# Exhibit 1

# 4.9 Spokane Master Bike Plan

# **Executive Summary**

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

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

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

For this Plan to be effective, the city will need to commit funding through its annual budget process. This commitment to improving bicycle transportation includes facility maintenance, devotion of adequate staff resources to implementing the Plan, and providing sustained funding for projects and programs.

#### **Goals and Policies:**

- 1. Increase use of bicycling for all trip purposes and improve safety of bicyclists throughout Spokane.
- 2. Provide convenient and secure short-term and long-term bike parking throughout Spokane and encourage employers to provide shower and locker facilities.
- 3. Educate bicyclists, motorists, and the general public about bicycle safety and the benefits of bicycling and increase bicyclist safety through effective law enforcement and detailed crash analysis.
- 4. Develop a collaborative program between a variety of city departments and agencies and several outside organizations to secure funding and implement the Master Bike Plan.

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

# Introduction

We have reached a point where working towards creating sustainable communities is an essential part of maintaining our quality of life. Transportation networks are an important part of this sustainability and developing a system that relies less on unsustainable motorized modes of transport and more on sustainable non-motorized transportation, is crucial. Riding a bicycle is the most efficient form of personal transport. The city recognizes this fact and recent planning efforts have focused on finding a way to make cycling "safe, accessible, convenient, and attractive." (Spokane's Comprehensive Plan

Ch. 4 p. 7) Spokane is in need of a bicycle network that meets all of these requirements while continuing to accommodate a variety of transportation options. With the vision of creating such a system, citizens, city staff and community leaders created this Master Bike Plan, a living document that will provide guidance and serve as a reference as this vision becomes reality.

Currently, there are over 1000 miles of paved streets within the city limits of Spokane; only 17 miles of those streets have designated bicycle lanes. Although these lanes provide a starting point for a bicycle network, many are disconnected and not adequately maintained. According to the 2000 census, Spokane has a higher percentage of cyclists than the national average, but there is still room for a significant improvement. A 2007 report, submitted by the Federal Highway Administration, states that 0.8% of working-age people in Spokane chose to ride their bicycles over other modes of transportation. Over the next twenty years, we would like to see 10 % of all trips in Spokane taken on a bicycle. Fortunately, a number of recent studies have shown that the addition of bicycle facilities and an enhancement of existing facilities can substantially increase the number of riders. If Spokane implements the recommendations contained in this Plan, the results will positively affect the city's economy, transportation systems, environment and health of its citizens.

## **History**

The 2008 Master Bike Plan is not the first bikeway planning effort for Spokane. The City's initial Bikeways Plan was adopted by the City Council in October, 1976 and integrated into the Comprehensive Plan in 1980. The 1980 plan was minimally updated in 1987. In 1996, the City Council adopted the Spokane Regional Pedestrian/Bikeway Plan that was prepared by the Spokane Regional Transportation Council. This detailed plan outlined a regional network of trails and other related recommendations. In 2001, Spokane adopted a comprehensive plan with updated bicycle related policies and goals. The adoption also included a revised map of Spokane's planned regional bikeway network. This marks the most recent occasion of significant changes to Spokane's bikeway network and bicycle related policies.

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

Although studies and accurate statistics about bicycling are difficult and expensive to attain, two recent reports contained useful information for this bike planning process. First, the Spokane River Centennial Trail Gaps report completed by Alta Planning and Design in December of 2007 identified key projects that would close current gaps along the Centennial Trail. The analysis identifies the potential cost and benefit of several alternatives for each of the gaps. Spokane's Master Bike Plan Map includes one of those alternatives for each of the four identified gaps. Second, in November of 2007 a report about cycling habits in Spokane was published. Spokane was chosen as the control city for four other cities highlighted in a non-motorized transportation pilot program conducted by the federal government (Interim Report to the U.S. Congress on the Nonmotorized Transportation Pilot Program SAFETEA-LU Section 1807, November 2007). Although Spokane did not receive any money for facility improvements, the report extensively studied non-motorized transportation in Spokane and provided our community with important baseline information regarding bicycle transportation. In part, Spokane was selected as the control city because it was expected that few non-motorized facility improvements would be built. The aforementioned report coincided with the beginning of the bicycle planning process in the last quarter of 2007 and the results of this endeavor are contained within this plan.

# **The Public Planning Process**

Public, city staff, and other stakeholder involvement have been essential to the plan's development. The bike planning process took more than a year to complete and contains the result of input from thousands of concerned Spokane citizens. With the help of newspapers, electronic notification, television news coverage, and various newsletters and magazines, city planning staff reached a large number of people regarding updates to the plan.

Key activities included:

- In 2008, nearly 350 people attended three preliminary open houses located at community and senior centers across the city. More than 70 people attended a city wide open house as well. These open houses encouraged citizens to provide input about specific routes and general goals of the plan. Open houses occurred on:
  - o April 22 at Southside Senior Activities Center
  - o April 24 at West Central Community Center
  - o April 29 at Northeast Community Center
  - o November 18 at Salem Lutheran Church
- 12 meetings with a workgroup representing diverse interests. This workgroup included representatives of city departments including Planning Services, Capital Programs, Police, Parks, Neighborhood Services and the Street Department. Other agencies represented included Avista Corporation, Spokane Regional Health District, and Spokane Regional Transportation Council. In addition there was active participation of interested groups such as the Friends of the Centennial Trail, members of the Bicycle Advisory Board (BAB), a member of the Community Assembly and Neighborhood Council (PeTT Committee). Staffs from Spokane County and the City of Spokane Valley also were a part of the process.
- Over 1200 people responded to a survey about biking in Spokane. This survey asked questions about riding habits and preferences for bicycle facilities while gathering demographic data about riders.
- 10 Bicycle Advisory Board meetings were attended by planning staff. The communication between the BAB and planning staff was essential to the success of the plan. Additional steering committee meetings were held.
- Information was presented to members of the PeTT sub-committee of the Community Assembly.
- Planning staff worked with consultant groups analyzing traffic of the downtown core and incorporated recommendations in the plan. In addition, staff from the National Parks Service and Bicycle Alliance of Washington participated in workgroup meetings.

After public input had been compiled, planning staff highlighted preferences and priorities of the public. City staff took this information and combined it with traffic volume counts, street width, number of existing lanes, presence/absence of curbs, need for on-street parking and other important observations to create a map of proposed facility ideas. The most direct route across town or between important destinations is always preferred to routes that wander or are confusing. There are many physical and monetary factors that influence the feasibility of bicycle facilities on a particular roadway, but public opinion played a major role in shaping this plan.

In addition to this Master Bike Plan, a number of amendments to the Comprehensive Plan have also been made. The text amendments occur in the following sections of Chapter 4-Transportation of Spokane's Comprehensive Plan:

# 4.4 Goals and Policies

- TR 1.1 Transportation Priorities
- TR 2.1 Physical Features
- TR 2.2 TDM Strategies
- TR 2.3 Pedestrian/Bicycle Coordination
- TR 2.4 Parking Requirements
- TR 2.5 Parking Facility Design
- TR 2.10 Pedestrian Linkages Across Barriers
- TR 2.11 Pedestrian Access on Bridges
- TR 2.12 Pedestrian Access to Schools

- TR 2.13 Viable Bicycling
- TR 2.14 Bikeways
- TR 2.15 Bicycles on Streets
- TR 2.16 Bicycle Lanes and Paths
- TR 2.18 Viable Transit
- TR 4.4 Arterial Location and Design
- TR 4.5 External Connections
- TR 4.6 Internal Connections
- TR. 4.10 Downtown Street Network
- TR 4.12 Law Enforcement
- TR 4.13 Traffic Signals
- TR 4.15 Lighting
- TR 4.16 Safety Campaigns
- TR 4.17 Street Maintenance
- TR 4.25 Pedestrian Access to Parks
- TR 5.7 Neighborhood Parking
- TR 6.3 Transportation Alternatives and the Environment

# 4.5 Existing and Proposed Transportation Systems

- -Existing Versus Proposed Transportation Systems
- -Pedestrian and Bicycle Systems: The History of Planning for Pedestrians and Bicycles in Spokane
- -Shared Bicycle and Pedestrian Facilities
- -The Bicycle System
- -Table TR2 Bicycle Terms

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

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

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

Master Bike Plan Part 2 contains facilities definitions, and planned bikeway network maps.

# MASTER BIKE PLAN PART 1 - CITYWIDE BICYCLING POLICIES

Goal: Increase use of bicycling for all trip purposes and improve safety of bicyclists throughout Spokane.

## **Policy**

# MBP 1 Bikeway Network and Bicycle-friendly streets:

Establish a bikeway network that serves all Spokane residents and neighborhoods and make Spokane's streets safe and convenient for bicycling while considering the current and future needs of all other modes of transportation.

#### **Actions**

# Action 1.1: Provide bicycle facilities on designated arterial streets.

Spokane's arterial streets offer the most direct routes to workplaces, shopping areas, schools, transit park-and-ride lots, and other destinations. A lack of bicycle facilities on the city's arterial street system prevents more people from making trips by bicycle and makes conditions less comfortable for bicyclists. This action helps to fulfill Spokane's Comprehensive Plan TR 1 OVERALL TRANSPORTATION Goal: Develop and implement a transportation system and a healthy balance of transportation choices that improve the mobility and quality of life of all residents.

### Action 1.2: Complete the Bikeway Network.

The Bikeway Network provides a skeleton of high-quality bicycle facilities that connects other cycling opportunities within the city. These facilities include bike lanes, on-street markings, signed routes, bicycle boulevards, or paths which are on separated rights-of-way from motorized traffic. Spokane should complete the Bikeway Network including key components, such as completing the Centennial Trail missing links, the Ben Burr Trail, Fish Lake Trail, and connections to other trails within the Greater Spokane Area.

# Action 1.3: Improve bicycle safety and access at arterial roadway crossings.

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

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

# Action 1.4: Make key operational improvements to complete connections in the Bikeway Network.

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

- Provide bicycle turn pockets at key intersections. Left-turn pockets allow bicyclists to wait in a designated space
  for a gap in traffic before turning left. These pockets are particularly beneficial on roadways with relatively high
  traffic volumes and significant bicycle turning movements. Locations with raised medians may provide good
  opportunities to add pockets.
- Traffic signal timing should consider all modes including bicycling. Therefore, all traffic signals should facilitate safe bicycle crossings. This includes providing a minimum green time and a minimum yellow time to ensure that bicyclists are able to clear intersections, per the AASHTO *Guide for the Development of Bicycle Facilities* (1999)

- or latest edition). Explore new technologies to detect bicyclists at traffic signals. In the future, explore new detection technologies such as infrared or video sensors that can tell the difference between bicycles and motor vehicles. This can help improve bicycle detection at actuated signalized intersections and make it possible to detect bicyclists at pedestrian crosswalk signals.
- Explore innovative designs for bicycles at intersections. This includes modifying pedestrian crosswalk signals to
  have separate push-buttons or sensors to detect bicyclists, pedestrians, and motor vehicles. This allows the traffic
  signal to stop arterial traffic for a shorter amount of time for bicyclist crossings than for pedestrian crossings.
   Separate crossing signals are provided for bicycles and pedestrians at these intersections. The City of Tucson, AZ
  has successfully used this signal design. Bicycle boxes should also be considered at signalized locations with high
  numbers of left turning bicyclists. The design of all types of traffic signals should not confuse pedestrians and
  should comply with the Americans with Disabilities Act.
- Improve bicycle accommodations on bridges. Bicycle accommodations on bridges need to be improved as well as on their approaches and access ramps. In the short-term, bicycle access should be improved using signage, marking, maintenance, and other spot improvements. In the long-term, as bridges are repaired or replaced, they should be studied to determine the demand for bicycle facilities. If needed, the bridge project should include new facilities or retrofitted with facilities that provide appropriate bicycle access (e.g., bicycle lanes or wide sidewalks minimum 10 feet wide). Bridges are critical for providing bicycle connectivity throughout Spokane.
- Explore the possibility of using "Bicyclists Allowed Use of Full Lane" signs. These signs should be considered in high-traffic areas, such as Downtown Spokane, to remind motor vehicle drivers of the legal right of bicyclists to use the roadway. Guidelines for use of these signs, including number of travel lanes, speed limits, and other roadway factors will need to be developed. The signs have been used in San Francisco.
- Explore the possibility of using "Share the Road" with bicycles signs. There are places where "Share the Road" signs may help alert motorists to the presence of bicyclists. For example, these signs could be posted along the Signed Shared Roadways as designated on the Bikeway Network Map.
- Pedestrian crosswalk signal design (i.e., improve access for both pedestrians and bicyclists).
- Additional locations for pedestrian pathways with bicycles permitted (e.g., potential pathways through parks, improvements to stairs).

#### Action 1.5: Provide wayfinding guidance through complicated connections in the Bikeway Network.

Wayfinding signs and pavement markings should be provided to help bicyclists navigate through complicated sections of the Bikeway Network (in addition to official Signed Bicycle Routes). There are a number of locations in the city where it may be necessary to use non-arterial streets, alleys, or sidewalks to connect between existing or proposed bicycle facilities. While many of these complicated connections are shown on the Bikeway Network Map, there are currently no signs or markings along the actual connection to facilitate wayfinding. The city should install a combination of signs and markings to guide bicyclists through these connections. Examples include:

- Centennial Trail
- Ben Burr Trail
- Fish Lake Trail.

# Action 1.6: Improve the quality and quantity of bicycle facility maintenance.

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

- Encourage bicycle organizations and other community groups to assist with minor maintenance activities. The city will work with bicycle organizations, community groups, civic organizations, and businesses to provide periodic upkeep along trail corridors. This will help improve bicycle facility safety, reduce maintenance costs, and build goodwill with neighborhood residents.
- Consider creating an "adopt a bike lane" program. A neighborhood or citizen group could work with the city to implement this plan. Potentially, groups could raise the money required for on-street paint, signage and maintenance of a particular bike project within the Master Bike Plan.

- Continue to respond to citizen complaints and maintenance requests. Establish a Bike Spot Safety program to accept maintenance complaints and requests from citizens. Use these requests to make short term improvements and to set maintenance priorities.
- Consider different types of weather and road conditions when developing and maintaining bicycle facilities. Weather and seasonal issues will be considered in the development and maintenance of bicycle facilities within reasonable limits. For example, slip-resistance will be a factor considered in the selection of pavement markings for bicycle facilities. Also on-street bicycle facilities and off-street paths should be swept more frequently to ensure the safety of cyclists. Drainage will also be addressed in the design of all roadways and paths.

## Action 1.7: Fix spot maintenance problems on existing city streets and bikeways.

Making maintenance improvements on existing on and off road bicycle facilities should be given high priority. Spot improvements, such as removing of specific surface irregularities, filling seams between concrete pavement sections, and facilitating safe railroad crossings should be made on an as-needed basis. The city should address these maintenance problems in conjunction with utility providers (e.g., utility providers may have responsibility for utility hole covers, steel plates, etc.). Public feedback is critical for identifying maintenance issues.

# Action 1.8: Prioritize bicycle facility development and maintenance to maximize the use and safety benefits of these investments.

Several factors will be considered to prioritize bicycle facility development and maintenance. The bicycle improvements that will be made first will be those that serve high volumes of users, improve safety, are cost-effective, and improve geographic equity. Prioritization criteria will be developed and may include the following:

#### User volumes

- Improve conditions in corridors where there is high potential to increase bicycle trips
- Increase the connectivity and safety of the Bikeway Network
- Improve bicycle conditions (by providing facilities that make bicycle and motorists behavior more predictable) in areas with high numbers of police-reported crashes
- Improve bicycle conditions proactively in locations where there is a high potential risk of crashes

#### Cost-effectiveness

- Implement bicycle facilities as a part of other projects, such as roadway repaying and reconstruction
- Make improvements that have been identified as important bicycle facilities in previous plans

# Geographic equity

- Provide facility connections in areas where bicycle lanes and trails are missing or disconnected
- Implement projects that have been identified as important bicycle facilities by the public

#### **Policy**

# MBP 2 Bike Parking and other support facilities:

Provide convenient and secure short-term and long-term bike parking throughout Spokane and encourage employers to provide shower and locker facilities.

#### **Actions**

# Action 2.1: Improve bicycle storage facilities at transit facilities.

Bicycle parking improvements are needed at transit facilities including park and ride lots. This includes providing bicycle racks and lockers and reserving adequate space during transit station construction to provide future bicycle racks and lockers. The following specific actions will be undertaken:

- Provide sufficient space for bicycle storage at transit stations and multimodal hubs.
- Provide sufficient space for bicycle storage at future transit stations and park and ride lots. As transit systems develop in the future, bicycle parking demand should be evaluated to determine the amount of space that is

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

### Action 2.2: Increase the availability of bicycle parking throughout the city.

Secure bicycle parking located in close proximity to building entrances and transit entry points is essential in order to accommodate bicycling. Secure bicycle parking helps to reduce the risk of bicycle damage and/or theft. Update the bicycle parking requirements for new developments in Spokane as necessary.

- Establish a proactive bicycle rack installation program. A proactive bicycle rack installation program should be established to provide additional bicycle parking in urban areas, particularly on commercial and high-density residential blocks. Schools, libraries, and community centers should also be targeted for bicycle rack installation. It will be important to work closely with adjacent property owners to make sure that racks are properly located and do not interfere with loading zones and other business related activities.
- Strengthen legislation to require more bicycle racks and lockers as a part of new developments.
- Consider installing covered, on-demand, longer-term bicycle parking. The City of Spokane will work with local agencies and the Spokane Parks and Recreation Department to examine the possibility of installing covered, on-demand, longer-term bicycle parking. Unlike locker facilities, this type of bicycle parking facility also has the advantages of not needing to be rented, not requiring keys, and not being a potential receptacle for trash. Certain types of covered, on-demand bicycle parking facilities can be locked with a padlock provided by the bicyclist.
- Provide incentives for operators of private parking facilities to add secure, high quality bike parking. It will be important for the city and transit agencies to maintain bicycle racks and lockers and use enforcement to deter misuse of these facilities. Abandoned bikes and locks can make existing racks unusable. Other racks can be obstructed by planters, news boxes and other street furniture.

Action 2.3: Encourage office development and redevelopment projects to include shower and locker facilities. The city should amend its development ordinance to strengthen existing requirements for shower and locker facilities based on employment densities. For employees who are considering bicycling to work, such facilities make it possible to shower and change into work clothes after the commute.

# **Policy**

# MBP 3 Education, law enforcement and crash analysis:

Educate bicyclists, motorists, and the general public about bicycle safety and the benefits of bicycling and increase bicyclist safety through effective law enforcement and detailed crash analysis.

#### **Actions**

Action 3.1: Educate Spokane's transportation system users about all bicycle facilities, including new elements. Additionally, perform community-wide efforts to increase public awareness of the rights of cyclists on the road.

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

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

Action 3.2: Promote bicycle education and encouragement in Spokane through partnerships with community organizations and schools.

# Action 3.3: Develop a Bicycle Crash Report "cheat sheet" so officers reporting bicycle crashes include necessary information for crash analysis.

This is needed for development of engineering, safety education and for enforcement program.

- The city should analyze bicycle crash data to determine bicycle safety improvement goals; to determine causal factors leading to such crashes and to identify locations where such crashes commonly occur.
- Engineers will work with the Spokane Police Department to enable them to develop traffic law enforcement plans that are responsive to these identified safety problems.

# Action 3.4: Increase enforcement of bicyclist and motorist behavior to reduce bicycle and motor vehicle crashes.

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

Motorist behaviors that will be targeted include:

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

Bicyclist behaviors that will be targeted include:

- Riding the wrong way on a street.
- Riding with no lights at night.
- Riding without helmets.
- Riding recklessly near pedestrians on sidewalks.
- Disobeying traffic laws.

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

# Action 3.5: Support efforts to obtain funding for bicycle education and enforcement programs.

# Action 3.6: Convert current bike route network signage to a destination based network.

The city will begin to use signs to mark bicycle routes that identify distances, destinations and directions.

# Action 3.7: If proven to be safe and effective, construct Bike Boxes at select and appropriate signalized intersections.

A Bike Box is an advance stop bar for bicycles. It provides a safe area for bicyclists to wait at traffic controls/signals that allow them to get an advance start on motor vehicle traffic, which stages at a stop bar behind the bicyclist. Often, the pavement within a Bike Box is painted.

# **Policy**

# MBP 4 Secure Funding and Implement Bicycle Improvements:

Develop a collaborative program between a variety of city departments and agencies and several outside organizations to implement the Master Bike Plan.

**Discussion:** Implementation of this Plan will be a collaborative effort between a variety of city departments and agencies and several outside organizations. The Bicycle/Pedestrian Coordinator will lead this effort and will work with city staff so that the Plan recommendations are implemented as a part of their regular work. The Transportation Department will provide technical expertise on issues related to bicycling and ensure that implementation of the Plan moves forward.

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

- Street Department
- Engineering/Capital Projects/Design
- Planning Services
- Police Department

Progress on implementing the Plan will be monitored on an annual basis with the goal of completing most of this Plan by 2020.

Every transportation project offers an opportunity to implement a piece of this Master Bike Plan. Therefore, institutionalizing bicycle improvements will be essential for successful implementation of this Plan. As stated in Action item 4.1, bicyclists' needs should be considered in the planning, design, construction, and maintenance of all transportation projects in the city.

#### **Actions**

# Action 4.1: Provide bicycle facilities as a part of all transportation projects to all possible extents.

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

- Actively seek opportunities to provide bicycle lanes, shared lane markings, and other on-road bicycle facilities as a part of repaving projects. (This includes roadways in the Comprehensive Plan Planned Bikeway Network as well as viable alternatives to the routes proposed, if necessary.)
- Develop trails in conjunction with the installation of underground cable, water, sewer, electrical, and other public or private efforts that utilize or create linear corridors. If possible, develop new trails along these utility corridors.
- Continue to develop trails in railroad corridors no longer needed for railroad purposes. Where appropriate, develop trails adjacent to rails.
- Leverage other types of projects that could potentially include bicycle facilities.
- Fix potholes, surface hazards, sight distance obstructions, and other maintenance problems on a regular basis.

### Action 4.2: Dedicate funding for bicycle project planning and implementation.

# Action 4.3: A Bicycle Program should provide the necessary staff expertise and commitment to implement the Bikeway Network within 20 years.

# Action 4.4: Continue to make minor improvements for bicycling through the Bicycle Spot Improvement Program. Spokane should continue to make the following types of improvements through this program:

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

# Action 4.5: Continue to receive regular input and guidance from the Bicycle Advisory Board.

The Bicycle Advisory Board should continue to provide regular input and guidance regarding bicycle issues. This will include monitoring the progress of implementation.

# Action 4.6: Provide bicycle planning and facility design training for appropriate project-level staff and consultants, and encourage staff from other agencies to attend.

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

# Action 4.7: All divisions of the City of Spokane should consult the Master Bike Plan when working on all projects.

All divisions should consult this Plan to ensure that the recommended facilities and maintenance practices are implemented in accordance with this Plan. For roadway repaving and reconstruction projects, the Master Bike Plan recommendation represents the best option. As conditions change, better alternatives to the proposed bicycle network may form. Further study, additional public involvement and consultation with the Bicycle Advisory Board may ultimately result in an even better strategy to provide bicycle access.

Action 4.8: Integrate the recommendations of the Master Bike Plan into other city ordinances, plans, and guidelines.

Action 4.9: Coordination within the city and between the agencies and organizations where necessary to implement the Master Bike Plan.

Action 4.10: Update the Master Bike Plan on a regular basis.

# Action 4.11: Evaluate new bicycle facility treatments.

New bicycle treatments should be evaluated to determine their effectiveness. For guidance on the type of bicycle facility treatments to be used, the city will use the U.S. Department of Transportation Federal Highway Administration Manual on Uniform Traffic Control Devices (MUTCD). Brief studies of these facility treatments should be done in the first three years after the Plan is adopted, and the results of these evaluations will be used to refine, adjust, and guide the future use (or discontinuation) of these treatments. This includes evaluating the following facilities (potential evaluation measures are shown in parenthesis):

- Shared lane and bicycle lane markings (evaluate their use by bicyclists, placement relative to parked cars and vehicles in travel lanes, maintenance needs, effects of any travel lane rechannelization and/or narrowing on the safety and comfort of all roadway users).
- Signage and wayfinding (assessment by stakeholders, use by bicyclists, interpretation of signs, effectiveness of sign and/or pavement marking placement).

# ☐ MASTER BIKE PLAN PART 2 – BIKEWAY NETWORK MAPS AND FACILITY DEFINITIONS

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

# **Bikeway Network Definition**

Implementation of this Plan will establish roughly a 160-mile network of bikeways throughout the city of Spokane. This Bikeway Network is composed of all of the locations throughout the city where specific improvements have either already been made or are proposed in the future to accommodate bicycles. Almost all Bikeway Network segments will have some type of visible cue (i.e. a bike lane, a bike route sign, a pavement marking, a trail, etc.) to indicate that special accommodations have been made for bicyclists. While the network will provide primary routes for bicycling, it is important to note that, by law, bicyclists are permitted to use *all* roadways in Spokane (except limited access freeways or where bicycles are otherwise prohibited). Therefore, the Bikeway Network will serve as a core system of major routes that can be used to safely access all parts of the city and other parts of the transportation system.

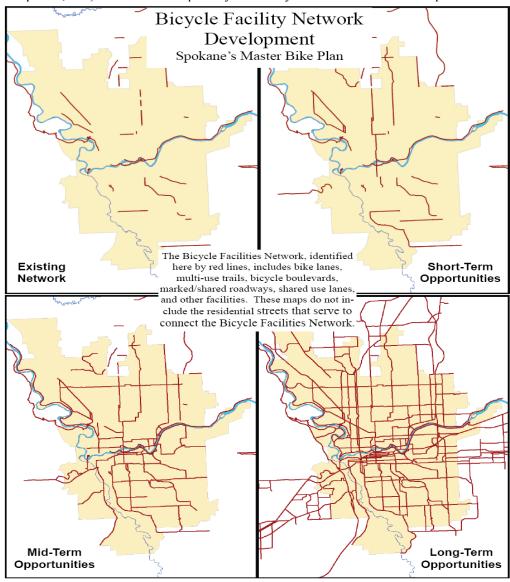
Portions of the Bikeway Network identified as "short-term" are recommended to be implemented in the next 6 years. Other segments of the network may require a longer period to implement due to their higher complexity. The completed Bikeway Network will connect all parts of the city and will provide a bicycle facility within one-half mile of most Spokane residents.

#### **Bikeway Network Maps**

**Bicycle Facility Network Development Maps-** Spokane's bicycle facilities network, identified on the graphic by red lines, includes bike lanes, multi-use trails, bicycle boulevards, marked/shared roadways, shared use lanes, and other facilities. These maps do not include the residential streets that serve to connect the bicycle facilities network. The

development of bicycle facilities is expected to take place over the course of the next 20 years. A number of unforeseen circumstances may affect the way that Spokane's bike network will develop. The Bicycle Facility Network Development Maps are not intended to define a specific time frame for the development of bike facilities within the city. These maps represent how the network may develop over time recognizing that the network cannot be created immediately. If an opportunity to develop any of the facilities on the map arises, that opportunity should be pursued.

- 1. **Existing Network Map-** This map shows all of the existing bike lanes and multiuse paths in Spokane at the time of the adoption of the Master Bike Plan.
- 2. **Short-Term Opportunities Map** These opportunities may be chances to add bicycle facilities to planned street projects if funding is found. These are also considered "high priority projects" that could be completed easily and would significantly improve Spokane's bikeway network.
- 3. **Mid-Term Opportunities Map** The mid-term opportunities are further connections to the short-term facilities. These projects may need more analysis to determine the most appropriate route.
- 4. **Long-Term Opportunities Map** The long-term opportunities are projects that are more difficult to complete, require a lot of money (Ex. Bridge improvements, tunnel construction, large sections of trails completed, etc.) or are less of a priority shown by the feedback from the open houses.



Bikeway Network Facility Type Map (See 4.10 Map TR 2)- The Bikeway Network Facility Type Map is intended to show where bicycle improvements should be implemented and maintained in the City of Spokane. There are four different classifications on this map: "Signed/Shared", "Bike Lane", "Bike Boulevard" and "Shared Use Path". All of these facilities require signs in a combination with other improvements (e.g. a built path or paint on the street). This map is not intended to designate where streets should have a wide "shared lane" without signs. When feasible, all streets should be designed to safely accommodate both automobiles and bicycles. Specific aspects of each design will be included in future project descriptions. This map is intended to show a network of bicycle facility improvements that will encourage more cyclists to safely use the roadways. Cyclists are welcome and encouraged to use any roadway; (with the exception of Interstate 90, Division between Buckeye and "The Y" and the Hamilton off ramp) but this map shows potential and current bicycle routes that may be more direct, have lower traffic volumes, or are safer.

# **Bikeway Network Facility Definitions**

The following section is a description of the legend for the Bikeway Network Facility Map.

# **Bicycle Boulevard:**

A number of tools can help to transform a roadway into a bicycle boulevard. Bicycle boulevards are designed for the safe and efficient movement of bicycles. Traffic engineers may use signs, on-street markings or traffic calming devices to create a roadway that prioritizes bicycle traffic. The design of the bicycle boulevard is flexible and will be tailored to meet the specific needs of the roadway. Below are examples of possible bicycle boulevard treatments.





#### Bike Lane:

A bike lane is identified by on-street striping. Typically a bike lane is 5 feet wide. However, bike lanes can be 4 feet wide if there is no if there is no curb or gutter. An on-street marking of a bicyclist and/or street signs identifying the bike lane may accompany the striping. Below are examples of potential bicycle lane designs. The actual design will depend on the roadway width and traffic conditions.













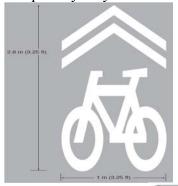
# **Shared Use or Multiuse Path:**

A shared use or multiuse path is an off-street facility designed for certain non-motorized uses. These paths have a minimum width of 10 feet to accommodate two-way traffic. These paths are often identified by signs and barriers preventing auto-traffic from using the path.



# Marked/Shared Roadway:

A Marked/Shared Roadway designation is typically found on important roadways where bicycle lanes may not be feasible. A Marked/Shared Roadway may use on-street markings and signs to alert motorists and cyclists to the designation. Sharrows are used to remind all roadway users to share the road while directing cyclists out of the "door zone". In cases of steep terrain, a "climbing lane" should be used on the uphill side of the roadway and sharrows should be used to guide cyclists in the downhill lane.







# **Shared Roadway:**

A shared roadway requires no on-street markings or signs. Typically, this designation is reserved for streets where a wide shoulder or wide lane increases safety and comfort for cyclists and motorists. However, these roadways may be considered for the addition of on-street markings if needed.



# **Further Evaluation of Bicycle Facility Recommendations**

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

# 4.<del>9</del> <u>10</u> MAPS

- TR 1 Regional Pedestrian Network
- TR 2 Regional Bikeway Network
  TR 3 Arterial Network
- TR 4 Boulevards, Parkways and Area Classifications
- TR 5 Regional Freight and Goods, Airports, and Railroads

# Exhibit 2

# Comprehensive Plan text amendments

# **Chapter 4: Transportation**

# The Importance of Design

Design is an important issue in several respects. First, the large-scale design of Spokane's street system largely determines how—and how well—people get about the city. Street system design features, such as the location, width and size of arterials, whether streets are one-way or two-way, and whether there is a transportation network for bicycles or and pedestrians all profoundly impact transportation. Second, concerns about the higher densities and mixed land uses needed to support alternative transportation modes often have to do with design. Citizens are concerned about how higher densities and mixed-uses will "fit" with surrounding areas. Finally, individual design features such as pedestrian buffer strips, bicycle paths and lanes, and bus shelters influence the availability, appeal, and use of transportation choices. Individual design features can also be used to direct traffic and calm traffic speed.

# TR 1 OVERALL TRANSPORTATION

Goal: Develop and implement a transportation system and a healthy balance of transportation choices that improve the mobility and quality of life of all residents.

#### **Policies**

#### **TR 1.1 Transportation Priorities**

Make transportation decisions based upon prioritizing the needs of people as follows:

- Design transportation systems that protect and serve the pedestrian first;
- Next, consider the needs of those who use public transportation and non-motorized transportation modes;
- Then consider the needs of automobile users after the two groups above.

Discussion: This fundamental transportation policy is a statement of how the City of Spokane prioritizes people's transportation needs. It indicates a general priority of how the needs of people are considered. Applying this policy on a case-by-case basis will not mean that in all cases bicycles or pedestrians come first and automobiles last. The intent of the policy is not meant to be anti-automobile, but rather the intent is to accomplish the following:

First, following these priorities leads to the development of the type of community described in the adopted "Citywide Vision" statement and Transportation Vision and Values statements. Second, it increases the transportation choices available to people. Third, it lessens the negative impacts of automobiles, such as noise and air pollution, traffic through neighborhoods, and the need for additional parking. Fourth, it helps prepare Spokane for the future when more people may need alternatives to driving and the negative impacts of automobiles increase as Spokane's population increases. Fifth, it makes driving in Spokane quicker, more convenient, and safer by reducing vehicle congestion and, in some cases, by providing separate facilities for bicycles, pedestrians and transit.

Sixth, these priorities recognize that we are all pedestrians. Seventh, they also recognize that pedestrians, babies in strollers, people in wheelchairs, and people on bicycles can't compete with automobiles or trucks, yet they should be able to travel safely and comfortably. Those least able to cope with the physical and psychological stresses of the built environment should receive

equal consideration. Finally, this policy recognizes that the city and region are auto-dominated without the variety of transportation choices desired by the community.

# TR 2 TRANSPORTATION OPTIONS

Goal: Provide a variety of transportation options including walking, bicycling, taking the bus, car pooling, and driving private automobiles, to ensure that all citizens have viable travel options and reduce dependency on automobiles.

#### TR 2.1 Physical Features

Incorporate site design and other physical features into developments that encourage alternatives to driving.

Discussion: Development that is oriented toward driving leads to people driving. Examples of such development include buildings set back far from the street, large parking lots in front of buildings. Development that includes physical features that encourage walking, bicycling, or taking the bus will foster use of these transportation alternatives. Physical features that encourage walking include sidewalks, street trees, street lights, benches, pedestrian islands, clearly marked pedestrian pathways in parking lots, water fountains, rest-rooms, and display windows on the street in commercial areas. Physical features that encourage bicycling include bicycle paths, lanes, boulevards, and routes; bicycle racks and lockers; and showers and lockers at work sites. Improvements for transit riders include seating, shelters, and walkways.

#### TR 2.2 TDM Strategies

Use Transportation Demand Management strategies to reduce the demand for automobile travel. Discussion: Transportation Demand Management (TDM) is an approach to solving transportation problems that focuses on reducing the demand for automobile travel rather than increasing the system capacity (supply) for automobile travel. TDM strategies should be particularly aimed at reducing the volume of single occupancy vehicles. TDM is a valuable tool with which to address transportation problems because it generally avoids the high environmental, financial, and human costs associated with capacity-oriented solutions, such as road construction. The Commute Trip Reduction Program provides TDM techniques locally. TDM involves two types of strategies. One strategy reduces the demand for single-occupant automobiles. This is accomplished through programs, such as:

- Employer-subsidized bus passes and other financial incentives for transit use and bicycle commuting.
- Infrastructure changes, such as providing safe and convenient bicycle parking and safe and convenient bikeways from residential to work, school, and shopping locations, to increase the use of non-motorized modes of transportation.
- Parking management that reduces the amount of easy and cheap parking for employees
  provided this does not lead to an unacceptable reduction in available parking for
  residents in adjacent areas.
- Preferential parking for car pools and vanpools.
- The building of lockers, change rooms, and shower facilities for bicyclists.
- Ride match services.

The other TDM strategy reduces the overall need for travel by any means. This is accomplished through programs, such as:

- Flexible work schedules, including four-day work week.
- Teleworking (using telecommunications and computer technology to work from home to another location).

TDM techniques should be used to reduce the demand for both work-related travel and non-work related travel, such as shopping and errands.

# TR 2.3 Pedestrian/Bicycle Coordination

Provide adequate City of Spokane staff dedicated to pedestrian/bicycle planning and coordination to ensure that projects are developed that meet the safety, access, and transportation needs of pedestrians, bicyclists, and other non-motorized transportation users.

Discussion: One of the main themes of this plan is that citizens should have viable transportation options. Accomplishing this requires the attention of City of Spokane staff from a variety of departments and disciplines. Some staff time, however, should be entirely devoted to the needs of pedestrians, bicyclists, and other non-motorized transportation users. This staff will work to accomplish the goals and carry out the policies of the City of Spokane's plans as they relate to non-motorized transportation users. Projects for the coordinator could include:

- Coordinate Coordinating with City of Spokane departments and other agencies to efficiently provide for transportation alternatives and facilitate the accomplishment of the city's transportation priorities.
- Incorporating bicycle/pedestrian facilities as early as possible into plans to reduce costs and take advantage of cooperative opportunities.
- Serve <u>Serving</u> as a resource for city departments for facility standards (such as Americans with Disabilities Act (ADA) requirements) so issues can be efficiently addressed.
- Seek Seeking funding sources for transportation alternatives.
- Develop and implement Developing and implementing design guidelines to ensure that public and private developments meet a variety of transportation needs.
- Develop <u>Developing</u> transportation-related educational programs for both non-motorized and motorized transportation users.
- Encourage Encouraging promotional events for transportation alternatives.
- Support Supporting efforts to increase the number of combined bicycle/transit trips.
- Develop and implement <u>Developing and implementing</u> specific plans for non-motorized transportation users.
- Incorporating bicycle facilities into design standards for new development.
- Assisting Spokane to achieve higher bicycle friendly city ratings.
- Promoting Spokane as a bicycle friendly city.

Providing adequate City of Spokane staff dedicated to pedestrian and bicycle planning and coordination is the best way to ensure that the interests of the pedestrian and bicycling community will be incorporated in the formation of public transportation policy, the development of transportation facilities, and in the fair disbursement of public funds for this important and currently under-served community.

#### TR 2.4 Parking Requirements

Develop and maintain parking requirements for vehicles that adequately meet the demand for parking yet discourages dependence on driving.

Discussion: Parking standards should aim to meet the need for parking, not to provide large amounts or an abundant supply of parking. Parking standards should achieve a balance between providing enough parking to adequately meet the needs of customers and employees. Reducing parking requirements has other benefits, including decreasing the amount of space businesses must devote to parking, reducing parking lot size (and thus making them pedestrian friendly), and freeing-up space to more easily enable sensitive parking lot design (see TR 2.5, "Parking Facility Design"), and that removing/re-striping of on-street parking may encourage/enable safer cycling.

One concern is to ensure that commercial parking is not displaced onto adjacent residential areas. Parking requirements should correspond to land uses. For example, there are some land uses that have a lower parking demand rate, such as college campuses. Possible ways to revise parking standards include reducing parking requirements, prescribing maximum as well as minimum parking requirements, increasing car pool preference parking spaces, and allowing onstreet parking for mixed-use development that is oriented to transit users and pedestrians. This policy has a strong link to policy TR 2.2, "TDM Strategies."

### TR 2.5 Parking Facility Design

Design parking facilities to enhance mobility for all transportation users (including those not driving) and to mitigate impacts on surrounding areas.

Discussion: Residents are frequently concerned about how parking facilities impact surrounding areas. For example, residents want parking lots to be visually attractive, unobtrusive, and accessible to all users, not just those in automobiles. The negative impacts of parking lots, which include noise, light, and their general visual impact, should be minimized. Such impacts can be mitigated through site design and design features, which include landscaping and fencing. Clearly marked pedestrian pathways through parking lots create a safer environment for pedestrians than having to walk behind parked automobiles. The availability of design features, such as bicycle racks, bike lockers, bicycle shelters, bus shelters, benches, and places to secure dogs influence the ability of non-drivers to access the places served by parking lots. The siting of parking lots, whether they are in front of buildings or to the rear or underground, affects both-mobility and impacts the surrounding areas. Parking lots should be user-friendly to pedestrians, bicyclists, and transit users, as well as drivers.

## TR 2.10 Pedestrian and Bicycle Linkages Across Barriers

Provide pedestrian <u>and bicycle</u> linkages between major activity areas where features that act as barriers prevent safe and convenient access.

Discussion: Due to geographic or man-made features, such as steep hillsides or freeways, special linkages may be needed to provide safe and convenient pedestrian and bicycle access. Existing examples of such linkages include the staircases with bike wheel channels linking Peaceful Valley with Browne's Addition and the pedestrian bridge spanning I-90 in the East Central neighborhood. Pedestrian and bicycle bridges or skywalks should not be developed where pedestrians and cyclists can be safely accommodated at the ground level through other techniques, such as crosswalks, pedestrian islands, and traffic calming devices.

#### TR 2.11 Pedestrian and Bicycle Access on Bridges

Provide safe pedestrian <u>and bicycle</u> access and an aesthetically pleasing <del>pedestrian</del> environment on bridges.

Discussion: Bridges serve as important links within the community. As part of the city's transportation network, bridges should provide safe pedestrian <u>and bicycle</u> access. Since By their nature, bridges present sensitive design issues; <u>and there</u> is no one answer for how to provide pedestrian <u>and bicycle</u> access for all bridges. The type of pedestrian <u>and bicycle</u> access can vary between bridges to be appropriate to the particular bridge and the opportunities and limitations the bridge and its site present. Pedestrian <u>aA</u>ccess on bridges might vary from both sides of the bridge, to just one side, to perhaps access beneath or above the vehicle deck area. What is essential is that pedestrian <u>and bicycle</u> access be available and safe. Pedestrian <u>and bicycle</u> facilities on bridges should also be aesthetically pleasing; New Jersey barriers and other bunker-like features should not be used.

#### TR 2.12 Pedestrian and Bicyclist Access to Schools

Enhance the pedestrian <u>and bicycle</u> environment along routes to schools to provide a safe walking environment for children.

Discussion: Providing a safe walking <u>and bicycling</u> environment for children on their way to school increases their safety and encourages them to develop the habit of walking <u>and bicycling</u>. The GMA requires the Transportation Element of the Comprehensive Plan to "include a pedestrian and bicycle component to include collaborative efforts to identify and designate planned improvements for pedestrian and bicycle facilities and corridors that address and encourage enhanced community access and promote healthy lifestyles" [RCW 36.70A.070(6)(a)(7)]. Simply stated, a bicycle and pedestrian component is now specifically required in a community's comprehensive plan. This supports goal 3 of the GMA, to encourage efficient multimodal transportation systems.

Ways to accomplish this include:

- Encouraging school routes not to cross arterials.
- Having user-activated lights at intersections where arterials must be crossed.
- Implementing safety patrols with traffic-control signs at busy street crossings.
- Working with schools to promote walking and bicycling groups.
- Strengthening and enforcing pedestrian right-of-way laws.

## TR 2.13 Viable Bicycling

Promote and provide for bicycling as a viable alternative to driving.

Discussion: Bicycling should be a viable transportation option so that the community has a full spectrum of transportation choices. <u>Viable transportation for bicycling includes being safe, efficient, and quick.</u> While bicycling can also serve recreational purposes it needs to be respected and accommodated as a mode of transportation.

# TR 2.14 Bikeways

Provide safe, convenient, continuous bikeways between activity centers and through the city. Discussion: Some city streets are more bicycle-friendly than others due to hills, traffic flow, speed, and the access they provide for bicyclists. Providing bicycle facilities that link city centers and the downtown core through identified corridors will encourage utilitarian cycling. This will serve to decrease traffic and its intrinsic problems (e.g. air and noise pollution). Bikeways should be designed and maintained that are clearly marked, safe, and that serve the needs of bicyclists for both thru-routes and destinations

# TR 2.15 Bicycles on Streets

Provide safe accommodations for bicyclists on the street system, which will continue to be the primary route system for bicyclists.

Discussion: The street system serves to connect citizens throughout the city. City of Spokane staff should coordinate with designers, engineers, law enforcement, "citizen advisory boards" such as the Bicycle Advisory Board, neighborhood councils, Department of Licensing, and educators to ensure that the street environment is safe and practical for bicyclists. All street users should be taught to understand and respect the rights of other street users to ensure safe and pleasant travel. Bicycles are legal on all public roadways unless specifically prohibited. Drivers Education classes could include detailed information about bicycling and the need for cooperation among road users while laws pertaining to bicyclists should be strictly enforced.

#### TR 2.16 Bicycle Lanes, Boulevards and Paths (Bicycle Facilities)

Use marked on-street bicycle lanes, bike routes and off-street bicycle paths in addition to the street system to provide for bicycle transportation within the city.

Discussion: Marked bicycle facilities will form the backbone of the bicycling transportation network While the street system is the primary route system for bicyclists (see policy TR 2.14, "Bikeways"). the construction of either Bicycle facilities with marked on-street bicycle lanes or off-street bicycle paths is are often desirable to accommodate This accommodates the differences in ages, abilities, and purposes of bicycle riding. Because narrowing travel lanes has the positive effect of calming traffic speeds to within legal limits, adding bicycle lanes to arterials has the dual effect of traffic calming as well as encouraging the use of bicycles. A fully separate, off-street bicycle system is costly and often impractical, particularly in existing neighborhoods. However, the city's off-street bicycle path system could be expanded into a safer and more widespread connecting system. The following elements could help accomplish this: (1) occasional scenic bicycle paths with few intersections, (2) additional bicycle paths in new subdivisions, and (3) an expanded system in older neighborhoods. Such paths, however, are often not favored by commuting and utilitarian cyclists. Rather, connection with neighborhoods can be facilitated through the creation of other options, to include bicycle boulevards or thoroughfares. These routes make use of appropriate automobile traffic calming measures to create a safe travel environment for bicycles and pedestrians. Auto traffic and parking along both sides of the street may be allowed where appropriate. Additionally, bicycle-activated crossings should be placed at busy intersections.

#### TR 2.18 Viable Transit

Provide transit services and facilities, including bicycle facilities, that make transit a viable transportation option for all segments of the community; the City of Spokane will work with Spokane Transit Authority to accomplish this.

Discussion: To accomplish this plan's goal of providing a variety of transportation options and reducing dependency on automobiles, transit will need to appeal to those currently not using transit as well as to those currently using and relying on it.

Making transit a viable transportation option for all segments entails balancing the variety of transportation needs of citizens. For example, people who use transit for much of their transportation have different needs in comparison to people who use transit less frequently, while people who live further away from the center of the city have different needs from those who live closer to the center. Disabled people also have their own needs. People attending special events, such as Bloomsday, or large events, such as those at the Convention Center or Spokane Arena, have other transit needs.

Providing for and balancing these different transit needs may require different types of transit or transit service. For example, for outlying parts of the city, transit routes that run only on arterials may be preferred so that service is fast and direct. For neighborhoods closer to the center of the city, transit routes on both arterial and non-arterial streets may be preferred, allowing service to be closer to users. Van transit might serve neighborhoods with fewer riders or riders who have physical mobility challenges. Additional or flexible transit service could serve the needs of those attending special or large events.

#### **TR 4.5 External Connections**

Design subdivisions and planned unit developments to be well-connected to adjacent properties and streets on all sides.

Discussion: It is important that subdivisions and planned unit developments (PUDs) be connected to their surrounding areas and the larger community and not be physically isolated because of poor transportation connections. With good connections for pedestrians, bicyclists, and automobiles, traffic is spread more evenly, reducing congestion and impacts on adjacent land uses. One intent of this policy is to stop the development of gated communities that are isolated and disconnected from their surroundings. Subdivisions and PUDs should have multiple ingress and egress points to enable good transportation connections. The connections should not, however, result in inappropriate cut-through traffic through neighborhoods; connections should direct traffic onto appropriate streets. Connections are needed for all transportation users and can take the form of both streets and paths.

## TR 4.6 Internal Connections

Design communities to have open, well-connected internal transportation connections. Discussion: Internal transportation connections are important for neighborhoods, subdivisions, and PUDs to promote ease of access. Long, confusing routes should be avoided to create greater efficiency. Shorter block lengths, which result in more frequent intersections than longer block lengths, provide greater opportunities for connection, make it easier for people to find their way around the city, and have the additional significant benefit of helping to keep vehicle speeds low. Block lengths could be tied to lot sizes and the number of lots in a block, instead of purely a block length measurement figure. Other ways to help accomplish a more open, well-connected network is by connecting streets and avoiding cul-de-sacs and vacating streets. Where cul-desacs or vacating streets cannot be avoided, pedestrian pathways, bikeways, and bike routes that link areas should be provided.

## **TR 4.10 Downtown Street Network**

Redesign and construct the downtown street network to encourage people to come to downtown Spokane and not to speed through it.

Discussion: While downtown traffic should flow smoothly, it should not be so fast that it is dangerous or uncomfortable to pedestrians <u>or bicyclists</u> and degrades street activity or otherwise detracts from commercial activity. Traffic moving rapidly through downtown is detrimental to pedestrian <u>and bicyclist</u> safety and comfort and does not encourage drivers to stop and use downtown; instead, downtown is perceived as a place through which to drive.

Traffic calming devices can be one way to implement this policy. Center islands, medians, and angled parking may be especially appropriate in downtown Spokane. Converting one-way streets to two-way streets can also slow the speed of traffic while making it easier to move around downtown.

This policy is directed to the speed of traffic through downtown, intending to avoid excessive speed. Traffic needs to flow smoothly, however, to avoid unwanted congestion and achieve air quality goals.

#### **TR 4.12 Law Enforcement**

Enforce traffic laws for all modes of transportation rigorously to protect the public health and safety.

Discussion: Enforcing traffic laws for all transportation users is needed. This includes:

- Enforcing speed limits.
- Promoting respect for crosswalks, such as automobiles (whether parked or moving) not blocking crosswalks.
- Increasing drivers' knowledge of pedestrian and bicyclists' rights through education.
- Enforcing laws that pedestrians and bicyclists must obey, to include preventing bicycles on sidewalks in the downtown business center.
- Enforcing laws against driving while under the influence of alcohol or drugs.

#### TR 4.13 Traffic Signals

Place and time traffic signals to ensure coordinated, smooth, and safe movement of traffic. Discussion: Traffic signals should be placed and their timing adjusted to encourage smooth, safe traffic flow, both pedestrian and vehicular. Using traffic signals to control left turns can assist with traffic flow, as can altering traffic signals to accommodate periods of heavy traffic, such as morning and evening commute times. Adding cycling-specific/aware traffic signals along bike routes and bikeways would encourage bicycling and potentially add bicycle safety and awareness to vehicular commuters. Pedestrians need enough time to cross streets; providing pedestrian activated traffic signals assists with this.

### TR 4.15 Lighting

Provide different degrees of lighting for safety and convenience based on the use of streets and sidewalks and the needs of residents.

Discussion: Lighting enhances the safety of transportation users, especially pedestrians and transit users. Lighting is especially needed at bus stops, crosswalks, and bicycle rack, and bicycle shelter areas. The hours and intensity of effective lighting varies according to the location. The placement, color, and intensity of lighting should all be addressed so that the lighting does not detract from surrounding areas while improving safety. The lighting should fit the character of the place it is illuminating.

#### TR 4.16 Safety Campaigns

Implement public safety campaigns aimed at driver, pedestrian, and bicyclist awareness of and respect for each other.

Discussion: Public safety campaigns can increase the safety of all transportation users, particularly pedestrians and bicyclists. These safety campaigns, which can be sponsored through schools, service clubs, <u>public health</u>, and other organizations, should include the need to respect all transportation users and the need for all transportation users to travel responsibly.

#### **TR 4.17 Street Maintenance**

Keep streets well maintained and clean for the benefit of drivers, bicyclists, and pedestrians. Discussion: Well-maintained and clean streets have many benefits: improved conditions for driving and bicycling, increased city pride, and improved air quality. Well-maintained streets include the removal of debris, gravel, glass, and snow and the prompt filling of potholes. Poorly maintained streets are especially hazardous to bicyclists. Better maintenance can be accomplished by placing a high priority on public spending for maintenance and cleaning.

#### TR 4.25 Pedestrian and Bicvclist Access to Parks

Develop safe pedestrian access <u>and bike ways/routes</u> to city parks from surrounding neighborhoods.

Discussion: The city shall analyze the existing safety of pedestrian <u>and bicycle</u> access within a quarter mile walking distance of each park. Based on that analysis city departments shall implement projects that improve the pedestrian circulation safety.

# **TR 5.7 Neighborhood Parking**

Preserve neighborhood on-street parking for neighborhood residents.

Discussion: Neighborhood residents and their guests need places to park. On-street parking also acts as an effective traffic calming measure, while re-stripping of on-street parking may help to encourage and enable safer bicycling. On-street parking is not intended, however, to be for long-term storage of vehicles; street sweeping and snow plowing require vehicles to be moved. Methods to control on-street parking include establishing neighborhood-parking districts near large traffic generators, such as shopping centers, universities, and hospitals, where parking permits are needed. Furthermore, parking lanes can be marked with striping on wide streets so that drivers don't attempt to create another driving lane. Since this policy is directed towards neighborhood parking, it is intended to apply primarily to local access streets and residential collector arterials. Other types of arterials may have the competing need of potentially re-moving parking to facilitate traffic flow (see policy TR 4.1, "Street Design and Traffic Flow"). It should be noted that while the Comprehensive Plan identifies bicycle facilities, many remain non-designated and on-street parking that is slated for removal to accommodate the bicycle facilities continues to exist. As a part of development of bicycle facilities, it needs to be acknowledged that on-street parking may need to be removed to accommodate bicycle facilities.

#### TR 6.3 Transportation Alternatives and the Environment

Promote the use of alternatives to driving alone, <u>such as walking</u>, <u>bicycling</u>, <u>use of transit</u>, <u>and carpooling</u> to reduce transportation impacts on the environment.

# 4.5 EXISTING AND PROPOSED TRANSPORTATION SYSTEMS

# **Existing Versus Proposed Transportation Systems**

First, this plan establishes a new priority for considering the transportation needs of people and making transportation decisions. Policy TR 1.1 establishes that it will be city policy to put pedestrians first, then to consider the needs of those who use transit and non-motorized transportation modes <u>such as bicyclists</u>, and finally to consider the needs of automobile users. The city's current transportation system does not reflect this priority and direction. Spokane's existing transportation system reflects Spokane's existing auto-dependent nature. Indeed, it is partly because of the existing nature of Spokane's built environment that Spokane is auto dependent and lacking viable transportation options and, as a consequence, that citizens established this new direction. Following this new direction with its clear transportation priorities, however, will lead to new transportation systems that reflect the city's new transportation goals. Establishing these new transportation systems for Spokane will take time. It will take careful and steady implementation of the plan, as expressed in its goals, policies, and implementation methods (such as the new street standards). But with consistent implementation of the plan on a

case by case basis, the community's built environment will change and with it, the opportunity for Spokane to achieve its desired future.

# Pedestrian and Bicycle Systems The History of Planning for Pedestrians and Bicycles in Spokane

In 1993 SRTC prepared the Spokane Regional Pedestrian/Bikeway Plan for Spokane County (generally referred to as "the Bike/Ped Plan"). The City of Spokane City Council adopted the plan on March 11, 1996. The purpose of the plan was to provide an updated comprehensive bicycle and pedestrian transportation plan that was built on previous plans. The plan focused on the urbanized Spokane area and connections to Millwood, Cheney, Medical Lake, and Idaho. The plan identified recommended key bicycle/pedestrian corridors that consisted of the Centennial Trail, exclusive bicycle paths, bicycle lanes, shared bikeways, and shared roadways. The SRTC Bike/Ped Plan superseded earlier plans developed by the city to address bicycle use, the last of which was "The Bikeways Plan" adopted by the City Council in 1988. The first bikeways plan developed in Spokane, called the "Bike Routes Plan," was adopted in 1976.

Since 1992 the City of Spokane has had a Bicycle Advisory Board, which was established by ordinance of the City Council. It was established "to provide advice and direction to the City Council and all departments and offices of the city on matters relating to bicycling and to raise public awareness of bicycling issues." The board is staffed supported by staff liaisons from the Economic Development Division and the Transportation Department a bicycle coordinator. These positions is are filled by a staff members of the Planning Services department as an additional responsibility added to their his full-time duties. As such, only a small percent of one two staff member's time is spent on bicycle planning. No city staff person, however, is dedicated specifically to planning for pedestrians, even part-time. Thus, while the SRTC plan adopted by the city included sections related to pedestrians, in reality it was used infrequently by the city for planning for pedestrians and instead was used more for bicycle planning. Generally, planning for pedestrians in Spokane has been inadequate. One of the most significant features of this transportation element is that it features a major redirection of the city's view of transportation planning, making planning for pedestrians a priority. As a small step toward that direction, this plan includes the first map ever included in a city plan that is devoted strictly to depicting pedestrian facilities, Map TR 1, "Proposed Regional Pedestrian Network."

While tThe 1993 SRTC Bike/Ped Plan was is superseded by the city's new 2001 comprehensive plan, its Bicycle Plan map was used in large part to develop the city's "Proposed Regional Bikeway Network" map (Map TR 2). In addition, tThe SRTC Bike/Ped Plan contains extensive background information that is not included in this general comprehensive plan for bicyclists and pedestrians. It remains a valuable reference tool for bicycle and pedestrian planning. With new transportation priorities and the multi-modal direction of the new comprehensive plan, it is expected that in the near future, the city will undertake additional planning for non-motorized travel to more specifically address the needs of bicyclists and pedestrians. This additional planning effort will be greatly assisted by the implementation of policy TR 2.3, "Bicycle Coordinator," which states that it will be city policy to provide a full-time pedestrian/bicycle coordinator on its staff.

<u>Future planning should include an integrated Master Bike Plan that defines the goals and design elements for bicycling facilities in the city.</u>

In 2008, the City of Spokane completed a Master Bike Plan that consists of Bicycle Plan Maps, updated Comprehensive Plan goals and policies, a list of projects and priorities, project cost estimates and an action program. During this process, SRTC was working on an update to the Regional Master Bike Plan- A plan to outline goals and objectives to guide Washington State Department of Transportation (WSDOT), Spokane Regional Transportation Council (SRTC), the City of Spokane, Spokane County, the City of Spokane Valley, the City of Liberty Lake, Cheney,

developing bikeway and walkway systems. This Plan outlines goals and objectives to help create a region where biking and walking are viable travel choices. The City of Spokane Master Bike Plan used the extensive background work contained in the SRTC plan as a part of the creation of the Master Bike Plan. This information remains a valuable reference tool for bicycle and pedestrian planning. This planning effort continues to support the implementation of policy TR 2.3, "Bicycle Coordinator," which states that it will be city policy to provide a full-time pedestrian/bicycle coordinator on its staff.

# **Shared Bicycle and Pedestrian Facilities**

Spokane features three major transportation pathways or trails that are shared by pedestrians and bicyclists. These are the Ben Burr, Fish Lake, and Centennial trails. The Ben Burr and Fish Lake trails are both owned and maintained by the Spokane Parks and Recreation Department. The Centennial Trail is developed by the Washington State Parks and Recreation Commission, maintained by the Spokane Parks and Recreation Department in the city and the Spokane County Parks and Recreation Department in the county, and funded by the Friends of Centennial Trail. These three facilities serve both a recreational and transportation function for pedestrians and bicyclists. A potential fourth major shared use facility is the North Spokane Corridor (north-south freeway), which plans to include a major pedestrian/bicycle trail. These shared use facilities are described below and depicted on the pedestrian and bikeway maps (Maps TR 1 and TR 2). They also appear as "trails" on Map CFU 5, "Parks," in Chapter 19, Capital Facilities and Utilities, which indicates how these trails serve recreational as well as transportation purposes.

#### **Ben Burr Trail**

The one-mile Ben Burr Trail connects Liberty and Underhill Parks in East Central Spokane. It follows the path of an old railway line. The trail features a pedestrian/bicycle bridge spanning Altamont Street, which was a project financed through federal Community Development funds. Future expansion may include a link into Underhill Park to the south and a link to the Centennial Trail to the north.

#### Fish Lake Trail

The Spokane Parks and Recreation Department has acquired a railroad right-of-way between the City of Spokane and Fish Lake. Construction has begun to convert the right-of-way to a 12-footwide asphalt bicycle/pedestrian trail which would ultimately connect the Centennial Trail to the existing Fish Lake and Columbia Plateau trails. Three and a-half miles of this proposed trail have been constructed, from the intersection of Scribner Road north towards Spokane. The proposed trail begins at the southeast corner of Government Way and Sunset Highway and ends at the existing trailhead at Fish Lake.

## **Centennial Trail**

Facilities designated exclusively for non-motorized travel modes include the 39-mile Centennial Trail, which parallels the Spokane River from Nine Mile to the Idaho border. The trail continues in Idaho through Post Falls and Coeur d'Alene. Currently, the trail has an incomplete section between downtown Spokane and the T. J. Meenach Bridge. The Friends of the Centennial Trail have completed the missing link, dedicated as the Sandifur Bridge, to span the river indicate that design is complete and fundraising is underway for a new bridge to span the Spokane River at the abandoned High Bridge piers.

The Spokane River Centennial Trail Master Plan published in 1986 identified a continuous trail alignment from the Idaho state line to the Spokane House, with extensions upstream to Wolf Creek on Lake Coeur d'Alene and downstream to Fort Spokane on Lake Roosevelt. In 1995, a master plan update of the Centennial Trail was completed identifying missing segments, revisiting

completed segments needing improvement, and outlining trail priorities and initiatives for the future. The primary recommendations of the master plan update were to building missing links and convert on road (Class II) bike routes to separated (Class I) shared-use pathways. A key missing link was identified between Riverfront Park in downtown Spokane and Riverside Park.

To address this missing link, a Bridge Alternatives Study was conducted in December of 1997. The study identified potential alignments for locating a bridge over the Spokane River and completing a missing segment of the Centennial Trail from Riverfront Park in downtown Spokane to Riverside State Park. The alignment selected from this study utilizes the abandoned High Bridge piers in the Spokane River. The connection from the proposed bridge to Riverside State Park will follow the existing bike route along Riverside Drive and Government Way, with connection at the Military Cemetery trailhead on Government Way. From the proposed bridge west, the trail will be constructed as a shared-use pathway following Ohio Avenue. A subsequent study funded by the Friends of the Centennial Trail in 2007 was conducted by Alta Planning and Design. This study identified a preferred trail route utilizing an abandoned railroad right of way that parallels Summit Blvd., travels on Summit Blvd. and modifies Pettet Drive to accommodate trail improvements. This route would rejoin the existing Centennial Trail at T.J. Meenach Bridge.

### North Spokane Corridor Pedestrian/Bicycle Trail

The Washington State Department of Transportation is currently designing a major pedestrian/bicycle trail that will be built in conjunction with the North Spokane Corridor (NSC). The project will eventually provide a pedestrian/bicycle route the full length of the corridor, extending from I-90 east of downtown to US 395 at Wandermere, approximately 10 miles north. The 12-foot paved pedestrian/bicycle trail will be a separate, but adjacent, designated route for commuters and recreational users. There will be trailheads along the route as well as access from the planned park-and-ride lots. It will also connect with the Centennial Trail. The pedestrian/bicycle trail will be constructed in usable segments in conjunction with the North Spokane Corridor.

# The Bicycle System

State law identifies bicycles as vehicles, with both the privileges, responsibilities, and regulations that accompany that status. A fundamental concept of this plan and the previous SRTC Bike/Ped Plan is that since because bicycles are vehicles to be used for transportation as well as recreation, bicycles are allowed on all streets except for those on which they are specifically prohibited. Thus, the city's street system is essentially the bikeway system. Table TR 2 defines the terms for the bicycle system used in this plan.

The City of Spokane encourages bicycle use on its facilities, except where prohibited by law. Bicycle facilities or improvements for bicycle transportation as shown on the Bikeways Map should be included as a part of street improvement projects. The Washington State Department of Transportation (WSDOT) Design Manual Chapter 1020 serves as a guide for designing bicycle elements. A bikeway is any type of facility designed to accommodate bicycles, such as a path, lane, or shared roadway. The term "bicycle route" is often used interchangeably with "bikeway" to mean the same thing (generally the "bikeway" definition). Bikeway is, however, the appropriate general term for streets that are open to bicycle travel. The term "bicycle route" should be used to indicate a marked or signed route that is intended to provide a route for cyclists to use. There are several areas where the city has marked or signed bicycle routes, generally along streets that have been developed with bicycle lanes. Frequently these bicycle routes have been developed in order to enable bicyclists to avoid fixed obstacles to bicycling. An example is the Addison Street bicycle route, which provides a north/south route parallel to Division Street since Division north of North Foothills Drive is closed to cyclists. Ideally, the term bicycle route should be used only in the context of those streets that are marked or signed as "bike routes." Since virtually all streets are bikeways, it is important to note that a signed bicycle route is a suggested route. Bicyclists are not required to use bicycle routes where they are available nor are they the only streets on which cyclists are allowed.

Map TR 2 indicates the "Proposed Regional Bikeway Network." Bikeway system terminology is specified in the following table, TR 2, "Bicycle Terms."

TABLE TR 2 BICYCLE TERMS	
General Bicycle Terms	
Bicycle Path	A bikeway physically separated from motorized traffic by an open space or barrier. Bicycle paths are entirely separated from the roadway but may be within the roadway right-of-way or within an independent right-of-way.
Bicycle Route	A marked or signed route that is intended to provide a route for bicyclists.  Marked or signed bicycle routes occur generally along streets that have been developed with bicycle lanes and have frequently been developed to enable bicyclists to avoid fixed obstacles to bicycling. A system of facilities that have a high potential for use by bicyclists or that are designated as such by the City of Spokane. A series of bicycle facilities may be combined to establish a continuous route and may consist of any or all types of bicycle facilities.
Bikeway	Any road or path that in some manner is specifically designated as being open to bicycle travel, regardless of whether such facilities are designated for the exclusive use of bicyclists or are to be shared with other vehicles.
Bicycle Terms on Map TR 2	
The following terms found on Map TR 2 are listed in order of access provided to bicyclists from most to least.	
Shared Use or Multiuse Path Shared-Use Pathway	A separated pathway for shared-use by bicycles and other users, such as walkers, joggers, people with baby carriages, skaters, and others who are likely to use such pathways. A facility physically separated from motorized vehicular traffic within a right of way or on an exclusive right of way with minimal crossflow by motor vehicles. It is designed and built primarily for use by bicycles, but is also used by pedestrians, joggers, skaters, wheelchair users (both non-motorized and motorized), equestrians, and other non-motorized users.
Bicycle Lane Bike lane	A portion of a roadway that has been designated by striping, signing, and pavement markings for the preferential or exclusive use of bicycles. A portion of a highway or street identified by signs and pavement markings as reserved for bicycle use.
Bicycle Boulevard	A shared roadway which has been optimized for bicycle traffic. Bicycle boulevards discourage cut-through motor vehicle traffic, but usually allow access to local motor vehicle traffic. They are designed to give priority to cyclists as through-going traffic.
Marked Shared Roadway (Designated Bike Route) Paved Shoulder	A paved portion of a roadway which has been designated by striping for use as a break down area for motor vehicles and for bicycle use outside the travel way.  Typical of high speed highways within the urban area as well as rural road design. A shared roadway that has been designated by on-street marking as a route for bicycle use.
Shared Roadway Shared-Use Lane	Wide curb lane that accommodates both bicycles and motor vehicles in the same lane. Lane allowing both vehicular traffic and bicycle traffic. A roadway that is open to both bicycle and motor vehicle travel. This may be an existing roadway, a street with wide curb lanes, or a road with paved shoulders.
Residential Bikeway	A residential street used as connection between other bikeway facilities. This designation applies to all residential roadways not otherwise designated. requires no special design accommodation for bicycles.
No Bikeway Requirement	There is no specific requirement to provide additional street width to accommodate bicycles.  Bicycles are permitted to utilize the street as any other legal vehicle.
Bicycles Prohibited	Bicycles are prohibited from using the street.

