2008
SPOKANE REGIONAL BIKE PLAN

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EXECUTIVE SUMMARY

Executive Summary

Part of developing a true multi-modal transportation system for the Spokane Metropolitan area necessitates a common vision for all modes of transportation and the understanding of how they can collectively achieve the mobility needs of the community. This document updates the 1993 Spokane Regional Bicycle and Pedestrian Plan, which was used to plan, prioritize and fund a substantial number of non-motorized projects through the Federal Transportation Enhancement program. Recognizing the importance of each mode of transportation, this document is being updated separately from the Pedestrian Plan. This approach provides a clear vision of a community where bicycles can provide a viable travel choice by connecting neighborhoods with key destinations, in order to improve personal mobility, health, economy, and the environment. The Regional Bike Plan details specific goals and objectives, key regional priorities, and provides recommendations and ideas to jurisdictions undertaking bicycle planning and network design.

Goals of the Bike Plan are:

1. To increase the mode share of people bicycling for transportation
2. To identify the needs and gaps in the regional bikeway system
3. To support recreational bicycling in the Spokane region to promote physical activity and potentially stimulate economic growth
4. To enhance awareness and cooperation between all roadway users

The High Priority Bicycle Projects listed below were identified through public outreach and have been forwarded to local agencies.

1. Completion of the Fish Lake Trail	**11.** Improve safety on bike routes with narrow road widths like Rutter Parkway and Elk-Chatteroy Rd.
2. Add strategic bike lanes/improve existing bike lanes to create a connected system	**12.** Create a bicycle friendly route off 5-Mile Prairie
3. Improve bicycle connections crossing the Spokane River	**13.** Bicycle Improvements in Downriver area
4. Create better bike routes from/to the South Hill	**14.** Provide safety on the Centennial Trail
5. Create bicycle lanes in the central business district	**15.** Incorporate bicycle improvements on Bigelow Gulch Rd.
6. Develop a major North/South bike route	**16.** Identify bicycle improvements on Highway 2 on the West Plains
7. Improve Bicycling on Northwest Blvd.	**17.** Incorporate biking improvements on 37th Ave.
8. Improve bike and motorist safety on Hatch Road from 57th Ave. to S.R. 195	**18.** Improve bicycle connections to Browne's Addition
9. Improve Bicycle use on the Maple/Ash Corridor	**19.** Implement bicycle Improvements on Post and Wall Streets
10. Improve bicycle crossings on Division St.	**20.** Make bicycle improvements on Assembly St.

The Recommendations for Bike Planning are:

Key Regional Issues
*Jurisdictions should plan and retrofit arterial **streets** with all users in mind.*

Plans and Policies
SRTC, through a sub-committee of the TTC, will convene a Non-Motorized or Active Transportation Technical Committee to encourage the sharing of information across jurisdictional and state boundaries. The main purpose of the sub-committee will be educational.

SRTC will review and update, as necessary, the Regional Bicycle Plan and Map every three to five years.

SRTC will sponsor an annual meeting with the intent of sharing information amongst the bicycle-oriented groups and advocates within the Spokane area to achieve funding and implementation of bicycle projects and programs.

Design and Engineering
Jurisdictions should adopt a regional bicycle classification system to avoid confusion between users, planners and engineers.

Consider the needs of bicyclists when designing and reconstructing intersections on bicycle routes.

Conveniently spaced, safe crossings should be designed into roadway projects.

Bridge projects should include adequate space for bicyclists.

Ensure that reconstructed at-grade railroad crossings are safe for bicyclists.

Traffic calming programs should consider the needs of bicyclists during the design and engineering phase.

The jurisdictions should consider adopting ordinances that incorporate bicycle-parking requirements into the standards currently required for all new motor vehicle parking as an element of the zoning code. At a minimum, space to park two bikes or 10% of car parking (whichever is greater) should be considered.

Maintenance
A regular sweeping program should be considered on streets identified as part of the bicycle network.

Maintenance and overlay work should include attention to potential hazards for all users.

Education, Encouragement, and Enforcement
Bike education programs for young school children should be funded and expanded in the Spokane area.

Bring training to the area that will help update area planners and engineers on non-motorized facilities.

Continued support of encouragement campaigns is important to raise awareness and participation for bicycle commuting.

Provide a map or database to review bicycle-related collision statistics as a means for allowing input on reducing problems, identifying problem areas, and improving bicyclist/motorist interaction.

Bicycle and walking trips avoid approximately 35,600,000 miles of vehicle travel on Spokane's roadways annually (i.e., removing three days worth of vehicle travel from the Spokane Region) and prevents 1,674,000 lbs. of carbon monoxide emissions per year. With the factors of increasing cost of fuel and the obesity crisis, the motivation to provide a safe and comfortable built-environment (i.e., non-motorized networks) for everyday travel and exercise is elevated. As important as the built-environment is continued maintenance of the network, and supportive projects and programs to educate, encourage, and enforce bicycle travel.

SECTION 1

PURPOSE AND OBJECTIVES

PURPOSE AND OBJECTIVES

PURPOSE

This Regional Bike Plan outlines goals and objectives to strive towards as a community in order to create a safe and efficient environment for bicycle transportation. Additionally, this Plan lists the regional priorities developed through the public involvement process, lists projects currently being considered within the region and reviews various planning, engineering, and encouragement components.

Bicycling can make a contribution to the overall transportation load. Additionally, biking is a low-cost transportation mode available to almost everyone. As bike travel is becoming more mainstream, it also helps meet the needs of the less fortunate, the young, the elderly, people with disabilities, and others who do not have access to an automobile for a variety of reasons.

SRTC recognizes the important benefits of bike transportation, which can improve mobility and safety, enhance the economy, improve the health of the community and protect the environment.

Mobility and Safety

- Nearly half of all trips in the United States are three miles or less, well within the boundaries of bicycling and walking trips.
- Building more roads will not adequately mitigate congestion.
- Active transportation investments lead to increased mode share. In Minneapolis, 20% of all trips involve walking or biking. In Spokane it is only 9%.

Economic

- Car ownership is the second largest expenditure for the average American household, driving less can free up substantial resources for other needs.
- Trails consistently increase property values along their corridors.
- Trails are the top community amenity that potential homebuyers seek in a new neighborhood.

Health

- 43% of people with safe places to walk within ten minutes of home meet recommended activity levels Just 27% of those without safe places to walk do not meet recommended activity levels.
- Creating and improving places to be active can result in a 25% increase in the percentage of people who exercise at least three times a week.

Climate

- Automobiles account for about 50% of Washington State energy related CO_2 emissions.

- Walking and biking currently yield greater CO_2 reductions than other popular solutions like hybrid cars.

The emphasis now being placed on non-motorized transportation requires an understanding of bicycles, bicyclists, pedestrian behavior, and transportation facilities. Non-motorized transportation, when adequately planned for and used, plays an important part in the overall transportation system. Safe, convenient, and attractive facilities are essential to encourage safe bicycling.

BACKGROUND

The Spokane region is home to over 400,000 residents and is known for it's potential economic vitality in a natural setting while offering a high quality of life to its residents. Both the City of Spokane and Spokane County put importance on recreational and nature-related activities.

On the basis of topography, Spokane County is diversified; with mountainous areas in the northeastern part, hilly areas in most of the northern section of the county, rolling prairie in part of the southeastern section of the county and in part of the southwestern section, undulating plains underlain by basalt in the central and southern parts of the county, and broad alluvial belts in the river valleys.

This setting has a strong draw for recreational cycling. Many cyclists in the community regard Spokane as having some of the most diverse recreation cycling in the country. However, navigating throughout the more urban region is challenging. As for commuter cycling, the urban street system was not well thought out or planned in advance for cyclists. In order to develop a mode shift to non-motorized transportation, an identified bicycle network that connects centers throughout the region would be attractive and useful to many cyclists.

In Spokane County, road standards require eight-foot wide shoulders, but no sidewalks. The County maintains that the wide shoulder accommodates all non-motorized users. In the winter months though, the shoulder is used for snow storage.

A highlight of the regional system is the Centennial Trail that connects the Spokane area with North Idaho. This trail is an important attribute to the community, which allows for a Class 1 Separated Path through the region in an east to west direction.

VISIONS, GOALS, AND OBJECTIVES

Visions

To create a bicycle-friendly community where biking is a viable travel choice that reduces congestion and pollution.

To provide an accessible, continuous, and safe network of facilities extending from neighborhoods to key destinations.

To promote, support, and encourage recreational bicycling in the Spokane region for physical exercise and as a tool for economic development.

To increase the awareness of all citizens and motorists to the need for cooperative travel throughout the region.

Goals

Goal 1: Increase the mode-share of people bicycling for transportation.

Objective 1.1 Increase the number of people who ride bicycles for transportation.

- Target employees that live less than five miles from Commute Trip Reduction (CTR) worksites.
- Create a bicycle commuter workshop and run it for employees at 20 work sites per year.
- Conduct an inventory of secure bicycle parking at CTR centers. Target worksites without bicycle parking to create safe bicycle parking.
- Survey potential locations for improved network to access transit stops by bicycle.

Evaluation Mechanism: Objectives to be recorded and benchmarked by CTR and SRTC travel-survey and Nu-Stats Survey 2006 and 2010, DKS Pedestrian and Bicycle Counts, Spokane Transit On-Board Surveys

Objective 1.2 Provide and maintain appropriate facilities to accommodate and encourage use by bicyclists.

- Inventory the present condition of routes identified on the Spokane Regional bicycle system from the 2006 Bicycle Map.
- Support the identification of new bicycle routes to be adopted by jurisdictions, prioritize maintenance or improvement of high priority routes, and encourage the removal of identified routes if they are no longer appropriate.
- Seek training opportunities for Engineering and Planning staff on bicycle facilities.

Evaluation Mechanism: Objectives to be evaluated by SRTC.

Objective 1.3 Ensure that all jurisdictional planning gives attention to bicycle planning.

- Encourage the adoption of this Plan into the Growth Management Planning objectives created by Spokane region jurisdictions.

Evaluation Mechanism: GMA Planning Objectives

Objective 1.4 Provide and maintain support facilities (e.g. bike racks and lockers).

- Identify potential bicycle destinations that do not have bike racks and target locations for bicycle rack installation.
- Review jurisdictional land use policies to include bicycle racks where appropriate.
- Evaluate the current use and future need for Spokane Transit Agency (STA) bicycle racks and lockers.

Evaluation Mechanism: Objectives to be compiled by SRTC with CTR and STA assistance.

Goal 2: Identify the needs and gaps in the regional bikeway system.

Objective 2.1 Propose key locations or improvements to connect neighborhoods and key destinations.

- Assist in identifying new bicycle projects to be adopted by jurisdictions, prioritize maintenance or improvement of high priority routes, and encourage the removal of identified routes if they are no longer appropriate.
- Use Inventory results and public input to identify high priority improvements.

Evaluation Mechanism: SRTC compilation of inventories, police data, public input, Spokane Regional Health District

Objective 2.2 Improve safety at identified areas.

- Use accident data to identify dangerous intersections and routes.

Evaluation Mechanism: Police data, STA accident data

Objective 2.3 Provide clear guidance to jurisdictions on how to best improve existing conditions for bicycling and walking and how to appropriately plan for the future.

- Use information gathered through this bicycle plan process to prioritize key projects;
- Contact jurisdictions directly of top projects in their area.

Evaluation Mechanism: Public input, SRTC's Bike Plan, and jurisdictions should be responsible for their top projects. Meetings will take place through SRTC's Active Transportation Technical Committee.

Objective 2.4 Provide information to citizens for keeping bikeways and intersections clear of debris.

- Provide phone numbers for jurisdictions to assist cleanup on bikeways and intersections.

Evaluation Mechanism: Jurisdictions should be responsible for their own roadways.

Objective 2.5 Provide and update (every three to five years) a regional map to indicate the bikeway network in the area.

Evaluation Mechanism: SRTC Bike Plan.

Goal 3: Support recreational bicycling in the Spokane region to promote physical activity and potentially stimulate economic growth.

Objective 3.1 Provide information to bicyclists where popular recreational routes are located.

- Provide online maps of recreation loop-routes for cycling in the Spokane area.
- Provide Spokane Regional Bicycle Maps to bike shops and at large employers throughout the Region.

Evaluation Mechanism: SRTC

Objective 3.2 Encourage biking beyond commuting for health and fitness purposes.

- Using a website, public service announcements, and CTR presentations, encourage bicycling and walking beyond commuting for fitness purposes.

Evaluation Mechanism: SRTC and Spokane Regional Health District

Objective 3.3 Provide resources where regional bicycle information can be obtained.

- Using a website, public service announcements, and CTR presentations, encourage bicycling beyond commuting for fitness purposes.
- Provide as much information as possible on potential funding opportunities for potential projects.
- Develop a Bicycle Advisory Committee comprised of bike groups and trail groups to focus on issues specific to the region.
- Develop a Non-Motorized or Active Technical Transportation Committee comprised of jurisdictional representatives to focus on issues specific to the region.

Evaluation Mechanism: SRTC

Objective 3.4 Promote Spokane as a recreational destination for bicycling in attempts to stimulate economic gain.

- Support programs to promote Spokane as a destination for great recreational cycling.
- Support programs to draw cyclists to the Spokane region.

Evaluation Mechanism: Area Chambers of Commerce

Goal 4: Enhance awareness and cooperation between all roadway users.

Objective 4.1 Improve awareness of motorists, bicyclists, and pedestrians as to their rights and responsibilities.

- Through increased signage, highlight “share the road” responsibilities.
- Improve intersection design and visibility where bike lanes intersect intersections.
- Use public service announcements and education programs to teach motorist, cyclists, and pedestrians the rules of the roadway for the purpose of improved safety and to promote non-motorized transportation.

Evaluation Mechanism: Jurisdictions

Objective 4.2 Improve safety and awareness through planning, engineering, education, enforcement, and encouragement.

- Provide design and engineering guidelines for different types of bicycle and pedestrian facilities, particularly those with high accident volumes.
- Continue support of programs that support biking and walking.
- Evaluate enforcement programs for pedestrians and bicyclists with the appropriate law enforcement agencies.
- Encourage non-motorized transportation through land-use planning, CTR programming, and enhancement funding.

Evaluation Mechanism: Police Department, CTR, grants, Comprehensive Plans

SECTION 2

CURRENT NETWORK INVENTORY AND USAGE

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EXISTING NETWORK INVENTORY

In Spring of 2006, SRTC released a Spokane Regional Bicycle Map that indicates the bicycle network within the Spokane region. The map not only serves to educate the public on the location and type of bicycle network available, but is an important planning tool for jurisdictions to use for identifying network gaps and improving continuity. Presently the Spokane Area Bicycle Network for all of Spokane County consists of approximately 1,050 miles of identified Class I-Class IV network (descriptions in Section 5, Pages 2-3). Additionally, only 25 miles of roadways are prohibited from bicycle travel.

The Spokane Regional Bicycle Map, available at www.srtc.org on the 'Bicycle/Pedestrian Resource' page, depicts the bicycle network within the Metropolitan Area. Map 2a of this Plan indicates the County-Wide Non-motorized and Rail Network.

EXISTING BICYCLE USAGE, SURVEY RESULTS

In late 2006, SRTC partnered with NuStats, a survey research and consulting firm, and the University of Minnesota, to conduct a non-motorized (NM) transportation study in Spokane County (*Nonmotorized Transportation Pilot Program Evaluation Study. University of Minnesota. 2007)*. Communities surveyed included: Marin County, CA; Minneapolis, MN; Sheboygan, WI; Columbia, MO, and Spokane, WA.

Spokane County serves as a control group for a NM transportation pilot program that provided four other aforementioned “pilot” communities with $25 million dollars for NM infrastructure facilities and programs. All areas were surveyed in 2006 and will be surveyed again in 2010 to determine if NM investment changes bicycle, walking, and transit usage. About 6,000 households in Spokane County were sent a survey to complete and another 400 households participated through telephone and internet surveys. Table 1 shows the mode split for each mode in the community. The vehicle mode split includes the number of trips taken by single-occupant vehicles while the rideshare mode-split includes vehicle trips with more than one occupant. Non-auto mode share (the use of modes other than automobile, including walking, bicycling, and transit) ranges from 8.5% in Sheboygan to 29.3% in Minneapolis, with Spokane showing 13.4 %.

Table 1 Share of Total Person Trips by Mode

Community	Vehicle %	Rideshare %	Walk %	Bicycle %	Transit %
Columbia, MO	86	2.2	8.6	1.5	2.2
Marin County, CA	82	1.4	11.8	1.8	3.2
Minneapolis, MN	69	2.2	17.6	2	9.7
Sheboygan, WI	89	2.4	6.6	0.7	1.2
Average for Pilots	82	2.1	11.2	1.5	4.1
Spokane, WA	85	2	8.5	0.8	4.1

A National Household survey indicates that 40% of all trips are less than 3 miles in length. This indicates that the potential to serve more trips by non-auto use is a realistic possibility. Table 2 shows the bicycle and pedestrian trip statistics for Spokane County and demonstrates that our daily trip distance on the bicycle is averaged at 8.55 miles, while the daily trip distance for pedestrians is 2.18 miles. Overall estimates indicated that this type of minimal bike and pedestrian usage adds up when accumulated over the year and eliminates approximately 35,635,777 Vehicle Miles Travelled (VMT) from the area per year. Further assumption could be made from this VMT reduction to indicate savings in vehicle emissions and fuel consumption. Additionally, connections are being made by the health community that having a built-environment that supports transportation choices can offer daily exercise opportunities and improve fitness and health.

Table 2 Transportation Usage Statistics

Mode	Spokane
Bicycle	
Average Daily Trips	2.45
Average Trip Distance	8.55 miles
Average Trip Duration	51.3 min.
Pedestrian	
Average Daily Trips	2.0
Average Trip Distance	2.18 miles
Average Trip Duration	43.6 min.
Percent of Trips to/from Transit via bike/walk	22%
Percent of Trips to/from Transit via driving	78%
Reduced Auto Use due to bike/walk (miles per adult in Spokane County)	0.31
Total Annual estimated Reduction in auto travel due to bike/walk (in miles)	35,635,777

The following data is more information from the NMTPP Survey. The entire survey can be found at www.srtc.org on the 'Bike/Pedestrian Resources Page' under the heading 'Bike/Ped-Related Documents.'

Walking and Biking Behaviors

- Spokane County citizens on average walk about 1/2 mile one-way to commute, while they bike about 1.5 miles on a one-way bike-commute (the lowest of the cities in the pilot project).

- About 1% of trips in Spokane County are by bike and 9% of trips in Spokane County are by walking.

Attitudes toward Walking and Biking

- More than 55% of respondents were somewhat or very satisfied with walking opportunities.

- Only 36% felt satisfied about cycling opportunities and 8 percent were very dissatisfied with cycling opportunities, the largest dissatisfied group in the pilot project.

- 69% felt there were bike lanes, paths, or routes that connected their home to places they wanted to ride to.

Getting to School

- 42% of school children are dropped off in a vehicle at school.
- Of the parents surveyed, 58% stated that the lack of sidewalks and bikeways make the roadways unsafe for their children to bike or walk to school.

Motivations to Walk or Bike More Often

The following are improvements that 50% or more of respondents said would likely get them to walk or bike more:

- More destinations close to home (walk)
- More marked bike lanes on existing streets (bike)
- More off-street bike paths (bike)
- Motorists who obey traffic laws (bike)
- Areas free of fast moving traffic (bike)

60% of the respondents stated more money should be spent to improve walking and biking infrastructure such as sidewalks, bike lanes, and trails in our community.

SECTION 3

KEY REGIONAL ISSUES

KEY REGIONAL ISSUES

HIGH PRIORITY PROJECTS IDENTIFIED DURING PUBLIC INVOLVEMENT

In order for a region to have a healthy non-motorized population, connectivity within the region is paramount. **For bicycling, the outlying areas must connect to urban areas on a safe and well-marked facility. Urban areas should also support bicycle facilities to promote and encourage furthering non-motorized transportation.** From a regional perspective, connectivity from the outlying areas inward to urban centers is an important component of this plan to shift vehicular trips onto the non-motorized network.

Recommendation: Jurisdictions should plan and retrofit arterial streets with all users in mind.

The following table identifies, through the SRTC public involvement process, high priority bicycle projects.

Table 3 High Priority Bicycle Projects

1. Completion of the Fish Lake Trail	**11.** Improve safety on bike routes with narrow road widths like Rutter Parkway and Elk-Chatteroy Rd.
2. Add strategic bike lanes/improve existing bike lanes to create a connected system	**12.** Create a bicycle friendly route off 5-Mile Prairie
3. Improve bicycle connections crossing the Spokane River	**13.** Bicycle Improvements in Downriver area
4. Create better bike routes from/to the South Hill	**14.** Provide safety on the Centennial Trail
5. Create bicycle lanes in the central business district	**15.** Incorporate bicycle improvements on Bigelow Gulch Rd.
6. Develop a major North/South bike route	**16.** Identify bicycle improvements on Highway 2 on the West Plains
7. Improve Bicycling on Northwest Blvd.	**17.** Incorporate biking improvements on 37th Ave.
8. Improve bike and motorist safety on Hatch Road from 57th Ave. to S.R. 195	**18.** Improve bicycle connections to Browne's Addition
9. Improve Bicycle use on the Maple/Ash Corridor	**19.** Implement bicycle Improvements on Post and Wall Streets
10. Improve bicycle crossings on Division St.	**20.** Make bicycle improvements on Assembly St.

SRTC will work with the appropriate jurisdictions to alert them to the regional projects that are priorities for bicycling in the area. Additionally, through the introduction of a Bicycle and Pedestrian Advocacy Committee, SRTC will keep a database of up-to-date non-motorized projects in the Region. The following tables include the non-motorized projects at various levels of planning in each jurisdiction. Some projects are fully funded; most appear in supporting planning documents but are unfunded while others are conceptual plans at this time.

AIRWAY HEIGHTS PROJECTS

This table shows projects being considered by Airway Heights.

Table 4 Bike Projects Considered by City of Airway Heights

Projects	Description	*Support*	Other Support	Secured Funding
Sidewalk Infill Program	Project infill existing sidewalk vacancies	City of Airway Heights Comprehensive Plan		None
Comprehensive City Wide Pathway Plan	Project provides a system of paths throughout the City to interconnect and provide linkages	City of Airway Heights Comprehensive Plan		None
Connection to FAFB	Project provides a bike route through the community to FAFB entrance	City of Airway Heights Comprehensive Plan		None
Connection to Centennial Trail	Project establishes a connection to Centennial trail that is north of City limits	City of Airway Heights Comprehensive Plan	Friends of the Centennial Trail	None
Connection to Medical Lake	Project provides a bike path along Craig & 902 that will connect to Medical Lake's existing	City of Airway Heights Comprehensive Plan	Traffic Safety Commission	None
HWY 2 and Airway Heights at Russell Road	Overhead or below grade pedestrian bridges (identified within our 6 yr transportation plan)	Six-year Transportation Plan	Traffic Safety Commission	None

Projects	Description	*Support*	Other Support	Secured Funding
HWY 2 and Airway Heights at King Street	Overhead or below grade pedestrian bridges (identified within our 6 yr transportation plan)	Six-Year Transportation Plan		None
HWY 2 and Airway Heights at Ziegler Street	Overhead or below grade pedestrian bridges (identified within our 6 yr transportation plan)	Six-Year Transportation Plan		None

CENTENNIAL TRAIL PROJECTS

The Spokane River Centennial Trail Gaps Plan, December 2007 outlines projects that bridge current gaps in the Centennial Trail system. The following projects are outlined in the Plan:

Table 5 Bike Projects Considered for the Centennial Trail

Projects	Description	Support	Other Support	Secured Funding
Mission Street Underpass	Construct a Mission Avenue underpass to connect the trail through Mission Park to Upriver Drive avoiding a dangerous intersection	Spokane County Trails Plan	Spokane River Centennial Trail Gaps, December 2007	No
Kendall Yards to SFCC Gap	A variety of treatments and a bridge project to achieve a clear and simple alignment between Spokane Falls Community College and the proposed Kendall Yards development	Spokane County Trails Plan	Spokane River Centennial Trail Gaps, December 2007	No

CHENEY PROJECTS

The City of Cheney also has the following projects in their Six-Year Street Transportation Program:

Table 6 Bike Projects Considered by the City of Cheney

Projects	Description	Support	Other Support	Secured Funding
Cheney-Spangle Road Project	2093 linear feet of sidewalk and bicycle lane improvement	Six-Year Street Transportation Program		None
Cheney Research and Industrial Park	1700 linear feet of new sidewalk	Six-Year Street Transportation Program	US Dept. of Commerce Grant	Partial
Simpson Parkway Extension, N 6th to Washington	2600 linear feet of new sidewalks and bike lanes	Six-Year Street Transportation Program		None
N 8th Street Extension	800 linear feet of new sidewalk and bicycle lanes	Six-Year Street Transportation Program		None
Mullinix Road Extension Project	4000 linear feet of new sidewalk and bicycle lanes	Six-Year Street Transportation Program		None

CITY OF SPOKANE PROJECTS

The City of Spokane is currently working on their Master Bike Plan. The new Master Bike Plan is focusing on route connectivity within the City of Spokane limits. The adoption of routes in the City of Spokane is critical to the mobility of our region. Adding bicycle facilities within and connecting the downtown, the largest employment center in our region, to the outlying neighborhoods is currently being considered. In addition, the City of Spokane's Regional Bikeway Network map can be found in the City of Spokane's Comprehensive Plan at www.spokaneplanning.org under the 'Documents' heading.

This table is a compilation of partially funded and unfunded projects being considered by the City of Spokane.

Table 7 Bike Projects Considered by the City of Spokane

Projects	Description	Support	Other Support	Secured Funding
Fish Lake Trail	16 mile Class I, separated path from Cheney to Spokane	Six Year Comprehensive Street Program/Funded Section	Spokane County Trails Plan	Partial
Post Street Bridge	Refurbishing bridge for pedestrian and bicycle access	Six Year Comprehensive Street Program /Funded Section	GTEC	Partial
Ben Burr from Liberty to Park to Centennial Trail	Dedicated bicycle facilities between Liberty Park and Centennial Trail	Six Year Comprehensive Street Program/Funded Section	GTEC, City of Spokane Comprehensive Plan	None
Ben Burr from Liberty to Park to Underhill	Class 1, separated path	Six Year Comprehensive Street Program/Funded Section		None
U-District Bike and Ped Bridge	Bicycle and pedestrian bridge in the U-District	Six Year Comprehensive Street Program /Unfunded Section	U-District Master Strategic Plan	None
37th Ave Bike Lanes on Grand to Regal	Mixture of Class IV, shared-use lanes and infill missing sidewalks	Six Year Comprehensive Street Program /Unfunded Section	Southside Transportation Study, SRTC	None

Projects	Description	Support	Other Support	Secured Funding
Downtown Bike Network	Dedicated bicycle facilities in the downtown core	DKS DRAFT Plan		None
City of Spokane Sidewalk Infill Program	Inventory and replace missing sidewalk segments		Community Development Area/GTEC	None
Bicycle Blvd.	Pilot project to develop bicycle boulevards	City Council Resolution December, 17 2007	GTEC	None
Bicycle Map in City of Spokane Comp. Plan	Various bike facilities identified on the City of Spokane Bike Map	City of Spokane Comprehensive Plan		None
Iron Bridge	Refurbish abandoned railroad bridge over the Spokane River	Spokane County Trails Plan	COS/Community Dev Area/U-district Master Strategic Plan	None
Division St. Ped/Bike Improvements	Various bike and pedestrian safety improvements	Will be in the unfunded section of Six Year Comprehensive Street Program when Division Study is completed	Multi-agency support (City, County, WSDOT, STA)	None

CITY OF SPOKANE VALLEY PROJECTS

The City of Spokane Valley is updating their bicycle map for the next Comprehensive Plan update. Spokane Valley currently has funding for the following projects that include the construction of bike lanes and sidewalks.

Table 8 Bike Projects Considered by the City of Spokane Valley

Projects	Description	Support	Other Support	Secured Funding
Pines Rd./Mansfield Ave. Project	Reconstruct Mansfield between Montgomery & Pines and improvements to intersections along Pines Road at the I-90 Interchange	City of Spokane Valley - Six Year Transportation Improvement Program	Private Developer contributions	Yes
Appleway Ave. from Tschirley Ave. to east City limits	Reconstruct Appleway to a 5 lane roadway with sidewalk on the north, 10' multi-use pathway on the south and bike lanes on both sides of the road.	City of Spokane Valley - Six Year Transportation Improvement Program	Spokane Transit Authority	Yes
Barker Rd. Bridge Replacement Project	Replace existing deteriorating bridge with a new bridge	City of Spokane Valley - Six Year Transportation Improvement Program		Yes
44th Avenue Pathway Project	Sands Rd. to Woodruff Rd. (Ponderosa neighborhood)	City of Spokane Valley - Six Year Transportation Improvement Program	Ponderosa Neighborhood support through public mtgs.	Yes
Broadway Ave. Improvements - Moore Rd. to Flora Rd	Reconstruct Broadway Avenue to a three lane section to include sidewalks and bike lanes	City of Spokane Valley - Six Year Transportation Improvement Program	Private Developer contributions	Yes
Broadway Ave. Safety Improvements	Restripe existing 4 lane road to 3 lanes with bicycle lanes from Park Road to Pines Road	City of Spokane Valley - Six Year Transportation Improvement Program		Yes

Projects	Description	Support	Other Support	Secured Funding
Sprague/Appleway - Argonne Road to University Road	Convert Sprague to 2-way reduce from 7 to 5 lanes between Argonne and University, convert Appleway to 2-way from Argonne to University	Subarea Plan	Comp Plan	None
Sprague/Appleway - University Road to Evergreen Road	Extend Appleway from University to Evergreen, convert Sprague to 2-way between University and Evergreen	Subarea Plan	Comprehensive Plan	Partial
Sprague/Appleway - I-90 to Argonne Road	Convert Sprague to two-way between Argonne & I-90, convert Appleway to 2-way between Thierman and Dishman-Mica	Subarea Plan	Comprehensive Plan	None
Sprague/Appleway - Evergreen Road to Tshirley Road	Extend Appleway as a 3 lane street to Sullivan, reduce Sprague from 7 to 5 lanes between Evergreen and Sullivan	Subarea Plan	Comprehensive Plan	None
Park Rd - Bridging the Valley/BNSF Grade Separation	Construct a bridge to allow vehicle/pedestrian/bicycle traffic over the BNSF tracks at Trent Avenue.	City of Spokane Valley - Six Year Transportation Improvement Program	Spokane Metropolitan Transportation Plan	Partial
8th Avenue Reconstruction Phase 1	This project will widen 8th Avenue from Havana to Park Road to an urban 3-lane section with sidewalks and bike lanes	City of Spokane Valley - Six Year Transportation Improvement Program		None
Flora Road Reconstruction	Reconstruct Flora Road to a three-lane arterial section with sidewalks and bike lanes from Sprague Avenue to Mission Avenue.	City of Spokane Valley - Six Year Transportation Improvement Program		None

Projects	Description	Support	Other Support	Secured Funding
Park Rd Project 2 - Broadway Ave to Indiana Ave	Reconstruct Park Road to a five-lane arterial with sidewalks and bike lanes linking Broadway Avenue to the new overpass at the BNSF tracks and Trent Avenue.	City of Spokane Valley - Six Year Transportation Improvement Program		PE Phase funded
32nd Ave Reconstruction - Evergreen Rd to Best Rd	Reconstruct 32nd Avenue from Evergreen Rd to Best Road (City limits) with a three-lane arterial with sidewalks and bike lanes. This project would connect with a County project from Best Road that will continue the improvement to Sullivan Rd	City of Spokane Valley - Six Year Transportation Improvement Program		None
Barker Rd Reconstruction - Appleway Ave to Broadway Ave	Reconstruct Barker Road to a five-lane section with center turn lane from Appleway Avenue to Broadway Avenue.	City of Spokane Valley - Six Year Transportation Improvement Program		None
Evergreen Rd Reconstruction - 16th Ave to 32nd Ave	Reconstruct Evergreen Road from 32nd Avenue to 16th Avenue to a three-lane urban section	City of Spokane Valley - Six Year Transportation Improvement Program		None
Broadway Ave - Flora Rd to Barker Rd	Construct a 3-lane urban arterial from Flora Road to Barker Road with curbs, gutters, and sidewalks	City of Spokane Valley - Six Year Transportation Improvement Program		None
Millwood-Spokane Valley Trail	10' wide Multi-use trail over old BNSF RR RW and Spokane County sewer between Fancher Road to Evergreen Road			None

Projects	Description	Support	Other Support	Secured Funding
North Greenacres Trail	10' wide Multi-use trail over old BNSF RR RW and Spokane County sewer between Sullivan Road to Liberty Lake			None
University Road Pedestrian Bridge	Pedestrian bridge over I-90 including bicycle facilities from Millwood/Spokane Valley Trail to Valley Mission Park			None

LIBERTY LAKE PROJECTS

The City of Liberty Lake has submitted the following projects:

Table 9 Bike Projects Considered by Liberty Lake

Projects	Description	Support	Other Support	Secured Funding
Indiana	2 miles Class 1, separated path 10' wide from Hodges to Harvard	Local Trail and Street Plan	Other developments are planning access	no
Sprague	1/2 mile Class 1, separated 10' path from Liberty Lake to Valley Way	Local Trail and Street Plan	Comp Plan	no
Lakeside	1 mile Class 1, separated path 10' wide from Valley Way south one mile	Local Trail and Street Plan	Comp Plan	no
Mission	1/2 mile Class 1, separated 10' path from Liberty Lake to Valley Way	Local Trail and Street Plan	Comp Plan	no
County Vista	Bicycle and pedestrian bridge from Mission to Appleway	Local Trail and Street Plan	Rocky Hill Neighborhood Plan	no

SPOKANE COUNTY PROJECTS

Bike projects being considered by Spokane County are as follows:

Table 10 Bike Projects Considered by Spokane County

Projects	Description	Support	Other Support	Secured Funding
Centennial Trail at Sontag Park to Lake Spokane (Long Lake) Resort.	Extend Centennial Trail from Sontag Park to Lake Spokane (Long Lake) Resort.	Spokane County Regional Trails Plan (1E), Spokane County Parks Plan, Centennial Trail Master Plan	Inland Northwest Trails Coalition, Non profit organizations, government agencies, school districts, local businesses and neighborhoods.	Fully Funded
Link to Carlson Road	Pave Carlson Road connection to Centennial Trail		Inland Northwest Trails Coalition, Non profit organizations, government agencies, school districts, local businesses and neighborhoods	None
Spokane's Gateway Park	Realign the Centennial Trail at Spokane's Gateway Park to provide a safe crossing under Spokane Bridge Road.	Spokane County Regional Trails Plan (1G), Spokane County Parks Plan, Centennial Trail Master Plan, Liberty Lake Community Trail system Plan, Idaho State Parks	Inland Northwest Trails Coalition, Non profit organizations, government agencies, school districts, local businesses, Liberty Lake, neighborhoods.	None

Projects	Description	Support	Other Support	Secured Funding
Rail Trail in North Spokane to Newport, WA	Develop rails to trails or other separated pathway connecting North Spokane to Newport, WA, generally paralleling Highway 2	Spokane County Regional Trails Plan (4B), Spokane County Parks Plan, Little Spokane Valley Concept Plan,	Inland Northwest Trails Coalition, Non profit organizations, government agencies, school districts, local businesses and neighborhoods.	None
Five Mile Prairie Loop Trail	Plan and possible develop 5 Mile Prairie Loop Trail providing connections to Holmberg Conservation Area, Sky Prairie park, Austin Ravine Conservation Area, and the Little Spokane River Natural Area. Possible extension to Cedar Rd.	Spokane County Regional Trails Plan (5D), Spokane County Parks Plan, Mead School District	Inland Northwest Trails Coalition, Non profit organizations, government agencies, local businesses and neighborhoods.	None
Connect Columbia Plateau Trail	Connection between the Columbia Plateau Trail and the public-use area at the Turnbull Wildlife Refuge.	Spokane County Regional Trails Plan, Turnbull National Wildlife Refuge Master Plan.	Inland Northwest Trails Coalition, Non profit organizations, government agencies, school districts, local businesses and neighborhoods.	None
Dream Trail	Trail between Dishman Hills Natural Area and Iller Creek Conservation Area	Spokane County Regional Trails Plan, Spokane County Parks Plan.	Inland Northwest Trails Coalition, Non profit organizations, government agencies, school districts, local businesses and neighborhoods.	None

Projects	Description	Support	Other Support	Secured Funding
City of Liberty Lake and Liberty Lake County Regional Park	Provide a safe trail connection between the City of Liberty Lake and Liberty Lake County Regional Park	Spokane County Regional Trails Plan, Spokane County Parks Plan, Liberty Lake Community Trails System Plan.	Inland Northwest Trails Coalition, Non profit organizations, government agencies, school districts, local businesses and neighborhoods.	None
Mica Peak trail from Liberty Lake Regional Park	Procure and develop a trail connection that provides access to Mica Peak from Liberty Lake Regional Park and state lands.	Spokane County Regional Trails Plan, Spokane County Parks Plan.	Inland Northwest Trails Coalition, Non profit organizations, government agencies, school districts, local businesses, neighborhoods.	None
Gleneden trail	Gleneden trail paving project	Washington State Department of Transportation, Little Spokane River Valley Concept Plan, Six Year Transportation Improvement Program	Inland Northwest Trails Coalition, Non profit organizations, government agencies, school districts, local businesses, neighborhoods.	None
Golden to Little Spokane Trails Network	Class 1, separated path connecting Golden to existing path, about I mile to the south	Spokane County Regional Trails Plan, Spokane County Parks Plan, Little Spokane River Valley Concept Plan, Six Year Transportation Improvement Program	Inland Northwest Trails Coalition, Non profit organizations, government agencies, school districts, local businesses, neighborhoods.	None

Projects	Description	Support	Other Support	Secured Funding
Midway Little Spokane	Link to Midway Little Spokane portion from Columbus to Golden Road	Spokane County Regional Trails Plan, Spokane County Parks Plan, Little Spokane River Valley Concept Plan, Six Year Transportation Improvement Program	Inland Northwest Trails Coalition, Non profit organizations, government agencies, school districts, local businesses, neighborhoods.	Fully Funded
Glenrose (Rd) Link to Centennial Trail	Glenrose (Rd) Link to Centennial Trail		Inland Northwest Trails Coalition, Non profit organizations, government agencies, school districts, local businesses, Glenrose neighborhood.	None
Dartford Drive Trail in conjunction with Little Spokane Bridge	Dartford Drive Trail to Cross River and Connect to Little Spokane Trail Network, only fixing trail ends	Six Year Transportation Improvement Program, Little Spokane Valley Concept Plan.	Inland Northwest Trails Coalition, Non profit organizations, government agencies, school districts, local businesses, neighborhoods.	Partial
Trail from Ben Burr to Moran Prairie Elementary School	Class , separated path from Ben Burr to Moran Prairie Elementary School	Six Year Transportation Improvement Program, Southeast Spokane Trails Master Plan,	Inland Northwest Trails Coalition, Non profit organizations, government agencies, school districts, local businesses, neighborhoods.	None

Projects	Description	Support	Other Support	Secured Funding
Rutter Parkway Link	Rutter Parkway Link to Little Spokane Natural Area & Indian Trail Road		Inland Northwest Trails Coalition, Non profit organizations, government agencies, school districts, local businesses, neighborhoods.	None
Wandermere path	Wandermere path from Little Spokane Bridge to Wandermere mall, also connects to North Spokane Corridor path	Six Year Transportation Improvement Program	Inland Northwest Trails Coalition, Non profit organizations, government agencies, school districts, local businesses, neighborhoods.	Development bond currently held for future construction. However funding is needed.
Various Conceptual Trails Planning for Right of Way and route alternatives 5A, 5-B, 5-H, 5-O, 5-Q.	Conceptual Trails Planning for Right of Way and route alternatives: 5A, 5-B, 5-H, 5-O, 5-Q from County Trails Plan	Spokane County Regional Trails Plan, Spokane County Parks Plan	Inland Northwest Trails Coalition, Non profit organizations, government agencies, school districts, local businesses, neighborhoods.	None
Travel Green Campaign	Employers encourage employees to travel green	Contained within the cities sustainable living program	Business and employers	Partial
Bike to Work Program	Promote the use of trails to bike to work	CTR Plans	WSDOT	None
Pedestrian and Bicycle Education and Safety Project	The project will promote bicycle and education and safety through public service announcements, instructor training, community education and printed materials.	Six Year Transportation Improvement Program	SRTC	Partial

SPOKANE TRANSIT AUTHORITY PROJECTS

Spokane Transit Authority (STA) is considering the following non-motorized projects:

Table 11 Bike Projects Considered by Spokane Transit Authority

Projects	Description	Support	Other Support	Secured Funding
Mission & Greene Community Transit Center	14 acre park & ride/transfer facility adjacent to SCC, connection to NSC bike/ped path to Centennial Trail	2008-2014 Transit Development Plan, WSDOT NSC preliminary plans	State Office of Transportation Mobility Grant	Partial
Farwell Park & Ride	Potential park & ride adjacent to NSC, trailhead for bike/ped path	2008-2014 Transit Development Plan, WSDOT NSC preliminary plans		No
Transit Enhancements	Shelters, Signage and ADA improvements	2008-2014 Transit Development Plan		Partial

WASHINGTON STATE DEPARTMENT OF TRANSPORTATION PROJECTS

The Washington State Department of Transportation (WSDOT) also has some projects in the works.

Table 12 Bike Projects Considered by WSDOT

Projects	Description	Support	Other Support	Secured Funding
North South Corridor Path	10.5 mile Class 1, separated path adjacent to proposed North South Corridor	WSDOT State Bike Plan, Approximately 5.5 miles funded by the State	EIS, part of the SRTC Metropolitan Transportation Plan	Partial
New Bike/Ped path along north side of US2	Class 1, separated path along north side of US2 between Calispel Ave and 7th St.	State Bicycle Facilities and Pedestrian Walkways Plan		None
Fish Lake Trail Segment	1.2 miles of Class 1 separated path along future arterial parallel to US 195	SRTC Metropolitan Transportation Plan		None

SECTION 4

PLANS AND POLICIES

PLANS AND POLICIES

Bicyclists legally have the same rights and responsibilities as motorists, and can ride on most public roads within the Spokane Region. Bicyclists should be expected on all streets. Many streets, including those with low speeds or low traffic volumes, accommodate bicycles safely with no special accommodation. However, a recommended bicycle system as outlined in the 2006 Spokane Regional Bicycle Map included a variety of bicycle lanes, shared roadways, and shared use paths. A bicycle system is a network of facilities that, for a variety of reasons, provide a superior level of service for bicyclists.

METROPOLITAN PLANNING ORGANIZATION

The Spokane Regional Transportation Council (SRTC) is required by federal law to perform transportation planning in Spokane County. Thus, SRTC is required to develop a multi-modal transportation plan that forecasts population and traffic growth at least 20 years into the future.

The Mission of SRTC is to provide for the safe and efficient movement of people and goods into, within and through the Spokane Region with an integration of balanced multi-modal transportation choices.

One of SRTC's centralized goals is develop a balanced, integrated, and multi-modal transportation system which serves the existing and future needs of the area and provide convenient choice among modes for trips into and out of Spokane's metropolitan area, for work, school, shopping, personal business, and recreation purposes.

Policy:

The SRTC Regional Bike Plan is integrated into the Metropolitan Transportation Plan (MTP), and bicycle projects will be included in the Transportation Improvement Program (TIP) as they are funded.

Recommendations:

SRTC, through a sub-committee of the TTC, will convene a Non-Motorized or Active Transportation Technical Committee to encourage the sharing of information across jurisdictional and state boundaries. The main purpose of the sub-committee will be educational.

SRTC will review and update, as necessary, the Regional Bicycle Plan every three to five years.

SRTC will sponsor an annual meeting with the intent of sharing information amongst the bicycle-oriented groups and advocates within the Spokane area to achieve funding and implementation of bicycle projects and programs.

Additionally, Spokane's Metropolitan Transportation Plan (MTP) 2007-2030 contains many policy statements that support land use decisions, parking policies and general non-motorized polices that are beneficial to all users. Go to www.srtc.org on the 'Documents, Plans, & Policies' page to view the goals and policies included in the MTP.

TRANSIT

Improving the bicycle-transit link is an important part of making bicycling a part of daily life. Linking bicycles with transit overcomes such barriers as steep terrain, poor weather, and concerns about riding at night. It extends the range of destinations that people can reach without a private vehicle. This is important for those who do not have an automobile, live in an area where riding is only convenient in one direction, as well as those who choose not to, or cannot, drive.

The bicycle-transit link can also make access to transit less expensive. In some locations, population densities are too low to offer transit service within walking distance (i.e., ¼ mile) of every commuter. Within the last few years, Spokane Transit has built park-and-rides to attract commuters and to function as Community Transit Centers (CTC) (transfers, hubs for various levels of service). A good example of a CTC is the South Hill Park and Ride. It isn't a typical commuter park-and-ride (near a freeway served by express routes). It functions as a hub for several routes and provides a convenient, safe, and informed point for transfers while also providing parking for commuters. And the CTCs have amenities for other modes as well, such as bike lockers.

As activity at a CTC grows, Spokane Transit has had opportunity to add services appropriate to the area (commuter express, neighborhood circulators or shuttles, regional connectors, etc.). Bicycling to transit instead of driving benefits Spokane by reducing taxpayer costs, air pollution, demand for park-and-ride land, and energy consumption, and traffic congestion with relatively low cost investments.

There are four main components of bicycle-transit integration:

- Allowing bicycles on transit
- Offering bicycle parking at transit locations
- Improving bike facilities to transit stops
- Encouraging usage of bicycle and transit programs

To enable and encourage the use of transit and bicycling, bike racks should be provided on all buses. This allows flexibility. If the weather turns bad during the day, a bicyclist can take the bus home and still bring the bike. A cyclist can take the bus to work in the morning and bike home in the evening, or vice versa. When long-term bike parking (such as bike lockers) is provided, people can bike to the bus stop and then store their bikes instead of having to bring the bike along. Alternately, people can keep a bike on the destination end of the trip:

take the bus to downtown, for instance, and then bike to work from the transfer center.

In order to use transit, people must be able to reach the transit stops. The bicycle system around transit stops, therefore, is important. When developing the bicycle system, location of transit routes and stops will be considered. The following steps would improve the transit and bicycle connection.

- Provide bike parking at major transit stops and transfer points, including short-term and/or long-term parking.
- Ensure that all buses and potential downtown trolleys have racks to carry bicycles, or allow bicycles on-board.
- Advertise the availability of bike racks on buses and bike parking.
- Survey the need for bicycle network or parking to improve the bicycle/transit relationship.

TRIP REDUCTION

Trip reduction, also known as transportation demand management, means reducing the number of people driving alone, rather than continuing to increase road capacity. In 2006, the Washington State Legislature passed the Commute Trip Reduction (CTR) Efficiency Act that requires local governments in those counties experiencing the greatest automobile-related air pollution and traffic congestion to develop and implement plans to reduce single-occupant vehicle trips. SRTC has prepared a regional CTR plan in accordance with RCW 70.94.527(6).

In the Spokane region, those affected jurisdictions are Airway Heights, City of Spokane, City of Spokane Valley, Liberty Lake, and Spokane County. The cities of Cheney and Medical Lake have been CTR-affected since the original CTR law was passed in 1991. Both cities have elected to opt in and remain in the program without interruption. They have both completed CTR Plans, signed intergovernmental agreements with Spokane County to implement CTR on behalf of the cities, and will update their CTR ordinances in accordance with the CTR Efficiency Act, in the spring of 2008.

Additionally, Downtown Spokane, in coordination with the University District, has been designated and funded as a Growth and Transportation

Efficiency Center (GTEC). The GTEC designation indicates a geographical area ripe for trip reduction and will have an increased focus for CTR strategies. The Downtown GTEC has seed money from the Washington State Department of Transportation for on-going trip reduction planning and implementation.

Bicycling is one of the transportation choices promoted through the CTR program. The commute trip has been the target of most efforts, focusing on getting employers to offer incentive programs. **Over a six-year period the regional goal of the CTR program is to reduce drive alone trips by 10% and reduce VMT by 13% from present levels**.

Strategies to do so specifically encourage bicycling, meaning employers should make secure, protected bicycle parking available for employees. Showers, or partnerships with nearby health clubs for shower use, also helps during summer months. In downtown areas, bicycling is usually faster than either walking or driving. Many workplaces have Wellness or Health Programs that encourage employees to walk on their lunch hour or work out at gyms. Encouraging employees to bicycle to work should be integrated into these programs.

Policy:

SRTC will work with the CTR Program to encourage employers to implement incentive programs and develop facilities to encourage employees to bicycle to work.

LAND USE

The convenience of bicycling is influenced by land use patterns, which are guided by land use regulations. Land use patterns that make bicycling easier include higher housing densities, mixed use zoning, and grid street patterns. Mixed use zoning and higher densities allow people to live closer to schools, parks, work, and shopping so that bicycling and walking are practical choices for transportation. Grid street patterns disperse traffic because they offer many alternative routes. Grid patterns usually result in shorter trip distances to destinations than cul-de-sac patterns.

Integrating land use and transportation planning allows new developments to implement these strategies from the beginning. Infill development can help meet some of these goals in established areas of the community. Changes in zoning laws and subdivision regulations are necessary to support balanced transportation.

SRTC's MTP includes several policy statement that encouraging land use design supportive of non-motorized transportation through zoning codes. To see policies in the MTP use the following link www.srtc.org on the 'Documents, Plans, & Policies' page.

POTENTIAL BICYCLE POLICY LANGUAGE FOR LOCAL COMPREHENSIVE PLANS

1. Appropriate bicycle and pedestrian facilities should be established in new construction and reconstruction projects in all urbanized areas unless one or more of three conditions are met:

- Bicyclists and pedestrians are prohibited by law from using the roadway. In this instance, a greater effort may be necessary to accommodate bicyclists and pedestrians elsewhere within the right–of-way or within the same transportation corridor.
- The cost of establishing bikeways or walkways would be excessively disproportionate to the need or probable use. Excessively disproportionate is defined as exceeding twenty percent of the cost of the larger transportation project.
- Sparse population or other factors indicate an absence of need.

2. In rural areas, paved shoulders should be included in all new construction and reconstruction projects on roadways used by more than 1,000 vehicles per day. Paved shoulders have safety and operational advantages for all road users in addition to providing a place for bicyclists and pedestrians to operate. Rumble strips or raised pavement markers are not recommended where shoulders are used by bicyclists unless there is a minimum clear width of one foot from the rumble strip to the traveled way, four feet from the rumble strip to the outside edge of the paved shoulder, or five feet to the adjacent guardrail or curb.

3. The design and development of the transportation infrastructure shall improve conditions for bicycling and walking through the following additional steps:

- **Planning projects for the long-term**. Transportation facilities are long-term investments that remain in place for many years. The design and construction of new facilities that meet the criteria in item 1) above should anticipate likely future demand for bicycling and walking facilities and not preclude the provision of future improvements. For example, a bridge that is likely to remain in place for 50 years, might be built with sufficient width for safe bicycle and pedestrian use in anticipation that facilities will be available at either end of the bridge even if that is not currently the case.
- **Addressing the need for bicyclists and pedestrians to cross corridors as well as travel along them.** Even where bicyclists and pedestrians may not commonly use a particular travel corridor that is being improved or constructed, they will likely need to be able to cross that corridor safely and conveniently. Therefore, the design of intersections and interchanges shall accommodate bicyclists and pedestrians in a manner that is safe, accessible and convenient.

SECTION 5

DESIGN AND ENGINEERING

DESIGN AND ENGINEERING

BASIC PRINCIPALS OF A BICYCLE NETWORK

Adherence to the American Association of State and Highway Transportation Officials (AASHTO) *Guide for the Development of Bicycle Facilities 3rd Edition*, 1999, will alleviate basic design problems. Careful attention to rider comfort, directness of route, an attractive environment, and coherent routes will answer most rider needs. The remaining variable is the cyclist's ability, the combination of skill, knowledge, and judgment.

In development of a bicycle network, the concept of a single "design cyclist" is attractive to transportation planners and engineers. They look for something similar to the "design vehicle" that is commonly used in roadway planning. The difficulty is that cyclists, unlike motorists, are practically unregulated and span the complete range of ages, abilities, and reasons for cycling.

Various schemes have been proposed to categorize types of cyclists to put some order into the planning process. The characteristic that best distinguishes cyclists is ability. The wide variation in cycling ability translates into different needs and preferences. Three basic types of abilities are evident:

Advanced cyclists are experienced riders, capable of operating under most traffic conditions, although they do not necessarily ride far or fast.

Basic adult cyclists are casual or novice riders who are less confident in their ability, or do not desire to ride in traffic without special provisions. This is a large group that spans all trip purposes: commuting, shopping, fitness, and recreation.

Child cyclists tend to go short distances and may behave erratically with little traffic awareness. They try to avoid high-traffic streets, but because they are under driving age there are few other transportation options.

In Spokane, 1% of commute trips are presently taken by bicycles, according to a 2005 Spokane and Kootenai County survey (*Spokane and Kootenai County Regional Travel Survey. NuStats. 2005*). This number represents the cyclists who have adapted their riding to the motorized environment. Improved accommodations on the roadway, combined with promotion and education, may generate an increase in advanced riders who do not presently commute. A larger increase in commute cyclists will require converting greater numbers of basic adult and younger riders.

A versatile planning and design approach is needed to accommodate all types of riders. Advanced cyclists are best served by making streets "bicycle friendly" by adopting design standards that include wide curb lanes and paved shoulders to accommodate shared use with motorists. This approach provides adequate

space for bicycles and motor vehicles to share the roadway with minimum need for changing lanes or lane position.

Basic and child cyclists are best served by identifying key travel corridors (typically served by arterials and collector streets) on which to provide designated facilities such as bike lanes. Care must be taken, however, to integrate the bicycle facility into the traffic flow, especially at intersections. Even on improved key bicycle corridors, a "child cyclist" should be supervised by more experienced riders.

In summary, this Bicycle Plan supports the following principles:

1. Three types of "design bicyclists" are recognized: advanced, basic adult, and child.

2. Except for those on which bicycles are specifically prohibited, arterials, collectors, and highways are "bicycle streets" and should be designed and maintained to accommodate shared use by bicycles and motor vehicles (per the AASHTO *Guide*). This means that, at a minimum, the ultimate goal of a Bicycle Plan should be for these streets to include the design treatments recommended for advanced cyclists.

3. Given the stated policy goal, a supply-driven approach of providing designated bicycle facilities to encourage increased use by basic adult and child riders (i.e., "if you build it they will come") is warranted. Where designated bicycle facilities are provided to accommodate and encourage increased use by basic adult and child cyclists, these facilities should be considered as additions to the existing roadway system, and not as substitutes for shared use of the system.

REGIONAL BICYCLE CLASSIFICATION SYSTEM

With a few exceptions, the roads in the Spokane area are open to bicyclists. Therefore, all roads are "bikeways". However, as discussed above, many roads in the Spokane area, particularly the collector and arterial system, need improvements to be bicycle "friendly." This section outlines the basic types of facilities that are typically provided to improve roads for bicycle use.

SRTC brought jurisdictions within Spokane County together to implement standardized bicycle classifications for the Spokane region. AASHTO guidelines were the basis for the classification system, which were then expanded to match state standards. These bicycle classifications are encouraged to be incorporated into the jurisdiction's Comprehensive Plans during their next update.

Class I- Shared Use Path - Facilities on separated right-of-way and with minimal cross flow by motor vehicles. Minimum one-way width of 6 feet.

Class II-Bike Lane - Portion of the roadway, which has been designated by striping, signing, and pavement marking for the exclusive use of the bicyclists. Minimum of 5 feet with an additional 8-inch stripe.

Class III-Signed Shared Roadway - Signed lane allowing both vehicular traffic and bicycle traffic. Minimum of 14 feet in width.

Class IV-Shared Roadway - Lane allowing both vehicular traffic and bicycle traffic without designation. Outside or curb lane minimum of 14 feet.

Class IX-Bicycles Prohibited - Bicycles are prohibited from using the roadway.

Recommendation: Jurisdictions should adopt a regional bicycle classification system to avoid confusion between users, planners, and engineers.

ON-STREET FACILITIES

The information provided in this document is for assistance only. More detail and engineering design are found in the national guidelines outlined in AASHTO's 1999 *Guide to the Development of Bicycle Facilities* and the USDOT's *Manual of Uniform Traffic Control Devices*. The information here highlights important issues, but more detail is contained in the national documents.

The appropriate bicycle facility for any given roadway depends on the roadway's classification, pavement and right-of-way width, motor vehicle speeds, traffic volumes, adjacent land use and other factors. On-street facilities typically consist of bicycle lanes, paved shoulders, wide curb lanes and shared roadways. The travel volumes and choice of roadway design will affect the level of use by bicyclists. For example, a four-lane divided highway with high traffic speeds and volumes, even with paved shoulders, will attract only more experienced bicyclists. Bicycle facilities are needed on major roadways despite the limited use by bicyclists in order to provide access to destinations and to get across barriers (e.g. interstates or rivers). No one type of facility will serve all bicyclists.

A desire to significantly increase bicycle use means tapping into the general population of basic adult and child cyclists (as well as potential cyclists), who may be less comfortable sharing a lane with motor vehicles. Properly designed and as part of an overall program to promote bicycling, bike lanes indicate to both motorists and bicyclists that there is a legitimate place on the road for all users, and provide a sense of place to the less experienced rider. Bike lanes have definite advantages, although a poorly designed and maintained lane is worse than no lane at all.

An experienced cyclist and a respectful motorist can successfully share a lane on almost any road. Collectors and arterials should accommodate advanced riders at a minimum. This means that many arterials and collectors in the Spokane area may need some modification to accommodate these riders on shared roadways.

Signed Shared Roadway Routes, Shared Roadways, Bike Lanes, and Bicycle Boulevards

Signed Shared Roadway Routes

Signed Shared roadways are shared roadways that have been identified as preferred bike routes by posting bike route signs. These routes provide connections for continuity to other bicycle facilities. As with bike lanes, signing shared roadways as bike routes is an indication to bicyclists that there are advantages to using these bike routes, as compared with alternative routes. This means the responsible agencies have taken action to ensure that these roadways are suitable for bicycling and will be maintained. Signing also alerts motor vehicle operators that bicycles are present. Improvements should be made to make these routes suitable as bike routes, and maintained in a manner consistent with the needs of bicyclists.

Using signage to identify preferred bike routes can be used in certain situations:

- The route provides continuity to other bicycle facilities such as bike lanes and shared use paths.
- The road is a common route for bicyclists through a high demand corridor.
- In rural areas, the route is preferred for bicycling due to low traffic volume or paved shoulder availability.
- The route extends along local streets and collectors that lead to an internal neighborhood destination such as a park, school or commercial district.

Shared Roadways

All roadways, unless expressly prohibited, are shared roadways and open to bicyclists; therefore, most are “shared roadways” where the bicyclist and motorist share the same travel lanes. There are no specific standards for shared roadways. Local streets with low traffic volumes generally accommodate bicyclists (except young children) safely with no additional treatment. Shared roadways with 11’ or 12’ travel lanes and speed limits of 30 mph or less, and average daily traffic (ADT) of 5,000 or less are usually adequate for bicyclists. Streets on which traffic is traveling at higher speeds than they were designed for can be made more suitable for bicyclists through traffic calming. In rural areas, the suitability of a roadway decreases as traffic volumes reach 1,000 ADT because of higher traffic speeds and a larger percentage of truck traffic.

Bike lanes

Bike lanes are provided on arterial and major collector streets. Bike lanes may also be used on rural roadways near urban areas, where there is high potential for bicycle use. Bike lanes are generally not recommended on rural highways with posted speed limits of 55 mph because of difficulties at intersections.
Bike lanes are one-way facilities that carry bicycle traffic in the same direction as adjacent motor vehicle traffic. Bike lanes should always be provided on both

sides of a two-way street. Motorists are prohibited from using bike lanes for driving and parking, but may use them for emergency situations. Bike lanes are designated with pavement markings as well as signs along the street. A typical bike lane width is 5' from the face of curb or guardrail to the bike lane stripe. Bicycle lane widths of 6 feet maximum may be desirable when one or a combination of the following conditions exists:

- Traffic volumes and speeds are high
- Adjacent parking use and turnover is high
- Catch basin grates, gutter joints and other obstacles are present in the bicycle lane
- Steep grades exist
- Truck volumes are high
- Bicycle volumes are high

Bicycle lane widths of 4' minimum may be acceptable when:

- Physical constraints exist (for a segment of less than 1 mile that links to existing bikeways on both ends)
- Implemented in conjunction with traffic calming devices
- Adjacent to parking with very low use and turnover, and low speed limits and traffic volumes
- Adjacent to an uncurbed street shoulder

Additionally, for on-street parking, an 8' (7' minimum) parking area width adjacent to the bicycle lane is recommended.

The travel lane width adjacent to a bicycle lane should be 11' (10' minimum). A 4' bicycle lane should not be used in combination with a 7' parking lane and/or a 10' travel lane.

Since bicyclists tend to ride a distance of 32 – 40" from the curb face, it is vital that this surface be smooth and free of structures. Drainage grates and utility covers that extend into this zone may cause cyclists to swerve and effectively reduce the width of the bike lane. Where these structures exist, it may be necessary to increase the bike lane width accordingly.

Among the benefits of bike lanes are:

- Defining a space for bicyclists to ride, helping less experienced cyclists feel more confident and willing to ride on busier streets
- Reducing motorist lane changing when passing bicyclists
- Increasing the visibility of bicyclists in the transportation system.
- Reducing pedestrian/bicyclist conflicts due to fewer cyclists on the sidewalks
- Creating a buffer between pedestrians and motor vehicles

- Increasing effective turn radii at driveways and intersections
- Improving sight distances
- Providing space for emergencies/breakdowns

Bicycle lanes can be implemented by narrowing existing travel lanes, removing a travel lane, removing parking, except where it is essential to serve adjacent land uses, and shoulder widening. Bicycle lanes may be implemented through stand-alone bikeway projects, through reconstruction or construction of roadways, and through routine resurfacing of roadways when the street configuration can be modified without parking removal or serious additional congestion.

Some streets where bicycle lanes are the preferred treatment have circumstances that make bicycle lane installation very difficult. These circumstances include: harm to the natural environment or character of the natural environment due to additional pavement; severe topographical constraints, economic or aesthetic necessity of retaining parking on one or both sides of the street, and serious traffic congestion that would result from eliminating travel lanes. These circumstances are to be evaluated very carefully before a decision is made to implement an alternative treatment.

For example, before deciding that on-street parking is necessary, off-street (including driveways and garages), and alternative parking opportunities (such as parking on the opposite side of the street) must be investigated. As another example, a travel lane should be removed even if traffic congestion may increase, unless the congestion that may be caused by lane removal cripples the flow of people and goods. Traffic calming improvements, wide outside lanes or alternative parallel bikeways may be substituted only after careful investigation has proven bicycle lanes to be unfeasible.

Bicycle Boulevards

A bicycle boulevard is a shared roadway which has been optimized for bicycle traffic. In contrast with other shared roadways, bicycle boulevards discourage cut-through motor vehicle traffic, but typically allow local motor vehicle traffic. They are designed to give priority to cyclists as through-going traffic. Bicycle boulevards not only allow commute cyclists optimized routes but cater to would-be, inexperienced, and young riders. As such, bicycle boulevards can be considered "stepping stone" facilities that help recreational riders (for example) move from bicycle paths and trails onto shared roadways.

Bicycle boulevards use a variety of traffic calming elements to achieve a safe environment. For instance, diverters with bicycle cut-outs at mid-block allow motorists to enter the block in order to park or otherwise access a property, and allow cyclists to continue to the next block as well, but do not allow motorists to continue. Typically, these modifications are thought to calm traffic and improve pedestrian safety as well as encouraging bicycling. Residents along a bicycle

boulevard street also enjoy the benefits of traffic calming, as well as the ambiance of the bicycle boulevard:

The purpose of a bicycle boulevard is to improve bicycle safety and circulation by having or creating one or more of the following conditions:

- Low traffic volumes (or bike lanes where traffic volumes are medium);
- Discouraging non-local motor vehicle traffic;
- Free-flow travel for bikes by assigning the right-of-way to the bicycle boulevard at intersections wherever possible
- Traffic control to help bicycles cross major arterial roads
- A distinctive look and/or ambiance such that cyclists become aware of the existence of the bike boulevard and motorists are alerted that the roadway is a priority route for bicyclists

Examples exist in a few cities, including; Berkeley, CA; Palo Alto, CA; San Luis Obispo, CA; Portland, OR; Eugene, OR; and Vancouver, British Columbia. In Berkeley, the boulevards are mostly residential streets, however some sections pass through commercial areas. Generally there are few cars on these streets, in large part because of the pre-existing traffic calming devices that slow and/or divert traffic.

The following criteria were used to select the roadways that make up the seven bicycle boulevards currently in use:

- Local street or low-volume collector
- Not a transit or truck route
- Very little commercial frontage
- Within ¼ mile of a major street or a high-traffic collector street
- Spaced between ¾ and 1½ miles from another Bicycle Boulevard (approximately the traditional spacing of major streets)
- Reasonably continuous (i.e., it extends over half of the cross-section of the City)
- Few jogs with main segments at least 0.5 mile long
- Traffic signals at major intersections, or traffic signals are potentially feasible
- Access to major destinations
- Connections to routes in neighboring cities

OFF-STREET FACILITIES

Shared use paths, often referred to as trails, are facilities on exclusive right-of-way and with minimal cross flow by motor vehicles. Users are non-motorized and may include bicyclists, pedestrians, joggers, wheelchair users, in-line skaters, and skiers. These facilities are usually designed for two-way travel and can serve a variety of purposes, from recreation to transportation. Shared Use Paths are separated from motorized traffic creating a safer environment for non-motorized users. These paths may occasionally cross vehicular traffic, but in many cases they are located along rivers or old railroad tracks and interaction with vehicular traffic is kept to a minimum. These paths should be considered as a part of an overall bicycle system, not as a substitute for on-street bicycle facilities.

In Spokane the most popular example of a Shared Use Path is the Centennial Trail. This path and other Shared Use Paths are typically recreational by nature, but if properly located can accommodate commute trips. They can provide school-aged children and beginning riders with a safe riding environment.

The key components to successful shared use paths are:

- Continuous separation from traffic (e.g. along a river or railroad)
- Scenic qualities
- Connection to major destinations (e.g. shopping malls, downtown, schools, parks)
- Well-designed street crossings;
- Shorter trip lengths than the road network offers
- Visibility (e.g. proximity to housing and businesses);
- Good design
- Proper maintenance

INTERSECTIONS

Most conflicts between motorists and bicyclists occur at intersections. In Spokane there are very few intersections that are marked for the additional safety or visibility of a cyclists, even on roadways that support bike routes and bike lanes. Good intersection design indicates to road users what path to follow and who has the right of way. Bicyclists' movements are complicated by their lesser speed and visibility. The following ideas are those that other cities are using to increase the safety and visibility of cyclists:

Bicycle Boxes: A space specifically designated for bicycles to stop while waiting at a traffic light. By allowing cyclists to wait in front of motorized traffic, the bike boxes are intended mainly to reduce the risk of "right hook" collisions, in which a driver makes a right turn without seeing the cyclists.

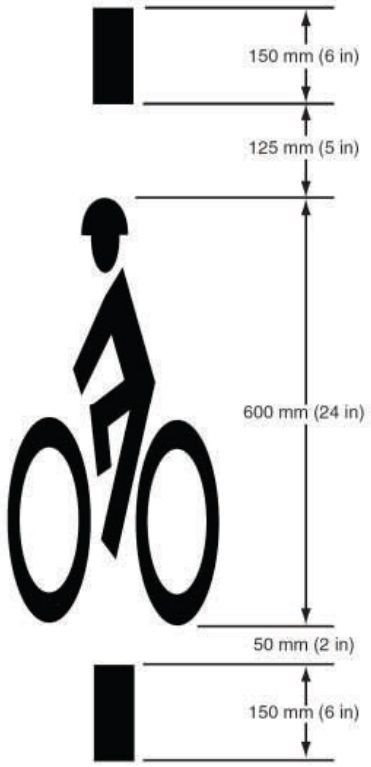
Painted intersections: Many collisions occur at intersections as vehicles and bicycles are turning or merging. To raise awareness of where bike lanes cross intersections, some cities paint them blue or green. Traffic signals should allow enough time for bicyclists to cross the intersection. Signal timing along a corridor can be a problem for cyclists trying to maintain constant speed to take advantage of momentum. The cyclist may be able to get through a few lights, but then has to stop. This can tempt bicyclists to run red lights. Traffic signals in downtown and other dense areas should be timed for speeds of 12–16 miles per hour, which would allow bicyclists to ride with traffic.

Loop Detectors: Bicycles have trouble triggering demand-actuated signals, which use detectors embedded in the pavement. There are several improvements that can be made:

- Place loop detectors in bike lanes, especially on side streets with lower traffic volumes.
- Increase sensitivity of detectors.
- Paint stencils to indicate the most sensitive area of the loop.
- Place push-buttons close to the roadway for cyclists to reach without dismounting.

- Use quadruple loop detectors rather than the standard square loops.

Figure 9C-7. Example of Bicycle Detector Pavement Marking



Recommendation: Consider the needs of bicyclists when designing and reconstructing intersections on bicycle routes.

BARRIERS

River Crossings

Barriers to bicycle travel include rivers, major roadways, and railroads. Barriers, or "weak links" in the bicycle system, can seriously inhibit bicycling in a community by making it difficult to travel safely to destinations. A good implementation plan should address these issues.

Bridges

Because bridges are typically expected to last up to 50 years, bicycle facilities need to be included in all major bridge projects. Even if bicycle facilities do not currently exist on either end of the bridge, they may be developed within 50 years.

Roads

Many arterials in a community are as much a barrier to crossings as rivers. Interstates and highways are also barriers. Bicycle crossings of these wide, busy

roads are challenging and often hazardous. Crossing opportunities can often be widely spaced. Additionally, roadways often contain barriers that prevent left turns or channels to separate traffic. These types of street treatments or even drainage covers prevent hazards for cyclists.

Because of their tendency to grab and channelize bicycle tires, railroad crossings present a difficult challenge for bicyclists. Unsafe railroad crossings on the bicycle system should be considered of highest priority. The maintenance and repair of railroad crossings are the responsibility of rail companies for commercial rail lines. Bridges over railroads have similar issues to bridges over rivers. At-grade crossings can also be difficult for bicyclists, either because of rough or broken pavement or because of slippery surfaces.

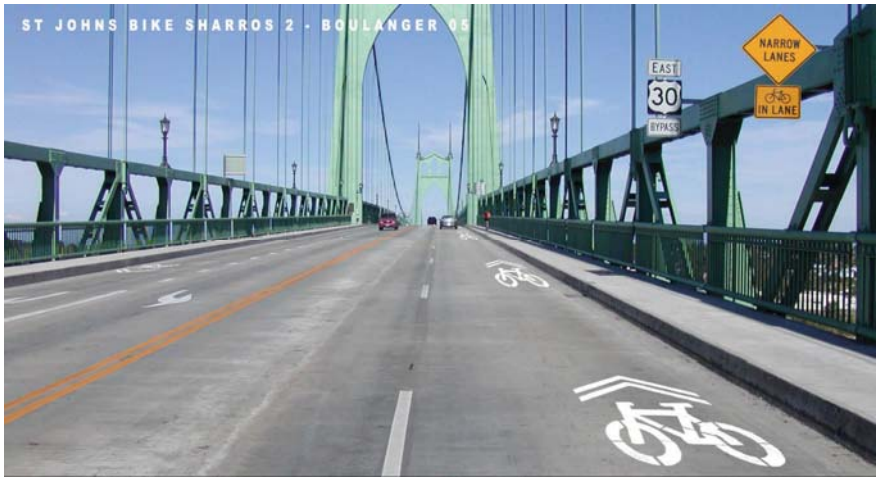
Recommendations:

- *Conveniently spaced, safe crossings should be designed into roadway*
- *Bridge projects should include adequate space for bicyclists*
- *Ensure that reconstructed at-grade railroad crossings are safe for bicyclists.*

SIGNAGE AND PAVEMENT MARKINGS

Sharrows

These markings are used to indicate the proper position of a bicycle and reduce the number of collisions between a bicycle and an open car door. These markings are often ideal in locations where bicycle lanes may not be feasible. Sharrows are found on shared roadways or signed shared roadways.



TRAFFIC CALMING

Traffic Calming is the combination of physical measures that reduce the negative effects of motor vehicle use and changing driver behavior to improve other non-motorized uses. Traffic calming helps increase the quality of life by creating safe and attractive streets while slowing traffic speeds and promoting pedestrian and cycle use.

Traffic calming objectives include:

- Achieving slow speeds for motor vehicles
- Reducing collision frequency and severity
- Increasing the safety and the perception of safety for non-motorized users of the street(s)
- Reducing the need for police enforcement
- Enhancing the street environment (e.g., streetscaping)
- Encouraging water infiltration into the ground
- Increasing access for all modes of transportation
- Reducing cut-through motor vehicle traffic.

Most traffic calming projects involve the installation of such measures as traffic circles, speed humps, curb extensions, and diverters. Generally, these measures are complementary to bicycle travel. However, these measures can also be challenging to bicycles if not well designed. The following considerations apply to all streets, but in particular, those streets included in the Bicycle Network.

Traffic Circles

In general, cyclists often complain that they feel “squeezed” by motor vehicles trying to pass at a traffic circle. On streets where bicycle lanes are recommended (generally on streets above 5,000 Average Daily Traffic), speed humps are preferable to traffic circles. When implementing traffic circles, careful consideration should be given to the impact of the circle on bicycle travel.

Speed Humps

Speed humps should be built to the standard of 14’ or 22’ to slow motor vehicles while providing a smooth ride for cyclists.

Curb Extensions

At intersections with curb extensions, care should be given to allow enough room for a bicyclist. Otherwise, bicyclists will have to veer out into traffic, or motor vehicles will “squeeze” bicyclists going through the intersection.

Diverters

All traffic diverters should preserve bicycle turning movement options and through access unless overriding safety concerns exist. A bicycle “cut-through” at full diverters should be wide enough (4’) to accommodate a bicycle trailer.

Narrowing Lanes

Narrowing lanes by adding striped bike lanes or a striped shoulder can be used to reduce traffic speeds, and improve the street for bicyclists.

Recommendation: Traffic calming programs should consider the needs of bicyclists during the design and engineering phase.

ASSOCIATED NEEDS FOR BICYCLES

Bicycle Parking

Just as universal parking is essential to automobile use, convenient and secure bicycle parking is needed to promote that mode of transportation. Any bicycle trip involves parking. The lack of secure and convenient parking is often the missing link in bicycle facilities and is a great deterrent to bicycle use. It is increasingly common for local governments to require bicycle parking in new developments just as they do for automobile parking.

Bicycle parking falls into two basic categories of user need: commuter (or long term) and convenience (or short term). A basic guideline for capacity is that bicycle parking should be approximately 10% of motor vehicle parking. For example, a use that requires 35 motor vehicle parking spaces would require facilities for parking four bikes. Some uses, such as a public library or a popular ice cream store, may require a higher ratio of bike parking to motor vehicle parking.

The primary design considerations are:

- Bicycle parking should be convenient and easy to find. Where necessary, a sign should be used to direct users to the parking facility.
- Bicycle parking should be located within sight of the main entrance of the building.
- Bicycle parking space should be at least 2’x6’ with a vertical clearance of seven feet.
- An access aisle of at least five feet should be provided in each bicycle parking facility.
- Parking facilities should offer security in the form of either a lockable enclosure in which the bicycle can be stored or a rack to which the bicycle can be locked. Structures that require a user-supplied lock should accommodate both cables and U-shaped locks and should permit the frame and both wheels to be secured (to avoid the need for removing the front wheel). *Note: businesses may provide long-term, employee parking by allowing access to a secure room within a building, although additional short-term, customer parking may also be required.*
- The rack should support the bicycle in a stable position without damage.
- Long-term parking should be sheltered so that bicycles are not exposed to the sun, rain and snow.

Recommendation:

The jurisdictions should consider adopting ordinances that incorporate bicycle parking requirements into the standards currently required for all new motor vehicle parking as an element of the zoning code. At a minimum, space to park two bikes or 10% of car parking (whichever is greater) should be required.

The STA Plaza, a centralized location in the downtown area, provides long-term bicycle parking and lockers.

Another suggestion is to promote transit-oriented development patterns. Encouraging higher density and allowing mixed-use zoning (commercial and residential) within one-half mile of transit lines have proven to support and encourage pedestrian and bicycle use in areas around the world.

Besides parking, showers and changing rooms should be encouraged in new construction for large employers to promote bicycle commuting. Many employers find that such facilities pay for themselves quickly in increased employee fitness, health, and morale.

SECTION 6

MAINTENANCE

MAINTENANCE

Unavoidable accumulations of debris along the road edges as well as surface deterioration render bikeways unpleasant and dangerous. Un-swept shoulders are one of the most common complaints from cyclists, especially in areas with winter climates like Spokane's. Thick gravel, glass, rough overlays, and cracks force cyclists into the travel lane to find a smooth surface, which causes animosity in motorists who do not understand the dilemma.

If the jurisdictions within Spokane County wish to encourage bicycling as a viable mode of transportation, there should be a commitment to regular maintenance of high-use bikeways. The following are the key points of a maintenance program that can encourage bike network use:

INSPECTION

A regularly scheduled inspection and maintenance program is essential. All roadwork should be performed with an understanding of how it affects cyclists.

SWEEPING

At the present time, the City of Spokane, Spokane County, and the City of Spokane Valley all have snowplow and sanding operations through the winter months. Road shoulders are covered with gravel due to unpaved driveways and sanding of the roads during winter storms. Automobiles tend to sweep the debris into a thick layer on the shoulders.

In May 1993, the City of Spokane signed an agreement with the U.S. Environmental Protection Agency, Washington State Department of Ecology, and the Spokane County Air Pollution Control Authority (now Spokane Regional Clean Air Agency) to mitigate the adverse impacts on local air quality generated in conjunction with the sanding of roads in the winter. This agreement is specifically directed toward particulate matter measuring 10 microns or less (called "PM-10"). The dust formed when snow traction materials are pulverized by motor vehicles largely generates PM-10. The City agreed to increase street sweeping in the summer, spring, and fall to:

- Residential -- 3 times per year (previously two times a year)
- Arterials -- 6 times per year (previously three times a year)
- Central Business District -- 1 time per week (same as previous)

The City of Spokane also agreed to reduce the use of sand for traction material by 50%, increase the use of liquid deicers, and to plow major arterials more often to reduce the need for traction material. The City's policy is:

Plow major arterial streets with an Average Daily Traffic (ADT) count of 15,000 or more and critical arterial hills when the snow depth exceeds one inch. A liquid or dry deicer will be spread onto these roadways following the plowing when

weather conditions permit. Sanding material will only be used when the roadways cannot be kept in a safe and operational condition using the above methods. When sanding materials are used, they will be swept up as soon as weather conditions permit regardless of the time of year. When the Spokane Regional Clean Air Agency declares a stagnant air alert, all sweeping operations will stop and the 15,000 ADT arterials will be treated as necessary with a dust palliative.

The Spokane County Board of Commissioners has passed a similar resolution to mitigate and control adverse impacts on air quality by reducing the use of traction materials through strict placement policies and increasing the use of chemical deicers, and to “increase sweeping activities in the early spring” and “increase flushing, including post-sweeping flushing in order to remove more PM-10 material from the travel way.”

Although the main intent of these agreements is to reduce particulates in the air, this program should result in major benefits for cyclists as well.

Recommendation: A regular sweeping program should be considered on streets identified as part of the bicycle network.

PAVE GRAVEL DRIVEWAYS

Paving gravel driveways from the road right-of-way to the edge of the existing pavement greatly benefits both bicyclists and residents, while adding only a small cost to road construction projects.

PUBLICIZE A HOTLINE FOR HAZARDS

A hotline would be beneficial that would allow cyclists to report glass and other hazards on the roadway for immediate removal. Some numbers for individual jurisdictions are already available on the SRTC Regional Bike Map and website, but a region-wide hotline would be more effective.

MINOR REPAIRS

Problems are not limited to potholes and pavement cracks. The roadway edge is often the first part of the road to experience pavement cracking or break-up. This is also the area most traveled by bicyclists. There is no current system in place for identifying these locations. A more proactive approach is needed. As streets have been resurfaced, drainage grates and gutters have remained at their original height, resulting in sometimes several inches of difference between the height of the road and the height of the grate or gutter. This creates a dangerous situation for bicyclists.

Similarly, the direction of the grate slots should be perpendicular to the direction of travel. Bicycle tires can get caught in slots that are parallel, resulting in bicyclist injuries. This picture is an example of an unsafe grate angle that can catch bicycle wheels.

Grate on Indiana and Cincinnati, courtesy John Speare.

Spot maintenance or overlay work can degrade bikeways if care is not taken. Where the work is in the bikeway, a smooth surface with feathered edges is important. Ideally, the work should extend the entire width of the bikeway. When a grader blade is used, the last pass may leave a rough tire track in the patch, so either a smooth tire should be used or the area should be rolled.

Even work confined to the travel lanes can cause problems because loose asphalt often ends up in the bikeway where it adheres to the existing surface and creates a rough spot. Work should be compacted sufficiently and loose materials should be swept away before they become a problem. Leaving the work of flattening a patch to passing vehicles is dangerous to cyclists.

Inspection procedures should be implemented, including an evaluation of the work done, considering bicyclists' needs. Changes to ordinances should be explored allowing a holdback of payment or the posting of a bond for a period of one year after the work has been completed to ensure that the work does not deteriorate.

During overlay work care should be taken with drainage grates. This is a photo of a drainage grate that was not raised as overlays were added over time making for a hazard for cyclists.

Poorly maintained drainage grate

Recommendation: Maintenance and overlay work should include attention to potential hazards for all users

Widening and Re-Striping
Improvement and periodic re-striping of roads present an excellent opportunity to improve cycling conditions. Bikeways should be resurfaced, at a minimum, to the same width as the existing pavement and, where possible, should be widened to standard bikeway widths.

Wide travel lanes can often be re-striped to 11 or even 10 feet to provide wider shoulders for bicyclists with no loss in automobile safety and movement (11-foot lanes in urban areas are now recommended by many authorities to reduce vehicle speed on over-designed roads). An extra foot in shoulder width can mean a lot to bicyclists' safety and pleasure. Many existing gravel shoulders have sufficient width and base to support shoulder bikeways. Minor excavation and the addition of three to four inches of asphalt is often all that is required. Care should be taken to avoid a joint at the edge of the existing pavement by feathering the new asphalt or creating a clean saw cut at the transition.

Four-lane arterials and collectors without bike lanes can often benefit from re-striping to two lanes with outside bike lanes and a center turn lane. This can increase safety and convenience for all users -- motorists, bicyclists, and pedestrians--while maintaining vehicle capacity. Where re-striping or other road redesign occurs to accommodate bicycle traffic, 'Share the Roadways' signage should be installed.

Oiling and Chip Sealing
On a case-by-case basis, attention should be given to maintaining the full pavement width and not allowing the edges to deteriorate. Because work that extends partially into the shoulder leaves a dangerous, raised ridge, oiling and chip sealing should extend the full width or stop at the shoulder stripe. The preferred chip seal size is 3/5 inch to 10 inch or smaller for bike lanes and shoulder bikeways. Utility access points, manhole covers, and drainage grates should be raised to match the new surface within 0.75 inch. Edges should be feathered to provide a smooth transition from the lane to other surfaces.

Snow Removal
Bicycles are used for transportation even during the winter months in many places with winters as severe as Spokane's, if snow is removed from the bikeway. Because the City and County currently use the shoulder and often the sidewalk for snow storage during the winter, keeping high use bikeways (and sidewalks) clear of snow may require a change in policy to removal of snow rather than storage.

Vegetation Removal
Trees, shrubs, and other vegetation and their roots encroaching into and under the bikeway cause safety and maintenance problems: loss of clearance, reduced sight distance, debris, and pavement breakup. Pruning, mowing and leaf removal should be part of routine maintenance. New construction should employ 12-inch root barriers where necessary.

SECTION 7

EDUCATION, ENCOURAGEMENT, AND ENFORCEMENT

EDUCATION, ENCOURAGEMENT, AND ENFORCEMENT

EDUCATION AND ENCOURAGEMENT

A bike system is most evident in its facilities, which are the most visible and expensive element. Indeed, some transportation agencies have felt that their job was finished once the bicycle facilities were provided, and that it was then up to the user to figure out how to use the facilities. This approach generally works with motorists because they must be a minimum age and pass a competence exam before they can drive.

Bicyclists, on the other hand, are practically unregulated, and a would-be cyclist may venture out on the roads with few skills and little judgment. This lack of knowledge, combined with the fact that automobiles are the dominant form of transportation in our society, often keeps people from even considering bicycling as a choice. The result is that good bicycle facilities may be misused or ignored and may even be perceived as unnecessary.

Getting people to use bicycle facilities and to use them safely requires follow-through in various programs that promote awareness, safety, skills, and enforcement. There are numerous strategies for providing education, including information packages, training courses, commuter programs, special incentives, event sponsorship, and law enforcement projects. One example of an education program is the Cooper Jones Act of March 2002, which seeks to improve bicycle and pedestrian education, enforcement, and encouragement for Washington State road users.

Information Packages

A bicycle information packet is one tool that can be easily and inexpensively provided by the Spokane Regional Transportation Council. The contents should include a map, suggested routes (both recreational and commuter), local services, contacts, and perhaps riding safety tips. Its purpose is to help bicyclists choose appropriate routes for their skill level, to orient visitors, and to encourage first-time riders. The Spokane Regional Bicycle Guide Map, last produced in 2006, is an important part of the information packet.

Training Classes

The existence of good facilities is not enough to get many people out on their bicycles. Those who do ride could endanger themselves and others with unsafe behavior. Potential and unskilled bicyclists need to be shown how to ride safely and easily. Motorists, too, need to be taught how to interact with bicyclists.

Training for Young Children

A January 23, 1992 survey of Spokane citizens compiled by the Spokane Bicycle Advisory Board (BAB), established in 1992, found that there was strong

agreement (79%) for bicycle education in the schools. In 2006, through the Transportation Enhancement Grant program, SRTC funded a Spokane Public Schools bicycling safety curriculum program reflecting the latest bicycling education information. The program was expanded to include middle and high school students to learn safety skills and improve their fitness through bicycling. In 2005, two sets of mountain bikes were purchased by the school district for this purpose.

The following messages have been consistently taught in the Spokane school district programs:

- **Wear a helmet.** In the event of a bicycle crash, wearing a helmet reduces the risk of serious head injury by up to 85%. It could save your life.
- **Obey all traffic laws.** Bicyclists have the same rights and responsibilities as motorists.
- **Look left, then right, then left again before crossing streets.**
- **Always be alert.** Make eye contact with drivers and always be aware of what's going on around you.
- **Always ride with the flow of traffic.**
- **Be predictable.** Always signal your intentions.
- **Be visible.** Wear light-colored clothing and bright or reflective clothing and always use a front light and rear reflectors at night.
- In addition, very young children (seven or younger) should ride with supervision

Recommendation: Bike education programs for young school children should be funded and expanded in the Spokane area.

Training for Older Children and Adults
The BAB recognizes a real need for training junior high school and high school students and adults. Numerous other training courses and materials that have been designed for all age groups are available, including:

- *Effective Cycling* from the League of American Wheelmen, Washington, D.C.
- *Training Programs for Bicycle Safety,* Washington Traffic Safety Commission, Seattle, Washington.
- *Bicycling Street Smarts* from *Bicycling Magazine,* Rodale Press, Emmaus, PA.

Structured training courses involving on-bike training are usually the most effective ways of teaching bicycle skills. Other materials can be presented through local school programs, the workplace, church, recreation departments, club and community events, skills fairs and rodeos, or at home. Palo Alto, CA even has a traffic school for juveniles who violate bicycle laws.

Training For Local Planners And Engineers
In order for a community to stay current with planning and designing bicycle facilities, it is necessary that planners and engineers receive training in this area. New engineering designs and techniques are being implemented and tested in Washington and the northwest. It is important to keep the area professional current and up to date of the needs of motorists and cyclists.

Recommendation: Bring training to the area that will help update area planners and engineers on non-motorized facilities.

Training For Motorists
Education for motorists should not be overlooked. Motorists should learn to look for cyclists in traffic just as they check for cars, especially when switching lane position, turning, or going through an intersection. They should look for cyclists in parking lots and when entering and exiting roadways. Motorists should pay special attention to child cyclists, particularly in residential areas and near schools. Children often ride on the sidewalk, so motorists should check for them when entering or exiting driveways. Kids do not judge distance or speeds well, and the motorist should give them extra space and attention. Motorists should learn to be predictable by signaling turns well before an intersection. The Cooper Jones campaign recently was successful in adding questions to the driver's license test to improve bicycle and motorist safety.

Public Relations Campaigns
An understanding between motorists and bicyclists is necessary for peaceful and functional co-use of the roads. A campaign with public service announcements, posters, bumper stickers, even billboards, can be very effective. These campaigns are often initiated or put on by public service groups in coordination with agencies. One example is the "Share the Road" campaign. An STA bus is a rolling billboard helping to raise awareness of bicyclists and pedestrians on roadways.

Commuter Programs
People need advice on how to commute by bicycle because most of them have never done it and they do not know what it entails. By far the most popular means of getting people to try bicycle commuting are the various bike-to-work events sponsored throughout the country. Bike to Work Spokane! is an encouragement campaign organized by a volunteer committee under the auspices of the City of Spokane Bicycle Advisory Board and the Bicycle Alliance of Washington, a 501(c)3 nonprofit organization. The goal of Bike to Work Spokane! is to increase awareness and participation in bicycle commuting. Because 2008 is the first year, in a revitalization effort, the focus is on downtown Spokane as a commuter and customer destination.

Spokane County's Commute Trip Reduction (CTR) program administers a wide variety of products, services, training, and technical support to Spokane's largest

employers and the newly formed downtown Growth and Transportation Efficiency Center (GTEC). CTR oversees many campaigns such as "Commuter Solutions," which raises awareness about carpooling, riding the bus, walking, bicycling, vanpooling, working from home, or compressing the weekly work schedule. Another program in the Spokane area is "Smart Moves," an annual campaign during April, which promotes the use of transit by encouraging citizens to choose a smart option other than driving alone. Providing special incentives or recognition for bicyclists, as described below, could expand this program. Many such programs have been designed for beginning commuters and offer much the same information. CTR's newest program is called "Travel Green" which focuses on non-motorized commute trips.

Spokane County has a "Pedestrian and Bicycle Education and Safety Project" included in the 2007-2012 Transportation Improvement Program that promotes education and safety through public service announcements, instructor training, community education and printed materials.

Recommendation: Continued support of encouragement campaigns is important to raise awareness and participation for bicycle commuting.

Special Incentives
Many employers and government agencies have found ways to make it easier to bicycle and to reward those who do. Some techniques are:

- **Stipends and Subsidies:** The direct approach to encourage bicycling is to pay employees to do it. Stipends of about $25 to $30 per month can be effective and have been used in California (for example, the Alza Corporation in Palo Alto pays its employees $1 for each day they ride to work). Reimbursing employees for business travel on bicycles (the City of Palo Alto pays its employees $0.07 per mile for business travel), as is done for cars, is becoming increasingly common. Employees who commute by bicycle should also be included in any incentive programs offered to those who rideshare.
- **Company-Sponsored Wellness Programs:** Some employers include biking to work as part of company-sponsored wellness programs or offer insurance discounts to employees who commute by bicycle regularly. For example, the U.S. Forest Service allows employees to spend part of their working day in aerobic fitness activities that include bicycling. Another approach was taken by Emanuel Hospital in Portland that offered employees $4,000 to buy homes in the local neighborhood within walking distance of work. An even more direct subsidy would be to forego parking costs and give the money directly to employees.
- **Flex Time:** Allowing bicyclists to schedule their work day so as to avoid rush hour or darkness encourages some commuters.

- **Bicycles and Maintenance Provided:** Rather than give stipends, some employers have offered to pay for an employee's bicycle after a certain period of riding to work regularly or to set up a credit program for its purchase (such as the City of Glendale, Arizona; City of Pasadena, California; and Food 4 Less Supermarkets, Inc. in La Habra, California). Glendale has worked out an agreement with the police department to use unclaimed recovered stolen bicycles for this purpose. Arranging for service at a local shop is another perk. Another incentive that can be arranged by the employer is a special discount at a local bike shop for commuter accessories and clothing. If bike shops expect business to develop, they are often willing to give a discount.
- **Ride-Home Services:** For companies with a vehicle at their disposal, an offer to take the employee home if the weather turns bad, if they need to work late unexpectedly, or if they become ill, can ease the fears of both the employee and the employer about bicycling or walking (such as done by the City of Spokane).
- **Awards and Commendations:** Approval is a powerful incentive. By singling out employees who commute by bicycle or walking, others can be encouraged to try. Competitions can even be arranged between departments. The Jet Propulsion Laboratory Bicycle Club in Pasadena, California has one such program.
- **Company Motor and Non-Motor Pools:** People who occasionally need a car to do their work may still commute by bicycle if their company has a motorpool from which employees can reserve a vehicle a day ahead. In fact, some areas (Ashland, Oregon and Seattle, Washington) have discovered that city-furnished bicycles are actually a more efficient and healthy way to conduct business such as road and building inspections. Numerous police departments have also added bicycles to their rolling stock.
- **Relaxed Dress Code:** Some offices have dress codes that are not entirely compatible with a commuting bicyclist or walker. For example, wrinkle-free fabrics, comfortable shoes and minimum makeup should be approved.
- **Bike Buddy Program:** This program encourages beginning bicyclists to ride to work. It matches bicyclists with mentors to help with the commute between your neighborhood and workplace.

Sponsor

Organized rides are an excellent way to introduce people to bicycling. These can be customizable; neighborhood rides for the family or longer distance tours for people wanting a challenge. The atmosphere should be friendly and supportive, with plenty of help and information available. Refreshments and even door prizes add to the festivities. Once they try it, many people get hooked on cycling for life. A local bicycle club or shop can help in staging events.

ENFORCEMENT

Law Enforcement

Law enforcement is a recognized aspect of bicycle safety and efficient use of bikeways. Typical violations by bicyclists include running stop signs and traffic signals, riding the wrong way on a street, and riding at night without a light. All of these behaviors put bicyclists at risk. Motorist violations that pose the most risk to bicyclists are driving inebriated, and not yielding to bicyclists when turning. Most collisions are initiated by one of these illegal actions. Frequent violations deteriorate the trust between cyclists and motorists and can contribute to lack of support for bikeways. See Map 7a for Bicycle and Pedestrian Accidents 2003-2005.

SRTC and the Spokane Regional Health District have been tracking collision data, both reported by Washington State and the hospitals. A partnership to evaluate locations of high accident volumes will help identify areas where repeated accidents are occurring and may require engineering or enforcement support for prevention.

Many communities have had difficulty in getting police to enforce the vehicle code with bicyclists. This is partly due to insufficiently trained officers who are not aware of the importance of citing bicyclists. Heavy criminal workloads also interfere and point to the need for more police staff. It is important that the police be encouraged and supported through adequate funding and the establishment of courses to train police in proper bicyclist behavior. Some areas, such as Seattle, Washington have had success with traffic enforcement, especially in regards to parking and bicycle violations, performed by trainees and bicycle-mounted patrols.

Recommendation; Provide a map or database to review bicycle-related collision statistics as a means for allowing input on reducing problems, identifying problem areas, and improving bicyclist/motorist interaction.

On August 13, 2004 Washington State enacted a helmet law for all ages. This helmet law includes bicyclists, skaters and boarders of all ages within the city limits. According to Paul Stepak, epidemiologist with the Spokane Regional Health District, some 1,200 cyclists who were not wearing helmets were treated at area hospitals in 2003 for head, neck, and face injuries.

SECTION 8

POTENTIAL FUNDING SOURCES

POTENTIAL FUNDING SOURCES

Bicycle facilities and programs can be funded through a broad range of local, state, federal and private sources:

- **Local:** road construction and maintenance budget, the general fund, system development charges, joint projects with utilities, and other agencies.
- **State:** highway projects, 0.5% State gas tax distribution, matching local assistance grants, and support from other agencies.
- **Federal:** surface transportation, enhancement and air quality programs.
- **Other:** donations, grants, development mitigations, and miscellaneous.

It is advantageous to develop a consistent funding source for capital projects and maintenance, and to actively seek additional sources for the remaining projects. Available money should be leveraged to the greatest extent possible by using it for matching grants and joint projects.

LOCAL FUNDING

Class II Bike Lanes and Class IV Shared Roadways, which make up the majority of a bike network system, are usually placed within the standard roadway width and so add negligible cost to the road construction budget. As new arterials and collectors are constructed or old ones are reconstructed to current standards, bikeways are simply incorporated into the project designs. In this way, a bikeway system can develop incrementally over time, in step with the road system, for minimal cost.

Local jurisdictions and agencies should ensure that any arterial road projects in the area are built to bikeway standards for the street classification included in this plan, and that costs are included as a normal part of the project. Similarly, resurfacing an arterial or collector is an excellent time to re-stripe for bike lanes at little additional cost. Bikeway maintenance should also be funded along with routine roadway maintenance; recognizing the need to maintain priority bikeways is a key step to improving their utilization.

The bike network may be constructed or improved as a part of roadway rehabilitation. For example, routine resurfacing of a shared roadway may be expanded to include shoulder bikeways. In such cases, additional funding may be sought for the portion of the project that includes the bikeway improvements. Special projects such as separated bike paths, shoulders added to a road in good condition, and re-striping for bike lanes also require unique funding. In private developments, bicycle facilities can be made a condition of approval, just as roads and parking lots. In some cases, mitigation fees can be imposed. If the impact of a development on adjacent streets is not immediate, the developer may participate in future improvements through a **Local Improvement District (LID).**

Availability of funds often limits alternatives and timely implementation of projects; however, lack of funds should not be used to justify inadequately designed, constructed, or maintained facilities. Initial investments in properly designed facilities can be more than offset by its durability, utility, attractiveness, and safety. Some communities in the Northwest earmark up to 10% of their road construction budget for bicycle projects.

When a bicycle project moves beyond the normal roadway resurfacing, other local funding may be needed. Examples of expenses outside the normal roadway include construction of a Class I, separated path, widening a road to accommodate a bikeway, or building a bikeway to higher standards than required. Parks, recreation, tourism, transit, and planning departments are often supporters of such projects.

In bike system construction projects, it is important to coordinate with other roadwork. This helps to keep expenses -- administration, material unit costs, mobilization, and traffic control -- to a minimum by sharing them with larger road projects. For example, a shoulder widening effort to accommodate bicycles along a popular route might be prohibitively expensive unless done at the same time as a scheduled pavement overlay; this can reduce bicycle-related costs.

STATE FUNDING

Washington State Law (RCW 47.30.050) provides that a portion of the State gasoline tax revenue for local governments be used for the development and maintenance of paths and trails. Bikeways are included in this provision. One-half of 1% of the State's gasoline tax, returned to the City and the County, is attributable to path and trail use. When received from the State, the funds may be used immediately for a project. At the end of the year, any unused funds are transferred to the Paths and Trails Reserve and held there until needed. At the present time, the City of Spokane receives about $14,000 per year. The County receives approximately $45,000 annually for paths and trails. The Paths and Trails Fund can be used for either on-road or separated facilities. The potential for this funding source to be used as a match for larger Federal grants should be explored.

FEDERAL FUNDING

The National Transportation Policy is to promote the increased use of bicycling, to accommodate bicycle and pedestrian needs in the design of transportation facilities for urban and suburban areas, and to increase pedestrian safety. Federal-aid funds are available for bicycle facilities as part of a normal highway construction project at the same financial match ratio as other highway projects. Bikeway projects independent of other construction projects, as well as non-construction projects related to bicycle use, could be funded with a federal share. Such projects must be principally for transportation rather than recreation to qualify and must compete openly with all eligible modes of transportation

identified in SAFETEA-LU (Safe, Accountable, Flexible, Efficient Transportation Equity Act).

SAFETEA-LU authorized expenditures of $151 billion nationally over 6 years and has clarified funding opportunities for bicycle projects. There were several programs in the SAFETEA-LU for which bicycle facilities and programs are eligible:

- The SURFACE TRANSPORTATION PROGRAM (STP) provides funds for a variety of uses, in part including bicycle facilities and safety programs. The Transportation ENHANCEMENT funding set aside under STP is to be the greater of 10% of the State's STP apportionment. Activities include bicycle facilities, conversion of abandoned railway corridors to bicycle trails, and greenway projects. “Enhancements” can be improvements independent of new construction or reconstruction (which already require bicycle facilities) such as wide curb lanes and shoulders on rural roads.
- The CONGESTION MANAGEMENT AIR QUALITY (CMAQ) Improvement Program is for use primarily in non-attainment and maintenance areas under the Clean Air Act. The Program includes encouraging states to invest in projects and programs that reduce congestion and improve air quality. Spokane is now a maintenance area for carbon monoxide and PM-10.
- SAFE ROUTES TO SCHOOL is a federal program disseminated through WSDOT in Washington. No State shall receive an apportionment under this section for a fiscal year of less than $1,000,000. The purposes of the program is (1) to enable and encourage children, including those with disabilities, to walk and bicycle to school; (2) to make bicycling and walking to school a safer and more appealing transportation alternative, thereby encouraging a healthy and active lifestyle from an early age; and (3) to facilitate the planning, development, and implementation of projects and activities that will improve safety and reduce traffic, fuel consumption, and air pollution in the vicinity of schools.
- BICYCLE AND PEDESTRIAN SAFETY GRANTS is another federal program aimed to be appropriated from the Highway Trust Fund (other than the Mass Transit Account) $300,000 for fiscal year 2005 and $500,000 for each of fiscal years 2006 through 2009 to carry out this subsection. The purposes of the grant portion of this program are to improve locations where fatal and injury collisions involving bicycles and pedestrians occur.
- THE INTERSTATE MAINTENANCE PROGRAM (IM) stresses cost-effective ways of extending pavement life and preventing major re-construction activities. This program cannot be used to increase capacity for single-occupancy vehicles. Funds are subject to the overall Federal-aid obligation limitation. A State may transfer up to 50% of its IM apportionment to its National Highway System, Surface Transportation, Congestion Mitigation and Air Quality Improvement, Highway Bridge Replacement and Rehabilitation, or Recreational Trails apportionment.

- CONSTRUCTION MITIGATION funding is money made specifically available if routes are impacted during the construction of a project. The funds can used for projects or signage to re-route non-motorized, vehicular, or transit trips.

The National Park Service and the National Trails Program oversees the following additional programs directed at recreational projects:

- The LAND and WATER CONSERVATION FUND, money is available for the acquisition of lands and waters or for the development of public outdoor recreation facilities. Greenways and parks are typical projects funded by the Land and Water Conservation Fund. These funds must be applied for by an eligible agency such as a City, County, or Park District.
- NATIONAL RECREATIONAL TRAILS PROGRAM offers grants for maintenance and re-routing of recreational trails, development of trail-side and trail-head facilities, operation of environmental education and trail safety programs.

OTHER FUNDING

Bikeway facilities and programs are a community investment shared by all sectors; private, business and government. Each can contribute in many ways, including land dedications, donations of engineering and public relations talent, special grants, sponsorship of fund-raising events, and so on.

Developers can also choose to include extra bikeway projects, beyond what is required, in their project designs. Businesses can voluntarily construct showers and offer incentives for their bicycling employees. These opportunities should be actively promoted and supported.

There are other means for obtaining materials, funds, or rights-of-way that can result from the inventiveness of the region. Some methods include:

- Environmental impact mitigation
- Street vacations
- Enforcement of franchise agreements for railroad crossings
- Utility tax for public works
- Utility easements
- Tax-deductible gifts in the form of signs, equipment and trail segments

Bicycle programs are found in various municipal and county departments including planning, public works, parks and recreation, police, and others. Bicycle advisory committees comprised of public representatives and department staff (often from several agencies) also contributes. The Spokane area is fortunate to have an active Bicycle Advisory Board. SRTC will be supporting a Regional Bicycle and Pedestrian Advocacy Committee upon approval of this Bike Plan.

SECTION 9

PUBLIC AND AGENCY INVOLVEMENT

PUBLIC AND AGENCY INVOLVEMENT

Public involvement is critical in bicycle planning because of the local nature of it. Spokane has a long history of public involvement involving non-motorized transportation, from the first *Bike Routes Plan in 1976* to this SRTC Regional Bike Plan, 2008.

A Steering Committee was formed to guide the Spokane Regional Pedestrian/Bikeway Plan. Steering Committee membership consists of representatives from Spokane County Health District, Spokane County Engineers, Spokane County Planning Department, Spokane County Traffic Safety Commission, City of Spokane Planning Department, City of Spokane Engineering Department, City of Spokane Street Department, Commute Trip Reduction, Washington State Department of Transportation, Spokane Regional Health District, City of Liberty Lake Planning, Spokane Regional Citizens Advisory Committee on Transportation, Spokane Bicycle Club Members, City of Spokane Valley, Washington State University Planning, Parks to Peaks, School Districts, Spokane Regional Clean Air Agency, Spokane Transit Authority, Bicycle Advisory Board, and the Spokane Regional Transportation Council. SRTC invited many others to the meetings but unfortunately they could not attend.

In June of 2003, SRTC, together with partner jurisdictions and public agencies, administered a **countywide outreach program** to gather public input regarding bicycle and pedestrian facilities across the county. Draft bicycle and pedestrian maps were placed at businesses throughout the county. At these events, the public voiced their ideas about bicycle and pedestrian facilities, those that are operating well and those that need improvement.

SRTC also discussed possibilities and concerns with the **City of Spokane Bicycle Advisory Board** (BAB), including bicycle and pedestrian issues around the City of Spokane.

SRTC presented to the **Healthy Families, Active Kids Coalition** and participated in several activities. Discussions ensued regarding bicycle and pedestrian issues, addressing areas that need improvement and areas that are good. They also drew maps of their ideal non-motorized transportation system.

SRTC presented to the **Spokane Bicycle Club** and discussed some of the bicycling issues around Spokane County, as well as some of the club members' favorite routes, commuter routes, and difficult routes.

Walkable Community Workshops were held in April 2002. These workshops helped transportation users learn what makes a community "walkable" and how a pedestrian friendly neighborhood means a safer, healthier community. The

workshops were led by two expert facilitators for the National Center for Bicycling and Walking in Washington, D.C. and focused on local pedestrian issues and hands-on solutions.

The **Move It! Workshops** (September 2003) used the Walkable Community Workshop program as a model. The Move It! Workshops focused on students from five selected middle schools. Spokane was one of three communities selected to attempt a youth-oriented outreach project with the goals of educating middle school students about the value of commute alternatives.

In 2005, SRTC extended an invitation to comment for all citizens, jurisdictions, and bicycle and pedestrian groups. Throughout the entire public participation process, over 200 comments were received and recorded. Appendix A contains public input collected throughout the public involvement process. Finally, in 2008 a thirty-day comment period was initiated on March 30, 2008.

APPENDIX A

PUBLIC INVOLVEMENT MATRIX

2003-2005

Insert Appendix A

APPENDIX B

PUBLIC COMMENTS

2008

Regional Bike Plan Public Comments 2008

Comment	Response/Action Taken
As we discussed I noticed that our gaps plan was not included in the Regional bike plan. We have been fortunate to have them included in the Spokane County Trails plan. As such we would appreciate 2 of our conceptual plans be included in the Regional Bike Plan. These projects are of utmost importance to address safety issues and gaps in the trail. Several other projects we have been working with are listed in the plan, such as the extension from Nine Mile Falls to Lake Spokane and the Gateway Park. The projects we feel that have been omitted are: 1. The Mission Street Underpass and connecting trail to the south. 2. Kendall Yards to SFCC Gap We have developed a conceptual plan, with the aid of Alta Planning addressing these areas. I thought the Argonne project was in the county portion but I don't see it. The County and the State of Washington have been working on putting the trail under the Argonne bridge (the space is there, it was constructed with the trail to eventually go under the bridge) As you are probably aware the house on the corner is owned by the County. The State and the County are working on some concept of a trailhead and hopefully moving the trail to Maringo. I don't know if this is appropriate for the Regional Plan. What are your thoughts? Thank you so much for allowing me to bring up the projects at the last minute. We are excited to be working on the gaps on the Centennial Trail. We feel these areas are safety hazards and the community dream always has been to have the Centennial Trail completed.	Gap Plan projects added to the Regional Bike Plan. Argonne concept to be considered for the Bike Plan update/amendment.
Pave alleyways from edge of street/roadway to right of way (at a minimum).	Comment Noted
Require bike commuters to register their bikes, much like motorized vehicles are required to be licensed. Funding should not be used for bike/pedestrian projects, but for street repairs. Money from registering bicycles could go to bike projects. Do not allow bikes on busy streets and arterials.	Comment Noted
For high priority issues, maybe add completion of the Ben Burr section to downtown, with the requisite connections thru the iron bridge, etc... Maple/ash is unfortunate in light of the bond's work, to include this year, that won't add lanes I would consider identification and creation of major routes throughout Spokane (e.g. south hill loop from SE--Freya--57th--hatch--cedar--downtown)	Comment noted, pending City of Spokane Master Bike Plan is in development. Outcome of that process will be considered for an amendment to this document.

I appreciate and support making a separate plan for bicycle routes and issues and another plan for pedestrian. -pg 8: Table 1, suggest defining "Rideshare" and whether "Vehicle" means SOV or includes carpool. -pg 3-16: Please add this project which we haven't sent to you previously... -Fish Lake Trail segment - Class 1 separated path along future arterial parallel to US 195, WSDOT will be constructing both the city street and the northernmost 1.3 mile of Fish Lake Trail. Support : project is in MTP Secured Funding : none	Text changed to meet the following comments.
It is my understanding that this Regional Bike Plan was not developed with all agencies involved (City of Spokane, City of Valley, & County)? In fact it is my understanding that this Regional Bike Plan does not match any of these agency's current bike plans. If this is to be a true regional bike plan should it not be in coordination with the current agency's bike plans and the updates to those bike plans which are in the process at the time. SRTC is also involved w/the DKS study which has bike routes in it.	Comment noted, Pending City of Spokane Master Bike Plan is in development. Outcome of that process will be considered for an amendment to this document.
Excellent compliment for the County's 2001 Comprehensive Plan and Countywide Planning Policies for GMA (their transportation components)	Comment Noted
I am concerned about the lack of continuity of the tike lanes- they end just before an intersection- on Southwest Blvd. At about 25th they completely eliminated the bike lane for 50-100 ft. or so when they put in a turn lane for traffic coming out of 25th and turning south onto Southeast Blvd.	Comment Noted
Please don't minimize the importance of recreational cycling.	Comment Noted
This looks like a great effort so far! I hope the final plan will greatly advance the cause of bicycle transportation in Spokane County.	Comment Noted
I was so happy to see 37th listed as an area for bike lane improvements, but as I scrolled through your document, I saw that the improvements stopped at Regal. Between Regal and Havana, 37th is a mess - most with no sidewalk, no bike lane, no shoulder, and many, many potholes. This stretch has a Middle School at one end and a high school at the other. We want to encourage our children to walk/ bike to school, but there is nowhere to do it. At the times they need to use 37th to get to school, the traffic is constant and includes many buses. I am a bike rider, but also as a driver on 37th, I am always concerned about the pedestrians/riders along that stretch. I am glad I have a mountain bike when I ride on 37th, a road bike would be horrible. There is no other easy route east/west in that area of the South Hill. You can go north to 57th. However, south to 29th is not a good choice. Neither of those options helps to get you to the schools. Please consider doing something along 37th - my choice would be a bike lane and a sidewalk from Glenrose all the way to Grand.	Comment noted, road and sidewalk project on 37th from Regal to Havana is being considered by the City of Spokane.

In order to encourage bicycle usage bicyclists must have a safe environment in which to ride their bikes. Currently, city, county and state governments have placed little or no emphasis in maintaining the curb lanes on streets that bicyclists need to travel. Potholes and pavement irregularities that are not noticed in an automobile are treacherous or even deadly to a bicyclist, especially when bicyclists are traveling down hills. Making bicyclists decide very quickly to either hit a pothole or swerve into a lane of traffic can be a life or death situation. Therefore, in order to encourage safe bicycle usage I would recommend that bicycle lanes be first in line for street maintenance. Additionally, any future improvements to the region's roadway system have bicycle usage as a prime consideration. Action Items 1. Bicycle lanes in designated bike routes get first priority in maintenance. 2. Stop chip sealing roads. Bicyclists need a smooth pavement in which to ride. For existing chip sealed roads add a slurry coat to smooth out the roadway surface. 3. Stop using rumble strips in bicycle lanes	Comment Noted
Has any thought been given to a bike path between Moran Prairie and Latah Creek at the foot of Hatch Road? There should be some connection between the shopping center/apartments etc. at 57th and Regal, and the valley below, without having to go down Hatch.	Comment Noted, project discussed during SRTC South Side Transportation Study.
I am a Bike commuter traveling from the Shadle area to the Spokane Industrial Park several times a week. In the Regional Bike Plan I did not see any emphasis placed on East West routes. The only contiguous route I see is the Centennial Trail. While the trail is great it is not efficient as a commute path because it does not allow for reasonable speed due to the amount of pedestrian use and speed limit of 10 mph. The route I take involves Buckeye (has a pike lane for a few blocks), Foothills Blvd, Euclid Ave (also has a bike lane for a few blocks), Upriver Drive, Wellesley. This is the most direct route East other than Trent Avenue which has Large Trucks and more than 4 times the traffic. The problems I encounter are Glass and other debris on the shoulder including overhanging branches, and Large Trucks on Wellesley and Upriver Drive (which is signed for no Commercial Trucks just not enforced). What would help are Increased sweeping, pruning of branches and shrubs, enforcement of No Truck zones, additional signage indicating bike usage. Additionally multiple North South and East West routes would be appreciated, of course they are of no use if they are not reasonably continuous, in other words more that a few blocks long. It would also help to increase Driver education and awareness through signage and advertising that bicycles do indeed belong on the roadways.	Comment Noted

As a small business owner, with nine employees in the Spokane Valley, I felt that emailing comments would be the best idea for us. It's easy to start seeing the money as free. Sadly, it's not. It comes from hard work, taking risks, and being very organized. Once you've received our money, I hope you give some real thought to how it can be used to help build the economy, and encourage the growth of the entrepreneurial small business. Remember, this isn't Venice, California. We love to bike, but spending real money on commuter lanes is a waste. Sure, it feels good, but the bike lanes only serve to create a false sense of security, in a world where people still drive while talking on cellphones. The Rails to Trails seems like a great use of money. Given our weather, trying to get people to use bikes to commute seems to me to be a huge waste. A few public service announcements should be all that you need to do	Comment Noted
I would like to see are Spokane area provide more bike lanes. I live on the North side and enjoy riding my bike to work - downtown in the summer and I love the idea of blocking off certain area roads for bicycles and just local traffic. What a great idea and I hope Spokane will integrated more "SAFE" bicycle lanes.	Comment Noted