# **Spokane County Active Transportation Plan**

Spokane County Public Works Department 2024

# Table of Contents

Executive Summary	6
Chapter 1	8
Purpose	8
Introduction	8
Why encourage active transportation in Spokane County?	9
Challenges to Active Transportation in Spokane County	9
Goals	10
Safety	10
Connectivity	10
Livability, Health, & Equity	10
Choice	10
Improve Safety	10
Improve Connectivity and Transportation Choices	11
Improve the Health of County Residents	13
Chapter 2	15
Benefits of Active Transportation	15
Background	15
Spokane County Demographics	15
Public Participation	21
Setting	21
Chapter 3	25
Active Transportation Safety and rules of the road	25
Helmet Laws	25
Additional laws, rules, and regulations	25
Electric Bicycles	26
Level of Traffic Stress	27
Scoring LTS	27
Prioritizing LTS Improvements	29
Rolling Amenities in Spokane County	30
Multi Use Paths	30
Bicycle Lanes	31
Shared Roadway	33

Separated Bikeways	33
Intersections	34
Wayfinding	34
Chapter 4	36
Active Transportation Safety	36
Pedestrian Safety	36
Connectivity	39
Intersections	40
Bike Parking	41
Chapter 5	42
Relationships To Other Plans	42
Countywide Plans	43
Spokane County	43
Spokane County Comprehensive Plan, 2017	43
Spokane County Transportation Element, 2019	45
Spokane County Trails Plan, 2020	46
Spokane County Commute Trip Reduction Program	47
Spokane County Sub-Area Plans	48
Local Jurisdiction Active Transportation Planning	53
City of Spokane Bicycle Master Plan, 2017	53
City of Spokane Pedestrian Master Plan, 2015	54
City of Spokane Valley Comprehensive Plan, 2016	55
City of Airway Heights, 2010	55
City of Liberty Lake Comprehensive Plan, 2015	56
Regional Plans	56
Washington State Growth Management Act	56
Washington State Department of Transportation	57
Spokane Regional Transportation Council (SRTC)	57
Spokane Transit Authority (STA), Connect Spokane, 2019	59
Chapter 6	61
Goals, Policies, and Implementation Measures	61
Vision Statement	61
Goals	61

Goal 1 Safety	61
Goal 2 Connectivity	62
Goal 3 Livability, Health & Equity	63
Goal 4 Choice	63
Chapter 7	64
Existing Conditions	
Pedestrian Infrastructure	64
Multimodal Infrastructure	65
Class I Shared Use Paths	65
Class II Bicycle Lanes	66
Class IV signed and unsigned roadways	67
Travel Behavior and Active Transportation Counts	67
Regional and Multi-Modal Connections	68
Support Facilities	68
Enforcement and Education	68
Public Participation	69
Survey Results for Pedestrians	70
Survey Results for bicyclists	73
Existing Conditions Map	
Needs Analysis	79
Chapter 8	80
Recommendations	80
Neighborhood Routes	81
Facility Improvements in School Zones	81
Bicycle Facility in Coordination with County Parks	82
Facility Improvements in Coordination with Public Transportation	85
Summary of Recommendations	87
Prioritized Active Transportation Infrastructure Improvements	89
Recently Completed and Current Construction	95
Chapter 9	97
Project Implementation	97
Funding Strategies	103
Funding Sources	103

Maintenance	104
Performance Measures	105
Appendix	108
References	

#### **DEFINITIONS**

**ADA Accessible:** Facilities accessible to persons with disabilities.

Active Transportation: Includes forms of pedestrian mobility including walking or running, the use of a mobility assistive device such as a wheelchair, bicycling and cycling irrespective of the number of wheels, and the use of small personal devices such as foot scooters or skateboards. Active transportation includes both traditional and electric-assisted bicycles and other devices. Planning for active transportation must consider and address accommodation pursuant to the Americans with disabilities act and the distinct needs of each form of active transportation. (RCW 47.04.015)

**Bicycle:** A two wheeled vehicle powered by pedaling or electricity.

**Bicycle Facility:** Any provisions, improvements, and amenities made to accommodate and encourage active transportation.

**Bike Lane:** Designates section of roadway for the use of bicyclists designated by road markings and signs.

**Bicycle Network:** Bicycle facilities consist of a mix of existing and proposed bicycle routes with the intent to be connected, safe, and providing an acceptable level of service.

**Bicycle Route:** Any road that provides a bicycle lane, route, or path for use by bicyclists used to get to destinations of interest.

#### **Complete Streets:**

**Connectivity:** A series of bicycle facilities, free of barriers, linking and providing access to key destinations with the intent to encourage active transportation and function like the road network.

**Context Sensitive:** An approach that analyzes an environment with the intent to respond in an appropriate manner given various physical settings such as aesthetics, environmental resources, and the preservation of historical sites.

**Pedestrian:** A person travelling on foot.

**Roadway:** The part of the right of way intended for vehicles.

**Shared Roadway:** An area of the road designated for vehicles but with allocated room to share with cyclists.

**Shared Use path:** Typically, a 10' to 12' path that supports multiple recreation and transportation modes, such as active transportation, active transportation, skating, and wheelchair use.

**Shoulder:** A strip of pavement outside the outer travel lane used by bicyclists and emergency traffic use.

**Sidewalk:** A pavement footpath that adds separation from vehicular traffic for pedestrian use.

# **Executive Summary**

This document is the first Active Transportation Plan (ATP) for the jurisdiction of Spokane County. The Plan is intended to work in conjunction with other local and regional transportation documents such as the Spokane County Comprehensive Plan, and other jurisdiction's Active Transportation Master Plans for overall effectiveness to enhance safety, connectivity, and encourage active transportation as a viable form of transportation over single occupancy vehicular transportation options. The effort of this plan facilitates contemporary active transportation planning and implementation practices for Spokane County.

- This plan focuses on four key goals: 1) improve active transportation safety in Spokane County, 2) Provide a low stress connected network of active transportation facilities including but not limited to: sidewalks, bicycle facilities, trails, and pathways in the County that are safe, ADA accessible, and encourage active transportation options. 3) provide equal access to active transportation facilities for all members of the community, and 4) improve the health of Spokane County residents.
- This plan addresses the value and goal of achieving low-stress active transportation facilities in Spokane County. The intent is to evaluate opportunities and ultimately improve transportation facilities so people of all ages and abilities feel comfortable and safe using active transportation as an option to access employment, transit, commercial centers, medical facilities, and other destinations in the county. This plan looks to identify existing facilities that may be improved and new facilities to be constructed. The plan does not guarantee that every proposed improvement in the Plan will be funded and constructed.
- The Plan uses a Level of Traffic Stress (LTS) analysis created by Peter Furth to assess the amount of stress people experience when they bicycle with various components of traffic on roads in the county. This LTS assessment can be used to gauge other forms of active transportation and is not exclusive to bicycling.

- By using the Level of Traffic Stress methodology on Spokane County's roadway network, recommendations can be selected to improve active transportation infrastructure. Spokane County facilities include approximately 100 miles of shared use paths, 130 miles of separated bike lanes, and 845 miles of shared roadways.
- Public outreach was implemented for the plan with surveys and an online map of the existing facilities within Spokane County for county residents to provide feedback on active transportation conditions.
- To encourage active transportation, the Plan recommends active transportation supportive programs and policy framework.
- The Plan evaluates important land uses in connection to active transportation networks to analyze gaps, increase connectivity, improve safety, and improve health. The Plan evaluates high crash density locations as well as underserved people by census block. Over time, active transportation facilities can be upgraded as part of development approval and county facility planning.
- •The Plan sets goals, objectives, performance measures that enable transparency and accountability in plan implementation.
- The plan is a key element in Spokane County's Vision Zero Action Plan to eliminate trafficrelated fatalities and serious injuries through annual analysis of crashes. Through annual analysis, trends can be observed, and the correct countermeasures can be implemented.
- Due to the rural nature of a large majority of Spokane County Active transportation facilities should be implemented where it makes sense, is safe, and not as part of every County capital project constructed. This Plan is intended to facilitate policy and project implementation in an urban and semi urban environment where it benefits people due to pedestrian generating land uses. Like all projects, design and implementation should be context sensitive to be truly successful.

# Chapter 1

# Purpose

The Spokane County Active Transportation Plan is intended to guide policies, the planning and development of existing and future active transportation networks, and ultimately increase the number of people that choose active transportation in Spokane County over single occupancy vehicles. This plan aims to provide a vision for a safe, connected, and integrated active transportation network that encourages and ensures alternative forms of transportation as practical. Safe, convenient, and comfortable active transportation should be an option for all residents and visitors of Spokane County facilitating a way to get to school, work, access transit, and for recreation purposes for riders of all abilities. The principal goal is to enhance the safety, connectivity, and convenience of active transportation infrastructure on County roads and thereby improve the quality of life for everyone using the Spokane County transportation system.

Active transportation is a low-cost, emission free, sustainable, and healthy form of transportation. Benefits of active transportation for everyday purposes include improved health, increased physical activity, stress reduction, and lower transportation costs. Social benefits of active transportation include improved air quality, reduced emissions created by driving and idling vehicles, less traffic congestion, reduced amounts of non-renewable fuel resources consumed, reduced health care costs, and healthier residents. It can be argued that roadways with active transportation infrastructure not only make active transportation more appealing and safer but can also improve the experience for drivers as well. Paved shoulders and the addition of active transportation infrastructure such as bicycle lanes improve sight distance, provide a buffer, and provide more consistent separation between motorists, cyclists, and pedestrians. This creates a more comfortable environment for all users of the roadway.

Providing safe and convenient active transportation facilities will contribute to Spokane County by offering the community a variety of transportation choices. This plan also builds upon the Spokane County Road Standards, the Transportation Element, the ADA Transition Plan, and the Complete Streets Ordinance. This Plan identifies barriers, opportunities, a better understanding of existing assets, connectivity, and rider comfort levels. The elements of this plan aim to determine the next steps for a more holistic active transportation network serving bicyclists, walkers, and rollers of all abilities.

#### Introduction

Spokane County would like to facilitate a good quality of life for all residents. This is reflected in the County's mission to provide the traveling public with safe and maintained roads, bridges, roadway construction, engineering, and planning services. The county's mission and values are supported by the implementation of this active transportation master plan.

Most people travel daily to meet their everyday needs and active transportation is a healthy and affordable option that can be easily integrated into everyday life when facilities feel safe, and destinations are easily accessible. In Spokane County, the roadway network provides convenient transportation options for those with vehicles, but everyone cannot afford or wants to own and maintain a car. Approximately one-third of the population does not drive a car resulting in active transportation and transit as a primary alternative to driving. People who are unable to drive experience barriers in the transportation system that make meeting basic needs time consuming, inconvenient, stressful, and sometimes dangerous. Adding to barriers, active transportation infrastructure is less complete than the road network. Barriers to active transportation in Spokane County often include incomplete or non-existent bicycle infrastructure, a lack of connected sidewalks, environments that make people directly interact with vehicles traveling at high speeds, and long distances between destinations.

Communities that have connected and safe active transportation facilities tend to be healthy and desirable places because they provide a high quality of life when residents can experience the health benefits of getting free physical activity and meeting their daily needs. Regular physical activity can decrease the risk for major chronic diseases such as heart disease, type 2 diabetes, stroke, and certain types of cancer. Active transportation infrastructure provides an alternative way for people to be less auto dependent, reduce vehicle miles traveled, and promotes a healthy environment. Active transportation infrastructure that is perceived to be safe such as marked, buffered, separated facilities, and intersections that feel safe to navigate results in transportation infrastructure that can be used by all ages and abilities. Communities that invest in safe, complete infrastructure, and programs to promote active transportation tend to have active and healthier residents. Not only does active transportation infrastructure improve health and improve safety, but residents and businesses are attracted to these communities where it is easy for people to get from place to place safely. Active communities also enhance economic development by making places for people to shop, eat, and work while encouraging residential and commercial development.

## Why encourage active transportation in Spokane County?

Spokane County is a county rich in aesthetic beauty and offers a complex mix of urban and rural elements. The landscape is diverse, offering towering evergreens, pillars of basalt rock, fertile farmlands, rivers, many lakes, and is home to extensive network of shared-use paths. The county is made up of five primary cities centrally located within the county. The Spokane River runs through the heart of the county offering scenic views and parallels the Centennial Trail, a 40+ mile separated path. This environment lends itself naturally to being well connected, and active transportation should be a safe option for residents to access daily needs as well as for recreation purposes.

## Challenges to Active Transportation in Spokane County

- Existing active transportation networks are incomplete.
- Access to a vehicle is a necessity to reach many destinations.

- Gaps in the active transportation networks impact vulnerable populations who do not drive.
- Many County roadways have higher speeds that can make active transportation facilities feel less safe.
- Crossing at intersections on County roads can be challenging for people using active transportation.
- Urban and rural land use patterns increase distances people must bike to reach destinations.
- Old development requirements may not have been constructed with walking, bicycle facilities, or transit options, resulting in land use patterns that primarily serve residents with personal vehicles as the most viable option for transportation.
- Traffic laws for how vehicles and bicyclists interact on roadways may not always be well understood. To improve safety for all roadway users, programs and education are needed for both those that travel by motor vehicle and active transportation.
- Due to the four seasons of the Inland Northwest, winter weather may reduce active transportation.

#### Goals

Safety: Work towards an active transportation network that is safe and comfortable for all ages and abilities. This can be measured with the reduction of serious injury and deaths of active transportation users on the county road network.

Connectivity: Create a connected network of active transportation facilities that link important destinations, transit, neighborhoods, and neighboring cities within the county and relieve auto-dependency.

Livability, Health, & Equity: Improve the health and livability of county residents by creating an environment that is supportive of active transportation for all.

Choice: Continually improving and developing the active transportation network system increases county resident's transportation options while improving health within Spokane County.

# Improve Safety

Spokane County is dedicated to improving safety for all active transportation users of the county road system. This plan includes strategies to analyze Level of Traffic Stress (LTS) of active transportation facilities and reduce the number of incidents active transportation users encounter with vehicles. Making the decision to choose active transportation on county roads is impacted by real and perceived concerns about traffic safety. The goal to improve the safety of

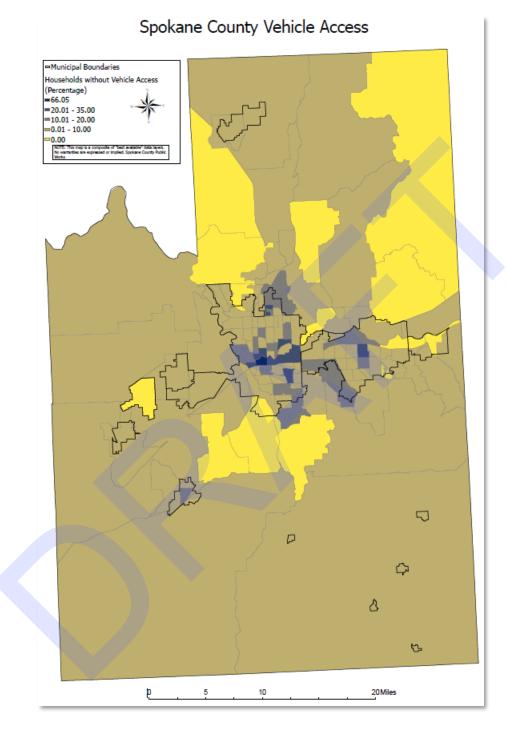
those choosing active transportation as a means of commuting complements the Plan's goal to increase the number of active transportation users on county roads. This goal simultaneously supports the Target Zero vision implemented by the Washington State Traffic Safety Commission (WTSC), to have zero deaths and serious injuries on Washington roads by 2030.

## Improve Connectivity and Transportation Choices

Having transportation options is important and Spokane County strives to meet the needs of all transportation system users. County roads facilitate multimodal travel and provide access to community destinations such as places of employment, schools, libraries, grocery stores, retail, and parks. Choosing active transportation has the potential to alleviate traffic congestion, reduce airborne pollutants, and is a mode to access public transit. For this reason, active transportation users are important to the county transportation system and the reason for this plan. To access important destinations, increase equity in transportation, and try to improve the environment it is important that infrastructure is connected. Without connected facilities, it is more likely that anyone choosing active transportation will encounter conflict and be less likely to choose walking, biking, or rolling for nearby trips, to access transit, or for recreation.

Spokane County has a predominant rural element, and this means that the more removed from city centers and transit, the more dependent people are on vehicles as a primary mode of transportation. Safety improvements support the mobility of residents without access to a vehicle and can improve equity disparities within Spokane County, especially in urbanized settings. Accessing transit for those that do not drive is another important reason to provide safe, convenient, and connected facilities. County roads often provide the most direct route to important destinations and bus stops. Figure 1.0 shows the percentage of households without access to a vehicle for accessing daily needs. The map shows that most residents do have access to a vehicle but also that there are still many places in the county that rely on other forms of transportation. This map is indicative of the need for connected facilities and safe crossings, particularly where the county and cities interface, to allow reduced auto-dependency and to reduce vehicle miles traveled (VMT).

Figure 1.0 Percent of Households Without Access to Vehicle



An additional goal of this plan is to take a closer look at how active transportation facilities are connected, locate gaps, and find funding and regional partnership opportunities to improve the multi-jurisdictional network over time. Understanding systemic connectivity is important for tying together safety and ensuring active transportation as a feasible choice.

# Improve the Health of County Residents

Incorporating active transportation into a daily routine is an easy way for children and adults to improve their overall health and increase physical activity. Regular physical activity reduces the risk of heart disease, diabetes, high blood pressure, helps control weight, and reduces stress. These conditions have significant effects on quality of life, life span, and health care costs. Most diseases and their associated conditions can be improved by increased physical activity. Active transportation planning can be part of a comprehensive public health strategy to reduce rates of chronic disease by improving existing active transportation infrastructure conditions for transportation and recreational purposes.

This plan also considers how facility planning can reduce health disparities; defined as the overall quality of health and different rates of preventable diseases among different population groups. In Spokane County, low-income populations and minorities have higher rates of chronic disease. Generally, low income and minority populations tend to have less access to auto oriented transportation and rely on transit and alternative forms of transportation to meet their daily needs. One of the goals of this plan is to identify geographic areas within the county that have higher rates of vulnerable populations and use this information to establish priorities for improvements.

When establishing the goals of the Spokane County Active Transportation Master Plan it has been important to ask the right questions.

- Does The Plan prioritize reducing the Level of Traffic Stress (LTS) to improve the county's existing assets and increase the amount of people choosing active transportation?
- Does The Plan improve connectivity and address barriers so that all ages and abilities can use active transportation infrastructure?
- Does The Plan support transportation options and public transit service?
- Does this Plan address equity in the county transportation system?

Monitoring the goals of the Active Transportation Master Plan is critical to the success of the plan. This ensures that the correct goals have been selected and allows opportunity to reevaluate and optimize infrastructure conditions.

Measure the increase of connectivity and low stress facilities with an annual analysis of
miles of improvements made. Improvements are expected to be made primarily where the
cities and county meet to specifically serve the densest populations providing the greatest
impact. This is typically accomplished by project specific improvements.

- Increase the overall proportion of active transportation users for commuting and recreational purposes.
- Decrease the amount of active transportation users vs. vehicle crashes through annual crash analysis and implement countermeasures that support a reduction in serious injury and death.

The Spokane County Active Transportation Master Plan supports improved access to important destinations within the County's jurisdiction such as grocery stores, libraries, schools, recreation centers, bus stops and STA Park and rides.

**1-**Increase access to high density centers, jobs, education, retail, parks and libraries, schools, recreational centers, transit, and other neighborhood destinations.

- Build low LTS bicycle facilities and lower high LTS bicycle facilities when feasible, that
  provide access to county destinations and connect to adjacent jurisdictional bicycle facilities
  and pedestrian generating places.
- Encourage more bicycle parking at new developments and important destinations like schools, grocery stores, and libraries.
- Evaluate all potential grant funding opportunities as well as developer's contribution to provide connected and high-quality active transportation facilities.

**2-**Address barriers so that vulnerable populations can increase their transportation options to important destinations.

- Increase the overall mileage of low-stress bicycle facilities and encourage the use of active transportation as a low-cost transportation.
- Prioritize the construction of bicycle facilities that close gaps in the bicycle network.
- Ensure that bicycle facility design does not create additional barriers or conflict points.

**3-**Improve active transportation routes that provide first and last mile connections to STA transit stations and major bus stops.

- Examine first and last mile transportation routes to STA park and rides for gaps and conflict points within the county to reduce transportation costs by reducing the reliance on vehicle ownership.
- Increase active transportation and micro-mobility resources to encourage active transportation options for county residents to popular destinations along transit routes when possible.

**4-**Provide information on bicycle resources and online maintenance training, Spokane County Public Library branches, Spokane Regional Health District (SRHD), and through Spokane County Commute Trip Reduction Program to empower residents to fix bicycle issues for free or a minimal cost.

Online resources (https://alison.com/course/bicycle-maintenance)

Local and low-cost bicycle repair resources can be found at places like Fitness Fanatics \$25.

# Chapter 2

## Benefits of Active Transportation

Active transportation is increasingly popular and the amount of people choosing active transportation is a key component of the success of a multimodal transportation system. Increasing transportation options achieves multiple objectives including improving public health, promoting economic development, addressing transportation equity, reducing environmental impacts, and reducing roadway maintenance costs. Addressing versatile mobility options provides strategies that complement local and regional plans and strengthens regional partnerships. These objectives mixed with a growing public demand for more transportation choices point to the need for implementing this plan.

# Background

Active transportation is an important option and mode of transportation for County residents. For many residents walking, cycling, and rolling are recreational activities, but for others it is less of a choice but a primary mode of transportation for commuting and obtaining daily necessities. For households living below the median annual income or households with only a single vehicle, active transportation may be the only means of transportation that is readily available for some households. Active transportation may be the only way for young people with working parents to get to school, recreational centers, libraries, and extracurricular activities.

# Spokane County Demographics

Active transportation is an easy way for children and adults to improve their overall health and increase regular physical activity in their daily routines. Regular physical activity reduces the risk of heart disease, diabetes, high blood pressure, helps control weight, and reduces stress. These conditions have significant effects on quality of life, life span, and health care costs. Most diseases and their associated conditions can be improved by increased physical activity such as walking and biking. Decreasing the level of traffic stress (LTS) and improving connectivity are elements that can be implemented to encourage active transportation, recreation, improve public health, and reduce rates of chronic disease.

This plan also considers how planning for active transportation can reduce health disparities. Health disparities are defined as the overall quality of health and different rates of preventable diseases among different population groups. Generally, disadvantaged, underserved, and overburdened communities have higher rates of chronic disease. One goal of this plan is to

identify geographic areas within the county that have higher rates of health-related issues and use this information to establish priorities for multi-modal improvements.

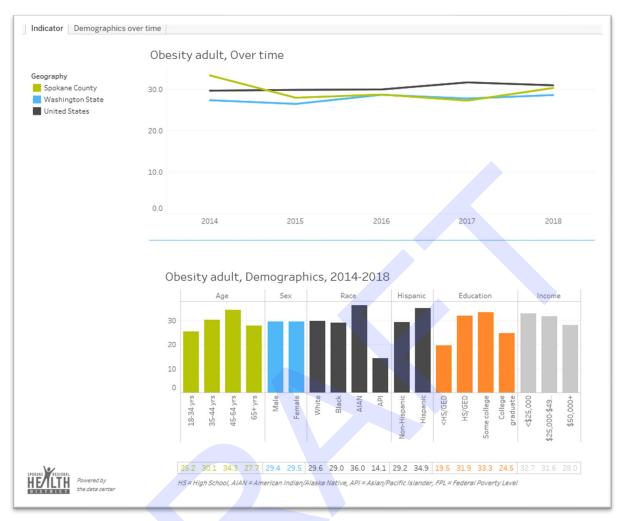
[2] Liberty Lake Spokane Spokane Valley Airway Heights Medical Lake Cheney [195] Fairfield

Figure 2.0, Potentially Disadvantaged Populations of Spokane County by tract level

It is widely accepted that exercise can mitigate many diseases such as cardiovascular disease, diabetes, obesity, high blood pressure, and can benefit those suffering from depression. Biking,

walking, and rolling are easy and affordable ways to improve health. Public health is a priority to the community and Spokane County, supported through the goals and policy of the adopted Comprehensive Plan that aims to provide a range of transportation options within the Spokane region. According to Spokane Regional Health District (SRHD) the obesity rate in Spokane County is 34% for the age group range of 45-65, the highest of any of the age groups in the county. Children under 18 years old have an obesity rate of 11% in Spokane County, this is under the state and national average of 18.5%. Obesity based on gender appears to be the same for both males and females, with an obesity rate of about 29%. Prioritizing an integrated and connected active transportation system that provides access to community districts and recreation may maintain these numbers and possibly facilitate progression in lowering these numbers.

Despite a discrepancy in earning differences among adults, the obesity rate difference is small in the adult demographic at roughly 3%. Adults earning less than \$25,000 annually suffer from the highest rate of obesity, averaging a 32.7% obesity rate. Households earning \$50,000 or more have an obesity rate just below 30%. There is a clear disparity in obesity rate based on racial and ethnic groups. Regionally, Caucasian adults have a 29.6% obesity rate while Native Americans have a 36% obesity rate, and Hispanics have a 34.9% obesity rate.



\*All health-related graphics have been provided by the Spokane Regional Health District.



\*All health-related graphics have been provided by the Spokane Regional Health District.

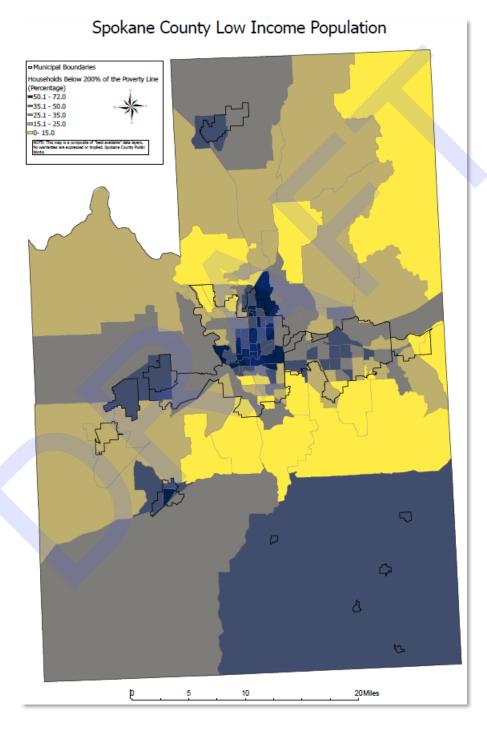
Generally, there are groups of Spokane County residents that may encounter greater vulnerabilities and experience disproportions in accessing the transportation system. The more groups a person identifies with, the greater the vulnerability.

These groups typically include:

- People earning below the median income and/or no income
- People with limited English proficiency
- People with disabilities
- Children, seniors, and women
- Single parents
- People who don't own cars

According to the U.S. Census Bureau QuickFacts for 2020, 13.4% of Spokane County lives below the poverty level. Figure 3 shows that most people in Spokane County living below the poverty level are within city limits and within the outskirts of the cities. The suburban ring outside of the designated urban growth area of the cities has the least amount of people affected by poverty.

Figure 3.0 Individuals Below Poverty Level. Data provided by the American Community Survey 2016-2020



# **Public Participation**

Spokane County values the public's opinion and encourages public participation. Surveys were created by the Spokane County Public Works staff to investigate how county residents feel about walking and riding their bikes on county sidewalks and roads, how safe they feel active transportation is, where they would like to walk and bicycle, and what their current destinations are. To see the questions that make up the survey please look in Appendix A.

To get an idea of how the public views current walking, biking, and rolling conditions, Spokane County staff attended the 2021 Bike Swap at the Spokane County Fairgrounds. A booth was set up for the duration of the event with the primary intention of engaging the public regarding their thoughts and feelings about the current and potential bicycle network. Additionally, a survey about biking in Spokane County was published on the Spokane County's website to garner broader participation. A map of existing bicycle facilities was made available to engage the public and encourage comments on safety, connectivity, barriers, and gaps in the system. The survey was finally distributed to bicycle shops to capture those that are actively participating in bicycle related activities and are most likely to have firsthand experience biking and rolling on county roads. The survey was conducted intermittently by Spokane County Public Works Transportation Planning staff from June of 2021 to November 2022. The survey had a total of 487 responses to questions centering on riding frequency, safety, and perceptions of bicycle facilities. The residents of Spokane County had a lot to say about active transportation, where they bicycle, where they would like to bicycle, their concerns, and what limits them from engaging in active transportation more.

As for walking in Spokane County, an online survey was conducted to gather information on pedestrian infrastructure. The survey consisted of seven questions to identify where residents enjoy walking, why they walk, and offered the community a place to identify where improvements need to be made, and what barriers they face when they walk. Community engagement is essential to better understand the needs of the residents living in Spokane County. Engaging the community also creates a greater sense of community ownership and ensures transparency on Spokane County's side. Furthermore, feedback from the residents guarantees that the goals for this plan align with the goals of the community. A total of 126 people responded to the survey related to walking.

# Setting

Spokane County is the fourth most populated county in Washington State and is only expected to continue growing. According to the U.S. Census Quick Facts, Spokane County population was 539,339 as of April 2020. Population density is 267.2 people per square mile, which is much higher than the state average of 96.76 people per square mile according to U.S. Census Bureau.

Spokane County is made up of a centralized urban core, a surrounding suburban outer ring, and finally a substantial rural component of undisturbed natural lands, farmlands, and small towns.

Spokane County is bisected by Interstate 90 (I-90) and State Highway 2 running east and west. Additionally, the county is further divided by State Highway 195 running south and State Highway 2 and State Highway 395 (the North Spokane Corridor) that run north. These corridors provide residents and visitors to Spokane County fast and convenient access to the county, but also result in barriers to active transportation users. The county is also divided by the Spokane River and an established railroad network that adds to potential barriers that people choosing active transportation may encounter.

There are 13 incorporated cities within Spokane County: Deer Park, Cheney, Airway Heights, Medical Lake, Millwood, Liberty Lake, Spangle, Rockford, Fairfield, Waverly, Latah, and the largest cities within the county are City of Spokane and City of Spokane Valley. The City of Spokane has a standalone Pedestrian Master Plan (2015) and Bicycle Master Plan (2017), and the other jurisdictions have transportation documents that address active transportation planning and bicycle infrastructure incorporated into their Comprehensive Plans. WSDOT created their active transportation plan 2020 And Beyond to address all forms of active transportation on the state highway system, helping counties and smaller jurisdictions guide their active transportation plans.

The topography and climate are ideal for active transportation for most of the year. County elevations range from flat stretches, rolling hills, steep climbs giving walkers, cyclists, and rollers a range of active transportation experiences. Spokane has warm dry summers and moderate spring and fall seasons. However, Spokane is subject to very cold winter months and averages approximately 45 inches of snow between November and April. Cold and snowy weather may impede active transportation if facilities are not maintained. Cold weather particularly affects bicycling and rolling, unless the cyclist is considered strong and fearless, or biking and rolling is a primary mode of transportation. It should be noted that other cities comparable in size or larger have active rollers and bicyclists during winter months such as Chicago, Madison, Minneapolis, Salt Lake City, Montreal, and Calgary. Reflective delineators designating clear and open facilities, equipment for snow storage, de-icing strategies, and snow removal route prioritization are just a few of many things to consider supporting year-round active transportation in Spokane County.

Topographical diversity, various development types and land use patterns lends the county landscape to a dynamic mix of urban and rural. This results in a variety of active transportation environments. Urban environments tend to be developed on grid systems and provide more opportunity to have connected active transportation facilities within proximity to residential, commercial, and institutional districts. Being close to major nodes and districts makes walking, biking, and rolling to community destinations easier to access if the network is connected and feels safe to the user. Safety and connectivity are key components that determine if someone will choose active transportation to get to a desired destination. This particularly affects small

outings, considering that most small trips can be made with a short bike ride. The outer ring suburbs and rural areas tend to be less friendly for active transportation users. In less densely populated environments facilities may not be connected let alone exist. Additionally, it typically does not make sense and may not be safe to construct active transportation facilities in many rural areas of the county. Active transportation facilities should typically be planned, designed, and constructed primarily within an urban or semi-urban context, where there are pedestrian generators such as commercial and institutional places people need and want to visit. Areas served by transit, low-income neighborhoods, places that may have a high concentration of non-English speakers are other places that active transportation facilities are needed. Rural environments rarely have the same land uses to justify the construction and maintenance of active transportation facilities. However, all transportation facilities should be developed using a context sensitive approach and is up to the County Engineer's professional discretion.

Population density can be an important indicator of the potential for active transportation facilities to expand and how they are connected. The population is the densest in the City of Spokane, City of Spokane Valley, Liberty Lake and in outlying communities like Cheney and Deer Park. The population density decreases extending away from the city centers and towards the rural outskirts of the County boundary. Figure 3 shows that despite the city centers carrying a large portion of the population there is a substantial population to the north, south, and east of the city centers. These census tracts to the north, south, and east are within Spokane County's jurisdiction and not within the city centers. Census tracts in these areas will need to be analyzed closely for the availability of bicycle lanes, shared use paths, sidewalks, crosswalks, ADA accessibility, and pedestrian-vehicle incidents. It is worth noting that active transportation facilities should be incorporated and connected to existing facilities and constructed where there are pedestrian generators. Adding active transportation facilities to rural contexts does not make sense and can even be considered dangerous if not done in a context sensitive way. This document is intended for urban and semi urban environments.

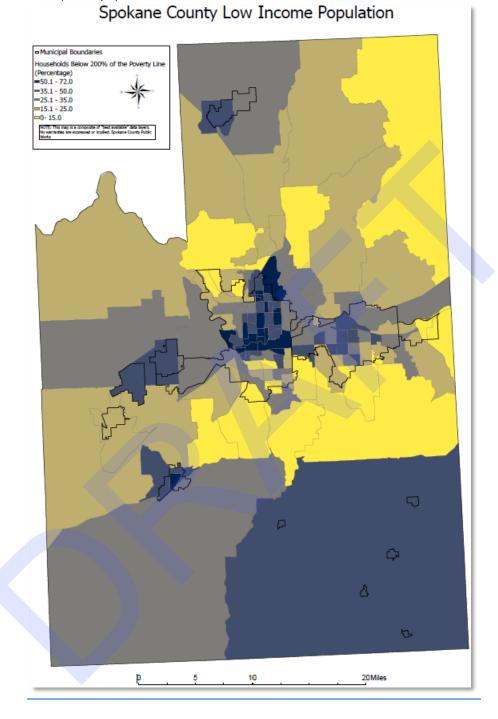


Figure 3, Spokane County Density by Census Tract

Providing active transportation facilities that residents want to use can have great impacts not only on county resident's quality of life but can have many positive impacts on real estate values, retail, tourism, and economic development. Equally important are the benefits to public health, social equity, the environment, and how an increase in active transportation may

contribute to pavement preservation, crash reduction, improved air quality, and reduced congestion.

# Chapter 3

# Active Transportation Safety and rules of the road

Knowing what is expected of you from the law and from other travelers on the road is important when choosing active transportation. The following can help keep everyone on the road safe if people make it a priority to educate themselves and actively obey the law.

#### Helmet Laws

In Spokane County children between the ages of 3 and 16 are required to wear helmets when riding anything with wheels. In the City of Spokane anyone over the age of one year old is required to wear a helmet when riding anything with wheels.

## Additional laws, rules, and regulations

The Revised Code of Washington (RCW 46.61.755 & 46.61.780) contains state rules and regulations for operating a bicycle and should also apply to all forms of recreation and transportation with wheels. The RCW does not define bicycles as vehicles, but states that anyone riding a bicycle has all the rights and responsibilities that drivers of vehicles have (RCW 46.61.755). This means that bicycle riders must follow the basic traffic laws that all drivers follow and may be ticketed (RCW 46.61.750). Per the RCW bicyclists should abide by the following rules and regulations including but not limited to the following:

- Every person riding a bicycle upon a roadway shall be granted all the rights and shall be subject to all of the duties applicable to the driver of a vehicle. Exceptions and special regulations can be found in RCW 46.61.750 through 46.61.780.
- Every person riding a bicycle on a sidewalk or crosswalk must be granted the same rights as a pedestrian and is subject to all the duties applicable to a pedestrian.
- Every bicycle when in use during the hours of darkness, as defined in RCW 46.37.020, shall be equipped with a lamp on the front which shall emit a white light visible from a distance of at least five hundred feet to the front and with a red reflector on the rear which shall be visible from all distances up to six hundred feet and visible to the lower beams of head lamps on a motor vehicle. A lamp emitting a red light visible from a distance of five hundred feet to the rear may be used in addition to the red reflector. A light-emitting diode flashing taillight visible from a distance of five hundred feet to the rear may also be used in addition to the red reflector.
- Every bicycle shall be equipped with brakes for safe stopping.
- Parents or guardians cannot knowingly allow their children to commit traffic violations (RCW 46.61.700).
- Cyclists may ride side by side but no greater than two abreast (RCW 46.61.700).
- Cyclists can ride in the travel lane, bike lanes, or shoulder of the road to fit their comfort level (RCW 46.61.770).

Additional traffic and safety considerations while Active transportation:

- Drive on the right side of the roadway
- Obey traffic control devices including signs and signals
- Yield to cross traffic
- Yield when changing lanes
- Slowest traffic stays right. Bicycles are typically slower than auto traffic and are therefore usually found on the right side of the road (or within a bike lane if provided). Bicycles may leave the right side of the road or a bike lane when they:
- Overtake and pass another bicycle or vehicle proceeding in the same direction.
- Find it reasonably necessary to avoid conditions (including but not limited to fixed or moving objects, vehicles, bicycles, pedestrians, animals, surface hazards, or substandard width lanes) that make it unsafe to continue along the right curb or edge.
- At intersections, bicycles should travel in the right-most lane that leads to their destination. This means that if a bicycle is preparing to make a left turn, they may leave the right side of the road even if a bike lane is provided.
- Laws and policies can change at any time rendering the above information outdated and non-applicable.

For additional Washington State Bicycle Law information and complete Revised Code of Washington (RCW) text, please visit <u>Washington Bike Laws - Washington BikesWashington Bikes (wabikes.org)</u>

## Electric Bicycles

Electric bikes, or e-bikes, are increasingly becoming more popular and considered a viable way to commute and recreate. They are generally regarded in the same manner that a conventional bike is, meaning that helmet, laws, rules, and regulations are enforced in the same manner for e-bikes as for bicycles. To ride an e-bike you must be at least 16 years old in the state of Washington and insurance and registration is not required. E-bikes are emissions-free, less physically demanding, provide assistance when climbing hills, and can extend the range of trips made on a bike. Because speed can be picked up quicker and sustained with an e-bike it is important for the rider to be aware of their speed, traffic, and pedestrians especially at intersections.

Washington state has created a three-tiered e-bike classification system to bring clarification on the differing models of e-bikes due to varying speed capabilities. To be considered an E-bike the motor must not exceed 750w.

Class 1 electric bicycle: A bicycle equipped with a motor that provides assistance only when the rider is pedaling, and that ceases to provide assistance when the bicycle reaches the speed of 20 miles per hour.

Class 2 electric bicycle: A bicycle equipped with a motor that may be used exclusively to propel the bicycle, and that is not capable of providing assistance when the bicycle reaches the speed of 20 miles per hour.

Class 3 electric bicycle: A bicycle equipped with a motor that provides assistance only when the rider is pedaling, and that ceases to provide assistance when the bicycle reaches the speed of 28 miles per hour and is equipped with a speedometer.

# Level of Traffic Stress

One of the goals of the Spokane County Active Transportation Master Plan focuses on increasing active transportation among county residents who would like to bicycle more but are concerned about bicycle safety. The more comfortable a bicycle facility is the more cyclists will use the facility and this increases the appeal of active transportation to a wider range of users. People are less tolerant of riding close to traffic and feel safer with physical separation from the road, especially on wider and faster streets. The amount of traffic lanes, the speed at which traffic flows, truck route designations, intersection control, and types of bicycle facilities constructed for the traveling public are all factors that determine the real and perceived safety and comfort level of bicycle riders. These various factors contribute to and are known as Level of Traffic Stress (LTS). LTS analysis helps to identify the general comfort level of active transportation on a given bicycle path, identifies gaps in facilities and busy crossings that can be dangerous to pedestrians, and may even impede crossing to adjacent facilities. Having knowledge of gaps and potentially dangerous crossings can lead to intersection improvements, recommendations, and prioritization of project development. LTS analysis takes a data driven approach to evaluate bicycle facilities by matching them with the type of roadway a cyclist might be riding on. The criteria for determining LTS for route segments and crossings used in this plan was first published in 2012 in a report by published by the Mineta Transportation Institute.

## Scoring LTS

LTS scoring is designed to correspond with the "Four Types of Bicyclists" categories defined by the Mineta Transportation Institute. The LTS ranges of 1 through 4 represent a range from lowest stress facilities to highest stress facilities. Besides bicycle facilities, roads and intersections are also classified into one of four LTS scores. Analysis shows when vehicle traffic volumes and speeds increase and separation between the cyclists and traffic decreases, the LTS scores increase, and the cyclist feels an increase in level of stress.

Most bicyclists prefer facilities with an LTS score of 1, where everyone of all ages and abilities feel safe and comfortable to bike. LTS 1 typically applies to multi-use paths that are separated from traffic. Facilities scoring a LTS of 2 can be cycled comfortably and ridden by the general population.

A LTS score of 3 is assigned to roads that would be used by riders that consider themselves "enthusiastic and confident" bicyclists and an LTS 4 represents roads that are only acceptable to bicycle riders that consider themselves to be "strong and fearless". A LTS 4 involves traveling on roadways with higher traffic volumes, higher speeds limits, and on bicycle facilities that do not provide separation from traffic.

The analysis of levels of traffic stress ranges from 1 to 4 as follow:

- •LTS 1: There is separation from traffic except low speed and low volume traffic. A LTS rating 1 involves crossings that are perceived to be simple, that are generally safe, and suitable for cyclists of all ages and abilities.
- •LTS 2: Cyclists ride among low volume traffic moving at low speed. Typically, in an LTS 2 facility cyclists have their own designated place to ride keeping them from having to interact with traffic except at crossings. Crossings are considered easy for most riders to cross. Cyclists traveling on LTS 2 routes would be considered "interested and concerned".
- •LTS 3: Cyclists ride with multilane traffic flowing at moderate to higher speeds. Cyclists traveling on LTS 3 routes are "enthused and confident."
- •LTS 4: Cyclist ride with or in close proximity to high-speed traffic. A LTS of 4 would only be considered acceptable only to those classified as "strong and fearless" cyclists.

According to Mekuria, Furth, and Nixon, when assessing the LTS for any given route a weakest link logic should be adopted. This means that if a bicycle route has a combination of various LTS levels then the entire section of road or bicycle facilities would take on the highest LTS classification for that segment.

Table 1.0 LTS Criteria

	Width of Street		
<b>Speed Limit of Street</b>	Up to 3 Lanes	4 - 5 Lanes	6+ Lanes
Up to 25 mph	LTS 1	LTS 2	LTS 4
30 mph	LTS 1	LTS 2	LTS 4
35 mph	LTS 2	LTS 3	LTS 4
40+ mph	LTS 3	LTS 4	LTS 4

In addition to the assigned comfort level based on LTS criteria for the roadway, there is also a connection between the physical ability of the rider and trip purpose. Some trips made by

bicycle can be for practical purposes such as commuting to and from work or school and for meeting daily needs such as trips to the grocery store. Many factors are associated with the decision to use active transportation for transportation purposes such as the riders age and cognitive ability to respond to rapidly changing situations. The combination of rider experience, LTS, physical ability, and trip purpose can help categorize the four types of bicyclists that use the transportation network. The following categories of bicyclists is derived from Peter Furth's LTS analysis.

#### STRONG AND FEARLESS

This group is willing to ride a bicycle on any roadway regardless of traffic conditions, vehicular speeds, and without designated bicycle facilities.

#### **EXCITED AND CONFIDENT**

This group of bicyclists are confident riding in most roadway situations but prefer a designated facility, such as on major streets with a bike lane.

#### INTERESTED BUT CONCERNED

This group is more cautious but is concerned about sharing the road with cars. Their comfort level drops on major streets, even with a striped bike lane, and they would prefer separated pathways or low traffic neighborhood streets.

#### **CURRENTLY NOT INTERESTED**

This group is not very interested at all in active transportation, may be physically unable or don't know how to ride a bicycle, and they are currently unlikely to adopt active transportation in any way.

Considering that bicyclists of all defined categories and abilities can easily bicycle on low stress facilities it is important to strive for as many low stress connections to existing destinations as possible. Providing low-stress facilities is an important strategy to make active transportation feel safer and more comfortable. Low LTS can be achieved by shared low traffic neighborhood streets, designated greenways, traffic calming techniques, providing facilities that involve very little interaction with higher vehicle speeds and volumes, and with greater physical separation between the rider and traffic. If low LTS cannot be obtained, then lowering the LTS where possible should be the goal to strive for.

# Prioritizing LTS Improvements

Active transportation facilities can be diverse and vary significantly in their design and locations. It is important to assess LTS for active transportation networks to evaluate how well-connected facilities are but also to see if the existing conditions are meeting the needs of the facility users. To serve all levels of facility users an ideal network should consist primarily of continuous low-stress LTS 1 and LTS 2 segments and intersections. A good goal is to obtain a minimum LTS rating on improvement projects but striving for LTS 2 & 3 whenever possible if the goal is to get more people active transportation as a means of transportation. If LTS 1 and 2 segments are

not continuous then active transportation activity will most likely be low, but it is extremely hard to eliminate LTS 3 and LTS 4 entirely from the network or from intersections. LTS analysis helps focus on, identify, and prioritize improvements that will bring the high-stress LTS 3 and LTS 4 gaps down to lower stress levels and reduce higher stress segments and barriers to active transportation so that most of the population can use the cycling facilities when feasible. LTS analysis is a tool to analyze if active transportation networks can be easily transitioned to lower stress facilities and especially relevant to one's exposure to the proximity and speed of vehicles, how many lanes a pedestrian or cyclist must cross, and navigating intersections. Gaps in the infrastructure network may cause people to cross into or travel with vehicle traffic. Having awareness of the County's current LTS status brings awareness of current conditions but may help program and prioritize future improvements.

# Rolling Amenities in Spokane County

Spokane County manages 2,527 miles of county roads. Along the road network there are over 1,000 miles of active transportation facilities. Spokane County primarily has three types of facilities designated to those that choose to roll including shared use paths, dedicated bike lanes, and shared roadways. There are 94 miles of shared use paths that county residents can use to travel to desired destinations or to be used as a safe place to bicycle or roll. Notably this includes the Centennial Trail, Fish Lake Trail, the Children of the Sun Trail, and some smaller trails and separate paths. These shared use paths occasionally cross county roads and are primarily used for recreation.

Rolling and bicycling for transportation purposes is not widely accepted as a primary option for most county residents yet. This generally holds true for children, women, and aging populations. Another reason that rolling and cycling is not widely accepted is because Spokane County has a substantial rural component that makes connecting an integrated bicycle facility impracticable. Facility improvements and connectivity need to be focused on areas in the county that link to other bicycle facilities, schools, commercial, adjacent cities within the county, and places people want to bike and roll to.

Getting more residents to roll and bicycle depends on if the active transportation networks feel safe, comfortable, and connected, resulting in more people are inclined to use the facilities and become more physically active. Safe, comfortable, and connected active transportation routes give everyone the option to roll or bike and not just those that have experience using active transportation facilities in stressful traffic situations. Having transportation options to choose from expands local programming opportunities, may facilitate funding opportunities, and provides long-range goals for the county to pursue.

#### Multi Use Paths

Class I shared use paths are designed to parallel roadways, travel along rivers, can be a neighborhood amenity, or transition abandoned railroad right of ways into public facilities.

They can be used as a transportation or recreational option and are typically 10' to 12' in width for active transportation traffic to be able to flow in two directions. A 5' separation between the path and the roadway is required for further separation from vehicles.

The most notable shared use paths in Spokane County are the Centennial Trail, the Children of the Sun Trail, Columbia Plateau Trail, Wandermere Rd, Chapman Rd, and the N. Little Spokane Drive neighborhood shared use path as shown in the image below. There are approximately 100 miles of these types of transportation and recreation options in Spokane County. Shared use paths would be considered to have an LTS of 1 where these routes would be acceptable to all cyclists of all capabilities.



# Bicycle Lanes

Class II Bicycle lanes are a designated part of the right of way that has been designated for rolling and bicycling for transportation purposes. Bike lanes are typically striped, signed, or have pavement markings that specifically indicate a portion of the road for active transportation users but may only have a centerline stripe depending on the speed of the road. Bike lanes run in the same direction as vehicular traffic and do not have any physical separation from motor vehicles. Bicycle lanes tend to primarily be located within the city centers with some owned and operated by WSDOT within Spokane County. Some notable bicycle lanes in Spokane County are on Midway Road, 57<sup>th</sup> Avenue, Day Mt. Spokane Road, and E. Farwell Rd. as shown in the image below. Bicycle lanes tend to make good connections to multi-use paths and shared roadways to eliminate gaps and connect the bicycle transportation system. The LTS ranges from a score of 2 through 4 depending on type of road, traffic speed, width of bicycle lane, and level of comfort

of the individual cyclist. Bike lanes are versatile facilities that can be located on minor and major collectors and on some arterials.



# Bike Route/Shared Roadway



# Shared Roadway

All active transportation users are legally permitted to use all roads unless specifically prohibited, as stated below. A "shared roadway" as defined by AASHTO is "a roadway which is not officially designated and marked as a bicycle route, but which is open to both bicycle and motor vehicle travel". In Spokane County active transportation is prohibited on Interstate 90, sections of Division Street, US 395, sections of Highway 2 adjacent to Airway Heights, and sections of Highway 195. Most of the roads within the county would be classified as a shared roadway and are subject to the active transportation user's perception of safety. This means that roads that we typically view as Shared Roadways in Spokane County can be anything from neighborhood roads, calm streets, to streets with moderate levels of traffic, or extremely busy roadways. The LTS ranges from LTS of 1 through 4 depending on the road classification, traffic speed, volume of traffic, and level of experience of the individual. Below is an example of a Shared Roadway on E Colbert Road.



# Separated Bikeways

Spokane County does not currently have any separated active transportation routes. The closest facility that Spokane County has to a separated facility is a multi-use path. Separated facilities offer little to no pedestrian vehicle interaction. Separated facilities are considered low stress because they offer an active transportation experience that feels safer due to some kind of vertical element (curbs, bollards, etc.) and is set back from vehicle traffic volumes and speed.

Separated facilities are typically constructed in more urban environments, on major streets with high speeds, high volumes of traffic, and are on direct routes to major destinations. Suitable areas to incorporate separated facilities into the transportation network are where the county boundary interfaces more densely populated areas. This also affords both the county and cities opportunities to collaborate to enhance facilities that link.

#### Intersections

Intersection functionality and safety is extremely important to the active transportation network and directly affects who and how many people will choose to use active transportation options. Crashes often occur at intersections in Spokane County. This lends itself to the idea that active transportation facilities are only as safe as the intersections along the designated route. If pedestrians perceive an intersection as unsafe then they may choose to cross midblock, away from the intersection, in attempt to avoid vehicular conflict. However, midblock crossings can be extremely dangerous because vehicle speeds increase the further a vehicle gets from the intersection and can result in an even more severe incident. Safe intersections increase the amount of active transportation users and make the infrastructure within the county complete and functional.

When analyzing operation improvements at intersections a context sensitive approach should be taken. Some important components that should be considered when evaluating the context of the intersection are intersection geometry, nearby land use, traffic volume and speed, crosswalk crossing distance, lighting, signal timing, and if bus stops are present. Intersection analysis, especially at intersections with crash history, allows the county to take a proactive stance on safety and multi-modal advocacy as well as lower long-term improvement costs. A systematic and context sensitive approach also helps to prioritize vulnerable pedestrians and bicyclists at intersections and draw attention to their presence by drivers and remind them that the roadway is traveled on by more than just vehicles.

Intersection improvements will be carefully reviewed by the County Engineer and supporting staff with care and attention. Intersection improvements are typically made when addressing safety concerns, new construction, and roadway rehabilitation projects. Intersection improvements are typically funded through grant awards and county capital improvement funds.

## Wayfinding

Wayfinding is an important part of any active transportation network because it is a good way to help people walking, biking, and rolling navigate to destinations that are important to them. Wayfinding signs should be implemented and evaluated on routes that go pedestrian generating destinations, park & rides, schools, parks, community centers, and neighboring cities. Gathering input from public engagement and from local active transportation users can be an indispensable resource when evaluating route wayfinding. Providing adequate wayfinding is another way that the county supports multi-modal transportation and encourages active

transportation. Effective wayfinding systems will help anyone destination driven to identify their location, guarantee that they are traveling in the right direction, navigate intersections, and identify the proximity of their destination.

The County will need to collaborate with the partner agencies to evaluate existing wayfinding, determine if any improvements can be made, and assess any gaps in signage that may need to be filled. The goal is to provide wayfinding that directs people to the safest intersection crossings, to nearby destinations, and reflects the context of each district. Wayfinding that is customized to reflect routes and accommodates different ages and abilities is considered an important asset to the active transportation community as identified by the public outreach survey results.

#### **Destination Ranking**

When creating a wayfinding system, it is helpful to have important destinations ranked based on regional significance. Major destinations should be ranked the highest and local destinations should be ranked lowest.

#### Level I

- Destinations up to five miles
- Neighboring cities

## Level II

- Destination up to two miles away
- Districts, colleges, transit centers, neighborhoods

#### Level III

- Destinations up to one mile away
- Regional parks, hospitals, major bikeway facilities

#### Level IV

- Up to a half mile away
- Local parks, libraries, elementary, middle, and high schools, community centers

## **Sign Implementation**

- 1. Determine routes that need wayfinding, connect multijurisdictional routes together, and identify routes for clarity.
- 2. Determine a list of destinations and assign each a hierarchical level.
- 3. Choose signage design and the location where the signs will be placed.
- 4. Locate intersections and other places where turns will be necessary for strategically placed signs.

- 5. Keep the bicycle network, destinations, and wayfinding signs on a web-based map for County and public use current.
- 6. Use a GIS database to manage location details for each sign and future system management.
- 7. Prioritize implementation.
- 8. Implement sign.

# Chapter 4

# Active Transportation Safety

Active transportation safety is a priority for Spokane County. For this document five years of bicycle and pedestrian vehicle collision data was collected but collisions within city jurisdictions were excluded resulting in data that focuses on incidents within unincorporated Spokane County only.

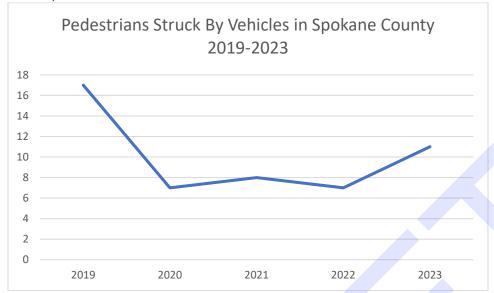
## Pedestrian Safety

From 2019 – 2023 there were a total of 40 pedestrians struck by vehicle incidents and 11 of those accidents resulting in a fatality. Table 2.0 shows the pedestrian collision trend reported during 2019 to 2023 has a sharp decline in persons struck with a sharp increase again in 2023, averaging 10 people per year hit by drivers of motor vehicles. Over the five-year data assessment, the month that a pedestrian was most likely to be struck by a vehicle was in September with 6 total accidents happening in that month followed by October with 5 pedestrians struck in that month all over the five-year time frame. There seems to be no difference between female and males being hit by vehicles as 24 of the 50 total were women. Most people hit were adults, between the ages of 38 – 78 years old and only three total incidents involved minors under the age of 18 years old. A third of the people struck were struck at intersections and 41 of the 50 incidents occurred after 4:00 in the evening where conditions might have been affected by lighting.

For reasons unknown the pedestrian-auto crashes spiked in 2023, with 11 incidents that year. Of the 11 reported accidents in 2023, four of them were fatal, accounting for over half the accidents that year. The city of Spokane jurisdiction has a higher number of people hit by automobiles than Spokane County's jurisdiction, the data is not easily comparable due to the distinct rural element that defines the county. The pedestrian and auto collisions that occurred in the thirteen cities within Spokane County are not included in this report.

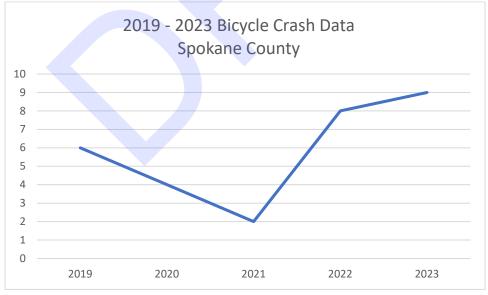
Of the conflicts encountered, results are spread out over the designated street types: 11 of the incidents occurred on an Urban Minor Arterial, 10 on urban or rural local access, 8 on Urban Major Collectors, 8 on Urban Principal Arterials, and 8 on Rural Major Collectors.

Table 2.0, Pedestrian Automobile Collisions



From 2019 – 2023 there was a total of 40 bicycle/automobile incidents and 1 fatality within Spokane County with data only current up to April 2023. Table 5 shows the bicyclist vs. vehicle collision trend reported during 2019 to 2023. Overall, the trend shows a sharp increase in bicycle riders getting hit by vehicles with an alarming increase in 2023. 2023 was also the only year that there was a fatal bicycle vs. vehicle incident.

Table 3.0 Five-year bicycle and automobile collision history



Of the total bicycle/automobile crashes 1 of the 29 incidents were fatal and the remaining crashes resulted in minor or sever injury. 18 of the crashes occurred at intersections accounting for over half of the incidents and 22 of the incidents occurred during daylight hours. 24 of the people struck by vehicles were male, 7 of the incidents were caused by distracted driving or impairment, and 3 of the reports stated that aggressive driving or speeding was a contributing factor in the crash. Assessing active transportation versus vehicular crashes annually provides an opportunity to examine crash trends on bicycle facilities and analyze spot locations of concern within the county. A more complete bicycle facility system leads to fewer active transportation crashes and fatalities. Figure 4 shows active transportation vs. vehicular crashes from 2019-2023.

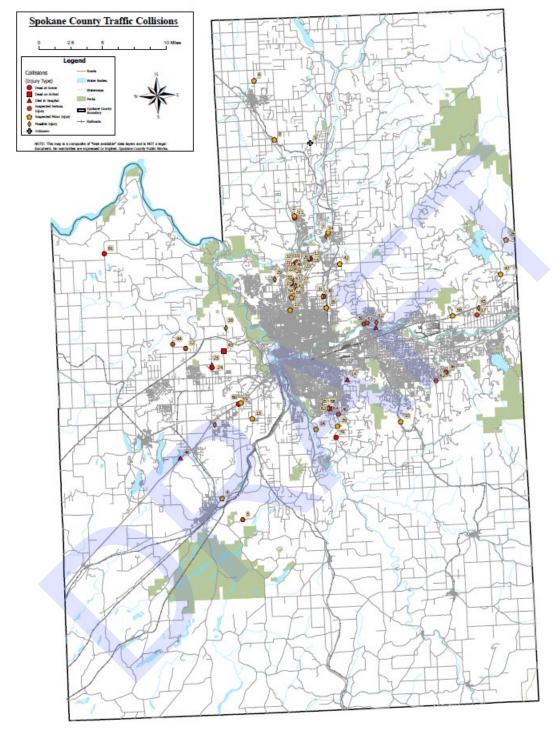


Figure 4 Active Transportation vs. vehicular crashes from 2019-2023

# Connectivity

Having access to a vehicle is often a necessity to reach many destinations within Spokane County. Gaps in the active transportation networks can heavily impact those that do not drive. How connected the network is plays an important role in how intensely the system is used and

by who. A well-connected active transportation system affords the residents of the county an additional opportunity to travel to desired destinations in a healthy low-cost way. Improvements to the active transportation network will strive to systemically close gaps in the existing facilities to help people reach their destinations within the county. This strategy will look to close sidewalk gaps, improve ADA compliance, add bike lanes where bike lanes currently end, and focus on connections to longer corridors that serve as the bike network backbone. To do this, Spokane County aims to provide meaningful connections where reasonable and feasible while looking for enhanced connectivity to long distance corridors, enhancing connections to adjacent cities, and places of interest in the upcoming years. Gap analysis can be a tool used to improve the existing active transportation network and prioritize projects that can be addressed through grant application funding and county funded transportation improvement projects.

#### Intersections

Spokane County actively implements safety as a primary factor when evaluating, constructing, and making intersection improvements. It is important to note that intersection capacity and functionality vary greatly and intersection with the same design configuration may be treated with different countermeasures based on number of trips generated and other data driven analyses. Currently, Spokane County treats bicyclists at intersections the same as vehicular traffic and there are no bicycle specific intersection elements currently implemented.

Intersections can be conflict points for users of the road and tend to be especially challenging for active transportation users. Crash data is a common data driven measurement that transportation professionals use to assess problem locations. It is becoming increasingly popular to move away from reactive mitigation measures that are based on crash data alone and take a systemic approach to identify intersection characteristics that are likely to have risk of incidents. Notable intersection characteristics could be pedestrian generating land uses, traffic volume and speed, crossing distance, lighting, intersection control, bus stops, and intersection geometry just to name a few. Once higher risk locations are identified mitigation measures can be taken to reduce injury and fatalities.

Every single trip generated starts with active transportation to get people where they need to go. Clear sight lines of active transportation infrastructure provide the first layer of protection from incidents occurring. Additionally, identifying potential conflict points, reducing speed limits, and minimizing the amount of time active transportation users are exposed to conflict are all ways to increase safer intersection crossings.

The National Cooperative Highway Research Program published *Guidance to Improve*Pedestrian and Bicycle Safety at Intersections in 2020. The report explains that just like LTS for bicycle facilities, intersections can be broken down into tiers based on the vehicle ADT, speed limits, and lanes of traffic. There are many countermeasures and combination of

countermeasures at the tier 1 through 3 level that can be used to address potential issues at intersections. Most of Spokane County's intersections fall within the tier 1 category.

Roadway Type	Vehicle ADT < 9,000		Vehicle ADT 9,000-12,000			Vehicle ADT 12,000-15,000			Vehicle ADT ≥ 15,000			
(Number of	Speed Limit (mph)											
Travel Lanes and Median Type)	≤30	35	≥40*	≤30	35	≥40*	≤30	35	≥40*	≤30	35	≥40*
2 Lanes	1	1	2	1	1	2	1	1	3	1	2	3
3 Lanes	1	1	2	1	2	2	2	3	3	2	3	3
4 Lanes with raised median**	1	1	2	1	2	2	2	3	3	3	3	3
4+ Lanes without raised median	1	2	3	2	2	3	3	3	3	3	3	3

Table 4.0 Recommended Countermeasure Tiers Depending on Traffic Context. Graph from Guidance to Improve Pedestrian and Bicycle Safety at Intersections, (National Cooperative Highway Research Program, 2020), 50 online resources.

Tier 1: countermeasures that are inexpensive to implement while slowing motorists down and getting them to yield to pedestrians. Examples can include anything from improving lighting, crossing islands, improving visibility by reducing parking, raised medians, curb extensions, to active warning beacon among other countermeasures.

Tier 2: countermeasures that encourage motorists to yield and tend to be less expensive. Examples can include narrowing the road widths, re-channelization, turn prohibitions for vehicles, traffic signals, leading bicycle intervals, bike boxes, improved lighting, advanced stop/yield lines.

Tier 3: countermeasures that separate pedestrians and vehicular traffic or require motorists to stop. Roundabouts, traffic signals, raised crossings, turn prohibitions, rectangular rapid flashing beacons (RRFB), or narrowing of lanes.

# Bike Parking

Most active transportation trips are typically within a few miles of our home, school, or workplace. Bicycle parking is an important part of the overall quality of the active transportation network and can affect the decision whether to bicycle or drive. Having strategically placed bicycle racks or bike lockers adds an extra layer of security to bicycle owners. To reduce the amount of bicycle theft and create an environment that cyclists feel safe to lock their bike up, bicycle racks should be designed so that they:

- Can accommodate high security U-shaped bike locks
- Can accommodate locks that secure both the frame and one or both wheels
- Provides adequate distance between racks so that bicycles do not get intertwined
- Does not have any sharp or protruding parts

- Does not bend wheels or damage the bicycle
- Does not require the user to lift the bicycle off the ground
- Support the bicycle at two points above its center of gravity

In Spokane County bicyclists can register their bicycles with one of the eleven Spokane C.O.P.S. shops to help recover their bicycle if it were to be stolen. <u>Spokane C.O.P.S.</u> (spokanecops.org)

# Chapter 5

# Relationships To Other Plans

This chapter summarizes regional and local planning documents that guide the development and implementation of multi-modal transportation and state statutes codified by the Washington Growth Management Act. The combined statutes and adopted plans are the guiding documents that determine how multi-modal safety measures, infrastructure, and implementation are administrated holistically within individual jurisdictions and as a combined effort throughout Spokane County. Predominant documents guiding active transportation policy for and within Spokane County can be in Table 5.0.

Table 5.0, Bicycle Planning and Policy Documents

Spokane County					
Spokane County Comprehensive Plan, 2017					
Spokane County Transportation Element, 2019					
Spokane County Trails Plan, 2020					
Spokane County Commute Trip Reduction Program, 1991					
City of Spokane					
City of Spokane Pedestrian Master Plan, 2015					
City of Spokane Bicycle Master Plan, 2017					
City of Spokane Valley					
City of Spokane Valley Comprehensive Plan, 2016					
Draft Transportation System Existing Conditions, 2015					
City of Airway Heights					
Complete Streets Ordinance, 2010					
City of Liberty Lake					
City of Liberty Lake Comprehensive Plan, 2015					
Spokane Transit Authority					
Connect Spokane, 2019					
Spokane Regional Transportation Council					
Horizon 2040, 2013					
WSDOT					
Active Transportation Plan 2020 and Beyond, 2020					
Washington State Growth Management Act, 1990					

# Countywide Plans

The Spokane County Active Transportation Master Plan builds upon years of collective planning objectives and initiatives to plan and develop multi-modal facilities throughout the County. The following efforts by various jurisdictions show the combined efforts that have influenced how and where people use active transportation in Spokane County. This chapter summarizes active transportation planning documents that frame policies currently in place for those that walk, bike, and roll in Spokane County. These collaborative documents facilitate planning, design, and construction of active transportation infrastructure throughout the region where appropriate and how the future development and investment in active transportation infrastructure is collectively planned. These plans have been grouped into two categories: countywide plans, and regional plans.

#### Spokane County

Spokane County transportation planners and engineers develop plans, improvements, oversee maintenance, construct transportation infrastructure, and understand the importance of supporting multi-modal transportation. The primary documents that Spokane County uses that support and guide current and future policies and implementation measures for an always improving active transportation system are the adopted Comprehensive Plan, Transportation Element, Spokane County Trails Plan, Spokane County Commute Trip Reduction Program, and Spokane County Sub-Area Plans.

#### Spokane County Comprehensive Plan, 2017

The Spokane County Comprehensive Plan is the master planning document to guide growth and development through a set of goals, policies, and implementation strategies. The plan provides long range vision and guidance around the intricate role land use has on various components including but not limited to the economy, environment, and transportation.

#### Overall Active Transportation Goals and Policies

- T.1 Develop transportation plans that complement, support, and are consistent with land use and transportation plans from other jurisdictions and agencies.
- T.1.1 Coordinate planning and operational aspects of the regional transportation system with cities within Spokane County, adjacent jurisdictions, Washington State Department of Transportation, Spokane Transit Authority, Spokane Regional Transportation Council and any other affected agencies.
- T.1.2 Consistency with the Transportation Element of the Comprehensive Plan.
- T.3a Provide a range of transportation choices and modes within the Spokane Region.
- T.3b.1 Coordinate with other governments and communities to create a regional network of safe, efficient, and cost-effective public transportation services and facilities.

- T.3b.3 Support development of secure, conveniently located park-and-ride lots.
- T.3b.4 Encourage the use of bus, ride-sharing and high-capacity transit services to make major segments of the transportation system more efficient.
- T.3b.5 Provide intermodal connections to enhance the efficiency and convenience of public transportation.
- T.3e Promote pedestrian and bicycle transportation countywide and increase safety, mobility and convenience for non-motorized modes of travel.
- T.3e.1 The transportation network should provide safe and convenient bicycle and active transportation access between housing, recreation, shopping, schools, community facilities and mass transit access points. Obstructions and conflicts with pedestrian and bicycle movement should be minimized.
- T.3e.2 Bicycle facilities should be designed where practical along arterials and should be clearly marked.
- T.3e.3 Inventory existing pedestrian and bicycle facilities and maintain a pedestrian/bicycle plan coordinated through the Spokane Regional Transportation Council and implemented through the County 6-year transportation improvement program.
- T.3e.5 Convenient bicycle parking and designated areas where bicycles can be secured shall be required at major destinations and at transportation centers.
- T.3e.6 Encourage preservation of abandoned rail rights-of-way for development of bike, pedestrian, equestrian routes or other non-motorized forms of transportation.
- T.3e.7 Allow hard-surfaced pathways, including but not limited to, concrete, asphalt and brick to substitute for sidewalks in commercial or industrial areas when pathways provide more direct and/or safer routes for pedestrians.
- T.3e.8 Develop street, pedestrian, path, and bike path standards that contribute to a system of fully connected routes.
- T.4a.16 Reduce right-of-way width dedications to the minimum necessary to provide for transportation needs.
- a. Use border easements to accommodate drainage and pedestrian facilities.

#### Spokane County Transportation Element, 2019

The Transportation Element provides a 20-year vision and framework for the Spokane County transportation network. This is a context sensitive document that plans for future growth, land use, and an efficient transportation system supporting the intricate interactions of these components.

#### **Overall Goals**

#### **Bicycle Facilities**

Accommodating a large range of bicyclists and experience levels requires a variety of bicycle facilities such as dedicated bike lanes, shared-use paths, and shared-bike friendly routes. Bicycle facilities are an imperative part of the active transportation system throughout Spokane County and a wide range of users, from school-age bicyclists, families biking together recreationally, to commuter cyclists. Much like the pedestrian facilities, Spokane County realizes that there are gaps in the bicycle network that may cause bicyclists to cross into vehicle traffic or travel with vehicles in the roadway.

#### **Active Transportation in Spokane County**

Active Transportation Planning promotes various forms of transportation and less reliance on vehicles. This can be accomplished through the development of a countywide multimodal transportation system that focuses on increasing safety and convenience for non-motorized modes of travel as supported by Goal T.3e in the Spokane County Comprehensive Plan. An additional goal and strategy for the county is supporting the regional trail system as a cornerstone of Spokane County active transportation goals and policies found within this document.

This Plan attempts to show the inventory of bike routes, bicycle facilities such as bike lanes, shared use pathways, and potential gaps in both sidewalks and bike routes. The bicycle and pedestrian chapter of the Comprehensive Plan also strives to identify goals and policies to guide improvements to implement where they are most needed. The Spokane County Active Transportation Plan was developed through coordination with the regional bike plan (published by SRTC), area city bicycle and pedestrian plans (City of Spokane and City of Spokane Valley), and WSDOT.

#### **Planning for Growth**

To plan for growth, promote a healthy community, and to provide alternative modes of travel, Spokane County Road Standards require new urban developments located on bike routes to accommodate bicycles and pedestrians through frontage developments. This also affords opportunities to connect sidewalks, bicycle facilities, and add multi-use paths where appropriate.

#### **Existing Deficiencies**

The Active Transportation Plan is intended to guide in planning the improvement of active transportation facilities. The plan indicates barriers and gaps in the system for travel by active transportation, lays the groundwork for planning projects to address deficiencies, and shows opportunities where facilities can be added to improve the overall network. Gaps in the network may create environments of high levels of traffic stress where walkers and rollers must navigate through vehicle traffic or difficult arterial crossings to complete their journey. Federal and state grant funding sources may be sought to fund the improvement of existing gaps and other deficiencies.

#### **Future Conditions**

The Active Transportation Plan helps to guide short-term (6-year TIP) and long-range (7 to 20-year plan) infrastructure needs, identifying and planning for the improvement of Spokane County's active transportation facilities. Spokane County will continue to support regional trails such as the Centennial Trail and the Children of the Sun Trail as transportation resources but understands that trails are primarily used for recreational purposes. For example, supporting the Centennial Trail means that Spokane County will continue planning efforts to develop plans and projects and seek funding for gaps in the multi-use path system, such as the Argonne Gap and the "detoured" section from Boulder Beach trailhead to the Donkey Island trailhead. To support the Children of the Sun Trail, Spokane County will plan local system and development activities to allow for connectivity to the trail.

#### Spokane County Trails Plan, 2020

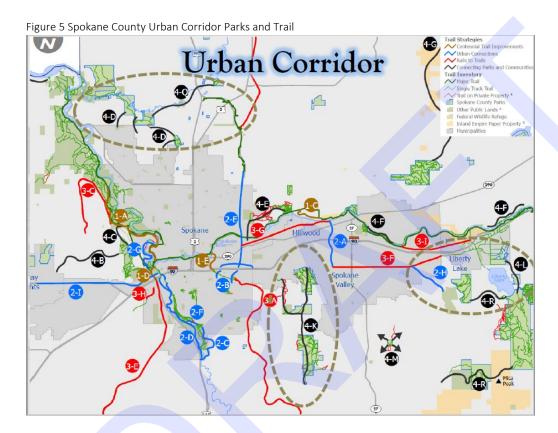
The Spokane County Regional Trails Plan was developed by the Spokane County Department of Parks Recreations and Golf in partnership with the Inland Northwest Trails Coalition to assess and analyze arterial trail systems that link communities and transit systems. The vision for this document is to acquire open space and create a large circle and spoke system interconnecting communities. This document shows a concerted effort to connect the county and includes many trails that are separated from vehicular traffic or include a sidewalk element to the trail as well as addressing safe crossings at intersections. The Spokane County Regional Trails Plan focuses more on the recreational needs of the community as soft trails are not typically used for daily transportation purposes, but also recognizes that non-motorized travel should not be seen as strictly recreational. There is a strong connection to how this plan can directly influence transportation needs while including the health benefits that county residents need. Trail systems provide a sense of place and make the County more desirable for residents and visitors.

#### Overall Goals related to Active Transportation

Each jurisdiction should coordinate its housing and transportation strategies to support existing, or develop new, public multimodal transportation systems.

Each jurisdiction shall address land use designations and site design requirements that are supportive of and compatible with public transportation, including, but not limited to:

- a. pedestrian-scale neighborhoods and activity centers;
- b. mixed-use development; and
- c. pedestrian-friendly and non-motorized design



# Spokane County Commute Trip Reduction Program

In 1991 the State of Washington determined that all organizations in specified counties that employ 100 or more employees, are required to participate in a Commute Trip Reduction (CTR) program. The program is designed to reduce the number of single occupancy vehicles commuting to work during peak morning commute hours of 6:00 to 9:00 in the morning. The goal of the program is to reduce traffic congestion and pollution caused from commuting. The program also provides information on basic bicycle maintenance and biking safe and legally.

#### **Overall Goal**

Support the regional goals of increasing multi-modal transportation and improving the health of county residents by:

- Carpooling
- Active transportation
- Alternative work schedules

- Biking
- Public Transit
- Vanpooling

#### Spokane County Sub-Area Plans

Spokane County has identified five subareas for bicycle infrastructure improvements. These sub-area plans involve completing and improving connectivity in existing bicycle facilities in the Greater Morgan Acres Transportation Improvement Plan, Five Mile Prairie Bike and Pedestrian Plan, South East Spokane Trails Master Plan, Mead-Mt. Spokane Transportation Area Plan, and the Little Spokane Trail System. The five sub-areas are growing and developing at a fast pace. Multi-modal improvements within the five sub-areas will ultimately improve safety and decrease auto-dependency for basic daily transportation needs.

#### Mead-Mt. Spokane:

The Mead Mt. Spokane area is in north Spokane County. The study and plan were developed in 2019. The primary outcomes of the sub area plan were to prioritize a list of capital improvement projects, recommended policies and future studies aimed at improving traffic safety, street connectivity, driveway access and multimodal mobility for all users of the transportation system through the year 2040. The full study can be found at MMSTAP-Final-Study-Plan-06292019 (spokanecounty.org).

Key Findings related to bicycle infrastructure improvements were that providing more options for active transportation and biking had very strong support. Future Bike Network Implementation of the projects and policies identified in the Plan are intended to result in more complete and connected bicycle facilities that can be accessed by people of all ages and abilities. Identified bicycle infrastructure improvements that were generated from the study include:

#### 1- Yale Road Bicycle/Pedestrian Bicycle Pedestrian Bridge Connection

The need for a pedestrian and bicycle-only bridge over the BNSF railroad tracks to connect the two sides of Yale Road was identified. This project will require a study to determine the location, preliminary design, and feasibility, followed by final design and construction. This bridge will need to be constructed along an alignment that could allow a future parallel full street connection.

#### 2- Day Mt. Spokane Road Safety and Multimodal Improvements

Within the existing curb-to-curb width, restripe the four-lane segment of Day Mt. Spokane Road east of US 2, to three lanes with wide buffered bicycle lanes (including one travel lane in each direction and a center-turn lane). Construct a pedestrian refuge median at the marked crosswalk in front of Mountainside Middle School adjacent to Patricia Drive. Speed reduction

from 45 mph to 35 mph will also be considered. This project would be implemented in conjunction with a related storm-water project.

#### 3- Study a bicycle connection along Market Street and Center Road

This project would require a study to be conducted with the ultimate preferred alternative resulting in a separate bicycle connection from Mt. Spokane Park Drive (SR 206) to Farwell Road and Children of the Sun Trail via bicycle lanes or a parallel multiuse trail. The bicycle connection would likely follow Market Street south of SR 206. The study should also consider the feasibility of constructing a multiuse trail to connect Center Road to the Children of the Sun Trail including paving the segment of Center Road east of Oak Street. This would provide a lower stress bicycle connection from Children of the Sun Trail to Market Street than the alternative along Farwell Road. The bicycle connection along Center Road could be a shared facility because it is a low volume, low speed facility.

#### 4- Market Street to SR 206 Connection

This project may be implemented in phases, with the first phase consisting of an alternative analysis to determine the best solution to improve the connection from Market Street to US 2. The second phase will consist of construction of the preferred alternative. A study would be required to determine if rerouting Market Street to connect into Mt. Spokane Park Drive (SR 206) east of the Yoke's Fresh Market is feasible. A roundabout may be considered at the new intersection to allow for safe full access of pedestrian, bicycle and motor vehicle traffic. Chris Court to the northern leg of this intersection may need to be realigned if a roundabout is determined to be the preferred alternative.

#### 5- Mt. Spokane Park Drive Multiuse Trail

This project intends to construct a new multiuse trail on the north side of Mt. Spokane Park Drive (SR 206) from US 2 to Fairview Drive to meet existing bicycle and pedestrian demand between Mt. Spokane High School, nearby residential subdivisions, and commercial development around US 2.

#### 6- Lowe Road to Mt. Spokane Park Drive Multiuse Trail Connection

This project would construct a new multiuse trail along existing County and WSDOT right-of-way between Lowe Road (just south of Peone Pines Drive) and Mt. Spokane Park Drive (SR 206) just west of the railroad crossing. This connection will provide a more direct bicycle and pedestrian connection between the existing residential subdivision and commercial development west of the railroad along a currently unestablished route already being used by pedestrians. As a first phase of this project WSDOT and the County will work to secure the property along the trail alignment in anticipation of future construction.

#### 7- Mt. Spokane Park Drive Bicycle & Pedestrian Improvements

As a condition of future development, buffered sidewalks, and bicycle lanes (or a parallel multiuse trail) will be provided on both sides of Mt. Spokane Park Drive (SR 206) between US 2 and the railroad tracks east of Yale Road to accommodate future multimodal traffic.

#### Five Mile Prairie Pathways

The Five Mile area is in northwest Spokane County. The plan was adopted in 2012 with the intent to set the framework to guide and implement a plan for more sidewalks, safe active transportation and biking infrastructure on the Five Mile Prairie, and connections to important community destinations.

#### The goals of the Plan:

- 1- Develop public, non-motorized routes connecting the hilltop Prairie to services, neighborhoods, parks, and transit facilities below.
- 2- Provide safer, connected pedestrian and bike routes on top of the Prairie.
- 3- Provide safe active transportation and biking routes to Prairie View Elementary School, Five Mile School, Sky Prairie Park, and natural areas.
- 4- Ensure consistency with locally adopted transportation plans, development regulations, and land use plans, including the Comprehensive Plan for the City of Spokane and Spokane County.

Key routes were identified and prioritized by the community for road widening to accommodate bicycle facilities among other active transportation related amenities.

- 1- Five Mile Road between Lincoln Road and Strong Road
- 2- Johannsen Road
- 3- Strong Road
- 4- Lincoln Road between F Street and Five Mile Road
- 5- Cedar Road between Chaucer Avenue and Johannsen Road

#### Little Spokane River Valley Plan

The Little Spokane River Valley is a scenic riparian area in northwest Spokane County and because of the beautiful natural elements is frequently used by pedestrians and bicyclists.

#### Goals:

- 1- Create trails and pathways
- 2- Encourage community and regional connectivity
- 3- Promote stewardship
- 4- Encourage community involvement
- 5- Support interpretive and educational opportunities

Improvements were advised for bicycle shoulders, pathways, and connections:

#### **Primary Routes:**

Hatch Road Wandermere Road

Midway Road Little Spokane Connector Road

Little Spokane Drive Wandermere Shopping Center Connection

**Dartford Drive** 

#### **Secondary Routes:**

Gleneden Connection from Little Spokane Drive to Midway Road

Little Spokane Drive to Colbert Road

Perry Road

Connection to the Children of the Sun multi-use path

#### **Tertiary Routes:**

Fender Road

Handy Road

Baade Road to Panorama Road to Halfmoon Road

**Burke Road** 

**Division Road** 

**Ballard Road** 

**Lower Colbert Road** 

**Upper Shady Slope Road** 

**Woolard Road** 

Burlington Northern Railroad

Little Spokane Drive to Eastview Drive or Gleneden Park

#### Greater Morgan Acres Subarea Plan

Morgan Acres is in northeast Spokane County with a variety of land uses and zoning designations. The development of US 395 (NSC Corridor) will eventually be constructed through the greater Morgan Acres subarea. To preserve the identity and livability of the area the Subarea Plan identified the following transportation related goals supporting active transportation.

#### 1- Goals for reducing traffic in residential areas

- Implement a workable traffic design plan that discourages or prevents trucks and other through traffic from using residential streets.
- Traffic calming measures should be employed to discourage truck traffic from using residential access streets such as additional speed limit signs, roundabouts, speed bumps, prominent crosswalk markings, warning signage and electronic speed monitoring signage.

#### 2- Improve pedestrian safety

- Improve pedestrian crossings with markings
- Over pass across Francis Avenue near Arlington School

3-Improve public transportation service to the industrial areas of Greater Morgan Acres

#### 4-Long term traffic management

- Maintain adopted levels of service for arterial intersections.
- Assess traffic and noise impacts from the North Spokane Freeway on residential areas and recommend actions to minimize those impacts.

5- Provide bicycle facilities and improvements that facilitate safe pedestrian and bicycle access within the Greater Morgan Acres and safe separation between bicycle and pedestrian traffic, and vehicular traffic.

Through the goals of the sub-area plan the Lincoln Road project was able to be implemented. Improvements include improvements have been successfully made to improve the livability of the residents in this area, increase transportation options, alternative forms of transportation, and improve multi-modal safety.

South East Spokane Trails Plan

The South-East Trails Plan is a pedestrian and bicycle improvement plan that will improve active transportation facilities in south-east Spokane County. The plan envisions a significant increase of sidewalks, bike lanes, paved shared use paths, and trails.

Figure 6 Spokane County's Five Sub-area plans

# Local Jurisdiction Active Transportation Planning

# City of Spokane Bicycle Master Plan, 2017

The City of Spokane strives to make cycling "safe, accessible, convenient, and attractive" for all residents by enhancing active transportation opportunities for all residents. The vision, objectives, and policies are supported by both their Comprehensive Plan and their Bicycle Master Plan. The City of Spokane Bicycle Master Plan is intended to be "a living document that will provide guidance and serve as a reference as this vision becomes reality."

#### Objectives

- Enhance Public Safety
- Maximize Public Benefits and Fiscal Responsibility
- Provide Transportation Choices
- Accommodate access to daily needs and regional destinations
- Promote economic opportunity
- Respect natural and community access

#### **Policies**

- Continually increase the bicycle mode share for all trips.
- Complete and maintain connected bikeways that provide safe transportation.
- 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.
- Increase active transportation by educating people using all transportation modes about the benefits of active transportation to the entire community.
- Enhance the safety of people riding bicycles through effective law enforcement, education and detailed crash analysis.
- 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.

#### City of Spokane Pedestrian Master Plan, 2015

#### Objectives

The City of Spokane recognizes that walking is the starting place for all journeys and is actively choosing to redesign the pedestrian network to provide high quality barrier-free walking environment that supports increased levels of physical activity, important connections to transit, and more transportation options for all.

#### Vision and Goals

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.

#### City of Spokane Valley Comprehensive Plan, 2016

The City of Spokane Valley incorporates their Bicycle Master Plan into their Comprehensive Plan. The following are transportation goals that they would like to see achieved related to multi-modal and bicycle transportation planning and implementation.

#### **Overall Goals**

- Maintain and enhance a comprehensive multimodal transportation system that promotes, supports, and improves the safe, efficient, and reliable movement of people, vehicles, and goods.
- Provide and maintain quality street, sidewalk, and shared-use path surfaces that provide a safe environment for all users.
- Develop a citywide trail system that provides improved access and linkages between Spokane Valley's existing trails, neighborhoods, and community amenities.
- Evaluate opportunities to improve multimodal connectivity in all transportation planning projects.
- Consider evaluating multimodal level of service for citywide planning efforts, particularly focusing on the quality of pedestrian, bicycle, and transit facilities.
- Design parks and community facilities to provide easy access for pedestrians, bicycles, autos, and public transit.
- Strategy-Coordinate transportation planning efforts with other jurisdictions to ensure that Spokane Valley businesses and neighborhoods are well served.

#### Draft Transportation System Existing Conditions, 2015

The Spokane Valley Draft Transportation System Existing Conditions is an evaluation of existing conditions as part of their Comprehensive Plan update. This document summarizes the existing state of their transportation system and identifies how the transportation network, and the surrounding land uses influence how people travel.

#### City of Airway Heights, 2010

The City of Airway Heights adopted a Transportation Circulation Plan in 2018 and their Comprehensive Plan in 2020. Airway Heights also formally adopted a Complete Streets ordinance in 2010 to further support their goals and policies on active transportation.

#### Combined Overall Goals

- Implementing policies that support bicycle infrastructure improvements
- Maintain and improve the continuity of sidewalks, trails, and bicycle paths
- Analyzing existing conditions, prioritizing and plan for approximately 15 miles of bicycle improvements
- Implement complete streets

#### City of Liberty Lake Comprehensive Plan, 2015

The City of Liberty Lake supports active transportation through their adopted Comprehensive Plan.

#### Overall Goals

- Providing active transportation users with access
- Secure bicycle parking
- Increase safety, mobility, connectivity, and convenience
- Integrated development patterns with friendly pedestrian/bicycle-friendly settlement patterns
- Designing transportation improvements for pedestrians, bicycles, transit, and vehicular use

# **Regional Plans**

Washington State Growth Management Act

#### **Overall Goal**

The Washington State Growth Management Act (GMA) was enacted in 1990 to act as a planning guide for growth and development for populations greater than 20,000. One of the required components of the GMA is to address transportation. The State's GMA requires local governments to prepare a transportation plan for regional consistency.

The following GMA goals are relevant to all regional transportation documents:

- Urban growth. Encourage development in urban areas where adequate public facilities and services exist or can be provided in an efficient manner (RCW 36.70A.020(1))
- Transportation. Encourage efficient multimodal transportation systems that are based on regional priorities and coordinated with county and city comprehensive plans (Revised Code of Washington [RCW] 36.70A.020(3)).
- Public facilities and services. Ensure that those public facilities and services necessary to support development shall be adequate to serve the development at the time the development

is available for occupancy and use without decreasing current service levels below locally established minimum standards (RCW 36.70A.020(12)).

- Environment. Protect the environment and enhance the State's high quality of life, including air and water quality, and the availability of water (RCW 36.70A.020(10)).
- Citizen participation and coordination. Encourage the involvement of citizens in the planning process and ensure coordination between communities and jurisdictions to reconcile conflicts (RCW 36.70A.020(11)).

#### Washington State Department of Transportation

WSDOT's *Active Transportation Plan 2020 and Beyond* addresses active transportation and biking on or across state highways in Washington based on comments from public outreach.

- Addresses safety, traffic related fatalities, and serious injuries such as higher driving speeds and roadway crossing issues.
- Considers ways to correct the effects of past infrastructure decisions on active transportation safety and mobility, particularly in places where those decisions affected transportation access and health.
- Provides a first-ever needs assessment of the state system for active transportation use.
- Gives a cost estimate for walking and biking improvements on the state highway in population centers.
- Introduces the concept of a statewide bikeways and trails network.
- Uses "level of traffic stress" as a quantitative tool to evaluate the state system with a focus on state routes in population centers and how they affect people's ability to use active transportation.
- www.wtp2040andbeyond.com

#### Spokane Regional Transportation Council (SRTC)

#### Horizon 2045, 2021

SRTC is the regional Metropolitan Planning Organization (MPO) that coordinates directly with local jurisdictions and WSDOT to ensure safety and security of the regional transportation system. The Horizon 2045 Plan is a holistic long-range transportation plan for the Spokane Region. Their transportation planning document aims to "Increase the safety of the transportation system for motorized and nonmotorized users" and the state's safety transportation goal "To provide for and improve the safety and security of transportation customers and the transportation system". SRTC understands that demographic and land use

are interconnected and therefore puts added pressure on the regional transportation network. Encouraging and increasing alternative modes of transportation for the community to utilize will alleviate stress on the transportation network.

Notable regional concerns stemming from the Horizon 2045 document related to active transportation in the region are as follows:

- Snow removal and snow storage needs to be improved,
- Pedestrian and bicycle signage, education and enforcement are needed,
- Driver awareness of pedestrians needs to be improved,
- A lack of a serious bicycle network,
- A lack of bike networks to trail heads,
- Trail gaps need to be filled in such as Centennial Trail and Fish Lake Trail,
- Sidewalk improvements; fixing damaged sidewalks and filling in gaps where none exist,
- Roadways need to be swept more often to improve safety for cyclists,
- Implement land use decisions that support nonmotorized transportation.

#### SRTC Active Transportation Implementation Strategies

#### **Strategy 7: Provide multimodal options**

Everyone, regardless of age, ability, income, race, or ethnicity, ought to have safe, comfortable, & convenient access to community destinations and public places—whether active transportation, driving, active transportation, or taking public transportation. Horizon 2045 promotes policies and practices that ensure streets are safe for all people while balancing the needs of different modes, and supporting local land uses, economies, and the surrounding environments.

#### Horizon 2045 will implement Strategy 7 by:

- Prioritizing roadway projects that include multimodal elements
- Continuing to require that Safe and Complete Streets Checklists are completed as related to the SRTC Policy and the SRTC Guiding Principles
- Coordinating with jurisdictions and agencies region-wide to determine viability of a regional Active Transportation Plan
- Implementing a regional bicycle and pedestrian count program for bicycle and pedestrian usage and trend data
- Pursuing collaboration opportunities with public health partners for projects with complimentary health and transportation benefits such as: Safe Routes to School, improving built environment, ensuring equity of access to transportation, reducing pollution, reducing collisions, and placemaking to improve social connections
- Targeting funding for bicycle and pedestrian network improvements at nearly \$280 million over the planning period

#### Spokane Transit Authority (STA), Connect Spokane, 2019

STA supports alternative transportation options that reduce the reliance on single occupant vehicles and provide Spokane County residents increased transportation options. *Connect Spokane* is the vision and policy framework document used by STA's Board of Directors to guide policy and implementation to increase ridership and reduce pollution, congestion, and single occupant vehicles.

In addition to STA's goals of reducing vehicle miles traveled and encouraging transit as an alternative to single car occupancy STA offers bike lockers for those looking to take advantage of one of the many Park and Rides in Spokane County for a small fee.

Location	Total Bike Lockers Available
Hastings Park and Ride	6
Jefferson Park and Ride	6
Liberty Lake Park and Ride	16
Mirabeau Park and Ride	6
South Hill Park and Ride	6
Valley Transit Center	12

#### **Overall Goals**

#### Increase interest in multi-modal connections

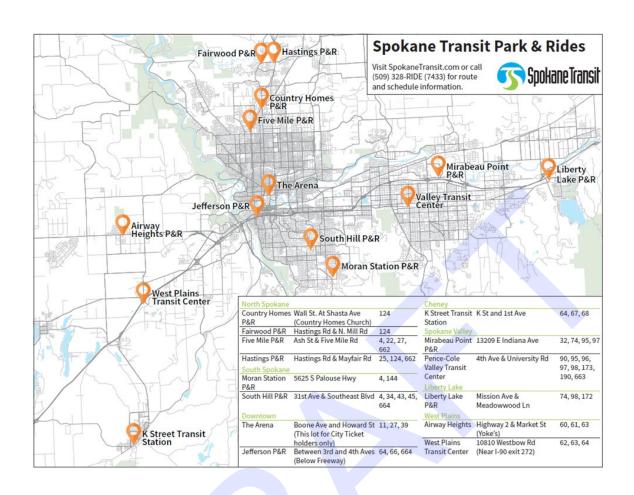
Support bicycle and pedestrian infrastructure: these accommodations include bus stop design and locations as well as the design and capabilities of its vehicles.

#### **Bicycle Facilities**

STA accommodates bicycles at STA's facilities and on STA buses. By supporting bike sharing, bicycle ridership through short- and long-term bicycle parking, and greater bicycle capacity on busses STA can increase options for those who choose multi-modal transportation.

#### **Improve Pedestrian Infrastructure**

STA partners with local jurisdictions, as funding allows, to improve pedestrian infrastructure in locations that link to STA bus routes. Financial contributions to any infrastructure improvements aim to maximize transit benefit and are directly determined by Spokane Transit.



# Chapter 6

## Goals, Policies, and Implementation Measures

Goals are general statements of intent proposed to provide direction for policy implementation. Goals provide detail and context for the Active Transportation Master Plan and a point of measurement. Goals can always be revised to achieve the long-term vision of the countywide active transportation network and Master Plan if context and concerns change over time.

Various Spokane County policies and regional planning documents were reviewed relating to active transportation planning. Document review and feedback collected from public outreach helped to develop a vision statement with supporting goals. Many of the goals presented are based on the County's transportation related documents and other jurisdictions' goals and policies.

#### Vision Statement

To provide a safe, connected, and accessible active transportation infrastructure that encourages active transportation as a viable form of transportation and recreation.

#### Goals

Goal 1 Safety: Work towards an active transportation network that is safe and comfortable for people of all ages and abilities. This plan includes strategies to monitor the county's active transportation infrastructure and promote safe behavior by multimodal users and motorists along Spokane County roads.

#### Implementation Measures

- 1- Monitor active transportation/vehicle crash data and severity annually to identify trends and specific problem areas.
- 2- Evaluate the presence of pedestrian scale lighting at key crossing locations, uncontrolled crosswalks, and intersections with a crash history.
- 3- Continue to apply for grant funding that supports active transportation within Spokane County to improve existing facilities and add low stress connected facilities to the county bicycle network.
- 4- Work with Spokane County schools to encourage bicycle education in correlation with each Safe Routes to School project.
- 5- Coordinate with Spokane County Sherriff's department and Target Zero liaisons to identify locations with more than one incident of bicycle/vehicle collisions for increased cross agency awareness and implementation of countermeasures.

6- Continue to develop, expand, and connect low stress active transportation facilities that reduce conflict between bicyclists and vehicular traffic.

Goal 2 Connectivity: Create a connected network of active transportation facilities that link important destinations, transit, neighborhoods, and neighboring cities within the county and relieve auto-dependency.

Active transportation can become a mainstream mode of transportation in Spokane County if a connected and low-stress network is developed that allows people to travel to the places they want to go by way of active transportation. About 11% of the bicycle facilities in Spokane are considered to have an LTS of 1 or 2 and can be considered low-stress active transportation environments. However, even with a LTS of 1 or 2 the bicycle facility may eventually encounter high speed and high-volume roads or difficult intersections. High stress encounters effectively act as barriers and as difficulties within the active transportation facility. Additional barriers to active transportation show up in unconnected sidewalks, facilities that are not maintained, and substandard ADA facilities.

A standalone active transportation network is not enough if people do not feel safe using the provided facilities. Reducing the travel lane widths to prevent speeding, reducing vehicle traveling speeds, and providing separation can help encourage everyday use of facilities and act as a link to what would be considered a high stress barrier. Separated bike lanes, marked shared bike lanes, signage, and side paths may be needed to connect the bicycle network and make cyclists feel safe. Another element that may help encourage biking for transportation is if cyclists have a secure place to lock up their bicycles when they get to their destinations. This goal should also consider bicycle parking at major destinations, such as transit stops, park and rides commercial areas and public facilities, including schools, libraries, and recreation centers. An effective way to incorporate more bike racks and bicycle parking is to incorporate this into the site plan review requirements with new developments.

#### Implementation Measures

- 1- Increase the miles of sidewalk and multi-use trails along county roadways where reasonable and feasible.
- 2- Analyze pedestrian crossings for missing crosswalks and places that inadvertently encourage mid-block crossings.
- 3- Fill in gaps where sidewalk is not connected.
- 4- Increase low stress connectivity to the busiest park and rides and transit stops, this will need to be done in coordination with STA.
- 5- Evaluate (and increase if needed) the level of low stress bicycle networks around county schools. Priority should be given to the most disadvantaged neighborhoods.
- 6- Prioritize and increase low stress connectivity to county libraries, recreation centers, major commercial centers, parks, and education centers.

7- Develop and implement effective wayfinding throughout the County bicycle routes, especially where barriers exist, such as rivers, freeways, and railroads.

# Goal 3 Livability, Health & Equity: Improve the health of county residents by creating an environment that is supportive of active transportation.

Increasing safe and connected active transportation facilities throughout Spokane County is an easy way for children and adults to get regular physical activity and will improve the health of county residents. Equal access to low stress facilities, connected sidewalks, and improving ADA infrastructure for all members of the community, especially those considered to be overburdened, underserved, and disadvantaged should be prioritized. Strategies under this goal also include Safe Routes to School programs, incorporating neighborhood greenways, and the implementation of projects in the 6-year Transportation Improvement Project (TIP) list of future capital improvements.

#### Implementation Measures

- 1- Prioritize connectivity and low stress bicycle infrastructure when reasonable and feasible in census tracts identified with high proportions of disabled and elderly communities as well as census tracts at or below the designated poverty level.
- 2- Continue to apply for Congestion Mitigation and Air Quality (CMAQ) funding through WSDOT to increase the amount of bicycle infrastructure, lower VMT, and improve air quality.
- 3- Monitor the percentage of county residents with preventable chronic diseases in collaboration with data from the Spokane Regional Health District.
- 4- Continue to support local programs that help low-income residents own a bicycle such as the Commute Smart Northwest Bike Swap.
- 5- Incorporate more greenways within Spokane County that end at desirable destinations.

# Goal 4 Choice: Update the bicycle network routes giving county residents informed bike route information so that choices can be made about what multi-modal transportation options are best for them.

- 1- Provide a GIS based bicycle map on the Spokane County Public Works web site that shows county residents the Level of Traffic Stress (LTS) of existing active transportation facilities. This is intended to show what active transportation experience can be expected and eliminate high stress/high speed Class IV shared roads as viable bike routes.
- 2- Reduce gaps in the bicycle network within a three-mile buffer of the cities to improve connectivity between destinations and expand the network of bicycle facilities. This offers cyclists access to a variety of destinations and provides route choices.

- 3- Increase and improve access and wayfinding to the Centennial Trail, Children of the Sun Trail, other low stress separated trails, and to important destinations.
- 4- Work on implementing corridor projects adjacent to busy arterial streets as an alternative to active transportation on high speed and high-volume roads.

The most important measure of success for the Active Master Plan is if there is an increase in active transportation over time among different ages, experience levels of people, destinations, and trip types. Advancing this goal is largely driven by success in advancing the four goals of the plan and, therefore, the recommendations for supporting policies and programs.

# Chapter 7

# **Existing Conditions**

This section of the Active Transportation Plan focuses on infrastructure, education, encouragement, enforcement, and evaluation.

#### Pedestrian Infrastructure

Spokane County manages 2,527 miles of county roads. Along the road network there are approximately 158 miles of sidewalks. Sidewalks make up much of the pedestrian facilities within the county. There are approximately 100 miles of shared-use paths that county residents can use to walk to desired destinations or to be used as an auto free place to exercise. Notably this includes the Centennial Trail, Fish Lake Trail, and the Children of the Sun Trail. These trails only occasionally cross county roads and are primarily used for recreation.

Table 6.0, Miles of Pedestrian Facilities Along Spokane County Roads

Mileage of Pedestrian Facilities Along Spokane County Road					
Sidewalks			158		
Multi-use Trails		•	51.1		
Total Pedestrian Facilities			209.1		

Sidewalks along county roads are typically constructed as part of new roadway construction, with reconstruction projects, or with new developments. Standalone sidewalk projects may be designed and constructed as targeted projects based on the need and the availability of County funds. The construction of standalone sidewalk projects is rare and typically based on complaints by county residents or if the sidewalk is not in compliance with the Federal Highway Administration (FHWA) standards. The intent of the Spokane County ADA Transition Plan is to facilitate infrastructure improvements to improve pedestrian curb ramps, pedestrian push

buttons, and crossings along county roads to bring those pedestrian related facilities into compliance with ADA.

Spokane County is not responsible for sidewalk maintenance. Sidewalk maintenance is the responsibility of the adjacent property owner and sidewalk surface maintenance is the responsibility of the municipality in which the sidewalk is located. Snow and ice removal is the responsibility of the adjacent property owner. It is very important to keep sidewalks clear of snow and ice in the winter season. Sidewalks clear of snow, ice, and winter debris make walking in the winter safer and easier for those that rely on walking as their primary mode of transportation or for exercise and relaxation. Spokane County municipal code 9.75.210 states that sidewalks must always be open for pedestrian traffic.

The county installs and maintains 19 traffic signals on county roads and views maintenance of these facilities as a priority. Crosswalk and roadway striping typically occurs on an annual basis as part of the maintenance process. The remaining traffic signals are maintained by either the Washington State Department of Transportation (WSDOT) or by one of the 13 municipalities within Spokane County. Countdown timers are the current standard for pedestrian signals and the county follows the Manual on Uniform Traffic Control Devices (MUTCD) regulating the amount of time pedestrians take to cross an intersection. Considering that Spokane County is predominantly rural, the crosswalks are set to have a 6 second "WALK" before they flash the "DON'T WALK" and the signal countdown starts. Accessible Pedestrian Systems (APS) are installed on most pedestrian pushbuttons within Spokane County and will be installed at any new signalized intersections that the county operates and maintains. Where APS is not currently installed, they will be as part of a planned county maintenance project.

#### Multimodal Infrastructure

Spokane County has a variety of multimodal facilities accommodating active transportation in both the urban and rural context including dedicated bike lanes, shared-use paths, and shared-bike friendly routes. The bicycle infrastructure can be used by a diverse range of users and abilities, from new riders, very experienced cyclists, and for micro mobility. There are over 1,000 miles of active transportation facilities available for county residents to use.

There are four different types of bicycle facilities throughout the county with varying levels of LTS associated with them depending on class type and components of the facilities. The existing conditions in this section describe the status of bicycle facilities in Spokane County.

#### Class I Shared Use Paths

Shared use paths in Spokane County are primarily separated completely from traffic but the user may encounter intersections that need to be crossed particularly the closer these trails come to urban environment. Some notable Class I separated facilities are the Centennial Trail, Children of the Sun trail, and the Columbia Plateau Trail. There are approximately 100 miles of

Class I bicycle facilities in Spokane County. Shared use paths are great for all forms of active transportation.

#### Centennial Trail

The Centennial Trail is a 40-mile trail that travels through Spokane County and into Idaho. This is primarily an LTS 1 trail with few intersections to cross in the northern section of this trail. The trail eventually runs through urban environments and into downtown Spokane, through the City of Spokane Valley, and terminating in Idaho. The LTS increases to 3 or even 4 depending on the continuity of the trail network and the various types of intersection crossings the facility user may encounter in the urban environments. An example of this separated trail having an increased LTS is the section from Boulder Beach to Donkey Island. The separated trail ends and requires that the facility user to navigate approximately 2 miles of county roads and a busy arterial intersection before eventually reconnecting to a low stress separated trail again.

#### Children of the Sun

The existing trail is a 7-mile paved path in north Spokane and is still in the process of being completed. The final product will be a 14-mile trail that runs parallel to the North Spokane Corridor (SR 395) and will connect to four specific communities and the Centennial Trail. Most of this trail could be considered to have a LTS 1, but where the trail intersects urban environments the LTS will naturally increase.

#### Columbia Plateau Trail

This trail is in southwest Spokane County and is 7.5 miles long. This trail has an LTS of 1 and is less likely to be used for transportation purposes as it ends at Fish Lake recreational facility. The trail head is located a few miles outside the city of Cheney.

#### Class II Bicycle Lanes

There are over 130 miles of Class II bicycle facilities in Spokane County with a significant portion of them residing in a dense urban setting. Designated bicycle lanes are not overly common in Spokane County, totaling roughly 19 miles and are primarily located in north Spokane County and buffer City of Spokane boundaries.

Market St 1.87 miles Wall St 0.75 Country Homes 1.85 Cascade Way 0.33 Hawthorne Rd 1.09 Waikiki/Mill Rd 1.48 Farr Rd 0.41 Upriver Dr 4.0 Columbia Dr. 1.24 Hastings/Farwell Rd 2.44 Little Spokane Dr. 0.67 Midway Rd 0.50 Day Mt Spokane Rd 0.54 Newport Rd (WSDOT) 1.29

#### Class IV signed and unsigned roadways

There are 845 miles of Class IV roadways in Spokane County, and they typically have a mixed LTS score depending on population density and roadway. A shared road may be in a quiet neighborhood or have high traffic volumes and vehicular traffic may be traveling at higher speeds. There may or may not be a shoulder provided resulting in bicycle and vehicular traffic being mixed, these routes are primarily for the "strong and fearless" riders that do not mind active transportation with high-speed traffic in close proximity. Table 7.0 summarizes the Spokane County bicycle facilities by miles and type.

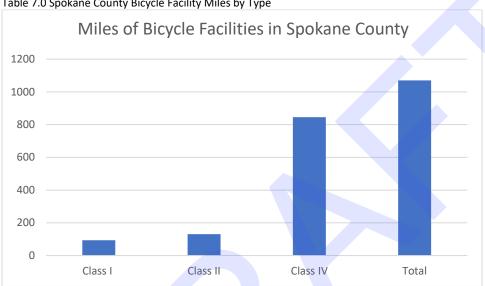


Table 7.0 Spokane County Bicycle Facility Miles by Type

In Spokane County there are 18 schools and many public parks, 11 of the 18 schools and some of the parks that are closest to populated areas lack any Class I or Class II bicycle facilities. It should be noted that a sidewalk inventory is not part of the Existing Conditions study and that there may sidewalks accessible where there are no low stress bicycle facilities present. It should also be noted that because of the rural nature of some parts of the county, or if schools and parks are in calm neighborhood settings, bicycle infrastructure may not be necessary.

#### Travel Behavior and Active Transportation Counts

Tracking active transportation use in key locations within the county can lend insight to the intensity and use of the existing network. However, Spokane County does not currently participate in counting the number of people using active transportation. To better understand the various modes of travel and travel behavior, it is the intention of the county to obtain this data at strategic locations in the future for specific projects. This affords the county an opportunity to collaborate with other regional entities that collect active transportation counts to better understand how facilities are being utilized.

Land uses that generate multimodal activity should be included when obtaining count data. Other sites of interest may be specific locations adjacent to where the county meets city boundaries. There is a complex overlap of active transportation facilities between county and city boundaries, and gathering data at key locations would indicate general patterns. Currently WSDOT monitors 11 permanent pedestrian/bike traffic recorder sites within the county and 14 manual sites. Of the combined 25 sites only 4 are located outside of the city centers. It is a future goal of county transportation planning staff to gain a better understanding of how this data reflects on county resident's active transportation usage. Bicycle and pedestrian count portal data can be found on the WSDOT website.

https://wsdot.wa.gov/data/tools/bikepedcounts/

# Regional and Multi-Modal Connections

The previous chapter identified the goal and implementation measures to improve Spokane County active transportation facilities and network. These goals include facilities and a network that is connected to the surrounding communities and to the larger regional network. The County also envisions a multi-modal transportation system that encourages active transportation and makes it easier for those who choose active transportation as a viable alternative to single occupancy vehicles. Finally, the County wants to provide the support facilities and amenities that can make active transportation a more enjoyable experience for more people. This section looks at the existing conditions of support facilities within Spokane County.

# Support Facilities

Network support facilities include physical infrastructure designed to encourage and accommodate active transportation. This may include anything from covered bus shelters, bicycle racks, water fountains, benches for resting, lighting, wayfinding along routes, and restrooms facilities. The entire length of the Centennial Trail includes periodic restrooms, drinking fountains, picnic areas, and parking facilities. Some supporting facilities may only be open seasonally. Support facilities are important because insufficient facilities may discourage active transportation. In Spokane County, the installation of secure bicycle parking is required as part of zoning code 14.805.060 (4). The required ratio is one bicycle rack, accommodating five or more bicycles, for every 25 parking spaces to encourage the use of bicycles as an alternative to driving. Most schools, parks, and other public buildings have bike parking. In addition to having the right support facilities in place is equally important to have them located strategically to maximize the benefits they provide and reduce theft.

#### **Enforcement and Education**

Spokane County is active in many active transportation encouragement and educational programs. These programs include but are not limited to participating in the pursuit of funding active transportation facility improvements, Safe Routes to School grants, road standards that

support Complete Streets, ADA Transition Plan, the Spokane County Road Safety Plan, an adopted Complete Streets ordinance, and has a Target Zero Manager. Spokane County collaborates with the Spokane Regional Health District, WSDOT, STA and the Spokane Regional Transportation Council (SRTC), amongst other active partners, to promote wellness through active transportation within the region. Spokane County does not participate in any law enforcement operations to improve compliance with active transportation related laws but relies on the Sherriff's department for all forms of enforcement.

# **Public Participation**



Public participation is an essential component to the development of the Spokane County Active Transportation Master Plan. Public participation gives insight into how the residents of Spokane County use active transportation, their needs, and concerns with existing facilities. Furthermore, feedback from the public helps to direct future goals, projects, and development of this plan.

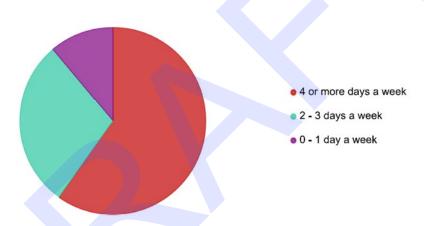
Surveys were created by the Spokane County Public Works department to help understand active transportation needs in the community. The surveys were aimed at understanding the real and perceived perceptions of active transportation in the county, where people ride their bikes and walk, how often, where they would like to bike and walk, and what improvements should be considered.

Public participation was kicked off at the June 12<sup>th</sup>, 2021, Bike Swap at the Spokane County Fairgrounds. The biking and walking surveys were made available through a variety of websites and social media sites as well as with bicycle shops throughout Spokane County. The intent of such a wide range of public outreach is to reach as many people as possible with varying levels of active transportation experience and abilities. Additionally, online maps of the existing infrastructure were put on the Spokane County website for public feedback and to document public opinion and concerns of active transportation conditions. The intent of this was to show

how residents use active transportation, where people like to walk, bike, and roll, and where people currently feel the safest participating in these activities. Through the public engagement process it became apparent that people really care about active transportation and how it affects their lives. There was a total of 568 comments from the public expressing ideas for improvements, their concerns, and places that they like to use active transportation in the County. Public comments are used to guide policy and implementation of the Active Transportation Master Plan and future capital projects. To gather enough data for this document public participation was ongoing. Due to the Covid-19 pandemic and the seasonal nature of the Inland Northwest public participation lasted approximately 18 months.

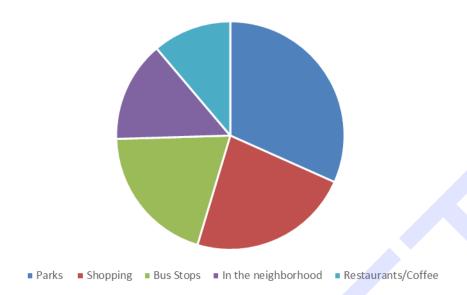
### Survey Results for Pedestrians

-How many times a week do you walk as a form of transportation or for recreation?



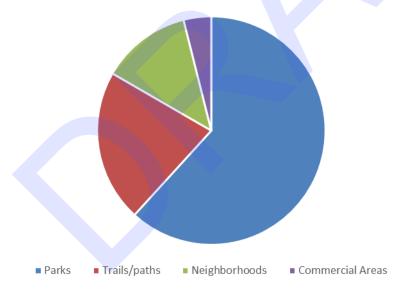
Results from the survey indicate that people walk regularly to get their daily needs met, as well as for recreation, to improve or maintain health, and for some because they are disabled and cannot drive. About 60% of respondents walk four or more days a week.

-Where do you walk to when you are walking for transportation purposes or for recreation?



Respondents indicated they enjoy walking in designated pedestrian places such as parks and their local neighborhoods the most. Walking to meet needs; going shopping, reaching a bus stop, and walking to local restaurants and coffee shops were also popular destinations for those that regularly walk as a transportation option.

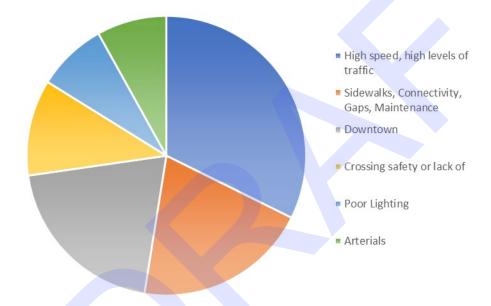
-Where do you consider a great place to walk, enjoyable?



Respondents prefer to walk in areas they feel safe and take them away from speeding vehicles and navigating complex intersections. Places that were mentioned as favorite places to walk were the Benn Burr Trail, Hazel Creek, Riverfront Park, Centennial Trail, High Drive, Moran Prairie, Wandermere, Perry District, Garland, Manito, and the Glenrose/Glenngrae area south of the City of Spokane Valley.

#### -Any specific places you avoid walking?

Safety appears to be the key indicator of where people choose to walk and what routes people take while on foot in Spokane County. When people are walking in Spokane County, they want to feel safe from high traffic volumes, high speeds, when they are crossing the streets, and they want to feel safe from being victimized from delinquency. Respondents indicated that any place where vehicles may be traveling at high speeds or have high traffic volumes make them feel unsafe and vulnerable. Lack of sidewalk connectivity, sidewalks missing ADA curb ramps, and sidewalks that are not maintained were frequently mentioned in the survey as concerns the public would like to see addressed. Additionally, places that do not have good lighting are at the top of their list to avoid. Respondents mentioned that they would like to be able to walk on Hamilton Street, Division Street, Indian Trail, as well as the area surrounding Glenrose Road, but do not because it does not feel safe to them.



#### -What improvements would make walking feel safer?

Improvements that would make walking feel safer to respondents included more and connected sidewalks, improve lighting, have more crosswalks and crossing treatments, keeping sidewalks clear of snow, ice, and debris, and provide more separation from traffic.

#### -What barriers do you encounter when walking?

The most mentioned barriers to walking from respondents include a lack of connected sidewalks, high speed traffic that feels unsafe to walk next to, and intersections that feel difficult to cross.

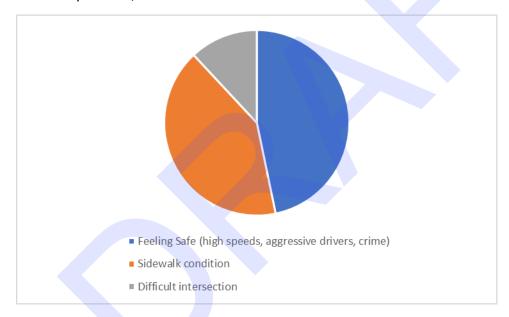
-Do you encounter any difficult intersections to cross when walking, difficulty crossing streets, proximity to traffic, lack of adequate pedestrian facilities such as sidewalks or trails?

The intersections that were identified as being difficult to cross include intersections that are not located within Spokane County's jurisdiction but within the adjacent cities. All intersections mentioned, regardless of location are listed as well as the number of times they were mentioned as a concern by respondents:

Hastings Rd (2), Glenngrae Rd (5), Havana St & Glenrose Rd (18), Hayford Rd/ Hwy 2 (6), Hwy 2 and Craig Rd, Northwest Blvd (3), 61st and Palouse Hwy (2), Wellesley Ave /Driscoll/Assembly Rd, Division St (6), Downtown Spokane (4), Upriver Dr/Argonne Rd/Farr Rd, Monroe Rd and Riverside Ave (2), Monroe/NW Blvd, Pines (2), Assembly Rd at Francis Ave and Wellesley Ave, Mission Ave. (2), and Indian Trail Rd (2).

# -What deters you from walking more?

Once again, safety is the primary deterrent to why people are not walking more. Many people consider walking to be dangerous when cars are exceeding the speed limits, when they are forced to walk in areas where the speed limit is high, sidewalks are not maintained, there is a lack of separation, and view some intersections as stressful to cross.



# Survey Results for bicyclists

Survey results show that bicyclists in Spokane County have four main concerns when active transportation in Spokane County. Table 8.0 shows that bicyclists experience the greatest stress riding their bikes due to the fear of getting hit by a car, a lack of connectivity (bicycle infrastructure) and aggressive drivers. These concerns are real with the potential for serious injury or death related to collisions with vehicles. The last two high ranking concerns are bike theft and secure bicycle storage when arriving at their destination.

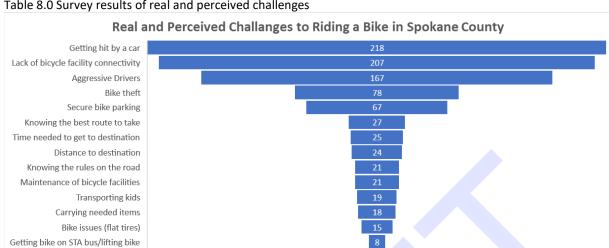


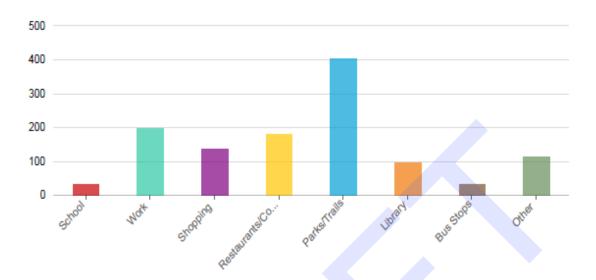
Table 8.0 Survey results of real and perceived challenges

Owning a bike/bike that fits

The results of the bicycle survey show that respondents would like to see improvements to bicycle facilities all throughout the county but specifically in the south and north with almost an even number of responses for both locations. Additional locations respondents would like to see improvements downtown and the Spokane Valley. Even though the downtown and Spokane Valley are not within the Spokane County jurisdiction it is worth noting that these may be optimal locations for Spokane County to collaborate and improve connectivity of the regional bicycle infrastructure for a more wholistic transportation system.

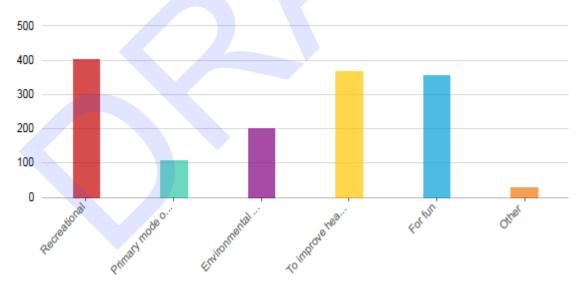
It is clear from the responses that safety and driver behavior is a substantial concern for those that bicycle. There was an overwhelming number of requests from the public for separation, more dedicated bicycle lanes, buffered facilities, and new bicycle routes. Respondents also showed concern for the general maintenance of bicycle facilities requesting that existing and new facilities remain clear of debris, overhanging branches, improved signage, and prefer facilities to have high visibility paint when marked. Additionally, improved connectivity, bicycle parking, and generally anything that gets bicyclists away from high speed and heavy traffic was a common concern. The following graphs and information are derived from the Bicycle Survey.

# Where do you ride your bike?



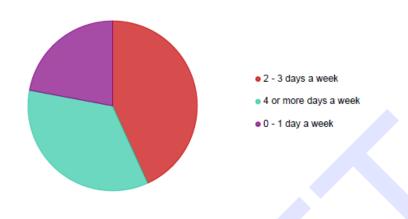
91.8% of the respondents to this survey primarily ride their bicycles to and from parks and on trails. 44.77% of respondents feel that it is safe enough and they are close enough to commute to their place of employment by way of two wheels. 41.36% of respondents like to bicycle to restaurants and coffee shops while 31.36% can do a little shopping via bicycle.

# Why do you bike?



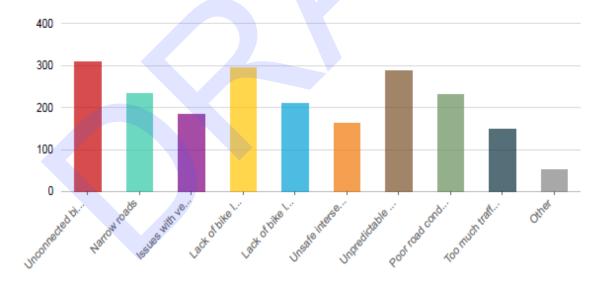
Most people that ride their bicycles do so for fun or recreational reasons with responses in this category being 91.59%, while 83.86% ride a bicycle to improve their health, 45.91% ride for environmental reasons, and 24.32% do so because it is their primary mode of transportation.

# How often do you bike?



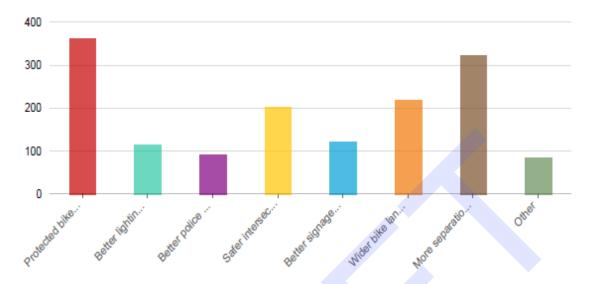
The results here show that most of the people that responded to this survey ride a bicycle quite frequently with 77.95% of the respondents riding a minimum of two times a week with bicycle rides primarily consisting of short to moderate outings with most active transportation trips having a duration of 30 - 60 minutes per outing.

What barriers to biking do you encounter?



70.5% of respondents reported that a lack of connectivity on the bicycle network is the reason why they do not ride their bicycles more often. This is complemented by a lack of bike lanes coming in at 67.5%. This is followed up with unpredictable drivers, narrow roads, and poor road conditions as the top-ranking barriers to getting people to ride their bikes more often.

What would make your biking experience better?



The survey results indicate that separation is a primary concern when biking in Spokane County. 82.5% of the respondents want protected bike lanes, 73.6% want more separation from vehicular traffic and this is further backed up with 50% of respondents asking for wider bike lanes. To follow this up safer intersections and better lighting are highly encouraged by the public.

# Real and perceived challenges

Respondents were asked to rank their top three challenges that they face while active transportation in Spokane County. The responses to these questions were communicated clearly with almost half (44.09%) of the respondents being afraid of getting struck by a vehicle. The other top concerns are aggressive drivers by 33.64%, 21.36% feel there is a lack of connectivity, 14.09% worry about bicycle theft, and 17.5% feel like they do not have safe bicycle parking. The rest of the questions and the percentage of concern and response can be found in Appendix A.

# **Existing Conditions Map**

Existing bicycle facilities in Spokane County are predominantly contained within the boundaries of the city centers as indicated by the red lines on the map. The yellow lines show where the shared use paths are. All other roads would be classified as shared facilities that mix bicyclists in with vehicular traffic. Figure 7 shows the existing bicycle facilities within Spokane County.

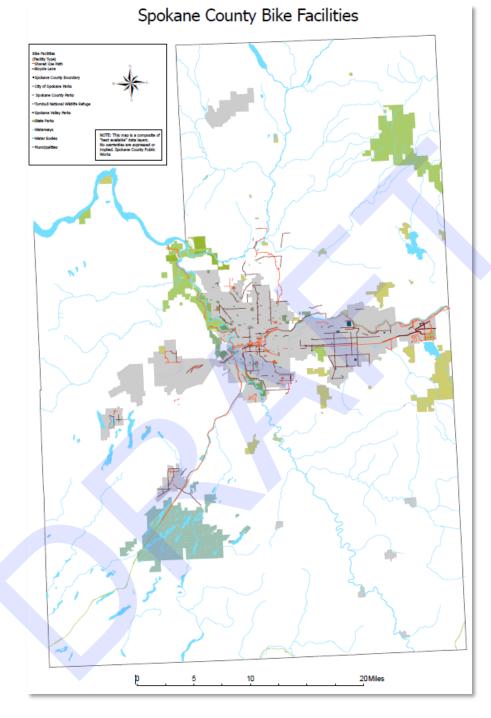


Figure 7, Existing Bicycle Network in Spokane County

# **Needs Analysis**

# **Active Transportation Safety**

It is important that collision data specific to active transportation is reviewed annually to identify collision locations and trends within unincorporated Spokane County. Collision data is provided by the Spokane County Sherriff's department and by WSDOT. Typically, a five-year analysis of all reported active transportation and vehicle-related incidents occurring within Spokane County is a good start at understanding any trends of incidents and locations of concern. The five-year crash data in Chapter 3 shows that there has been an increase in serious injuries and fatalities within Spokane County with the highest rate of incidents occurring within the last documented year. Note that other types of bicycle collisions do occur including bicyclists crashing into other bicyclists as well as bicycle and pedestrian collisions, but typically very little data is reported on those types of collisions.

It is clear from the 5-year collision data in Chapter 4 that there is clustered bicycle involved crashes occurring in both north and south Spokane County, specifically within a few miles of where Spokane County and the City of Spokane interface. In north Spokane this seems to be occurring along Hastings Rd and within the vicinity of Wall Street. Incidents occurring to the south of Spokane County look to be occurring around the Ben Burr Rd and Palouse Highway area. These areas will need to be monitored for crashes and areas that will need to be analyzed for preferred improvements to increase safety at these locations.

# Chapter 8

# Recommendations

This section addresses a comprehensive list of improvements recommended to help improve Spokane County's active transportation infrastructure and connectivity. The following list can be used to identify projects but is not entirely comprehensive or implies an order to what project should be implemented first. Additionally, the list does not imply a timeline in which a project should be prioritized since the availability of funds for implementation is tied to the priorities of the County's capital improvement project list (6 Year TIP), the variability of grant funding from year to year, and the annual Spokane County budget. If necessary, a best fit approach can be used to achieve the most impactful outcome to the active transportation network. Projects prioritization may be implemented but is limited to funding cycles, new and evolving information, new funding sources, updated collision statistics, project collaboration with adjacent entities, or updated capital improvement projects.

Recommendations for active transportation facility improvements in Spokane County emphasize the goals from Chapter 1. Proposed recommendations ensure that opportunities to implement a community endorsed active transportation network are not lost and help guide the direction of implementation in conjunction with the capital improvement projects to promote active transportation as an attractive option. However, it is important to have active transportation improvement projects identified in the County's 6-year TIP for funding and implementation reasons. Recommendations for improvements to be considered during project development should include the following:

- Places people want to go (health care, institutions, grocery, employment)
- Schools lacking low LTS connectivity
- Parks lacking low LTS connectivity
- Reported collisions and incident trends
- Public transportation/first & last mile
- Households without vehicles by census tract
- 2020 population density
- 2020 employment density
- Census tracts identifying as disadvantaged, overburdened, or underserved
- Gap closure
- Comments received from the community engagement process
- Grant funding opportunities
- Projects that have been previously identified for active transportation and traffic calming improvements.

# Neighborhood Routes

Neighborhood routes are also known as bicycle boulevards or greenways. People typically enjoy these types of places for active transportation because they provide low stress commutes on their local street network instead of busy arterials. Neighborhood routes should have wayfinding signage, so travelers are aware of the routing, but also play an important role in traffic calming. The road markings and signage decrease cars speeds and prioritize people.

# Facility Improvements in School Zones

Although Safe Routes to School Routes documents are developed and published by the school districts, Spokane County encourages safe transportation to and from schools. Spokane County participates by providing recommendations that can facilitate needed improvements as well as securing partnerships with local advocacy groups and schools. GIS analysis was used to look at existing conditions and determine what schools in unincorporated Spokane County lack facilities or have a bicycle LTS of 3 or greater. These school zones are where connecting facilities or reducing the LTS should be prioritized and considered when making any roadway improvements or when seeking grant funding. Spokane County is in continual collaboration with SRTC and WSDOT to improve safety and increase multi-modal transportation options for school age children.

The listed schools within the County are schools that can be scoped and considered for projects to improve connectivity and lower LTS. It should be noted that if schools in rural communities are located on higher speed but lower volume roads it may not make sense to have young children use active transportation as a commuting option to and from school or be feasible to implement facilities at these locations. Additionally, there are also a fair number of schools within neighborhoods where there are sidewalks or bicycle facilities, and it is expected that vehicles will be traveling at 20 mph or under during school hours of operation. This would lower the LTS for school age children and be a safe environment for children to walk, roll, and bike to school. Implementation of active transportation facilities within school zones should be analyzed for the individual context sensitivity and schools with the greatest needs should be prioritized first.

Otis Orchards Elementary (funded for improvements),
Colbert Elementary, Midway Elementary,
Meadow Ridge Elementary,
Shiloh Hills Elementary,
Northwood Middle School,
Farwell Elementary,
East Farms, Elementary,
Brentwood Elementary,

Prairie View Elementary,
Arlington Elementary,
Evergreen Elementary,
Phil Snowden Elementary,
Windsor Elementary,
Mullan Road Elementary,
East Valley Elementary,
Linwood Elementary,
Moran Prairie Elementary,

Mountain Side Middle School, Pasadena Park Elementary

# Bicycle Facility in Coordination with County Parks

There are 52 parks that Spokane County maintains and operates. Parks play an important role within the County for relaxation, recreational purposes, to conserve natural areas from development, and secure the natural beauty of the region. Parks are frequently visited destinations by county residents and visitors to Spokane County. As stated throughout this Plan, due to the rural nature of Spokane County, it may not be reasonable or feasible to develop active transportation facility connections to all parks. Parks with insufficient connectivity or with LTS of 3 or greater and adjacent to higher density development should be project priorities. These community amenities should have safe connections to the established transportation network, provide safe street crossings, and be accessible for all. These elements and more are professionally planned out and delivered but should not be left out when improvements to the transportation network are under consideration. Improving accessibility to parks provides an opportunity to collaborate with the Spokane County Parks and Recreation department.

- -Bicycle facilities incompletely connect to the popular 95-acre Plante's Ferry Sports Complex. This park is partially accessible via the Centennial Trail by Class I bicycle facilities but then turns into a slightly disjointed Class II facility before reconnecting to another section of the Centennial Trail and lowering back down to a Class I facility. This higher-Class II section would provide an opportunity to make a more direct and clear connection along the Spokane River and lower the Class and LTS level.
- -Bicycle facilities on Waikiki Rd lead partially to Holmberg Park but do not link to the park. This park is surrounded by residential homes for locals to access, but a bicycle facility gap is present. Both Waikiki Road and Country Homes Boulevard have existing Class II bicycle facilities that could be linked and provide access to not only the park but Whitworth University, the 5 Mile Park & Ride, as well as grocery and other commercial opportunities.
- -Trolley Trail Conservation Area and Sterling Heights Park are adjacent to each other in semirural residential areas of southwest Spokane County. They are served by Class IV facilities, but these two amenities afford an opportunity to lower the bicycle class level and collaborate with the City of Spokane to connect this residential area to light industrial and improve the bicycle network in this area of Spokane County.

The following list includes all parks within Spokane County:

1 Northwood Community
Park

2 Bidwell Community Park (funded for improved connectivity) 3 Camelot Community

Park

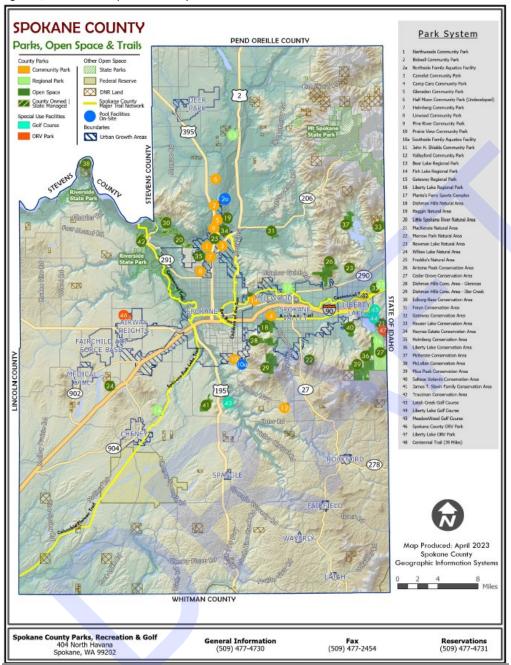
4 Camp Caro/Dishman **Community Park** 5 Glenden Community Park 6 Half Moon Community Park 7 Holmberg Community 8 Linwood Community Park 9 Orchard Ave Community Park 10 Pine River Community Park 11 Prairie View Community Park 12 Shields Community Park 13 Sontag Community Park 14 Valleyford Community Park 16 Bear Lake Regional Park 17 Fish Lake Regional Park 18 Gateway Regional Park 19 Liberty Lake Regional Park 20 Plante's Ferry Regional

Park

21 Dishman Hills Natural Area 22 Haggin Natural Area 23 Little Spokane River atural Area 24 MacKenzie Natural Area 25 Morrow Park Natural Area 26 Newman Lake Natural Area 27 Willow Lake Natural Area 28 Freddie's Natural Area 29 Antoine Peak Conservation Area 30 Cedar Grove Conservation Area 31 Dishman Hills Cons. Area - North 32 Dishman Hills Cons. Area - South 33 Edburg-Bass **Conservation Area** 34 Feryn Conservation Area 35 Gateway Conservation 36 Hauser Lake Conservation Area

37 Haynes Estate Conservation Area 38 Holmberg Conservation Area 39 Liberty Lake Conservation Area 40 McKenzie Conservation 41 McLellan Conservation Area 42 Mica Peak Conservation Area 43 Saltese Uplands Conservation Area 44 Slavin Family Conservation Area 45 Trautman Conservation Area 46 Hangman Valley Golf Course 47 Liberty Lake Golf Course 48 Meadow Wood Golf Course 49 Spokane County ORV Park 50 Liberty Lake ORV Park 51 Spokane County Raceway

Figure 8, Parks Within Spokane County



# Facility Improvements in Coordination with Public Transportation

Spokane County remains primarily rural. While there are other transportation options serving the rural communities, it is not feasible or reasonable for STA bus routes to serve these rural communities. However, access to employment, education, and essential services within the cities is a main objective of STA. Transit plays an important role in increasing the number of people choosing to use active transportation within unincorporated Spokane County to access their daily needs. Active transportation infrastructure and the associated LTS to STA Park & Rides and to STA bus stops that are in unincorporated north and south Spokane County were examined with GIS analysis. While there may not be large numbers of bus stops or many Park & Rides in unincorporated Spokane County, they play a vital role in the overall vitality of the transportation system and the local economy. The following analysis and results help highlight areas that may or may not be well served by the existing County active transportation infrastructure.

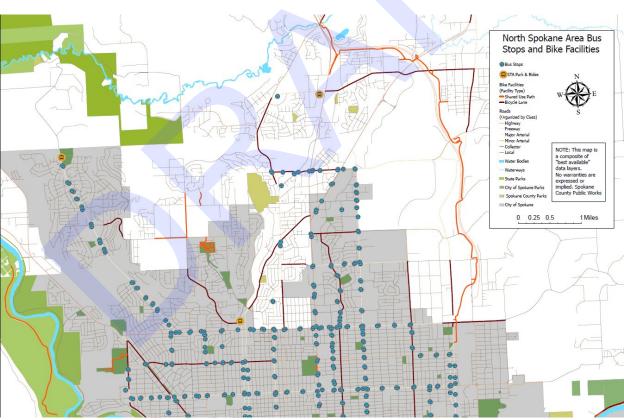


Figure 9, STA Bus Stops and Park and Rides in Association with Existing Bicycle Facilities in North Spokane County

In the south side of unincorporated Spokane County, there are 19 bus stops and 17 of those are accessible by a 35 mph Class II bicycle facility. The two bus stops that are not on the Class II facility are classified as local access roads with a speed limit of 25 mph.

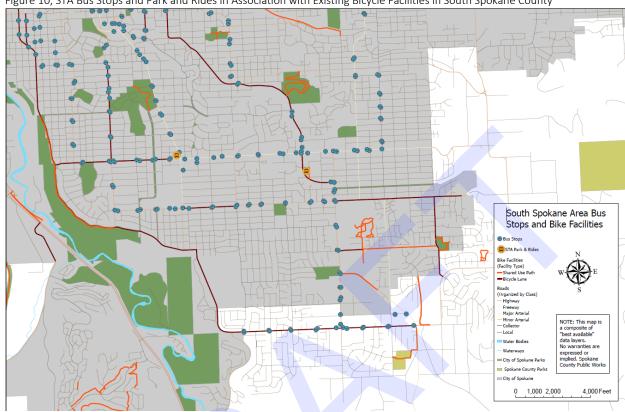


Figure 10, STA Bus Stops and Park and Rides in Association with Existing Bicycle Facilities in South Spokane County

Results indicate that most of bus stops in unincorporated north Spokane County are accessible by 30 miles per hour Class II bicycle facilities. Figure 9 shows bicycle facilities that provide direct access to Hawthorn Road serving Whitworth University and Country Homes Boulevard is a Class II facility with a direct path to the Five Mile Park & Ride within the City of Spokane. The obvious gap in facilities is the north side Hastings Park & Ride. This could be considered especially problematic for bicyclist with the Park & Ride adjacent to US 395 and a 5 lane Urban Principal Arterial. The Aero and Westbow Park & Ride and the Moran Prairie are two STA transit facilities that may be good candidates for improved access for those using active transportation to get to bus stops.

# **Census Designated Places**

Census Designated Places (CDPs) in Spokane County are places that have been identified as significant within the County. CDPs are edge cities that people want to gather for commercial, educational, and other opportunity reasons but they are still considered unincorporated. Spokane County has seven significant CDPs. Two abut city limits and in turn make active transportation facilities essential for residents. These are in north Spokane and the other is in east Spokane. The other significant CDP is on the West Plains of Spokane County. This is a significant CDP due to the amount of residential and commercial development taking place in these communities.

# Summary of Recommendations

- Project Priority Special consideration should be considered for projects that have already been scoped and are ready for grant application submittal in the 6-year TIP, community parks, commercial centers, schools, employment centers, and census blocks designated as overburdened, disadvantaged, or underserved. Additionally, roadway conditions need to be considered for all active transportation infrastructure projects including but not limited to federal functional classification, number of lanes, capacity, and speed.
- Connectivity It is intended that meaningful connections between existing active transportation facilities and places of interest are made, ultimately correlating to the goals of this plan. Enhancing connections ensures that people will use multimodal transportation options. Annual Traffic Analysis Zone (TAZ) analysis may need to be done, with the help of SRTC, to re-evaluate changes in land use to see where connections may need to be made to support a connected active transportation network in Spokane County.
- System Coverage Proposed improvements to the active transportation infrastructure system should improve access to population centers for both commuting and recreational purposes.
- Multi-jurisdictional projects Projects that close gaps or connect to other jurisdictions to complete a larger multi-jurisdictional project. This is important because this creates access to facilities that can be used for long uninterrupted use to important destinations.
- Safety Countermeasures Safety concerns will be evaluated using a context sensitive approach based on traffic volumes, vehicular speed, land use, transit, daily trips, and natural environment.

### **IMPROVING MAJOR STREET CROSSINGS**

Active transportation on low volume neighborhood streets is usually a low stress activity but the experience can be adversely impacted when forced to cross a high-volume high-speed road. Some solutions that have been used to improve intersection crossings are protected intersections, bike boxes, traffic signalization, leading bike/pedestrian intervals (LBI or LPI), or curb extensions to improve the visibility and safety of active transportation users at heavily trafficked intersections.

#### REDUCING OR PREVENTING SPEEDING

It is widely accepted that the severity of an injury to active transportation users in a collision is related to how fast vehicles travel. Neighborhoods are recommended for multimodal greenways because their posted speed limits are 25 MPH.

### PREVENTING HIGH CAR VOLUMES

The volume of cars passing active transportation users on the street affects comfort, particularly if the travel lane is shared with motor vehicles. For example, a high-volume road has motorists passing a bicycle at least once a minute with the potential for many vehicles per minute. Data from Peter Furth and the Dutch guidelines suggest that sharing a road does not work well when the average daily trips on a road exceed 4,000. Roadways with higher traffic volumes should be considered for alternate side routes that parallel higher volume roads.

#### INCREASING PAVEMENT QUALITY

Many of the roads within Spokane County have mixed pavement quality because these types of road improvements rely heavily on grant funding. Spokane County's Public Works department strives for smooth and safe roads for all to travel but poor pavement quality such as cracks, potholes, and bumps can make active transportation uncomfortable. It is the intent that when roads get resurfaced that the adjacent facility will also get resurfaced if necessary.

As well as advancing projects that are at roughly 30% design, other project components that should be considered address connecting the active transportation system, improving safety, wayfinding, and pavement markings. These components help to create a desirable environment for all users of the roadway and reinforce appropriate behavior for all roadway users.

#### Education

When looking at the active transportation network, infrastructure is only part of the solution to making the county more multimodal friendly. It is important to address non-infrastructure elements to reduce the number of active transportation-vehicle conflicts and make active transportation safe for all roadway users. Developing safe active transportation habits, behaviors, and drivers being aware that the road must be shared with pedestrians and bicyclists is a critical element to increase the number of active transportation users in the county and ensuring their safety on the county transportation system. An educational component is necessary to support the goal of safety and increasing the number of people choosing active transportation. It may be beneficial for users of the road to be reminded of the following:

### 1-Sharing the road

Encourage respectful driving behavior and increase awareness of bicyclists and pedestrians as vulnerable users of the roadways. Bring understanding of the right of active transportation users to occupy the roadway for example, drivers are required by law to give bicyclists enough room to travel safely per RCW 46.61.110.

- -If there are two or more lanes, drivers must move out of the right lane to pass a cyclist.
- -If there is only one lane in each direction, drivers must slow down and give the cyclist at least three feet of space.
- -If there is one lane in each direction, but not enough room to pass, the driver must move into oncoming traffic when safe to do so.
- 2- Active transportation is a fun and financially attractive alternative travel option

Active transportation is fun, healthy, can reduce roadway congestion, and save money. Developing a safe and well-connected active transportation network will make Spokane an appealing place to live and may attract businesses to connected parts of the county.

## 3- Active transportation as a healthy choice

Active transportation is an excellent way for people of all ages to increase their physical activity and makes the county a better place to live. A connected active transportation network is one way to accomplish a healthier and greener Spokane County.

Recommendations for improving active transportation infrastructure segments are analyzed using a context sensitive approach, taking into consideration right-of-way limits, posted speeds, traffic volumes, truck and bus routes, adjacent land use, etc. Recommended facility improvements should not be considered proposed projects or final recommendations. County Planning and Engineering staff will study all proposed active transportation facility improvements and their locations in greater detail and consider context sensitive alternatives as funding and scheduled projects advance. New projects may be proposed to close gaps in the facilities or to create longer corridors. Final project implementation and scheduling will be determined by project prioritization and funding eligibility and at the final discretion of the County Engineer.

# Prioritized Active Transportation Infrastructure Improvements

Table 9.0, Proposed Active Transportation Projects

Project or Road Name	Type of Improvement	Project Limits	Location In County
32nd	Bicycle lane	Best Rd to Sullivan Rd 0.75 miles	Southeast of CoSV
32nd Ave	Addition of Sidewalks on the north side of road  Conklin Road to Chapman Rd (0.44 miles)		East Spokane County
65th Ave	sidewalk	Regal Rd to Freya St	South Spokane County
Aero Rd / Westbow Rd	Bicycle facility	Connect to PnR / Fill in gaps	West Spokane County
Argonne Gap	Planning study will determine project limits and extent of project implementation	TBD, Boulder Beach to Donkey Island. Possible connection to CoSV Loop project	North of City of Millwood

Argonne Gap	Reconnect the Argonne Rd		East central Spokane	
	Centennial Trail for lower LTS		County	
Argonne Road	Path or sidewalk	Wellesley Ave to Columbia Dr	East Spokane County	
Barker Road	ADA improvements	Urban area boundary to COSV (0.50 miles)	East Spokane County	
Brentwood Elementary	Path from Whitehouse stub to school, coordinate with Parks dept. & Mead, scope for other potential improvements	SC Parks Department and Spokane County Right of Way	North Spokane County	
Children of The Sun Trail Connection	Pedestrian facilities connecting and access the trail	Farwell Rd	North Spokane County	
Colfax Rd	Neighborhood greenway	Hawthorne Rd to Westview Ave 0.35 miles	North Spokane County	
Craig Rd	Bike lanes or bike path	TBD	West Spokane County	
Craig Rd	Addition of sidewalks and bicycle facilities	I-90 to US-2	West Spokane County	
Crestline St	Addition of sidewalks on east side of road	63rd Ave to 57th Ave	South Spokane County	
Day Mt Spokane Rd	Shared use path	Bruce Rd to Greenbluff	North Spokane County	
Eagle Ridge	Path or bike route	Marshall Rd to Fish Lake Trail	West Spokane County	
First/Last Mile Connections	Various	0.5 to 1.0 miles	Systemic	
Five Mile Prairie Pathways	Connections to paved paths, sidewalks, bicycle facilities, and additional developments upon area buildout	Within the area of the identified sub-area plan	North Spokane County	
Five Mile Prairie Pathways	Connections to paved paths, sidewalks, bicycle facilities, and additional developments upon area buildout	Within the area of the identified sub-area plan	North Spokane County	
Frederick Ave	Bicycle facility	Already being managed by COS/Parks?	East, north of Liberty Lake	
Fredrick Ave "Minnehaha Path"	Path	Spokane city limits (Havana St) to John H. Shields Park	East Spokane County	

Freya Street	Sidewalk	Hastings Rd to Grace Ave	North Spokane County
Future West Plains Community County Park	TBD, potential for paths, sidewalks, and crossing treatments	TBD upon project completion	West Plains
Future West Plains Community County Park	TBD, potential for paths, sidewalks, and crossing treatments	TBD upon project completion	West Plains
General Mead Area	Sidewalks or Paths	Areas of older development	North Spokane County
Glenrose Path	10'-12' path	Palouse Highway/57th to Big Springs / Spokane City Limits	Southeast of COS
Glenrose Path	Path	57th to Spokane City limits (17th)	South Spokane County
Glenrose Rd	Bike lanes or bike path	Addition of bicycle lanes and possible connections to other bicycle routes	Southwest Spokane County
Government Way	10'-12' path	Connect path from Houston Rd to existing Government Way path 0.75 miles	West of COS
Graves Rd	Neighborhood greenway	Connect Greta bike path to Holmberg Park	North Spokane County
Greater Morgan Acres Sub-Area Plan	Connections to paved paths, sidewalks, bicycle facilities, and additional developments upon area buildout	Within the area of the identified sub-area plan	North Spokane County
Greater Morgan Acres Sub-Area Plan	Connections to paved paths, sidewalks, bicycle facilities, and additional developments upon area buildout	Within the area of the identified sub-area plan	North Spokane County
Grove Rd	Bike lanes or bike path	Connect to I-90 Interchange	West Spokane County
Grove Road	Path	Thorpe to I-90	West Spokane County
Harvard Rd	10' - 12' path	Wellesley Ave to Euclid Ave 1.0 mile	East, north of Liberty Lake
Hastings Rd	Bicycle facility	Mill Rd to US 395 0.85 miles	North Spokane County

Hatch Rd	Add sidewalks to the	Midway Rd to Urban	North Spokane
Tracer Na	west side of road	Area Boundary (2.75 miles)	County
Hatch Rd Phase 1	Add bike lanes,	Midway Ave to Urban	North Spokane
Haten Ka i nase 1	sidewalks, swales, and	Growth Area	County
	improve pedestrian	Growth 7 in ed	
	crossings		
Hatch Rd Phase 2	Add bike lanes,	Midway Ave to Urban	North Spokane
	sidewalks, swales, and	Growth Area	County
	improve pedestrian		
	crossings		
Hawthorne Rd Path	Shared use path	COS limits to Nevada to	North Spokane
		Children of the Sun Trail	County
Hawthorne Road	Path	Nevada St to Children of	North Spokane
		Sun Trail	County
Hayford Rd	Bike lanes or bike path	TBD	West Spokane County
Hayford Rd	Addition of sidewalk	Richland Road to	West Spokane County
	on east side of road	Westbow	
		Road (0.33 miles)	
Holmberg Park	RRFB and pedestrian	spot locations	North Spokane
crossing	island and/or improved		County
improvements: Wall St & Graves Rd,	pedestrian crossings		
Whitworth Dr. & Wall			
St, and Waikiki Rd. &			
Banbury Dr.			
Homberg Park Bike	Bicycle facility Through neighborhood		North Spokane
Route		then on to Wall St	County
Little Spokane River	Connections to paved	Within the area of the	North Spokane
Trails and Pathways	paths, sidewalks,	identified sub-area plan	County
Sub-Area Plan	bicycle facilities, and		
	additional		
developments upon			
Little Cooleans Diver	area buildout	14/(4h-) - 4h	No while Considering
Little Spokane River	Connections to paved	Within the area of the	North Spokane
Trails and Pathways Sub-Area Plan	paths, sidewalks, bicycle facilities, and	identified sub-area plan	County
JUN-AICA FIAII	additional		
	developments upon		
	area buildout		
Lynwood Elementary	Greenway on Rhoades	COS boundary to Wall St	North Spokane
,	Ave	•	County
Madison Road	Sidewalk or Path on	40th Ave south to Thorpe	Southeast Spokane
	east side of road	Road	County adjacent to
			the City of Spokane
			Valley

Maringo Dr	Neighborhood	Upriver Dr past Farr Rd	East Spokane County
24 1 10	greenway	5 1151 11 116	N C
Market St	Bicycle facility	Farwell Rd north to US 206 1.0 mile, Francis to SR206 (Phased?)	North Spokane County
Market St	Path or bike route	Children of the Sun Trail to SR 206	North Spokane County
Market Street	Path	Farwell Rd to SR-206	North Spokane County
Mead-Mt Spokane Sub-Area Plan	Connections to paved paths, sidewalks, bicycle facilities, and additional developments upon area buildout  Within the area of the identified sub-area particles.		North Spokane County
Mead-Mt Spokane Sub-Area Plan	Connections to paved paths, sidewalks, bicycle facilities, and additional developments upon area buildout	Within the area of the identified sub-area plan	North Spokane County
Meadow Ridge Elementary	Sidewalks, 20 MPH when flashing and improved crossing infrastructure	Day Mt. Spokane Rd from Myrtle Rd south to Freya St and terminating at Moody Rd	North Spokane County
Meadow Ridge Elementary	Crossing improvements	Freya St, Day-Mt. Spokane Rd and Moody Rd crossings	North Spokane County
Melville Rd Park	Sidewalks, crossings, path, and connectivity	Thomas Mallen Rd to Hayford Rd	West Spokane County
Midway Elementary	Crosswalk relocation, crossing treatments, 6' sidewalks, bike lane restriping	Intersection of Midway Rd and Hatch Rd	North Spokane County
Mullen Hill Elementary	Sidewalk and crossing improvements	west of school on 63rd Ave	South Spokane County
Nevada St sidewalk and path	Fill in gaps in sidewalk on west side of road	Nevada St spot locations / path from Hawthorne Rd to US-2	North Spokane County
Nevada Street	Complete sidewalk gaps and 10'-12' path on east side	US-2 to Hawthorne Rd	North of COS (tie into Nevada or Hawthorne facilities with COS)

Palouse Highway	10'-12' path Fill gap on Palouse Highway Shared Use Path		South Spokane County	
		(0.50 miles) & connect to Moran Prairie PnR and 57th		
Prairie View Elementary	Potential path and crossing improvements	Johansen Rd to Five Mile Rd	North Spokane County	
Price Rd	Bike land and sharrows	Division St to Weipert Dr	North Spokane County	
Rhoades Ave	Greenway	Wall St to Normandie	North Spokane County	
Safe Routes to Transit	First and last mile connections to transit	Systemic	High Priority Transit Stops	
Seven Mile Rd crossing improvements	New reflective signs, relocate, and upgrade the crosswalk	Spot location at Riverside Park Dr and Seven Mile Rd	Northwest Spokane County	
Snowden Elementary Sidewalks	Construct sidewalk on south side of Hallett and west side of Thomas Mallen, marked crosswalk, curb ramps	Thomas Mallen Road to Holly Rd (0.34 miles)	West Spokane County	
Spokane County Regional Trails Sub- Area Plan	Connections to paved paths, sidewalks, bicycle facilities, and additional developments upon area buildout	Within the area of the identified sub-area plan	System wide	
Spokane County Regional Trails Sub- Area Plan	Connections to paved paths, sidewalks, bicycle facilities, and additional developments upon area buildout	Within the area of the identified sub-area plan	System wide	
SR-206	Path	US-2 to Mt. Spokane High School (Mead -Mt. Spokane Transportation Study)	North Spokane County	
Sub-area plan	Various	Yet to be determined	Within the 5 sub-area	
Trolley Trail	10'-12' path	City of Spokane limits to Thorpe Rd	West Spokane County	
Trolley Trail Path	Path	TBD	West Spokane County	
Upriver Dr	Sidewalk	Bessie Rd to Wellesley Ave	East Spokane County	

Upriver Drive	Addition of sidewalk to Upriver Drive	Argonne Rd to Farr Rd (0.37 miles)	Central Spokane County, north of the City of Millwood
US-2	Path	Nevada St to North Access Road Costco Path	North Spokane County
Waikiki Road sidewalk or path	Sidewalk or Path	Hatchery Road to Mill Road	North Spokane County
Wellesley Ave	Sidewalk	Upriver Dr to Argonne Rd	East Spokane County
West Plains Sidewalks	Addition of sidewalks to the STA Park & Ride	Approximately 0.82 miles of new sidewalk along Aero Rd and Westbow Rd	West Spokane County
Whitworth Dr.	Sidewalk or path	Hawthorne Rd to Division St /Falcon Ave /Regina Dr	North Spokane County
Yale Rd	Shared use path bridge study	Over BNSF Railroad	North Spokane County
Yale Rd	Planning study to construct pedestrian/bicycle bridge over BNSF railroad	Yale Rd and Colbert Rd	North Spokane County

<sup>\*</sup>City of Spokane (COS), City of Spokane Valley (COSV), City of Airway Heights (CoAWH), Spokane Transit Authority (STA), Park and Ride (PnR)

# Recently Completed and Current Construction

Over several years Spokane County has encouraged active transportation through scoping, obtaining funding for, and constructing various active transportation facilities. Constructed facilities have become assets to many areas throughout the County, serve different neighborhoods, provide places to recreate, and serve various land use types. These facilities are not only constructed by Spokane County but are also constructed through developers required to finance a proportionate share of facilities to support their development and the surrounding land uses. Additionally, the active transportation facilities that have been constructed emphasize how important the connection between all modes of transportation and land use are and shows concurrency with the policies found within the Spokane County Comprehensive Plan. Table 10 shows Spokane County's recently constructed and current construction projects.

Table 10.0 Spokane Cou	inty recent and current p	edestrian construction p	projects, * denotes pro	pjects currently being constructed
				Pedestrian Generating
County Road	Type of Improvement	Project Limits	Location In County	Locations
				Compliments bicycle facilities,
Market St	Sidewalks	Parksmith Dr to Farwell Rd	North Spokane County	residential, and commercial districts
iviai ket 3t	Sidewalks	ransiliiti Di to laiweli Nu	North Spokane County	residential, and commercial districts
				Consolina and about division and his sained
Dalausa Highway	Da+h	E7th Avo to 61st Avo	South Spokano County	Compliments shared use path, mixed residential, and commercial districts
Palouse Highway	Path	57th Ave to 61st Ave	South Spokane County	An addition to the Centennial Trail that
				removes pedestrians and active
				transportation users from the
				roadway, found in the Comprehensive
Centennial Trail	Path	Carlson Rd to Charles Rd	North Spokane County	Plan
				Compliments transit routes,
Geiger Blvd	Path	Hayford Rd to Electric Ave	West Spokane County	commercial, and employment districts
	Sidewalks and ADA	,		
Wellesley Ave	Improvements	Arden Rd and continuing east	East Spokane County	Library, residential, schools
				Mulley Del Classesters, abuseles
				Mullen Rd Elementary, churches,
				Moran Prairie Library, South Hill Dog
	Sidewalks and ADA			Park, residential, and adjacent to 57th  Ave commercial. Compliments the
Crestline Street	Improvements	57th to 63rd	South Spokane County	crossing with pedestrian island at 57th.
Crestime Street	Improvements	3711110 0314	South Spokaric County	crossing with peacethan island at 57th.
				Mullen Rd Elementary, churches,
				Moran Prairie Library, South Hill Dog
	Side welling and ADA			Park, residential, and adjacent to 57th
Cook Street	Sidewalks and ADA	57th to 63rd	South Spokano County	Ave commercial. Compliments the
COOK Street	Improvements	3711110 0310	South Spokane County	crossing at 57th.
		Systemic throughout the		Compliments a neighborhood and golf
West Terrace	ADA Improvements	neighborhood	West Spokane County	course
			,	
				Improves access to the Centennial
				Trail, the City of Liberty Lake,
Harvard Rd*	Path	Wellesley Ave to Euclid Ave	West Spokane County	residential, and institutional
narvara na	Tutti	Wellesley / We to Eucliu / We	West spokane county	Provides access to multiple bicycle
				facilities, compliments residential, and
				improves safety adjacent to an
Lincoln Rd*	Path	Crestline St to Market St	North Spokane County	industrial zone
				Neighborhood, school, and
Rowan Ave	ADA improvements	Starr Rd to Idaho Rd	East Spokane County	institutional
	Pedestrian crossings, ADA			
Glenrose Rd	improvements	Havana St to Glenngrae Ln	East Spokane County	Neighborhood
	Pedestrian crossings, ADA			
Yale Rd	improvements	Yale Rd and Glenrose Rd	South Spokane County	Schools and neighborhood
Frova Avo	Pedestrian crossings, ADA	61st to 62rd	South Spokana County	Neighborhood and South Side Aquatic
Freya Ave	improvements	61st to 63rd	South Spokane County	facility
				Compliments bicycle facilities and
Little Spokane Drive	•	Wandermere Rd to Little		shared use path, serves residential,
Connector Pathway*	Path	Spokane Dr	North Spokane County	found in Comprehensive Plan
Wellesley Ave (Otis Orchards		Sportation Di		Safety improvement project directly
Elementary Safe Routes to	Sidewalks and improved			benefitting school age children,
School)*	crossing infrastructure	Harvard Rd to Arden Rd	West Spokane County	residential, and commercial districts
		•	· · · · · · · · · · · · · · · · · · ·	

	1	1		i e
	Sidewalks, 20 MPH when	Day Mt. Spokane Rd from		
	flashing and improved	Myrtle Rd south to Freya St		
Meadow Ridge Elementary	crossing infrastructure	and terminating at Moody Rd	North Spokane County	Residential and institutional
Weadow Mage Elementary	Sidewalks, crossings, path,	Thomas Mallen Rd to	North Spokane County	Residential and institutional
Melville Rd Park	and connectivity	Hayford Rd	West Spokane County	Spokane County Parks & Area HOAs
Wiching Na Fark	Connections to paved paths,	riayrora na	West spokane county	Spokane county ranks dyffed from
Little Spokane River	sidewalks, bicycle facilities,			
Trails and Pathways Sub-	and additional developments	Within the area of the		County parks, right of way, residential,
Area Plan	upon area buildout	identified sub-area plan	North Spokane County	commercial, and institutional
7.1.04 1 14.11	Connections to paved paths,	identified sub-dred plan	Troitin spokane county	commercial, and institutional
	sidewalks, bicycle facilities,			Residential, institutional, right of way,
Greater Morgan Acres	and additional developments	Within the area of the		existing pedestrian and bicycle
Sub-Area Plan	upon area buildout	identified sub-area plan	North Spokane County	infrastructure
	Connections to paved paths,	·		
	sidewalks, bicycle facilities,			Residential, institutional, right of way,
Mead-Mt Spokane Sub-	and additional developments	Within the area of the		existing pedestrian and bicycle
Area Plan	upon area buildout	identified sub-area plan	North Spokane County	infrastructure
	Connections to paved paths,			
	sidewalks, bicycle facilities,			
<b>Spokane County Regional</b>	and additional developments	Within the area of the		County parks, right of way, residential,
Trails Sub-Area Plan	upon area buildout	identified sub-area plan	System wide	commercial, and institutional
	Connections to paved paths,			
	sidewalks, bicycle facilities,			Residential, institutional, right of way,
Five Mile Prairie	and additional developments	Within the area of the		existing pedestrian and bicycle
Pathways	upon area buildout	identified sub-area plan	North Spokane County	infrastructure

# Chapter 9

# **Project Implementation**

Implementation of the Spokane County Active Transportation Master Plan will be implemented and led by the Spokane County Public Works Department. This Plan will guide the county's ongoing work and be updated every three to five years and in conjunction with other transportation related plan updates. The Public Works Department will coordinate the implementation and recommendations of this plan with all other transportation related documents for the most current information to best serve county residents. Each recommendation will be implemented in collaboration with the appropriate county departments, local, and state jurisdictions. Progress of the plan will be monitored and tracked to measure performance and allow for new and innovative approaches to complex active transportation related issues. Monitoring the Plan's progress will be done by how many additional facilities are added, if connectivity is improved, health trends over time, and serious injury and fatality trends.

Since Spokane County operates on a constrained budget, active transportation facility projects may be combined with other transportation improvement projects such as preservation, safety, and corridor improvements rather than as standalone projects. Funding for implementation will come from grant funding and county allocated funds when available. The county actively seeks grant opportunities to accelerate the implementation of projects and overall active transportation improvements throughout the jurisdiction.

The county will focus primarily on project scoping and on recommendations that have been identified as a high priority for short term implementation and as funding allows. With limited funding, Spokane County must decide what projects to prioritize. Projects with minimal tradeoffs and community support can typically be installed as part of a street repaving project. These projects are considered short range projects. Long range projects are projects that require a community outreach process, evaluation of highest-ranking alternatives, and require multiagency coordination.

Priority projects are primarily safety improvement projects, but project implementation may also be given to projects that meet two or more criteria in terms of safety, access, gap closure, and allow for low-cost solutions. The first step of the prioritization process identifies projects that would provide the greatest benefit to Spokane County residents and align with the various multi agency goals. Selection criteria included but may not be limited to:

## Safety Improvement Projects

These projects improve active transportation safety on the arterials and collector roads, intersections with a known pedestrian or bicycle vs. vehicle collision history and aim to provide parallel routes that provide alternatives to a roads and intersections with higher LTS ratings.

In 2017 Spokane County did a large standalone project that consisted primarily of upgrading pedestrian facilities. The safety project initiated the upgrade and prioritizing of pedestrian push buttons, signals, and curb ramps throughout the county. Of the 19 signalized intersections that Spokane County owns and maintains 15 intersections needed to be upgraded. The improvements produced a total of 51 individual pedestrian push buttons upgraded to meet current ADA requirements. All pedestrian push buttons were reviewed and upgraded to meet clear space for operable parts, mounting heights, and accessible APS pedestrian signals. In 2019 a rectangular rapid flashing beacon and pedestrian island was installed to facilitate access to transit and eliminate mid-block crossing on busy Wall Street and south of Shasta Way. Also, in 2019 various pedestrian crossing improvements were installed on 57th Street. This is a busy two-lane road with a center turn lane serving a mix of residential and commercial districts with a history of pedestrians being struck by vehicles.

#### **Destination Connectivity Projects**

These projects provide direct active transportation connections to local destinations including schools, libraries, recreation centers, and major transit stations.

#### **Gap Closure Projects**

These projects strive to reduce and close gaps in the existing active transportation network.

#### **Low-Cost Solution Projects**

These projects align with pavement preservation projects that are simultaneously preserving active transportation infrastructure. Additional low-cost solutions to improve the active transportation network could include restriping bike lanes to help designate bicyclists as a

priority on the transportation system, additional signage, wayfinding, ADA improvements, and small sidewalk gap closures.

## **Short Range Projects Project Ideas**

- Prioritizing collector streets and increasing separation along busier streets, an active transportation network that feels safer will increase active transportation use.
- Neighborhood greenways are local access streets with low motorized traffic volumes and speeds designated and designed to give priority to multimodal users. Neighborhood greenways use signs, pavement markings, are designed for low speed and low volume, and discourage cars from cutting through neighborhoods for a more comfortable active transportation experience. Neighborhood greenways are selected based on households adjacent to public institutions, commercial centers, and essential services. Currently, Spokane County has the Greta to Whitworth Bike Route as the one designated greenway.
- Filling in gaps in the active transportation infrastructure system to improve connectivity and expanding the designated space allotted for active transportation could be examples of short-range projects.
- The county's current practice is to construct all new signals with APS, there are only a
  few signals in the county that do not have APS installed. APS upgrades are installed
  upon new development and a significant amount were installed as part of the 2017
  Spokane County Safety Project.

## Long Range Planning Project Ideas

Connecting large gaps in the active transportation network and connecting the network infrastructure to adjacent cities within the county could be considered long range projects. Building connections to parks, aquatic centers, institutions, and essential services that are lacking connectivity could be considered long range projects. Walk Scores

Walk Scores are based on distance to amenities and pedestrian facilities from where people live. The Walk Score is scored from 0-100 with anything scoring under 50 being car dependent. This would give staff a visual idea of areas that are adjacent to city boundaries that might be good future pedestrian facility projects and help plan for forecasted growth. A Walk Score Data heat map could also be used to better understand if there are schools, senior centers, parks, etc. that need pedestrian facility improvements.

Practices to Continue

# Construct ADA accessible facilities with all road improvements

Some sidewalks along county roads are challenging to pedestrians due to barriers in the sidewalk, lack of connectivity, and can be especially challenging for persons with disabilities. Through the ADA Transition Plan the county has conducted an inventory of curb ramps and pedestrian push buttons at intersections. An inventory of sidewalk conditions would be insightful and should include obstructions, clear space, sidewalk cross slope and running slopes that do not meet ADA standard, and trip hazards. This inventory could be used to develop priorities for improving conditions of sidewalks along county roads and adding these pedestrian projects into larger road rehabilitation projects. As part of this strategy, county staff encourages residents to report obstructions and poor sidewalk conditions to the public Works Department.

Continue Best Practice Guidelines for the Installation of Rectangular Rapid Flash Beacons

Rectangular Rapid Flashing Beacons (RRFB) signals can improve pedestrian safety in certain circumstances. RRFB signals may increase pedestrian safety especially when crossing multiple lanes and when there is not a midblock pedestrian refuge feasible. Community interest in these signals has increased in recent years, however it should be noted that advanced signalization and RRFB signals are not always feasible or appropriate at every signalized intersection within Spokane County. WSDOT has developed guidelines for installation of RRFB signals to ensure that these signals are appropriately installed across the state and county road system. When it is determined that these types of signals are appropriate to install guidance should be based on research and guidelines from WSDOT, the Federal Highway Administration (FHA), MUTCD, and AASHTO. The effectiveness of these signals should be monitored to ensure that they are making a positive impact on pedestrian safety.

Currently the Spokane County has implemented 9 RRFB signals located at the following roads:

- Wall Street south of Shasta Way;
- Hawthorne Rd west of Colfax Rd;
- Whitworth Drive north of Hawthorne Rd;
- Hawthorne Rd west of Whitworth Drive;
- Market St south of Farwell Rd;
- Five Mile Rd south of Hawthorne Rd (north);
- Hastings Rd at Mead High School;
- Day Mt. Spokane Rd at Mountain Side Middle school;
- and Five Mile at Bob Olson Ln.

# Plan and Construct Multi-Use Paths Along County Roads to Provide Multimodal Pedestrian Facilities

The county currently plans for multi-use paths and works with municipalities and developers to plan and construct these separated paths along county roads. Multi-use paths provide for both pedestrian and bicycle use. This plan supports the continued planning and construction of multi-use paths along county roadways to provide pedestrian facilities where none exist.

# **Review Active Transportation Crashes Annually**

Public Works will continue to analyze active transportation incident trends annually. This includes the number, severity, and locations of incidents along county roads. This information is used as an important resource to identify ways to improve safety through the implementation of this plan and other Spokane County plans and projects. The database used to report crashes provides data on the year of incident, location, time, type of crashes, severity, fatalities, and property damage. An evaluation procedure provides consistency and clarity on the locations, types, and severity of crashes. This data is indicative of ways technology can be implemented to create safer facilities.

# **Spokane County Safe Routes to School Program**

Safe Routes to School is a document developed by the school districts in an effort to find the safest way for children to get to school and back and encourage walking and biking for school age children. Spokane County's Public Works department does not write the document but is a partner to help support and expand the Safe Route to School plans that are developed by the schools. The program is currently grant funded through WSDOT. The County's role will be to continue seeking Safe Routes to School funding and implement active transportation improvements within a half mile of school districts in collaboration with the school districts. These actions enable and encourage biking and walking to school, improve safety, increase the numbers of active commuters to school, and improve the accessibility of children being able to actively walk and bike to school. County staff will continue working to obtain funding for infrastructure improvements and encourage program success within schools and school districts.

### **Strategies to Implement**

#### **Safe Routes to Transit**

Within unincorporated Spokane County Spokane Transit Authority (STA) operates, serves, and maintains 33 individual bus stops. There are four major park and rides serving the greater Spokane area located to the north, south, and west of the city centers. Transit is a primary source of transportation for a significant amount of county residents especially for the young, elderly, and low income. There is a need to assess the active transportation network that leads to transit stops and implement changes and upgrades based on how people access and use their built environment. A complete active transportation network for access to transit stops includes a complete sidewalk network, ADA compliant curb ramps and pushbuttons, safe and appropriate crosswalks, and pedestrian scaled lighting. A Safe Routes to Transit project would be a collaborative project involving Spokane County, Spokane Transit Authority (STA), and other regional transportation partners.

### A Comprehensive Demographic Assessment Within the County

Identifying locations within the county that are most likely to suffer from health disparities, chronic disease, and disabilities, based on data gathered through the Spokane Regional Health Department and the U.S, Census should be incorporated into active transportation facility

priority planning. This strategy targets geographic areas with populations experiencing the most need for improving ADA compliance and access to sidewalks and multi-use paths to better address gaps and barriers in the active transportation network. Census tracts with these specific demographics are primarily located in the city centers, but also north and east as well as a substantial portion of the southeast of Spokane County.

Community concerns voiced through complaints and community engagement also help to identify locations that are challenging or perceived to be challenging for active transportation users to navigate. Locations identified as challenging to travel, combined with county staff tracking the locations of people vs. vehicle crashes, can help determine places to prioritize and evaluation procedures to monitor these locations for potential safety improvements. This encourages a data driven approach to improving safety at the highest priority locations. Spokane County encourages residents to report connectivity and safety concerns. The reporting process allows residents to have a specific point of contact with the county for their active transportation related concerns. For questions and concerns about the county pedestrian network please contact the Spokane County Transportation and Development Services Engineer.

The County Transportation Element (TE) is a document that houses a 20-year vision for Spokane County's transportation network. The TE is one place in many County documents that identifies safety improvements for all users of the transportation system within the county. As the TE gets updated so will the Active Transportation Master Plan, the ADA Transition Plan, and all other transportation related plans that are referenced in this primary transportation planning document. As crash trends change throughout the years, the various county transportation planning documents will be updated. Staff are continually learning and researching new active transportation related safety countermeasures that may improve safety and identify any new locations of increased active transportation-vehicle crashes.

# **Partnerships**

County staff works with WSDOT, SRTC, adjacent cities, school districts, Spokane County Parks Departments, STA, and developers to encourage the construction and completion of active transportation facilities to provide better access to schools, parks, senior centers, transit, and commercial services. The highest priorities should be to fill in gaps along county roads within 1/2 mile of schools, parks, and other pedestrian generators. Staff should encourage funding for sidewalk and bikeway construction near schools, parks, and other pedestrian generators including those within school zones where facilities are incomplete.

Partnering with Spokane Transit Authority (STA) to encourage wayfinding and pedestrian scale lighting on common routes to bus stops would improve transit user safety and help new users find their way to and from this important transportation option. If an opportunity presents itself, either through standalone projects or grant funded opportunities, it would be worthwhile to collaborate towards installing bus stop shelters for transit riders at the busiest bus stops. In addition to this, Spokane County's Target Zero liaison should work with schools within county

boundaries to encourage active transportation and safety education through the school district's curriculum.

# **Funding Strategies**

Spokane County allocates between \$500,00 and \$600,000 annually for active transportation projects dependent upon the annual County budget. Project implementation of the active transportation network as well as any proposed active transportation projects relies on supplemental funding from local, state, and federal entities for projects. Grant funding for active transportation is typically a small fraction of available transportation funds and grants are often extremely competitive and tend to be primarily allocated for urban projects. However, a variety of sources exist to help fund active transportation infrastructure projects, programs, and studies. Local, state, and federal funding sources that can be used for construction or maintenance of bicycle or pedestrian improvements, along with competitive grant programs are described here.

# **Funding Sources**

**Safe Routes to School**- The purpose of the Safe Routes to School grant program is to improve safety and accessibility of travel to and from schools. Through safety improvements children are able and encouraged to walk and bike to school. Funding for this grant is for all schools aged children (K-12) within two miles of all schools. This grant is administered through WSDOT and the federal government and on a two-year cycle.

**Bike/Pedestrian Safety**- This program has been active since 2005 and is administered through WSDOT. The goal of this grant program is to improve safety for those who choose to travel by means of active transportation and biking and improve the travel infrastructure that makes this kind of active transportation possible. This grant program is on a two-year cycle.

**Connecting Washington Multimodal-** This grant was passed into the Washington State legislature in 2015 and is intended to last for 16 years. This is a large grant program that facilitates general funding for biking, pathways, rail, and transit.

### **Transportation Improvement Board Complete Streets Awards-**

This grant is awarded to local governments that have adopted a Complete Streets Ordinance and demonstrates that their planning and building practices are intended to accommodate all users of all ages and abilities. The grant is awarded on a two-year cycle.

**Transportation Improvement Board Urban Arterial Program-** This grant is awarded to arterials in urbanized areas in a two-year cycle and scored on safety, growth and development, physical condition of the arterial, mobility, sustainability, and constructability. Grant funding provides awardees the ability to improve both arterial roadways as well as improve pedestrian infrastructure for long term sustainable transportation options.

**Transportation Improvement Board Active Transportation Program**- The Active Transportation Program provides funding to improve pedestrian and cyclist safety, enhanced pedestrian and cyclist mobility and connectivity, or improve the condition of existing facilities on principal, minor, and collector roads.

**Surface Transportation Block Grant (STBG)**- This grant is the most flexible of all the WSDOT grants that are distributed through SRTC due to the broad range of transportation related components that this grant can fund. This grant may apply to public roads, pedestrian and bicycle infrastructure, and transit.

**STBG Set Aside**- This is a Federal Highway Funds grant distributed by SRTC that specifically funds transportation alternatives and funding for bridges not located on Federal aid highways.

**CMAQ-** The CMAQ is a federal funding program administered to State and local governments for transportation related projects that help improve air quality and reduce traffic congestion.

**Private Sources-** There may be opportunity for private investment for active transportation.

### Maintenance

Spokane County strives to keep the roadways safe, comfortable, and free of hazards and this is done in part by the County Maintenance division. Most county roads are swept and cleaned in spring to clean up the remnants of winter sand ensuring smooth pavement and the removal of debris and vegetation along the roadway. Active transportation facilities within the jurisdiction of Spokane County are included in the annual maintenance of county roads, as well as the maintenance of traffic control devices, striping, and signage that facilitate active transportation travel.

To ensure proactive maintenance of active transportation facilities, as well as response to maintenance requests by residents, County residents can submit requests to the Public Works Department through the county website or reach out to the Spokane County Public Works Senior Project Manager to report issues that may affect active transportation infrastructure. Reported issues will be circulated internally to the correct department for consideration or remediation.

Active transportation facility maintenance is addressed as part of planning and design process and through collaboration across Spokane County Public Works departments. Current efforts to ensure clean and clear active transportation infrastructure include but are not limited to:

- Maintenance needs are included in the design of Spokane County active transportation facilities to ensure proper maintenance after construction.
- Operational issues such as crossings, vehicular parking, and traffic operations are addressed during the design process to ensure that shared use paths, intersections, and vehicular traffic can be properly maintained and operate safely.

• Planning efforts for bike lanes and shared roads are coordinated with Spokane County Pavement Management to ensure good pavement quality.

#### Performance Measures

Evaluating performance measures is the best way to determine whether the goal and the delivery of the project meet the expected outcomes. Performance measures are an important part of this plan and help to track Spokane County's success and reprioritize goals if needed. They are directly related to the goals established in Chapter 1 and are used to monitor progress, optimize success, or redirect strategies as needed.

### -Increase Active Transportation Safety

Spokane County's staff goes through an incident safety analysis regularly on the county road system. Crash data is provided by the Spokane County Sheriff's Department to provide a high level of accuracy and reliability. Included in the crash data reports is information about the severity of injuries resulting from incidents on the county road system, time of day, details of the incident, and if there are fatalities. The purpose of tracking the number of incidents is to understand where incidents are occurring, to understand trends in the severity of crashes, and to predict where pedestrian generating land uses may cause accidents even if they are not currently occurring at a specific location for a systemic approach to eliminating crashes. The ultimate objective is to obtain the vision zero goal of reduce crashes and reach zero fatalities.

#### -Level of Traffic Stress

Decreasing the LTS is another way to improve the safety of active transportation users in Spokane County. The LTS of multimodal facilities can be lowered using many options including but not limited to:

Making sure that bike lanes are clearly marked;

Provide separation from vehicular traffic when feasible;

Reduce speed limits when possible;

Analyze busy intersections for improvements that make active transportation easier and improve connectivity and;

Provide adequate lighting as many incidents occur when vision is compromised.

### -Connectivity

Well-connected active transportation infrastructure systems are a key component to get more people of all ages and abilities to use active transportation. Performance measures for connectivity can be measured with the number of sidewalks, shared use paths, and bicycle lane gaps that get filled in as well as added to transportation system. These measurements are particularly important to desirable destinations like places of employment, schools, community/commercial centers, and neighborhoods.

### -Livability, Health, & Equity

Performance measures for livability, health, and equity should address access to amenities such as parks, libraries, and important institutions to improve health and wellbeing. Other performance measures could include measuring safety, education, employment, and preventable chronic diseases within census blocks. This data may come predominantly from the Spokane Regional Health Department.

#### -Mode Choice

The goal of providing transportation options benefits everyone. Increased walking, biking, and rolling for transportation reduces the number of vehicles on the road, reduces traffic congestion, and improves air quality. Having transportation choices especially benefits those that are limited to the number of vehicles in a household, those that are too young to drive, those that cannot afford to drive, and those that choose not to drive. An inadvertent consequence people may experience is an improvement to their physical and emotional health.

Despite long and cold winters in the Inland Northwest, active transportation can still be achieved when temperatures drop, and daylight hours are reduced. Other places that have comparable winters to Spokane County, or worse, with residents that choose active transportation year-round include Calgary, Chicago, Madison, Minneapolis, Montreal, and Salt Lake City. Achieving the goal of improved transportation choices for county residents and increasing the number of people choosing active transportation year-round is facilitated by decreasing the gaps in the active transportation system, decreasing LTS when feasible, improving safety through crash data analysis and implementing countermeasures to protect vulnerable roadway users, education of sharing the road for both active transportation users and drivers, and reducing theft of bicycles.

Spokane County encourages public input on active transportation facility deficiencies, suggestions for improvements, safety concerns, what projects are being done that prove to be beneficial, and projects that improve the quality of life for active transportation users in unincorporated Spokane County. Continual community discussion is critical to achieve the goals of this Plan and to ensure that the Plan keeps momentum. Spokane County will continue to monitor crash data and implement best practice countermeasures. Additionally, Spokane County will continue to evaluate and implement active transportation infrastructure projects to better understand how improvements to county facilities impact and provide benefits. Information about new and improved facilities will be shared with the public on the Spokane County website and through social media channels.

### **Bike Share**

Currently micro mobility in Spokane County is limited to the city boundaries. It may be worth considering if bike sharing and electric scooters could benefit county residents where city and county jurisdiction meet. Due to the rural nature of the county this obviously does not make sense in the more rural context. Micro mobility is an increasingly popular form of

transportation in Spokane with approximately 300,000 trips made in 2019. This could be extended to within a half mile of the cities to accommodate the densely populated areas where the county interfaces with the cities, this would be particularly relevant in north Spokane County and on the South Hill just outside of the City of Spokane city limits. Where the county and the cities interface there are commercial, educational institutions, and residential developments that may benefit from added micro mobility. This may be a solution to the critical first/last mile people have accessing transit. Just like all components of transportation, micro mobility has its own barriers such as pricing, credit card requirements, access to a cell phone, and a lack of familiarity with how the system works. The trend shows bike sharing and electric scooters have increased over time and is here to stay.

#### Additional resources

### 1-C.O.P.S

Register your bike and scooter in case of theft for quick recovery. https://www.spokanecops.org/how-to-register-your-bicycle

Every year, C.O.P.S. volunteers register hundreds of bicycles and scooters throughout the city of Spokane.

- Volunteers take information on the bicycle or scooter, including size, color, and serial number.
- The owner of the bicycle or scooter will give their name, address, and phone number so they can be contacted if their bike or scooter is found.
- A numbered sticker is placed on the bike or scooter that will identify the substation and the owner information.
- Some C.O.P.S. shops sponsor Bike Rodeos and Safety Fairs where bikes can get inspected and tuned-up.

#### 2-Spokane Bike Swap and Expo

The bike swap is your region's only biking and biking equipment event featuring hundreds of new and used bikes, offering something for everyone. Exhibitors sell new bicycles, accessories and promote their products and services including cycling events, health and wellness programs, recreational non-profits and more. The Spokane Bike Swap is a wonderful way to donate or consign bikes you have outgrown, don't ride, or want to upgrade. It also provides affordable bikes for those who cannot afford to purchase a new one.

#### 3-Spokane Bicycle Club

The Spokane Bicycle Club is a recreational and social organization that promotes cycling for fun and health. They advocate for safe cycling through sponsoring and supporting cycle-positive events and activities as well as involvement in local, state, and national transportation legislation. They educate members on bicycle safety, local cycling routes, and cycling

innovation. Socially the Spokane Bicycle Club organizes group rides accommodating riders of various skill levels with organized bicycle rides that cover a variety of terrains, distances, and organizing multi-day cycling tours. Additional social opportunities are provided through monthly meetings, bimonthly newsletter.

# **Appendix**

### **Bicycle Survey Questions**

- 1-Where do you ride your bike? School, work, shopping, restaurants/coffee shops, parks/trails, library, bus stops, other?
- 2-Where do you wish you could ride your bike but do not?
- 3-What would make your biking experience better? Protected bike lanes, better lighting, better police enforcement, safer intersections, better signage and wayfinding, wider bike lanes, more separation from vehicles, other?
- 4-What barriers to biking do you encounter? Unconnected bicycle network, narrow roads, issues with vehicle separation, lack of bike lanes, lack of bike lanes with buffer, unsafe intersection, unpredictable drivers, poor road conditions, too much traffic, other?
- 5-Why do you bike? Recreational, primary mode of transportation/commuting, environmental reasons, to improve health, for fun?
- 6-How often do you bike? 0-1 day a week, 2-3, more than 4?
- 7-How long are your bike trips? 0-30 minutes, 30-1 hours, 1-2 hours, greater than 2 hours?
- 8-General areas of Spokane County you would like to see bicycle facility improvements made?

#### Real and Perceived Challenges (Rank top 3)

Aggressive Drivers
Bike theft
Getting hit by a car
Secure bike parking
Distance to destination
Lack of bicycle facility connectivity
Knowing the best route to take
Carrying needed items
Bike issues (flat tires)
Knowing how to get bike on STA bus/lifting bike
Time needed to get to destination

Knowing the rules on the road Transporting kids Owning a bike/bike that fits Maintenance of bicycle facilities

# **Pedestrian Survey Questions**

- 1-How many times a week do you walk as a form of transportation or for recreation? 0-1 day a week, 2-3 times a week, more than 4?
- 2-Where do you walk to when you are walking for transportation purposes or for recreation? School, work, shopping, restaurants/coffee shops, parks/trails, library, bus stops, other?
- 3-Where do you consider a great place to walk and why?
- 4-Any specific places you avoid walking and why?
- 5-Any notable places that you walk that need improvement? What type of improvements?
- 6-What improvements would make walking feel safer?
- 7-What barriers do you encounter when walking? Unconnected sidewalks, difficult intersections to cross, lack of curb ramps, issues with vehicle separation or vehicle speed, unsafe intersection, too much traffic, lighting, other?
- 8-Do you encounter any difficult intersections to cross when walking?
- 9-What deters you from walking more?

# References

Safety.fhwa.dot.gov

Evaluating the Connectivity of an Active transportation Network (northeastern.edu) https://cpb-us-w2.wpmucdn.com/sites.northeastern.edu/dist/e/618/files/2016/03/2015-Evaluating-the-Connectivity-of-a-Active transportation-Network-Furth-Noursalehi-TRB.pdf

City of Spokane/ <a href="https://my.spokanecity.org/projects/wheelshare/">https://my.spokanecity.org/projects/wheelshare/</a>

City of Spokane Valley Bike and Pedestrian Master Program - Spokane Valley, WA https://spokanevalley.org/BPMP

Active Transportation Plan | WSDOT (wa.gov) https://wsdot.wa.gov/construction-planning/statewide-plans/active-transportation-plan

Horizon 2040 | SRTC https://www.srtc.org/horizon-2040

Helmet Laws | Spokane City and Spokane County <a href="https://ccdlaw.com/safety/bicycle-helmet-law/">https://ccdlaw.com/safety/bicycle-helmet-law/</a>

Spokane C.O.P.S. (spokanecops.org)

Guidance to Improve Pedestrian and Bicyclist Safety at Intersections, NCHRP, 2020 <a href="https://tooledesign.com/project/nchrp-guidance-to-improve-pedestrian-bicyclist-safety-at-intersections/">https://tooledesign.com/project/nchrp-guidance-to-improve-pedestrian-bicyclist-safety-at-intersections/</a>

https://www.spokanecops.org/how-to-register-your-bicycle

https://www.spokanebikeswap.com/

State Electric Bicycle Laws | A Legislative Primer (ncsl.org)

https://wsdot.wa.gov/about/transportation-data/travel-data/bicyclist-and-pedestrian-count-programs

 $\frac{https://www.census.gov/quickfacts/fact/table/spokanecountywashington/PST045218}{https://srhd.org/media/documents/DemographicsSpokaneCounty2017.pdf} \\ \frac{https://countyhealthinsights.org/county/spokane/indicators/obesity-adult/}{https://countyhealthinsights.org/county/spokane/indicators/obesity-adult/}{https://countyhealthinsights.org/county/spokane/indicators/obesity-adult/}$ 

