

US 195/I-90 STUDY



US 195 Executive Summary

THE STUDY

The **US 195/Interstate 90 (I-90) Transportation Study** was initiated to develop a long-range transportation vision to address existing and future challenges in the Latah Valley, Grandview, and Thorpe areas of Spokane and Spokane County. This study, led by the Spokane Regional Transportation Council (SRTC) in a collaborative effort with the Washington State Department of Transportation (WSDOT), the City of Spokane, Spokane County, and the Spokane Transit Authority (STA), has identified recommendations that, when implemented, will:

- ▶ Create a more resilient and connected network for local trips between Hatch Road and I-90.
- ▶ Improve safety for all and preserve capacity on US 195 for regional trips.
- ▶ Extend the life of the US 195/I-90 interchange.
- ▶ Provide more connections for walking, biking, and using transit to travel within the study area and connect to key destinations in the Spokane region.

WHY NOW?

Past planning efforts have identified improvements aimed at improving safety and operations along the US 195 corridor, most notably by proposing interchanges at key intersections with US 195. However, over the last 22 years, only one interchange at Cheney-Spokane Road has been constructed while the number of local and regional trips using US 195 has continued to increase as a result of growth in the Spokane region.

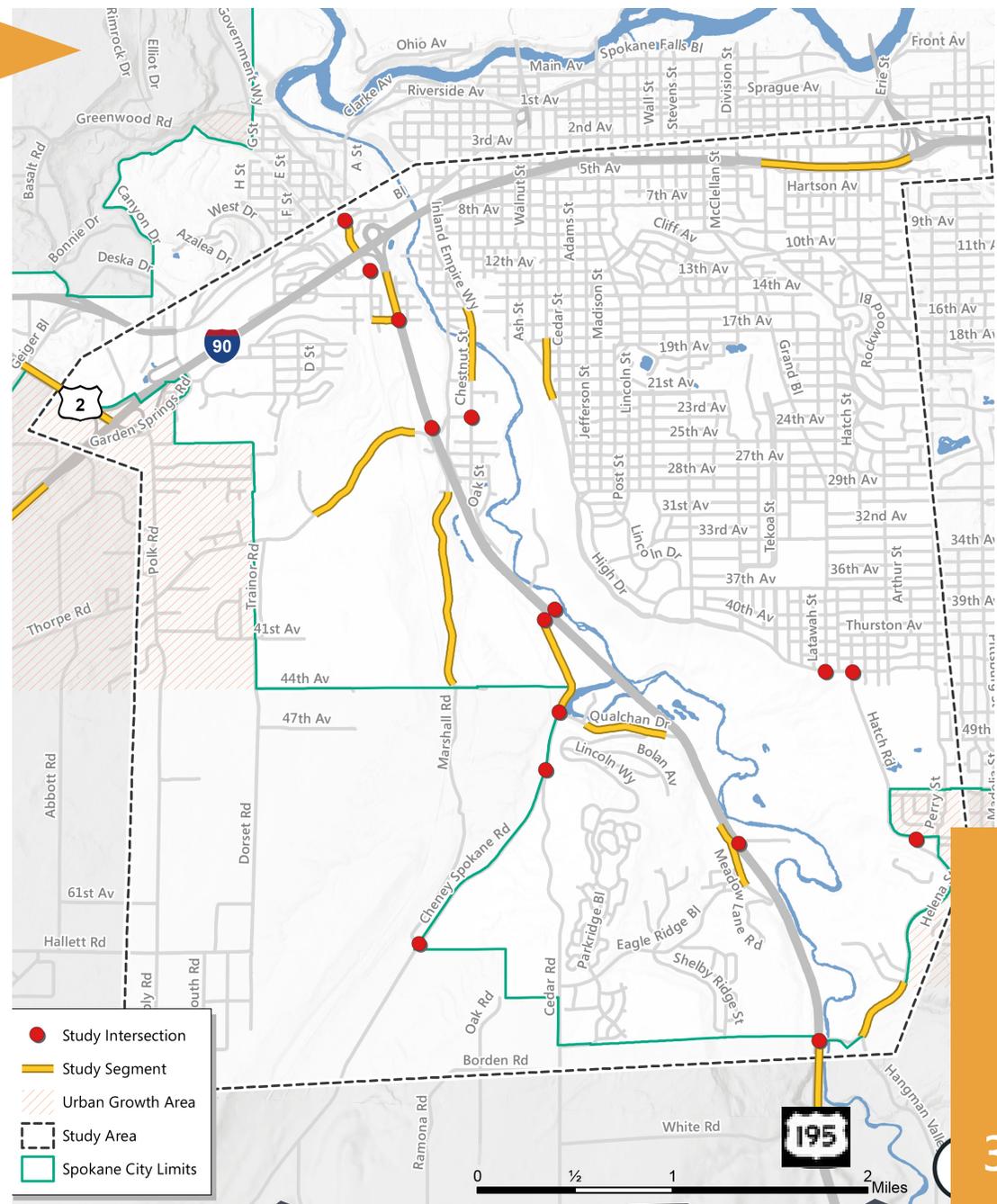
Looking forward, the challenging funding environment that has hampered the State and region's ability to enhance the US 195 corridor is expected to continue. Additionally, project costs have risen faster than inflation; for example, the estimated cost of improving the US 195/I-90 interchange alone exceeds \$400 million. Given these regional growth pressures and financial, **now is the time** for a more practical, sustainable, and implementable vision for the US 195/I-90 area.



ABOUT THE STUDY

The western portion of the Spokane Region is booming. The West Plains is expected to see major growth in both employment and housing in the coming decades and continued, steady growth is expected on the land already zoned for development along the US 195 corridor. With this growth in mind, this study focused on a full multimodal systems approach to addressing existing and future transportation needs framed through the lens of Practical Solutions. Practical Solutions is WSDOT's approach to providing mobility through collaboration with partners to make **the right investments, in the right places, at the right time, using the right approach** to achieve an integrated, sustainable transportation system.

The project study area, shown on the figure to the right, is located within the City of Spokane and Spokane County and covers approximately 19 square miles. Consistent with a full systems approach, this study considered regional roadways like US 195 and I-90; and local roadways, such as Thorpe Road, Cheney-Spokane Road, and Hatch Road; STA transit services; and the local trails, sidewalks, and bike lanes.



THE STUDY GOALS

Five goals were identified for the US 195/I-90 Transportation Study through collaboration with the Study Advisory Team, which was made up of representatives from each of the stakeholder agencies, and input from members of the community.

Goal



Improve Existing & Future Safety Conditions

ACHIEVING THIS GOAL MEANS

- ▶ Fewer crashes occurring at locations with high crash rates today.
- ▶ Fewer crashes occurring at locations where crash rates could increase as traffic volume increases.

PROJECTS THAT ADVANCE THIS GOAL INCLUDE

- ▶ Intersection improvements.
- ▶ Geometric improvements (e.g., realigning curves).
- ▶ New connections to distribute traffic.
- ▶ New connections/infrastructure for pedestrian, bicycle, and transit travel.
- ▶ Traffic calming.

Goal



Maintain Mobility for Local & Regional Trips, Including Freight/Goods Movement

ACHIEVING THIS GOAL MEANS

- ▶ Maintaining mobility for regional trips on I-90 and US 195.
- ▶ Expanding options for local trips on other roads and modes.
- ▶ Maintaining economic vitality through the movements of goods and services.

PROJECTS THAT ADVANCE THIS GOAL INCLUDE

- ▶ New connections that provide alternate routes for local trips.
- ▶ New connections/infrastructure for pedestrian, bicycle, and transit travel.

Goal



Accommodate the Transportation Needs of Planned Development

ACHIEVING THIS GOAL MEANS

- ▶ The study area transportation network can accommodate permitted and planned growth.
- ▶ Better roadway connections improve access to/from existing or planned development in the event of an emergency.

PROJECTS THAT ADVANCE THIS GOAL INCLUDE

- ▶ Additional route options from the study area to commercial and employment areas.
- ▶ More direct connections to existing and potential residential areas.
- ▶ Intersection and roadway improvements that allow for more efficient use of the local transportation network.

Goal



Increase Modal Options Such as Walking, Biking, & Transit

ACHIEVING THIS GOAL MEANS

- ▶ More connections for users choosing to walk, bike, or take transit.
- ▶ A more connected local network allowing for more efficient transit service.

PROJECTS THAT ADVANCE THIS GOAL INCLUDE

- ▶ Improved connections to regional trails.
- ▶ Multi-modal connections to local retail areas.
- ▶ Roadway improvements to allow for buses to better access the area.
- ▶ New park-and-ride access.

Goal



Identify Projects That Are Practical, Implementable, & Fundable in a Reasonable Timeline

ACHIEVING THIS GOAL MEANS

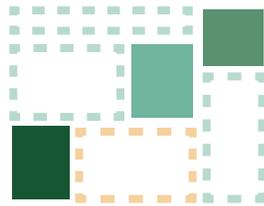
- ▶ Projects have support from the major stakeholders.
- ▶ Projects get built in a reasonable timeframe.
- ▶ Projects with a relatively low barrier to implementation get built more quickly.

PROJECTS THAT ADVANCE THIS GOAL INCLUDE

- ▶ Regional, local, and multimodal connections that achieve the goals of all the stakeholders.
- ▶ “Quick-win” projects that can be implemented within five years.
- ▶ Projects within existing right-of-way owned by the City, County, or WSDOT.
- ▶ Projects that do not require extraordinary or new funding sources.

THE STUDY AREA TODAY

This study began by evaluating how the transportation system within the study area functions today by examining the existing and zoned land use within the study area and identifying areas of congestion and safety concerns. The project team also analyzed existing travel patterns to understand the key origins and destinations of people traveling through the US 195/I-90 corridor.



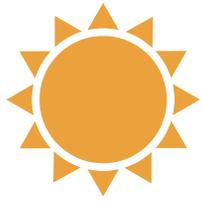
Land Use & Zoning

Today, the study area is primarily zoned for single-family residential uses. Commercial land uses in the study area are located near the Cheney-Spokane Road interchange. Other uses allowed within the study area include medium density residential north of Thorpe Road and a limited amount of residential agriculture to the east of US 195. While not in the study area, this study also considered the land use and zoning in the West Plains, as that is one of the key regional growth centers for the coming decades.



Travel Patterns

To understand how travelers are using the transportation system travel patterns were analyzed, particularly for the northbound US 195 merge with eastbound I-90, to understand where travelers using the ramp were traveling to and from. This ramp was selected since it was identified by stakeholders and the community as a major connection with high traffic and safety concerns during the peak commute periods. The key findings are summarized on the following page.



AM Commute Hours

- ▶ 54% of trips using the US 195 northbound ramp to eastbound I-90 originate from residential areas west of US 195 within the study.
- ▶ Eagle Ridge and the surrounding residential areas account for 33% of trips using the northbound ramp to eastbound I-90.
- ▶ 14% of trips using the ramp originate east of US 195, requiring out-of-direction travel to reach the ramp.
- ▶ As shown on the chart below, most trips using the ramp are destined for areas north of the Spokane River, Downtown and surrounding areas, and areas to the east of the study area such as Spokane Valley.



PM Commute Hours

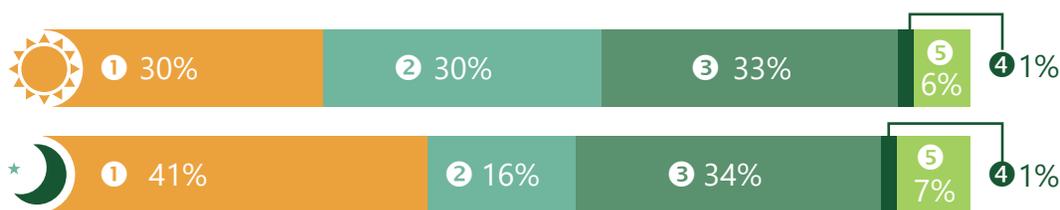
- ▶ The overall percentage of trips originating in the study area decreases to 33% during evening commute hours.
- ▶ The number of trips originating from east of US 195 increases to 21%, compared to 14% morning commute hours.
- ▶ As shown on the chart below, destinations during PM commute hours are similar to the AM commute hours, with the most notable change being the increase in trips destined for areas north of the Spokane River.

Conclusions

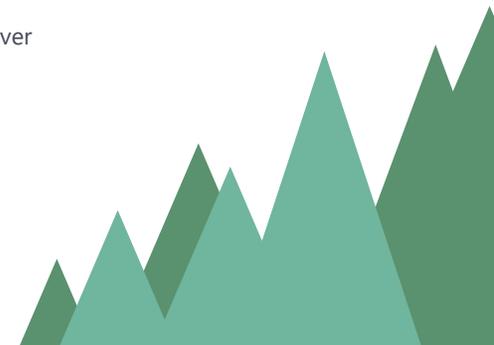
- ▶ The majority of the trips on the critical ramp connection between US 195 and eastbound I-90 originate in the study area; in other words there are more local than regional trips on this ramp.
- ▶ The majority of the destinations for these trips are accessed via the Downtown Spokane ramps from I-90 (neighborhoods north of the Spokane River, Downtown, and the medical district).

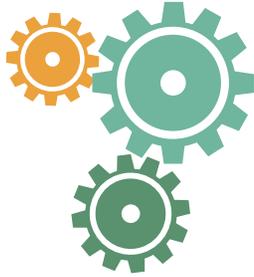
Therefore, these findings indicate the potential benefits of strengthening local and multimodal connections between the study area and Downtown Spokane to meet the study goals.

US 195 MERGE WITH EASTBOUND I-90 TRAVELER DESTINATIONS



- 1 North of the Spokane River
- 2 Downtown Spokane & Surrounding Areas
- 3 I-90 East of Study Area
- 4 East of Study Area
- 5 South Hill





How the Corridor Operates

Today, congestion in the study area primarily occurs along the US 195 corridor where at-grade intersections require drivers attempting to access the US 195 corridor to wait for gaps in traffic on US 195. There is also notable congestion on I-90 eastbound in the AM peak hour through Downtown Spokane and in the PM peak hour extending back to US 195.

Safety was also identified as one of the primary concerns of both stakeholders and travelers using the corridor today. To identify crash hotspots, crash data from 2015-2019 for the US 195 corridor was analyzed, with a focus on existing at-grade intersections. Over the five-year time period, the highest number of crashes on US 195 were recorded at the 16th Avenue intersection while the Meadow Lane Road intersection had the highest number of severe injury crashes. The short merge and heavy weaving activity at the US 195 ramp to eastbound I-90 was also frequently identified as a safety concern by area residents.

THE STUDY AREA IN 2040

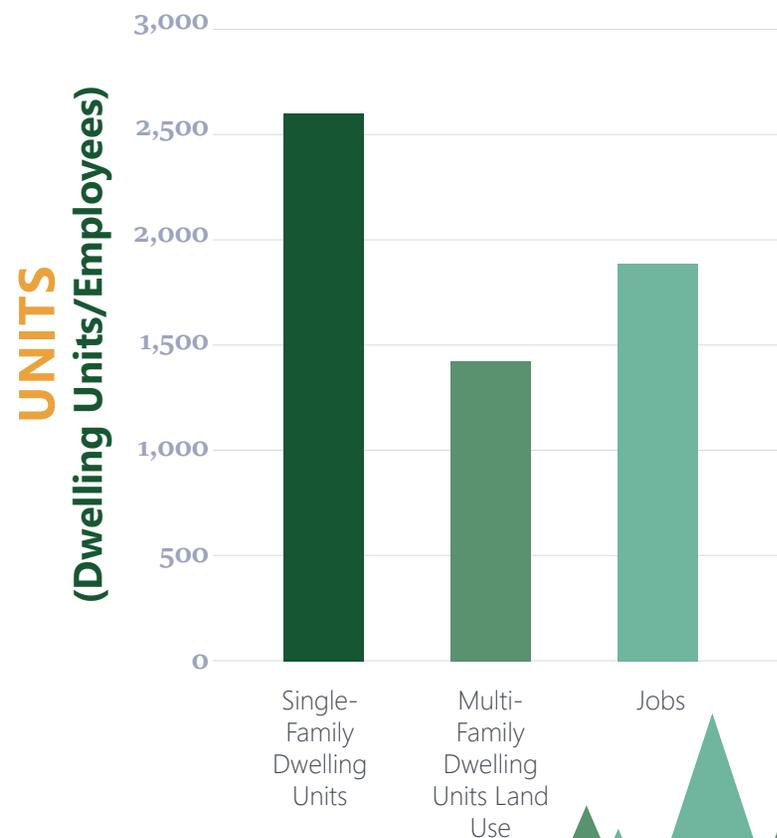
While we understand where improvements are needed today, a future conditions analysis identified locations where the current system cannot accommodate the expected growth. The future conditions analysis also served as a baseline to compare the benefits of mobility improvements that were considered as part of this study.

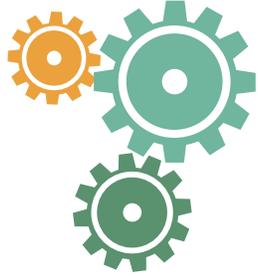
Land Use & Zoning

To confirm that the growth forecast within the study area aligns with economic conditions, a land use market analysis was completed for this study. The market analysis for this study looked at the economic market paired with opportunities and barriers for development within the US 195/I-90 study area to determine how much growth can be reasonably expected to occur over the next 20 years.

As shown on the chart to the right, over the next 20 years approximately 4,000 new residential units are expected to be constructed in the study area and nearly 2,000 jobs will be added.

20 YEAR RESIDENTIAL & EMPLOYMENT GROWTH





How the Corridor Will Operate

By 2040, congestion will continue to increase as the number of travelers attempting to access US 195 using at-grade intersections increases. As volume on US 195 increases, gaps in traffic will decrease resulting in congestion at all intersections on US 195. As volume increases on local roadways like Thorpe Road, Cheney-Spokane Road, and Hatch Road congestion on these routes will also increase.

Additionally, as traffic volumes in the study area increase, existing safety concerns would be expected to worsen and locations with latent crash risk may also experience an increase in the number of crashes. The increased safety risks are most notable for the busier at-grade intersections with uncontrolled left-turns (16th Avenue, Meadow Lane Road, and Hatch Road).



Recommended Projects



The Projects

Following a detailed technical evaluation, collaboration with the Study Advisory Team, and input from the community, 26 projects were identified as recommended projects. The recommended projects are shown on the figure and listed in the table on the following pages. These projects were grouped by timeline for implementation in the following categories: **Near Term, Key Investments, and Supporting Investments.**

5 YEARS OR LESS

NEAR TERM INVESTMENTS ARE:

- ▶ Smaller in scale and less complex to implement.
- ▶ Projects that address existing safety issues.
- ▶ Projects that address existing operational issues.
- ▶ Projects that help accommodate zoned and approved growth.

5+ YEARS

KEY INVESTMENTS ARE:

- ▶ More expensive and complex projects.
- ▶ Projects that provide the greatest mobility and safety enhancements in the study area.
- ▶ Projects that establish a parallel network west of US 195 from Hatch Road to Sunset Boulevard.

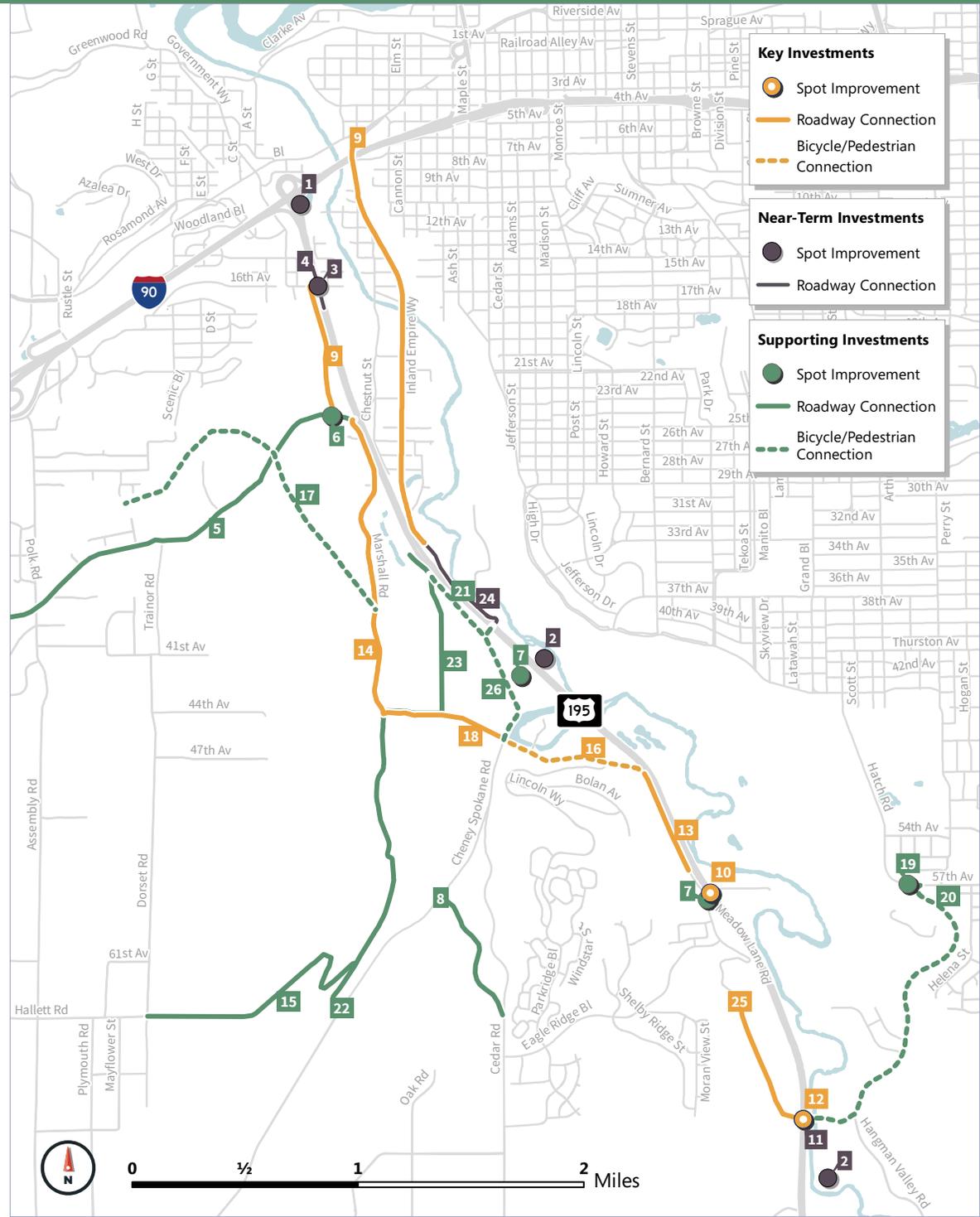
TIMELINE UNDEFINED

SUPPORTING INVESTMENTS ARE:

- ▶ Projects that are not essential to building out the parallel local network, but could be opportunistically implemented through development agreements, grant funding, or as part of other major capital projects.
- ▶ Projects that support a more connected local network for all modes.
- ▶ Projects that have been identified to reserve right-of-way for important multimodal connections.

PROJECTS MAP

The 26 recommended projects are shown on the map to the right. The recommend projects are shown by timeline for investment and by the primary mode served. Projects that provide new connections for autos are identified as roadway connections, while projects creating new connections for active transportation modes are shown as bicycle/ pedestrian connections. Some projects identified as roadway connections will improve the system for all modes since they will include pedestrian and bicycle facilities as part of a complete street improvement. The project list on the following page provides additional project details.



PROJECT LIST

| | IMPLEMENTATION TIMELINE | | | PROJECT TYPE | | | | |
|---|-------------------------|----------------|-----------------------|-------------------|----------------------|---------|--------------------|-------------------|
| | Near Term | Key Investment | Supporting Investment | Street Connection | Bicycle & Pedestrian | Transit | Safety Improvement | Congestion Relief |
| 1 US 195/I-90 Ramp Metering | ■ | | | | | | ■ | ■ |
| 2 Northbound US 195 Travel Time Signs | ■ | | | | | | ■ | |
| 3 US 195 & 16th Avenue Intersection Modifications | ■ | | | | | | ■ | |
| 4 US 195 Acceleration/Deceleration Lanes at 16th Avenue | ■ | | | | | | ■ | |
| 5 Thorpe Road Improvements | | | ■ | | ■ | | | |
| 6 Thorpe Road Undercrossing Improvement | | | ■ | | | ■ | ■ | |
| 7 Spokane Transit Authority Park & Ride | | | ■ | | | ■ | | |
| 8 Cedar Road Realignment | | | ■ | ■ | | | ■ | ■ |
| 9 Lindeke Street & Inland Empire Way Connection | | ■ | | ■ | ■ | ■ | ■ | ■ |
| 10 US 195 & Meadow Lane Road J-Turns | ■ | ■ | | | | | ■ | ■ |
| 11 US 195 & Hatch Road East Leg Widening | ■ | | | | | | | ■ |
| 12 US 195 & Hatch Road J-Turns | | ■ | | | | | ■ | ■ |
| 13 Qualchan Drive Extension to Meadow Lane Road | | ■ | | ■ | ■ | ■ | ■ | |
| 14 Marshall Road Improvements (Thorpe Road to 44th Avenue) | | ■ | | ■ | ■ | | ■ | |
| 15 Hallet Road to Marshall Road Connection | | | ■ | ■ | | | | |
| 16 Qualchan Drive/Cheney-Spokane Road Bicycle & Pedestrian Connection | | ■ | | | ■ | | | |
| 17 Bicycle Connection to the West Plains | | | ■ | | ■ | | | |
| 18 Qualchan Drive Extension to Marshall Road | | ■ | | ■ | ■ | | ■ | |
| 19 Traffic Control at 57th & Hatch Road | | | ■ | | | | ■ | ■ |
| 20 Hatch Road Multiuse Path | | | ■ | | ■ | | ■ | |
| 21 Multiuse Path West of US 195 | | | ■ | | ■ | | | |
| 22 Marshall Road Improvements (44th Avenue to Cheney-Spokane Road) | | | ■ | ■ | ■ | | | |
| 23 Connect 44th Avenue to Inland Empire Way | | | ■ | ■ | ■ | | | |
| 24 Inland Empire Way Connection | ■ | | | ■ | ■ | | ■ | |
| 25 Meadow Lane Road to Hatch Road Connection | | ■ | | ■ | | | | |
| 26 Right-Sizing Cheney-Spokane Road | | | ■ | | ■ | | ■ | |

Summary of Results

When evaluated as a coordinated package of improvements, the 26 projects identified recommended in this study strongly advance the goals identified by key stakeholders and the public.



1

Improve Existing & Future Safety Conditions

- ▶ Volume using the northbound merge with eastbound I-90 is reduced by 20% during AM peak hour, 30% during the PM peak hour.
- ▶ More local trips will use the lower-speed routes off US 195.
- ▶ Potential vehicle conflict points will be reduced by 50% on US 195.



2

Maintain Mobility for Local and Regional Trips Including Freight/Goods Movement

- ▶ Capacity on US 195 will be maintained for regional trips.
- ▶ New local routes will provide connections to Downtown Spokane and Yokes Retail center off of US 195.



3

Accommodate the Transportation Needs of Planned Development

- ▶ Seven projects have been identified that can be implemented in the near-term.
- ▶ New connections will improve access to potential development areas.
- ▶ Projects will address existing and future congestion at intersections on US 195.



4

Increase Modal Options Such as Walking, Biking, and Transit

- ▶ New lower speed facilities will provide dedicated space for bicyclists and pedestrians.
- ▶ A more built out local network will create more opportunities for efficient transit service.
- ▶ A built out local network will provide better connections to the existing Fish Lake Trail.



5

Identify Projects That Are Practical, Implementable, and Fundable in a Reasonable Timeline

- ▶ A vision that is substantially less costly than the previous vision for US 195.
- ▶ A set of projects that is substantially less costly than the US 195/I-90 interchange rebuild, estimated to cost over \$400M.

