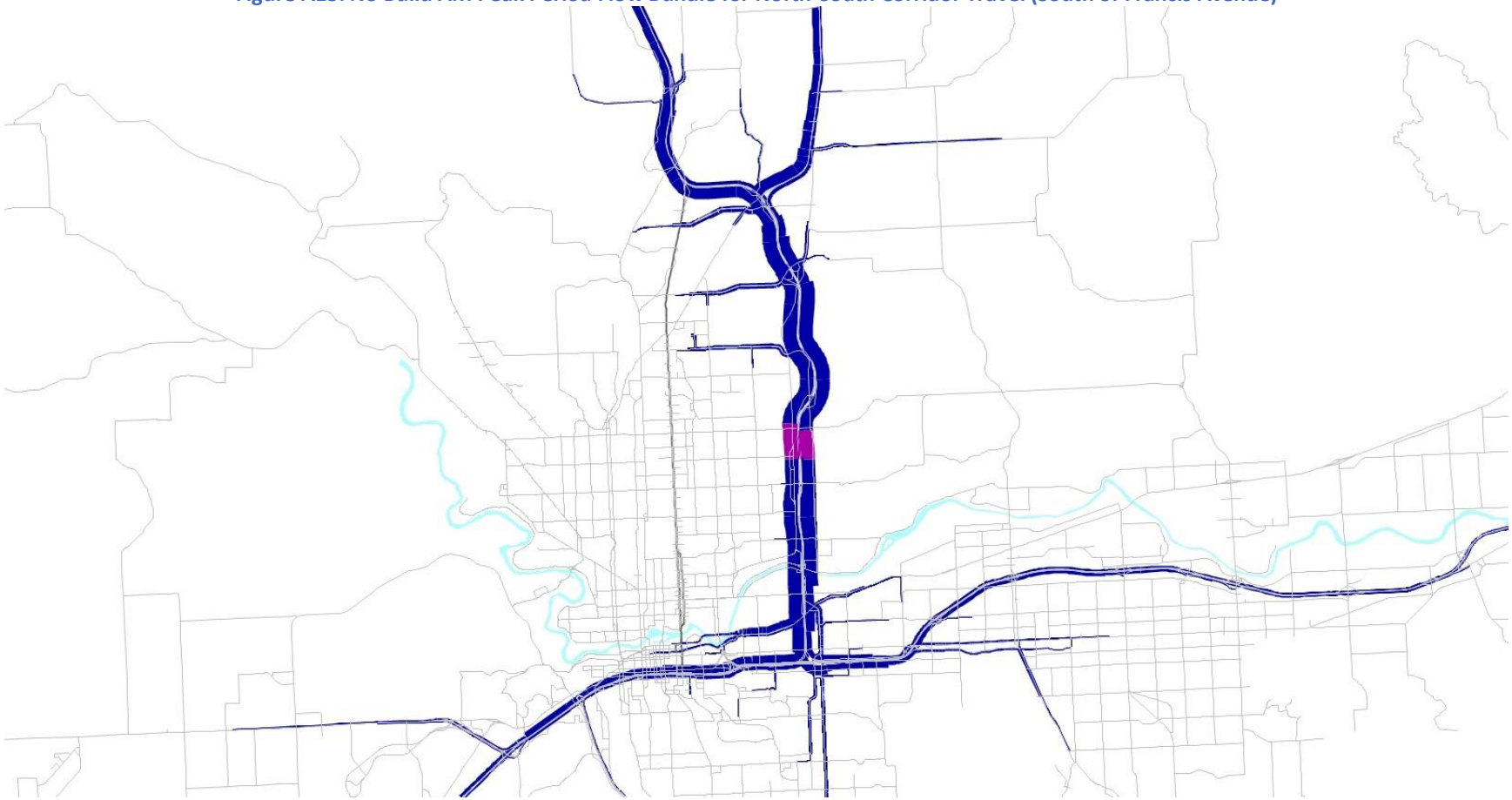


Figure A16: No Build PM Peak Period Flow Bundle for North-South Corridor Travel (South of Francis Avenue)

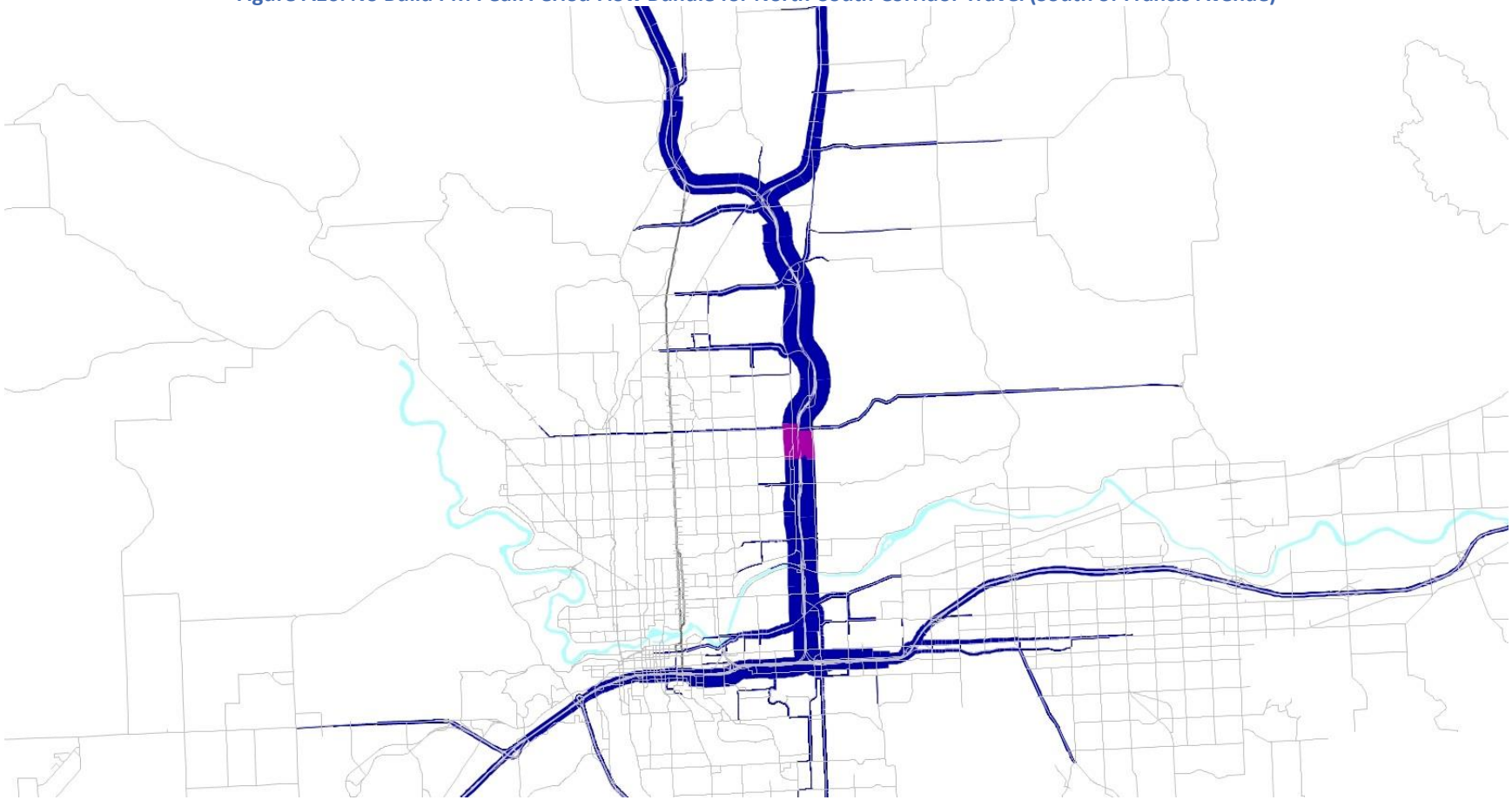


Figure A17: 2040 PM Peak Period Congestion – No Build Alternative

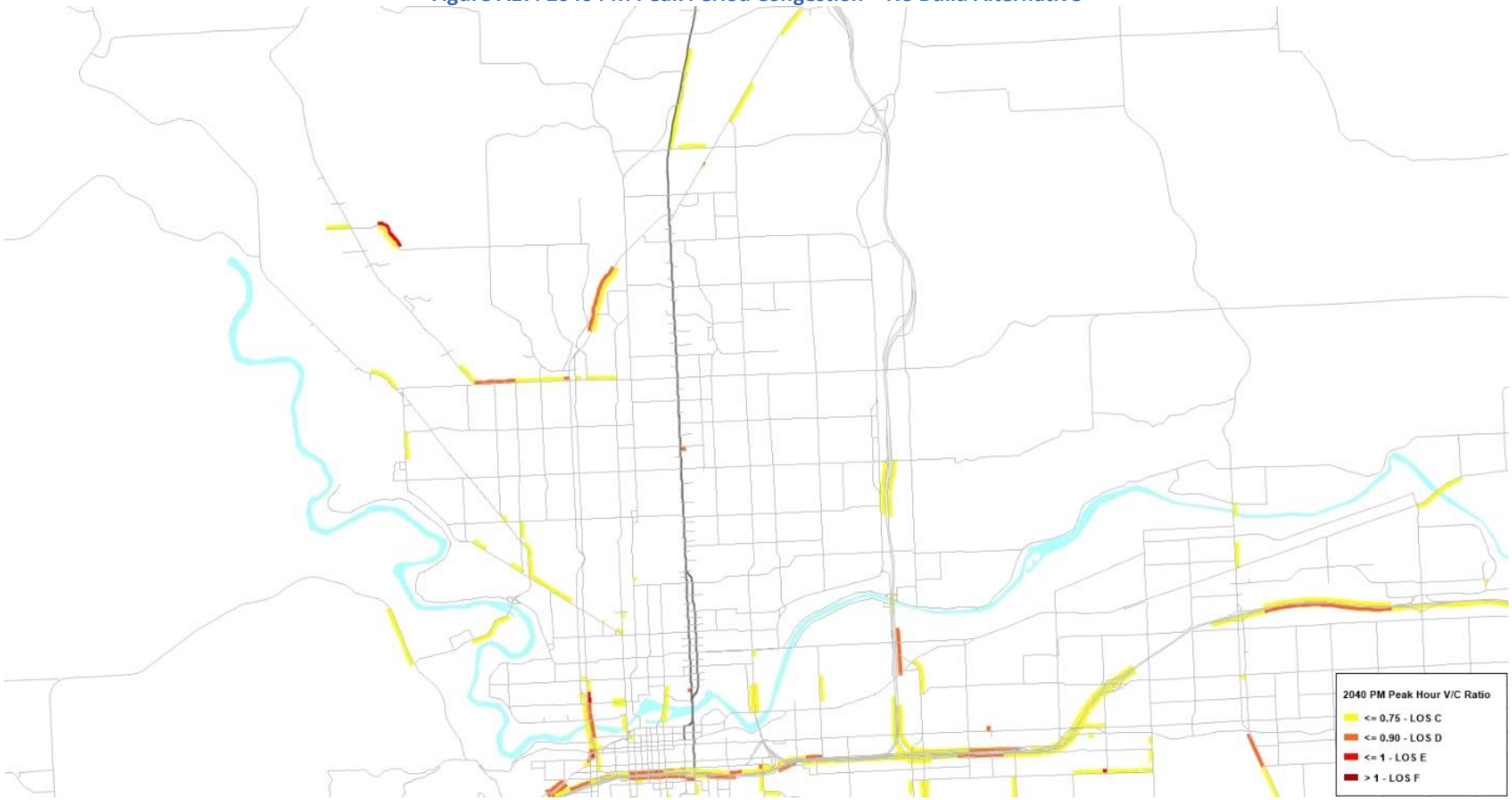


Figure A18: 2040 PM Peak Period Congestion – Center-running Alternative

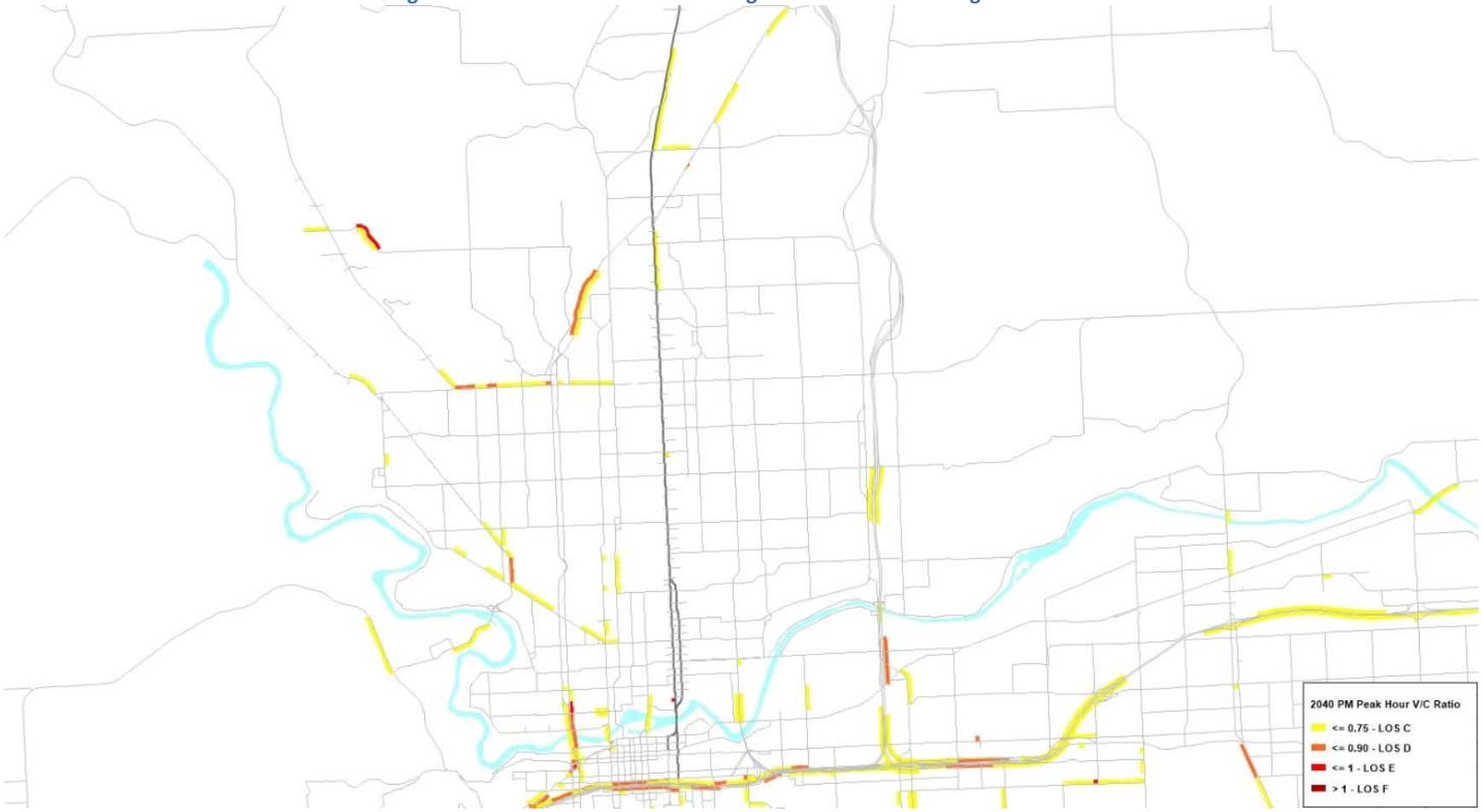


Figure A19: 2040 PM Peak Period Congestion – Side Running A Alternative

Figure A20: 2040 PM Peak Period Congestion – Side Running B Alternative

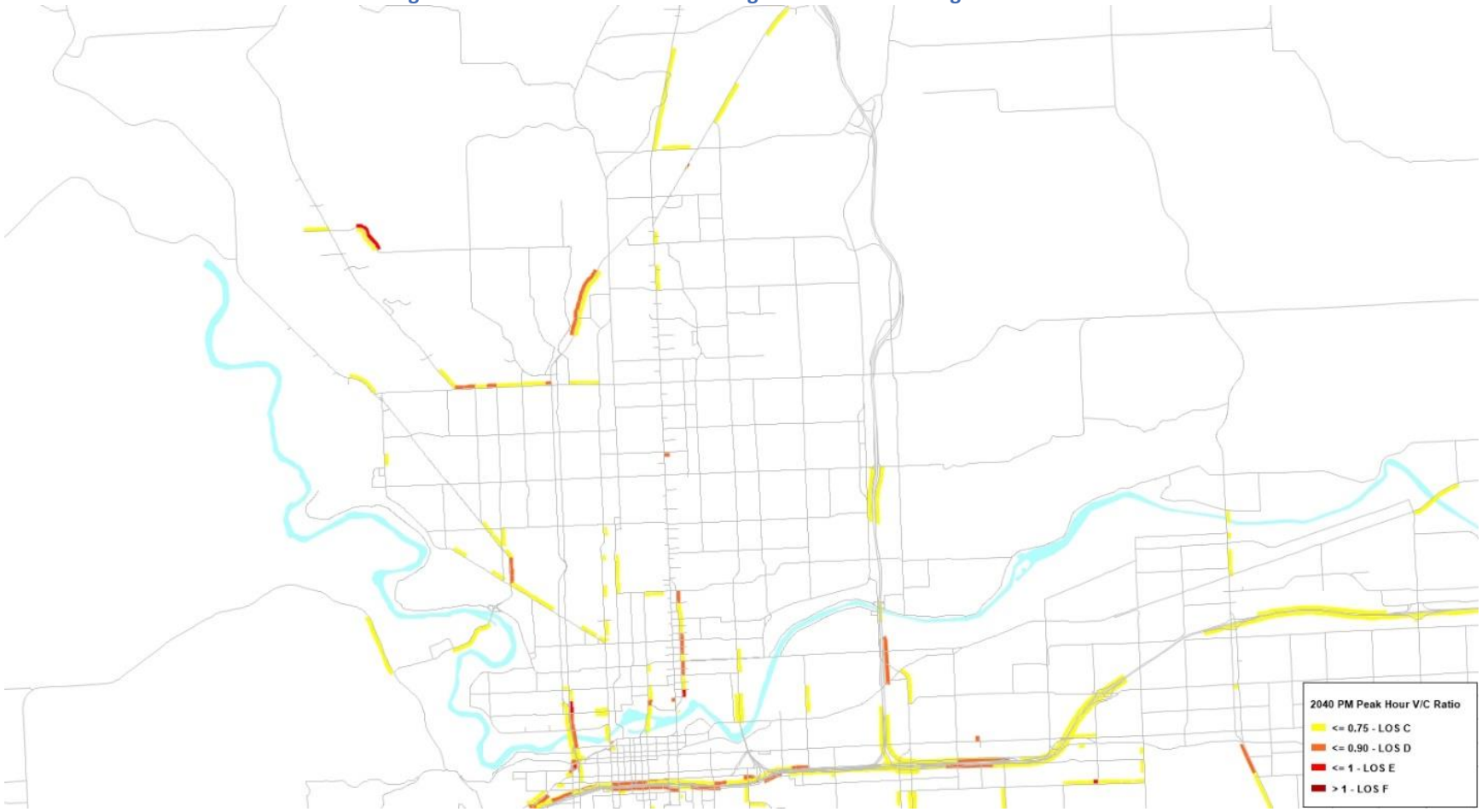


Figure A21: 2040 PM Peak Period Congestion – Side Running C Alternative

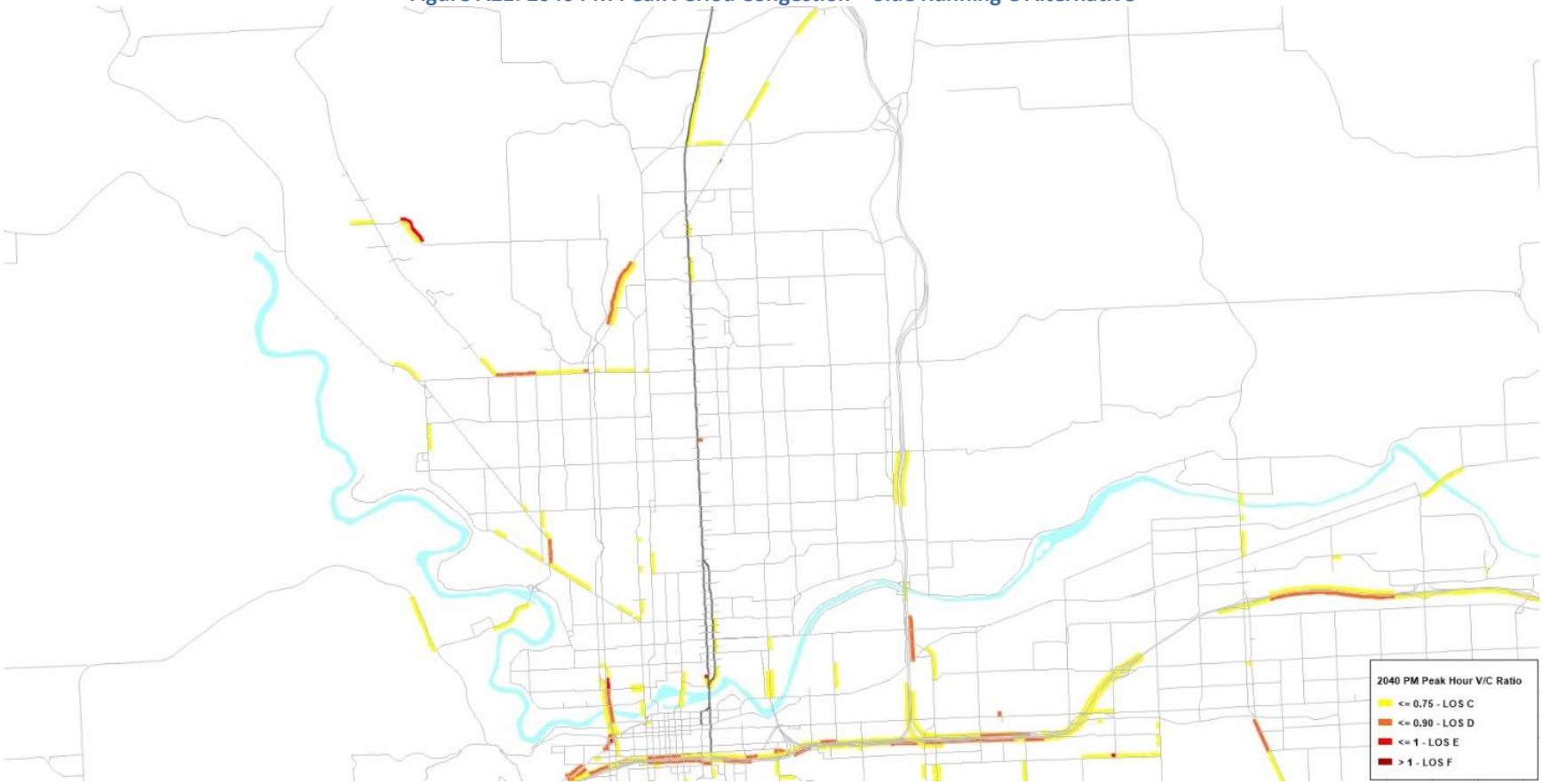


Table A1 – Detailed Average Daily Screenline Comparison

Description	Measure	2015	2040				
		Existing	No Build	Center-running	Side-running A	Side-running B	Side-running C
TOTAL Screenline (With NSC)							
Daily ADT	South of Hawthorne Road	89,473	126,782	126,300	126,111	126,322	125,842
	Between Lincoln Road and Francis Avenue	114,602	156,106	154,475	154,296	154,463	153,813
	Between Wellesley Avenue and Garland Avenue	136,820	194,558	193,140	192,442	192,040	192,039
	Between Indiana Avenue and Maxwell Avenue	195,749	256,612	255,428	254,753	253,294	253,426
	Overall	536,644	734,058	729,343	727,602	726,119	725,120
AM Peak Period ADT	South of Hawthorne Road	17,259	24,357	24,356	24,206	24,327	24,200
	Between Lincoln Road and Francis Avenue	21,499	29,251	29,013	28,848	28,950	28,873
	Between Wellesley Avenue and Garland Avenue	27,286	38,374	38,173	37,892	37,947	38,064
	Between Indiana Avenue and Maxwell Avenue	38,516	50,161	50,009	49,653	49,600	49,760
	Overall	104,560	142,143	141,551	140,599	140,824	140,897
PM Peak Period ADT	South of Hawthorne Road	23,405	32,836	32,574	32,621	32,570	32,693
	Between Lincoln Road and Francis Avenue	30,032	40,925	40,588	40,576	40,454	40,641
	Between Wellesley Avenue and Garland Avenue	35,205	50,681	50,135	50,111	49,842	50,106
	Between Indiana Avenue and Maxwell Avenue	50,130	65,748	65,338	65,423	64,623	65,116
	Overall	138,772	190,190	188,635	188,731	187,489	188,556
Daily ADT Difference %	South of Hawthorne Road		42%	0%	-1%	0%	-1%
	Between Lincoln Road and Francis Avenue		36%	-1%	-1%	-1%	-1%
	Between Wellesley Avenue and Garland Avenue		42%	-1%	-1%	-1%	-1%
	Between Indiana Avenue and Maxwell Avenue		31%	0%	-1%	-1%	-1%
	Overall		37%	-1%	-1%	-1%	-1%
AM Peak Period ADT Difference %	South of Hawthorne Road		41%	0%	-1%	0%	-1%
	Between Lincoln Road and Francis Avenue		36%	-1%	-1%	-1%	-1%
	Between Wellesley Avenue and Garland Avenue		41%	-1%	-1%	-1%	-1%
	Between Indiana Avenue and Maxwell Avenue		30%	0%	-1%	-1%	-1%
	Overall		36%	0%	-1%	-1%	-1%
PM Peak Period ADT Difference %	South of Hawthorne Road		40%	-1%	-1%	-1%	0%
	Between Lincoln Road and Francis Avenue		36%	-1%	-1%	-1%	-1%
	Between Wellesley Avenue and Garland Avenue		44%	-1%	-1%	-2%	-1%
	Between Indiana Avenue and Maxwell Avenue		31%	-1%	0%	-2%	-1%
	Overall		37%	-1%	-1%	-1%	-1%
TOTAL Screenline (Without NSC)							
Daily ADT	South of Hawthorne Road	78,895	74,665	73,587	73,567	73,644	73,252
	Between Lincoln Road and Francis Avenue	104,024	103,989	101,762	101,752	101,785	101,223
	Between Wellesley Avenue and Garland Avenue	136,820	119,913	117,910	117,483	116,687	116,802
	Between Indiana Avenue and Maxwell Avenue	195,749	181,967	180,198	179,794	177,941	178,189

Description	Measure	2015	2040				
		Existing	No Build	Center-running	Side-running A	Side-running B	Side-running C
	Overall	515,488	480,534	473,457	472,596	470,057	469,466
AM Peak Period ADT	South of Hawthorne Road	15,060	13,316	13,233	13,195	13,248	13,092
	Between Lincoln Road and Francis Avenue	19,300	18,210	17,890	17,837	17,871	17,765
	Between Wellesley Avenue and Garland Avenue	27,286	23,369	23,042	22,936	22,865	22,928
	Between Indiana Avenue and Maxwell Avenue	38,516	35,156	34,878	34,697	34,518	34,624
	Overall	100,162	90,051	89,043	88,665	88,502	88,409
PM Peak Period	South of Hawthorne Road	20,666	19,611	19,125	19,169	19,130	19,254
	Between Lincoln Road and Francis Avenue	27,293	27,700	27,139	27,124	27,014	27,202
	Between Wellesley Avenue and Garland Avenue	35,205	31,686	31,031	30,978	30,620	30,843
	Between Indiana Avenue and Maxwell Avenue	50,130	46,753	46,234	46,290	45,401	45,853
	Overall	133,294	125,750	123,529	123,561	122,165	123,152
Daily ADT Difference %	South of Hawthorne Road		-5%	-1%	-1%	-1%	-2%
	Between Lincoln Road and Francis Avenue		0%	-2%	-2%	-2%	-3%
	Between Wellesley Avenue and Garland Avenue		-12%	-2%	-2%	-3%	-3%
	Between Indiana Avenue and Maxwell Avenue		-7%	-1%	-1%	-2%	-2%
	Overall		-7%	-1%	-2%	-2%	-2%
AM Peak Period ADT Difference %	South of Hawthorne Road		-12%	-1%	-1%	-1%	-2%
	Between Lincoln Road and Francis Avenue		-6%	-2%	-2%	-2%	-2%
	Between Wellesley Avenue and Garland Avenue		-14%	-1%	-2%	-2%	-2%
	Between Indiana Avenue and Maxwell Avenue		-9%	-1%	-1%	-2%	-2%
	Overall		-10%	-1%	-2%	-2%	-2%
PM Peak Period ADT Difference %	South of Hawthorne Road		-5%	-2%	-2%	-2%	-2%
	Between Lincoln Road and Francis Avenue		1%	-2%	-2%	-2%	-2%
	Between Wellesley Avenue and Garland Avenue		-10%	-2%	-2%	-3%	-3%
	Between Indiana Avenue and Maxwell Avenue		-7%	-1%	-1%	-3%	-2%
	Overall		-6%	-2%	-2%	-3%	-2%
TOTAL Screenline (Division Street/Ruby Street Only)							
Daily ADT	South of Hawthorne Road	22,861	21,718	21,002	21,094	21,152	21,126
	Between Lincoln Road and Francis Avenue	41,652	38,473	29,857	32,438	32,263	32,001
	Between Wellesley Avenue and Garland Avenue	38,202	34,602	27,572	28,123	26,813	27,211
	Between Indiana Avenue and Maxwell Avenue	47,004	42,809	37,447	37,427	29,826	32,476
	Overall	149,719	137,602	115,878	119,082	110,054	112,814
AM Peak Period ADT	South of Hawthorne Road	4,415	3,806	3,708	3,760	3,759	3,746
	Between Lincoln Road and Francis Avenue	8,050	7,175	5,514	5,989	5,941	5,973
	Between Wellesley Avenue and Garland Avenue	7,968	7,077	5,740	5,832	5,587	5,624
	Between Indiana Avenue and Maxwell Avenue	9,809	8,667	7,737	7,734	6,380	6,493
	Overall	30,242	26,725	22,699	23,315	21,667	21,836

Description	Measure	2015	2040				
		Existing	No Build	Center-running	Side-running A	Side-running B	Side-running C
PM Peak Period	South of Hawthorne Road	5,742	5,693	5,337	5,391	5,365	5,404
	Between Lincoln Road and Francis Avenue	9,218	8,577	6,447	7,072	7,030	7,046
	Between Wellesley Avenue and Garland Avenue	8,450	7,715	5,810	6,011	5,652	5,764
	Between Indiana Avenue and Maxwell Avenue	11,943	10,492	9,268	9,319	6,435	7,510
	Overall	35,353	32,477	26,862	27,793	24,482	25,724
Daily ADT Difference %	South of Hawthorne Road		-5%	-3%	-3%	-3%	-3%
	Between Lincoln Road and Francis Avenue		-8%	-22%	-16%	-16%	-17%
	Between Wellesley Avenue and Garland Avenue		-9%	-20%	-19%	-23%	-21%
	Between Indiana Avenue and Maxwell Avenue		-9%	-13%	-13%	-30%	-24%
	Overall		-8%	-16%	-13%	-20%	-18%
AM Peak Period ADT Difference %	South of Hawthorne Road		-14%	-3%	-1%	-1%	-2%
	Between Lincoln Road and Francis Avenue		-11%	-23%	-17%	-17%	-17%
	Between Wellesley Avenue and Garland Avenue		-11%	-19%	-18%	-21%	-21%
	Between Indiana Avenue and Maxwell Avenue		-12%	-11%	-11%	-26%	-25%
	Overall		-12%	-15%	-13%	-19%	-18%
PM Peak Period ADT Difference %	South of Hawthorne Road		-1%	-6%	-5%	-6%	-5%
	Between Lincoln Road and Francis Avenue		-7%	-25%	-18%	-18%	-18%
	Between Wellesley Avenue and Garland Avenue		-9%	-25%	-22%	-27%	-25%
	Between Indiana Avenue and Maxwell Avenue		-12%	-12%	-11%	-39%	-28%
	Overall		-8%	-17%	-14%	-25%	-21%

APPENDIX H

DivisionConnects: Active Transportation
Technical Memo

Parametrix
ENGINEERING . PLANNING . ENVIRONMENTAL SCIENCES

719 2ND AVENUE, SUITE 200 | SEATTLE, WA 98104 | P 206.394.3700

TECHNICAL MEMORANDUM

DATE: January 20, 2021
TO: Jason Lien, Mike Tresidder, and Karl Otterstrom
FROM: Darby Watson, Frank Ide, Erinn Ellig Parametrix
SUBJECT: Division Connects Active Transportation Technical Memo
CC:

INTRODUCTION

The Division Street Corridor Study evaluates the future of transportation and land use along this important corridor in Spokane. 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 to 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 highway project anticipated to be complete by 2029, agency partners, businesses, residents, and the broader community are looking to evaluate the future of the Division Street corridor. The key elements of this Study are:

- Examine opportunities and identify a preferred concept for rubber-tired high performance transit in the corridor as identified in STA's Transit Development Plan as Bus Rapid Transit (BRT);
- Develop options for all modes of travel in the corridor;
- Recommend capital projects and implementation plans;
- Identify land use opportunities.

This memo, documents all forms of active transportation in the study area, including bicycles, pedestrians, and scooters. Goals and policies that guide the development of active transportation facilities in the City and that will inform 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 in and near the Division Street corridor.

Corridor Description

The study area is located along Division Street/US Highway 2 (US 2) in the City of Spokane and parts of unincorporated Spokane County. The corridor extends north through US 395 and the Newport Highway past the 'Y' and will extend south to and 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 Bus Route 25 whose southern terminus is the STA Plaza in downtown Spokane and northern terminus at the Hastings Park & Ride, providing access to the following neighborhoods:

- Shiloh Hills
- North Hill
- Nevada Heights
- Emerson/Garfield

- Logan
- Riverside
- East Central

The study corridor includes the area within ¾ mile of either side of Division Street, which encompasses Hamilton Street to the east and Monroe Street to the west as shown in Figure 1. STA Route 25 runs the entire length of the corridor. The study area is purposely broad to understand the function, role, and interactions of adjacent streets, highways, land uses, and community character.

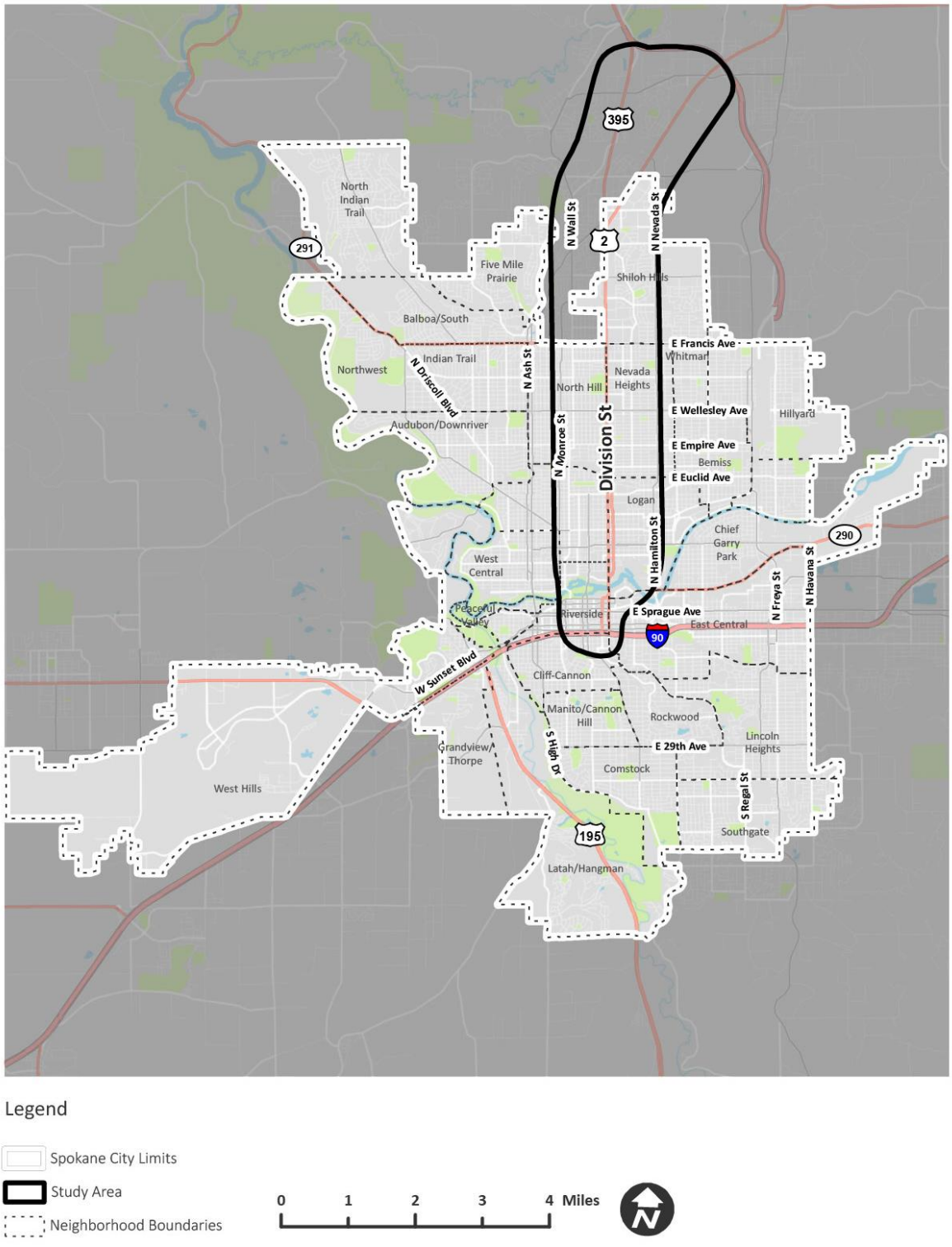


Figure 1. Division Street Corridor Study Area

ACTIVE TRANSPORTATION GOALS AND POLICIES

Division Street has historically been an auto-oriented corridor. The roadway is wide with multiple lanes of heavy volume, higher speed traffic. This environment is generally uncomfortable for most active transportation users. However, recent local planning efforts have highlighted the importance of providing for and accommodating pedestrian-powered transportation options through multiple adopted plans within the Greater Spokane area. The following documents guide bicycle and pedestrian planning and design:

- Spokane Pedestrian Plan 2015 City of Spokane
- Bicycle Master Plan 2017 City of Spokane
- Horizon 2040 Spokane Regional Transportation Council
- Division Street Gateway Project 2015 City of Spokane
- WSDOT Active Transportation Plan 2019 (To be completed in 2021)
- Spokane County Comprehensive Plan, Chapter 5 Transportation
- City of Spokane Comprehensive Plan Chapter 4 Transportation
- Spokane Regional Pedestrian Plan 2009 Spokane Regional Transportation Council
- WSDOT Design Guidelines (WSDOT, NACTO, et. al.)

The goals and policies in these adopted documents reflect the needs and desires of the community confirmed during the public participation periods for each of the planning efforts. During each of the public participation processes, active transportation goals and priorities have included the desire to provide connectedness, safety and security, sustainability, accessibility, comfort, convenience, and invitation. Table 1 summarizes how each of these goals and priorities are included in the various plans.

Table 1. Active Transportation Goals in Greater Spokane Area Plans

Adopted Goals and Policies	City of Spokane Bicycle Master Plan	SRTC Horizon 2040	City of Spokane Pedestrian Plan	Spokane County Comprehensive Plan	City of Spokane Comprehensive Plan	City of Spokane Division Street Gateway Project	SRTC Pedestrian Plan
Connectedness (trails, transit, centers & corridors, neighborhoods, etc.)	X	X	X		X	X	X
Safety and Security	X		X	X	X	X	X
Sustainability						X	X

Provide Year-round Barrier-Free Accessibility		X	X		X		X
Comfortable, Inviting, and Convenient	X		X	X		X	X

For the Division Street Corridor Study, active transportation is guided by the following overarching goal: Provide well-defined, north/south multi-modal route(s) along and/or adjacent to Division Street as well as east-west connectivity and safe crossings to facilitate all non-vehicular commuters and recreational users now and in the future while fulfilling adopted goals and policies. Additional goals and policies guiding the development of active transportation improvements are summarized below.

Connectedness

The need for connected facilities appears in multiple Spokane area planning documents. The following considerations are critical in ensuring that this is achieved:

- Implement facilities near populations and destinations with a particular focus on equity
- Ensure facilities intersect with other routes, trails, and pedestrian facilities, including both north-south and east-west corridors
- Minimize distances between signalized crossings
- Provide facilities near to and connected with transit stops
- Ensure that facilities include clear termini and do not end mid-route
- Provide wayfinding

Safety and Security

The following factors improve the safety and security of proposed active transportation facilities, consistent with local planning documents:

- Encourage lower levels of Bicycle Level of Traffic Stress and Pedestrian Level of Stress[1] by separating facilities from high-speed traffic, implementing facilities along routes with lower traffic volumes and speeds, and providing wider nonmotorized facilities with adequate protection from moving vehicles, including through the use of parking lanes as buffers
- Encourage controlled crossings of arterial streets with signalization that is pedestrian actuated with adequate crossing times for all mobility levels and provide pedestrian refuge islands on wide streets

[1] Bicycle Level of Traffic Stress and Pedestrian Level of Service are ratings given to a road segment or crossing that indicates the level of stress a cyclist or user will experience while using that facility, based on characteristics such as level of separation, traffic volumes, and traffic speeds.

- Locate facilities on corridors with minimal driveways; driveways should be defined and isolated for commercial businesses and residential areas should orient driveways away from the main travel way to side yards and alleys
- Maintain facilities in a state of good repair with smooth surfaces free of root damage, cracks, and uneven surfaces
- Reduce obstructions and surface obstacles such as storm drains/curb inlets, utility valves, and parked cars
- Ensure that facilities are well-lit and implemented in populated corridors to create sense of security
- Ensure year-round maintenance best practices, including plowing of nonmotorized facilities in winter and removal of gravel and debris in summer
- Design facilities using best practices to ensure appropriate widths, separation and sight distances

Sustainability

Sustainability will ensure that active transportation facilities can be easily maintained and corridors should be considered that have the flexibility to accommodate changing needs in the future. The following considerations will allow for the implementation of sustainable active transportation facilities:

- Select corridors for improvements that can accommodate changing needs in the future, including the potential to accommodate for new modes of transportation
- Evaluate future land uses and development when implementing facilities
- Integrate economically and environmentally sustainable design practices

Year-Round Barrier-Free Accessibility

The climate in the Spokane area requires that the impacts of different types of weather and encroachments can be addressed, such as snow, ice, flooding, debris, and vegetation, so that active transportation facilities can be usable year-round. The following allow for the network to maintain usability throughout different weather and seasonal conditions:

- Implement accessible curb ramps
- Ensure year-round maintenance best practices, including plowing of nonmotorized facilities in winter and removal of gravel and debris in summer
- Maintain facilities in a state of good repair with smooth surfaces free of root damage, cracks, and uneven surfaces
- Reduce obstructions and surface obstacles such as storm drains/curb inlets, utility valves, and parked cars
- Ensure that routes are clearly designated for all roadway users

Comfortable, Inviting, and Convenient

Active transportation facilities should be comfortable and inviting for all users, which can be achieved through consideration of the following:

- Encourage lower levels of Bicycle Level of Traffic Stress and Pedestrian Level of Stress by separating facilities from high-speed traffic, implementing facilities along routes with lower traffic volumes and speeds, and providing wider nonmotorized facilities with adequate protection from moving vehicles, including through the use of parking lanes as buffers
- Ensure that facilities are well-lit and implemented in populated corridors to create sense of security
- Design facilities so they are easily identifiable by active transportation users as well as other roadway users
- Strive to select routes that follow the primary desire line for nonmotorized travel
- Provide user comforts and amenities, including wayfinding and bicycle parking
- Consider the corridor context and integrate facilities appropriately
- Encourage controlled crossings of arterial streets with signalization that is pedestrian actuated with adequate crossing times for all mobility levels and provide pedestrian refuge islands on wide streets

CORRIDOR EXISTING CONDITIONS

The corridor existing conditions are summarized in this report and included in detail in the Division Street Project State of the Corridor Report (April 2020). Figure 2 shows the active transportation network in the Study Area.

Bicycle Conditions

Division Street is currently not a designated bike route within the study area; in fact, bicycles are prohibited on the corridor between Buckeye Avenue and the North Division 'Y'. There are corridors parallel to Division Street that provide bicycle facilities, such as bicycle lanes or shared roadway designations. However, many of the north-south bicycle corridors are beyond a 1/3 of a mile from Division Street, which limits direct access to the corridor. The Spokane River crossing is also challenging for cyclists; riders must use off-street bridges to the east or west or must ride on the sidewalk of the Division Street bridge. Figure 3 shows the bicycle routes adjacent to the Division Street corridor. The City of Spokane also completed a Bicycle Level of Traffic Stress analysis for bicycle facilities in the City, shown on Figure 4. Division Street is identified as a Very High Stress facility with many of the parallel north-south routes as well as east-west connecting routes identified as Moderate, Higher Stress, or Very High Stress facilities. There are also few bicycle parking opportunities along the corridor.

Pedestrian Conditions

Sidewalks are present on at least one side of most streets within the study area. Sidewalk coverage decreases in the northern end of the corridor in unincorporated Spokane County. Although most of Division Street has sidewalks, the pedestrian environment is relatively high stress due to few crossing opportunities, a high density of driveways, narrow sidewalks with few landscape buffers, faster-moving vehicles and high traffic volumes. Sidewalks in the corridor are in need of repair, with areas of cracks, unevenness, and obstructions, such as utility cabinets and poles. It should be noted that curb ramps are present at many intersections along the corridor and many appear to have been recently upgraded in compliance with the Americans with Disabilities Act (ADA).

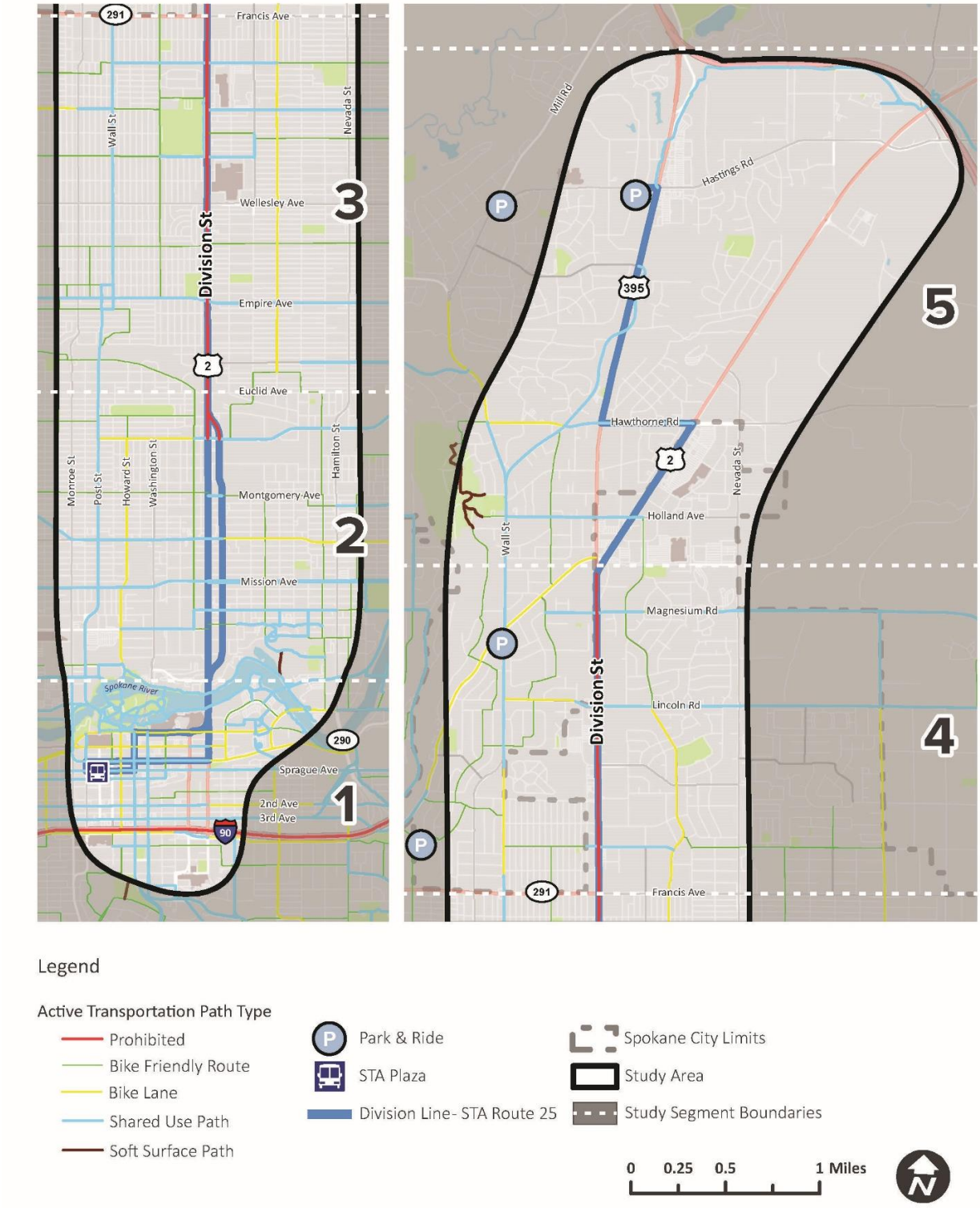


Figure 2. Existing Active Transportation Network

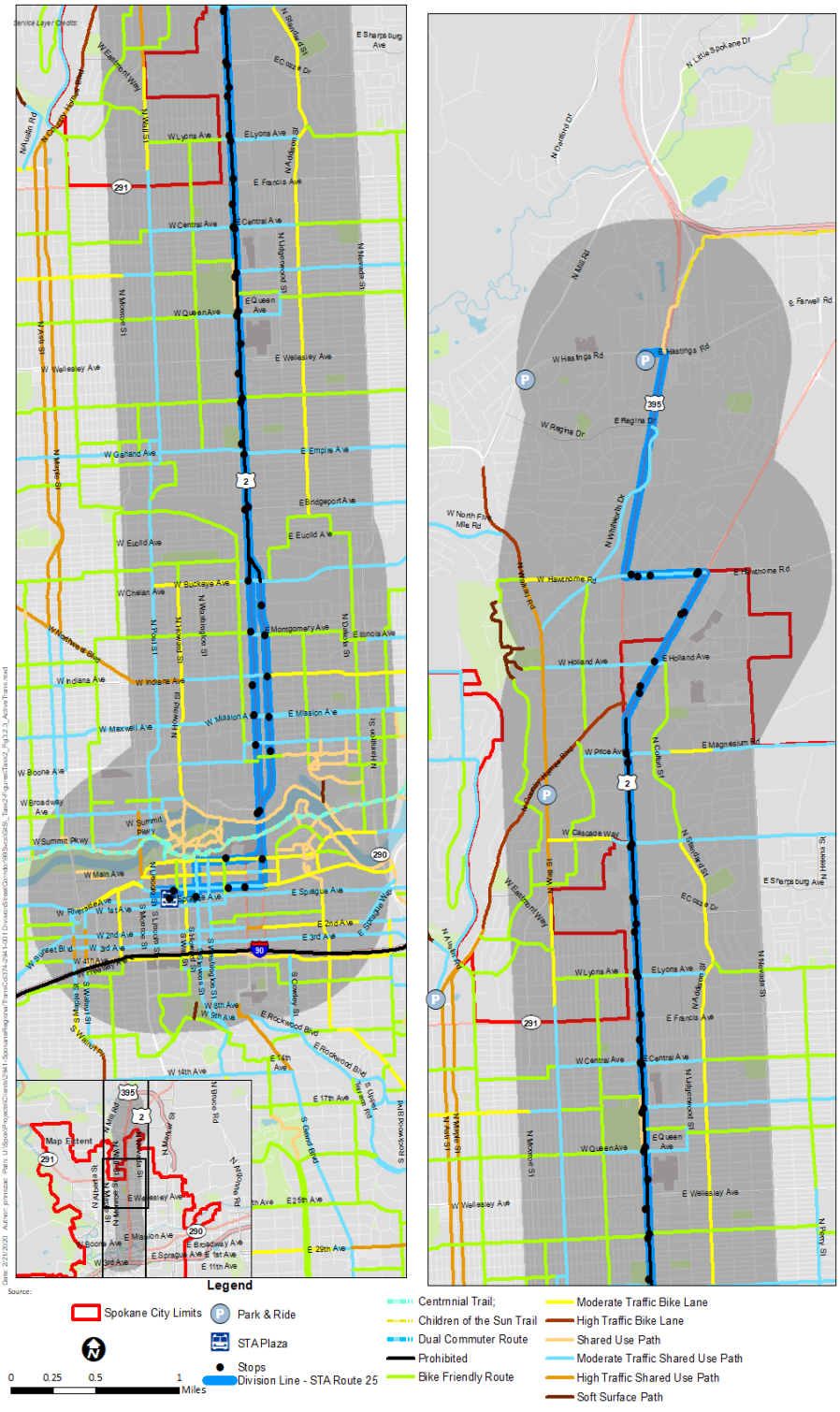


Figure 3. Existing Bicycle Routes in the Study Area

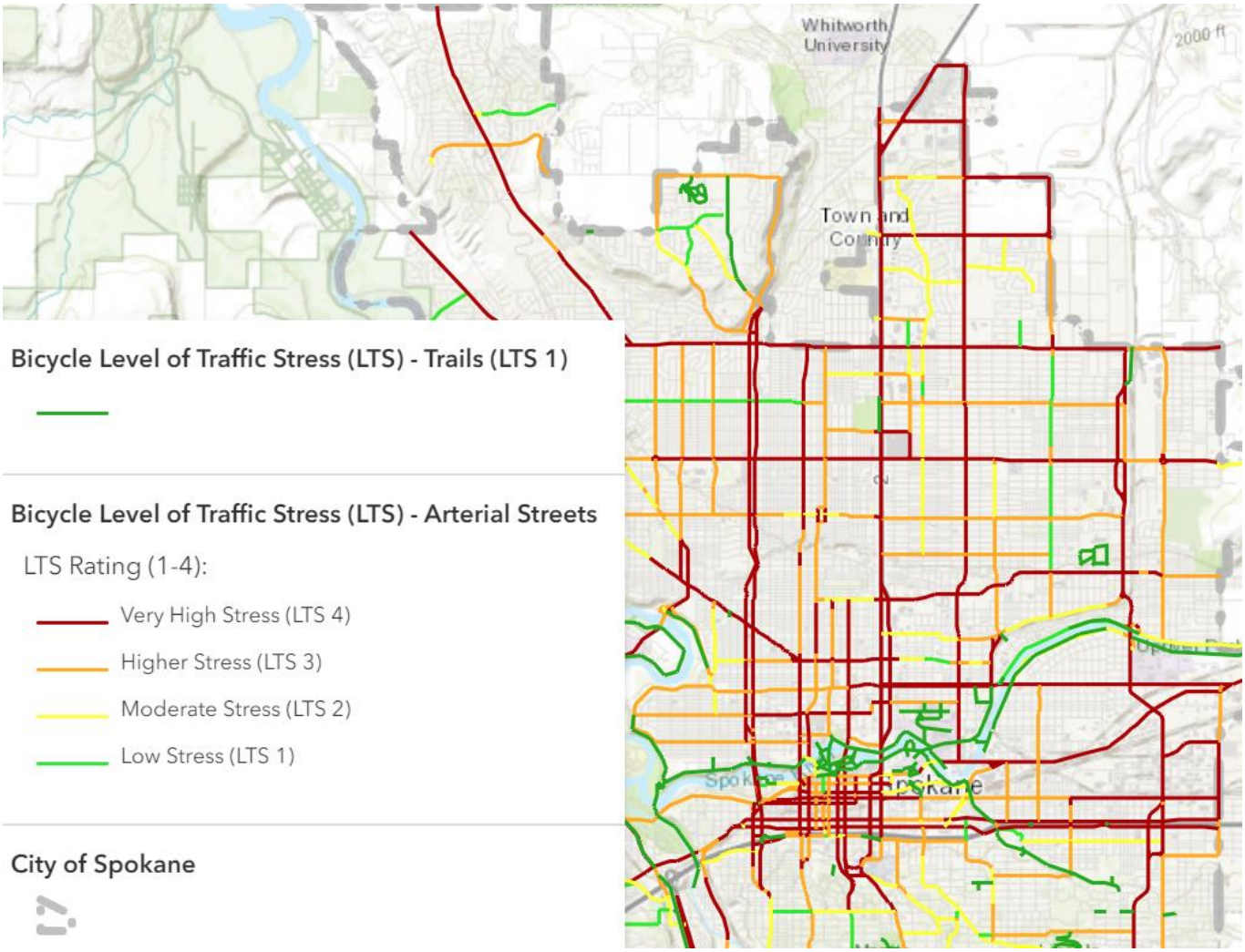


Figure 4. Existing Bicycle Level of Traffic Stress

Scooter Conditions

Motorized scooters are available within the study area, provided by Lime. Lime also provides electric-assist bikeshare options in the study area. Data provided by Lime helps to establish context for scooter- and bikeshare use and travel patterns in the study area:

- On average, scooters were ridden nine minutes per trip, for about one mile. Lime bike trips averaged six minutes, and about a half-mile.
- About 643,000 miles were traveled over 581,000 scooter share and bikeshare rides from May 2019 through mid-November 2019. The vast majority of rides were on scooters, with 630,000 miles ridden on scooters. The remaining 13,000 miles were on electric-assist bikes.
- About 24 percent of riders used Lime rather than a car. Almost 27 percent used Lime to get to or from public transit. Nearly 37 percent live in households that have access to one or no cars, according to a the 2019 Lime Spokane Survey.
- About 25 percent of riders used Lime to commute to or from work or school, almost 28 percent used Lime to travel to or from dining or entertainment, and 13 percent used Lime to travel to or from shopping or errands.
- More than half of riders used Lime because it was a fun way to get to their destination.
- About 47 of riders in the survey identified as female, and 51 percent identified as male.
- A barrier to riding was insufficient bikeway infrastructure. More than 17 percent of riders said lack of a safe place to ride would dissuade them from riding again.
- Sidewalk riding, which is illegal, continues to be a problem for pedestrians, the City and Lime. The city surveyed riding on the sidewalk for all people, not just those on Lime vehicles, and found that of all the bikes and scooters counted, about half were on the sidewalk. About 7 in 10 people riding on the sidewalk were on a scooter.

Figure 5 shows study area trips on Lime scooters and bikes.

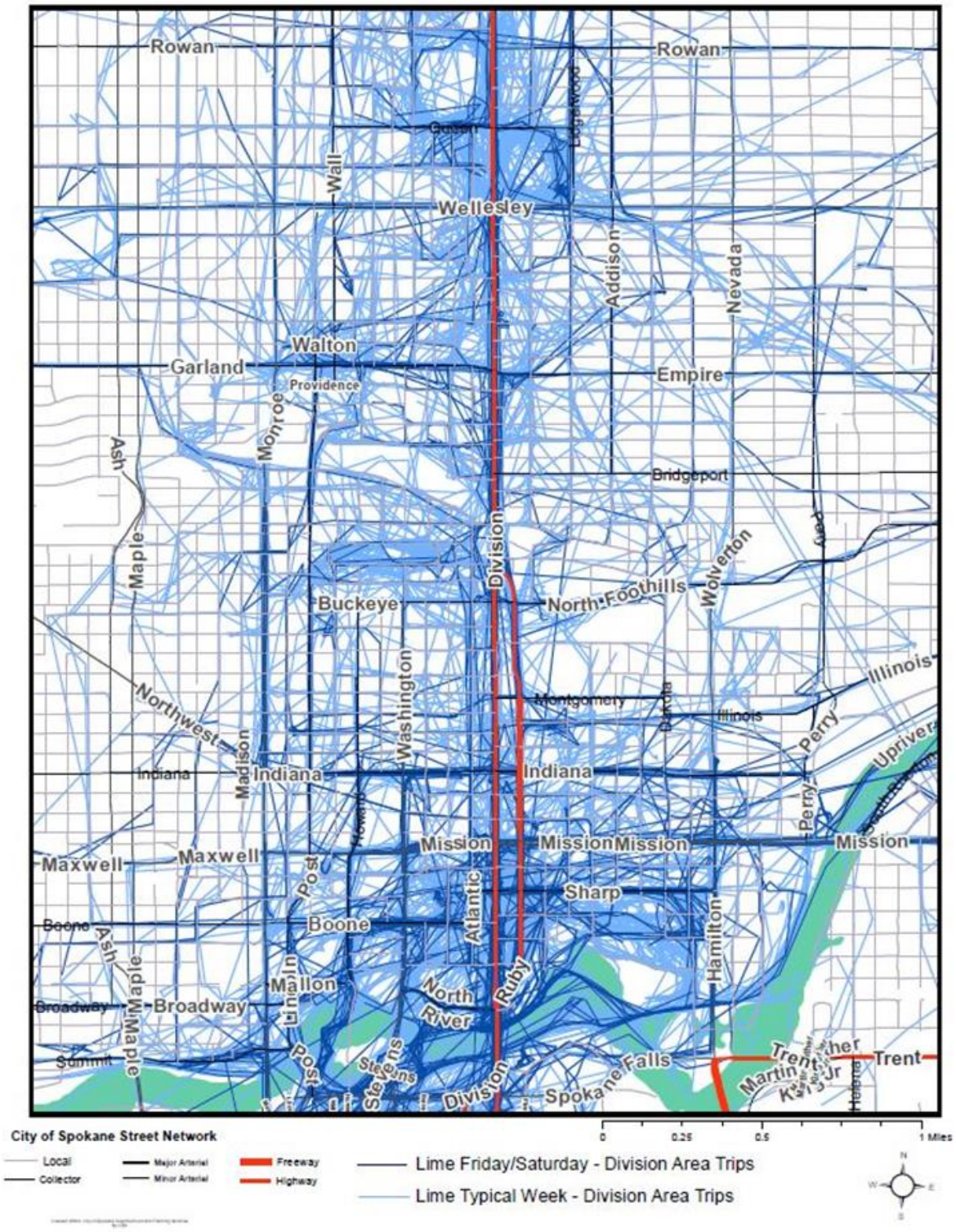


Figure 5. Existing Lime Scooter and Bikeshare Trips

Safety

Collision data was collected for the 5-year period from 2015 through 2019. In total, there were 2,129 crashes recorded. Bicycle and pedestrian related crashes accounted for just five percent of total crashes, but 64 percent of severe and fatal crashes involved nonmotorized users along Division Street. This indicates the need to focus on reducing the potential for crashes involving nonmotorized users in the corridor, which often lead to severe injuries or fatalities. Most of the crashes involving nonmotorized users occurred at intersections or driveways.

The perception of safety in the corridor can also be a major influence on nonmotorized travel in the study area. Some factors along the Division Street corridor that may diminish perceived safety include:

- Vehicle speeds (both posted and actual) in excess of 30 MPH.
- Significant vehicle volumes (greater than 45,000 on weekdays and greater than 35,000 on weekends).Sidewalks along most of the corridor lack buffers from traffic (no landscape, hardscape, or parked vehicles).
- Signalized crossings are spaced far apart (on average 1200 to 2000 feet).
- Some access driveways are wider than necessary, including some slip-lanes onto intersecting streets.
- Many retail buildings are set back from the roadway requiring people walking to navigate large parking areas and access lanes to patronize businesses.

Division Street has two primary hot spots of crime, just west of the corridor in downtown Spokane and between Wellesley Avenue and Francis Avenue. The crimes are varied but include aggravated assault and robbery. These types of crimes could have a significant impact on the comfort of all users of the roadway, particularly those on foot or bicycle.

Awareness of crime hot spots and additional security features such as monitored security cameras and use of crime prevention through environmental design (CPTED) can reduce risks and improve community safety.

PROPOSED ACTIVE TRANSPORTATION IMPROVEMENTS

Active transportation improvements are a critical part of each of the scenarios under evaluation. These improvements facilitate access to transit and encourage safe, nonmotorized travel in the corridor. Each of the scenarios includes a set of proposed active transportation improvements that allow for nonmotorized travel along and/or adjacent to Division Street. Each scenario is described in the following sections.

Mainline Division Street Proposed Improvements and Constraints

All of the scenarios include pedestrian spot improvements, such as portions of sidewalk near stations and crossing improvements, along the mainline portion of Division Street; however, no dedicated bicycle facilities would be provided along this portion of the corridor. The right-of-way for Division Street north of the one-way couplet varies between 94 and 97 feet and currently includes a 5- to 6-foot sidewalk on either side, six general purpose travel lanes and a center median or two-way-left-turn lane. The existing right-of-way property line is consistently just outside of the sidewalk for most of the corridor, limiting the ability to widen for expanded sidewalks or to include dedicated bicycle or other modal facilities. Introducing a bike lane in each direction at even minimal

widths would require that all travel lanes be narrowed to widths that are not compliant with WSDOT standards. The bike lanes would also likely be high stress facilities considered uncomfortable for all but the most fearless cyclists. It would be difficult to achieve low stress facilities even if buffers or other separation were provided because of high speeds and traffic volumes on Division Street. The WSDOT Design Manual provides guidance on bicycle facility selection with consideration to roadway characteristics (speed and average daily traffic) and the type of cyclist to be accommodated (from the Strong and Fearless to the Interested, but Concerned), which can inform bicycle facility selection on the mainline portion of Division Street. Within just a few blocks to the east or west, there are parallel streets to Division Street that can accommodate lower stress nonmotorized facilities. The east option could include facilities along N Mayfair Street/N Lidgerwood Street. The west option could include facilities along N Atlantic Street/N Whitehouse Street. The potential east and west options are shown on Figure 6 through Figure 10. These corridors have lower traffic volumes and speeds, making them safer and more suitable for integration with active transportation. Connecting from these corridors to Division Street would require limited travel deviation and users originating from adjacent neighborhoods would benefit from nearby, dedicated active transportation facilities. Potential parallel corridors are described in the sections below.

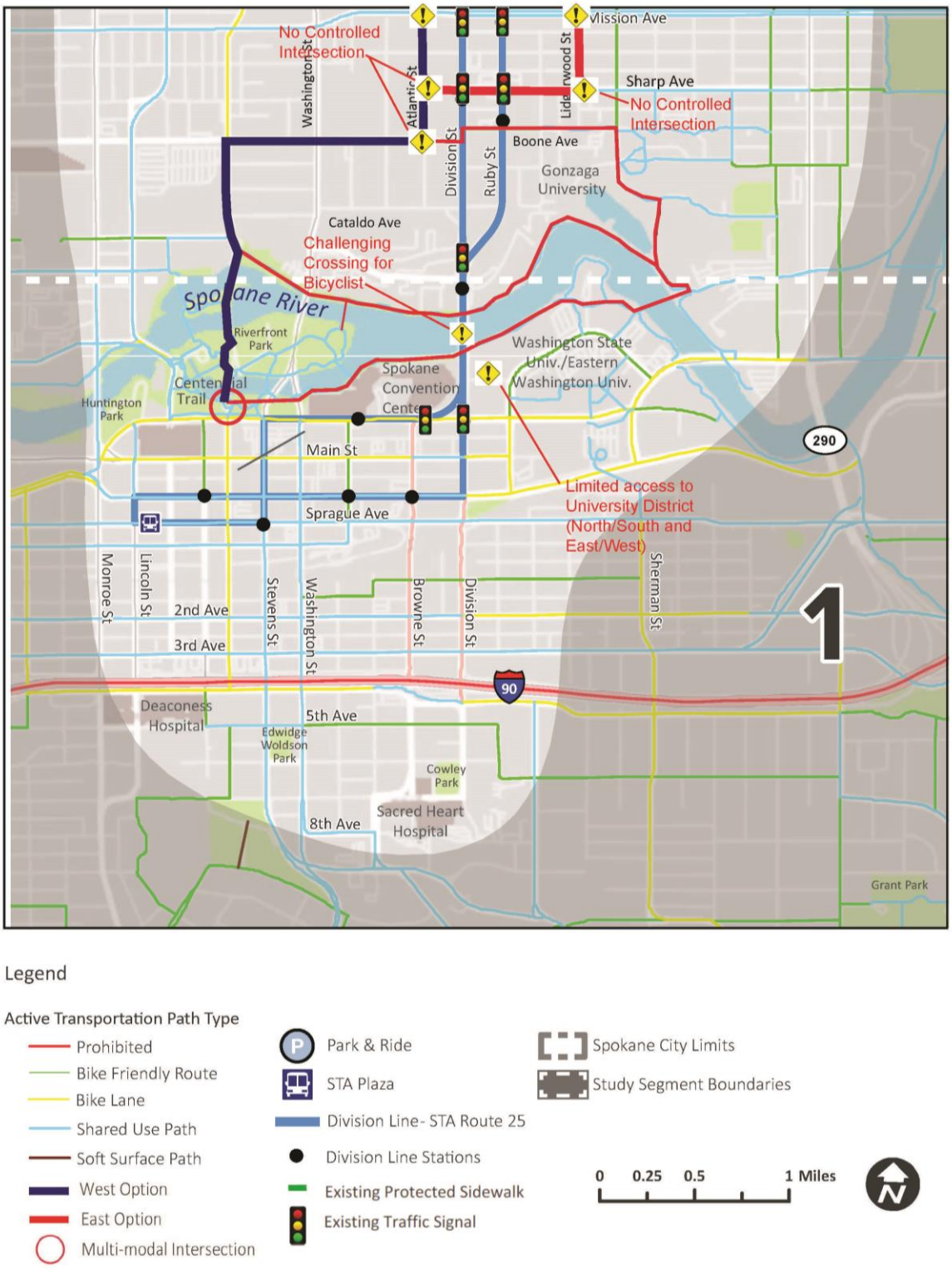


Figure 6. Parallel Nonmotorized Corridors Segment 1

Figure 7. Parallel Nonmotorized Corridors Segment 2

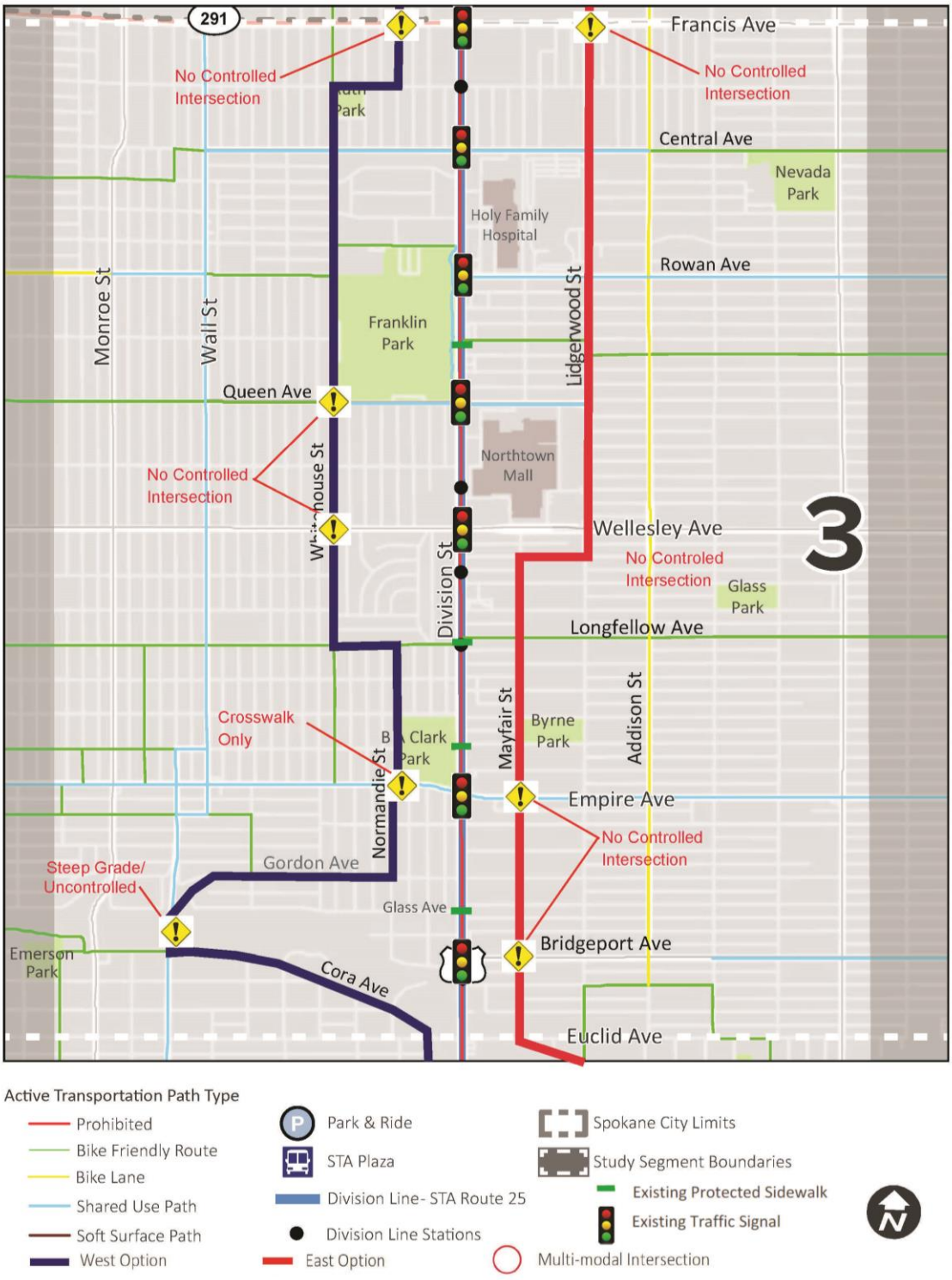


Figure 8. Parallel Nonmotorized Corridors Segment 3

Figure 9. Parallel Nonmotorized Corridors Segment 4

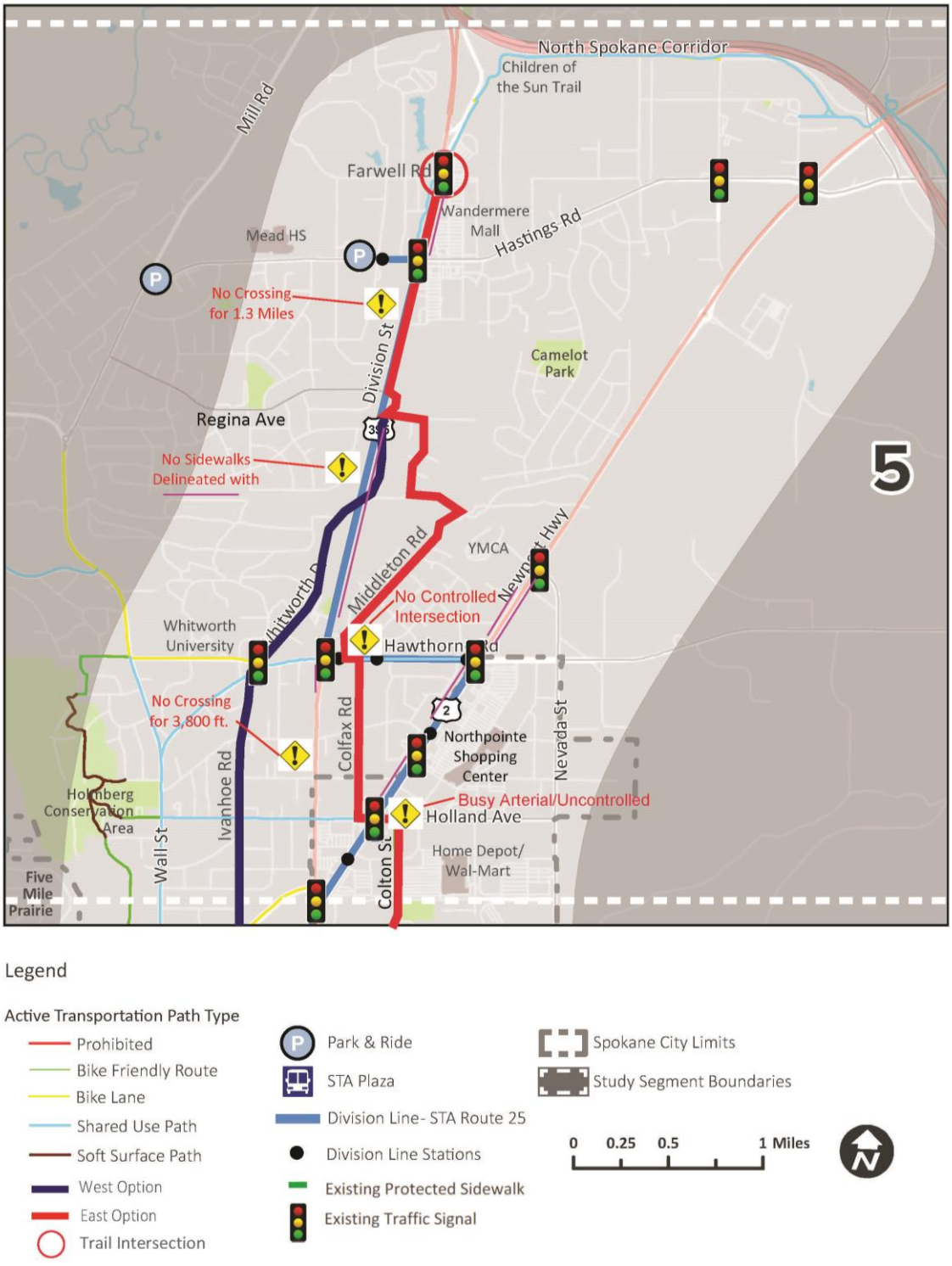


Figure 10. Parallel Nonmotorized Corridors Segment 5

Alternative Center Running

This scenario includes center running BRT lanes along the mainline of the Division Street corridor with left running BAT lanes through the couplet portion of the corridor, as shown on Figure 11. Active transportation facilities would include the following:

- Spot improvements such as portions of sidewalk near stations and crossing improvements along Division Street
- Through the mainline portion of the Division Street corridor, dedicated bicycle facilities would be provided on a parallel corridor either to the east or west of Division Street.
- In the couplet, protected bicycle lanes would be included on the right side of the street in the direction of travel

Figure 11. Scenario Center Running Cross Section

Alternative Side Running A

Scenario Side Running A includes side running BAT lanes along the mainline of the Division Street corridor with right running BAT lanes through the couplet portion of the corridor, as shown on Figure 12. Active transportation facilities would include the following:

- Spot improvements such as portions of sidewalk near stations and crossing improvements along Division Street
- Through the mainline portion of the Division Street corridor, dedicated bicycle facilities would be provided along either an east or west parallel corridor as described for Center Running
- In the couplet, protected bicycle lanes would be included on the left side of the street in the direction of travel along with street tree buffers for sidewalks

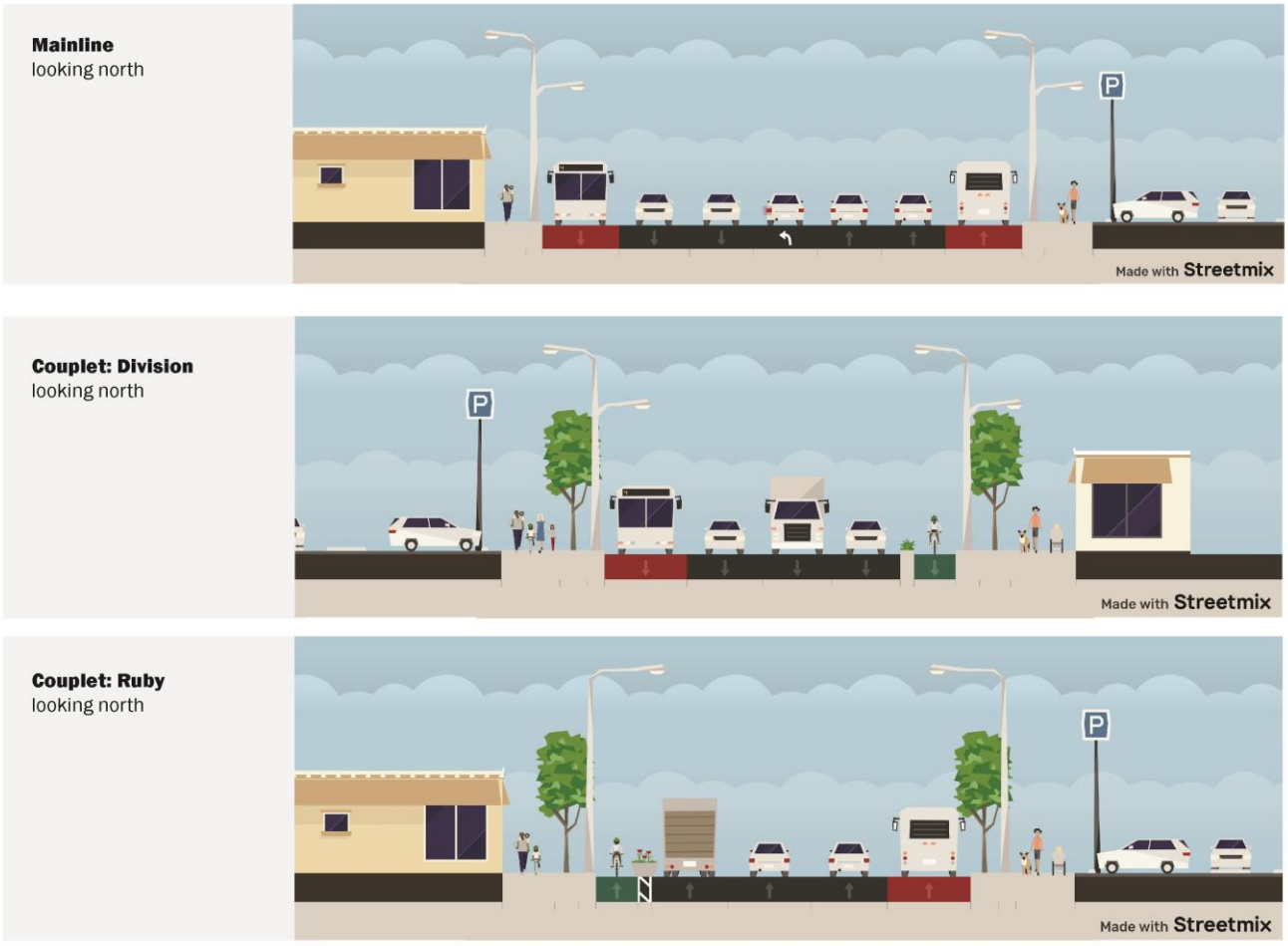


Figure 12. Scenario Side Running A Cross Section

Alternative Side Running B

Scenario Side Running B includes side running BAT lanes along the mainline of the Division Street corridor. The couplet portion of the corridor would be converted to two-way operations with side running BAT lanes consolidated on Ruby Street. Division Street through the couplet would not include transit or active transportation facilities. Figure 13 shows the roadway configuration for Scenario Side Running B. Active transportation facilities would include the following:

- Spot improvements such as portions of sidewalk near stations and crossing improvements along Division Street
- Through the mainline portion of the Division Street corridor, dedicated bicycle facilities would be provided along either an east or west parallel corridor as described for Scenario Center Running
- In the couplet, sufficient space exists for either a two-way cycle track on the left side of Ruby Street along with street tree buffers for sidewalks, or for separate, one-way protected bicycle lanes.
- No dedicated bicycle facilities would be included on Division Street through the couplet, street tree buffers for sidewalks added where possible.

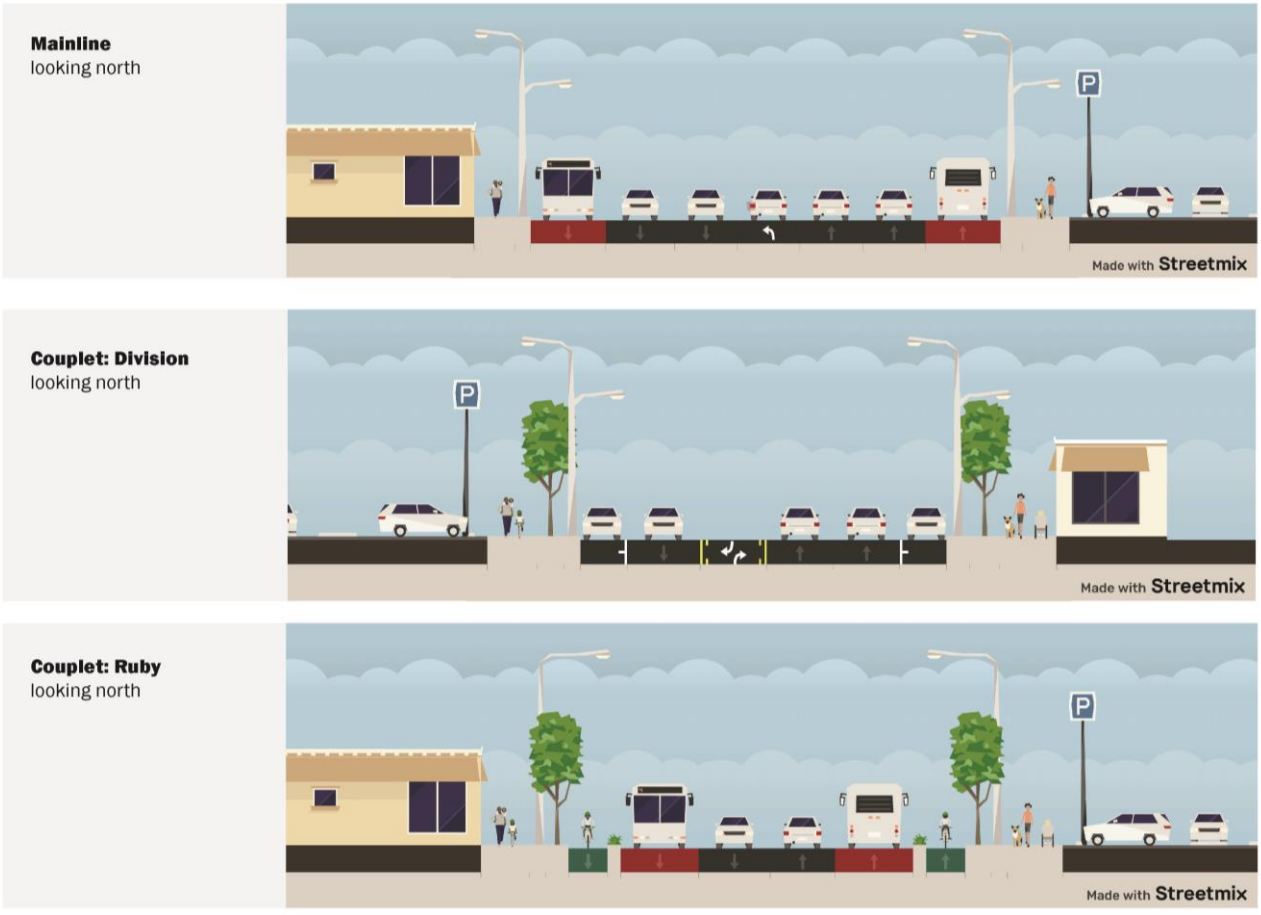


Figure 13. Scenario Side Running B Cross Section

Scenario Side Running C

This scenario includes side running BAT lanes along the mainline of the Division Street corridor with right running BAT lanes through the couplet portion of the corridor, as shown on Figure 14. Active transportation facilities would include the following:

- Spot improvements such as portions of sidewalk near stations and crossing improvements along Division Street
- Through the mainline portion of the Division Street corridor, bicycle facilities would be provided along either an east or west parallel corridor as described for Center Running
- In the couplet, a two-way cycle track would be provided on the right side of Ruby Street along with street tree buffers for sidewalks
- No dedicated bicycle facilities would be included on Division Street through the couplet, street tree buffers for sidewalks
- Note that the narrowing of Ruby and Division in the couplet could provide space for additional urban design, outdoor retail activities, landscaping, and/or green stormwater infrastructure.

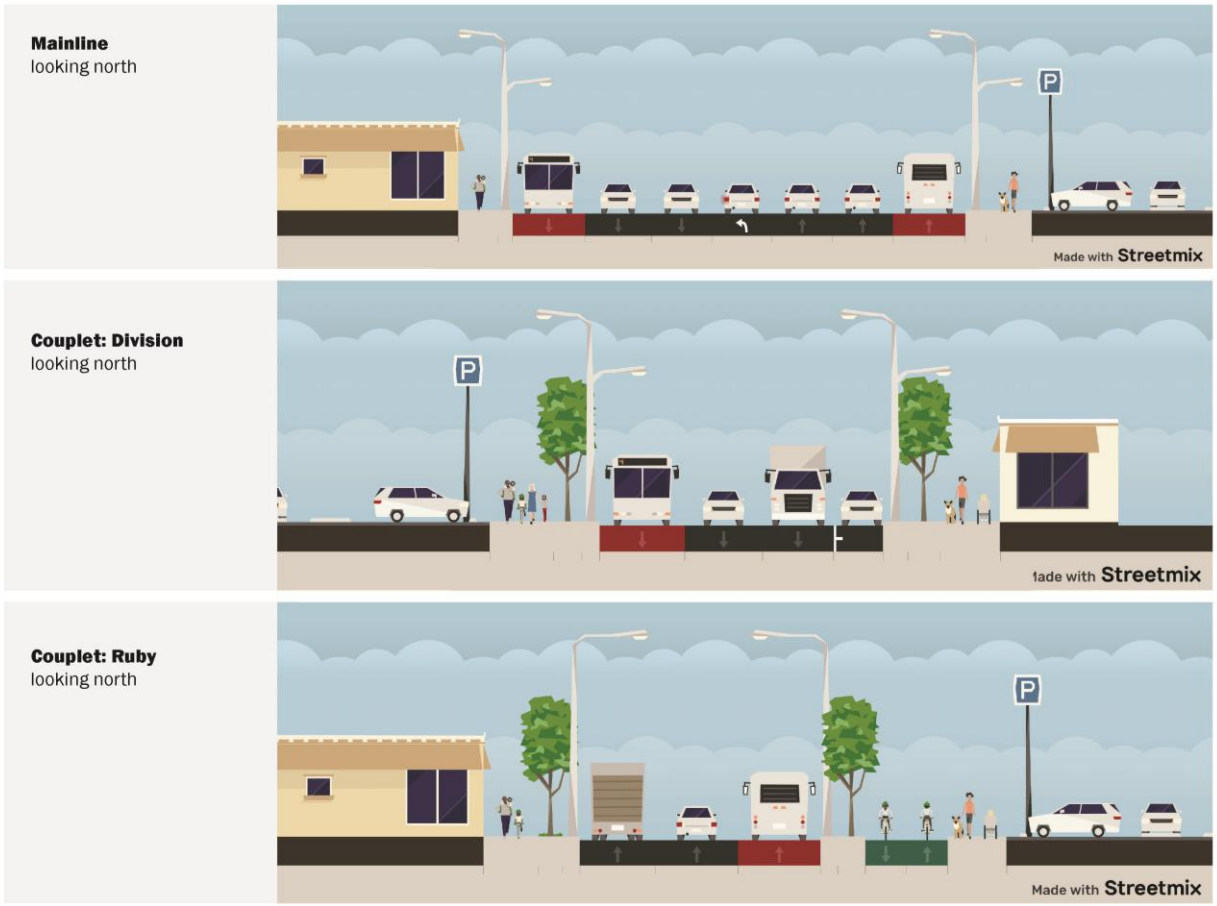


Figure 14. Scenario S3 Cross Section

Active Transportation Improvements Evaluation

Each of the scenarios have different benefits and considerations for active transportation. Table 2 summarizes the differences for each of the scenarios.

Table 2. Evaluation of Proposed Active Transportation Facilities

Scenario	Benefits	Considerations
Center Running	• Center running BRT lanes reduce the number of lanes riders must cross to get to and from transit stops • Center running BRT lanes result in more upgrades to crossings along the corridor • Right side bike lanes do not conflict with transit vehicles and transit stops • Right side bike lanes remove conflict points with left turning vehicles • Right side bike lanes are easy to connect to the rest of the bicycle network	• Center running BRT lanes may result in crossing against the signal if rider can see bus approaching and they do not have crossing priority • Right side bike lanes do not have a direct connection with transit stops; require riders to cross to stops via intersections
Side Running A	• Side running BAT lanes provide some separation between the sidewalk and general purpose travel lanes • Left side bike lanes do not conflict with transit vehicles and transit stops	• Left side protected bike lanes are more challenging to connect to the rest of the bicycle network • Left side bike lanes introduce conflict points with left turning vehicles • Left side bike lanes in a one-way corridor are less expected for vehicle drivers • The downhill terrain of the roadway results in risker left turns due to faster moving cyclists and vehicles
Side Running B	• Side running BAT lanes provide some separation between active transportation facilities and general purpose travel lanes • Protected bicycle lanes in same corridor reduce out of direction travel for nonmotorized users • Protected bicycle lanes considered more attractive to a wide of range of bicyclists	• Many destinations are on Division Street in the couplet; connections from Ruby Street for nonmotorized users will be required • Protected bicycle lanes may result in some users still traveling on Division Street where no designated facilities are provided • Protected bicycle lanes may require specialized treatments for bicycles through most intersections • Protected bicycle lanes may require special treatments at driveways • Protected bicycle lanes may encourage higher travel speeds for nonmotorized users
Side Running C	• Side running BAT lanes provide some separation between active transportation facilities and general purpose travel lanes • Two-way cycle track on a one-way street are generally compatible	• Two-way cycle track may require signalization for bicycles through most intersections • Two-way cycle track may require special treatments at driveways

Scenario	Benefits	Considerations
	• Two-way cycle track reduces out of direction travel for nonmotorized users • Two-way cycle track minimizes right-of-way needs • Two-way cycle track considered more attractive to a wide of range of bicyclists	• Two-way cycle track on right side increases distance to connect with Division Street and opposite side of street • Two-way cycle track is potentially challenging to connect to the rest of the bicycle network • Two-way cycle track may encourage higher travel speeds for nonmotorized users

NEXT STEPS

The purpose of this high-level analysis of proposed improvements is to outline Active Transportation options at a conceptual level and is not meant to be conclusive. Additional work is needed to further refine safety and mobility improvements that complement the BRT line and provide practical and effective options to connect people and destinations. Tasks anticipated include:

- Station locations including accessibility and connections to the pedestrian and bicycle networks including walkshed analysis
- Proposed safety and comfort improvements for all users
- Coordination with micromobility options
- Routing and recommended treatments for active transportation facilities parallel to the mainline of Division Street

APPENDIX I

Relative Capital Cost Comparison for
Division Street Corridor Study Technical Memo

Parametrix
ENGINEERING . PLANNING . ENVIRONMENTAL SCIENCES

835 NORTH POST, SUITE 201 | SPOKANE, WA 99201 | P 509.328.3371

TECHNICAL MEMORANDUM

DATE:	January 11, 2021
TO:	Spokane Transit Authority
FROM:	Patrick Krych
SUBJECT:	Relative Capital Cost Comparison for Divsion Street Corridor Study
CC:	Darby Watson Morgan Stumpf Alicia McIntire
PROJECT NUMBER:	374-2941-001
PROJECT NAME:	Division Street Corridor Study

Cost Estimate Overview

Parametrix has developed a high-level relative cost comparison of the Division Street Corridor Study. Four project concept scenarios were developed for alternative screening. These scenarios include bus rapid transit corridor and roadway improvements. The street configuration varies based on the scenario. These alternative scenarios include:

- Scenario C1 = Center-Running Alternative
- Scenario S1 = Side-Running A Alternative
- Scenario S2 = Side-Running B Alternative
- Scenario S3 = Side-Running C Alternative

The intent of the cost estimate is to compare corridor alternative scenarios using range of magnitude costs. This tech memo 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 in the below sections. A cost estimate summary is attached, along with a cost estimate backup information for each scenario.

It should be noted the estimates are at a very high level which can lead to wide variations in estimated costs. The estimates were based on alignment information and quantity information is very limited at this early stage of project.

Construction Cost Estimate:

The basis of the cost estimate is based on the planning level cross-sections. The cross sections were developed to depict the desired lane configurations for the various scenarios and segments of the corridor.

Using these cross sections, costs were assigned to the known construction elements and allowances for some of the unknown construction elements were assigned. In addition to the allowances, a large contingency of 50% was applied due to the early level of development and unknown components of the project. All costs are high level and estimated on a per mile basis.

General Transportation: cross-section items known and included in the cost estimate include:

- Removal items
- Earthwork (cut/fill)
- Grind/inlay (per area with depth identified)
- New roadway construction (per area with section identified)
  - Asphalt concrete pavement
  - Portland cement concrete pavement
  - Aggregate base
- Curb
- Sidewalk
- Multiuse path
- Drainage/Stormwater and utilities – allowance per mile.
- Traffic items including Striping/pavement markings – allowance per mile.
- Traffic Signal(s) – new and modifications – allowance per signalized intersection.

- Transit: discipline items included:
  - Transit Stations

Unit cost pricing for each of the known construction elements were determined using historical bid analysis information and the recent bid tabs for the Central City Line project.

Right of way Acquisition

For this estimate, it was assumed there was sufficient right of way throughout the corridor for all but one of the alternatives. The estimate includes right of way costs for Scenario C (center running) at each of the transit stations. The ROW cost was estimated at 5000 sf per station (10'x200' each to accommodate left turn pocket and center station platform, plus transition) at $40/sf based on recent estimates for commercial property on Division Street, using Zillow estimates.

Professional Services

Professional services include allowances for preliminary engineering, final design, permitting, construction management. These allowances vary based on the scope of work. Suggested allowances are shown below and have been included in the current estimate:

- Preliminary Engineering and Environmental Review - 8%
- Final Design - 10%
- Permitting – 5%
- Construction Management - 10%

Project Costs

Total project costs for each scenario were developed by combining the construction cost, ROW acquisition, and professional services. For the purpose of the alternative screening, refer to Attachment A Summary cost comparison.

Station programming such as kiss and rides, park and ride lots, operator facilities or fleet vehicles, charging or other technologies were not included in the estimates. In addition, it is known that the existing operations and maintenance base cannot accommodate the additional fleet that would be added to serve this new corridor. These costs are also not included in the cost estimates until additional information in known about the potential base expansion.

Attachments

Attachment A – Summary Cost Comparison

Attachment B – Backup Cost Estimates per Scenario

Relative Capital Costs based on Concept level Cross-Sections

PROJECT COST COMPARISON SUMMARY

	Scenario C1	Scenario S1	Scenario S2	Scenario S3
	Center-Running Alternative	Side-Running A Alternative	Side-Running B Alternative	Side-Running C Alternative
Mainline	$ 83,000,000	$ 72,000,000	$ 73,000,000	$ 71,000,000
Ruby/Division couplet	$ 48,000,000	$ 37,000,000	$ 54,000,000	$ 49,000,000
Total approximate cost	$ 131,000,000	$ 109,000,000	$ 127,000,000	$ 120,000,000

Assumptions:

This estimate is based on planning level cross sections and 0% design

Mainline: Estimated from Cleveland Ave (north end of couplet section) - to North Division Y, approximately 3.8 miles

Couplet: River to Cleveland approximately 1.4 miles

Vehicle costs are not included

Maintenance Base upgrades are not included

Technology and Charging costs are not included in the estimate

Center-Running Alternative

Ruby/Division Couplet Segment			(feet)	
Existing Pavement width			*50*	
Existing Right of Way width			*100*	
Back of walk to back of walk			*75*	estimated
Existing sidewalk-swale-C&G			*15*	
		Lanes	Width (ft)	
Proposed section	HMA	3	36	grind and overlay
	PCC	1	12	
C&G one side			2	
Curb separated Bicycle lane			6	
Roadside swale - reconstructed			8	Approx. existing swale in segment
Sidewalk replaced			5	
			84	

Opinion of Project Cost - Planning 0% complete
COUPLET RUBY/DIVISION - SCENARIO C1
EACH DIRECTION OF COUPLET

Standard Item Description	Unit of Measure	Qty/MILE	Unit Price $	$ Amount	Notes
PREPARATION					
PLANING BITUMINOUS PAVEMENT (3" THICK)	SY	21120	$ 5	$ 105,600	
REMOVING CEMENT CONC. CURB AND GUTTER	LF	5280	$ 20	$ 105,600	
REMOVING CEMENT CONC. SIDEWALK	SY	2933	$ 20	$ 58,667	
SAWCUTTING FLEXIBLE PAVEMENT	LF	5280	$ 5	$ 26,400	
GRADING				$ -	
ROADWAY EXCAVATION INCL. HAUL (FOR PCC LANE,SW, AND SWALE)	CY	6600	$ 60	$ 396,000	
CEMENT CONCRETE PAVEMENT					
CEMENT CONCRETE PAVEMENT 12.5 INCH THICK	SY	7040	$ 120	$ 844,800	
FURNISHING CONCRETE FOR CEMENT CONCRETE PAVEMENT	CY	2441	$ 225	$ 549,120	
HOT MIX ASPHALT					
PREPARATION OF UNTREATED ROADWAY	SY	7040	$ 2	$ 14,080	
CRUSHED SURFACING TOP COURSE (10"BELOW PCC)	CY	1955	$ 65	$ 127,060	
CSTC FOR SIDEWALK AND DRIVEWAYS	CY	323	$ 65	$ 20,973	
HMA CL. 1/2 IN. PG 70-28, 3 INCH THICK	TON	3608	$ 75	$ 270,600	
TRAFFIC					
CEMENT CONCRETE TRAFFIC CURB	LF	0	$ 30	$ -	No islands in this segment
CEMENT CONCRETE CURB AND GUTTER	LF	5280	$ 30	$ 158,400	one side estimated
GENERIC STRIPING, INCL MARKINGS	LF	5280	$ 20	$ 105,600	
TRAFFIC ALLOWANCE	LS	1	$ 50,000	$ 50,000	
OTHER					
CEMENT CONCRETE SIDEWALK	SY	2933	$ 90	$ 264,000	
				$ -	
				$ -	
UTILITIES					
ADJUST MANHOLE (INCLUDES DRAINAGE STRUCTURE, VALVE BOX)	EACH	100	$ 2,000	$ 200,000	estimated based on sample mile on Division City GIS
UTILITY ALLOWANCES	LS	1	$ 50,000	$ 50,000	
STORMWATER ALLOWANCE (Based on Swale construction which may not be feasible)	SY	4693	$ 35	$ 164,267	
PER MILE SUB-TOTAL				**$ 3,511,167**	
LENGTH OF SEGMENT EACH SIDE (RUBY/DIVISION)	MI	1.4		$ 4,915,634	
MULTIPLY X2 (FOR EACH SIDE OF COUPLET)				**$ 9,831,267**	
FIXED NUMBER ITEMS					
STATION					
TRAFFIC SIGNAL SYSTEM	EACH	14	$ 250,000	$ 3,500,000	14 signalized intersections within the couplet segment
MAJOR STATION AT SIGNALIZED INTERSECTION	EACH	14	$ 500,000	$ 7,000,000	Side station
SUB-TOTAL				$ 20,331,267	
MOBILIZATION (10 %)	10%			$ 2,033,127	
SUB-TOTAL				$ 22,364,394	
PLANNING CONTINGENCY (50%)	50%			$ 11,182,197	
SUB-TOTAL				$ 33,546,591	
PROFESSIONAL SERVICES					
PRELIMINARY ENGINEERING AND ENVIRONMENTAL REVIEW	8%			$ 2,683,727	
FINAL DESIGN	10%			$ 3,354,659	
PERMITTING	5%			$ 1,677,330	
CONSTRUCTION MANAGEMENT	10%			$ 3,354,659	
RIGHT OF WAY (5000 SF/STATION)	SF	70000	$ 40.00	$ 2,800,000	Assume 10'x200'+Transitions=5000sf per station
TOTAL COST				**$ 47,416,966**	

Assumptions:
1. Curb, gutter & sidewalk - swale on one side will be preserved.
2. Other side C&G will be removed and replaced at wider limit.
3. Pavement section is suitable for grind and overlay of GP lanes
4. Bus (BST) lanes to be reconstructed with PCC pavement. Assume 12.5" PCC over 10" CSBC
5. Bicycle lane to be curb separated from traffic on right
6. Swale on Ruby will be reconstructed.

Center-Running Alternative

Center.Left Division segment			(feet)	
Existing Pavment width			80	
Existing Right of Way width			100	estimated avg
Back of walk to back of walk			88	estimated avg
Existing sidewalk-swale-C&G			*0*	
Proposed section	HMA	4	44	grind and overlay
	PCC	2	24	
C&G			4	both sides
Curb separated Bicycle lane			0	
Roadside swale			8	Does not currently exist, but added as a costing measure for storm, may not be feasible
Cement Conc sidewalk (center channelizations)			12	will either be station sidewalk or turn lanes etc.
Cement Conc. Sidewalk			10	
			102	

Opinion of Project Cost - Planning 0% complete

MAINLINE - SCENARIO C1

Cleveland to the "Y"

Standard Item Description	Unit of Measure	Qty/MILE	Unit Price $	$ Amount	Notes
PREPARATION					
PLANING BITUMINOUS PAVEMENT (3" THICK)	SY	25813.33333	$ 5	$ 129,067	
REMOVING CEMENT CONC. CURB AND GUTTER	LF	8560	$ 20	$ 171,200	both sides
REMOVING CEMENT CONC. SIDEWALK	SY	9511	$ 20	$ 190,222	
SAWCUTTING FLEXIBLE PAVEMENT	LF	10560	$ 5	$ 52,800	adjacent to two bus lanes
GRADING				$ -	
ROADWAY EXCAVATION INCL. HAUL (FOR PCC LANE,SW, AND SWALE)	CY	12027	$ 60	$ 721,600	
CEMENT CONCRETE PAVEMENT					
CEMENT CONCRETE PAVEMENT 12.5 INCH THICK	SY	14080	$ 120	$ 1,689,600	
FURNISHING CONCRETE FOR CEMENT CONCRETE PAVEMENT	CY	4881	$ 225	$ 1,098,240	
HOT MIX ASPHALT					
PREPARATION OF UNTREATED ROADWAY	SY	14080	$ 2	$ 28,160	
CRUSHED SURFACING TOP COURSE (10"BELOW PCC)	CY	3910	$ 65	$ 254,121	
CSTC FOR SIDEWALK AND DRIVEWAYS	CY	645	$ 65	$ 41,947	
HMA CL. 1/2 IN. PG 70-28, 3 INCH THICK	TON	4410	$ 75	$ 330,733	
TRAFFIC					
CEMENT CONCRETE TRAFFIC CURB	LF	9960	$ 30	$ 298,800	Channelization islands for entire length (minus 100' @major intersectio
CEMENT CONCRETE CURB AND GUTTER	LF	8560	$ 30	$ 256,800	
GENERIC STRIPING, INCL MARKINGS	LF	5280	$ 40	$ 211,200	
OTHER					
CEMENT CONCRETE SIDEWALK	SY	9511	$ 90	$ 856,000	
				$ -	
				$ -	
UTILITIES					
ADJUST MANHOLE (INCLUDES DRAINAGE STRUCTURE, VALVE BOX)	EACH	100	$ 2,000	$ 200,000	estimated based on sample mile on Division City GIS
UTILITY ALLOWANCES	LS	1	$ 50,000	$ 50,000	
STORMWATER ALLOWANCE (Based on Swale construction which may not be feasible)	SY	4693	$ 35	$ 164,267	
PER MILE SUB-TOTAL				**$ 6,744,756**	
LENGTH OF SEGMENT CLEVELAND TO Y	MI	3.8		**$ 25,630,073**	
FIXED NUMBER ITEMS					
STATION					
TRAFFIC SIGNAL SYSTEM	EACH	14	$ 250,000	$ 3,500,000	14 signalized intersections north of couplet segment
MAJOR STATION AT SIGNALIZED INTERSECTION	EACH	14	$ 500,000	$ 7,000,000	One center left side boarding station accomodates both directions.
SUB-TOTAL				$ 36,130,073	
MOBILIZATION (10 %)	10%			$ 3,613,007	
SUB-TOTAL				$ 39,743,080	
PLANNING CONTINGENCY (50%)	50%			$ 19,871,540	
SUB-TOTAL				$ 59,614,621	
PROFESSIONAL SERVICES					
PRELIMINARY ENGINEERING AND ENVIRONMENTAL REVIEW	8%			$ 4,769,170	
FINAL DESIGN	10%			$ 5,961,462	
PERMITTING	5%			$ 2,980,731	
CONSTRUCTION MANAGEMENT	10%			$ 5,961,462	
RIGHT OF WAY (5000 SF/STATION)	SF	70000	$ 40.00	$ 2,800,000	Assume 10'x200'+Transitions=5000sf per station
TOTAL COST				**$ 82,087,446**	

Assujmptions:

1. Curb, gutter & sidewalk on one side will be preserved.
2. Other side C&G will be removed and replaced at wider limit.
3. Pavement section is suitable for grind and overlay of GP lanes
4. Bus (BST) lanes to be reconstructed with PCC pavement. Assume 12.5" PCC over 10" CSBC
5. Swale not shown, but used only for stormwater estimate

Side-Running A Alternative

Ruby/Division Couplet Segment			(feet)	
Existing Pavement width			*50*	
Existing Right of Way width			*100*	
Back of walk to back of walk			*75*	estimated
Existing sidewalk-swale-C&G			*15*	
		Lanes		
Proposed section	HMA	3	36	
	PCC	2	12	
C&G one side			2	
Curb separated Bicycle lane			6	
Roadside swale - reconstructed			8	
Sidewalk replaced this side			5	
			84	

Opinion of Project Cost - Planning 0% complete
COUPLET RUBY/DIVISION - SCENARIO S1
EACH DIRECTION OF COUPLET

Standard Item Description	Unit of Measure	Qty/MILE	Unit Price $	$ Amount	Notes
PREPARATION					
PLANING BITUMINOUS PAVEMENT (3" THICK)	SY	21120	$ 5	$ 105,600	
REMOVING CEMENT CONC. CURB AND GUTTER	LF	5280	$ 20	$ 105,600	
REMOVING CEMENT CONC. SIDEWALK	SY	2933	$ 20	$ 58,667	
SAWCUTTING FLEXIBLE PAVEMENT	LF	5280	$ 5	$ 26,400	
GRADING				$ -	
ROADWAY EXCAVATION INCL. HAUL (FOR PCC LANE,SW, AND SWALE)	CY	6600	$ 60	$ 396,000	
CEMENT CONCRETE PAVEMENT					
CEMENT CONCRETE PAVEMENT 12.5 INCH THICK	SY	7040	$ 120	$ 844,800	
FURNISHING CONCRETE FOR CEMENT CONCRETE PAVEMENT	CY	2441	$ 225	$ 549,120	
HOT MIX ASPHALT					
PREPARATION OF UNTREATED ROADWAY	SY	7040	$ 2	$ 14,080	
CRUSHED SURFACING TOP COURSE (10"BELOW PCC)	CY	1955	$ 65	$ 127,060	
CSTC FOR SIDEWALK AND DRIVEWAYS	CY	323	$ 65	$ 20,973	
HMA CL. 1/2 IN. PG 70-28, 3 INCH THICK	TON	3608	$ 75	$ 270,600	
TRAFFIC					
CEMENT CONCRETE TRAFFIC CURB	LF	0	$ 30	$ -	No islands in this segment
CEMENT CONCRETE CURB AND GUTTER	LF	5280	$ 30	$ 158,400	one side
GENERIC STRIPING, INCL MARKINGS	LF	5280	$ 20	$ 105,600	
TRAFFIC ALLOWANCE	LS	1	$ 50,000	$ 50,000	
OTHER					
CEMENT CONCRETE SIDEWALK	SY	2933	$ 90	$ 264,000	
				$ -	
				$ -	
UTILITIES					
ADJUST MANHOLE (INCLUDES DRAINAGE STRUCTURE, VALVE BOX)	EACH	100	$ 2,000	$ 200,000	estimated based on sample mile on Division City GIS
UTILITY ALLOWANCES	LS	1	$ 50,000	$ 50,000	
STORMWATER ALLOWANCE (Based on Swale construction which may not be feasible)	SY	4693	$ 35	$ 164,267	
PER MILE SUB-TOTAL				**$ 3,511,167**	
LENGTH OF SEGMENT EACH SIDE (RUBY/DIVISION)	MI	1.4		$ 4,915,634	
MULTIPLY X2 (FOR EACH SIDE OF COUPLET)				**$ 9,831,267**	
FIXED NUMBER ITEMS					
STATION					
TRAFFIC SIGNAL SYSTEM	EACH	14	$ 250,000	$ 3,500,000	14 signalized intersections within the couplet segment
MAJOR STATION AT SIGNALIZED INTERSECTION	EACH	14	$ 250,000	$ 3,500,000	Side station
SUB-TOTAL				$ 16,831,267	
MOBILIZATION (10 %)	10%			$ 1,683,127	
SUB-TOTAL				$ 18,514,394	
PLANNING CONTINGENCY (50%)	50%			$ 9,257,197	
SUB-TOTAL				$ 27,771,591	
PROFESSIONAL SERVICES					
PRELIMINARY ENGINEERING AND ENVIRONMENTAL REVIEW	8%			$ 2,221,727	
FINAL DESIGN	10%			$ 2,777,159	
PERMITTING	5%			$ 1,388,580	
CONSTRUCTION MANAGEMENT	10%			$ 2,777,159	
RIGHT OF WAY (5000 SF/STATION)	SF	0	$ 40.00	$ -	Assume no R/W for right side stations
TOTAL COST				**$ 36,936,216**	

Assumptions:
1. Curb, gutter & sidewalk - swale on one side will be preserved.
2. Other side C&G will be removed and replaced at wider limit.
3. Pavement section is suitable for grind and overlay for vehicle lanes
4. Bus (BST) lanes to be reconstructed with PCC pavement. Assume 12.5" PCC over 10" CSBC
5. Bicycle lane to be curb separated from traffic on right
6. No R/W for right side stations & no other R/W estimated
7. Swale not shown, but used only for stormwater estimate

Side-Running A Alternative

Side Right Division Section			(feet)	
Existing Pavment width			*80*	
Existing Right of Way width			*100*	estimated avg
Back of walk to back of walk			*88*	estimated avg
Existing sidewalk-swale-C&G			*0*	
		Lanes		
Proposed section	HMA	5	55	2-PCC, 4 HMA, 1 center HMA lane
	PCC	2	24	
C&G			4	
Curb separated Bicycle lane			0	
Roadside swale - reconstructed			8	Does not currently exist, but added as a costing measure for storm, may not be feasible
Cement Conc. Sidewalk			5	
			96	

Opinion of Project Cost - Planning 0% complete
MAINLINE - SCENARIO S1
Cleveland to the "Y"

Standard Item Description	Unit of Measure	Qty/MILE	Unit Price $	$ Amount	Notes
PREPARATION					
PLANING BITUMINOUS PAVEMENT (3" THICK)	SY	32267	$ 5	$ 161,333	
REMOVING CEMENT CONC. CURB AND GUTTER	LF	8560	$ 20	$ 171,200	
REMOVING CEMENT CONC. SIDEWALK	SY	4756	$ 20	$ 95,111	
SAWCUTTING FLEXIBLE PAVEMENT	LF	10560	$ 5	$ 52,800	
GRADING				$ -	
ROADWAY EXCAVATION INCL. HAUL (FOR PCC LANE,SW, AND SWALE)	CY	10120	$ 60	$ 607,200	
CEMENT CONCRETE PAVEMENT					
CEMENT CONCRETE PAVEMENT 12.5 INCH THICK	SY	14080	$ 120	$ 1,689,600	
FURNISHING CONCRETE FOR CEMENT CONCRETE PAVEMENT	CY	4881	$ 225	$ 1,098,240	
HOT MIX ASPHALT					
PREPARATION OF UNTREATED ROADWAY	SY	14080	$ 2	$ 28,160	
CRUSHED SURFACING TOP COURSE (10"BELOW PCC)	CY	3910	$ 65	$ 254,121	
CSTC FOR SIDEWALK AND DRIVEWAYS	CY	323	$ 65	$ 20,973	
HMA CL. 1/2 IN. PG 70-28, 3 INCH THICK	TON	5512	$ 75	$ 413,417	
TRAFFIC					
CEMENT CONCRETE TRAFFIC CURB	LF	0	$ 30	$ -	Center turn lane , no curbed channelization
CEMENT CONCRETE CURB AND GUTTER	LF	8560	$ 30	$ 256,800	Assume between the curbs
GENERIC STRIPING, INCL MARKINGS	LF	5280	$ 40	$ 211,200	
TRAFFIC ALLOWANCE	LS	1	$ 50,000	$ 50,000	
OTHER					
CEMENT CONCRETE SIDEWALK	SY	2933	$ 105	$ 308,000	
				$ -	
				$ -	
UTILITIES					
ADJUST MANHOLE (INCLUDES DRAINAGE STRUCTURE, VALVE BOX)	EACH	100	$ 2,000	$ 200,000	estimated based on sample mile on Division City GIS
UTILITY ALLOWANCES	LS	1	$ 50,000	$ 50,000	
STORMWATER ALLOWANCE (Based on Swale construction which may not be feasible)	SY	4693	$ 35	$ 164,267	
PER MILE SUB-TOTAL				**$ 5,832,422**	
LENGTH OF SEGMENT CLEVELAND TO Y	MI	3.8		**$ 22,163,202**	
FIXED NUMBER ITEMS					
STATION					
TRAFFIC SIGNAL SYSTEM	EACH	14	$ 250,000	$ 3,500,000	14 signalized intersections north of couplet segment
MAJOR STATION AT SIGNALIZED INTERSECTION	EACH	28	$ 250,000	$ 7,000,000	Two side stations per intersection
SUB-TOTAL				$ 32,663,202	
MOBILIZATION (10 %)	10%			$ 3,266,320	
SUB-TOTAL				$ 35,929,522	
PLANNING CONTINGENCY (50%)	50%			$ 17,964,761	
SUB-TOTAL				$ 53,894,284	
PROFESSIONAL SERVICES					
PRELIMINARY ENGINEERING AND ENVIRONMENTAL REVIEW	8%			$ 4,311,543	
FINAL DESIGN	10%			$ 5,389,428	
PERMITTING	5%			$ 2,694,714	
CONSTRUCTION MANAGEMENT	10%			$ 5,389,428	
RIGHT OF WAY (5000 SF/STATION)	SF	0	$ 40.00	$ -	Assume no R/W for right side stations
TOTAL COST				**$ 71,679,397**	

Notes:
1. Assume Curb, gutter & sidewalk on one side will be preserved.
2. The other side C&G will be removed and replaced at wider limit.
3. Assume pavement section is suitable for grind and overlay for vehicle lanes
4. Bus (BST) lanes to be reconstructed with PCC pavement. Assume 12.5" PCC over 10" CSBC
5. Bicycle lane to be curb separated from traffic on right
6. No R/W for right side stations & no other R/W estimated
7. Swale not shown, but used only for stormwater estimate

Side-Running B Alternative

Ruby Couplet Segment			(feet)	
Existing Pavement width			*50*	
Existing Right of Way width			*100*	
Back of walk to back of walk			*75*	estimated
Existing sidewalk-swale-C&G			*15*	
		Lanes		
Proposed section	HMA	3	36	
	PCC	2	24	
C&G			4	
Curb separated Bicycle lane			12	
Roadside swale			8	
Sidewalk replaced this side			5	replace one side
			89	

Opinion of Project Cost - Planning 0% complete

COUPLET - SCENARIO S2

RUBY

Standard Item Description	Unit of Measure	Qty/MILE	Unit Price $	$ Amount	Notes
PREPARATION					
PLANING BITUMINOUS PAVEMENT (3" THICK)	SY	21120	$ 5	$ 105,600	
REMOVING CEMENT CONC. CURB AND GUTTER	LF	5280	$ 20	$ 105,600	
REMOVING CEMENT CONC. SIDEWALK	SY	2933	$ 20	$ 58,667	
SAWCUTTING FLEXIBLE PAVEMENT	LF	5280	$ 5	$ 26,400	
GRADING				$ -	
ROADWAY EXCAVATION INCL. HAUL (FOR PCC LANE,SW, AND SWALE)	CY	10120	$ 60	$ 607,200	
CEMENT CONCRETE PAVEMENT					
CEMENT CONCRETE PAVEMENT 12.5 INCH THICK	SY	14080	$ 120	$ 1,689,600	
FURNISHING CONCRETE FOR CEMENT CONCRETE PAVEMENT	CY	4881	$ 225	$ 1,098,240	
HOT MIX ASPHALT					
PREPARATION OF UNTREATED ROADWAY	SY	14080	$ 2	$ 28,160	
CRUSHED SURFACING TOP COURSE (10"BELOW PCC)	CY	3910	$ 65	$ 254,121	
CSTC FOR SIDEWALK AND DRIVEWAYS	CY	323	$ 65	$ 20,973	
HMA CL. 1/2 IN. PG 70-28, 3 INCH THICK	TON	4811	$ 75	$ 360,800	
TRAFFIC					
CEMENT CONCRETE TRAFFIC CURB	LF	0	$ 30	$ -	No islands in this segment
CEMENT CONCRETE CURB AND GUTTER	LF	5280	$ 30	$ 158,400	one side
GENERIC STRIPING, INCL MARKINGS	LF	5280	$ 20	$ 105,600	
TRAFFIC ALLOWANCE	LS	1	$ 50,000	$ 50,000	
OTHER					
CEMENT CONCRETE SIDEWALK	SY	2933	$ 90	$ 264,000	
				$ -	
				$ -	
UTILITIES					
ADJUST MANHOLE (INCLUDES DRAINAGE STRUCTURE, VALVE BOX)	EACH	100	$ 2,000	$ 200,000	estimated based on sample mile on Division City GIS
UTILITY ALLOWANCES	LS	1	$ 50,000	$ 50,000	
STORMWATER ALLOWANCE (Based on Swale construction which may not be feasible)	SY	4693	$ 35	$ 164,267	
PER MILE SUB-TOTAL				**$ 5,347,627**	
LENGTH OF SEGMENT (RUBY)	MI	1.4		**$ 7,486,678**	

FIXED NUMBER ITEMS

STATION					
TRAFFIC SIGNAL SYSTEM	EACH	7	$ 500,000	$ 3,500,000	7 signalized intersections on Ruby segment premium for two way con
MAJOR STATION AT SIGNALIZED INTERSECTION	EACH	14	$ 250,000	$ 3,500,000	Side station - two per stop
SUB-TOTAL				$ 14,486,678	
MOBILIZATION (10 %)	10%			$ 1,448,668	
SUB-TOTAL				$ 15,935,346	
PLANNING CONTINGENCY (50%)	50%			$ 7,967,673	
SUB-TOTAL				$ 23,903,019	
PROFESSIONAL SERVICES					
PRELIMINARY ENGINEERING AND ENVIRONMENTAL REVIEW	8%			$ 1,912,242	
FINAL DESIGN	10%			$ 2,390,302	
PERMITTING	5%			$ 1,195,151	
CONSTRUCTION MANAGEMENT	10%			$ 2,390,302	
RIGHT OF WAY (5000 SF/STATION)	SF	0	$ 40.00	$ -	Assume no R/W for right side stations
TOTAL COST				**$ 31,791,015**	

Assumptions:

1. Curb, gutter & sidewalk - swale on one side will be preserved.
2. Other side C&G will be removed and replaced at wider limit.
3. Pavement section is suitable for grind and overlay for vehicle lanes
4. Bus (BST) lanes to be reconstructed with PCC pavement. Assume 12.5" PCC over 10" CSBC
5. Bicycle lane to be curb separated from traffic on left
6. Swale not shown, but used only for stormwater estimate

Side-Running B Alternative

Division Couplet Segment			(feet)	
Existing Pavement width			*50*	
Existing Right of Way width			*100*	
Back of walk to back of walk			*75*	estimated
Existing sidewalk-swale-C&G			*15*	
		Lanes		
Proposed section	HMA	5+2parking	76	
	PCC	0	0	
C&G			4	
Curb separated Bicycle lane			0	
Roadside swale - reconstructed			8	
Sidewalk replaced this side			5	one side
			93	

Opinion of Project Cost - Planning 0% complete

COUPLET - SCENARIO S2

DIVISION

Standard Item Description	Unit of Measure	Qty/MILE	Unit Price $	$ Amount	Notes
PREPARATION					
PLANING BITUMINOUS PAVEMENT (3" THICK)	SY	44587	$ 5	$ 222,933	
REMOVING CEMENT CONC. CURB AND GUTTER	LF	5280	$ 20	$ 105,600	
REMOVING CEMENT CONC. SIDEWALK	SY	2933	$ 20	$ 58,667	
SAWCUTTING FLEXIBLE PAVEMENT	LF	0	$ 5	$ -	
GRADING				$ -	
ROADWAY EXCAVATION INCL. HAUL (FOR PCC LANE,SW, AND SWALE)	CY	3080	$ 60	$ 184,800	
CEMENT CONCRETE PAVEMENT					
CEMENT CONCRETE PAVEMENT 12.5 INCH THICK	SY	0	$ 120	$ -	
FURNISHING CONCRETE FOR CEMENT CONCRETE PAVEMENT	CY	0	$ 225	$ -	
HOT MIX ASPHALT					
PREPARATION OF UNTREATED ROADWAY	SY	0	$ 2	$ -	
CRUSHED SURFACING TOP COURSE (10"BELOW PCC)	CY	0	$ 65	$ -	
CSTC FOR SIDEWALK AND DRIVEWAYS	CY	323	$ 65	$ 20,973	
HMA CL. 1/2 IN. PG 70-28, 3 INCH THICK	TON	7617	$ 75	$ 571,267	
TRAFFIC					
CEMENT CONCRETE TRAFFIC CURB	LF	0	$ 30	$ -	
CEMENT CONCRETE CURB AND GUTTER	LF	5280	$ 30	$ 158,400	
GENERIC STRIPING, INCL MARKINGS	LF	5280	$ 20	$ 105,600	
TRAFFIC ALLOWANCE	LS	1	$ 50,000	$ 50,000	
OTHER					
CEMENT CONCRETE SIDEWALK	SY	2933	$ 105	$ 308,000	
				$ -	
				$ -	
UTILITIES					
ADJUST MANHOLE (INCLUDES DRAINAGE STRUCTURE, VALVE BOX)	EACH	100	$ 2,000	$ 200,000	estimated based on sample mile on Division City GIS
UTILITY ALLOWANCES	LS	1	$ 50,000	$ 50,000	
STORMWATER ALLOWANCE (Based on Swale construction which may not be feasible)	SY	4693	$ 35	$ 164,267	
PER MILE SUB-TOTAL				**$ 2,200,507**	
LENGTH OF SEGMENT (DIVISION)	MI	1.4		**$ 3,080,709**	

FIXED NUMBER ITEMS

STATION					
TRAFFIC SIGNAL SYSTEM	EACH	7	$ 500,000	$ 3,500,000	7 signalized intersections on Ruby segment premium for two way con
MAJOR STATION AT SIGNALIZED INTERSECTION	EACH	14	$ 250,000	$ 3,500,000	Side station - two per stop
SUB-TOTAL				$ 10,080,709	
MOBILIZATION (10 %)	10%			$ 1,008,071	
SUB-TOTAL				$ 11,088,780	
PLANNING CONTINGENCY (50%)	50%			$ 5,544,390	
SUB-TOTAL				$ 16,633,170	
PROFESSIONAL SERVICES					
PRELIMINARY ENGINEERING AND ENVIRONMENTAL REVIEW	8%			$ 1,330,654	
FINAL DESIGN	10%			$ 1,663,317	
PERMITTING	5%			$ 831,659	
CONSTRUCTION MANAGEMENT	10%			$ 1,663,317	
RIGHT OF WAY (5000 SF/STATION)	SF	0	$ 40.00	$ -	Assume no R/W for right side stations
TOTAL COST				**$ 22,122,117**	

Assumptions:
1. Curb, gutter & sidewalk - swale on one side will be preserved.
2. Other side C&G will be removed and replaced at wider limit.
3. Pavement section is suitable for grind and overlay for vehicle lanes
4. Bus (BST) lanes to be reconstructed with PCC pavement. Assume 12.5" PCC over 10" CSBC
5. Swale not shown, but used only for stormwater estimate

Side-Running B Alternative

Side Right Division segment			(feet)	
Existing Pavment width			*80*	
Existing Right of Way width			*100*	*estimated avg*
Back of walk to back of walk			*88*	*estimated avg*
Existing sidewalk-swale-C&G			*0*	
		Lanes		
Proposed section	HMA	5	60	
	PCC	2	24	
C&G			4	one side
Curb separated Bicycle lane			0	
Roadside swale			8	
Cement Conc. Sidewalk			5	replace one side
			101	

Opinion of Project Cost - Planning 0% complete

MAINLINE - SCENARIO S2

Cleveland to the "Y"

Standard Item Description	Unit of Measure	Qty/MILE	Unit Price $	$ Amount	Notes
PREPARATION					
PLANING BITUMINOUS PAVEMENT (3" THICK)	SY	35200	$ 5	$ 176,000	
REMOVING CEMENT CONC. CURB AND GUTTER	LF	5280	$ 20	$ 105,600	
REMOVING CEMENT CONC. SIDEWALK	SY	2933	$ 20	$ 58,667	
SAWCUTTING FLEXIBLE PAVEMENT	LF	10560	$ 5	$ 52,800	
GRADING				$ -	
ROADWAY EXCAVATION INCL. HAUL (FOR PCC LANE,SW, AND SWALE)	CY	10120	$ 60	$ 607,200	
CEMENT CONCRETE PAVEMENT					
CEMENT CONCRETE PAVEMENT 12.5 INCH THICK	SY	14080	$ 120	$ 1,689,600	
FURNISHING CONCRETE FOR CEMENT CONCRETE PAVEMENT	CY	4881	$ 225	$ 1,098,240	
HOT MIX ASPHALT					
PREPARATION OF UNTREATED ROADWAY	SY	14080	$ 2	$ 28,160	
CRUSHED SURFACING TOP COURSE (10"BELOW PCC)	CY	7819	$ 65	$ 508,241	
CSTC FOR SIDEWALK AND DRIVEWAYS	CY	323	$ 65	$ 20,973	
HMA CL. 1/2 IN. PG 70-28, 3 INCH THICK	TON	6013	$ 75	$ 451,000	
TRAFFIC					
CEMENT CONCRETE TRAFFIC CURB	LF	0	$ 30	$ -	Center turn lane , no curbed channelization
CEMENT CONCRETE CURB AND GUTTER	LF	5280	$ 30	$ 158,400	Assume between the curbs
GENERIC STRIPING, INCL MARKINGS	LF	5280	$ 40	$ 211,200	
TRAFFIC ALLOWANCE	LS	1	$ 50,000	$ 50,000	
OTHER					
CEMENT CONCRETE SIDEWALK	SY	2933	$ 90	$ 264,000	
				$ -	
				$ -	
UTILITIES					
ADJUST MANHOLE (INCLUDES DRAINAGE STRUCTURE, VALVE BOX)	EACH	100	$ 2,000	$ 200,000	estimated based on sample mile on Division City GIS
UTILITY ALLOWANCES	LS	1	$ 50,000	$ 50,000	
STORMWATER ALLOWANCE (Based on Swale construction which may not be feasible)	SY	4693	$ 35	$ 164,267	
PER MILE SUB-TOTAL				**$ 5,894,348**	
LENGTH OF SEGMENT CLEVELAND TO Y	MI	3.8		**$ 22,398,521**	
FIXED NUMBER ITEMS					
STATION					
TRAFFIC SIGNAL SYSTEM	EACH	14	$ 250,000	$ 3,500,000	14 signalized intersections north of couplet segment
MAJOR STATION AT SIGNALIZED INTERSECTION	EACH	28	$ 250,000	$ 7,000,000	Two side stations per intersection
SUB-TOTAL				$ 32,898,521	
MOBILIZATION (10 %)	10%			$ 3,289,852	
SUB-TOTAL				$ 36,188,374	
PLANNING CONTINGENCY (50%)	50%			$ 18,094,187	
SUB-TOTAL				$ 54,282,560	
PROFESSIONAL SERVICES					
PRELIMINARY ENGINEERING AND ENVIRONMENTAL REVIEW	8%			$ 4,342,605	
FINAL DESIGN	10%			$ 5,428,256	
PERMITTING	5%			$ 2,714,128	
CONSTRUCTION MANAGEMENT	10%			$ 5,428,256	
RIGHT OF WAY (5000 SF/STATION)	SF	0	$ 40.00	$ -	Assume no R/W for right side stations
TOTAL COST				**$ 72,195,805**	

Assumptions:

1. Curb, gutter & sidewalk - swale on one side will be preserved.
2. Other side C&G will be removed and replaced at wider limit.
3. Pavement section is suitable for grind and overlay for vehicle lanes
4. Bus (BST) lanes to be reconstructed with PCC pavement. Assume 12.5" PCC over 10" CSBC
5. Swale not shown, but used only for stormwater estimate

Side-Running C Alternative

Side-Running C Alternative		Lanes	
Proposed section	HMA	3	36
	PCC	2	12
C&G			4
Curb separated Bicycle lane			12
Roadside swale - reconstructed			10
Sidewalk replaced this side			10
			84

Opinion of Project Cost - Planning 0% complete
COUPLET - SCENARIO S3
RUBY

Standard Item Description	Unit of Measure	Qty/MILE	Unit Price $	$ Amount	Notes
PREPARATION					
PLANING BITUMINOUS PAVEMENT (3" THICK)	SY	21120	$ 5	$ 105,600	
REMOVING CEMENT CONC. CURB AND GUTTER	LF	5280	$ 20	$ 105,600	
REMOVING CEMENT CONC. SIDEWALK	SY	2933	$ 20	$ 58,667	
SAWCUTTING FLEXIBLE PAVEMENT	LF	5280	$ 5	$ 26,400	
GRADING				$ -	
ROADWAY EXCAVATION INCL. HAUL (FOR PCC LANE,SW, AND SWALE)	CY	11440	$ 60	$ 686,400	
CEMENT CONCRETE PAVEMENT					
CEMENT CONCRETE PAVEMENT 12.5 INCH THICK	SY	7040	$ 120	$ 844,800	
FURNISHING CONCRETE FOR CEMENT CONCRETE PAVEMENT	CY	2441	$ 225	$ 549,120	
HOT MIX ASPHALT					
PREPARATION OF UNTREATED ROADWAY	SY	7040	$ 2	$ 14,080	
CRUSHED SURFACING TOP COURSE (10"BELOW PCC)	CY	1955	$ 65	$ 127,060	
CSTC FOR SIDEWALK AND DRIVEWAYS	CY	645	$ 65	$ 41,947	
HMA CL. 1/2 IN. PG 70-28, 3 INCH THICK	TON	3608	$ 75	$ 270,600	
TRAFFIC					
CEMENT CONCRETE TRAFFIC CURB	LF	0	$ 30	$ -	
CEMENT CONCRETE CURB AND GUTTER	LF	5280	$ 30	$ 158,400	
GENERIC STRIPING, INCL MARKINGS	LF	5280	$ 20	$ 105,600	
TRAFFIC ALLOWANCE	LS	1	$ 50,000	$ 50,000	
OTHER					
CEMENT CONCRETE SIDEWALK	SY	5867	$ 105	$ 616,000	
				$ -	
				$ -	
UTILITIES					
ADJUST MANHOLE (INCLUDES DRAINAGE STRUCTURE, VALVE BOX)	EACH	100	$ 2,000	$ 200,000	estimated based on sample mile on Division City GIS
UTILITY ALLOWANCES	LS	1	$ 50,000	$ 50,000	
STORMWATER ALLOWANCE (Based on Swale construction which may not be feasible)	SY	5867	$ 35	$ 205,333	
PER MILE SUB-TOTAL				**$ 4,215,607**	
LENGTH OF SEGMENT (RUBY)	MI	1.4		**$ 5,901,850**	
FIXED NUMBER ITEMS					
STATION					
TRAFFIC SIGNAL SYSTEM	EACH	7	$ 250,000	$ 1,750,000	7 signalized intersections on Ruby segment
MAJOR STATION AT SIGNALIZED INTERSECTION	EACH	14	$ 250,000	$ 3,500,000	Side station - two per stop
SUB-TOTAL				$ 11,151,850	
MOBILIZATION (10 %)	10%			$ 1,115,185	
SUB-TOTAL				$ 12,267,035	
PLANNING CONTINGENCY (50%)	50%			$ 6,133,517	
SUB-TOTAL				$ 18,400,552	
PROFESSIONAL SERVICES					
PRELIMINARY ENGINEERING AND ENVIRONMENTAL REVIEW	8%			$ 1,472,044	
FINAL DESIGN	10%			$ 1,840,055	
PERMITTING	5%			$ 920,028	
CONSTRUCTION MANAGEMENT	10%			$ 1,840,055	
RIGHT OF WAY (5000 SF/STATION)	SF	0	$ 40.00	$ -	Assume no R/W for right side stations
TOTAL COST				**$ 24,472,734**	

Assumptions:
1. Curb, gutter & sidewalk - swale on one side will be preserved.
2. Other side C&G will be removed and replaced at wider limit.
3. Pavement section is suitable for grind and overlay for vehicle lanes
4. Bus (BST) lanes to be reconstructed with PCC pavement. Assume 12.5" PCC over 10" CSBC
5. Bicycle lane to be curb separated from traffic on right
6. Swale not shown, but used only for stormwater estimate

Side-Running C Alternative

		Lanes	
Proposed section	HMA	3	36
	PCC	2	12
C&G			4
Curb separated Bicycle lane			0
Roadside swale - reconstructed			10
Sidewalk replaced this side			10
			72

Opinion of Project Cost - Planning 0% complete

COUPLET - SCENARIO S3

DIVISION

Standard Item Description	Unit of Measure	Qty/MILE	Unit Price $	$ Amount	Notes
PREPARATION					
MOBILIZATION					
PLANING BITUMINOUS PAVEMENT (3" THICK)	SY	21120	$ 5	$ 105,600	
REMOVING CEMENT CONC. CURB AND GUTTER	LF	5280	$ 20	$ 105,600	
REMOVING CEMENT CONC. SIDEWALK	SY	5867	$ 20	$ 117,333	
SAWCUTTING FLEXIBLE PAVEMENT	LF	5280	$ 5	$ 26,400	
GRADING				$ -	
ROADWAY EXCAVATION INCL. HAUL (FOR PCC LANE,SW, AND SWALE)	CY	7920	$ 60	$ 475,200	
CEMENT CONCRETE PAVEMENT					
CEMENT CONCRETE PAVEMENT 12.5 INCH THICK	SY	7040	$ 120	$ 844,800	
FURNISHING CONCRETE FOR CEMENT CONCRETE PAVEMENT	CY	2441	$ 225	$ 549,120	
HOT MIX ASPHALT					
PREPARATION OF UNTREATED ROADWAY	SY	7040	$ 2	$ 14,080	
CRUSHED SURFACING TOP COURSE (10"BELOW PCC)	CY	1955	$ 65	$ 127,060	
CSTC FOR SIDEWALK AND DRIVEWAYS	CY	645	$ 65	$ 41,947	
HMA CL. 1/2 IN. PG 70-28, 3 INCH THICK	TON	3608	$ 75	$ 270,600	
TRAFFIC					
CEMENT CONCRETE TRAFFIC CURB	LF	0	$ 30	$ -	
CEMENT CONCRETE CURB AND GUTTER	LF	5280	$ 30	$ 158,400	Betweencurbs
GENERIC STRIPING, INCL MARKINGS	LF	5280	$ 20	$ 105,600	
TRAFFIC ALLOWANCE	LS	1	$ 50,000	$ 50,000	
OTHER					
CEMENT CONCRETE SIDEWALK	SY	5867	$ 105	$ 616,000	
				$ -	
				$ -	
UTILITIES					
ADJUST MANHOLE (INCLUDES DRAINAGE STRUCTURE, VALVE BOX)	EACH	100	$ 2,000	$ 200,000	estimated based on sample mile on Division City GIS
UTILITY ALLOWANCES	LS	1	$ 50,000	$ 50,000	
STORMWATER ALLOWANCE (Based on Swale construction which may not be feasible)	SY	5867	$ 35	$ 205,333	
PER MILE SUB-TOTAL				**$ 4,063,074**	
LENGTH OF SEGMENT (DIVISION)	MI	1.4		**$ 5,688,303**	
FIXED NUMBER ITEMS					
STATION					
TRAFFIC SIGNAL SYSTEM	EACH	7	$ 250,000	$ 1,750,000	7 signalized intersections on Ruby segment
MAJOR STATION AT SIGNALIZED INTERSECTION	EACH	14	$ 250,000	$ 3,500,000	Side station - two per stop
SUB-TOTAL				$ 10,938,303	
MOBILIZATION (10 %)	10%			$ 1,093,830	
SUB-TOTAL				$ 12,032,133	
PLANNING CONTINGENCY (50%)	50%			$ 6,016,067	
SUB-TOTAL				$ 18,048,200	
PROFESSIONAL SERVICES					
PRELIMINARY ENGINEERING AND ENVIRONMENTAL REVIEW	8%			$ 1,443,856	
FINAL DESIGN	10%			$ 1,804,820	
PERMITTING	5%			$ 902,410	
CONSTRUCTION MANAGEMENT	10%			$ 1,804,820	
RIGHT OF WAY (5000 SF/STATION)	SF	0	$ 40.00	$ -	Assume no R/W for right side stations
TOTAL COST				**$ 24,004,106**	

Assumptions:
1. Curb, gutter & sidewalk - swale on one side will be preserved.
2. Other side C&G will be removed and replaced at wider limit.
3. Pavement section is suitable for grind and overlay for vehicle lanes
4. Bus (BST) lanes to be reconstructed with PCC pavement. Assume 12.5" PCC over 10" CSBC
5. Swale not shown, but used only for stormwater estimate

Side-Running C Alternative

Side-Running C Alternative		Lanes		
Proposed section	HMA	5	60	
	PCC	2	24	
C&G			4	one side
Curb separated Bicycle lane			0	
Roadside swale - reconstructed			10	
Cement Conc. Sidewalk			5	replace one side
			103	

Opinion of Project Cost - Planning 0% complete
MAINLINE - SCENARIO S3
Cleveland to the "Y"

Standard Item Description	Unit of Measure	Qty/MILE	Unit Price $	$ Amount	Notes
PREPARATION					
PLANING BITUMINOUS PAVEMENT (3" THICK)	SY	35200	$ 5	$ 176,000	
REMOVING CEMENT CONC. CURB AND GUTTER	LF	5280	$ 20	$ 105,600	
REMOVING CEMENT CONC. SIDEWALK	SY	2933	$ 20	$ 58,667	
SAWCUTTING FLEXIBLE PAVEMENT	LF	10560	$ 5	$ 52,800	
GRADING				$ -	
ROADWAY EXCAVATION INCL. HAUL (FOR PCC LANE,SW, AND SWALE)	CY	9973	$ 60	$ 598,400	
CEMENT CONCRETE PAVEMENT					
CEMENT CONCRETE PAVEMENT 12.5 INCH THICK	SY	14080	$ 120	$ 1,689,600	
FURNISHING CONCRETE FOR CEMENT CONCRETE PAVEMENT	CY	4881	$ 225	$ 1,098,240	
HOT MIX ASPHALT					
PREPARATION OF UNTREATED ROADWAY	SY	14080	$ 2	$ 28,160	
CRUSHED SURFACING TOP COURSE (10"BELOW PCC)	CY	3910	$ 65	$ 254,121	
CSTC FOR SIDEWALK AND DRIVEWAYS	CY	323	$ 65	$ 20,973	
HMA CL. 1/2 IN. PG 70-28, 3 INCH THICK	TON	6013	$ 75	$ 451,000	
TRAFFIC					
CEMENT CONCRETE TRAFFIC CURB	LF	0	$ 30	$ -	
CEMENT CONCRETE CURB AND GUTTER	LF	5280	$ 30	$ 158,400	Assume between the curbs
GENERIC STRIPING, INCL MARKINGS	LF	5280	$ 40	$ 211,200	
TRAFFIC ALLOWANCE	LS	1	$ 50,000	$ 50,000	
OTHER					
CEMENT CONCRETE SIDEWALK	SY	2933	$ 105	$ 308,000	
				$ -	
				$ -	
UTILITIES					
ADJUST MANHOLE (INCLUDES DRAINAGE STRUCTURE, VALVE BOX)	EACH	100	$ 2,000	$ 200,000	estimated based on sample mile on Division City GIS
UTILITY ALLOWANCES	LS	1	$ 50,000	$ 50,000	
STORMWATER ALLOWANCE (Based on Swale construction which may not be feasible)	SY	5867	$ 35	$ 205,333	
PER MILE SUB-TOTAL				**$ 5,716,494**	
LENGTH OF SEGMENT CLEVELAND TO "Y"	MI	3.8		**$ 21,722,677**	
STATION					
TRAFFIC SIGNAL SYSTEM	EACH	14	$ 250,000	$ 3,500,000	14 signalized intersections north of couplet segment
MAJOR STATION AT SIGNALIZED INTERSECTION	EACH	28	$ 250,000	$ 7,000,000	Two side stations per intersection
SUB-TOTAL				$ 32,222,677	
MOBILIZATION (10 %)	10%			$ 3,222,268	
SUB-TOTAL				$ 35,444,944	
PLANNING CONTINGENCY (50%)	50%			$ 17,722,472	
SUB-TOTAL				$ 53,167,417	
PROFESSIONAL SERVICES					
PRELIMINARY ENGINEERING AND ENVIRONMENTAL REVIEW	8%			$ 4,253,393	
FINAL DESIGN	10%			$ 5,316,742	
PERMITTING	5%			$ 2,658,371	
CONSTRUCTION MANAGEMENT	10%			$ 5,316,742	
RIGHT OF WAY (5000 SF/STATION)	SF	0	$ 40.00	$ -	Assume no R/W for right side stations
TOTAL COST				**$ 70,712,664**	

Assumptions:
1. Curb, gutter & sidewalk - swale on one side will be preserved.
2. Other side C&G will be removed and replaced at wider limit.
3. Pavement section is suitable for grind and overlay for vehicle lanes
4. Bus (BST) lanes to be reconstructed with PCC pavement. Assume 12.5" PCC over 10" CSBC
5. Swale not shown, but used only for stormwater estimate

APPENDIX J

NEPA/SEPA Overview for DivisionConnects Transit Project Technical Memo

Parametrix
ENGINEERING . PLANNING . ENVIRONMENTAL SCIENCES

719 2ND AVENUE, SUITE 200 | SEATTLE, WA 98104 | P 206.394.3700

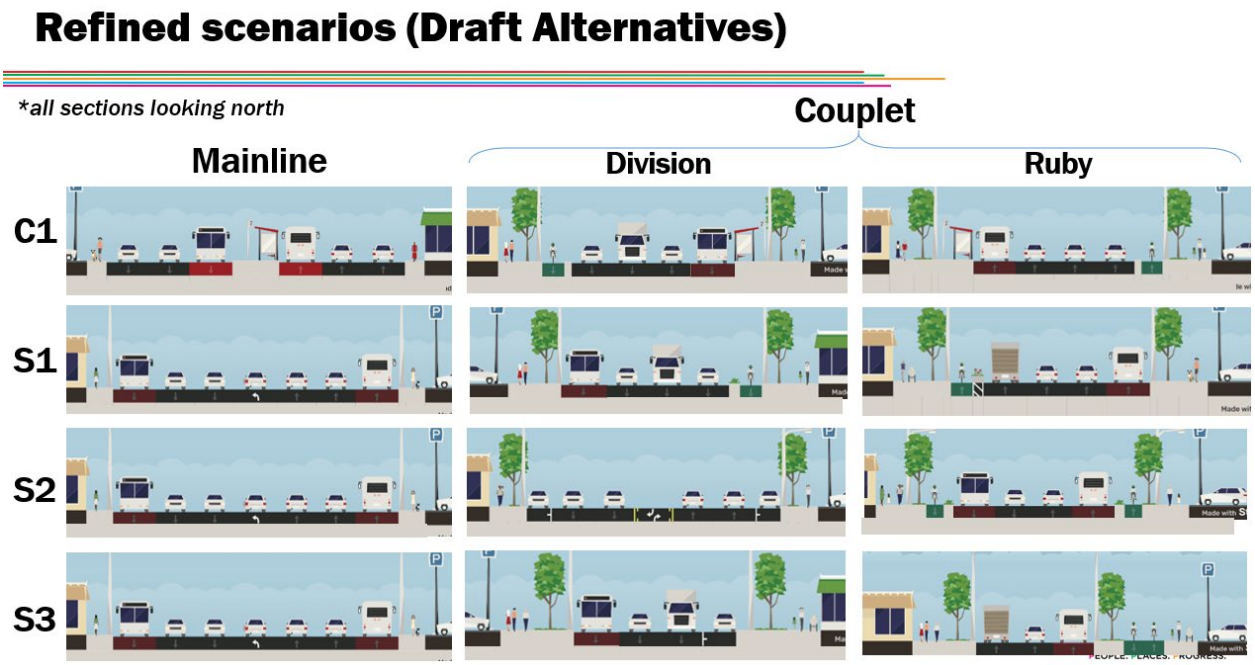
MEMORANDUM

DATE: April 1, 2021
TO: Spokane Regional Transportation Council
FROM: Parametrix
SUBJECT: NEPA/SEPA Overview for Division Connects Transit Project

INTRODUCTION

The purpose of this memorandum is to provide an overview of existing environmental conditions within the Division Street corridor study area and to identify the potential environmental impacts from the addition of bus rapid transit in the Division Street corridor. The study area was defined as the .25 miles surrounding the proposed project alignment from the existing transit plaza (located between N. Post Street, W. Riverside Ave., N. Wall St., and Sprague Avenue), north along the mainline on N. Division Street, the Ruby Street Couplet, and the six "Y" scenarios (Scenario A, A+, B, C, D, and H) under consideration, between W. 1st Avenue to the South, north to E Hastings Road and E Farwell Road. That study area was used to identify existing environmental conditions and potential impacts from the Division Connects transit project.

This overview also considers the various configurations that have been identified within those alignments, including locating BRT in the center of the roadway (Center Running Alternative – Scenario C1), as well as a standard business access transit (BAT) lane with both a one-way (Side-Running A Alternative – Scenario S1) and two-way (Side-Running B Alternative – Scenario S2) option for the Ruby Street Couplet, with various bike and pedestrian facility configurations (Side-Running C Alternative – Scenario S3), summarized below:



This overview is based on project information provided by the Spokane Regional Transportation Council and online environmental databases and sources, including:

- Washington Information System for Architectural and Archaeological Records (WISAARD)
- Washington Department of Archaeology and Historic Preservation
- Washington State Department of Ecology (Ecology) Facility/Site database and Toxics Cleanup Program Web Reporting database
- Washington Department of Fish and Wildlife
- Washington Department of Natural Resources Natural Hazard database
- Washington Recreation and Conservation Office (RCO) database
- U.S. Fish and Wildlife (USFW) National Wetlands Inventory (NWI)
- Federal Emergency Management Agency (FEMA) flood hazard information
- Wetland mapping from the City of Spokane and Spokane County
- Geological hazard mapping from the City of Spokane and Spokane County
- Spokane Housing Authority
- City of Spokane historic properties database
- Demographic data for the City of Spokane and Spokane County

The primary environmental resources identified in the study area are shown on the attached Figures 1-12. No fieldwork was performed to support this overview of environmental conditions.

RESOURCE OVERVIEW

Existing Conditions in the Study Area

The Division Connects transit project would be located within the City of Spokane and Spokane County. The southern portion of the corridor is urban and highly developed in nature, whereas the northern portion is more suburban and slightly less densely developed, with a few parcels that are somewhat rural in nature. The project would cross the Spokane River and would be located adjacent to several parks, trails, and historic sites, as well as within at least two designated historic districts. Some hazardous materials sites exist within the project study area, some of which are adjacent to the proposed alignments. Other environmental resources in the project study area include environmentally critical areas, such as flood prone areas, and minority and low-income communities.

POTENTIAL ENVIRONMENTAL IMPACTS

This section describes the potential environmental impacts for each of the Alternatives being considered for the Division Street transit project. The purpose of this evaluation is to provide a high-level summary of the potential environmental impacts and, to the extent possible at this stage, a comparative evaluation of potential environmental impacts from the various Alternatives.

Impacts Common to All Alternatives

Historic Resources

Several sites adjacent to the project alignment and more broadly within the study area are listed or determined to be eligible for listing on the National Register of Historic Places (NRHP) and/or the Spokane Register. In addition, the project alignment would be located within or adjacent to several historic districts. Historic resources are illustrated on Figures 1-4.

Parks and Trails

All of the Alternatives would cross shared use paths on either side of the Spokane River and would be adjacent to at least two parks (Franklin Park and BA Clark Park). Any impacts to those parks or paths depend on whether any permanent or temporary acquisition would be required.

There are also several properties in the study area that are subject to Section 6(f) of the Land and Water Conservation Act, which requires that the conversion of lands or facilities acquired with Land and Water Conservation Act funds need to be coordinated with the National Park Service. Parks and trails are also identified on Figures 1-4.

Section 4(f)

Section 4(f) of the U.S. Department of Transportation Act of 1966, prohibits the U.S. Department of Transportation (DOT) agencies, including the Federal Transit Administration (FTA), from approving projects that would affect a park, recreation area, historic and cultural resource, or wildlife and waterfowl refuge unless there is no feasible and prudent alternative to the use of the land and includes all possible effort to minimize the harm.

As described above, there are numerous Section 4(f) properties adjacent to the proposed project alignments and within the study area. To the extent any of those properties would be affected, either temporarily or permanently, a different alternative would need to be selected or an analysis showing that there is no feasible and prudent alternative would be required.

Hazardous Materials

A preliminary review identified at least 15 potentially affected hazardous materials sites, shown on Figures 5-8. The potential impacts related to hazardous materials sites would depend on the type of site and the proximity to the project. Because those sites are all currently located along an existing, developed roadway, any impacts would be anticipated to be minor. Potential hazardous materials sites are identified on Figures 5-8.

Rivers and Lakes

All Alternatives would cross the Spokane River, which is a priority habitat for several species. The project may have some construction impacts to the river and nearby lake, but those impacts are not currently anticipated to be significant, since the project will be installed on an existing bridge crossing the river with no in-water construction. Rivers and lakes within and near the project study area are identified on Figures 9-12.

Natural Resources

Other than the Spokane River, no significant natural resources such as wetlands, floodplains, steep slopes, or other environmentally critical or geotechnical hazard areas are located adjacent to the proposed project alignments. Some floodplains are located within the study area, but no impacts would be anticipated.

Right-of-Way

The project is proposed to be located primarily within existing right-of-way (ROW) on Division Street, Ruby Street, and streets in downtown Spokane near the existing transit plaza. To the extent the project is located outside of existing right-of-way, the type and extent of impacts may be greater, and the potential impacts would vary based on the configuration of the BRT.

The Center-Running Alternative would require more right-of-way at intersections and stations than the other proposed configurations and, therefore, may have greater impacts than other configurations. Scenario D (for the Y-routes), which would add a new segment of roadway where no road currently exists (currently just BPA lines) may have greater impacts than the other scenarios because of the change in use. Right-of-way impacts would be minimal in the Y portion of the alignments, north of N. Country Homes Boulevard, because buses are anticipated to travel in existing general traffic lanes, rather than a new BAT or transit only lane.

Access/Transportation

The project is not likely to negatively impact transportation or access within the Division Street corridor study area. Transit, motorized, and non-motorized access is anticipated to be improved. It is possible that the Center-Running Alternative could have a greater impact on access to adjacent businesses and would create some access issues for pedestrians accessing stops. Additional buses in the downtown area, particularly near the existing transit plaza, could impact existing transit stops and access.

Environmental Justice

The study area is home to a population that is approximately 20% minority, which is slightly higher than the City of Spokane and Spokane County as a whole. The percentage of population with a disability in the study area along the Division corridor mainline, south of the Y, is slightly higher than the City and County as a whole.

Geography		% of population with a disability	Median Household Income	Vehicles Available				% limited English-speaking households	% of population racial/ethnic minority
				None	1	2	3+		
Y Scenarios	Scenario A	14.3%	$ 48,927	3.7%	22.6%	34.0%	39.7%	1.1%	19.0%
	Scenario A+	14.0%	$ 50,948	3.5%	22.2%	35.4%	38.9%	1.3%	18.4%
	Scenario B	14.2%	$ 45,739	4.6%	26.4%	34.3%	34.8%	1.7%	22.5%
	Scenario C	15.2%	$ 44,538	4.1%	25.3%	34.2%	36.4%	1.6%	21.0%
	Scenario D	14.6%	$ 47,803	3.6%	23.8%	35.7%	36.9%	1.7%	19.4%
	Scenario H	14.3%	$ 46,752	4.5%	24.5%	32.6%	38.4%	0.9%	21.1%
Division Corridor Mainline (Y to Plaza)		18.0%	$ 36,439	7.4%	28.3%	35.6%	28.6%	0.9%	20.3%
Baseline	City of Spokane	15.7%	$ 50,306	3.0%	23.9%	42.8%	30.3%	1.5%	19.0%
	Spokane County	14.5%	$ 56,904	2.3%	18.4%	40.7%	38.6%	1.2%	15.4%

Source: 2019: ACS 5-Year Estimates

In general, the project would likely be beneficial to environmental justice populations by providing additional high frequency transit. Any benefit may be countered if displacement of low-income housing or other resources occurs as a result of the project, but none has been identified at this time.

Transportation

Transit performance would improve and corridor mobility is not anticipated to be significantly impacted. Side-Running A Alternative, which would consist of a BAT lane with one-way couplet, would likely improve corridor

mobility the most, whereas the Center-Running Alternative would have the biggest benefit for transportation performance.

Land Use

Land uses along the project alignment consist of general commercial, multi-family residential, some single-family residential. Unless a significant portion of land is acquired for the project outside of existing right-of-way, no significant land use impacts would be anticipated. Land use impacts in the northern portion of the alignment are likely to be minor, since no additional right of way would be needed in the Y portion of the alignment. Throughout the remainder of the project study area, any work outside of the existing right of way may convert parking to a new transportation use or impact structures and businesses, given their orientation toward the street.

Impacts Related to the Center Running Configuration

The Center-running Alternative would require more permanent and temporary acquisition of property adjacent to the project alignment, which, could result in greater impacts to various environmental resources. In addition to the potential impacts identified above, the utility impacts and construction impacts related to the Center-Running Alternative are likely to be greater than other configurations, since additional utility relocations and additional road closures during construction would be required.

Impacts Related to Side-Running B and C Alternatives

The Side-Running B and C Alternatives may have greater impacts than the one-way couplet, because changing from the existing one-way configuration would require greater modification to the existing environment.

NEPA/SEPA

SEPA and NEPA provide categorical exemptions/exclusions where an action is unlikely to have significant environmental impacts. Specifically, NEPA provides categorical exclusions (CEs) for actions that do not include significant impacts to planned growth or land use for the area; do not require the relocation of significant numbers of people; do not have a significant impact on any natural, cultural, recreational, historic, or other resource; do not involve significant air, noise, or water quality impacts; do not have significant impacts on travel patterns; or do not otherwise, either individually or cumulatively, have significant environmental impacts. Title 23 CFR Part 771, §771.117 and §771.118 list the categorical exclusions for FHWA and FTA.

These categorical exclusions include the installation of fencing, signs, pavement markings, small passenger shelters, traffic signals, and railroad warning devices where no substantial land acquisition or traffic disruption will occur, and for projects that will occur entirely within the existing operational right-of-way. Minor expansions of transit structures and facilities outside existing right-of way, such as bridges, stations or rail yards are also categorically excluded. An action that is otherwise described as categorically excluded may not be processed as CE if it involves a finding of “adverse effect” to historic properties or the use of a 4(f) property or is inconsistent with any Federal, State or local law, requirement, or administrative determination relating to the environmental aspects of the action.

Because the proposal is anticipated to require acquisition and construction outside of the existing right-of-way and may impact a cultural, recreational, or historic resource, it is unlikely this project would fit clearly within a defined categorical exclusion.

CONCLUSIONS

Based on a desktop review, the proposed Division Connects transit Project appears feasible and the potential impacts to most elements of the environment are likely to be minor given the urban/developed context of most of the study area and the location of the project within existing right-of-way.

Based on the information currently available, it is anticipated that the Division Connects transit project will require an Environmental Assessment (EA) under NEPA. Whether an EIS is required would be depended on several factors:

- Whether the project is constructed entirely within existing right-of-way;
- Whether the project will impact any Section 4(f) properties or NHRP eligible or listed historic sites;
- Whether the project will significantly impact any hazardous materials sites; and
- Whether other unexpected significant impacts are identified.

DIVISION CONNECTS
PEOPLE. PLACES. PROGRESS.

Figure 1

COMMUNITY RESOURCES *SEGMENTS 1 & 2*

Date: 1/12/2021 Path: U:\Spok\Projects\Clients\2941-SpokaneRegionalTransCo\374-2941-001 DivisionStreetCorridor\99Svcs\GIS\MapDocs\Community.aprx

Figure 2

COMMUNITY RESOURCES *SEGMENT 3*

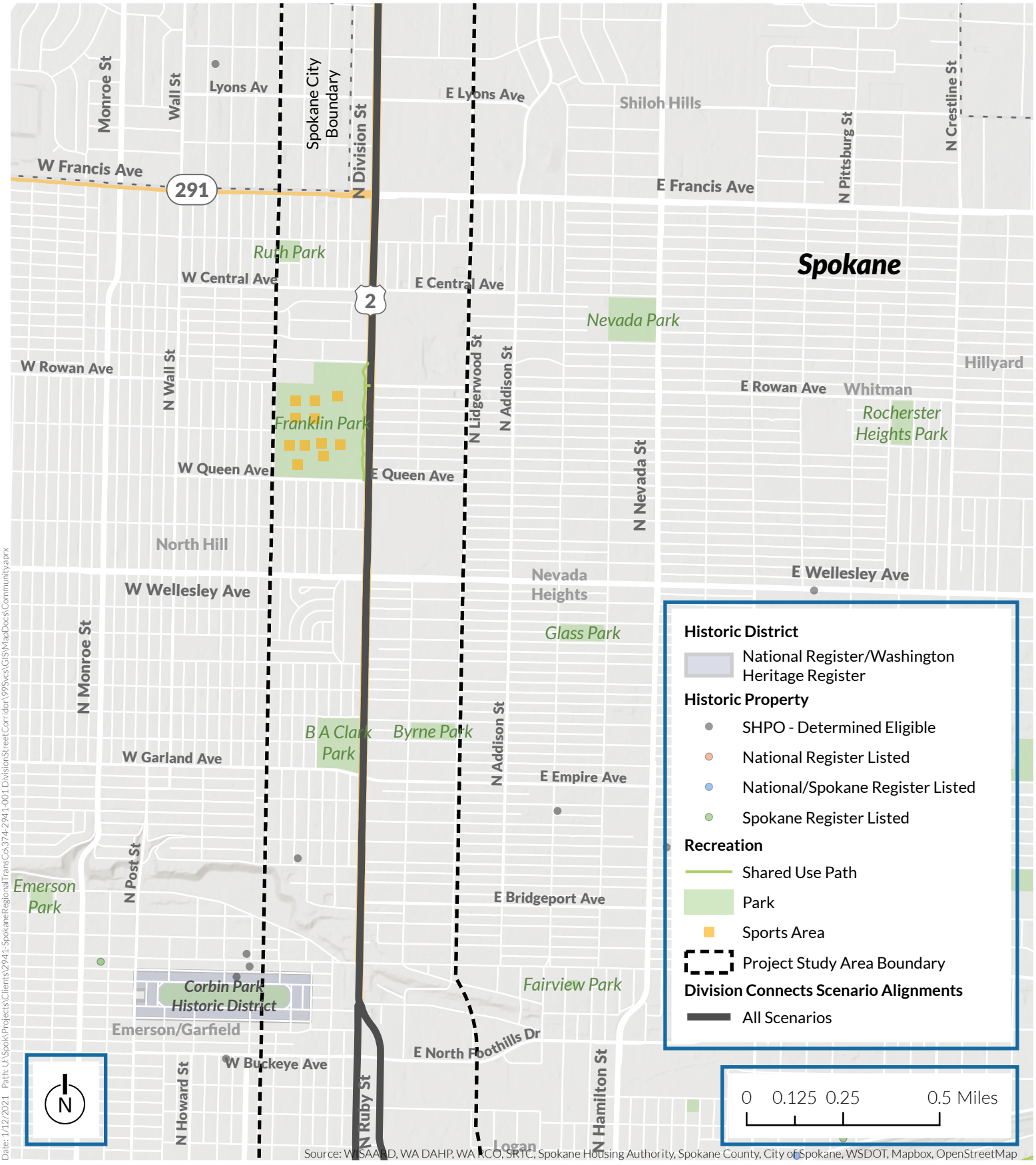


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Figure 3

COMMUNITY RESOURCES *SEGMENT 4*

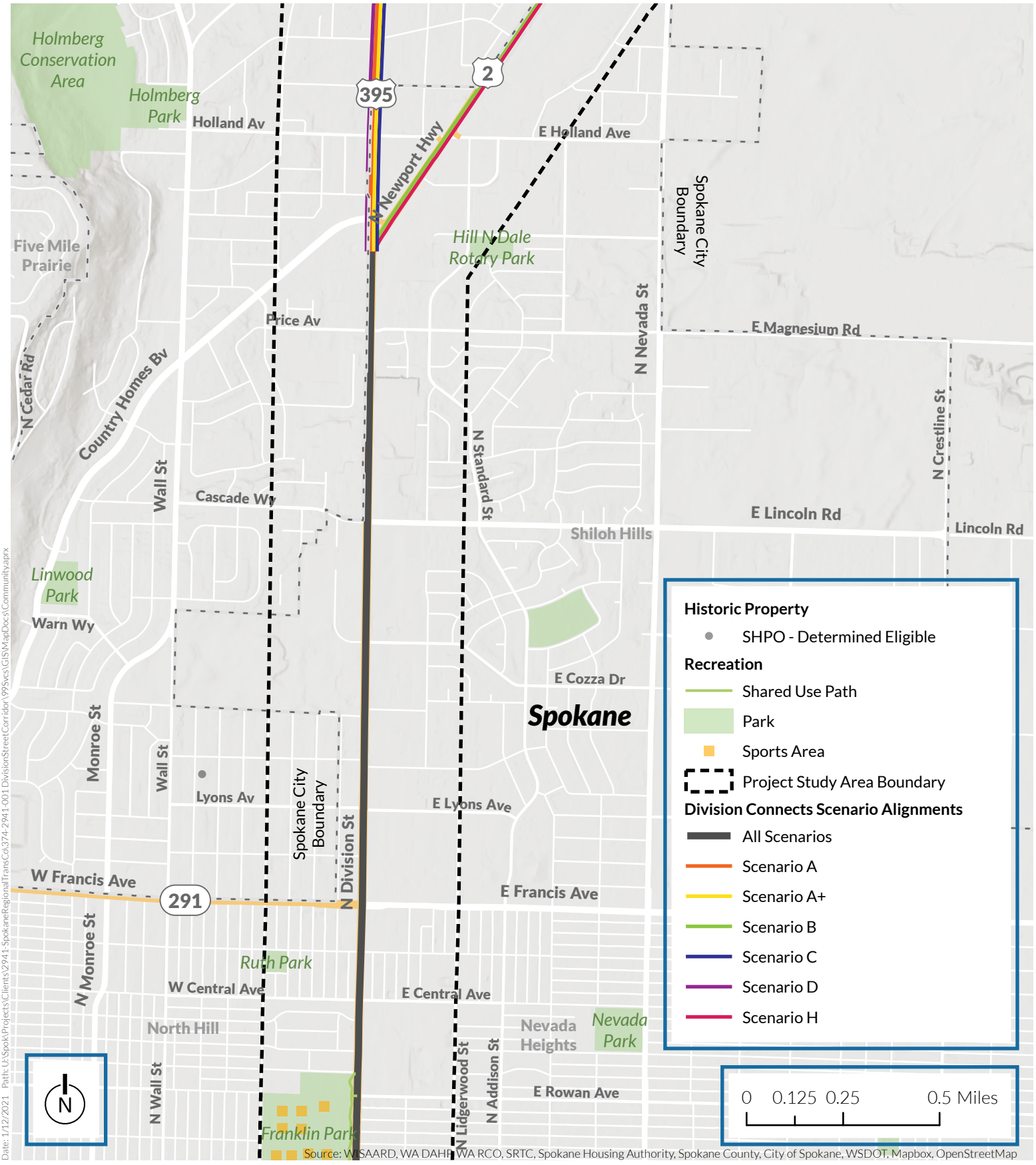

Figure 4

COMMUNITY RESOURCES *SEGMENT 5*

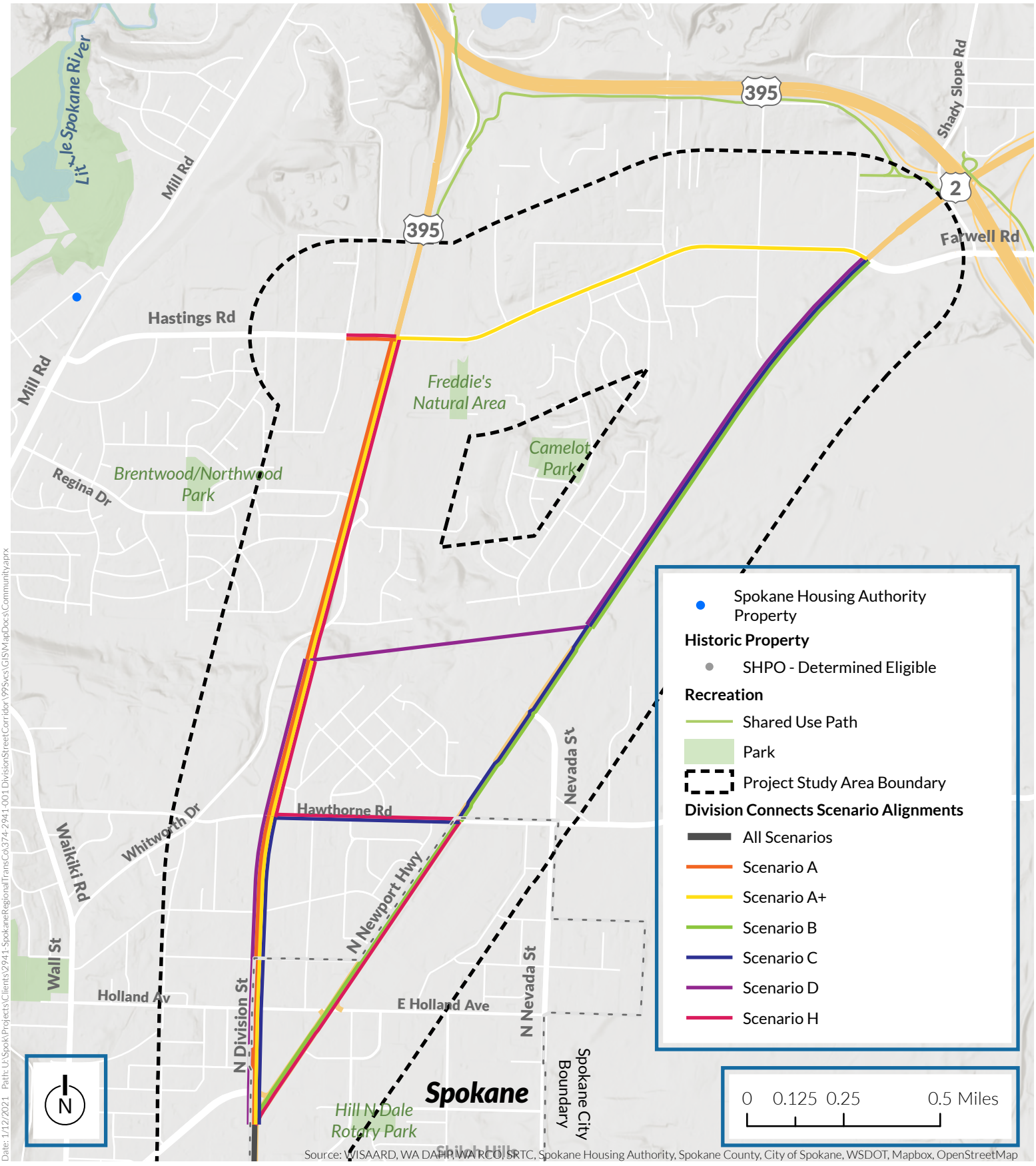

Figure 5

HAZARDOUS MATERIALS SITES *SEGMENTS 1 & 2*

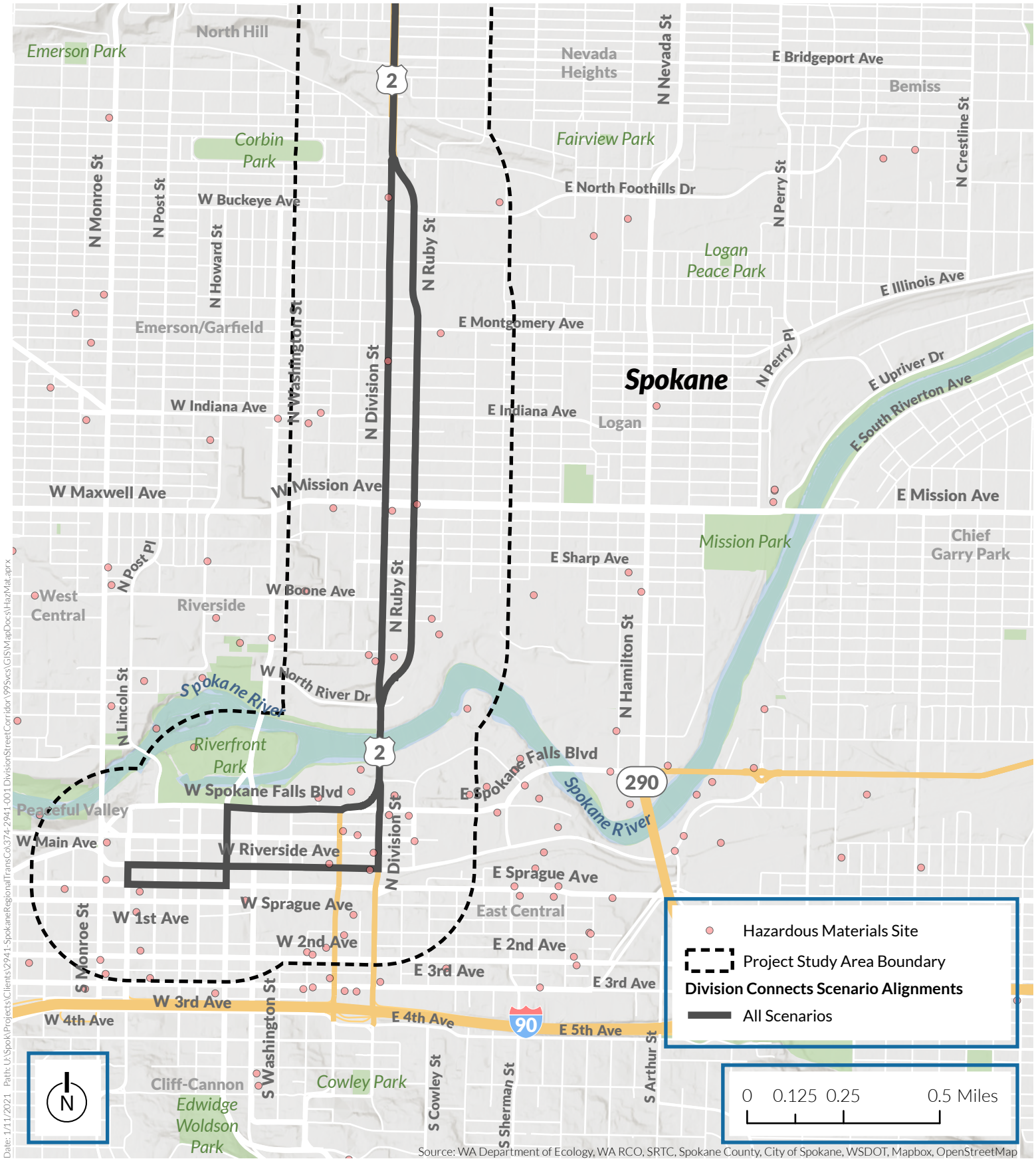

Figure 6

HAZARDOUS MATERIALS SITES *SEGMENT 3*

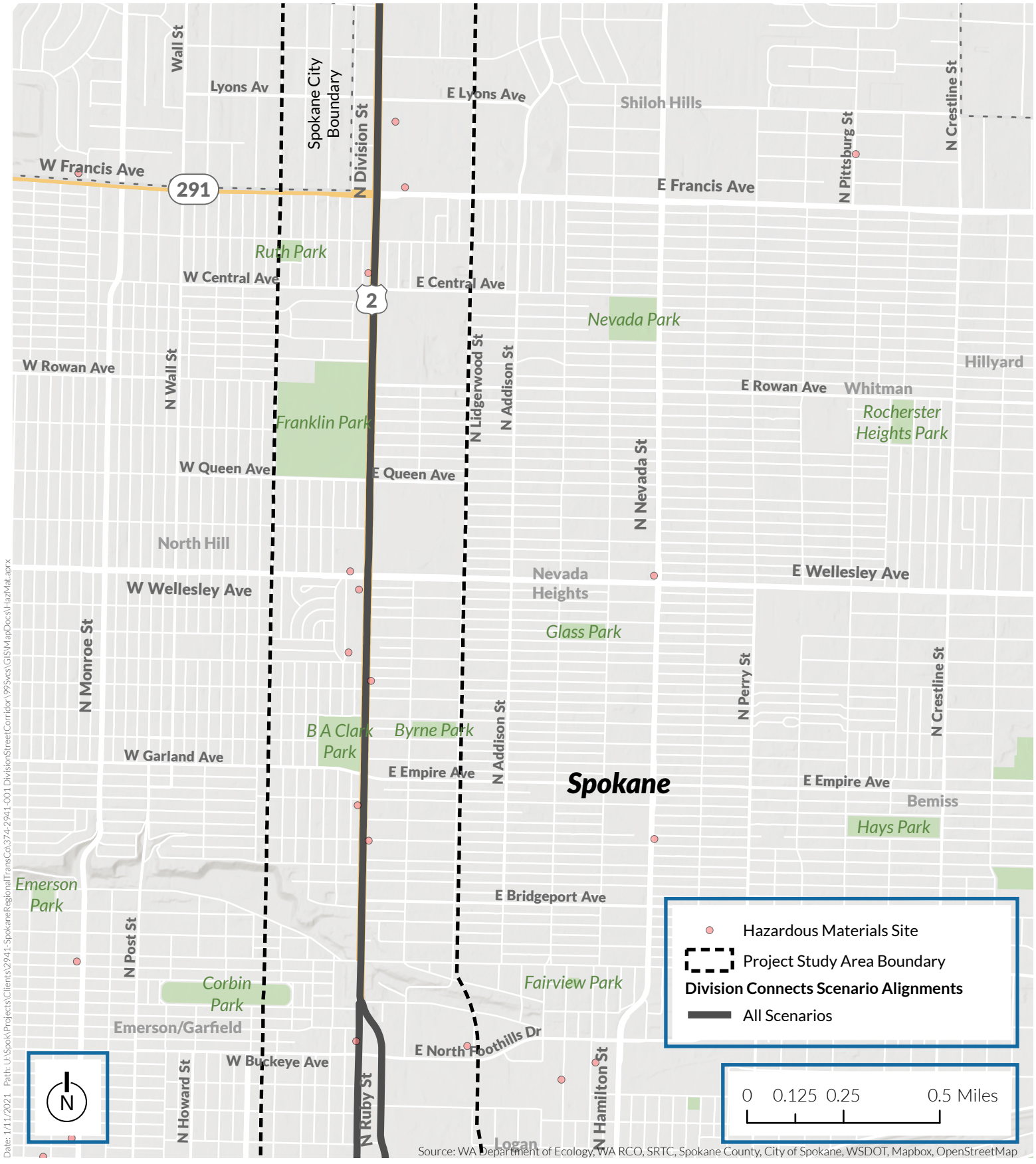

Figure 7

HAZARDOUS MATERIALS SITES *SEGMENT 4*

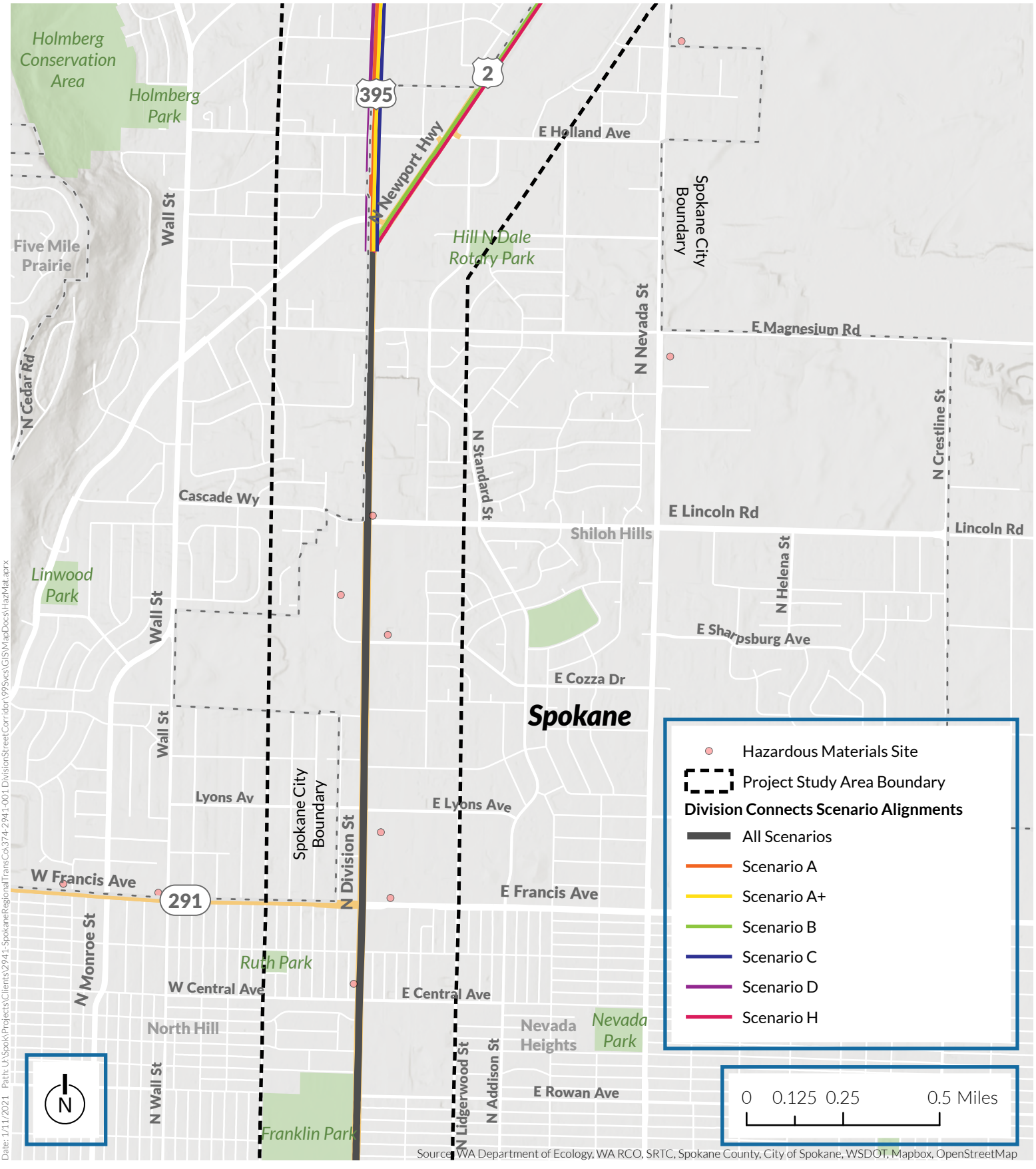

Figure 8

HAZARDOUS MATERIALS SITES *SEGMENT 5*

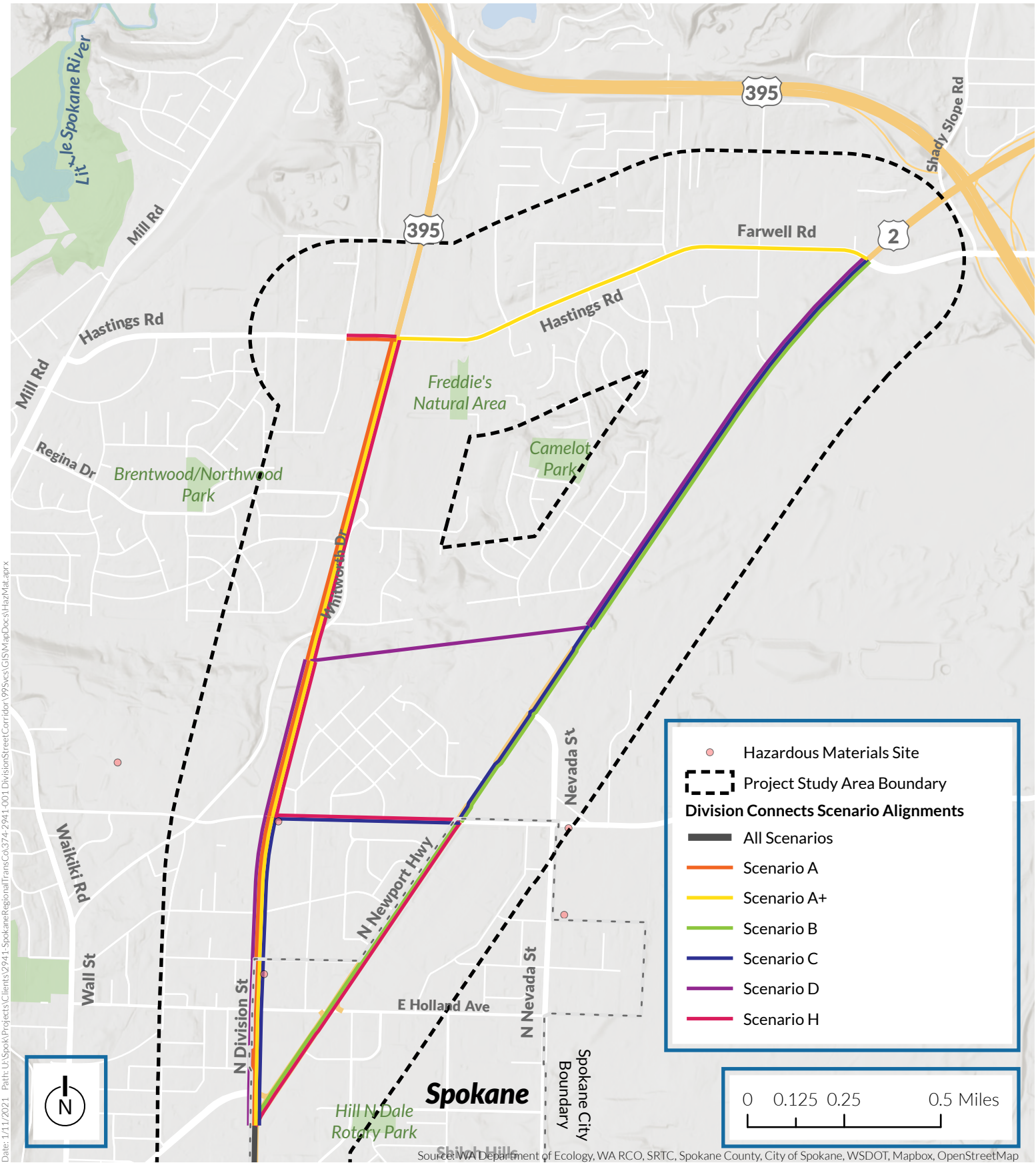

Figure 9

NATURAL ENVIRONMENT *SEGMENTS 1 & 2*

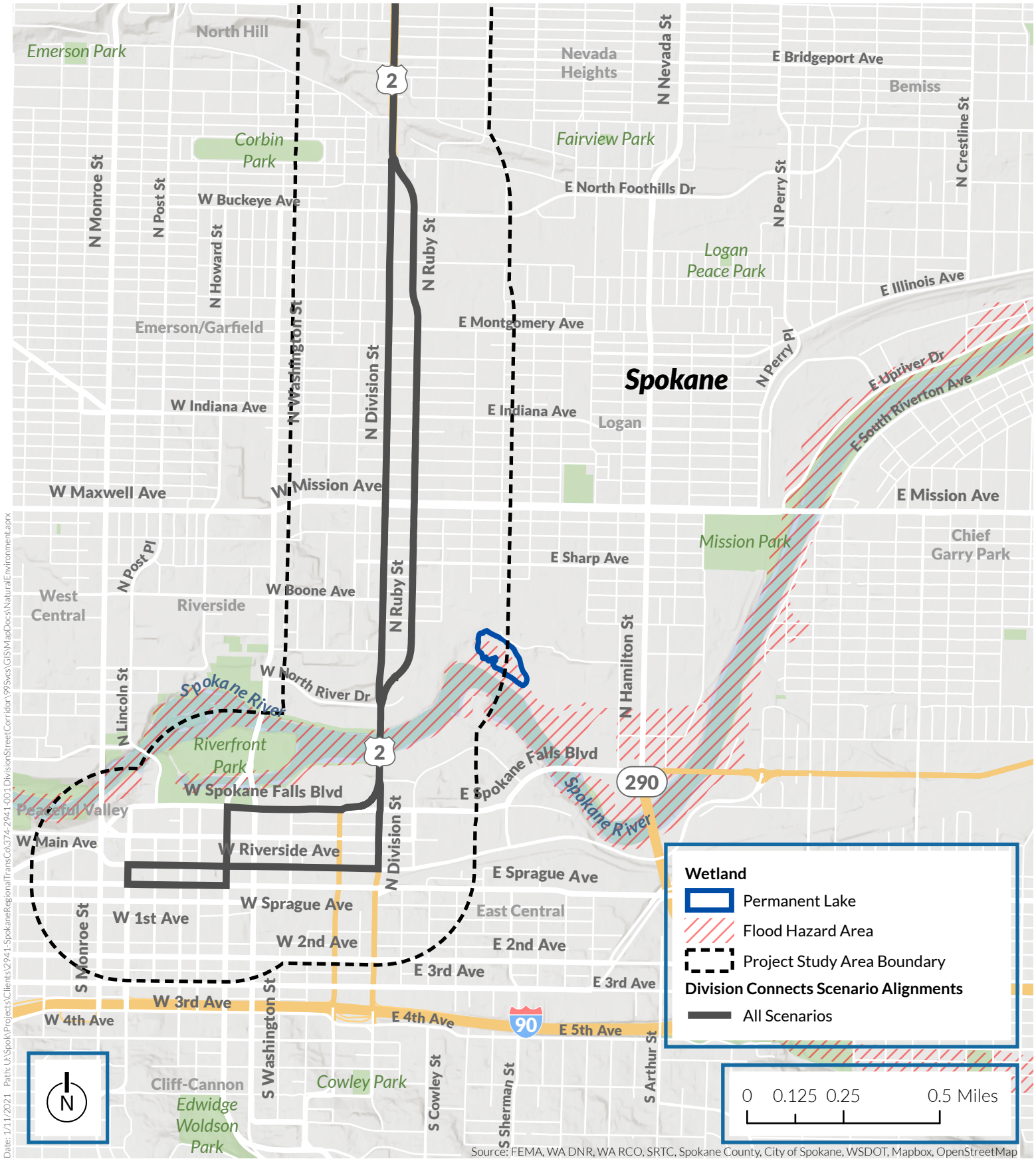

Figure 10

NATURAL ENVIRONMENT *SEGMENT 3*

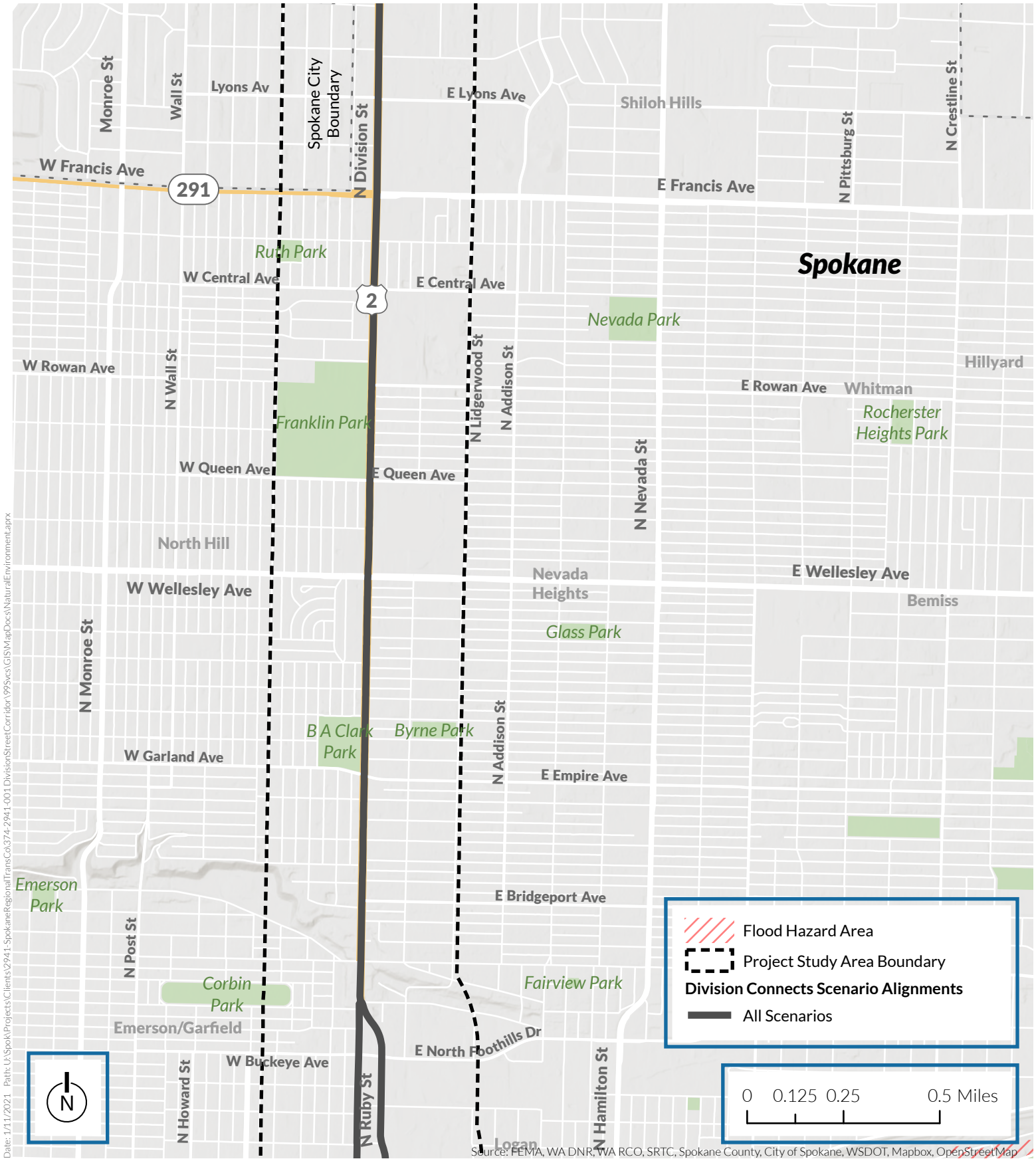

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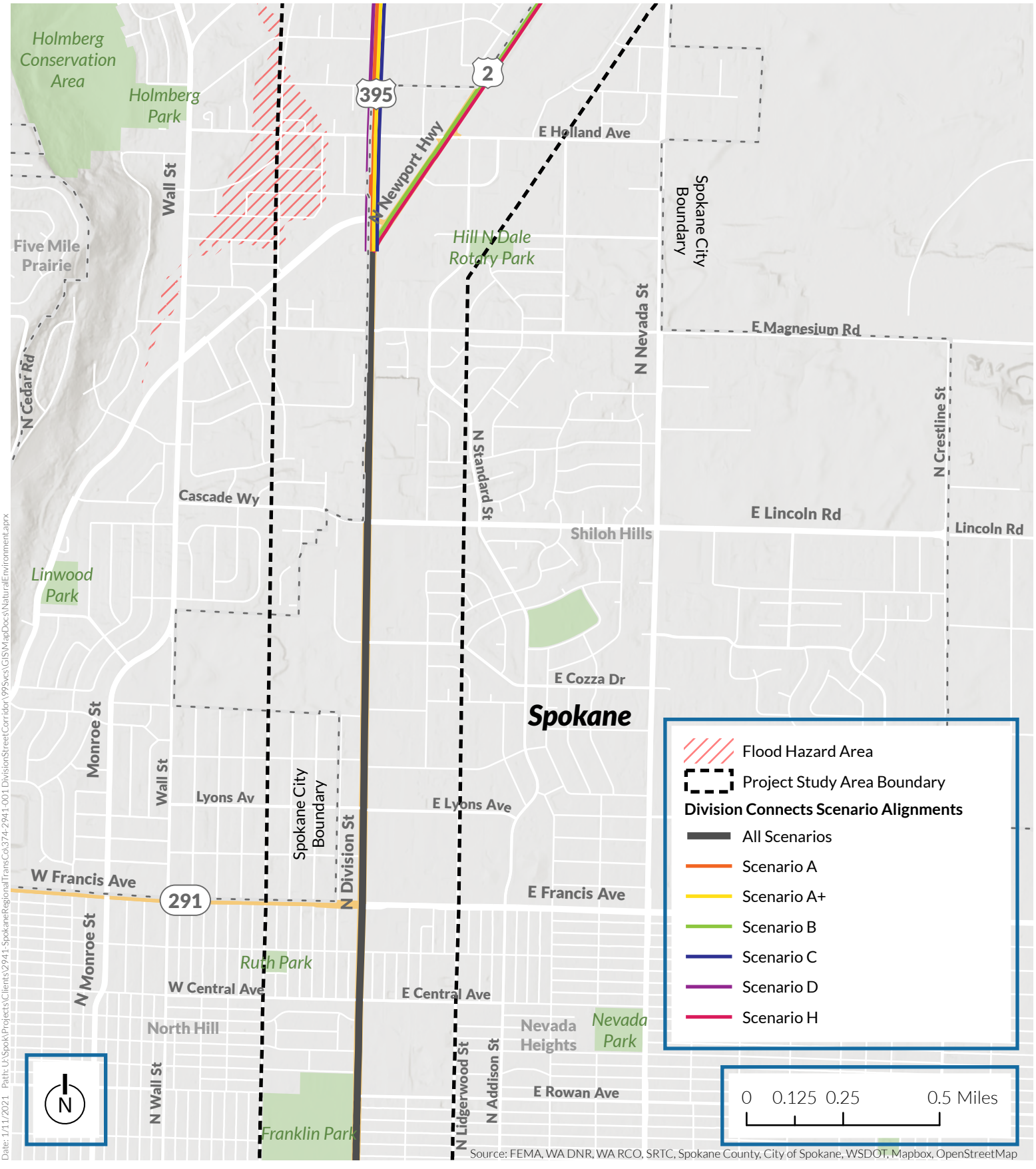
Figure 11

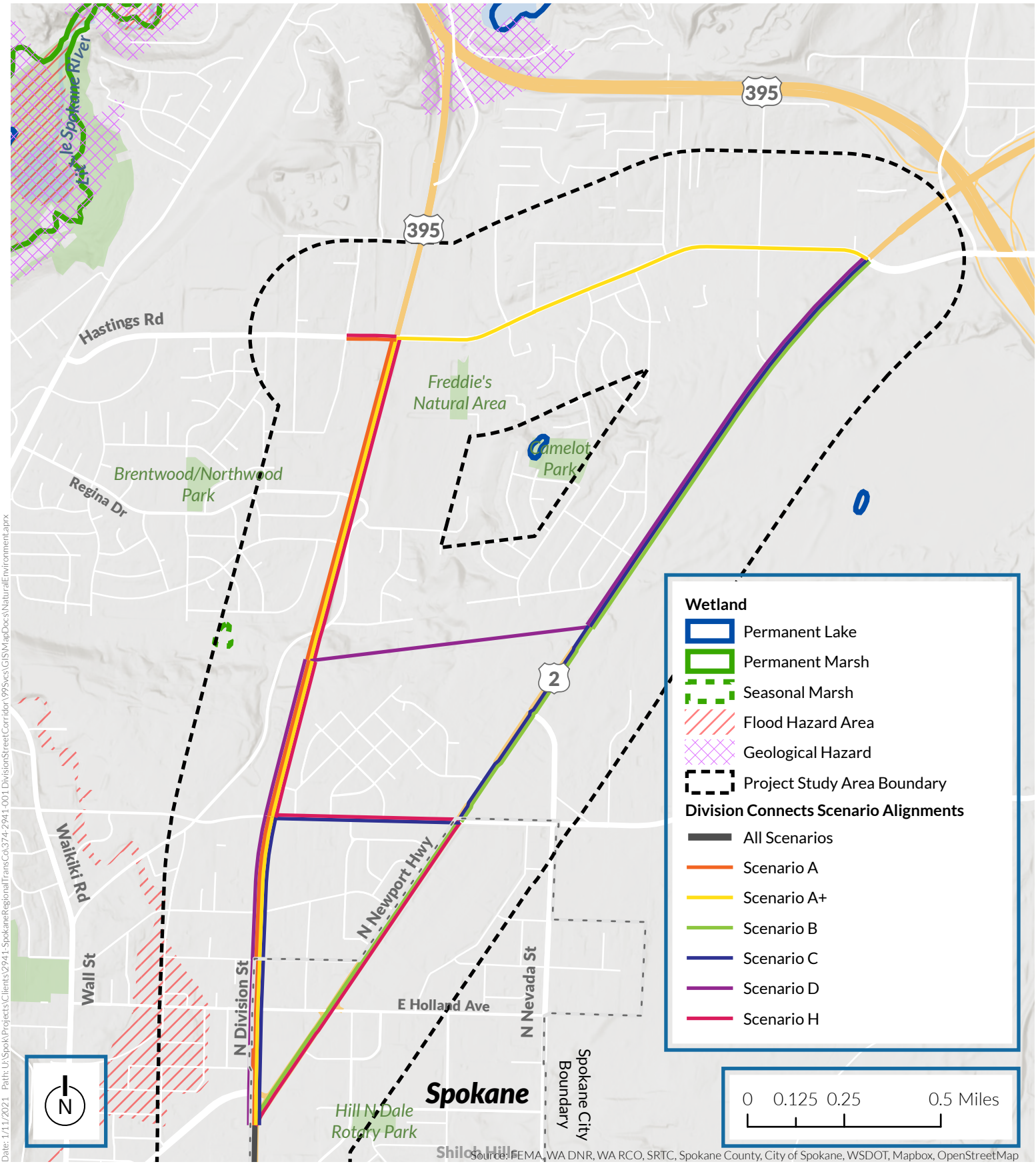
NATURAL ENVIRONMENT *SEGMENT 4*



Date: 1/11/2021 Path: U:\Spok\Projects\Clients\2941-SpokaneRegionalTransCo\374-2941-001 DivisionStreetCorridor\99Svcs\GIS\MapDocs\NaturalEnvironment.aprx

Figure 12

NATURAL ENVIRONMENT *SEGMENT 5*



APPENDIX K

Transit Sensitivity North of the "Y"
Technical Memo

TECHNICAL MEMORANDUM

To:	Darby Watson Parametrix	From:	Jennifer Emerson-Martin Iteris, Inc.
Date:	January 21, 2021		
RE:	Transit Sensitivity – North of the "Y"		

The purpose of this memo is to document the transit sensitivity of different scenarios related to boarding numbers for the future year (2040) as it relates to options for the transit route alignment north of the "Y". The results of the analysis can be used to inform a decision by SRTC, STA, and WSDOT regarding the alternative(s) to advance for the Division Corridor Study.

1 EMPLOYMENT AND HOUSEHOLD GROWTH

The SRTC model includes economic data related to employment and housing and maintains that information at the transportation analysis zone (TAZ) level. Figures illustrating employment and household growth were made in the areas north of the "Y" from the year 2015 to 2040 and demonstrate the total (the label on the TAZ) and relative growth (the shaded area for each TAZ) in the area north of the "Y". **Figure 1** illustrates employment growth along Division Street and north of the "Y" along Newport Highway. **Figure 2** illustrates households growth in the same area. As illustrated in both figures, the area north of the "Y" is forecast to experience significant growth, with approximately 2,000 employees and 1,300 households.

Figure 1 – 2015 – 2040 Employment Growth

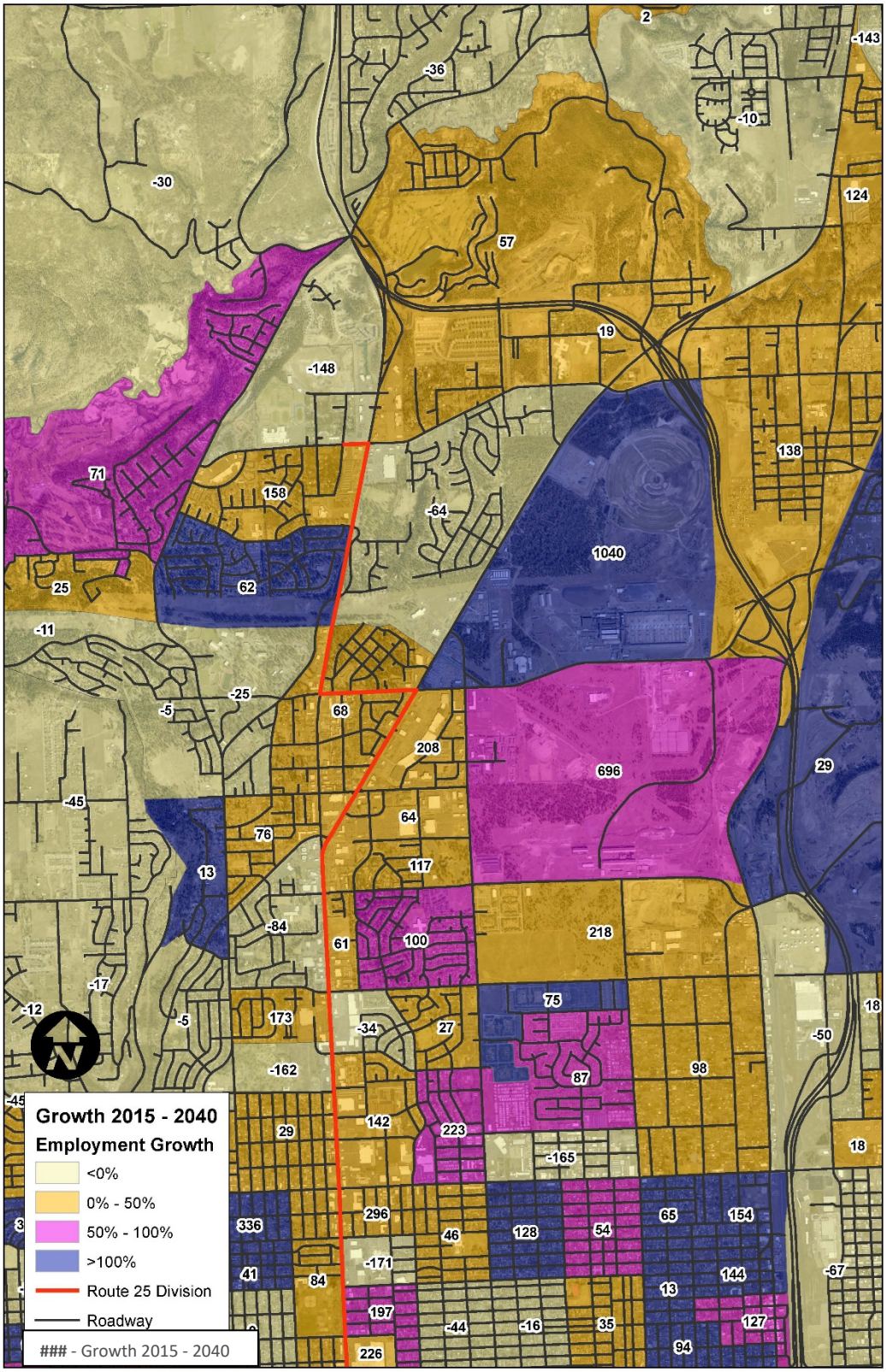
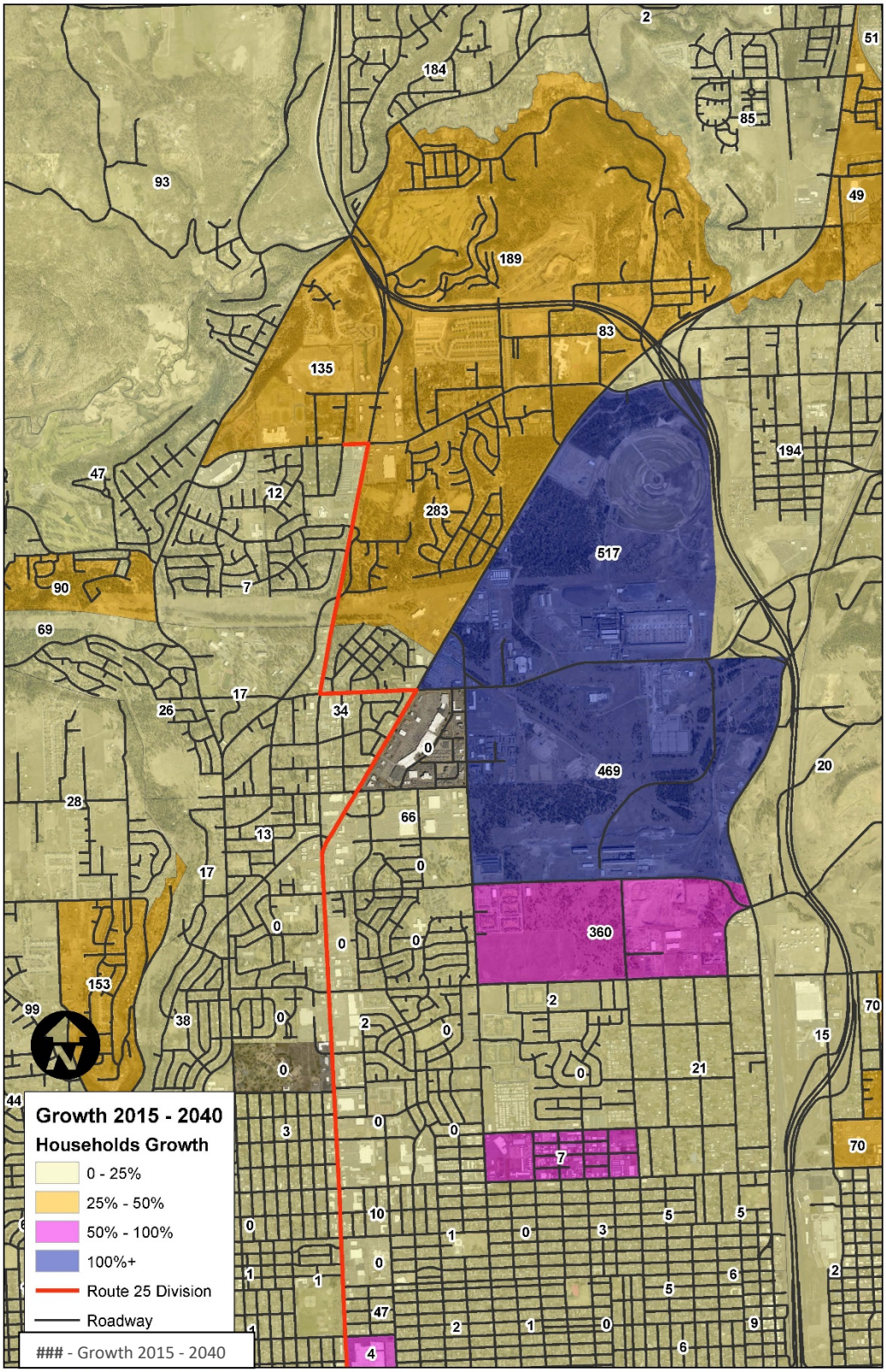


Figure 2 – 2015 – 2040 Households Growth



2 TRANSIT SCENARIO RIDERSHIP

For the transit sensitivity analysis, it was assumed that all transit routes will maintain the same headways throughout the day and will have the same configurations south of the "Y" into downtown. The headways used for the modeling effort represent the assumed typical weekday service. All of the transit scenarios (including the No Build scenario) assume that all regional transit improvements assumed in the SRTC MTP are included in the background conditions. The alignment for the 2040 No Build scenario is identical to the existing conditions and is illustrated in **Figure 1** and **Figure 2**.

The headways for the sensitivity scenarios were assumed as typical weekday service, assumed in the modeling for 5:00 AM to 12:00 PM with frequencies as assumed below:

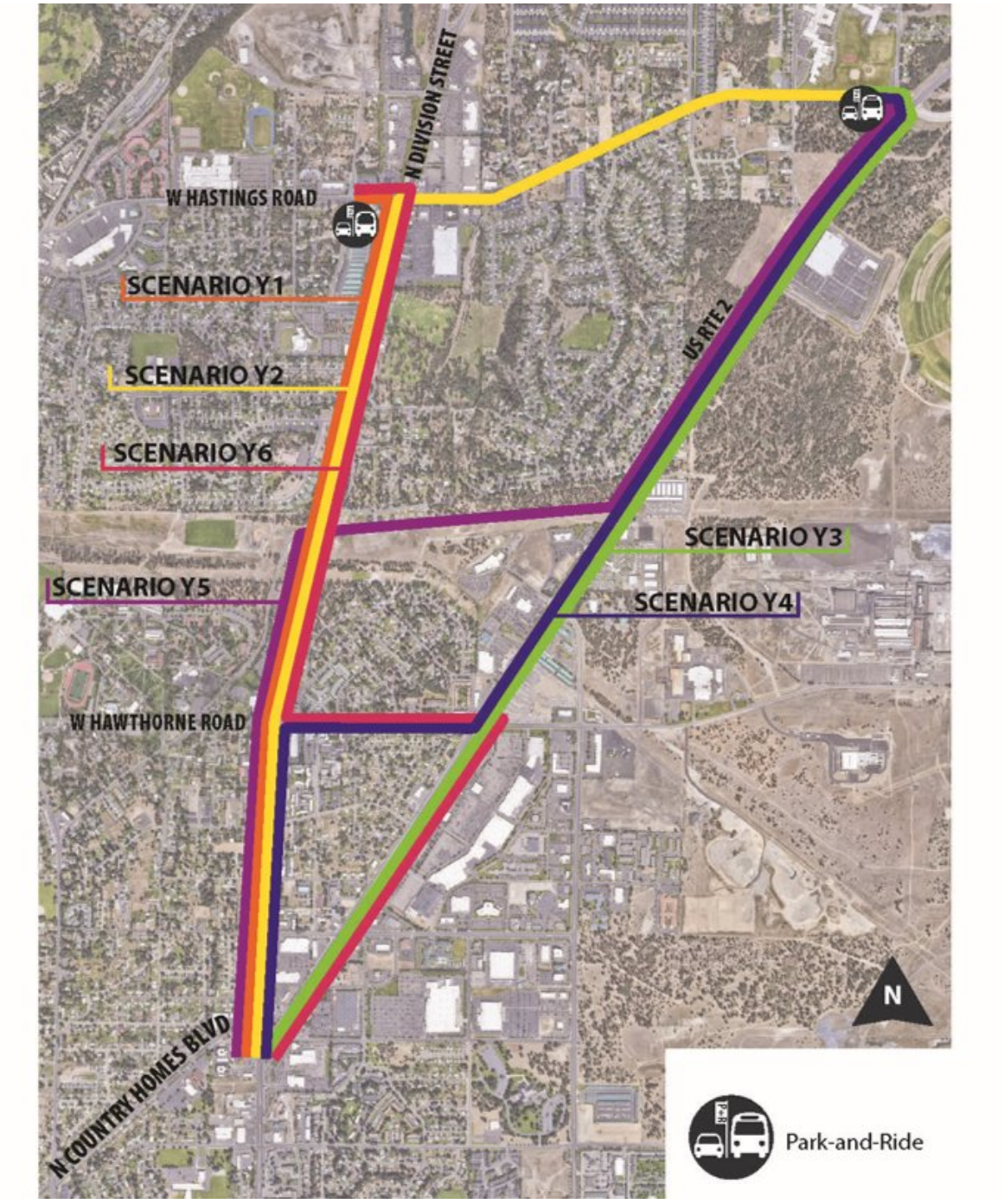
- 5:00 AM to 6:00 AM: 30 Minute Headways
- 6:00 AM to 8:30 AM: 7.5 Minute Headways
- 8:30 AM to 5:30 PM: 10 Minute Headways
- 5:30 PM to 8:00 PM: 7.5 Minute Headways
- 8:00 PM to 11:00 PM: 15 Minute Headways
- 11:00 PM to 12:00 AM: 30 Minute Headways

The transit sensitivities will be evaluated for the following scenarios:

- **Scenario Y1**: From the "Y", travel north on Division Street to the existing Hastings park and ride
- **Scenario Y2**: From the "Y", travel north on Division Street to a stop at Hastings Road and Division Street, then continuing east on Hastings Road/Farwell Road to a new park and ride located at Farwell Road and Newport Highway
- **Scenario Y3**: From the "Y", travel north on Newport Highway to a new park and ride located at Farwell Road and Newport Highway
- **Scenario Y4**: From the "Y", travel north on Division Street to Hawthorne Road, turn east and continue to Newport Highway, turn north on Newport Highway to a new park and ride located at Farwell Road and Newport Highway
- **Scenario Y5:** From the "Y", travel north on Division Street to the existing Bonneville power line right-of-way, turn east and continue to Newport Highway, turn north on Newport Highway to a new park and ride located at Farwell Road and Newport Highway
- **Scenario Y6**: Same as the existing service (2020), From the "Y", travel north on Newport Highway to Hawthorne Road, travel west on Hawthorne Road to Division Street, the travel North on Division Street to the existing Hastings park and ride
    - *The alignment for Scenario Y6 is identical to the existing service (2020) and the future No Build scenario.*

Figure 3 illustrates the transit scenarios north of the "Y".

Figure 3: Transit Sensitivity Scenarios



The comparison of ridership was completed for the entire Route 25 for Inbound and Outbound. Additionally, the analysis captured the daily trips starting at the associated park and rides on the north end of the routes. **Table 1** summarizes the transit sensitivities for the six (6) scenarios. Park and ride capacity and person trip usage is also summarized in **Table 1**.

Notable comparisons include:

- Transit Ridership
  - All future high-performing transit scenarios increase forecast ridership when compared with the No Build scenario.
  - When comparing the six high-performing transit scenarios with each other, they generally perform similarly, with Scenario Y4 attracting the greatest number of average weekday boardings.
  - The growth in average daily boardings ranges between 1,300 and 1,575 when compared with the No Build, which equates to an increase of approximately 30% (a range of 27% to 34% increase).
  - The two high-performing transit scenarios with the lowest forecast ridership are Y3 and Y6, which both travel along Newport Highway between the "Y" and Hawthorne Road. This route alignment misses some of the ridership demand from the residential and non-residential development west of Division Street between the "Y"/Country Homes Boulevard and Hawthorne Road.
  - The high performing transit scenario which has the lowest forecast ridership of all scenarios is Y3, which is the only scenario that does not provide service to Whitworth University.
- Park and Ride Usage
  - In general, the park and ride at Hastings Road attracts more daily trip ends than the Farwell Road park and ride, with Hastings Road attracting between 385 and 460 daily boardings and Farwell Road attracting between 185 and 355 daily boardings.
  - Using an estimated 2.35 persons per vehicle it is estimated that the approximate required parking at the Hastings park and ride exceeds the current capacity of 135 stalls for all future year scenarios.

Table 1: Transit Sensitivity Comparison

Year and Scenario	Total Route 25 Average Daily Boardings	Difference in Average Daily Boardings (Compared to No Build)	Park and Ride Location[1,2]	Park and Ride Peak Period Person Bus Trips (Raw Model Estimates)	Approximate Parking Required
Existing	3,075		Hastings	280	120
2040 – No Build **Not high-performing*	4,650		Hastings	385	165
2040 – Scenario Y1	6,075	1,425	Hastings	460	195
2040 – Scenario Y2	6,025	1,375	Farwell	185	80
2040 – Scenario Y3	5,925	1,275	Farwell	275	120
2040 – Scenario Y4	6,225	1,575	Farwell	355	155
2040 – Scenario Y5	6,150	1,500	Farwell	240	105
2040 – Scenario Y6	5,950	1,300	Hastings	415	180

[1]Hastings Park and Ride parking capacity assumed to be 135 stalls.
[2]Farwell Park and Ride parking capacity assumed to be 500 stalls.

3 ANALYSIS LIMITATIONS

Iteris discussed a park and ride forecasting issue with SRTC related to model forecasts, because the modeled return park and ride trips appeared lower than expected, and in some cases zero. It was noted by SRTC that this model anomaly was a recognized issue and one that SRTC has discussed with PTV (the software developer). The recommendation was to consider post-processing the results for return trips, or to use the model as-is for relative comparison. For this analysis, the modeling team used the relative comparison of growth in boardings and did not post-processing return park and ride trips.