

Appendix 3

Transportation

Background

This appendix summarizes the data, modal inventories, analysis, current plans and programs for the overall transportation system in the City of Spokane, as updated with PlanSpokane 2046, the Periodic Update to the Comprehensive Plan.

- 1 Transportation Facilities Plan
- 2 Planning Documents Reviewed
- 3 Spokane Pedestrian Master Plan
- 4 Spokane Bicycle Master Plan
- 5 Multi-Modal Level of Service Memo
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- 7 Transportation Demand Management (TDM) Memo
- 8 Project Prioritization Matrix Summary
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- 10 Bicycle Priority Network Documentation

Appendix 3

Transportation:

1 Transportation Facilities Plan

TRANSPORTATION FACILITIES PLAN: 2027-2046

AUGUST 2026 - CITY OF SPOKANE

TRANSPORTATION FACILITIES PLAN: 2027-2046

AUGUST 2026

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INTRODUCTION

The Transportation Facilities Plan (TFP) is the City of Spokane’s twenty-year transportation network inventory and long-term program summary. This document provides an overview of current conditions and summarizes a long-term program of improvements balanced to projected revenues. By providing an overall perspective of the multiple networks – existing and planned – that comprise the City’s public right-of-way system, the TFP represents one phase in the City’s transportation planning process, as outlined in Figure TFP-1 below.

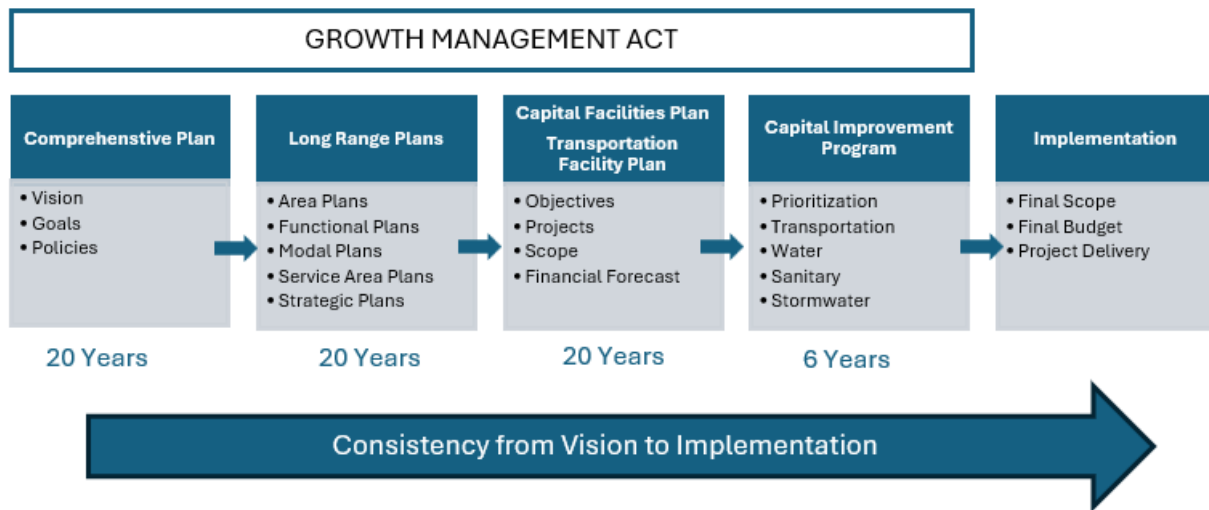


FIGURE TR-1 - TRANSPORTATION PLANNING PROCESS

1. STRATEGIES

Urban Hubs

Establishing active mixed-use destinations and lively corridors requires a combination of transportation options, density, transit access, and walkability. These factors have been emphasized to encourage mixed-use growth in Urban Hubs, locations designated for future growth with an emphasis on the facilitation of complementary infrastructure, commercial, and residential development investment. These areas require a mix of transportation options, with an emphasis on transit access supported by robust infrastructure for walking, bicycling and rolling with adaptive devices, in addition to local vehicular circulation and parking.

Approach to Transportation Planning

Investing in a mix of transportation options supports community health, connects us with our neighbors, promotes economic prosperity, and provides connectivity between goods, services, and jobs. A robust transportation network with many transportation options for all users serves as the backbone for vibrant communities. A balanced approach to transportation planning supports this effort

to safely move all users, manage resources with fiscal responsibility, and add lasting value to Spokane's neighborhoods, commercial corridors, open spaces, and the broader region.

To achieve this goal within the constraints of limited transportation funding, this plan outlines a balanced approach that accommodates many needed uses within the right of way. This approach furthers the pedestrian-first modal focus originally established in the 2001 Comprehensive Plan, reaffirmed in the 2017 Periodic Update, and confirmed in the PlanSpokane 2046 Periodic Update community engagement. This priority recognizes that every trip begins and ends with walking. While the automobile plays a fundamental role in the transportation systems of the Spokane region, the City continues to re-establish space for other users within the public right-of-way by ensuring the size and design of each transportation project responds to the surrounding land use and development context. Figure TR 1 below illustrates City's comprehensive approach to transportation planning that considers a wider range of strategies for achieving mobility and accessibility, beyond conventional approaches.

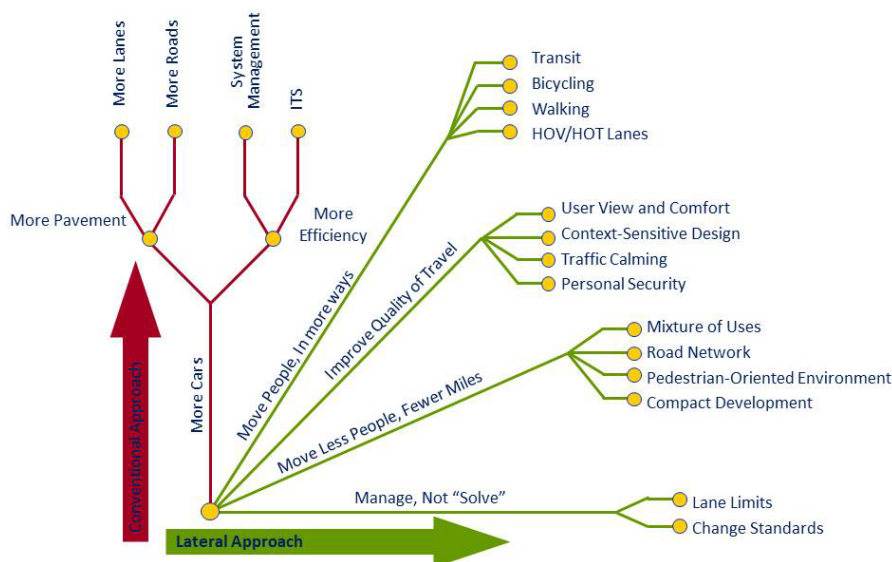


FIGURE TR-2 - LATERAL APPROACH TO TRANSPORTATION PLANNING

Density

Densities centers where people can live, work and play owe their success to a concentration of people, activities, and services. While not all neighborhoods must be dense, infill development in select areas offers the potential for a greater number of short trips, reducing dependence on the street network and buffering associated maintenance costs. By adding residences to active areas with a mix of jobs, recreational opportunities and transit access, Spokane further encourages the use of a variety of travel options.

Transit

Transit access helps large volumes of people reach their destinations at low individual costs, while providing affordable transportation choices for people too old, too young, or otherwise unable to drive.

By linking neighborhoods to major destinations, increased transit service, frequency, span and coverage can improve ridership. Smaller capital investments also meaningfully enhance the transit experience and support increased ridership. Transit shelters and real-time information provide a comfortable place to wait, and accurate information that helps people make the most of their time.

Walking and Bicycling

Establishing a well-connected network of bicycle facilities, sidewalks, and pathways plays a key role in achieving the City's goals for Urban Hubs that support focused growth. In neighborhoods, robust networks for walking, biking and rolling with assistive devices can connect people to residences, schools, and local retail destinations without forcing private automobile travel as the only option. These networks support activity centers and active corridors, giving people a wider variety of safe travel options for achieving short local trips to businesses and services.

Along some corridors, vehicle speed, sidewalk conditions, and lack of crossings create barriers to walking, biking, and rolling. In these cases, traffic calming, sidewalk, and crossing improvements play a critical role in establishing a fully connected multi-modal transportation system.

Transportation Demand Management

Transportation Demand Management (TDM) measures help to increase efficiency within the transportation system by changing how, when, where, and why people travel. A successful TDM program typically includes a variety of strategies. These strategies work together to achieve a more sustainable transportation system by making the most of the existing infrastructure. Strategies often include a combination of strategies such as carpool incentives, parking cash-out (where employees can exchange parking passes for cash when they choose to forego vehicle parking for other travel options), subsidized transit passes, and improved bike parking facilities.

Incorporating TDM strategies into a major employment center not only makes better use of transportation infrastructure but also reduces demand for new roadway capacity. TDM programs can help make developments, employment centers and neighborhoods more attractive places to live, work, and visit.

Many of the transportation demand management strategies listed below work synergistically, achieving the greatest effect when combined rather than implemented individually. Results vary considerably depending on context and how strategies relate to one another, combining to achieve a wide range of changes such as reductions in traffic or parking demand.

The city should continue to improve upon TDM strategies already in use throughout the region while exploring new TDM strategies covered in Volume 7 - TDM Strategies. In the Volume 6 – Vehicle Miles Traveled (VMT) Memo, additional TDM policies and programs are referenced due to the critical role of TDM programming in achieving VMT reductions and complying with greenhouse gas emissions reduction requirements.

2. MODAL NETWORKS

Pedestrian Network

Walking is generally the starting place for all journeys, even as people walk to their cars, transit, their bicycle or another assistive device to move between the places throughout the day. Due to the importance of walking for most Spokane residents, improving the walking environment continues to be a focus of transportation investments in Spokane.

While street and intersection designs have shifted to include design features that address safety for walking and biking to balance motor vehicle speeds and traffic volumes, many corridors continue to lack high-quality crossings and neighborhoods across the city continue to exhibit crumbling sidewalk infrastructure.

Addressing these conditions represents a critical component in achieving a multi-modal transportation system as the city continues to refine implementation of the Complete Streets ordinance.

The Pedestrian Master Plan vision and goals continue to guide the selection and implementation of sidewalk network and crossing improvements.

Pedestrian Master Plan Goals

Five goals guide the enhancement of the environment for walking and rolling with assistive devices in Spokane.

- **Goal 1 Well Connected and Complete Pedestrian Network** - Provide a connected, equitable and complete pedestrian network within and between Centers and Corridors and Pedestrian Priority Zones that includes sidewalks, connections to trails, and other pedestrian facilities, while striving to provide barrier-free mobility for all populations.
- **Goal 2 Maintenance and Repair of Pedestrian Facilities** - Provide maintenance for and improve the state of repair of existing pedestrian facilities.
- **Goal 3 Year-Round Accessibility** - Address the impacts of snow, ice, flooding, debris, vegetation and other weather and seasonal conditions that impact the year-round usability of pedestrian facilities.
- **Goal 4 Safe and Inviting Pedestrian Settings** - Create a safe, walkable city that encourages pedestrian activity and economic vitality by providing safe, secure, and attractive pedestrian facilities and surroundings.
- **Goal 5 Education** - Educate citizens, community groups, business associations, government agency staff, and developers on the safety, health, and civic benefits of a walkable community.

Project Identification/Pedestrian Improvement Methodology

The Pedestrian Priority Areas Map (Map TR 4) provides guidance for identifying high-priority areas for future walking improvements. The Pedestrian Priority Areas were identified using the Pedestrian Needs Analysis, which compares pedestrian demand indicators with existing pedestrian infrastructure. Pedestrian Priority Areas guide investments to areas with the greatest potential to support walking

access to destinations such as employment, schools, parks, and transit stops. Priority zones were identified using an analysis of pedestrian demand and deficiency. Identification of these zones will help the City target investments in pedestrian infrastructure, such as sidewalks, curb ramps, and pedestrian crossings.

This analysis compared different locations to help make data-driven decisions that are equitable and fair. This is only one tool to assist with prioritizing locations for pedestrian projects; it should not be used as the sole determinant for making decisions. An integrated approach that includes availability and stipulations of funding, community support, and cost sharing opportunities with other planned projects is considered in the decision-making process. Pedestrian projects and other street projects are identified in the Six-Year Comprehensive Street Program which is updated annually.

Americans with Disabilities Act (ADA) Transition Plan

The Americans with Disabilities Act Self Evaluation Update and Transition Plan Update establishes the City of Spokane's ongoing commitment to provision of equal access to all of its public programs, services, and activities for citizens with disabilities. In order to develop this plan, the City of Spokane completed a comprehensive evaluation of its facilities and programs to determine what barriers might exist for individuals with disabilities. An update to the draft ADA Transition Plan is scoped to help guide future planning and implementation of necessary accessibility improvements. The city will update the plan within five years, and the plan is available on the city's website here:

<https://my.spokanecity.org/accessibility/>.

Bicycle Network

The Spokane Bicycle Master Plan creates a vision for enhancing bicycling opportunities for all residents of Spokane. It establishes goals and actions intended to make Spokane a City where bicycling is a safe, comfortable, and useful utilitarian option for people of all ages and abilities to meet their daily needs for accessing school, work, goods, and services.

The city recognizes bicycling as a low-cost form of daily travel for people of all ages and abilities, whether they are too old, too young, or otherwise can't drive or don't choose to drive. Current planning efforts focus on making bicycling safe, accessible, convenient, and attractive for more Spokaneites.

With the vision of creating such a system, citizens, city staff and community leaders continue to reference and update the Bicycle Master Plan as a living document that provides a touchstone of guidance and purpose to make this vision into reality.

From 2019 to 2022, yearly amendments to Map TR-5: Proposed Bicycle Network updated the selected route segments to match current travel patterns, development trends, and community preferences for separated bike lanes and neighborhood greenways.

From 2022 to 2024, the Accelerated Mobility Playbook community planning effort and the subsequent Bicycle Priority Network mapping led to the development of the City's Bicycle Priority Network, which is integrated into this Periodic Update in an updated Map TR-5. This updated mapping approach aligns

with the approach of designating routes by priority, with facility designations to be dictated by traffic conditions and forthcoming bikeway design guidance funded through the U.S. Department of Transportation's Safe Streets & Roads for All grant program. The Accelerated Mobility Playbook Report is documented in Part 9 of Appendix 3: Transportation, and the Bicycle Priority Network documentation is included in Part 10. These recent plans and studies led to development of a near-term implementation project to construct 27 miles of continuous high-comfort bikeways by the year 2027, known as the "27 by 2027" project. Expansion of this core "Urban Mobility Network" will continue beyond 2027, extending on the priority bike routes shown in Map TR-5.

Bicycle Master Plan Policies

The following policies provide a path for the Bike Master Plan to benefit the community as a whole:

- **BMP 1:** Continually increase the bicycle mode share for all trips.
- **BMP 2:** Complete and maintain connected bikeways that provide safe transportation for Spokane cyclists throughout the city.
- **BMP 3:** Provide convenient and secure short-term and long-term bike parking to connect people to popular destinations and transit throughout Spokane and encourage employers to provide shower and locker facilities.
- **BMP 4:** Increase bicycling by educating people using all transportation modes about the benefits of bicycling to the entire community. Enhance the safety of people riding bicycles through effective law enforcement, education and detailed crash analysis.
- **BMP 5:** Develop a collaborative program between a variety of city departments and agencies and several outside organizations to secure funding and implement the Bike Master Plan through capital project delivery as well as community planning processes.

Bikeway Network Definition

Implementation of the Bicycle Master Plan will establish roughly a 300-mile network of bikeways throughout the city of Spokane. This Proposed Bike Network (Map TR-5) indicates all locations throughout the city where specific improvements either have been made or are proposed in the future to accommodate bicycles.

Almost all Bikeway Network segments will have some type of visible cue (i.e. a bike lane, a bike route sign, a bike crossing, signal detection, a pavement marking, a trail, etc.) to accommodate bicyclists. The Bikeway Network serves as a core system of major routes for safely accessing all parts of the city and other parts of the transportation system. Table TR 1 identifies the type of bicycle facilities identified in the updated Map TR-5: Proposed Bicycle Network, which indicates routes by priority level. Facility type and design will be guided by the bikeway design guidelines and standards, forthcoming.

TABLE TR-1 - BICYCLE FACILITY CLASSIFICATIONS

TABLE TR-1 – BICYCLE FACILITY CLASSIFICATIONS	
Class	Description
Tier 1	Tier 1 routes indicate segments that are highest priority for funding, near-term advancement and design quality adhering to the highest design principles. These routes are intended to provide a core network of safe and comfortable routes for bicycling. Facilities can include Neighborhood Greenways, Separated Bike Lanes, bike lanes and shared streets.
Tier 2	Tier 2 routes indicate segments that will eventually connect into the core network of safe and comfortable bike routes. These routes are secondary for advancement in terms of timing and funding.
Tier 3	Tier 3 routes indicate segments that are not prioritized for near-term funding opportunities or advancement. These routes can be improved as opportunities arise and as the Tier 1 and 2 networks are completed.
Shared Use Pathways	A shared use or multiuse path is an off-street facility designed for certain non-motorized uses. These paths have a minimum width of eight to ten feet to accommodate two-way traffic. These paths are often identified by signs and barriers preventing auto-traffic from using the path
Soft-Surface Trails	A soft-surface trail indicates dirt, gravel, or hardpacked off-street paths that provide important regional recreational connections.

Spokane's Bikeway Network

Map TR 5 shows the future bikeway network along with proposed route classifications.

Shared Use Paths

Spokane features five major transportation pathways or trails that are shared by people walking and bicycling. These are the Children of the Sun, Ben Burr, Fish Lake, Spokane Valley-Millwood, and Centennial trails. These facilities serve both recreational and transportation functions for people walking and bicycling

Children of the Sun

The Children of the Sun trail is the pedestrian and bicycle trail provided through the North Spokane Corridor that will connect neighborhoods along the corridor to other trails along the route. This trail will connect neighborhoods to other major trails including the Centennial Trail, the Ben Burr Trail, and the eventual Spokane Valley-Millwood Trail. The facility will also provide connections from the Ben Burr Trail to the west to the east along the I-90 corridor, connecting to new pedestrian and bicycle bridges over I-90.

Ben Burr Trail

The Ben Burr Trail connects Liberty and Underhill Parks in East Central Spokane into the University District, Downtown and the Centennial Trail. It follows the path of an old railway line. The trail features a pedestrian/bicycle bridge spanning Altamont Street, financed through federal Community Development funds.

Fish Lake Trail

The Spokane Parks and Recreation Department owns a railroad right-of-way between the City of Spokane and Fish Lake. The Fish Lake Trail leaves West Spokane (southeast corner of Government Way and Sunset Highway) and runs south through open forest to reach Queen Lucas Lake, which is 1.5 miles north of the trail's ultimate planned destination, Fish Lake Regional Park. The remaining 2.5 miles of the trail will cross active railroad tracks and connect to Fish Lake Park and Cheney's trail. A safe way to get people across the tracks is needed. Most likely bridges will be the safest solution, although highly expensive. Upon completion of this gap, two bridges over active rail lines will join this trail to 3.5 paved miles of the Columbia Plateau Trail, serving as a corridor for commuting and recreation between Spokane and the college town of Cheney. In the near-term, a connection from the current trailhead at Government Way and Sunset Boulevard will extend north and east through Highbridge Park to the Sandifur Bridge, linking into the South Gorge Trail and the Centennial Trail.

Spokane Valley-Millwood Trail

The Spokane Valley-Millwood trail will connect to the Centennial Trail at both ends, providing access for residents of Spokane and Spokane Valley to the non-motorized network of trails in Spokane. The trail will use the abandoned Great Northern Railway right-of-way that is now owned by Spokane County and run adjacent to active freight tracks. This urban pathway will connect schools, parks, business districts, transit facilities, neighborhoods, Spokane Community College, and a regional mall. Currently used by walkers, joggers, and mountain bikers, the project will provide a paved trail with adjacent soft surface area for walking and running.

Centennial Trail

The 39-mile Centennial Trail parallels the Spokane River from Nine Mile to the Idaho border. The trail continues in Idaho through Post Falls and Coeur d'Alene. Currently, the trail has several gaps within the city of Spokane. A gap currently remains within the City of Spokane at Mission Avenue. Mission Avenue is a major east/west four-lane arterial over the Spokane River. From Mission Park, Centennial Trail users are faced with BNSF railroad track crossing, a challenging pedestrian crossing and a tight right turn to reach the new Upriver Park section of off-street pathway through improved park land. Continuing east on Upriver Drive past Freya Street poses a safety challenge requiring special design attention, as the trail currently joins Upriver Drive without physical separation. Funded design studies will address this existing Upriver Drive gap.

Transit Network

The Spokane Transit Authority (STA) is the Spokane region's municipal corporation, providing public transportation services within the Spokane County Public Transportation Benefit Area. STA's latest long

range Comprehensive Plan titled “Connect Spokane” was originally adopted in 2010 with the latest update adopted in March 2026. The plan was developed after extensive public feedback and in cooperation with the jurisdictions STA serves.

STA’s ongoing shorter term planning process, *Connect 2035*, is a 10-year planning effort that outlines the High Performance Transit network and the next phase of the transit system implementation strategy of Connect Spokane.

Based on input from citizens and technical preparation, STA’s plans aim to maintain the existing transit system while strategically adding more resources to improve service levels throughout the region. With more jobs and residents forecasted, public input indicated a demand for continued buildout of the transit network to support a growing population and economy.

Every major planning document in the Spokane region calls for improvements in transit services to support development and enhance transportation options. The Metropolitan Transportation Plan, by the Spokane Regional Transportation Council, explicitly calls for many of the projects contained in the *Connect 2035* 10-year strategic plan. The City of Spokane’s Comprehensive Plan calls for more transit to support Urban Hubs as future growth areas. STA continues to coordinate closely with the city to develop an improvement plan that aligns with the city’s land use and transportation goals.

By adding transit service and enhancing the speed and reliability of transit service, the plan forecasts a continued increase in ridership of STA’s fixed route system.

The STA Moving Forward plan proposes the implementation of Bus Rapid Transit on Division Street to build on the success of the City Line Bus Rapid Transit system, improved night and weekend service, service expansion to new areas, new commuter service, improved park and rides/transit centers, new shelters and passenger amenities. Spokane Transit improved the quality of service by investing in real-time vehicle tracking technologies to help customers make better travel decisions, preserving the quality and cleanliness of its fleet and facilities and making incremental improvements within the financial means anticipated.

High Performance Transit Network

The High Performance Transit Network (HPTN) (Map TR 6) 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 HPTN defines a system of corridors for heightened and long-term operating and capital investments.

High Performance Transit Principles

1. **Pedestrian Support.** More than any other service type, HPT extends the range of the pedestrian.
2. **Ubiquity.** HPT service should attempt to serve the greatest number of people possible and the greatest number of destinations possible.

3. **Activity Centers.** HPT should connect the region's cities and centers of population and jobs as much as possible.
4. **System Effectiveness.** The HPTN should improve the effectiveness of the transportation system.
5. **Appropriate Scale.** The HPTN should be fiscally responsible and scaled appropriately to the region's current and long-term needs given competing demands for scarce public resources.
6. **Mode Neutrality.** Service quality, not mode technology, is the defining feature of HPT.
7. **Permanence.** HPT features permanence of investments.
8. **Integration.** HPT should integrate and provide connections with other modes and transport services.
9. **Competitive.** HPT should make desired connections better than competing modes whenever possible.

High Performance Transit Corridors

Map TR 6 identifies the routes of the High Performance Transit Network. Short descriptions of some of the corridors are found below.

Cheney Corridor

Implementation of High Performance Transit between Cheney and Downtown Spokane enhances service on the West Plains by improving the frequency, hours of service, passenger amenities and the operation of an enhanced bus along the path of current Route 66 Cheney.

City Line BRT

The City Line moves more people without more cars, help grow the economic core of Spokane and optimizing financial investments in downtown infrastructure. Running from Browne's Addition through Downtown Spokane and Gonzaga University to Spokane Community College, the City Line provides frequent service, expands the hours of service, provides improved passenger amenities and operates with electrically powered buses. This line also allows for the direction of more support for transit options throughout the region for people who don't need to travel through downtown to reach their destination. Operating the line with high frequency enables an enhanced network where fewer routes dwell at the Plaza.

Monroe-Regal Line

This line connected some of Spokane Transit's most successful routes to create a line that directly connects north and south Spokane. Supporting several planned and existing transit and pedestrian future growth areas, this line feature frequent service, expanded hours and improved passenger amenities. As this line develops, or as grant funding becomes available, this line will be eligible for full High Performance Transit enhancements.

Division Street Bus Rapid Transit Line

The enhancement of existing Route 25 Division will add needed capacity by increasing the size of the buses and improve reliability of the route through the establishment of Bus Rapid Transit (BRT) service consistent with the standards established by the City Line. As the busiest route in the system, Route 25 has already seen interim passenger amenity improvements. A minimum operable BRT service is scheduled for 2030, with additional BRT enhancements by 2032.

Freight Network

One of the objectives of the Freight Element (as identified in the Washington State Freight Mobility Plan) is the development of an urban goods movement system that supports jobs, the economy, and clean air for all; and provides goods delivery to residents and businesses. Map TR 7 identifies the primary routes used by freight and estimated total tonnage along those routes.

Bridge Inventory

The city's bridge inventory is maintained as prescribed by the US Department of Transportation, Federal Highway Administration (FHWA). The FHWA establishes the standards for bridge inspection and maintains the National Bridge Inventory (NBI), a database of all the bridges in the Country. All bridges are inspected on a regular schedule, which is typically once every two years and the information is forwarded on to the FHWA.

The City Street Department inspects and maintains the city's 66 bridges, which includes 43 vehicular and 23 pedestrian facilities. The records of the inspections, maintenance activities, load limits and any design plans are filed in the Bridge Office. Map TR 10 identifies the location of all bridges within the City of Spokane.

Rail Network

Freight rail service is provided by the Burlington Northern Santa Fe Railroad (BNSF) and the Union Pacific Railroad (UP). Combined, the two railroads operate close to 100 trains per day in and through Spokane. BNSF traffic is generally oriented east/west between Seattle, Tacoma, and Portland, with destinations in the Midwest, South, and Southeast. BNSF has a Spokane Intermodal Facility located just south of E Trent Ave off of North Fancher Road. The Everett to Spokane line, which passes through the Cascade Tunnel under Stevens Pass, is BNSF's primary route for intermodal traffic.

UP operates trains through Spokane with traffic generally oriented north/south, to and from Canada. Map TR 5, "Regional Freight and Goods, Airports, and Railroads," shows the location of railroad lines, as well as regional freight and goods routes and airports.

Factors that could significantly affect future rail volumes include:

- **New bulk exports.** The most significant near-term development facing Washington's rail system is the introduction of additional coal traffic that would be exported from the Pacific Northwest to Asia. The source of this coal would be the Powder River Basin, which now has an excess of production capacity following declines in domestic demand.

- **Shifting modal economics between rail and truck.** The modal economics of ground transportation are in flux. Some developments will tend to increase the relative mode share of rail, while other developments will tend to decrease the relative share of rail.
- **Fluctuating fuel costs and potential conversion to alternative sources of energy.** Fuel makes up more than 20 percent of rail operating costs and more than 40 percent of motor carrier costs, making transportation costs very sensitive to fuel prices. The advent of low-cost natural gas offers potential savings on an equivalent energy basis of as much as 70 percent. For example, rapidly falling costs of liquefied natural gas, which is now approximately one-third the cost of diesel fuel, have encouraged a new look at using this fuel for powering trains.

Passenger Rail Network

Passenger rail service is provided by Amtrak's Empire Builder route, which provides service between Seattle, Portland, and Chicago. The Amtrak station is located on West First Avenue in downtown Spokane. With funding through the Federal Railroad Administration from the Infrastructure Investment and Jobs Act (IIJA), funding has been granted to study options for restoring passenger rail connecting Chicago to Seattle through Spokane through restoration of the *North Coast Hiawatha Route*. Upcoming investments from the Federal Rail Administration will cover equipment upgrades for passenger locomotives for Midwestern and Pacific Northwest Routes passing through Washington State via Spokane.

Air Network

Air cargo consists of both air freight, which includes all non-mail items shipped in the belly of passenger planes and on planes dedicated to freight, and air mail. Air freight makes up approximately 85 to 90 percent of total air cargo volume in Washington. With over 2 million tons of air cargo handled in Washington State annually, Spokane International Airport (GEG or "the Airport") handles approximately 15-16% of that tonnage annually, second to Seattle-Tacoma International Airport.

The Spokane International Airport (GEG or "the Airport") is the second busiest airport in the State of Washington in terms of passenger and cargo service. GEG is designated as a small hub primary commercial service airport by the Federal Aviation Administration (FAA) because it handles more than 10,000 annual passenger boardings, accounting for between .05% and .25% of the total U.S. passengers boardings. In addition to the many buildings and systems in place to support the passenger and cargo service, airport facilities support general aviation, and military activity. The Airport manages a nearby business and industrial park which supports airport-compatible development. Fairchild Air Force Base (FAFB), home of the 92nd Air Refueling Wing, is located four miles to the west.

Located in an area known as the West Plains within Spokane County, the Airport lies within a large area of industrial-zoned lands approximately 6 miles southwest of Downtown Spokane. A Public Development Authority for the West Plains/Airport Area, S3R3 Solutions, manages economic development projects and incentives in the area, leading a regional development focus on expanding

aerospace manufacturing, logistics warehousing, and other manufacturing and industrial uses, including production of materials such as metals and plastics for aerospace components.

GEG serves scheduled and charter commercial passenger airlines, scheduled and charter commercial freight airlines, military users, and general aviation. The Airport offers non-stop service to destinations across the Western, Midwestern, and Central United States, and onward connections to the rest of the country and the world.

Service Area

The extent of the Airport's service area, the area from which it draws users, varies by user type. General aviation and military users have more options within the region than scheduled commercial airlines. The service area for scheduled commercial airline service is known as the catchment area. Other airports in the region do not have passenger terminals or associated facilities. As a result, the catchment area for GEG includes the Inland Northwest, eastern Washington, northern Idaho, and western Montana, serving 30 counties across these states as well as southern British Columbia, Canada. GEG provides a large service area for corporate and business users due to the airport's available runway length, instrument approach procedures, and proximity to population centers. For light general aviation, the airport has a smaller service area because of competition from smaller general aviation airports such as Felts Field that are specifically tailored to general aviation users.

Roadway Access Considerations

GEG is connected to its service area via interstate, U.S., and state highways, including Interstate 90 and U.S. Highway 2. Major roadways tying into the system of highways include Airport Drive, Flint Road, Spotted Road and Geiger Boulevard. Primary access into and out of the Airport's Business Park area is provided by Flightline Boulevard, Pilot Drive, and Spotted Road.

The airport has supported major roadway improvements and undertaken realignment projects to support major concourse expansion. k accidents along U.S. Highway 2 have elevated the safety concerns in this area. The second concern is that Geiger and Flightline Boulevards routinely experience congestion associated with heavy truck traffic. The third concern is that development of the planned new runway at the Airport could result in the need to realign roadways that provide access to GEG, which could influence terminal building development.

Summary of Major Improvements

GEG and partner agencies undertook major improvement projects over the past ten years, with more ongoing and slated over the long term. Recent projects include improvements to access streets, roadway realignments, a taxi lane expansion, and parking additions as well as initiation of major terminal expansion.

Recent Improvements:

- Completion of the Concourse C expansion as part of the Terminal Renovation and Expansion (TREX) Program.

- Alignment of Airport Drive to the southwest, accommodating access to the Concourse C expansion and providing additional parking between inbound and outbound Airport Drive.
- Construction of the Rail-Truck Transload Center.
- Economy Lot expansion.
- Passenger boarding bridge refurbishment.
- Installation of two phases of electrical vehicle charging station.
- Improvements to Flint Road intersections.
- West Terminal ramp expansion and parallel taxi lane construction.

Ongoing and Upcoming Projects

- TREX Program: Construct a unified Central Hall to consolidate all existing terminals into one facility.
- Construct access and internal roadways within the Airport Business Park.
- Continued safety improvements and project support on surface roads.

Long-Term Projects:

- Realign Hayford Road to accommodate new runway.
- Spotted Road and Airport Drive Interchange: Combine inbound and outbound Airport Drive at Spotted Road and construct an overpass to improve access and manage intersection traffic
- Continue to update terminal airfield operations, including expansion of overnight aircraft parking.
- Modernization of A and B concourses subsequent to future funding.

Arterial Network

The City of Spokane has identified a Heavy Haul Arterial Network (Map TR 11) to support commerce and freight and goods movement within and through the city. These arterial routes require roadway designs in line with the function of carrying the highest volumes of truck traffic. In addition, the Spokane Municipal Code provides a map of truck routes throughout the city to guide trucks for local delivery. This network establishes corridors within the city's transportation network to support freight and goods movement through the city and to areas supporting industrial uses, warehousing and trucking operations. The needs of vehicles supporting local goods delivery will be balanced with the context of the areas to be served.

The state highways and local arterials supporting the industrial areas and freight related business often have design needs that are different than areas serving non-industrial or trucking uses.

The arterial network serving current and future industrial uses and zoned industrial areas will see upgrades or brand new facilities as needed in areas such as "The Yard" in the Hillyard neighborhood and expansion of the arterial network serving the West Plains. The industrial corridor along the Trent Ave. corridor in the eastern portion of the city has been served by major reconstruction of the Freya Street corridor and the Havana Street Bridge over regional rail. Future facility improvements will continue to increase the network connectivity in this heavy industrial area.

Recent and current arterial projects specifically serving freight include facilities such as:

- Thor and Freya reconstruction and intersection upgrades at I-90.
- Washington State Department of Transportation projects:
 - North Spokane Corridor;
 - Highway 2;
 - US 195 Safety Improvements.
 - North Spokane Corridor

The North Spokane Corridor (NSC) is a multi-modal freeway and pedestrian/bicycle corridor that is bringing US-395 through metropolitan Spokane to I-90. The vehicular portion of this major infrastructure project provides an alternative route for freight and vehicles using local arterials travelling North and South through Spokane.

The bulk of the remaining design on the project will occur from over the course of 2026 and 2027 with the facilities construction being completed within the 2030-2032 biennium according to the Washington State budget.

This project improves mobility by allowing motorists and freight to move north and south through metropolitan Spokane, from I-90 to US 395 at Wandermere. Once complete, the NSC will decrease travel time, fuel usage, and congestion, while improving safety by reducing collisions on local arterials.

When fully complete, the North Spokane Corridor is slated to be a 60-mile per hour, 10.5 mile-long north/south limited access facility. The corridor will connect to I-90 on the south end (just west of the existing Thor/Freya Interchange) and connect to the existing US 2 (at Farwell Road) and US 395 (at Wandermere) on the north end.

Interchanges are located along the corridor from south to north, at: Interstate 90, Trent Avenue (SR 290), Wellesley Avenue, Francis/Freya Street, Parksmith Drive, US 2, and US 395 at Wandermere.

Auto Network

The city's street network has tremendous influence on the livability, economic health and quality of life on the overall city as well as its neighborhoods. For example, citizens' concerns regarding the impacts of transportation on neighborhoods and the need for viable transportation choices are often related to the design and development of the street network.

Spokane's street system in large portions of the city is largely built out, and further network development is often constrained by topography, natural features, and existing mature development. The primary emphasis for managing the automobile modal element is to operate the system as safely and efficiently as possible. A limited number of intersection improvements are planned to increase efficiency, remove bottlenecks, and address multi-modal congestion at these locations. Intersection operational improvements are designed to balance traffic flow with impacts to the other modes. These projects generally include additional left- or right-turn lanes along with raised crossings and refuge

islands to improve safety for pedestrians. Traffic flow improvements also include the installation of new signals and improved signal timing and coordination with other traffic control.

Street Network Classification

The City of Spokane's street network consists of the arterial system and local access streets. Arterial streets are designed to serve two primary functions: provide access to adjacent land and provide mobility through the city. Local access streets primary role is to provide access to land and adjacent land uses such as residential or commercial uses, in lieu of mobility.

Arterial Classification

Arterial streets (TR Map 12) are classified into categories according to the function they are intended to perform. Arterial classification is based on the degree to which the arterial is to provide either mobility or access to land. For example, some arterials should be designed and constructed for the primary purpose of moving traffic with little or no access to adjacent land. The primary purpose of other arterials is to provide more access to adjacent land with less mobility as a result.

Table TFP-2 identifies the various roadway classes and descriptions for Spokane, as defined by the FHWA¹.

TABLE TR 2 - ARTERIAL STREET CLASSIFICATIONS

TABLE TR-2 – ARTERIAL STREET CLASSIFICATIONS	
Class	Description
Urban Principal Arterial	Principal arterials are designed to permit relatively unimpeded traffic flow between major traffic generators, such as downtown, major shopping centers, and major employment districts. They serve the longest trip demands within the urban area.
Urban Minor Arterial	Minor arterials are designed to provide less mobility than principal arterials and greater access to adjacent properties. They should be moderate speed facilities that collect and distribute traffic from principal arterials to collector arterials and residential access streets.
Urban Major Collector	Collectors serve a critical role in the roadway network by gathering traffic from Local Roads and funneling them to the Arterial network. Serve both land access and traffic circulation in higher density residential, and commercial/industrial areas. Penetrate residential neighborhoods, often for significant distances.
Urban Minor Collector	Serve both land access and traffic circulation in lower density residential and commercial/industrial areas. Penetrate residential neighborhoods, often only for a short distance.
Urban Local Access	The primary function of local access streets is to provide access to adjacent property.

¹ US Department of Transportation, Federal Highway Administration. "Highway Functional Classification Concepts, Criteria and Procedures". (2013)

The city's arterial street map is shown in Map TR 11. Upon adoption, the changes on this map are forwarded to WSDOT for approval at the state level. The city's own arterial street map is the same as the one adopted at the state level. Any variation between the two may be due to a difference in traffic volume, where a street may be treated as a collector by the city but there is insufficient traffic for it to meet the standards for a collector at the state level.

The actual design of the street is determined by two primary factors: context and street type. In terms of context, for example, sidewalks must be wider on downtown streets to accommodate higher pedestrian volumes. In terms of street type, bicycle facilities on arterial roads in any context require physical separation of vehicles for safety and comfort. The street typologies are used throughout the street standards to define characteristics for Spokane's streets.

Additional information on street design guidelines can be found in the city's adopted Street Design Standards.

State Highways and Highways of Statewide Significance

State Highways, which are owned by the State and managed by WSDOT, greatly influence regional traffic patterns and adjacent land uses. These highways connect communities to one another throughout the Inland Northwest. To serve traffic at higher speeds and meet mobility and safety goals, access to limited access corridors is restricted and regulated in accordance with RCW 47.05. The State Highways that are within or adjacent to Spokane are designated as part of the Highways of Statewide Significance (HSS) (Map TR 11). In addition, the State identifies highways that are part of the Washington State Freight and Goods Transportation System (RCW 47.06A.020).

HSS include interstate highways and other State routes needed to connect major communities in the State. The State uses the designation to allocate and direct funding. The HSS system was mandated by the 1998 legislature through enactment of House Bill 1487 and codified into RCW 47.06.140.

When these highways enter the city of Spokane, it is expected that some of the mobility benefits (higher speeds, fewer cross-streets, signals) found outside the city limits will be traded for greater access opportunities (additional cross-streets, business frontage access, etc.).

US 195 corridor

A part of the National Highway System, US 195 supports an array of transportation demands including international, interstate, and interregional commerce. This highway is the regional transportation link of people and goods between Lewiston, Idaho and Spokane, Washington.

Throughout the corridor there are numerous locations where growth is anticipated, primarily in the form of residential developments. The increased traffic associated with this growth will continue to intensify congestion and traffic safety concerns.

The City of Spokane, WSDOT, and SRTC joined together to complete the US 195/I-90 Transportation Study in 2021. The study identified practical solutions that all agencies could agree on, with a focus on

reducing the volume using the substandard NB 195 to EB I-90 ramp. The projects include: J-turns at US 195/Meadowlane and US 195/Hatch Roads, turn restrictions at US 195/16th, reconnection of Inland Empire Way to US 195, construction of Lindeke from Thorpe to 16th, improvement of Marshall Road from Thorpe to 44th, restriping the commercial part of Cheney-Spokane Road, a shared-use pathway on Cheney-Spokane from Qualchan Drive to the interchange, additional frontage roads between Qualchan and Hatch and establishment of transit service in the area.

Pavement Management

Currently Spokane has over 2000 lane miles of paved streets and more is added with new development. Arterial streets account for approximately 760 of the total lane miles. The Street Department manages its pavements by regularly assessing their condition and performing routine maintenance as far as budget constraints will allow. City streets are visually inspected to document their existing condition. After roads are inspected, a condition index is calculated from 0-100. Generally, streets rated 70-100 are considered “Good.” One of our goals is to keep “good” streets in “good” condition. When roads begin to fail, they fail quickly and the costs to repair them increases dramatically. While it might be tempting to fix all “failed” streets first, it would be prohibitively expensive, leaving no money for preventive maintenance or rehabilitation of “fair” to “good” streets.

Forecasts & Growth

The Growth Management Act (GMA) requires that this plan support the land uses envisioned in the Comprehensive Plan (RCW 36.70A.070(6)(a)(i), RCW 36.70A.070(6)(a)(iii)(E), WAC 365-196-430(2)(f).) The land uses have been incorporated into the regional travel demand model that is maintained by the Spokane Regional Transportation Council. The model provides a traffic forecast that is typically 20-25 years into the future, depending on the horizon year selected by the region.

The traffic forecasts have been compared against existing volumes in select parts of the city to see where capacity failures may occur. This analysis is done at the intersection level in order to match with the city’s level of service standards. This analysis will lead to prioritization of capacity-oriented projects that are funded through the Transportation Impact Fee program. The projects include construction of new arterials, signals, roundabouts and intersection turn lanes. The impact fee projects are summarized in section 5 of this plan.

3. LEVEL-OF-SERVICE STANDARDS

Transportation Level of Service (LOS) standards for arterial streets are a required element of city Comprehensive Plans. They are discussed in RCW 36.70A.070 and in further detail in the city’s adopted *Transportation Concurrency Level of Service Standards* Administrative Policy and Procedure.

For vehicles, LOS is a qualitative measure describing operational conditions within a traffic stream, based on service measures such as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, as defined in the TRB Highway Capacity Manual. The City of Spokane requires analysis of control delay for each movement at two-way stop unsignalized intersections and

aggregated average control delay for signalized intersections and all-way stop intersections. This measure is then equated to a letter value, LOS A through LOS F. with the exception noted in the concurrency section, this standard applies to both the AM and PM peak hours.

Locally Owned Facilities

The following levels of service apply to the city-owned arterials shown on Map TR 12:

- LOS F, not to exceed 120 seconds of intersection delay at all the following signalized arterial intersections:
 - Within the Downtown and the area bound by and including the Spokane River, Maple Street, 5th Avenue and Sherman Street; and
 - Within zones that implement Centers and Corridors.
- LOS E at all other signalized arterial intersections along Principal arterials, Minor arterials, or Collector arterials.
- LOS E at all unsignalized intersections. Individual approach movements are analyzed at all unsignalized intersections with two-way stop-controlled (TWSC). The average of all movements is analyzed at all-way stop-controlled (AWSC) intersections. The department may allow a lower level of service at unsignalized intersections based on major and minor movement queue length, traffic volume, delay and volume to capacity ratio.

State Highways

State highways can be divided into two categories: Highways of Statewide Significance (HSS) and Regionally Significant Highways (non-HSS). HSS routes in the City of Spokane include I-90 (including ramp terminals), US 2, US 395 and US 195. Non-HSS routes in Spokane include SR 290 and SR 291. The following levels of service apply to the state-owned arterials shown on Map TR 11:

- LOS D for all arterial intersections on HSS routes as established by the 2024 Highway System Plan. When a development affects an intersection where the LOS is already below the applicable threshold, the pre-development LOS will be used instead.
- LOS D for all arterial intersections on Non-HSS routes as established by the 2024 Highway System Plan (Appendix G). Typically, the level of service for non-HSS routes is defined by the MPO/RTPO in the Metropolitan Transportation Plan. SRTC reviews major corridors for regional performance tracking. When a development affects an intersection where the LOS is already below the applicable threshold, the pre-development LOS will be used instead.

Multi-Modal Level of Service

The city has adopted a level-of-service for non-motorized facilities based on a percent of network completed. This level-of-service standard is used for concurrency purposes. As established in RCW

36.70A.070, the City is required to establish and assess an approach to Multi-Modal Level of Service to provide ongoing monitoring of facility performance for all modes.

The impacts of the various growth scenarios and preferred growth alternative on multimodal performance and levels of service were analyzed in the Environmental Impact Statement (EIS) for this periodic update, including several projects in the transportation analysis as they offer improvements for multimodal travel. These projects include:

- US 2/Division Street and NSC
- City Line and STA High-Performance Transit (HPT)
- Pedestrian and Bicycle Master Plans
- Vision Zero and Complete Streets Projects

Based on recent legislation, the City's *Transportation Concurrency Level of Service Standards* Administrative Policy and Procedure will be updated to reflect standards based on recommendations included in the *Multi-Modal Level of Service Memo*, included in Volume 5 of this appendix, and consistent with the EIS.

Concurrency

Concurrency was established as part of the 1990 Growth Management Act and is addressed in WAC 365-196-840. The purpose of concurrency is to provide assurance that those public facilities and services necessary to support development are adequate to serve that development at the time it is available for occupancy and use, without decreasing service levels below locally established minimum standards.

This section is intended to provide a brief overview of the city's transportation concurrency system. The city has a separate adopted *Transportation Concurrency Level of Service Standards* Administrative Policy and Procedure that describes the transportation concurrency system in detail.

The city's concurrency system has historically focused primarily on vehicular traffic, but expanded in 2017 to include non-motorized transportation modes and corresponding improvement projects. This is now being updated to focus on Multi-Modal Level of Service as mandated by state regulations such as RCW 36.70A.108 and WAC 365-196-840(4)(b).

Vehicle Policy

Concurrency applies to all of service apply to the city-owned arterials shown on Map TR 13, except for the HSS routes (Map TR 12). Per RCW 37.70A.070 (6)(C) HSS routes are not subject to concurrency.

LOS for vehicular concurrency purposes will be evaluated during the PM peak hour of traffic. This does not preclude the city from requesting analysis of other time periods for purposes of safety, operational or SEPA concerns.

For locations where an adequate LOS cannot be maintained with development, the city has historically used intersection improvement or capacity adding projects to meet concurrency. However, there are other options allowed under WAC 365-196-840(6)(i). The city intends to expand the use of transportation strategies to mitigate development which may include increased public transportation service, ride sharing programs, demand management or other strategies as approved by the city.

Multi-Modal Level of Service

The Integrated Capital Management Department performs a concurrency test for non-motorized transportation on an annual basis at the end of construction season.

The pedestrian policy is based on miles of sidewalk completion each year. The city sets a target for total mileage and for high-priority sidewalk added per year. High-priority sidewalk is sidewalk built within those areas defined in the city's pedestrian plan.

The bicycle policy is based on percentage of bicycle network completion each year. Map TR 5 shows the city's bicycle plan. The city sets a target for annual percentage completed of this future bicycle network and evaluates whether that target is being met.

The growth scenarios and preferred growth alternative for this Periodic Update were assessed in the EIS regarding impact on multimodal level of service. Furthermore, recommendations were made for potential revisions and updates to multi-modal level of service methodologies as outlined in Volume 5 of the Transportation Chapter appendix and will be considered for ongoing updates to the City's multi-modal level of service methodology.

At this time, the Multi-Modal Level of Service approach used by the City of Spokane for the sake of concurrency measurement will continue to use the system completeness approach, comparing annual completion of projects to planned 20-year buildout of each modal network. Consistent with the recommendations, this approach leverages the value of adhering to the preparation for future growth determined in modal planning documents and master plans. This also avoids the identified dynamic of chasing failing intersections while missing the broader strategic and systematic buildout of complete networks. The system completeness approach provides the city with latitude to build the right project in the right location consistent with available resources, grants, and adjacent development status.

4. VEHICLE MILES TRAVELED

The Vehicle Miles Traveled approach is established in compliance with greenhouse gas emissions reduction requirements consistent with RCW 36.70A.070. The goals and approach based on recommendations included in the attached *Vehicle Miles Traveled* Memo, included in Volume 6 of this appendix. Goals and policies in the Transportation Chapter of the Comprehensive Plan have been updated to be consistent with the Climate elements and the recommendations of this memo, to support Spokane's effort to achieve compliance with statewide goals for reductions in VMT.

Based on the assessment of current and anticipated travel patterns established in the Environmental Impact Assessment (EIS), which accounted for changes in multi-modal travel in the context of regional travel patterns, the City is setting a realistic VMT per capita reduction target of keeping VMT per capita at existing levels as a reasonable sign of progress for the Department of Commerce five-year check-in. Planned growth outside city boundaries and ongoing freeway expansion, with anticipated completion within the planning horizon, promise an increase in vehicular through-traffic from beyond city borders. Despite increasing concentrations of density and mixed-use development within the City's identified future growth areas, achieving significant near-term reductions in VMT poses a practical challenge.

Going beyond mandatory requirements in transportation demand management and accelerating establishment of planned multi-modal transportation networks may mitigate this impact over a longer planning horizon. Over the twenty-year horizon of the Comprehensive Plan, a realistic target for Spokane's VMT per capita reductions is anticipated to be within a range of 5% from existing levels. For more information on VMT reduction approaches and target-setting, the *Vehicle Miles Traveled Memo* in Volume 6 of the transportation chapter appendix provides additional discussion and analysis.

5. IMPLEMENTATION

20 Year Transportation Project Lists

One of the major goals of the transportation plan is to create a prioritized project list that guides transportation system investments and timing of projects over the life of the plan. The project lists include subjects for future study, arterial reconstruction, arterial maintenance, pedestrian, bicycle, trail, and projects that change capacity for all modes including those that are coordinated with future transit system investments.

This plan includes projects that the city may partner with other entities or that may be funded or constructed by entities other than the city. Projects where the funding methods have not been completed or where another entity may be the lead agency, while shown on the Arterial Map, are intentionally not included in the following 20-year project lists that are intended to be the focus of city funded or lead projects. Examples include new roadways shown on the arterial map and new or different transit facilities shown on the transit map that the city may seek to partner with WSDOT, the Spokane International Airport, Spokane Transit, or private developers to complete.

Transportation system project lists were prioritized based upon a scoring matrix tool that uses the following six transportation plan goals as the major Evaluation Categories. The source of the projects within the plan included:

- The projects listed in the previous version of the transportation chapter of the Comprehensive Plan.
- Adopted Neighborhood and Sub-Area Plans.
- The Downtown Plan & the South University District Plan.
- The Spokane Regional Transportation Council – Horizon 2050.
 - Transportation Plans for jurisdictions surrounding the city.
 - Spokane Airports Master Plan.
- Spokane Transit Authority – Connect Spokane & Connect 2035
 - High-Performance Transit Network
 - Division Street Bus Rapid Transit
- City Bicycle and Pedestrian Plans.
 - Spokane Area Safe Routes to School.
- City Transportation Impact Fee Project List.
- Joint West Plains Transportation Study.
- WSDOT Plans and Projects.
 - North Spokane Corridor, Route Development Plans, Washington Transportation Plan, US 195/I-90 Transportation Study.
- Current Arterial Pavement Conditions and Utility Conditions.

20 Year Integrated Project Funding Strategy

When forecast availability of funding is available to include new projects within the annually updated 6 Year Capital Program, the highest priority projects are reviewed to determine which projects are the best fit for the overall program. Projects that rank high in the possibility of integration with other public utility needs and that do not conflict with the constructability of the other projects already in the 6 Year Capital Program are reviewed for inclusion by the Transportation Commission and Plan Commission and for final action annually by the City Council. Projects are evaluated to ensure that their possible construction effects are not geographically concentrated within any one area of the city.

All the sources of funding are covered in detail in the 6-Year Capital Street Program. Other major sources of funding to implement the Transportation Facilities Plan come from the integrated strategy which is summarized below:

Integrated Clean Water Plan / Clean River Initiatives (Combined Sewer Overflow)

The Integrated Clean Water Plan allows the city to meet its regulatory requirements related to water quality in the Spokane River and Lake Spokane. The city is subject to regulatory requirements across its range of stormwater, CSO, and municipal wastewater treatment services. All these requirements come from the Clean Water Act and are regulated through a National Pollutant Discharge Elimination System (NPDES) permit for CSOs and municipal wastewater treatment, existing and potential future total

maximum daily load (TMDL) limits, and the Eastern Washington Phase II NPDES Municipal Stormwater Permit.

The Integrated Clean Water Plan specified that as part of the city's long-term effort to reduce pollution to the rivers, stormwater removal systems (Green Infrastructure) were to be incorporated into street projects. Implementing this has reduced the amount of stormwater in the Combined Sewer Overflow system and reduced the amount of water to be treated at water reclamation facilities or that flows straight to a river. These projects use different technologies and often involve using street right of way for either storage facilities or piping to move water from a source to a treatment facility. This combination of treatment techniques achieves greater pollution reduction than would have been possible if these water investments were implemented just to meet regulatory requirements. When these projects are coordinated and integrated with transportation projects, the public benefits from multiple system improvements while disrupting the local area only once.

The project prioritization matrix methodology includes project integration criteria and seeks to achieve and maximize several community benefits with every project. Benefits emphasized in the Clean Water Plan include environmental outcomes, community benefits such as improved streets, parks, and natural areas, economic development potential, operations and maintenance considerations, and life-cycle costs.

Maintenance and street sweeping can also reduce stormwater pollution. Each year, thousands of cubic yards of material are collected from the streets and prevented from entering the stormwater and combined sewer systems.

Street Levy

In November of 2014, the citizens of Spokane approved a 20-year levy lid lift as outlined in City Resolution "RES 2014-0085" for improved and integrated streets. This levy replaced the 2004 10-Year Street Bond with a longer-term funding source.

This pay-as-you-go source recognized that street repair needs are perpetual and ongoing investment was critical to maintain the system. The Levy specified that the city would prioritize projects using an integrated approach that considers all needs in the right-of-way including transportation and utility needs. Levy dollars are to be focused on improvements to the arterials system including both complete rehabilitation of streets and maintenance work.

Water and Sewer System Utility Contribution

The city is leveraging the dollars from the 2014 Street Levy with matching funds from the other city utilities and state and federal sources for a total annual investment of around \$20 million a year into our arterial system.

The city is approaching its work in the right of way in an "integrated" fashion, considering all uses of the street right of way with each project. The effort focuses on incorporating public and private utility work, stormwater management, economic development opportunities, and facilities to support multiple

modes of transportation from vehicles to bikes and pedestrians to mass transit and freight mobility. To support that integrated approach, the city has committed an annual investment in maintaining the condition of the street from the city's utilities, which use city right-of-way to serve customers.

Financial Outlook Projection

The transportation system Capital financial outlook was based on a look at 18-20 years (depending on data availability) of the City of Spokane historical finances. Existing funding sources included:

- Transportation Improvement Board (TIB);
- Freight Mobility Strategic Improvement Board (FMSIB);
- Highway Safety Improvement Program (HSIP);
- Safe Routes to School (SRTS) and Bike/Ped;
- Spokane Regional Transportation Council (STRC);
- Real Estate Excise Tax (REET); and
- Paths & Trails.

Sources for the next 20-years also include the Street levy and the sewer system utility contribution.

Tables TR 3 and TR 4 identify the projected high and low ends of expected revenue (TR 3) and projected project costs (TR 4). As the plan is implemented these estimates will guide future decision making during project scoping and selection.

PREVIOUS TABLES – NOTE 8/31/26: To be updated by 9/30/26

TABLE TR 3 – PROJECTED REVENUE		
Revenue Source	Low	High
Local Funds (Levy, Utility, REET)	\$265,000,000	\$275,000,000
Grant Funds	\$50,000,000	\$70,000,000
TOTAL	\$315,000,000	\$345,000,000

TABLE TR 4 – PROJECTED PROJECT COSTS		
Revenue Source	Low	High
Integrated	\$270,000,000	\$350,000,000
Other Capital (bridges, stand-alone bike/ped projects, capacity impact fee projects)	\$85,000,000	\$125,000,000
TOTAL	\$355,000,000	\$475,000,000

NEW TABLES

TABLE TR 3 - PROJECTED REVENUE (NEW/UPDATED TABLE TO BE PROVIDED HERE BY 9/30/26)

TABLE TR 3 – PROJECTED REVENUE		
Revenue Source	Low	High
Local Funds (Levy, Utility, REET)		
Grant Funds		
TOTAL		

TABLE TR 4 - PROJECTED PROJECT COSTS (NEW/UPDATED TABLE TO BE PROVIDED HERE BY 9/30/26)

TABLE TR 4 – PROJECTED PROJECT COSTS		
Revenue Source	Low	High
Integrated		
Other Capital (bridges, stand-alone bike/ped projects, capacity impact fee projects)		
TOTAL		

20 Year Project Prioritization

The 20 Year transportation project lists were prioritized based upon a scoring matrix tool that uses the following six transportation plan goals as the major Evaluation Categories. Within each evaluation category measurable criteria are used to score how well each project fits the criteria. Each measurable criteria column is then added to give a total project score. The higher the total score of the project the higher priority the project has in the 20-Year Transportation Plan. Details on the project list prioritization process are found in Volume 8 of the Transportation Appendix and include the scoring criteria, rankings, and planning-level cost estimates. Condensed versions of those tables can be found below in Tables TR 5 – TR 8.

Financially Constrained Project List

Based on the projected revenue and projected costs identified in Tables TR 3: Projected Revenue and TR 4: Projected Project Costs, Table TR 5: Integrated Street Rebuilds identifies a financially constrained project list for the next 20 years. Projects outside the financially constrained list are greyed out in Table TR 5. These projects will remain on the list and may receive future funding depending on circumstances.

In developing the financially constrained lists, it was necessary to make assumptions regarding future available funds based on best available data. The number of projects to be considered financially constrained will necessarily change based upon actual future funding.

Transportation Goals Used as Evaluation Categories

In developing the prioritization matrix, the city settled on using and expanding on the goals established for this transportation chapter update.

- TR Goal B: Provide Transportation Choices.
- TR Goal C: Accommodate Access to Daily Needs and Priority Destinations.
- TR Goal D: Promote Economic Opportunity.
- TR Goal E: Respect Natural & Community Assets.
- TR Goal F: Enhance Public Health & Safety.
- TR Goal G: Maximize Public Benefits and Fiscal Responsibility with Integration.

Project Categories

Within the prioritization matrix, projects are organized as follows:

- **Integrated Street Repaving Projects (Table TR 5):**
 - Projects typically include full depth reconstruction, integration of storm water, water, and sewer repair and or replacement. Addition of or repair of all transportation modes are included in the scope of these projects, including incorporating transit.
- **Maintenance / Overlays:**
 - These projects are part of the 20-Year Arterial Strategy to keep the “Good” streets in good condition and manage the poor streets until they can be fully rebuilt.
- **Active Transportation Projects (Table TR 6):**
 - Walking, biking, and pathway projects that are part of the transportation system.
- **Capacity Improvement Project List (Table TR 7):**
 - Motorized capacity projects including new roadway segments to improve connectivity, intersection modifications including new signals and Intelligent Transportation Systems (ITS) to move goods and people more efficiently.
- **Bridges (TR 8):**
 - Bridges provide key surface links between downtown and the surrounding area, supporting the city’s ability to maintain and build upon its economic strength.

20-Year Arterial Strategy

The 20-year Arterial Strategy includes the following implementation approaches tied to the Transportation Plan goals:

- Integrated Street Repaving Projects;
- Maintenance / Overlays; and
- Everything Has Its Place.

Integrated Street Rebuilds

Rebuilding streets in an integrated fashion including Green Infrastructure and adding multi-modal transportation modes as outlined in the Transportation Plan. The prioritization matrix process provides the majority of the guidance on how these streets are selected into the 6 Year Capital Street Program.

The goal of these projects is to:

- Do all the work that's needed when you rebuild – ensure that all infrastructure is prepared for the next 20 years.
- Include underground utilities:
 - Water & sewer;
 - Electric & natural gas; and
 - Communications & data including telephony, cable, signal systems.
- Manage stormwater.
- Bike Facilities as called for in the Bicycle Master Plan (BMP).
- Pedestrian needs.
- Transit system improvements.

TABLE TR 5 - INTEGRATED STREET REPAVING PROJECTS

NOTE 8/31/26: NEW/UPDATED TABLE TO BE PROVIDED HERE BY 9/30/26

TABLE TR 5 – INTEGRATED STREET REPAVING PROJECTS			
ID	Project Name	Project Location	Project Description
1.	Main Ave.	Monroe to Wall	Full depth reconstruction, SW repair, structural sidewalk mitigation, stripe bike lanes, redo lighting (parking funds).
2.	Sprague	Howard to Browne	Full depth reconstruction, SW repair, structural sidewalk, stripe bike lanes, redo lighting (parking funds).
3.	Spokane Falls Blvd.	Post to Division	Full depth reconstruction, SW repair, structural sidewalk, redo lighting (parking funds).
4.	1st Ave.	Wall to Bernard	Full depth reconstruction, SW repair, structural sidewalk, redo lighting (parking funds).
5.	Howard St.	SFB to Riverside	Full depth reconstruction, SW repair, structural sidewalk, redo lighting (parking funds).
6.	Howard St.	Sprague to 4th	Full depth reconstruction, SW repair, structural sidewalk, redo lighting (parking funds).
7.	Main Ave.	Cedar to Monroe	Full depth reconstruction, SW repair, structural sidewalk.

8.	Mallon	Monroe to Howard	Full depth reconstruction, SW repair.
9.	Monroe	Maxwell to Indiana	Full depth reconstruction, SW repair.
10.	Post St.	Main to 3rd	Full depth reconstruction, SW repair, structural sidewalk, redo lighting.
11.	Belt	Garland to Rowan	Full depth reconstruction, new sidewalk, SW repair, crosswalks, bike lane.
12.	Broadway Ave.	Cedar to Post	Full depth reconstruction, SW repair.
13.	Summit Blvd. - Mission	A St. to Pettit	Full depth reconstruction, SW repair.
14.	Boone	Maple to Monroe	Full depth reconstruction, SW repair.
15.	Freya (Phase 1)	Wellesley to Francis	Full depth reconstruction, SW repair.
16.	Rowan	Crestline to Market	Full depth reconstruction, SW repair.
17.	17th Ave.	Grand to Upper Terrace	Full depth reconstruction, SW repair.
18.	Boone	Washington to Division	Full depth reconstruction, SW repair.
19.	Howard St.	Maxwell to Buckeye	Full depth reconstruction, SW repair.
20.	Havana	Sprague to 3rd	Full depth reconstruction, SW repair.
21.	14th Ave.	Bernard to Grand	Full depth reconstruction, SW repair.
22.	Bernard - Ben Garrett – Grove	9th to 14th	Full depth reconstruction, SW repair.
23.	Freya Paving	37th to 42nd	Full depth reconstruction, SW repair.
24.	Freya Paving	17th to 29th	Full depth reconstruction, SW repair.
25.	Wellesley	Driscoll to A St.	Full depth reconstruction, SW repair.
26.	Freya	Upriver to Euclid	Full depth reconstruction, SW repair.
27.	Sharp-Atlantic	Boone to Pearl	Full depth reconstruction, SW repair.
28.	Summit Blvd.	Boone to Broadway	Full depth reconstruction, SW repair.
29.	Cedar - High Dr.	15th to 29th	Full depth reconstruction, SW repair.
30.	Central Ave.	Wall to Division	Full depth reconstruction, SW repair.
31.	Summit Blvd.	A St. to Boone	Full depth reconstruction, SW repair.
32.	14th Ave.	Monroe to Grand	Full depth reconstruction, SW repair.
33.	Freya	Wellesley to Euclid	Full depth reconstruction, SW repair.
34.	Lincoln	Division to Nevada	Full depth reconstruction, SW repair.
35.	Belt	NW Blvd to Montgomery	Full depth reconstruction, SW repair.
36.	25th Ave.	Bernard to Grand	Full depth reconstruction, SW repair.
37.	Empire	Helena to Crestline	Full depth reconstruction, SW repair.
38.	Milton-14 th	16th to Lindeke	Full depth reconstruction, SW repair.
39.	Rowan	Nevada to Crestline	Full depth reconstruction, SW repair.

40.	6th-7th Ave.	Inland Empire to Walnut St.	Full depth reconstruction, SW repair.
41.	Perry	Wellesley to Euclid	Full depth reconstruction, SW repair.
42.	Wellesley	Freya to Havana	Full depth reconstruction, SW repair.
43.	Strong Rd.	Five Mile to Cedar	Full depth reconstruction, SW repair.

Maintenance

As a part of the adoption of the Street Levy the goal was to bring the system wide average pavement condition to a “Good” condition. This recognized that while some of the system would be improved to an “Excellent” condition after a full rebuild other parts of the system would need to be maintained without either needing or being able to be fully rebuilt within the next 20 years. This would include grind/overlay projects, pothole and sub-grade repair, skin patching, utility cut patching, and crack sealing to prolong street pavement life.

Keep the “good” streets “good”:

- This is MOST important.
- Invest in streets to keep them from deteriorating to the point of rapid decline.
- Select streets based on prescribed schedule & visual inspection.
- Increase dollars spent in this area over time.

Keep “poor” streets together until they can be rebuilt:

- Road condition is priority.
- Improve the ride until it can be rebuilt.
- Mostly grind and overlay work.
- Include 1-2 projects each year.

Selecting grind and overlay to manage poor streets, reviewing:

- Pavement condition.
- Traffic volumes.
- Pedestrian demand and bike facilities.
- Location in a Center or Corridor or Target Area.
- Location on a transit route.
- Completion of a larger corridor.
- Geographic diversity.

Active Transportation Projects

With integrated project delivery, many planned active transportation projects are implemented along with street rebuilds and annual maintenance activities. However, there ARE stand-alone active

transportation projects that are a priority for the city and its residents, such as the Maxwell Avenue bikeway. For those projects, a portion of the federal funding received, along with grant funding, is used to complete the projects. The pursuit and development of the active transportation projects listed below in Table TR 6 will be opportunity driven, and thus the projects are not ranked. For many of these projects, a study determining feasibility and alignment will be the necessary first step. It should be noted that not all these projects will be completed in the next 20 years.

TABLE TR 6 - ACTIVE TRANSPORTATION PROJECTS

NOTE 8/31/26: NEW/UPDATED TABLE TO BE PROVIDED HERE BY 9/30/26

TABLE TR 6 – ACTIVE TRANSPORTATION PROJECTS		
ID	Project Name	Project Location
1.	Longfellow Greenway	Driscoll Boulevard to Market Street
2.	Thornton Murphy Park Pathway and Crossing Improvement	Ray/23rd to 27th/Fiske.
3.	Cook Street Greenway	Illinois Avenue to Francis Avenue
4.	Fiske Street Greenway	Thornton Murphy Park to 37 th Avenue
5.	Addison / Standard Bikeway Upgrades	Liberty Avenue to Magnesium Road
6.	Hemlock Street Pathway	Euclid Avenue to Liberty Avenue
7.	Downtown Structural Sidewalk Repair	Various locations downtown.
8.	Spokane Falls Boulevard Bikeway	Post Street to Division Street
9.	First Avenue Bikeway	Cedar Street to Washington Street
10.	Centennial Trail / Mission Ave Ped Crossing	Make Crossing Improvements at Mission Ave.
11.	Spokane Valley/Millwood Trail	Western leg from Greene St. to Felts Field.
12.	Everett Street Greenway	Division to Market.
13.	Elm Street Greenway	Summit Parkway to NW Blvd.
14.	AM Cannon Park Area - Sidewalk Infill	Elm, Sinto, Oak, Cannon as needed.
15.	N Monroe Area Sidewalk Infill	Gaps on Madison, Euclid.
16.	Sprague Avenue Bikeway	Cedar Street to Washington Street
17.	Stairway Repair and Replacement	Various locations.
18.	S Hillyard Area - Sidewalk Infill	Haven west side, Rich, Regal.
19.	East Sprague Area Sidewalk Infill	Gaps on Helena, Madelia.
20.	34th-35th Avenue Greenway	Arthur to Regal.
21.	Indian Trail Pathway	Lowell to Kathleen.
22.	Division Sidewalk Weile to Lincoln	Gaps on eastside of Division from Weile to Cozza.

23.	Cook Street Greenway	SE Blvd to 49 th .
24.	US 2 - Shared Use Path - Spotted to Flint	North Side of US 2 b/w Spotted Rd and Flint Rd.
25.	US 2 - Shared Use Path - Flint to Hazelwood	North side of US 2 b/w Flint and Hazelwood.
26.	Division sidewalk Cozza to Lincoln	Gaps on west side of Division from Cozza to Lincoln.
27.	Division sidewalk Rhoades to Houston	Gaps on westside of Division from Rhoades to Houston.
28.	33rd Avenue Greenway	High Drive to Arthur Street
29.	East Central Community Center Area - Sidewalk Infill	Lee, Stone, Cook, Napa.
30.	North Hill (Garland) Sidewalk Infill	Lincoln, Rockwell, Lacrosse, Longfellow.
31.	Arthur Street Greenway	26 th Ave to 42 nd Ave
32.	21st Avenue Greenway	Cedar to Rockwood Blvd.
33.	Havana Sidewalk	Gaps from Havana to 3 rd .
34.	Holy Family Area - Sidewalk Infill	Central, Standard, as needed.
35.	Belt St Sidewalk	East side Wellesley to Longfellow.
36.	US 195 Shared Use Path	Spokane-Cheney commercial area to Meadowlane.
37.	Trolley Trail Acquisition and Improvement	Complete the Trolley Trail from the northern terminus of the publicly owned trail (running from Assembly northeast for 1.5 miles) to Milton Street.
38.	17th Ave. Greenway	Cedar to Rockwood Blvd.
39.	Rowan Ave. Sidewalk	North side Napa to Crestline.
40.	Greene/Upriver Area - Sidewalk Infill	West of Greene, Jackson, Market, Carlisle.
41.	Alberta St. Sidewalk	East side gaps from Wellesley to Francis.
42.	Francis Sidewalk Gaps	Sutherlin to Winston (both sides).
43.	Alberta-Cochran Sidewalk	Infill from NW Blvd to Gordon.
44.	Alberta St. Sidewalk	East side from Driscoll to Longfellow.
45.	Perry St. Sidewalk	East side Bridgeport to Empire.
46.	Cliff Dr. Sidewalk	Gaps from Bernard to Grand.
47.	Alberta St. Sidewalk	West side from Driscoll to Garland.
48.	Perry St. Sidewalk	East side Empire to Wellesley.
49.	Helena St. Sidewalk	Both sides Rowan to Olympic.
50.	Fish Lake Trail Gap II	Queen Lucas Lake to Fish Lake Regional Park.

Capacity Improvement Projects

The GMA authorizes impact fees for adding needed capacity for streets and roads. The fees must be based on, and used for, specific improvement projects in the Transportation Plan. The projects must be

“system improvements” that provides additional system capacity service and benefits to the community, and not “project improvements” that provide service and benefits only to the individual development. Table TR 7 is a snapshot in time and will change based on the city’s needs over time based on actual and forecasted growth.

TABLE TR 7 - CAPACITY IMPROVEMENT – IMPACT FEE PROJECTS

NOTE 8/31/26: NEW/UPDATED TABLE TO BE PROVIDED HERE BY 9/30/26

TABLE TR 7 – CAPACITY IMPROVEMENT – IMPACT FEE PROJECTS		
Region	Project Name	Project Location
D	5th Ave / Sherman St	Intersection - install new traffic signal.
D	Trent / Hamilton intersection	Modifications due to new traffic patterns with NSC.
D	D Bicycle Improvements	Stripe bike facilities on arterials.
D	D Pedestrian Improvements	Install pedestrian facilities on arterials.
NW	Assembly St / Francis Ave (SR291)	Intersection - construct roundabout.
NW	Indian Trail Rd - Kathleen to Barnes	Widening - construct to 5-lane section.
NW	Francis/Alberta	Modify NB and SB lanes to allow protected phasing.
NW	Francis/Maple	Add WBR lane.
NW	NW Bicycle Improvements	Stripe bike facilities on arterials.
NW	NW Pedestrian Improvements	Install pedestrian facilities on arterials.
S	29th Ave / Freya St	Stripe EBL and WBL turn lanes, and widen for NB and SB left turn lane. Keep 4-way stop.
S	37th Ave / Freya St	Construct traffic signal.
S	37th Ave / Ray St	Construct traffic signal and WBR channelization.
S	Ray-Freya Preferred Alternative	Study scope within general area of 17 th Ave. to 57 th Ave. and from Crestline St. to Freya St.
S	44th/Regal	Widen northbound approach to 2 lanes.
S	Freya / Palouse Hwy.	Roundabout (or turn lanes).
S	S Bicycle Improvements	Stripe bike facilities on arterials.
S	S Pedestrian Improvements	Install pedestrian facilities on arterials.
NE	Lincoln Rd. / Nevada St.	Intersection Improvements - construct separate eastbound and westbound left-turn lanes; include west leg widening and construction of 5-lane east of Nevada 1000'.
NE	Mission/Havana	Signal.
NE	Nevada / Magnesium	left turn phasing, additional lanes

NE	NE Bicycle Improvements	Stripe bike facilities on arterials.
NE	NE Pedestrian Improvements	Install pedestrian facilities on arterials.
W	21 st Avenue: Deer Heights to Flint/Granite	Segment - construct new 3-lane arterial.
W	Deer Heights Road: south end to 18th/21st	Segment - construct new 2-lane arterial.
W	12 th Avenue: Deer Heights to Flint/Granite	Segment - construct new 2-lane arterial.
W	US 2 Bike Path	Bike path from Deer Heights to Sunset Hill.
W	W Bicycle Improvements	Stripe bike facilities on arterials.
W	W Pedestrian Improvements	Install pedestrian facilities on arterials.

Bridges

The Spokane River has served as an industrious focal point for hundreds of years. Because the river and Spokane Falls drew people to gather at its banks, bridges became requisite and have played a major role in Spokane's economic vitality for over 100 years. Freight transfer into and through Spokane is facilitated by six key bridges. These bridges provide key surface links between downtown, the heart of our economic engine, and the surrounding area. All bridges listed in Table TR 8 are showing their age, portions of some of these bridges have deteriorated to the point that the City of Spokane has had to restrict traffic to maintain safety standards.

TABLE 8 - BRIDGE PROJECT LIST

TABLE TR 8 – BRIDGE PROJECT LIST	
Project Name	Year Built
Latah Bridge	1913
Mission Street Bridge	1909
Greene Street Bridge	1955
Monroe Street Bridge	1911

Residential Strategy

Non-Arterial streets traditionally have fewer maintenance and new construction funds available than Arterial streets. Federal and State funding sources are normally not available, leaving the local community as the sole source for maintenance or rebuilding local streets. The City Council formed a local Transportation Benefit District (TBD) to generate revenue for the repair and maintenance of non-arterial streets.

The TBD governing board (currently the City Council) established a Citizen's Transportation Advisory Board (CTAB) as per resolution "RES 2010-0002" which transitioned into the City's Transportation Commission (TC) as established by resolution. As the TPD Board, formation of the Transportation Commission further recognizes that successful implementation of the city's TBD requires full public

transparency and accountability regarding the revenue generated by the vehicle tab fee as well as the projects on which these funds are spent. The volunteer citizens of the Transportation Commission are responsible for the review of transportation projects under consideration for TBD funding and make recommendations to the TBD governing board.

Railroad Crossing Projects

There are many at-grade rail crossings within the city. Most of these already have warning devices and gates installed to provide increased protection for vehicles, cyclists, and pedestrians on the road. However, there are a few arterial crossing locations that could use further improvements, as funding becomes available. These locations are already equipped with warning lights and bells. However, due to increased traffic on the roadway or on the rail line, the locations listed in table TR-9 would benefit from additional safety measures.

TABLE TR 9 - RAILROAD CROSSING PROJECT LIST

TABLE TR 9 – RAILROAD CROSSING PROJECT LIST	
Project Name	Needed Improvements
Havana Street crossing of UP (n/o Sprague Avenue)	Widen crossing for sidewalk, install gates, update preemption equipment and track circuit for the adjacent traffic signal
Freya Street crossing of UP (n/o Sprague Avenue)	Install gates, update preemption equipment and track circuit for the adjacent traffic signal
Mission Street crossing of BNSF (e/o Perry Street)	Install gates, update preemption equipment and track circuit for the adjacent traffic signal

Notes: UP = Union Pacific Railroad. BNSF = Burlington Northern and Santa Fe Railroad.

6. FUTURE CONDITIONS

In addition to the proposed projects and policies presented in this plan, there are several noteworthy technological, demographic, and societal changes anticipated to have significant impacts on the future of transportation systems in Spokane. This section reviews some of these trends and tries to provide insight on how these may change transportation needs in the future.

Technological

Shared Micro-Mobility

For profit shared micro-mobility companies such as Lime, Bird, and Veo continue to operate within cities across the country, including Lime's operations as Spokane's shared micro-mobility vendor, as selected through a competitive Request for Proposals. These companies operate within the public right-of-way through contracts with municipalities, paying for the right to park vehicles within the right-of-way. For a fee, users can use the phone-based application to rent scooters, bikes and electric personal

vehicles to accomplish short trips throughout the city. The technology, character and regulations determining the success and safety of this industry continue to evolve, and cities continue to rapidly adjust permissions, contracts, and regulations.

Ride Sourcing

Transportation network companies (TNC), such as Uber and Lyft, continue to influence the dynamic of the transportation system. As prices and operational controls have stabilized, and prices have increased, these companies have become a standard part of transportation options in most cities. Although often priced beyond the range of many citizens, they continue to provide a convenient option for completing short trips without use of a personally owned vehicle.

Autonomous Vehicles

As testing and use of autonomous vehicles has increased in major cities on the west coast, proponents have touted benefits including increased mobility and maximized efficiency. But with ongoing test and controls limiting the ubiquity of autonomous vehicles due to ongoing safety concerns, cities continue to explore options for integrating autonomous vehicle technology with existing infrastructure and drivers at an affordable rate. As transportation technology continues to rapidly evolve, major benefits such as improved safety, increased mobility, and maximized efficiency are on the horizon. The costs for fully supporting autonomous vehicle technology promise to create an extended period of transition outside of metropolitan areas with major technology hubs.

In addition, there is the potential for negative impacts on VMT and emission levels as a result of empty autonomous cars circling without passengers or travelling to cheaper parking areas away from the owners' destination, both of which would add to local congestion. With vehicle sensing and autonomous features potentially increasing the capacity of existing roadways and intersections through more efficient signal timing and tighter vehicle spacing, unintended consequences may include individuals using their own vehicles more often and as an alternative to transit services.

Several policy approaches may be considered to curtail the VMT impacts of autonomous vehicles. Potential system features to prevent increases in VMT could include the following:

- Charging autonomous vehicle companies per mile traveled;
- Using autonomous vehicles to supplement transit and active modes rather than as a replacement; and
- Ensure high-quality transit is available at a higher frequency and quality and at a more cost-effective rate than autonomous vehicles.

Other considerations include the relative impacts on public health, economic development, and quality of life compared to other modes such as public transit and active transportation. Modal balance of the transportation system will be as important in the future as it is today for residents.

As these technologies begin to emerge, Spokane should not only update infrastructure technologies to maximize capacity and safety of the network, but also look ahead to address potential challenges of managing new technologies as they may impact VMT levels and other travel patterns.

Economic

Expected Increases in Delivery Freight

Shoppers are continuing to make fewer trips to stores, a trend exacerbated by the COVID-19 pandemic. Many are continuing the trend of shopping online for regular purchases rather than spending locally at brick-and-mortar commercial areas. As the digital footprint grows and more goods come directly to residences, the City of Spokane can anticipate more delivery trucks in residential areas and throughout major corridors.

The Sharing Economy

Technology has enabled the growth of the sharing economy, from shared micro-mobility to shared electric vehicles and short-term rental housing through phone-based application. The role of short-term rentals increasing trips and turnover within neighborhoods, and the use of shared vehicles to replace personal automobiles, may continue to shift travel patterns in unpredictable ways.

Demographics

Driving Trends

VMT per capita is increasing throughout the United States, and continues to hold at record highs, steadily climbing past pre-pandemic highs, despite drops in 2020 and 2021.

Younger Generations Are Driving Less

Younger age groups continue exhibiting strong preferences for active transportation modes, ridesharing and transit rather than purchasing a personal vehicle, suggesting the potential for a future shift. Current generations of teenagers are more likely than previous generations to use transit, walk, and bike, and less likely to drive (Wang, 2024).

Licensing Rates

While younger generations wait longer to obtain drivers licenses, trends have rebounded as Millennials entered the adult workforce, with licensing rates rebounding. The generation born between 1981 and 1996 now make up the core of the U.S. driving population, and account for approximately 28% of all drivers within the United States.

Renewed Desire to Live in Urban Areas

With today's technology, millennials have grown accustomed to having the world at their fingertips. As cities resurface as centers of economic energy and vitality, millennials are opting to live in urban areas over the suburbs of rural communities, with indications of a preference among younger generations for living in mixed-use communities found in urban centers, close to shops, restaurants, and employers. Millennials are currently living in urban areas at a higher rate than any other generation, however the next generation, Gen-Z, shows a marked trend toward living in suburban and rural locations as

compared to Millennials. This indicates a need to focus on providing a greater variety of transportation options and shortening trip distances in suburban environments and developments on the rural edge, in addition to the previous focus on central cities (Wang, 2024).

Demand for Transit is Up

Nationwide, transit ridership increased consistently from 2010 until the COVID-19 pandemic, with transit ridership once again rebounding in Spokane in recent years. These trends indicate a rebound toward transit and a continued shift toward modes other than driving a personal vehicle.ⁱ

More Single Households

Younger generations are waiting longer than before to get married and have children. This means that housing preferences and travel patterns observed in family households are not emerging as strongly as before, shifting housing choices from suburban single-family homes toward close-in neighborhoodsⁱⁱ with higher density and greater access to jobs, goods, and services within shorter trip distance.

ⁱ <https://www.transit.dot.gov/about/news/travel-trends-report-transit-ridership-rise-nationwide-industry-supports-hundreds> (FTA, 2025)

ⁱⁱ Wang, K. (2024). Are Generation Z Less Car-Centric Than Millennials? A Nationwide Analysis Through the Lens of Youth Licensing. *Cities: The International Journal of Urban Policy and Planning*, 149(June), 12. Retrieved 8 31, 2026

Appendix 3

Transportation:

2 Planning Documents Reviewed

2. Plans Reviewed

City of Spokane Plans, Studies and Guidance

- The City of Spokane's Comprehensive Plan
 - 2001 and 2006, 2012, 2014, and 2017 periodic updates
- 2026 to 2031 6-Year Capital Improvement Program
- ReFive: 5th Avenue Community Plan (2026)
- Division Street Transit Oriented Development (TOD) Plan (2026)
- South Logan Transit Oriented Development (TOD) Project (2024)
- City of Spokane Centers & Corridors Study (2024)
- Spokane Bicycle Priority Network (2024)
- Spokane Accelerated Mobility Playbook (2024)
- City of Spokane Transit Oriented Development (TOD) Framework Study (2022)
- Spokane Downtown Plan Update (2021)
- South University District Sub Area Plan (2020)
- Grand Boulevard Transportation & Land Use Study (2020)
- City of Spokane Downtown Parking Study (2019)
- Spokane Bicycle Master Plan (2017)
- The Downtown Plan: Fast Forward Spokane (2008)
- University District / Downtown Spokane Transportation Improvement Study (2009)
- Downtown Parking Study (2005 & 2010 reports)
- University District Strategic Master Plan (2004)
- University District Parking Study (2007)
- Division Street Gateway Study (2015)
- Pedestrian Master Plan (2015)
- West Plains Transportation Subarea Plan (2014)
- ADA Transition Plan (2015)
- Impact Fee Ordinance and projects
- Residential Traffic Calming Program
- City Unified Development Code
- City Street Design Standards

Neighborhood Plans

- West Central Infrastructure Project (2024)
- Shadle Area Neighborhood Plan (2019)
- Browne's Addition: Master Plan for Coeur d'Alene Park - Spokane Park Board Approval
- East Central: City Council resolution number: RES 2006-0032

Appendix 3, Part 2: Plans Reviewed

- Emerson-Garfield: City Council resolution number: RES 2014-0086
- Five Mile: City Council resolution number: RES 2012-0007
- Grandview/Thorpe: City Council resolution number: RES 2015-0115
- Logan: City Council resolution number: RES 2006-0069
- Logan Neighborhood Identity Plan and Model Form-Based Code for Hamilton Corridor: RES 2014-0053
- Nevada Lidgerwood: City Council resolution number: RES 2012-0009
- North Hill: City Council resolution number: RES 2015-0064
- Peaceful Valley: 2015
- Southgate: City Council resolution number: RES 2012-0008
- South Hill Coalition: City Council resolution number: RES 2014-0067
- West Central: City Council resolution number: RES 2013-0012

Spokane Regional Transportation Council (SRTC)

- SRTC HORIZON 2050: The Metropolitan Transportation Plan (2025)
- Horizon 2050 System Performance Report (2025)
- SRTC Unified List of Regional Transportation Priorities (2026)
- SRTC Transportation Improvement Program 2026-2029 (2026)
- Regional Commute Trip Reduction Plan 2025-2029 (2025)
- SRTC Congestion Management Process Report (2025)
- DivisionConnects: Phases 1 and 2 (2021 and 2022)
- US 195 North/I-90 Transportation Study (2021)
- Spokane Regional Truck Freight Profile (2021)
- Spokane Regional ITS Architecture Plan (2019)
- Spokane Regional Commute Trip Reduction Plan (2008)
- Spokane Region ITS Systems Plan (2013)
- Regional Bicycle Priority Network
- Regional Bicycle Level of Traffic Stress
- SRTC Safe and Complete Streets Policy and Checklist (2012)

Spokane Transit Authority (STA)

- STA Moving Forward (2021)
- Connect 2035 (2026)
- Transit Development Plan 2027 – 2032 (2026)
- DivisionConnects: Phases 1 and 2 (2021 and 2022)
- Central City Line Strategic Overlay Plan (2016)

Washington State Department of Transportation (WSDOT)

- WSDOT North Spokane Corridor Project (underway)
- WSDOT Active Transportation Programs Design Guide (2026)

Appendix 3, Part 2: Plans Reviewed

- WSDOT Active Transportation Programs Quick Build Guide (2026)
- WSDOT Active Transportation: Connectivity (2024)
- WSDOT Highway System Plan (2024)
- US-2 – West Plains Subarea Transportation Management Plan Study (2022)
- US 195 North/I-90 Transportation Study (2021)
- Washington Statewide Human Services Transportation Plan (2022)
- WSDOT Active Transportation Plan 2020 and Beyond (2020)
- WSDOT – Washington Transportation Plan (WTP 2035) (2015)

Spokane Valley

- Spokane Valley Active Transportation Plan (SVATP) (2026)

Spokane County

- Spokane County Active Transportation Plan (underway)

Appendix 3

Transportation:

3 Spokane Pedestrian Master Plan



PEDESTRIAN MASTER PLAN

CITY OF SPOKANE



ADOPTED NOVEMBER 2, 2015

Pedestrian Master Plan
City of Spokane

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1 SPOKANE PEDESTRIAN MASTER PLAN

PLAN PURPOSE

Walking is the most fundamental transportation choice -- the starting place for all journeys, even as people walk to their cars, transit, or bicycle to move between the places they visit throughout the day. Despite the fact that nearly all Spokane residents walk at some point, the details of the walking environment go largely unexamined; as for most people in Spokane the duration of a walking trip is so short that a facility of any quality that connects two places with the shortest path will do.

Like many cities, Spokane has focused its attention over the last 60 years on planning and design solutions that improve motor vehicle access and mobility. Street and intersection designs have come to accommodate high motor vehicle speeds and traffic volumes with limited delay. Furthermore, the probability of choosing transit or walking as a primary mode is reduced by missing or deteriorated sidewalks, a lack of high quality crossings on higher speed and volume streets such as arterial streets, and long trip distances along curvilinear streets.

In response to these conditions, and a demand for more safe transportation options, Spokane, like cities across the country is choosing to redesign its streets. These redesigns can provide a high quality barrier-free walking environment that supports increased levels of physical activity, important connections to transit, and more transportation options for all. Of particular note in considering these changes is that the Millennial generation (born between 1981 and 2000) is expecting diverse shared mobility options. According to the 2010 Census, the 85.4 million Millennials who make up close to 28% of the total U.S. population are traveling differently. Compared to their parents' generation, Millennials are:

- Purchasing fewer cars and driving less^{1 2}
- Not obtaining their driver's license³
- Biking, walking, and taking transit more^{4 5}

This chapter includes the following sections to support a more walkable Spokane:

- Goals for the pedestrian environment
- Description of the basic elements of providing a quality pedestrian experience
- Assessment of existing conditions for walking today
- Recommended policies and actions

¹ American Public Transportation Association. "Millennials & Mobility: Understanding the Millennial Mindset."
<http://www.apta.com/resources/reportsandpublications/Documents/APTA-Millennials-and-Mobility.pdf>

² Ibid.

³ Federal Highway Administration, *Highway Statistics 2010—Table DL-20*, September 2011.

⁴ American Public Transportation Association. "Millennials & Mobility: Understanding the Millennial Mindset."
<http://www.apta.com/resources/reportsandpublications/Documents/APTA-Millennials-and-Mobility.pdf>

⁵ U.S. PIRG. "A New Direction." 2013.
<http://uspig.org/sites/pirg/files/reports/A%20New%20Direction%20vUS.pdf>.

This chapter also provides a number of relevant best practices which are intended to serve as a toolbox for Spokane as it addresses key pedestrian improvements. The best practices should be used to inform opportunities to improve and enhance Spokane's existing pedestrian environment.

Vision and Goals

Five goals guide the continued enhancement of the pedestrian environment in Spokane.

- **Goal 1 Well Connected and Complete Pedestrian Network** - Provide a connected, equitable and complete pedestrian network within and between centers and corridors and Pedestrian Priority Zones that includes sidewalks, connections to trails, and other pedestrian facilities, while striving to provide barrier-free mobility for all populations.
- **Goal 2 Maintenance and Repair of Pedestrian Facilities** - Provide maintenance for and improve the state of repair of existing pedestrian facilities.
- **Goal 3 Year-Round Accessibility** - Address the impacts of snow, ice, flooding, debris, vegetation and other weather and seasonal conditions that impact the year-round usability of pedestrian facilities.
- **Goal 4 Safe and Inviting Pedestrian Settings** - Create a safe, walkable city that encourages pedestrian activity and economic vitality by providing safe, secure, and attractive pedestrian facilities and surroundings.
- **Goal 5 Education** - Educate citizens, community groups, business associations, government agency staff, and developers on the safety, health, and civic benefits of a walkable community.

Pedestrian Priority Zones

The Pedestrian Master Plan establishes Pedestrian Priority Zones to guide investments to areas with the greatest potential to support walking access to destinations such as employment, schools, parks, and transit stops. Priority zones were identified using an analysis of pedestrian demand and deficiency found later in this chapter. Identification of these zones will help the City target investments in pedestrian infrastructure such as sidewalks, curb ramps, and pedestrian crossings.

EXISTING GUIDING DOCUMENTS

Spokane's current plans, design guidelines, and best practices influence the recommendations in this chapter.

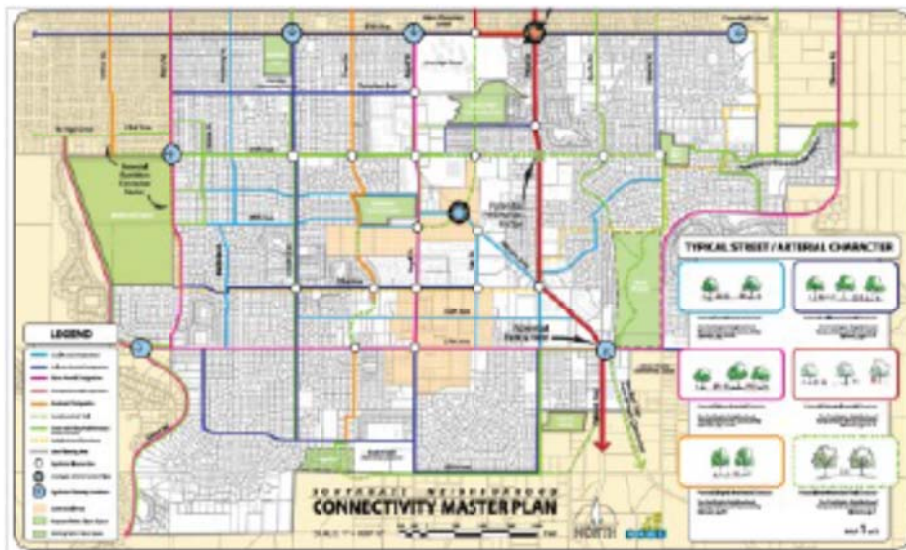
Neighborhood Plans Addressing Pedestrians

Since the adoption of the 2001 City of Spokane Comprehensive Plan, several neighborhoods have participated in localized planning efforts. They have engaged stakeholders, evaluated existing conditions, established visions and goals and identified key projects and implementation steps to improve neighborhood livability. Among other things, the neighborhood plans address many topics including pedestrian transportation, connectivity and safety. The following neighborhood plans have been adopted by resolution by the Spokane City Council:

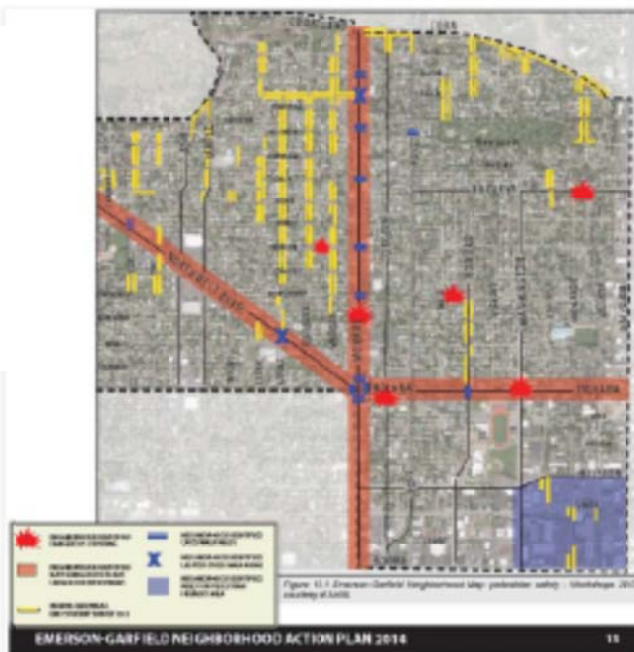
- Browne's Addition: Master Plan for Coeur d'Alene Park - Spokane Park Board Approval
- East Central: City Council resolution number: RES 2006-0032
- Emerson-Garfield: City Council resolution number: RES 2014-0086
- Five Mile: City Council resolution number: RES 2012-0007
- Grandview/Thorpe: City Council resolution number: underway
- Logan: City Council resolution number: RES 2006-0069
- Logan Neighborhood Identity Plan and Model Form-Based Code for Hamilton Corridor: RES 2014-0053
- Nevada Lidgerwood: City Council resolution number: RES 2012-0009
- North Hill: City Council resolution number: underway
- Peaceful Valley: City Council resolution number : underway
- Southgate: City Council resolution number: RES 2012-0008
- South Hill Coalition: City Council resolution number: RES 2014-0067
- West Central: City Council resolution number: RES 2013-0012

Many neighborhood plans include consideration of pedestrian improvements (see examples below). Although these plans will require further study for implementation, they provide direction to the City of Spokane as to the future desires of the neighborhood and are a useful tool for planning capital projects within a neighborhood. In the context of the Pedestrian Master Plan, the neighborhood plans are valuable for addressing neighborhood based connectivity improvements and in setting priorities for future projects. It is anticipated that the Spokane City Council will adopt additional neighborhood/subarea plans in the future that consider pedestrian improvements.

Pedestrian Master Plan
City of Spokane



Southgate Neighborhood Connectivity Master Plan



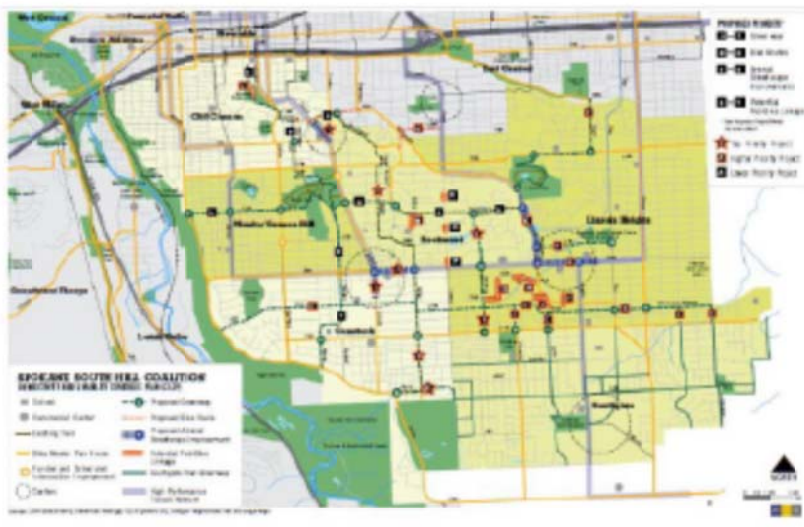
Emerson-Garfield
Neighborhood
Action Plan 2014

Pedestrian Master Plan

City of Spokane



Pedestrian Improvement Plan—Five Mile Prairie Neighborhood Plan



South Hill Coalition Connectivity and Livability Strategic Plan

Downtown Spokane Streetscape Inventory, SPVV Landscape Architects, November 2014

The Downtown Spokane Sidewalk Inventory and Assessment was completed in November of 2014. The inventory included the downtown area from Spokane Falls Boulevard to Interstate 90; west side of Monroe Street to the east side of Browne Street.

The goal of the Inventory and Assessment project was to gain an understanding of the conditions of the pedestrian surfaces in Downtown Spokane, including the pavement types and conditions; street furnishings; street trees and accessible ramps. The inventory process took place between August and October, 2014, and included data collection in the field in the form of written notes, photographs, preparation of narratives for each block, and area take-offs that identify square

footages of pedestrian surfaces needing replacement or repair; locations and types of street trees, tree grates, benches, trash receptacles, media boxes and other street furnishings; locations of access hatches into structural sidewalks; and identification of compliant- and non-compliant pedestrian cross-walks. The document contains individual chapters for each block within the study area, including a map graphic with colored representations of each type of sidewalk surfacing that needs repair/replacement, along with supporting photographs of each block and major elements within the inventory. In addition to graphic information found here, substantial amounts of information were uploaded to the City of Spokane GIS database regarding site furnishings, street trees, tree grates, etc.

Spokane Design Guidelines

The City's current design standards for pedestrian facilities are found in the adopted Comprehensive Plan, Unified Development Code, Street Design Standards, and Spokane's Standard Plans. The Street Design Standards developed as part of the Transportation Plan Update will become the design standards for the City.

NACTO Urban Street Design Guide

In November 2014, the Spokane City Council endorsed the National Association of City Transportation Officials (NACTO) Urban Street Design Guide and Urban Bikeway Design Guide.⁶ The NACTO guide offers a blueprint for modern urban streets, guiding design decisions for streets, intersections, and traffic control. The guide holistically integrates pedestrian planning into street design. Additionally, it offers documented guidance to support engineering decisions to use innovative treatments that are not yet found in other guides.

⁶ City of Spokane Council Resolution RES 2014-0113, December 11, 2014. Accessed online: http://nacto.org/wp-content/uploads/2014/12/Spokane-WA_USDG-UBDG-Resolution.pdf

WHAT IS THE QUALITY OF THE WALKING EXPERIENCE IN SPOKANE TODAY?

According to the US Census Bureau's American Community Survey (ACS), approximately 4% of Spokane's residents walk to work⁷ while another 4% use public transportation, a trip that most often requires a pedestrian trip on one or both ends of the journey⁸.

Short blocks, complete sidewalks, and marked crossings result in a walkable environment in the downtown core. Older streetcar suburbs like Browne's Addition feature shaded streets, sidewalks with planted buffers, and quieter streets that are comfortable to cross. Walking conditions are more challenging in other parts of the city, such as portions of North Division, where narrow sidewalks adjacent to high speed traffic are relatively uncomfortable to walk along and contain barriers for disabled populations where there is inadequate space to navigate around street furniture or utility poles. Other parts of the city have few or no sidewalks and a lack of marked crossing opportunities.

Any walking experience is made more safe and comfortable by design strategies that establish a clear path of travel for pedestrians separated from other modes, both along street segments and at intersections. In addition, because the pace of people walking is slower, intriguing and interesting adjacent buildings and land uses make the walk more pleasant. This section describes best practices for design and land use conditions and compares them to the state of walking in Spokane today, focusing on the considerations that have significant impact on the quality of the pedestrian experience:

- Continuous sidewalks and buffers
- Pedestrian accommodation at signalized intersections
- Convenient marked pedestrian crossings
- Driveway curb cuts
- Street connectivity
- Land use and building design
- Safe routes to school
- Universal accessibility

⁷ US Census, "Commuting Characteristics by Sex, 2009-2013 American Community Survey, 5-Year Estimates." Accessed January 12, 2015 online:
http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_13_5YR_S0801&prodType=table

⁸ ACS asks respondents to report their most common means of transportation taken to work, meaning it is possible that some residents choose to walk to work sometimes, but that travel goes unreported. Additionally, the journey to work is only one of a large number of purposes that generate daily travel activity. In 2013, work trips accounted for just 15.6% of all trips and 27.8% of vehicle miles of travel. It is for this reason that the Census journey to work question generally underestimates the amount of walking in a community.

Continuous Sidewalks and Buffers

Because they provide a place to walk that is physically separated from traffic, sidewalks are the most effective way to avoid pedestrian involved collisions. Yet they are often taken for granted as a basic design element.

Best Practices

A system of pedestrian ‘zones’ helps to organize sidewalk space and buffer cars from pedestrians:

- The Curb Zone provides a physical buffer between the walking/seating areas of the sidewalk and the roadway.
- Pedestrian Buffer Strip provides a place for shade trees that give shade and further physical separation between moving vehicles and pedestrians. The pedestrian buffer strip ideally includes landscaping and trees to add to the appeal and perceived safety of the street. Depending on the land use context, typical elements in the pedestrian buffer strip include pedestrian lighting, trash receptacles, seating, transit stops, and street utilities such as traffic signal controls and fire hydrants. Street trees in a landscaped buffer similarly protect the sidewalks from the cars beyond them and also create a perceptual narrowing of the street that can lower driving speeds.
- The Pedestrian Through Zone is the open sidewalk area for pedestrian movement, and should be free of obstacles. Commercial and activity districts tend to feature the widest pedestrian zones, often allowing people to walk side by side.
- The Frontage Zone is the area in front of buildings used for tables/chairs or displaying “wares” to entice shoppers.
- On-Street Parking complements the pedestrian buffer strip. Whether parallel or angled, occupied on-street parking provides a physical barrier between moving traffic and the sidewalk. It can also slow traffic, because drivers tend to slow down out of concern for possible conflicts with cars parking or pulling out.
- Lighting contributes to personal security, traffic safety and a high quality pedestrian environment.

Spokane’s Design Guidance regarding Sidewalks and Pedestrian Buffer

The City’s current design standards for sidewalks and pedestrian buffer widths are found in the adopted Comprehensive Plan, Unified Development Code, Street Design Standards, and Spokane’s Standard Plans. In Spokane’s four adopted standards, sidewalks are required on both sides of streets, with widths ranging from 5 feet to 12 feet depending on the land use context. There have historically been some discrepancies among the Design Standards, Unified Development Code, Standard Plans and the Comprehensive Plan, with respect to terminology and required dimensions within each land use type. A part of the Transportation Plan Update is updated Street Design Standards that provide sidewalk and buffer recommendations that should be reflected in future revisions to the Standard Plans.

Existing Sidewalk Conditions in Spokane

Wall Street, downtown Spokane



South Perry Street, a Neighborhood Center



Intersection of Mission Street and Greene Street



Decatur Avenue



Pedestrian conditions vary along neighborhood streets, largely based on the age of the neighborhood. In older historic neighborhoods such as Browne's Addition, sidewalks on both sides of streets include wide pedestrian buffer strips; streets in older (up to the mid-20th century) neighborhoods such as Cliff/Cannon include sidewalks on both sides, with sidewalks and buffer strips narrower than historic neighborhoods. Mid-20th century to late 20th-century neighborhoods such as Southgate and the Nevada/Lidgerwood neighborhoods have a mix of streets with and without sidewalks, sometimes featuring sidewalks on one side of the street or with numerous sidewalk gaps.

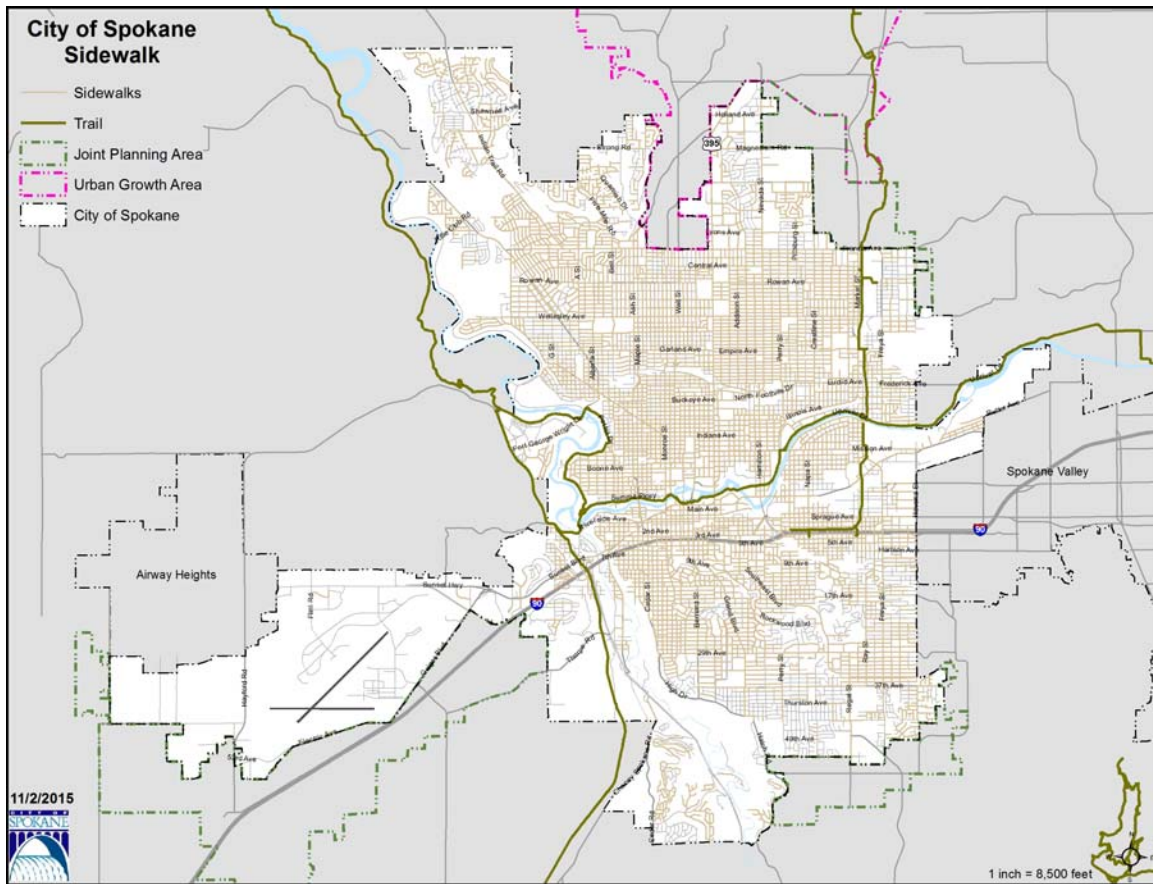
Downtown sidewalks tend to be more than 12-feet wide, located alongside slower automobile traffic or buffered by parking. On arterials, it is common to find narrow sidewalks with widths of 5-feet or less and no landscaped buffer to separate pedestrians from adjacent traffic. Many arterial sidewalks have frequent obstructions, such as utility poles and signs. Sidewalk conditions vary depending on the age of the sidewalk. Many sidewalks are in need of repair due to tree root damage.

Citywide, sidewalks are missing on 38% (381 miles) of the 981 roadway miles suitable for sidewalks.⁹ Over 55% of City streets have sidewalks on both sides of the street while 6% have sidewalks on one side.¹⁰

⁹ City of Spokane. DRAFT ADA Transition Plan, 2014-2019. Accessed online:
<https://static.spokanecity.org/documents/about/spokanecity/accessibility/ada-transition-plans-draft.pdf>

Pedestrian Master Plan
City of Spokane

Figure 1 - Spokane's Sidewalk and Path Network, Existing 2015

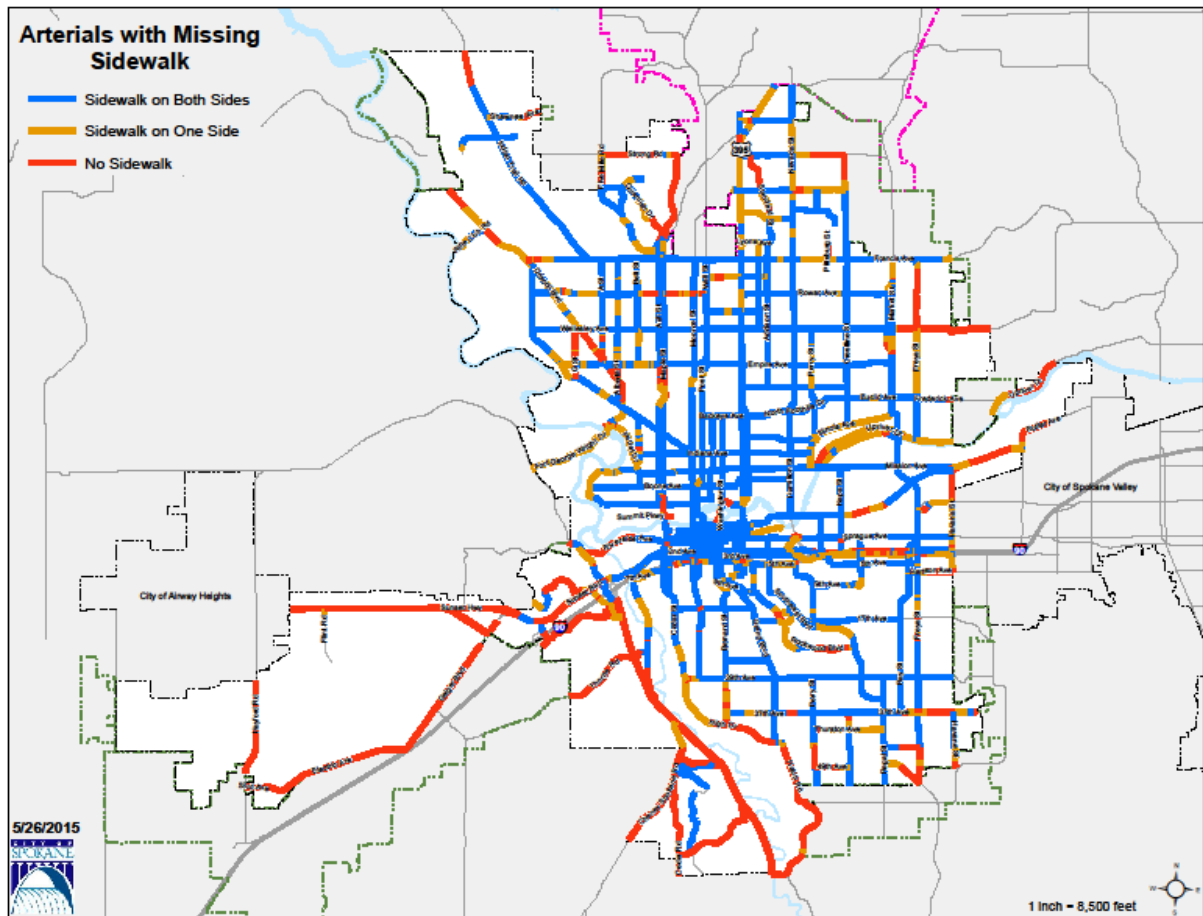


¹⁰ City of Spokane. DRAFT ADA Transition Plan, 2014-2019. Accessed online:
<https://static.spokanecity.org/documents/about/spokanecity/accessibility/ada-transition-plans-draft.pdf>

Sidewalks along Arterial Streets

Figure 2 shows the existing arterial streets in Spokane and identifies the arterial streets with sidewalk on both sides, sidewalk on one side, and no sidewalks. Most of the arterial streets have sidewalks along one or both sides. This map is useful for the identification of gaps in the sidewalk network and the prioritization of capital projects.

Figure 2 – Sidewalks along Arterial Streets



Pedestrian Accommodation at Signalized Intersections

The traffic operations of higher volume intersections typically benefit from signalization. However, the phased separation of conflicting motor vehicle phases also introduces pedestrian delay and conflict. The delay is caused by the need of the pedestrian to wait for their turn to move in the sequence after pressing the pedestrian push button, regardless of suitable gaps in traffic. Signalized intersections tend to be over-represented in collisions.

Best Practices

A number of tactics can improve pedestrian comfort and safety at signalized intersections:

- High visibility crosswalks (e.g. continental (zebra) striping or special paving) - raise driver awareness at unsignalized intersections that are in a zone where pedestrians are expected to be crossing.
- Leading pedestrian interval - gives pedestrians a few seconds head start to claim the right-of-way ahead of turning traffic, this may reduce conflicts with turning vehicles.
- Prohibiting right turns on red - prevents vehicles from turning into crossing pedestrians. Signal phases need to accommodate adequate time for through-movement to reduce the urge to violate the no-turn-on-red signal.
- Reducing intersection widths - improves visual contact between drivers and pedestrians and reduces crossing distances and the time needed to cross on foot.
- Curb extensions are often placed at the end of on-street parking lanes so that pedestrians standing on the curb can see and be seen by drivers before crossing. These can also be placed mid-block to effectively shorten block lengths.
- Rightsizing to reduce the width or number of travel lanes, often by converting a 4-lane street into a 2- or 3-lane plus bike lane and/or a center turn lane. This reduces crossing distances, vehicle speeds, and the number of travel lanes to cross the street. When using this approach, the entire traffic corridor must be considered, not just one intersection.
- Pedestrian recall – describes the situation where pedestrian is given the ‘walk’ signal at every signal phase, without having to push a button. Pedestrian recall is presently used in areas with higher levels of pedestrian activity (e.g., downtown), and could be considered in new locations with high pedestrian traffic. Some intersections work best using recall during busier hours of the day and switching to pushbutton operation at night.

Spokane’s Signalized Intersection Design Guidance

The City of Spokane operates over 250 signalized intersections. This number will change over time as new signalized intersections are added. Signal installation is warranted according to the Manual on Uniform Traffic Control Devices (MUTCD), and local guidance provides for basic signal timing parameters. Traffic signals are found in the Central Business District downtown, along major corridors, arterials and locations with high pedestrian volumes. The city uses the MUTCD standard of 3.5-feet per second to time the clearance phase, meaning that someone walking 3.5-feet per second who leaves the curb while the walk symbol is on can make it to the far curb before the conflicting motor vehicles get a green light.

Existing Signalized Intersection Conditions in Spokane

Signalized intersections represent about 4% of all intersections in the city. Most include pedestrian signal heads indicating the walking interval. Instead of recalling to the walking symbol

icon when through-traffic has a green light, many intersections require pedestrians to push a push-button to ‘actuate’ or trigger the walking phase.

The intersections of arterials can create cross sections in excess of seven lanes to accommodate left- and right-turn pockets. These large intersections increase pedestrian exposure due to the long distance between the curbs. Slower pedestrians may be unable to make it all the way across the crosswalk before the conflicting light turns green.

Many signalized intersections have protected left turning phases, meaning only left turning vehicles move during the phase. While left turn phases introduce additional wait time for pedestrians, the benefit of this treatment is that it minimizes the chance of a left turning vehicle having a collision with oncoming traffic or a pedestrian in the crosswalk.

Drivers are often observed encroaching on pedestrians in crosswalks, both as they wait in the crosswalk and pass closely in front or behind them while pedestrians have the right of way. Washington State law requires operators of all vehicles to stop and remain stopped to allow pedestrians in marked or unmarked crosswalks to completely clear the lane of the operator.¹¹

Convenient Marked Pedestrian Crossings

People generally cross where it is most convenient, expedient, efficient, and in as direct a line to their destination as possible. This is known as the ‘desire line.’ A network of convenient and comfortable marked pedestrian crossings is essential to increase predictability for all road users.

South Grand Boulevard



14th and Monroe



Best Practices

The placement of marked crosswalks should be considered carefully. Crossings should be provided where an analysis shows a concentration of origins and destinations across from each other.

- Crossings should be located according to the walking network rather than the driving network.
- There is no hard and fast rule for crossing spacing. Generally speaking, people will not travel far out of their way in order to cross at a signalized crossing, making midblock or marked crosswalks at unsignalized crossings important for connectivity.

¹¹ Washington State Legislature, Revised Code of Washington, RCW 46.61.235, Crosswalks.

There are circumstances in which a marked crosswalk alone is insufficient. The type of crossing treatment is largely a function of automobile speed, automobile volume, pedestrian volume, and roadway configuration. People informally cross narrow streets of low automobile speed and volume without marked crossings. On the other hand, in general, a marked crosswalk alone is insufficient for crossing more than two lanes of traffic. The following principles inform the selection of enhanced crossing treatments:

- Multi-lane, high-speed, and high-volume roads require more aggressive treatments such as lane narrowings, curb extensions, high visibility continental (zebra) crosswalks, median refuge islands, flashing beacons, overhead signs, and advance stop lines. The City Street Design Standards provide guidance for enhanced crossing treatments.
- Enhanced crosswalks are more visible and thus make it more clear to pedestrians where crossing is intended, and increases the probability that people driving will stop for them.
- Small curb radii and curb extensions reduce vehicle-turning speeds to 15 mph or less for passenger vehicles. Making the corner bigger through smaller curb radii also increases storage for people waiting to cross, and makes pedestrians more visible.

Spokane's Design Guidance regarding Marked Crossings

Spokane City Council adopted a new crosswalk ordinance in the fall of 2014 that lays out criteria for placement and design (see SMC 17H.010.210). These changes, summarized below, are intended to improve the connectivity and safety of Spokane's crossings:

- Marked crosswalks to be installed at intersections in centers and corridors adjacent to schools, parks, hospitals, trail crossings, and other pedestrian traffic-generating locations, at signalized intersections, and priority pedestrian areas.
- Mid-block crossings are permitted on arterial streets at pedestrian generators or where pedestrian conditions warrant. Exceptions are allowed if engineering studies determine that the proposed crosswalk does not meet nationally-recognized safety standards.
- Advanced stop-lines shall precede each crosswalk at arterial intersections and any mid-block crosswalks in pedestrian-generators in centers and corridors per direction from the Manual on Uniform Traffic Control Devices.
- On arterial streets with three or more lanes per direction in centers and corridors adjacent to schools, parks, hospitals, trail crossings, and other pedestrian-traffic generators, marked crossings with pedestrian refuge islands shall be constructed during the next street rehabilitation project such as resurfacing, unless the installation is in conflict with sub-area or neighborhood plans or contrary to engineering studies.
- Travel lanes may be narrowed, additional existing right-of-way may be utilized, and/or the number of travel lanes may be reduced to accommodate pedestrian refuges.
- Elevated crosswalks may be installed in lieu of pedestrian refuges.

Existing Crossing Conditions in Spokane

Outside of the dense street network in the downtown core, it is not uncommon for there to be distances of a half-mile or more between marked pedestrian crossings on streets such as south Grand Boulevard, east Sprague Avenue, north Greene Street, north Division Street, west Garland Avenue, and west Northwest Boulevard. Because pedestrians are typically unwilling to endure long distance out of direction travel, pedestrians must instead wait for breaks in traffic or rely on driver's yield compliance in accordance with Washington State law, which designates all intersections as crosswalks, whether or not they are marked. (State law RCW 46.61.235).¹²

The City of Spokane is increasingly using state-of-the-practice pedestrian design interventions to improve the pedestrian environment, particularly in locations with limited pedestrian amenities as well as areas with long distances between marked pedestrian crossings. Treatments such as median refuge islands, curb extensions, and High intensity Activated crossWalk (HAWK) beacons (such as installed near Gonzaga University at Hamilton Street and Desmet Avenue), have been demonstrated to improve visibility and increase yielding by motorists.

Figure 3 - Pedestrian crossing Grand Blvd



Figure 4 - Bus rider crossing Francis & Belt



Figure 3a – Median Refuge Island Grand Blvd



Figure 4a – Curb extensions in the Perry District



Driveway Curb Cuts

Parking lots and drive-through facilities introduce hazards and psychological barriers to people on foot as each driveway introduces a potential conflict area with motor vehicles.

¹² Revised Code of Washington, RCW 46.61.235; Crosswalks. Accessed online:
<http://apps.leg.wa.gov/RCW/default.aspx?cite=46.61.235>

Best Practice

Efforts should be made to consolidate driveways across the sidewalk whenever possible. Corridor access management, which limits the frequency and width of driveways, is recognized by FHWA as a 'proven' safety countermeasure.¹³

Driveway Conditions in Spokane

On-the-ground access management in Spokane is inconsistent. Due to factors such as land use changes over time and changing design guidance, the number and width of driveways on some sections of arterials, such as Grand Boulevard and Division Street, exceeds the design guidelines. This creates uncomfortable walking conditions as the pedestrian traverses frequent and wide driveways, some with multiple lanes of traffic entering or exiting the street.

In the urban context, the Federal Highway Administration (FHWA) recommends smaller driveway radii of 25 to 35 feet as narrower driveway throats are more sensitive to pedestrian crossing. While FHWA does not provide direct guidance for driveway spacing, in urban contexts, FHWA recommends driveways positioned as upstream from intersections as possible.¹⁴

In designated Centers and Corridors curb cut limitations are placed on development. In the *Initial Design Standards and Guidelines for Centers and Corridors*, a curb cut for a nonresidential use should not exceed 30 feet for combined entry/exits. Where a sidewalk crosses a driveway, the driveway width should not exceed 24 feet. No driveways should be located on designated Pedestrian Streets.¹⁵

¹³ http://safety.fhwa.dot.gov/provencountermeasures/fhwa_sa_12_006.cfm

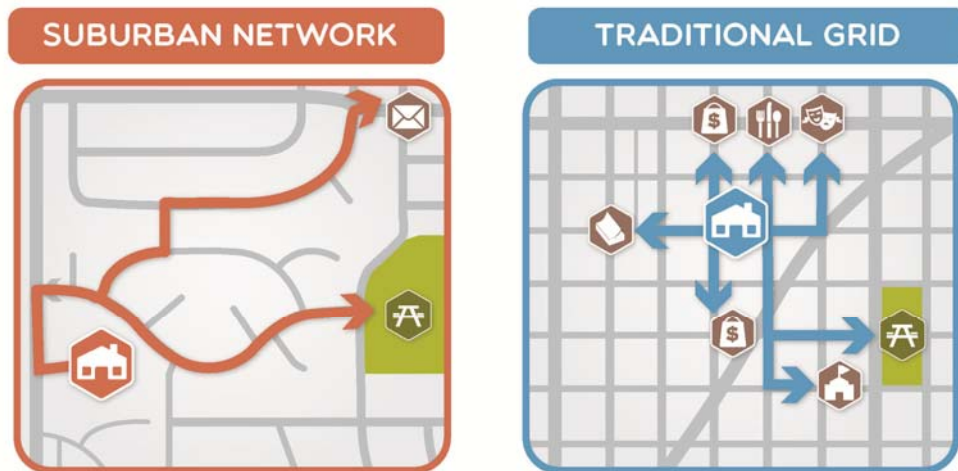
¹⁴ Federal Highway Administration, Technical Summary, *Access Management in the Vicinity of Intersections FHWA-SA-10-002*. Accessed online: <http://safety.fhwa.dot.gov/intersection/resources/fhwasa10002/>

¹⁵ City of Spokane, *Initial Design Standards and Guidelines for Centers and Corridors*. Adopted August 2002. Accessed online: <https://static.spokanecity.org/documents/business/resources/compplan/centerscorridors/centers-corridors-design-standards.pdf>

Street Connectivity

Best Practice

Street connectivity and block length have strong relationships with walking, bicycling, and transit use. Interconnected streets organized in a grid pattern tend to shorten distances for walking and biking trips. Neighborhoods where all roads are designed to connect to arterials or collector streets also allow transit customers to reach bus stops without walking out of their way and provide more efficient routing options that can support efficient transit service. These types of streets place destinations closer to each other, increasing the likelihood of walking.



Spokane's Street Connectivity Guidance

Spokane's Comprehensive Plan directs external and internal connections to neighborhoods. External connections apply to new subdivisions and planned unit developments (PUDs). Comprehensive Plan Policy TR 4.5 states, "design subdivisions and planned unit developments to be well-connected to adjacent properties and streets on all sides."¹⁶ Connections are needed for all transportation users and can take the form of both streets and paths. Policy 4.5 notes that well-connected neighborhoods with good connections for pedestrians, bicyclists, and automobiles, spreads traffic more evenly and reduces congestion and impacts on adjacent land uses.

Internal connections apply to all neighborhoods, subdivisions, and PUDs. Comprehensive Plan Policy TR 4.6 states, "design communities to have open, well-connected internal transportation connections."¹⁷ The Comprehensive Plan directs that designers promote ease of access through avoiding long, confusing routes and by using shorter block lengths. Policy 4.6 notes that internal connections are promoted by connecting streets and avoiding cul-de-sacs. Where cul-de-sacs and vacating streets cannot be avoided, Policy 4.6 recommends pedestrian pathways that link areas. Comprehensive Plan Policy LU 4.5 states, "Block lengths of approximately 250 to 350 feet on average are preferable, recognizing that environmental conditions, (e.g., topography or rock outcroppings), might constrain these shorter block lengths in some areas."¹⁸

¹⁶ City of Spokane, Comprehensive Plan, Revised Edition: June 2015, TR 4.5 External Connections.

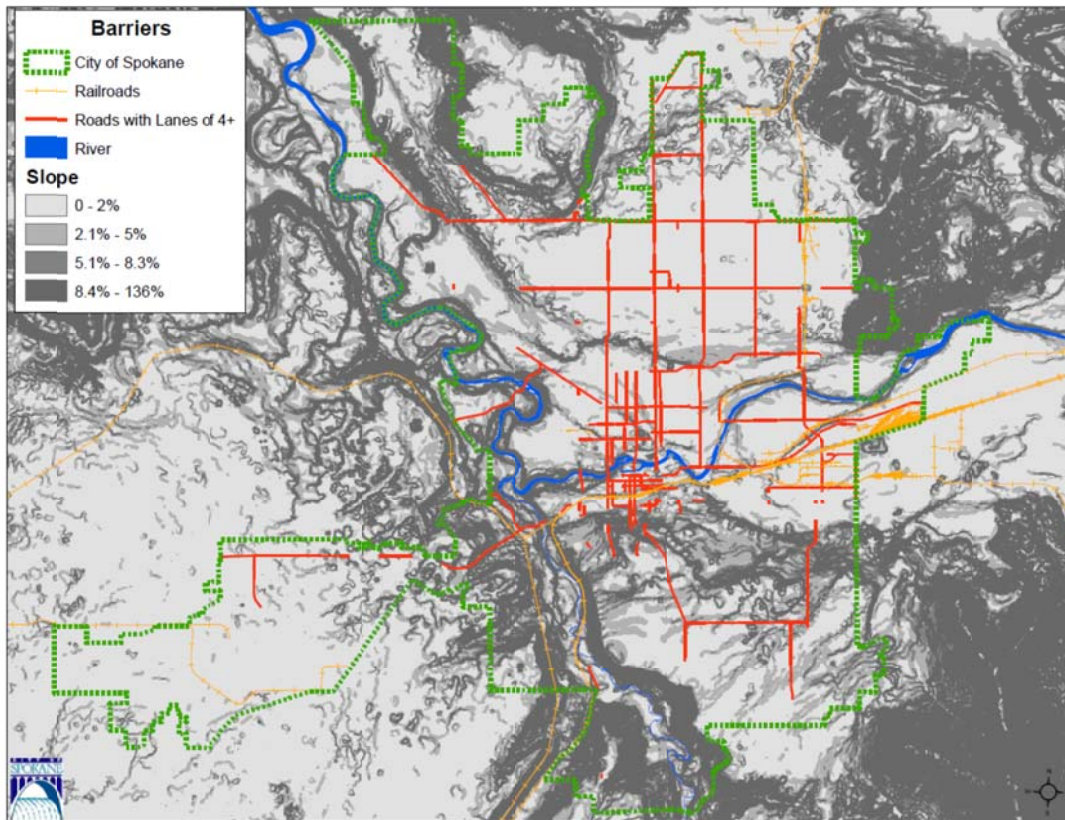
¹⁷ City of Spokane, Comprehensive Plan, Revised Edition: June 2015, TR 4.6 Internal Connections.

¹⁸ City of Spokane, Comprehensive Plan, Revised Edition: June 2015, LU 4.5 Block Length

Pedestrian Network Connectivity and Block Length in Spokane Today

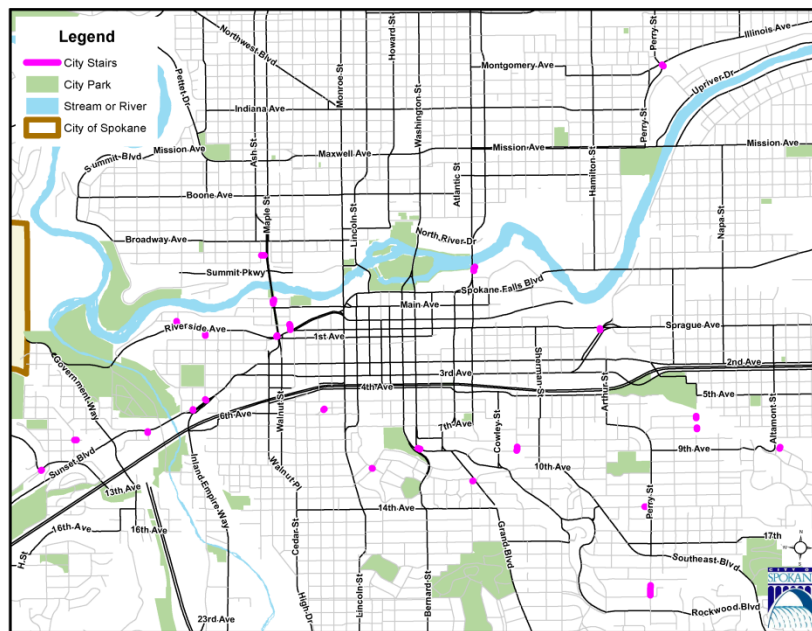
Mid-20th century to late 20th-century neighborhoods such as Southgate and the North Indian Trail Neighborhood have a street network with features such as winding streets, dead ends and cul-de-sacs. This type of street pattern is less supportive of pedestrian travel as it makes walking trips longer and less intuitive. Many recent developments include sidewalks but feature a roadway network design that lacks pedestrian connections as walking routes are much longer than a more traditional grid street network. In addition, these streets often lack destinations nearby, like neighborhood shops, schools, and parks. Therefore walking activity is likely limited to recreational trips or trips to reach transit.

In areas of Spokane where the existing street grid provides smaller blocks, it is easier to get around by walking compared to many suburban areas. On the other hand, the ability to walk is more difficult in locations where the street grid is much larger due to the freeway, railroads, and large developments, and where there are natural barriers such as the river and steep slopes. Low pedestrian network connectivity in these areas deters walking by increasing walking distances and walking times.



The City of Spokane has 24 sets of pedestrian stairways available for public use. The stairways are located in public rights-of-way or on city-owned parcels in neighborhoods generally closer to the city center. Typically the stairways are found in areas with steep slopes and provide important connections for pedestrians, allowing them to avoid lengthy detours to move between higher and lower lying areas. Publicly-accessible staircases are located throughout the city, making connections between locations such as Peaceful Valley and Riverside Avenue, and connecting South Perry Street between 20th Avenue and Overbluff Road. Where formal paths or staircases do not exist, such as Glass Avenue and Courtland Avenue, it is common to see informal “social paths” worn into the grass illustrating pedestrian demand.

Anecdotal evidence regarding the origins of the stairways is available from news media stories and other sources. Some stairs may have been developed to provide connections to former streetcar routes, while others, such as along Perry Street north of 20th Avenue, provided a way for people to get up steep hillsides to go to work. The stairs were said to connect Overbluff area mansions with their staff, who often lived below in the smaller, working class homes in the Perry District.



The City’s stair inventory provides information about stair locations, condition, and maintenance. Most of the stairways are very old, though dates of construction are not available. The type of material used in the construction of most of the stairs is concrete with railings made of metal pipe. The newer stairs are steel grate with pipe rails. The inventory notes that Spokane’s one wooden stairway (located on Spruce Street between Riverside Avenue and Bennett Avenue) is in disrepair.

The historic Tiger Trail is an example of a path/trail that is used to overcome a barrier (steep slopes). The Tiger Trail is a very steep set of stairs and an unimproved pathway located in Pioneer Park near the Corbin and Moore-Turner Heritage Gardens. It generally connects the area between West Cliff Avenue and 7th Avenue. It is named Tiger Trail because students from Lewis & Clark High School use the trail to get to and from school. Walkers and joggers in the neighborhood also use the trail. The South Hill Coalition Connectivity and Livability Strategic Plan identifies this as a potential Ped-Bike Linkage to improve neighborhood grid connectivity.

There is a need to complete additional planning for areas with low pedestrian network connectivity. This planning includes defining, mapping and identification of improvements including features for these areas such as bicycle/pedestrian trails and bridges, new streets with sidewalks, new sidewalk “shortcuts” through large blocks and new or updated stairways.

Land Use and Building Design

Best Practice

Buildings and streetscapes that activate the environment, such as sidewalk cafes and parks, build community and stimulate the desire to walk to reach destinations. Transparent building facades with windows at street level create interest and open up the pedestrian realm so people are not forced to walk beside an imposing blank wall. Active sidewalks and transparent building facades both create ‘eyes on the street’, which provide pedestrians with a sense of security. Land uses that attract pedestrians include coffee shops, grocery stores, and small-scale retail.

Spokane’s Land Use and Building Design Guidance

Spokane’s Comprehensive Plan directs the City’s zoning, including the urban growth strategies that focus on increasing the mix and density of uses at designated centers and along specific corridors. This is supported through zoning changes, municipal code requirements, the Centers and Corridors Design Guidelines, neighborhood plans, and economic development incentives.

Centers and Corridors are intended to promote pedestrian-orientation through limiting auto-orientation such as parking between and in front of buildings, curb cuts for driveways, and certain land uses such as drive-through restaurants. Direction for pedestrian scale lighting, pedestrian connections in parking lots, and pedestrian streets are detailed in the Municipal Code. Spokane’s Centers and Corridors include the corridors of North Hamilton Street near Gonzaga University and North Monroe Street from the river north to Cora Avenue and centers like the Garland District and South Perry Neighborhood.

The Comprehensive Plan defines Centers and Corridors as important places to encourage employment, shopping, and residential activities. In addition to district, employment, and neighborhood centers, pedestrian activity areas include locations along transit routes, near schools and community spaces, and near recreational facilities such as play fields and parks.

Land Use and Building Design in Spokane Today

Spokane’s Comprehensive Plan encourages much of the future growth to occur in district centers, employment centers, neighborhood centers, corridors and downtown. Downtown Spokane is the Regional Center and is a thriving neighborhood with a diversity of activities and a mix of uses. Another area of focus is the University District. In addition to centers and corridors, the comprehensive plan describes land uses throughout the city including a full range of residential, commercial, institutional, industrial and open space/recreational designations.

The Unified Development Code (UDC) guides the growth and development of the city. UDC standards for building and site features encourage building and site development that is consistent with the vision of the comprehensive plan. The UDC requires new development to provide features that support pedestrians, such as sidewalks. Site development is directed to provide pedestrian elements and building design that incorporate features that encourage walking and improve the pedestrian experience.

For the Pedestrian Master Plan it is helpful to further define the general city development pattern into two land use contexts:

- Urban –These are places with high levels of pedestrian activity and include retail and commercial hubs. All Centers and Corridors are in the Urban Context as defined in the proposed Street Design Standards.

- Mobility –Areas without much expected pedestrian activity, including state highways, corridors connecting retail centers, or areas without active land use frontages.

The Urban Context

The Downtown Core hosts government buildings, the Financial District, and the Davenport Arts District. Downtown is home to more than 13% of Spokane County’s jobs.¹⁹ Residential growth is expected in the downtown area including the University District. The downtown district’s businesses and residences benefit from the city’s most walkable area. WalkScore, which collects information such as block length, intersection density, and nearby amenities like shops, restaurants, and food stores, scores Downtown Spokane as 90/100. The University District has a Walk Score above 75.²⁰

Downtown streets have the highest level of pedestrian amenities in the city, with features including pedestrian countdown timers at signalized intersections, wider sidewalks, pedestrian areas protected from the elements by the overhang of adjacent buildings, and curb extensions to increase pedestrian visibility and shorten crossing distances. The Spokane Municipal Code requires permits and provides standards for placing sidewalk cafés, signs, bike racks and other features in or upon sidewalks in the public right-of-way. The standards address details such as insurance, terms, conditions, and clear distance (unobstructed width). Downtown also includes shared realms that minimize the demarcations between spaces for pedestrians and motor vehicles, such as Wall Street between Spokane Falls Boulevard and Riverside Avenue. The pedestrian network connects to multi-use paths along the river, offering transportation and recreational opportunities as well as connecting to destinations such as the University District, shopping, and recreational opportunities.

Spokane also features a popular skywalk system that offers pedestrians access throughout much of downtown. These walkways offer walking routes that are protected from the weather, passing from building to building, though walking routes are not always direct. Opportunities exist to improve wayfinding to help users navigate the skywalk system. The existence of these routes may reduce pedestrian activity along storefronts on the street below.

As Spokane grows—and grows more pedestrian friendly—many streets in designated Centers and Corridors will be redesigned in the urban context. Today, conditions on those streets vary depending on their location and age of development. Some of the existing districts included in the urban context include the Garland and Perry Districts and the University District.

The Spokane Transit Authority operates along many of the designated Corridors and through Centers. Some busy locations with transit stops, (e.g., The Grand District Center, along East 29th Avenue near the East 29th Avenue and South Grand Boulevard neighborhood center), lack marked crossings near bus stops causing riders to attempt risky crossings or to walk long distances out of direction to reach a signalized intersection. An analysis of such crossings should be considered in these situations to address possible issues with stop placement.

¹⁹ Spokane Central City Transit Alternatives Analysis Process Summary Report

²⁰ Walk Score: www.walkscore.com



The Mobility Context

Many of the Centers and Corridors remain strongly auto-oriented with high-speed arterial streets, limited marked crossings, long block lengths, and numerous driveways. Throughout the city, it is common to have more than half-mile stretches between marked crossings on arterial streets.

Today, approximately 52% of Spokane's arterial streets have sidewalks on both sides and another 19% have sidewalks on one side, leaving over 76 miles of arterials without sidewalks on either side.²¹ Where there are sidewalks, they are often narrow, and many are in a deteriorating condition, interrupted by frequent driveways, or obstructed by poles or utility vaults. To bring these streets up to the Centers and Corridors standards, they will need to have both "pedestrian emphasis... and [be] automobile-accommodating."²²

The Spokane Transit Authority uses many of the City's mobility-context arterials, locating stops along streets that may lack adequate sidewalks and crossings.



Indian Trail at Barnes is an arterial in the mobility context that is a planned Neighborhood Center.

²¹ City of Spokane. Draft ADA Transition Plan, 2014-2019. Accessed online:
<https://static.spokanecity.org/documents/about/spokanecity/accessibility/ada-transition-plans-draft.pdf>

²² City of Spokane Planning Services. Initial Design Standards and Guidelines for Centers and Corridors. Adopted 08/11/02. Accessed online:
<https://static.spokanecity.org/documents/business/resources/compplan/centerscorridors/centers-corridors-design-standards.pdf>

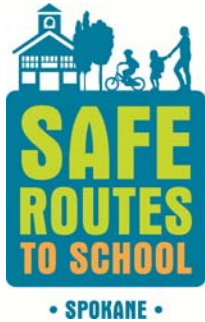
Safe Routes to School

Best Practice

Safe Routes to School is a national movement to improve school zone safety and encourage more children to walk and bicycle to school. Successful programs typically integrate engineering, education, enforcement, education and encouragement to foster a safe active transportation culture.

Safe Routes to School Spokane

In February 2015, the Spokane Regional Health District (SRHD) launched its Safe Routes to School Spokane program (<http://www.srhd.org/news.asp?id=457>). The intent is to encourage more of Spokane's children to safely walk and bike to school. SRHD notes that the program to support walking or biking to school benefits children, families and the community. The program is slated to roll out to seven area public grade schools during the next three years, the program is being introduced this spring to two of them—Holmes Elementary in Spokane and Seth Woodard Elementary in Spokane Valley. The five other elementary schools include Stevens, Logan, Sunset, Bemiss and Moran Prairie. SRHD staff is designing the program to benefit each of the schools in ways unique to the barriers each faces in getting more students walking and



biking safely.

Spokane Public Schools Suggested Walk Routes

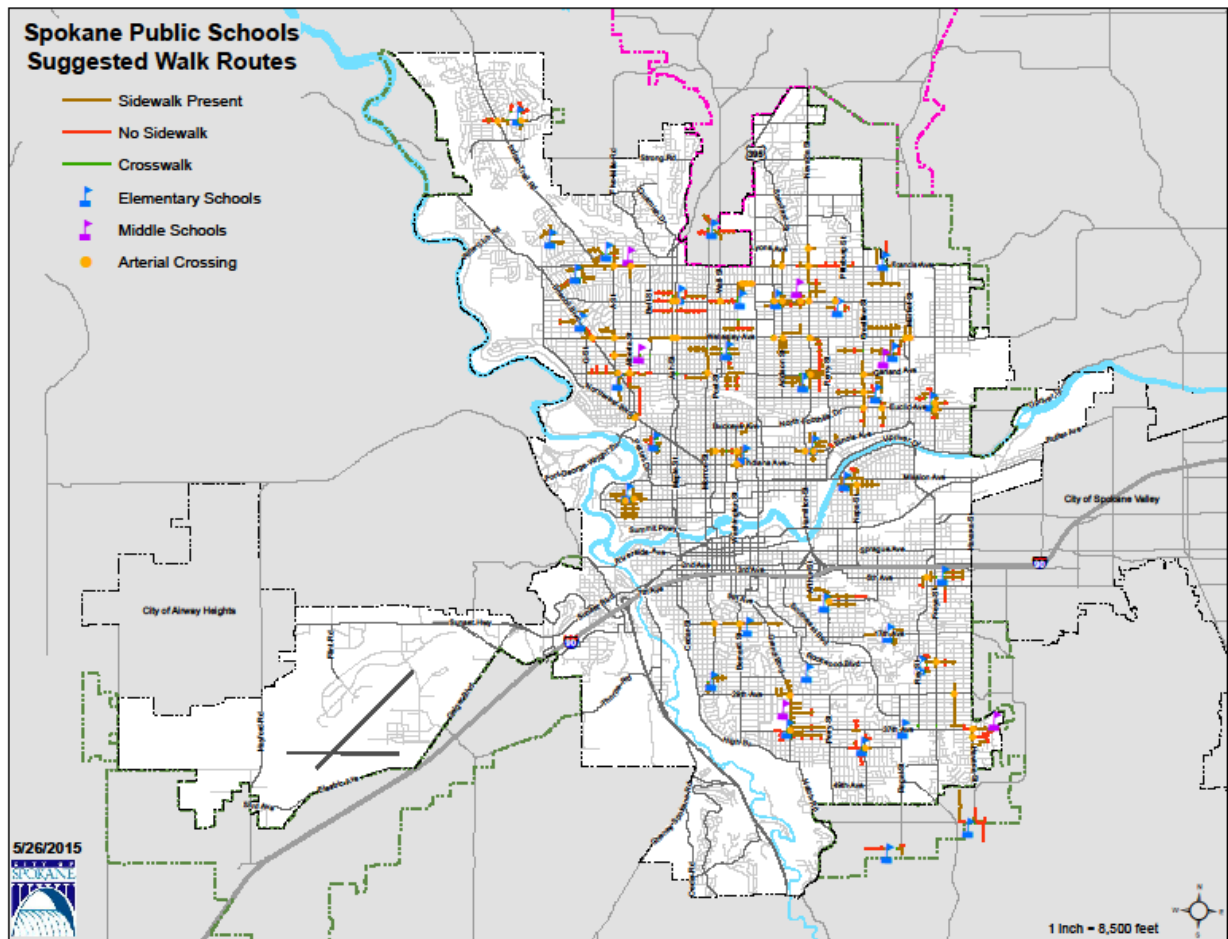
Spokane Public Schools provides information on its website regarding school attendance boundaries for all elementary, middle and high schools. These maps include school location, suggested walk routes, crosswalks, bus stops, and bus service areas (<http://www.spokaneschools.org/site/Default.aspx?PageID=89>).

The suggested walking route information has been converted to a GIS map in the City of Spokane GIS database. Figure 4 below shows the suggested walk routes information for all Spokane Public Schools consolidated on a single map. The map also shows the suggested walk routes that presently do not have sidewalks. Where there are no sidewalks, the suggested walk routes usually follow unimproved paths paralleling a low traffic residential street. The suggested walk routes guide children to school along the most favorable walking routes that lead to sidewalks and crosswalks with crossing guards. It should be noted that the suggested walk routes information is recognized as a guide and is subject to adjustment and change over time.

There are three school districts operating within the current Spokane city limits. The vast majority of the City of Spokane is served by Spokane Public School District. Cheney School District serves some small corners in the southwest area of the city and the west plains. Mead School District is generally located on Five-Mile Prairie and north of Lincoln Road. Any available Safe Routes to School information from Cheney and Mead School Districts should be considered in the identification of pedestrian facility development projects.

The information in Figure 4 related to the suggested walk routes and those without sidewalks is useful for the identification of gaps in the sidewalk network and the prioritization of capital projects.

Figure 4 – Spokane Public School Elementary School Suggested Walk Routes



Universal Accessibility

Universal Access Best Practice

Streets that are designed for children, the elderly, and people with mobility impairments serve everyone better.

- Americans with Disabilities Act (ADA) guidelines and requirements guide appropriate sidewalk, driveway cut design, curb ramp placement at intersections and building entrances. Driveway cuts should be limited, grades leveled, and cross-slopes reduced to make sidewalks safer and more comfortable for those using mobility devices like wheelchairs or canes.
- Obstacles such as litter, utility poles, and trash cans should be removed from the sidewalk to create a clear path for everyone.
- Visible and consistent placement of signage makes wayfinding systems more navigable and helpful for all people on foot.
- Pedestrians of all abilities benefit from adequate green signal phases with audible countdown signals to allow ample time to cross.
- When unique paving materials or raised crosswalks are used to provide a visual and tactile enhancement to the pedestrian environment, care must be given to ensure that any pavement treatments do not hinder movement for those using wheelchairs or canes.
- Pedestrians need street lighting which contributes to personal safety, traffic safety and a high quality pedestrian environment. Some areas in Spokane have missing or infrequent street lighting.

Spokane's Universal Accessibility Design Guidance

ADA accessibility requires a navigable, safe pedestrian environment for all people, including those with physical disabilities. This includes curb ramps with shallow approach angles and smooth transitions, detectable warning strips with truncated domes, and ideally includes audible crossing signals at priority locations. The City of Spokane uses ADAAG (Americans with Disabilities Act Accessibility Guidelines) guidance to inform all capital projects and land development and consistently utilizes PROWAG (Public Right of Way Accessibility Guidelines) which exceed ADAAG standards.²³

Accessibility in Spokane Today

The City of Spokane's Draft ADA Transition Plan and the Pedestrian Master Plan identify the City's inventory and need for sidewalk and curb cut gaps. The ADA Transition Plan finds that 38% of the City's roadway miles that are suitable for sidewalks do not have sidewalks on either side and 6% have sidewalks on one side. About 52% of arterial streets have sidewalks on both sides and an additional 19% of arterials have sidewalks on one side.

²³ City of Spokane. Draft ADA Transition Plan, 2014-2019. Accessed online:
<https://static.spokanecity.org/documents/about/spokanecity/accessibility/ada-transition-plans-draft.pdf>

The curb ramp inventory of the ADA Transition plan states that of the 6,928 intersections included in the inventory, 82% are missing at least one access ramp, 1,700 on arterial and highway street intersections and 4,000 on local street intersections.²⁴

Pedestrian Needs Analysis

This section provides a pedestrian needs analysis that considers factors indicative of walking potential as compared to the supply (or lack thereof) of pedestrian infrastructure, to illustrate where there is a mismatch in the demand for and availability of walking infrastructure. Indicators included in the analysis are described below. Each indicator is given a numerical value ranging from 1 to 5 according to the visual and physical qualities tied to each indicator, along with weights for each factor. Generally speaking, areas with higher demand (i.e., walking potential) and lower supply (i.e., supply deficiency) are higher priorities for investment as compared to areas with higher demand / higher supply or areas with lower demand / lower supply. This analysis identifies the Pedestrian Priority Zones described in Goal 1.

Pedestrian Demand (Walking Potential)

Figure 5 presents a composite map of the factors included in the analysis of walking potential:

- Employment density - Major employment centers such as downtown and the University District, can generate walking trips both on the journey to and from work (including in connection with other modes) as well as mid-day activity for lunch, errands, etc.
- Population density - Higher density residential areas tend to be more supportive of having destinations within a walkable distance, with a mix of land uses located in close proximity to each other.
- Proximity to destinations (Centers and Corridors, neighborhood shopping, social services, transit stops, schools, parks) – These destinations attract walking trips. Neighborhood shopping and schools are major destinations for daily activities, most transit trips in Spokane begin or end with a walking trip, and children are potential walkers to school.
- Demographic factors from the US Census (% of people with no vehicle available, % of households below the poverty level, % of people under 18, and % of people 65 or over) – These population groups can be dependent on walking due to financial considerations or a lack of access to a personal vehicle.

Demand Map Observations

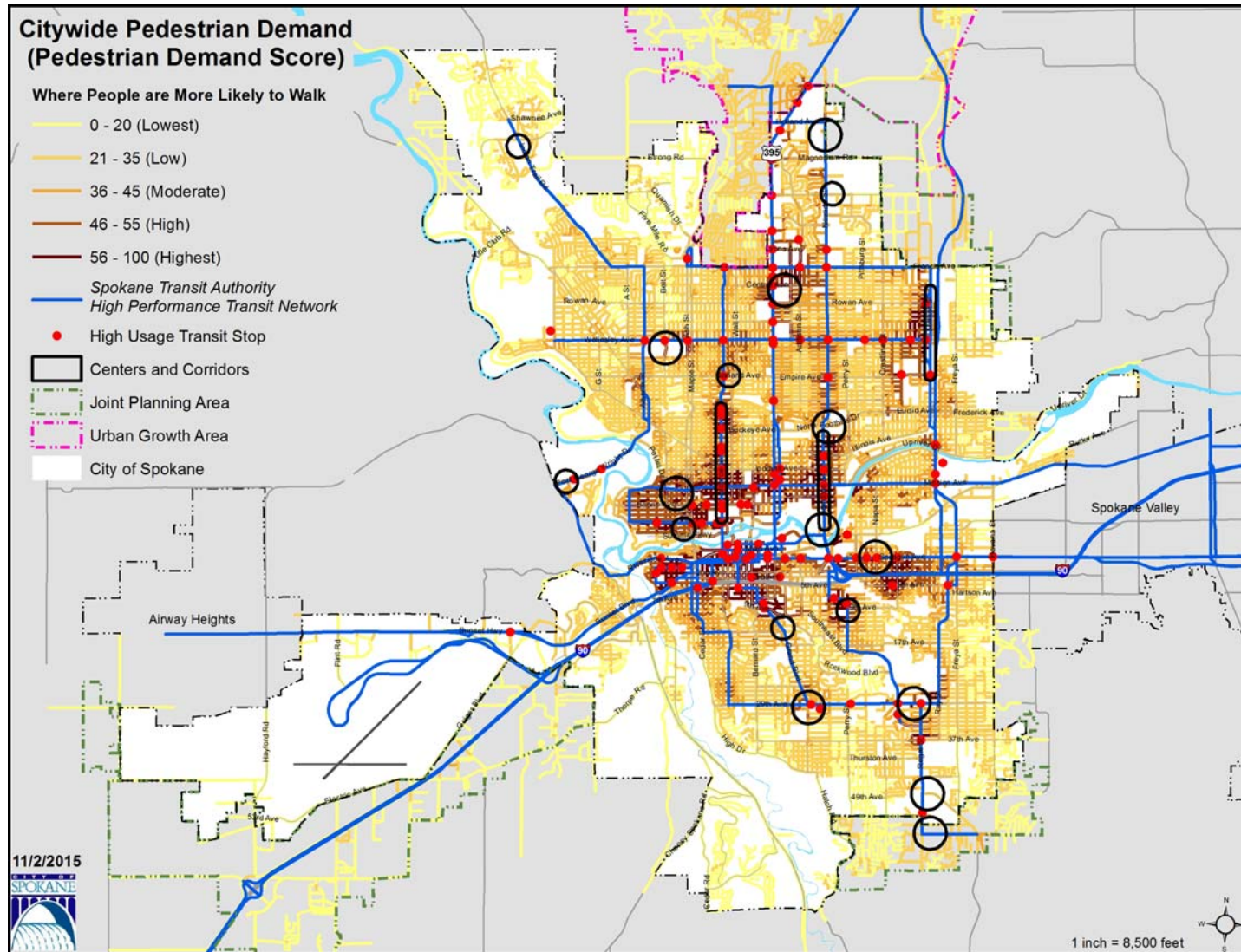
- Higher demand areas correspond with designated centers and corridors and STA's High Performance Transit Network and high usage transit stops
- The Highest demand areas include Holy Family, Hillyard, North Monroe, West Central, North Riverbank, Gonzaga/Logan, Browne's Addition, Downtown, Lower South Hill, East Sprague/East Central, Sacred Heart Medical Center, 9th and Perry, Manito Shopping Center, and Lincoln Heights Shopping Center
- Higher demand corridors on the north side of Spokane include Monroe, Hamilton/Nevada, east and west along Wellesley between Shadle and Hillyard, and Market Street

²⁴ City of Spokane. Draft ADA Transition Plan, 2014-2019. Accessed online:
<https://static.spokanecity.org/documents/about/spokanecity/accessibility/ada-transition-plans-draft.pdf>

- Higher demand areas on the north side of Spokane include the area near Franklin Park Commons, Tombari Center, and Lowe's.
- Higher demand areas on the South Hill include Lincoln Street near Wilson Elementary School and the area near 29th Avenue and Grand Boulevard, the intersection of 29th Avenue and Regal, and the intersection of 37th Avenue and Regal.
- In general, single family residential areas display lower demand, which increases with proximity to a school, park, or bus route.

Pedestrian Master Plan
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Figure 5 – Pedestrian Demand map



Pedestrian Deficiency

Figure 6 presents a composite map of the factors included in the pedestrian deficiency analysis:

- Presence of sidewalks - Sidewalks provide a dedicated facility separated from the roadway (may or may not provide a pedestrian buffer strip)
- Width of the street – Wider roads tend to enable higher vehicle speeds, which reduces comfort for pedestrians and makes roadway crossings more difficult ^{25 26}
- Collision history – A history of multiple pedestrian collisions likely reflects difficult walking or crossing conditions.

Deficiency Map Observations

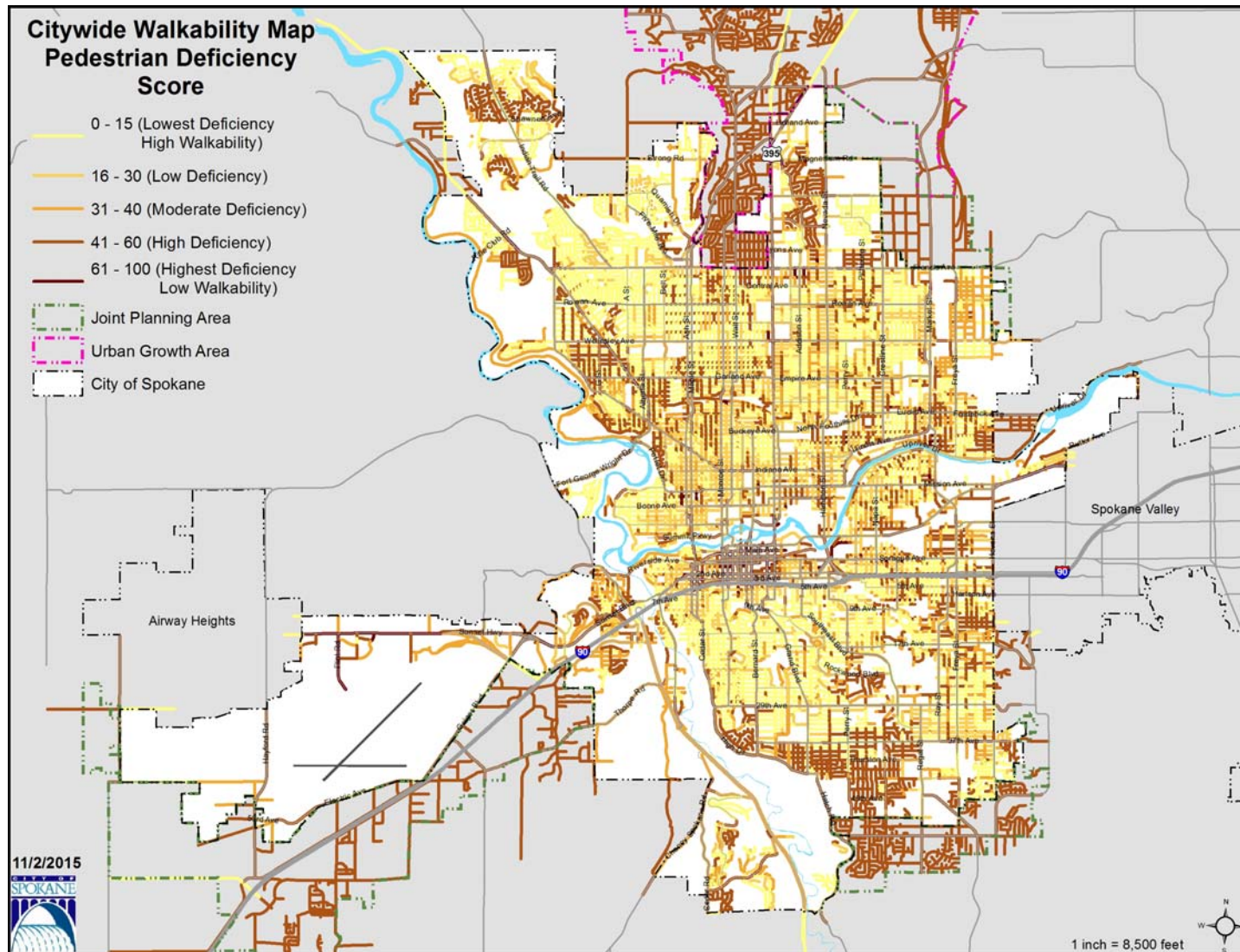
- The highest deficiency scores tend to align with streets that lack sidewalks, cul-de-sacs, unpaved streets, long street segments (e.g., Antietam Drive south of Magnesium Road) and very wide streets without sidewalks (e.g., Oak Street near Sinto Avenue and Sycamore Street east of Freya Street north of Sprague Avenue)
- High deficiency scores are common on wider streets (about 36 to 40 feet curb to curb) that lack sidewalks on both sides of the street. (e.g., Nevada Street between Calkins Drive and St. Thomas Moore Way)
- Most arterial streets have sidewalks and about half have sidewalks on both sides. Arterial streets that lack sidewalks (e.g., Cochran Street-Alberta Street-Northwest Boulevard area; Maple Street and Ash Street south of Garland Avenue) score high on the deficiency map
- Areas with longer block lengths show moderate deficiency due the longer distances between crossing opportunities (e.g., Broad Avenue between Alberta Street and Nettleton Street, Longfellow Avenue between Alberta Street and Belt Street, and Northwest Boulevard west of Assembly Street)
- Several areas with moderate to high deficiency are areas with a history of pedestrian collisions (e.g., streets throughout downtown).

²⁵ “Previous research has shown various estimates of relationship between lane width and travel speed. One account estimated that each additional foot of lane width related to a 2.9 mph increase in driver speed.” Kay Fitzpatrick, Paul Carlson, Marcus Brewer, and Mark Wooldridge, “[Design Factors That Affect Driver Speed on Suburban Arterials](#)”: Transportation Research Record 1751 (2000):18–25.

²⁶ “Longer crossing distances not only pose as a pedestrian barrier but also require longer traffic signal cycle times which may have an impact on general traffic circulation.” Macdonald, Elizabeth, Rebecca Sanders and Paul Supawanich. [The Effects of Transportation Corridors’ Roadside Design Features on User Behavior and Safety, and Their Contributions to Health, Environmental Quality, and Community Economic Vitality: a Literature Review](#). UCTC Research Paper No. 878. 2008.

Pedestrian Master Plan
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Figure 6 – Pedestrian Deficiency Map



Composite Pedestrian Needs Map: Pedestrian Priority Zones

Figure 7 illustrates the results of the composite map which combines the assessment of pedestrian demand and pedestrian deficiency. This map serves to clarify where the pedestrian needs in the city are greatest. Figures 14 and 15 below provide additional data regarding pedestrian and vehicle collisions between 2005 and 2012. Areas with higher demand and deficiency scores are candidates for designation as Pedestrian Priority Zones and include:

- Downtown/Browne's Addition/University District
 - Where: Throughout downtown, Browne's Addition and the University District
 - Why: Downtown and the University District have the highest pedestrian demand and a vibrant mix of uses and destinations. While downtown has relatively good pedestrian infrastructure, this area still has a significant number of collisions involving pedestrians, offering opportunities for further improvement.
- West Central/Emerson-Garfield/Logan neighborhoods north of the Spokane River
 - Where: Boone Avenue at Maple Street/Ash Street; along Maxwell Avenue/Mission Avenue between Belt Street and Hamilton Street.
 - Why: Neighborhoods includes a mix of residential, employment areas such as Spokane County offices, and recreational activities including Spokane Arena. Major arterial crossings make pedestrian connections difficult. One area with many pedestrian-vehicle collisions is the intersection of Division Street & North River Drive.
- Holy Family Employment Center/Norhtown/Francis -Division
 - Where: Along Francis near Division; near Holy Family Hospital, Franklin Park, Franklin Park Commons and Northtown Mall.
 - Why: The Holy Family Employment Center, the two shopping centers and the higher intensity land uses including offices, high density residential living, as well as an elementary school and major park are significant generators of pedestrian demand. The streets in this area have very high pedestrian demand scores. Vehicle speeds on Francis Avenue and Division Street are often very high. This area includes a designated Employment Center and a pedestrian fatality took place near the intersection of Division and Francis. Access to Franklin Park from the east side of Division Street is challenging due to high speeds and traffic.
- Mission Park/Mission and Napa area
 - Where: In the area near Mission Park and the Spokane River extending to the east including Stevens Elementary School and the Mission and Napa neighborhood business area.
 - Why: This is an active area with a concentration of activities including mixed land uses, schools, employment, and connections to the Centennial Trail.
- Lincoln Heights activity area
 - Where: Area in the vicinity of the 29th Avenue and Southeast Boulevard intersection east to Ray and along Regal south to 37th Avenue.
 - Why: The Lincoln Heights District Center is the principal activity node of surrounding neighborhoods. The area is a shopping center close to two parks, a

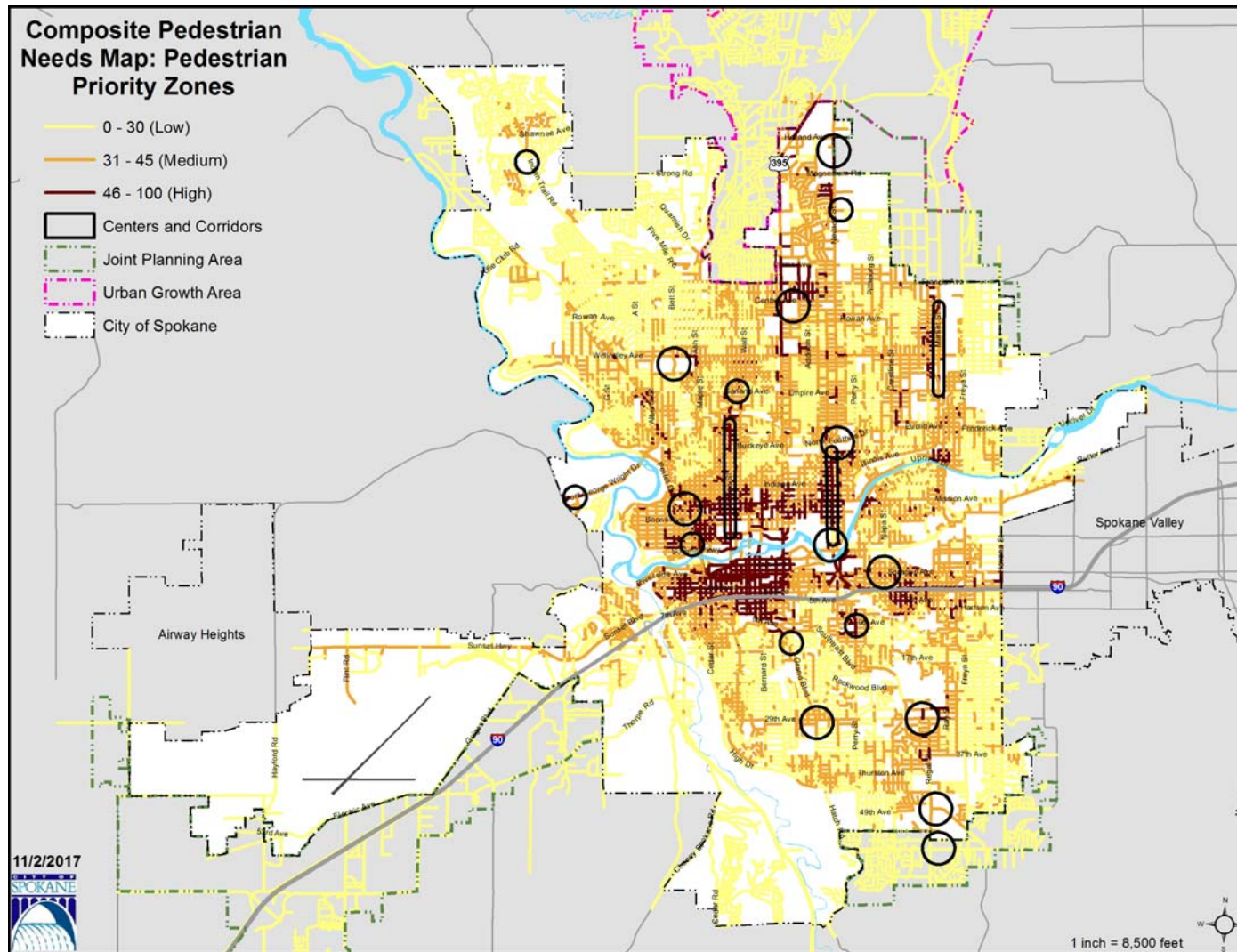
senior center, and schools. The area also includes three grocery stores. Pedestrian deficiency scores are high in several locations within this area.

- North Monroe Street Corridor
 - Where: From the Spokane River north along Monroe Street to the Garland District
 - Why: Pedestrian need is relatively low in the residential neighborhoods bordering Monroe, but people in these neighborhoods rely on a variety of services along the corridor, creating high pedestrian demand. The Garland District is a designated Neighborhood Center.
- Market Street, Hillyard Business Corridor
 - Where: Market Street between Wellesley Avenue and Francis Avenue.
 - Why: Developing commercial corridor with residential and employment areas nearby. Demand is very high and pedestrian deficiency scores are moderate.
- South University District, Sprague Avenue
 - Where: Along Sprague Avenue, in the vicinity of Sherman Street.
 - Why: This is a part of the South University District and is an employment area with a mix of commercial and industrial uses. This area is expected to develop with residential uses and along with the planned University District Bridge providing a north-south connection to the University District campus, significant pedestrian demand is anticipated. Demand and overall need scores are high.
- Hamilton Street
 - Where: Hamilton Street, north of the Spokane River to Foothills Drive.
 - Why: Rapidly growing high demand corridor near Gonzaga University which includes parks, grocery stores, employment, and schools. Hamilton is an arterial roadway that is a designated Corridor. Hamilton divides many university uses and passes through residential areas. This corridor illustrates moderate to high pedestrian need scores.
- East Sprague/5th and Altamont
 - Where: In the neighborhood of East Sprague Avenue and extending south of Sprague in the area near Altamont Street.
 - Why: The East Sprague – Sprague and Napa Employment Center is an area with higher pedestrian demand scores, a school, social services and a commercial corridor. Altamont Street connects the neighborhood south of I-90 with Sprague. The area west of Altamont is the location of the East Central Community Center and the East Side Library. There have been recent improvements to the pedestrian environment in portions of this area along Sprague Avenue.
- Driscoll Boulevard/Northwest Boulevard/Alberta/Cochran
 - Where: In the area generally north of Northwest Boulevard along Alberta and Cochran Streets and connecting to Driscoll Boulevard.
 - Why: These arterial streets have higher pedestrian deficiency scores largely because of a lack of sidewalks. The pedestrian demand score for the areas nearby are moderate to high. High traffic volumes on these major arterials make pedestrian crossings difficult.
- Lincoln and Nevada - future opportunity – new development Lincoln and Nevada Neighborhood Center

- Where: Lincoln Road and Nevada Street.
- Why: Many residential streets north of Lincoln lack sidewalks but connect to destinations including schools and parks. Vehicle speeds on Nevada Street are often very high. This area includes a Neighborhood Center. A pedestrian fatality took place at the intersection of Magnesium and Nevada to the north when a city truck hit a teenager while turning at the signal. Sidewalk exists on the west side of Nevada. Sidewalk on the east side of Nevada will be constructed as this area develops in the future.
- South Perry
 - Where: In the neighborhood of South Perry Street and 9th Avenue.
 - Why: The South Perry Neighborhood Center is an area with higher pedestrian demand scores, an elementary school, higher density housing, a city park, and social services. Perry Street is a minor arterial that connects to the vicinity of the University District to the north and Southeast Boulevard to the south. The heart of the Perry District is an active business center. There have been recent improvements to the pedestrian environment in this area with improved sidewalks, street trees and other features.
- Lower South Hill/Sacred Heart Medical Center
 - Where: The lower South Hill area generally extending from Maple Street to Cowley Street.
 - Why: This area has some of the highest employment and population density in the city. Sacred Heart Medical Center is a major employer and there are significant office uses in this area. Higher density residential housing is located throughout this area of the South Hill. Lewis and Clark High School generates a large amount of pedestrian activity. Other generators of pedestrian demand include city parks and social services in nearby downtown Spokane.

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Figure 7- Composite Pedestrian Needs Map: Pedestrian Priority Zones



Crash Analysis

This section provides a snapshot of pedestrian-involved crashes in Spokane between 2005 and 2012. Figure 8 below identifies the number of reported pedestrian collisions and fatalities in Spokane by year. Over this time period, there has been an average of 172 reported pedestrian collisions per year, while the number of pedestrian fatalities in a given year varies significantly.

Figure 8 – Summary of Pedestrian-Vehicle Collisions by Year

Year	Non-Fatal	Fatalities
2005	104	1
2006	198	2
2007	128	4
2008	111	0
2009	107	8
2010	118	1
2011	117	4
2012	131	5

Approximately 90% of reported pedestrian collisions took place at an intersection. Figure 9 relates the number of intersection collisions during this period with the traffic control present. During this period, about 88% of all pedestrian-involved collisions at intersections took place at locations with some form of traffic control, either stop signs or traffic signals. Eleven-percent of pedestrian-involved collisions took place at locations without a traffic control device. The large number of collisions at locations with some form of traffic control suggests a need to improve these conditions through protected turn phases, enhanced crosswalks, driver behavior change, and other strategies.

Figure 9 - Location of Pedestrian-Vehicle Collisions (2005-2012)

Location of Pedestrian-Vehicle Collision	Collision Count
Collision at intersection with no traffic control	94
Collision at traffic signal	379
Collision at stop control	343
Collision at traffic circle	0
Total number of collisions at intersections	816

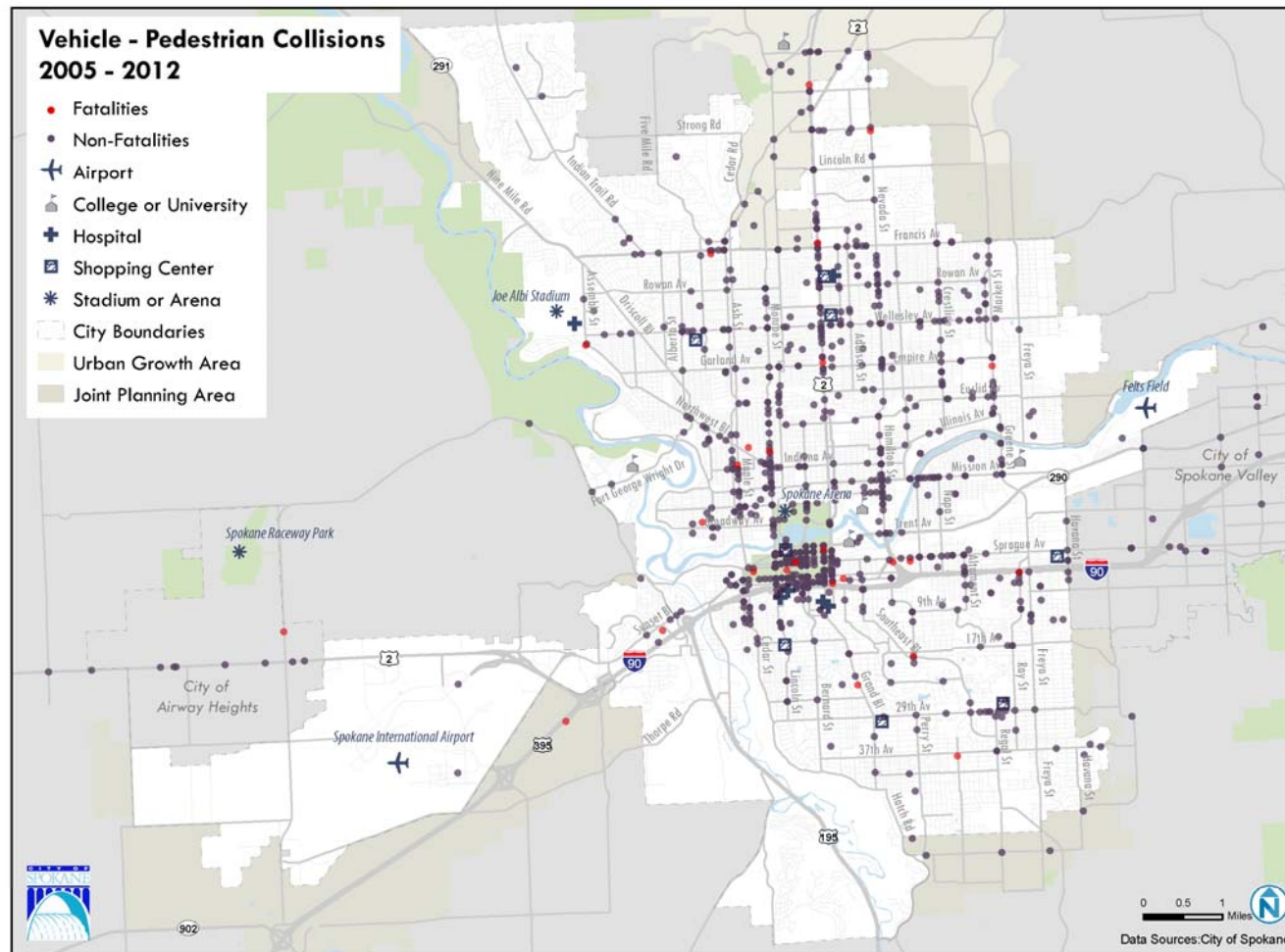
Figure 10 provides a map of all pedestrian crashes, with fatal crashes identified in red. Figure 11 utilizes a density analysis to illustrate further high crash corridors and intersections. These maps illustrate locations with concentrations of pedestrian-involved collisions.

The highest amount of pedestrian activity takes place in Downtown Spokane and this is where the greatest concentration of pedestrian-vehicle collisions took place during the analysis period. Intersections in downtown with the highest concentration of pedestrian-vehicle collisions include Second Avenue & Washington Street (11 collisions), Pacific Avenue & Browne Street (9 collisions), Second Avenue & Monroe Street (8 collisions), Second Avenue & Maple Street (7 collisions), Sprague Avenue & Wall Street (7 collisions) Sprague Avenue & Stevens Street (7 collisions) and Sprague Avenue & Browne Street (7 collisions).

Many crashes are concentrated along arterial streets, including those that are wide and with higher posted speeds that make them difficult to cross without marked crossings such as traffic signals or pedestrian refuge islands. Outside of Downtown, a number of corridors register including multiple intersections along Division Street, Mission Avenue in the Chief Garry Park neighborhood, Hamilton Street near Gonzaga University and the intersection of Francis Avenue and Ash Street.

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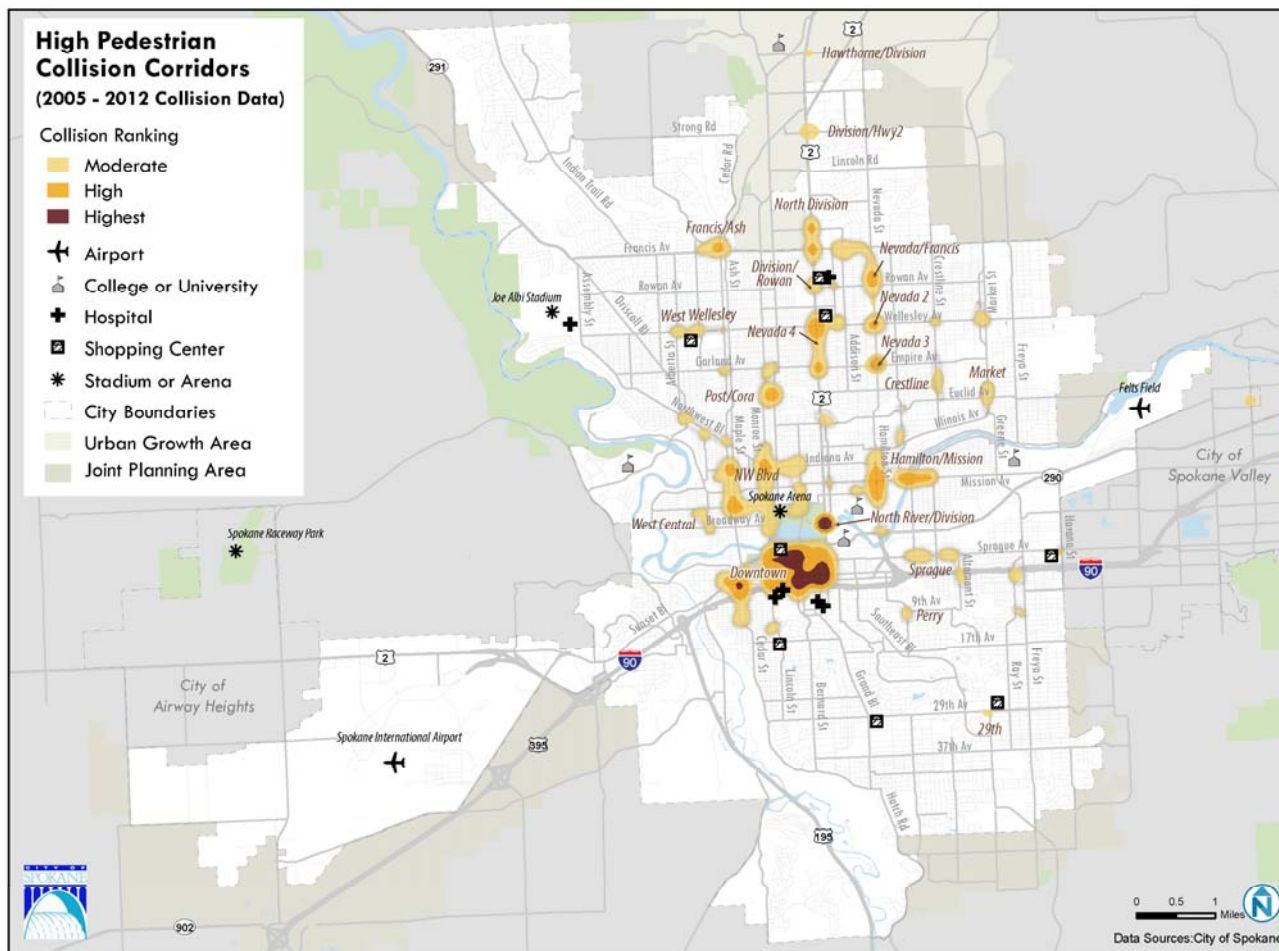
Figure 10 – Map of Pedestrian Collisions, 2005-2012



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Figure 11 – Map of High Concentrations of Pedestrian Collisions, 2005-2012



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Figure 12 – High Crash Corridors, 2005-2012

Street	Crashes	Fatalities	Length (Miles)	Crashes/Mile	High Crash Intersections
Hamilton from Illinois to Cataldo	36	0	0.8	45	Hamilton & Mission(11), Hamilton & Indiana(4), Hamilton & Sharp(6)
Washington from Maxwell to North River	10	0	0.4	33.3	Sinto & Washington(2), Maxwell & Washington(1), Boone & Washington(3)
Division/Ruby from Desmet to Division St. Bridge (This location requires further analysis due to possible collision data mapping anomalies.)			0.5		Division & North River(2)
Mission from Perry to Lee	19	0	0.6	31.6	Mission & South Riverton(4), Mission & Upriver(3), Magnolia & Mission(5)
Market from Courtland to Cleveland	7	0	0.3	23.3	Euclid & Market(1), Liberty & Market(2), Bridgeport & Market(2)
Division from Wedgewood to Gordon	49	2	2.1	23.3	Division & Lyons(5), Division & Wellesley(9), Division & Empire(2)
Crestline from Empire to Bridgeport	7	0	0.3	23.3	Crestline & Gordon (3), Crestline & Empire (1)
Sprague from Ivory to Cook	19	1	0.9	21.1	Lee & Sprague(4), Pittsburg & Sprague(4), Helena & Sprague(3), Altamont & Sprague(3)
Nevada from Lyons to Garland	35	0	1.8	19.4	Joseph & Nevada(6), Nevada & Wellesley(6), Empire & Nevada(7), Nevada & Rowan(3)
Monroe from Garland to Monroe St Bridge	36	1	2.2	16.4	Boone & Monroe(2), Monroe & Spofford(3), Maxwell & Monroe(2), Indiana & Monroe(2), Garland & Monroe(1)
Wellesley from Milton to Maple	12	0	0.8	15	Wellesley & Belt(3), Wellesley & Alberta(3), Wellesley & Ash(2)
Wellesley from Martin to Greene	10	0	0.8	12.5	Lee & Wellesley(2), Lacey & Wellesley (2), Crestline & Wellesley(1)
Francis from Alberta to Cedar	9	1	0.8	11.25	No intersections along Five Mile Shopping
Maple/Ash from Knox to Maple St Bridge	22	1	2.2	10	Indiana & Maple(4), Ash & Gardner(2), Maple & Maxwell(2), Boone & Maple(2), Ash & Maxwell(1)
Northwest from Fairview to Maple	6	0	0.8	7.5	Cochran & Northwest(1),

Figure 13 - Top Crash Intersections within high crash corridors, 2005-2012

Intersection	Traffic Control	Crashes	Corridor
Second Av & Washington St	Signal	11	Downtown
Hamilton St & Mission Av	Signal	10	Hamilton
Browne St & Pacific Av	None	9	Downtown
Monroe St & Second Av	Signal	8	Downtown
Maple St & Second Av	Signal	7	Downtown
Sprague Av & Wall St	Signal	7	Downtown
Sprague Av & Stevens St	Signal	7	Downtown
Browne St & Sprague Av	Signal	7	Downtown
Empire Av & Nevada St	Signal	7	Nevada
Joseph Av & Nevada St	Stop	6	Nevada
Hamilton St & Sharp Av	Signal	6	Hamilton
Fourth Av & Maple St	Signal	6	Downtown
Nevada St & Wellesley Av	Signal	6	Nevada
Browne St & Second Av	Signal	5	Downtown
Browne St & Third Av	Signal	5	Downtown
Division St & Lyons Av	Signal	5	North Division
Division St & Second Av	Signal	5	Downtown
Monroe St & Sprague Av	Signal	5	Downtown
Magnolia St & Mission Av	Stop	5	Mission
Hamilton St & Indiana Av	Signal	4	Hamilton
First Av & Washington St	Signal	4	Downtown
Riverside Av & Stevens St	Signal	4	Downtown
Mission Av & South Riverton Av	Stop	4	Mission*
Mission Av & Upriver Dr	Stop	3	Mission
Division St & North River Dr	Signal	2	North River
Boone Av & Monroe St	Signal	2	Monroe

*This intersection has been modified to right-in, right-out from South Riverton Avenue to Mission Avenue

Figure 14 – Top Crash Intersections independent of high crash corridors, 2005-2012

Intersection	Traffic Control	Crashes
9th Av & Perry St	Stop	5
Boone Av & Walnut St	Stop	4
Garland Av & Post St	Signal	4
Ash St & Five Mile Rd	Signal	3

PROGRAMMATIC RECOMMENDATIONS

This section provides a series of goals, policies and actions to continue making Spokane a more walkable community over time. Making steady progress by implementing these and other actions will help Spokane achieve recognition as a Walk Friendly Community as well as support other community initiatives related to livability, public health and economic development. By applying for a Walk Friendly Community designation, the city will receive specific suggestions and resources on how to make needed changes for pedestrian safety. Through the questions in the assessment tool, the city will be able to identify the areas of needed improvements that can form the framework for a comprehensive pedestrian improvement plan. Communities awarded with a Walk Friendly Community designation will receive national recognition for their efforts to improve a wide range of conditions related to walking, including safety, mobility, access and comfort.

Goal 1 Well Connected and Complete Pedestrian Network

- Provide a connected, equitable and complete pedestrian network within and between centers and corridors and Pedestrian Priority Zones that includes sidewalks, connections to trails, and other pedestrian facilities, while striving to provide barrier-free mobility for all populations.

- Policy 1.1 Create walkable environments through short and connected blocks.
 - Action 1.1.1 Review concurrency and developer requirements and recommend modifications to achieve greater connectivity.
- Policy 1.2 Create direct connections for users of all abilities.
 - Action 1.2.1 Map concentrations of vulnerable users such as older adults, children, or people with disabilities.
 - Action 1.2.2 Create design standards for these areas, including consideration of longer street crossing clearance intervals, if appropriate.
 - Action 1.2.3 Implement the City's ADA Disability Transition Plan for Physical Facilities.
- Policy 1.3 Close gaps in the sidewalk network.
 - Action 1.3.1 Apply a prioritization methodology to identify capital projects, including ADA retrofits and sidewalk infill.
 - Action 1.3.2 Identify new funding sources for construction of sidewalks and crossings.
 - Action 1.3.3 Program projects in the capital budget.

Definition of Programmatic Recommendations' Organization

The adopted Spokane Comprehensive Plan states, "Goals and policies provide specificity for planning and decision-making. Overall, they indicate desired directions, accomplishments, or aims in relation to the growth and development of Spokane."

- A goal is a general statement of the community's desired outcome
- Policies are a course of action that a community will take to meet its goals. They are focused and direct actions
- Actions are specific projects and activities directed to achieve the goals.

- Policy 1.4 Document the number of each type of improvement to the pedestrian system.
 - Action 1.4.1 Continue and expand the sidewalk inventory, curb ramp inventory, and crosswalk inventory.
 - Action 1.4.2 Track and report new pedestrian facilities and investments.
- Policy 1.5 Support the continued development and identification of shared-use pedestrian and bicycle pathways.
- Policy 1.6 Provide connections for pedestrians to adjacent jurisdictions.

Goal 2 Maintenance and Repair of Pedestrian Facilities - Provide maintenance for and improve the state of repair of existing pedestrian facilities.

- Policy 2.1 Increase funding for maintenance of pedestrian facilities.
 - Action 2.1.1 Continue and expand the crosswalk maintenance program.
 - Action 2.1.2 Develop an annual program to repair and replace broken sidewalks in Pedestrian Priority Zones.

Goal 3 Year-Round Accessibility - Address the impacts of snow, ice, flooding, debris, vegetation and other weather and seasonal conditions that impact the year-round usability of pedestrian facilities.

- Policy 3.1 Define and maintain the walkable zone to facilitate clear pedestrian travelways.
 - Action 3.1.1 Use available funding sources for maintenance of pedestrian facilities, including snow clearance on regional trail system.
- Policy 3.2 Improve awareness and enforcement of snow clearing and maintenance policies.
 - Action 3.2.1 Improve public information resources for pedestrian facility maintenance.
 - Action 3.2.2 Implement the improvements to the public information resources and document the impacts.

Goal 4 Safe and Inviting Pedestrian Settings - Create a safe, walkable city that encourages pedestrian activity and economic vitality by providing safe, secure, and attractive pedestrian facilities and surroundings.

- Policy 4.1 Increase pedestrian safety both along and across the roadway.
 - Action 4.1.1 Use targeted enforcement programs to ensure the safety and security of pedestrians in crosswalks and on city streets, trails, and walkways.
 - Action 4.1.2 Build new sidewalks and crossings in accordance with street design standards.
- Policy 4.2 Remediate areas of known pedestrian safety incidents.
 - Action 4.2.1 Conduct regular coordination of traffic engineers and planners to work with police to review sites in need of safety improvement for motorists and pedestrians.
 - Action 4.2.2. Use pedestrian crash data to identify problem areas and potential solutions.
- Policy 4.3 Create vibrant places that invite walking and gathering.

- Action 4.3.1 Create a pilot parklet program.
- Action 4.3.2 Adopt development standards and guidelines to encourage lively, attractive, safe and walkable pedestrian environments.
- Policy 4.4 Evaluate the impacts of pedestrian improvements.
 - Action 4.4.1 As warranted, conduct field studies to assess changing conditions including yield compliance, visibility triangles, and prevailing speed at project locations.
 - Action 4.4.2 Explore pedestrian count technology to assess change in activity over time.
 - Action 4.4.3 Consider pursuing application for Walk Friendly Community designation.

Goal 5 Education - Educate citizens, community groups, business associations, government agency staff, and developers on the safety, health, and civic benefits of a walkable community.

- Policy 5.1. Partner with other agencies in the promotion of the benefits of walking.
 - Action 5.1.1 Develop and train staff to implement a citywide pedestrian education program based on national best practices.
 - Action 5.1.2 Provide information to Spokane residents about the benefits of new pedestrian facilities.
 - Action 5.1.3 Develop pedestrian messaging campaigns, including public health campaigns related to walking and the benefits of investing in pedestrian facilities.
 - Action 5.1.4 Develop public service announcements to encourage safe walking and driving.
 - Action 5.1.5 Identify funding and partnering opportunities with City agencies and local, regional, and national partners for effective and wide dissemination of the walking encouragement programs.
 - Action 5.1.6 Develop Walking maps (e.g., neighborhood maps, school route maps, city-wide maps, trails and greenways, etc.).
 - Action 5.1.7 Support implementation of a uniform pedestrian wayfinding system.

PROJECT IDENTIFICATION/PEDESTRIAN IMPROVEMENT METHODOLOGY

The Pedestrian Priority Zones provide guidance for identifying high priority areas for future pedestrian improvements. The Pedestrian Priority Zones were identified using the pedestrian needs analysis. The Pedestrian Needs Analysis compares pedestrian demand indicators with existing pedestrian infrastructure, and is used to compare different locations to help make data-driven decisions that are equitable and fair. This is only one tool to assist with prioritizing locations for pedestrian projects; it should not be used as the sole determinant for making decisions. An integrated approach that includes availability and stipulations of funding, community support, and cost sharing opportunities with other planned projects will be considered in the decision making process. Pedestrian projects and other street projects are identified in the Six-Year Comprehensive Street Program which is updated annually.

Figure 15 shows the general location of the Pedestrian Priority Zones.

Figure 15 – Pedestrian Priority Zones

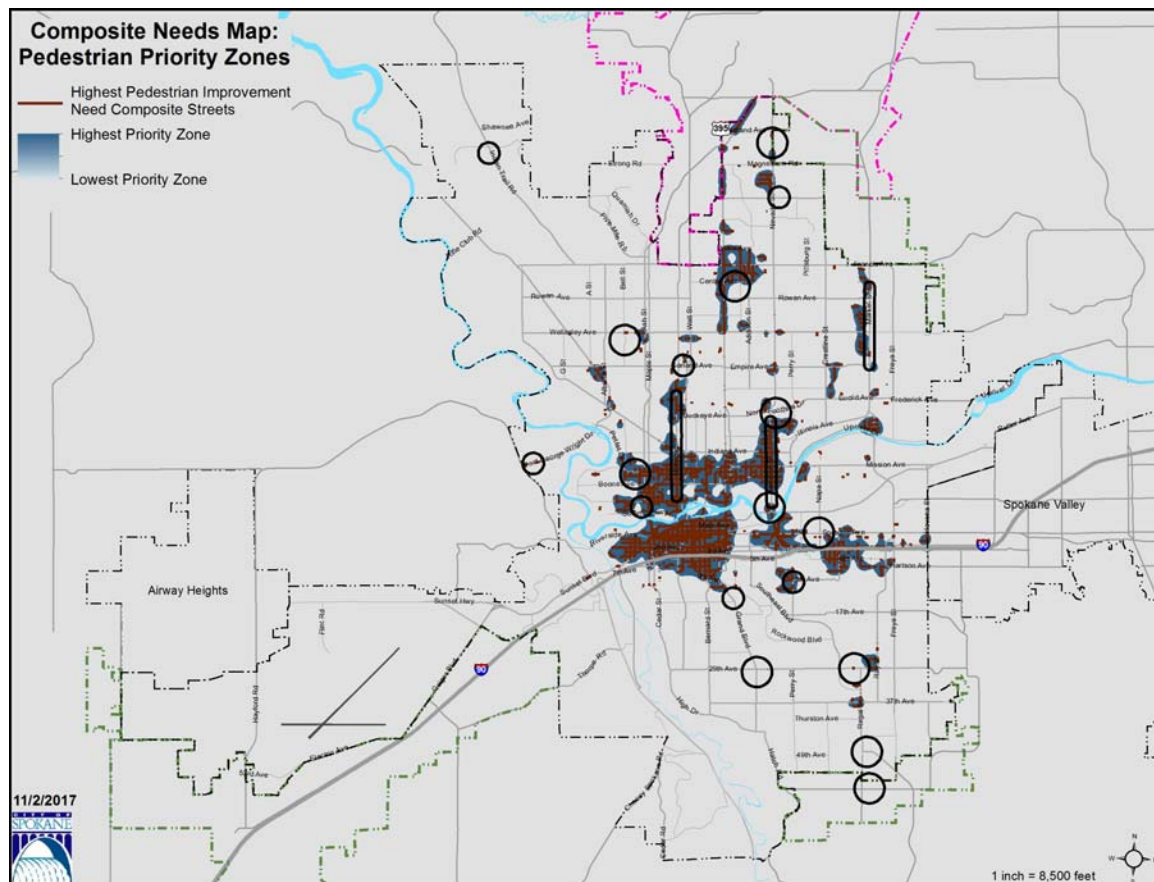


Figure 16 shows the Pedestrian Priority Zones with the 2015 construction projects that include pedestrian facilities and the 2016-2021 6-year Street Program projects that include pedestrian facilities. The street projects incorporate calming traffic and improving safety for pedestrians by reducing road and lane width; providing wider sidewalk, installation of curb extensions; modifying ADA ramps; adding a pedestrian pathway; improving transit accessibility; placing missing sidewalk; repairing sidewalk; installation of pedestrian lighting; improved median refuge islands; and other improvements. Many of the projects are within Pedestrian Priority Zones and are consistent with the guidance provided by the Pedestrian Master Plan.

Figure 16 – 2015 Construction Projects and 2016-2021 6-year Street Program projects that include pedestrian facilities

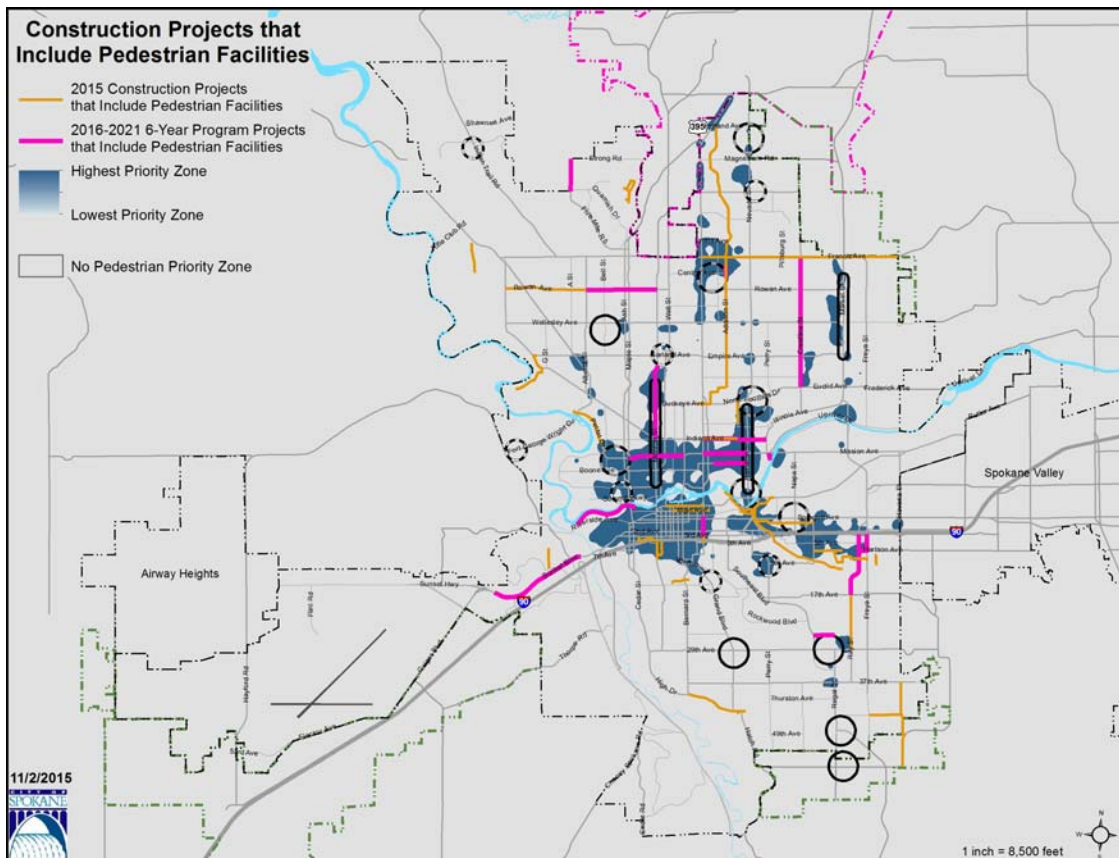
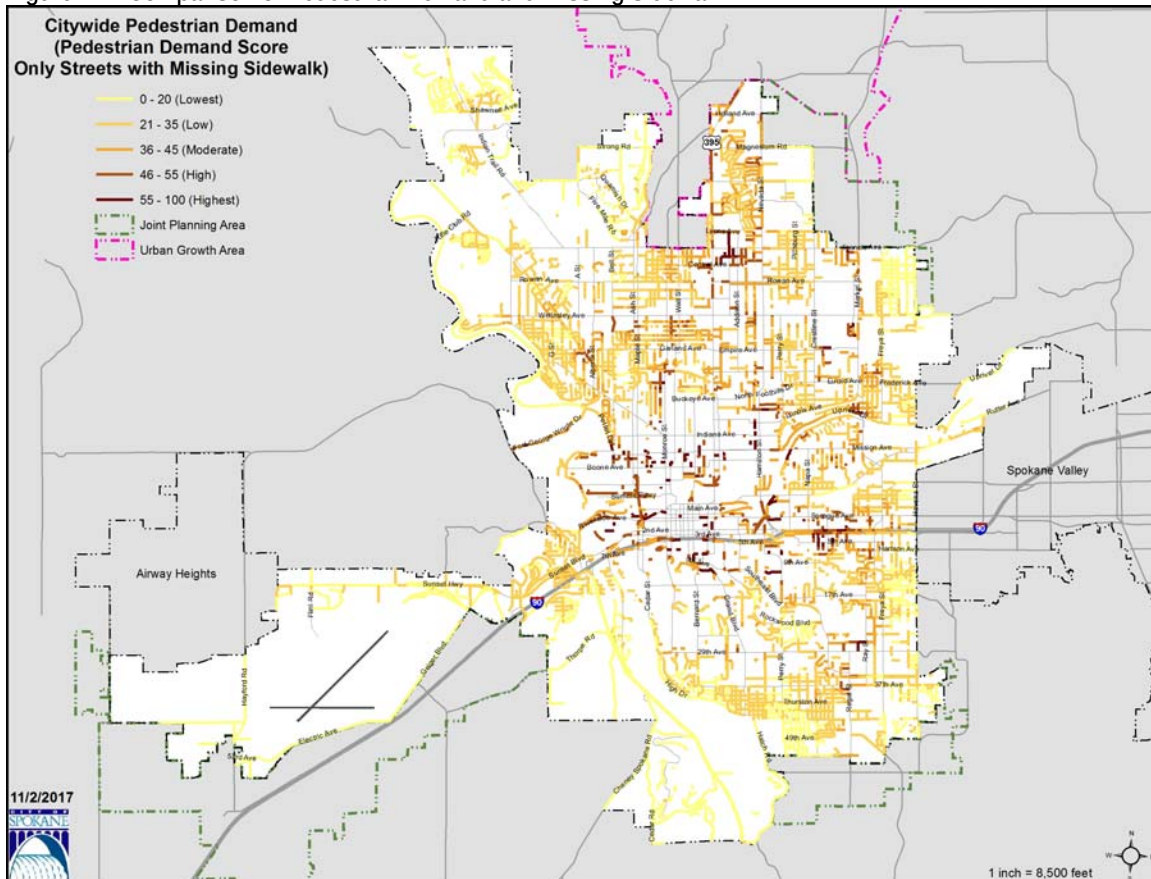


Figure 17 provides an example of how potential sidewalk improvement projects may be identified using the pedestrian demand analysis. The map identifies missing sidewalks on one or both sides of a street. The missing sidewalk data is compared to the Pedestrian Demand Score. The result is an identification of locations where there is missing sidewalk in areas with the highest pedestrian demand.

Figure 17 – Comparison of Pedestrian Demand and Missing Sidewalk



POTENTIAL FUNDING SOURCES

The Pedestrian Master Plan should be used as a guide to identify pedestrian improvement projects and decide which to fund. The evaluation of pedestrian improvement needs should be considered as a part of all projects when city controlled sources of funding are eligible to pay for pedestrian projects.

Several examples of funding sources available for financing pedestrian improvement projects are included below. Other funding sources should be identified and utilized whenever opportunities arise.

Local

- **Transportation Benefit District (TBD)**

On February 14th 2011, City Council adopted Ordinance No. C34690 establishing the allocation of 10% of the Transportation Benefit District (TBD) revenue generated to implement the Pedestrian Program of the City of Spokane's Six-Year Comprehensive Street Program. The funding will remain in place for six years beginning in 2012. The collection of the TBD funds began in September of 2011. The Pedestrian Master Plan will help identify the pedestrian facilities that would ultimately be funded with TBD revenue under the Pedestrian & Bikeways section of the Program. TBD funding available in 2012 is on the order of \$150,000 and is expected to be at almost \$180,000 in subsequent years. The front-work of the Pedestrian Master Plan was utilized to select projects for 2012, and future projects under this program will also be identified from the Pedestrian Master Plan.

- **Local Improvement District (LID) bonds**

A major fund source for the construction of new residential streets and alleys is the use of Local Improvement District (LID) bonds. These bonds are financed through direct property assessment. General obligation bonds financed through property tax (GO bonds) are also used to fund specific projects. Sidewalk construction may be included as a part of an LID project.

- **Automated Traffic Safety Cameras funding allocation**

On September 30, 2013 the City Council passed Resolution No. 2013-0070 related to allocation of funds from infractions issued with automated traffic safety cameras. Among the items to be allocated funding, the resolution provides a flexible matching fund for neighborhood traffic calming projects, neighborhood business districts, streetscape improvement or community development projects related to public safety.

- **2014 Street Levy**

In 2014 city voters passed a 20-year levy to create a sustainable, long-term funding source for streets. The levy concentrates new investments on the arterial streets, which account for more than 90 percent of vehicle miles traveled through the City. The levy supports the City's "integrated" way of looking at streets. Integrated streets consider pavement conditions, multi-modal transportation components (including pedestrian facilities), stormwater management, water and wastewater infrastructure, and economic development opportunities. The levy will generate about \$5 million a year to fund new street work. Those funds would be matched with local utility dollars and state and federal matching funds to support about \$25 million in street improvements annually.

State

- **Paths and Trails Reserve**

A portion of the State gasoline tax revenue which, by Washington State Law, is returned to local government to be used for the development and maintenance of paths and trails. One half of one percent (0.5%) of the tax is returned to the City. Presently the City receives approximately \$14,000 per year from this funding source. Both pedestrian and bike facilities can utilize these funds, however historically these funds have been extremely limited.

- **State Arterial Street Funds**

State Arterial Street Funds may be obtained for both pedestrian and bikeway facilities as long as the facility is a component part of a street improvement project and available for funding.

- **State Transportation Improvement Board (TIB) Funds**

A sidewalk program is included in TIB's funding program. Historically these funds have been limited to projects under \$250,000 and TIB will not participate in any needed right-of-way costs.

Federal

- **Community Development Block Grant Program**

This funding comes from the Housing and Community Development Act of 1974 and authorizes the Department of Housing and Urban Development to distribute funds to local governments for the purpose of improving their community. The Community Development Block Grant (CDBG) program primarily addresses capital construction needs in low-to-moderate income neighborhoods. Funds for pedestrian and bicycle facilities are included.

- **Federal Arterial Street Funds**

Pedestrian facilities may utilize these funds, as long as the facility is a component part of a street improvement project and available for funding.

Implementing new programs and solutions will require funding and there likely will never be enough money to do everything. As a way to prioritize projects, the Pedestrian Master Plan supports incorporating pedestrian safety and accessibility improvements (including ADA) into existing transportation projects that fall within the City's priority areas.

Any project being designed in the public right-of-way, from a street being resurfaced to the placement of the new transit stop, should be reviewed to ensure that pedestrian safety and accessibility improvements are included. For example, as mentioned above, projects funded using the 2014 Street Levy will incorporate multimodal transportation components including pedestrian improvements. Other street projects, including those involving non-arterial streets, will include improvements to meet ADA standards such as the addition of new curb ramps or replacement curb ramps. There will also be an assessment of existing pedestrian facilities such as sidewalks and repair or replacements will be completed as necessary.

Another potential resource is the partnering with other agencies, foundations and the private sector for future awareness and education campaigns. The City should continue partnering with other agencies like the Spokane Regional Health District that have a considerable interest in improving pedestrian safety. Strengthening these partnerships and forming new ones will provide additional opportunities to increase awareness of pedestrian safety issues.

Appendix A - Pedestrian Needs Analysis Methodology

A pedestrian needs analysis was completed that considered factors indicative of walking potential (pedestrian demand) as compared to the supply (or lack thereof) of pedestrian infrastructure (pedestrian deficiencies), to illustrate where there is a mismatch in the demand for and availability of walking infrastructure. Indicators included in the pedestrian demand analysis are:

- Employment density - Major employment centers such as downtown and the University District can generate walking trips both on the journey to and from work (including in connection with other modes) as well as mid-day activity for lunch, errands, etc.
- Population density - Higher density residential areas tend to be more supportive of having destinations within a walkable distance, with a mix of land uses located in close proximity to each other.
- Proximity to destinations (Centers and Corridors, neighborhood shopping, social services, transit stops, schools, parks,) – These destinations attract walking trips. Neighborhood shopping and schools are major destinations for daily activities, most transit trips in Spokane begin or end with a walking trip, and children are potential walkers to school.
- Demographic factors from the US Census (% of people with no vehicle available, % of households below the poverty level, % of people under 18, and % of people 65 or over) – These population groups can be dependent on walking due to financial considerations or a lack of access to a personal vehicle.

The methodology's premise is that the highest priority improvements should be located in those areas where walking potentials (pedestrian demand) are high and pedestrian facilities are lacking. Each street segment received a pedestrian demand score rating and an infrastructure deficiency rating. The rating values were applied to each street segment based on a conversion of the unique indicator measurement units into a common set of rating criteria. Additionally, the methodology weighted the importance of each indicator relative to other indicators. Pedestrian demand indicators were weighted separately from infrastructure deficiency indicators to support the methodology's two separate indices.

After all street segments received their weighted scores for pedestrian demand and infrastructure deficiency, the highest scoring segments on both indices were found by taking the geometric mean of the two score sets. This produced the pedestrian priority zones which are the areas with the greatest need for improvements.

For the pedestrian demand scoring, using the relative weighting allows placement of emphasis on indicators that are likely to generate more pedestrian demand than other indicators. The results more accurately reflect how an indicator influences pedestrian demand. As an example, employment density is given a higher weight because major employment centers such as

downtown and the University District, can generate walking trips both on the journey to and from work as well as mid-day activity for lunch, errands, etc.

Figure 20 and 21 below shows the factors that were considered in the pedestrian needs analysis. The City's GIS database was used to map the indicators and the relative weighting based on the importance of each indicator relative to the other indicators.

Figure 7 of the Pedestrian Master Plan provides the results of the pedestrian demand mapping.

Pedestrian deficiency indicators were also mapped. See Figure 2 below. Indicators included in the pedestrian deficiency analysis are:

- Presence of sidewalks - Sidewalks provide a dedicated facility separated from the roadway (may or may not provide a pedestrian buffer strip).
- Width of the street – Wider roads tend to enable higher vehicle speeds, which reduces comfort for pedestrians and makes roadway crossings more difficult.
- Collision history – A history of multiple pedestrian collisions likely reflects difficult walking or crossing conditions.

Figure 8 of the Pedestrian Master Plan provides the results of the pedestrian deficiency mapping.

Figure 9 of the Pedestrian Master Plan illustrates the results of the composite map which combines the assessment of pedestrian demand and pedestrian deficiency. This map serves to clarify where the pedestrian needs in the city are greatest. Areas with higher demand and deficiency scores are candidates for designation as Pedestrian Priority Zones.

Maps with background information used in the Pedestrian Needs Analysis follow the Pedestrian Demand Score and Pedestrian Deficiency Score tables. See Figure 20 through below.

Pedestrian Master Plan
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Figure 18 – Pedestrian Demand Score

Indicator	Weight	Indicator Score	Rating Value	
Centers and Corridors	5	0 -330	500	*Using City Zoning (CC1, CC2, DTC, DTG, DTS & DTU), City Zoning Overlay (CC3), County Zoning (NC, MU)
		330 -660	375	
		660 -990	250	
		990 - 1320	125	
		1320+	0	
Street Segment Length (ft)	10	0-400	500	* Left segments broken as they are in the street network.
		400-500	400	
		500-750	300	
		750-1000	200	
		1000-1500	100	
		1500+	0	
Employees per Acre	15	0-3.5	0	*Employees by TAZ given to us from SRTC. These numbers were generated by SRTC to show in their Horizon 2040
		3.5-8	100	
		8.1-16	200	
		16-32	300	
		32-80	400	
		80+	500	
Population per Acre	15	0-5	0	*Using Block 2010 Census
		5-10	100	
		10-15	200	
		15-20	300	
		20-25	400	
		25+	500	
Neighborhood Shopping Proximity (ft.)	5	0 -330	500	*Using City Zoning (NR)
		330 -660	375	
		660 -990	250	
		990 - 1320	125	
		1320+	0	
Social Service Proximity (ft.)	5	0 -330	500	* Used list of Resources for Disabled
		330 -660	375	
		660 -990	250	
		990 - 1320	125	
		1320+	0	
Transit Proximity (ft.)	10	0 -330	500	*Used STA HPTN Bus Routes
		330 -660	375	
		660 -990	250	
		990 - 1320	125	
		1320+	0	
Park Proximity (ft.)	5	0 -330	500	*Used City GIS layer but only kept neighborhood parks, major parks and community parks
		330 -660	375	
		660 -990	250	
		990 - 1320	125	
		1320+	0	
School Proximity & Community Centers (ft.)	10	0 -330	500	*Used City GIS layer for schools. Also Included Community Centers
		330 -660	375	
		660 -990	250	
		990 - 1320	125	
		1320+	0	
People with No Vehicle Available (%)	5	0-3.2%	0	*Used tract data from American Community Survey. The categories were created by using natural breaks.
		3.3% - 4.9%	125	
		5% - 8.4%	250	
		8.5% - 15.4%	375	
		15.5%+	500	
Below Poverty Level (%)	5	0 - 6.92	0	*Used tract data from American Community Survey.
		6.93 - 11.43	100	
		11.44 - 19.36	200	
		19.37 - 26.4	300	
		26.41 - 32.9	400	
Under 18, 65 or Over (%)	5	32.91 +	500	*Used block from 2010 Census data
		0%	0	
		1 - 24%	100	
		24.1 - 32.14%	200	
		32.15 - 38%	300	
Bus Stop (ft.)	5	38.1 - 44.74%	400	*Used STA Bus Stops
		44.75% +	500	
		0 -330	500	
		330 -660	375	
		660 -990	250	
		990 - 1320	125	
		1320+	0	
Total Weight	100			

Figure 19 – Pedestrian Deficiency Score

Indicator	Weight	Indicator Score	Rating Value
Street Width (ft.)	20	0-25	0
		25-35	100
		35-45	200
		45-55	300
		55-65	400
		65+	500
Sidewalk (%)	50	0 - 20	500
		20 - 35	400
		35 - 50	300
		50 - 65	200
		65 - 80	100
		80 - 100	0
Accidents	30	0 - 13.37	0
		13.38 - 66.88	100
		66.89 - 173.91	200
		173.92 - 356.73	300
		356.74 - 642.11	400
		642.12+	500

*Used City of Spokane Pavement Management System data

* Numbers are based on a raster dataset.

The background maps for the Pedestrian Master Plan Pedestrian Needs Analysis are provided below:

- STA HPTN and Transit Stops (Figure 20)
- Street Width (Figure 21)
- Street Segment Length (Figure 22)
- Social Services (Figure 23)
- Sidewalk Coverage (Figure 24)
- Schools and Community Centers (Figure 25)
- Percentage of Population Below Poverty Level (Figure 26)
- Population Density (Figure 27)
- Percentage of Population with No Vehicle Available (Figure 28)
- Parks (Figure 29)
- Neighborhood Retail Zoned Areas (Figure 30)
- Employment Density (Figure 31)
- Center and Corridor and Downtown Zoning (Figure 32)
- Percentage of the Population Under 18 and 65 and Over ()
- Pedestrian Serious Injuries and Fatalities, 2010-2014 (Figure 35)
- Crash Fatalities Density, Crashes 2002-2014 Overview (Figure 36)
- Crash Fatalities Density, Crashes 2002-2014 West Focus Area (Figure 37)
- Crash Fatalities Density, Crashes 2002-2014 Central Focus Area (Figure 38)

- Crash Fatalities Density, Crashes 2002-2014 East Focus Area (Figure 39)
- Crash Fatalities Density, Crashes 2002-2014 North Focus Area (Figure 40)
- Minor and Serious Injury Crash Density, Crashes 2010-2015 Q1 Overview (Figure 41)
- Minor and Serious Injury Crash Density, Crashes 2010-2015 Q1 East Focus Area (Figure 42)
- Minor and Serious Injury Crash Density, Crashes 2010-2015 Q1 North Focus Area (Figure 43)
- Minor and Serious Injury Crash Density, Crashes 2010-2015 Q1 West Focus Area (Figure 44)

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Figure 20 - STA HPTN and Transit Stops

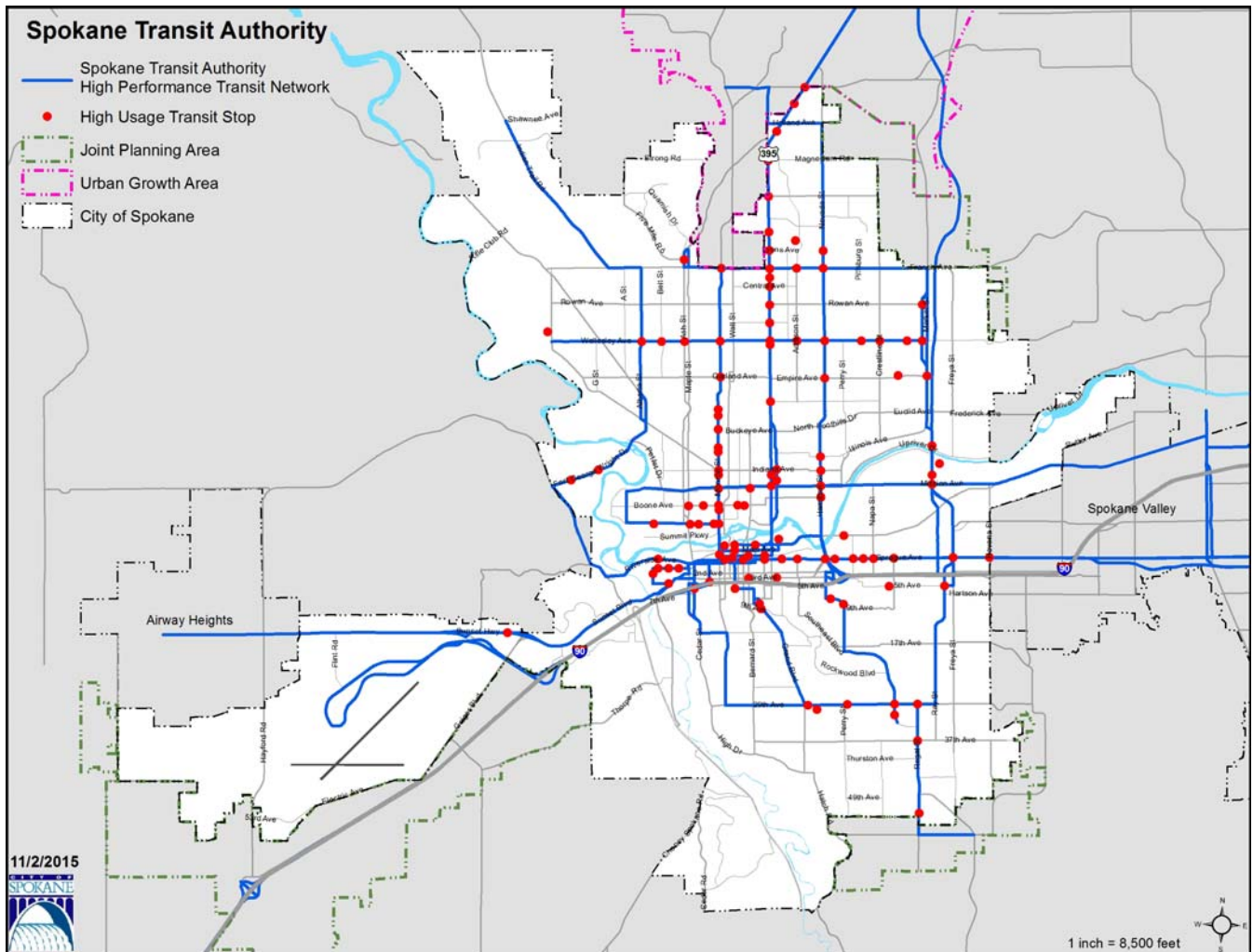


Figure 21 – Street Width

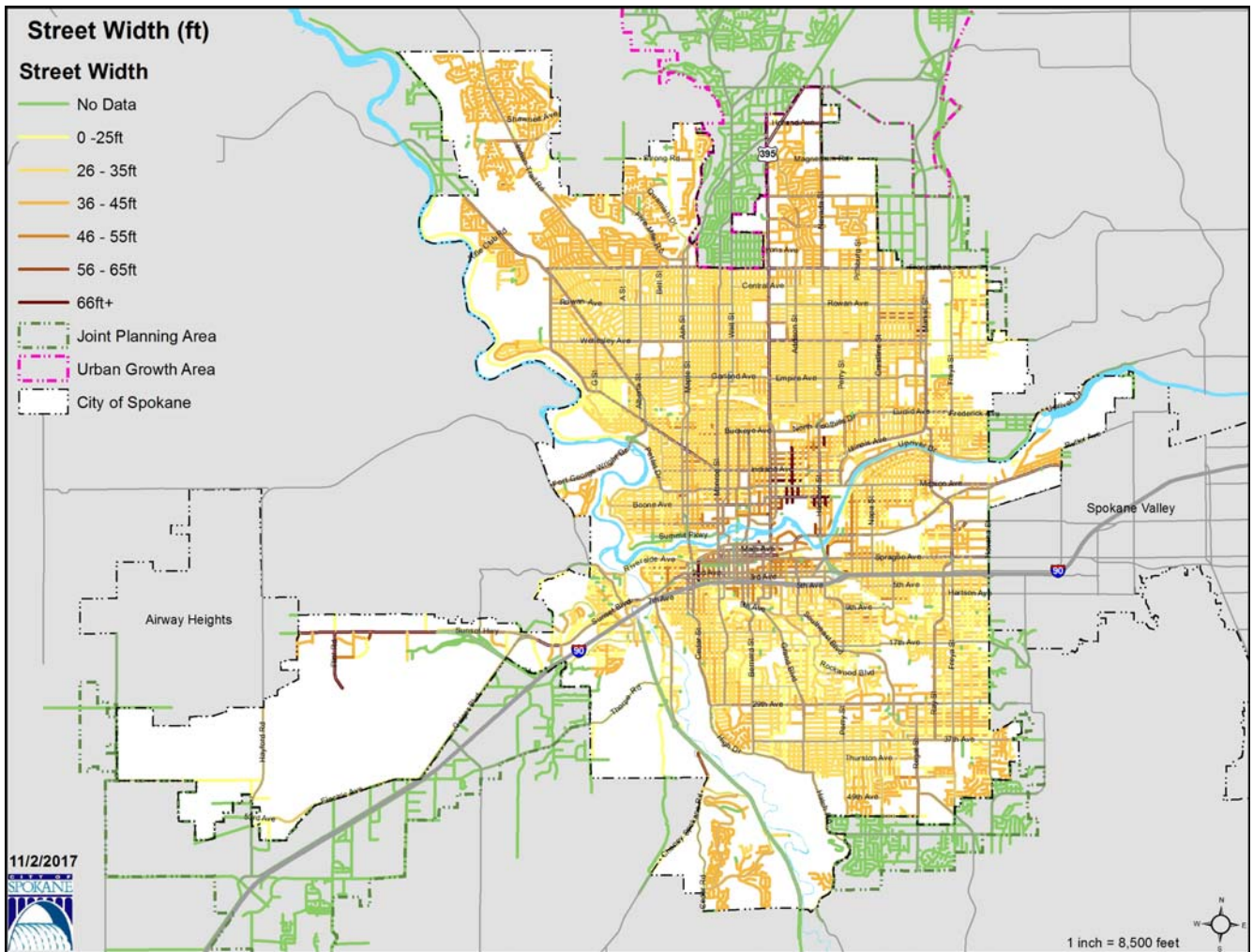
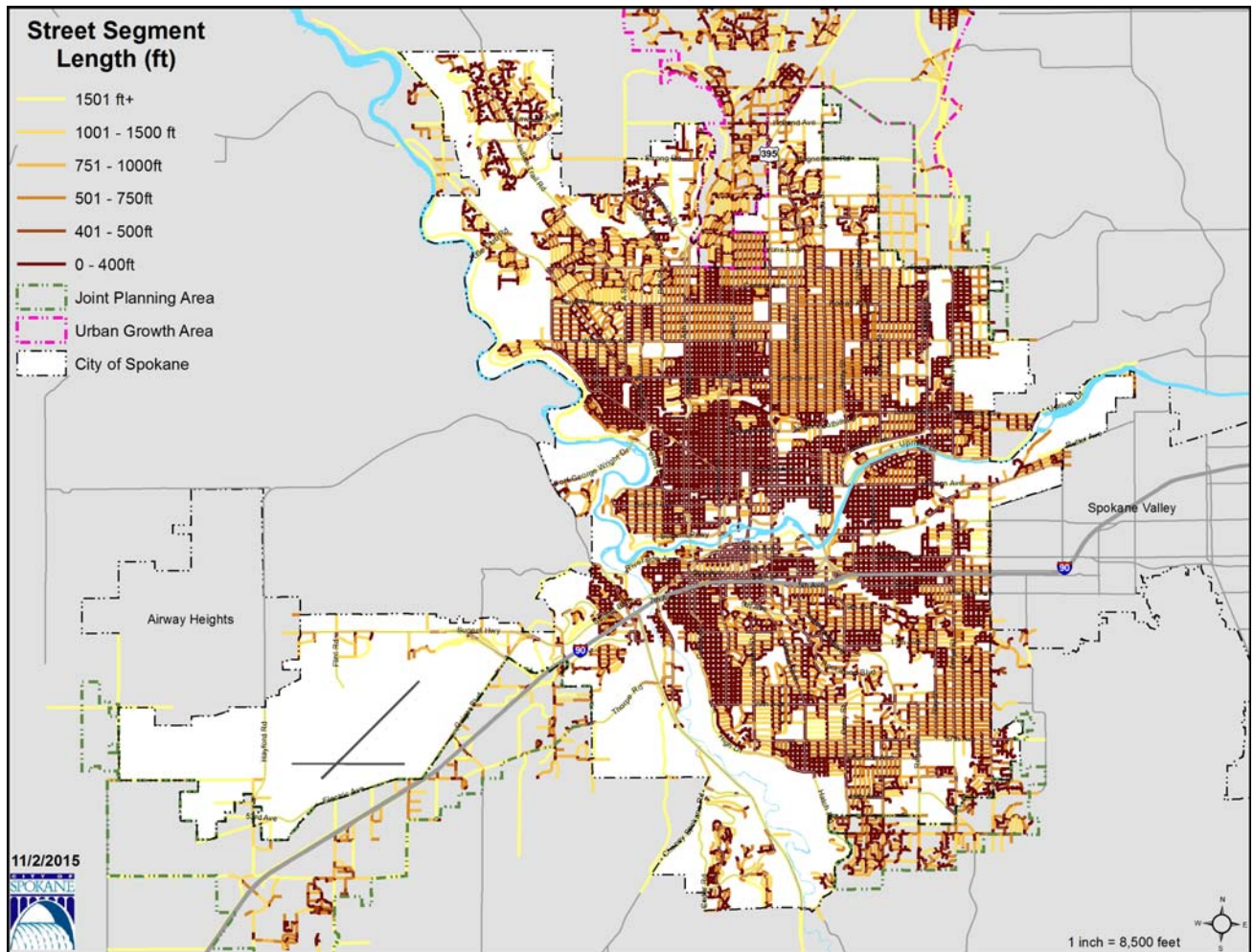


Figure 22 - Street Segment Length



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Figure 23 - Social Services

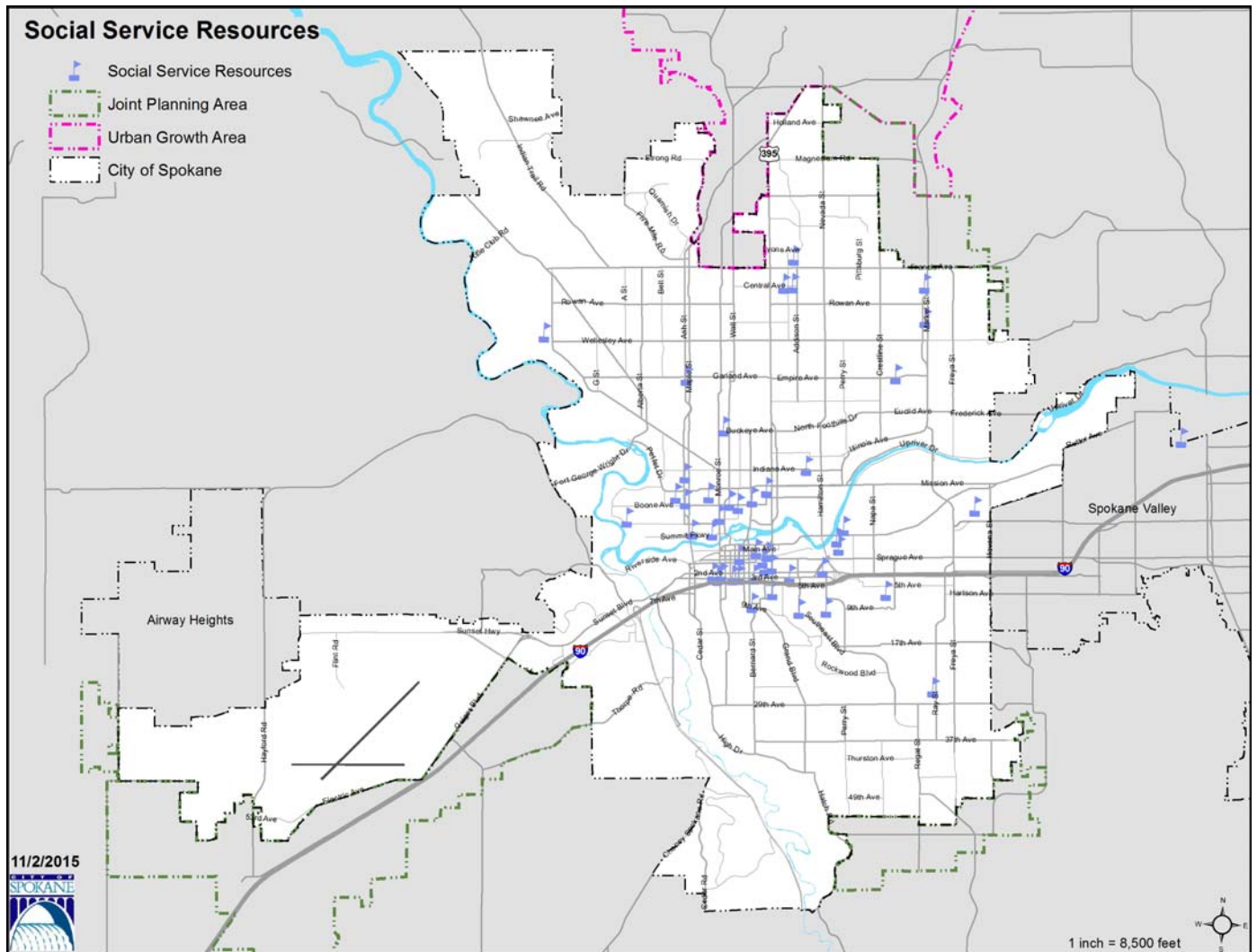
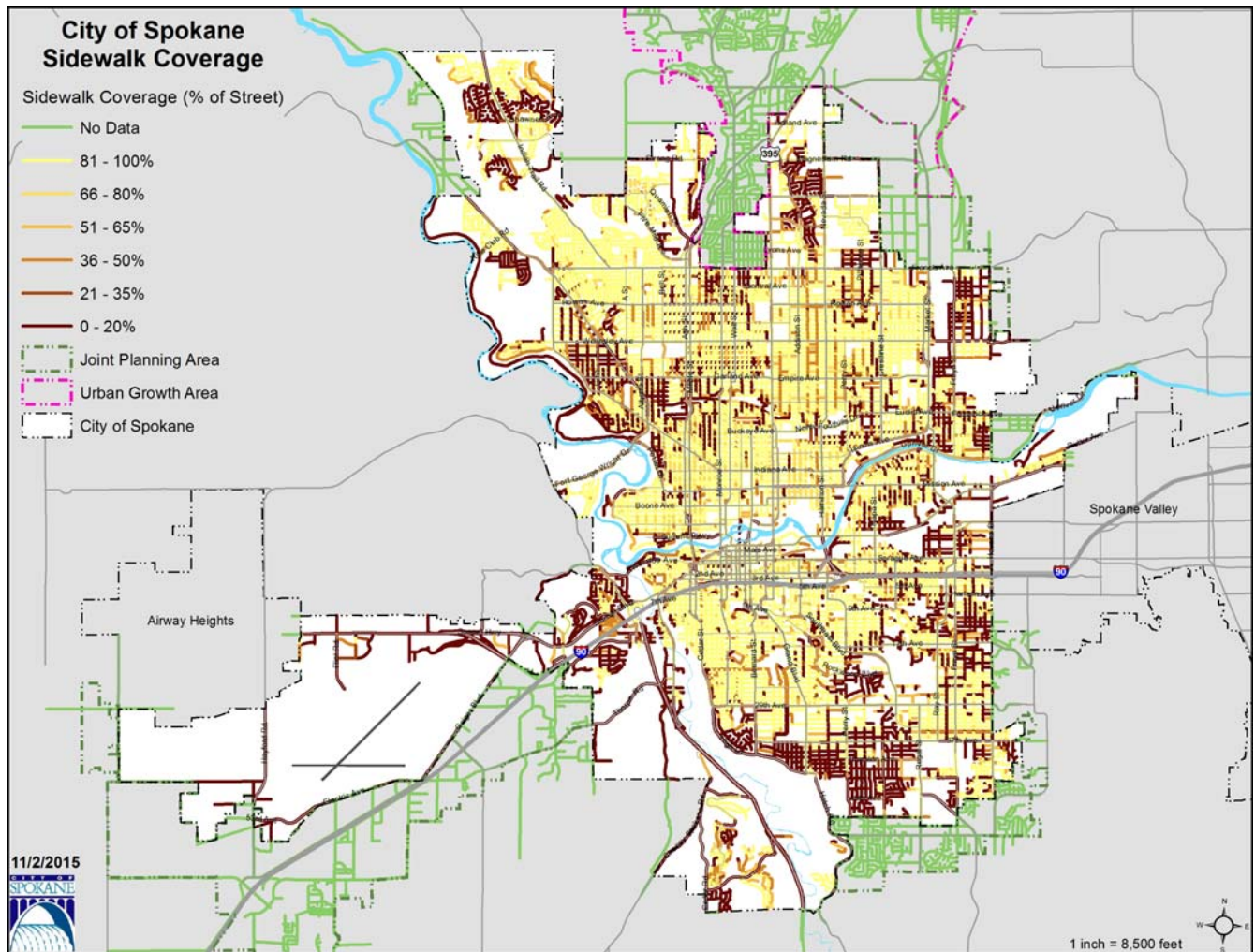
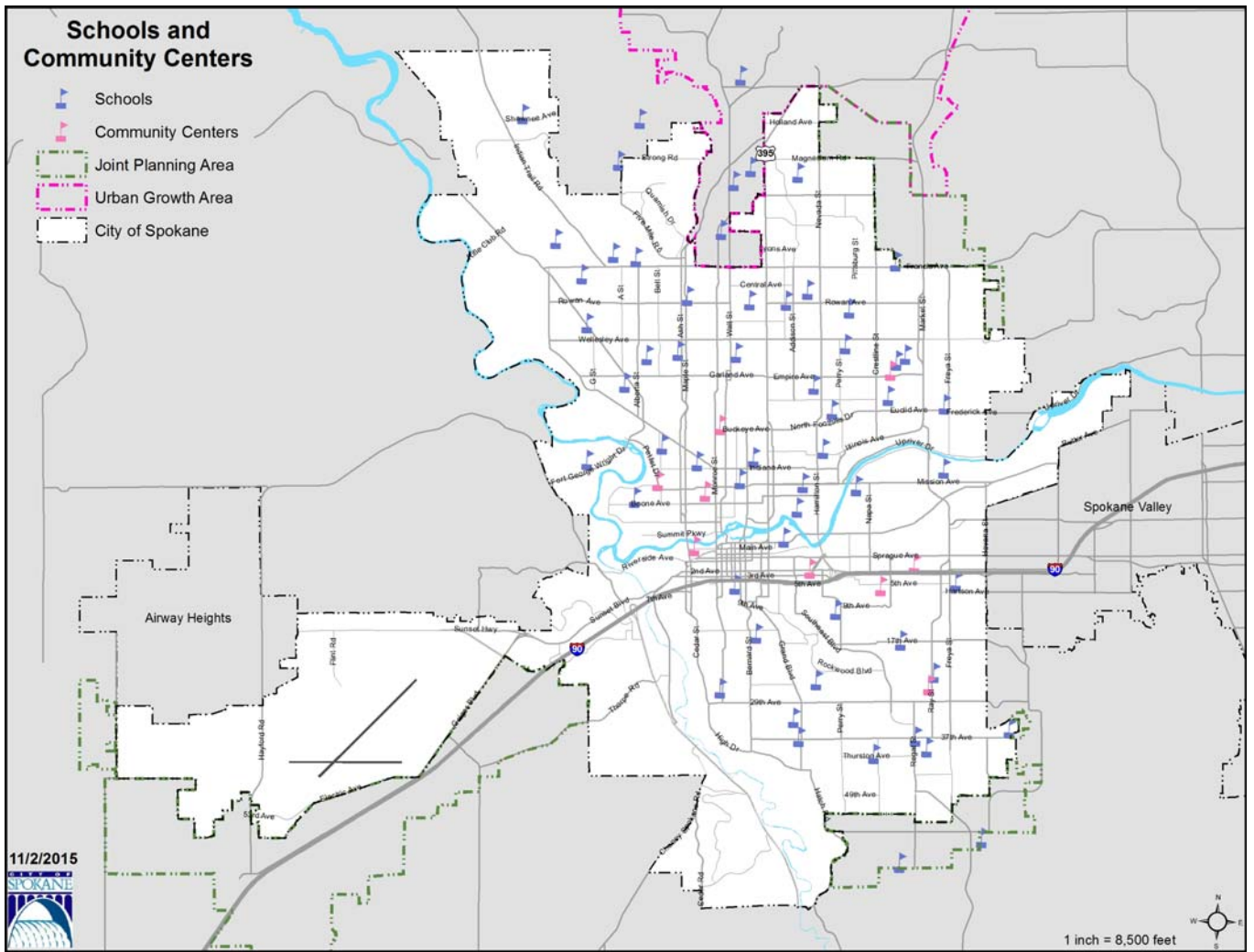


Figure 24 - Sidewalk Coverage



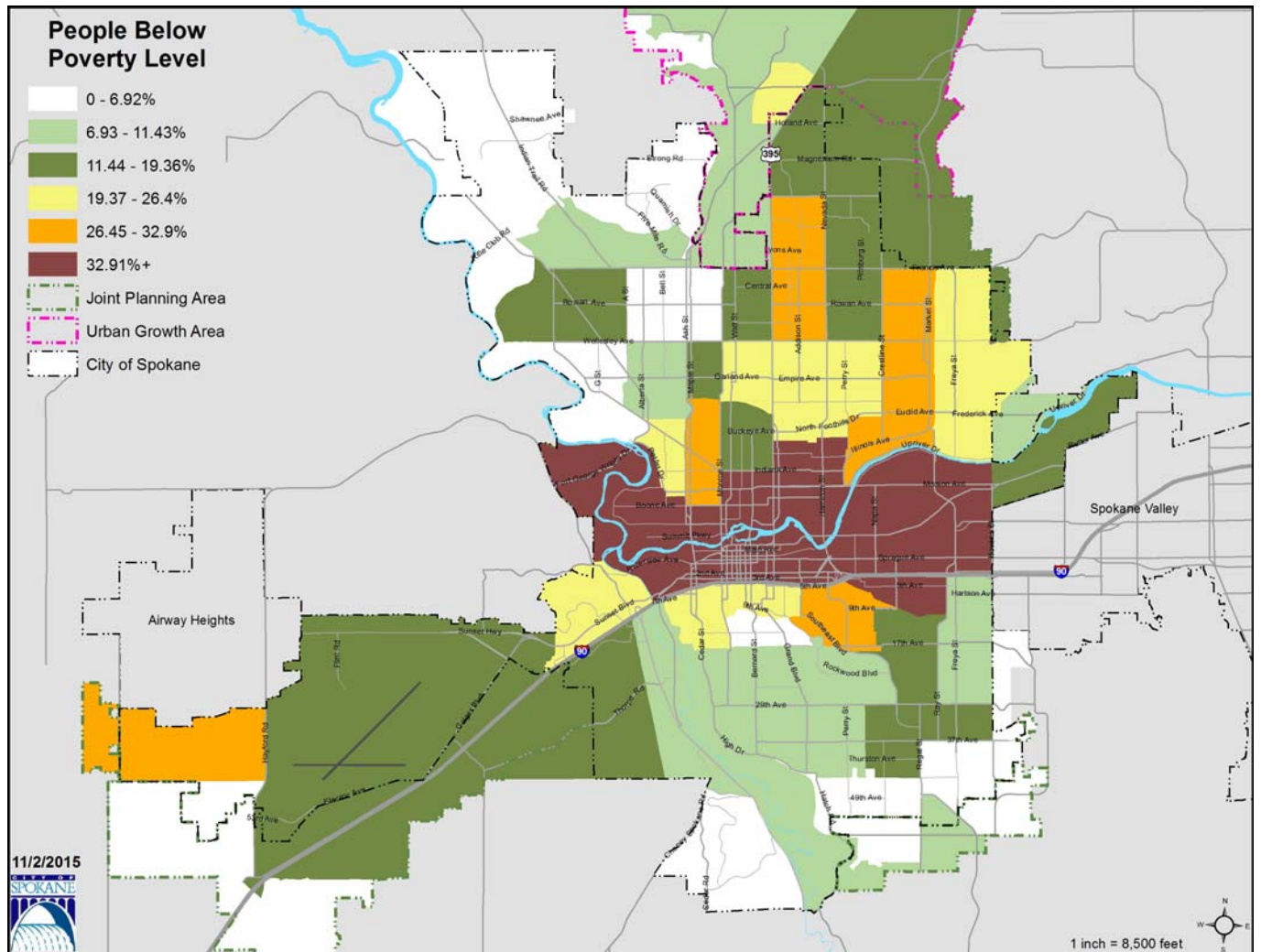
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Figure 25 – Schools and Community Centers.



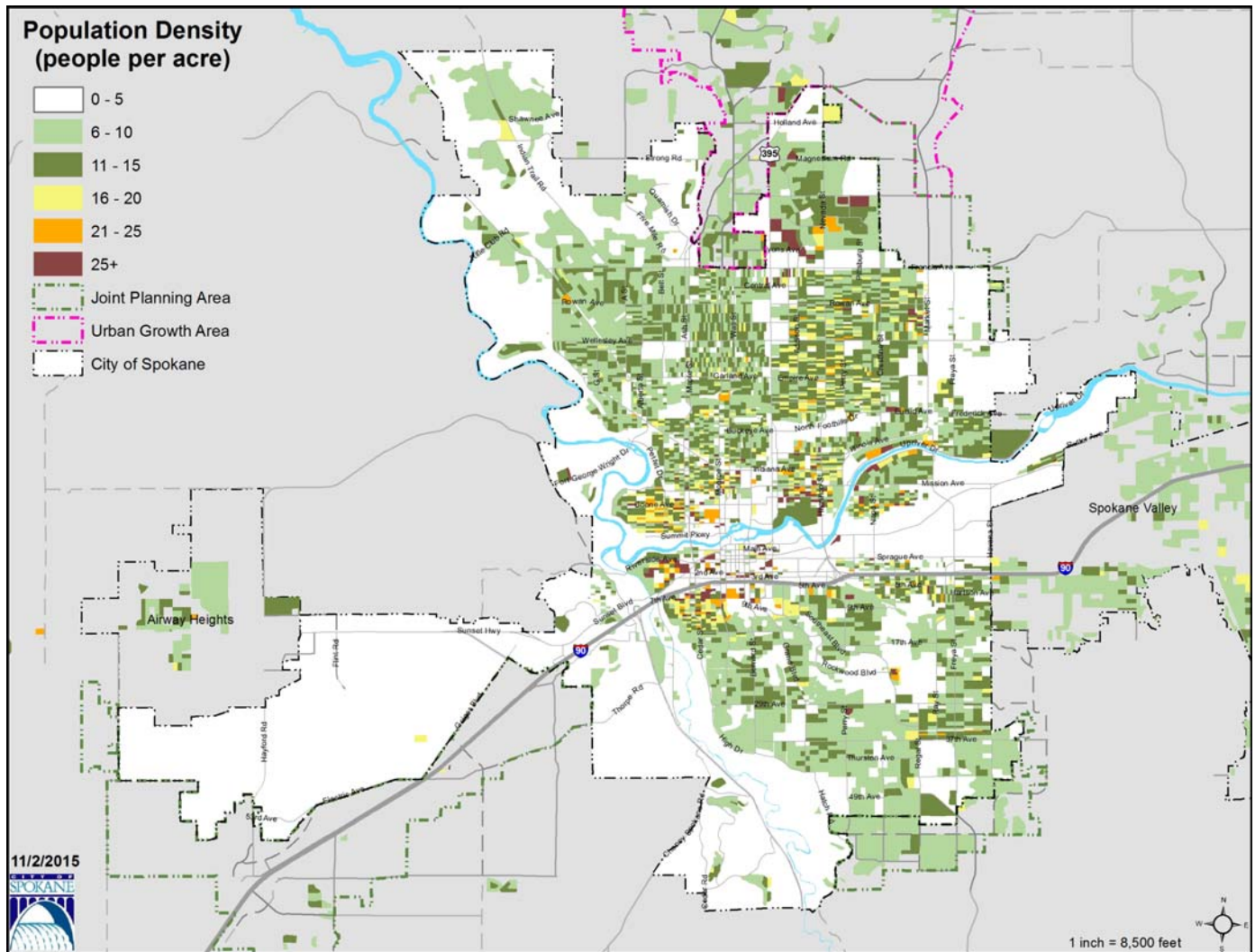
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Figure 26 - Percentage of Population below Poverty Level



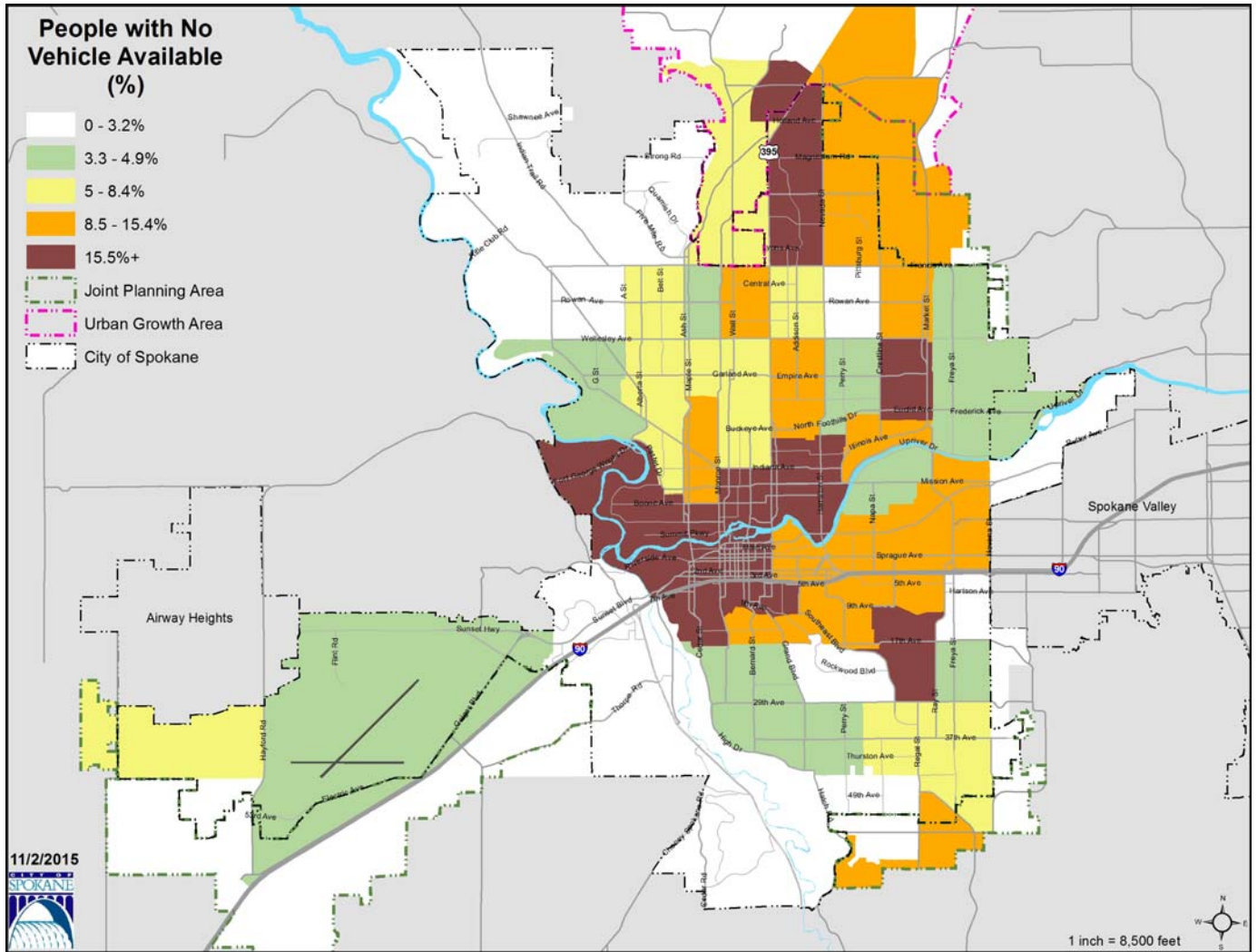
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Figure 27 - Population Density



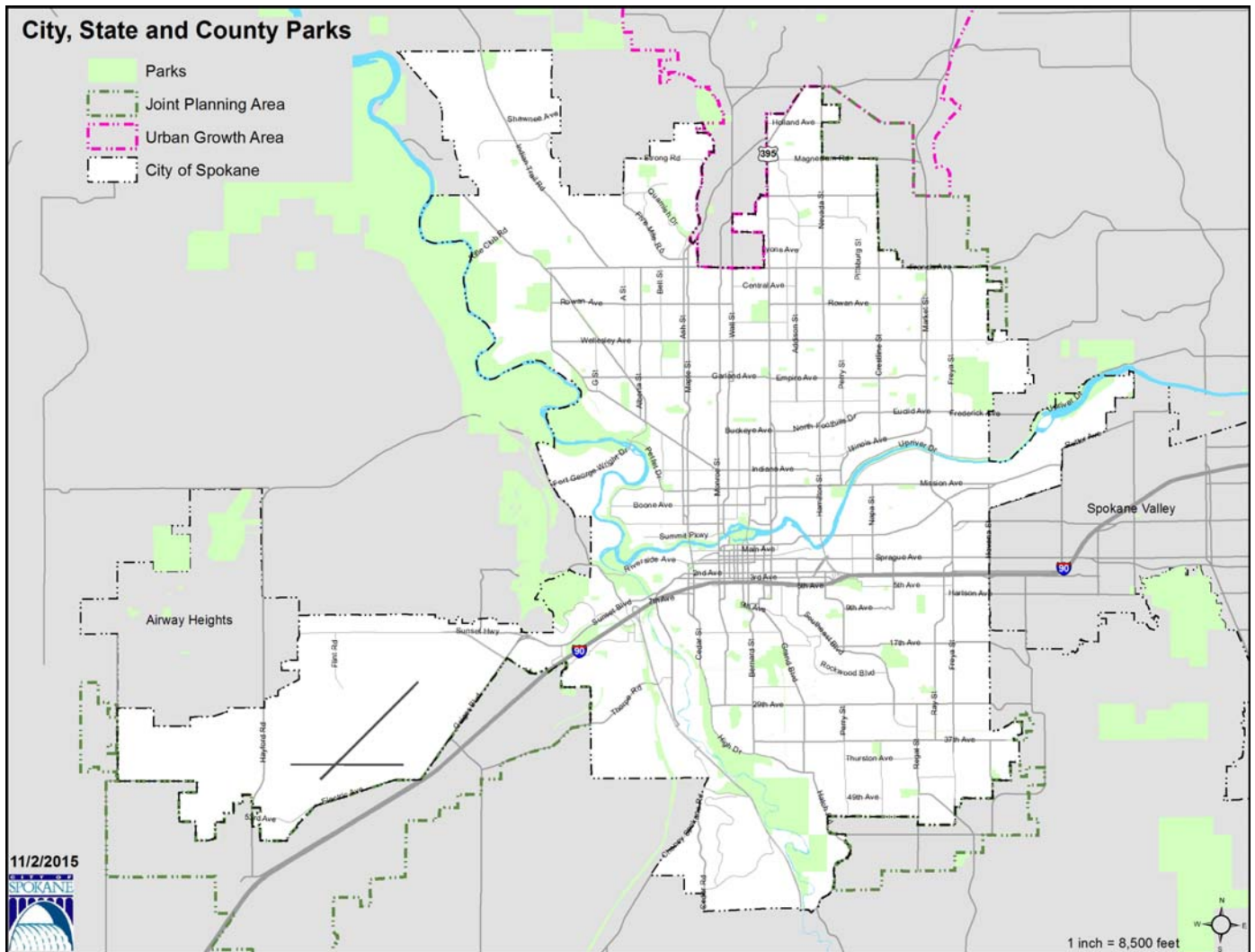
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Figure 28 - Percentage of Population with No Vehicle Available



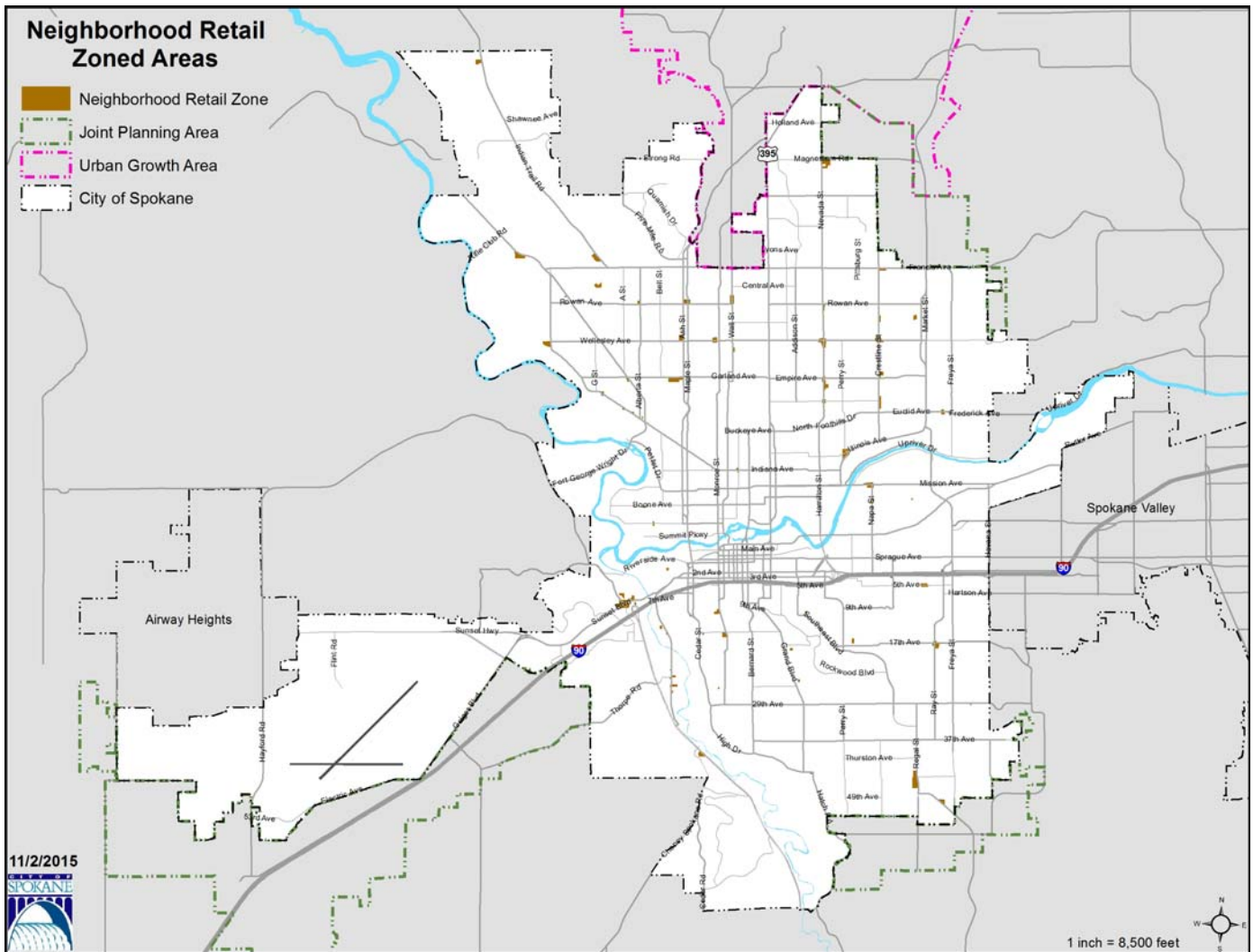
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Figure 29 – Parks



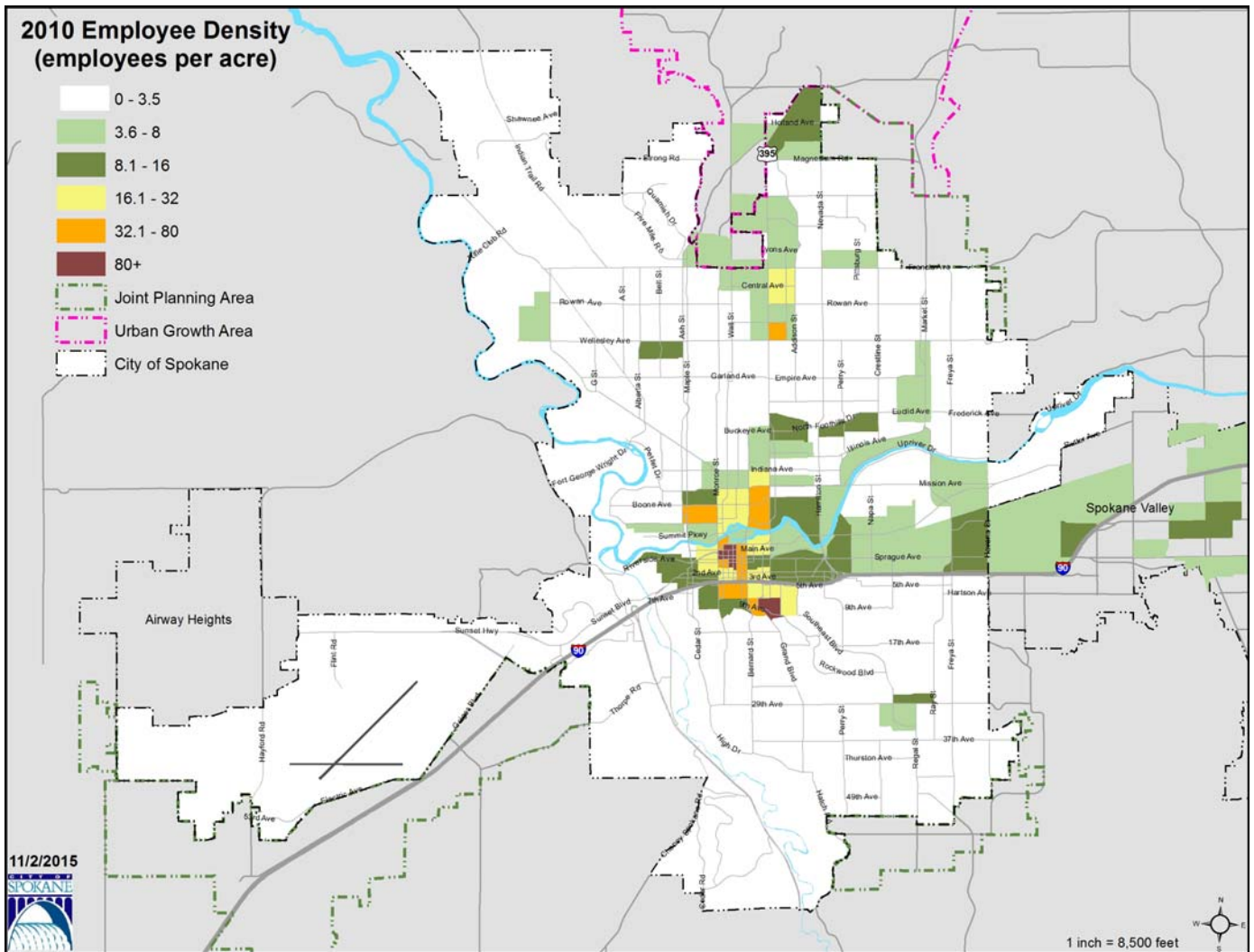
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Figure 30 - Neighborhood Retail Zoned Areas



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Figure 31 - Employment Density



Pedestrian Master Plan

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Figure 32 - Centers and Corridors and Downtown Zoning

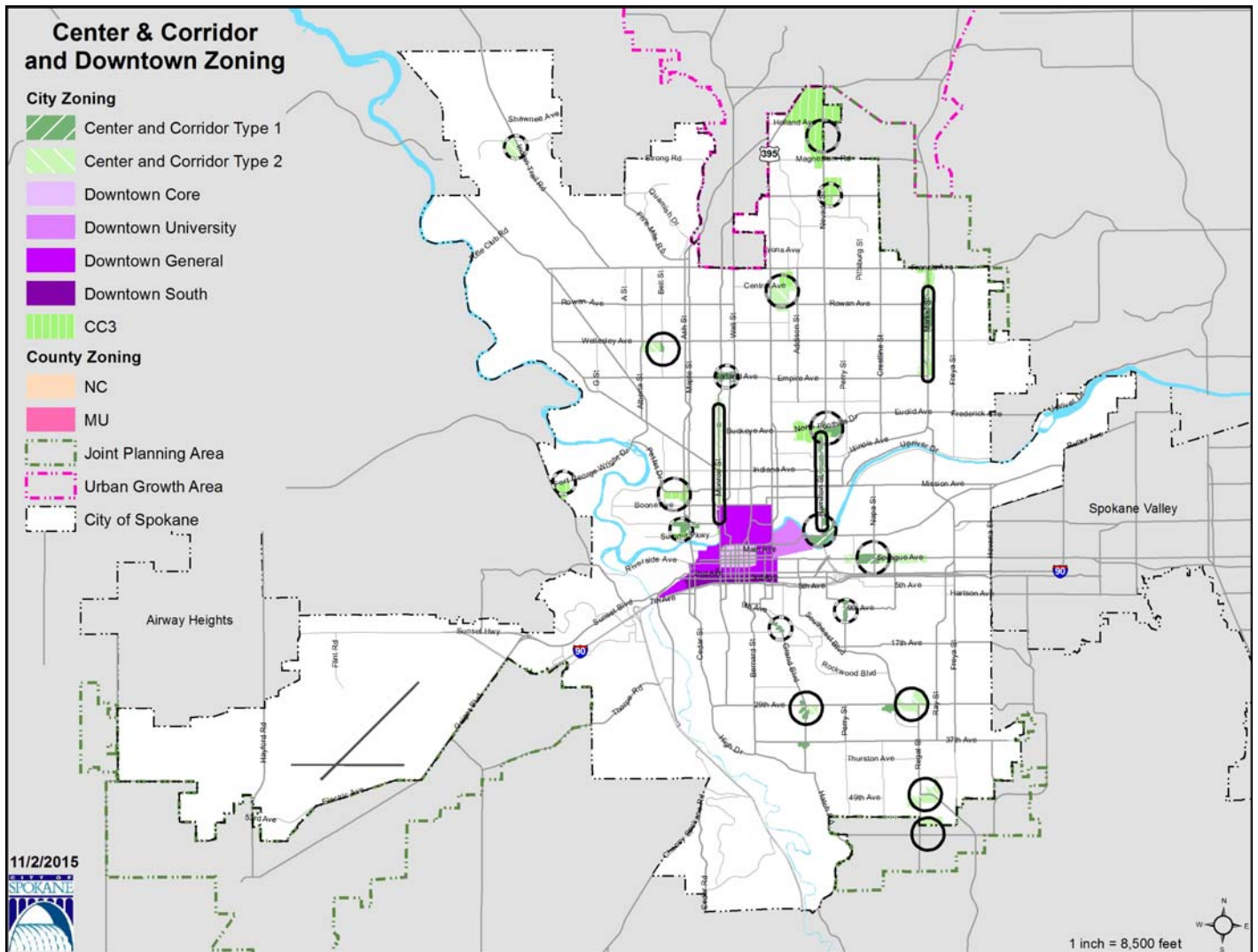
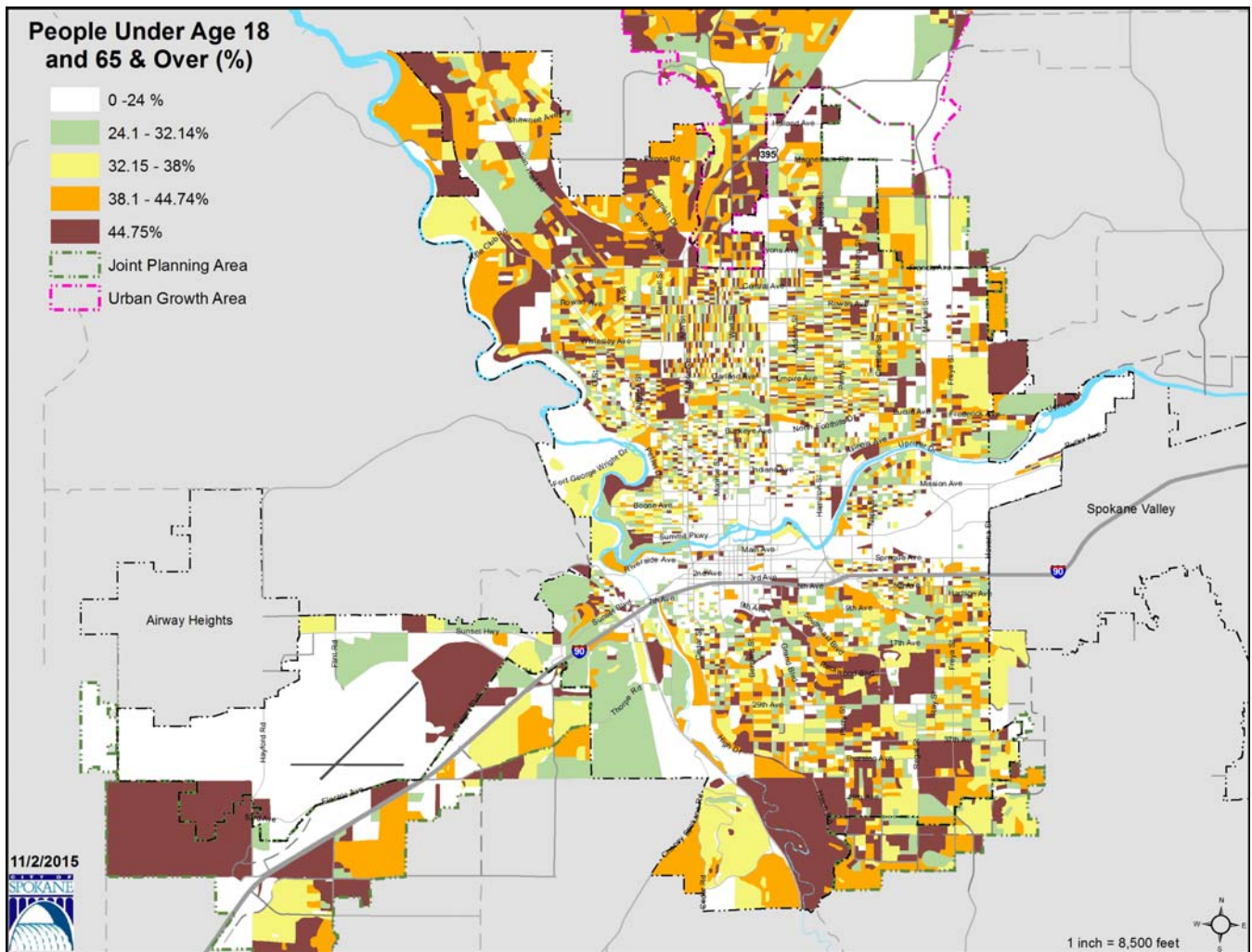
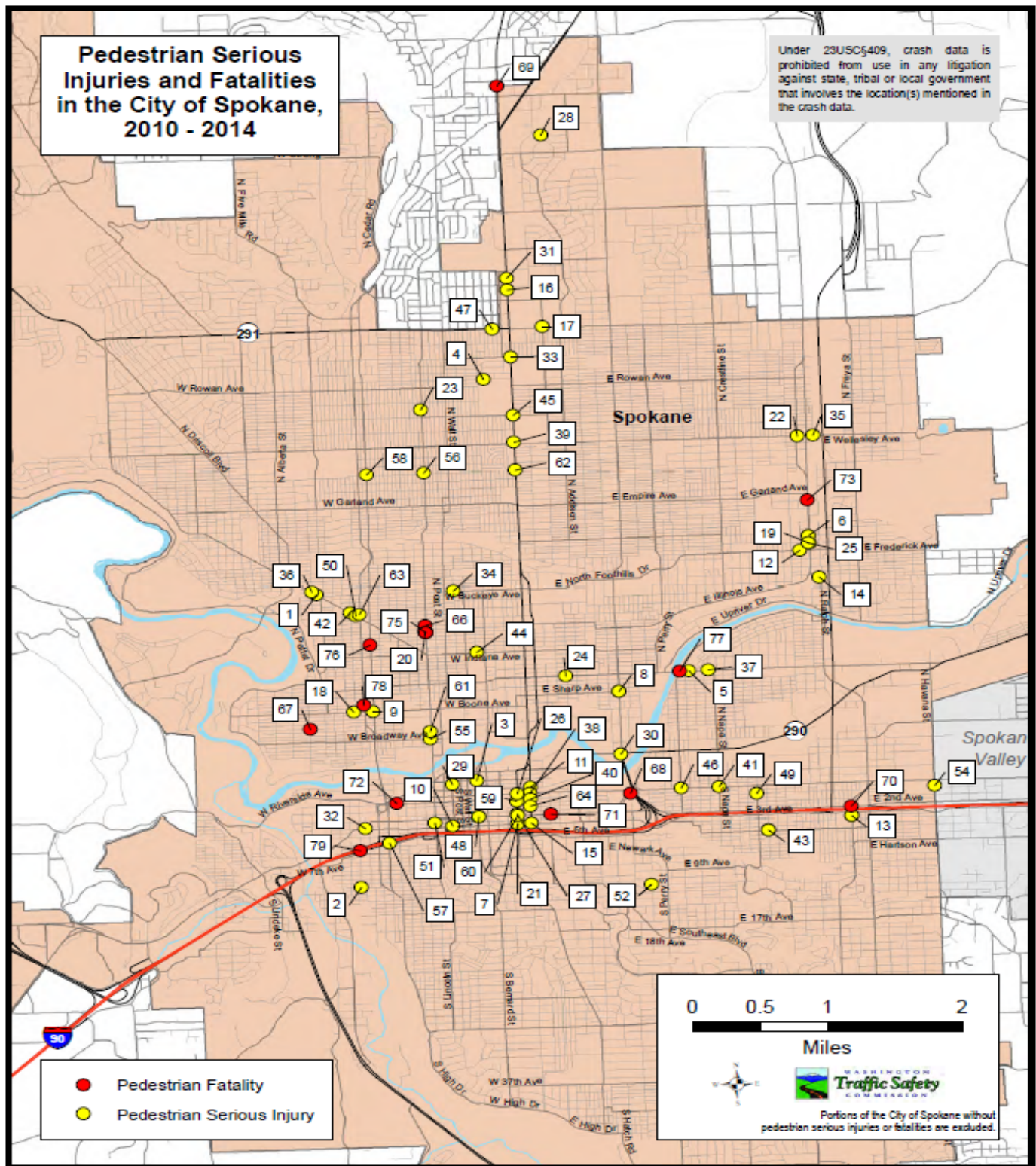


Figure 33 - Percentage of the Population under 18 and 65 and Over



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Figure 34 Pedestrian Serious Injuries and Fatalities, 2010-2014, Washington Traffic Safety Commission



Data courtesy: NHTSA, WSDOT, WA DNR

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Figure 35 Key - Pedestrian Serious Injuries and Fatalities, 2010-2014

Key	Crash Data	Crash Time	Number of Pedestrians	Driver Contributing Circumstances	Pedestrian Action
1	10/25/2010	17:47	1	Fail RW to NM	Xing at Intersection - No Signal
2	2/22/2010	12:20	1	Other	Standing or Working in Roadway
3	7/2/2010	14:05	1	None	Xing at Intersection Against Signal
4	3/26/2010	16:30	1	Over Cent Line	Not in Roadway
5	12/22/2010	18:30	1	None	Xing - Non Intersection - No X Walk
6	11/27/2011	16:40	2	Fail RW to NM	Xing at Intersection - No Signal
6	11/27/2011	16:40	2	Fail RW to NM	Xing at Intersection - No Signal
7	1/7/2010	8:49	1	Fail RW to NM	Xing at Intersection with Signal
8	2/5/2011	23:54	2	Alcohol	At Intersection Not Using Crosswalk
8	2/5/2011	23:54	2	Alcohol	At Intersection Not Using Crosswalk
9	6/18/2010	2:29	1	Fail RW to NM	All Other Actions
10	8/1/2010	21:09	1	Alcohol	Xing - Non Intersection - No X Walk
11	5/10/2011	11:28	1	Fail RW to NM	Xing at Intersection with Signal
12	3/6/2010	22:40	1	Fail RW to NM	Xing at Intersection - No Signal
13	7/12/2012	21:52	2	None	Xing - Non Intersection - No X Walk
13	7/12/2012	21:52	2	None	Xing - Non Intersection - No X Walk
14	6/24/2010	8:13	1	Other	Walking on Roadway Shoulder with Traffic
15	10/16/2011	8:49	1	Fail RW to NM	Xing at Intersection with Signal
16	7/5/2012	0:33	1	Other	Xing - Non Intersection - No X Walk
17	7/6/2012	14:09	1	Fail RW to NM	Xing at Intersection - No Signal
18	1/4/2014	17:29	1	None	Xing - Non Intersection - No X Walk
19	10/30/2011	1:12	1	Def Equip	Xing - Non Intersection - No X Walk
20	10/18/2013	18:29	3	Inattention	Xing - Non Intersection - No X Walk
20	10/18/2013	18:29	3	Inattention	Xing - Non Intersection - No X Walk
20	10/18/2013	18:29	3	Inattention	Xing - Non Intersection - No X Walk
21	7/24/2011	13:14	1	Fail RW to NM	Xing at Intersection with Signal
22	8/10/2011	13:13	1	Fail RW to NM	Xing at Intersection with Signal
23	4/23/2011	4:31	1	Smoking	Standing or Working in Roadway
24	11/16/2010	14:30	1	Fail RW to NM	Xing at Intersection - No Signal
25	1/20/2013	1:42	1	None	Walking in Roadway with Traffic
26	11/14/2014	12:45	1	Fail RW to NM	Xing at Intersection with Signal
27	10/9/2013	2:58	1	Inattention	Xing - Non Intersection - No X Walk
28	10/21/2013	3:28	1	Fail RW to NM	All Other Actions
29	6/27/2014	20:22	1	Excd Safe Speed	Playing in Roadway
30	11/22/2013	17:57	1	Unk Dist	At Intersection Not Using Crosswalk
31	11/12/2010	16:30	1	None	Xing - Non Intersection - No X Walk
32	9/30/2011	18:55	1	None	Xing - Non Intersection - No X Walk
33	10/24/2011	18:33	1	Fail RW to NM	Xing at Intersection with Signal
34	1/28/2012	21:42	1	Alcohol	Xing at Intersection - No Signal
35	2/12/2012	1:53	1	Other	Walking in Roadway with Traffic
36	2/13/2012	19:02	1	None	Xing - Non Intersection - No X Walk
37	3/12/2012	8:12	1	Fail RW to NM	Xing at Intersection - No Signal
38	6/7/2012	16:48	1	Fail RW to NM	Xing at Intersection with Signal
39	6/27/2012	15:56	1	Fail RW to NM	Xing at Intersection - No Signal
40	7/25/2012	21:55	1	None	At Intersection Not Using Crosswalk
41	9/5/2012	9:59	1	Fail RW to NM	Xing at Intersection with Signal
42	10/29/2012	18:30	1	None	Xing at Intersection - No Signal
43	11/1/2012	15:29	2	None	Xing at Intersection - No Signal
43	11/1/2012	15:29	2	None	Xing at Intersection - No Signal
44	11/14/2012	20:47	1	None	Xing - Non Intersection - No X Walk
45	12/11/2012	18:25	1	None	Walking in Roadway with Traffic
46	12/17/2012	6:50	1	Fail RW to NM	Xing at Intersection with Signal
47	1/4/2013	19:19	1	None	Xing at Intersection - No Signal
48	5/13/2013	16:53	2	Fail RW to NM	Xing at Intersection with Signal
48	5/13/2013	16:53	2	Fail RW to NM	Xing at Intersection with Signal
49	9/5/2013	2:43	1	Other	Xing at Intersection - No Signal
50	9/15/2013	21:01	1	None	Xing - Non Intersection - No X Walk
51	9/15/2013	19:58	1	Other	All Other Actions
52	10/6/2013	16:50	1	None	Playing in Roadway
53	11/11/2013	16:33	1	Fail RW to NM	Xing - Non Intersection - In X Walk
54	12/16/2013	18:10	1	Fail RW to NM	Xing - Non Intersection - No X Walk
55	1/3/2014	17:37	1	Fail RW to NM	Xing at Intersection with Signal
56	2/6/2014	14:09	1	None	From Behind Parked Vehicle
57	3/12/2014	18:35	1	None	Walking in Roadway with Traffic
58	4/18/2014	15:59	1	Other	Walking on Roadway Shoulder with Traffic
59	5/21/2014	21:46	1	None	All Other Actions
60	10/6/2014	16:20	1	Inattention	Xing at Intersection with Signal
61	10/23/2014	12:02	1	Fail RW to NM	Xing at Intersection with Signal
62	11/12/2014	15:28	1	Fail RW to NM	Xing at Intersection - No Signal
63	12/24/2014	21:16	1	Other	Fell or Pushed Into Path of Vehicle
64	12/31/2014	13:39	1	None	A

*(cont.)

Pedestrian Master Plan
City of Spokane

Key	Crash Date	Crash Time	Number of Pedestrians	Driver Contributing Circumstance	Pedestrian Contributing Circumstance 1
66	1/30/2011	22:04	1	No factors	Failure to Obey Traffic Signs, Signals or Officer
67	7/2/2012	11:25	1	No factors	Other
68	8/30/2011	11:06	1	No factors	Dart-Out
69	1/8/2010	18:50	1	No factors	In Roadway Improperly (Standing, Lying, Working, Playing, etc.)
70	11/23/2011	5:51	1	No factors	Failure to Yield Right-Of-Way
71	9/26/2012	14:21	1	Failure to Yield Right-of-Way	None Noted
72	2/14/2012	17:24	1	Failure to Yield Right-of-Way	Not Visible (Dark Clothing, No Lighting, etc.)
73	1/28/2012	2:11	1	Failure to Yield Right-of-Way	Unreported
74	8/11/2012	19:40	1	No factors	None Noted
75	10/18/2013	18:29	3	No factors	Inattentive (Talking, Eating, etc.)
75	10/18/2013	18:29	3	No factors	Inattentive (Talking, Eating, etc.)
75	10/18/2013	18:29	3	No factors	Inattentive (Talking, Eating, etc.)
76	11/7/2011	21:08	1	No factors	Jaywalking
77	2/9/2014	20:47	1	No factors	Failure to Obey Traffic Signs, Signals or Officer
78	6/19/2014	23:54	1	No factors	Failure to Obey Traffic Signs, Signals or Officer
79	7/25/2014	21:50	1	No factors	Failure to Obey Traffic Signs, Signals or Officer

*There is no item 65 so is not shown on the map nor included in the list above.

Figure 36 Crash Fatalities Density, Crashes 2002-2014, Washington Traffic Safety Commission

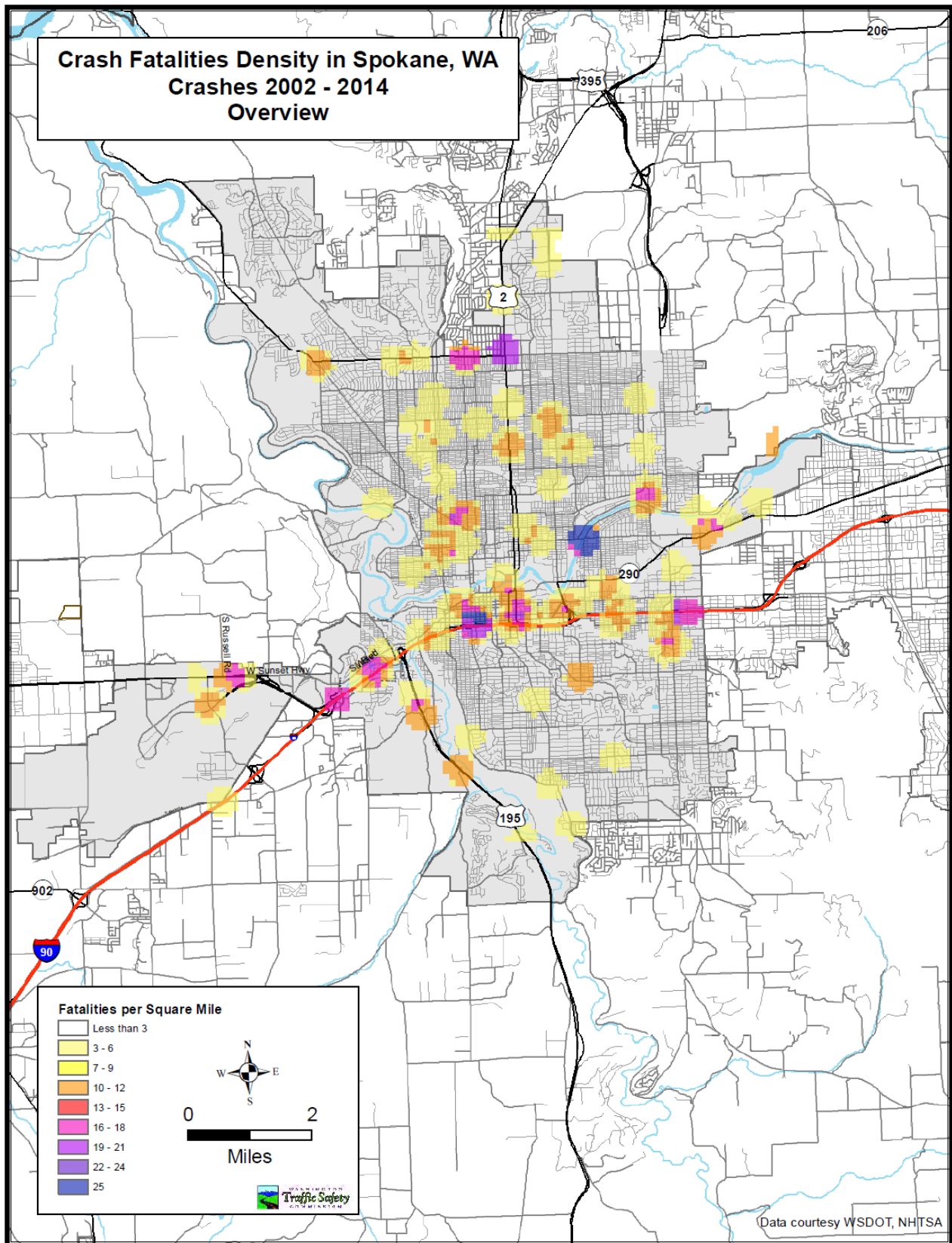
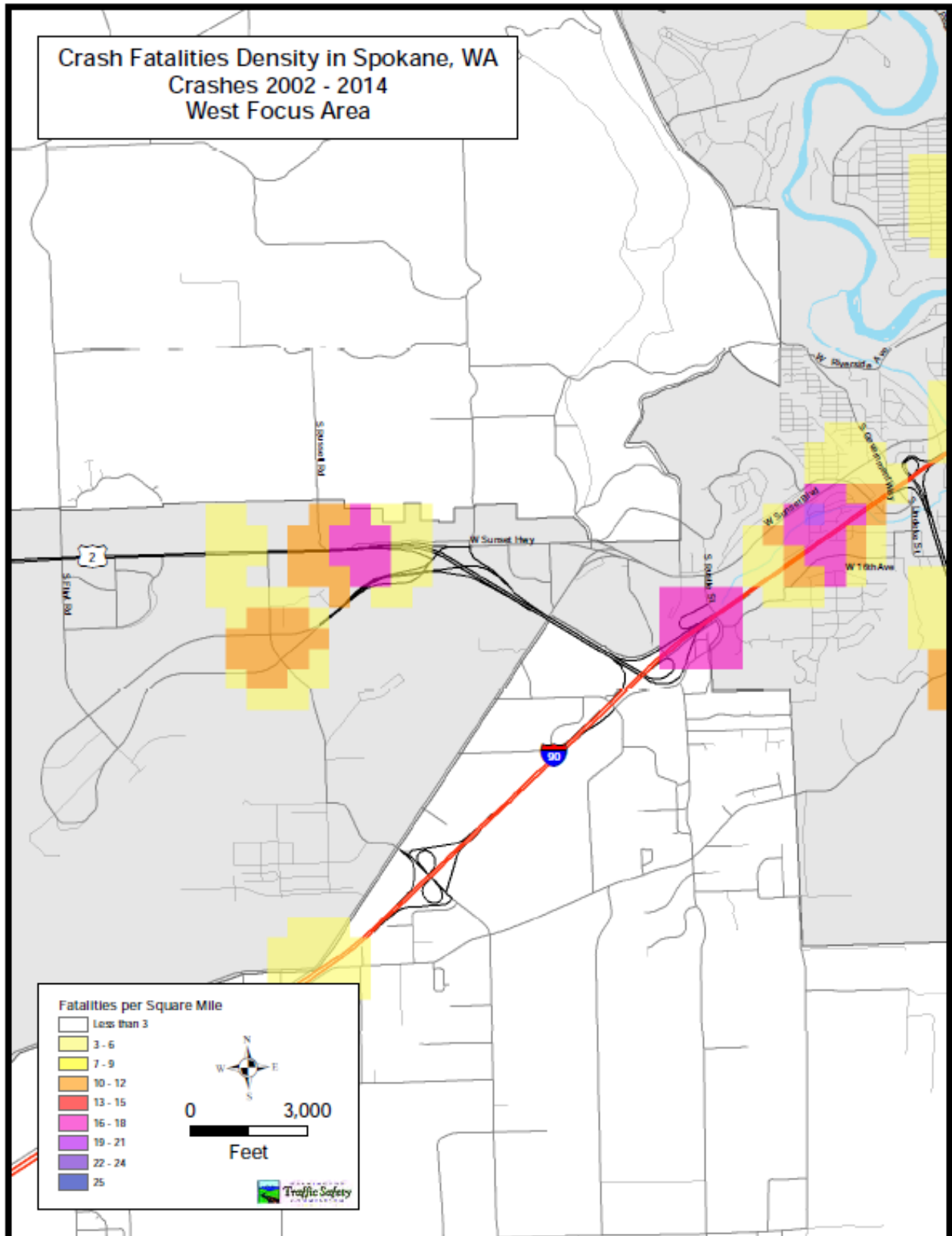


Figure 37 Crash Fatalities Density, Crashes 2002-2014 West Focus Area, Washington Traffic Safety Commission



Pedestrian Master Plan
City of Spokane

Figure 38 Crash Fatalities Density, Crashes 2002-2014 Central Focus Area, Washington Traffic Safety Commission

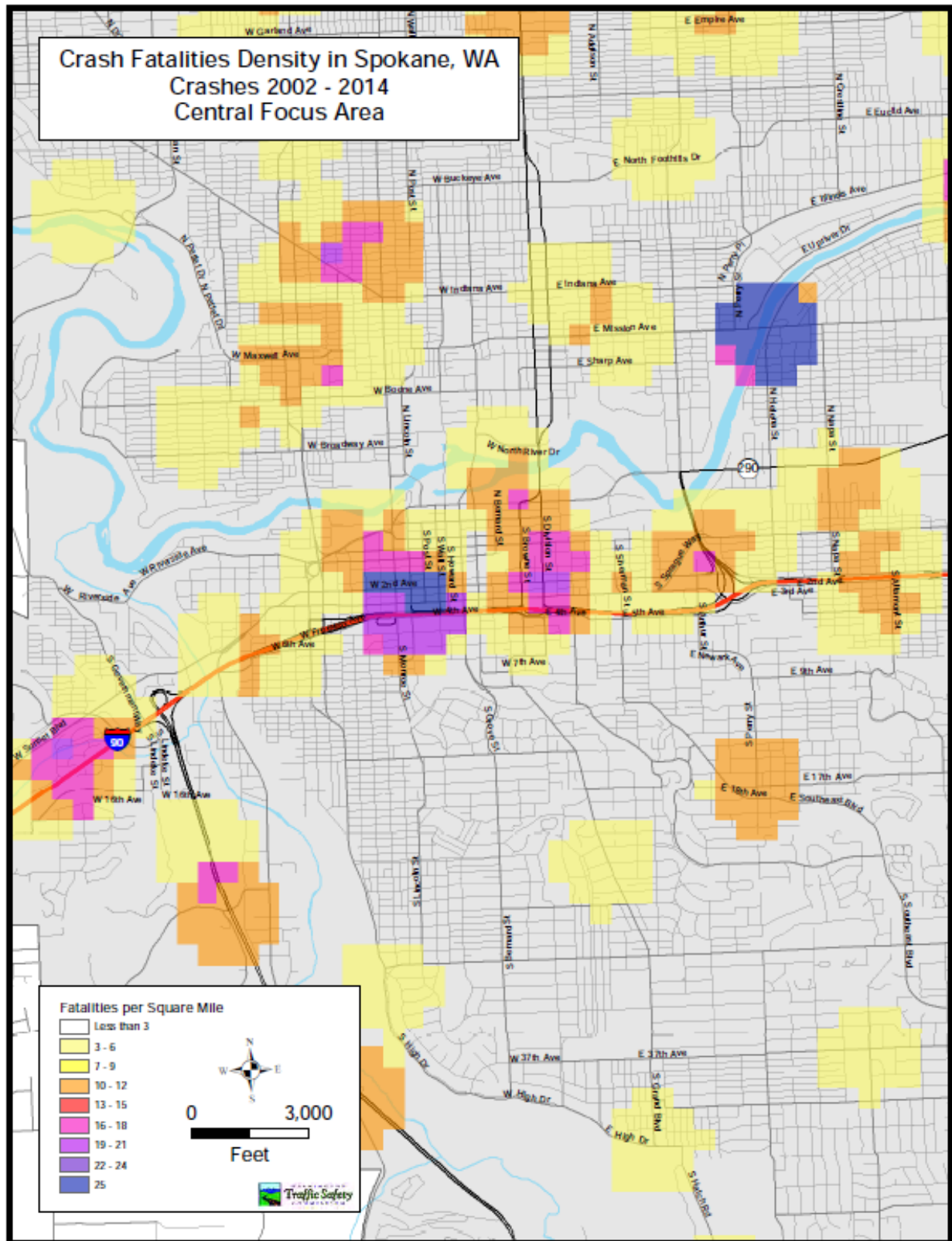


Figure 39 Crash Fatalities Density, Crashes 2002-2014 East Focus Area, Washington Traffic Safety Commission

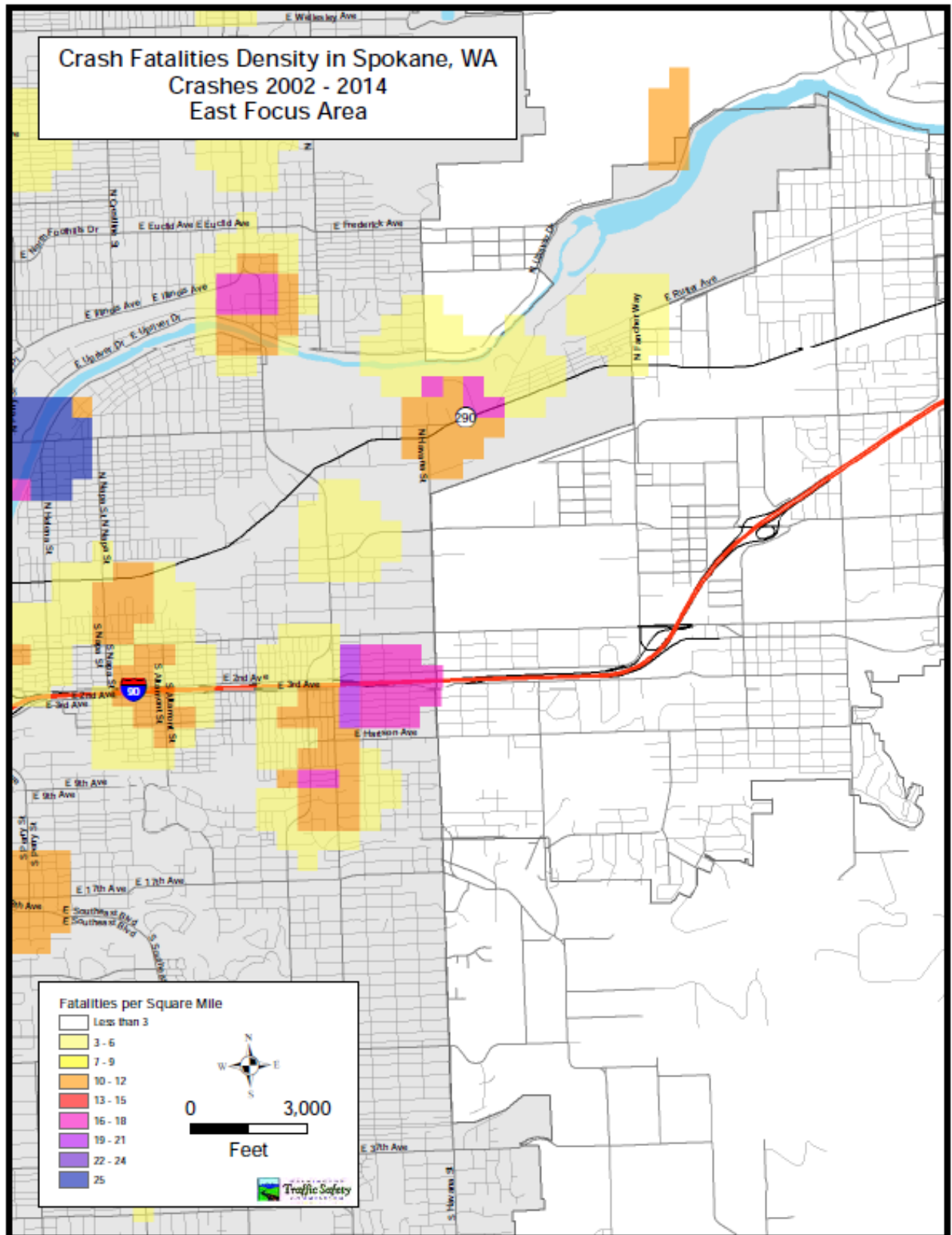
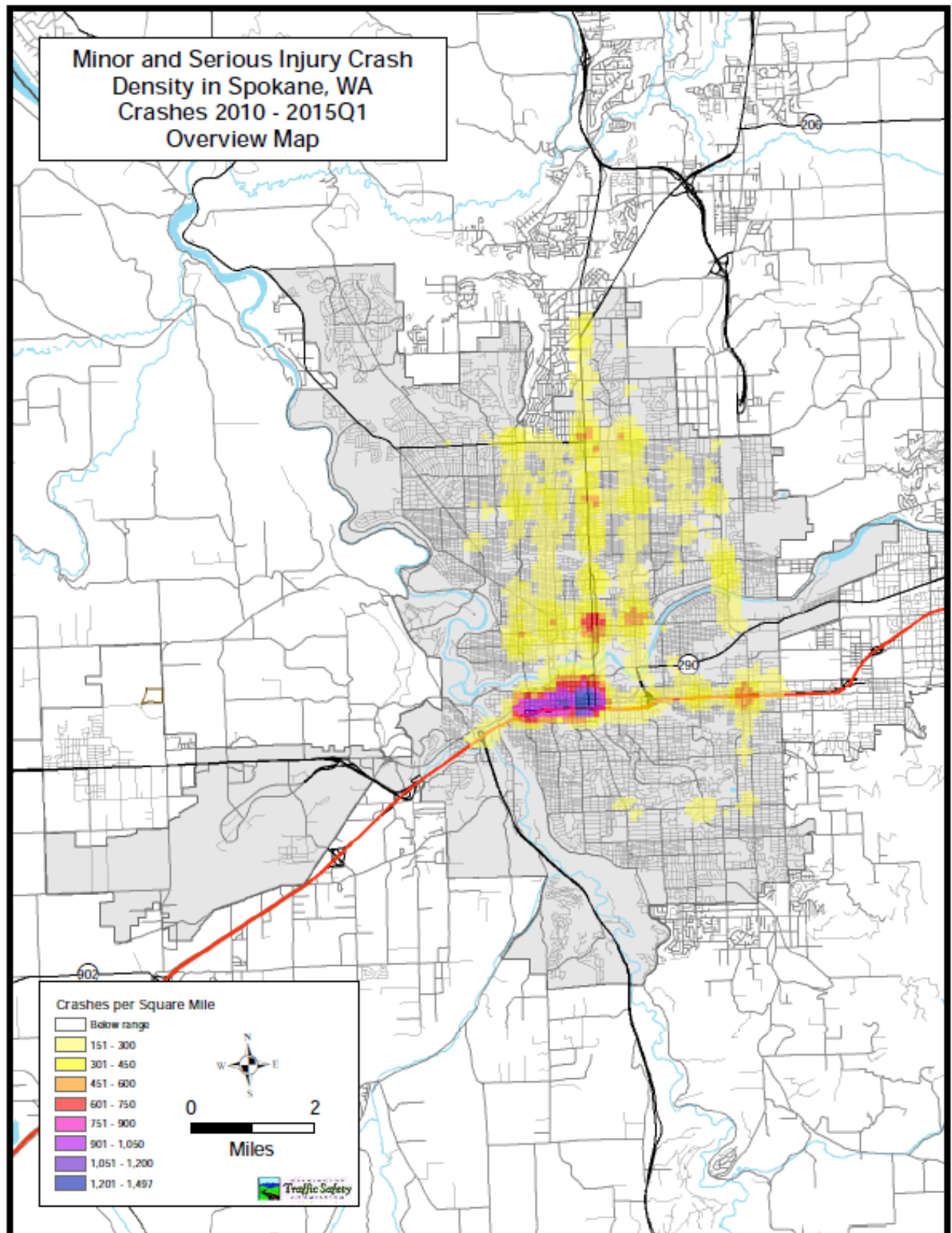


Figure 41 Minor and Serious Injury Crash Density, Crashes 2010-2015 Q1 Overview, Washington Traffic Safety Commission



Pedestrian Master Plan
City of Spokane

Figure 42 Minor and Serious Injury Crash Density, Crashes 2010-2015 Q1 East Focus Area, Washington Traffic Safety Commission

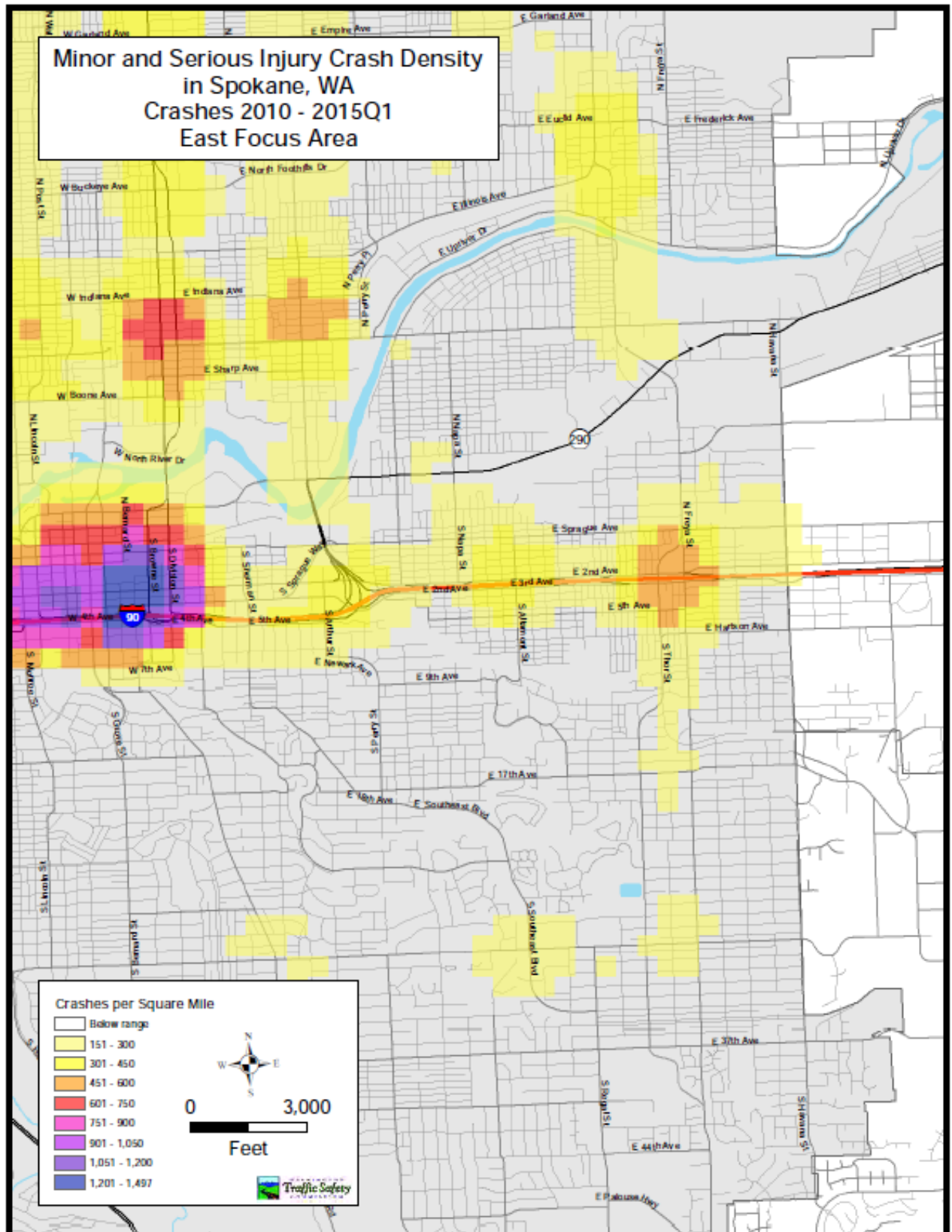


Figure 43 Minor and Serious Injury Crash Density, Crashes 2010-2015 Q1 North Focus Area, Washington Traffic Safety Commission

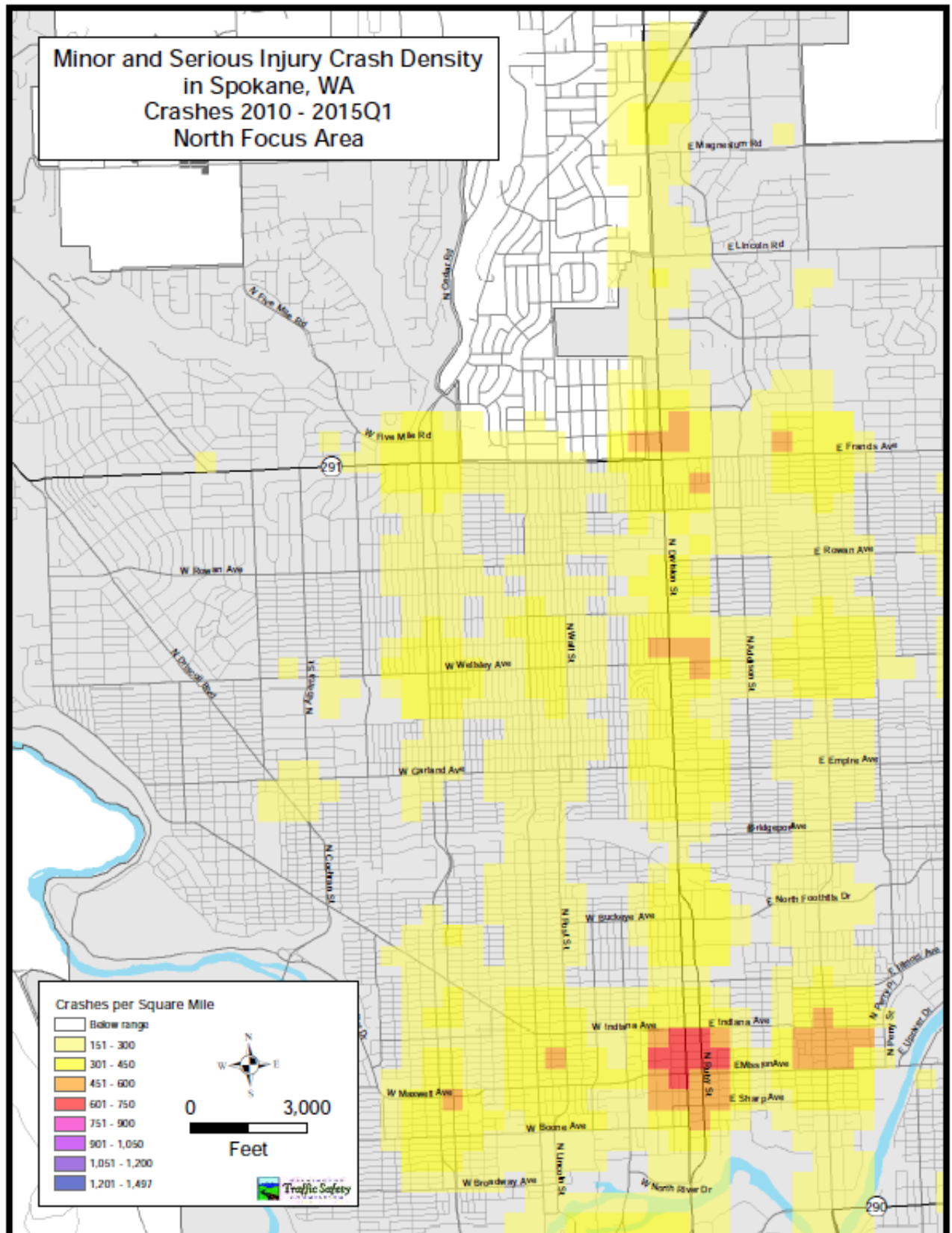
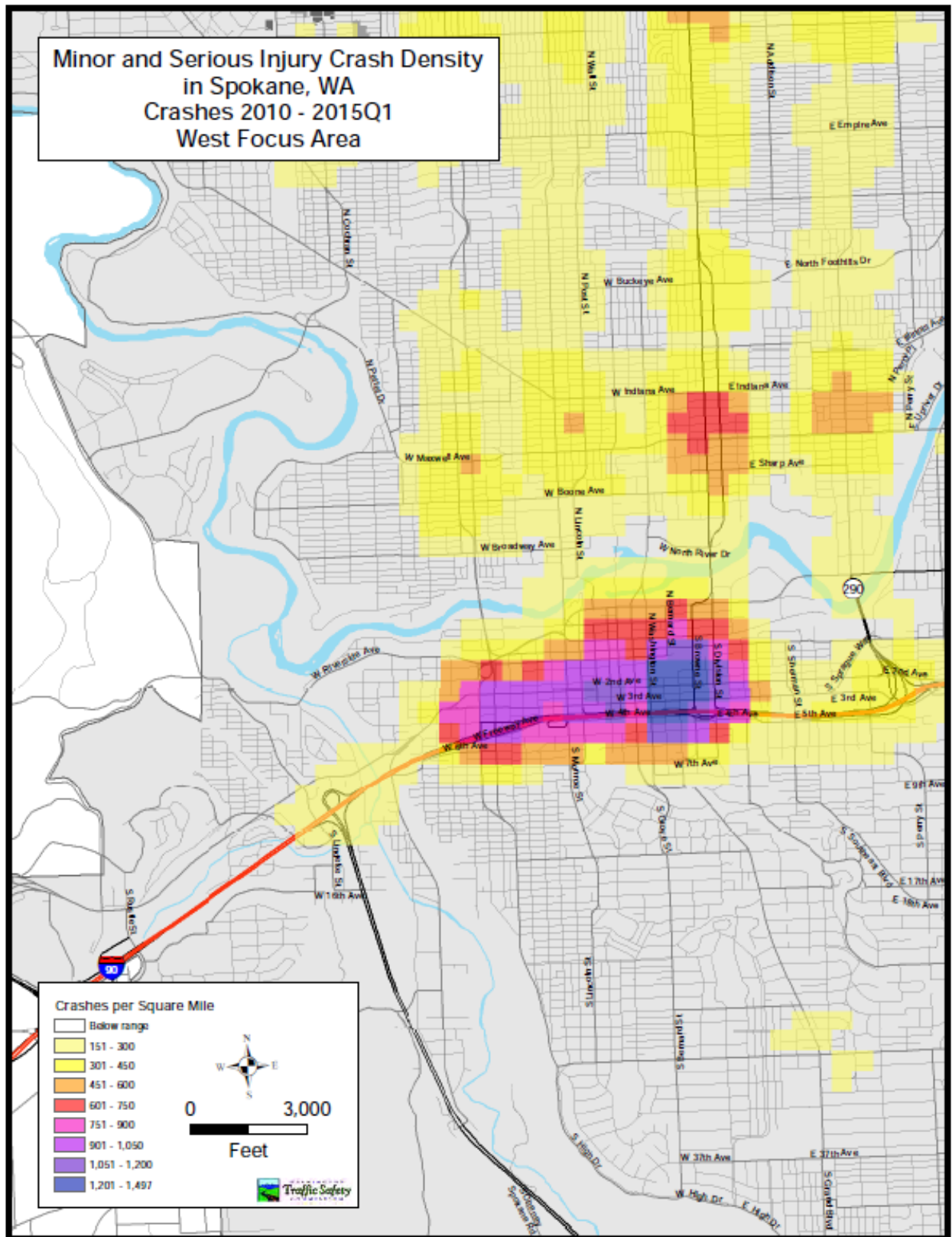


Figure 44 Minor and Serious Injury Crash Density, Crashes 2010-2015 Q1 West Focus Area, Washington Traffic Safety Commission



Appendix 3

Transportation:

4 Spokane Bicycle Master Plan



SPOKANE BICYCLE MASTER PLAN

MAY 2017



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EXECUTIVE SUMMARY

The Spokane Master Bicycle Plan creates a vision for enhancing bicycling opportunities for all residents of Spokane. Its policies and actions are intended to make Spokane a more bicycle-friendly city. Communities that embrace active living principles provide healthy environments for its citizenry and are more economically vital.

Although Spokane has performed bicycle facility planning for more than thirty years, the current Bicycle Facilities Network is disconnected and signed bicycle routes are sporadic. There are numerous barriers (hills, high traffic volume streets, the Spokane River, etc.) that make cycling difficult and inconvenient. Additionally, end-of-trip facilities such as bicycle parking and lockers are inadequate. This plan proposes to address these issues by creating a bicycle network that guides cyclists of all ages and abilities safely throughout Spokane and its unique geography. Importantly, the Spokane Master Bicycle Plan includes recommendations and actions that will ensure that bicycling becomes a more viable alternative mode of transportation for all.

Research has consistently shown that enhanced bicycle facilities provide safe options for those individuals who may not bicycle regularly. Therefore, Spokane supports bicycling because it is a cost-effective mode of transportation that promotes health, the environment, and community development.

This commitment to improving bicycle transportation includes facility maintenance, devotion of adequate staff resources to implementing the Plan, and providing sustained funding for projects and programs.

Vision

Riding a bicycle is a comfortable and integral part of daily life in Spokane for people of all ages and abilities.

Objective and Policies

Objective

The objective of the Bicycle Master Plan is to meet and support the goals established in the Transportation Chapter, shown below.



Policies

The policies in this section support all of the goals in the Transportation Chapter while maintaining a focus on the needs of bicyclists within the City of Spokane.

Policy: BMP 1: Continually increase the bicycle mode share for all trips.

Policy: BMP 2: Complete and maintain connected bikeways that provide safe transportation for Spokane cyclists throughout the City.

Policy BMP 3: Provide convenient and secure short-term and long-term bike parking to connect people to popular destinations and transit throughout Spokane and encourage employers to provide shower and locker facilities.

Policy BMP 4: Increase bicycling by educating people using all transportation modes about the benefits of bicycling to the entire community. Enhance the safety of people riding bicycles through effective law enforcement, education and detailed crash analysis.

Policy BMP 5: Develop a collaborative program between a variety of city departments and agencies and several outside organizations to secure funding and implement the Bike Master Plan through capital project delivery as well as community planning processes.

Spokane's Bicycle Master Plan uses these policies to establish a broad vision for cycling in Spokane. Implementing this plan will be a challenge. However, if the enormous public support for this plan is any indication, the citizens of Spokane are ready to move towards more sustainable transportation options.

INTRODUCTION

We have reached a point where working towards creating attractive, sustainable communities is an essential part of maintaining our quality of life. Transportation networks are an important part of this sustainability and developing a system that relies less on unsustainable motorized modes of transport and more on sustainable non-motorized transportation, is crucial. Riding a bicycle is the most efficient form of personal transport. The city recognizes this fact and recent planning efforts have focused on finding a way to make cycling, “safe, accessible, convenient, and attractive.” (*Spokane Comprehensive Plan Ch. 4, p. 7*) Spokane is in need of a bicycle network that meets all of these requirements while continuing to accommodate a variety of transportation options. With the vision of creating such a system, citizens, city staff and community leaders created this Bicycle Master Plan, a living document that will provide guidance and serve as a reference as this vision becomes reality.

Currently, there are over 1000 miles of paved streets within the city limits of Spokane; less than 300 miles of those streets are designated as bicycle facilities. Although these lanes provide a starting point for a bicycle network, many are disconnected and not adequately maintained. According to the 2010 census, Spokane has a higher percentage of cyclists than the national average, but there is still room for a significant improvement. 0.9 % of working-age people in Spokane chose to ride their bicycles over other modes of transportation as a means of transportation to work.

Over the next twenty years, we would like to see 5% of all trips in Spokane taken on a bicycle. Fortunately, a number of recent studies have shown that the addition of bicycle facilities and an enhancement of existing facilities can substantially increase the number of riders. If Spokane implements the recommendations contained in this Plan, the results will positively affect the city’s economy, transportation systems, environment and health of its citizens.

HISTORY

The City’s initial *Bikeways Plan* was adopted by the City Council in October, 1976 and integrated into the Comprehensive Plan in 1980. The 1980 plan was minimally updated in 1987. In 1996, the City Council adopted the *Spokane Regional Pedestrian/Bikeway Plan* that was prepared by the Spokane Regional Transportation Council. This detailed plan outlined a regional network of trails and other related recommendations. In 2001, Spokane adopted a comprehensive plan with updated bicycle-related policies and goals. The adoption also included a revised map of Spokane’s planned regional bikeway network. This marks the most recent occasion of significant changes to Spokane’s bikeway network and bicycle related policies.

In 2006, the Bicycle Advisory Board (BAB) encouraged the Spokane City Council to adopt an amendment to the City of Spokane’s Comprehensive Plan that would require the City of Spokane to adopt a Master Bike Plan. The BAB requested the plan be integrated into the comprehensive plan. On January 17, 2007, Spokane’s City Council adopted a comprehensive plan amendment that included language supporting this request. Shortly thereafter, city staff was assigned to begin work on the plan.

After conducting an extensive public process, on June 8, 2009, the Spokane City Council passed an ordinance adopting an emergency amendment to the City of Spokane Comprehensive Plan including amendments to Chapter 4 Transportation, and adopted a Bike Master Plan including changes to the text of the Transportation Chapter of the Comprehensive Plan and a new planned bikeway network map (map TR 2). The bicycle plan was updated again in 2015.

2017 BICYCLE MASTER PLAN UPDATE

This 2017 update of the 2009 Bicycle Master Plan reflects changes made to the system since 2009. This update reflects the current state of bicycle system planning and facility design. Implementing bicycle systems and facility design is evolving quickly across the country as efforts to create safe and attractive systems for a wider range of cyclists has resulted in ever changing strategies and techniques to facilitate the implementation.

The Spokane Bicycle Master Plan is incorporated into the Spokane Comprehensive Plan. The purpose of the Bicycle Master Plan is to improve the environment for bicycling and provide more opportunities for multimodal transportation. The plan focuses on developing a connected bikeway network and support facilities.

The Spokane Bicycle Master Plan contains a list of specific actions that delineate activities or programs to be undertaken by the city or other appropriate agencies to assure successful implementation. In summary these include: Continued institutional commitments to improving bicycle transportation; devote adequate staff resources to implementing the Plan; provide sustained funding for projects and programs; and learn from implementing projects and adjust approaches as necessary.

Bicycle Master Plan Part 1 contains citywide bicycling policies and action items that will be used to encourage construction of bicycle projects, support facilities, maintenance, education, funding, evaluation, coordination and other critical issues.

Bicycle Master Plan Part 2 contains facility identification and definitions, and the Existing and Future Bikeway Network maps.

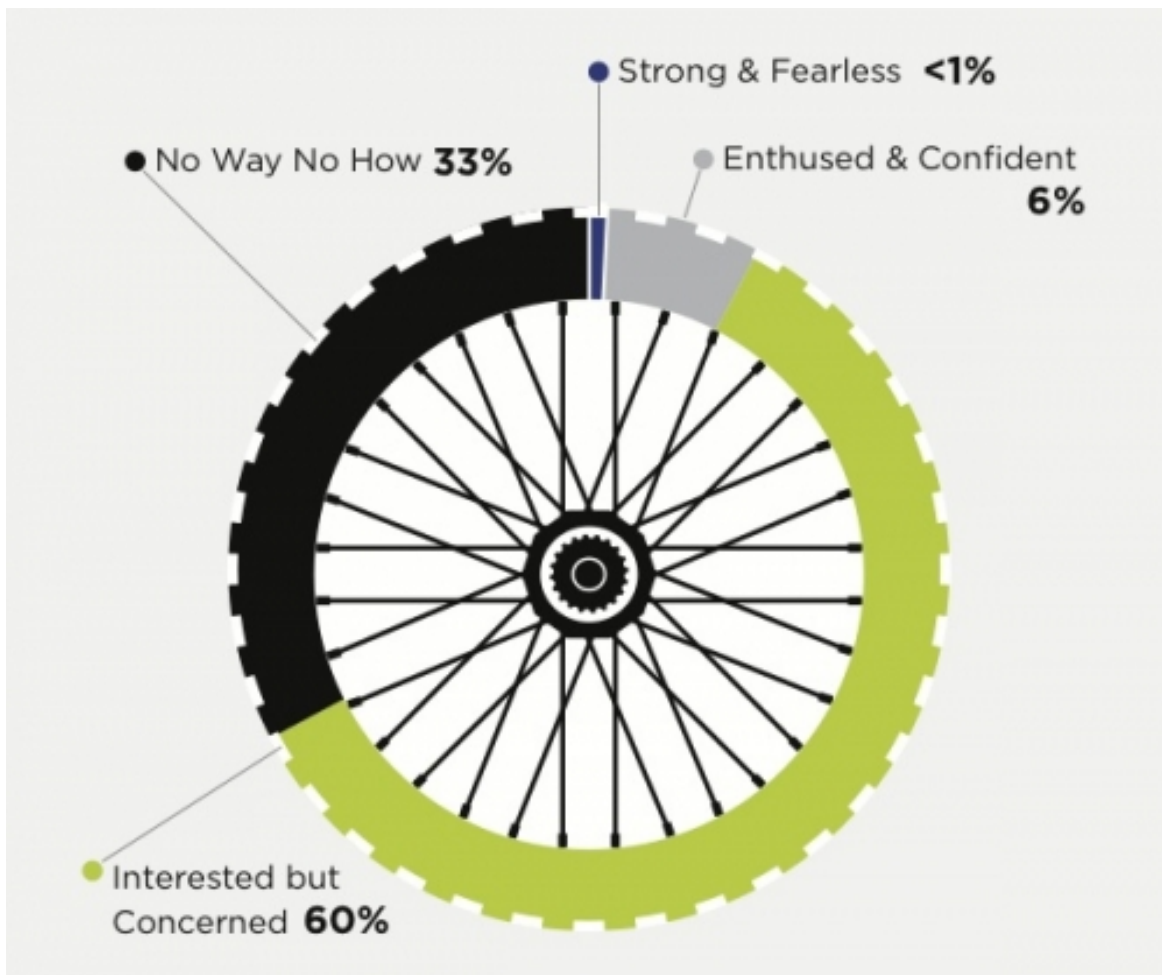
Bicycle Master Plan Purpose

This update to the Master Bicycle Plan is designed around a bicycle network that is more appealing to the “interested but concerned” category as the target market for increasing cycling for transportation. The type of facilities to support the “interested but concerned” riders are typically in lower traffic speed environments, and where the separation between bicycles and motor vehicles can be increased, such as in buffered bicycle lanes on arterials, cycle tracks, neighborhood greenways, or on lower-speed, non-arterial streets.

Through research done by the City of Portland in 2005, four categories were proposed to help identify and understand the needs of cyclists and non-cyclists. The “*Four Types of Transportation Cyclists*” categorizes cyclists based on the conditions in which they are willing to ride a bicycle:

- **Strong & Fearless:** Representing the smallest portion of the population, this group is willing to ride on roads regardless of the speed and volume of traffic or the facilities provided.
- **Enthusied & Confident:** Representing a larger portion of the population than the Strong & Fearless category, this group is comfortable riding in the road next to cars, but appreciates designated bicycle facilities.
- **Interested but Concerned:** Representing the largest segment of the population. This group likes to ride bicycles, but do not ride regularly due to safety concerns. They generally will not ride on higher volume and higher speed roads such as arterials without facilities that buffer them from automobile traffic. These riders perceive traffic, safety, and other issues as significant barriers to bicycling.
- **No Way No How:** This category typically represents about a third of the population. This group does not bicycle due to a lack of interest or ability.

Figure 1. The Four Types of Transportation Cyclists



BICYCLE MASTER PLAN: PART 1 - CITYWIDE BICYCLING VISION, POLICIES AND ACTIONS

VISION STATEMENT

Riding a bicycle is a comfortable and integral part of daily life in Spokane for people of all ages and abilities.

POLICIES / ACTIONS

Policy BMP1: Continually increase the bicycle mode share for all trips.

Actions

Action 1.1: Use the performance goals, measurements and targets identified in Table 1.

Table 1. Bicycle Master Plan Performance Measures

Goal	Performance Measure	Baseline Measurement	Performance Target
Increase bicycle trips year after year	Number of bicyclists counted at locations throughout Spokane	2016 citywide counts and daily counts at permanent counter locations, using first year installation as baseline	Quadruple ridership between 2016 and 2036
Increase bicycle share of commute trips	Commute mode share	2010-2014 American Community Survey 0.9%	Triple commute mode share between 2016 and 2036

Action 1.2: Encourage and support land uses that make bicycling more attractive than driving for trips of 3 miles or less.

Policy BMP 2: Complete and maintain connected bikeways that provide safe transportation for Spokane cyclists throughout the City.

Actions

Action 2.1: Design bicycle facilities and the network for all ages and abilities to attract the “interested but concerned” riders. This category represents the largest segment of the community.

The following is a list of general implementation and design measures that will need to be made by the city to support Action 2.1:

- Provide a high degree of separation between people riding bicycles and people driving cars on high traffic streets
- Incorporate separated bicycle facilities where potential users will be of a variety of ages and

abilities

- Consider a variety of methods to reduce speed differential between motorists and bicyclists where separated bicycle facilities are not possible
- Develop a system of Neighborhood Greenways on low volume and low speed streets, utilizing context appropriate design and traffic calming techniques
- Design bicycle facilities with safety and comfort as basic requirements to attract riders of all ages and abilities

Action 2.2: Continually monitor best practices in bicycle facility design and update the City's design guidance as necessary to reflect current best practices. National best practice guides such as the NACTO Urban Bikeway Design Guide should be used as reference guides for bicycle system planning and facility design.

Action 2.3: Provide bicycle facilities on designated arterial streets.

Spokane's arterial streets offer the most direct routes to workplaces, shopping areas, schools, transit park-and-ride lots, and other destinations. A lack of a bicycle network and facilities on critical portions of the city's arterial street system prevents more people from making trips by bicycle and makes conditions less comfortable for bicyclists. This plan allows for flexibility in the implementation of the network to take advantage of opportunities to improve upon what is shown the Planned Bicycle Facility Map when the opportunity arises.

Action 2.4: Complete the Bikeway Network.

Continue to allocate funds and seek additional funding to complete the bicycle network and finish 100% of the bicycle network by 2037. Continue to meet the bicycle level-of-service standards established in the transportation element of the Comprehensive Plan.

The Bikeway Network provides a backbone of high-quality bicycle facilities to connect to high priority destinations within the city. These facilities include protected bike lanes, bike lanes, on-street markings, signed routes, neighborhood greenways, or pathways. Select bicycle facility types that provide increasing separation on higher speed and volume roads, where feasible. Important pathway projects include completing the Centennial Trail missing links, the Ben Burr Trail, Fish Lake Trail, and connections to other trails within the greater Spokane area.

Tools for completing the bikeway network include:

- Right size roadways or reduce lane widths to accommodate bicycle facilities on streets with excessive capacity
- Reviewing on-street parking utilization rates to determine the best use of the public right-of-way

Action 2.5: Improve bicycle safety and access at arterial roadway crossings.

Improvements are needed at arterial roadway crossings in the Bikeway Network to provide bicyclists

with continuous, safe routes between destinations. Spokane has a number of streets that carry high-speed and high-volume traffic (e.g. Francis, Monroe, Maple/Ash, Wellesley and 29th Ave). Many other arterial streets are also challenging to cross, particularly during peak travel periods. In order to make it possible for bicyclists to travel throughout the city, there needs to be opportunities to cross major streets without disrupting the traffic flow of these important corridors.

Recommended improvements include treatments such as traffic signals, median crossing islands, curb extensions combined with signs, and/or markings. These crossings must also be safe and accessible for pedestrians. While the recommended Bikeway Network map identifies many critical needs, it does not represent a complete inventory of the city's intersections. The city should evaluate the Bikeway Network for other potential bicycle crossing improvements. The first priority will be to improve intersections where existing bicycle facilities cross arterial roadways. Other key crossings should be considered as each new segment of the Bikeway Network is implemented. In addition, all future roadway improvement projects should address bicycle crossing needs as a routine part of the design process when feasible.

Action 2.6: Make key operational improvements to complete connections in the Bikeway Network.

There are many spot locations in the Bikeway Network where bicycle access should be improved by making changes to roadway operations. The following is a list of general operational improvements that will need to be made by the city to complete bicycle connections:

- Provide bicycle turn pockets at key intersections. Left-turn pockets allow bicyclists to wait in a designated space for a gap in traffic before turning left. These pockets are particularly beneficial on roadways with relatively high traffic volumes and significant bicycle turning movements. Locations with raised medians may provide good opportunities to add pockets.
- Traffic signal timing should consider all modes including bicycling. Therefore, all traffic signals should facilitate safe bicycle crossings. This includes providing a minimum green time and a minimum yellow time to ensure that bicyclists are able to clear intersections, per the AASHTO *Guide for the Development of Bicycle Facilities* (1999 or latest edition). Explore new technologies to detect bicyclists at traffic signals. In the future, explore new detection technologies such as infrared or video sensors that can tell the difference between bicycles and motor vehicles. This can help improve bicycle detection at actuated signalized intersections and make it possible to detect bicyclists at pedestrian crosswalk signals.
- Explore innovative designs for bicycles at intersections. This includes modifying pedestrian crosswalk signals to have separate push-buttons or sensors to detect bicyclists, pedestrians, and motor vehicles. This allows the traffic signal to stop arterial traffic for a shorter amount of time for bicyclist crossings than for pedestrian crossings. Separate crossing signals are provided for bicycles and pedestrians at these intersections. The City of Tucson, AZ has successfully used this signal design. Bicycle boxes should also be considered at signalized locations with high numbers of left turning bicyclists. The design of all types of traffic signals should not confuse pedestrians and should comply with the Americans with Disabilities Act.
- Improve bicycle accommodations on bridges. Bicycle accommodations on bridges need to be

improved as well as on their approaches and access ramps. In the short-term, bicycle access should be improved using signage, marking, maintenance, and other spot improvements. In the long-term, as bridges are repaired or replaced, they should be studied to determine the demand for bicycle facilities. If needed, the bridge project should include new facilities or retrofitted with facilities that provide appropriate bicycle access (e.g., bicycle lanes or wide sidewalks - minimum 10 feet wide). Bridges are critical for providing bicycle connectivity throughout Spokane.

- Additional locations for pedestrian pathways with bicycles permitted (e.g., potential pathways through parks, bike channel improvements to stairs).

Action 2.7: Provide wayfinding guidance through the Bikeway Network.

Wayfinding signs and pavement markings should be provided to help bicyclists navigate through the Bikeway Network. The city should begin by signing the regional trail routes, then work on the entire system within close proximity to downtown, and slowly expand outwards. There are a number of locations in the city where it may be necessary to use non-arterial streets, alleys, or sidewalks to connect between existing or proposed bicycle facilities. While many of these complicated connections are shown on the Bikeway Network Map, there are currently no signs or markings along the actual connection to facilitate wayfinding. The city should install a combination of signs and markings to guide bicyclists through these connections.

Action 2.8: Explore a paid bike share program.

Many cities with size comparable to Spokane are investing in paid bike sharing programs. These systems provide an alternative travel method to driving or taking transit for short-distance trips (2 miles or less). The City would first need to prepare a feasibility study and financial plan for such a system. Studies have shown that having more cyclists on the road is a big factor in driver awareness of cyclists, with a positive correlation to safety. A paid bike share program would be one method of increasing the overall number of cyclists.

Action 2.9: Improve the quality and quantity of bicycle facility maintenance.

Bicycle facility maintenance will be improved by establishing clear maintenance responsibilities and by involving the public in identifying maintenance needs. Maintenance agreements between city agencies should be negotiated to take advantage of the strengths of each agency. In addition, there are also opportunities to utilize volunteers to assist with some maintenance tasks. These actions will improve the efficiency and quality of bicycle maintenance in the city.

- Encourage bicycle organizations and other community groups to assist with minor maintenance activities. The city will work with bicycle organizations, community groups, civic organizations, and businesses to provide periodic upkeep along trail corridors. This will help improve bicycle facility safety, reduce maintenance costs, and build goodwill with neighborhood residents.
- Continue to respond to citizen complaints and maintenance requests. Use these requests to make short term improvements and to set maintenance priorities.
- Educate roadway maintenance crews on the impact to the bicycle facility of abrupt transitions

from new to old surfacing material on street resurfacings and chip sealing and the impact of on the usability of adjacent bicycle facilities.

- Consider different types of weather and road conditions when developing and maintaining bicycle facilities. Weather and seasonal issues will be considered in the development and maintenance of bicycle facilities within reasonable limits. For example, slip-resistance will be a factor considered in the selection of pavement markings for bicycle facilities. Also on-street bicycle facilities and off-street paths should be swept more frequently to ensure the safety of cyclists. Drainage will also be addressed in the design of all roadways and paths. Snow removal and storage is an important consideration especially on more urban corridors.
- Ensure all bicycle legends and markings, including shared lane markings (sharrows), are included in the city's street maintenance program. Coordinate new installations while securing maintenance funds.

Action 2.10: Prioritize bicycle facility development to maximize the use and safety benefits of these investments.

Bicycle improvements will often occur as a result of other project investments, such as the reconstruction or repaving of an arterial street as provided by the Street Levy. Other active transportation projects may be the result of specific funding opportunities and/or how well a particular project scores against others in a competitive process. While pursuing those opportunities, improvements will be considered on those facilities that serve high volumes of users, improve safety, are cost-effective, and improve geographic equity.

Policy BMP 3: Provide convenient and secure short-term and long-term bike parking to connect people to popular destinations and transit throughout Spokane and encourage employers to provide shower and locker facilities.

Actions

Action 3.1: Require compliance with the City of Spokane Bicycle Parking Design Guidelines

Working with Planning and Business Development, ensure that any bicycle parking installed in the city follows the City of Spokane Bicycle Parking Design Guidelines with respect to both rack type as well as placement in relation to buildings and other obstacles so that the bicycle racks/lockers/corrals are usable by all bicyclists.

Action 3.2: Improve bicycle storage facilities at transit facilities.

Partner with STA to identify and provide bicycle parking improvements at transit facilities including park and ride lots. This includes providing bicycle racks and lockers and reserving adequate space during transit station construction to provide future bicycle racks and lockers. The following actions are recommended:

- Provide sufficient space for bicycle storage at transit stations and multimodal hubs.

- Provide sufficient space for bicycle storage at future transit stations and park and ride lots. As transit systems develop in the future, bicycle parking demand should be evaluated to determine the amount of space that is needed for bicycle racks and lockers. Space for bicycle parking should be included in station designs from the onset of a project.
- Work with the Spokane Transit Authority (STA) to develop a safe bicycle storage facility at the downtown transit center. By funding and promoting a staffed bicycle facility at the downtown transit center, Spokane will be showing support for bicycling as a viable form of transportation. This facility will provide a safe place for commuters to store their bicycle. In addition to parking, this facility could provide resources for bicycle repair, maps and other information.

Action 3.3: Increase the availability of bicycle parking throughout the city.

Secure bicycle parking (short-term: appropriate style bike rack, long-term: covered in access restricted location) located in close proximity to building entrances and transit entry points is essential in order to accommodate bicycling. Secure bicycle parking helps to reduce the risk of bicycle damage and/or theft. Update the bicycle parking requirements for new developments in Spokane as necessary.

- Establish a proactive bicycle rack installation program. A proactive bicycle rack installation program should be established to provide additional bicycle parking in urban areas, particularly on commercial and high-density residential blocks. Schools, libraries, and community centers should also be targeted for bicycle rack installation. It will be important to work closely with adjacent property owners to make sure that racks are properly located and do not interfere with loading zones and other business related activities.
- Strengthen city code to ensure properly-installed bicycle racks and lockers are a part of new developments.
- Consider installing covered, on-demand, longer-term bicycle parking. The City of Spokane will work with local agencies and the Spokane Parks and Recreation Department to examine the possibility of installing covered, on-demand, longer-term bicycle parking. Unlike locker facilities, this type of bicycle parking facility also has the advantages of not needing to be rented, not requiring keys, and not being a potential receptacle for trash. Certain types of covered, on-demand bicycle parking facilities can be locked with a padlock provided by the bicyclist.
- Provide incentives for operators of private parking facilities to add secure, high quality bike parking. It will be important for the city and transit agencies to maintain bicycle racks and lockers and use enforcement to deter misuse of these facilities. Abandoned bikes and locks can make existing racks unusable. Other racks can be obstructed by planters, news boxes and other street furniture.
- Develop standard plans and policy for bike corrals. Bike corrals provide a high-capacity option for bicycle parking by replacing one vehicular parking space with up to 24 bicycle parking spaces. Bicycle corrals may also be located in unused/underutilized areas of the street, although they are better utilized when placed directly in front of a business. This option keeps the sidewalk clear for pedestrian use.
- Pursue dedicated funding for bicycle parking

Action 3.4: Encourage office development and redevelopment projects to include shower and locker facilities.

The city should amend its development ordinance to strengthen existing requirements for shower and locker facilities based on employment densities. For employees who are considering bicycling to work, such facilities make it possible to shower and change into work clothes after the commute.

Policy BMP 4: Increase bicycling by educating people using all transportation modes about the benefits of bicycling. Enhance the safety of people riding bicycles through effective law enforcement, education and detailed crash analysis.

Actions

Action 4.1: Educate Spokane’s transportation system users about all bicycle facilities, including new elements. Additionally, perform community-wide efforts to increase public awareness of the rights and responsibilities of cyclists on the road.

The city will provide Spokane residents with information about the purpose of new bicycle facility treatments (e.g., neighborhood greenways, shared lane markings, etc.) and safe behaviors for using these facilities. The city will work with the Spokane Police Department (SPD) to educate users about the new facilities, including the following strategies:

- Develop web pages and disseminate information about each treatment.
- Install temporary orange warning flags, or signage at locations where new facilities are installed, where appropriate.
- Increase police patrols for a period of time as roadway users adjust their behavior after a new facility is installed.

Action 4.2: Promote bicycle education and encouragement in Spokane through city actions and through partnerships with community organizations, school, and private businesses.

It’s not just enough to develop a program or build a facility – the city must develop appropriate promotional events and materials to let the residents and employees of Spokane know about their travel options. Examples include:

- Work with the Spokane Bicycle Club, Washington Bikes and others to disseminate information regarding bicycling programs and tours in and around Spokane.
- Designate bicycle friendly districts and local service bikeways to encourage bicycling
- Promote business based bicycling programs and incentives
- Participate in Bike to Work Day and other bike events and contests to promote bicycling
- Participate in Sunday Parkways or other Open Streets type events regularly
- Support an individualized marketing campaign to people receptive to replacing automobile trips with bicycling

Action 4.3: Increase enforcement of bicyclist and motorist behavior to reduce bicycle and motor vehicle crashes.

The City of Spokane will work with the Spokane Police Department (SPD) to enforce laws that reduce bicycle/motor vehicle crashes and increase mutual respect between all roadway users. This enforcement program will take a balanced approach to improving behaviors of both bicyclists and motorists.

Motorist behaviors that will be targeted include:

- Turning left and right in front of bicyclists.
- Passing too close to bicyclists.
- Parking in bicycle lanes.
- Opening doors of parked vehicles in front of bicyclists.
- Rolling through stop signs or disobeying traffic signals.
- Harassment or assault of bicyclists.

Bicyclist behaviors that will be targeted include:

- Riding the wrong way on a street.
- Riding with no lights at night.
- Riding recklessly near pedestrians on sidewalks.
- Disobeying traffic laws.

Bicyclist safety is a shared responsibility between all roadway users. Enforcement priorities should be established through a collaborative process involving the Bicycle Advisory Board and the Spokane Police Department.

Action 4.4: Support efforts to obtain funding for bicycle education and enforcement programs.

Efforts might include working with partner agencies in establishing a mini-grant program to support community bicycle related encouragement efforts

Action 4.5: Work with local and regional partners, and private corporations, to develop incentive programs to encourage bicycling and other non-single occupancy vehicle use.

Work with the Spokane County Commute Trip Reduction program (<http://www.mycommute.org/>) to promote and further develop incentives promoting bicycling as an active form of transportation. Types of incentives identified include:

- Including bicycle incentives in travel demand management programs
- Creating incentives to promote active transportation to employment centers, commercial districts, transit, schools, public institutions and recreational destinations
- Providing incentives for bicycle use and incorporate bicycle travel in all reimbursable travel expenses

Policy BMP 5: Develop a collaborative program between a variety of city departments and agencies and outside organizations to implement the Bike Master Plan through capital project delivery as well as community planning processes.

Implementation of this Plan will be a collaborative effort between a variety of city departments, agencies and outside organizations. Bicycle and pedestrian coordination efforts will ensure that the Plan recommendations are implemented as a part of these departments regular work. The Street Department will provide technical expertise on issues related to bicycling and ensure that implementation of the Plan moves forward.

Key departments within the city for planning and implementing bicycle improvements include:

- Street Department
- Integrated Capital Management
- Planning and Development Services
- Police Department

Progress on implementing the Plan will be monitored on an annual basis, and every transportation project offers an opportunity to implement a piece of this Master Bike Plan.

Therefore, institutionalizing bicycle improvements will be essential for successful implementation of this Plan. As stated in Action item 5.1, bicyclists' needs should be considered in the planning, design, construction, and maintenance of all transportation projects in the city.

Actions

Action 5.1: Provide bicycle facilities as a part of all transportation planning and capital projects to all possible extents.

Incorporate requirements for bicycle facilities in the city Engineering Standards Manual, standard specifications, and standard plans.

- Actively seek opportunities to provide protected bicycle lanes, bicycle lanes, shared lane markings, and other on-road bicycle facilities as a part of repaving projects. (This includes roadways in the Comprehensive Plan Planned Bikeway Network as well as viable alternatives to the routes proposed, if necessary.)
- Provide higher quality facilities (i.e. add a buffered bike lane instead of a bike lane) than the Planned Bikeway Network calls for when the opportunity exists.
- Develop trails in conjunction with the installation of underground cable, water, sewer, electrical, and other public or private efforts that utilize or create linear corridors. If possible, develop new trails along these utility corridors.
- Continue to develop trails in railroad corridors no longer needed for railroad purposes. Where appropriate, develop trails adjacent to rails.

- Leverage other types of projects that could potentially include bicycle facilities.
- Integrate bicycle planning into neighborhood and commercial planning efforts
- Encourage and support the transformation of auto-oriented commercial areas into compact mixed-use centers that are equally conducive to pedestrian, bicycle, transit and motor vehicle activity.
- Fix potholes, surface hazards, sight distance obstructions, and other maintenance problems on a regular basis.

Action 5.2: Dedicate funding for bicycle project planning and implementation using a portion of currently available transportation dollars to implement the bicycle network.

Action 5.3: A Bicycle Program should provide the necessary staff expertise and commitment to implement the Bikeway Network within 20 years.

Action 5.4: Continue to make minor improvements for bicycling.

Spokane should continue to make the following types of improvements:

- Surface improvements (patch potholes, fill seams between concrete panels in the street, replace drain grates, etc.).
- Signing and striping (bicycle lane striping and stenciling, motor vehicle warning signs at trail crossings, etc.).
- Access improvements (adjust electronic detection for bicyclists at traffic signals, traffic island modification, etc.).
- Bicycle rack installation in public rights-of-way (sidewalks, parking spaces, etc).
- Other low cost bicycle improvements as appropriate.

Action 5.5: Continue to receive regular input and guidance from the Bicycle Advisory Board.

The Bicycle Advisory Board should continue to provide regular input and guidance regarding bicycle issues. This will include monitoring the progress of implementation. Work with the Bicycle Advisory Board to develop and distribute an annual report card describing progress on Master Bike Plan implementation and key performance measures such as system mileage and use.

Action 5.6: Provide bicycle planning and facility design training for appropriate project-level staff and consultants, and encourage staff from other agencies to attend.

Staff and consultants working on projects that affect bicycle access, directly or indirectly, should be strongly encouraged to attend training sessions on bicycle planning and facility design.

Action 5.7: All divisions of the City of Spokane should consult the Bike Master Plan when working on projects.

All divisions should consult this Plan to ensure that the recommended facilities and maintenance practices are implemented in accordance with this Plan. For roadway repaving and reconstruction

projects, the Bike Master Plan recommendation represents the best option. As conditions change, better alternatives to the proposed bicycle network may form. Further study, additional public involvement and consultation with the Bicycle Advisory Board may ultimately result in an even better strategy to provide bicycle access.

Action 5.8: Integrate the recommendations of the Bike Master Plan into other city ordinances, plans, and guidelines.

This action includes, but is not exclusive, to the following actions:

- Require compliance with bike plan policies and standards for new development
- Review and strengthen subdivision ordinances to ensure a connected street network
- Require long-term parking, bike rooms, showers or other amenities in large commercial and residential projects
- Require bicycle parking to be located close to building entrances and no further away than the closest car parking space
- Disconnect the amount of bicycle parking from the amount of car parking, particularly in downtown and designated centers and corridors

Action 5.9: Coordinate within the city and between the agencies and organizations where necessary to implement the Master Bike Plan.

Action 5.10: Update the Bike Master Plan on a regular basis.

Action 5.11: Develop, implement, and enforce a written bicycle access policy and guidance for use at public and private construction projects that impact the public right-of-way

POTENTIAL FUNDING SOURCES

The Bicycle Master Plan should be used as a guide to identify bicycle improvement projects and decide which to fund. The evaluation of bicycle improvement needs should be considered as a part of all projects when city controlled sources of funding are eligible.

Investment Approach

Other top cycling cities have shown that a broad-based approach to bicycle investment that funds bicycle infrastructure, marketing, education, maintenance, and transit access improvements can simultaneously realize marked increases in bicycle use and bicycling safety. A balanced investment approach will be important.

Spokane should employ a funding allocation strategy that is flexible and allows for opportunistic spending. The funding approach should be multi-pronged, covering investments not just in constructing new bicycle facilities, but also in offering bicycle parking, encouraging people to use facilities and bicycles in general, educating people about the rules of the road, maintaining bicycle facilities, and tracking the success of bicycle projects and programs. Several examples of funding sources are listed within the Transportation Chapter and many of the sources are available for financing bicycle improvement projects. A few newer funding sources that could be used for bicycle facilities are listed below.

Local

Transportation Impact Fees

The city intends to expand the Transportation Impact Fee program to allow use of the funds on infill type bicycle and pedestrian projects. Bicycle project funding will be set aside in each of the districts.

Automated Traffic Safety Cameras funding allocation

On September 30, 2013 the City Council passed Resolution No. 2013-0070 related to allocation of funds from infractions issued with automated traffic safety cameras. Among the items to be allocated funding, the resolution provides a flexible matching fund for neighborhood traffic calming projects, neighborhood business districts, streetscape improvement or community development projects related to public safety.

State

Paths and Trails Reserve

A portion of the State gasoline tax revenue which, by Washington State Law, is returned to local government to be used for the development and maintenance of paths and trails. One half of one percent (0.5%) of the tax is returned to the City. Presently the City receives approximately \$14,000 per year from this funding source. Both pedestrian and bike facilities can utilize these funds, however historically these funds have been extremely limited.

Federal

The Federal Fixing America's Surface Transportation (FAST) Act was signed into law in 2015. The FAST Act is a five-year bill that will slightly increase funding and slightly change some policy. The biggest change is that it will create long-term certainty for states, local governments and transportation stakeholders.

Surface Transportation Block Grant (STBG) Program

The FAST Act eliminates the MAP-21 Transportation Alternatives Program (TAP) and replaces it with a set-aside of Surface Transportation Block Grant (STBG) program funding for transportation alternatives (TA). These set-aside funds include all projects and activities that were previously eligible under TAP, encompassing a variety of smaller-scale transportation projects such as pedestrian and bicycle facilities, recreational trails, safe routes to school projects, community improvements such as historic preservation and vegetation management, and environmental mitigation related to stormwater and habitat connectivity.

TAP funding was set at 2% of all the core highway programs and yielded approximately \$820 million in FY 2015. Funding levels in the new STBG Set-aside Program are set at \$835 million for FY2016 and FY2017, rising to \$850 million in FY2018-FY2020. Within that, funding for the Recreational Trails Program is preserved at the 2009 level and is effectively a set-aside of the STBG.

TIFIA and TIGER

In 1998, Congress created the Transportation Infrastructure Finance and Innovation Act (TIFIA) to provide credit assistance to large-scale surface transportation projects. The threshold for project eligibility was set at a minimum cost of \$50 million (\$25 million for rural infrastructure projects). The FAST Act lowers this threshold to \$10 million for projects involving local governments, and allows the bundling of projects to meet this lower threshold. This should make it easier for active transportation projects to use these credit and innovative financing mechanisms. The Transportation Investment Generating Economic Recovery (TIGER) grant program was created in 2009 and has included many bicycling and walking projects and programs in the seven rounds of funding awarded since then. While the program is administered by the US Department of Transportation, funding is provided by an annual appropriation rather than a periodic transportation bill such as the FAST Act.

Community Development Block Grant Program

This funding comes from the Housing and Community Development Act of 1974 and authorizes the Department of Housing and Urban Development to distribute funds to local governments for the purpose of improving their community. The Community Development Block Grant (CDBG) program primarily addresses capital construction needs in low-to-moderate income neighborhoods. Funds for pedestrian and bicycle facilities are included.

Congestion Management Air Quality

CMAQ funding has been available to the Spokane region for several years. It can be used on projects that reduce vehicular travel and therefore reduce emissions. A certain percentage of the regional funding is typically set aside for bicycle and pedestrian projects. In recent years that funding has been allocated to a neighborhood greenway and a shared-use path.

Other Sources

Another potential resource is the partnering with other agencies, foundations and the private sector for future awareness and education campaigns. The City should continue partnering with other agencies like the Spokane Regional Health District that have a considerable interest in improving bicyclist safety. Strengthening these partnerships and forming new ones will provide additional opportunities to increase awareness of active transportation safety issues.

BICYCLE MASTER PLAN PART 2 – BIKEWAY NETWORK

FACILITY DEFINITIONS AND MAPS

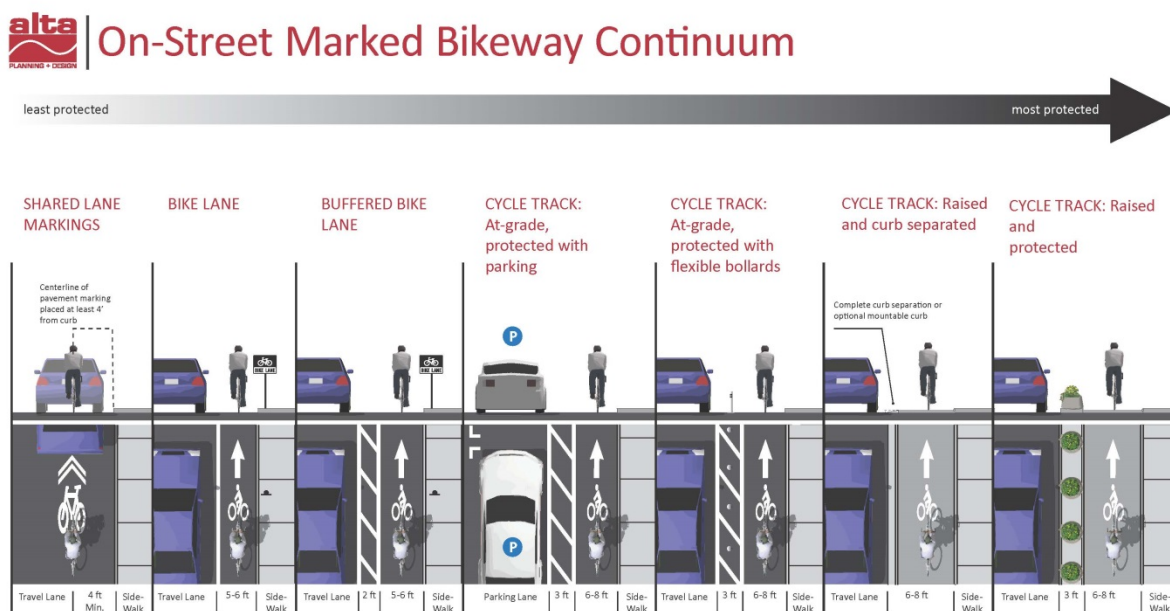
Providing a network of bicycle facilities throughout Spokane is fundamental to achieving the goals of this Plan. Additional bike lanes, roadway crossing improvements, multi-use trails, and other facilities are needed in order to encourage more Spokane residents to bicycle.

BIKEWAY NETWORK DEFINITION

Implementation of this Plan will establish roughly a 400 -mile network of bikeways throughout the city of Spokane. This Bikeway Network is composed of all of the locations throughout the city where specific improvements have either already been made or are proposed in the future to accommodate bicycles.

Almost all Bikeway Network segments will have some type of visible cue (i.e. a bike lane, a bike route sign, a pavement marking, a trail, etc.) to indicate that accommodations have been made for bicyclists. While the network will provide primary routes for bicycling, it is important to note that, by law, bicyclists are permitted to use *all* roadways in Spokane (except limited access freeways or where bicycles are otherwise prohibited). Therefore, the Bikeway Network will serve as a core system of major routes that can be used to safely access all parts of the city and other parts of the transportation system.

Figure 1. On-Street Marked Bikeway Continuum

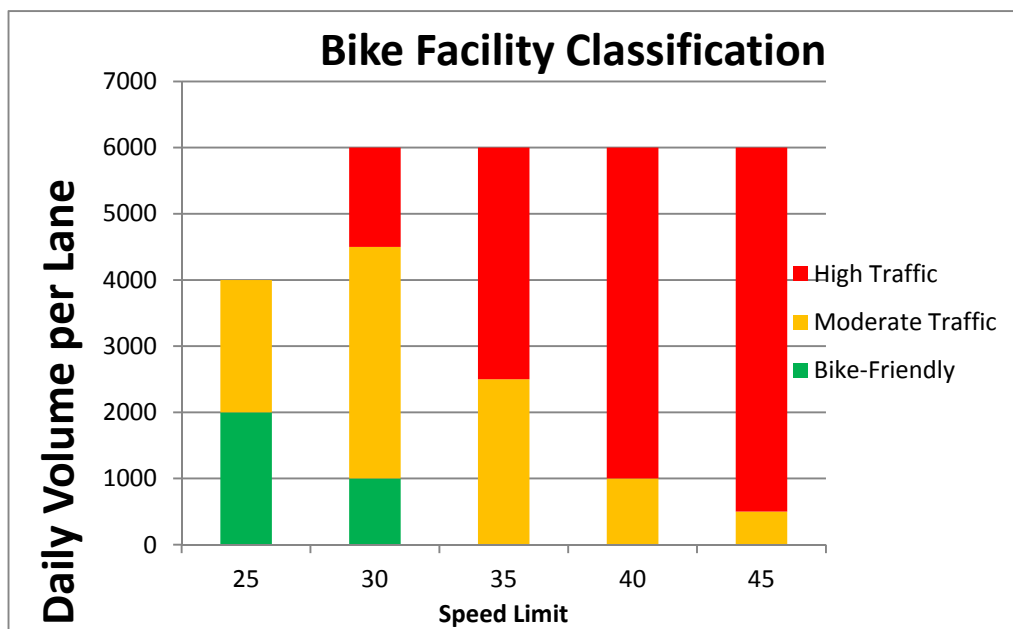


With this update the city has changed the bikeway classifications. The goal of this change is to provide better information to users of the bike routes while moving facility design to the right on the continuum in Figure 1 whenever possible. The classification system now factors in the traffic volume on each facility. The new classifications are listed below and are summarized in greater detail in the following pages:

- High Traffic (Bike Lane)
- High Traffic (Shared)
- Moderate Traffic (Bike Lane)
- Moderate Traffic (Shared)
- Bike Friendly Route
- Neighborhood Greenway
- Shared Use Path
- Soft Surface Path

Figure 2 provides a matrix of daily traffic volumes that can be expected with each bike facility classification.

Figure 2. Bike Route Classification based on traffic volume and speed



High or Moderate Traffic (Shared):

A Shared Roadway designation is typically found on important roadways where bicycle lanes may not be feasible. The High and Moderate designation provides an indication of the level of traffic and/or conflict the cyclist can expect to experience. See figure 1 above for Bike Route Classification based on traffic volume and speed. A Shared Roadway may use on-street markings and signs to alert motorists and cyclists to the designation. Shared Lane Markings (aka Sharrows) are used to remind all roadway users that bicyclists may be present and are allowed to use the full lane while directing cyclists out of the “door zone”. In cases of steep terrain, a “climbing lane” should be used on the uphill side of the roadway and sharrows should be used to guide cyclists in the downhill lane.

Figure 3. Examples of Shared Roadway treatments



High or Moderate Traffic (Bike Lane):

A bike lane is identified by on-street striping. Buffered bike lanes and cycle tracks are also included in this category. The High and Moderate designation provides an indication of the level of traffic and/or conflict the cyclist can expect to experience. The actual design will depend on the roadway width and traffic conditions. A 5 foot bike lane with a 3 foot buffer is preferred. As an alternative, a bike lane width of 6 feet is desirable. An on-street marking of a bicyclist and/or street signs identifying the bike lane may accompany the striping.

High traffic bike lane

- A collector, minor, or principal arterial
- Traffic lanes are striped
- Higher volume and/or speed as shown in Figure 2.
- Greater chance of conflicts between cyclists and vehicular traffic
- Attractive to advanced cyclists comfortable with taking the lane, or those who can keep up with traffic

Moderate traffic bike lane

- Typically a collector, minor, or principal arterial, but may include some local streets
- Centerline and/or traffic lanes are striped
- Attractive to advanced and intermediate level riders - including typical commuter cyclists
- Any facility that doesn't fit the High traffic route or Bike-Friendly categories

Figure 4. Examples of potential bike lane designs



Protected Bike Lanes

A protected bike lane is an exclusive bike facility that combines the user experience of a separated path with the on-street infrastructure of a conventional bike lane. A protected bike lane is physically separated from motor traffic and distinct from the sidewalk. Protected bike lanes have different forms but all share common elements—they provide space that is intended to be exclusively or primarily used for bicycles, and are separated from motor vehicle travel lanes, parking lanes, and sidewalks. In situations where on-street parking is allowed protected bike lanes are located to the curb-side of the parking (in contrast to bike lanes).

Protected bike lanes may be one-way or two-way, and may be at street level, at sidewalk level, or at an intermediate level. If at sidewalk level, a curb or median separates them from motor traffic, while different pavement color/texture separates the protected bike lanes from the sidewalk. If at street level, they can be separated from motor traffic by raised medians, on-street parking, or bollards. These design features do raise different considerations – such as driveway conflicts, driver expectations, and maintenance issues that need to be addressed. By separating cyclists from motor traffic, cycle tracks can offer a higher level of security than bike lanes and are attractive to a wider spectrum of the public. Routes classified as future bike lanes in this plan may be considered for protected bike lane designs following additional assessment and review. Further network-level planning will be required to identify a system of routes best suited to these designs.

Figure 5. Examples of potential protected bike lane designs



Bike Friendly Routes:

A bike-friendly route is a low-volume route marked by bicycle signage and/or the use of shared lane markings. These routes are attractive to beginning and intermediate level riders. Other features include:

- Primarily local streets with a few collector arterials
- No centerline stripe except in CBD
- Cyclists can comfortably ride mixed with traffic - bike lane not needed, but a few have them such as in the CBD.
- Low vehicle volumes, low vehicle speeds
- Posted speed 30 mph and less than 1,000 volume (ADT) per lane
- Posted speed 25 mph and less than 2,000 volume (ADT) per lane

Figure 6. Bike Friendly Route



Neighborhood Greenways:

Neighborhood Greenways are low-volume and low-speed streets that have been optimized for bicycle and pedestrian travel. Neighborhood Greenway treatments can be applied at several different intensities, which should be identified in detail during project design. Wayfinding signs, pavement markings, traffic calming and intersection treatments are potential elements of these facilities. Neighborhood Greenways are designed to attract bicyclists of all ages and abilities, especially those in the Interested but Concerned category. The design of the neighborhood greenway is flexible and will be tailored to meet the specific needs of the roadway. Below are examples of possible neighborhood greenway treatments.

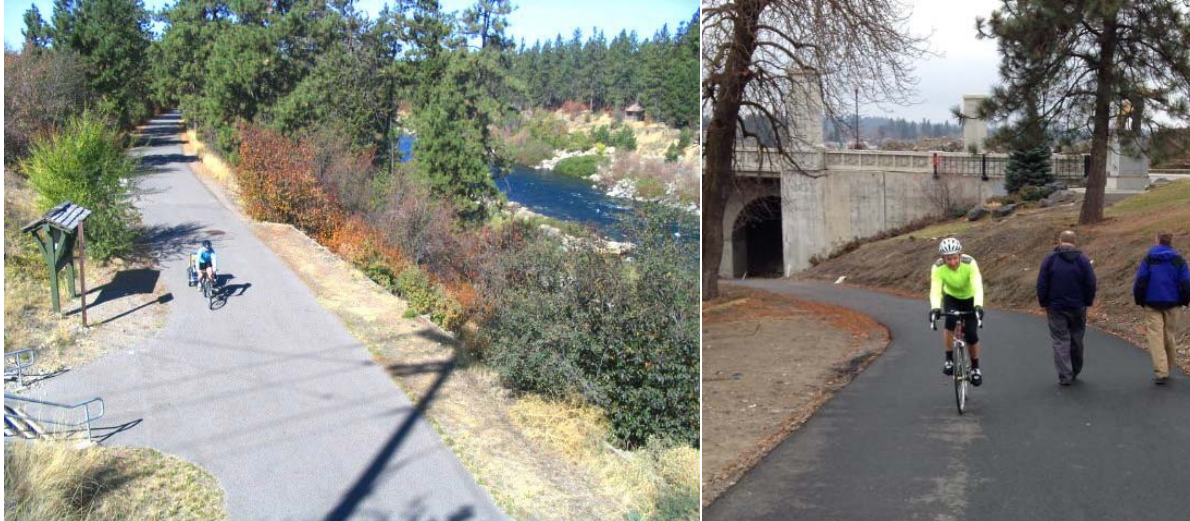
Figure 7. Examples of Neighborhood Greenway treatments



Shared Use or Multiuse Path:

A shared use or multiuse path is an off-street facility designed for certain non-motorized uses. These paths have a minimum width of ten feet to accommodate two-way traffic. These paths are often identified by signs and barriers preventing auto-traffic from using the path. Examples include the Centennial Trail and the Fish Lake Trail.

Figure 8. Shared Use Paths



Soft Surface Path:

A soft surface path is an off-street facility allowing non-motorized uses. These paths are unpaved and have a minimum width of 5 feet. Surfacing may be gravel or dirt. They often form a key connection in the bicycle network and may be designated for paving in the future.



Figure 9. Soft Surface Path

State of the Practice:

The City of Spokane endorsed the NACTO (National Association of City Transportation Officials) Urban Street Design Guide and Urban Bikeway Design Guide in November 2014. In an overview, the NACTO Urban Bikeway Design Guide states: “The purpose of the NACTO Urban Bikeway Design Guide (part of the Cities for Cycling initiative) is to provide cities with state-of-the-practice solutions that can help create complete streets that are safe and enjoyable for bicyclists.

The NACTO Urban Bikeway Design Guide is based on the experience of the best cycling cities in the world. The designs in this document were developed by cities for cities, since unique urban streets require innovative solutions. Most of these treatments are not directly referenced in the current version of the AASHTO Guide to Bikeway Facilities, although they are virtually all (with two exceptions) permitted under the Manual on Uniform Traffic Control Devices (MUTCD). The Federal Highway Administration has posted information regarding MUTCD approval status of all of the bicycle related treatments in this guide and in August 2013 issued a memorandum officially supporting use of the document. All of the NACTO Urban Bikeway Design Guide treatments are in use internationally and in many cities around the US.”

Examples of bike facilities / techniques found in the NACTO guide that may be implemented in Spokane are provided below. There are numerous other suggested designs.

Colored Bicycle Facilities:

Colored pavement within a bicycle lane increases the visibility of the facility, identifies potential areas of conflict, and reinforces priority to bicyclists in conflict areas and in areas with pressure for illegal parking. Colored pavement can be utilized either as a corridor treatment along the length of a bike lane or cycle track, or as a spot treatment, such as a bike box, conflict area, or intersection crossing marking. Color can be applied along the entire length of bike lane or cycle track to increase the overall visibility of the facility. Consistent application of color across a bikeway corridor is important to promote clear understanding for all users.



Intersection Crossing Markings:

Intersection crossing markings indicate the intended path of bicyclists. They guide bicyclists on a safe and direct path through intersections, including driveways and ramps. They provide a clear boundary between the paths of through bicyclists and either through or crossing motor vehicles in the adjacent lane.



Bike Box at Intersection:

A bike box is a designated area at the head of a traffic lane at a signalized intersection that provides bicyclists with a safe and visible way to get ahead of queuing traffic during the red signal phase.



Protected Intersections:

A protected intersection is an at-grade road junction in which cyclists and pedestrians are separated from cars. Vehicles turning right (in countries driving on the right, or left in countries driving on the left) are separated by a car length from crossing cyclists and pedestrians, providing increased reaction times and visibility. Drivers looking to turn right have better visibility to cyclists and pedestrians as they can look to the side for conflicts instead of over their shoulders.



BIKEWAY NETWORK MAPS

Spokane's bicycle facilities network includes protected bicycle lanes, bike lanes, shared-use paths, neighborhood greenways, shared roadways, and bike-friendly routes. The development of bicycle facilities is expected to take place over the course of the next 20 years. A number of unforeseen circumstances may affect the way that Spokane's bike network will develop. The Bicycle Facility Network Development Maps are not intended to define a specific time frame for the development of bike facilities within the city. These maps represent how the network may develop over time recognizing that the network cannot be created immediately. If an opportunity to develop any of the facilities on the map arises, that opportunity should be pursued. The bikeway network is shown in Map TR-5 in Comprehensive Plan Chapter 4: Transportation.

FURTHER EVALUATION OF BICYCLE FACILITY RECOMMENDATIONS

The projects that are shown on the maps will require additional evaluation during the implementation process to determine if there are other factors that may either help or hinder their development.

Additional traffic analysis will be needed in some cases to determine the optimum design for specific locations and transportation capacity impacts, with the understanding that the network is a flexible tool that can and should be modified as circumstances dictate. Like other public projects, neighborhood involvement will also be an important part of the evaluation process. Some locations shown on the map may be determined, after more detailed analysis, to require different or more costly improvements and, therefore, may become longer-term projects. However, for every project, the first assumption will be that the bicycle facilities, as shown in the Bicycle Master Plan, will be implemented. If the city decides not to proceed with implementing the Bicycle Master Plan recommendation on a particular roadway an explanation shall be provided to clarify why it is not implementing a recommendation in the Plan.

Appendix 3

Transportation:

5 Multi-Modal Level of Service Memo



Multimodal Level of Service, Concurrency, Impact Fees, and Project Identification Report

City of Spokane

August 2024



Executive Summary

Spokane is in the process of updating its comprehensive plan. As part of the update, there is an opportunity to assess Spokane's current approach to multimodal level of service (MMLOS), concurrency, impact fees, and project prioritization. State and regional requirements have been updated since the previous comprehensive planning cycle. Accordingly, the Spokane Transportation Element will be required to meet new standards, including the required incorporation of MMLOS policy.

Reviewing new requirements and referencing various methods to meet the requirements can provide the City of Spokane with a full picture of the possibilities for the Transportation Element update. This report will describe the state and regional planning requirements, review the methodology implemented in Spokane as well as in several peer cities, and summarize several ways to incorporate equity and safety into project list development. The document will conclude with a summary of best practices and a set of recommendations tailored to the City of Spokane.

The City of Spokane can utilize this document as a reference throughout the decision-making process. This will aid the development of set of MMLOS, concurrency, impact fee, and project identification methodology that meet requirements while being effective and easy to apply long-term.



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State and Regional Planning Requirements

WA Growth Management Act

The State's Growth Management Act (GMA) of 1990 requires communities to prepare a plan that ties directly to the City's land use decisions and financial planning. To tie land use decisions to financial planning, the GMA requires concurrency and MMLOS. The GMA also authorizes the use of impact fees to fund projects that improve person-trip capacity. Plans must also include a discussion of Transportation Demand Management and methods to reduce per capita vehicle miles traveled (VMT).

Updates to State Legislation

Since the previous iteration of the comprehensive plan in 2017, there have been several statewide changes to the legislature. House Bill (HB) 1181 includes updates to the level of service requirements as well as an increased focus on vehicle miles traveled (VMT) per capita reduction. The bill requires jurisdictions to replace vehicular level of service (LOS) with MMLOS. The plan must also forecast multimodal demand and utilize MMLOS impacts to replace general "traffic impacts."¹ Under this legislation, development cannot be denied for LOS failure/concurrency reasons if impacts can be mitigated through active mode, transit, ride sharing, demand management, or other transportation management strategies funded by the development. Facilities that provide the greatest safety benefit to each category of roadway users should be prioritized.

Recent legislation has also changed the impact fee development process. Senate Bill (SB) 5254 redefines "public facilities" eligible for impact fees to include off-street bicycle and pedestrian facilities that were designed with multimodal commuting as an intended use. HB 1337 limits impact fees on ADUs to no more than 50% of the rate for a single-family home, and HB 1331 allows childcare/early learning facilities to be exempted from impact fees. Spokane's updated impact fee program will be required to meet this updated state guidance.

Spokane County Planning Policies

Spokane County maintains a document outlining planning policy requirements for jurisdictions in the county.² The requirements included in the Countywide Planning Policies for Spokane County

¹ "Multimodal level of service standards for all locally owned arterials, locally and regionally operated transit routes that serve urban growth areas, state-owned or operated transit routes that serve urban areas if the department of transportation has prepared such standards, and active transportation facilities to serve as a gauge to judge performance of the system and success in helping to achieve the goals of this chapter consistent with environmental justice" (<https://wsdot.wa.gov/sites/default/files/2023-12/LevelOfService-Guidance-MultimodalLevelOfService.pdf>)

² <https://www.spokanecounty.org/DocumentCenter/View/50123/CPP-20221213-APPROVED?bidId=>



would apply to any updates made to the City of Spokane comprehensive plan. The following policies apply to MMLOS, impact fee, and concurrency development in the City of Spokane:

- Each jurisdiction should coordinate its housing and transportation strategies to support existing, or develop new, public multi-modal transportation systems, including levels of services, in partnership with the Spokane Transit Authority (STA).
- Each jurisdiction should consider transportation demand management and/or other best practices for reducing vehicle miles travelled.
- Each jurisdiction shall establish roadway standards, level of service standards and methodologies and functional road classification schemes to ensure consistency throughout the region and to support the use of alternative transportation modes.
- Each jurisdiction shall use its adopted level of service standards to evaluate concurrence for long-range transportation planning, development review and programming of transportation investments.
- The transportation element of each jurisdiction's comprehensive plan will include level of service standards for all locally owned arterial facilities and transit routes. Each jurisdiction should coordinate the level of service standards with all adjacent jurisdictions and appropriate agencies.

Countywide planning policy also states that “where the roadway level of service (LOS) adopted in the local comprehensive plans cannot be maintained as a result of proposed new development, strategies shall be developed to address impacts across all applicable modes.”³ This guidance is consistent with the new requirements outlined in HB 1181. For additional transportation-related countywide policies, see pages 11-12 of the Countywide Planning Policies for Spokane County document.⁴

Horizon 2045 Spokane Metropolitan Transportation Plan

Spokane Regional Transportation Council (SRTC) is the Regional Transportation Planning Organization (RTPO) in Spokane County. SRTC has adopted a Metropolitan Transportation Plan (MTP), with which transportation plans in the region must align.⁵ The following guiding principles and policies compose the regional vision as laid out in the Horizon 2045 plan⁶:

Economic Vitality

- Focus on people, freight and goods movement to improve regional, national, and global competitiveness
- Enhance accessibility and connections to economic activity centers

³ <https://www.spokanecounty.org/DocumentCenter/View/50123/CPP-20221213-APPROVED?bidId=> (Pg. 11)

⁴ <https://www.spokanecounty.org/DocumentCenter/View/50123/CPP-20221213-APPROVED?bidId=> (Pg. 11-12)

⁵ <https://www.srtc.org/horizon-2045>

⁶ <https://www.srtc.org/wp-content/uploads/2022/01/Horizon-2045-Executive-Summary.pdf> (pg. 14)



- Prioritize multi-modal investments

Cooperation and Leadership

- Provide a regional forum to develop priorities
- Identify funding strategies
- Coordinate with stakeholders

Stewardship

- Protect the environment
- Follow federal, state, and local legislation and policies
- Measure performance
- Share the use of infrastructure

System Operations, Maintenance, and Preservation

- Preserve and prolong the life of infrastructure
- Use fiscal resources prudently
- Provide adequate funding
- Improve efficiency of system operations

Safety and Security

- Draw on best-practice design
- Utilize education and outreach
- Make use of operational strategies
- Protect critical infrastructure from external threats
- Improve maintenance of the transportation system

Quality of Life

- Offer safe and convenient forms of active transportation that support public health objectives
- Consider the needs of all transportation users, regardless of ability
- Increase public transit access and improve service
- Improve transportation system connections
- Design to support social, cultural, and commercial activities

The transportation element of the Spokane Comprehensive Plan will need to align with the Horizon 2045 plan. Eight implantation strategies are included in the plan⁷:

1. Prioritize Transportation Preservation, Maintenance, and Operations
2. Support Transportation Demand Management (TDM) & Transportation Systems Management and Operations (TSMO)

⁷ <https://www.srtc.org/wp-content/uploads/2022/01/Horizon-2045-Chapter-4-How-Well-Get-There.pdf> (pg. 122-124)



3. Encourage Cost-Effective Transportation Solutions
4. Invest in Public Transit
5. Improve Safety & Security
6. Protect the Natural Environment
7. Provide Multimodal Options
8. Promote Regional Leadership

Actions under each overarching strategy are included in *Chapter 4. How We'll Get There* (pages 122-124) of the Horizon 2045 plan.⁸

MMLOS, Concurrency, and Impact Fees Overview

While often assumed to be the same, MMLOS, concurrency, and impact fees support one another, but have distinct purposes and definitions. MMLOS is a tool to measure the performance of the transportation system and identify needed improvements for areas that do not meet the community's expectations. MMLOS, as opposed to single-mode LOS (historically just focusing on traffic congestion), involves standards for all modes of transportation used within the community. HB 1181 requires that all jurisdictions develop a set of MMLOS standards.

Concurrency is evaluated as part of the development approval process. This tool requires communities to build new infrastructure in conjunction with expected growth to meet the defined MMLOS standards. However, MMLOS standards are not required to match concurrency standards. For example, a city may have vehicle LOS standards under their MMLOS standards to inform their project list, but could choose to have a system completeness approach to concurrency. This approach requires cities to build person-trip capacity to keep pace with development. If a development would cause a concurrency impact, the city could choose any project from their concurrency list to increase person-trip capacity. This approach allows greater flexibility by not prescribing specific auto capacity projects that a traditional auto LOS concurrency program would result in.

Transportation impact fees are a funding mechanism to help fund these projects. This tool involves charging a fee to a new development that would help the City build new capacity. The GMA authorizes the use of impact fees to fund projects necessary to meet MMLOS standards or concurrency standards. **Figure 1** and **Figure 2** show flowcharts of each of these three tools (**Figure 2** also shows SEPA's relationship – note that SEPA can use MMLOS standards to define thresholds of significance, but it is not required to do so).

⁸ <https://www.srtc.org/wp-content/uploads/2022/01/Horizon-2045-Chapter-4-How-Well-Get-There.pdf> (pg. 122-124)



Figure 1. Flowcharts for MMLOS, Concurrency, and Impact Fee

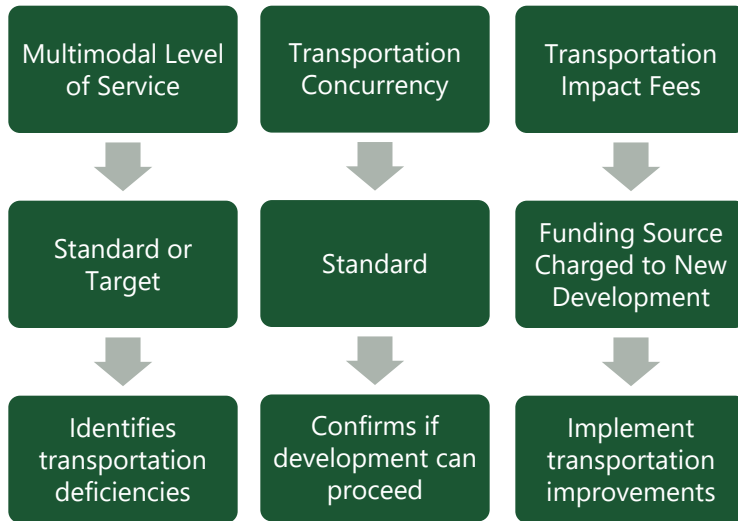
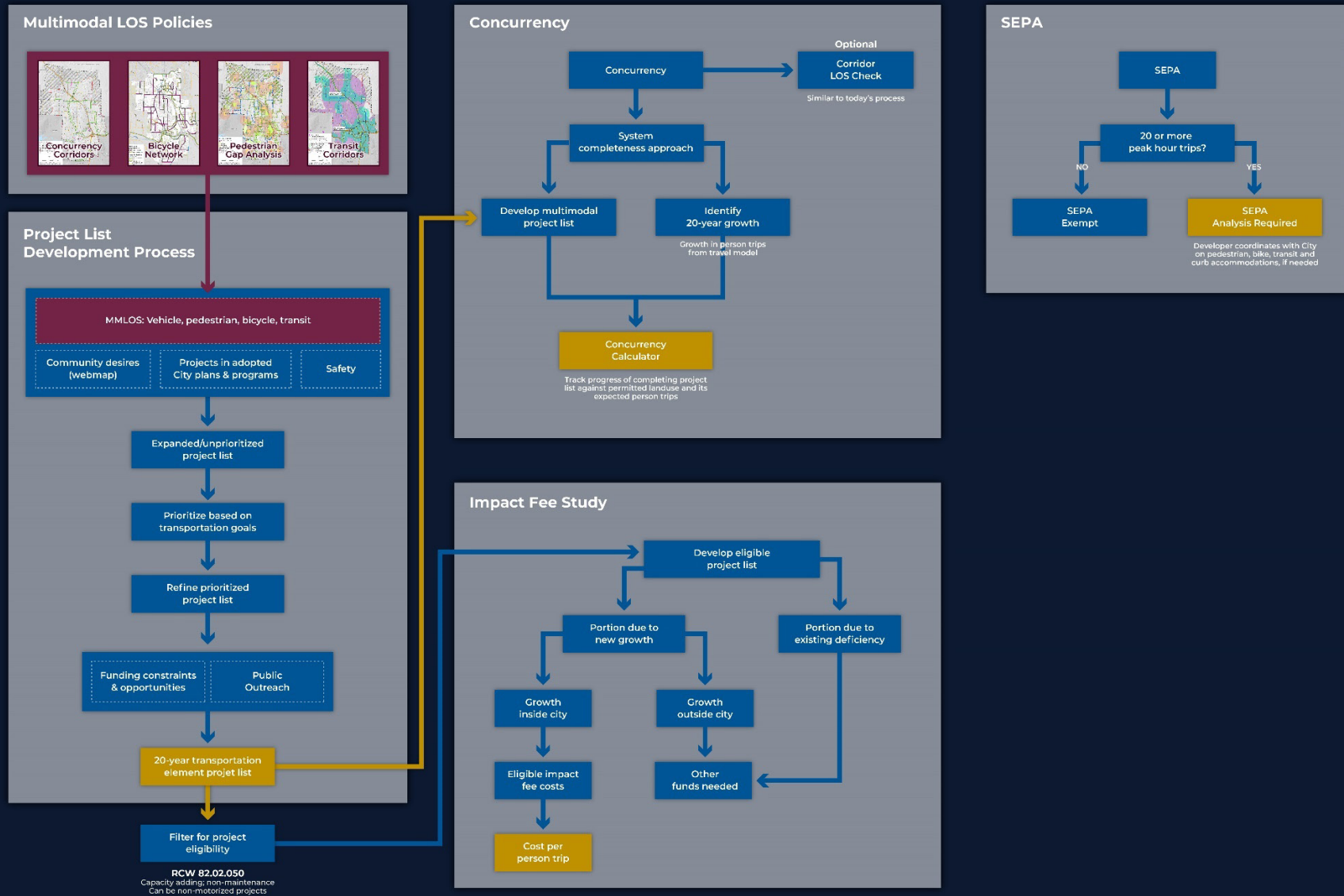


Figure 2. Relationship between MMLOS, Concurrency, Impact Fees, and SEPA

Relationship Between Multimodal Level of Service, Concurrency, and Impact Fees





The GMA requires that jurisdictions define MMLOS standards or targets for arterials, transit services/facilities, and active transportation facilities. The MMLOS standard or target is used to understand what facilities need to be expanded or enhanced to accommodate travel demand and community expectations. They are typically based on facility capacity or the design of the facility. MMLOS helps cities develop comprehensive plans and networks for each mode, and generally dictates “what the city is planning to build, and where”.

The GMA also requires that jurisdictions set a standard to ensure that the planned transportation investments occur in conjunction with growth – this is called transportation concurrency. Concurrency standards can be based on facility capacity, design, or the total multimodal supply of infrastructure. An assessment of concurrency is performed for each new development seeking permits. The city must ensure that the concurrency standard is met within 6 years of identifying a deficiency or development must be denied or modified to meet the concurrency standard. Many jurisdictions have historically used a “capacity” based system for defining a standard and the only mode that is typically capacity-constrained is auto (dominated by SOV trips), which compels the use of public funds to expand the capacity for autos. There is no evaluation given to other modes because they aren’t at capacity. However, by measuring concurrency based only on auto LOS, jurisdictions tend to focus on improvements that benefit autos, potentially at the expense of pedestrians, bicycles, and transit. Anecdotally, many communities have a roadway system that connects to every parcel, but only a partially implemented network for bicycles and pedestrians.

Impact fees are authorized by the GMA to assist with capital project funding. The Washington Administrative Code (WAC) defines impact fees as a one-time fee that can fund new or expanded “system improvements” of “streets and roads.” Impact fee projects must directly address increased demand caused by new development and can only apply to fixed capital projects, not ongoing maintenance or existing deficiencies. Impact fees can also fund capacity-expanding multimodal projects, such as a new multi-use commuter trail. Finally, impact fee schedules must be proportionate to the impact of the development. For example, the impact fees charged for developing a single-family home would be less than the fees charged for developing a 20-unit apartment complex. Impact fees are not required by the state but are a useful funding mechanism to ensure that MMLOS and concurrency requirements are met.

Spokane’s Current Approach

This section outlines the City of Spokane’s current approach to MMLOS, concurrency, and impact fees.

Level of Service

The City of Spokane incorporates a LOS approach that differs in areas across the City. The areas that accommodate more flexibility in LOS standards include downtown, centers, and corridors. These areas, which are targeted for mixed-use type development, include multiple transportation

mode choices are available; elsewhere has fewer transportation mode choices. The approach taken under current conditions differentiates between vehicular LOS and non-motorized LOS. A visualization of LOS is displayed in **Figure 3** and **Table 1** outlines the levels of service based on seconds of delay as defined by the Highway Capacity Manual (HCM) 6th edition.

Figure 3. Intersection Level of Service Visualization

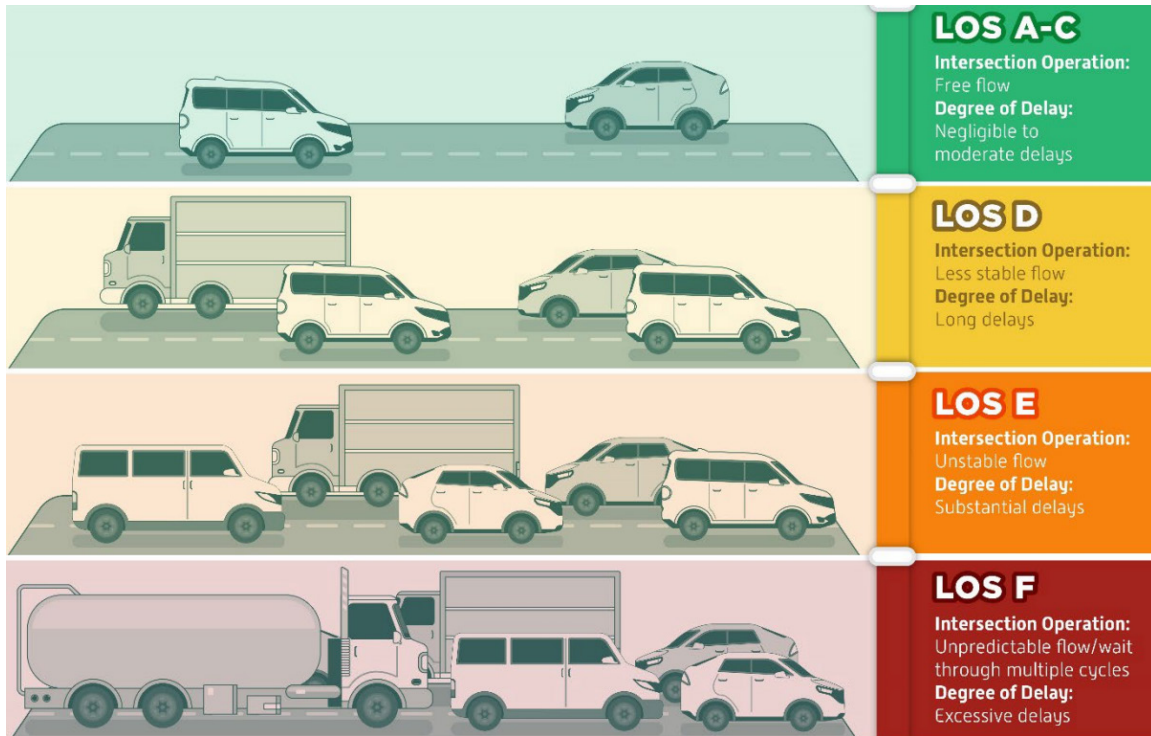


Table 1. Level of Service Delay (seconds)

Letter Grade	Signalized Intersections (average delay for all vehicles)	All-Way Stop-Controlled Intersections and Roundabouts (average delay for all vehicles)	Two-Way Stop-Controlled Intersections (delay for movement)
A	< 10	< 10	< 10
B	> 10 to 20	> 10 to 15	> 10 to 15
C	> 20 to 35	> 15 to 25	> 15 to 25
D	> 35 to 55	> 25 to 35	> 25 to 35
E	> 55 to 80	> 35 to 50	> 35 to 50

F	> 80	> 50	> 50
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Source: Highway Capacity Manual 6th Edition.

Vehicle LOS for locally owned facilities currently utilizes the following LOS standards:⁹

- LOS F, not to exceed 120 seconds of intersection delay at all the following signalized arterial intersections:
 - Within the Downtown and the area bound by and including the Spokane River, Maple Street, 5th Avenue and Sherman Street; and
 - Within zones that implement Centers and Corridors.
- LOS E at all other signalized arterial intersections along Principal arterials, Minor arterials, or Collector arterials.
- LOS E at all unsignalized intersections. Individual approach movements are analyzed at all unsignalized intersections with two-way stop-controlled (TWSC). The average of all movements is analyzed at all-way stop-controlled (AWSC) intersections. The department may allow a lower LOS at unsignalized intersections based on major and minor movement queue length, traffic volume, delay and volume to capacity ratio.

Vehicle LOS for state highways in Spokane are categorized as highways of statewide significance (HSS) and regionally significant highways (non-HSS).

- HSS routes in Spokane
 - I-90 (including ramp terminals)
 - US 2
 - US 395
 - US 195
- Non-HSS routes in Spokane
 - SR 290
 - SR 291

Vehicle LOS for state-owned arterials utilize the following LOS standards (as defined by WSDOT):

¹⁰

- LOS D for all arterial intersections on HSS routes.

⁹ <https://static.spokanecity.org/documents/shapingspokane/comprehensive-plan/chapter-4-transportation-v5-2022-04-28.pdf> (page 4-52)

¹⁰ 2007-2026 Highway System Plan (Appendix G)

- LOS D for all arterial intersections on Non-HSS routes. Typically, the LOS for non-HSS routes is defined by the MPO/RTPO in the Metropolitan Transportation Plan. However, since this MPO/RTPO standard has not been set, the LOS for the HSS routes will apply.

For non-motorized facilities, Spokane has a LOS standard that is based on the percentage of the network completed. This assessment is only used for concurrency purposes.¹¹ To identify the type of non-motorized facility to be built, Spokane relies on its Pedestrian Master Plan, Bicycle Master Plan, and Design Standards.

Concurrency

The City of Spokane uses the same standards for concurrency as the LOS standards presented in the comprehensive plan. Historically, Spokane's system focused only on vehicle concurrency. It has been expanded to include other modes of transportation as concurrency projects to align with state recommendations (see RCW 36.70A.108 and WAC 365-196-840(4)(b)).

The vehicle concurrency policy applies to all city-owned arterials, excluding HSS routes, as per state law, HSS routes are not subject to concurrency. PM peak hour LOS results are used for concurrency purposes, however, the City can request analysis of other time periods to use for other purposes (concerns about safety, operations, etc.). Capacity projects, including intersection and street widening, as well as non-motorized projects are included on the project list to meet concurrency in areas where LOS standards cannot be maintained following a development. Under WAC 365-196-840(6)(i), other types of projects can be used to meet concurrency. This may include improved public transit service, expanding ride share, and implementing demand management strategies.

Spokane also incorporates non-motorized capacity as part of its concurrency program. Concurrency tests are evaluated for non-motorized networks on an annual basis. Pedestrian network concurrency is based on the miles of sidewalk constructed annually as compared to the target mileage. The construction of sidewalks is prioritized by focusing on sidewalks within areas defined as high priority in the City's Pedestrian Master Plan. Bicycle network concurrency is based on the network completion percentage annually. The City sets an annual target for percent of the future bicycle network completion and analyzes whether the network percent constructed meets the target. Spokane has been meeting its targets for network completion.

Impact Fees

The City of Spokane has developed an impact fee program that includes fee reductions and credits. The City identified certain types of developments, including dense development within

¹¹ <https://static.spokanecity.org/documents/shapingspokane/comprehensive-plan/chapter-4-transportation-v5-2022-04-28.pdf> (page 4-53)

specified areas, as development likely to generate fewer PM peak hour vehicle trips than other developments (such as single-family homes). Development that fits into this category would be charged a lower impact fee rate to account for the reduced number of vehicle trips. Specific rate schedules and codes can be found on the City's website.¹²

Spokane is currently in the process of updating its impact fee program to clarify the calculations related to how growth outside of a zone is calculated along with other refinements to make the impact fee program easier for developers to implement. The impact fee project list can be found on the City's website.¹³

Peer Cities Examples

MMLOS, concurrency, and impact fees are tailored to the needs of the community that they serve. This section provides examples of MMLOS, concurrency, and impact fee systems for peer cities in Washington. Descriptions of Bainbridge Island, Bellingham, and Kent are included. Bainbridge Island's system incorporates climate and VMT goals into its planning documents, and has simplified and streamlined its MMLOS, concurrency, and impact fee programs to ensure efficiency. The City of Bellingham provides an example outside of Puget Sound that was an early adopter of multimodal concurrency. The City of Kent has maintained its vehicular LOS criteria for concurrency while incorporating a streamlined set of MMLOS standards. The City of Spokane can look towards pieces of each of these peer city examples to construct a set of programs that meet the needs of the community.

Bainbridge Island

MMLOS

Bainbridge Island is in the process of streamlining its MMLOS, concurrency, and impact fee programs through their 2024 Transportation Element update. The vehicle LOS standards for vehicles are consistent with WSDOT, Washington State Ferries, Kitsap County, and Kitsap Transit documentation.¹⁴ Bainbridge Island requires varying LOS standards based on subarea and roadway classification. The vehicle LOS requirements are outlined below:

- SR 305 Intersections: LOS D (set by WSDOT)
- Winslow Subarea Intersections: LOS E
- Intersections outside of the Winslow Subarea: LOS C

¹² <https://my.spokanecity.org/business/commercial/impact-fees/>

¹³ <https://static.spokanecity.org/documents/smc/appendix/2023/appendix-d-impact-fee-project-list.pdf>

¹⁴ https://www.bainbridgewa.gov/DocumentCenter/View/5632/Chapter3_?bidId= (Page 3-3)

Bainbridge Island is in the process of updating its bike LOS standards to incorporate the Level of Traffic Stress (LTS) principles tailored to street typologies and treatments on the island. The LTS score rider categories are outlined in **Figure 4** and the scoring criteria are included in **Table 2**.

Figure 4. Bike LTS Rider Categories

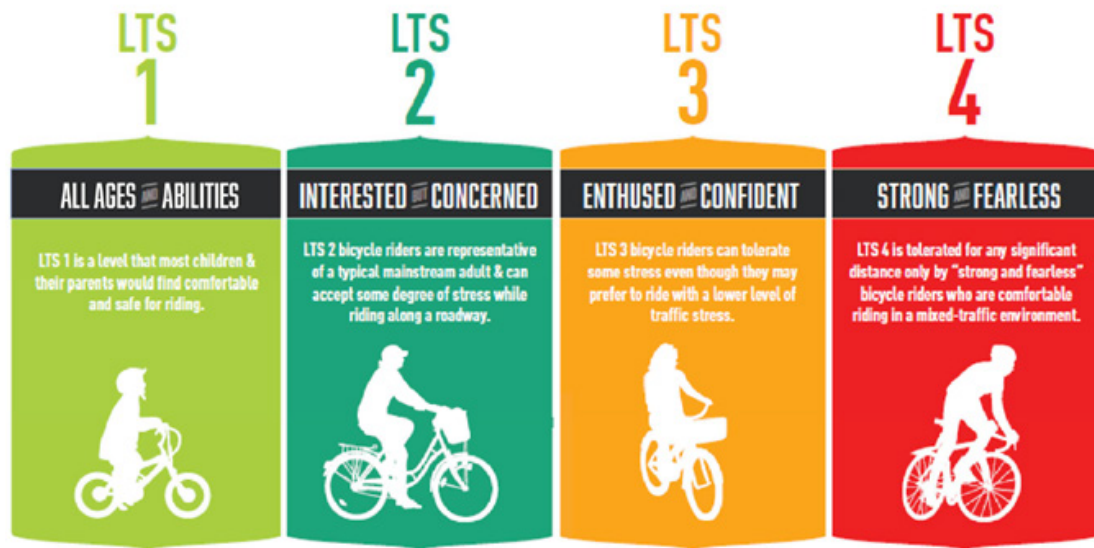


Table 2. Bainbridge Island Bike LTS Structure

Speed Limit (MPH)	Functional Class	No Marking	Sharrow Lane Marking	Striped Bike Lane/ Shoulder	Buffered Bike Lane (Horizontal)	Protected Bike Lane (Vertical)	Physically Separated Bikeway
≤ 20	Local Access	1	1	1	1	1	1
	Collector	1	1	1	1	1	1
	Secondary Arterial	3	2	2	1	1	1
25	Collector	3	3	2	2	1	1
	Secondary Arterial	3	3	3	2	1	1
30	Collector	4	4	3	2	1	1
	Secondary Arterial	4	4	3	3	2	1
35	Collector	4	4	4	3	3	1
	Secondary Arterial	4	4	4	3	3	1
>35	Primary Arterial	4	4	4	4	3	1

Source: City of Bainbridge Island 2024 Transportation Element Update

Bainbridge Island is updating its pedestrian LOS guidance using a corridor-level approach. Policy requirements (including treatment types, side of street, minimum width, and amenity zones) are

required based on the category of corridor. **Table 3** outlines the requirements by corridor type and **Figure 5** maps the corridor types on the island.

Table 3. Bainbridge Island Pedestrian LOS Policy

Corridor Types	Treatment Type	Side of Street	Minimum Width (Pedestrian Through Zone)	Amenity Zone
Neighborhood Centers	Sidewalk	Both Sides	6 ft	4 ft
Trails	Asphalt Path	n/a	10 ft	4 ft
Local Access Street (suburban)	Shoulder	Both Sides	6 ft	n/a
Local Access Street (urban)	Sidewalk	Both Sides	5 ft	n/a
Suburban Collector	Shoulder	Both Sides	6 ft	n/a
Urban Collector	Sidewalk	Both Sides	5 ft	n/a
Secondary Arterial (<30mph)	Sidewalk or Shoulder	Both Sides	6 ft	n/a
Secondary Arterial (≥30mph)	Sidewalk or Shoulder	Both Sides	8 ft	n/a
SR-305	Sidewalk or Asphalt Path	One Side	12 ft	6 ft

Source: City of Bainbridge Island 2024 Transportation Element Update

Pedestrian LOS Policy

- SR 305
- Neighborhood Center
- Secondary Arterial (≥ 30 mph)
- Secondary Arterial (< 30 mph)
- Collector
- Local Access Street
- Winslow Subarea

As part of the GMA requirements, transit LOS standards will also need to be developed as part of MMLOS. Bainbridge Island is still in the process of drafting transit LOS policy.

Concurrency

Bainbridge Island is also updating their concurrency program as documented in Bainbridge Island Municipal Code Chapter 15.32 (Transportation Concurrency).¹⁵ Concurrency, as defined in the Bainbridge Island Municipal code “means that adequate transportation improvements or strategies needed to maintain the adopted LOS standards are in place at the time of development or that a financial commitment is in place to provide the improvements or strategies within six years.”¹⁶ The code states that the City will perform concurrency tests for all non-exempt development applications to determine if capacity meets increased needs caused by the development. Bainbridge Island’s plan update includes a new approach to concurrency: system completeness. This involves the development of a concurrency project list based on the fiscally constrained multimodal project list and measuring if the City’s capacity for growth is keeping pace with development. The City of Bainbridge Island has already developed a multimodal network and related projects. System completeness methodology helps the City track build-out progress of planned projects to ensure that construction is keeping pace with development. As more development occurs, the City must implement a commensurate amount of multimodal projects to keep pace with the growth. For example, if the City has permitted 20% of the planned growth under the Comprehensive Plan, then it must also have completed or committed funding to implement 20% of its multimodal network improvements identified in the Comprehensive Plan. The type and location of the project is at the discretion of the City to implement, based on the transportation demand changes seen as growth occurs. The City of Kent, described later in this section, also utilizes the system completeness approach to concurrency.

Impact Fees

Bainbridge Island’s system for transportation impact fees assess fees based on a cost per PM peak hour person trip, rather than PM peak hour vehicle trip. Person-trip based fee calculations allow non-motorized projects that improve capacity to be included in the impact fee eligible project list. Fehr & Peers worked with the City to develop the TIF project list by removing projects that were not eligible for TIF funding. Removed projects did not add multimodal capacity, addressed only maintenance or safety, or addressed existing deficiencies. The City of Bainbridge Island is only prioritizing multimodal projects, developed from previous sustainability work, to support citywide growth. As a result, the TIF project list includes 49 projects that compose a network of biking, walking, and transit-supportive projects on the city’s roadway system. Auto LOS is only used as a planning tool. The Bainbridge Island impact fee eligible project list is mapped in **Figure 6**.

¹⁵<https://www.codepublishing.com/WA/Bainbridgelsland/html/Bainbridgelsland15/Bainbridgelsland1532.html>

¹⁶<https://www.codepublishing.com/WA/Bainbridgelsland/html/Bainbridgelsland15/Bainbridgelsland1532.html>

Figure 6. Bainbridge Island Impact Fee Projects



To calculate the cost per person trip generated by a development, Fehr & Peers has calculated a conversion factor for each land use category to convert ITE vehicle trip rates to person trip rates. The conversion factors for land use categories on Bainbridge Island were based on the PSRC household travel survey.

Bellingham

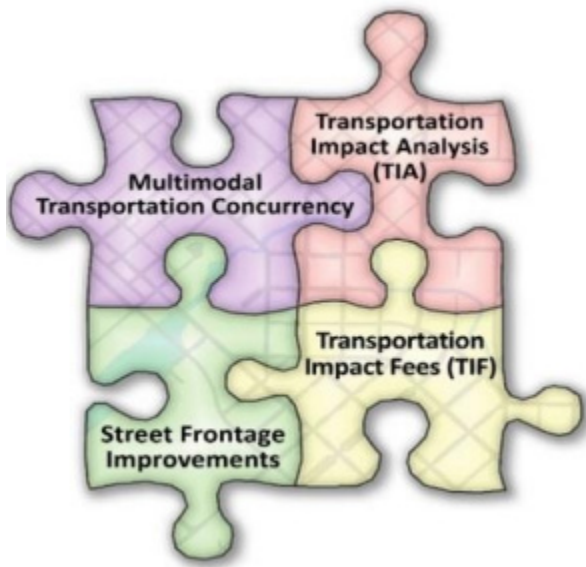
MMLOS

The City of Bellingham's MMLOS is wrapped into its multimodal transportation concurrency requirements. **Figure 7** provides a graphic of how these programs interact. Policy T-21 in Bellingham's 2016 Transportation Element states "Calculate 'Person Trips Available by Concurrency Service Area' as Bellingham's adopted LOS standard to serve planned growth in different parts of the City. Per BMC 13.70 Multimodal Transportation Concurrency, Bellingham and the UGA are divided into Concurrency Service Areas (CSA) based on differing land use contexts and multimodal LOS is calculated for each CSA using the following performance measurements:

- Completeness of sidewalk network;
- Completeness of bicycle network;
- WTA transit capacity, transit route frequency, and transit ridership;
- Vehicle traffic volume to capacity; and
- Access to multiuse trails."¹⁷

¹⁷ <https://cob.org/wp-content/uploads/2016-comp-plan-trans-element.pdf> (page 14)

Figure 7. Bellingham Structure of Multimodal Transportation Concurrency, TIA, Frontage Improvements, and TIF



Bellingham was relatively early to adopt standards for non-vehicular modes of transportation, prior to the MMLOS requirement in the GMA. Bellingham's approach allows the City to track traditional auto LOS at locations within each CSA, but a "failing" LOS at an intersection does not trigger the immediate need to add capacity at that location. Bellingham's approach is reliant on a strong pedestrian and bicycle master plan, that allows the City the ability to implement other modal improvements in lieu or in conjunction with traditional auto capacity improvements. From a MMLOS standpoint, Bellingham's approach is very similar to Spokane's, however, as noted in the next section, their concurrency program offers the city more flexibility on how to add transportation capacity to accommodate growth.

Concurrency

Bellingham's concurrency program is in sync with MMLOS requirements set for each mode. The program is complex, but recognizes the different land use, transportation network, and transit service variations across the city. Bellingham Municipal Code Chapter 13.70 outlines the current process and exemptions from concurrency and LOS standards.¹⁸ In BMC 13.70, concurrency (providing adequate transportation facilities) is required in Bellingham within three years of development, including meeting standards for multimodal facilities.¹⁹ The values in **Table 4** are used to calculate a "concurrency metric" for each mode in each CSA. This provides a system completeness score to understand concurrency in each of the three service areas. Note that

¹⁸ <https://bellingham.municipal.codes/BMC/13.70>

¹⁹ <https://bellingham.municipal.codes/BMC/13.70>

within Bellingham's program, dense areas like Downtown (Type 1 CSA), place a greater emphasis on buildout of the pedestrian and bicycle network and the frequency and utilization of transit, with a lower weight on vehicle LOS. The opposite is true of lower density Type 3 CSAs. This approach to concurrency means that if an intersection is not meeting the LOS expectation, the City can choose to implement non-motorized improvements or work the local transit agency to improve bus service as an alternative to widening the intersection. This approach is more complex than the pure system completeness metric used by Bainbridge Island but has the advantage of clearly identifying traffic congestion issues as part of the concurrency metric, which is important to Bellingham residents. The system has a disadvantage in the fact that it is reliant on transit service provided by an entity not under City control and the relatively high cost to calculate all the metrics across multiple CSAs on an annual basis.

Table 4. Bellingham Transportation Concurrency Standards

Mode	Transportation Concurrency Service Areas		
	Type 1 ¹	Type 2 ²	Type 3 ³
Motorized			
Auto			
Mode weight factor ⁴	0.70	0.80	0.90
Transit			
Mode weight factor ⁵	1.00	1.00	0.80
Nonmotorized			
Pedestrian			
Percent threshold for minimum system complete ⁶	50%	50%	50%
Person trip credit for 1% greater than minimum threshold ⁷	20	20	20
Mode weight factor ⁸	1.00	0.90	0.80
Bicycle			
Percent threshold for minimum system complete ⁶	50%	50%	50%
Person trip credit for 1% greater than threshold ⁷	20	0	20
Mode weight factor ⁹	1.00	0.90	0.80
Multi-Use Trails¹⁰			
Person trip credit for each 1% of bicycle ¹¹	10	10	10
Mode weight factor ¹²	1.00	0.90	0.80

1. Type 1 = Urban village areas with adopted master plan or high-density mixed use zoning.
2. Type 2 = Medium density areas adjacent to and influenced by urban villages.
3. Type 3 = Lower density and auto-oriented areas outside of urban villages.
4. Auto mode weight factor considers the importance of roadways to a service area, relative to the availability of other mode alternatives.
5. Transit mode weight factor considers the availability/viability of the transit mode to a service area.
6. This is the minimum level of the planned system completed for it to be considered a viable mode alternative.
7. Person trips credited to service area based on the amount of the system completed minus the minimum threshold.
8. Pedestrian mode weight factor considers the importance of pedestrian facilities to a service area, relative to land use and travel patterns.
9. Bicycle mode weight factor considers the importance of bicycle facilities to a service area, relative to land use and travel patterns.
10. Multi-use trails = relatively level, multi-use trails connecting activity centers, destinations, and biking facilities.
11. Person trips credited to service area based on each comparative 1% of the total planned bike system adopted in comprehensive plan. Ten rather than 20 person trip credits are awarded for each 1% in recognition that not all bicyclists will be able to make use of off-street gravel trails.
12. Multi-use trail mode weight factor considers the importance of bike-friendly trails to a service area, relative to land use and travel patterns.

Source: City of Bellingham Transportation Concurrency

Impact Fees

Bellingham's Multimodal Transportation Impact Fee (TIF) program incorporates person-trip capacity expanding projects of all modes. Like Bainbridge Island, Bellingham also converts the ITE PM peak vehicle trip rates to person trip rates using a ratio based on the City of Bellingham data and the WCOG model as well as other TIF programs in Washington. Bellingham's multimodal TIF program also includes a reduction for development within the City's Urban Villages. This provides an economic incentive that rewards development in compact, mixed-use designated urban villages within Bellingham. These areas have more complete sidewalk and bicycle networks and maintain WTA high-frequency transit.²⁰ The City of Bellingham has a wider range of projects on their impact fee eligible project list, totaling 123 projects included in the 2018 Rate Study.²¹

Kent

MMLOS

The City of Kent's Transportation Master Plan (TMP) was adopted in March 2021 and includes a vision for each mode of transportation in the city using MMLOS principles. The layered network MMLOS approach taken in Kent is very similar to that of Bainbridge Island. **Table 5** outlines the LOS standards that apply to vehicles on Kent's roadways under the 2021 TMP.

²⁰ <https://cob.org/wp-content/uploads/Bellingham-TIF-Rate-Study.pdf> (page 7)

²¹ <https://cob.org/wp-content/uploads/Bellingham-TIF-Rate-Study.pdf> (page 31)

Table 5. Vehicle LOS Standards by Corridor Type

Corridor Type	LOS Standard
Frequent Transit Corridors	LOS D
Isolated Intersections in Downtown	LOS F (maximum 90 seconds of delay)
State Facilities	WSDOT standard (LOS D or E)
All other Citywide corridors	LOS E average

Source: City of Kent 2021 Transportation Master Plan

Like Bainbridge Island, Kent has adopted the LTS methodology for bicycle LOS. The rider categories are the same between the two cities, however, Kent utilizes arterial traffic volume as opposed to street classification. The structure that Kent has implemented is shown in **Table 6** and mapped in **Source: City of Kent 2021 Transportation Master Plan**

Table 7. Kent Recommended Bike Facility Treatments at an Intersection

Bike LOS/LTS	Bike Signal	Street Crossing	Approach to Intersection	Approach to Intersection with Right Turn Lane
LOS 1	Bike Signal	Green solid or skip-stripe	Green bike box	Curb ramp to wide sidewalk, Dutch intersection
LOS 2	Bike Signal	Skip stripe	Bike box	Green bike lane to left of turn lane
LOS 3	Green Cycle Length	Sharrow lane markings	Automatic signal actuation	Bike lane to the left
LOS 4	No specific design guideline for LTS/LOS 4			
Trail or Mid-Block Crossing	Full signal or HAWK or RRFB	Green solid or skip-stripe	N/A	N/A

Source: City of Kent 2021 Transportation Master Plan

Figure 8. Kent also includes intersection treatments by LTS category (see **Table 7**).²²

²² <https://www.kentwa.gov/home/showpublisheddocument/16632/637505338861430000> (page 67)

Table 6. Kent Bike LTS Structure

Speed Limit (MPH)	Arterial Traffic Volume	No Marking	Greenway/ Bike Boulevard	Striped Bike Lane	Buffered Bike Lane (Horizontal)	Separated Bike Lane (Vertical)	Physically Separated Bikeway
≤ 20	Any	1	1	1	1	1	1
25	<1.5k	1	1	1	1	1	1
	1.5-7k	3	2	2	2	1	1
	≥7k	3	3	2	2	1	1
30	<7k	4	4	2	2	1	1
	7-15k	4	4	3	2	1	1
	15-25k	4	4	3	3	2	1
	≥25k	4	4	3	3	2	1
35	<25k	4	4	3	3	3	1
	≥25k	4	4	4	3	3	1
>35	Any	4	4	4	4	3	1

Source: City of Kent 2021 Transportation Master Plan

Table 7. Kent Recommended Bike Facility Treatments at an Intersection

Bike LOS/LTS	Bike Signal	Street Crossing	Approach to Intersection	Approach to Intersection with Right Turn Lane
LOS 1	Bike Signal	Green solid or skip-stripe	Green bike box	Curb ramp to wide sidewalk, Dutch intersection
LOS 2	Bike Signal	Skip stripe	Bike box	Green bike lane to left of turn lane
LOS 3	Green Cycle Length	Sharrow lane markings	Automatic signal actuation	Bike lane to the left
LOS 4	No specific design guideline for LTS/LOS 4			
Trail or Mid-Block Crossing	Full signal or HAWK or RRFB	Green solid or skip-stripe	N/A	N/A

Source: City of Kent 2021 Transportation Master Plan

Figure 8. Kent Proposed Bike LTS Network

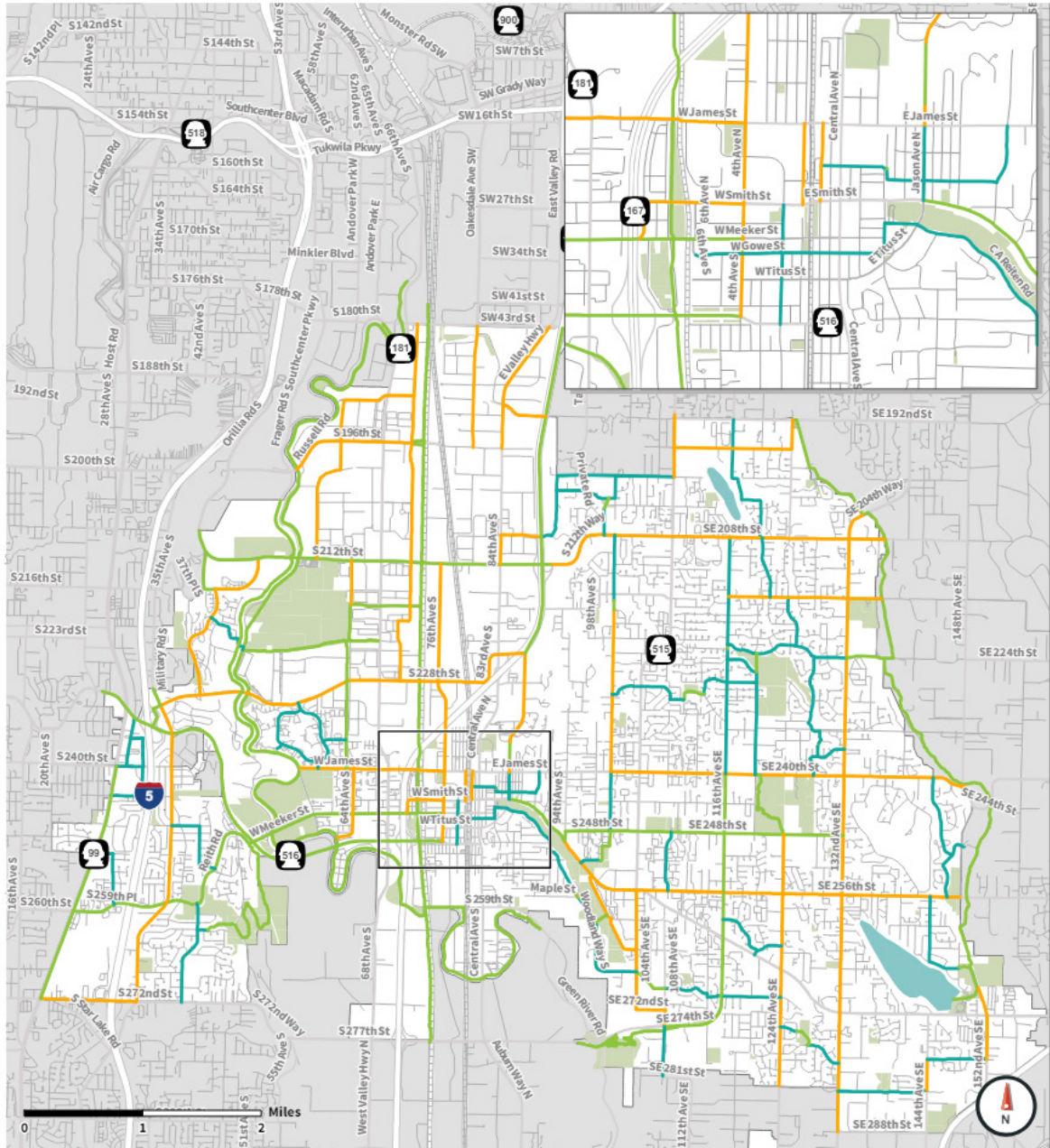


Figure 25
Proposed Bicycle Level of Stress Network

LTS

- 1
- 2
- 3

Kent has incorporated pedestrian LOS standards based on sidewalk design elements that aim to provide a comfortable environment for people walking. The treatments required to meet these needs change based on roadway type and land use context. **Table 8** outlines the facility requirements based on land use and street classification context and **Figure 9** maps the corridor types and areas within the City.²³

Table 8. Pedestrian Level of Service Policies in Kent

Component	Downtown /TODs	Areas of High Pedestrian Activity	Industrial Collector Arterials/Principal Arterials/Critical Residential Corridors	Arterials Elsewhere
Minimum Sidewalk Width	8 feet	8 feet	8 feet	6 feet
Minimum Amenity Zone Width	4 feet	4 feet	Industrial Collector Arterials: 2 feet Principal Arterials: 4 feet	4 feet
Arterial Crossing Frequency	≤ 330 feet	Within 300 feet of a stop pair along FTN ¹ or community asset ² Elsewhere, ≤660 feet	Within 300 feet of a stop pair along FTN or community asset Elsewhere: ≤1,320 feet	Within 300 feet of a stop pair along FTN or community asset Elsewhere: ≤1,320 feet
Sidewalk – Side of Street	Both	Both	Both	Both

1. Frequent transit network

2. A community asset is defined as a park, school, community center, or library

Notes: This table applies to arterial roadways, which include minor arterials, industrial collector arterials, and residential collector arterials. The listed minimum sidewalk width does not include the amenity zone.

Source: City of Kent 2021 Transportation Master Plan

²³ <https://www.kentwa.gov/home/showpublisheddocument/16632/637505338861430000> (page 64)

Figure 9. Kent Pedestrian Network

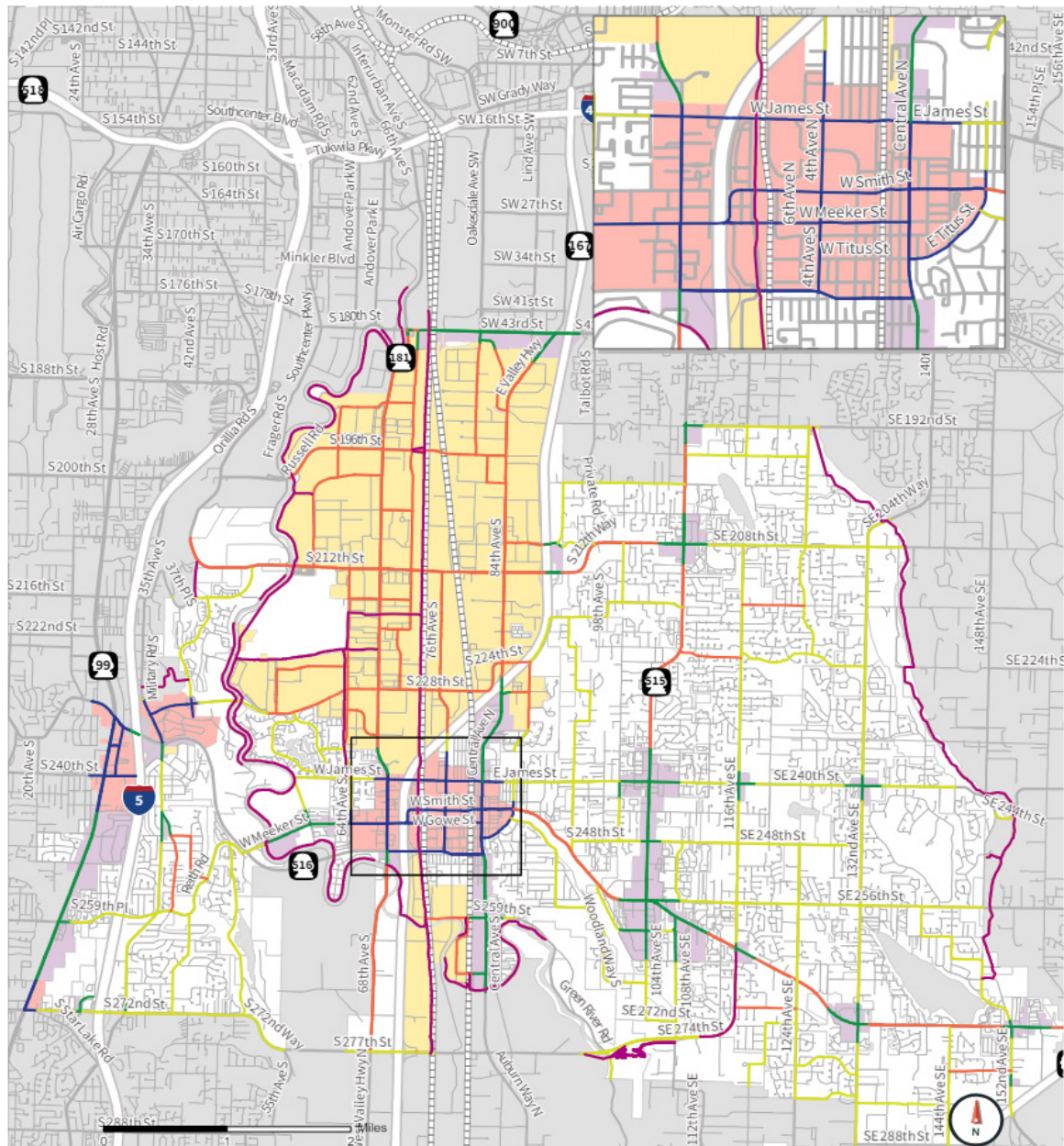


Figure 23
Pedestrian Network

Kent has included transit standards within the City. Since outside transit agencies (Sound Transit and King County Metro) operate in Kent, the City has limited ability to require changes to the transit routes, operations, and frequency. Instead, Kent is able to ensure that corridors are accommodating to transit service. **Table 9** outlines the guidelines for citywide transit treatments and the corridors are mapped in **Figure 10**.²⁴

Table 9. Kent Guidelines for Transit Treatments

Stop Component	Local Transit Corridor	Frequent and Express Transit Network Corridor
Weather Protection	Yes, priority with 25+ daily boardings	Yes for Rapid Ride stops, priority with 25+ daily boardings on other Frequent/Express stops
Seating	Yes, adjacent to community assets	Yes for Rapid Ride stops, priority with 25+ daily boardings on other Frequent/Express stops
Paved Bus Door Passenger Zone	Yes, zone length 25-30 feet	Yes, zone length 60 feet
Wayfinding	Yes, priority with 25+ daily boardings	Yes for Rapid Ride stops, priority with 25+ daily boardings on other Frequent/Express stops
Other Amenities (trash, lighting, bike parking)	Yes, priority with 25+ daily boardings	Yes for Rapid Ride stops, priority with 25+ daily boardings on other Frequent/Express stops

Source: City of Kent 2021 Transportation Master Plan

²⁴ <https://www.kentwa.gov/home/showpublisheddocument/16632/637505338861430000> (page 70)

Figure 10. Kent Transit Network Corridor Types

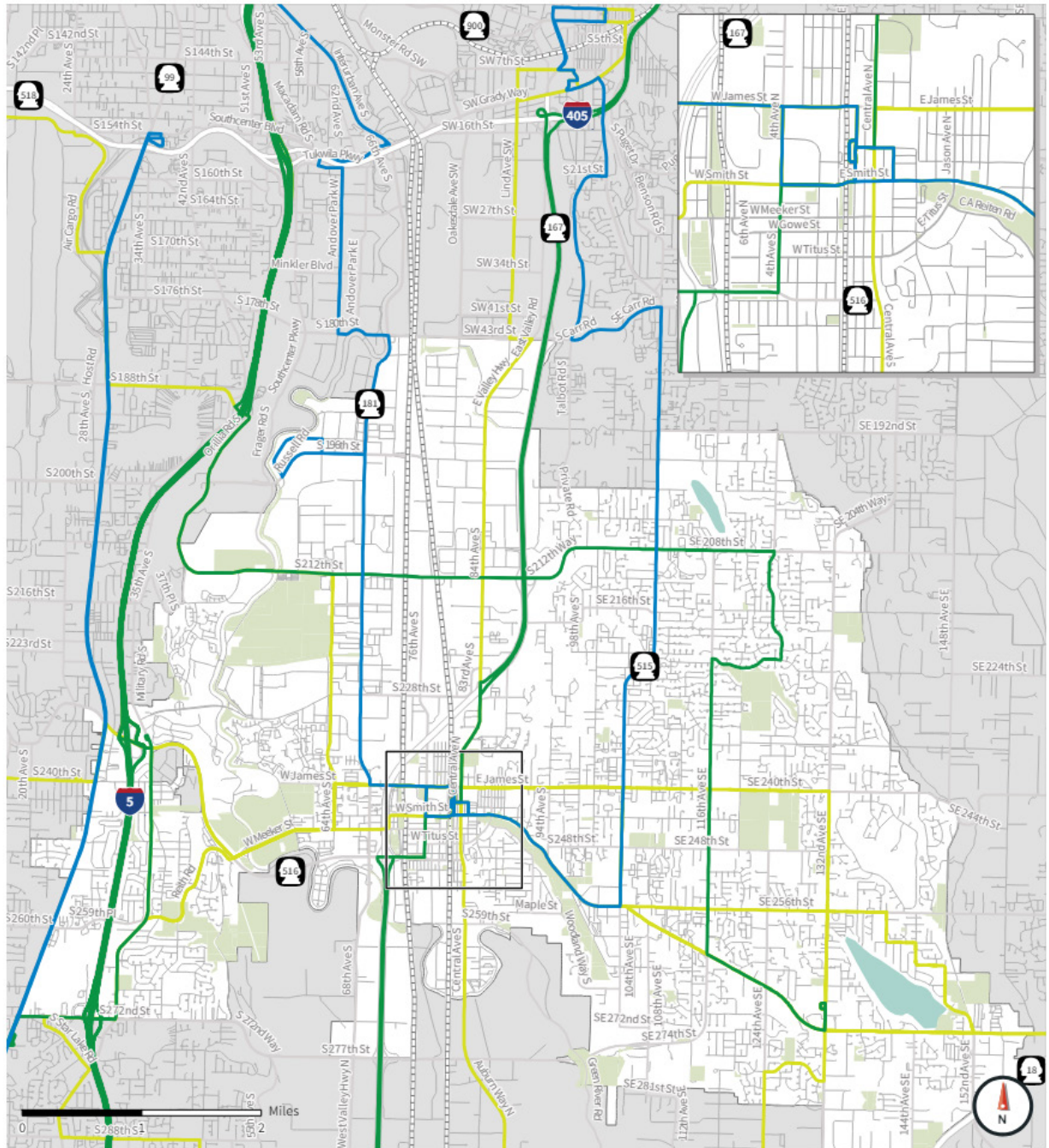


Figure 26
Transit Network

Bus Route Type

— Frequent — Express — Local

Concurrency

Kent updated its concurrency program alongside the transportation master plan update and impact fee update in 2021. The concurrency program update moves to a City-wide capacity assessment based on the supply and demand of person trips, or “mobility units.” The new system tracks that the implementation of new transportation infrastructure (mobility unit supply) is keeping pace with land use development, which generates person trips (e.g., mobility unit demand).²⁵ The list of eligible concurrency projects is derived from three categories:

- Transportation projects that are fully funded from the City’s six-year Transportation Improvement Program (TIP) – these projects are automatically assumed to provide mobility unit supply for concurrency.
- Transportation projects from the Prioritized Project list from the City’s Transportation Master Plan (TMP) update – these projects provide mobility unit supply for concurrency once a funding commitment is made within six years.
- Any other transportation investment that adds person trip capacity to the system that may be funded outside of the above project lists - the City has discretion about whether to count this infrastructure toward the City’s mobility unit supply in concurrency, but allowing for its inclusion recognizes how transportation infrastructure works as a system regardless of how it’s funded.

To aid in the tracking of new transportation system capacity/mobility units of supply, Fehr & Peers developed a concurrency tracking spreadsheet. A screenshot of the spreadsheet is shown in **Figure 11**. The spreadsheet enables the City to quickly understand whether a proposed development has an adequate number of mobility units of supply, relative to its demand (person trips). In this way, Kent can program and implement new concurrency projects in a way that tracks with the growth trends in the city. As with Bellingham, this program allows flexibility if a vehicle LOS standard is not being met by allowing the City to implement a project that can serve person-trip capacity from another mode or expand vehicle capacity on parallel street. This is important for Kent, which is largely built-out and in some places does not have space to further expand vehicle capacity.

²⁵ <https://www.codepublishing.com/WA/Kent/html/Kent12/Kent1211.html>

Figure 11. Screenshot of Transportation Concurrency Tracking Spreadsheet Tool (Kent)

CITY OF KENT TRANSPORTATION MASTER PLAN **Mobility Units Concurrency Calculator** version 0.95

Mobility Units Summary

Number of Projects Completed or Funded in Next 6 Years	Capital Cost	Mobility Units Capacity from Completed or Funded Projects	Mobility Units Consumed by Development	Mobility Units Remaining
41	\$252,004,000	8,311 ▶	0	8,311

Additional Mobility Units Supply from Other Developments

Pedestrian Facilities: Mobility Units Supply	Bicycle Facilities: Mobility Units Supply	New Roadway: Mobility Units Supply	Enhanced Crossing Treatments: Mobility Units Supply	Transit Supportive Infrastructure: Mobility Units Supply
0 ▶	0 ▶	0 ▶	0 ▶	0 ▶

Project List

[Go to Project List](#) Click on the button to access the project list. You can add or modify projects and update project status.

Development Section

Permit Number	Description of Development	Land Use and ITE Category	Unit Value	
	<Enter development description here>	000 Custom Land Use		mobility units

[Add Development](#)
[Del Development](#)

List of Developments

Permit Number	Developments Description	ITE Category	Size	Unit	Mobility Units	Notes

Impact Fees

The impact fee program, outlined in Kent City Code Chapter 12.14, utilizes a person-trip-based fee calculation, which includes non-motorized capacity of projects.²⁶ The program evaluates person trip generation of development as a means for developing a fee. Fee reductions are included for developments occurring in Downtown Kent and in the Midway subarea. Although Spokane has different impact fees by zone, Spokane's approach is distinct from Kent's reduction areas. Kent only includes specific areas where a reduction is present, focusing on downtown, which allows denser development, as well as Midway, which will be upzoned with the new Link Light Rail station. On the other hand, Spokane impact fee zones cover the entire city, some of which have no fee. In Kent, all developments incur a fee, and some areas have reduced fees to promote development. Maintaining a fee reduction encourages development in the specific reduction subarea. Because these subareas have greater density than the rest of the city and more transportation options, the number of vehicle trips generated from a development within the subarea is expected to be lower than development in areas outside of the identified subareas. Therefore, development in the subareas results in less of an impact to the transportation network, which justifies a lower impact fee rate. Overall, the calculation for impact fees in Kent uses a very similar structure to that in Bellingham. For more details on the calculation process, the Transportation Impact Fee Rate Study records the methodology used in Kent.²⁷

²⁶ <https://www.codepublishing.com/WA/Kent/html/Kent12/Kent1214.html>

²⁷ <https://www.kentwa.gov/home/showpublisheddocument/17338/637629888297870000>

Peer Cities Summary

Table 10. MMLOS, Concurrency, and Impact Fee Comparison Table compares Spokane’s approach to MMLOS, concurrency, and impact fees to each of the three peer cities.

Table 10. MMLOS, Concurrency, and Impact Fee Comparison Table

Spokane		Bainbridge Island	Bellingham	Kent
MMLOS				
Metric	Vehicle: LOS Standard Non-motorized: based on plans and standards	Vehicle: Intersection Delay Bike: LTS Ped: Amenities	Vehicle: Volume/Capacity Bike/Ped: based on plans and standards Transit: Capacity, Frequency, and Ridership	Vehicle: Corridor Delay Bike: LTS Ped: Amenities Transit: Amenities by corridor
How to Apply	Standard, per Transportation Element	Standard, per Transportation Element	Calculation by CSA outlined in 2016 Transportation Element	Standard, per Transportation Element
Concurrency				
Metric	Vehicle: LOS standard Non-Motorized: System Completeness	System Completeness	Calculated concurrency metric based on vehicle volume/capacity, transit capacity, frequency, and ridership, and non-motorized system completeness	System Completeness
How to Apply	Vehicle: PM Peak Hour Non-motorized: Annual construction review in each district	City-wide capacity assessment	Calculations for each of 20 CSAs; updated annually	City-wide capacity assessment
Impact Fees				
Metric	PM peak hour vehicle trips	PM peak hour person trips	PM peak hour person trips	PM peak hour person trips
Fee Reduction	Lower fees in areas with fewer projects and PM peak trips generated	None	Development in the Urban Villages	Development in Downtown Kent and Midway Subarea



Equity and Safety in Project Identification

The GMA explicitly requires the incorporation of equity and safety considerations as part of the project prioritization process. Spokane's project prioritization matrix, used for street reconstruction projects, includes six evaluation categories:²⁸

- Transportation Choices
- Access to Daily Needs
- Economic Opportunity
- Natural & Neighborhood Assets
- Enhance Public Health & Safety
- Fiscal Responsibility

The Disadvantaged Accessibility subcategory of the Access to Daily Needs evaluation category addresses equity concerns and awards points to areas with disadvantaged accessibility. This increases the priority level of projects in underserved areas.²⁹ The Enhance Public Health & Safety category contains four subcategories: Vehicle Safety, Bike Safety, Pedestrian Priority Area, and Pedestrian Safety. These scoring criteria award points to projects based on the extent of safety improvements by mode.³⁰

While Spokane currently integrates safety and equity into project prioritization, it is beneficial to review prioritization methodology from across the state and ensure that equity and safety remain at the forefront of the updated comprehensive plan. Bellevue, Tacoma, Tukwila, and Vancouver provide examples methodology for incorporating equity into prioritization in Washington State.

Bellevue

Improving safety and considering equity account for two of the four goals of the Bellevue Mobility Implementation Plan (MIP). In prioritizing projects, projects are evaluated based on their location relative to the high injury network (HIN) and equity composite index (see **Figure 12** and **Figure 13**). The HIN is developed by identifying corridors with the highest risk of injury resulting from a collision on the transportation network. The equity composite index compiles information on the following components:³¹

- Housing costs as percentage of income (renter-occupied)
- Limited English proficiency households

²⁸ <https://static.spokanecity.org/documents/shaping Spokane/comprehensive-plan/appendix-d-v2-2023-03-13.pdf> (page 9)

²⁹ <https://static.spokanecity.org/documents/shaping Spokane/comprehensive-plan/appendix-d-v2-2023-03-13.pdf> (page 16)

³⁰ <https://static.spokanecity.org/documents/shaping Spokane/comprehensive-plan/appendix-d-v2-2023-03-13.pdf> (page 22-25)

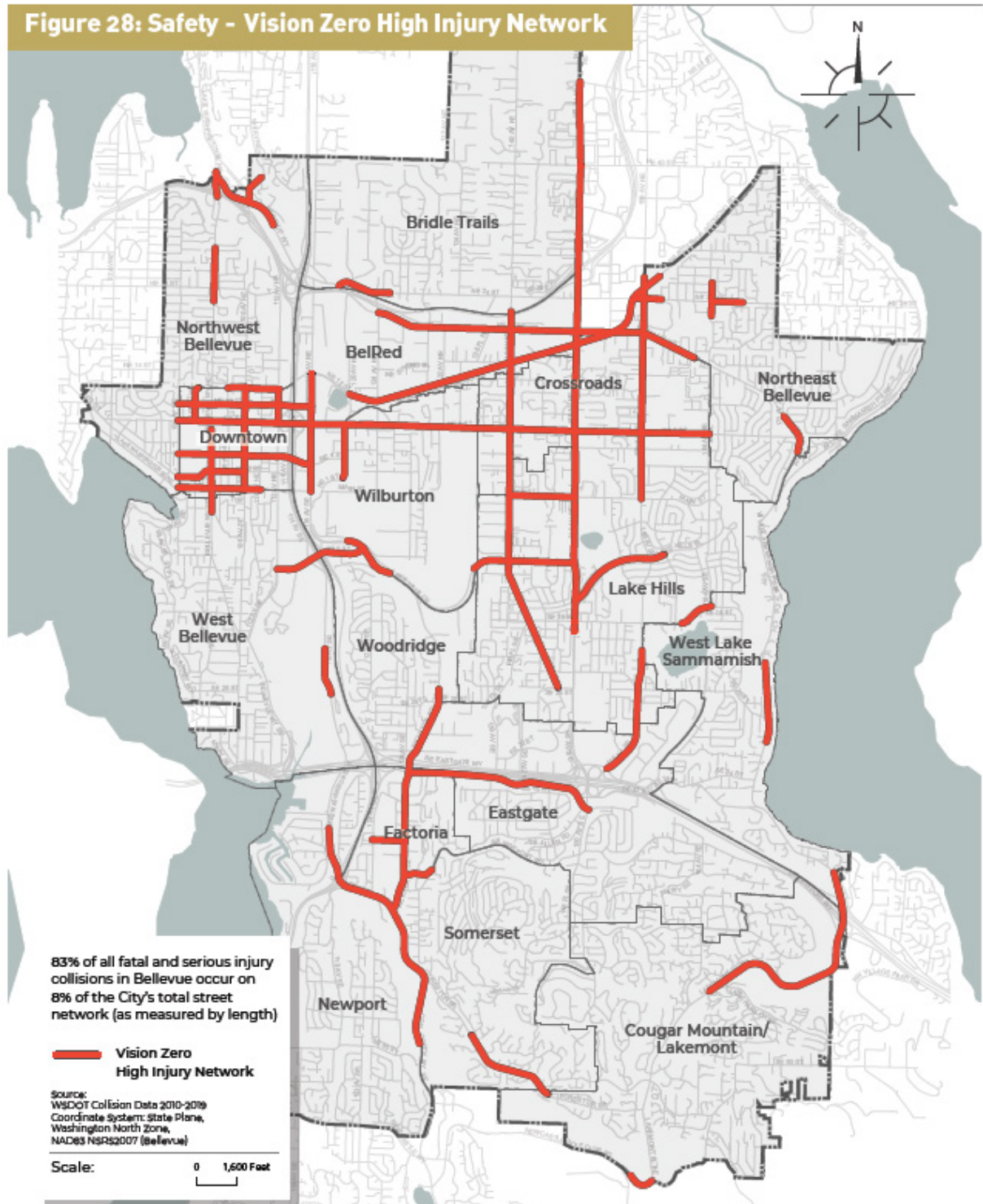
³¹ <https://bellevuewa.gov/city-government/departments/transportation/planning/infrastructure-and-subareas/mobility-implementation-plan>

- Low-income households
- Low-wage jobs (based on job location)
- People of color
- People over age 64
- People under age 18
- People with a disability
- Single-parent households
- Zero-vehicle households

Projects that further the safety and equity goals receive more points and increase priority level on the project. Scores for each goal are summed along with a supplemental score to reach a final score for each project. For more information on project prioritization used in the Bellevue MIP, see Appendix G of the final plan.³²

³² https://bellevuewa.gov/sites/default/files/media/pdf_document/2022/Bellevue_MIP_Vol1%262_8.1.22.pdf

Figure 12. Bellevue Vision Zero High Injury Network Map

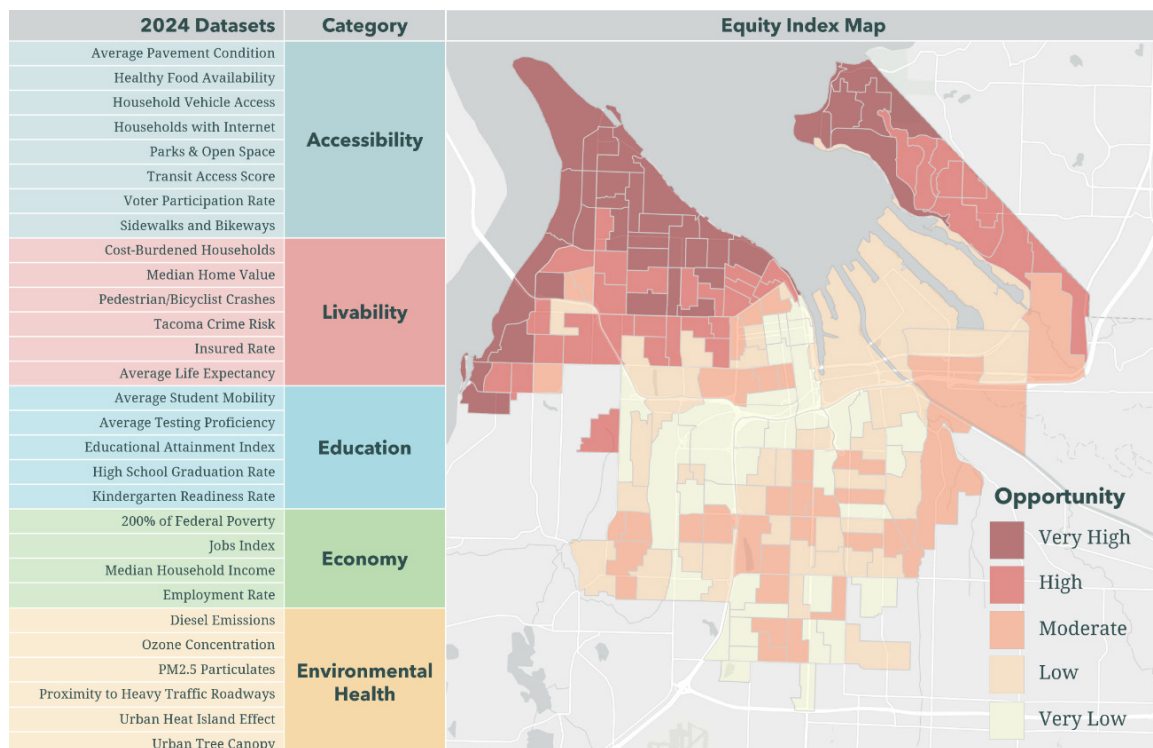


Consider Equity

Tacoma

The City of Tacoma maintains an Equity Index in the City and incorporates this into citywide decision making.³³ The research and data focuses on where opportunities are concentrated within Tacoma to understand what areas need additional support to ensure sufficient opportunities. A map of the Tacoma equity index is shown in **Figure 14**. Tacoma maintains an online StoryMap containing equity index case studies to operationalize equity goals.³⁴

Figure 14. Tacoma Equity Index Map



Tukwila

The City of Tukwila provides an in-progress example of incorporating equity into project evaluation metrics. Equity is one of the five Transportation Element goals, defined using the following guiding principle: “Ensure fair access to healthy, affordable, reliable transportation options, livable places, and jobs, particularly for historically marginalized and vulnerable populations.” The equity goal includes two evaluation criteria, which are scored using the matrix outlined in **Table 11**. The scores are normalized and weighted based on community feedback.

³³ <https://www.cityoftacoma.org/cms/One.aspx?portalId=169&pageId=175030>

³⁴ <https://storymaps.arcgis.com/collections/2526c69ee8164e93a63929dc3d2e9997?item=1>

The total score of the below equity metrics is weighted 20% against the other four goals (Safety 35%, Connectivity 20%, Adaptability 10%, and Environment 15%).

Table 11. Tukwila Equity Goal Evaluation Criteria

Community Outreach and Engagement		Delivery of Transportation Services
Description	Project is supported by community members. The community is meaningfully engaged in identifying how the project supports community needs and goals.	Project provides access to healthy, affordable, reliable transportation options in areas with historically marginalized or vulnerable populations.
4 Points	High community support	Result in substantial increase in access for historically marginalized or vulnerable populations (new mode/route options or significant reduction in travel time)
2 Points	Moderate community support	Modest improvement in access for historically marginalized or vulnerable populations
0 Points	No community support	Has no impact to historically marginalized or vulnerable populations

Source: City of Tukwila 2024 Transportation Element Update

Safety also one of the five Transportation Element goals, defined using the following guiding principle: “Provide safe transportation infrastructure and improve personal comfort to emphasize Tukwila as a welcoming place.” The safety goal includes three evaluation criteria, which are scored using the matrix outlined in **Table 12**. Like the equity goal, the scores for safety are normalized and weighted based on community feedback. The total score of the below safety metrics is weighted 35%, the highest weight among the other four goals.

Table 12. Tukwila Safety Goal Evaluation Criteria

	Safe and Comfortable Options	Crossing Safety	Collision History
Description	Project improves levels of comfort and desirability of walking, biking, rolling or using transit.	Project provides new or improved crossing treatment (e.g. restriping, RRFB, curb ramps, crossing island, curb extension, reduced pedestrian exposure, new signal, reduced motor vehicle turning speed, narrowed curb return, etc.).	Project is identified as a priority project in Tukwila's Local Road Safety Plan (LRSP).
4 Points	Improves LTS score by at least 1 point or increases sidewalk width or adds buffer or improves ADA compliance or improves stop amenities and is in high pedestrian-use area (adjacent to a light rail station or commercial uses)	Improves or adds a crossing treatment (e.g. restriping existing crosswalk, adding curb ramps, RRFB) and in a high pedestrian use area (adjacent to a light rail station or commercial uses)	Identified as a high-priority project in Tukwila's LRSP
2 Points	Improves LTS score by at least 1 point or increases sidewalk width or adds buffer or improves ADA compliance or improved stop amenities	Improves or adds a crossing treatment (e.g. restriping existing crosswalk, adding curb ramps, RRFB).	Identified as a priority project in Tukwila's LRSP
0 Points	No improvements in level of comfort or desirability	Provides little to no improvements to crossing treatment	Not identified in Tukwila's LRSP

Source: City of Tukwila 2024 Transportation Element Update

Vancouver

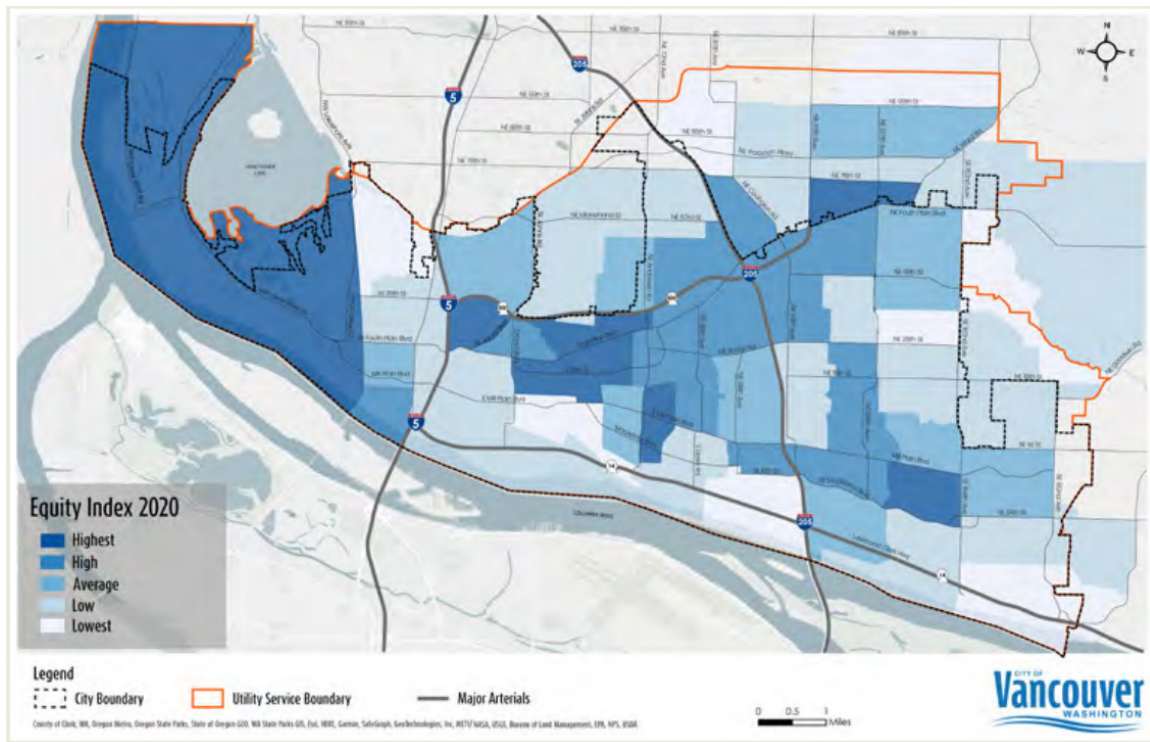
The City of Vancouver provides an example of equity prioritization outside of Puget Sound. Vancouver has completed an equity risk analysis as part of the Vancouver Moves plan. The

analysis evaluated demographic indicators to identify risks by Census tract. The demographic indicators include:

- People of color (non-white and/or Hispanic/Latinx)
- People below 200% of the poverty level
- Renters
- Adults without a 4-year degree
- Households with limited English proficiency
- People with disabilities
- Youth under age 17
- Older adults 65 and up³⁵

The Census tracts with the highest equity index score, which measures risk, can be used to prioritize investment. A map of the 2020 equity index analysis results is displayed in **Figure 15**.

Figure 15. Vancouver Equity Index Map (2020)



³⁵ https://www.cityofvancouver.us/wp-content/uploads/2024/01/Vancouver-TSP-2024_reduced_size.pdf

Summary

This section will provide high-level best practices in developing MMLOS, concurrency, and impact fee programs as well as recommendations tailored to Spokane.

Best Practices

Overall, the most effective MMLOS, concurrency, and impact fee programs are set up in a manner that is easy to understand and apply. Adding unnecessary layers of complication makes programs more difficult to implement. Streamlining the process serves developers as well as City staff who are calculating fee requirements and compliance.

Specific to MMLOS, standards should be tailored to existing conditions and future desires within the community. Consider the priority “skeleton” network of all ages and abilities non-motorized facilities: where are these facilities most desired? How feasible is implementation, given available right-of-way and vehicle or freight priorities? Are there parallel routes that are more feasible? Once the basic networks for each mode are defined, use MMLOS to identify what types of facilities best meet community expectations for travel. These can vary across different parts of the community, as is demonstrated in most of the examples earlier in this document.

Impact fees can take many forms based on the community needs and development outlook. This may look like expanding the impact fee eligible project list to increase the number of projects that are able to use impact fee funds. There may be fee reductions in areas with documented lower rates of vehicle trip generation to encourage development. Clearly identifying existing deficiencies and how growth outside of an impact fee boundary are also key to ensuring a defensible and robust impact fee program. Switching to a person-trip based model can allow the use of impact fee funds for non-motorized projects that increase person throughput of a transportation facility.

While concurrency standards may overlap with MMLOS and impact fees, in our opinion, it is best practice for concurrency to focus on completion of planned projects using the system completeness approach. This technique leverages the value of planning documents’ forecasting and preparation for growth. It avoids the challenge where communities simply chase intersections that fail to meet LOS standards in a way that does not strategically build out a complete network. System completeness provides the community with the latitude to implement the right project, in the right place, at the right time to ensure an orderly implementation of improvements. When the concurrency project list is accompanied by a robust analysis of future conditions, planners can clearly and transparently communicate with the public and elected officials about how the system will work when it is implemented.

Finally, all three programs should fit together in an adaptable manner to meet the changing needs of the community. Regular touchpoints with elected officials and community members are

useful to ensure the effectiveness of the implementation systems. Transparency in program development will foster trust and understanding among the community.

Recommendations

Based on this review of current practices and acknowledging Spokane's current practices and approach, the following recommendations would help Spokane fulfill the requirements of HB 1181 and begin integrating best practices from around the state, and should be incorporated into the upcoming Comprehensive Plan periodic update:

MMLOS

- Evaluate current vehicular LOS standards: what elements of the current system are effective? Is more variation in LOS standards helpful in balancing limited right-of-way, the need to implement improvements for other modes, while acknowledging community concerns about traffic congestion?
- Develop LOS standards specific to each non-motorized mode (pedestrian, bicycle, transit).
 - o Identify high-priority pedestrian, bike, and transit needs to create citywide policy maps for each mode.
 - o MMLOS targets or standards for the other modes can simplify and facilitate future updates to the pedestrian and bicycle master plans and can facilitate in transit planning with STA
 - o If MMLOS standards are developed for pedestrian and bicycle modes, consider whether updates to City design standards are needed to ensure implementation as part of frontage improvements or other City and private development projects.

Concurrency

- Evaluate the current concurrency program: what elements of the current system are effective?
- HB 1181 requires jurisdictions to take measures to reduce VMT per capita. To meet the requirement, it is recommended to de-emphasize or remove auto LOS for concurrency and shift to system completeness.
 - o Maintaining auto LOS as a concurrency standard can lead to capacity projects that induce VMT..
 - o Continue using a system completeness model for non-motorized concurrency.
- Consider developing a tracking tool to streamline the evaluation process.
- Consider transitioning to a full system completeness concurrency program that streamlines concurrency review.

Impact Fees

- Evaluate the current impact fee program: is the current system effective? Are areas with lower project costs still in line with expected growth and density?
- Consider the use of person-trip based impact fee allocation.
- Consider switching from the current zone system to a subarea reduction technique. Alternatively, consider reducing the number of zones across the city.
- Continue work to update the impact fee program to improve how it addresses existing deficiencies and growth occurring outside of a given zone.
- Update the impact fee eligible project list to reflect changes to the MMLOS approach.

Equity and Safety in Project Prioritization

- Develop an equity index that is tailored to local needs.
- Consider pairing equity priority areas to community input and endorsement, as documented in Tukwila.
- Consider evaluating how the equity and safety metrics in the current prioritization framework impact the overall project scores to understand if changes are desired.

Appendix 3

Transportation:

6 Vehicle Miles Traveled Memo

Vehicle Miles Traveled (VMT) Analysis Memo

Requirements, Policies, and Strategies that Support VMT
Reduction

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Overview

The City of Spokane is in the process of updating its Comprehensive Plan as part of the PlanSpokane 2046 Periodic Update. The PlanSpokane 2046 update will incorporate climate and resiliency goals and policies throughout the Comprehensive Plan to address the new Climate Element requirements; for transportation, these include reducing on-road greenhouse gas (GHG) emissions and vehicle-miles-traveled (VMT). Fehr & Peers is supporting the update to the Transportation Element by identifying effective VMT reduction policies and strategies. This memorandum documents the new legislative requirements, VMT analysis from the Comprehensive Plan Environmental Impact Statement (EIS), best practices and effectiveness of VMT reduction strategies, and concludes with a set of recommended policies for reducing VMT per capita, including actions that Spokane can take to implement these policies.

Statewide Requirements

HB 1181 introduced key updates to Washington's Growth Management Act (GMA), establishing new statewide requirements for climate planning. Under these updates, jurisdictions must now develop and implement effective policies and strategies aimed at reducing VMT per capita, a key metric for achieving goals related to GHG emissions and the environment, traffic safety, the economy, and public health.

VMT per capita is measured as the annual number of miles traveled using cars and light trucks divided by the number of residents. To support effective planning and progress tracking, the WA Department of Commerce's Climate Planning Guidance¹ recommends setting a near- and long-term VMT per capita reduction target. Jurisdictions are required to integrate these VMT elements into their local comprehensive plans, either within a dedicated Climate Element or relevant Comprehensive Plan chapters. They are also expected to regularly evaluate progress by tracking policy implementation and monitoring changes in VMT per capita over time. These requirements aim to align transportation planning with statewide climate and resiliency goals.

Understanding Total VMT vs. Per Capita VMT

The focus on per capita VMT aligns with the intent of HB 1181 to reduce greenhouse gas emissions from the transportation sector while accounting for population growth and land use patterns. By evaluating strategies based on their impact on per capita VMT, jurisdictions can better assess whether land use and transportation policies are effectively promoting more sustainable travel behaviors, such as reducing reliance on single-occupancy vehicles and encouraging transit, walking, and biking. This distinction matters because changes in total VMT do not necessarily reflect changes in travel behavior or the efficiency of travel relative to GHG emissions. For example, if total VMT increases but the population grows at a faster rate, per capita VMT could still decline, indicating a relative reduction in the amount people are driving, even though overall vehicle travel is higher.

Regional Context

In addition to the new Department of Commerce guidelines for climate planning, the WA Legislature directed the Washington Department of Transportation (WSDOT) to partner with the WA Department of Commerce and Regional Transportation Planning Organizations (RTPOs) to develop a process of establishing local VMT reduction targets. WSDOT's VMT Targets – Final Report (WSDOT VMT

¹ <https://www.commerce.wa.gov/growth-management/climate-planning/climate-planning-guidance/>

Reduction Report)² and the Implementation of Vehicle Miles Traveled Targets and Supporting Actions – Interim Report, June 2024³ recommend that RTPOs set regional targets for reducing VMT per capita. These regional targets could then be used by local jurisdictions to align planning efforts and targets with their RTPO, or the regional targets could be further refined based on more local context.

In June 2025, the Spokane Regional Transportation Council (SRTC), the RTPO for the Spokane region, published the Regional Vehicle Miles Traveled Reduction Framework Plan. This plan reviews past trends in VMT per capita, forecasts future VMT per capita estimates under three scenarios, and identifies strategies for VMT reduction. The report also outlines the next steps for VMT per capita reductions within the regional context. SRTC will not be setting a regional per capita VMT reduction target. Instead, SRTC, the regional agency will monitor VMT on an annual basis while awaiting guidance from WSDOT on data sources, methodology, and targets. SRTC plans to continue supporting statewide VMT reduction goals in line with the GMA by recommending policies, projects, and programs that jurisdictions can reference in planning for VMT reduction. Finally, the report highlights three key VMT reduction strategies for regional focus: land use density in urban core areas, transit enhancements, and improvements to bicycle and pedestrian facilities.

Although SRTC did not set a VMT per capita reduction target for Spokane to consider, the City of Spokane can continue to coordinate with SRTC in developing local policies and strategies that align with regional and statewide transportation and VMT goals.

2046 VMT Analysis

Fehr & Peers is leading the transportation analysis for the Comprehensive Plan Environmental Impact Statement (EIS), which includes modeling future land use alternatives to understand transportation impacts. This work provides important context for evaluating potential future changes in VMT per capita as Spokane grows over the next twenty years. All of the alternatives study housing growth to the growth target level with Alternative 1 having a greater share of single-family housing than Alternatives 2 and 3 which add more attached housing in the downtown and frequent transit corridors. Alternative 2 studies the lowest job growth, and Alternative 3 the highest with Alternative 1 in the middle. The distribution of housing and job growth varies as described below.

Fehr & Peers conducted an analysis to estimate the change in VMT per capita under each future land use alternative compared to existing:

- **Alternative 1, Stay the Course:** This Alternative (No Action Alternative) is the continuation of the current Comprehensive Plan and associated zoning and regulations. Alternative 1 growth in mixed use areas like downtown but often in vacant lands on the outskirts of the city.
- **Alternative 2, Distributed and Balanced:** Alternative 2 adds greater housing and job intensity along frequent transit routes in mixed use areas but also has a lower number of added jobs compared to Alternatives 1 and 3.
- **Alternative 3, Center City and Regional Hubs:** Alternative 3 adds greater housing and job intensity in the City of Spokane's downtown vicinity called the "Center City" and in employment centers in the West Plains (Airport) and Northeast (Hillyard) Spokane as well as selected corridors like Division and others. It studies the highest number of jobs.

² [*WSDOT. \(2023\). Vehicle Miles of Travel \(VMT\) Targets – Final Report.*](#)

³ [*WSDOT Implementation of Vehicle Miles Traveled Targets and Supporting Actions – Interim Report, June 2024*](#)

On a citywide level, the VMT per capita is forecasted to increase under all land use alternatives (see **Table 1**). This result is not typical of other communities in Washington State. In general, other Washington State communities generally show total VMT increasing with population and employment growth, but VMT per capita decreasing as a result of increased land use densities, greater mixes of uses introduced within existing residential areas, and more transit and multimodal infrastructure. In Spokane, both total and per capita VMT are forecasted to increase on a citywide level, however, the action alternatives show per capita VMT reductions of up to 7% in subareas with higher levels of planned growth.

Table 1. Change in per Capita VMT (Existing to Future Alternatives 1, 2, and 3)

	2024	2046		
	Existing	Alternative 1	Alternative 2	Alternative 3
Citywide per Capita VMT	17.9	19.9	19.2	19.8
Citywide per Capita VMT % change	-	+11%	+7%	+11%

Source: Fehr & Peers, 2025

To confirm this result, we also reviewed SRTC's Horizon 2050 plan. Horizon 2050 also projects substantial growth in total VMT and increases in VMT per household across the Spokane region.⁴ While the current scope of work did not allow for an extensive evaluation for why both the City of Spokane and the region are both forecast to see increases in per capita VMT, we have identified two potential issues for further investigation:

- Unlike many other areas around the state, the land use growth pattern in Spokane County across all Horizon 2050 alternatives intensifies development on the periphery of the region, particularly for employment. Employment at the edge of a developed region is particularly influential on VMT since the base of employees tends to be spread across the region and many workers might have to drive considerable distances to reach their workplace. Centralizing employment within the core of a region tends to reduce per capita VMT, while peripheral employment development tends to increase per capita VMT.
- The SRTC model is relatively new and has not been thoroughly calibrated and validated to estimate and forecast VMT. Specifically, a form of validation called "dynamic validation"⁵ has not been performed to ensure that the model produces accurate VMT forecasts. Dynamic validation for VMT is uncommon outside of California and to our knowledge, only the PSRC model has undergone some form of dynamic VMT validation in Washington.

Through the project team working group discussions, Fehr & Peers understands that the City would like to set a realistic VMT per capita reduction target. Based on this analysis, regional growth patterns may present headwinds to long-term per capita VMT reduction in the City of Spokane. In the near term, the City should focus on keeping VMT per capita at existing levels as a reasonable sign of progress for the

⁴ https://srtc.org/wp-content/uploads/2025/10/h2050_draft_v3_01_101725_comp.pdf

⁵ Dynamic validation for a travel demand model is the process of testing how well the model responds to changes in key inputs, such as land use, costs, or network conditions, rather than only matching a single base-year dataset. It's important because it ensures the model is robust and behaves realistically under future scenarios, making forecasts more credible for planning and policy decisions.

Department of Commerce five-year check-in. Long-term, a realistic target for Spokane's VMT per capita reductions could be within a range of 5% to 10% from existing levels.

Effectiveness Analysis

This memorandum builds on actions outlined in the Comprehensive Plan policy analysis to identify transportation actions and policies that support the City's VMT per capita reduction goals. This review can inform VMT per capita reduction targets and supports the development of actionable, locally appropriate policies to achieve these targets. This document focuses on the policies that the Department of Commerce identifies as "high-priority," and further refines and prioritizes the policies based on effectiveness.

In **Table 2**, the project team classified the VMT reduction potential for several broad strategies as either low, medium, or high based on data from the Victoria Transport Policy Institute⁶ and quantified outcomes from CAPCOA's *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity*.⁷ The strategies selected for this analysis fall within broad categories of high-priority actions identified by Commerce in support of VMT reduction. Some of these strategies are already under consideration in Spokane, while others may need further vetting to confirm if they can be implemented with local context in mind. This summary is intended to provide a broad overview of the potential influence of strategies that the City could incorporate into its plans.

While not all strategies yield large VMT reductions individually, many offer co-benefits, such as improved multimodal connectivity and equitable access, that amplify the effectiveness of other efforts. Strategies related to land use typically offer some of the greatest impact, though they often require significant time and coordination to achieve substantial results. While not widely or aggressively implemented in North America, policies that reduce the appeal/ease of driving, such as increased auto ownership costs, parking pricing, or limited parking availability, have the strongest impact on VMT reduction per capita. Fundamentally, most other developed countries with substantially lower per capita VMT tend to both increase the cost of owning and operating a vehicle while also building far less capacity in terms of the number of lanes or parking spaces within a community. However, these policies have been challenging to implement in North America because they would reverse decades of precedent and many communities do not have many viable alternatives to driving for many trips.

Therefore, in the shorter term, expanding multimodal transportation options can serve as the foundation for long-term travel behavior changes by creating easy ways for people to shift mode for at least some of their travel, especially when paired with disincentives to driving like road usage charges or more restricted parking. Gradually and steadily expanding transportation demand management (TDM) programs (such as WSDOT's Commute Trip Reduction Program) are also solid steps to advance VMT reduction goals. A well-rounded policy document can allow Spokane to craft a transportation system that meets the City's climate and resiliency goals and incrementally move to a future with ever lower VMT per capita.

⁶ <https://www.vtpi.org/elasticities.pdf>

⁷ <https://www.caleemod.com/handbook/index.html>

Table 2: VMT Reduction Potential of Possible Strategies

Strategy	VMT Reduction Potential	Application in Spokane
Land Use Density and Mixed-Use Development	High	While Spokane's proposed land use strategies do focus some growth within centers and transit corridors, it also includes dispersed growth on the edges of the City. Concentrating growth where multimodal transportation options exist could have a greater potential for VMT per capita reduction. In general, shifting away from typical low-density suburban development to compact, mixed-use, and transit-oriented development across the city can support non-motorized connectivity options by reducing the distances between residences and key destinations. Different land use contexts will require different strategies for development, and concentrating growth should consider other overlapping plans. Planning for shifts in land use patterns will require coordination with agencies like Spokane Transit Authority (STA) and neighboring jurisdictions to enable more effective investments in infrastructure and transit that aligns with planned development. The benefits of this development strategy are most tangible when coordinated. To minimize auto-focused development on frequent transit corridors, the City could consider updates to the zoning code to strategically limit auto-oriented businesses, such as drive throughs, along these routes. Examples include car washes, gas stations, oil change, drive-through banks, fast-food restaurants with multiple drive-through lanes or with small interior seating.
Road Usage Charge/Congestion Pricing/Tolling	High ^{1,2}	Washington State Legislature is pursuing a road usage charge to capture driver share for road usage.⁸ This may also promote a shift toward non-driving travel modes such as bicycling and public transit. Spokane could advocate to Legislature to encourage adoption of the road usage charge. However, to have a stronger effect on reducing VMT, any road usage charge should not be a pure replacement for the gas tax and should also more conspicuously communicate to drivers that less driving is "rewarded" by a lower fee through a rebate program for people who don't drive much or a regular bill that shows the level of driving and resulting charges. Spokane could also pursue congestion pricing and/or tolling to disincentivize driving in congested areas or at peak periods.
Increased Parking Costs & Reduced Parking Availability	High ^{1,3}	Spokane has taken measures to eliminate parking minimums for all uses and maintains paid street parking in particular areas including downtown but could further reduce VMT per capita by increasing the cost of parking where it is in place and applying parking

⁸ <https://wstc.wa.gov/studies-surveys/road-usage-charge/>

Strategy	VMT Reduction Potential	Application in Spokane
		maximums for all new developments. Incorporating parking maximums will disincentivize the development of large parking lots and shift towards pedestrian-scale development. Additional strategies, like Spokane's new Parking to People program, encourage redevelopment of underutilized surface parking lots by offering a sales and use tax deferral for projects that include affordable housing. The City may also want to consider a commercial parking tax to disincentive parking at private paid lots and help fund transit, walking, and biking infrastructure.
Transportation Demand Management (TDM)	Medium	Hybrid and remote work options have reduced the effectiveness of TDM as a VMT per capita reduction strategy on a citywide scale. TDM will generally have a limited impact, aside from larger employers. In Spokane, there is significant growth planned for the airport and surrounding areas. Spokane should coordinate TDM strategies among large employers in these high growth areas, working with the countywide TDM program administered by CommuteSmartNW.
Adding Multimodal Infrastructure	Medium	Multimodal networks should be expanded in accordance with Spokane's Bicycle Master Plan (2017) and Pedestrian Master Plan (2015) to establish a safe, connected, and efficient multimodal network across the city.
Increasing Transit Service and Transit Speed & Reliability Infrastructure	Medium	Spokane Transit Authority has planned bus rapid transit (BRT) investments on Division Street. The City can support this investment to fully realize transit ridership along the corridor by improving connectivity to provide comfortable first/last mile connections. This effort could involve a speed and reliability study to understand where signal operations, lane layout, signal priority, minor intersection reconfiguration, installation of stop bump outs, or other projects could improve the speed and reliability of the routes. The City can also support the testing and potential implementation of on-demand transit services in lower-density portions of Spokane where fixed route transit is not effective or feasible.
Mobility Hubs	Low	Spokane can implement mobility hubs that incorporate shared micromobility, bicycle parking, e-bike charging, and other amenities at key transit stations, including The Plaza downtown and the West Plains Transit Center, to support non-motorized access to transit. The City can also explore opportunities for neighborhood-scale hubs that connect the city's bicycle and pedestrian networks to the transit network.

Strategy	VTM Reduction Potential	Application in Spokane
Citywide Education/Outreach	Low	The City can engage with large employers (such as Fairchild Air Force Base, Providence Inland Northwest, Spokane Public Schools, and Amazon) ⁹ in the area to promote TDM strategies and educate employees about multimodal travel options and incentives.

Source: Fehr & Peers, 2025.

1. The elasticity of vehicle travel WRT total price (including fuel, tolls, parking fees, vehicle wear and travel time) is -1.0 to -2.0 in the long-term.
2. The elasticity of vehicle travel WRT to VMT fees is between -0.2 and -0.25.
3. The elasticity of vehicle trips WRT parking prices is typically between -0.1 and -0.3, with significant variation depending on demographic, geographic, travel choice, and trip characteristics.

Recommended Policies and Strategies

As outlined in the effectiveness analysis above, Spokane has a broad range of policy options that could support VMT per capita reductions. The recommended policies and strategies in this section are tailored to the City of Spokane as they build on momentum from current investments as well as existing plans/policies to ground them in tangible changes that can influence VMT per capita.

The following sections present recommended policies and strategies organized by category, with the most effective policy categories first. The recommended policies include existing policies from the current Comprehensive Plan, some of which are amended to increase VMT reduction potential, and policies currently under review by the Climate Resilience and Sustainability Board (CRSB). Fehr & Peers also selected high-priority policies identified through the Washington State Department of Commerce Climate Policy Explorer¹⁰ to round out the policy list. For the transportation-specific categories, Fehr & Peers has identified VMT per capita reduction strategies that can support the recommended policies.

As part of the planning process, land use policies are undergoing a separate review process and will be refined outside of the Transportation Element (TE). This document provides recommendations for land use policies and suggested amendments to be considered by the land use team. Exact policy language below may not match the resulting policies included in the Land Use Element. While Spokane's existing land use policies generally support VMT reduction goals, they may diverge from regional growth plans. To address this, the policy list can be further tailored to emphasize other high effectiveness strategies within the City's control—such as TDM and parking reforms—that can help mitigate misalignment and strengthen progress toward VMT reduction.

⁹ <https://www.spokanejournal.com/articles/15630-spokane-countys-largest-employers-list>

¹⁰ <https://experience.arcgis.com/experience/dd012fae9fad4a309b0d89e3c13016e5/page/Basic/>

VMТ Policies

TR 8.3 – Set and Monitor Targets for Vehicle Miles Traveled (VMT) – In alignment with regional and state goals and policies, establish short- and long-term VMT per capita targets via an ordinance and carry out regular monitoring to ensure progress toward established goals. TE policy; amended.

TR 8.4 – Enact programs and carry out investments to reduce Vehicle Miles Traveled (VMT) and associated Greenhouse Gas (GHG) emissions – Seek out new programs and projects with high potential to make meaningful reductions in Vehicle Miles Traveled to achieve VMT and GHG targets. TE policy; remove: Focus on the specific strategies highlighted in the sections below.

VMТ Strategies

- !! Coordinate with WSDOT and SRTC on obtaining more useful VMT data for existing conditions analysis and ongoing monitoring.

Foster High-Intensity Land Uses in Mixed Use Areas Along Transit

Recommended Policies

LU 1.4 Higher Intensity Residential Areas. Direct new higher intensity residential uses to areas in and around mixed-use areas designated on the Land Use Plan Map and to areas where existing development intensity is already consistent with development of this type. Existing policy; keep.

LU 3.2 Centers and Corridors. Designate mixed-use areas (neighborhood scale, community or district scale, and regional scale) on the Land Use Plan Map that encourage a mix of uses and activities around which growth is focused. Existing policy; keep.

LU 3.5 Achieve a proportion of uses in designated mixed-use that will stimulate pedestrian activity and create mutually reinforcing land uses. Existing policy; keep.

LU 4.2 Land Uses That Support Travel Options and Active Transportation. Provide a compatible mix of housing and commercial uses in neighborhood-level, district-level, and regional-scale mixed-use areas. Existing policy; keep.

Prioritize Infill Development, Missing Middle Housing, and Increase Density Near Transit

Recommended Policies

SSAP: HW 2.1 Continue to invest in affordable housing, low-barrier housing, and safe, accessible, affordable public transportation to increase density near transit. Existing policy; amend: Be more specific about how/where to invest. Could consider/combine in Neighborhoods Element to address this overlapping issue.

H 1.3 Provide incentives for employers to sponsor or develop affordable housing in proximity to their place of employment. Existing policy; amend: Prioritize areas with the highest vulnerability identified in the Spokane Climate Vulnerability and Risk Assessment.

Land Use GHG Policy 1 - Accommodate diverse, affordable, and attainable housing types within the city to meet demand while avoiding sprawl in order to decrease emissions and infrastructure costs and preserve open space. Policy under review, keep.

Land Use GHG Policy 2 - Prioritize infill development, while expanding, protecting, and maintaining the City's tree canopy, through zoning regulations and permitting processes. Policy under review; amend: Incorporate information that ties infill development to resilience and efficiency such that VMT is reduced and emissions follow. Policy under review, similar to TR 17. Keep and remove TR 17.

Land Use GHG Policy 3 - Foster transit-oriented development and accessible neighborhoods by increasing density and supporting multimodal transportation in areas that are well-served by transit. Policy under review, similar to H 1.11. Keep and remove H 1.11.

Implement Complimentary, Mixed Use Land Uses

Recommended Policies

SH 2.4 Encourage a land use pattern that allows convenient access to daily goods and services, especially for those persons with limited mobility and/or transportation options. Existing policy; amend: Add updated language from climate work to ensure all neighborhoods have accessible uses.

LU 1.6 Neighborhood Retail Use. Direct new neighborhood retail use to Neighborhood Centers designated on the Land Use Plan Map. Existing policy; amend: Add updated language from climate work strengthening mandate to add retail uses in areas designated for neighborhood-level mixed use development via conditional use permits and remove references to Neighborhood Centers.

LU 4.1 Coordinate land use and transportation planning citywide to result in an efficient pattern of development that supports alternative transportation modes consistent with the Transportation Chapter and makes significant progress toward reducing sprawl, traffic congestion, and air pollution. Existing policy; amend: Strengthen requirements for new development to establish connections to neighborhood retail and update language to replace "alternative transportation modes" with "active transportation modes."

Potential Strategies

- !! Develop a plan for siting neighborhood distribution centers and incorporating future delivery modes which may be more VMT efficient than traditional retail delivery modes.
- !! Update zoning code to prohibit most drive-through businesses on high priority transit routes. These drive-through businesses may include car washes, gas stations, oil change, drive-through banks, fast-food restaurants with multiple drive-through lanes or with small interior seating, etc.
- !! Review and update design standards for new developments to ensure walkability and bikeability through factors such as gridded streets, short blocks, and connected nonmotorized infrastructure.

Reduce/Eliminate Parking Requirements

Recommended Policies

TR 18: Develop and administer vehicle parking policies that reduce excess parking that deters non-motorized transportation users. TE policy; amended.

LU 3.8 Encourage shared parking facilities for business and commercial establishments that have dissimilar peak use periods. TE policy; keep.

Expand existing parking maximums to new developments citywide, including commercial developments. Climate Policy Explorer.

Potential Strategies

- !! Explore additional strategies to reduce the appeal of vehicle trips in Spokane, such as implementing higher parking rates during peak travel periods (e.g., weekday mornings and evenings) to discourage solo driving and encourage shifts to off-peak travel or alternative transportation modes.
- !! Other strategies could include tolling or restricting vehicle access to certain streets during parts of the day. These strategies would require changes to the state law to authorize cities and other jurisdictions to impose pricing or restrictions on city-owned streets.

Improve Transit Frequency, Coverage, Speed and Reliability

Recommended Policies

TR 3.2: Support efficient transit operations through street and transit stop designs on transit priority streets that comply with standards and include transit-supportive elements, such as shelters, lighting, and schedule information. Assist in implementing the STA Comprehensive Plan. TE policy; keep.

SSAP: EP 3.3 Invest in and support public transit infrastructure, including sidewalks with sufficient width for an ADA pad, climate resilient frontage improvements, and transit-oriented development to increase access to affordable and convenient transportation options. Partner with STA on adding and upgrading transit stop amenities. Existing policy; amended.

Transportation GHG Policy 2 - Support public transit expansion and use through coordinated land use and transportation planning that prioritizes transit service for lower-income and overburdened neighborhoods. Policy under review, keep.

Potential Strategies

- !! Partner with STA to conduct Transit Speed & Reliability studies on select routes.
- !! Implement transit signal priority on HPT routes to reduce transit delay.
- !! Incorporate transit stop upgrades into city street projects.
- !! Consider proximity to transit priority streets when prioritizing bicycle and pedestrian network gap projects.
- !! Support expansion of bicycle rack and locker capacity at appropriate transit stops, mobility hubs, and park & rides in line with bus rapid transit (BRT) improvements.

Implement Travel Demand Management (TDM) Programs

Recommended Policies

TR 4: Evaluate transportation demand management (TDM) strategies to optimize transportation options within the context of Complete Streets. Use TDM strategies to gain efficiencies in the transportation system to reduce demand for auto travel, particularly in downtown. TE policy; amended.

Potential Strategies

- !! Explore the adoption of a local ordinance that would expand trip reduction requirements within Spokane to include more business types and sizes, leveraging Spokane's authority to exceed state minimums under the Washington State Commute Trip Reduction (CTR) law.
- !! Continue to implement and enhance the City's participation and investment in the countywide TDM program. Organize and sustain targeted, City-specific community education and outreach initiatives that promote a shift away from drive-alone trips, especially in high growth employment areas.
- !! Explore ways to partner or help provide additional resources to Commute Smart Northwest to expand their reach and recruit more businesses who are not covered by the CTR law.

Increase Multimodal Capacity

The multimodal capacity policy review includes recommended policies from Goal 2 and Goal 5 of the TE that could have an influence on per capita VMT reductions. The TE includes other policies that address multimodal capacity, however, this section is not an exhaustive list of those policies. Rather, these are the key policies that could reduce VMT per capita. The project team is not recommending changes to any TE policies that are not listed below.

Recommended Policies

TR 2.1 – Design the transportation system to provide a complete transportation network for all users in line with the Complete Streets Ordinance, ensuring equitable distribution of innovation, access, choice, and options throughout the four seasons. Users include pedestrians, bicyclists, transit riders, and persons of all abilities, as well as freight, emergency vehicles, and motor vehicle drivers. TE policy; broken out into multiple policies.

TR 2.1 – Complete any necessary upgrades to ensure that all streets meet mandated accessibility standards and level of service standards outlined in the Master Bike Plan, Pedestrian Master Plan, Spokane Transit's Comprehensive Plan, and the Arterial Street map. TE policy; broken out into multiple policies.

TR 2.2 – Identify high-priority active transportation projects to carry on completion/upgrades to the priority active transportation networks. TE policy; amended.

TR 5.1 – Enhance first-mile and last-mile connectivity from local walking, bicycling and rolling networks to local and regional public transit service. TE policy; keep.

TR 5.2 – Ensure continuous connectivity for multiple transportation options between neighborhoods, activity centers and areas with high concentrations of businesses and services to support long-term system reliability and climate resiliency. TE policy; amended.

Maintain bicycle and pedestrian connectivity during construction of development or projects that block the right of way. Best practice.

Transportation GHG Policy 1 - Develop a citywide connected multi-modal network that follows 'Complete Streets' principles, aligns with higher-density housing and commercial centers, and ensures equitable distribution of safe, accessible, and affordable transportation options. Transportation policy under review; remove: Redundant with TR 2.1.

Ecosystem Policy 2 - Establish and maintain a green belt of parks that supports connectivity and non-motorized travel between destinations across the city. Ecosystems policy under review; amend: Add clarity on the definition of green belts to refer to a network of low-stress transportation routes.

Potential Strategies

- !! Continually maintain and update the Safe Streets plans to ensure safe, efficient, and direct pedestrian and bicycle access to key destinations, including downtown Spokane, transit stations, schools, parks, and trails.
- !! Coordinate multimodal capacity expansion effort with the location of higher-density housing and commercial centers.
- !! Update citywide analyses from the Pedestrian Master Plan, City Safety Plan and Bicycle Priority Network to continually assess and identify major barriers to crossing arterial streets and recommend and prioritize bicycle and pedestrian crossing enhancements.
- !! Conduct regular City-specific community education and outreach to promote a shift toward non-driving travel modes such as bicycling and public transit.
- !! Establish standards for bicycle and pedestrian facilities when establishing detours during construction.

Improve Multimodal Concurrency

Recommended Policies

Improve active transportation and other multimodal types of transportation options in concurrency programs – both in assessment and mitigation. Climate Policy Explorer.

Potential Strategies

- !! Update the concurrency program to downgrade the required auto LOS in some areas and improve the system completeness tool for multimodal concurrency, to ensure the City's multimodal infrastructure investment tracks with land use growth. Downgrading auto LOS may include:
 - Allowing auto LOS F in more locations where street connectivity is high.
 - Maintaining LOS E in locations where transit uses the corridor or where there are limited alternate routes.
- !! Maintain level of service standards for bicycle and pedestrian infrastructure while detours are in place.

Next Steps

The City's Transportation Chapter Working Group will review the recommended transportation policies for VMT per capita reduction and incorporate edits into the first draft of the Transportation Element in

December. The City will also integrate strategies to guide actions that influence per capita VMT reductions, but it still needs to determine where these strategies will be located within the Comprehensive Plan and how they will be carried forward. They may not ultimately reside in the Transportation Element itself.

Land use policies are undergoing a separate review process, but the team can use the recommended refinements in this memo to inform additional changes to those policies. The upcoming planning work over the next few months will also include a comprehensive policy prioritization process and an equity review. After this process, which may suggest additional policy refinements, the project team will identify and cross-reference policies that support multiple goals and chapters. Ultimately, the selected policies for VMT per capita reduction will be integrated into the Comprehensive Plan.

Planning for VMT will require collaboration among various agencies within Spokane as well as regional and statewide agencies. The City should continue to collaborate with partner agencies to align goals and strategies for the shared vision of reduced VMT per capita.

Appendix 3

Transportation:

7 Transportation Demand Management (TDM) Memo

MEMORANDUM

To: Louis Mueller, Mike Tresidder, City of Spokane
From: Paul Moore, Roger Pardo, Nelson\Nygaard
Date: December 14, 2016
Subject: Transportation Demand Management Toolkit - Update

EXPLORING TDM MEASURES

TDM measures collectively work to change how, when, where, and why people travel. TDM efforts help to increase efficiency within the transportation system. Supporting alternative modes - cycling, walking, transit, and carpooling - gives employees, residents, and visitor's incentives to reduce reliance on the single-occupant vehicles. TDM approaches can be an important, cost-effective solution to overall transportation challenges, both reducing vehicular impact and parking demand, while improving the accessibility and success of a new development. A successful TDM approach typically includes a variety of strategies. These strategies work together to achieve a more sustainable transportation system by making the most of the existing infrastructure.

Incorporating TDM strategies in a new development serves not only to make better use of transportation infrastructure, but also to reduce the demand for new roadway capacity. It can also result in better place-making and community building; TDM can help make developments and neighborhoods more attractive places to live, work, and visit. Workplaces and developments that have a vested interest in making places more accessible to employees and residents often emerge as vibrant, walkable neighborhoods with desirable amenities.

Many of the transportation demand management strategies listed below have synergistic effects (i.e., a combination of strategies will be more effective together than individually). Results, such as mode split changes or reductions in traffic or parking demand, vary depending not only on the context, but also on how strategies are implemented in relation to one another.

The City should continue to improve upon TDM strategies that are already being used in the region and continue to explore implementation of other TDM strategies covered in this TDM toolkit.

- Commute Trip Reduction Plan / Growth and Transportation Efficiency Center Plan
- Shared Parking Codes and Incentives
- Bicycle, Pedestrian, and Transit System improvements
 - o Bicycle Share Program
- Transit Supportive policies and programs
 - o Park and Ride Facilities
 - o Car and Van Pool Support
 - o Ride Share / Guaranteed Ride Home program

PARKING CASH-OUT

A parking cash-out program is one in which people (typically commuters, sometimes residents of multi-family housing) are offered the opportunity to choose either a parking space or the cash equivalent of the space, based on the out-of-pocket costs to the employer. The employee or resident can determine whether to use the cash for alternative modes of transportation or keep the funds. Offering the option of “cashing out” their subsidized parking space can incentivize employees to ride transit, bike, walk, or carpool to work, thereby reducing vehicle commute trips and emissions.

This program can benefit commuters, employers, taxpayers, and the environment.

- Employees/residents get freedom of choice and additional income, and appreciate the fairness of the program;
- Employers can reduce the need for parking spaces;
- Because vehicle miles traveled are reduced, auto emissions drop, leading to better air quality;
- The community benefits from reduced traffic congestion.

Steps for Implementation: The City may implement a policy supporting employers that provide employees with subsidized parking to offer a cash allowance instead of a parking space. The intent of such a program is to encourage employees to seek out alternative modes of transportation for their commutes, reducing congestion and minimizing the demand for parking. Alternatively, a cash-out program could be a key feature of a transportation management association (TMA), typically a partnership of major employers in a region collaborating to improve transportation options and air quality.

UNBUNDLING PARKING COSTS

Separating the cost of parking from building cost is a strategy used to 1) increase housing affordability and housing choice, and 2) reveal the true cost of parking to employers and their employees. By requiring payment for parking every day or month as opposed to receiving it for free or bundled in with rents, residents and employees are more likely to become conscious of this cost and utilize alternative transportation modes. Charging separately for parking is the single most effective strategy to encourage households to own fewer cars, and rely more on walking, cycling, and transit.

Parking costs are often part of the sale, lease or rental price of housing and commercial space for the sake of simplicity. Although the cost of parking is often hidden in this way, parking is never free. “Unbundling” the cost of parking is a valuable change to status quo parking provision. We have learned that providing parking – or, for that matter, anything – for free or at highly subsidized rates to users encourages its use and means that more parking spaces have to be provided to achieve the same rate of availability.

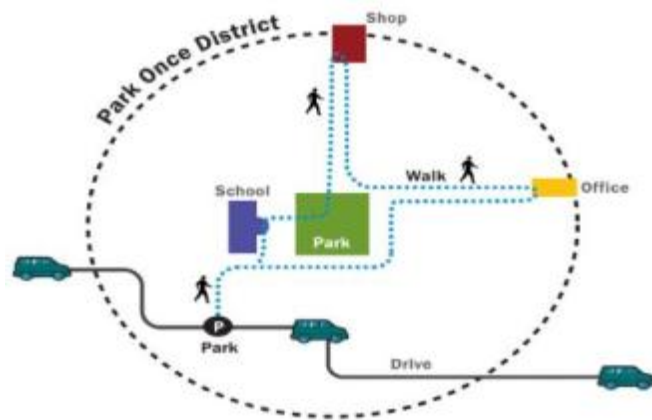
Residential unbundling provides a financial reward to households who would like to reduce the number of their vehicles, changing parking from a required purchase to an optional amenity. This provides additional choice and a market of residents who wish to live in a walkable, transit-oriented neighborhood where it is possible to live well with a single car, or even no car, in the household.

Unbundling for commercial uses provides strategies that make it easier for businesses to save money by reducing employee parking demand. Strategies include providing an option for commercial tenants to either minimize or not include the parking in a commercial space lease. Parking could be leased to tenants or employees separately, with employers having the option of changing their supply as needed or at a minimum when the lease is renewed. Progressive parking policy moves towards the separation of parking costs, as it is continually shown to be the primary factor guiding employers to incentivize alternatives to expense of needing an automobile.

Steps for Implementation: Spokane may consider adopting an unbundled parking policy. This would decouple the cost of rent and parking, which will make housing more affordable for some, and financially incentive some residents to utilize alternative modes of transportation. Such a policy is particularly effective in walkable areas with access to alternative modes of transportation.

SHARED PARKING

Mixed-use developments offer the opportunity to share parking spaces between various uses, thereby reducing the total number of spaces required compared to the same uses in stand-alone developments. This is a primary benefit in mixed-use development contexts of moderate-to-high density. Shared parking operations offer many localized benefits to the surrounding community, including a more efficient use of land resources and reduced traffic congestion.



Based on an original illustration by Walker Hubert.

Park Once District

Often compact and walkable environments allows for parking to be shared. Visitors can park once and walk to multiple destinations; employees can park once for the day and walk to complete errands before, after, or during their workday. Each land use does not need its own dedicated supply of parking, yet that is often what standard parking generation analysis and zoning code parking requirements create. In reality, different uses have different peak demands throughout the day. For example, an office may have a high demand until 5pm, and a restaurant open for dinner may have a high demand only after 5pm.

Shared parking encourages use of large centralized parking facilities and discourages the development of many small facilities. This results in more efficient traffic flow because there are fewer curb cuts and turning opportunities on main thoroughfares. This has the added benefits of reducing accidents and reducing emissions from idling vehicles stuck in traffic.

Steps for Implementation: In areas where there is a diverse mix of land uses, the City of Spokane may consider expansion of shared parking policy. A shared parking policy reduces the amount of total parking developed by maximizing the utility of each space and sharing it amongst multiple land use types. In areas identified as viable locations for a shared parking strategy, developers may be allowed to pay into a fund for development and/or maintenance of off-site

municipal parking facilities, or to lease underutilized parking spaces from a nearby private facility, rather than build new, unnecessary supply. This provides developers an alternative to the hefty cost of providing parking and allows the City to use pricing or regulation tools to manage parking supply and demand in shared parking districts.

BIKE INFRASTRUCTURE

Bike System Improvements

Bicycle system improvements can help reduce peak-hour vehicle trips by making commuting by bike easier and more convenient for more people. Bike facilities can serve direct door-to-door trips, especially those trips that are “too far to walk but not far enough to drive” (e.g. trips of between one and two miles are too long to walk for most people, but are a short bicycle ride). In addition, improved bicycle facilities can increase access to and from transit hubs, thereby expanding the “catchment area”¹ of the transit stop or station and increasing ridership. Bicycle access can also reduce parking pressure on heavily-used and/or heavily-subsidized feeder bus lines and auto-oriented park-and-ride facilities.



Bike Lane in Philadelphia, PA

Safe accommodation of cyclists should be made within travel ways of the street in either mixed flow or within designated bicycle lanes.

Steps for Implementation: The principal step in bringing bicycle infrastructure to the City of Spokane is the adoption of the Bicycle Master Plan, something the City has accomplished, and updated in recent years. The plan has identified specific routes where bicycle facilities should go. The City should ensure that the installation of bicycle facilities is conducted efficiently and as part of other roadway maintenance projects as necessary.

Spokane should prioritize the elimination of system gaps and introduce facilities where high use is expected. In addition, bicycle facilities may be proposed to developers as a condition for development.

¹ A transit catchment area is the geographic area from which a transit station draws riders.

Bike Depot (with Bus Rapid Transit Station)

A high level of bicycle access suggests that a transit station may be suitable for a “bicycle station.” Bicycle stations offer sheltered and secure bicycle storage facilities that provide safe and accessible locations for riders looking to bridge their “first mile/ last mile barrier” with a transit connection. Bicycle storage facilities are often membership based and sometimes staffed, meaning cyclists do not have to reserve space in advance. If designed well, they have been shown to dramatically expand the “catchment area” of a transit station by removing a key obstacle to increased bicycle use – the fear of having a bike damaged by weather or vandalism, or stolen. Some bike depot facilities even provide tool and repair stations, showers, and bathrooms, as well as valet parking during staff hours.

Bicycle stations operate at rail stations throughout the US, including the Palo Alto Caltrain Station, Embarcadero and Berkeley BART stations, Long Beach Blue Line station in California; Pioneer Square Tunnel Station in Seattle; Millennium Park in Chicago, and Union Station in Washington, DC.



BikeStation in Washington, DC
Source: Bikestation

Steps for Implementation: The City of Spokane should identify high ridership stops with the assistance of the Spokane Transit Authority. These stops could be considered as potential locations for a bike depot where transit riders may accomplish their first mile to or from transit. Such a strategy would require significant level of transit ridership, as well as adequate bicycle facilities to encourage individuals to ride a bicycle to connect to transit. Funding may be a collaborative effort between the city and transit agency.

Sheltered and Secure Bicycle Parking

Providing sheltered or indoor bicycle parking for long-term parkers, such as residents and employees – as well as many convenient short-term racks on-street and near entries – helps treat bicycling as a serious alternative to the automobile by providing the same level of access, security and amenity that a car gets.

Covered or sheltered bicycle parking should be located in areas suitable for longer-term stays. The bicycle parking should:

- Be able to be accessed 24 hours a day
- Be identified via clear signage
- Have convenient access to/from surrounding streets
- Be safe and secure



Bike Shelter

All long-term spaces will be designed to accommodate bicycles with a length of 6-feet and a minimum width of 2-feet.

The proportion of short and long term spaces provided varies depending on the type of building use (e.g. retail uses have predominantly short-term spaces, whereas office and residential buildings need more long-term parking).

On-Site Bike Repair Facilities

Installing a bicycle repair facility with air compressors for tires is a minimal investment to support infrastructure that can keep bicycles in circulation and reduce parking demand that might otherwise be created by frustrated former bike commuters.

A simple do-it-yourself bicycle stand is an inexpensive investment that provides essential support for cyclists, including tire gauges, air pumps, and wrenches and other tools for minor repairs. A bicycle stand can fit in a small space in a parking garage or on the ground floor of a building.

A full-service, staffed bicycle repair facility could add professional repair services as well as bike rentals, valet bike parking, and bike share registration.

On-Site Changing Facilities for Bicyclists

For many commuters, arriving at work covered in sweat is a bike-commuting deal breaker. An increasingly popular means for avoiding this green-commute barrier is to provide employee facilities for showering and changing into fresh clothes.

End of trip and support facilities are key parts of a complete bicycle trip. Shower, changing, and locker facilities promote bicycle commuting by providing a convenient place for bicyclists to shower, change, and/or store their clothes if they arrive in sweat, mud, or rain. Simple secure facilities are an easy addition to on-site bathrooms.

Steps for Implementation: Spokane should establish a policy that requires developers to create secured bicycle parking when developing parking. Such facilities should also be paired with on-site changing facilities and on-site repair stations outfitted with basic tools for bicyclists. Providing such amenities provides a visual cue for people to consider bicycling to work. The City of Spokane could establish such amenities for City employees to establish a precedent.

BIKE SHARE

Bike share programs bring the convenience and speed of biking in an urban/downtown setting without the hassle of owning, maintaining, and finding parking for your own bike, which can allow residents and employees to commute and do errands without needing to transfer bus lines, find parking, or get stuck in traffic. Bike sharing is a form of bike rental where anyone can have access to a shared fleet of bicycles on an as-needed basis. Bike share programs provide safe and convenient access to bicycles for short trips, such as running errands during lunch or for accessing the transit system by helping to bridge “first mile/last mile” barriers.

Bicycle sharing programs work in a similar fashion to car-sharing programs in that they provide people with an on-demand mobility option without the operation and maintenance costs that come along with ownership. These programs also attempt to increase physical activity and health of users, and reduce traffic congestion and air pollution in urban areas.

These programs have been implemented in various forms for the past 40 years. Until recently, bike share programs worldwide have experienced low to moderate success. However, in the last 5 years, innovations in technology have given rise to a new (third) generation of technology-driven bike share programs. These new bike share programs can dramatically lower the barrier to use by allowing reservations and/or payment via smart card, credit card, or even cell phone. In addition, damage or theft of bicycles is minimized by linking accounts to a user’s credit card.

The most common operational models for third generation bike sharing programs are:

- The first and most common model is a privately–operated program, where contracts for exclusive rights to outdoor advertising space (bus stops, billboards, etc.) include a provision that requires the advertising company to install, operate, and maintain a bike sharing system. The Vélib system in Paris is an example of this first model.
- The second model is a publicly-operated program run by a government agency as part of a larger transit access or TDM/parking management strategy. Montreal’s Bixi and Long Beach’s employee-based program are examples of this second model. Some cities sell advertising rights at the bike stations and on the bikes themselves to help defray program costs, but the program is not operated by an advertising company.



Hubway Bike Share, Boston, MA

Steps for Implementation: In order to bring a bike share system to Spokane, the City should undergo an analysis to determine the demand for such a service, and identify locations where stations would be successful. Such a program would be helpful for reducing the use of personal vehicles to accomplish short trips, and would likely find success in Downtown.

PEDESTRIAN INFRASTRUCTURE IMPROVEMENTS

A walkable environment gives people more transportation choices and improves quality of life. A well-designed network of streets and pedestrian ways is key to pedestrian accessibility, and includes streets, alleys, trails, midblock crossings and pedestrian pass-throughs.

Demand for parking can be reduced by providing pedestrian and bicycle amenities that make it easier and more pleasant for people to walk or bicycle rather than drive. These amenities and design changes can help alleviate traffic congestion. In particular, improving the walkability and pedestrian orientation of mixed use neighborhoods encourage an increase in physical activity and health of users.

Promoting bicycle and pedestrian transport modes can also be accomplished through simple design changes, some of which can be implemented at no additional cost. Instead of locating parking between the street and the buildings, requiring pedestrians and bicyclists to navigate through parking lots, parking should be set back behind or to the side of buildings. Simple low cost pedestrian infrastructure improvements include

- Creating continuous sidewalks and installing visible crosswalks at intersections
- Landscaping and buffers between sidewalks and the roadway
- Handicapped accessible curb ramp design
- Highly visible pavement markings
- Reducing intersection crossing distance
- Pedestrian-scaled lighting



Vancouver, BC

Steps for Implementation: Spokane faces a challenge in regards to maintaining sidewalks, as the owners of adjacent property are responsible for maintenance. However, improving walkability makes a community significantly more accessible, and is particularly important in locations where there is a mix of land uses and destinations, where walking is a viable alternative for getting between destinations. The City of Spokane can work with local businesses to establish a business improvement district (BID). BID's bring together private organizations and businesses to improve a local district to attract visitors, and as such, could guide sidewalk development and design.

DISTRICT- BASED SHUTTLE

Shuttle services are a form of public transit that utilizes smaller buses or vans to bring passengers to their destinations. Some employers provide or contract transit providers to operate direct shuttles between employment sites and transit or parking facilities. Employer shuttles pick up employees at a parking lot, regional bus stop, or commuter rail station, and drive them to their workplace. Some employers also operate daytime shuttles, allowing employees to leave their jobsite for lunch or running errands, making it unnecessary for them to drive. Shuttles can be operated by a local transit system, an employer, a municipality, a nonprofit, or a partnership of a combination of these entities.



Atlantic Station Free Shuttle

Source: CBS Atlanta

Steps for Implementation: Spokane would need to identify significant trip patterns that could potentially benefit from a shuttle. Once identified, survey data could be collected to gauge the willingness of individuals to use such a service between key destinations. Spokane Transit Authority would likely be a leading partner in the development of these kinds of systems.

CAR-SHARING

Car-sharing programs allow people to have on-demand access to a shared fleet of vehicles on an as-needed basis. Usage charges are assessed at an hourly and/or mileage rate, in addition to a refundable deposit and/or an annual membership fee. Car-sharing is similar to conventional car rental programs with a few key differences:

- System users must be members of a car-sharing organization.
- Fee structures typically emphasize short-term rentals rather than daily or weekly rentals.
- Vehicle reservations and access is “self-service.”
- Vehicle locations are widely distributed rather than concentrated.

Car-sharing programs reduce the need for businesses or households to own vehicles, and reduce personal transportation costs and vehicle miles traveled (VMT).

Through car-sharing, individuals



Car2Go Car Share, Calgary, AB

Source: Calgarysun.com

gain access to vehicles by joining an organization that maintains a fleet of cars and light trucks in a network of locations.

Car-sharing has sometimes been referred to as the “missing link” in the package of alternatives to the private automobile ownership. For example, vehicles available near a person’s workplace or school can enable them to commute to work via transit or other means, knowing that they’ll have a car-share vehicle available during the day only if needed for work or personal trips. It has proven successful in reducing both household vehicle ownership and the percentage of employees who drive alone because of the need to have a car for errands during the workday. As a result, car sharing can be an important tool to reduce parking demand.

For residents, car sharing reduces the need to own a vehicle, particularly a second or third vehicle. Recent surveys have shown that more than half of car-share users have sold at least one vehicle since joining the program in the San Francisco Bay Area (source: survey by Nelson \Nygaard Consulting Associates for City CarShare). For employees, car sharing allows them to take transit to work, since they will have a vehicle available for errands during the day.

SUBSIDIZED/ UNIVERSAL TRANSIT PASSES

Reduced price passes have been shown to increase transit ridership and provide an incentive to reduce vehicle ownership. Similar programs have been successfully created for a wide range of residential developments. In recent years, growing numbers of transit agencies have teamed with cities, employers, operators of multi-family residential complexes and even with entire residential neighborhoods to provide transit pass programs.

The principle of reduced transit passes is similar to that of group insurance plans – transit agencies can offer deep bulk discounts when selling passes to a large group with universal enrollment on the basis that not all those offered the pass will actually use them regularly.

Private employers may provide transit subsidies to their employees. The type and amount of subsidy varies by employer. Some employers cover a percentage of the cost that an employee spends on transit, others give a set dollar amount, and some provide employees with free transit passes. In addition, some cities require developers to provide subsidized transit passes to employees and/or residents of a development as a condition of approving project entitlements.

Studies have shown that reduced cost transit passes have led to reductions in car mode share of 4 to 22-percent, with an average reduction of 11-percent. Many of these reductions have occurred in areas with very limited transit service.

Steps for Implementation: Spokane may adopt a policy that provides developers of multi-family housing in areas with transit access with the option of reducing the amount of parking constructed if subsidized transit passes are provided to residents. Similar strategies may be used by employers, and could be part of a package of strategies led by a TMA.



Calgary Transit Pass, Calgary, AB
Source: Calgary Transit

TRANSIT STOP AMENITIES

To transit riders, travel time, frequency and cost are the most important factors in determining satisfaction in transit service. Apart from capital improvements impacting these factors, stop level amenities, specifically transit shelters and real-time information availability, are the most important improvements impacting transit rider satisfaction according to a 2016 study completed by the Transit Center.

These are relatively simple and low-cost improvements when compared to the capital costs associated with travel time, frequency and cost. Transit shelters provide an enhanced experience for riders by providing a shield from the elements, be it rain, snow, or the warm sun. In addition, real-time information takes away the uncertainty previously associated with transit service, allowing riders to maximize their time by limiting wait times. Real-time information can be displayed on transit shelters as well as be made accessible on mobile devices.

Steps for Implementation: Spokane and Spokane Transit Authority should collaborate to identify what transit stop amenities could feasibly be introduced to the system and to identify financing.

TRANSPORTATION DEMAND MANAGEMENT COORDINATOR

Mobility coordinators or ambassadors have been used to great success throughout the United States to help administer transportation demand management programs at specific businesses, individual developments, or a group of organizations under a Transportation Management Association (TMA), which often collaborates with the city to meet transportation management goals. The tailored individual perspective of an on-site resource greatly improves the efficiency of getting travelers to use alternative modes. One of the greatest cost benefits of a TDM Coordinator is the ability to appoint or assign this role to an assisting staff member, and incorporates the details of this position within their job responsibilities.

Mobility Coordinators administer and actively market demand management programs. They may also serve as a facility-wide concierge, providing personalized information on transit routes and schedules, ridesharing information, bicycle routes and facilities, and other transportation options available to residents, employees and customers. The Coordinator also negotiates with transit agencies for low cost transit passes.

Typical responsibilities of Mobility/TMA Coordinators include:

- Providing information about monthly transit passes
- Marketing, including distribution of new employee/tenant orientation materials
- Distribution of transportation news and commuter alerts
- Assisting with rideshare matching
- Providing Guaranteed Ride Home vouchers



Commuter Challenge Award Ceremony
Boulder, Colorado

- Audit and review corporate/building transportation needs
- Consultation regarding pre-tax transportation fringe benefits, setting-up commute programs, and compliance with regulatory requirements

Steps for Implementation: The City of Spokane should continue to explore opportunities to enhance TDM strategies particularly within Downtown. Supporting efforts like the Growth and Transportation Efficiencies Center (GTEC) plan can support many of the goals of TDM. The position should also coordinate with relevant departments and agencies, such as STA, Planning and Public Works to ensure the City has a cohesive approach to improving transportation and parking options.

CARPOOLING/ VANPOOLING

Carpooling is the shared use of a car by the driver—usually the owner of the vehicle—and one or more passengers. When carpooling, people either get a ride or offer a ride to others instead of each driving separately. Carpooling programs involve varying degrees of formality and regularity. Although carpools are typically formed voluntarily, institutions, employers, developers and property owners can encourage and accommodate them through the establishment and reservation of preferred parking spaces and free or reduced parking costs for designated and registered carpools.

Vanpools serve longer-distance commutes along corridors with very limited or no existing transit service. They consist of a group of five to 15 commuters who rideshare to and from work in vans either leased from an outside operator or transit agency who owns and maintains the vehicles and provides insurance and other support, or self-supporting, where operating costs are divided among individual riders. In some cases, vans can be provided by an employer or can be owned by an individual. One of the vanpool participants serves as the primary driver and another as a backup driver. (Volunteer drivers usually ride free in exchange for their additional driving and coordination responsibilities.) The cost for participants depends on the size of the van, the length of the commute trip, the number of participants, and the availability of employer or government subsidies.



Employee Vanpool

Rideshare and Ride Matching

One of the greatest impediments to carpool and vanpool formation can be finding suitable partners with similar work schedules, origins, and destinations. Facilitated rideshare matching can overcome this obstacle by enabling commuters who are interested in ridesharing to enter their travel preferences into a database and receive a list of potential rideshare partners. The success of these programs is largely determined by the number of participants and, in turn, the

number of potential matches that can be made. Rideshare programs may be administered through individual employers, but are often most effective when coordinated through a transportation management association or other larger scale program. The home, workplace, or local TMA coordinator often obtains the responsibility of overseeing this program.

Steps for Implementation: The city could partner with other agencies or launch its own web-based rideshare tool to assist residents in finding a carpool, and could also provide incentives such as priority parking spaces and parking discounts in City-managed facilities. This strategy could be accomplished by a TMA that collaborates with local employers to market such opportunities to employees.

GUARANTEED RIDE HOME

A long-standing but effective TDM strategy, Guaranteed Ride Home programs provide transportation when typical means are not available to residents or employees returning home outside of their normal schedule. An employer or association provided benefit allows for a set amount of free taxi rides or car-share usage for unplanned trips home that cannot be accommodated by the employee's normal commute mode (e.g., working late past last scheduled bus, carpool passenger with sick child at school). Statistics on such programs indicate that although they tend to have relatively low employee utilization rates, they have very high satisfaction rates from participants, providing a high benefit for a low cost to employers.

A recent Nelson\Nygaard study evaluating the effectiveness of a regional GRH program in Alameda California found that 95% of program participants felt that the GRH program did encourage alternative mode use. Another study found that 15-25% of program enrollees would otherwise drive to work if the GRH program did not exist.

Steps for Implementation: With the rise of services such as Uber and Lyft, the taxi industry has had to identify operational niches. Spokane may establish a GRH program in partnership with local taxi service providers, that provide employees with a trip home as necessary. Such a program assumes that employers, likely those participating in a TMA to reduce transportation demands, will provide employees with a set amount of rides for such trips. This strategy provides taxis with a service niche, while providing employees that opt not to drive with a guaranteed trip home.

TDM MEASURES MATRIX

This section provides a matrix of the previously described TDM measures with high level information regarding the effectiveness, planning level costs, and associated traffic, parking, or mode split benefits of each strategy. The planning level costs associated with these measures provide a general range of prices associated with each strategy, which can vary depending on the depth and details of each program, but provide a good starting point for consideration. Similarly, the percentages provided in the traffic, parking, and mode split benefits column are based on observed impacts and help quantify each measure's effectiveness. While it is difficult to pinpoint the precise impact each measure may provide, the impact ranges provide a basis for discussions of measures. While evidence from published literature about the effectiveness of some strategies can be limited, or difficult to untangle from the effects of other transportation strategies that were implemented at the same time, most strategies work best in tandem with a combination of TDM programs.

APPENDIX 3, PART 8: TRANSPORTATION DEMAND MANAGEMENT TOOLKIT
City of Spokane City of Spokane

Figure 1: TDM Measure Cost/Benefit Summary

TDM Measure	Cost Estimates- Planning Level	Traffic/ Parking / Mode Split Benefit	Impact per cost
Parking Cash-Out	Varies on depending on location and parking supply factors. Effective cash out for employees/ residents ranges around \$30-\$150/ month, but requires less parking to be built (cost of parking ranges \$5,000-\$40,000)	Reduces automobile commuting by 10-30% Reduces parking demand and saves cost of providing parking Reduce employee VMT by 12% for those choosing cash-out	High
Unbundling Parking	None Reduces rent/lease costs as parking is not subsidized	Reduces vehicle ownership and parking demand 10-20%	High
Shared Parking	Staff/ management costs to administer	Reduction of 10-30% of parking required	High
Bicycle Infrastructure	Average cost of \$130,000 per mile with a range of \$5,000 to \$535,000 per mile depending on the condition of the pavement, the need to remove and repaint the lane lines, and other project specifications.	In U.S. cities with more than 250,000 residents, each additional mile of bike lanes per square mile is associated with a 1% increase bicycle commute mode share.	Medium
Bike Share*	Capital Cost per station*: Approximately \$55,000 Annual Operational Costs*: \$2,500 per bike Yearly Memberships- \$85-144 (a majority provide bulk discounts)	Increase in mode share of bicyclists 1-2% Reduction in automobile usage by 5%-30%	Medium
Bike Depot	Construction Costs: \$500,000- \$1,000,000 (depending on size and amenities) Operating Costs: \$100,000- \$150,000 Membership: \$80-\$100/ year	Reduces parking and traffic by 5-15%	Low-Medium
On-Site Secure Bicycle Parking	Varies with number of bicycle parking and type of storage Ranges: \$200-\$600	Reduces parking and traffic by 5-15%	High
Bike Rack	\$150-300 (for a two bicycle rack)	Reduces parking and traffic by 1-5%	Medium
On-Site Bicycle Changing Facilities	Construction costs associated with development.	Reduces parking and traffic by 5-15%	Medium
On-Site Bicycle	\$100-\$300 (basic bicycle repair tools)	Reduces parking and traffic by 1-5%	Medium

APPENDIX 3, PART 8: TRANSPORTATION DEMAND MANAGEMENT TOOLKIT
City of Spokane

TDM Measure	Cost Estimates- Planning Level	Traffic/ Parking / Mode Split Benefit	Impact per cost
Repair			
Pedestrian Infrastructure Improvements	Varies by type of improvement Sidewalks: \$5-\$10 per square foot Handicap accessible curb ramp: \$800-\$1,000 Crosswalk: \$100-\$400 (one leg) Curb Extensions: \$3,000-7,000) Planting Tree: (\$150-\$300)	Increase walking mode split by 0.27% per 1% increase in sidewalk coverage.	Medium-High
District- Based Shuttle	Service Operation: \$80-\$100 / hour Purchase of shuttle/ bus: \$30,000 (10-14 passenger) -\$100,000 (30-passenger)	Reduces up to 40% of vehicle trips to shuttle trips <i>This percentage varies dramatically depending on type of service, frequency, location/ geography, origin/destination etc.</i>	Medium-High
Car Share (Car2Go/Zip Car)**	Designating Car Share Spaces in Development: No cost associated with designating Car2Go parking locations within development, however surface lots must be accessible 24/7 to public users and on-street parking near the development must be within the "Home Area" zone. Purchasing Corporate/ Bulk Memberships: There is often a bulk discount associated with purchasing bulk memberships for employees or residents. Generally a membership for Car2Go is a one-time \$35 fee, and members pay for their usage.	Each car share vehicle eliminates demand for 15-20 private vehicles and each car share member reduces their driving between 27%-69%	High
TMA Coordinator	Varies- based on staffing from part time responsibilities to full time coordinator	Reduce requirements 10-40% at worksites with effective parking and mobility management programs. (Cannot combine reduction effects with the Coordinator's TMA implementation strategies.)	High
Carpool/ Vanpool	Carpool: None Vanpool: \$30,000-\$40,000 (purchase of 10-14-person shuttle/ bus) Operating costs can be offset by charging participants- average \$100/ month	Reduces parking and traffic by 5-10%	Low-Medium

APPENDIX 3, PART 8: TRANSPORTATION DEMAND MANAGEMENT TOOLKIT

City of Spokane City of Spokane

TDM Measure	Cost Estimates- Planning Level	Traffic/ Parking / Mode Split Benefit	Impact per cost
Rideshare	None	Reduces parking and traffic by 1-5%	Medium-High
Guaranteed Ride Home	Varies depending on the number of rides designated to employee/ resident and form of transportation	Reduces automobile commuting by 15-25%	Medium-High
Discount Transit Passes	\$50-\$120/ month (depending on subsidy discount rate, generally 50%-60% of a full price monthly transit pass for full time employees)	Reduces automobile commuting by 4% to 22% with an average reduction of 11%	Medium

*Costs derived from Regional Bike Share Implementation Plan for Los Angeles County http://clkrep.lacity.org/online/docs/2015/15-0985_misc_f_08-20-15.pdf

**Information derived from Car2Go Seattle Website: <https://www.car2go.com/en/seattle>

Appendix 3

Transportation:

8 Project Prioritization Matrix Summary

LINK Spokane Project Selection Criteria

Evaluation Categories

- Transportation Choices
- Access to Daily Needs
- Economic Opportunity
- Natural & Neighborhood Assets
- Enhance Public Health & Safety
- Fiscal Responsibility

Sources for Project List

- Existing Comprehensive Plan
- Neighborhood Plans
- Downtown Plan & U-District Plan
- Bicycle and Pedestrian Plan
- Existing Impact Fee List
- West Plains Transportation Study
- Arterial and Utility Conditions

Matrix Types

- Reconstruction
 - Projects of Significance
- Maintenance / Overlays
- Non-Motorized
- Transportation Impact Fee List

Transportation Choices

Person Capacity

1 pt - < 5k ADT

2 pts – < 5k ADT + HPTN *or* 5k-10k ADT

3 pts – 5k-10k ADT + HPTN *or* 10k-20k ADT

4 pts – 10k-20k ADT + HPTN *or* > 20k ADT

5 pts – > 20k ADT+ HPTN



Transportation Choices

Network Connectivity

0 pts - none

2 pt – adds one mode

3 pts – adds two modes

4 pts – adds three modes

5 pts – adds four modes



Access to daily needs

Neighborhood Accessibility

- 1 pts – score 1-5
- 2 pts – score 6 -10
- 3 pts – score 11 - 15
- 4 pts – score 16-20
- 5 pts – score 21-25



Access to daily needs

Regional Accessibility

0 pts - none

2 pt – 1-2 destinations near project limits

3 pts – 3-4 destinations near project limits

4 pts – 5-6 destinations near project limits

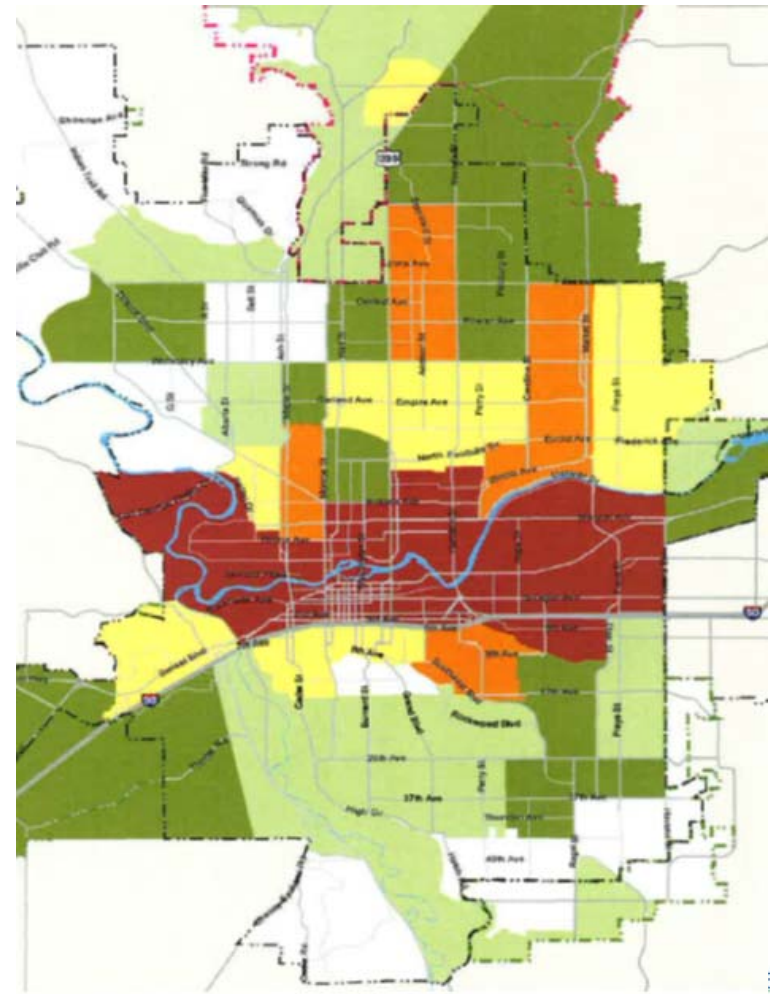
5 pts – downtown core



Access to daily needs

Disadvantaged Accessibility

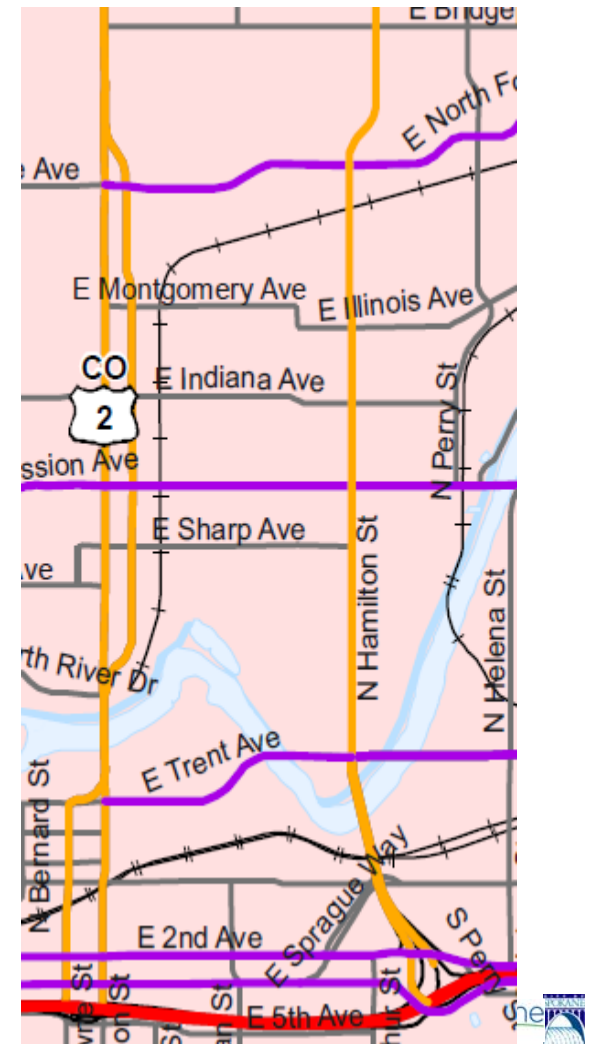
0 pts	-	0% - 6.92%
1 pts	-	6.93% - 11.43%
2 pts	-	11.43% - 19.36%
3 pts	-	19.37% - 26.4%
4 pts	-	26.45% - 32.9%
5 pts	-	32.91%



Economic Opportunity

Freight & Goods Movement

- 0 pts - not classified
- 1 pt - T5 (20-100 tons)
- 2 pts - T4 (100-300 tons)
- 3 pts - T3 (300-4,000 tons)
- 4 pts - T2 (4,000-10,000 tons)
- 5 pts - T1 (over 10,000 tons)



Economic Opportunity

Development/Redevelopment Potential

0 pts - none

1 pt – within ½ mile

3 pts – within ¼ mile

5 pts – within project limits



Target Areas



Centers and Corridors



The YARD

Natural & Neighborhood Assets

Air Quality

- 0 pts - adds VMT
- 2 pt – neutral
- 3 pts – decreases idling
- 5 pts – reduces VMT



Natural & Neighborhood Assets

Water Quality



0 pts - negative

2 pts - neutral

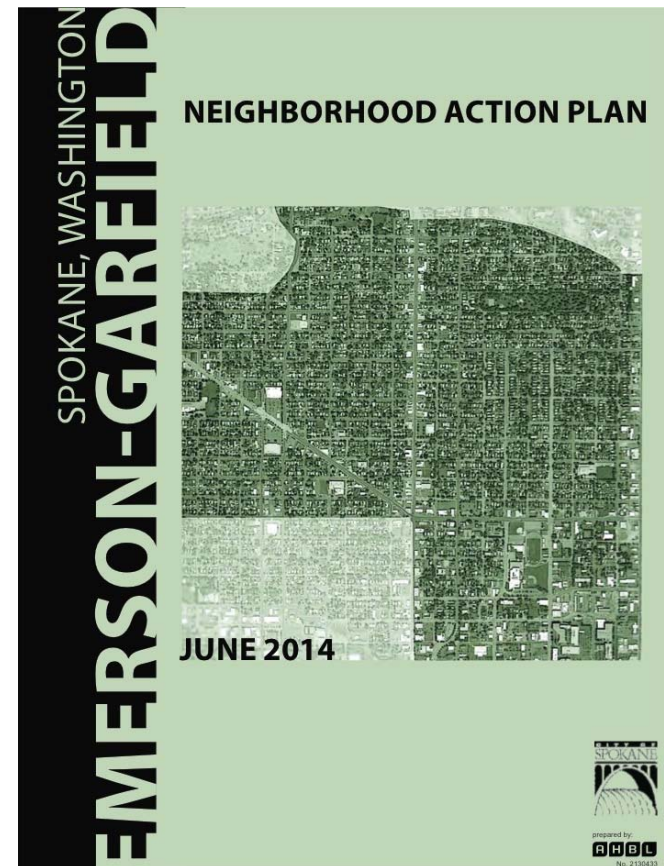
5 pts – includes new or updated stormwater facilities



Natural & Neighborhood Assets

Neighborhood/District Impact

- 0 pts -
not in neighborhood plan
- 2 pt – consistent with plan
concepts
- 5 pts – project listed in
neighborhood plan



Enhance Public Health & Safety

Vehicle Safety

0 pts - none

3 pts – clear safety benefit

5 pts – corrects documented collision pattern



Enhance Public Health & Safety

Bike Safety

- 0 pts - none
- 2 pts – signing, marking
- 3 pts – bike lane
- 4 pts – buffered lane, greenway, controlled xing
- 5 pts - separated path, grade separated xing



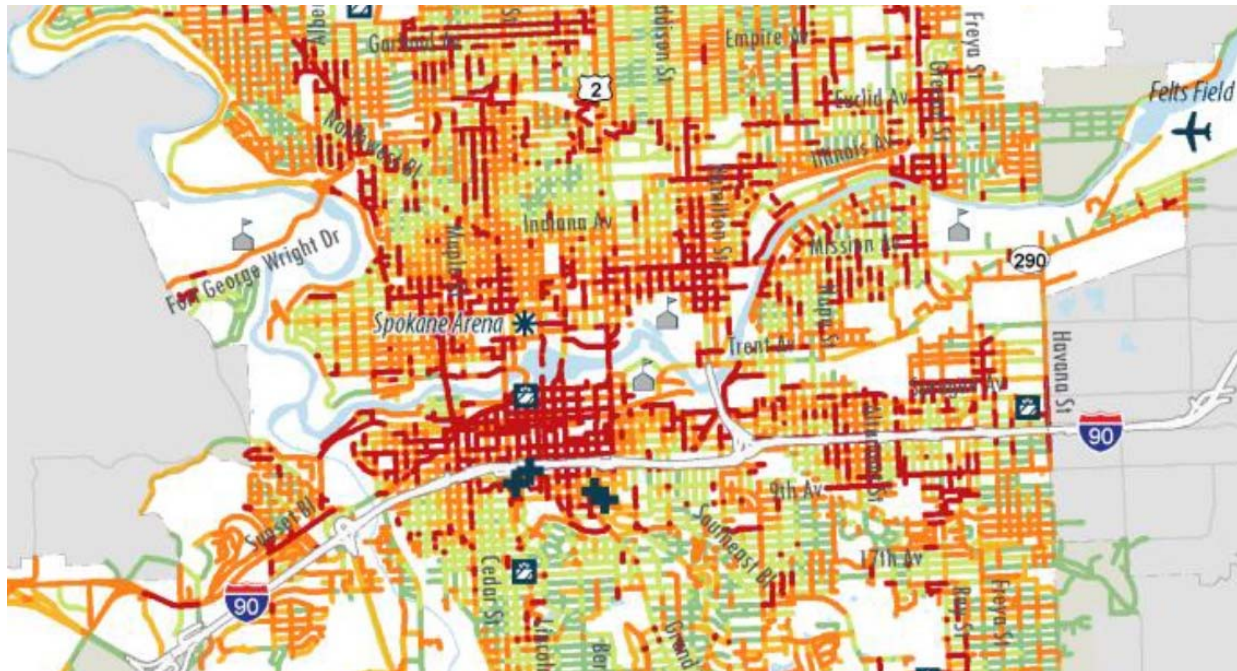
Enhance Public Health & Safety

Pedestrian Priority Area

0 pts – none

2 pts – vicinity of ped priority area

5 pts – in ped priority area



Enhance Public Health & Safety

Pedestrian Safety

0 pts - none

2 pt – sidewalk ramps or leveling

3 pts – adds sidewalk or crosswalk

4 pts – adds controlled crossing

5 pts – adds separated path or xing



2 pts – curb ramps

Fiscal Responsibility

CSO Integration

- 0 pts - none
- 1 pts – Low Priority
- 3 pts – Medium Priority
- 5 pts – High Priority



Fiscal Responsibility

Water Integration

- 0 pts - none
- 1 pts – 1995 – present
- 2 pts – 1975 - 1994
- 3 pts – 1956 - 1974
- 4 pts – 1931-1955
- 5 pts – 1850-1930



Fiscal Responsibility

Maintenance and Facility Condition

0 pts - PCI 80-100

2 pts – PCI 60-80

3 pts – PCI 40-60

4 pts – PCI 20-40

5 pts – PCI 0-20



Fiscal Responsibility

Leveraged Financing

- 0 pts - limited
- 1 pt - grant eligible
- 2 pts - on impact fee list
- 4 pts - <50% funded
- 5 pts - >50% funded

(excludes levy funds)



SAMPLE PROJECT RANKING

Full Street Reconstruction Project Evaluation Matrix

			Provide Transportation Choices			Access to Daily Needs and Regional Destinations				Promote Economic Opportunity			Respect Natural and Neighborhood Assets				Enhance Public Health and Safety					Maximize Public Benefits and Fiscal Responsibility with Integration																							
Project Name	Project Location	Project Description	Person Capacity		Network Connectivity	Score	Neighborhood Accessibility		Regional Accessibility		Disadvantaged Accessibility	Score	Freight/ Goods movement		Development & Redevelopment Potential	Score	Air Quality		Water Quality		Neighborhood/District Impact	Score	Vehicle Safety		Bike Safety		Ped Plan Priority Area		Ped Safety	Score	CSO Integration		Water Integration		Maint and Facility Condition		Leveraged Financing (excludes levy)		Score	Total Score					
Sprague	Howard to Bernard	Full depth reconstruction, SW repair, structural sidewalk, stripe bike lanes, redo lighting (parking	5k-10k ADT	2	Adds 1 mode	2	4	score 6-10	2	downtown core	5	32.91% +	5	8	T4	2	adjacent	5	7	No change	2	Neutral	2	Consistent with plan concepts	2	4	None	0	bike lane	3	In Ped Priority Zone	5	sw ramps or repair	2	5	Medium	3	1850-1930	5	PCI 0-20	5	grant eligible	1	7	35.0
Sprague Ave	Cedar to Howard	Full depth reconstruction, sidewalk repair, bike lanes, lighting, signal update, waterline	< 5k ADT + HPTN	2	Adds 1 mode	2	4	score 6-10	2	downtown core	5	32.91% +	5	8	T4	2	adjacent	5	7	No change	2	Neutral	2	Consistent with plan concepts	2	4	None	0	bike lane	3	In Ped Priority Zone	5	sw ramps or repair	2	5	Medium	3	1850-1930	5	PCI 40-60	3	grant eligible	1	6	34.0
Riverside Ave	Maple to Monroe	Full depth reconstruction, SW repair, structural sidewalk, redo lighting (???)	< 5k ADT + HPTN	2	None	0	2	score 6-10	2	downtown core	5	32.91% +	5	8	T4	2	adjacent	5	7	No change	2	Neutral	2	Not in plan	0	3	None	0	bike lane	3	In Ped Priority Zone	5	sw ramps or repair	2	5	High	5	1850-1930	5	PCI 20-40	4	<50% funded (any source)	4	9	33.7
Washington	SFB to 4th	Full depth reconstruction, SW repair, structural sidewalk, redo lighting (parking funds)	10k-20k ADT	3	None	0	3	score 6-10	2	downtown core	5	32.91% +	5	8	T3	3	adjacent	5	8	No change	2	New or updated facilities	5	Not in plan	0	5	None	0	signing, marking	2	none	0	add sw and/or xwalk	3	3	Medium	3	1850-1930	5	PCI 20-40	4	grant eligible	1	7	32.7
Monroe	Maxwell to Indiana	Full depth reconstruction, SW repair	10k-20k ADT + HPTN	4	None	0	4	score 6-10	2	none	0	26.45%-32.9%	4	4	T3	3	adjacent	5	8	No change	2	New or updated facilities	5	Not in plan	0	5	None	0	none	0	In Ped Priority Zone	5	sw ramps or repair	2	4	Medium	3	1850-1930	5	PCI 60-80	2	grant eligible	1	6	29.7
Howard Street	SFB to Riverside	Full depth reconstruction, SW repair, structural sidewalk, redo lighting (parking funds)	< 5k ADT	1	None	0	1	score 6-10	2	downtown core	5	32.91% +	5	8	T5	1	adjacent	5	6	No change	2	New or updated facilities	5	Not in plan	0	5	None	0	bike lane	3	In Ped Priority Zone	5	sw ramps or repair	2	5	Medium	3	1850-1930	5	PCI 60-80	2	grant eligible	1	6	30.2
Howard Street	Sprague to 4th	Full depth reconstruction, SW repair, structural sidewalk, redo lighting (parking funds)	< 5k ADT	1	None	0	1	score 6-10	2	downtown core	5	32.91% +	5	8	T5	1	adjacent	5	6	No change	2	New or updated facilities	5	Not in plan	0	5	None	0	bike lane	3	In Ped Priority Zone	5	sw ramps or repair	2	5	Medium	3	1850-1930	5	PCI 60-80	2	grant eligible	1	6	30.2
4th Avenue	Walnut to Wall	Full depth reconstruction, SW repair	5k-10k ADT	2	None	0	2	score 1-5	1	downtown core	5	19.37%-26.4%	3	6	T5	1	adjacent	5	6	No change	2	New or updated facilities	5	Not in plan	0	5	None	0	bike lane	3	In Ped Priority Zone	5	sw ramps or repair	2	5	Medium	3	1850-1930	5	PCI 20-40	4	grant eligible	1	7	30.2
Stevens	SFB to 4th	Full depth reconstruction, SW repair, structural sidewalk, redo lighting (???)	10k-20k ADT	3	None	0	3	score 6-10	2	downtown core	5	32.91% +	5	8	T3	3	adjacent	5	8	No change	2	New or updated facilities	5	Not in plan	0		None	0	signing, marking	2	In Ped Priority Zone	5	sw ramps or repair	2	5	Medium	3	1931-1955	4	PCI 20-40	4	grant eligible	1	6	29.5
4th Avenue	Washington to Division	Full depth reconstruction, SW repair	< 5k ADT	1	None	0	1	score 1-5	1	downtown core	5	19.37%-26.4%	3	6	T5	1	adjacent	5	6	No change	2	New or updated facilities	5	Not in plan	0	5	None	0	bike lane	3	In Ped Priority Zone	5	sw ramps or repair	2	5	Medium	3	1850-1930	5	PCI 40-60	3	grant eligible	1	6	28.7
Post St.	Main to 3rd	Full depth reconstruction, SW repair, structural sidewalk, redo lighting (???)	< 5k ADT	1	None	0	1	score 6-10	2	downtown core	5	32.91% +	5	8	T5	1	adjacent	5	6	No change	2	Neutral	2	Not in plan	0	3	None	0	none	0	In Ped Priority Zone	5	sw ramps or repair	2	4	High	5	1850-1930	5	PCI 40-60	3	limited	0	7	27.7
Indiana Avenue	Ash (use Maple) to Monroe	Full depth reconstruction, SW repair, bike lanes	< 5k ADT	1	Adds 1 mode	2	3	score 6-10	2	none	0	26.45%-32.9%	4	4	T3	3	within 1/2 mile	1	4	No change	2	New or updated facilities	5	Not in plan	0	5	None	0	bike lane	3	none	0	sw ramps or repair	2	3	Medium	3	1850-1930	5	PCI 20-40	4	grant eligible	1	7	24.7
Riverside Ave	Hemlock to Maple	Full depth reconstruction, SW repair	< 5k ADT	1	None	0	1	score 1-5	1	downtown core	5	32.91% +	5	7	T5	1	adjacent	5	6	No change	2	Neutral	2	Not in plan	0	3	None	0	signing, marking	2	vicinity of Ped Priority	2	sw ramps or repair	2	3	None	0	1850-1930	5	PCI 20-40	4	limited	0	5	24.5
Boone	Maple to Monroe	Full depth reconstruction, SW repair	5k-10k ADT	2	None	0	2	score 6-10	2	none	0	26.45%-32.9%	4	4	T4	2	adjacent	5	7	No change	2	Neutral	2	Not in plan	0	3	None	0	none	0	In Ped Priority Zone	5	sw ramps or repair	2	4	Medium	3	1850-1930	5	PCI 80-100	0	limited	0	4	23.2
Summit Blvd - Mission	A St. to Pettit	Full depth reconstrction, SW repair	< 5k ADT	1	None	0	1	score 6-10	2	none	0	19.37%-26.4%	3	3	T5	1	adjacent	5	6	No change	2	Neutral	2	Not in plan	0	3	None	0	signing, marking	2	vicinity of Ped Priority	2	sw ramps or repair	2	3	High	5	1931-1955	4	PCI 20-40	4	limited	0	7	22.5

Ranking of Impact Fee Projects

SAMPLE PROJECT RANKING

			Provide Transportation Choices				Access to Daily Needs and Regional Destinations				Promote Economic Opportunity			Respect Natural and Neighborhood Assets				Enhance Public Health and Safety						Maximize Public Benefits and Fiscal Responsibility with Integration																					
ProjectName	ProjectLocation		Person Capacity		Network Connectivity	Score	Neighborhood Accessibility		Regional Accessibility		Disadvantage d Accessibility	Score	Freight/ Goods moveme nt	Development & Redevelopme nt Potential	Score	Air Quality		Water Quality		Neighborhood/ District Impact	Score	Vehicle Safety		Bicycle Safety		Ped Plan Priority Area		Pedestrian Safety	Score	CSO Integration		Water Integratio n		Maint and Facility Condition		Leveraged Financing (excludes levy)		Score	Total Score						
Hamilton St. Corridor Enhancement Project	Desmet to Foothills		>20k ADT + HPTN	5	Adds 2 modes	3	8	score 6-10	2	1-2 destinations near project limits	2	32.91% +	5	6	T2	4	adjacent	5	9	Decreases idling	3	Neutral	2	Consistent with plan concepts	2	4.7	Corrects documented collision pattern	5	none	0	In Ped Priority Zone	5	sw ramps or repair	2	6	None	0	None	0	n/a	0	on impact fee list	2	1.3	35
Greene/Ermina signal	Greene/Ermina		>20k ADT + HPTN	5	Adds 2 modes	3	8	score 1-5	1	1-2 destinations near project limits	2	32.91% +	5	5.3	T1	5	None	0	5	Decreases idling	3	Neutral	2	Consistent with plan concepts	2	4.7	Clear safety benefit	3	buffered lane, greenway	4	Ped Priority Zone	2	controlled xing	4	6.5	None	0	None	0	n/a	0	on impact fee list	2	1.3	31
Lincoln/Nevada intersection improv	Lincoln/Nevada		10k-20k ADT	3	Adds 2 modes	3	6	score 1-5	1	none	0	11.43%-19.36%	2	2	T3	3	within 1/4 mile	3	6	Decreases idling	3	Neutral	2	Not in plan	0	3.3	None	0	none	0	vicinity of Ped Priority Zone	2	none	0	1	None	0	None	0	n/a	0	on impact fee list	2	1.3	20
Francis/Nevada intersection improv	Francis/Nevada		10k-20k ADT	3	Adds 2 modes	3	6	score 1-5	1	none	0	19.37%-26.4%	3	2.7	T2	4	None	0	4	Decreases idling	3	Neutral	2	Not in plan	0	3.3	None	0	none	0	vicinity of Ped Priority Zone	2	none	0	1	None	0	None	0	n/a	0	on impact fee list	2	1.3	18
Magnesium & Crestline Intersection	Magnesium & Crestline		10k-20k ADT	3	Adds 2 modes	3	6	score 1-5	1	none	0	11.43%-19.36%	2	2	T5	1	None	0	1	Decreases idling	3	Neutral	2	Not in plan	0	3.3	None	0	none	0	none	0	add sw and/or xwalk	3	1.5	None	0	None	0	n/a	0	on impact fee list	2	1.3	15
12th Avenue construction	Deer Heights to Flint		< 5k ADT	1	Adds 2 modes	3	4	score 1-5	1	none	0	11.43%-19.36%	2	2	T5	1	None	0	1	Reduces VMT	5	Neutral	2	Consistent with plan concepts	2	6	Clear safety benefit	3	bike lane	3	none	0	add sw and/or xwalk	3	4.5	None	0	None	0	n/a	0	on impact fee list	2	1.3	19
US 2/ Deer Heights: Signal Improvements	US 2 and Deer Heights		>20k ADT	4	Adds 2 modes	3	7	score 1-5	1	none	0	11.43%-19.36%	2	2	T2	4	None	0	4	Reduces VMT	5	Neutral	2	Consistent with plan concepts	2	6	Clear safety benefit	3	buffered lane, greenway, controlled xing	4	none	0	controlled xing	4	5.5	None	0	None	0	n/a	0	on impact fee list	2	1.3	26
US 2 Signal Communications/ITS Equipment	Lawson to Spotted Rd		>20k ADT	4	Adds 2 modes	3	7	score 1-5	1	1-2 destinations near project limits	2	11.43%-19.36%	2	3.3	T2	4	None	0	4	Decreases idling	3	Neutral	2	Consistent with plan concepts	2	4.7	None	0	none	0	none	0	none	0	0	None	0	None	0	n/a	0	on impact fee list	2	1.3	20
Deer Heights Road construction	South end to 18th-21st Avenue		< 5k ADT	1	Adds 2 modes	3	4	score 1-5	1	none	0	11.43%-19.36%	2	2	T5	1	None	0	1	Reduces VMT	5	Neutral	2	Consistent with plan concepts	2	6	None	0	signing, marking	2	none	0	add sw and/or xwalk	3	2.5	None	0	None	0	n/a	0	on impact fee list	2	1.3	17
12th Avenue construction (Flint to Campus)	Flint Road to Campus Drive		< 5k ADT	1	Adds 2 modes	3	4	score 1-5	1	1-2 destinations near project limits	2	11.43%-19.36%	2	3.3	T5	1	None	0	1	Reduces VMT	5	Neutral	2	Consistent with plan concepts	2	6	None	0	signing, marking	2	none	0	add sw and/or xwalk	3	2.5	None	0	None	0	n/a	0	on impact fee list	2	1.3	18
Campus Drive construction	12th Avenue to US 2		< 5k ADT	1	Adds 2 modes	3	4	score 1-5	1	none	0	11.43%-19.36%	2	2	T5	1	None	0	1	Reduces VMT	5	Neutral	2	Consistent with plan concepts	2	6	None	0	signing, marking	2	none	0	add sw and/or xwalk	3	2.5	None	0	None	0	n/a	0	on impact fee list	2	1.3	17
US 2/Campus Drive signal	Signal or intersection improvements		10k-20k ADT	3	Adds 2 modes	3	6	score 1-5	1	none	0	11.43%-19.36%	2	2	T2	4	None	0	4	Decreases idling	3	Neutral	2	Not in plan	0	3.3	None	0	buffered lane, greenway, controlled xing	4	none	0	controlled xing	4	4	None	0	None	0	n/a	0	on impact fee list	2	1.3	21
Campus Drive construction	US 2 to Granite-18th-21st Avenue		< 5k ADT	1	Adds 2 modes	3	4	score 1-5	1	none	0	11.43%-19.36%	2	2	T5	1	None	0	1	Reduces VMT	5	Neutral	2	Consistent with plan concepts	2	6	None	0	signing, marking	2	none	0	add sw and/or xwalk	3	2.5	None	0	None	0	n/a	0	on impact fee list	2	1.3	17
18th-21st Avenue construction	Technology Blvd to Spotted Rd		5k-10k ADT	2	Adds 2 modes	3	5	score 1-5	1	1-2 destinations near project limits	2	11.43%-19.36%	2	3.3	T5	1	None	0	1	Reduces VMT	5	Neutral	2	Consistent with plan concepts	2	6	Clear safety benefit	3	bike lane	3	none	0	add sw and/or xwalk	3	4.5	None	0	None	0	n/a	0	on impact fee list	2	1.3	21

Ranking of Impact Fee Projects

SAMPLE PROJECT RANKING

ProjectName	ProjectLocation		Person Capacity		Network Connectivity	Score	Neighborhood Accessibility		Regional Accessibility		Disadvantaged Accessibility	Score	Freight/ Goods movement		Development & Redevelopment Potential	Score	Air Quality		Water Quality		Neighborhood/ District Impact	Score	Vehicle Safety		Bicycle Safety		Ped Plan Priority Area		Pedestrian Safety	Score	CSO Integration		Water Integration		Maint and Facility Condition		Leveraged Financing (excludes levy)		Score	Total Score					
Flint Road/18th-21st Avenue Traffic signal or roundabout	Intersection		5k-10k ADT	2	Adds 2 modes	3	5	score 1-5	1	1-2 destinations near project limits	2	11.43%-19.36%	2	3.3	T5	1	None	0	1	Decreases idling	3	Neutral	2	Consistent with plan concepts	2	4.7	None	0	buffered lane, greenway, controlled xing	4	4	None	0	None	0	n/a	0	on impact fee list	2	1.3	19				
21st Avenue Construction (Hayford to Flint)	Hayford Rd to Flint Rd		5k-10k ADT	2	Adds 2 modes	3	5	score 1-5	1	1-2 destinations near project limits	2	11.43%-19.36%	2	3.3	T5	1	None	0	1	Reduces VMT	5	Neutral	2	Consistent with plan concepts	2	6	None	0	bike lane	3	none	0	add sw and/or xwalk	3	3	None	0	None	0	n/a	0	on impact fee list	2	1.3	20
5th/Sherman signal	5th/Sherman		5k-10k ADT	2	Adds 2 modes	3	5	score 1-5	1	1-2 destinations near project limits	2	26.45%-32.9%	4	4.7	T5	1	within 1/2 mile	1	2	Decreases idling	3	Neutral	2	Consistent with plan concepts	2	4.7	Clear safety benefit	3	buffered lane, greenway, controlled xing	4	5.5	None	0	None	0	n/a	0	on impact fee list	2	1.3	23				
Ash Street 2-way conversion	Broadway to Dean		5k-10k ADT	2	Adds 2 modes	3	5	score 6-10	2	1-2 destinations near project limits	2	32.91% +	5	6	T4	2	adjacent	5	7	Reduces VMT	5	Neutral	2	Consistent with plan concepts	2	6	None	0	bike lane	3	In Ped Priority Zone	5	none	0	4	None	0	None	0	n/a	0	on impact fee list	2	1.3	29
North Indian Trail Rd widening	Kathleen St to Barnes Rd		10k-20k ADT	3	Adds 2 modes	3	6	score 1-5	1	none	0	0%-6.92%	0	0.7	T5	1	within 1/4 mile	3	4	Decreases idling	3	New or up	5	Not in plan	0	5.3	Clear safety benefit	3	bike lane	3	none	0	sw ramps or repair	2	4	None	0	None	0	n/a	0	on impact fee list	2	1.3	21
Assembly/Francis roundabout	Assembly/Francis		>20k ADT	4	Adds 2 modes	3	7	none	0	1-2 destinations near project limits	2	19.37%-26.4%	3	3.3	T3	3	None	0	3	Decreases idling	3	Neutral	2	Not in plan	0	3.3	Clear safety benefit	3	buffered lane, greenway, controlled xing	4	5.5	None	0	None	0	n/a	0	on impact fee list	2	1.3	24				
Wellesley/Driscoll roundabout	Wellesley/Driscoll		10k-20k ADT	3	Adds 2 modes	3	6	none	0	none	0	6.93%-11.43%	1	0.7	T4	2	None	0	2	Decreases idling	3	Neutral	2	Not in plan	0	3.3	None	0	buffered lane, greenway, controlled xing	4	4	None	0	None	0	n/a	0	on impact fee list	2	1.3	17				
Assembly/Wellesley roundabout	Assembly/Wellesley		10k-20k ADT	3	Adds 2 modes	3	6	score 1-5	1	1-2 destinations near project limits	2	6.93%-11.43%	1	2.7	T3	3	None	0	3	Decreases idling	3	Neutral	2	Not in plan	0	3.3	None	0	buffered lane, greenway, controlled xing	4	4	None	0	None	0	n/a	0	on impact fee list	2	1.3	20				
SR 291/Rifle Club Rd signal	SR 291/Rifle Club Road		5k-10k ADT	2	Adds 2 modes	3	5	score 1-5	1	none	0	0%-6.92%	0	0.7	T3	3	None	0	3	Decreases idling	3	Neutral	2	Consistent with plan concepts	2	4.7	None	0	buffered lane, greenway, controlled xing	4	4	None	0	None	0	n/a	0	on impact fee list	2	1.3	19				
West Leg of Regal/Palouse Intersection Improvements	Regal and Palouse		>20k ADT + HPTN	5	Adds 2 modes	3	8	score 1-5	1	none	0	0%-6.92%	0	0.7	T5	1	adjacent	5	6	Decreases idling	3	Neutral	2	Not in plan	0	3.3	None	0	separated path, grade sep xing	5	none	0	add sw and/or xwalk	3	4	None	0	None	0	n/a	0	on impact fee list	2	1.3	23

Ranking of Impact Fee Projects

SAMPLE PROJECT RANKING

ProjectName	ProjectLocation		Person Capacity		Network Connectivity	Score	Neighborhood Accessibility		Regional Accessibility		Disadvantaged Accessibility	Score	Freight/ Goods movement		Development & Redevelopment Potential	Score	Air Quality		Water Quality		Neighborhood/ District Impact	Score	Vehicle Safety		Bicycle Safety		Ped Plan Priority Area		Pedestrian Safety	Score	CSO Integration		Water Integration		Maint and Facility Condition		Leveraged Financing (excludes levy)		Score	Total Score					
Ray St./Freya St. Crossover	44th to 35th		10k-20k ADT	3	Adds 2 modes	3	6	score 6-10	2	none	0	6.93%-11.43%	1	2	T5	1	None	0	1	Reduces VMT	5	Neutral	2	Not in plan	0	4.7	Clear safety benefit	3	bike lane	3	vicinity of Ped Priority Zone	2	add sw and/or xwalk	3	5.5	None	0	None	0	n/a	0	on impact fee list	2	1.3	21
29th/Freya signal	29th/Freya		10k-20k ADT	3	Adds 2 modes	3	6	score 1-5	1	none	0	11.43%-19.36%	2	2	T3	3	within 1/2 mile	1	4	Decreases idling	3	Neutral	2	Not in plan	0	3.3	None	0	buffered lane, greenway, controlled xing	4	none	0	controlled xing	4	4	None	0	None	0	n/a	0	on impact fee list	2	1.3	21
29th Ave TWLTL	e/o Pittsburgh to SE Blvd		10k-20k ADT	3	Adds 2 modes	3	6	score 1-5	1	none	0	6.93%-11.43%	1	1.3	T3	3	within 1/2 mile	1	4	No change	2	Neutral	2	Not in plan	0	2.7	Clear safety benefit	3	none	0	none	0	none	0	1.5	None	0	None	0	n/a	0	on impact fee list	2	1.3	17
37th/Freya signal	37th/Freya		10k-20k ADT	3	Adds 2 modes	3	6	score 1-5	1	none	0	6.93%-11.43%	1	1.3	T4	2	None	0	2	Decreases idling	3	Neutral	2	Not in plan	0	3.3	None	0	buffered lane, greenway, controlled xing	4	none	0	controlled xing	4	4	None	0	None	0	n/a	0	on impact fee list	2	1.3	18
Palouse / Freya improvements																																													
Southeast Blvd/Rockwood signal	Southeast Blvd/Rockwood		10k-20k ADT	3	Adds 2 modes	3	6	score 1-5	1	none	0	11.43%-19.36%	2	2	T3	3	within 1/2 mile	1	4	Decreases idling	3	Neutral	2	Not in plan	0	3.3	None	0	buffered lane, greenway, controlled xing	4	none	0	controlled xing	4	4	None	0	None	0	n/a	0	on impact fee list	2	1.3	21
NW Impact Fee District Bicycle Program	NW District arterials		5k-10k ADT	2	Adds 1 mode	2	4	score 1-5	1	none	0	6.93%-11.43%	1	1.3	T4	2	within 1/2 mile	1	3	Reduces VMT	5	Neutral	2	Consistent with plan concepts	2	6	Clear safety benefit	3	buffered lane, greenway, controlled xing	4	vicinity of Ped Priority Zone	2	sw ramps or repair	2	5.5	None	0	None	0	n/a	0	on impact fee list	2	1.3	21
NW Impact Fee District Pedestrian Program	NW District arterials		5k-10k ADT	2	Adds 1 mode	2	4	score 1-5	1	none	0	6.93%-11.43%	1	1.3	T4	2	within 1/2 mile	1	3	Reduces VMT	5	Neutral	2	Consistent with plan concepts	2	6	Clear safety benefit	3	buffered lane, greenway, controlled xing	4	vicinity of Ped Priority Zone	2	sw ramps or repair	2	5.5	None	0	None	0	n/a	0	on impact fee list	2	1.3	21
S Impact Fee District Bicycle Program	S District arterials		5k-10k ADT	2	Adds 1 mode	2	4	score 1-5	1	none	0	6.93%-11.43%	1	1.3	T4	2	within 1/2 mile	1	3	Reduces VMT	5	Neutral	2	Consistent with plan concepts	2	6	Clear safety benefit	3	buffered lane, greenway, controlled xing	4	vicinity of Ped Priority Zone	2	sw ramps or repair	2	5.5	None	0	None	0	n/a	0	on impact fee list	2	1.3	21

Ranking of Impact Fee Projects

SAMPLE PROJECT RANKING

ProjectName	ProjectLocation		Person Capacity		Network Connectivity	Score	Neighborho od Accessibility		Regional Accessibility		Disadvantage d Accessibility	Score	Freight/ Goods moveme nt		Development & Redevelopme nt Potential	Score	Air Quality		Water Quality		Neighborhood/ District Impact	Score	Vehicle Safety		Bicycle Safety		Ped Plan Priority Area		Pedestrian Safety	Score	CSO Integration		Water Integratio n		Maint and Facility Condition		Leveraged Financing (excludes levy)		Score	Total Score					
S Impact Fee District Pedestrian Program	S District arterials		5k-10k ADT	2	Adds 1 mode	2	4	score 1-5	1	none	0	6.93%-11.43%	1	1.3	T4	2	within 1/2 mile	1	3	Reduces VMT	5	Neutral	2	Consistent with plan concepts	2	6	Clear safety benefit	3	buffere d lane, greenw ay, contro ll ed xing	4	vicinity of Ped Priority Zone	2	sw ramps or repair	2	5.5	None	0	None	0	n/a	0	on impact fee list	2	1.3	21
NE Impact Fee District Bicycle Program	NE District arterials		5k-10k ADT	2	Adds 1 mode	2	4	score 1-5	1	none	0	11.43%-19.36%	2	2	T4	2	within 1/2 mile	1	3	Reduces VMT	5	Neutral	2	Consistent with plan concepts	2	6	Clear safety benefit	3	buffere d lane, greenw ay, contro ll ed xing	4	vicinity of Ped Priority Zone	2	sw ramps or repair	2	5.5	None	0	None	0	n/a	0	on impact fee list	2	1.3	22
NE Impact Fee District Pedestrian Program	NE District arterials		5k-10k ADT	2	Adds 1 mode	2	4	score 1-5	1	none	0	11.43%-19.36%	2	2	T4	2	within 1/2 mile	1	3	Reduces VMT	5	Neutral	2	Consistent with plan concepts	2	6	Clear safety benefit	3	buffere d lane, greenw ay, contro ll ed xing	4	vicinity of Ped Priority Zone	2	sw ramps or repair	2	5.5	None	0	None	0	n/a	0	on impact fee list	2	1.3	22
DN Impact Fee District Bicycle Program	DN District arterials		5k-10k ADT	2	Adds 1 mode	2	4	score 1-5	1	downtown core	5	32.91% +	5	7.3	T4	2	adjacent	5	7	Reduces VMT	5	Neutral	2	Consistent with plan concepts	2	6	Clear safety benefit	3	buffere d lane, greenw ay, contro ll ed xing	4	vicinity of Ped Priority Zone	2	sw ramps or repair	2	5.5	None	0	None	0	n/a	0	on impact fee list	2	1.3	31
DN Impact Fee District Pedestrian Program	DN District arterials		5k-10k ADT	2	Adds 1 mode	2	4	score 1-5	1	downtown core	5	32.91% +	5	7.3	T4	2	adjacent	5	7	Reduces VMT	5	Neutral	2	Consistent with plan concepts	2	6	Clear safety benefit	3	buffere d lane, greenw ay, contro ll ed xing	4	vicinity of Ped Priority Zone	2	sw ramps or repair	2	5.5	None	0	None	0	n/a	0	on impact fee list	2	1.3	31
WP Impact Fee District Bicycle Program	WP District arterials		5k-10k ADT	2	Adds 1 mode	2	4	score 1-5	1	none	0	11.43%-19.36%	2	2	T4	2	within 1/2 mile	1	3	Reduces VMT	5	Neutral	2	Consistent with plan concepts	2	6	Clear safety benefit	3	buffere d lane, greenw ay, contro ll ed xing	4	vicinity of Ped Priority Zone	2	sw ramps or repair	2	5.5	None	0	None	0	n/a	0	on impact fee list	2	1.3	22
Wp Impact Fee District Pedestrian Program	WP District arterials		5k-10k ADT	2	Adds 1 mode	2	4	score 1-5	1	none	0	11.43%-19.36%	2	2	T4	2	within 1/2 mile	1	3	Reduces VMT	5	Neutral	2	Consistent with plan concepts	2	6	Clear safety benefit	3	buffere d lane, greenw ay, contro ll ed xing	4	vicinity of Ped Priority Zone	2	sw ramps or repair	2	5.5	None	0	None	0	n/a	0	on impact fee list	2	1.3	22

Appendix 3

Transportation:

9 Accelerated Mobility Playbook Report



City Thread



Accelerated Mobility Playbook (AMP)

Spokane, WA

Phase 1: Readiness Assessment

September 26, 2024

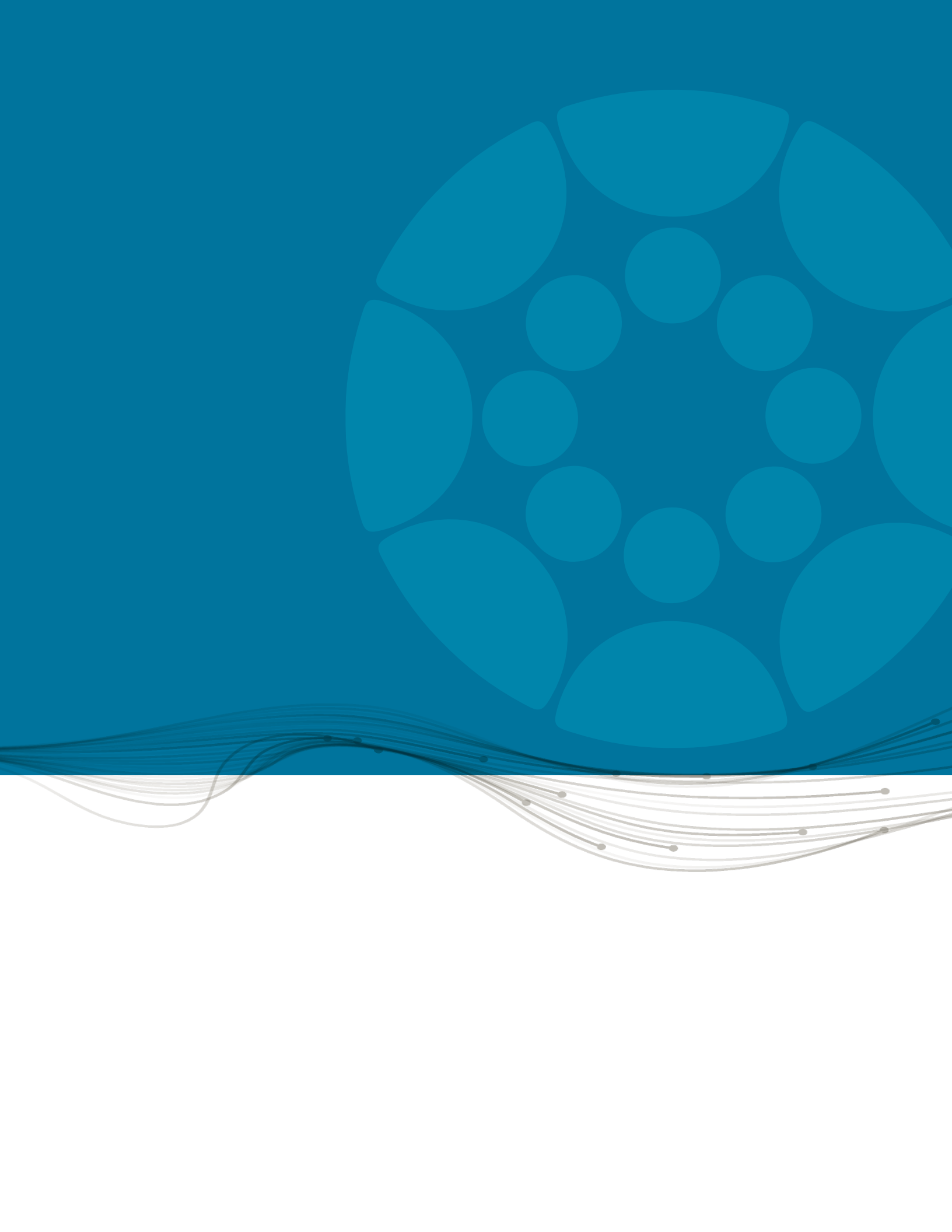
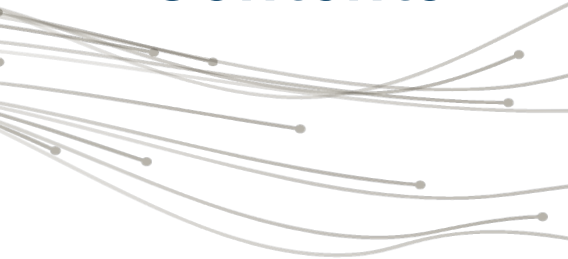


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For the purposes of this report, we may use “**bicycle network**,” “**bike network**,” and “**mobility network**” interchangeably. While some cities and experts may differ in opinion, when we use any of the above phrases, we are referring to on-street infrastructure that is built to specifically accommodate bicycles, scooters, and other individual mobility devices.

Executive Summary

Today, leaders in cities big and small face a daunting mix of challenges. In addition to responsibilities that keep a city running, public officials are tasked with pressing issues of population growth and decline, climate change, income inequality, economic vitality, and public safety. Spokane leaders are proactively looking for ways to address these challenges.

The future of Spokane and mobility are inextricably linked. The city's compact downtown, active outdoor community, and focus on sustainability provide an ideal environment where bicycling, walking, and public transit can enhance the quality of life for all its residents. In recent years, community leaders and city staff have collaborated on programs that make traveling without a car safer and more convenient.

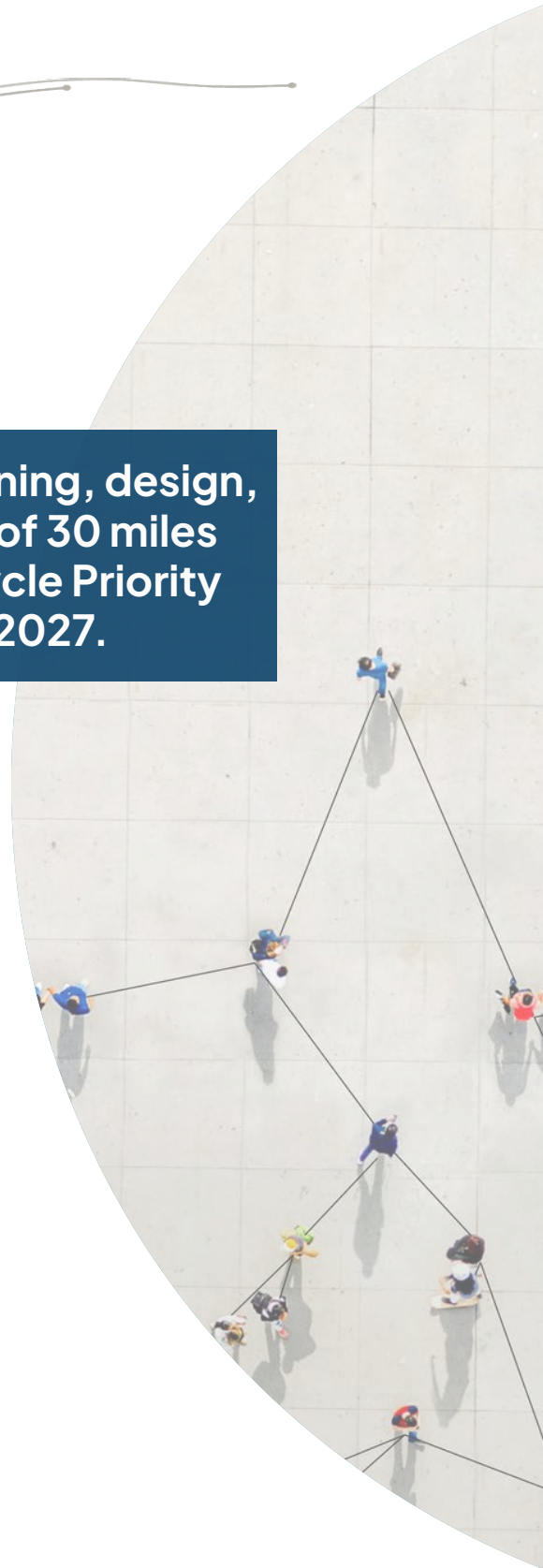
With support from Mayor Brown, Spokane City Council recently passed the "Janet Mann – Safe Streets Now" resolution to elevate biking and walking safety as top priorities for City transportation investments and implement the needed infrastructure more quickly.

This Accelerated Mobility Playbook (AMP) outlines an approach to help Spokane speed the completion of its Bicycle Priority Network.

Accelerate the planning, design, and construction of 30 miles of Spokane's Bicycle Priority Network by 2027.

Combining efforts already underway – the Six-Year Comprehensive Street Program, Vision Zero Action Plan, Safe Streets For All federal grant, and the Safe Streets Now resolution – has built the necessary momentum for the City of Spokane to achieve its goal of eliminating traffic fatalities and serious injuries.

To prepare this report, City Thread interviewed 33 stakeholders, examined planning documents, reviewed public meeting materials, and surveyed public messaging strategies. This report concludes with a set of customized recommendations that Spokane can use to improve implementation methods, build effective partnerships, and amplify support for changes to the city's streets.



Spokane's playbook is distilled into the following four strategies:

1 Establish a Shared Goal

Spokane can capitalize on growing popular support for infrastructure improvements that make it safer and easier for all residents and visitors to get around the city's neighborhoods. To improve processes and maximize efficiency, Spokane can align the existing Vision Zero Action Plan and recently passed Safe Streets Now ordinances with the Six-Year Comprehensive Street Program.

Effective partnership relies upon a shared vision among community stakeholders. Setting a network implementation goal helps clarify what each partner is working to accomplish and aligns the diverse work of individuals and organizations into a single focus. To be effective, this vision must be bold yet achievable. It should inspire partners to action and, when accomplished, build momentum toward future success.

City Thread recommends Spokane take the following action steps:

- **Acceleration:** Spokane will accelerate the planning, design, and construction of 30 miles of its Bicycle Priority Network by 2027.
- **Safety Improvements:** Overlapping safety projects identified in the Vision Zero Action Plan, SS4A grant, and Safe Streets Now legislation will be counted towards the AMP implementation goal, accomplishing much needed safety improvements alongside bicycle network implementation.

2 Align Partners

A coalition model of organizing can be used to improve outcomes and sustain momentum for changes to city streets. The most effective coalitions engage with residents with diverse viewpoints, representing interests outside of mobility infrastructure.

Effective messaging is only as effective as the messenger. A diverse coalition that represents Spokane residents is needed to authentically communicate the vision for active transportation and the associated benefits and tradeoffs. A community-based coalition and its municipal partners need only to identify those spokespeople and amplify their voices to move forward, quickly.

City Thread recommends Spokane take the following action steps:

- **Interdepartmental Collaboration:** No single department or team within the City of Spokane can achieve this goal on their own. Success will require focus and alignment among different divisions responsible for existing transportation duties and responsibilities. A coordinated, cross-departmental task force should be created to guide a new project delivery process seeking to improve outcomes, reduce demand on internal resources, and leverage external partnerships in new ways.
- **Community-Based Coalition:** Create an expansive, non-partisan coalition with thoughtful recruitment from outside the bicycle community. An organized coalition is key to turning out support at the time and in the way that is most helpful to city staff and elected leaders.

3 Resource Partners

Achieving the City's bold and ambitious goal requires new resources so that each stakeholder group – city staff, elected leaders, and community partners – can effectively work towards it. Building trust and cooperation in partnerships is easier when everyone has access to the resources needed to accomplish their roles. The AMP acknowledges that each of the groups represented in this partnership is critical and that they require different forms of support.

To provide these resources, the AMP highlights the role of philanthropy, corporate sponsors, and anchor institutions – not just as funders, but also conveners, spokespeople, and invested representatives of the city's future.

City Thread recommends Spokane take the following action steps:

- **Partnerships:** City and philanthropic investment should be dedicated to the livability and accessibility of Spokane's working-class neighborhoods. A people-centered approach to transportation planning moves residents from automobile-dependency to a community connected by pedestrian, bicycle, and transit networks, and is particularly important in low-to-moderate-income residential areas.
- **Fund Development:** Executing the AMP requires funding, and much of it can't – and shouldn't – come from the municipal coffers. Resourcing the coalition starts with hiring a coalition manager to devote full time energy to this work, but does not end there. City Thread estimates that local philanthropic and business interests could provide \$1.5 million over two years to support community-based activities.

4 Build a Network, Quickly

Once existing community support and demonstrated political will is aligned, the City of Spokane can rapidly accelerate the pace of network implementation. The resulting projects are transformative, connected, and complete, meeting the community's desire for transportation choices and improved safety.

Successful implementation requires consistent engagement practices and predictable project delivery methods. While the process of building infrastructure contains multiple layers of simultaneous activities, cities can streamline and refine their efforts to make implementation easier, more efficient, and less expensive.

City Thread recommends Spokane take the following action steps:

- **Project Delivery:** Spokane will create and test new methods of holistic project delivery where urgent safety improvements are most needed. These methods will seek to redefine public engagement, interdepartmental collaboration, and partnerships with community supporters.
- **Community Engagement:** A robust community engagement strategy will work with underrepresented constituencies to more fully reflect community needs in the planning and implementation of each new bikeway network project. Community partners will connect resident and neighborhood concerns to the City's work.

AMP Overview

Transportation, mobility, and access improvements offer cost-effective solutions to the challenges cities face, but traditional methods of planning, project development, community engagement, and messaging often leave residents searching for better answers, and the resulting projects rarely achieve their desired intent.

Improvements to the built environment take too long to implement, infrastructure is disconnected and incomplete, and poor messaging around projects creates fear and distrust, empowering a vocal minority of opposition.

The Accelerated Mobility Playbook (AMP) provides a roadmap for accelerating project delivery, completing network-focused implementation plans, and conducting authentic community engagement. It showcases existing popular support and enables leaders to get ahead of opposition and neutralize misinformation.

The AMP is divided into three distinct phases. The phases build on each other — rooted in the trust, collaboration, and mutual support among key stakeholders needed to accelerate project delivery.

Phase 1 of the AMP is both an audit of a city's current state of practice and an action plan for improved implementation and partnership. This phase is presented in two parts:

- A **Readiness Assessment** details the results of an audit conducted by City Thread to benchmark the current mobility environment. Understanding the current practice of project delivery, capacity of city staff and local partners, backing from elected leadership, intensity of community support, and philanthropic engagement allows City Thread to identify challenges that will affect accelerated implementation and the creation of effective partnerships.
- An **Action Plan** outlines opportunities to improve mobility network implementation methods, build lasting and effective partnerships with community stakeholders, and amplify existing public support for changes to the city's streets. The recommendations include suggested campaign objectives, budget guidance, and next steps for community action.

With the AMP action plan in hand, Phases 2 and 3 follow. It is in these phases that work begins to build a diverse coalition of community supporters, launch a supportive media campaign, develop a process for rapid project delivery, and accelerate the construction of complete mobility networks.

Urgency for Change

Cities today must address an intimidating list of challenges. Public officials face the critical issues of affordable housing, gentrification and displacement, climate change, income inequality, economic vitality, and public safety – all in addition to day-to-day operations. Most communities lack the resources and strategies needed to adequately tackle these problems, threatening the quality of life for residents and preventing cities from realizing their full potential.

Solutions to these challenges require careful planning and sustained leadership.

Resources are limited, spread across large geographies and multiple issue areas, and the support that is available may not allow cities the flexibility to adapt solutions to their unique context and place. Local leaders, attentive to a range of constituent needs and interests, are not always aligned around a single strategy. As a result, public agencies are overwhelmed by the scale of problems, and must direct their limited capacity to small improvements or short-term solutions.

Our challenges are connected.

A history of segregation and disinvestment in many cities has consequences that they continue to reap today. Highways divided thriving communities, separating them from amenities and essential services, stunting their capacity for economic and social growth. Redlining and discriminatory housing practices, community investments, business development, and access to recreation and education have resulted in distinct geographic disparities within any municipality – a result that

Spokane faces a daunting mix of challenges. Solutions to these challenges require careful planning and sustained management.

- High levels of poverty and homelessness stress the city's significant financial resilience. A budget shortfall of \$50 million adds to the constraints. Strategies to drive smart growth and create more equitable employment opportunities for residents are stymied by these resource limitations.
- The city's roads, bridges, and water and sewer systems are in urgent need of repair and modernization. However, the cost of upgrading these systems is high, and the city has limited financial resources to invest in these improvements.
- Increases in housing costs make it difficult for low-income residents to find affordable and stable housing. Addressing this challenge requires support for initiatives that revitalize neighborhoods while preventing displacement and ensuring equitable access to housing and transportation.
- A precipitous rise in the number of traffic crashes resulting in a fatality or serious injury have heightened concerns about roadway safety, and forced city leaders to focus already limited resources on near-term solutions.
- Spokane is vulnerable to extreme weather events, including heat waves, wildfires, and flooding. Preparing for and mitigating the impacts of climate change is a critical challenge for Spokane in the coming years.
- Trust in public governance has eroded where the City has failed to deliver projects that meet the expectations of stakeholders participating in public engagement.

further the experience of disconnection and distrust among residents.

Limited availability of low- and middle-income housing options, and a historical preference for low-density, single family residential homes places upward pressure on property values. Finding affordable housing forces many residents to live further away from centralized employment and cultural districts. Long term residents find it increasingly difficult to remain in their neighborhoods, while young professionals and seniors are being priced out of cities. Those that stay find the shifts in the culture and experience of their neighborhoods disorienting and dispiriting.

Transportation networks become increasingly congested, leading to longer commute times, increased air pollution, and decreased safety. For municipal leaders, aging infrastructure, increasing project costs, and limited staff capacity make it difficult to keep pace with the growing demands placed on public infrastructure. Meanwhile, residents and business leaders face the reality of declining traffic safety, limited parking options, crowding and overuse of recreational areas, and insufficient connectivity to the places they frequent on a daily basis.

Cities must also grapple with the challenge of maintaining their cultural identity and uniqueness. Cookie-cutter solutions threaten traditional cultural practices, and can lead to the homogenization of a community's identity or the displacement of people, neighborhoods, and civic pride.

Looming above it all, climate change poses a significant threat to urban areas due to the concentration of people, infrastructure, and resources. Forest fires, extreme weather events, and heat waves are some of the climate

change impacts that cities must address to maintain their viability.

Mobility options can help.

Cities that have developed and promoted complete, safe networks for biking, walking, and accessing public transit have made measurable progress in addressing the other challenges they face. While increases in biking and walking are far from the only solution, they are a cost-effective, time-tested, quickly implemented remedy that can be applied just about anywhere in the world.

A connected network of mobility infrastructure allows people to get where they need and want to go without adding more cars to the road. Moreover, the city's capacity to deliver high quality projects that meet the needs of its constituents demonstrates the effectiveness of local government and rebuilds trust between residents and the leaders they elect. The development of a complete, connected network does much more than improve mobility; it helps cities sustainably build on their success and ease the challenges they face.

A Vision for Mobility

To overcome the range of challenges cities face, leaders must provide more options that give people a choice for how they get from one place to another. To do this, cities must invest in infrastructure that is connected, comfortable, and easy to use. Cities with safe mobility networks have made measurable progress at increasing the popularity of biking, walking, and rolling for daily transportation.

The development of complete mobility networks does much more than improve transportation. Cities that provide mobility options are widely recognized as great places to live and work, balancing the economic and tourism potential of the city with the needs and desires of local residents just trying to get to school, the park, or the grocery store safely.

Good infrastructure doesn't require bike riders, drivers, or pedestrians to navigate incomplete connections that force everyone into unsafe and confusing situations.

Instead, improved infrastructure helps us move forward together by relieving traffic congestion, increasing mobility and opportunity for residents, and making our city feel more alive and livable.

Our transportation problems are too big to be solved by any one solution. We know that thinking about transportation needs as a whole will make cities more livable—no matter how people choose to get around. When carefully planned and constructed, mobility projects can help everyone get where they need to go with the greatest safety, reliability, and the least

By increasing the popularity of biking, walking, and rolling for daily transportation, Spokane can increase opportunity for everyone.

- Spokane has a robust network of neighborhood councils, community-based organizations, and anchor institutions – a prime audience for new ideas, aspirational messaging and positive reinforcement in support of safer mobility options and complete streets projects.
- A package of Safe Streets infrastructure legislation recently signed by the Mayor and City Council provides an opportunity to create and test a new model of project delivery built on cross-departmental collaboration and meaningful partnerships with local businesses, community-based organizations, and anchor institutions.
- City Council members, residents, and local leaders share concerns about housing affordability and the increasing population of unhoused people. This provides an opportunity to connect incremental mobility improvements to primary issues like housing access and economic resilience.
- Business leaders are willing to support a vision for streets and public spaces that will lead to mobility options, traffic safety, and economic vitality across Spokane.

amount of hassle.

In cities with many transportation options, people make choices that give them the most control over their schedule. Having these options opens up opportunities for everyone – for job opportunities, commuting, recreation, and health.

Build a Network

A mobility network is a completely connected, comfortable system of sidewalks, trails, bike lanes, transit stops, and accessible public spaces that allow people to travel safely, comfortably, and reliably without using a car. Everyone, no matter if they bike, walk, scoot, drive, or use an assisted mobility device, can get where they are going with the greatest safety and the least difficulty because everyone's traffic flow needs are met through careful planning and smart construction.

The recent Safe Streets infrastructure legislation signed by the Mayor and City Council provides an opportunity to create and test a new model of project delivery built on cross-departmental collaboration and meaningful partnerships with local businesses, community-based organizations, and anchor institutions.

The street network allows drivers to travel anywhere in their community without needing to think much about where they are going or how they will get there. Complete mobility networks offer the same flexibility to people who don't drive.

Connect People and Places

A mobility network can only be successful if it connects residents to popular destinations like schools, parks, trails, employment centers, libraries, grocery stores, community centers, and clinics. In most cities, there are good pieces of a network: a shared use path or two, some appealing neighborhood streets, and maybe a protected bike lane on a major corridor. Too often, though, these projects stand alone and fail to help users fully reach their desired destinations.

Business leaders are willing to support a vision

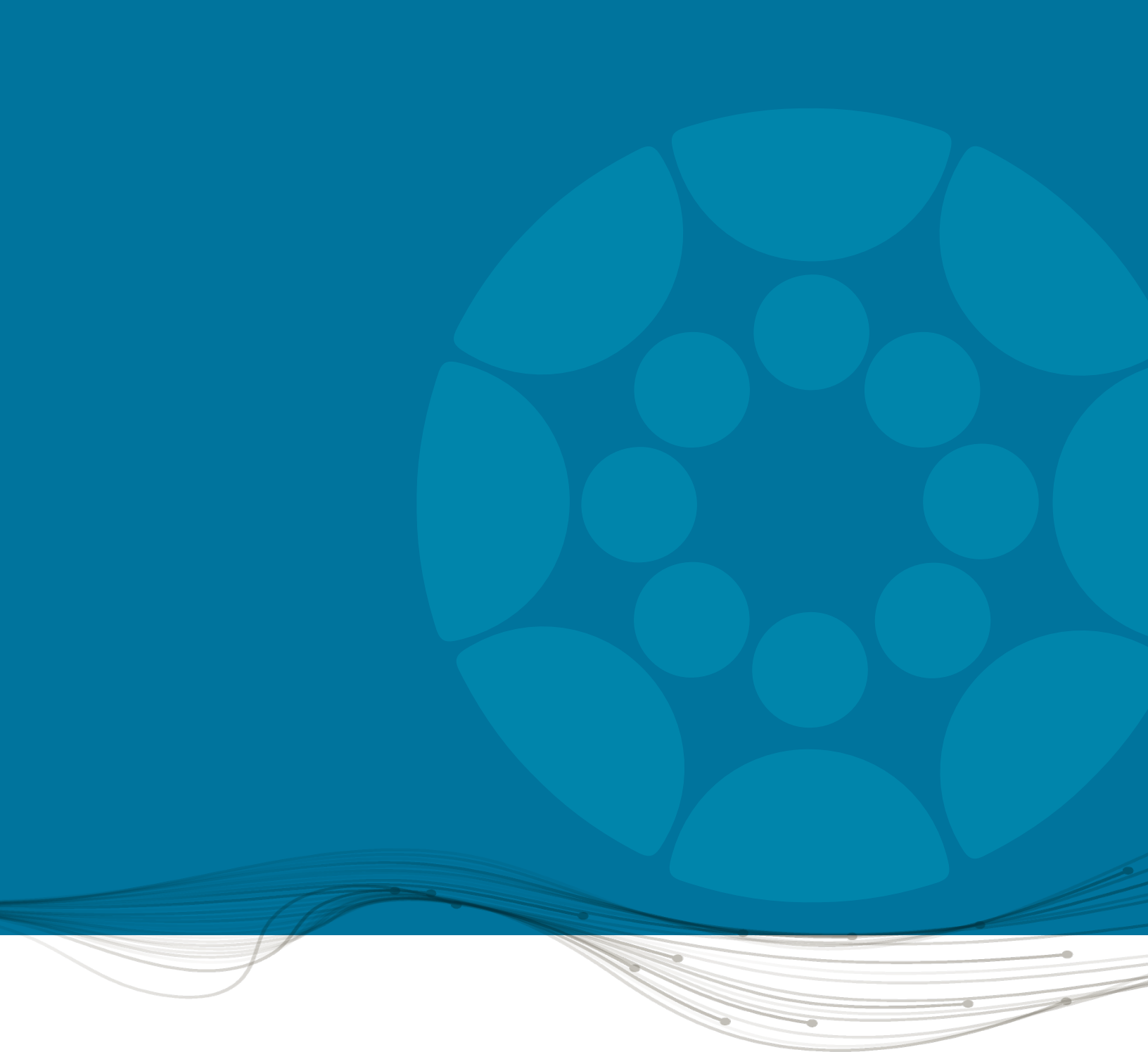
for streets and public spaces that will lead to mobility options, traffic safety, and economic vitality across Spokane, but they need to be engaged in a movement that supports this larger vision rather than reactive campaigns to preserve on-street parking or keep unhoused people away from their businesses.

By increasing the connectivity of the network, cities create more equitable access for increasingly diverse populations and offer more choices on how residents move through their community.

Improve Comfort and Safety

The design quality of the network matters. For decades, traffic engineers assumed that people on bikes could almost always share the road with cars or that intersections are best left without marked crosswalks. However, a striped bike lane on a street with fast traffic isn't an appealing place to ride for most people, and putting a pedestrian crossing sign along a busy thoroughfare doesn't make it a place where parents want to cross with their children.

For a mobility network to attract the widest audience of users, its most fundamental attributes should be comfort, safety, and convenience. Thoughtful design and route selection give people of all ages and abilities the real option to leave their cars at home. Attractive street improvements send the message that streets are for everyone, and that the city can build public spaces that value and prioritize everyone that lives there.



Phase 1: Readiness Assessment

The Accelerated Mobility Playbook (AMP) begins with an audit of the existing mobility landscape in Spokane. This audit includes an evaluation of ongoing mobility projects, existing partnerships, examples of community-based support, and the City's ability to deliver transformational projects.

City Thread relies on insight from people involved in the process, current plans, public records, and case studies of past projects to get a deep, personal sense of where mobility-based projects are succeeding and where improvements could be made. The assessment seeks to understand project delivery using four strategic areas:

Partnership Development

To manage this multi-year action plan and build robust systems that enable sustained momentum, the AMP recommends opportunities to increase staffing capacity and support across all levels of local leadership. Participation in study tours and technical workshops provides an opportunity to align partners on program goals, learn from peers, and build relationships with other practitioners from around the world.

Public Communications

Audience research, public opinion surveys, content branding, paid marketing strategies, and earned media help pinpoint public perceptions of mobility solutions, present those results to decision makers, and share findings through local media outlets. Public opinion research guides a messaging strategy that presents the benefits of multimodal choices for local residents and bolsters support for the acceleration of mobility projects.

Community Outreach

Thoughtful engagement of residents, non-profits, businesses, and other leaders in the community builds support for mobility projects. Through close collaboration and cooperation with municipal leaders and transportation departments, local outreach activities diversify the base of support in neighborhoods where projects are being planned and increase the visibility of non-bicycle advocates and supporters.

Implementation Support

While the AMP recommends municipal partners be responsible for funding capital expenses associated with network implementation, it also recognizes the need for technical expertise to provide crucial design, project management, communications, organizational, and strategy assistance for all coalition partners. Understanding the limitations of staffing capacity helps inform these recommendations.

The playbook is designed to overcome typical challenges that prevent cities from developing complete, safe mobility networks:

- Resistance to changing the design and function of public roads, particularly changes that are perceived as a threat to car use;
- Limited funding options for transportation infrastructure, especially in the context of all other infrastructure needs within a community, including storm water drainage, parks, bridges, municipal buildings, schools, and roadway maintenance;
- Newspaper and social media comments that misrepresent public opinion by giving a small minority of citizens a prominent platform to express their personal opposition to complete streets infrastructure;
- Concern that creating safer spaces for people walking or biking will reduce convenient parking options and hurt businesses that depend on easy access;
- Perceptions that bicycling is a niche activity with minimal potential to improve mobility and reduce traffic congestion; and
- A negative image of people who bike as quirky, condescending elitists and not mainstream.

Concerns about housing affordability, increasing numbers of the unhoused, a shortage of mental health professionals, and environmental concerns such as wildfires and flooding create urgency for Mayor Brown and other leaders to expand transportation choices and create safe streets for everyone.

By increasing the city's mobility options, Spokane can compete with its peer cities while also achieving intersecting goals around equity, health, safety, and economic growth.

The AMP provides a dynamic, accelerated approach to overcoming these challenges. It works first to establish a short-term implementation goal for placed-based

projects, align the interests of community groups with municipal departments, resource all those parties to maximize the potential of the private/public partnership, and move collectively towards rapid completion of the mobility network.

Distilled into four distinct steps, the AMP strategy first establishes a vision for what can be achieved once partnership among like-minded stakeholders is created. From there, it develops working relationships built on trust and accountability, and promotes the systems needed to facilitate communication, information sharing, and benchmarking. Support from philanthropy and other sources allows the partners to work toward their bold, ambitious goal. Project delivery follows, accompanied by a city-wide messaging campaign and a diverse coalition in support of the city's selected projects.

Accelerated Mobility Playbook

1 Establish a shared goal

Acceleration relies upon a shared vision among community stakeholders.

This goal must be **bold, yet achievable.**

2 Align Partnerships

Success requires coordination, partnership, and communication.

Elected officials, City staff, and community organizations must unite behind a shared strategy.

3 Resource Partners

A multi-year cooperative effort requires customized resources.

Philanthropy provides each partner resources to address their specific needs.

4 Build the Network, Fast

Project delivery occurs alongside paid media and engagement.

Residents participate positively because the process is **consistent** and **predictable.**

Organized into four steps, the AMP outlines opportunities to define a short-term implementation goal, build lasting and effective partnerships with community stakeholders, amplify existing public support for changes to a city's streets, and improve methods of project delivery.

1. Establish A Shared Goal

The availability of capital funding, a healthy mix of forward-looking policies, or the presence of charismatic leadership are not sufficient on their own to guarantee a city will work quickly and effectively to improve mobility. The success of any city-wide initiative depends upon partnership and coordination among various community stakeholders.

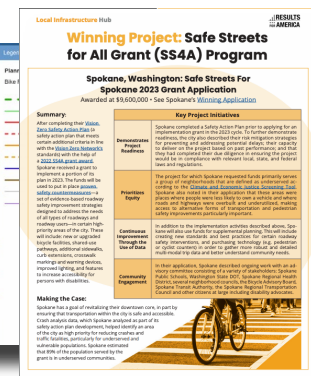
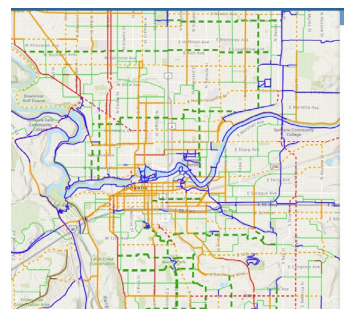
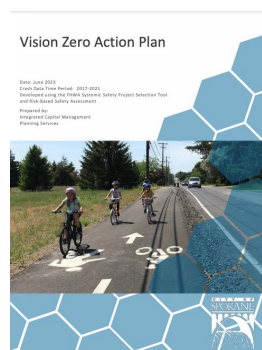
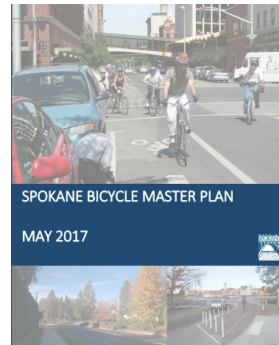
Elected officials announce and drive initiatives based on their public commitments. City staff use their technical expertise, public engagement activities, and capital funding to carry out these initiatives. Community groups educate residents and support city staff and elected officials on behalf of constituent needs.

Where We Started

The future of Spokane and mobility are inextricably linked. The city's compact downtown, active outdoor community, and focus on sustainability provide an ideal environment where bicycling, walking, and public transit can enhance the quality of life for all its residents. In recent years, community leaders and city staff have collaborated on programs that make traveling without a car safer and more convenient.

Threatening these supportive conditions, Spokane faces a reckless driving epidemic that jeopardizes the safety and quality of life for all residents. Mayor Brown has made bicycle and pedestrian safety a top priority for her administration.

For more than a decade, City officials have advanced and championed road diets, protected bicycle lanes, and traffic calming



Spokane has the policy foundation in place to address its mobility challenges, but project managers lack a comprehensive strategy that binds the numerous plans and programs into a cohesive implementation strategy.

measures throughout the city. Network plans, design guides, and implementation manuals have been developed, publicly vetted, and funded for almost all modes of transportation throughout the city. There is no shortage of

plans or policy priorities to address the city's mobility challenges.

In spite of this preparation, large gaps in the network remain and many existing routes do not meet modern design standards for a low stress, all ages and abilities experience. Individual plans are not necessarily informed by other planning documents and remain focused on single-modes of travel. Implementation is expensive and the outcomes are inconsistent. Project managers, across multiple departments, lack a comprehensive strategy that binds the many plans and programs being advanced on an annual basis.

Demonstrating steady progress towards the mileage goal of its Bicycle Priority Network, the City of Spokane has made significant investments in shared-use paths and traditional on-street bicycle lanes. Still, nearly 110 miles of the complete network remain to be constructed with a targeted end date of 2037.

Combining efforts already underway - the Six-Year Comprehensive Street Program, Vision Zero Action Plan, Safe Streets For All federal grant, and the recently adopted Safe Streets Now resolution - affirm the City of Spokane's solid policy framework to build the necessary momentum for accelerating the completion of the Bicycle Priority Network while simultaneously achieving its goal of eliminating traffic fatalities and serious injuries.

However, even with these policies in place, the City does not currently have a comprehensive project delivery strategy to guide the completion of a connected, low-stress mobility network. Ongoing projects demonstrate important progress, but the network still remains sparse, disconnected, and lacks the quality of design to truly be safe for users of all ages and abilities. Despite best efforts

The following challenges affect the pace and acceptance of efforts to reconfigure Spokane's roadways:

- While municipal leaders and community partners have a shared understanding of the desired bicycle network implementation goals, they have different expectations on the pace and quality of outcomes.
- Staff are tasked with multiple job duties and priorities, some of which are urgent public safety issues, leaving little time to establish a strategy that will guide implementation or allocate resources.
- Community engagement efforts lack a consistent strategy for managing expectations, both internally at the City and externally with community stakeholders. Limited staffing and resources result in inconsistent community engagement and little public-facing communication before, during, or after implementation.
- Community stakeholders have limited trust in local government to effectively plan and deliver projects that meet the needs of residents. Completed projects often differ in design from original scope with no explanation for why changes were made.
- For completed projects, design standards fail to meet community expectations, ignore modern best practices for safety and access, and present obstacles to seamless connectivity and comfort for users. Lack of clarity and internal misalignment result in a variety of design standards being used by project managers.

in recent years, the planning and design of major corridor projects have been piecemeal, leading to a patchwork of suggested bicycle and pedestrian enhancements that do not link up in a connected, citywide vision for active transportation.

Where We Can Go

In 2017, Spokane adopted the most recent

update to its Bicycle Master Plan. This plan creates a vision for enhancing bicycling opportunities for all residents of Spokane. Its policies and actions are intended to make Spokane a more bicycle-friendly city. Although Spokane has conducted bicycle facility planning for more than thirty years, the current Bicycle Facilities Network is disconnected and signed bicycle routes are sporadic. Numerous barriers (hills, high traffic volume streets, the Spokane River, among others) make cycling difficult and inconvenient. Additionally, end-of-trip facilities such as bicycle parking and lockers are inadequate. This plan proposes to address these issues by creating a bicycle network that guides cyclists of all ages and abilities safely throughout Spokane and its unique geography. Importantly, the Bicycle Master Plan includes recommendations and actions that will ensure that bicycling becomes a more viable mode of transportation for all.

In 2022, Spokane City Council adopted its Vision Zero resolution aimed at eliminating all traffic-related fatalities and serious injuries within the city by 2042. Subsequently, the Vision Zero Action Plan was adopted in 2023 focusing on improving safety for all road users—pedestrians, cyclists, and drivers—through a combination of infrastructure improvements, policy changes, education, and enforcement. Key components include redesigning streets to be safer, implementing speed management measures, enhancing crosswalks and bike lanes, and promoting public awareness about traffic safety.

In December 2023, the City of Spokane was awarded \$9.6 million in Safe Streets and Roads for All (SS4A) grant funds to improve safety for pedestrians and bicyclists. The grant will fund a variety of safety and mobility projects, including bike lanes, shared-use paths,

crosswalk improvements, and ADA ramps. The data-driven plan will identify implementation priorities that improve safety on city roadways, especially for neighborhoods with historically underserved populations and people experiencing homelessness.

“Everyone has the right to get to work, school and their homes safely. We have the ability to proactively address safety risks that are built into the transportation system, and it is long past time that we start implementing these proven strategies.”

–Lisa Brown, Spokane Mayor

Most recently in 2024, Mayor Brown and City Council passed three pieces of legislation intended to accelerate project development that will lead to safer streets across the city. First, the City Council passed the “Janet Mann Safe Streets Now” resolution that called on Mayor Brown’s administration to implement “adaptive design strategies,” to improve bicycle and pedestrian safety which can be quickly installed to pilot possible longer-term solutions. Mayor Brown’s subsequent executive order in support of this resolution directs city staff to prioritize the safety of bicyclists and pedestrians in future city transportation investments, highlighting a number of roadway corridors targeted for improvements. Additionally, a new ordinance consolidates a number of transportation advisory committees into a single transportation commission, one of many efforts intended to streamline project delivery and expand public engagement.

While these recent successes are indicators of forward momentum, residents and supportive businesses, community groups, and anchor institutions still require a vision to unite around, a process that incorporates their feedback, and results that represent their needs.

Effective partnership relies upon a shared vision among community stakeholders. Setting a network implementation goal helps clarify what each partner is working to accomplish and aligns the diverse work of individuals and organizations into a singular focus. To be effective, this vision must be bold yet achievable. It should inspire partners to action and, when accomplished, build momentum toward future success.

One of the reasons cities often fail to accomplish their transportation goals is that their objective is too big in size or scale. They try to run before they can walk.

For Spokane, establishing implementation goals before defining processes to manage community engagement, project selection, and design/construction protocols has left city staff exposed to opposition and backlash, internally and externally.

Rather than using the AMP to change the entirety of Spokane's transportation effort, City Thread recommends building on the momentum already in place to accelerate the completion of the Bicycle Priority Network. This slightly narrower focus will help to build the partnerships, trust, and track record of accomplishment needed to sustain a system-wide shift in planning and development practices for other modes.

The existing Vision Zero Action Plan, recent Safe Street legislation, and access to nearly \$10 million from SS4A grants provide an opportunity for Spokane leaders to establish a new strategy for project implementation where multiple outcomes can be achieved simultaneously through careful planning and coordination. A focus on coalition building, authentic community engagement, and high-quality projects can serve as a model for broader mobility programs in the future.

City Thread recommends Spokane take the following action steps:

- **Acceleration:** Spokane will accelerate the planning, design, and construction of 30 miles of its Bicycle Priority Network by 2027.
- **Safety Improvements:** Overlapping safety projects identified in the Vision Zero Action Plan, SS4A grant, and Safe Streets Now legislation will be counted towards the AMP implementation goal, accomplishing much needed safety improvements alongside bicycle network implementation.
- **Interdepartmental Collaboration:** No single department or team within the City of Spokane can achieve this goal on their own. Success will require focus and alignment among different divisions responsible for existing transportation duties and responsibilities. A coordinated, cross-departmental task force should be created to guide a new project delivery process seeking to improve outcomes, reduce demand on internal resources, and leverage external partnerships in new ways.
- **Community-Based Coalition:** Create an expansive, non-partisan coalition with thoughtful recruitment from outside the bicycle community. An organized coalition is key to turning out support at the time and in the way that is most helpful to city staff and elected leaders.
- **Partnerships:** City and philanthropic investment should be dedicated to the livability and accessibility of Spokane's working-class neighborhoods. A people-centered approach to transportation planning moves residents from automobile-dependency to a community connected by pedestrian, bicycle, and transit networks, and is particularly important in low-to-moderate-income residential areas.
- **Fund Development:** Executing the AMP requires funding, and much of it can't – and shouldn't – come from the municipal coffers. Resourcing the coalition starts with hiring a coalition manager to devote full time energy to this work, but does not end there. City Thread estimates that local philanthropic and business interests could provide \$1.5 million over two years to support community-based activities.
- **Project Delivery:** Spokane will create and test new methods of holistic project delivery where urgent safety improvements are most needed. These methods will seek to redefine public engagement, interdepartmental collaboration, and partnerships with community supporters.
- **Community Engagement:** A robust community engagement strategy will work with underrepresented constituencies to more fully reflect community needs in the planning and implementation of each new bikeway network project. Community partners will connect resident and neighborhood concerns to the City's work.

2. Align Partnerships

Achieving network implementation goals are most effective when project delivery is supported by community-based organizations and leaders that are trusted by local residents. Long before a project is proposed to a community, city staff and advocacy partners should be working to build long-term relationships with neighborhood leaders.

Looking For Direction

Elected officials and City of Spokane staff struggle to define a common value proposition that could be used to build support for street changes. Engagement with residents is inconsistent, and the benefits of mobility projects are ill defined. As a result, completed projects often fail to meet the needs and expectations of residents, businesses, or elected officials.

Business leaders and long-term residents lack understanding of how planned changes to city streets can benefit all road users, regardless of how they choose to get around. Influential community partners are hesitant to leverage the power of their leadership to advance public infrastructure projects.

While city-wide communications about transportation fail to build consensus with external partners, a lack of shared intent among the many departments that are necessary for project delivery makes internal coordination difficult. Furthermore, project delivery teams do not have a clear, consistent, or well-resourced process for aligning on project scoping, implementation, or sharing information.

What Works Well...

- Mayor Brown brings a strong commitment to safe and complete streets. Leveraging the momentum provided by the Safe Streets legislation and Vision Zero Action Plan, a renewed focus on mobility projects from her office could shape a transformative implementation program for the next three years.
- The mayor and city council are aligned in a way that they haven't been in previous years. A broad and diverse coalition in support of changes to city streets can strengthen their capacity to deliver on the issues that residents care most about.
- City staff, in multiple departments, have the experience needed to deliver projects at an accelerated pace. The City's prepared plans, policy guidance, and internal expertise are not a limitation to achieving a bold, ambitious implementation goal.

What Doesn't Work Well...

- Trust in the public process has eroded when the City fails to communicate effectively with residents and other local stakeholders, delays much-needed improvements, or alters the design plans after public engagement has concluded.
- City staff has never before attempted to deliver projects at this scale. Internal processes and communications among city departments will need to be rethought without sacrificing project quality or authentic public engagement.
- The city has many pressing needs that will compete with transportation for attention and resources. Staff, city council members, and community leaders may push back against the need for bicycle infrastructure.

Mobility projects that develop in isolation are largely misunderstood by the public and difficult for even supportive elected officials to explain.

Residents, businesses, and other community stakeholders that could be activated in support of city-led projects are not equipped with the information, messaging, and organizing strategy needed to participate meaningfully. Levers for affecting project outcomes or communicating with decision-makers are opaque, so residents and community groups turn to social media, neighborhood councils, and direct communication with City Council members.

Models of Collaboration

Despite lacking an organized implementation strategy, Spokane has experienced success collaborating with trusted community partners on other projects. Priority Spokane has engaged a variety of business and community stakeholders to address gaps

in student participation in online schooling during the pandemic and to help provide housing for students and their families. The Department of Public Works has partnered with Spokane Public Schools and specific school communities to improve safety and access for children and their families.

Spokane boasts a strong network of community-based organizations that understand the benefits of mobility and placemaking. A shared vision that will unite and focus these stakeholders is critical.

Polling, messaging, and coalition building in support of a clear and compelling vision will provide the Mayor and her department directors the affirmation needed to follow through on community commitments. Support from a broad and diverse coalition of partners will increase the city's capacity to deliver transformative projects.

The most effective coalitions engage with residents from a variety of distinct but related viewpoints, representing not only mobility

- Without leadership from elected officials, city staff and community partners don't have a message around which to build broad support.
- Extended project timelines for planning, design, and implementation fail to establish realistic expectations, and are often viewed as a mismanagement of government resources.



- City staff undermine community engagement processes and effective messaging when they don't deliver on the promise of safe mobility.
- Communications from projects fail to engage a broader audience — primarily people that drive — or demonstrate the benefits of proposed roadway changes to residents that may never get on a bike.

infrastructure, but also youth engagement, safety, disability access, public health, affordable housing, social and racial justice, economic development, environmental sustainability, and other community concerns.

Mode-specific organizations like the Spokane Bicycle Club play an important role in attending to the needs of their constituents and advocating for bicycle safety and access improvements, but struggle to talk about projects in a way that engages a wider audience, particularly those that do not bike. These groups should be part of a coalition, but cannot become its visible leaders and serve its goals successfully.

Limited staffing capacity and a lack of financial resources prevent the City's Planning Department and Neighborhood Services teams from participating effectively in every project. This results in tension between resident expectations and what is possible with the current public processes. Honoring people's deep roots in their communities and providing clarity on where and how their feedback fits in would create more ways for broad support to find its way to leadership.

The Department of Public Works and Utilities communications office has a strong team with expertise in ever-changing online algorithms and platforms, working to be responsive and transparent when engaging with residents. Transportation communications would be bolstered by preparing talking points that connect the city's mobility goals with pressing matters of sustainability, affordability, and public safety. There is an opportunity to pivot the existing "us vs. them" narratives to be more comprehensive, informative, and mode-agnostic, and to maintain engagement after projects are complete to share their outcomes and benefits accurately.

The recent package of Safe Streets legislation can significantly advance the Mayor's mobility goals, especially through careful coordination with other preexisting plans, policies, and funding programs.

Shift the Conversation

Selecting the right messengers – and the right messengers for different audiences – will be key to any accelerated implementation program. Reaching broad, diverse audiences is most successful when the messenger represents community-wide interests and is respected by neighborhood leaders. Important target audiences include people who drive and those who don't identify as bicycle riders.

Collaboration, accountability, and a consistent process for communication and community engagement among City staff would go a long way to increase resident satisfaction, while streamlining internal project delivery, staffing requirements, and resource allocation.

In 2018, social marketing firm Neimand Collaborative, and their data analytics partner, Artemis Strategy Group, commissioned research across eight U.S. metropolitan areas to better understand mobility and the ways in which bike infrastructure can help people achieve their transportation goals. Although different in size, demographics, geography, and transportation resources, people agree that most cities are not easy to get around and desire better transportation options.

The research found that a 69% majority of voters support investments in active

transportation infrastructure. Even more impressive, this support increases to 81% when sidewalks, traffic calming, and bike lanes are combined with other transportation improvements such as road maintenance, additional on-street parking, or integration with public transportation. Three-quarters of respondents believe that this comprehensive approach to transportation infrastructure would make their communities more livable.

Audience research is important to ensure communications are not just talking to community members, but connecting with them emotionally—and inviting them to participate through a call to action. After defining the audience and their top areas of concern, a broad and diverse coalition will be able to customize messaging to suit those objectives. In some markets, digital ads make more sense than others, as does specific messaging about safer streets for kids or less congested roads for drivers.

With a diverse coalition in place, and messaging that resonates with residents, a marketing campaign can successfully activate residents to support reorganized streets. The campaign's call to action engages traditionally apathetic or less engaged residents, directing their support to local leaders and decision-makers. This campaign will be deployed across a dynamic and diverse media roadmap that aligns with the city and coalition's activity.

To accomplish this broad-based support, the AMP recommends creating an expansive, non-partisan coalition with thoughtful recruitment from outside the bicycle community. Potential members include philanthropy, business leaders, parents, long-term residents, and anchor institutions. Strategic decisions around who leads the coalition can play a meaningful role in advancing the city's mobility goals.

This coalition will work hand-in-hand with city staff to double the implementation pace of the planned Bicycle Priority Network. A new partnership between city staff and this community-based coalition provides the opportunity for testing, learning, and iterating on a limited scale that can be replicated for all mobility projects in the future.

Strategies for communicating the promise of a safe, connected, and convenient mobility network:

- Don't oppose cars; you need drivers to support mobility infrastructure.
- Transition the use of "active transportation" and "complete streets" to "mobility networks" in order to frame infrastructure as a solution for all modes of transportation.
- Don't be a "special interest" for bike lanes and biking; show your interest in mobility solutions for everyone without judgment. Instead, talk about how mobility infrastructure improves the lives of all — whether they bike or not.
- Remember how few people use bikes as their primary mode of transportation and respect their choices.
- Acknowledge that stress, fear, confusion, and inconvenience people feel is common in Spokane. Suggest traffic calming, protected bike lanes, and accessible sidewalks are part of the solution.
- Position safe, comfortable, connected streets as a part of community development, neighborhood vitality, and a way to preserve Spokane's identity.

3. Resource Partners

Success will require securing new resources to implement the strategies described in this playbook. Building trust and cooperation in partnerships is easier when everyone has access to the resources needed to accomplish their roles. The AMP recognizes that each of the constituent groups represented in this partnership requires a different set of resources in order to maintain productive partnerships.

Partner Needs

Building trust in partnerships is essential for fostering a collaborative and cooperative environment. This is accomplished by aligning to a shared goal, acknowledging past shortcomings, filling the gaps that contributed to them, and duplicating successful strategies.

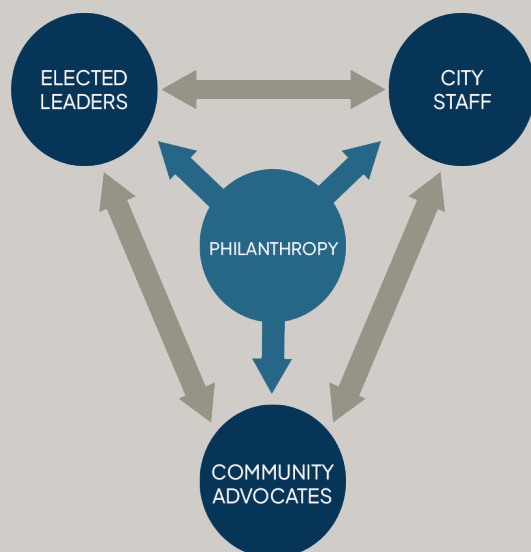
The previous section spoke to the importance of ensuring that city staff, relevant departments, and elected leaders are focused

on a clear and measurable goal, while bringing community organizations, businesses, faith-based groups, anchor institutions, and others to the table as well. Each of these stakeholder groups need to be resourced to ensure they can meaningfully contribute to reaching that goal.

Aligning and resourcing partners are not two linear steps that happen independently. They are linked and iterative: successful partnerships are constantly and consistently reinforcing the focus on the shared goal while providing the information, support, funding, training, and guidance that allows each member of the team to help reach that goal.

Elected Leaders

The mayor and city council need to know that they are responding to community priorities, and must be prepared to connect municipal



- 1 **Elected leaders** want vocal support from advocates and trust their staff will deliver projects with precision and care.
- 2 **City staff** need elected leaders to publicly support bold choices and advocates to bring diversity of support to each project.
- 3 **Advocates** want to be trusted advisors on project decisions and for elected leaders to follow through on campaign promises.
- 4 **Philanthropy** fills resource gaps for each partner, removing barriers to execution and incentivizing cooperation.

initiatives to those interests. Audience research, including polling, resident surveys, and focus groups, pinpoints the issues that residents care most about and provides insight into how to message them effectively.

Paid media campaigns bolster the connection between what people want (safe streets) and what the city is doing about it (installing speed humps). These campaigns simultaneously let people know that elected officials are actively working to improve their lives and that these projects are effective at bettering neighborhoods.

Mayor Brown and the City Council have placed a focus on street safety changes that improve access for people walking, biking, and using transit. The Vision Zero Action Plan and Safe Streets legislation are tangible examples of this commitment.

Without effective communication demonstrating the connection between these programs and the concerns that residents have voiced, support is limited to a knowledgeable few and vulnerable to pushback.

Resourcing elected leaders means giving them the data that demonstrates support for the initiatives that they are backing, talking points that connect community needs to municipal programs, and paid media efforts that reinforce that connection at a wider scale.

City Staff

The people proposing, designing, engineering, and building street improvements, along with those leading community engagement and communications efforts, also need help to stay focused on their bold, ambitious goal.

First, they need to know that elected leaders will support bold changes, especially if a vocal – and possibly powerful – few start pushing back.

Second, city staff need their community partners to show up when and how they will be most effective in voicing their support. Local school and business communities joining with residents to show up at a neighborhood meeting about a planned street change and speaking in favor of it sends a powerful message. City council members, the mayor, as well as those in opposition see that a majority of residents want the project.

Finally, staff may need professional development or technical assistance to help them deliver more projects at a faster pace. Training, workshops, or participation in national conferences can provide the knowledge and expertise needed for innovative street treatments. Consultant support for design, engineering, or writing applications for state or federal grants can make the difference between two neighborhoods receiving street calming improvements and ten neighborhoods getting them.

Community Partners

Community partners have an important role to play: maintaining focus on the shared goal, encouraging high quality projects that meet resident expectations, championing city commitments and cheerleading the outcomes are critical for moving everyone in the right direction. A coalition composed of diverse partners, representative of the people, neighborhoods, businesses, and anchor institutions, is an extremely effective model. This coalition must be able to unite, direct, activate, and fund its members to ensure their desired outcomes are timely.

Resourcing the coalition starts with hiring a

coalition manager to devote full time energy to this work, but does not end there. Additional funding can provide stipends to key partners to organize and staff activities like weekly Bike Trains to school, disseminating yard signs, or door-to-door canvassing. Mini grants to local non-profits or neighborhood associations can fund mural projects or tabling activities at the farmers market. Ambassadors or street teams can answer questions, create content for social media, or organize neighborhood rides or walks. All of these activities strengthen the coalition and engage its members to meld the work they do best with direct support to municipal projects and programs.

An organized coalition is also key to turning out support at the time and in the way that is most helpful to city staff and elected leaders. Close coordination with these partners means that residents are encouraged to show up for this community engagement event, but not that city council meeting. Emailing the mayor may be less effective than posting support on the city's instagram account. Consistency and predictability sustain municipal leadership commitment to the shared implementation goal.

Philanthropy

The partners described above require funding, and much of it can't – and shouldn't – come from the municipal coffers. While some activities might find funding from existing grant programs, the coalition must work with, but not for, the city in order to preserve its independence and maintain trust with community members.

Historically, philanthropy has not heavily invested in transportation infrastructure in the U.S. The complex regulatory environment and long timelines associated with infrastructure

projects have deterred many foundations, which often prefer more immediate and measurable impacts.

This trend has begun to shift in recent years as the critical role of transportation in addressing issues like climate change, economic inequality, and public health has become increasingly apparent, prompting more funders to explore ways to engage with and influence transportation systems.

AMP provides philanthropic organizations an entry point for supporting transportation through strategic partnerships and targeted investments. AMP's strategies align with a variety of place-based priorities and have tangible and replicable results. This approach also focuses funding to activities that support city investment, leveraging capital infrastructure dollars and staff time in order to achieve a shared goal.

Most importantly, philanthropic contributions support local organizations and leaders working collaboratively with each other in new ways. While the focus is specific and time-limited, the benefits of building these relationships and strategies can be sustained long afterward.

While community, family, and corporate foundations are the primary funder for AMP activities, corporations and individual donors may also have a role to play.

Corporate and business interests are often tied to mobility as they consider how to recruit and retain employees, and how to move people from where they live to work centers. In Spokane, Gonzaga University and the University of Washington–Spokane are facing these very challenges, with shared interests around helping students access retail centers, recreational opportunities, and helping

students, staff, and faculty access the campus.

AMP Funding Potential

Spokane has a small giving community spread regionally. While limited in number, funders represent a good mix of corporate, foundation, and major gift donors providing opportunity to raise money from a variety of sources.

Environmental resilience, education, economic development, and human services are top priorities for individual major gift donors and foundations working in Spokane. Downtown and the east side of the city have seen consistent investment in infrastructure and programming since the early 2000's. A case can be made for building out a complete mobility network that unlocks solutions for other community priorities.

Banking institutions and property developers are untapped funding sources for community development programs. They are primed to see the connection between complete mobility networks and their business goals, to understand the value of diverse coalitions, and the need to build effective partnerships with the City.

The University District provides a replicable model for public-private partnership and funding, and the innovative green building practices used for the Saranac Building reflect collaboration with the City around zoning and permitting. Both projects activate vacant and under-developed properties and promote connectivity across Spokane. These initiatives are successful because a network of organizations, businesses, and residents built strong relationships with city staff and elected officials, working together to advance their shared goals.

Spokane's passion and commitment to the community indicate that it has the capacity

to raise \$1.5 million needed to support AMP strategies over the next two to three years. Philanthropic, corporate, and major donors have the opportunity to contribute meaningfully to this fund development work.

Strategies for making a compelling pitch to particular funding sources:

Foundations & Philanthropy

- Regardless of their unique funding priorities, the people that community and family foundations seek to serve need choices for how they get around their city and safety on the streets where they live, learn, work, and play.

Businesses & Corporations

- Spokane's population growth over the last five years will only continue. Vibrant, appealing work centers and transportation options become even more important to employers' ability to recruit and retain talented employees.

Major Donors

- 50 years after the World's Fair and the transformative investments that accompanied it, the time is now to set Spokane up for the next 50 years.

4. Build The Network, Quickly

After the shared goal is set and partnerships are aligned and resourced, the City is ready to move quickly to deliver projects. Successful implementation requires consistent engagement practices and predictable project delivery methods. While the process of building infrastructure contains multiple layers of simultaneous activities, cities can streamline and refine their efforts to make implementation easier, more efficient, and less expensive.

Predictable and Consistent

The City of Spokane should set clear expectations for process, timeline and outcomes. Projects often face stringent deadlines, funding constraints, and political obstacles that can clash with the organic, time-consuming process of building community trust.

Staff can mitigate the community's fears by establishing standard written procedures that outline the key decision points, timelines, and decision-makers for each project.

Presenting projects as a complete network or as mobility improvements can help dissolve intense backlash against specific corridors. Instead of presenting one project at a time, try combining different corridors into one, larger project scope. Spell out the projects that need to be built, prioritize routes that will have the biggest impacts, and establish a transparent process local residents can understand. This is not always an exercise that requires major

The following challenges affect the city's ability to implement much needed roadway projects:

- City departments lack a consistent set of tools for public engagement. Community engagement occurs too early in the process before the city's technical experts and implementation crews are able to change project scopes and designs. New systems, like EngagementHQ, may be the correct tool to address this challenge, but will require interdepartmental collaboration to ensure consistent implementation.
- Responsibility for projects is decentralized among various departments, leaving little accountability for decisions, and creating an environment where individual staff members can wield significant power.
- Communication among staff is fragmented, often leading to outcomes that differ from the original intent.
- The prioritized outcomes of different mobility plans can create conflict for project prioritization and selection. Pursuing a connected network, addressing dangerous intersections, or traffic calming may be at odds with prioritizing equity in disinvested neighborhoods.

realignment on project selection, this process can often be developed using thoughtful communications and marketing around your existing project list.

The short term nature of this Playbook can be helpful, as a short-term plan is often more relatable for engaged citizens. Drawings or renderings of what the street or neighborhood will look like when the project is complete can generate enthusiasm and commitment.

Transparent Communication

The broad and diverse coalition of partners developed and resourced in earlier steps of the AMP play a critical role as the city begins to build. Coalition members help city leaders tap into resident support, neighborhood events, and coalition-led activities to share project delivery timelines, opportunities to weigh in, and where projects are in the process.

Knowing that effective messaging depends on the right messenger, coalition leadership can offer insight on who and how to update

influential local leaders. This diverse coalition representing Spokane residents, elected leaders, and community partners authentically communicates the vision for mobility and the associated benefits and tradeoffs to reach the shared goal centered around streets that work for everyone.

During public outreach, staff will often hear about other issues that are important to the community. If people express concerns about garbage pickup, crumbling sidewalks, or broken street lights, the City should be ready



Spokane should prioritize the following to build the network, quickly:

- Implement a new cross-department collaboration model and a revised project implementation process that identifies when and how the community engagement, communications, planning, engineering, and construction teams activate.
- Utilize a messaging framework, informed by audience research, that speaks to people who drive as well as those who bike, scoot, walk, and take public transportation.
- Select and prioritize projects that meet multiple safety metrics and contribute to the City's planned network approach. Define how equity, displacement, and gentrification considerations will be included in the planned mobility network.
- Build trust and community through partnership with a broad and diverse coalition of residents, community-based organizations, businesses, philanthropy, and anchor institutions that represent local needs and interests.

to address those challenges, too. Responding promptly to these issues, and treating them as the important contributors to community well-being that they are, builds trust between residents and city staff. Ensuring that the appropriate City Councilmember, or one of their staff, is present to respond to community concerns can also help demonstrate that elected leaders are receptive to and aware of local issues.

Public engagement doesn't end once design or construction begins. How the City moves to implementation says as much to community members as a public hearing or press conference does. Residents may have to endure the temporary inconveniences of construction for weeks or months – timely communication about these impacts helps manage their burdens. The project delivery process itself, if done well, can build momentum for projects. When it comes time for building, continue your outreach to keep people engaged and up to date.

In the same way that a lack of communication during construction can weaken goodwill, too long a gap between planning and implementation can lead to frustration, annoyance, and even diminished support for the project. Consensus may erode as people forget their earlier enthusiasm, and the uncertainty of project timing and the realization of its benefits can create a backlash.

To the extent possible, shrink the time it takes to move from public meetings to construction.

People will be amazed that their input had such an immediate effect, and they'll show up to the next meeting trusting that their participation matters.

After the conclusion of each project, take time to meet with all partners to review and refine the process from start to finish. Did community partners come to the table at the right point? Did city staff have the assistance they needed to move from design to engineering to construction? Were local champions resourced to show up when and where it mattered? Did public meetings run as expected? Did the messaging resonate and result in the desired actions? Is the mayor still on board?

No project goes perfectly, and thoughtful debriefs identify what to keep and what to change for the next one. These collaborative reviews offer an opportunity to involve stakeholders who are not involved in the day-to-day activities, such as philanthropy and elected officials. They offer a perspective that can positively influence the next iteration of the project process.

Network Guidance

The following principles provide the framework for decision-making and measuring progress of complete mobility networks:

Low-Stress

Choosing to walk or bike should be a low-stress experience. The built infrastructure is the greatest influence on whether a person considers a route to be low-stress. Low-stress networks take many forms including protected bike lanes, shared use paths, bike boulevards, raised crosswalks, ADA ramps, wide sidewalks, street trees, and more. All low-stress networks are safe and comfortable for any user, of any age or ability.

Connected

Networks, by definition, must connect to each other, creating a continuous path of low-stress routes. By extending the existing low-stress corridors and then building the network outward, cities can avoid building discontinuous pieces here and there across its geography.

Useful

Mobility networks should provide people with access to daily destinations including jobs, healthcare, services, shopping, and schools. By providing access to meaningful destinations, bicycling, walking, or taking public transit can become a convenient and attractive option for travel.

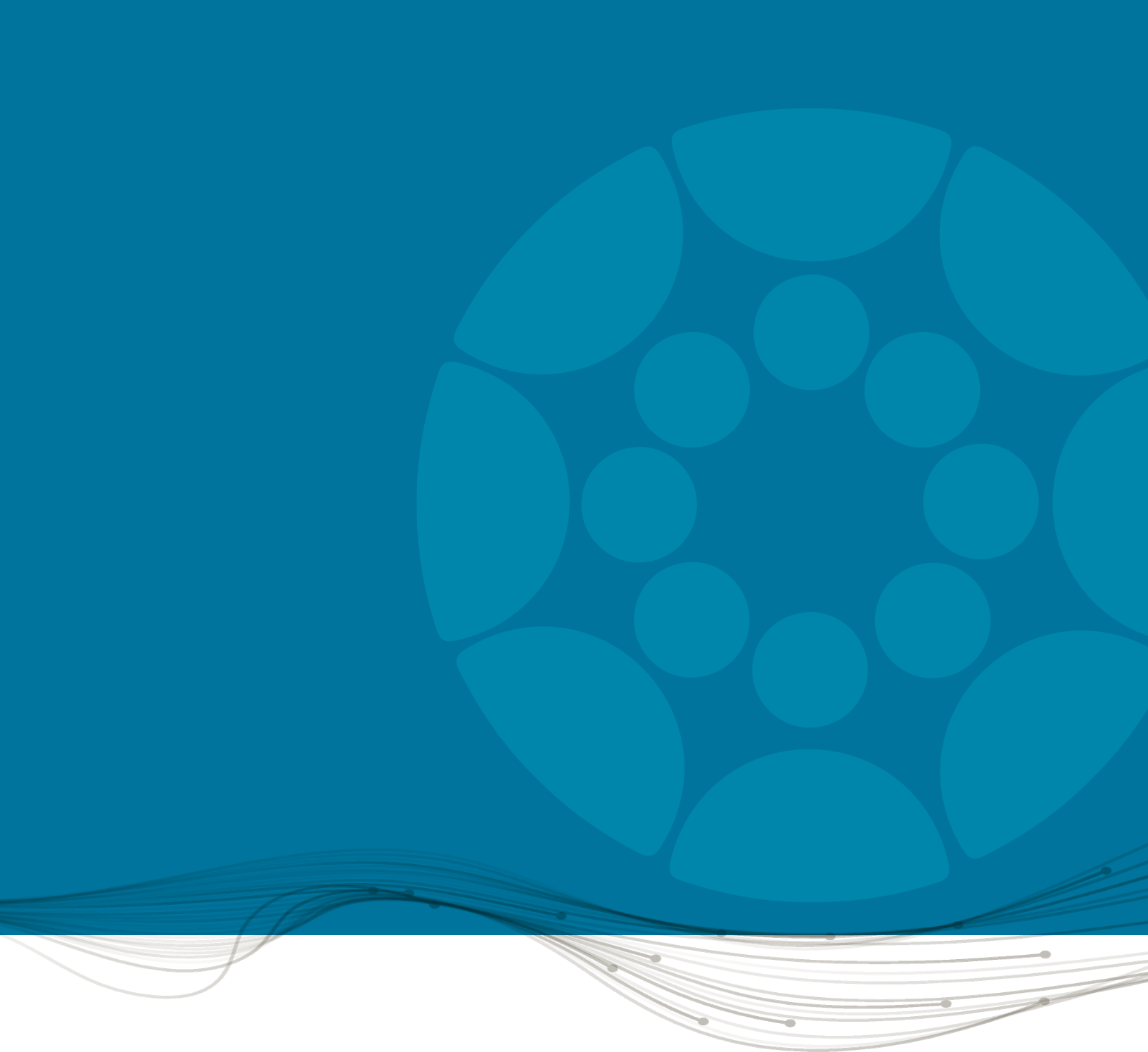
Equitable

Infrastructure investment should be equitable across the city, with an emphasis on using these investments to increase the livability and access to jobs and services for historically underserved neighborhoods. Networks should be designed to be comfortable and appealing to a wide array of people, especially those that fall outside of the traditional bicyclist persona. This involves providing adequate operational space for people that move at slower speeds, users of other personal mobility devices - wheelchairs, scooters, skateboards, and more - and including traffic control elements that increase the safety, security, and usability of the mobility network.

Timely

Network improvements should be implemented in a timely manner to quickly transform the city's streets. This will necessitate focusing on cost-effective design treatments and choosing projects along corridors with fewer constraints to advance design and implementation. Central to this principle are an efficient, coordinated City process and partnerships that lead to sustainable methods of project delivery and measurable results.





Action Plan

This Accelerated Mobility Playbook (AMP) outlines an accelerated approach to help Spokane achieve a new goal, centered around its existing project pipeline and bolstered by its commitment to biking and walking safety .

This report concludes with a set of customized recommendations that Spokane can use to improve implementation methods, build effective partnerships with community stakeholders, and amplify support for changes to the city's streets.

This Action Plan includes suggested campaign objectives, budget recommendations, and an implementation timeline. Strategies for the AMP program are divided into two distinct phases:

- **Phase 2** activities are designed to establish working relationships between community groups and municipal staff. Resources are secured to maximize the potential of partnerships among various community stakeholders, and move collectively towards implementation. Phase 2 activities typically take 6–12 months to complete.
- **Phase 3** activities build on the established outcomes of the previous phase – stewarding and strengthening the working relationships between community partners – while adding the additional responsibility of mobilizing community supporters in meaningful and effective ways to align with the accelerated project delivery schedule. Phase 3 activities typically take at least 12 months to complete, depending on the scale of projects being supported.

Cities that commit to AMP Phase 2 and Phase 3 are undertaking a meaningful investment in time, expertise, political capital, and financial resources to rapidly accelerate the implementation of their mobility plans. To be successful, all stakeholders (city staff, elected officials, community organizations, and philanthropic partners) must work in partnership with each other and with the broader community.



Phase 1 of the Accelerated Mobility Playbook concludes with this report. It benchmarks your city's capacity and partnerships against best practices, and identifies challenges that delay projects and impede progress. Moving forward, Phases 2 and 3 seek to methodically implement solutions to those challenges, and simultaneously promote partnerships that allow mobility projects to be implemented faster.

PHASE 2

Playbook Initiation

Phase 2 of the Accelerated Mobility Playbook establishes working relationships and systems of communication between municipal staff and their community partners.

Spokane staff finalize a list of prioritized projects that will address urgent roadway safety needs while also creating the backbone of a connected, safe, and convenient active transportation network. Thoughtful engagement of residents, non-profits, businesses, and other leaders in the community will help build support for transportation projects. Through close collaboration and cooperation with municipal leaders and planning and public works departments, local outreach activities diversify the base of support in neighborhoods where projects are being planned and increase the visibility of non-bicycle advocates.

Q1: DEVELOP COMMUNICATIONS PLAN

Resident focus groups and public opinion surveys inform a marketing and communications campaign that will support Spokane's effort once network implementation begins. The strategy for timing, placement, and messaging of this campaign is matched against the implementation schedule developed by the City.

Q2: BUILD A COALITION

An individual or organization should be hired to lead and manage a branded coalition of supporting community organizations that will be the public face of community engagement and communications efforts. Spokane staff and community leaders will create work plans for community outreach, construction management, and communication campaigns. This work plan recommends contracting technical expertise for crucial design, project management, communications, organizational, and strategy assistance.

Q3: ALIGN COMMUNITY PARTNERS

Coalition members will test methods of outreach intended to support the city's public engagement efforts. Local non-profit organizations will be resourced to organize and execute some aspects of community engagement. Targeted events and neighborhood ambassadors will be deployed to build awareness of upcoming mobility projects. All partners will share the message that mobility networks make the street safer and more efficient for all users.

Q4: ADJUST THE IMPLEMENTATION PLAN

Outreach and media intensity is reduced, moving the focus to making adjustments to media placement, developing additional collateral, and increasing the frequency and intensity of the messaging campaign. Coalition activation strategies and outcomes will be reviewed and adjusted for future "activation sprints."

Timeline: 12 months

Budget: \$660,000

Activity 1.1

Host focus groups

Activity 1.2

Conduct representative surveys

Activity 1.3

Develop creative marketing assets

Activity 2.1

Develop infrastructure project list

Activity 2.2

Hire coalition manager

Activity 2.3

Host a coalition membership summit

Activity 3.1

Launch community outreach activities

Activity 3.2

Host study tour for leadership

Activity 3.3

Identify necessary technical assistance

Activity 4.1

Refresh creative marketing assets

Activity 4.2

Review project implementation plans

Activity 4.3

Identify technical assistance needs

PHASE 2

ACTIVITIES

Q1

DEVELOP COMMUNICATIONS PLAN

Activity 1.1: Focus groups identify the depth of community support for safer mobility options, test the resonance of messaging strategies, inform paid media efforts, and ascertain influence with key audiences.

Activity 1.2: Representative surveys evaluate the depth and focus of community support for more and safer mobility options. This research can be used to test message language, inform public information and marketing efforts, and determine effectiveness with key audiences.

Activity 1.3: Using the insights developed from audience research, a professional creative or marketing agency will develop a creative brief. This brief will outline a recommended messaging framework, creative concept, and media placement strategy for use locally to build support for accelerated mobility networks.

Q2

BUILD A COALITION

Activity 2.1: Coalition leadership will collaborate with City of Spokane staff and make recommendations about the reorganization of municipal engagement, planning, and implementation processes to accelerate network implementation. This collaboration will outline the timeframe, milestones, and resource needs required to support the City's accelerated pace of development.

Activity 2.2: An individual or organization will be contracted to lead the development of a diverse community-led coalition. This coalition manager will align local outreach activities and initiatives with the network implementation goals established by the City of Spokane, facilitate communications among local partners, and activate coalition members to support network implementation.

Activity 2.3: Organize and host a summit of all coalition members, publicly launching the coalition, branding, and presence in Spokane. This summit will serve as a kick-off for on-the-ground outreach activities coordinated with the coalition's membership.

PHASE 2

ACTIVITIES

Q3

ALIGN COMMUNITY PARTNERS

Activity 3.1: The coalition will support the city's public engagement efforts by resourcing local non-profit organizations to organize and execute community activations. The effort will include, but is not limited to, outreach to communities in the project areas, coordinating community meetings, door-to-door outreach, and digital sharing of project information.

Activity 3.2: Study Tours allow a small delegation of key coalition partners and municipal leaders to take part in an immersive learning experience. Set against the backdrop of leading U.S.-based cycling cities, these trips help coalition partners to align on the AMP goal and frame a conversation on the required strategies needed to rapidly transform their community's streets.

Activity 3.3: Experienced, knowledgeable consulting firms will assist with the reorganization of municipal engagement, planning, and implementation processes. This team will work collaboratively with municipal partners to outline the timeframe, milestones, and resource needs required to ramp-up the City's implementation effort and sustain an accelerated pace of development.

Q4

ADJUST THE IMPLEMENTATION PLAN

Activity 4.1: Using the insights developed from audience research, campaign performance metrics, and evaluations of coalition activity, the marketing creative brief will be updated. This renewed brief will outline recommended changes to the messaging framework, creative concept, and media placement strategy for use in the following year.

Activity 4.2: Coalition leadership will collaborate with City of Spokane staff and make recommendations about the reorganization of municipal engagement, planning, and implementation processes to accelerate network implementation. This collaboration will outline the timeframe, milestones, and resource needs required to support the City's accelerated pace of development.

Activity 4.3: Experienced consulting firms will be contracted to support municipal processes related to public engagement, planning, design, and implementation. The consultants will provide task order-based services for various planning and design related activities that allow the City of Spokane to increase the speed of implementation.

PHASE 3

Playbook Activation

Phase 3 of the Accelerated Mobility Playbook mobilizes community supporters in meaningful and effective ways to align with the accelerated project delivery schedule led by city staff.

City of Spokane staff begin the systematic implementation of selected projects, utilizing a consistent approach to public engagement, project design, and implementation processes. Community-led activities, demonstrations of support, and celebrations of successful project completion are organized in quarterly “sprints” that run parallel to the City’s construction efforts. Each sprint contains a similar set of activities but are modified based on performance and need.

Q5: MOBILIZE THE COALITION

Leading up to the start of construction efforts, the coalition will work with its member organizations to finalize community outreach plans, develop and launch paid media campaign materials, and organize neighborhood kick-off events for planned projects.

Q6: ACTIVATE COMMUNITY SUPPORT (SPRINT #1)

Working alongside City staff, coalition members will strategically align neighborhood activation and outreach activities to coincide with ongoing engagement, planning, and construction activities led by the City of Spokane. Thoughtful engagement of residents, non-profits, businesses, and other leaders in the community builds support for active infrastructure projects.

Q7: ACTIVATE COMMUNITY SUPPORT (SPRINT #2)

Working alongside City staff, coalition members will strategically align neighborhood activation and outreach activities to coincide with ongoing engagement, planning, and construction activities led by the City of Spokane. With accelerated construction of the network underway, city staff may identify technical or community-based problems requiring the assistance of the coalition.

Q8: CELEBRATE AND SUSTAIN MOMENTUM

As construction efforts near completion, outreach and media intensity is reduced, allowing the coalition, City of Spokane, and its partners the opportunity to reflect on the end of this multi-year campaign, celebrate the shared success, and build momentum for future collaborative efforts.

Timeline: 12 months

Budget: \$910,000

Activities 5.1

Contract technical consultants

Activitites 5.2

Host coalition summit

Activities 5.3–5.4

Launch paid media campaign

Activity 6.1–6.2

Launch coalition engagement programs

Activity 6.3–6.4

Monitor communications campaign

Activity 6.5–6.6

Renew audience research

Activity 7.1–7.2

Continue coalition engagement programs

Activity 7.3–7.4

Monitor communications campaign

Activity 7.5

Participate in AMP peer training program

Activity 8.1

Host coalition celebration

Activity 8.2

Participate in study tour for leadership

Activity 8.3

Develop sustained momentum strategy

PHASE 3

ACTIVITIES

Q5

MOBILIZE THE COALITION

Activity 5.1: Consulting firms with significant experience and knowledge will be contracted to support municipal processes related to public engagement, planning, design, and implementation. The consultants will provide task order-based services for various planning and design related activities that allow Spokane to increase the speed of implementation.

Activity 5.2: Organize and host a summit of all coalition members. This event will serve as a kick-off for outreach activities, build excitement for upcoming projects led by City of Spokane, soft-launch the paid media campaign, and provide opportunities for new members to strategically engage with the coalition.

Activity 5.3: Create compelling marketing collateral that resonates with local residents and works within the designated format of selected media channels. Creative content will be launched in the next quarter through established media channels in order to reach a wide swath of key audiences in the community. Media placement, frequency, intensity, and calls to action will be coordinated with municipal project delivery efforts.

Activity 5.4: Launch the paid media and advertising campaign. Placement, frequency, intensity, and calls to action will be coordinated with the implementation timeline established by City of Spokane.

Q6

ACTIVATE COMMUNITY SUPPORT

Activity 6.1: The coalition will support the city's public engagement efforts by resourcing local non-profit organizations to organize and execute some elements of community engagement. The effort will include, but is not limited to, outreach to neighborhoods in the project areas, coordinating community meetings, door-to-door outreach, and digital sharing of project information.

Activity 6.2: Focused outreach strategies will be used to develop relationships with grassroots organizations and community-oriented leaders, broadening the base of support and connecting the AMP's mobility-focused goal to pressing issues like housing affordability, equity of access, pathways to employment, school safety, recreational access, and healthcare.

Activity 6.3: Engage a local public relations firm to proactively monitor and pitch stories on the city's mobility efforts. Key allies and spokespeople will be introduced to media contacts in hopes of broadening the base of support beyond municipal employees and transportation advocates.

Activity 6.4: Collect and monitor campaign performance data to evaluate the reach of the paid media campaign and its effectiveness at securing completed calls-to-action. Click through rates, total impressions, video views and completion rate, and website views are examples of the types of metrics that will be collected and evaluated. Adjust frequency, placement, and calls-to-action in real-time as necessary, and record outcomes for future consideration.

Activity 6.5: An additional round of audience research will be used to monitor any change in the intensity of community support, messaging effectiveness, and reach with key audiences midway through the paid media program. Representative surveys will be used to guide adjustments to paid media, messaging and calls-to-action in both real-time and for future consideration.

Activity 6.6: Monitor and evaluate coalition activation strategies and the outcomes related to the City's public engagement process. Adjust in real-time as necessary, and record outcomes for future consideration.

PHASE 3

ACTIVITIES

Q7

ACTIVATE COMMUNITY SUPPORT

Activity 7.1: The coalition will support the City's public engagement efforts by resourcing local non-profit organizations to organize and execute some elements of community engagement. The effort will include, but is not limited to, outreach to neighborhoods in the project areas, coordinating community meetings, door-to-door outreach, and digital sharing of project information.

Activity 7.4: Collect and monitor campaign performance data to evaluate the reach of the paid media campaign and its effectiveness at securing completed calls-to-action. Click through rates, total impressions, video views and completion rate, and website views are examples of the types of metrics that will be collected and evaluated. Adjust frequency, placement, and calls-to-action in real-time as necessary, and record outcomes for future consideration.

Activity 7.2: Focused outreach strategies will be used to develop relationships with grassroots organizations and community-oriented leaders, broadening the base of support and connecting the AMP's mobility-focused goal to pressing issues like housing affordability, equity of access, pathways to employment, school safety, recreational access, and healthcare.

Activity 7.5: Leadership from the coalition and the City of Spokane will participate in a professional development training hosted by City Thread. Working alongside other cities that are implementing their own Accelerated Mobility Playbooks, participants will receive direct training from peer practitioners that have already successfully implemented playbooks in their communities.

Activity 7.3: Engage a local public relations firm to proactively monitor and pitch stories on the City's mobility efforts. Key allies and spokespeople will be introduced to media contacts in hopes of broadening the base of support beyond municipal employees and transportation advocates.

Q8

CELEBRATE AND SUSTAIN MOMENTUM

Activity 8.1: Organize and host a summit of all coalition members. This event will serve as a celebration for reaching the shared goal and recognition of the work and relationships built within the coalition.

Activity 8.2: Study Tours allow a small delegation of key coalition partners and municipal leaders to take part in an immersive learning experience. Set against the backdrop of leading cycling cities, both domestically and abroad, these trips help coalition partners to align on the AMP goal and frame a conversation on the required strategies needed to rapidly transform their community's streets.

Activity 8.3: Coalition leadership will collaborate with City of Spokane staff to debrief the strategies used to achieve the shared goal and develop a plan for sustaining the momentum. This collaboration will outline the timeframe, milestones, and resource needs required to support the City's accelerated pace of development towards its next goal.

PHASE 2-3

DETAILED BUDGET ESTIMATES

PHASE 2	Q1	Q2	Q3	Q4	
Partnership Development	\$0	\$18,100	\$70,950	\$25,950	\$115,500
Public Communications	\$30,000	\$100,000	\$102,500	\$55,000	\$287,500
Community Outreach	\$0	\$0	\$31,000	\$16,000	\$47,000
Implementation Support	\$40,000	\$40,000	\$65,000	\$65,000	\$210,000
	\$70,000	\$157,500	\$269,450	\$161,950	\$660,000

PHASE 3	Q5	Q6	Q7	Q8	
Partnership Development	\$31,725	\$31,425	\$121,425	\$31,425	\$215,700
Public Communications	\$24,750	\$84,750	\$39,750	\$54,750	\$204,000
Community Outreach	\$4,500	\$44,750	\$45,000	\$28,750	\$123,000
Implementation Support	\$148,000	\$73,000	\$73,000	\$73,000	\$367,000
	\$211,675	\$233,925	\$279,175	\$187,925	\$910,000

Interview List

City Thread would like to acknowledge and thank the following individuals for their time and expertise that facilitated the development of this report. Their participation in focus groups, meetings, and individual interviews were critical components of the recommendations presented here.

First	Last	Title	Organization
Lisa	Brown	Mayor	City of Spokane
Grant	Shipley	Chair	Bicycle Advisory Board
Lauren	Pangborn	Vice Chair	Bicycle Advisory Board
Noah	Apprill-Sokol	Intern, District 3	City of Spokane, City Council
Shae	Blackwell	Legislative Assistant, District 1	City of Spokane, City Council
Michael	Cathcart	Councilmember, District 1	City of Spokane, City Council
Jackson	Deese	Legislative Assistant, District 3	City of Spokane, City Council
Kitty	Klitzke	Councilmember, District 3	City of Spokane, City Council
Abbey	Martin	Manager of Neighborhood Connectivity	City of Spokane, City Council
Zack	Zappone	Councilmember, District 3	City of Spokane, City Council
Spencer	Gardner	Planning Director	City of Spokane, Community & Economic Development
Tyler	Kimbrell	Planner II	City of Spokane, Community & Economic Development
Colin	Quinn-Hurst	Senior Planner	City of Spokane, Community & Economic Development
Brian	Walker	Communications Manager	City of Spokane, Community & Economic Development
Kirstin	Davis	Communications Director	City of Spokane, Department of Public Works and Utilities
Marlene	Feist	Director of Public Works	City of Spokane, Department of Public Works and Utilities
Clint	Harris	Director of Streets	City of Spokane, Department of Public Works and Utilities
Kevin	Picanco	Principal Engineer	City of Spokane, Department of Public Works and Utilities
Adam	McDaniel	Policy Advisor	City of Spokane, Mayor's Office
Kelly	Thomas	Operations Manager	City of Spokane, Mayor's Office
John	Hindman	CEO	Community Body Enterprises
Katy	Sheehan	Executive Director	Community Building Foundation
Andrew	Rolwes	Vice President	Downtown Spokane Partnership
Drew	Comito	Executive Director	Excelsior Wellness Center
Ryan	Oelrich	Executive Director	Priority Spokane
Sally	Phillips	Member	Spokane Bicycle Club
Olga Lucia	Herrera	Member	Spokane Immigrant Rights Project
Samantha	Hennessy	Health Program Specialist 2 - Built Environment	Spokane Regional Health District
David	Silver	Teacher	Spokane School District
Jennifer	Soto	Safety & Risk Management Specialist	Spokane School District
Eliza	Billingham	Reporter	The Inlander
Andrew	Perera	Executive Director, Student Wellness	Washington State University- Spokane
Lauren	Schubring	Community Member	

ABOUT



City Thread

City Thread is a national, non-profit 501(c)(3) organization working to connect people and communities. The City Thread team combines 50 years of experience in urban planning, marketing, communications, public participation, fundraising, grant making, community engagement, strategic planning, and campaign management.

We collaborate with diverse teams of elected officials, city staff, community leaders, funders, and residents to identify problems, brainstorm solutions, and develop a shared vision to accelerate mobility and place-based projects. Our custom strategies prioritize local coalition-building, developing organizations, and launching campaigns that achieve success for everyone.

Beginning in 2019, five U.S. cities pioneered use of the Accelerated Mobility Playbook to significantly advance the construction of their bicycle networks.

Collectively, Austin, TX; Denver, CO; New Orleans, LA; Pittsburgh, PA; and Providence, RI constructed 335 miles of new, safe, and connected bikeways – moving projects from concept to completion in only 24 months. They are now on pace to fully build their planned networks 25 years earlier than expected.

Today, the Playbook is being used in 14 additional U.S. cities.

ADDRESS

1550 Larimer Street, #863
Denver, CO 80202

PHONE

(720) 466-5228

ONLINE

info@citythread.org
www.citythread.org

Appendix 3

Transportation:

10 Bicycle Priority Network Documentation

DATE: February 29, 2024
TO: City of Spokane
FROM: Erin David, Sierra Ohlsen
SUBJECT: Spokane Bicycle Network: Network Development Principles
PROJECT NAME: Spokane Priority Bicycle Network

Introduction

The purpose of this memo is to identify proposed Network Development Principles for Spokane's priority bicycle network. The proposed principles build on established goals for the bicycle network as well as prioritization criteria used to guide the selection of priority network segments and routes. The following sections describe the importance of Network Development Principles, how they can be used to facilitate network selection, and describe each of the proposed principles, including how it's measured. Finally, additional resources are provided for further guidance on establishing principles and applying them to the network.

Guiding Network Development

Network Development Principles translate project goals into practical considerations for selecting priority routes. They not only reflect specific targets or priorities, but they also capture logistical considerations for route selection that were revealed through the selection of the City's priority network.

Network Development Principles are an important consideration as the City advances priority network implementation. The selected priority network represents current and anticipated future conditions in the city. However, over time, the built environment, travel patterns, and other projects change. Routes once identified as a priority may no longer be feasible, or other projects open opportunities for better routes. Network Development Principles will help the City navigate these changes while remaining consistent with the overall vision established through this project and other planning efforts.

How to Use Network Development Principles

The Network Development Principles outlined in this memo provide a framework for selecting priority network segments and routes. When used in conjunction with prioritization criteria, these principles can help streamline decision-making and lend to a more consistent application of network goals and priorities. While each of the principles outlined here are important aspects of network selection, it is important to consider the role each has in the selection process and how they correspond with City priorities.



Certain principles, such as Route Directness and Access to Destinations, correspond with factors that are less flexible and less likely to change—the location of destinations and configuration of the roadway network. However, factors such as low-stress routes and route legibility are more flexible. Facility selection, design choices, and the addition of amenities can significantly improve user experience related to these factors. Finally, principles including network spacing, equitable network coverage, and feasibility serve as additional checks to the process to confirm that the right routes—both in terms of location and quantity—are included. This relationship is depicted in Figure 1.

IDENTIFY
POTENTIAL
ROUTES



REFINE
ROUTE
SELECTION



ASSESS
NETWORK

Route Directness

Network links should prioritize direct routes, minimizing out-of-direction travel.

Access to Destinations

Network links should connect to places people want to go, including where people live, where people work, where people recreate, where people access transit, and where people learn.

Low-Stress Routes

Network links should form low-stress routes that support safe and comfortable travel, scoring as an LTS 2 or better.

Route Quality and Legibility

Route provides for a high-quality user experience, including consistent application of design treatments.

Equitable Network Coverage

Selected network links should provide access to and from areas identified as disadvantaged.

Network Spacing

Network links should provide for frequent access to other links in the network, with routes occurring about every 1/2 mile.

Route Feasibility

The route is feasible to implement and maintain over time. The route is consistent with other transportation projects.

Local Context

The route should be consistent with the local context, including known community route preference and characteristics not reflected in available data.

Figure 1: How to Use Network Development Principles



Network Development Principles

Route Directness

Route directness refers to the variation between the total trip distance of a particular route compared to the shortest route available. More direct routes help people get to where they're going faster and with fewer turns to navigate. Route directness is a key component of route utility; when balanced with safety and comfort, route directness can also improve user experience. As an example, neighborhood streets that have lower speed limits and lower volumes of motor vehicles may provide a more comfortable path of travel. However, limited connectivity due to cul-de-sacs or limited safe crossing opportunities may require significant out-of-direction travel, adding significant time/distance to a route.

How is this measured? Route directness can be measured by comparing distance (in miles) or anticipated trip time (in minutes). Comparison among route choices may also include qualitative measures, like ease of navigation.

Recommended Principle: Routes should prioritize direct routes between key destinations, neighborhoods, or districts. Direct routes will minimize out-of-direction travel to the extent feasible. Selection of less direct routes may be required if the creation of safe, comfortable connections is not feasible along the selected route (see LTS below).

Associated Goals: Connectivity

Access to Destinations

Access to destinations is a key factor in building out a quality route and network. Providing adequate access to destinations via the bicycle network removes barriers for people bicycling, whether for commuting, running errands, recreation, or something else.

How is this measured? Access to destinations can be measured through quantitative means, such as describing the number or percent of jobs accessible by bicycle, the percentage of households with access to a low-stress bicycle route, or the development of travel sheds for specific destination types. Access to destinations can also be evaluated through a visual assessment that compares bicycle routes, key destinations, and areas where people work or live. This principle currently uses a visual assessment.

Recommended Principle: Priority network routes should provide access to the greatest number of destinations possible. Routes should connect within a block of destination clusters and should provide direct access to schools, transit centers, activity centers, employment areas, and parks.

Associated Goals: Comfort, Connectivity, Equity, Sustainability, Safety



Low-Stress Routes

Level of Traffic Stress (LTS) is a framework that estimates route safety and comfort based on factors such as posted speed limit, traffic volumes/number of lanes, presence of bicycle facilities, and bicycle facility characteristics (width, separation from motor vehicles, and similar). LTS provides a framework for understanding overall route safety and comfort while also corresponding with who might be expected to use the route. For example, LTS 1 routes are typically known to accommodate all ages and abilities, while LTS 2 routes are suitable for most adults.

How is this measured? LTS scores routes and intersections using a four-point scale. LTS results estimate the expected comfort and safety of a particular route, with lower scores (LTS 1 and 2) corresponding with low-stress routes, and higher scores (LTS 3 and 4) corresponding with high-stress routes. LTS scores apply to both road segments (travel along) and intersections (travel across). LTS score assignment should be consistent with evaluation methods used in the region.

Recommended Principle: Priority network routes should accommodate low-stress travel, with a target of LTS 2 or better along the entire route. This evaluation should account for intersections as well as segments.

Associated Goals: Safety, Comfort

Network Spacing

Network spacing defines the density of routes on the priority network. Network spacing provides a sense of network coverage and has direct impacts on access to destinations, route directness, and more. Targets for network spacing will vary across the network based on factors such as roadway network density as well as the density of trip generators and attractors. Areas with denser road networks and a greater density of people and places may necessitate closer spacing, while areas with a less dense road network and fewer people and places may require less frequent spacing. The target identified below is based on observations from the selected priority network.

How is this measured? Network spacing refers to the straight-line distance between two parallel routes. It is recommended to measure at various points along the routes for both east-west and north-south travel.

Recommended Principle: The priority network should have frequent and direct network connections. Spacing between parallel segments should be about a $\frac{1}{2}$ mile for most of the city and no more than one mile apart in less dense areas. Areas with a greater density of roadways and destinations, or that have one-way routes, may be spaced at less than $\frac{1}{2}$ mile.

Associated Goals: Comfort, Connectivity



Route Quality and Legibility

Route quality and legibility directly influence user experience. Route quality refers to various physical characteristics of the route that improve user experience; examples include tree/shade coverage, lighting, and pavement quality. Consistency refers to the use of consistent design treatments and features that help people understand the route. Not only can this increase comfort, but it helps the route be more intuitive for navigation purposes.

While this measure accounts for some existing conditions, such as lighting and tree coverage, it may also include consideration for design potential. Questions may include:

- If a route does not currently have significant tree coverage or lighting, can this be added as part of the route design?
- Do the physical constraints along the route prevent consistent application of facility treatments?
- What are the maintenance considerations that will guide long-term route quality?

How is this measured? Existing data regarding tree coverage and lighting can guide the selection of routes; additional data collection and/or collaboration with relevant departments may be required for other elements.

Recommended Principle: Priority network routes should provide for a consistent experience along the corridor, whether based on existing characteristics or the ability to improve quality and consistency through route implementation.

Associated Goals: Safety, Comfort, Connectivity

Equitable Coverage

Priority routes should be accessible to disadvantaged areas. As network links and routes are selected, City staff should confirm that areas identified as disadvantaged are not precluded from priority network coverage. Providing priority network access in these areas helps expand mobility choice for the community.

How is this measured? The Climate and Economic Justice Screening Tool is a federal resource that identifies areas with higher concentrations of disadvantaged populations based on environmental and socioeconomic factors. Other sources of data include USDOT, FTA, FHWA, and WSDOT. These sources should be utilized depending on the needs of available funding opportunities.

Recommended Principle: Priority network routes should connect through areas identified as disadvantaged, providing high-quality routes connecting to destinations.

Associated Goals: Equity, Connectivity



Local Context

Routes should also consider local context, including both additional factors not represented in available data as well as community preference, a based on local knowledge and experience. These considerations may mean that a route with more out-of-direction travel may be preferred as it's more intuitive to people biking, provides access to destinations not reflected in the data, or exhibits unique ride quality in terms of pavement condition, topography or aesthetic factors. This principle also provides consideration for known projects or other agency actions that may influence route feasibility over time.

How is this measured? Understanding of local context can reflect City staff knowledge, public input, and engagement through the City's Bicycle Advisory Board. As an example, the City is asking for feedback on the draft priority network as part of this project, as seen [here](#).

Recommended Principle: Priority network routes should account for community preference and local context when it is logical to do so.

Associated Goals: Comfort, Connectivity

Route Feasibility

Selected routes and required treatments to align with identified principles (such as low-stress routes and route quality) should be feasible for both implementation and long-term maintenance. Feasibility includes consideration for factors such as cost to implement, available right-of-way, consistency with maintenance practices and procedures, and cost of ongoing maintenance. Additionally, the route should be consistent with other planned transportation projects. For example, will other planned projects substantially impact the ability of this corridor to provide a complete, connected, and low-stress route for people bicycling?

How is this measured? Feasibility should reflect internal City buy-in with consideration for capital project funding, operations funding, and relevant department procedures. Coordination with other departments and agencies may be required to assess compatibility with future projects.

Recommended Principle: Selected routes should be feasible, both to implement and maintain in the long-term. Planned transportation projects should not negatively impact bicycle routes.

Associated Goals: Sustainability



Additional Resources

The following list of resources available through the Federal Highway Administration (FHWA) can provide additional guidance to City staff for the implementation of a priority bicycle network that aligns with the local vision for a complete, connected, safe, and comfortable bicycle system.

- **Bikeway Selection Guide**

Guidance for identifying the most appropriate bicycle facility for a corridor to provide safe and comfortable routes of travel.

Website: https://safety.fhwa.dot.gov/ped_bike/tools_solve/docs/fhwasa18077.pdf

- **FHWA Guidebook for Measuring Multimodal Connectivity Guidebook**

Guidebook and toolbox for evaluating network connectivity for bicycle and pedestrian networks.

Website:

https://www.fhwa.dot.gov/environment/bicycle_pedestrian/publications/multimodal_connectivity/fhwahep18032.pdf

- **Guidebook for Developing Pedestrian & Bicycle Performance Measures**

Guidance for identifying relevant performance measures and track system progress over time.

Website:

https://www.fhwa.dot.gov/environment/bicycle_pedestrian/publications/performance_measures_guidebook/pm_guidebook.pdf



DATE: Revised June 21, 2024
TO: City of Spokane
FROM: Parametrix
SUBJECT: Spokane Priority Bicycle Network Process Documentation
PROJECT NAME: Spokane Priority Bicycle Network

Introduction

The following memo describes the revised prioritization framework and methodology for identifying the priority bicycle network for the City of Spokane. This process was developed in coordination with City staff and included feedback milestones from agency partners, the City's Bicycle Advisory Board, and community.

The framework is informed by available data, input from project stakeholders, current best practices, and city staff review. Selection of the priority network followed an iterative process that provided the ability to best reflect local context. The attached matrix provides additional detail on specific categories, measures, and data sources.

Evaluation Process

Evaluation of proposed network segments used a combination of quantitative and qualitative data. Quantitative data, such as population density or proximity to key destinations, relied on available spatial data and third-party data sources, such as Replica. Qualitative data included input from City staff on aspects such as feasibility, as well as manual review of aspects such as connectivity. The project team evaluated the Future Network layer provided by the City. This included both existing and proposed facilities and is broken into distinct project segments.

Since the result of this project is a priority network as opposed to a ranked project list, the project team used a multi-part evaluation process. This process included:

- **Step 1: Evaluate measures using quantitative data. (Table 1)**
The result of this step was a total score for each network segment. The score helped the project team identify key network links and assess network patterns based on a combination of data.
- **Step 2: Review results and assemble draft priority network.**
Using the scores produced in Step 1, the project team identified high priority segments and routes. Additionally, the use of Replica data, which uses anonymized data from location-based devices to capture local travel patterns, informed high-demand areas. The project team assembled a priority network using this information, with an emphasis on:
 - Direct routes that connect destinations and areas of high demand
 - Routes that provide for continuous travel and connections to other priority routes
 - Inclusion of key network links, such as the Centennial Trail
 - Evaluating network spacing options and trends



- **Step 3: Review network and evaluate measures using qualitative data. (Table 2)**

The City and project stakeholders reviewed the draft priority network to confirm route selection. Using Felt, an online interactive mapping tool, stakeholders and community members had an opportunity to provide input on the priority routes, identify routes that better reflect current travel patterns, and identify preferred priority route connections. Table 2 in the attached matrix outlined example information that could be considered in this step, such as high-use routes, as well as factors such as feasibility, planned project opportunities, maintenance, and user experience.

- **Step 4: Finalize Network Draft**

Based on feedback provided by the City and stakeholders, City staff refined the Bicycle Priority Network (BPN). This included removing segments identified in the draft network; adding new or alternate segments that were not included in the draft; as well as identifying a selection of routes that represent an Expanded Priority Network (EPN). The EPN includes routes and segments that are not part of the spine but are important connections that should be advanced as opportunities arise. The complete BPN and EPN were then consolidated into a final dataset. Final processing steps included:

- Applying quantitative prioritization scores to new segments in both the BPN and EPN.
- Adjusting quantitative scores of BPN segments based on changes in segmentation.
- Documenting data attributes in the accompanying Data Dictionary.

Table 1: Step 1 Evaluation - Quantitative Data

CATEGORY	CRITERIA (GIS Field Name)	DEFINITION	SCORING NOTES	SCORING	
Access to Destinations This category assesses the route's proximity to places people want to go and considers from where people might be traveling. Areas with higher concentrations of destinations will be higher priority, while fewer destinations will be lower priority. For the purposes of this measure, proximity is defined by straight-line distance and does not necessarily reflect door-to-door access to destinations.	Education (Access_Educ)	Proximity to educational opportunity. Destinations include public elementary, middle, and high schools, as well as higher education institutions.	• High Score: Route travels adjacent to an educational institution. • Medium Score: Route travels within 1/4 mile of an educational institution. • No Score: Route does not provide connectivity within ¼ mile of an educational institution.	5	30
	Recreation (Access_Rec)	Proximity to recreation locations, including parks, green spaces, and trails.	• High Score: Route travels adjacent to or through a recreational space. • Medium Score: Route travels within 1/4 mile of a recreational space. • No Score: Route does not provide connectivity within ¼ mile of a recreational space.	5	
	Transit (Access_Transit)	Proximity to transit, including bus stops and transit stations.	• High Score: Route travels adjacent to a transit facility. • Medium Score: Route travels within 1/4 mile of a transit facility. • No Score: Route does not provide connectivity within ¼ mile of a transit facility.	5	
	Economic (Access_Econ)	Proximity to areas with higher employment density or areas identified as an activity center. Density will be evaluated at the block group level; data will be categorized by quintiles, with the top quintile qualifying for the highest score.	• High Score: Route travels adjacent to or through an area with high employment density or an area identified as an activity center. • Medium Score: Route travels within 1/4 mile of an area with high employment density or an area identified as an activity center. • No Score: Route does not provide connectivity within ¼ mile of an area with high employment density or an area identified as an activity center.	5	
	Services (Access_Serv)	Proximity to services, including healthcare centers (e.g., hospitals), civic destinations, and food sources.	• High Score: Route travels adjacent to or through an area with services. • Medium Score: Route travels within 1/4 mile of services. • No Score: Route does not provide connectivity within ¼ mile of services.	5	
	Population Density (Access_PopDen)	Proximity to areas with higher population density relative to the City of Spokane. Density will be evaluated at the block group level; data will be categorized by quintiles, with the top quintile qualifying for the highest score.	• High Score: Route travels adjacent to or through an area with high population density. • Medium Score: Route travels adjacent to or through an area with moderate population density. • No Score: Route travels adjacent to or through an area with low population density.	5	



CATEGORY	CRITERIA (GIS Field Name)	DEFINITION	SCORING NOTES	SCORING	
Equity This category evaluates routes based on the proximity or service to/through areas identified as disadvantaged. Data used in this category will provide consistency with equity measures used in state and federal funding sources.	Transportation (Equity_Transpo)	Does the route provide service to/through areas identified as disadvantaged? Disadvantaged areas are those within the top quintile of results.	• High Score: Route directly connects to/through disadvantaged areas. • Medium Score: Route travels within 1/4 mile of disadvantaged areas. • No Score: Route does not provide connectivity within 1/4 mile of disadvantaged areas.	10	30
	Health (Equity_Health)	Does the route provide service to/through areas identified as disadvantaged? Disadvantaged areas are those within the top quintile of results.	• High Score: Route directly connects to/through disadvantaged areas. • Medium Score: Route travels within 1/4 mile of disadvantaged areas. • No Score: Route does not provide connectivity within 1/4 mile of disadvantaged areas.	10	
	Climate Change (Equity_ClimateCh)	Does the route provide service to/through areas identified as disadvantaged? Disadvantaged areas are those within the top quintile of results.	• High Score: Route directly connects to/through disadvantaged areas. • Medium Score: Route travels within 1/4 mile of disadvantaged areas. • No Score: Route does not provide connectivity within 1/4 mile of disadvantaged areas.	10	
Safety This category evaluates proximity to freight and high frequency transit (HFT). It should be noted that while category is intended to guide route selection toward more comfortable and safer corridors, improvements made through implementation of the bicycle network may mitigate current conditions. This measure should be considered closely with assessments of feasibility.	Freight/High-Frequency Transit Route (Safety_FrghtHFT)	Is the route co-located with identified freight routes or high frequency transit routes?	• High Score: Route is not co-located with a freight route or high-frequency transit route. • No Score: Route is co-located with a freight route or high-frequency transit route.	25	25
User Experience This category evaluates measures related to user experience of a route. Elements such as shade (via street trees) and lighting for visibility may have impacts on user comfort and experience. Additional user experience factors are recommended in Step 2.	Lighting (UserExp_Light)	Does the route currently have lighting to facilitate visibility?	• High Score: Route currently includes lighting along the length of the corridor. • Medium Score: Route includes some lighting, but the lighting is not consistent for the length of the corridor. • No Score: Route includes limited or no lighting.	5	10
	Street trees (UserExp_StTrees)	Does the route currently have street trees located along the route?	• High Score: Route currently includes street trees along the length of the corridor. • Medium Score: Route includes some street trees, but street trees are not consistent for the length of the corridor. • No Score: Route includes limited or no street trees.	5	

Table 2: Step 3 Evaluation - Qualitative Data

CATEGORY	CRITERIA	DEFINITION	SCORING NOTES
Feasibility This category evaluates measures related to feasibility of implementation. These measures cover a broad range of questions that may influence feasibility and include topics to guide discussion with other staff, departments, and agencies. As a secondary step in the evaluation process, this category is intended to inform selection among competing routes or provide the basis for review.	Cost	At a high level, is the expected cost of implementing this route feasible? For example, is there sufficient ROW to accommodate the needed improvement; can the facility be accomplished through restriping or other low-cost measures?	• High Score: Expected cost of implementing the route is feasible. • Medium Score: Expected cost of implementing the route is significant but potentially feasible. • No Score: Expected cost of implementing the route is not feasible.
	Regional Consistency	Does the project align with other local or regional plans? For example, is the route identified in the regional bike network? Is the project in alignment with upcoming projects?	• High Score: Project aligns with other local and regional plans. • No Score: Project does not align with other local and regional plans.
	Maintenance	Ability to maintain facilities to standard, including practices related to snow clearing/storage, regular cleaning, and ongoing maintenance.	• High Score: Ability to maintain facilities along route to standard. • No Score: Cannot maintain facilities along route to standard.
Network Connectivity This category assesses the completeness of the network and the ability of routes to connect to other routes. This category includes evaluation of key connections, existing intersection infrastructure, and inclusion of key corridors/signature routes. Elements of this category are scored quantitatively, while other elements require qualitative evaluation. As a secondary step in the evaluation process, this category includes measures that will guide a more manual review of segment selection, including informing selection among multiple higher priority routes.	Key Corridors and Connections	Does the route connect to key routes, either those representing signature corridors (e.g., Centennial Trail) or required connection points, such as river crossings?	Manual review of high priority corridors will help identify if adjustment must be made so that key routes and corridors are included.
	Segment Connectivity	Does the route connect to other high priority routes? Are there opportunities to create a low-stress complete and connected network if route is currently disconnected?	Manual review of high priority corridors will help identify if adjustment must be made to provide for a complete and connected network.
	Key connection points	Does the route use existing crossing infrastructure, such as pedestrian or traffic signals or other enhanced crossings?	Manual review of high priority corridors will help identify if adjustment must be made to provide for a complete and connected network. For example, if two parallel corridors are both high priority, the project team will review the corridors to determine if one has a higher prevalence of existing low-stress crossings.
	Network Density	<i>Note: This measure will be defined through the evaluation process and inform network development principles. For example, when reviewing prioritization results, the project will assess network spacing and identify expected frequency of routes.</i>	<i>Preferred measures will be defined through the prioritization and refinement process.</i>

CATEGORY	CRITERIA	DEFINITION	SCORING NOTES
Safety This category evaluates safety-related measures to inform route selection, including crash history and level of traffic stress. It should be noted that while category is intended to guide route selection toward more comfortable and safer corridors, improvements made through implementation of the bicycle network may mitigate current conditions. This measure should be considered closely with assessments of feasibility.	Crashes (Safety_Crash)	Does the corridor have a history of serious injury and/or fatal crashes involving people on bicycles?	Consider prioritizing corridors without a history of serious crashes. Evaluate feasibility of providing low-stress, separate bicycle facilities if location along a high-crash corridor is preferred.
	LTS (Safety_LowStress)	Is the route low-stress (i.e., LTS 1 or 2)?	Consider prioritizing existing low-stress corridors where feasible. Low-stress corridors may require less intervention or leverage existing investments.
User Experience This category evaluates route grade as related to user experience of a route.	Topography (Safety_Topo)	Does the route provide a relatively flat path of travel for people bicycling?	Prioritize flatter routes. While steep routes may be included in the final network based on necessity, consider the relationship between grade and out-of-direction travel required to travel via a flatter route.