DIVISION CONNECTS

PEOPLE. PLACES. PROGRESS.

DRAFT STATE OF THE CORRIDOR

April 28, 2020

TABLE OF CONTENTS

DIVISION STUDY EXECUTIVE SUMMARY

1. INTRODUCTION AND KEY FINDINGS 1

1.1 Corridor Description 2
- Figure 1a. Study Area 3
- Figure 1b. Study Area - Segments 4
- 1.2 Key Findings 5
- 1.3 Plan and Study Review 6

2. CORRIDOR DEMOGRAPHICS 9
- Figure 2. Car Ownership 10
- Figure 3. Disability 11
- Figure 4. Income 12

3. EXISTING CONDITIONS 13

3.1 Land Use 13
- Table 1. Land Use Summary 14-15
- Figure 5. Household Density 16
- Figure 6. Current Zoning 17
- Figure 7. Comprehensive Plan Land Use Designations 18

3.2 Transportation 19
- Segment 1. Browne/Division couplet south of the Spokane River - Both Directions 19
- Segment 2. The Spokane River to Euclid Avenue - Northbound (Ruby Street) 20
- Segment 2. The Spokane River to Euclid Avenue - Southbound (Division Street) 20
- Segment 3. Euclid Avenue to Francis Avenue 21
- Segment 4. Francis Avenue to the Newport Highway (the “Y”) 21
- Segment 5. Newport Highway SR-2 (the “Y”) to the North Spokane Corridor - Northbound 22
- Segment 5. N Division SR-395 (the “Y”) to the North Spokane Corridor - Southbound 22
- Segment 6. US 395 from the “Y” to the North Spokane Corridor Interchange 23

3.2.1 Traffic 24
- Figure 8. 2019 Average Northbound Traffic in the Study Corridor on US 2 25
- Figure 9. 2019 Average Southbound Traffic in the Study Corridor on US 2 25

3.2.2 Transit 28
- Table 2. Headways by Service Type 28
- Figure 10. Points of Interest Near Route 25 30
- Table 3. Division Street Points of Interest 31
- Table 4. Study Area Park and Rides 31
- Table 5. High Ridership Stops 32
- Figure 11. Boardings and Alightings by Stop 33
- Figure 12. Average Weekday Ridership by Hour 34

TABLE OF CONTENTS

3.2.3 Active Transportation 36
Figure 13. Active Transportation Network 37
3.2.4 Safety 38
Table 6. Intersection Crashes 38
Figure 14. Crash Types 39
Figure 15. Vehicle to Vehicle Crash Types 39
Figure 16. Severe and Fatal Crashes 40
Figure 17. Crash Trends 41
Figure 18. Vehicle to Pedestrian and Bike Collisions 42
Figure 19. Pedestrian and Bike Collisions with Injuries 42
3.3 Environmental Resources 44
3.3.1 Historic and Cultural Resources 44
Figure 20. Historic Districts 45
3.3.2 Natural Environment 46
Figure 21. Natural Environment Features 46

APPENDIX A - Division Street Corridor Land Use Analysis Memorandum
APPENDIX B - Division Street Corridor Cultural Resources Review
APPENDIX C - Safety Analysis Memorandum
APPENDIX D - ITS Architecture Review
APPENDIX E - Traffic and Transit Data (electronic appendix)

STATE OF THE CORRIDOR EXECUTIVE SUMMARY

Background

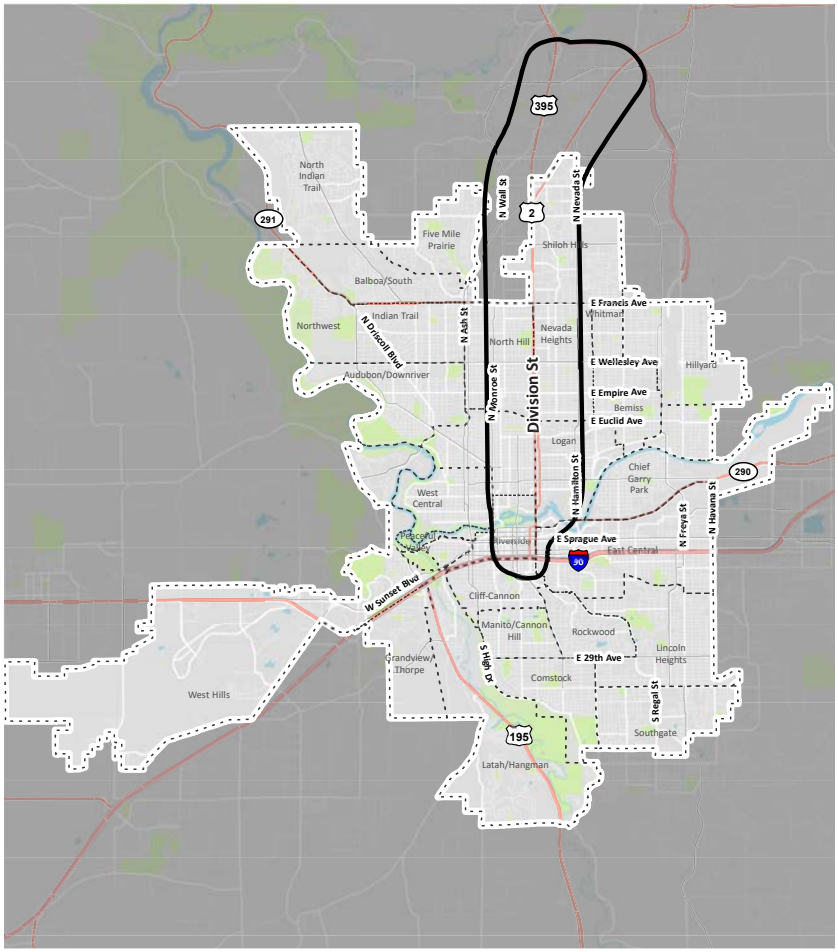
The Division Street Corridor Study is looking at the future of transportation and land use along this important street in Spokane. The Study is a coordinated effort between the Spokane Regional Transportation Council (SRTC), Spokane Transit Authority (STA), the City of Spokane, Spokane County, and the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



Legend

Spokane City Limits

Study Area

Neighborhood Boundaries

0 1 2 3 4 Miles

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).

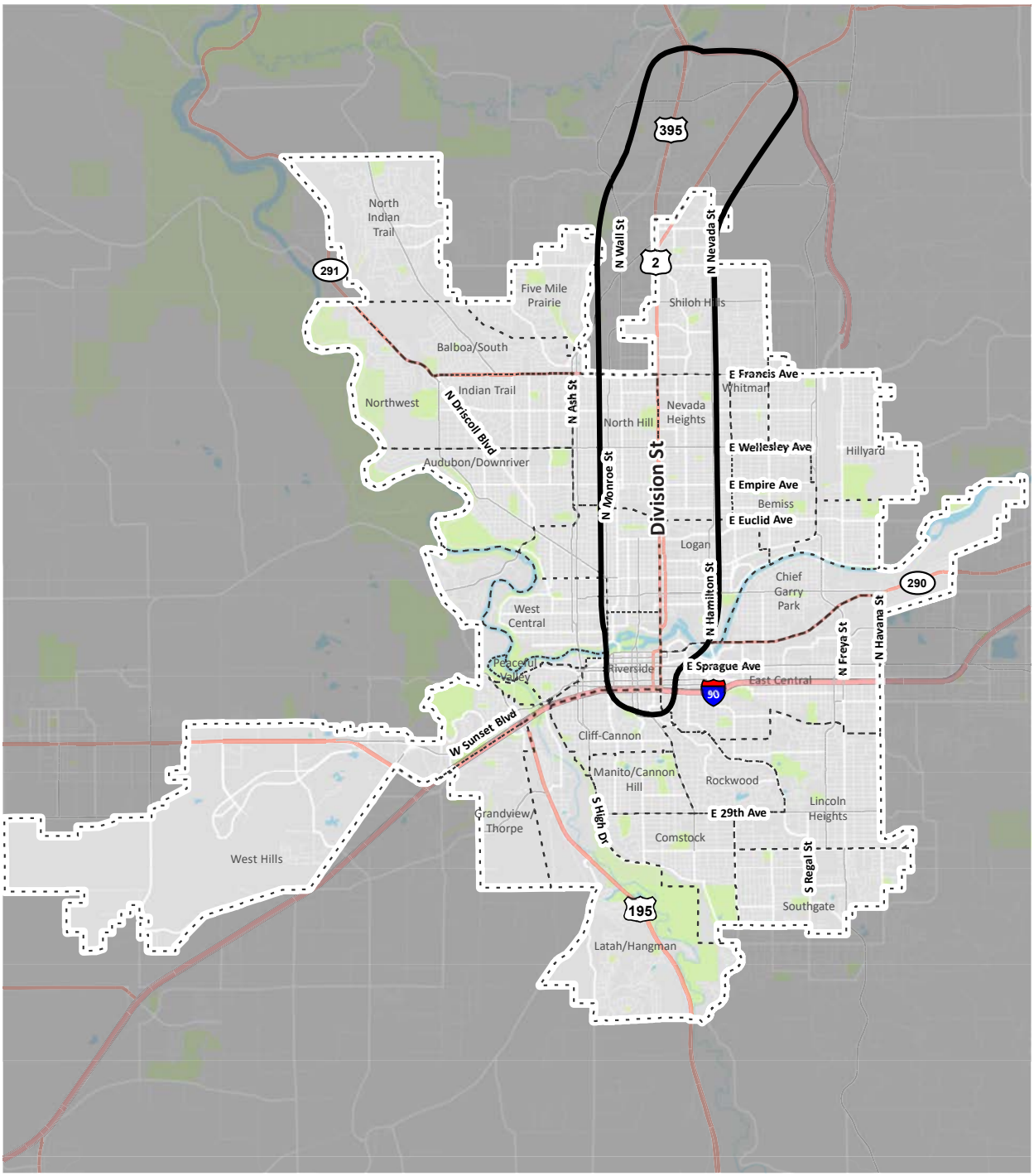
The study corridor includes the area within ¾ mile of either side of Division Street, which encompasses Hamilton Street to the east and Monroe Street to the west as shown in Figure 1a. STA Route 25 runs the entire length of the corridor. The study area is purposely broad to understand the function, role,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

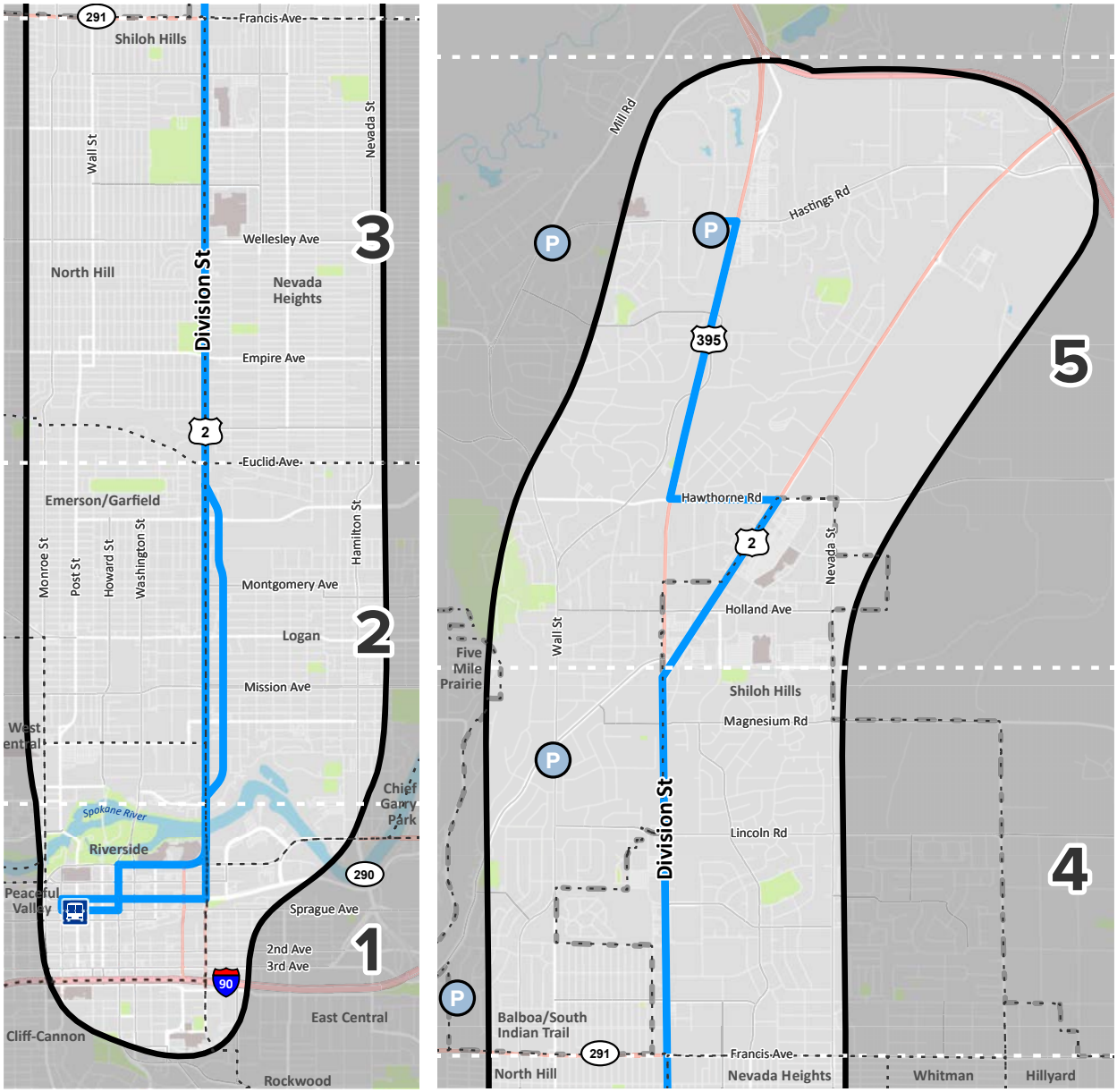
Spokane City Limits

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.

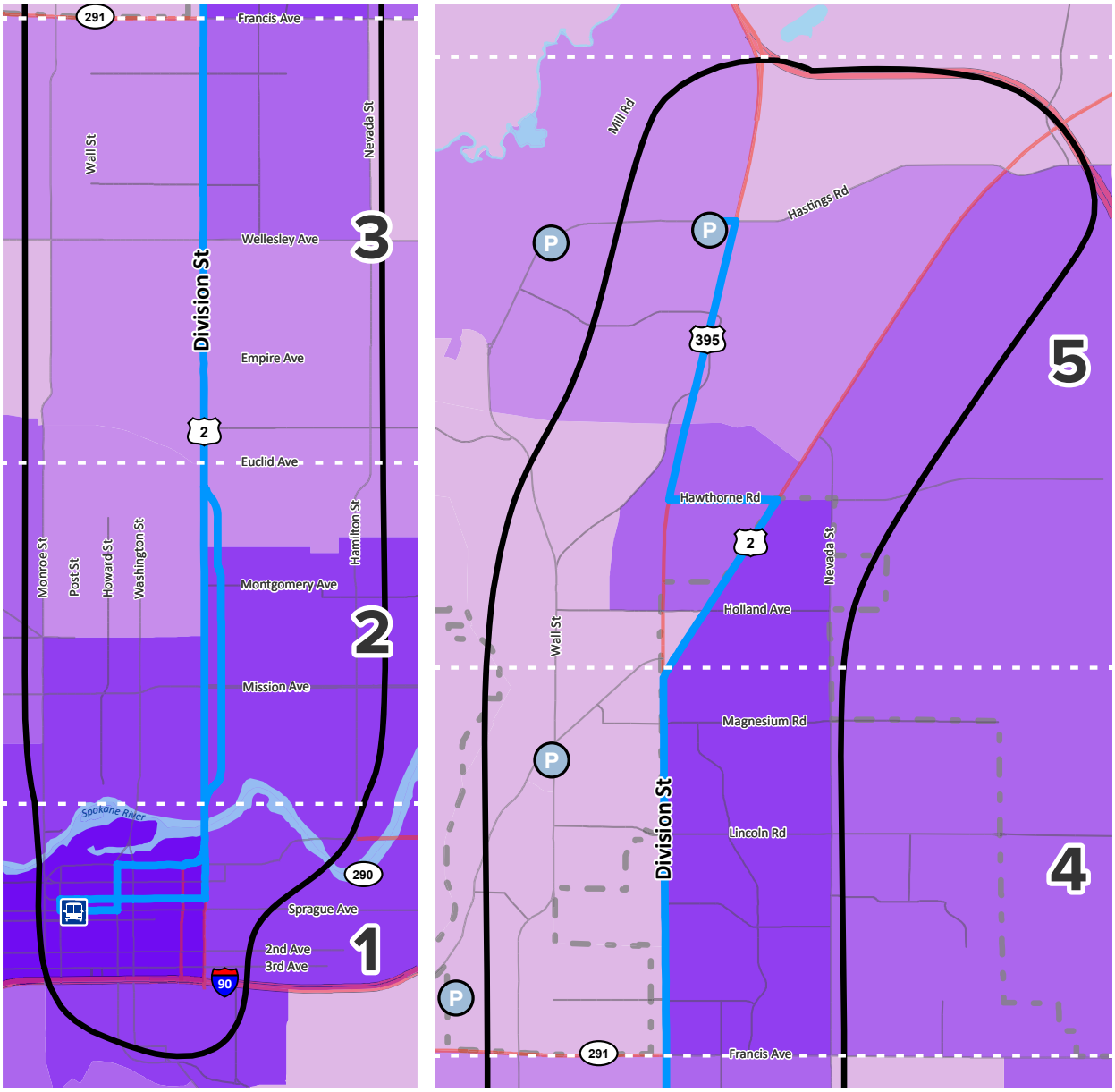
Demographic factors are important to understanding the travel needs of those living in the study area and inform discussion on land use needs. In general, low income households tend to use transit at a greater rate, while people with disabilities can experience substantial challenges in getting to bus 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

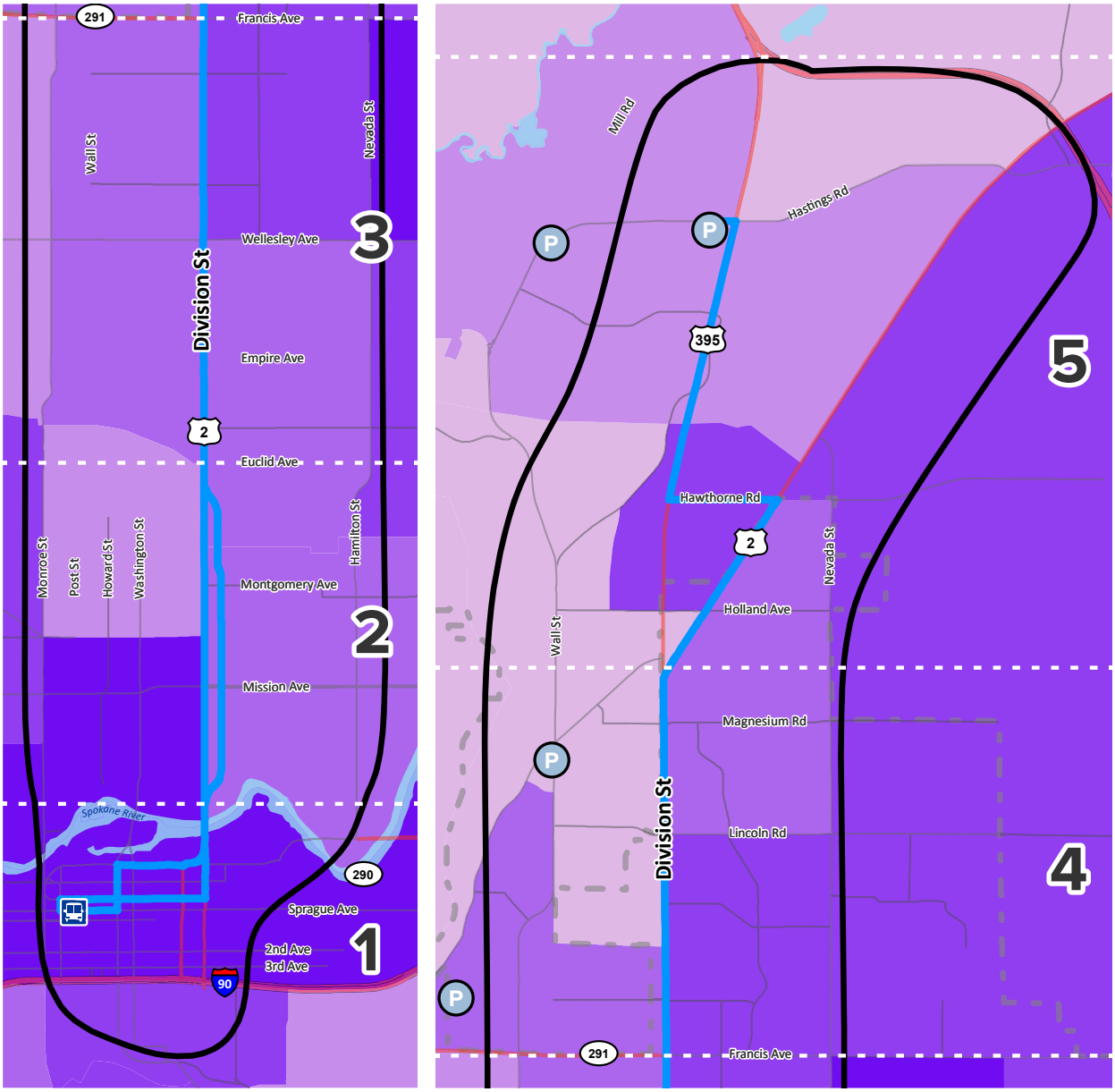
Spokane City Limits

Study Area

Study Segment Boundaries

0 0.25 0.5 1 Miles

Figure 3. Disability



Legend

Percent Population with Disability

High

Low

Park & Ride

STA Plaza

Division Line- STA Route 25

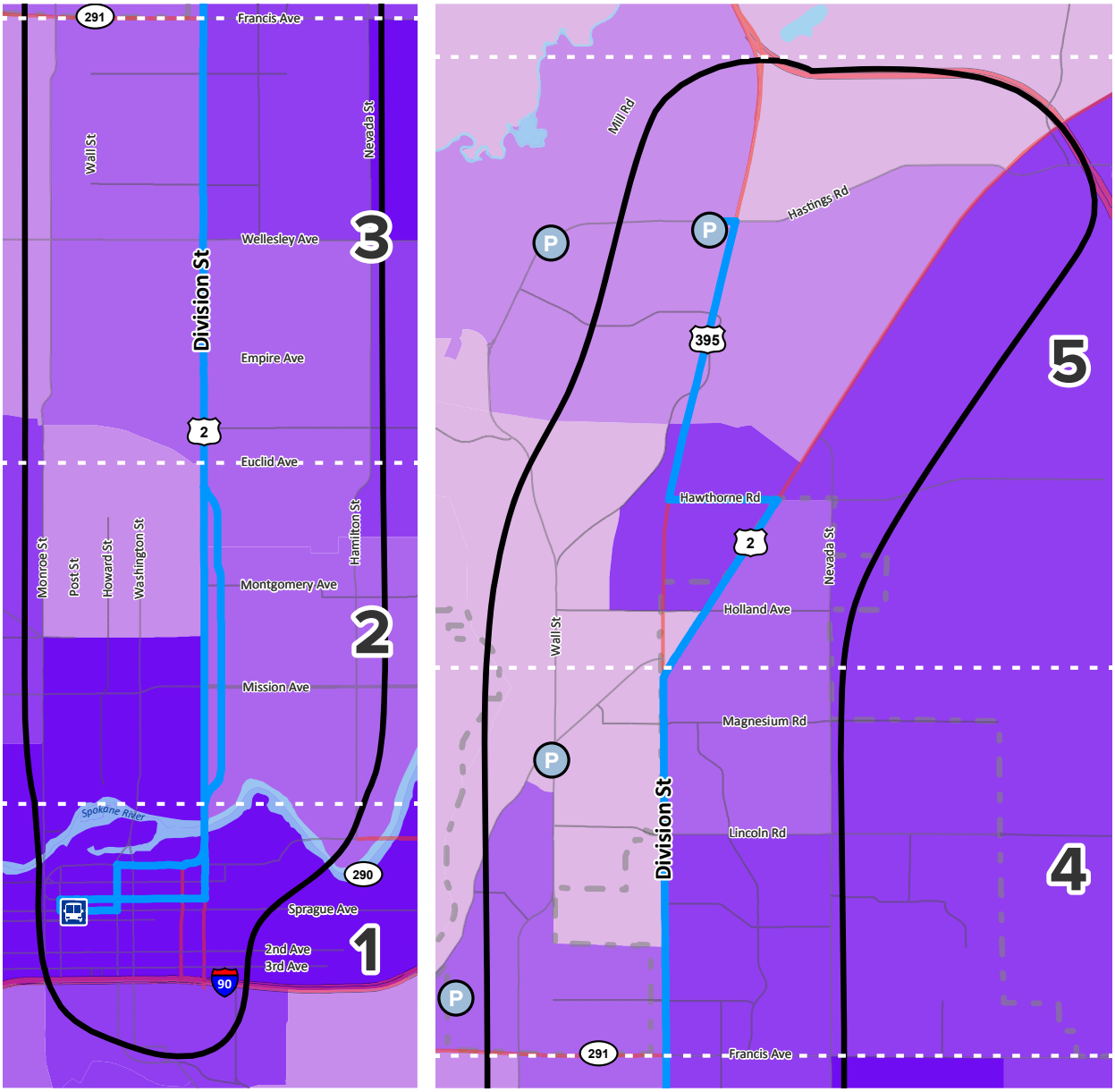
Spokane City Limits

Study Area

Study Segment Boundaries

0 0.25 0.5 1 Miles

Figure 4. Income



Legend

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.

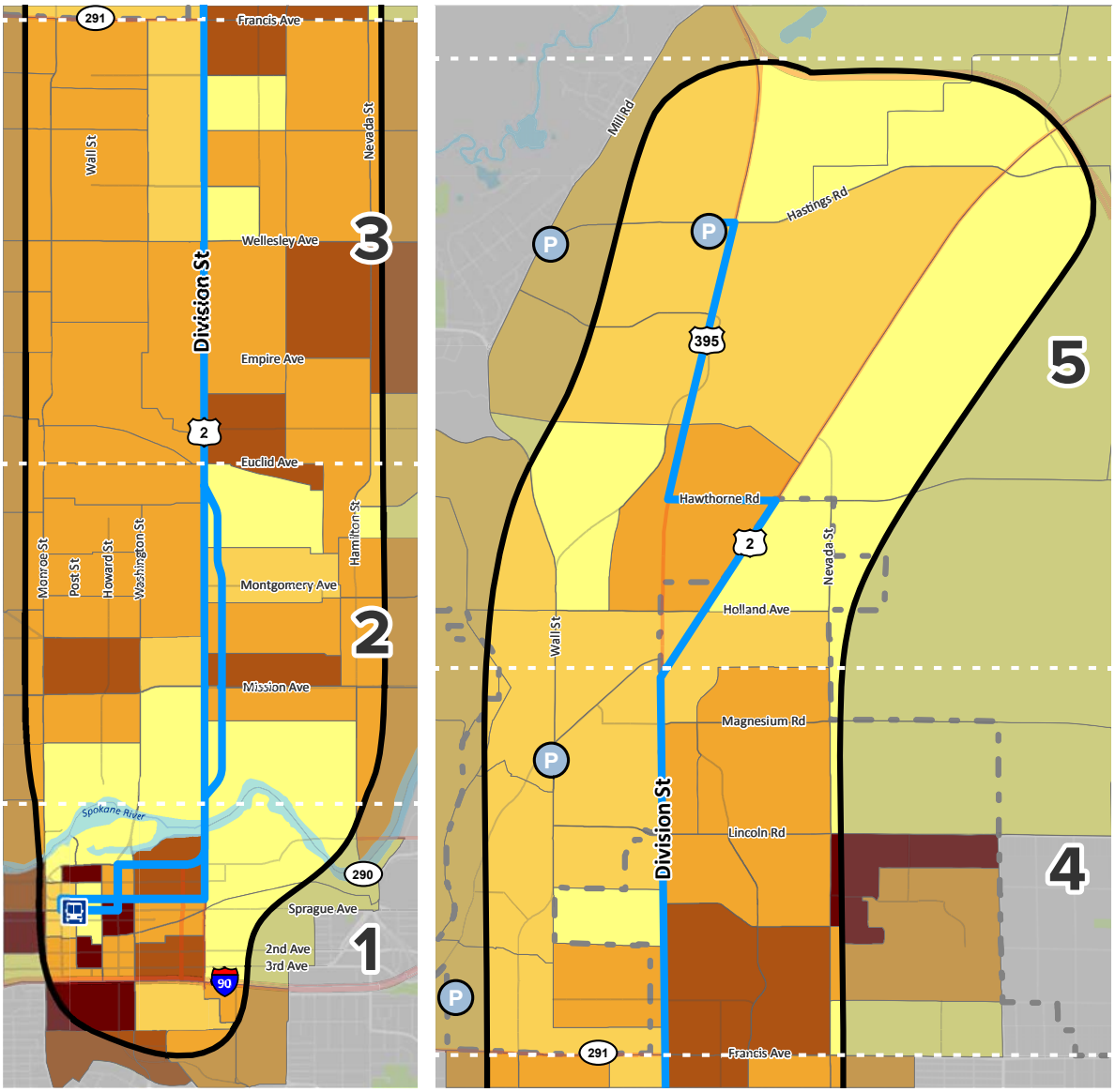
Table 1. Land Use Summary

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



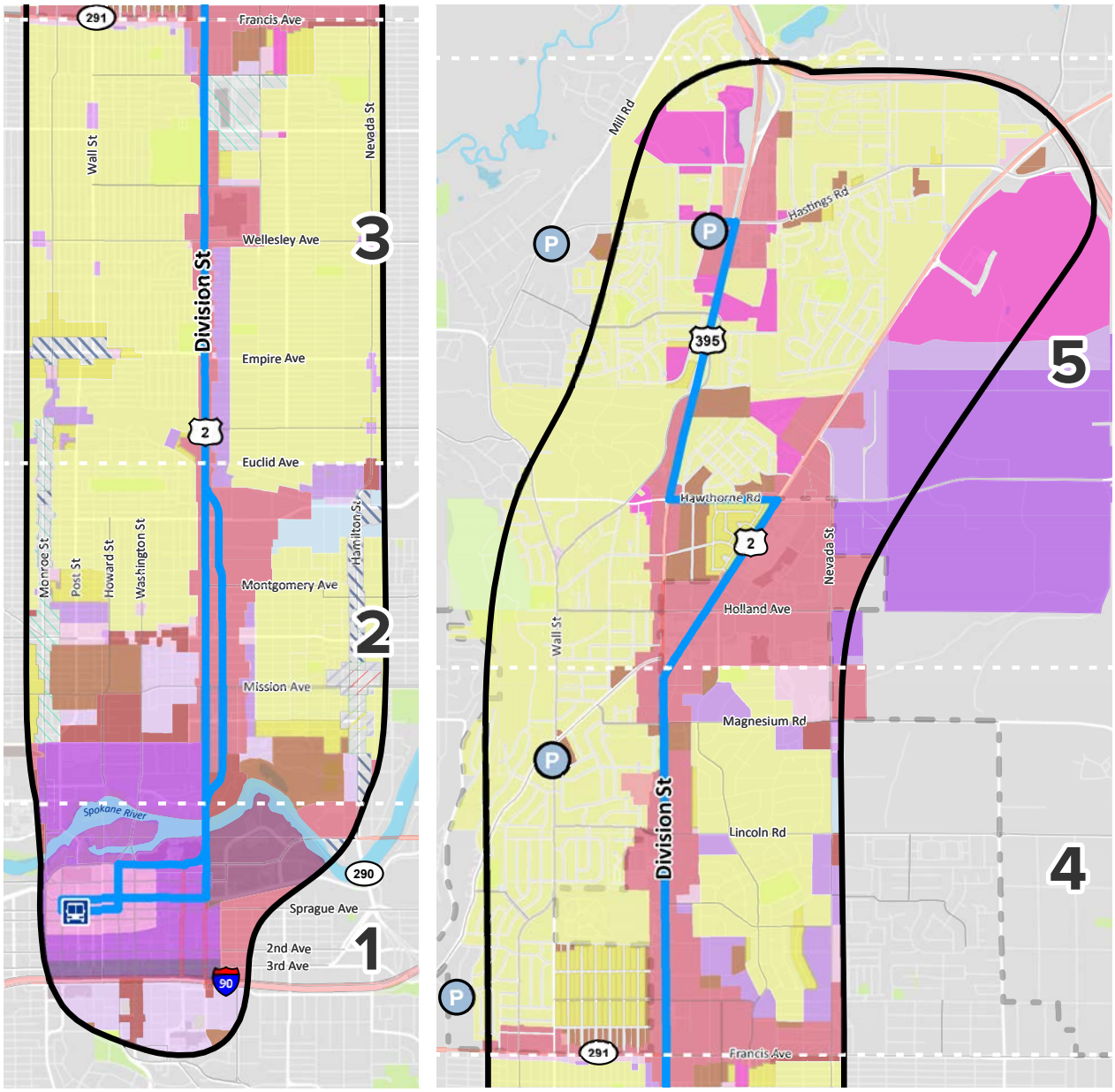
Legend

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



Legend

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

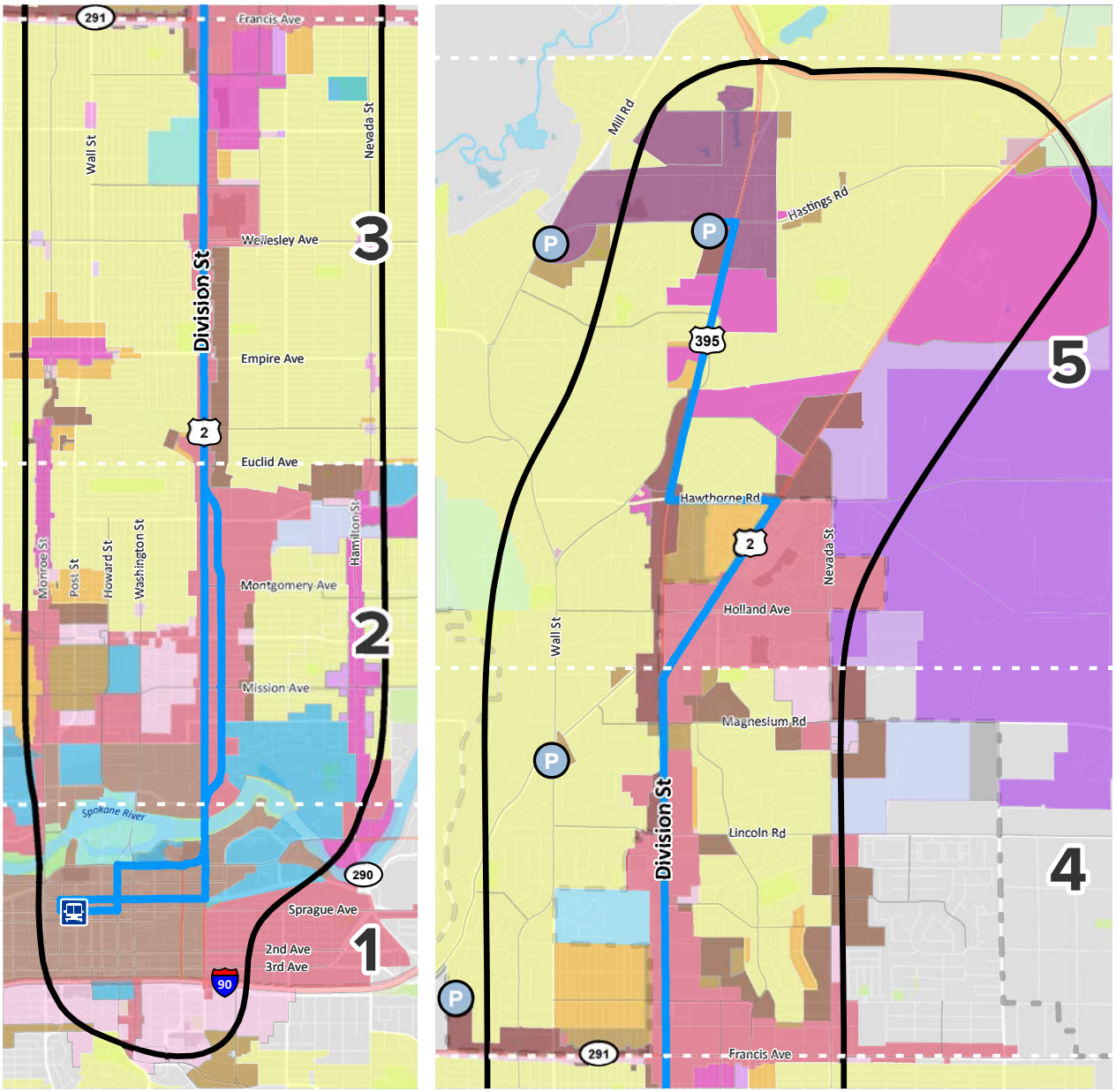
Spokane County Zoning

- 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

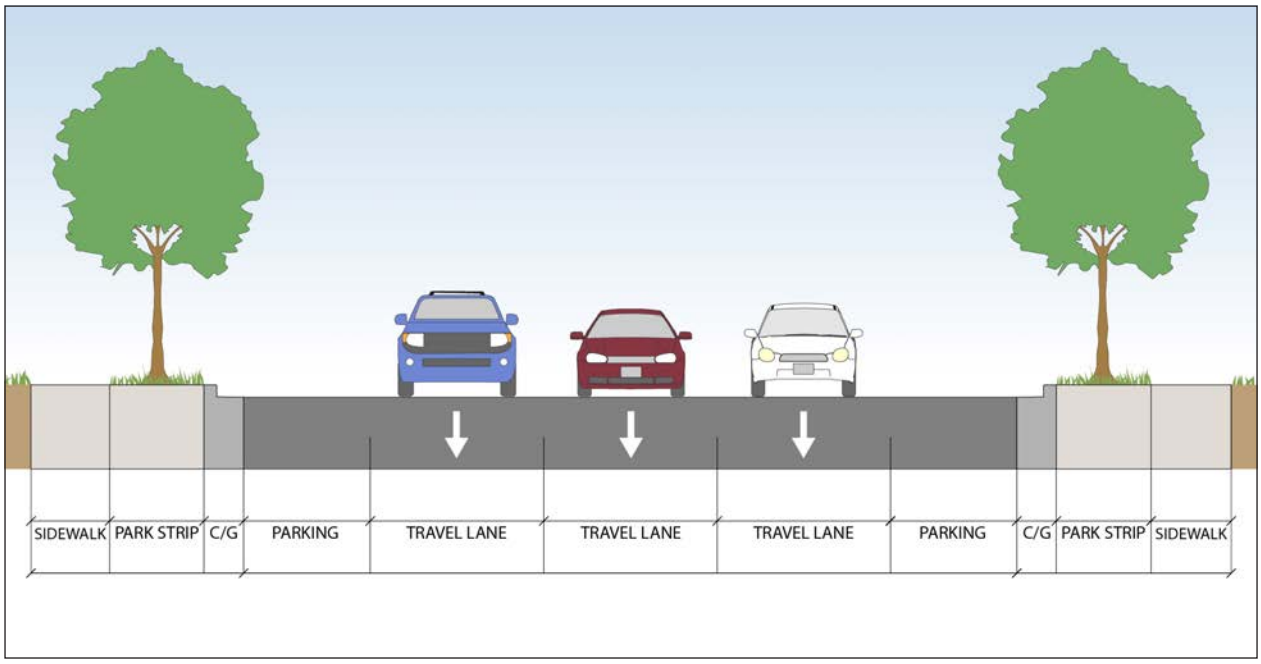
0 0.25 0.5 1 Miles

3.2 Transportation

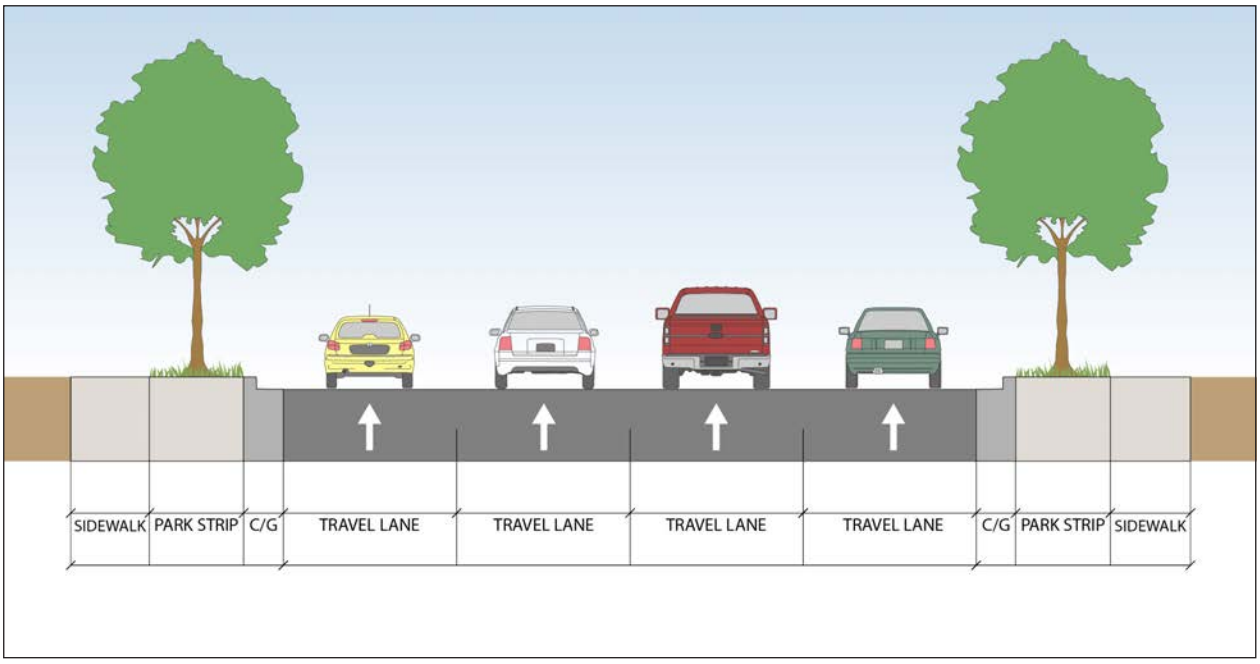
As the highest volume north-south street in Spokane, Division Street plays an important role in the transportation network and provides access to thousands of homes, jobs, and services. With average weekday vehicle trips exceeding 50,000, Division Street connects north Spokane to downtown, I-90, and 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:

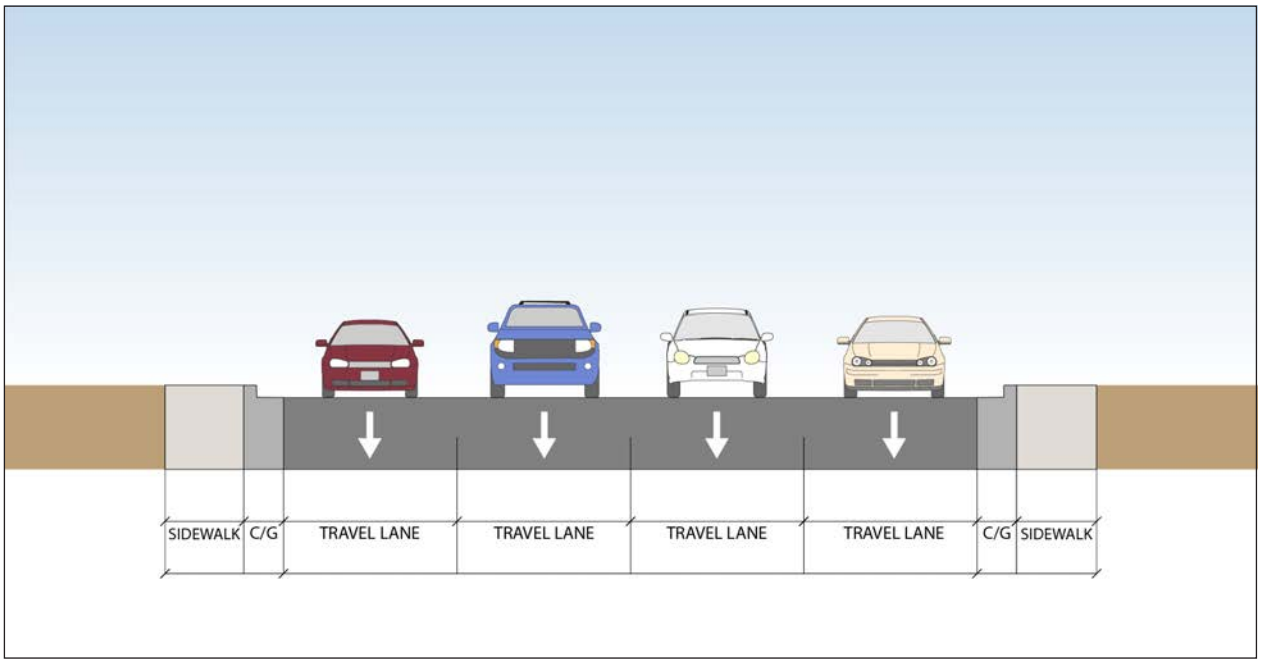
Segment 1. Browne/Division couplet south of the Spokane River - Both Directions



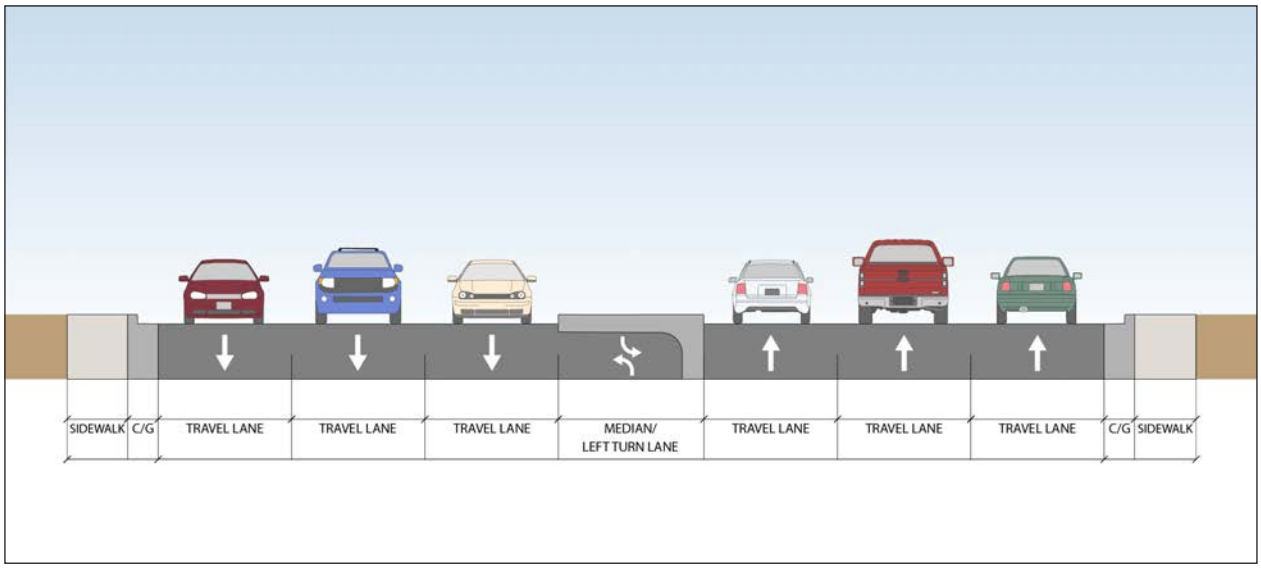
Segment 2. The Spokane River to Euclid Avenue - Northbound (Ruby Street)



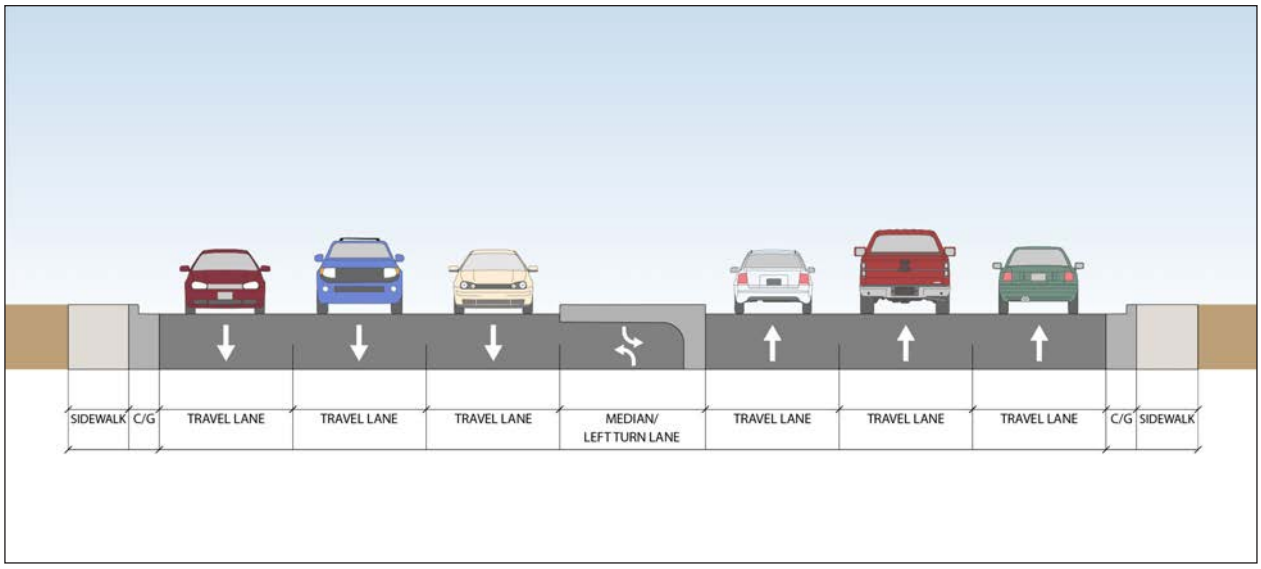
Segment 2. The Spokane River to Euclid Avenue - Southbound (Division Street)



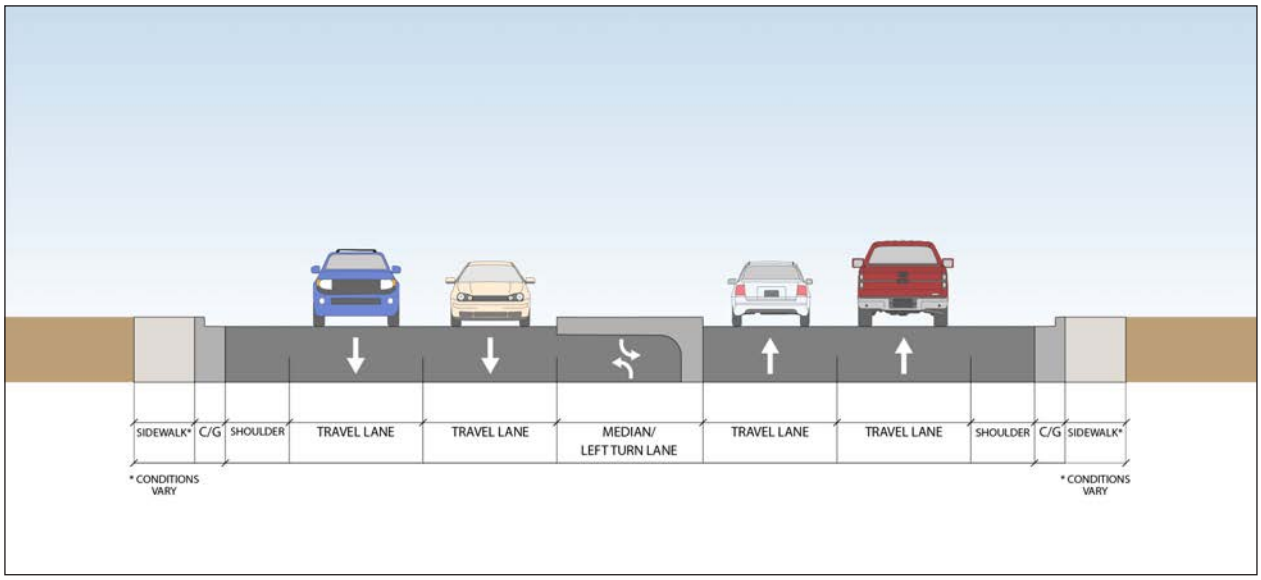
Segment 3. Euclid Avenue to Francis Avenue



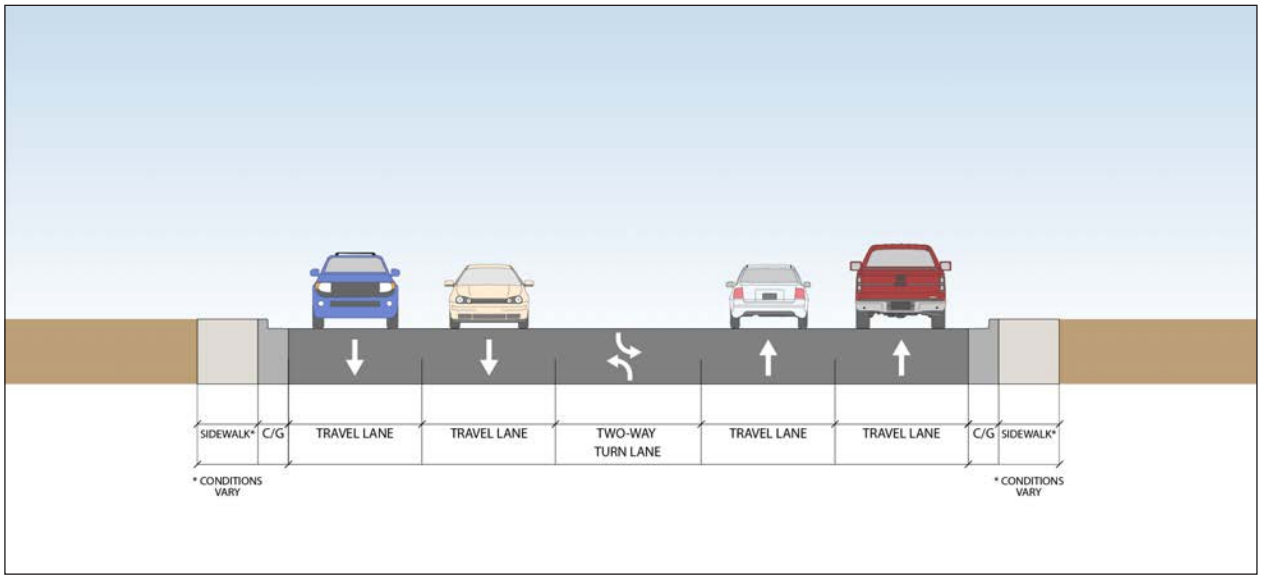
Segment 4. Francis Avenue to the Newport Highway (the "Y")



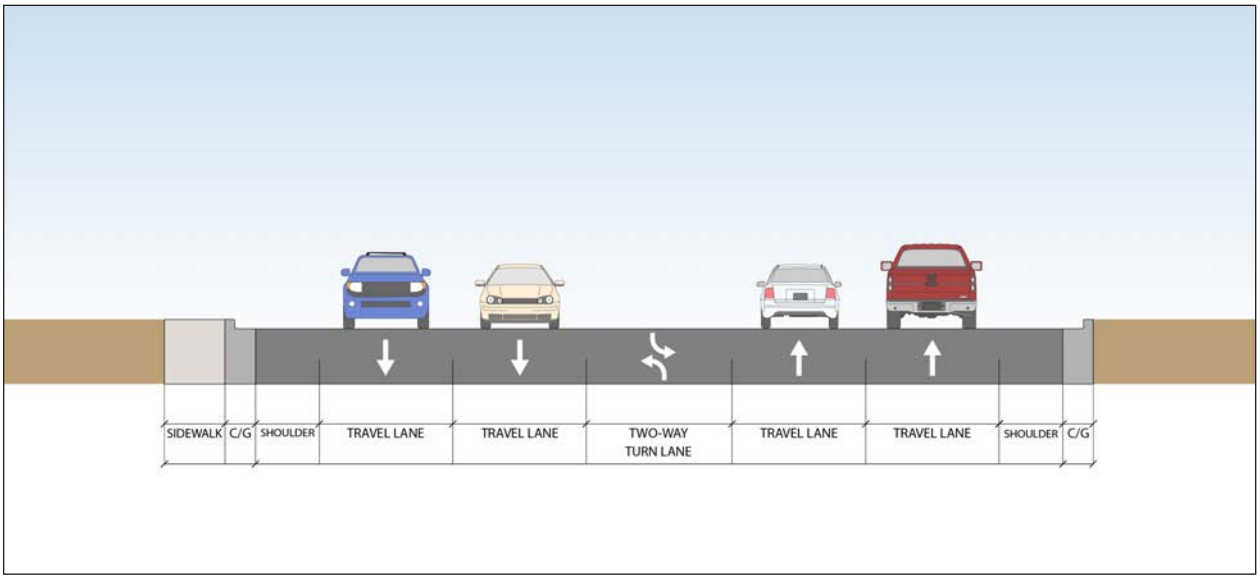
Segment 5. Newport Highway SR-2 (the "Y") to the North Spokane Corridor - Northbound



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



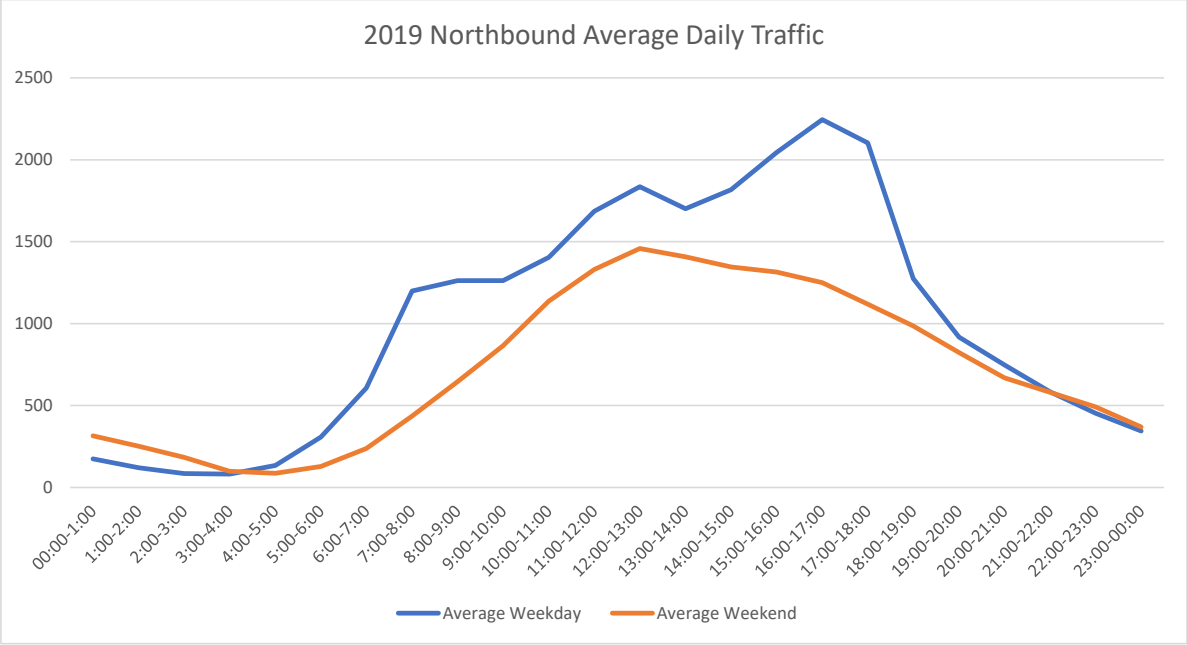
3.2.1 Traffic

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.

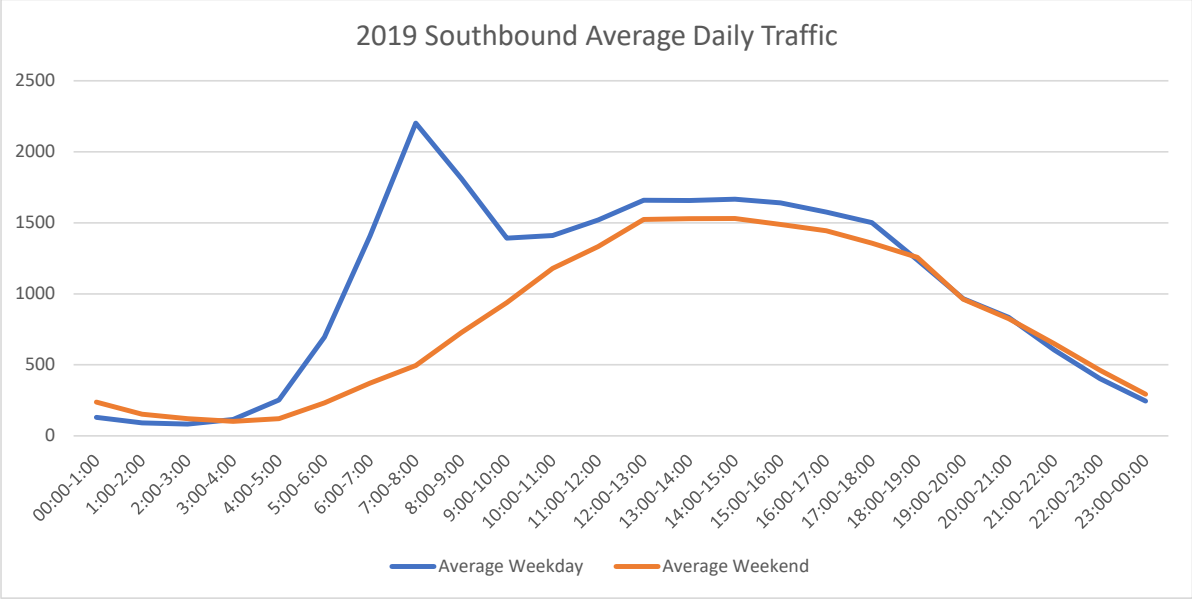
WSDOT has two permanent traffic recorders on US 2 just north of the intersection of North River Drive (northbound) and just south of Euclid Ave (southbound). Daily combined northbound and southbound volumes vary between 45,000 and 51,000 vehicle trips during weekdays and between 32,000 and 40,000 on 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.

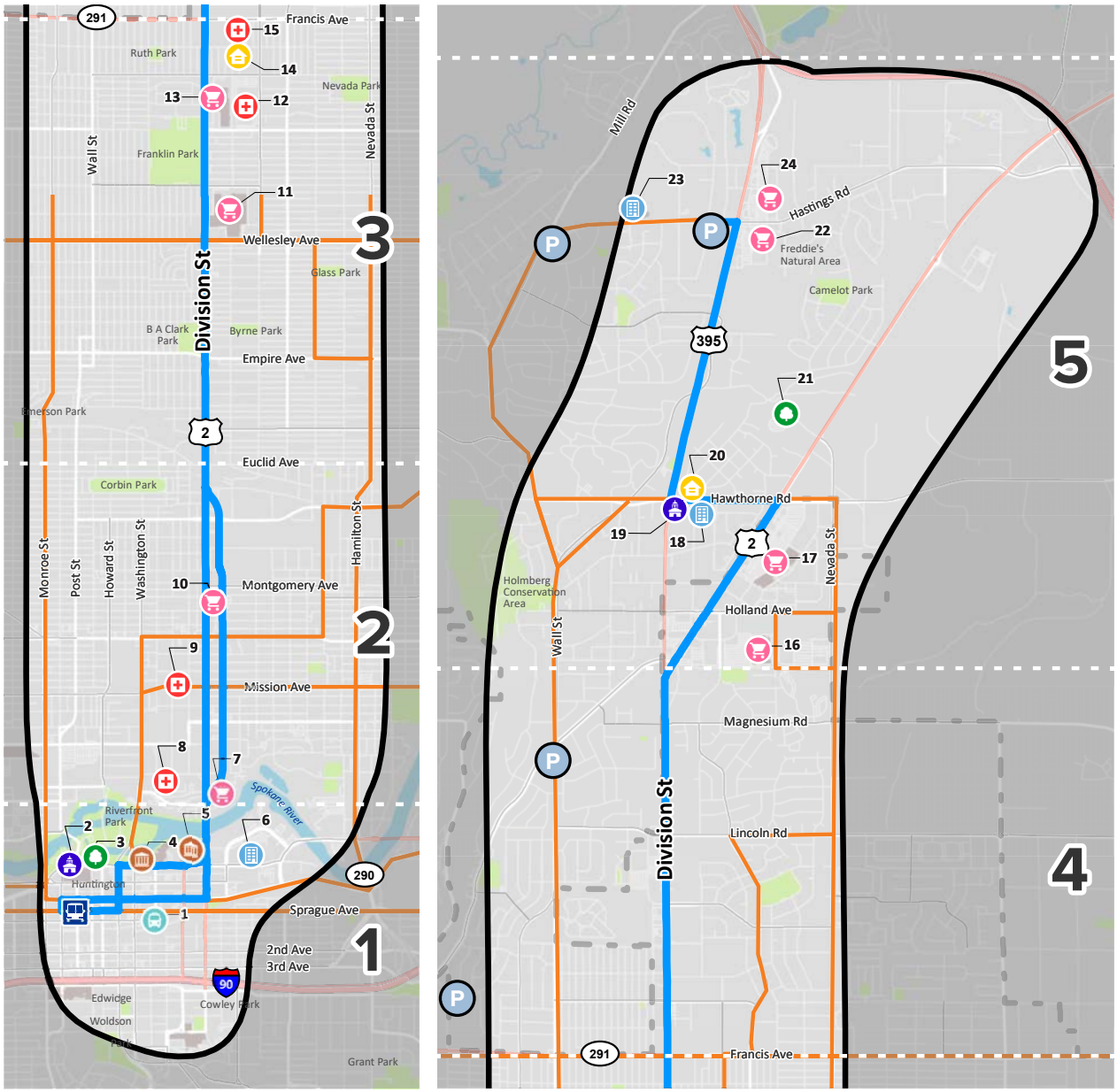
This route is just over 9 miles long and intersects with several other bus routes. Key transfer locations to other bus services are located at:

- 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.

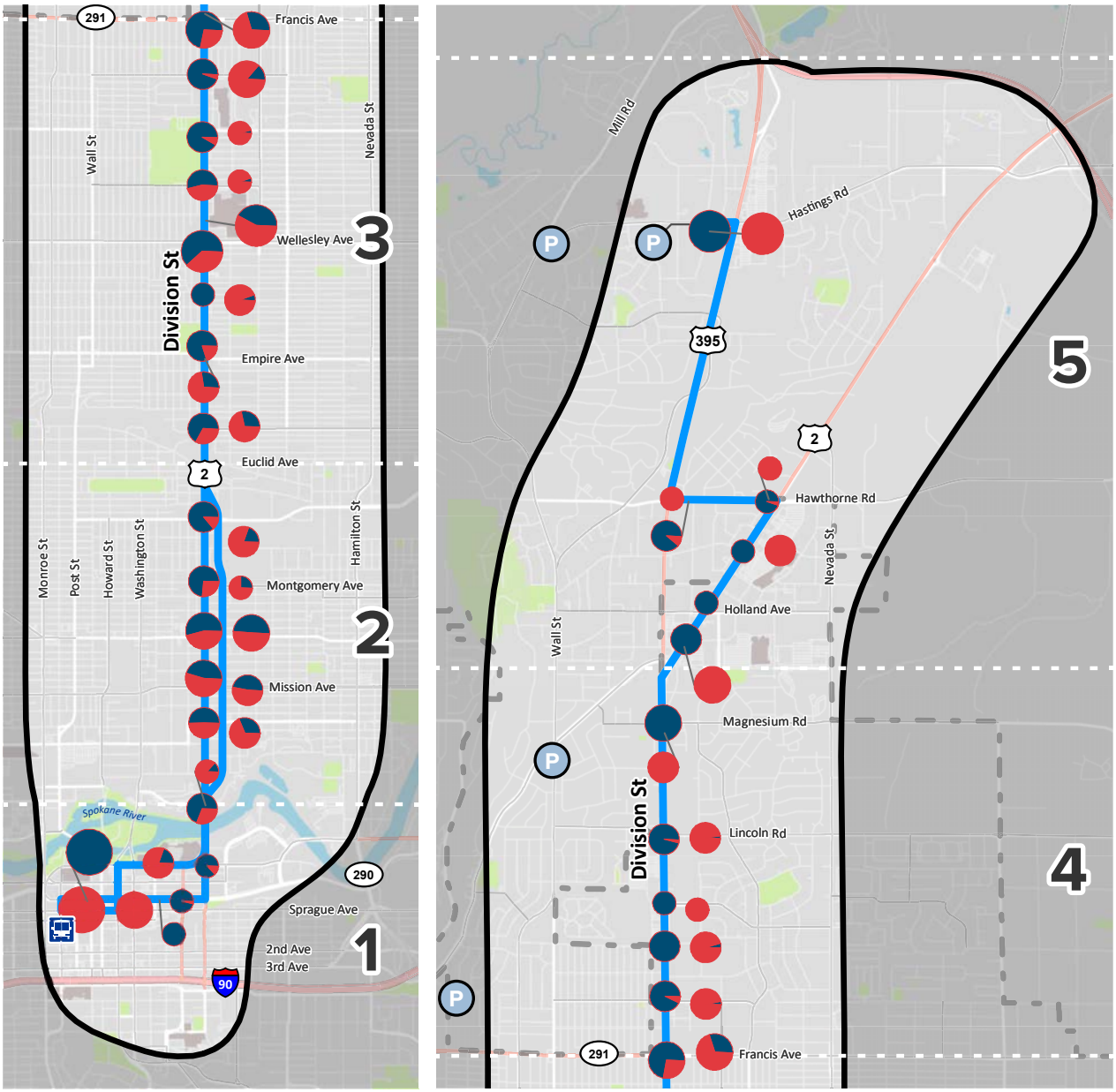
28 northbound stops and 30 southbound stops are located along Route 25. The location of stops and average daily ridership activity by stop is shown in Figure 11. Highest ridership stops with more than 100 combined boardings and alightings are summarized in Table 5. These stops are located at route termini 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

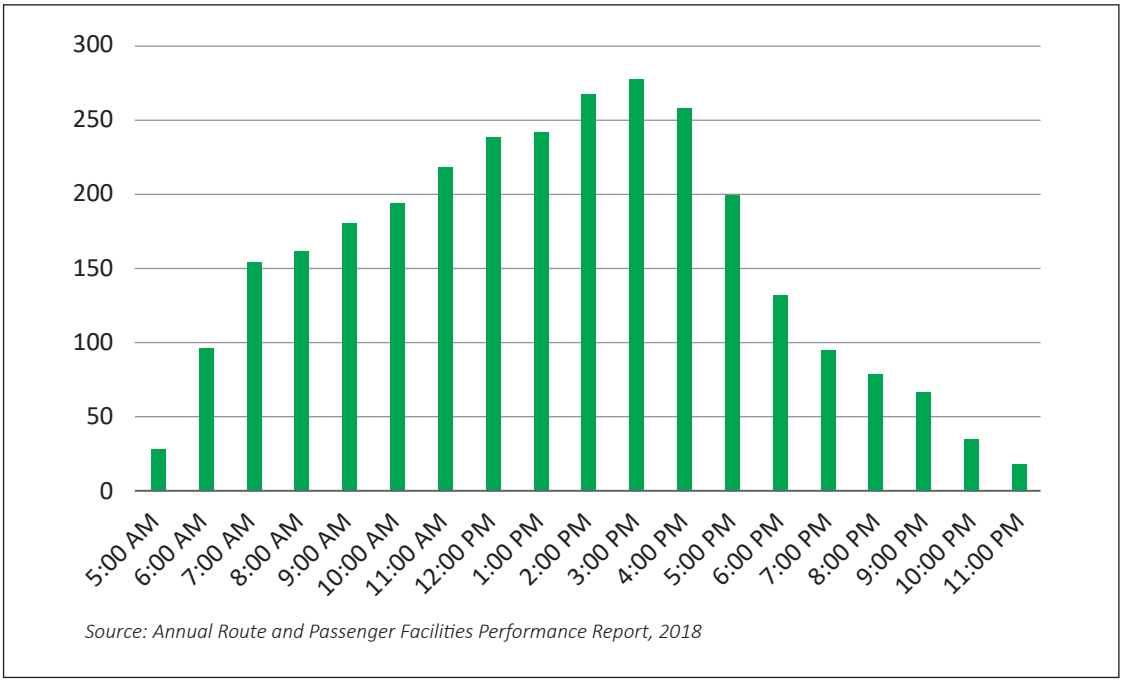
Study Area

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.

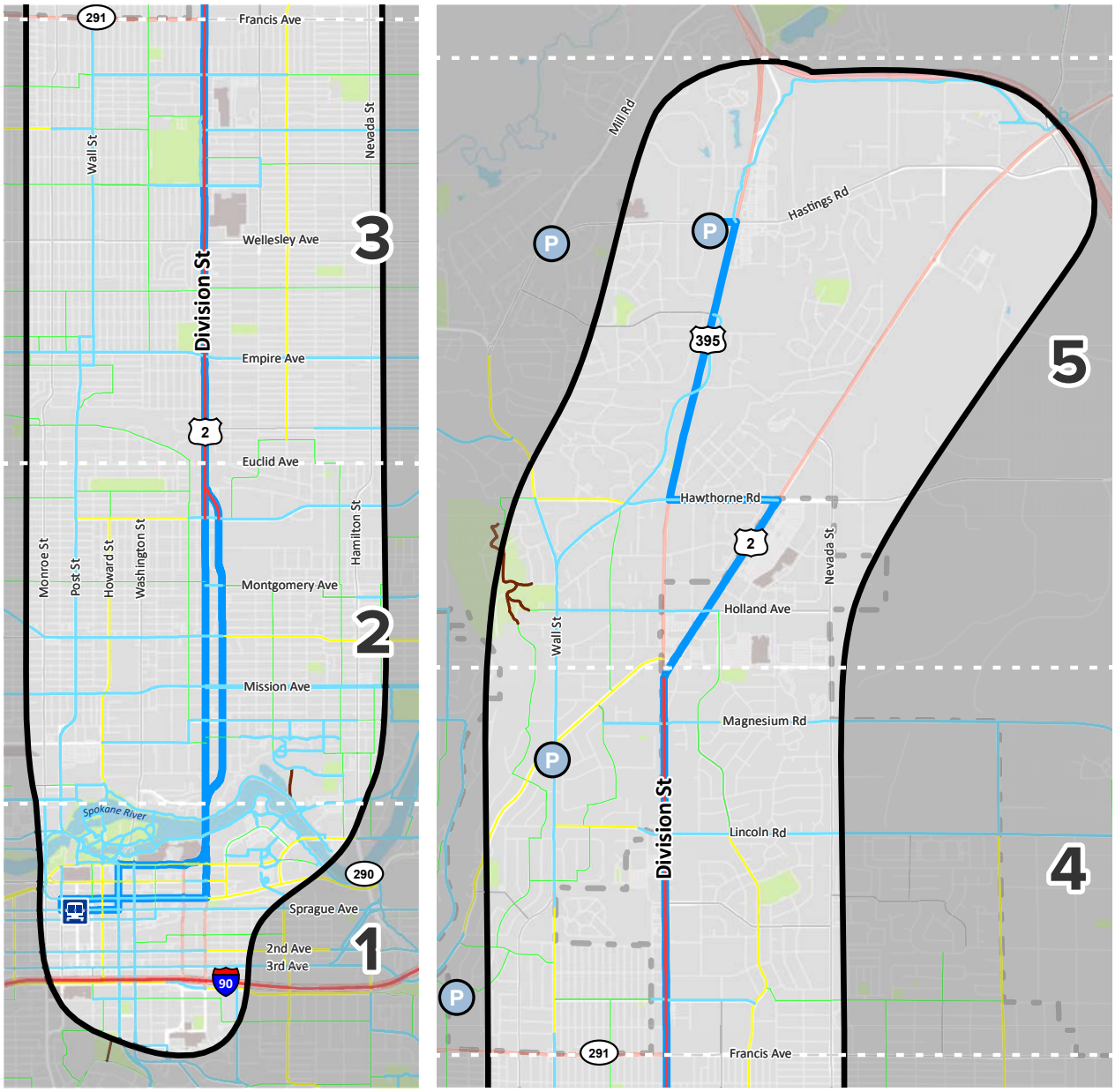
3.2.3 Active Transportation

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.

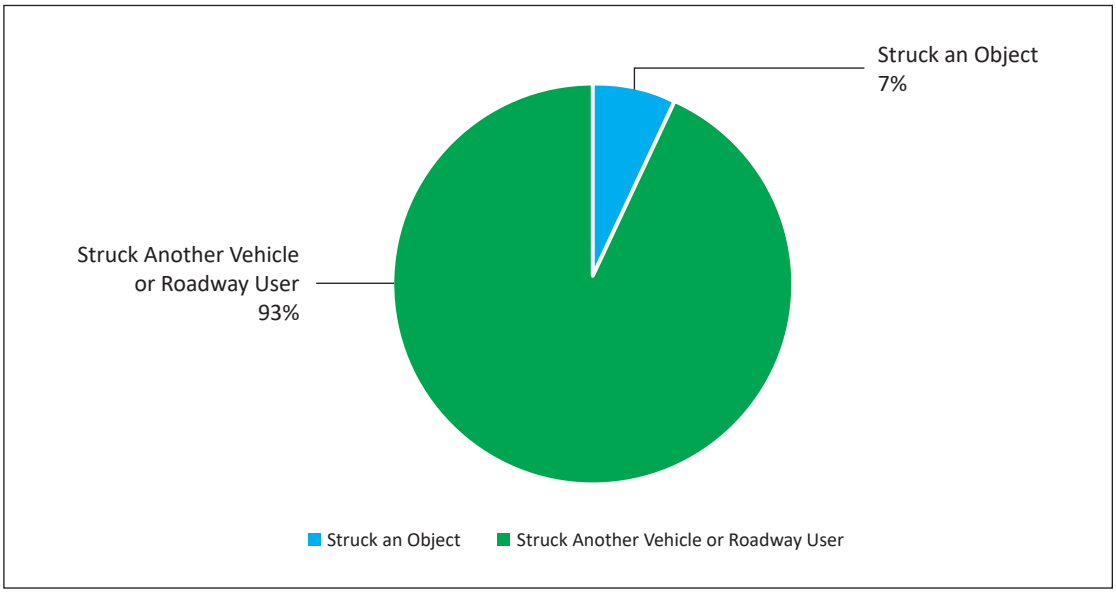
Key intersections with crashes from north to south are summarized in Table 6.

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.

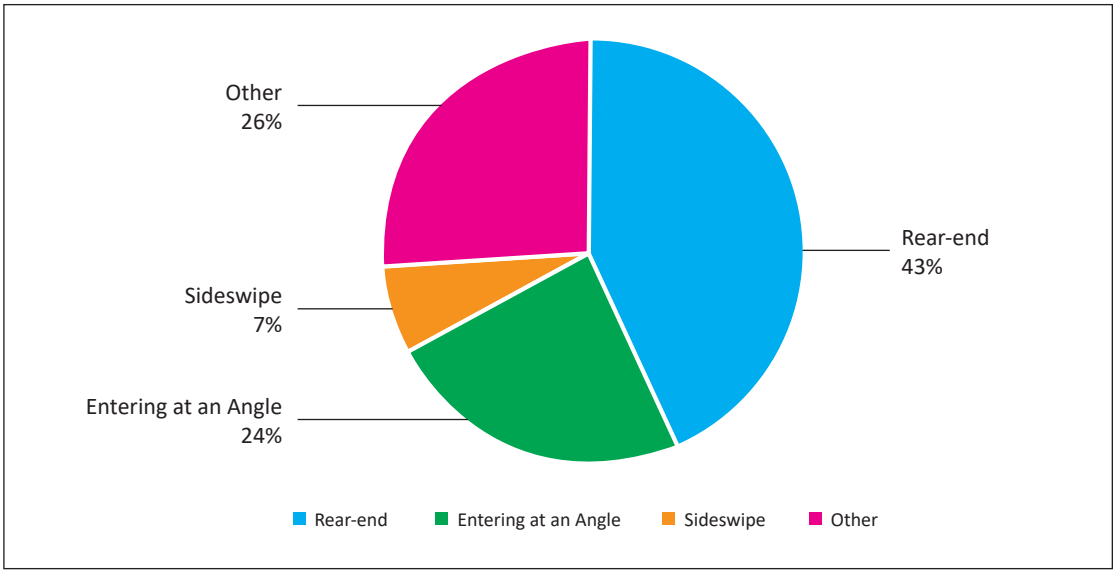
Figure 14. Crash Types



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:

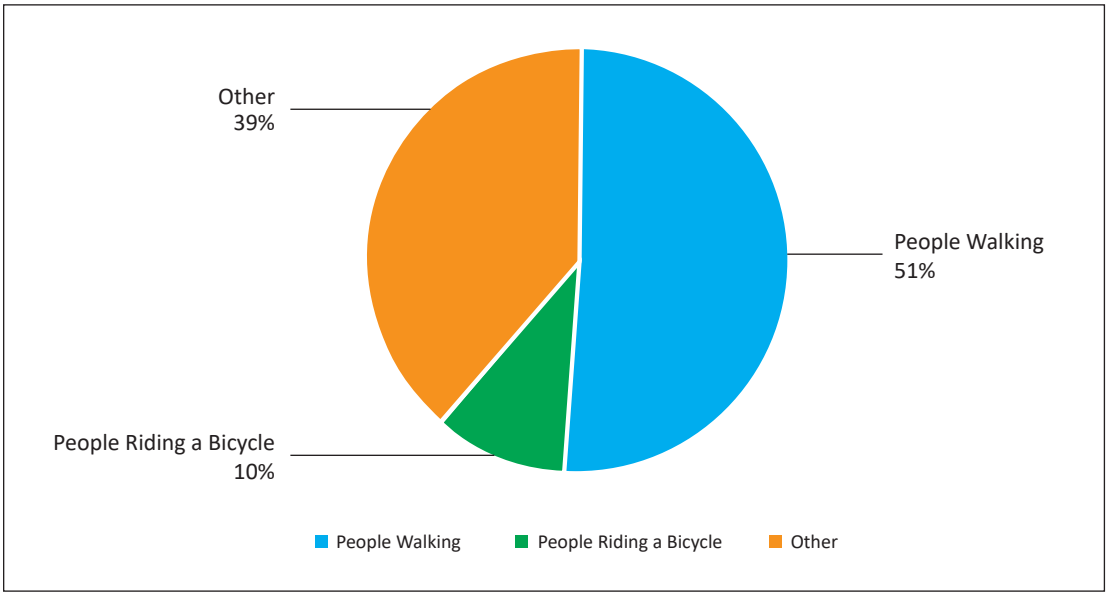
1. Inattention (418)
2. Follow too closely (418)
3. Did not grant right-of-way to vehicle (297)

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

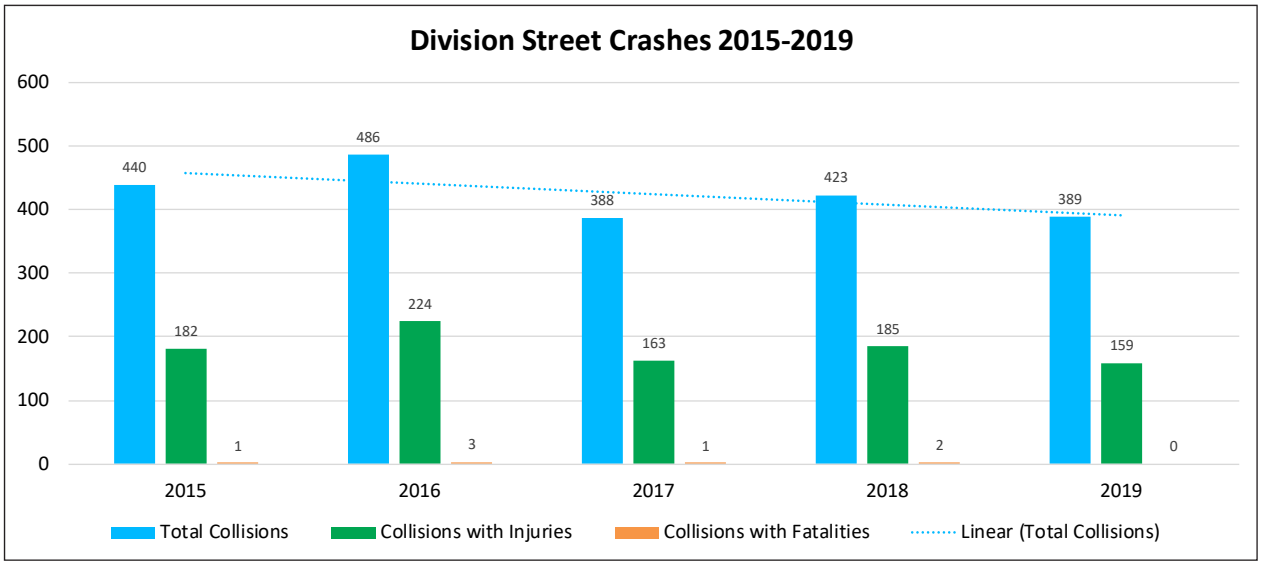


Figure 18. Vehicle to Pedestrian and Bike Collisions

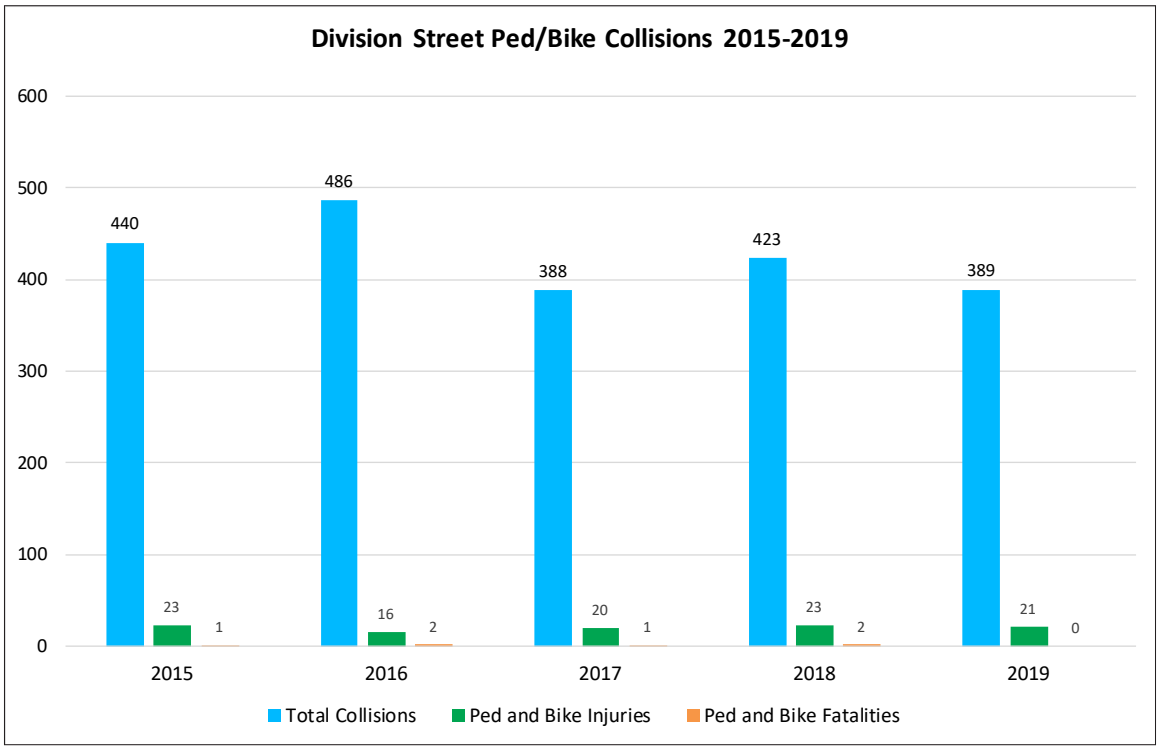
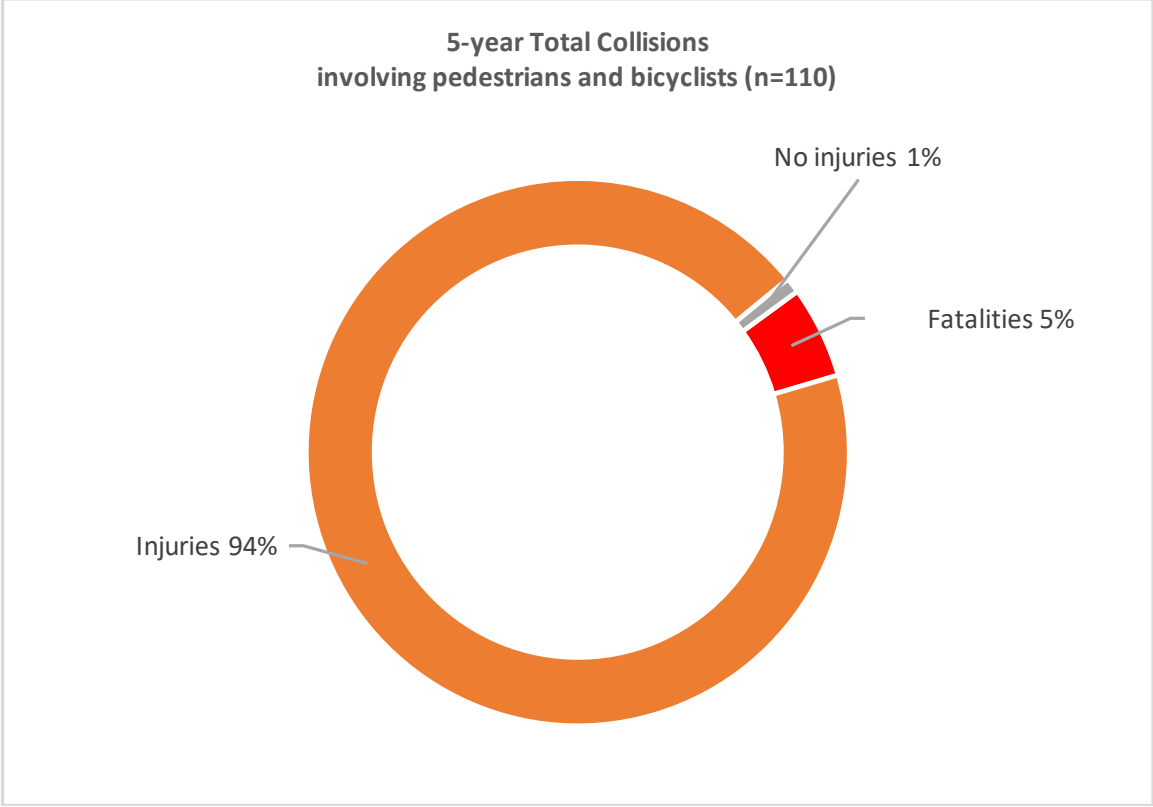


Figure 19. Pedestrian and Bike Collisions with Injuries



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.

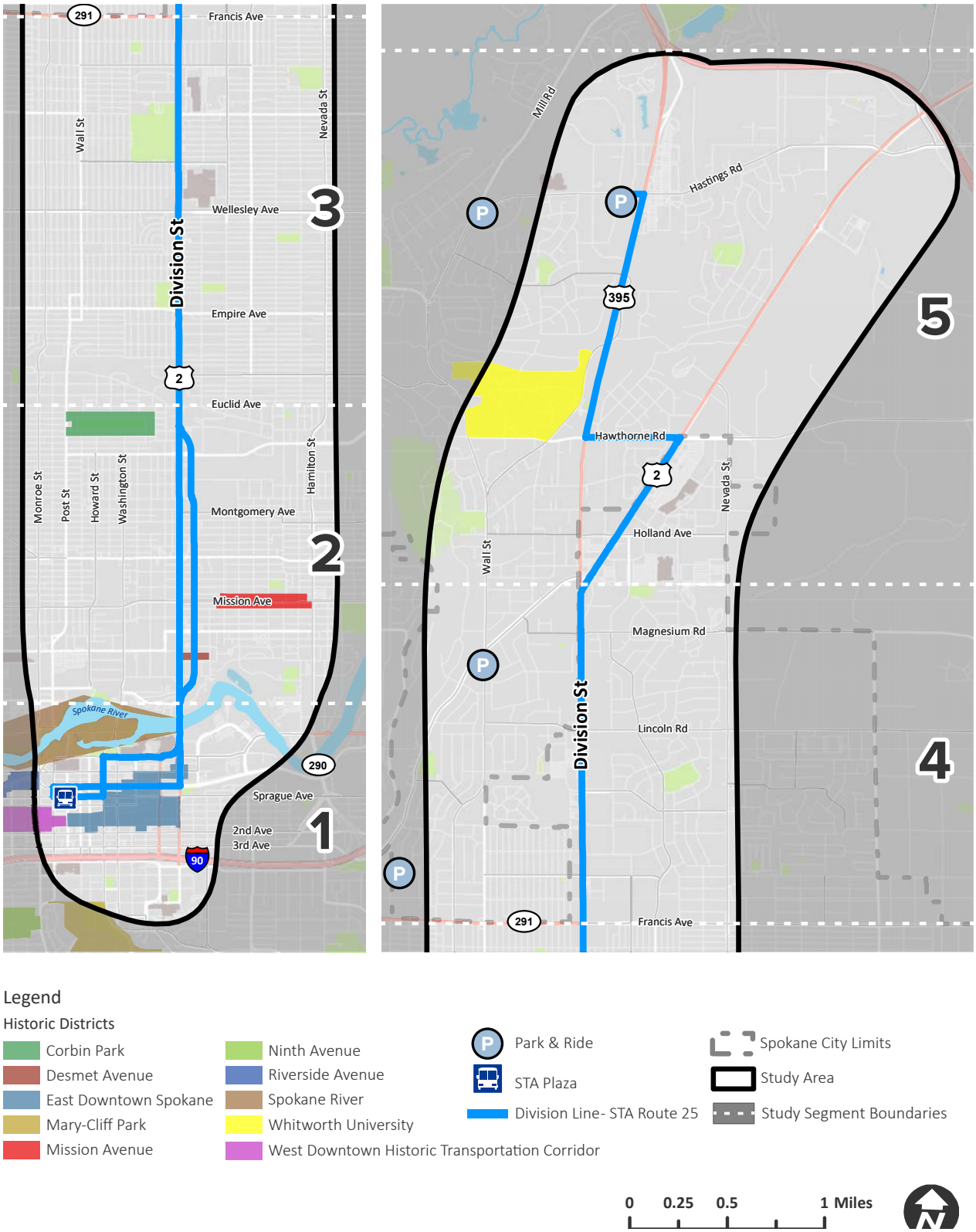
Spokane River District

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.

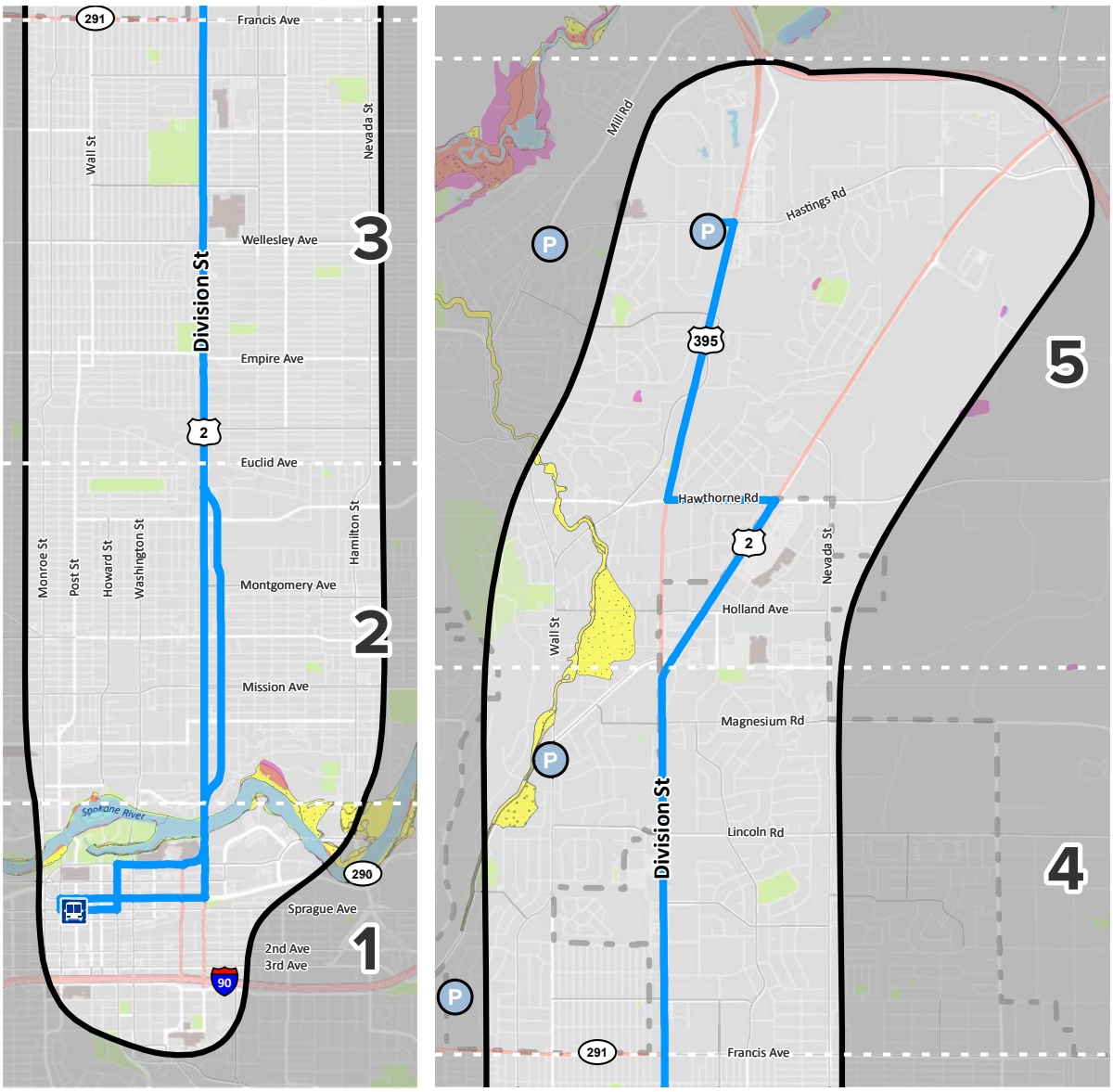
Figure 20. Historic Districts



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

iteris®
509.990.3441
iteris.com
Spokane, WA 99218

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