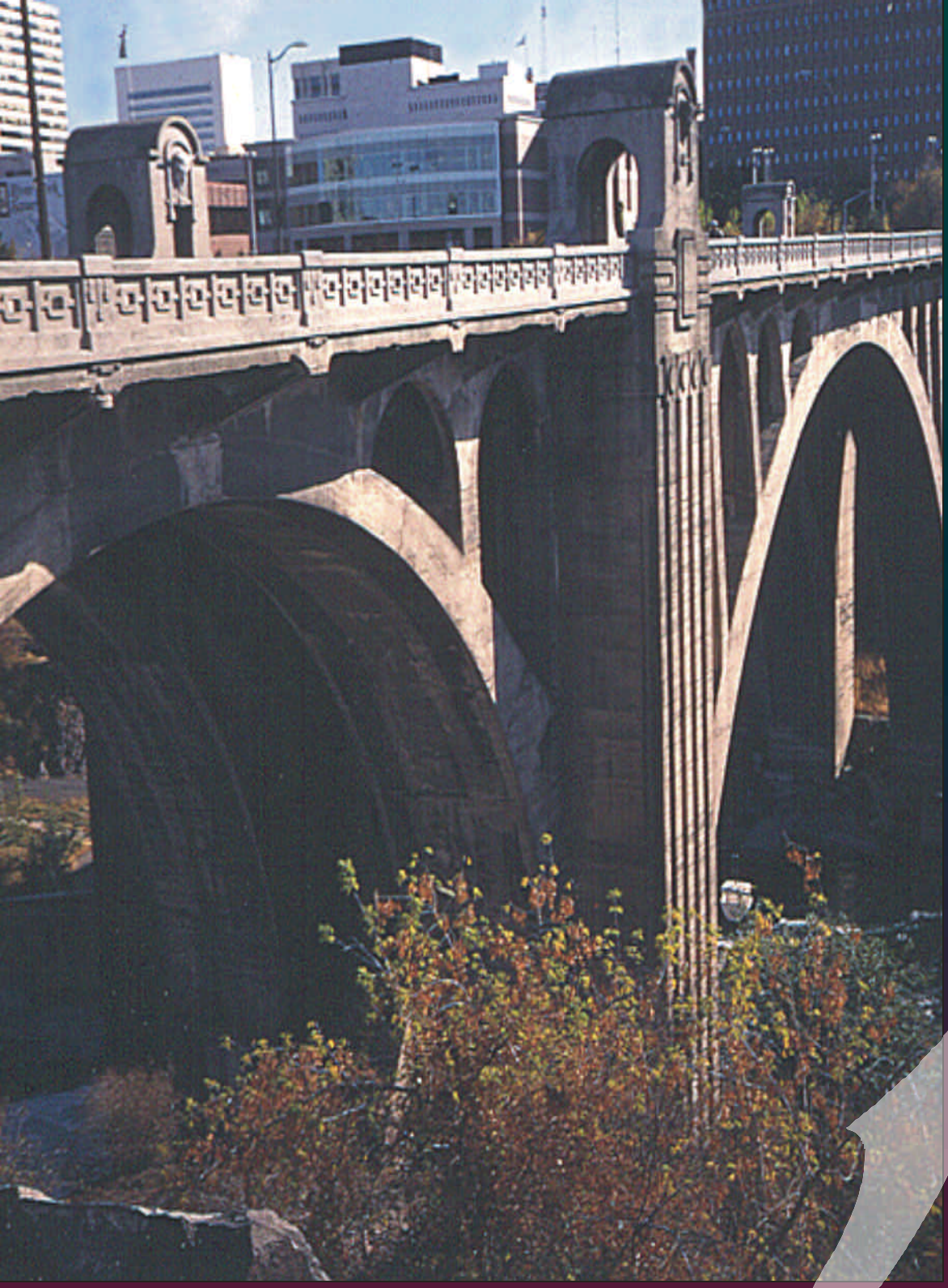
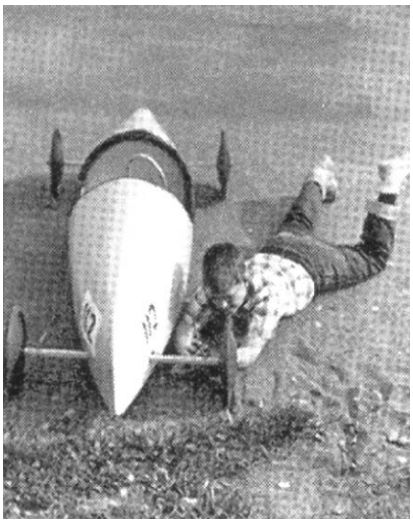


4 Transportation

CHAPTER CONTENTS

4.1 INTRODUCTION

Transportation: Shaping Spokane's Future



In planning for Spokane's transportation future, citizens discussed the many components of Spokane's transportation system, from driving to bicycling, from walking to taking the bus. Citizens also recognized that transportation has key relationships to other planning topics such as land use, urban design, neighborhoods, and social health. Citizens realized that transportation needs to be viewed not just as a way for people to move about the city but also as something that shapes the city and the lives of its residents.

This transportation plan is planning for Spokane's future—not just for the people or conditions of today but for those 20 years in the future. The plan considers the changing demographics, transportation needs and desires, and lifestyles expected in the future. It recognizes the need to look to the future and not limit tomorrow's transportation options by what is done today.

Key Transportation Themes that Shaped the Plan

Several themes or issues greatly influenced the planning for Spokane's transportation future. These are the themes about which citizens were consistently vocal. These themes arose early in the planning process and continued to surface throughout the development of the plan. Consequently, they greatly influenced the plan's content—the transportation vision, values, goals, and policies. It is imperative to understand these key themes in order to understand properly the rest of the plan.

The key transportation themes are:

- Citizens want viable transportation choices.
- Transportation has a key relationship to community quality of life.
- Transportation and land use are closely connected.
- The true costs of driving are complex and high.
- Design is important to transportation.

Wanted: Viable Transportation Choices

A primary theme of this plan is that citizens should have a variety of viable transportation choices. To be viable, a transportation choice needs to be safe, accessible, convenient, and attractive. The desire is to make it as easy for people to walk, take the bus, and bicycle as it is to drive. The reasons this plan focuses on providing citizens with transportation options and reducing dependency on driving include:

- The transportation desires and needs of all people should be respected. All citizens, including those who cannot or choose not to drive, should have viable transportation options.
- In the future increasing numbers of people may not physically or financially be able to drive.
- All people are pedestrians at some point—if nothing else people must walk to get to their automobiles.
- Continued dependency on driving may not be sustainable in the future, either economically or environmentally.
- Designing Spokane around the automobile decreases people-friendly environments and erodes the quality of community.

The focus is to increase transportation choices and reduce dependency on driving. *The intent, however, is not to eliminate automobile use but to provide people with viable options to driving.* The desire is to serve all people's transportation needs by providing transportation choices, including driving, for all. Furthermore, enhancing transportation options benefits those who drive by reducing congestion.

If alternatives to driving are to be used, however, they must be truly viable. All transportation options must be safe, accessible, convenient, and attractive. For instance, people might be more likely to use public transportation if service is frequent, routes to transit stops are pedestrian friendly, and shops and services are clustered near stops in pleasant walking and social environments. Safety alone is a crucial factor. People will not choose transportation options they perceive to be unsafe.

The Relationship Between Transportation and Quality of Life

Transportation greatly impacts Spokane's quality of life, ranging from impacts on neighborhoods and air quality to the way people experience the city and each other. Spokane's neighborhoods, which are a major source of both pride and concern for city residents, are especially vulnerable to transportation impacts. Increasing amounts of traffic and speeding traffic are significant threats to the livability of city neighborhoods. Environmental impacts are also important. Many of the attractions that draw people to Spokane, such as great parks and easy access to recreational opportunities, are related to the environment. Finally, transportation also has a key role in fostering a community's sense of place. A city's character is often derived in large part from its transportation system—think of New York's active sidewalks, Seattle's ferries, and Portland's light rail system. Spokanites want to have an enjoyable experience as they travel in the city—and a more enjoyable experience once they get where they are going.

Recognize the True Cost of Driving (It's More than a Gallon of Gas)

Citizens spoke a great deal about the need to recognize the true cost of driving. It is important to recognize the true financial costs but also the environmental costs and costs to Spokane's quality of life. There are not only the costs to individuals but to the community as a whole. There are also the costs of being an auto-dependent society—a society where those without automobiles lack needed access to workplaces, grocery stores, and other essentials.

The desire for transportation choices and the need to protect Spokane's quality of life arise in part from recognition of these costs. One example of this issue's complexity and specific concerns that arise from it is that people living outside the city who drive on city streets contribute to congestion and to the deterioration of streets and city neighborhoods, yet they do not pay for street maintenance or improvements through city property taxes or bond issues. This problem increases with sprawl, as more people live outside the city and are dependent on driving for transportation.

It is especially important in this age of limited resources and fragile environments to recognize the true costs of driving.

The Land Use and Transportation Connection

There is a close, essential relationship between land use and transportation. How land is used affects what transportation choices are available or likely to be used. For example, the density of development impacts transportation, with lower densities decreasing the ability to provide mass transit or efficient bus service. The more spread out the city becomes and the more segregated land uses are, the farther people have to travel from home to work and play and the less likely they will be able to take the bus, bicycle, or walk.

Conversely, people's transportation choices, in turn, affect the use and enjoyment of land. For example, older neighborhoods close to the center of the city suffer from an increasing number of vehicles driving through them to outlying areas. As another example, the amount of land that must be devoted to moving or storing automobiles in an auto-dependent society is substantial.

But significantly, transportation facilities greatly affect how land is used or, in other words, transportation facilities are primary "drivers" of the urban pattern. For example, street improvements can induce greater use of automobiles and, thus, the need for even more land for moving and storing automobiles. But in addition, by facilitating development at the urban edge and beyond, street improvements can be a cause of the sprawling land use pattern that GMA is intended, in part, to reduce.

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 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.

Current Trends

This plan's key transportation themes and its focus on the future are especially relevant given the increasing amount of driving that is occurring, including an increasing number of automobile trips, the increasing length of these trips, and increasing amounts of time spent driving. These trends are projected to continue in the future. The following table indicates these trends for Spokane County.

TABLE TR 1 CURRENT TRANSPORTATION TRENDS

	1996	1998	2010 (projected)
Number of Trips Taken In One Day in a Vehicle	1,548,952	1,547,069*	2,250,475
Average Number of Vehicle Miles Traveled in a Day	6,313,806	6,603,756	9,500,475
Average Peak Hour Commute Time (5:00-6:00 pm)	9.73 minutes	12.54 minutes	15.02 minutes*

*The drop in number of trips from 1996 to 1998 is due to a change in land use forecast methods used in 1998 as a result of GMA.
**2010 commute time assumes: (1) All transportation projects intended to improve capacity in SRTC's Regional Transportation Plan (RTP) are built and operational by 2010; (2) People's travel behavior will change in the future due to congestion (people will make shorter trips).
Data Source: Spokane Regional Transportation Council. Data applies to the federal non-attainment area of Spokane County (areas where air quality standards are exceeded), which is essentially the urbanized area of the county.

These current transportation trends are deeply connected to the plan's primary themes or issues. The following table identifies some of these connections.

TABLE TR 2 CONNECTIONS BETWEEN TRANSPORTATION TRENDS AND THEMES

Transportation Theme	Connection to Increased Automobile Use
Wanted: Viable Transportation Choices	♦ Currently, Spokane is auto-dependent and lacks viable alternatives to driving. ♦ People drive because driving has been made easy and convenient; alternatives to driving must also be easy and convenient if they are to be viable and used. ♦ Auto-oriented environments encourage automobile use but are not friendly to pedestrians, bicyclists, and transit users.
The Relationship Between Transportation and Quality of Life	♦ Congestion degrades the efficient and safe mobility of people and goods. ♦ Increasing amounts of traffic and speeding traffic are a growing concern of neighborhood residents. ♦ Spokane's quality of life is threatened by congestion, more and faster traffic, and the inability to safely walk or bicycle.
Recognize the True Costs of Driving	♦ An auto-dependent society does not provide everyone with access to workplaces and other essentials of life. ♦ As individuals drive more, the community's financial, environmental, and quality of life costs increase. ♦ When people lack the options of not driving or not driving as frequently or as far as they currently do, they lack those options for reducing their transportation expenses.
The Land Use/Transportation Connection	♦ Recent driving trends are partly the result of sprawl, a land use pattern made possible by the automobile and which has now made it difficult to live without one. ♦ Higher land use densities and a mixture of land uses are needed in some areas of the city to support walking, bicycling, and transit as viable transportation alternatives. ♦ More driving leads to more land devoted to moving and storing automobiles. ♦ The increased traffic that threatens Spokane's neighborhoods affects neighborhood land use.
The Importance of Design	♦ Design features can be used to ease congestion and mitigate other negative effects of increased traffic. ♦ Design features can make driving, walking, bicycling, and taking the bus safer, more enjoyable, and more viable. ♦ People are concerned about the design of the higher density and mixed-use buildings that are needed to support alternatives to driving.

4.2 GMA GOAL AND REQUIREMENTS AND COUNTYWIDE PLANNING POLICIES

GMA Transportation Planning Goal (RCW 36.70A.020)

The Washington State Growth Management Act (GMA) includes 13 goals, which were adopted to guide the development and adoption of comprehensive plans and development regulations. The following is the GMA goal for transportation:

> **"**Encourage efficient multimodal transportation systems that are based on regional priorities and coordinated with county and city comprehensive plans."

GMA Requirements for Transportation Planning (RCW 36.70A.070)

The GMA requires that comprehensive plans include a transportation element. Although the GMA includes specific requirements for the transportation element, flexibility is written into the GMA so that jurisdictions can tailor their transportation plans to their own visions, goals, and needs. Key aspects of the GMA regarding transportation include:

- Considering many types of transportation, including walking, bicycling, driving, transit, rail, and air.
- Ensuring that all elements in the comprehensive plan are consistent, particularly the land use and transportation elements.
- Coordinating planning between jurisdictions and ensuring consistency between city, county, and regional plans.
- Establishing regionally coordinated level of service standards for arterials and transit routes.
- Ensuring that level of service standards adopted in the transportation element are maintained.
- Identifying transportation facility and service needs, including actions and requirements to maintain levels of service standards.
- Ensuring that adequate transportation service is provided concurrent with (or within six years of) development.

Countywide Planning Policies

The Countywide Planning Policies and Environmental Analysis for Spokane County (CWPPs), adopted by the Spokane Board of County Commissioners in 1994, include transportation as one of the ~~nine~~ policy topics. The CWPPs overview of the GMA's requirements for transportation planning states:

> "Regional transportation systems include major highways, airports and railroads, as well as bikeways, trails and pedestrian systems. The Growth Management Act (GMA) encourages a variety of efficient transportation systems in order to reduce sprawl while improving the efficient movement of people, goods and services. Therefore, close coordination is necessary between transportation planning and the land use element of each jurisdiction's comprehensive plan. The Growth Management Act (GMA), as well as other state and federal legislation, requires transportation planning to be conducted on a regional basis.
>
> According to RCW 36.70A, local jurisdictions must adopt and enforce ordinances which prohibit development approval if the development causes the level of service on the transportation facility to decline below the standards adopted in the transportation element of the comprehensive plan unless transportation improvements or strategies to accommodate the impacts of development are made concurrent with the development. The strategies could include increased public transportation services, ride-sharing programs, demand management strategies, and other transportation system management strategies."

Twenty-one CWPPs for transportation were adopted. The document's overview of the transportation policies states:

> "The Countywide Planning Policies (CWPPs) propose that transportation planning in Spokane County be carried out by the Spokane Regional Transportation Council. Consequently, each jurisdiction's land use plan should be consistent with the regional transportation system.
>
> The policies recognize the need to preserve corridors capable of providing for high-capacity transportation such as commuter lanes, rail, or dedicated busways. Through their comprehensive plans, local jurisdictions will be responsible for planning for developments along these corridors that would support public transportation services.
>
> The Countywide Planning Policies also recognize the need to preserve our existing regional transportation system. New land developments would not be allowed to lower the adopted level of service of the existing transportation system. To accomplish this, developments would be required to pay for transportation improvements at the time of construction or to identify other transportation strategies to offset the impacts. These strategies could include increased public transportation services, ride-sharing programs and other alternative programs."

For the text of the 21 policies, consult the Countywide Planning Policies and Environmental Analysis for Spokane County, adopted December 22, 1994.

4.3 VISION AND VALUES

Spokane Horizons volunteers identified important themes in relation to Spokane's current and future growth. A series of visions and values was crafted for each element of the Comprehensive Plan that describes specific performance objectives. From the Visions and Values document, adopted in 1996 by the City Council, the Comprehensive Plan's goals and policies were generated.

Transportation refers to the circulation and network patterns for automobiles, pedestrians, bicycles, transit, rail, air, and freight that support land uses.

Vision

> "Citizens of Spokane will have a variety of transportation choices that allow easy access and mobility throughout the region and that respect property and the environment."

Values

"The things that are important to Spokane's future include:

- Ensuring mobility and access within the city.
- Maintaining the ability to access quickly the outdoors from the city.
- Decreasing north-south congestion.
- Increasing the variety and public awareness of transportation choices.
- Developing and maintaining good public transit.
- Maintaining roads.
- Developing and maintaining pedestrian-oriented neighborhoods.
- Developing convenient access to the downtown area, increasing parking, bus service, light rail, and satellite parking with shuttles, and improving the pedestrian environment."

4.4 GOALS AND POLICIES

Goals and policies provide specificity for planning and decision-making. Overall, they indicate desired directions, accomplishments, or aims in relation to the growth and development of Spokane. Additional background and technical materials for this chapter are located in the Draft Comprehensive Plan/EIS, Volume 2, Chapter 18, Transportation.

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.

Policies

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 and large parking lots in front of buildings. Development that includes physical features that encourage walking, bicycling, or taking the bus will foster use of those 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.
- 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 meets 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:

- 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.
- Serving as a resource for city departments for facility standards (such as Americans with Disabilities Act (ADA) requirements) so issues can be efficiently addressed.
- Seeking funding sources for transportation alternatives.
- Developing and implementing design guidelines to ensure that public and private developments meet a variety of transportation needs.
- Developing transportation-related educational programs for both non-motorized and motorized transportation users.
- Encouraging promotional events for transportation alternatives.
- Supporting efforts to increase the number of combined bicycle/transit trips.
- Developing and implementing specific plans for non-motorized transportation users.
- Incorporating bicycle facilities into design standards for4 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.

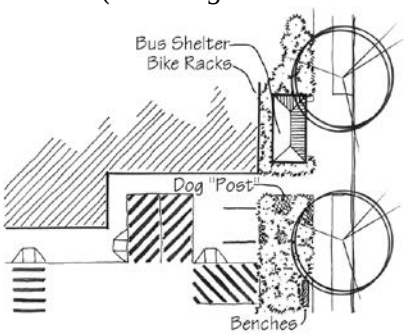
Discussion: Parking standards should aim to meet the need for parking, not to provide large amounts or an abundant supply of parking. Parking standards should achieve a balance between providing enough parking to adequately meet the needs of customers and employees. Reducing parking requirements has 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 on-street 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 mobility and impacts on surrounding areas. Parking lots should be user-friendly to pedestrians, bicyclists, and transit users, as well as drivers.

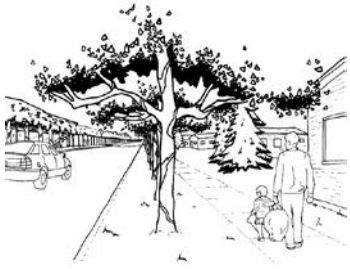
TR 2.6 Viable Walking Alternative

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

Discussion: People should be able to walk safely and conveniently, particularly within a city. Walking should be a viable option for those who desire or need to walk for transportation. In addition, at some point, everyone is a pedestrian since people must walk to get to their automobile, bicycle, or bus. Pedestrian activity, however, also contributes to the health and vitality of cities. An active street life makes places appealing and increases a feeling of safety. Walking, however, also adds to the public interaction and community socialization that is key to healthy community life.

TR 2.7 Safe Sidewalks

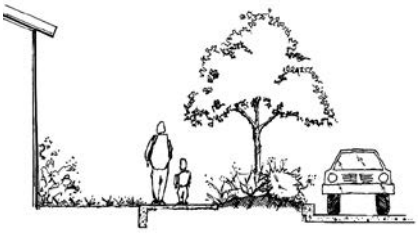
Provide for safe pedestrian circulation within the city; wherever possible, this should be in the form of sidewalks with a pedestrian buffer strip or other separation from the street.



Discussion: It is essential that pedestrians be able to walk safely and easily within the city. Besides being safe, the pedestrian environment should feel safe.

Providing a separation between streets and sidewalks has many benefits for creating safe, usable sidewalks. Separation creates a buffer for a feeling of safety from automobiles, reduces the amount of water and gravel and other debris thrown on sidewalks from passing automobiles, and prevents curbcuts and driveway aprons from protruding onto sidewalks. A separation also provides a place for fire hydrants, poles, signs, trashcans, recycling bins, and other obstacles. A separation additionally provides places to store snow, plant trees, and absorb runoff.

The preferred separation is a pedestrian buffer strip. Pedestrian buffer strips, also known as planting strips, can be landscaped with a variety of treatments, not just grass (see policy TR 7.4, "Pedestrian Buffer Strips").



In some cases, some other type of pedestrian pathway, such as a trail or staircase, may be preferred to the separated sidewalk. The type of pedestrian circulation provided may differ according to the type of street, topography, or unique circumstances.

In situations where a separation from the street is constrained, such as by topography or existing development, deviations from this policy can be granted by the Design Review Committee upon a finding that an alternative design is necessary to achieve the spirit and intent of the Comprehensive Plan. The potential additional cost to achieve separation is not, in itself, justification for a policy deviation. The separation between sidewalks and streets is the preferred, *expected* form of sidewalk design. Deviations from the separation design are to be for truly exceptional cases—the exception, not the rule.

TR 2.8 Sidewalk Repair and Replacement

Repair and replace broken and uneven sidewalks to improve safety and to encourage use by pedestrians.

Discussion: Traditionally in Spokane, the repair of sidewalks has been the responsibility of the adjacent property owner. Within some Community Development neighborhoods, some federal funding has been allocated towards sidewalks. One potential way to accomplish this policy on a citywide basis is for the City of Spokane to conduct a citywide assessment of the current condition of existing sidewalks. At the same time potential alternatives for funding resources should be identified. A sidewalk repair and replacement program should be developed based on identified needs and funding alternatives. This is an example of a needed program that should be developed by city staff dedicated to pedestrian/bicycle coordination (see policy TR 2.3, "Pedestrian/Bicycle Coordination").

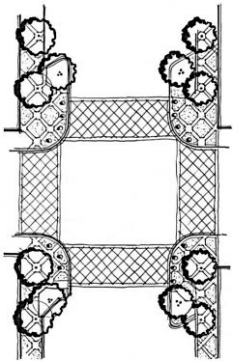
TR 2.9 Crosswalks

Establish and maintain crosswalks at key locations used by pedestrians.

Discussion: Key locations for crosswalks include heavily traveled street crossings, transit stops, parks, and school sites. Crosswalk types include the traditional crosswalk formed by painted lines or distinctive crosswalks, such as those surfaced with scoured or colored concrete or brick pavers.

TR 2.10 Pedestrian and Bicycle Linkages Across Barriers

Provide pedestrian and bicycle 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 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 and bicycle access and an aesthetically pleasing 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 and bicycle access. Since by their nature bridges present sensitive design issues and there is no one answer for how to provide pedestrian and bicycle access for all bridges. The type of pedestrian and bicycle access can vary between bridges to be appropriate to the particular bridge and the opportunities and limitations the bridge and its site present. Access 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 access be available and safe. Pedestrian and bicycle facilities on bridges should also be aesthetically pleasing.

TR 2.12 Pedestrian and Bicyclist Access to Schools

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

Discussion: Providing a safe walking and bicycling environment for children on their way to school increases their safety and encourages them to develop the habit of walking and bicycling. 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. Viable transportation for bicycling includes being safe, efficient, and quick. 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.

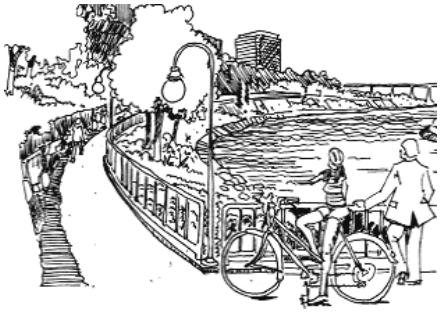
TR 2.15 Bicycles on Streets

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, 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. (See policy TR 2.14, "Bikeways") Bicycle facilities with marked on-street bicycle lanes or off-street bicycle paths are often desirable to accommodate 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 2.17 Facilities to Support Bicycling

Provide facilities that support bicycling to make it more feasible for transportation and recreation.

Discussion: Physical features are needed to enable the use of bicycles, just as physical features, such as parking, enable the use of automobiles. Such features for bicycles include short and long-term bicycle parking and locker rooms or other facilities for changing clothes and showering. They should be provided at a variety of locations where bicycles can be used for transportation or recreation, such as workplaces, schools, parks, transit facilities, and park-and-ride lots.

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 2.19 Service and Facility Support

Ensure that street standards, land uses, and building placement support the facilities and services needed along transit routes to make transit viable.

Discussion: The City of Spokane and STA need to work together to implement this policy, which is essential to making transit a viable transportation option. For example, it is essential that street and site plan standards support transit and should be followed consistently.

TR 2.20 Transit Shelters and Other Features

Provide transit shelters, bus benches, and other features that support transit use in key locations, such as where transit use is especially wanted.

Discussion: Physical features can enhance the experience of being a transit user. Such features include transit shelters, bicycle racks and lockers, and good pedestrian pathways to and from transit stops. These features are needed at both ends of the transit trip when the transit rider becomes a pedestrian, bicycle rider, or driver and should be attractive as well as functional. Such features can be identified and their design facilitated during neighborhood planning stages to reflect individual neighborhood needs and character (see TR 5.3, "Neighborhood Traffic Issues").

TR 2.21 Transit Level Of Service (LOS)

Establish and measure transit levels of service to meet concurrency requirements and assure that transit can compete with other transportation modes within 20 years as outlined in the Regional Transportation Plan.

Discussion: The GMA requires that level of service (LOS) standards be concurrent with growth. Since the City of Spokane is not a provider of transit, it must work with the STA to implement the transit LOS standards identified in the Regional Transportation Plan (RTP). Additional transit service will be provided as density and, therefore, need evolves. In areas where roadway level of service allows more congestion in order to balance the needs of pedestrians and automobiles, such as high-density residential corridors, the goal is to maintain efficient transit schedules by using the least costly method possible. This might include converting parking lanes

or general traffic lanes into high occupancy vehicle (HOV) lanes or transit-only lanes during commute hours, building intersection queue-jumper lanes, and allowing signal priority devices for transit.

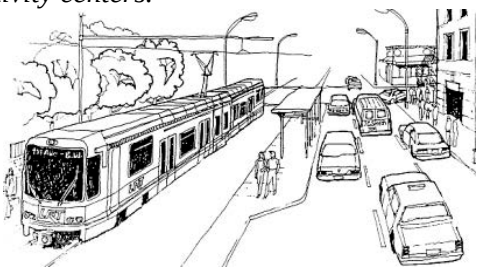
LOS is established and measured to support the transportation and land use goals established for the city and region and to meet concurrency requirements. When LOS falls below or congestion exceeds the standard, mitigation should be considered that takes into account the City of Spokane's transportation and land use goals.

The downtown area Super Accessibility Zone should include downtown Spokane and areas adjacent to the downtown area with housing or uses, such as hospitals, that could benefit by the increased transit service. The downtown zone could be bordered on the south by 14th Avenue, on the east by Hamilton, on the north by Indiana, and on the west by Hangman Valley. A couple of service arms might be extended to Sprague and Division. Within the zone, buses might run on both arterials and neighborhood streets.

A document known as The Concurrency Management System for the Spokane Region was adopted by the Spokane Regional Transportation Council on September 10, 1999 and published on April 24, 2001.

TR 2.22 High Capacity Mass Transit

Provide high capacity mass transit along corridors to connect to and from downtown Spokane to serve the city and the region's growing populations and activity centers.



Discussion: High capacity mass transit provides citizens with another transportation option and is a tool to facilitate development in desired areas. Transportation Policy 7 of the Countywide Planning Policies states, "In the long-term, growth and change will necessitate the designation of specific transportation corridors which can support high capacity transportation." SRTC has studied the possibility of light rail transit as part of its Major Investment Study (MIS) of the South Valley Corridor. One alternative of the study is light rail transit that connects downtown Spokane and Liberty Lake. Stops at the Spokane Interstate Fairgrounds, University City Shopping Center, and about a dozen other locations would be included. In the future the route has the potential of being expanded in either direction. To the west it might expand to reach the Spokane International Airport while to the east it could go to Coeur d'Alene.

This policy supports the development of some type of high capacity mass transit. SRTC's South Valley Corridor study indicates that the east-west corridor is the most likely place for mass transit to be feasible. The North Spokane Corridor (north-south freeway) provides another opportunity, however, since it is being planned with sufficient right-of-way to allow for the addition of high capacity mass transit in the future.

TR 3 TRANSPORTATION AND LAND USE

Goal: Recognize the key relationship between the places where people live, work, and shop and their need to have access to these places; use this relationship to promote land use patterns, transportation facilities, and other urban features that advance Spokane's quality of life.

Policies

TR 3.1 Transportation and Development Patterns

Use the city's transportation system and infrastructure to support desired land uses and development patterns, especially to reduce sprawl and encourage development in urban areas.

Discussion: Transportation and land use planning must be coordinated for the city to function smoothly, efficiently, and healthily. Investments in new transportation infrastructure can have both positive and negative impacts on the city. For example, while it may be relatively easy to build new streets or expand existing streets at the edge of the city to add transportation capacity, that can lead to sprawling development that, in the long run, is costly to the city.

This policy is particularly important given two goals of the GMA, which state:

- "Encourage development in urban areas where adequate public facilities and services exist or can be provided in an efficient manner."
- "Reduce the inappropriate conversion of undeveloped land into sprawling, low density development."

TR 3.2 Reduced Distances to Neighborhood Services

Provide a variety of services within neighborhoods that are convenient to and meet the needs of neighborhood residents, decreasing the need for driving.

Discussion: Providing a variety of services within neighborhoods decreases the distances needed to travel to meet daily needs, making opportunities for walking and bicycling more feasible. The services are intended to serve the daily needs of neighborhood residents, not to draw people from outside the neighborhood. Furthermore, the design of the buildings housing these services must be compatible with the neighborhood.

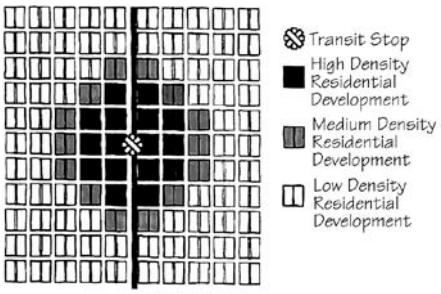
TR 3.3 Walking and Bicycling-Oriented Neighborhood Centers

Incorporate physical features in neighborhood centers to promote walking, bicycling, and other non-motorized modes of transportation to and within the centers, reducing the need for driving.

Discussion: This policy, though similar to TR 2.1, "Physical Features," is included to ensure that the neighborhood services desired in TR 3.2, "Reduced Distances to Neighborhood Services," are walking and bicycling oriented. Development that requires driving to the development and from place to place within the development should be avoided.

TR 3.4 Increased Residential Densities

Increase residential densities, as indicated in the land use element of the City of Spokane's Comprehensive Plan, to support the efficient functioning of transit and mass transit.



Discussion: Residential densities relate strongly to transportation options. Lower densities decrease the ability to provide efficient alternative transportation modes while higher densities increase the ability. Furthermore, sprawling growth increases the stress on the transportation system in that the more spread out the city becomes, the farther people have to travel and the less likely they will be to walk, bicycle, or take the bus. This policy does not mean that there will be no single-family residential areas in the city. This policy has an essential link to policy TR 3.6, "Use of Design."

TR 3.5 Healthy Commercial Centers

Maintain healthy commercial centers within the city that satisfy the shopping and service needs of residents to reduce the amount of driving, utilize existing transportation infrastructure and services, and maintain the city's commercial tax base.

Discussion: Maintaining healthy commercial centers within the city has several advantages for city residents:

- They can choose to travel shorter distances.
- They have more options for how to travel.
- Existing transportation services and infrastructure can be utilized.
- Profitable commercial centers contribute to the city's tax base.
- It increases community pride.

Ideas for creating such centers include:

- Incorporating housing as part of the center.
- Providing housing in a variety of forms, such as in second and third stories of buildings, loft-style housing, and townhouses.
- Reducing costs of some City of Spokane services and utilities, such as trash pick-up.
- Pursuing public/private partnerships to save historic buildings and adapt to new uses.

TR 3.6 Use of Design

Facilitate the acceptance of densities that support alternative modes of transportation and businesses within neighborhoods by ensuring compatible design of mixed-use and non-single family residential buildings to protect neighborhood character.

Discussion: Design that is sensitive to the community and its character is crucial to the successful implementation of this transportation plan. Sensitive design is important to accomplish key transportation goals. For example, while mixed-uses are needed in some areas to support alternative transportation options (or at least make it feasible to drive shorter distances), the design of the mixed-use buildings needs to be compatible with the surrounding neighborhood to be acceptable to neighborhood residents. This policy supports and has a strong link to policies TR 3.2, "Reduced Distances to Neighborhood Services" and TR 3.4, "Increased Residential Densities."

❑ TR 4 EFFICIENT AND SAFE MOBILITY

Goal: Design and maintain Spokane's transportation system to have efficient and safe movement of people and goods within the city and region.

Policies

TR 4.1 Street Design and Traffic Flow

Use street design to manage traffic flow and reduce the need for street expansions.

Discussion: Street design can affect the amount and speed of traffic. This concept applies to both arterials and local access streets, which have different purposes for both the amount and speed of traffic (see policy TR 4.2, "Self-Enforcing Street Design"). Street design elements can also be used in place of street expansions, or "capacity improvements," to manage congestion, primarily along arterials. Such design elements, also known as "traffic engineering techniques," include limiting access along arterials to improve traffic flow, prohibiting parking along arterials, using left-hand turning channels, and providing space for bicycles on arterials to keep all traffic

flowing smoothly and to increase the viability of bicycling. This policy applies to the design of both arterials and local access streets.

TR 4.2 Self-Enforcing Street Design

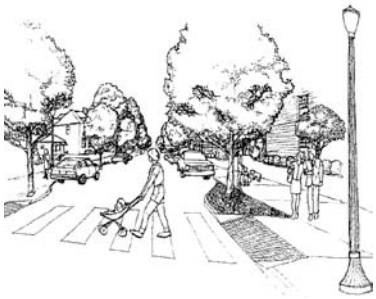
Design streets to discourage drivers from speeding and increase the safety of pedestrians, bicyclists, other drivers, and every person and animal in the city.

Discussion: Speeding traffic is a major concern to city residents. Faster traffic speeds shorten the time drivers have to react, make drivers less able to yield to pedestrians, create noise pollution, and contribute to road rage. Within neighborhoods, cut-through traffic results in inappropriate, excessive traffic through neighborhoods and also *speeding* traffic through neighborhoods, resulting in decreased safety and declining neighborhood quality of life. Streets can be designed through their width and use of traffic calming devices to discourage speeding and increase safety. While the intent of this policy is to discourage speeding traffic and not to stop traffic altogether, this policy needs to be balanced with the need to design streets to reduce traffic congestion and idling time (see TR 6.5, "Traffic Congestion").

TR 4.3 Narrow Streets

Build streets with the minimum amount of street width needed to serve the street's purpose and calm traffic.

Discussion: Streets should be constructed as narrow as possible. Narrow streets are less costly to build, require less maintenance, reduce storm water runoff, help reduce the speed of traffic, conserve land for other uses, and are safer for pedestrians.
Narrow streets also serve as an effective traffic calming measure. Calming traffic is important to Spokane neighborhoods (see TR 5.4, "Traffic Calming Measures").



This does not mean, however, that all streets will be narrow since street widths vary according to the street's function. For example, arterials are wider than streets serving only neighborhood traffic. Street width also needs to take into account the need for bicycle lanes.

The City of Spokane's street standards have been developed with the intent of implementing this narrow streets policy. Another technique to implement this policy is to carefully provide for the location of on street parking, which serves to reduce the width of travel lanes. The use of chicanes (design features that change a street's path from straight to serpentine) at appropriate locations can also serve to reduce the travel lane width of streets. Finally, this policy also has a strong link to policy TR 4.6, "Internal Connections," since providing greater connectivity and access addresses some of the access concerns raised by narrow streets.

TR 4.4 Arterial Location and Design

Assure that both the location and design of arterials are compatible with existing and proposed land uses in the areas through which they pass.

Discussion: The integrity of the areas through which arterials pass should be protected while meeting the citywide interests that arterials serve. Both the location and design of arterials are important to minimize negative impacts on adjacent areas. For example, new arterials that divide neighborhoods should be avoided. Existing arterials that pass through neighborhoods should be designed to allow people to cross the arterial safely. Arterials that pass through commercial areas should be designed to provide safe and convenient access to those areas for pedestrians and bi-cyclists, as well as drivers. Streets in commercial areas need to be commercially friendly. Examples

of specific design issues include the use of couplets and one-way versus two-way streets. This policy has strong links to policies TR 4.10, "Downtown Street Network" and TR 7.2, "Street Life."

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-de-sacs or vacating streets cannot be avoided, pedestrian pathways, bikeways, and bike routes that link areas should be provided.

TR 4.7 Holistic Plans

Require a transportation master plan as part of any subdivision, PUD, institutional master plan, or other major land use decision process.

Discussion: The intent of this policy is to ensure that new communities that are planned within the city relate to and connect with the larger community. Developments should not be planned piecemeal. The plan should identify transportation features such as the external and internal connections, connecting streets, arterials, public paths for pedestrians and bicyclists, transit stops, and major transportation generators, such as schools, parks, and commercial areas.

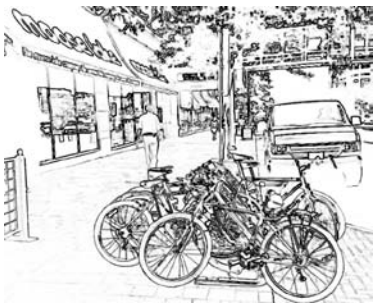
TR 4.8 Freight and Commercial Goods

Accommodate moving freight and commercial goods in ways that are safe, cost efficient, energy efficient, and environmentally friendly.

Discussion: Freight and commercial goods are crucial to supporting the daily needs of people within the city. The movement of goods is also important to businesses for retaining existing business and providing for expansion. While planning for the movement of goods, it is also

important to maximize safety and quality of life in neighborhoods, the city, and the surrounding region. Ways to accomplish this include:

- Designating truck freight routes through the city that provide appropriate access without compromising neighborhood safety and livability. Concerns include noise, pollution, and congestion.
- Allowing small commercial trucks to travel on neighborhood streets to deliver supplies to home businesses.
- Giving priority and incentives to environmentally friendly and energy efficient modes of freight movement including rail, non-polluting vehicles, and alternative fuels.
- Supporting intermodal freight transfer facilities (land to air, rail to street, interstate trucking to local delivery).



TR 4.9 Downtown Accessibility

Ensure that downtown Spokane is accessible and friendly to all types of transportation users.

Discussion: It is especially important that the downtown area, as Spokane's heart and center, is accessible to everyone. Pedestrians, people in wheelchairs, bicyclists, and drivers should be welcome and able to travel safely and efficiently downtown.

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 or bicyclists and degrades street activity or otherwise detracts from commercial activity. Traffic moving rapidly through downtown is detrimental to pedestrian and bicyclist 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 4.11 Consistency of Rules

Strive for consistency in setting speed limits, designating and locating arterials, and developing other transportation rules.

Discussion: Inconsistencies or inequities in transportation rules lead to increased confusion and violations, both intentional and unintentional. Consistency of rules supports a greater common understanding, awareness, and acceptance. Speed limits, for example, that vary from street to street or from one section of an arterial to another are confusing and unclear. Examples of rules include speed limits, designation and location of arterials, and location of traffic calming devices.

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.

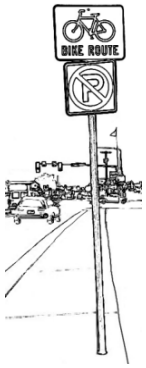
TR 4.13 Traffic Signals

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 4.14 Signs

Use signs to achieve transportation goals.



Discussion: Signs can help achieve Spokane's transportation goals. For example, signs can enhance mobility by facilitating efficient flow of traffic, improve the safety of pedestrians and bicyclists, and add to a sense of place. Signs should be clear, readable, and placed with care. Signs should not be hazardous to pedestrians or block their paths.

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, 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, public health, 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 4.18 Sidewalk Maintenance

Keep sidewalks clean and well maintained.

Discussion: Gravel, snow, over-hanging vegetation, and cracks all present obstacles for pedestrians. Better maintenance by private property owners eliminates many of these problems. Neighborhood groups could also be used to address concerns.

TR 4.19 Awareness of ROW Streetscape Elements

Increase the understanding and awareness of the essential importance of pedestrian buffer strips, medians, traffic circles and other right-of-way streetscape elements in protecting public safety and enhancing community.

Discussion: Right-of-way (ROW) streetscape elements are key tools to help accomplish Spokane's transportation goals. Their design, placement, and maintenance greatly influence many transportation goals, including efficient and safe mobility, transportation options, sense of place, neighborhood protection, and environmental protection. An increased understanding and awareness of the importance of ROW streetscape elements and how they relate to Spokane's goals and desired future is essential. Only through increased understanding and awareness can they be intelligently planned for and the variety of issues related to them (such as design, maintenance, and placement) addressed.

TR 4.20 Design and Maintenance of ROW Streetscape Elements

Design pedestrian buffer strips, medians, traffic circles and other right-of-way streetscape elements so that they enhance public safety and Spokane's visual and environmental quality and can be effectively maintained.

Discussion: This policy is first directed towards ensuring that ROW elements are maintained in a way to achieve two purposes: (1) to enhance public safety and welfare and (2) to enhance Spokane's visual and environmental quality. This policy is also intended, however, to recognize and effectively utilize the key relationship between the *design* of right-of-way elements and their *maintenance*. For in addition to addressing the functional use and aesthetic appearance of ROW streetscape elements, design can also influence the type and level of maintenance that is required to maintain them.

The design of elements can and should vary according to the surrounding area (see policies TR 7.4, "Pedestrian Buffer Strips" and TR 5.3, "Neighborhood Traffic Issues"). One factor that may vary according to area is maintenance options. Some areas may be willing to support fairly maintenance-intensive design options, such as turf grass, annuals, and non-native ornamental shrubs. Other areas may favor more low-maintenance options, such as native and drought-tolerant groundcovers, perennials, or hardscape landscape treatments. Hardscape treatments, however, should be used with caution, both in their location and design. For example, policy TR 7.4, "Pedestrian Buffer Strips," states, "complete coverage of the pedestrian buffer strip with an impervious surface and no trees or ground over is discouraged." In addition, policy TR 7.3, "Street Trees," specifies that street trees should be planted "wherever possible to enhance the transportation environment." Thus, street trees should be a part of the streetscape, wherever possible.

Proper design that incorporates maintenance along with other issues identified in the plan can do much to address maintenance concerns regarding ROW streetscape elements. The City of Spokane could assist in recommending designs appropriate to the maintenance capabilities of the neighborhood or individual project.

TR 4.21 Maintenance Responsibility for ROW Streetscape Elements

The maintenance of pedestrian buffer strips, medians, traffic circles and other right of way streetscape elements is the responsibility of the adjacent property owner and/or neighborhood except for those elements specifically assumed by the City of Spokane.

Discussion: The City of Spokane assumes responsibility for only those ROW streetscape elements listed on the City of Spokane's maintenance responsibility list identified in the City of Spokane's Street Tree Ordinance. All other ROW streetscape elements are the responsibility of the adjacent property owner and/or neighborhood. The elements the city assumes responsibility for can change through time, as additional resources are identified and/or community priorities change.

Traditionally, the City of Spokane's Parks and Recreation Department has only maintained certain ROW streetscape elements along a very limited number of streets. Such streets have traditionally been limited to those of exceptional scenic or community interest, such as Mission Avenue, Manito Boulevard, Rockwood Boulevard, and High Drive. As the Comprehensive Plan is being adopted (spring of 2001) a multi-departmental team is working to identify maintenance issues and options.

Policy TR 4.20, "Design and Maintenance of ROW Streetscape Elements," addresses the key link between the design and maintenance of ROW streetscape elements, including how the design of elements should vary according to the surrounding area. This concept can greatly influence maintenance responsibility issues, particularly for those elements within the curbline of the right-of-way, such as traffic islands and medians. As two examples: neighborhoods that desire higher intensive landscaping of such features must be willing to assume the higher degree of maintenance they require. Also, the design of such elements will vary greatly depending on whether they are on arterials or local access streets, due to access and safety issues.

The Parks and Recreation Department has direct maintenance responsibilities for developed and undeveloped properties that are under direct control of the Spokane Park Board. Ownership of public lands for Park purposes is defined by the City Charter, the portion that describes the Spokane Park Board's duties and responsibilities. Simply put, for the Parks and Recreation Department to assume responsibility for additional ROW streetscape elements, the Spokane Park Board would have to formally decide on acceptance of ROW property as Park Board controlled land and have approval of design, as it would relate to long-term maintenance. Maintenance obligations would include any horticultural development, support of facilities that support the established plant material and future revision/replacement of the landscape development.

Another potential implementation strategy to address maintenance is for the City of Spokane to reinstate the leaf pick-up program for all leaves. Currently, the program only covers those leaves on the street.

TR 4.22 Awareness of Maintenance Responsibility for ROW Streetscape Elements

Increase the understanding and awareness of whose responsibility it is to maintain pedestrian buffer strips, medians, traffic circles and other streetscape right of way elements to improve the maintenance of these elements.

Discussion: Maintenance of ROW streetscape elements is a key concern. Poorly maintained ROW streetscape elements degrade Spokane's quality of life. One important aspect to address of this challenging issue of ensuring that ROW elements are appropriately maintained is to ensure that it is clear whose responsibility it is to maintain the various elements. Ignorance in this area leads to nonexistent or inappropriate maintenance.

Potential implementation strategies to increase understanding and awareness of maintenance responsibility include the use of Channel 5 television programs, utility bill inserts, and announcements by the Mayor or City Councilpersons. Such education strategies could also include the awareness needs behind policy TR 4.19, "Awareness of ROW Streetscape Elements."

TR 4.23 Transportation LOS

Set and maintain transportation level of service standards that support desired focused growth patterns and choices of transportation modes.

Discussion: The City of Spokane's transportation level of service standards differ between (1) areas targeted for growth and where transportation mode choices are available and (2) areas not targeted for growth and that have fewer transportation mode choices. These level of service standards apply to all modes—vehicle, transit, and pedestrian.

In order to encourage development where it is desired, reduced level of service for vehicles is permitted in center and corridor areas where growth is being encouraged and where adequate choice of non-vehicle transportation modes (such as transit, pedestrian) exist. Reducing level of service in these areas has several benefits. First, lowering the vehicle level of service in these areas reduces the cost of the infrastructure required to serve these areas and allows higher density development without costly mitigation measures. Another benefit is that it will lower vehicle speeds, which is compatible with the concept of these focused growth areas. In addition, higher availability of non-vehicle modes of transportation in these areas is expected to balance overall transportation needs.

It should be noted that level of service standards for pedestrians are expressed in the varying street design standards in the four area classifications (see section 4.6, "Street Standards") and with the greater pedestrian amenities expected in the focused growth areas.

To further help focus growth where it is desired, higher vehicle level of service standards are required in areas where intense development is not desired, such as on the edge of the urban area. Raising the vehicle level of service in these areas increases the infrastructure costs in theses areas and requires mitigation measures when intensity of development exceeds provided capacity. Furthermore, these higher vehicle level of service environments are generally more typical of low-intensity, suburban development on the edge of the urban area.

The level of service standards for the arterial street network are based on the Highway Capacity Manual capacity techniques.

Further information about the City of Spokane's transportation LOS and its concurrency management program can be found in the Draft Comprehensive Plan/EIS, Volume 2. Section 18.4, "Transportation LOS—Executive Summary," of the draft provides a summary of the City of Spokane's preliminary program for the LOS and concurrency management. Section 18.1, "Major Transportation Planning Issues" includes a more general discussion of LOS issues.

TR 4.24 Transportation LOS Coordination and Consistency

Coordinate the setting and maintaining of transportation level of service standards with other agencies and private providers of transportation so that they are consistent.

Discussion: The transportation system provides the structure for Spokane to interact with the rest of the world. A number of public agencies and private companies provide transportation services in, to, and through Spokane. The standards and goals established by these groups need to be considered in establishing transportation level of service standards.

The Spokane Regional Transportation Council is tasked in the adopted countywide planning policies with establishing level of service standards for the regional street network. SRTC establishes travel time standards in the principal travel corridors.

The Washington State Transportation Commission sets the level of service standards for highways of statewide significance. The Commission coordinates with the Spokane Regional Transportation Council to establish level of service standards for state routes not on the highways of statewide significance system. Transportation Facilities and Services of Statewide Significance (TFSSS), as designated by the Washington State Transportation Commission, are listed in section 4.5, "Existing and Proposed Transportation Systems."

Other agencies and private transportation providers of statewide significance establish level of service standards for their respective jurisdiction. The City of Spokane coordinates with these agencies where appropriate.

TR 4.25 Pedestrian and Bicyclist Access to Parks

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

Discussion: The city shall analyze the existing safety of pedestrian and bicycle 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 NEIGHBORHOOD PROTECTION

Goal: Protect neighborhoods from the impacts of the transportation system, including the impacts of increased and faster moving traffic.

Policies

TR 5.1 Neighborhoods for Pedestrians

Orient, design, and maintain neighborhoods for pedestrians.

Discussion: The quality of life of neighborhoods is greatly affected by the city's transportation system. In the past, the focus of transportation has been on moving a greater volume of automobile traffic at a faster rate. The results have not always been good for city neighborhoods or the people who live in them. Establishing pedestrians as the focus for neighborhoods is a clear statement of the City of Spokane's transportation priorities and its commitment to healthy neighborhoods.

TR 5.2 Neighborhood Transportation Options

Promote a variety of transportation options within neighborhoods.

Discussion: Providing for walking, bicycling, and transit use as viable transportation options gives residents more transportation choices and reduces the amount of traffic in neighborhoods. Transportation choices that are environmentally, culturally, and historically connected to neighborhoods produce healthy and cohesive neighborhoods.

One way to accomplish this is to provide paths for pedestrians and bicyclists in neighborhoods. Streets being considered for vacation could instead be made into paths to connect streets. These paths could be enhanced with trees and other features to encourage walking and bicycling and to strengthen a sense of place.

TR 5.3 Neighborhood Traffic Issues

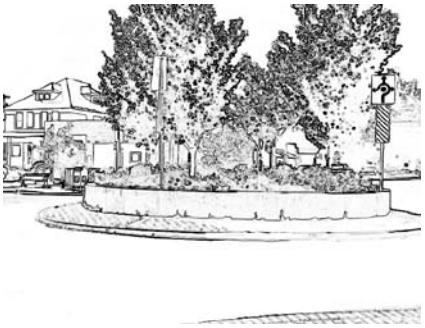
Work with neighborhoods to identify, assess, and respond to the unique traffic issues and needs in each neighborhood.

Discussion: Working with neighborhoods provides the opportunity to apply the broad, citywide direction of the transportation element to the neighborhood level and to do so in a way that is responsive to the needs and character of individual neighborhoods while also following the citywide interests reflected in the element. A challenge in working with neighborhoods on traffic issues is the need to recognize that individual neighborhoods form a part of the larger city and have a relationship to it. The entire city's transportation needs must be considered as well as the neighborhood's. It is also important to assess the entire neighborhood and not react to just a small group of vocal people. Areas of transportation planning that are particularly dependent on neighborhood involvement include design issues (such as the selection of street tree types and landscaping choices for pedestrian buffer strips) and the location and type of traffic calming measures and traffic control.

TR 5.4 Traffic Calming Measures

Use traffic calming measures in neighborhoods to discourage speeding, reduce non-neighborhood traffic, and improve neighborhood safety.

Discussion: Traffic calming measures create safer and quieter streets. They help reduce traffic speed and discourage the inappropriate use of neighborhood streets by non-neighborhood residents as shortcuts to bypass arterials. They make neighborhoods healthier and more appealing places to live. Examples of traffic calming measures include narrowed streets, curved streets, roundabouts (traffic circles), pedestrian islands, textured crosswalks, and large street trees with overhanging canopies, and speed bumps and dips.



TR 5.5 Arterials and Neighborhoods

Locate and design arterials to minimize impacts on neighborhoods.

Discussion: The impacts of arterials on neighborhoods should be minimized. Arterials that through poor design or location divide neighborhoods should be avoided. Arterials do not have to be vast stretches of asphalt that separate and isolate neighborhoods. By directing that arterials should usually not pass through neighborhoods but instead form neighborhood boundaries, this policy identifies an ideal situation for most cases. In some cases, existing arterials already pass through neighborhoods. If carefully designed and appropriate to a particular neighborhood, an arterial might provide a focus for creating a neighborhood center. New neighborhoods might be centered on an arterial with the arterial and adjacent land uses forming the heart of the neighborhood.

TR 5.6 Neighborhood Traffic Speed

Ensure that neighborhood streets have a significantly lower traffic speed than arterial streets.

Discussion: Speeding traffic and thru-traffic seriously degrade neighborhood quality of life. There should be a distinct difference between the speeds of traffic moving on neighborhood streets versus arterial streets. Arterial streets should be established as a route of choice for non-neighborhood traffic.

Without a distinct difference between the speeds of traffic on neighborhood streets versus arterial streets, little incentive to use arterials exists. Some drivers shortcut through neighborhoods to avoid delays on arterials, which can be caused by traffic lights, buses that slow down the curb lane, and zones that slow automobiles, such as school crossings. This results in increased traffic and speeding traffic through neighborhoods. This poses significant safety hazards, especially for children and pets, and detracts from neighborhood livability.

Maintaining a speed difference will come from a number of different strategies, including speed limit enforcement, street design, and education.

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 ENVIRONMENTAL PROTECTION

Goal: Minimize the impacts of the transportation system on the environment, including the region's air quality and environmental features, such as nature corridors.

Policies

TR 6.1 Pollution

Design, build, and operate transportation improvements to minimize air, water, and noise pollution and the disruption of natural surface water drainage and natural areas.

Discussion: To reach the City of Spokane's Transportation Vision and achieve the transportation goals, protection of the environment is essential. Protection should address the specific impacts transportation has on air and water quality and noise pollution, as well as transportation's more general impacts on Spokane's quality of life and sense of place.

Vegetation, especially street trees, has an important role to play in minimizing the negative environmental impacts of transportation. For example, large street trees that provide an overhanging canopy improve air quality, calm traffic, and act as buffers between people and automobiles. Motor oil disposal, however, remains as one transportation-related threat to the aquifer, making the aquifer the focus of special environmental concern.

TR 6.2 Land Respect

Plan and construct transportation improvements with care, considering natural land forms, geography, and nature corridors.

Discussion: Features such as the type and abundance of trees, rock formations, and the overall land form help define who we are as a community. The City of Spokane's policy is to consider such important environmental features in its transportation planning and development.

TR 6.3 Transportation Alternatives and the Environment

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

TR 6.4 Street Cleaning

Clean streets to protect air quality and make for a cleaner, safer Spokane.

TR 6.5 Traffic Congestion

Design streets and time traffic signals to reduce traffic congestion and vehicle idling time.

Discussion: Traffic signals can be used to benefit the environment by reducing congestion. This policy needs to be balanced, however, with other goals and policies pertaining to the dangers of speeding traffic and protection of neighborhoods.

TR 6.6 Vehicle-Related Air Pollution

Develop transportation control measures to reduce vehicle-related air pollution.

Discussion: Transportation control measures are measures contained in the State Implementation Plan (SIP) that are designed to reduce vehicle-related air pollution. Any agency, however, may implement other transportation control measures that are not included in the SIP.

The City of Spokane should work with the SCAPCA, SRTC, the State Department of Transportation, STA, and other jurisdictions and agencies to develop appropriate transportation control measures. Current measures include vehicle emission testing programs and use of oxygenated fuels. Potential new transportation control measures include:

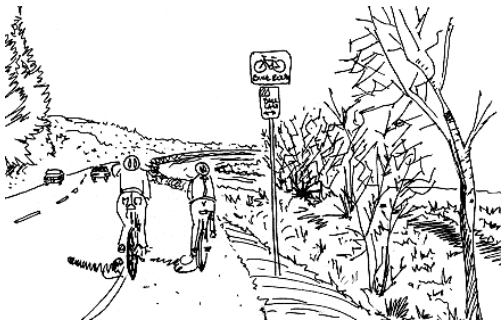
- Promoting the purchase of fuel-efficient vehicles, alternative fuel vehicles, and new technology vehicles.
- Offering incentives for reducing miles traveled and using vehicles with high fuel efficiency.

TR 6.7 Street Paving

Place a high priority on public spending for paving dirt and gravel streets to reduce air pollution.

TR 6.8 City Hall Goes Green

Conduct City of Spokane business in a way that reduces the environmental impacts resulting from its transportation-related decisions.



Discussion: The City of Spokane should provide leadership and demonstrate to the community the environmental responsibility it expects from others. It should do this with the decisions it makes as to how it conducts its business. For true success and viability, a community's practices must be sustainable.

The City of Spokane should continue to provide employees with shower facilities and lockers, reduced-cost bus passes, and safe bicycle storage and should also consider additional strategies, such as:

- Providing employee parking only for carpools or vanpools.
- Replacing fleet vehicles with vehicles that meet zero emission standards.
- Using quieter, perhaps smaller garbage trucks.
- Using alternatives to automobiles to deliver city services.

- Pursuing alternative fuel options for vehicles.
- Planting street trees to mitigate exhaust of fossil fuel for transportation uses.

❑ TR 7 SENSE OF PLACE

Goal: Foster a sense of community and identity through the availability of transportation choices and transportation design features, recognizing that both profoundly affect the way people interact and experience the city.

Policies

TR 7.1 Character and Pride

Create transportation improvements that promote Spokane's character, enhance the character of its neighborhoods, and foster community pride.

Discussion: Protecting Spokane from transportation impacts that infringe on the community's character or sense of place is important. Transportation elements to consider include street design, sidewalk design and materials, streetlights, large street trees, bus stops, transit stops and buildings, public squares, and traffic calming devices.

City of Spokane departments devoted to the arts, youth, parks, planning, and transportation can play a key role in promoting a sense of place through creating transportation improvements that are sensitive to local character. Communication and cooperation between city departments and neighborhoods is essential. Neighborhood councils and steering committees are key participants. One specific option for carrying out this policy is to create a process through which neighborhoods, including those downtown, participate in the process to identify and/or apply design standards and participate in the design review process.

TR 7.2 Street Life

Promote a healthy street life in commercial areas, especially downtown, through transportation facilities that are designed with care to enhance both their use and the surrounding street environment.

Discussion: A healthy street life is essential to creating healthy cities. A vital, active street life makes areas more appealing places to be, improves a sense of safety, and increases the public interaction essential to healthy community life.

Design features can either promote or hinder street life. For example, sidewalks that feature pedestrian buffer strips and are free from barriers promote walking by creating a safe pedestrian environment. Transit stops or centers that include shelter, seating, and schedule information create a more appealing environment than those that don't. Other design features such as landscaping, public art, and fountains can help establish spaces as public gathering places that attract people as well as provide relief from harsher built environments. Design details matter. For example, sidewalks that adjoin buildings with plenty of windows and entrances are more people-friendly than sidewalks that run along buildings with blank walls.

TR 7.3 Street Trees

Plant street trees wherever possible to enhance the transportation environment.

Discussion: A healthy "urban forest" is one of the greatest assets a city can have. It is also one of the few infrastructure elements that appreciate in value with age. For transportation purposes, street trees have many benefits; they provide a traffic calming effect, help orient motorists,

provide shade and habitat, reduce glare, noise, erosion, and wind, and absorb carbon monoxide. Large trees with overhanging canopies of branches are especially desirable. Streets with a cathedral of trees overhead are an important aesthetic element that fosters community pride and identity.

One concern in planning for street trees is to ensure that public safety is protected by preventing sidewalks and curbs from being damaged by tree roots. This problem can be addressed through the design of the pedestrian buffer strip and the selection of the appropriate tree type for the planting site. In addition, planting techniques such as root barriers, "structural soil," and irrigation practices are helpful mechanisms in preventing tree roots from damaging sidewalks and curbs.

Poorly selected or poorly maintained trees can present other problems, including interfering with overhead utility lines, underground utilities, neighboring properties, and other plants and minimizing sight distances. Due to these potential problems, it is important that the appropriate type of tree be selected for each location and that trees be properly maintained. This is particularly true since trees are living organisms that grow larger each year, increasing in height, canopy width, and size of root system. It is important to consider what the size and shape of trees will be when they are mature. The Parks and Recreation Department's urban forestry program maintains a list of appropriate trees for planting in different environments. A permit is required to plant a tree in the right-of-way.


"Soft Surface"

The potential problems caused by street trees should not be used to override their fundamental importance and overall value. It is imperative to remember that a city without trees isn't fit for a dog.


"Hard Surface" (pavers)

TR 7.4 Pedestrian Buffer Strips

Develop pedestrian buffer strips in a way that is appropriate to the surrounding area and desired outcomes.

Discussion: Treatments of pedestrian buffer strips, also known as planting strips, vary greatly, from completely covered with hard surfaces to completely landscaped with soft surfaces and street trees. "Hard surfaces" include concrete, bricks, and other pavers; "soft surfaces" include sod, drought tolerant grass, and ground covers. Street trees can vary from small ornamental trees to large trees that provide overhanging canopies for streets.


Hard Surface" (hardscape treatment)

How the pedestrian buffer strip is treated should relate to the surrounding environment and desired outcomes for that area. For example, grass should continue to be used in historic areas where grass is the traditional treatment. Where traffic calming is desired, large street trees are preferred. In commercial areas, street trees with a hardscape treatment or tree grates may be appropriate. Sand-set pavers, cobbles, "grassblocks," and similar pervious materials are encouraged wherever hardscape is incorporated. Complete coverage of the pedestrian buffer strip with an impervious surface and no trees or ground cover is discouraged.

Pedestrian buffer strips are crucial to creating safe, useable sidewalks (see policy TR 2.7, "Safe Sidewalks"). They should be designed with care to enhance the pedestrian environment, relate to the surrounding environment, and achieve desired outcomes. For example, in planning for pedestrian buffer strip width, one factor that should be considered is whether or not on-street parking is provided. Areas without on-street parking and the associated buffering it provides should feature a wider pedestrian buffer strip than areas with on-street parking. The ultimate driver in designing pedestrian buffer strips for particular locations is to ensure that the pedestrian

buffer strip provides for safe pedestrian circulation while also being appropriate to the surrounding area.

TR 7.5 Building Setbacks

Reduce building setbacks from the street and distances between buildings in neighborhood commercial areas to improve pedestrian access and develop an urban form.

Discussion: Reducing building setbacks and distances between buildings reduces the distance pedestrians must walk to enter buildings. Buildings that are a considerable distance from the street or from each other are not inviting to pedestrians. Such settings can be intimidating to pedestrians, especially if they must cross large parking lots. Establishing maximum setbacks can help create a more pedestrian-friendly environment. Reducing the width of buildings or storefronts has the same effect. Finally, reducing setbacks and distances between buildings creates an urban form, as opposed to a suburban or rural form.

TR 7.6 Sidewalk Use

Allow businesses to utilize available sidewalks as long as pedestrian travel is not unreasonably impacted and the sidewalk's use and design is in character with the neighborhood.

Discussion: The use of sidewalks for sidewalk cafes or outdoor seating for coffee shops can add to the appeal and vitality of street life. Similarly, stores that bring their wares to the sidewalk in front of their shops can also add appeal. When using sidewalks for business purposes, however, it is imperative to maintain adequate and efficient pedestrian movement. Also, occupancy of sidewalk space should be limited to non-permanent structures and seasonal use.

TR 8 REGIONAL PLANNING

Goal: Plan for transportation on a regional basis.

Policies

TR 8.1 Plan Collaboratively

Work together to achieve a regional transportation plan that meets the goals and requirements of the GMA but also reflects the visions, values, and interests of the City of Spokane.

Discussion: The Countywide Planning Policies for Spokane County include a policy that states, "Regional transportation planning shall be conducted by the Spokane Regional Transportation Council (SRTC). The SRTC shall coordinate with local jurisdictions and the Spokane Transit Authority (STA) to ensure that the regional transportation plan and local jurisdiction's land use plans are compatible and consistent with one another."

The City of Spokane is dedicated to working with SRTC in its role of conducting and coordinating regional transportation planning, while also working to ensure that the City of Spokane's visions, values, and interests are reflected in the regional plan.

The City of Spokane, as a partner in planning for transportation regionally, recognizes that part of SRTC's role is to establish travel time-based level of service standards for the regional arterial network and determine the regional arterial network following appropriate federal and state requirements.

In addition, there are statewide transportation facilities within the city that impact the city while serving statewide needs and interests. Therefore, collaboration between the City of Spokane and

the appropriate state agency is imperative to ensure that both the City of Spokane and Washington State's interests are met. At the current time, two major collaborative study efforts, US 195 and the North Spokane Corridor, are underway.

TR 8.2 Efficient Regional Transportation

Coordinate with SRTC to ensure efficient, multimode transportation of people and goods between communities regionally.

TR 8.3 Countywide Planning Policies

Use the adopted Countywide Planning Policies (Capps) as additional guidance for transportation planning.

TR 8.4 Airfields

Protect the operations of Fairchild Air Force Base, Spokane International Airport and Felts Field with compatible land use regulations and ensure planning is coordinated and consistent with the airfields' respective Master Plans.

TR 8.5 Sharing Information

Share information between all transportation entities on a regular basis; planning information shall be shared during all phases of projects.

Discussion: Many transportation entities affect transportation in the area, such as SRTC, the Washington State Department of Transportation (WSDOT), STA, SCAPCA, and transportation and planning departments of local jurisdictions. Early and continuous communication between these entities is key for effective community planning.

TR 9 EQUITABLE FUNDING

Goal: Finance a balanced, multimode transportation system using resources efficiently and equitably.

Policies

TR 9.1 Cost Information for Citizens

Promote alternatives to private automobile use by informing citizens of the total economic costs and publicly financed subsidies to motor vehicle use.

TR 9.2 Environmental Impact Information

Provide information on the environmental impacts of motor vehicle use.

TR 9.3 Dedicated Funds for Retrofitting

The City of Spokane shall dedicate some amount of its annual transportation capital budget to retrofitting the street system to meet the city's pedestrian design standards.

Discussion: As noted in the "Street Standards" (section 4.6, see subsection titled "General Considerations"), the City of Spokane's street standards apply to *newly constructed* public and private streets. The standards are also applied in certain situations as land development occurs (such as where level of service is impacted or where development abuts an existing arterial). The standards, however, are not intended to apply to the resurfacing, restoration, or rehabilitation of existing arterials. Without this policy, little would be done to retrofit the City of Spokane's existing street system to meet the new pedestrian design standards and thus achieve the intent of the transportation element. (The Transportation Capital Facilities Program does include a program to construct sidewalks along arterials where they are missing, but no other such retrofitting program was planned as part of the comprehensive planning process.) This policy is a

practical, direct way to implement the City of Spokane's pedestrian standards and create Spokane's desired transportation future. The fundamental pedestrian standard to be implemented is the policy to provide for safe pedestrian circulation, primarily in the form of sidewalks with a pedestrian buffer strip (TR 2.7, "Safe Sidewalks").

This policy creates a project type of its own in the Transportation Capital Facilities Program (section 4.7), called "Pedestrian Facilities Retrofitting Program." To identify the funds to allocate to this program and thus implement this policy, each year City of Spokane staff will develop a proposal for an amount of the transportation capital budget to devote to fulfilling this policy. The city will develop a program to identify where and how to apply these funds (a task for, at least in part, the Pedestrian/Bicycle Coordination staff, policy TR 2.3).

❑ TR 10 THE FUTURE

Goal: Prepare for the future and changing transportation needs resulting from changing populations, technology, and trends.

Policies

TR 10.1 Planning Integration

Integrate planning for transportation needs and facilities into project design, including for Pods, individual projects, and neighborhoods.

TR 10.2 Innovation to Meet Spirit

Review proposals for development projects in a way that allows innovative design and for solutions that meet the spirit and intent of the law, if not the letter of the law.

Discussion: Spokane has a wide variety of environments and conditions. Specific development proposals have their own limitations as well as opportunities for development. The variety of environments within the city and variety of development proposals makes it difficult if not impossible to have a detailed list of very specific rules, such as policies or design standards that must be followed in all cases. Though there are general rules that work in most cases, some room for discretion in applying them and allowing for deviations from them is needed.

This opportunity for discretion or deviation is needed for two reasons: first, to allow for opportunities for creative solutions to meet the goal or intent behind the rule, and second, to allow for exceptions to the rules where an exception is clearly necessary, such as where topographic features make them impossible to follow.

If a rule is not to be followed, however, the proponent needs to make it clear why it should not be followed as well as how the alternative being proposed in its place meets the intent of the rule. It is also important to recognize that while this provides for an opportunity to deviate from rules, such situations should indeed be exceptions to the rule and not the rule. In other words, it is expected that rules will be followed, except in necessary situations, as noted above.

Further information about how street standards will be implemented can be found in section 4.6, "Street Standards," under "Implementing the Standards."

TR 10.3 Education

Provide education on the transportation needs of the entire community, the benefits of transportation alternatives, and the rights and responsibilities of sharing the road.

Discussion: Education is the foundation of understanding, respect, and acceptance. A better understanding of the true costs of driving, respect for other users of our streets, and acceptance of

choices different than our own will make our streets safer and more enjoyable. Since people currently are so auto-dependent, knowledge of the impacts of driving is essential. This knowledge must also be balanced with a sense of responsibility connected with use of an automobile.

Dependence on the automobile has social, financial, and environmental impacts. These impacts have been well documented but are not generally known, acknowledged, or included in any education curriculum. This gap in the school curriculum and the general media should be addressed by educational programs.

4.5 EXISTING AND PROPOSED TRANSPORTATION SYSTEMS

Introduction

This section provides an overview of Spokane's existing and proposed transportation systems. It includes inventories of existing conditions as well as plans for the future for:

- Pedestrian and Bicycle Systems
- Transit System
- The City's Street Network
- Rail
- Air Facilities and Services
- Transportation Facilities and Services of Statewide Significance

The following articulates two general points about these inventories of Spokane's 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, "Transportation Priorities," 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 such as bicyclists, 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.

A Broad, Comprehensive Review

Second, this review of Spokane's existing conditions and transportation inventories is a broad review. It includes citywide or regional-scale transportation systems, not smaller-scale transportation features. For example, the street system inventory focuses on the arterial system, not neighborhood access streets. Similarly, the pedestrian system inventory focuses on the sidewalk system along arterials and major pedestrian trails, not smaller-scale features such as staircases or local routes to neighborhood schools. Such smaller-scale transportation features, while crucial to the vitality of neighborhoods and the entire community, are beyond the scope of this citywide comprehensive plan and instead will be planned for in later, more detailed planning stages. These later planning stages may include subject-specific plans (such as a detailed bicycle plan or pedestrian plan) and geographic-specific plans (such as neighborhood or special district plans). The goals and policies of the transportation element of the comprehensive plan provide a general direction or framework for creating these later plans.

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 supported by staff liaisons from the Economic Development Division and the Transportation Department. These positions are filled by staff members as an additional responsibility added to their full-time duties. As such, only a small percentage of 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, "Regional Pedestrian Network."

The 1993 SRTC Bike/Ped Plan was superseded by the City's 2001 Comprehensive Plan, its Bicycle Plan map was used in large part to develop the city's "Regional Bikeway Network" map (Map TR 2).

In 2009, 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, Deer Park, Medical Lake, Airway Heights, Spokane Transit Authority (STA) and other agencies in 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 (see Maps TR 1 "Regional Pedestrian Network," and TR 2, "Regional Bikeway Network.") They also appear as "trails" on Map CFU 5, "Parks," in Chapter 5, "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-foot-wide 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 toward 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.

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 build 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. 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 Pedestrian System

As noted previously, one of the most significant features of this transportation element is its focus on making walking a viable transportation option in Spokane—to make it as easy to walk within the city, as it is to drive. The primary means within the city of providing for pedestrian access is the city's sidewalk system. The sidewalk system is supplemented by other pedestrian facilities, such as the shared facilities described earlier and the city staircases that both link neighborhoods and provide access within

neighborhoods Examples include the staircases that link Peaceful Valley and Browne's Addition and the staircase at 19th and Perry.

Map TR 1 "Regional Pedestrian Network," indicates those pedestrian facilities that are the subject of this plan: sidewalks along arterials and the four main shared-use pathways described above (three existing and one proposed). Policy TR 2.7, "Safe Sidewalks," states that the city should "provide for safe pedestrian circulation within the city; in most cases, this should be in the form of sidewalks with a separated curb and sidewalk." The planning level of this plan focuses on sidewalks along arterials, with the 20-year transportation capital facilities program providing cost estimates for establishing sidewalks along both sides of all city arterials.

A separated curb and sidewalk is a key feature of sidewalk design. As stated in policy TR 2.7, "Safe Sidewalks," it is the preferred sidewalk design. Due to the many crucial benefits a separation between the curb and sidewalk provides, this plan uses a new term for the physical separation: "pedestrian buffer strip" (PBS). The PBS term replaces the terms "planting strip" and "parking strip" used in earlier plans. The discussion section of TR 2.7 describes the value of a pedestrian buffer strip, its purpose and function, and notes they can be landscaped with a variety of treatments. Policy TR 7.4 "Pedestrian Buffer Strips" elaborates on this important point regarding PBS design, stating "develop pedestrian buffer strips in a way that is appropriate to the surrounding area and desired outcomes."

The plan includes background as to the importance of providing well-designed sidewalks to enable safe pedestrian travel within the city. An important point is that walking is not only a transportation mode but also part of the dynamic of city living that contributes to healthy urban places. The following excerpt discusses of how pedestrian activity and the design of pedestrian facilities has changed over time in Spokane in order to provide a context for viewing Spokane's desired pedestrian future.

Spokane: For Pedestrians, Past as Prologue?

As a "settlement," the community's informal roads and paths accommodated all modes of travel -- the connections were designed for commerce and little else. They were, however, places of great personal interaction. As we became a "city," formality of streets accompanied the growing need to establish physical order—sidewalks surfaced as part of orderliness. With the City Beautiful movement that helped transform early Spokane, city fathers insisted on street trees and planting strips. The city's maturity also fostered "social order" and sidewalks became a venue to experience this emerging social culture. Other examples of the street setting fostering socialization include large front porches and inviting front yard landscapes. With post-war suburbanization and the push for home ownership, Spokane's street environment changes to embrace the automobile, and the human and cultural experience followed the new design. Infrastructure was not always complete in new subdivisions—many lacked sidewalks altogether. Where sidewalks were developed, they most often lacked the traditional planting strip, and in effect became large curbs, rather than places for people to safely walk. Increasing reliance on the car made sidewalks, front porches, street trees, and formal front yards of little consequence. In Spokane's post-war era, local development economies and subdivision design placed a low priority on pedestrians. The result, like with many cities across the country, is a built environment that is designed more for cars than people.

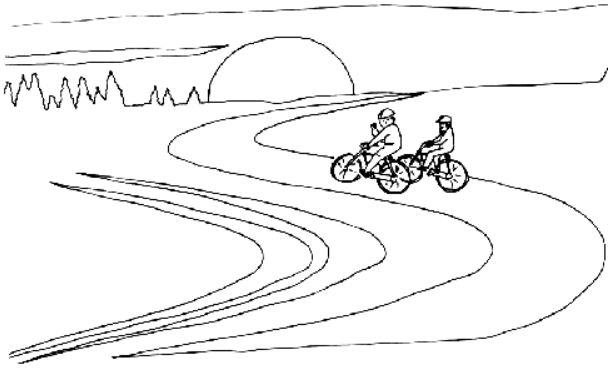
Spokane's history has set the stage for its future. This plan establishes a redirection for pedestrian planning by making it a priority. This is done not out of a sense of a nostalgia for days gone by but as part of Spokane's comprehensive effort to create its desired future.

The Bicycle System

State law identifies bicycles as vehicles, with the privileges, responsibilities, and regulations that accompany that status. A fundamental concept of this plan and the SRTC Bike/Ped Plan is that 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 "Regional Bikeway Network." Bikeway system terminology is specified in the following table, TR 3, "Bicycle Terms."

TABLE TR 3 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 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	
Shared Use or Multiuse Path	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.
Bike Lane	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	A shared roadway that has been designated by on-street marking as a route for bicycle use.
Shared Roadway	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.
Bicycles Prohibited	Bicycles are prohibited from using the street.

Transit System

Public transit service within the City of Spokane is provided by the Spokane Transit Authority (STA). STA's service area covers all of the City of Spokane and more. STA's 370.8 square mile service area is centered around Spokane and extends east to the Liberty Lake area, west to Medical Lake and Fairchild Air Force Base, and southwest to Cheney. STA buses operate on 36 fixed routes between 5:00 am and 11:00 pm on weekdays, with 30-minute headways during the peak hours on most routes. Service levels are reduced on weekends and holidays. Spokane Transit Authority's transit routes are changed fairly frequently, so it is best to consult the latest version of the transit routes that are produced by STA.

In addition to fixed-route service, STA provides paratransit service for the elderly and disabled population. Qualified individuals can schedule door-to-door service to and from any location within the STA service area.

A ride sharing program is provided through STA Ridershare. Ridershare provides passenger vans for van pools formed by residents who have origins and destinations within the STA service area. A computerized ride match program is provided to facilitate car-pooling. Ridershare also coordinates employer-sponsored car pool and transit pass programs.

The STA is developing Service Planning Guidelines. The guidelines, when adopted by the STA Board, will provide policy guidance for future evaluation of the STA system and decision-making with regard to service allocation. A policy that is currently being considered is a Service Allocation Policy. It is based

on an evaluation of three service strategies: coverage, productivity, and equity. The three strategies are highlighted in Table TR 4, "Three Transit Service Strategies."

TABLE TR 4 THREE TRANSIT SERVICE STRATEGIES	
Coverage	The coverage strategy is designed to provide equal access to the same level of transit service for all. The main problem associated with this strategy is that in low population density areas, ridership will usually be low. This translates into low revenues when compared to operating costs. Since service is not concentrated in higher density areas where ridership will be highest, benefits of air pollution reduction and reduced traffic congestion will not be fully realized.
Productivity	The productivity strategy is designed to maximize ridership per hour of operation. The productivity strategy allocated service to carry as many people as possible, thereby maximizing revenues compared to cost of operations. The productivity strategy also does the most to reduce traffic congestion and air pollution. The disadvantage with a pure productivity strategy is that outlying, low population density areas would receive much less or no transit service in comparison to high-density areas.
Equity	The equity strategy is a combination of the coverage and productivity strategies. Under this strategy, service is allocated in proportion to population, employment density, or other activity. Under the equity strategy, service is provided with an emphasis on productivity by providing more transit service to densely populated areas. Minimum coverage, however, is still provided to all areas.

In sum, the strategies can be viewed as follows:

- **Coverage Strategy:** Service shall be allocated uniformly across all developed areas.
- **Productivity Strategy:** Service shall be allocated according to how heavily it is used.
- **Equity Strategy:** Service shall be allocated proportionally to population and other activity.

The spectrum of strategies runs from a pure coverage strategy on one end to a pure productivity strategy on another end, with the equity strategy in between the two extremes.

STA's draft Service Planning Guidelines recommend that the service allocation standard be as follows:

- 70 percent of service shall be deployed according to the Equity Strategy.
- 20 percent of service shall be deployed wherever and whenever it is most productive.
- 10 percent of service shall be deployed regardless of productivity or equity in order to meet special needs of the community.

Light Rail

A light rail line from downtown Spokane to Liberty Lake has been in the planning stages for several years and could be operational in as little as five years. This light rail project is the result of a Major Investment Study undertaken by the Spokane Regional Council; the name of the study document is the South Valley Corridor Major Investment Study, High Capacity Transportation Options, Task 1, Summary Report, updated February 1998.

The purpose of the study was to look at future transportation options to address the challenges of maintaining mobility in the growing Spokane region. The study included an analysis of a variety of alternatives, including high occupancy vehicle (HOV) lanes, an express busway, and light rail transit.

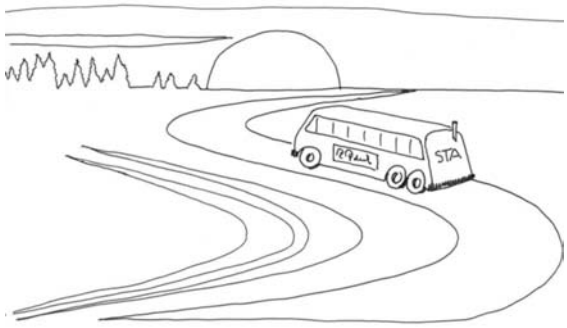
Light Rail Transit (LRT) involves the use of a transit vehicle on a fixed rail or track. The light rail draws its power from overhead wire, allowing automatic grade crossings and operations in mixed traffic flow, as well as operations on an exclusive right-of-way. Spokane's proposed 16-mile light rail system would run between downtown Spokane and Liberty Lake with a total of 16 stops. LRT and supporting feeder bus operations would be coordinated to minimize transfer times. Existing bus routes would be modified, as necessary, to intersect the LRT alignment and support efficient transfers. The light rail system would encourage private development around stations because it would provide a permanent, long-term transportation investment through the corridor. Three of the stops, the Fairgrounds, University City, and Liberty Lake, have the potential to become major activity nodes. Pedestrian and bicycle mobility and

safety would also improve with the development of light rail. Mobility options for all citizens, including transit dependent, would improve.

Spokane's prospective light rail system was estimated in 1993 as costing approximately $300 million. The system is estimated to be cheaper than light rail systems in other cities because the area the system would run through is a relatively narrow area, with no spur lines anticipated. In addition, much of the right-of-way is already in public ownership, therefore the need for property acquisition would be limited. One-third of that would need to be funded locally, with the remaining two-thirds needing to come from state and local sources. Maintenance and operation of the facility would most likely be by the Spokane Transit Authority and paid for through user fees and government subsidies.

In 1999, the Spokane Regional Transportation Council (SRTC) received approval for $1,000,000 in High Capacity Transit (HCT) account funds from the Washington State Legislature. These funds matched $3,000,000 in Federal Transit Administration (FTA) funds appropriated by Congress for federal fiscal years 1999 and 2000. In turn, STA has matched these federal and state funds, allowing the light rail project to move forward into engineering and design. With the passage of Initiative 695 in February 2000 and the subsequent loss of the Motor Vehicle Excise Tax, the decision was made to delay entry into engineering and design until after the 2000 legislative session to better determine the continued availability of HCT account funds at the state level.

As of April 14, 2000 the Washington State Legislature has yet to approve a supplemental budget addressing the impact of I-695. This has resulted in continued delay in starting the engineering and design work. Pending the outcome of a supplemental budget, STA has still approved in their 2000 budget funding to match the federal FTA funding. Additional funding is also expected from Congress as part of the 2001 appropriation bill.



The location of the proposed light rail system is identified on the land use maps in Chapter 3, Land Use.

The City's Street Network

The city's street network has tremendous impacts on the overall city as well as its neighborhoods. For example, citizens' concerns regarding the impacts of transportation on neighborhoods and the need for viable transportation choices were often related to the design and development of the street network. Concerns about the city's street network are nothing new. The City of Spokane's 1986 Arterial Street Plan states:

> "The impacts of arterial traffic on residential neighborhoods has been a concern of the city and neighborhood residents for many years. Increased population growth and development in the City of Spokane and Spokane County without commensurate improvements to the arterial system has resulted in increased congestion on arterial streets and an "overspill" of traffic into residential neighborhoods. Increased traffic flowing through neighborhoods detracts from normal daily activities necessary to maintain a stable, cohesive living environment. Increased traffic causes increased noise, pollution, and hazards to pedestrians."

The City of Spokane's 1986 Arterial Street Plan stated that some street network concerns of that time reached all the way back to the city's 1966 Arterial Street Plan. Some of these are the same issues citizens raised in the late 1990s, such as these statements from the 1986 plan:

> "An arterial street tree planting program has not been established and arterial improvements during the last 20 years have not included street tree plantings with a standard landscape design."
>
> "Sidewalks adjacent to arterial streets are inadequate in many areas of the city. Integrated curbs and sidewalks are the rule rather than the exception."
>
> "Traffic continues to infiltrate through residential neighborhoods."
>
> "Transit, car pools, van pools, and programs such as flex time and staggered work hours have had only minimal effects in reducing peak-hour traffic volumes."

Due to the importance of the city's street network, this section examines four elements of the network: classification, function, components, and street standards.

Street Network Classification

The City of Spokane's street network consists of the arterial system and local access streets. Arterial streets are designed to serve two primary functions: provide mobility and provide access to land. Arterials are streets that collect and route traffic to and from the traffic generators as well as provide some access to adjacent land. The single function of local access streets, on the other hand, is to provide access to adjacent land. Local access streets provide access to land in lieu of mobility.

The street network may also be described as having two components: the regional arterial network and the neighborhood street network. The regional arterial networks are those arterial streets whose primary function is to provide mobility for traffic through the metropolitan area, between the area and external terminations, and between the various neighborhoods of the city. The planning of the regional arterial system must be on a regional scope. The neighborhood street network consists of those arterial streets and local access streets whose primary function is to provide access to adjacent land and to collect local traffic and connect it to the regional arterial system. Planning for the neighborhood street network is completed on the neighborhood level.

Table TR 5 summarizes these key points about arterials and local access streets.

TABLE TR 5 KEY POINTS ABOUT ARTERIALS AND LOCAL ACCESS STREETS

Street Type	Primary Function	Street Network Component	Planning Scope
Arterial Streets	Provide Mobility	Regional Arterial Network	Regional Level
Local Access Streets	Provide Access	Neighborhood Street Network	Neighborhood Level

Arterial Classification

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

The City of Spokane's previous "Arterial Street Plan," adopted in 1986, classified arterials into four functional classifications: Controlled Access High-Capacity Facilities, Principal Arterials, Minor Arterials, and Neighborhood Collector Arterials. The city's street network included a fifth functional classification, Local Access Streets, which are not arterials. In addition, a "parkway" classification was established. The parkway classification could be applied to any of the arterial classifications.

This functional classification system has essentially been retained in this plan, with only a few changes. The most significant change has been the addition of the "boulevard" designation that, like the parkway designation, can be applied to any of the arterial classifications. Another change has been the group of classifications into either the regional arterial network or the neighborhood street network. The relationship between the functional classification system and the regional arterial network and neighborhood street network is identified in Table TR 6, "Relationship Between Functional Classification and Street Network."

TABLE TR 6 RELATIONSHIP BETWEEN FUNCTIONAL CLASSIFICATION AND STREET NETWORK

Functional Classification	Street Network
Controlled Access High-Capacity Facilities	Regional Arterial Network
Principal Arterials	Regional Arterial Network
Minor Arterials	Regional Arterial Network
Neighborhood Collector Arterials	Neighborhood Street Network
Local Access Streets	Neighborhood Street Network

The final change to the functional classification system has been to revise slightly and rename the types of collector arterials and local access streets. The specific names of all of the City of Spokane's street types are listed in Table TR 7, "Street Network Classification." The street types are grouped under their network type and are defined in the following section, "Street Network Function."

TABLE TR 7 STREET NETWORK CLASSIFICATION

Regional Arterial Network	♦ Controlled Access High Capacity Facilities ♦ Principal Arterials ♦ Minor Arterials
Neighborhood Street Network	♦ Collector Arterials—Residential ♦ Collector Arterials—Commercial/Industrial ♦ Local Access Streets—Low Density Residential (<10 du/acre) ♦ Local Access Streets—Medium/High Density Residential (>10 du/acre) ♦ Local Access Streets—Commercial/Industrial
Other Classifications	♦ Parkway Designation ♦ Boulevard Designation

Street Network Function

The following describes how each of the arterial classifications and residential access streets is intended to function, what components are needed to allow them to function in the prescribed manner, and what planning and traffic features are associated with each classification.

Regional Arterial Network

Controlled Access High-Capacity Facilities

This classification includes both freeways and expressways. The basic difference between a freeway and an expressway is the degree of access allowed and the provision or lack of grade separated intersections.

Controlled access high-capacity facilities are intended to permit relatively unimpeded high-speed traffic flow through the city and between its most prominent traffic generators. They should be located so they do not bisect communities, neighborhoods, or any other homogeneous area and should be designed with a buffer between residential areas.

Traffic is separated by a median strip, which serves to control turning traffic and provide space for sign installation and landscaping. Access is fully controlled on freeways and partially controlled on expressways. Freeway intersections are generally grade-separated, while expressways have at-grade intersections. Access to adjacent property is provided by frontage roads, which also provide for bicycle travel and sidewalks for pedestrians. Bicycle travel, parking, and pedestrian facilities on controlled access arterials should be prohibited. Lanes may be designated for the exclusive use of transit, vanpools, and car pools.

Travel lanes and shoulders should each be 12 feet in width. The median strip should be a minimum of 15 feet in width. Landscaping is used to control erosion, improve aesthetics, and provide a buffer to adjacent land uses.

Principal Arterials

Principal arterials are designed to permit relatively unimpeded traffic flow between major traffic generators, such as downtown, major shopping centers, and major employment districts. They are four to six-lane, moderately fast facilities. These arterials are the framework street system for the city and should be located on community and neighborhood boundaries. Principal arterials should not bisect homogeneous areas, such as residential neighborhoods, shopping centers, or parks. Access to principal arterials should be partially controlled by restricting access to adjacent residential property and consolidating access to commercial property.

Frontage roads can also be used to provide access to adjacent property. Access from intersecting residential streets should be limited to right turns. Channelization, or a fifth lane, should be provided to control left turns, to provide space for snow storage, and to provide protection for vehicles and pedestrians. Pedestrian crosswalks should be provided at signalized, at-grade intersections. At other locations where heavy pedestrian cross is desirable, grade-separated crossings should be used. Twelve-foot travel lanes should be used to accommodate moderately fast speeds and to provide adequate width during winter driving conditions.

Landscaping should be provided in planting strips to improve the aesthetics of the arterials. Sidewalks should be separated from the curb by planting strips to promote pedestrian safety by providing a separation between vehicles and pedestrians. On-street parking and bicycles should be prohibited. Where principal arterials are used as transit routes, bus pullout bays should be installed.

Minor Arterials

Minor arterials are designed to provide less mobility than principal arterials and greater access to adjacent properties. They should be moderate speed facilities that collect and distribute traffic from principal arterials to collector arterials and residential access streets. They should be located on community and neighborhood boundaries and should not bisect residential neighbor-hoods. Minor arterials may function as two-lane facilities with on-street parking or as four-lane facilities with parking removed. Channelization and traffic signals should be provided at major intersections. Stop signs should be installed at intersecting residential access streets. Travel lanes should be 12 feet wide to provide for an eventual four-lane moderate speed facility and to provide for bicycle lanes when serving as a two-lane facility. Twelve-foot lanes provide additional space for plowed snow. Where possible, access to commercial and industrial land uses should be provided off minor, rather than principal arterials. A pedestrian buffer strip to provide increased pedestrian safety and space for plowed snow and landscaping should separate sidewalks.

Neighborhood Street Network

Collector Arterials

Collector arterials are relatively low-speed, two-lane facilities designed to provide greater access to adjacent property rather than providing mobility. They should primarily serve individual neighborhoods, distributing traffic from neighborhood traffic generators, such as elementary schools and neighborhood stores, to minor and principal arterials. On-street parking is desirable. If used as a bikeway, the parking lane should be 12 feet in width. Sidewalks along collector arterials are the major means by which school children reach elementary schools located within the neighborhoods to bus routes located on minor and principal arterials at the neighborhood boundaries. Pedestrian buffer strips make the neighborhood a more attractive place to live, provide a buffer between the street and children playing along the sidewalk, and provide storage for plowed snow.

Local Access Street

The primary function of local access streets is to provide access to adjacent property. They should be designed and located to provide convenient access to fronting lots and to discourage continuous or unobstructed flows of traffic through the area. Street alignment and traffic control measures should encourage a slow, safe speed. Parking lanes, separated sidewalks, and street plantings are features that help make the neighborhood a more desirable place to live.

Other Classifications

Parkway Designation

Parkway is a designation used to identify arterials that, because of their geographical location, provide recreational and/or scenic opportunities unique to that particular arterial. Arterials designated as parkways may function as a principal, minor, or neighborhood collector arterials but require special design and construction treatment, such as landscaped medians, bikeways,

viewpoints, basalt retaining walls, log guard rails, or theme lighting. Neighborhood and community boundaries are desirable locations for parkways. Generally, traffic signals will be used to control crossing and turning movements at major intersections. Pedestrian crosswalks will be at-grade and parking is prohibited. Street planting may be installed in the parking strip, median, or both. Viewpoint turnouts with off-street parking are desirable at significant view locations. Access may be restricted in certain areas. Minimum arterial standards will be determined by the underlying arterial functional classification.

Boulevard Designation

The boulevard designation is applied to arterials that are enhanced with special aesthetic qualities yet also serve as primary transportation routes between key locations, such as neighborhood or business centers, centers of civic activity, and community landmarks. Landscaping and pedestrian accommodations provide an aesthetically pleasing environment for both motorized and non-motorized users. Boulevards are intended to be multimodal with transit, bicycle, and pedestrian facilities.

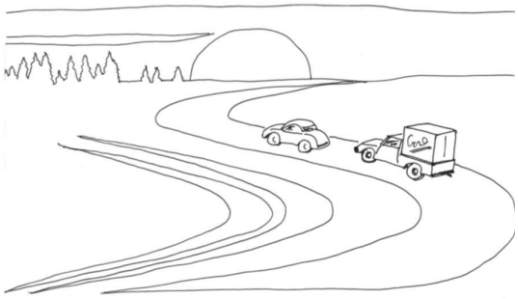
Within the context of the transportation element, the boulevard designation has this specific, particular meaning. Streets thought of as boulevards in the popular sense (such as Manito, Northeast, and Southeast Boulevards), are not necessarily designated as boulevards in the transportation element.

City Street Network Maps

Map TR 3, indicates the City of Spokane's "Arterial Network." The street network depicted on the map consists of the following arterial classifications:

- Neighborhood Collector
- Minor
- Principal
- Principal—Controlled Access High Capacity
- Principal—State Route

As the "Street Standards (section 4.6) describes, a single set of universal street standards that would apply universally throughout the city has not been developed for arterials. Within the city, instead, four different types of environments are identified, each of which features slightly different street standards. These environments are the Special Downtown Environment, Focused Growth Area, Urbanized Area, and Non-Urbanized Area classifications.



Map TR 4, "Boulevards, Parkways and Area Classifications," shows the four different area classifications and the two final arterial classifications: boulevards and parkways.

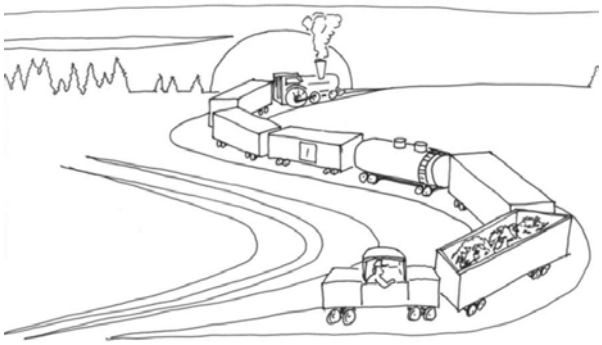
Street Network Components

Travel and parking lanes, medians, curbs, parking strips, and sidewalks are all components of the City of Spokane's street network. They are described in the following table:

TABLE TR 8 STREET NETWORK COMPONENTS	
Auxiliary Travel Lanes	Auxiliary travel lanes are travel lanes dedicated for a special purpose. Examples include dedicated turn lanes, deceleration lanes, and transit lanes. Lane width requirements vary with the anticipated speed and function of the arterial. For moderate and high-speed facilities, 11 and 12-foot lanes are common. For low speed arterials, ten-foot lanes are adequate.
Curbs	Curbs are used to control drainage, discourage vehicles from leaving the pavement, protect pedestrians, and promote orderly roadside development.
Medians	Medians are used on moderate and high speed arterials to control left turning movements, reduce headlight glare, provide space for drainage and snow storage, turn and speed-change lanes, pedestrian and vehicle protection, and future expansion. Medians with channelization increase peak hour vehicular flow and provide increased safety. Median widths are generally 15 or 16 feet.
Parking Lanes	On-street parking is desirable on streets designed primarily to provide access to adjacent property. Seven-foot parking lanes are adequate for residential access streets and eight-foot parking lanes for collector arterials. On street parking on minor arterials with low traffic volumes is acceptable. However, minor arterials may be designed with four travel lanes with the outside lane used for parking until such time as traffic congestion requires an additional lane. The lane used for parking on a minor arterial is usually 11 or 12 feet wide. Twelve-foot parking lanes should be required on all arterials intended to serve as bikeways.
Pedestrian Buffer Strips	Pedestrian buffer strips (PBS) are landscaped sections adjacent to travel or parking lanes. In the past, the terms "planting strip" or "parking strip" have been used as names for this space. This plan adopts the term pedestrian buffer strip, which more accurately reflects its importance. A PBS improves safety by separating vehicles and pedestrians, provides space for drainage and snow storage, improves air quality through oxygenation and absorption of carbon dioxide, can provide shade from the sun and barriers against wind, and contributes to the general aesthetics of the city. Properly landscaped streets contribute greatly to the beauty and health of the city. Pedestrian buffer strips that are landscaped with soft surfaces should be a minimum of five to six feet, the minimum area needed to effectively support street trees. Pedestrian buffer strips that feature hard surfaces should be a minimum of three to four feet.
Sidewalks	Sidewalks provide the primary means by which pedestrians move about the city. Sidewalks can be adjacent to the curb and parking or travel lane (referred to as "integral curbs and sidewalks"), or they can be separated from the curb by a pedestrian buffer strip. Separated sidewalks are preferred for several reasons. First, they help reduce pedestrian accidents by providing a separation between pedestrians and vehicles. Second, sidewalks separated from the curb provide a smoother walking surface because they are not as affected by curb cuts and driveways. Third, separated sidewalks are less affected by snow storage and traffic sign placement. Sidewalks should be a minimum of five feet in width; they should be wider in areas where pedestrian traffic is heavy.
Travel Lanes	Travel lanes are the part of the street used for the movement of traffic. Lane width requirements vary with the anticipated speed and function of the arterial. For moderate and high-speed facilities, 11 and 12-foot lanes are common. Twelve-foot lanes are preferred because they provide for additional safety. The effective width of the street is reduced during the winter due to ice and snow. For low speed arterials, nine-foot lanes are adequate. Accident studies show that on moderate and higher speed facilities, accidents increase uniformly with lane widths below 11 feet.

Rail

Passenger rail service is provided by Amtrak's Empire Builder route, which provides service between Seattle, Portland, and Chicago. The Amtrak station is located on West First Avenue in downtown Spokane.



Freight rail service is provided by the Burlington Northern Santa Fe Railroad (BNSF) and the Union Pacific Railroad (UP). BNSF operates 60 trains per day through the Spokane area. BNSF traffic is generally oriented east/west between Seattle, Tacoma, and Portland and destinations in the midwest, south, and southeast. UP operates four trains per day through Spokane with traffic generally oriented north/south, to and from Canada. UP also operates two local trains. One local train provides service between Spokane and Plummer, Idaho, while the other local train operates within the immediate Spokane area. Map TR 5, "Regional Freight and Goods, Airports, and Railroads," shows the location of railroad lines, as well as regional freight and goods routes and airports.

Air Facilities and Services

Felts Field is located within the City of Spokane; Spokane International Airport is located outside the current 1999 city limits but is within the City of Spokane's Final Urban Growth Area Study Areas. Spokane International Airport and Felts Field are owned jointly by the City of Spokane and Spokane County. Both airports are operated by the Spokane Airport Board, which is appointed by the Spokane City Council and the Board of Spokane County Commissioners. The Spokane Airport Board operates pursuant to RCW 14.08. Map TR 5, "Regional Freight and Goods, Airports, and Railroads," shows the location of Spokane International Airport and Felts Field.

Spokane International Airport serves commercial airlines, general aviation, and military flights. The airport's primary focus is commercial airline operations. During the 1990s, the Airport Board approved over $100 million in capital improvements, including rehabilitation of both runways, new entrance roads for Spokane International Airport and the Airport Business Park, expanded surface parking, and the addition of a Ground Transportation Center at the end of the Terminal Building. Funding for projects was generated from user fees, not appropriated tax dollars. Though jointly owned by the city and county, Spokane International Airport is self-sufficient from revenues generated from user fees, leases, and concession agreements. Table TR 9 identifies use of the airport from 1995 to 1999.

TABLE TR 9 USE OF SPOKANE INTERNATIONAL AIRPORT

	1995	1996	1997	1998	1999
Number of Commercial Flights	88,179	83,982	70,551	67,624	71,173
Number of Passengers (on commercial flights)	2,988,575	3,258,762	3,043,238	2,949,833	3,041,626
General Aviation Operations	28,808	27,959	32,883	36,674	41,114
Military Flight Operations	2,093	1,190	2,349	4,485	3,102

Felts Field serves general aviation traffic. Table TR 10 identifies its use from 1995 to 1999.

TABLE TR 10 USE OF FELTS FIELD

	1995	1996	1997	1998	1999
Number of Flight Operations	67,637	62,162	66,670	72,241	75,844

The Spokane International Airport Master Plan (updated in 1993) and the Felts Field Airport Master Plan (updated in 1994) were both adopted by the Spokane Airport Board to guide development of these facilities. Felts Field is one of the oldest officially designated airports in the nation, formally recognized by the United States Department of Commerce in 1926. The site in the Spokane Valley, which was originally acquired by the city to protect its underground water supply, was used for aviation purposes as early as 1913 when it was known as Parkwater Field. Felts Field was used for the area's first commercial flights beginning in 1920 and was the site of the region's first Air National Guard unit as well as early air races. Eventually, the site became too small for the increased air activity and land was purchased west of Spokane for a new air facility, which was known as Sunset Airport. Construction began in 1940, the same year it was renamed Geiger Field. Commercial air traffic then moved from Felts Field to Geiger Field in 1946; in 1949, the National Guard unit relocated and in 1960, Geiger Field was renamed Spokane International Airport. Portions of Felts Field were placed on the National Register of Historic Places in 1991 when a Felts Field Historic District was established.

Specific plans have been developed for both airports by airport staff and have been adopted by the Airport Board. The Spokane International Airport Master Plan was last updated in 1993. The Felts Field Airport Master Plan was last updated in 1994.

Transportation Facilities and Services of Statewide Significance

The Washington State Transportation Commission designates Transportation Facilities and Services of Statewide Significance (TFSSS). The following is a preliminary list of these facilities:

- **The Interstate Highway System**
  - See the section below for Highways of Statewide Significance
- **Interregional State Principle Arterials**
  - See the section below for Highways of Statewide Significance
- **Intercity Passenger Rail Services**
  - Seattle to Spokane
  - Vancouver to Spokane
- **Major Passenger Intermodal Facilities**
  - Spokane Intermodal Center – Intercity Bus Depot and Rail Facility
- **Freight Railroad System**
  - Burlington Northern Santa Fe Railroad
  - Union Pacific Railroad
  - Montana Rail Link

State-Owned Transportation Facilities

The following is a list of state-owned transportation facilities:

- **Highways of Statewide Significance (HSS)**
  - State Route 2 – from Airway Heights to SR 90
  - State Route 2 – Division Street (including Browne Street and Ruby Street) and Newport Highway from SR 90 to north urban boundary
  - State Route 90 – west urban boundary to east urban boundary
  - State Route 195 – south urban boundary to State Route 90
  - State Route 395 – Division Street and Highway 395 from Newport Highway to north urban boundary
- **Other State Highways (non-HSS)**
  - State Route 290 – Trent Avenue from Division Street to east urban boundary
  - State Route 291 – Francis Avenue and Nine Mile Road from Division Street to west urban boundary
  - State Route 902 – Medical Lake Road from SR 90 to west urban boundary

Note: these facilities are those designated in the fall of 2000. As noted above, Transportation Facilities and Services of Statewide Significance (TFSSS) are designated by the Washington State Transportation Commission. Policy TR 4.24, "Transportation LOS Coordination and Consistency," discusses coordination issues between the City of Spokane and Washington State for these facilities.

4.6 STREET STANDARDS

This section describes the physical street standards to be used for street improvement projects. These standards will be used for new streets, for reconstruction of rural roads into urban streets as urbanization occurs, primarily for deficiencies related to capacity, safety, and land widths, and for other street construction projects that involve major redesign of the street itself. Transportation preservation projects (projects involving the resurfacing, rehabilitation, or reconstruction of the street pavement, sidewalks, or bridges) are exempt from these standards.

The street standards are to guide street design and to describe the desired street environment. The street standards provide for streets that meet functional, safety, and aesthetic requirements. They also meet or exceed the minimum requirements of the state so that street projects are eligible for state and federal grants.

The 1986 Arterial Street Plan contained prescriptive standards for each street classification. These standards assumed that sufficient street right-of-way existed for all desired elements and were based solely on the functional classification. Little guidance was given on how to match the design elements to the actual needs or conditions of particular locations.

This plan develops guidelines to match street standards to needs and to allow street design to foster a sense of place consistent with the unique characteristics of the surrounding area. A significant new addition is flexible guidelines for design projects for existing streets and narrow right-of-ways.

Implementing the Standards

The process for how these proposed street standards will be implemented; including how development projects will be reviewed to ensure compliance with the standards will be determined and specified at a later phase of plan development. The following discussion is intended to identify key issues about implementation and to provide a framework for that later work.

The intent of the city is to use a multidisciplinary city staff team in its process for applying street standards to specific projects. This multidisciplinary staff review team will provide input into the design process, beginning as early as possible in the review process and continuing as needed until construction is completed. While this narrative outlines key issues about the process, the exact review process for any project will depend to some extent on the nature of the project. For example, the review process for projects that meet the street standards outright will be different from projects that involve a deviation from the standards. (For an explanation of the reasoning behind allowing deviations, see policy TR 10.2, “Innovation to Meet Spirit.”) As another example, projects that involve the development of parkways and boulevard street classifications, which include broad design parameters or guidelines rather than specific street standards, will be different from the other street classifications, which are more standardized and prescriptive.

Though the precise review process will vary according to the nature of the project, the following principles will apply to the process:

- The goal or intent of the project review process will be to use the process as an opportunity to make projects the best possible for the public, as measured by the goals, policies, and regulations of the comprehensive plan.
- Neighborhood involvement in the process will be based on the principles expressed in policy TR 5.3, “Neighborhood Traffic Issues.”
- The review team will be multidisciplinary, including city staff from the fields of engineering, traffic engineering, urban design, city planning, and other areas of expertise as needed.
- The multidisciplinary team’s review of projects will begin as early as possible to provide the optimal opportunity for efficient and effective input into the development process. For example, multidisciplinary input at the scoping stage and development of the six-year CIP is desired.

- Review will take place at the administrative level whenever possible. Administrative review is expected where projects clearly conform to the design standards and meet the high end of the standard ranges. Exceptions to this administrative level review, when review is taken to the city's Design Review Committee, will include when deviations from standards are sought or when the standards are so broad that such review is needed for effective evaluation, as with the parkway and boulevard street classifications. The exact measures used to clearly define these situations will be developed at a later planning stage.
- A challenge in implementing street standards is to balance flexibility with discipline. Some flexibility is needed in applying the standards in that unique circumstances present unique challenges and opportunities. The somewhat general standards that are meant to apply across the city may not meet the unique needs of all individual cases. In addition, policy TR 10.2, "Innovation to Meet Spirit," allows for innovative design to allow for opportunities for creative solutions to meet the intent behind standards. However, if the desired future of citizens expressed in the goals, policies, and standards is to be achieved, rigorous discipline is needed in the decision-making stage of applying the policies and standards to individual cases. Deviations from the standards are meant to be the exception not the rule.

Another important consideration pertaining to implementing the street standards should be noted. This plan provides for the City of Spokane to provide adequate city staff dedicated to pedestrian/bicycle planning and coordination ensure that projects are developed to meet the needs of pedestrians, bicyclists, and other non-motorized transportation users and to help achieve the goals of this plan (see Policy TR 2.3, "Pedestrian/ Bicycle Coordination"). Having staff expertise and time available in this crucial area of transportation planning is a necessary tool for the city to use to achieve its goals and create its desired future.

General Considerations

The proposed City of Spokane street standards, hereafter referred to as "Standards," are intended to apply to all newly constructed public and private streets. As required by the city, these Standards would also apply to the reconstruction of arterials as outlined in the current capital improvement program. They would also be required, at the discretion of the city, as land development-related improvements for the following situations:

- A development that is anticipated to impact the level of service or safety of an existing arterial would be responsible for arterial improvements in accordance with the Standards. The extent of responsibility toward improvement would be based upon an assessment of development impacts directed by the City of Spokane.
- A proposed development abutting an existing arterial would be responsible for frontage improvements in accordance with the Standards. The extent of responsibility toward the frontage improvement would be based upon an assessment of development impacts directed by the City of Spokane.
- Any proposed development that contains internal arterials would construct them to meet the Standards, or improve the existing internal arterials to meet the Standards.

The Standards are not intended to apply to the resurfacing, restoration, or rehabilitation of existing arterials. Any deviation, variance, or dispute to the Standards may be presented to the city in writing based upon sound engineering principles that maintain safety, function, appearance, and maintainability as priorities.

Pedestrian Standards

The city's transportation policies state that pedestrians should come first in priority and the transportation system should always provide for pedestrians. The following standards are intended to implement those policies:

Single-Family and Duplex Dwelling Units

- Each building, except small auxiliary buildings, shall have an all-weather walkway connecting the building to the public right-of-way.

Multifamily and Commercial Buildings

- Each building, except small auxiliary buildings, shall have an accessible walkway to the public right-of-way.
- Large developments shall have additional walkways connecting to the public right-of-way, one for each 600 feet of street frontage.
- Developments that front two or more streets shall connect a walkway to each street that has more than 200 feet of street frontage.
- Planned unit developments shall provide walkway connections to adjacent planned unit developments that share at least 400 feet of frontage.

Public Streets

- Streets shall provide sidewalks on both sides except as noted in this section.
- High capacity limited access facilities shall provide a pathway rather than sidewalks.
- Streets adjacent to railroads, airports and high capacity limited access facilities may provide one sidewalk, provided that it can be demonstrated that the omitted sidewalk does not complete a missing link in the sidewalk system.
- Streets in areas of severe topography may provide sidewalk on one side only, provided that no lots access the omitted side and that it can be demonstrated that the omitted sidewalk does not complete a missing link in the sidewalk system.

Public Pathways

- Public pathways shall be provided every 600 feet between streets that are approximately parallel and not more that 400 feet apart.
- A public pathway shall be provided at the end of every cul-de-sac street connecting the cul-de-sac sidewalk to an existing or future street or public pathway.

Arterial Classifications

There are seven proposed arterial classifications. The principal, minor, commercial/industrial collector, and residential collector classifications constitute the majority of city arterials and are more clearly defined by the Standards. These classifications, when referenced in coordination with the area classifications, can be used to reference the Standards for any arterial within the City of Spokane. The boulevard and parkway classifications are more discretionary because they represent more specialized applications to community and pedestrian-friendly arterials. Local access arterials are also less clearly defined because they are intended to meet the more specific needs of residential and industrial developments. A brief description of the arterial classifications is as follows:

- **Principal Arterial:** A principal arterial permits relatively unimpeded traffic flow between major areas of the city at moderately high speeds. The arterial is typically divided and has limited or controlled access to fronting properties. Intersections are typically at-grade and channelized with pedestrian accommodations. Intersecting streets are stop sign controlled. Parking lanes are typically prohibited, but bus pullouts are available at key locations.

- **Minor Arterial:** A minor arterial collects and distributes traffic between higher classified arterials and major traffic generators. Major traffic generators would include areas such as community business centers, shopping centers, and areas with multiple residential developments. Minor arterials are designed for moderate speeds. Major intersections are typically signalized. Stop signs are used on street approaches to minor arterials. Bicycle lanes and parking lanes may be located on minor arterials. Minor arterials are restricted to two-lanes within neighborhood centers.
- **Commercial/Industrial Collector Arterial:** Commercial/Industrial collector arterials collect and distribute traffic between higher classification streets, business centers, and commercial centers. These arterials are designed for moderate speeds. Traffic control should be used to facilitate the collection and distribution of traffic to higher classified arterials yet discourage the cut-through of traffic between arterials. Parking lanes and bicycle lanes are acceptable. Stop signs are used on street approaches to commercial/industrial collector streets.
- **Residential Collector Arterial:** Residential collector arterials collect and distribute traffic between higher classification streets and residential access streets and directly to traffic destinations. Arterials are design for low to moderate speeds. They are designed for low to moderate speeds. Traffic control should be used to promote safety and discourage cut-through traffic between neighborhoods. Parking lanes and bicycle lanes are acceptable. Stop signs are used on street approaches to residential collector streets.
- **Boulevard:** The "boulevard" designation is applied to arterials that are enhanced with special aesthetic qualities, serve as primary transportation routes between key locations, and are intended to be multimodal with transit, bicycle, and pedestrian facilities. Landscaping and pedestrian accommodations provide an aesthetically pleasing environment for both motorized and non-motorized users. Within the context of the transportation element, the boulevard designation has this particular, specific meaning. Streets thought of as boulevards in the popular sense (such as Manito, Northeast, and Southeast Boulevards), are not necessarily designated as boulevards in the transportation element.
- **Parkway:** A parkway is an arterial that is constructed along or within areas of scenic beauty such as conservation lands, rivers, golf courses, and city parks. These arterials are intended to support low volumes and speeds so that the natural environment may be maintained. Parkways may periodically have pull-off areas for locations that have particular interest. This facility includes pedestrian and bicycle facilities.
- **Local Access:** Local access streets are intended to provide access to adjacent properties. Daily volumes are variable and the design of the arterials may vary to meet the needs of the project so long as they stay within the general design framework outlined by the city. There are three sub-classifications within the local access street classification. They are:

  Low Density Residential Access Streets: Serve areas of ten dwelling units/acre or less.

  Medium/High Density Residential Access Streets: Serve areas of ten dwelling units/acre or more.

  Commercial/Industrial Access Streets: Serve non-residential developments.

Alleys

Alleys are not considered to be part of the city's street network. Rather than serving a transportation function, alleys provide access to adjacent properties. Policy LU 1.1, "Neighborhoods" includes in its discussion section the statement that alleys "are used to provide access to garages and the rear part of lots." Issues related to alleys include security and placement of utilities. Security is an issue since alleys provide access to all. Where utilities are placed in alleys, alley widths may need to be widened to allow access for construction/excavation equipment.

The general principle in designing alleys is to follow the narrow streets philosophy (TR 4.3, "Narrow Streets"), that is, to build them as narrow as possible to serve the alley's purpose.

Area Classifications

In addition to the arterial classifications for street standards, the city has also developed four area classifications for street standards. These four area classifications were developed within the context of the city's growth management planning. These classifications characterize different types of areas within the city and can be used, along with the arterial classifications, to reference the street standards.

These four area classifications are as follows: Special Downtown Environment, Focused Growth Areas, Urbanized Areas, and Non-Urbanized Areas. These four area classifications recognize the distinctions that exist between different areas within the city. They allow different sets of street standards to be applied to different areas and thus allow street design to foster a distinct sense of place that is consistent with the area. Again, these area classifications, in addition to the arterial classifications, can be used to reference the standards for any arterial within the city. A brief description of the proposed area classifications follows. The areas are depicted on Map TR 4, "Boulevards, Parkways and Area Classifications," for a narrative description of these maps, see "City Street Network Maps" in section 4.5.

- **Special Downtown Environment** This classification focuses on the characteristics of arterials in the Central Business District. This area is generally defined from Monroe and Cedar Streets (west) to Division Street (east) and from Riverside Avenue and Boone Avenue (north) to I-90 (south). This area classification is outlined on Map TR 4, "Boulevards, Parkways and Area Classifications," as the "Downtown Boundary."
- **Focused Growth Area** This classification defines the characteristics of arterials in the mixed-use district centers, neighborhood centers, and employment centers. These areas are marked on Map TR 4, "Boulevards, Parkways and Area Classifications," with the different types of focused growth area boundaries.
- **Urbanized Area** This classification defines the arterial characteristics of streetways that connect between the Central Business District and focused growth areas. The classification accounts for most of the City of Spokane. These areas are on shown on Map TR 4, "Boulevards, Parkways and Area Classifications," as the non-hatchmarked portions of the "Urban Growth Area."
- **Non-Urbanized Area** This classification includes the characteristics of arterials located in areas that are not as urbanized as the three other area classifications. The Non-Urbanized areas, which are located within the city's Urban Growth Area (UGA), are parts of the UGA that are not heavily built-up (essentially, that currently have a more rural character than urban character). These non-urbanized areas offer greater opportunities for designing arterials to optimal standards, as opposed to the more urbanized areas where the design of arterials is more constrained by the already-built urban environment. These areas are shown on Map TR 4, "Boulevards, Parkways and Area Classifications," as the hatchmarked areas that are labeled "Non-Urbanized Area."

Arterial Standards

The arterial standards should be used as a guideline for the development or redevelopment of city arterials. City of Spokane staff will apply these standards with the process outlined in the "Implementing the Standards" section above.

Tables TR 11 through 19, outline the proposed arterial Standards for the City of Spokane. These standards have been developed through close coordination with the engineering and planning departments of the city. The Standards are presented in two separate tabular layouts, each presenting the same information to facilitate comparative review depending on individual perspectives. Tables TR 11 through 14, present the Standards arrayed by area classifications—Special Downtown Environment, Focused Growth, Urbanized, and Non-Urbanized. Tables TR 15 through 19, present the same information arrayed by arterial classifications—principal, minor, commercial/industrial collector, and residential collector. Information presented on these Standards include the descriptions and/or requirements for the planning data, such as

traffic volumes, number of lanes, lane widths, medians, sidewalks, 208 treatment/drainage, bicycle lanes, on-street parking, building set-backs, posted speed limits, and access spacing. Detailed design information is not provided with these planning standards.

The boulevard, parkway, and local access arterial classifications were not listed on the tables due to the distinctiveness of the classification and the potential for modifications. A few general criteria have been included, however, to provide guidelines for preliminary planning purposes.

Note that while boulevard and parkway concepts and general characteristics have been identified, how they are applied is highly dependant upon the specific site for the boulevard or parkway. Thus, their characteristics are not specified in tables. Instead, their general characteristics are described more conceptually to be applied depending to the site. Figures TR 10 and 11 provide examples of how these concepts can be applied. The general criteria for boulevards, parkways, and local access streets are as follows:

Boulevard General Planning Criteria

- General design criteria should be comparable to that of a principal or minor arterial classification.
- Sidewalks should be separated on both sides with a landscaped pedestrian buffer.
- Street plans should be consistent with Standards pertaining to principal and minor arterials.
- Medians should be landscaped as right-of-way width permits.
- Landscaping with shade trees should be located on both sides of the arterial and should conform with the Standards as they pertain to principal and minor arterials.
- Bikeways should be incorporated into the plan and are required if the boulevard is along designated bikeway.

Parkway General Planning Criteria

- A maximum of two travel lanes is part of the criteria.
- General design criteria should be comparable to the collector arterial classifications.
- Parking is required either as an on-street parking lane, as pullouts, or within viewpoints.
- Landscaping with shade trees should be located on both sides of the arterial except in areas where conflicting with existing vegetation.
- A separated pedestrian pathway should be located on the scenic side of the street.
- Bikeways should be incorporated into the plan and are required if the parkway is along designated bikeway.
- Curb adjacent to the scenic side may be omitted and drainage ditches provided.

Local Access Street Planning Criteria

- Access is provided to adjacent properties through at-grade arterials.
- Alignments are designed to encourage slow, safe speeds.
- Traffic control measures are provided as warranted to provide adequate sight distance and safety.
- Pedestrian buffer strips area used to provide a safe environment for pedestrians as well as to enhance the environment of the development aesthetically.
- The use of soft landscaping is encouraged.
- Minimum low-density residential street width is 32 feet from curb-to-curb.
- Widths of medium/high density and commercial/industrial access streets may vary to suit need of the project.
- Design of local access streets are subject to city approval.

Local Access Street Standards

The local access street standards should be used as a guideline for the development of local access streets. City staff will apply these standards with the process outlined in the “Implementing the Standards” section.

Table TR 11, "Local Access Street Standards," outlines the proposed local access street standards. The standards identify different standards for three types of adjacent land use: Low-density residential, medium/high density residential, and commercial/industrial.

The narrow street standard is intended to be used only in low-density areas when the street pattern conforms to new urbanism principles and on streets that are connecting on each end. Emergency access is assured by providing two access directions to each property; the low-density characteristic reduces on-street parking demand in comparison to other areas.

TABLE TR 11 LOCAL ACCESS STREET STANDARDS

	Low-Density Residential	Medium / High Density Residential	Commercial / Industrial
Directions of Travel	Two-way	Two-way	Two-way
Curb to Curb Width*	32'	36'	40'
Sidewalks			
Requirement	Both Sides	Both Sides	Both Sides
Pedestrian Buffer Strip	5-6'	5-6'	5-6'
Planted, Minimum	NA	NA	3'
Hard Surface, Minimum	5'	5'	5'
Walkway Strip, Minimum			
208 Treatment			
Adjacent	Optional	Optional	Optional
Minimum	10'**	10'**	10'**
Bikeways			
Requirement	See Bike Plan	See Bike Plan	See Bike Plan
On-Street Parking	Yes	Yes	Yes
Parking Bay			
Requirement	Non-Residential Use	Non-Residential Use	No
Minimum Width	4'	4'	
Design Speed	20 mph	20 mph	25 mph
Access Spacing			
Maximum Width	20'	30'	40'
Spacing	80'	80'	80'
Number of Driveways	1	2	2

* These widths are intended to implement the City of Spokane's narrow streets policy (TR 4.3). See the policy discussion section for issues associated with street width. Those streets lacking the internal connections (such as cul-de-sac streets), which influence this narrower street width, will require wider widths (36' for low-density residential). In addition, these widths assume that at appropriate locations travel lane widths will be narrower than the curb-to-curb widths, due to the provision of on-street parking and chicanes (design features that change a street's path from straight to serpentine).

**Pedestrian buffer strip may be included in 10' requirement.

TABLE TR 12 STREET STANDARDS BY AREA CLASSIFICATION— SPECIAL DOWNTOWN ENVIRONMENT

	Arterial Classification			
	Principal Arterial	**Minor Arterial**	**Collector Arterial (Commercial and Industrial)**	**Collector Arterial (Residential)**
Traffic Volumes				
Recommended Minimum	26,000	9,500	-	-
Recommended Maximum	40,000	19,500	7,000	5,000
Number of Lanes				
Two-Directions	3-5	3-5	2-4	2
One-Direction	3	3	1-2	1
Lane Widths				
Interior	10’	10’	10’	-
Exterior	12’	12’	12’	12’
Single Lane, No Parking	16’	16’	16’	16’
Medians and Left-Turn Lanes				
Requirement	Optional	Optional	Optional	Optional
Minimum Width	2’	2’	2’	2’
Minimum W/Pedestrian Refuge	8’	8’	8’	8’
Maximum Width	15’	15’	15’	15’
Sidewalks				
Requirement	Both Sides*	Both Sides*	Both Sides*	Both Sides*
PBS Minimum: Planted	-	-	-	-
PBS Minimum: Hard Surface	4’	4’	4’	4’
Walkway Strip Minimum	8’	8’	8’	8’
208 Treatment/Drainage				
Adjacent Drainage Swale	No**	No**	No**	No**
Minimum Width	-	-	-	-
Bike Lanes (one direction)				
Requirement	See Bike Plan	See Bike Plan	See Bike Plan	See Bike Plan
On-Street Parking				
Requirement	Yes	Yes	Yes	Yes
Width	8’	8’	8’	8’
Posted Speed				
Minimum	25 mph	20 mph	20 mph	20 mph
Maximum	30 mph	30 mph	30 mph	30 mph
Access Spacing				
Maximum Width	30’	30’	30’	24’
Spacing	125’	125’	100’	80’
Number of Driveways	2	2	2	1

*Required on both sides in all cases with exceptions to be coordinated with the City of Spokane.
**Proximity of storm sewer may limit option. Issue to be coordinated with the City of Spokane.

TABLE TR 13 STREET STANDARDS BY AREA CLASSIFICATION— FOCUSED GROWTH AREA

	Arterial Classification			
	Principal Arterial	**Minor Arterial**	**Collector Arterial (Commercial and Industrial)**	**Collector Arterial (Residential)**
Traffic Volumes				
Recommended Minimum	20,000	8,000	-	-
Recommended Maximum	40,000	15,000	7,000	5,000
Number of Lanes				
Two-Directions	3-5	3-5	2-4	2
One-Direction	3-4	3	1-2	1
Lane Widths				
Interior	10’	10’	10’	-
Exterior	12’	12’	12’	12’
Single Lane, No Parking	16’	16’	16’	16’
Medians and Left-Turn Lanes				
Requirement	Optional	Optional	Optional	Optional
Minimum Width	2’	2’	2’	2’
Minimum W/Pedestrian Refuge	8’	8’	8’	8’
Maximum Width	15’	15’	15’	15’
Sidewalks				
Requirement	Both Sides*	Both Sides*	Both Sides*	Both Sides*
PBS Minimum: Planted	-	-	-	-
PBS Minimum: Hard Surface	3’	3’	3’	3’
Walkway Strip Minimum	7’	7’	7’	7’
208 Treatment/Drainage				
Adjacent Drainage Swale	No**	No**	No**	No**
Minimum Width	-	-	-	-
Bike Lanes (one direction)				
Requirement	See Bike Plan	See Bike Plan	See Bike Plan	See Bike Plan
On-Street Parking				
Requirement	Yes	Yes	Yes	Yes
Width	8’	8’	8’	8’
Posted Speed				
Minimum	25 mph	20 mph	20 mph	20 mph
Maximum	30 mph	30 mph	30 mph	30 mph
Access Spacing				
Maximum Width	30’	30’	30’	24’
Spacing	125’	125’	100’	80’
Number of Driveways	2	2	2	1

*Required on both sides in all cases with exceptions to be coordinated with the City of Spokane.
**Proximity of storm sewer may limit option. Issue to be coordinated with the City of Spokane.

TABLE TR 14 STREET STANDARDS BY AREA CLASSIFICATION—URBANIZED AREA

	Arterial Classification			
	Principal Arterial	**Minor Arterial**	**Collector Arterial (Commercial and Industrial)**	**Collector Arterial (Residential)**
Traffic Volumes				
Recommended Minimum	15,000	8,000	-	-
Recommended Maximum	40,000	15,000	7,000	5,000
Number of Lanes				
Two-Directions	3-7	2-5	2-4	2
One-Direction	3	2-3	1-2	1
Lane Widths				
Interior	11’	11’	10’	-
Exterior	12’	12’	12’	12’
Single Lane, No Parking	16’	16’	16’	16’
Medians and Left-Turn Lanes				
Requirement	Optional	Optional	Optional	Optional
Minimum Width	2’	2’	2’	2’
Minimum W/Pedestrian Refuge	8’	8’	8’	8’
Maximum Width	15’	15’	15’	15’
Sidewalks				
Requirement	Both Sides*	Both Sides*	Both Sides*	Both Sides*
PBS Minimum: Planted	5-6’	5-6’	5-6’	5-6’
PBS Minimum: Hard Surface	3’	3’	3’	3’
Walkway Strip Minimum	5’	5’	5’	5’
208 Treatment/Drainage				
Adjacent Drainage Swale	Optional**	Optional**	Optional**	Optional**
Minimum Width	10’***	10’***	10’***	10’***
Bike Lanes (one direction)				
Requirement	See Bike Plan	See Bike Plan	See Bike Plan	See Bike Plan
On-Street Parking				
Requirement	No	Optional	Desired	Yes
Width	8’	8’	8’	8’
Posted Speed				
Minimum	30 mph	25 mph	20 mph	20 mph
Maximum	45 mph	40 mph	30 mph	30 mph
Access Spacing				
Maximum Width	40’	40’	30’	24’
Spacing	125’	125’	100’	80’
Number of Driveways	2	2	2	1

*Required on both sides in all cases with exceptions to be coordinated with the City of Spokane.
**Proximity of storm sewer may limit option. Issue to be coordinated with the City of Spokane.
***Pedestrian buffer strip can be included in 10’ requirement.

TABLE TR 15 STREET STANDARDS BY AREA CLASSIFICATION— NON-URBANIZED AREA

	Arterial Classification			
	Principal Arterial	**Minor Arterial**	**Collector Arterial (Commercial and Industrial)**	**Collector Arterial (Residential)**
Traffic Volumes				
Recommended Minimum	5,000	8,000	-	-
Recommended Maximum	35,000	15,000	7,000	5,000
Number of Lanes				
Two-Directions	3-7	2-5	2-4	2
One-Direction	3	2-3	1-2	1
Lane Widths				
Interior	11’	11’	10’	-
Exterior	12’	12’	12’	12’
Single Lane, No Parking	16’	16’	16’	16’
Medians and Left-Turn Lanes				
Requirement	Optional	Optional	Optional	Optional
Minimum Width	2’	2’	2’	2’
Minimum W/Pedestrian Refuge	8’	8’	8’	8’
Maximum Width	15’	15’	15’	15’
Sidewalks				
Requirement	Both Sides*	Both Sides*	Both Sides*	Both Sides*
PBS Minimum: Planted	5-6’	5-6’	5-6’	5-6’
PBS Minimum: Hard Surface	3’	3’	3’	3’
Walkway Strip Minimum	5’	5’	5’	5’
208 Treatment/Drainage				
Adjacent Drainage Swale	Optional**	Optional**	Optional**	Optional**
Minimum Width	10’***	10’***	10’***	10’***
Bike Lanes (one direction)				
Requirement	Yes	Yes	Yes	Shared Bikeway
On-Street Parking				
Requirement	No	Optional	Desired	Yes
Width	8’	8’	8’	8’
Posted Speed				
Minimum	30 mph	25 mph	20 mph	20 mph
Maximum	50 mph	40 mph	30 mph	30 mph
Access Spacing				
Maximum Width	40’	40’	30’	24’
Spacing	125’	125’	100’	80’
Number of Driveways	2	2	2	1

*Required on both sides in all cases with exceptions to be coordinated with the City of Spokane.
**Proximity of storm sewer may limit option. Issue to be coordinated with the City of Spokane.
***Pedestrian buffer strip can be included in 10’ requirement.

TABLE TR 16 STREET STANDARDS BY ARTERIAL CLASSIFICATION— PRINCIPAL ARTERIAL

	Area Classification			
	Special Downtown Environment	**Focused Growth Areas**	**Urban Areas**	**Non-Urbanized Areas**
Traffic Volumes				
Recommended Minimum	26,000	20,000	15,000	5,000
Recommended Maximum	40,000	40,000	40,000	35,000
Number of Lanes				
Two-Directions	3-5	3-5	3-7	3-7
One-Direction	3	3-4	3	3
Lane Widths				
Interior	10’	10’	11’	11’
Exterior	12’	12’	12’	12’
Single Lane, No Parking	16’	16’	16’	16’
Medians and Left-Turn Lanes				
Requirement	Optional	Optional	Optional	Optional
Minimum Width	2’	2’	2’	2’
Minimum W/Pedestrian Refuge	8’	8’	8’	8’
Maximum Width	15’	15’	15’	15’
Sidewalks				
Requirement	Both Sides*	Both Sides*	Both Sides*	Both Sides*
PBS Minimum: Planted	-	-	5-6’	5-6’
PBS Minimum: Hard Surface	4’	3’	3’	3’
Walkway Strip Minimum	8’	7’	5’	5’
208 Treatment/Drainage				
Adjacent Drainage Swale	No	No	Optional**	Optional**
Minimum Width	-	-	10’***	10’***
Bike Lanes (one direction)				
Requirement	See Bike Plan	See Bike Plan	See Bike Plan	Yes
On-Street Parking				
Requirement	Yes	Yes	No	No
Width	8’	8’	8’	8’
Posted Speed				
Minimum	25 mph	25 mph	30 mph	30 mph
Maximum	30 mph	30 mph	45 mph	50 mph
Access Spacing				
Maximum Width	30’	30’	40’	40’
Spacing	125’	125’	125’	125’
Number of Driveways	2	2	2	2

*Required on both sides in all cases with exceptions to be coordinated with the City of Spokane.
**Proximity of storm sewer may limit option. Issue to be coordinated with the City of Spokane.
***Pedestrian buffer strip can be included in 10’ requirement.

TABLE TR 17 STREET STANDARDS BY ARTERIAL CLASSIFICATION— MINOR ARTERIAL

	Area Classification			
	Special Downtown Environment	**Focused Growth Areas**	**Urban Areas**	**Non-Urbanized Areas**
Traffic Volumes				
Recommended Minimum	9,500	8,000	8,000	8,000
Recommended Maximum	19,500	15,000	15,000	15,000
Number of Lanes				
Two-Directions	3-5	3-5	2-5	2-5
One-Direction	3	3	2-3	2-3
Lane Widths				
Interior	10’	10’	11’	11’
Exterior	12’	12’	12’	12’
Single Lane, No Parking	16’	16’	16’	16’
Medians and Left-Turn Lanes				
Requirement	Optional	Optional	Optional	Optional
Minimum Width	2’	2’	2’	2’
Minimum W/Pedestrian Refuge	8’	8’	8’	8’
Maximum Width	15’	15’	15’	15’
Sidewalks				
Requirement	Both Sides*	Both Sides*	Both Sides*	Both Sides*
PBS Minimum: Planted	-	-	5-6’	5-6’
PBS Minimum: Hard Surface	4’	3’	3’	3’
Walkway Strip Minimum	8’	7’	5’	5’
208 Treatment/Drainage				
Adjacent Drainage Swale	No	No	Optional**	Optional**
Minimum Width	-	-	10’***	10’***
Bike Lanes (one direction)				
Requirement	See Bike Plan	See Bike Plan	See Bike Plan	Yes
On-Street Parking				
Requirement	Yes	Yes	Optional	Optional
Width	8’	8’	8’	8’
Posted Speed				
Minimum	20 mph	20 mph	25 mph	25 mph
Maximum	30 mph	30 mph	40 mph	40 mph
Access Spacing				
Maximum Width	30’	30’	40’	40’
Spacing	125’	125’	125’	125’
Number of Driveways	2	2	2	2

*Required on both sides in all cases with exceptions to be coordinated with the City of Spokane.
**Proximity of storm sewer may limit option. Issue to be coordinated with the City of Spokane.
***Pedestrian buffer strips can be included in 10’ requirement.

TABLE TR 18 STREET STANDARDS BY ARTERIAL CLASSIFICATION— COMMERCIAL/INDUSTRIAL COLLECTOR

	Area Classification			
	Special Downtown Environment	**Focused Growth Areas**	**Urban Areas**	**Non-Urbanized Areas**
Traffic Volumes				
Recommended Minimum	-	-	-	-
Recommended Maximum	7,000	7,000	7,000	7,000
Number of Lanes				
Two-Directions	2-4	2-4	2-4	2-4
One-Direction	1-2	1-2	1-2	1-2
Lane Widths				
Interior	10’	10’	10’	10’
Exterior	12’	12’	12’	12’
Single Lane, No Parking	16’	16’	16’	16’
Medians and Left-Turn Lanes				
Requirement	Optional	Optional	Optional	Optional
Minimum Width	2’	2’	2’	2’
Minimum W/Pedestrian Refuge	8’	8’	8’	8’
Maximum Width	15’	15’	15’	15’
Sidewalks				
Requirement	Both Sides*	Both Sides*	Both Sides*	Both Sides*
PBS Minimum: Planted	-	-	5-6’	5-6’
PBS Minimum: Hard Surface	4’	3’	3’	3’
Walkway Strip Minimum	8’	7’	5’	5’
208 Treatment/Drainage				
Adjacent Drainage Swale	No	No	Optional**	Optional**
Minimum Width	-	-	10’***	10’***
Bike Lanes (one direction)				
Requirement	See Bike Plan	See Bike Plan	See Bike Plan	Yes
On-Street Parking				
Requirement	Yes	Yes	Desired	Desired
Width	8’	8’	8’	8’
Posted Speed				
Minimum	20 mph	20 mph	20 mph	20 mph
Maximum	30 mph	30 mph	30 mph	30 mph
Access Spacing				
Maximum Width	30’	30’	30’	30’
Spacing	100’	100’	100’	100’
Number of Driveways	2	2	2	2

*Required on both sides in all cases with exceptions to be coordinated with the City of Spokane.
**Proximity of storm sewer may limit option. Issue to be coordinated with the City of Spokane.
***Pedestrian buffer strips can be included in 10’ requirement.

TABLE TR 19 STREET STANDARDS BY ARTERIAL CLASSIFICATION— RESIDENTIAL COLLECTOR

	Area Classification			
	Special Downtown Environment	Focused Growth Areas	Urban Areas	Non-Urbanized Areas
Traffic Volumes				
Recommended Minimum	-	-	-	-
Recommended Maximum	5,000	5,000	5,000	5,000
Number of Lanes				
Two-Directions	2	2	2	2
One-Direction	1	1	1	1
Lane Widths				
Interior	-	-	-	-
Exterior	12’	12’	12’	12’
Single Lane, No Parking	16’	16’	16’	16’
Medians and Left-Turn Lanes				
Requirement	Optional	Optional	Optional	Optional
Minimum Width	2’	2’	2’	2’
Minimum W/Pedestrian Refuge	8’	8’	8’	8’
Maximum Width	15’	15’	15’	15’
Sidewalks				
Requirement	Both Sides*	Both Sides*	Both Sides*	Both Sides*
PBS Minimum: Planted	-	-	5-6’	5-6’
PBS Minimum: Hard Surface	4’	3’	3’	3’
Walkway Strip Minimum	8’	7’	5’	5’
208 Treatment/Drainage				
Adjacent Drainage Swale	No	No	Optional**	Optional**
Minimum Width	-	-	10’***	10’***
Bike Lanes (one direction)				
Requirement	See Bike Plan	See Bike Plan	See Bike Plan	Shared Bikeway
On-Street Parking				
Requirement	Yes	Yes	Yes	Yes
Width	8’	8’	8’	8’
Posted Speed				
Minimum	20 mph	20 mph	20 mph	20 mph
Maximum	30 mph	30 mph	30 mph	30 mph
Access Spacing				
Maximum Width	24’	24’	24’	24’
Spacing	80’	80’	80’	80’
Number of Driveways	1	1	1	1

*Required on both sides in all cases with exceptions to be coordinated with the City of Spokane.
**Proximity of storm sewer may limit option. Issue to be coordinated with the City of Spokane.
***Pedestrian buffer strips can be included in 10’ requirement.

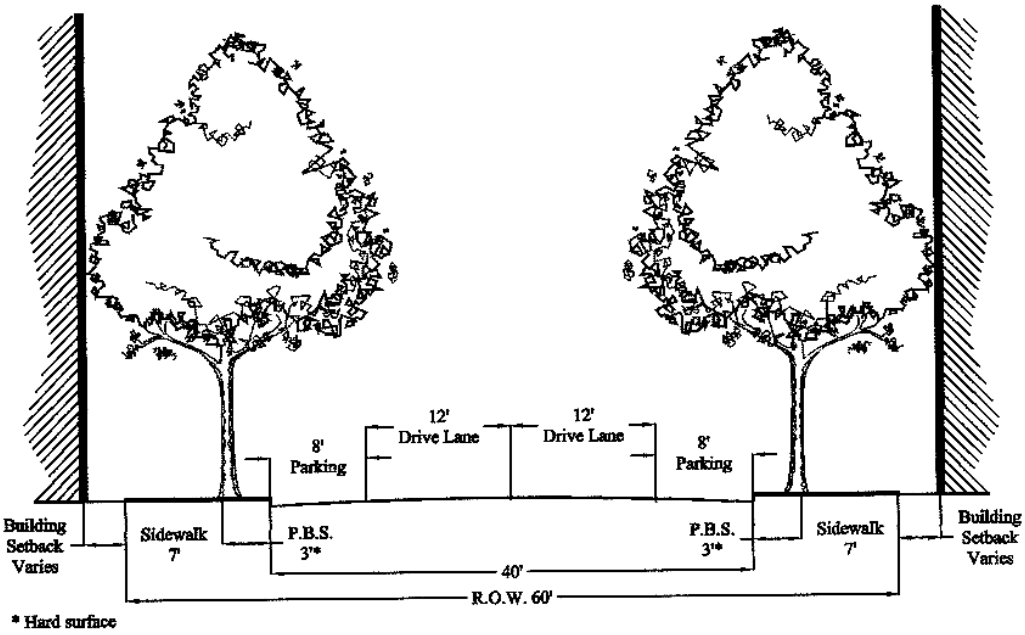


Figure TR 1a Collector Arterial: Two-Lane, One-Way
Focused Growth Areas

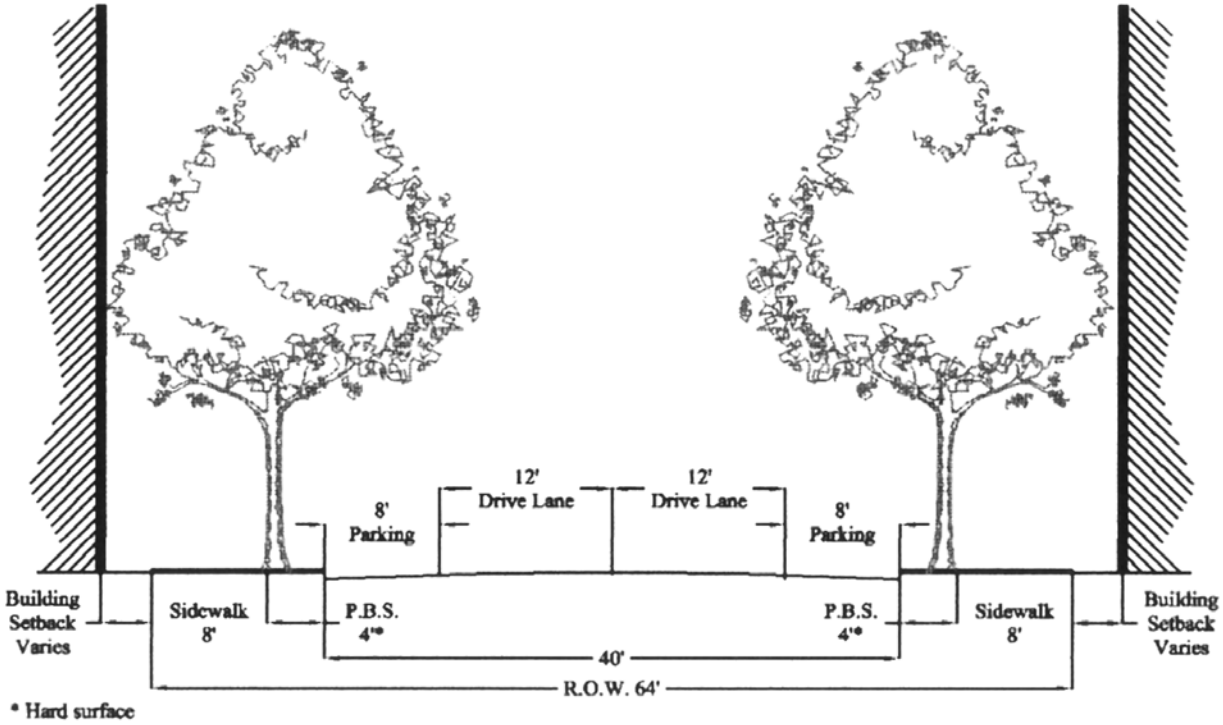


Figure TR 1b Collector Arterial: Two-Lane, Two-Way
Focused Growth Areas

These illustrations are examples only of potential applications of the street standards to depict the different types of streets and street environments. Refer to the street standards and policies for guidance on applying standards to specific cases.

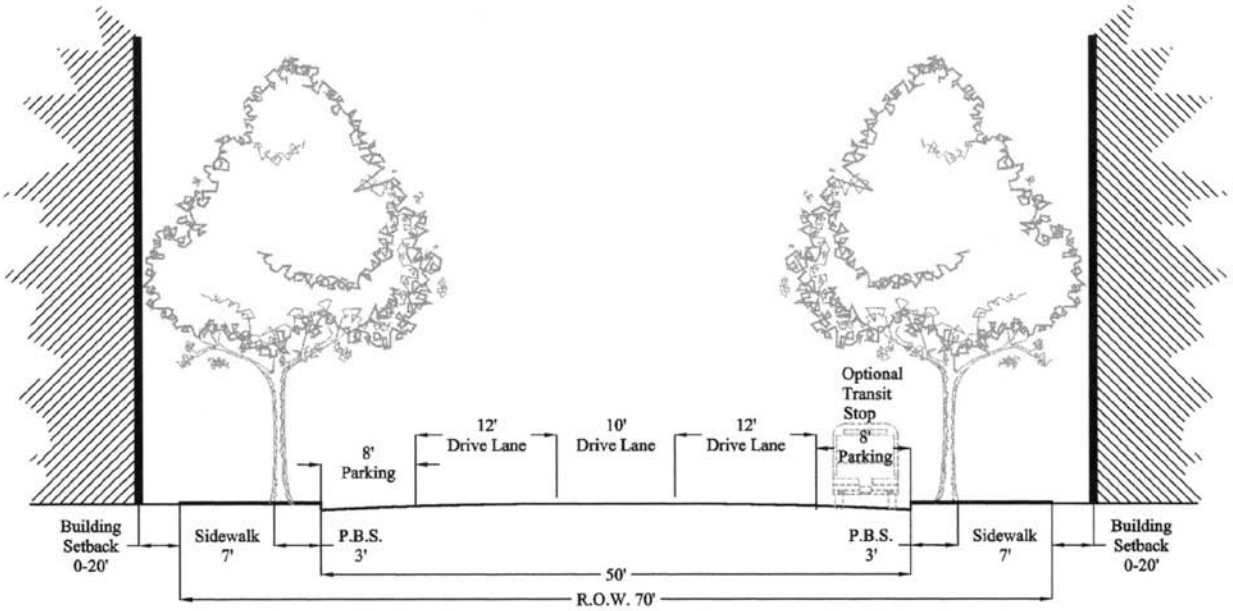


Figure TR 2a Principal Arterial: Three-Lane, One-Way
Focused Growth Areas

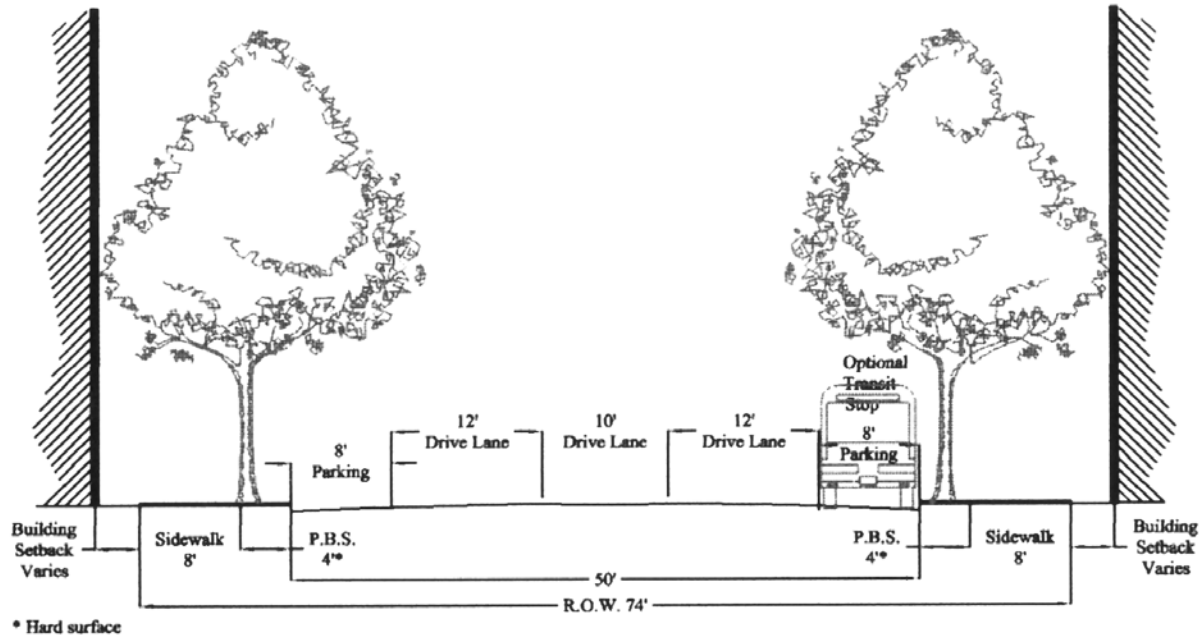


Figure TR 2b Principal Arterial: Three-Lane, One-Way
Special Downtown Environment

These illustrations are examples only of potential applications of the street standards to depict the different types of streets and street environments. Refer to the street standards and policies for guidance on applying standards to specific cases.

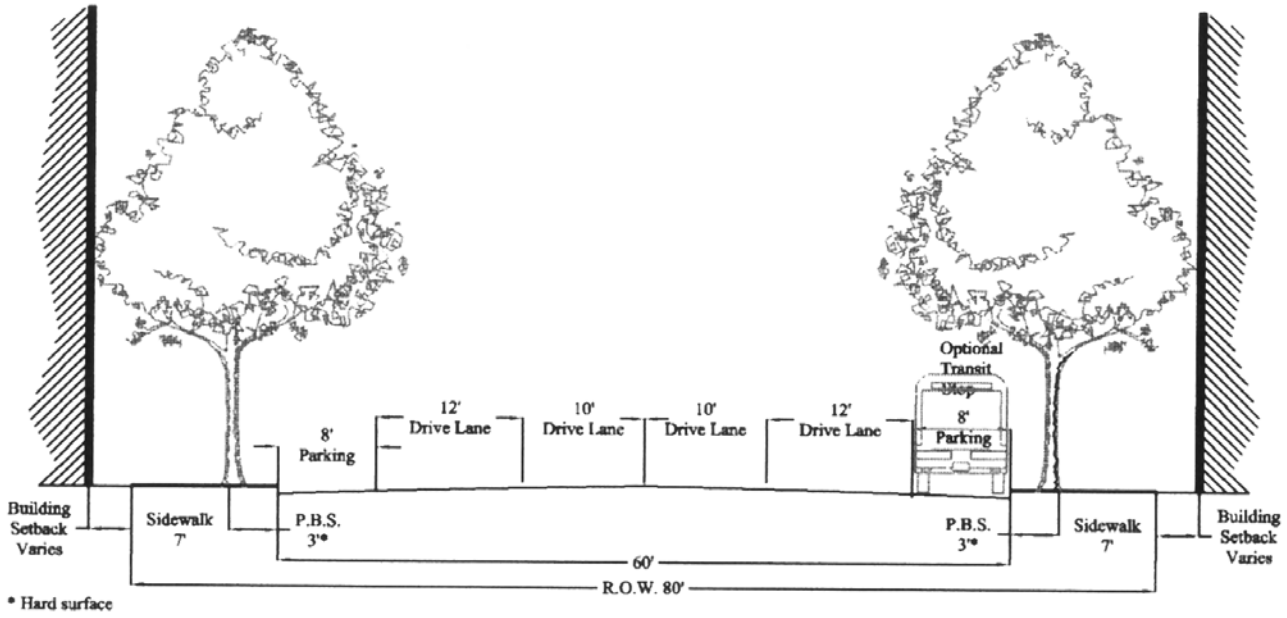


Figure TR 3a Principal or Minor Arterial: Four-Lane, Two-Way
Focused Growth Areas

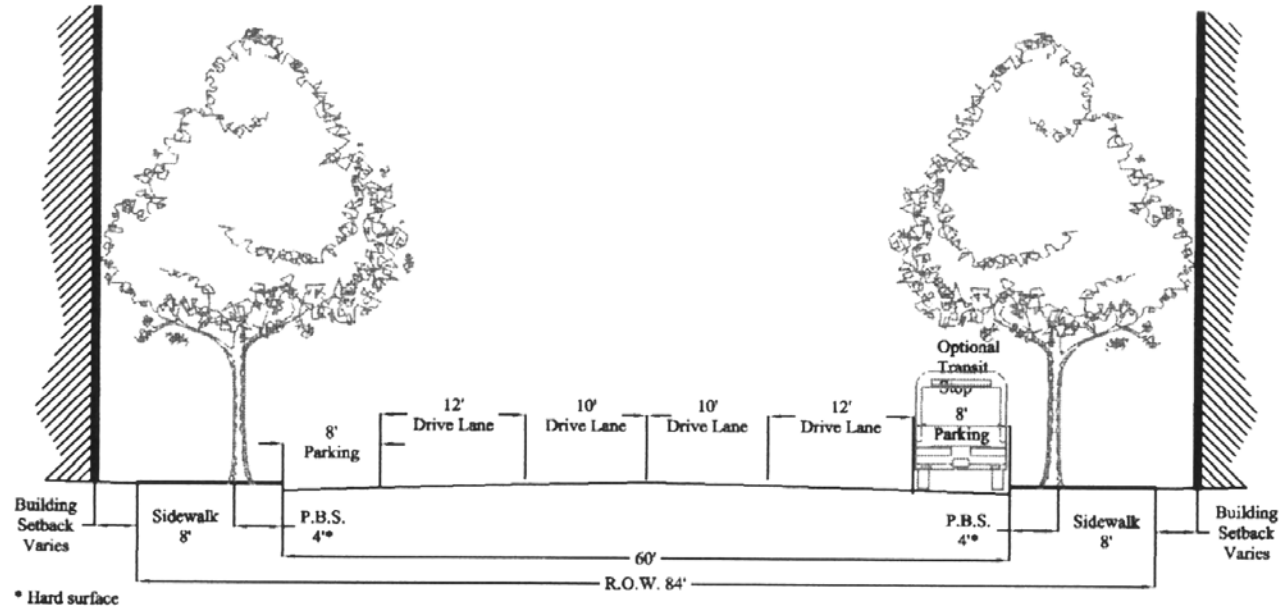


Figure TR 3b Principal or Minor Arterial: Four-Lane, Two-Way
Special Downtown Environment

These illustrations are examples only of potential applications of the street standards to depict the different types of streets and street environments. Refer to the street standards and policies for guidance on applying standards to specific cases.

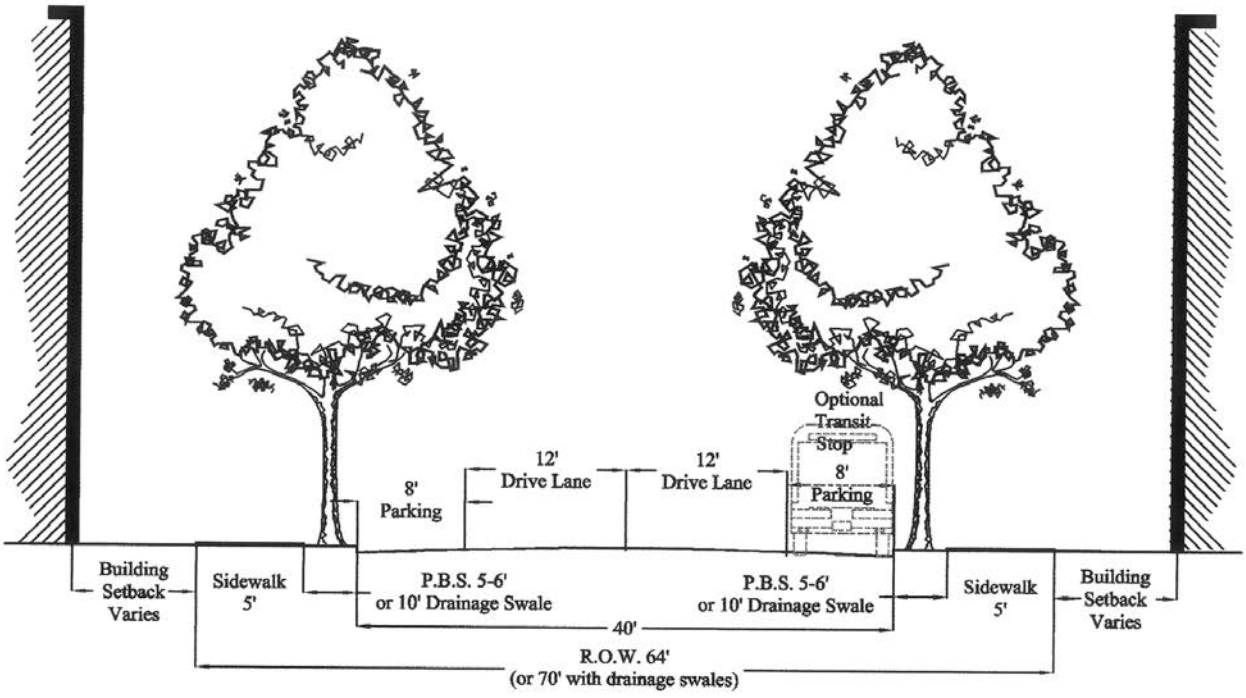


Figure TR 4 Collector Arterial: Residential or Commercial, Two-Lane Urbanized and Non-Urbanized Areas

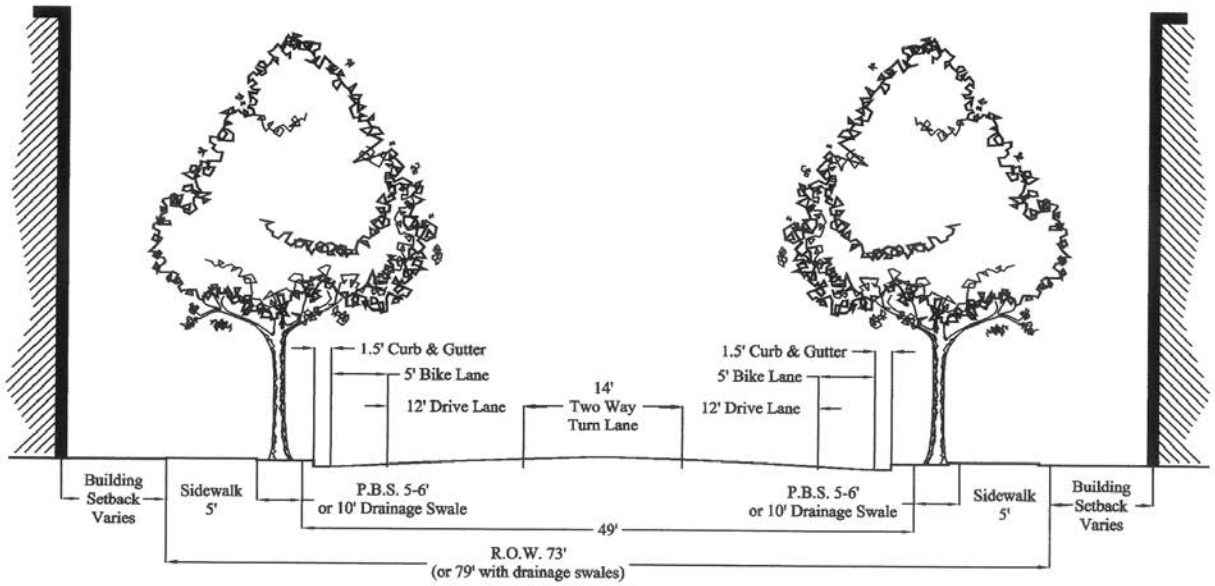


Figure TR 5 Principal or Minor Arterial: Three-Lane with Two Bicycle Lanes Urbanized and Non-Urbanized Areas

These illustrations are examples only of potential applications of the street standards to depict the different types of streets and street environments. Refer to the street standards and policies for guidance on applying standards to specific cases.

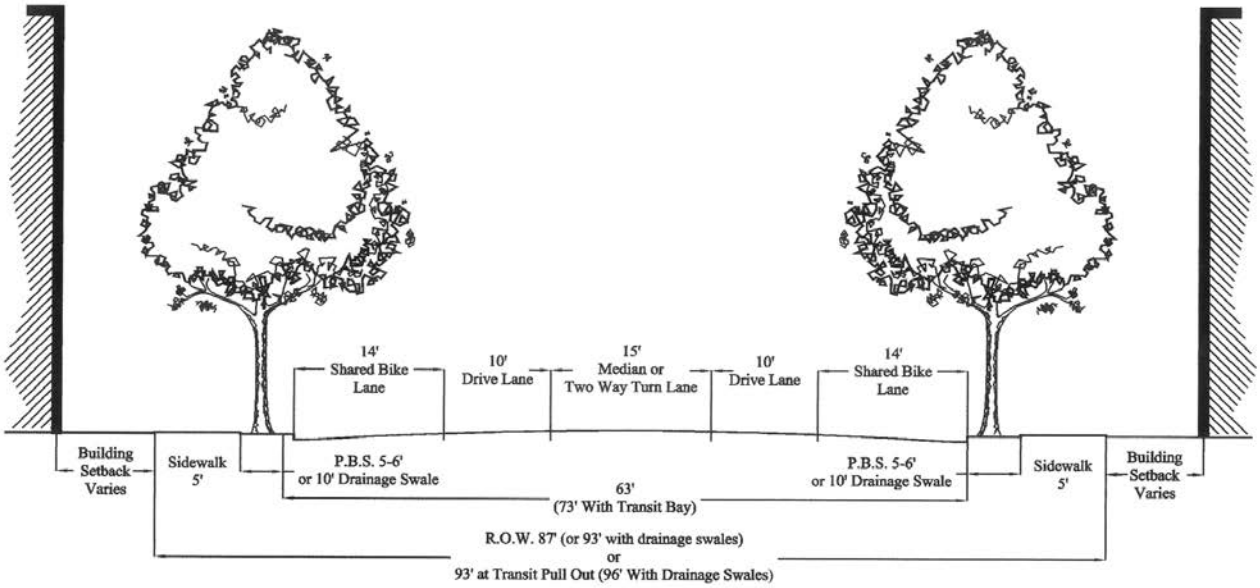


Figure TR 6a Principal Arterial: Five-Lane Urbanized and Non-Urbanized Areas

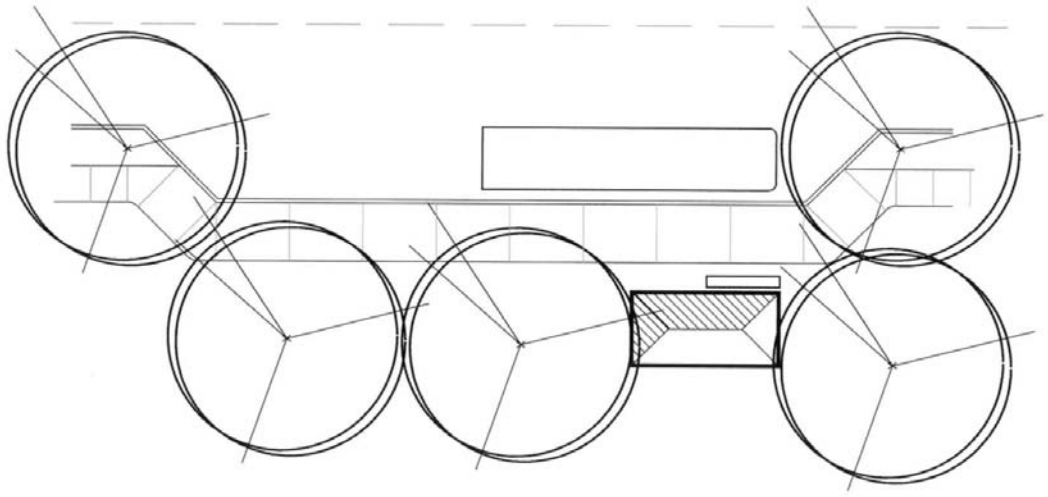


Figure TR 6b Plan View of Alternative Bus Pull-Out

These illustrations are examples only of potential applications of the street standards to depict the different types of streets and street environments. Refer to the street standards and policies for guidance on applying standards to specific cases.

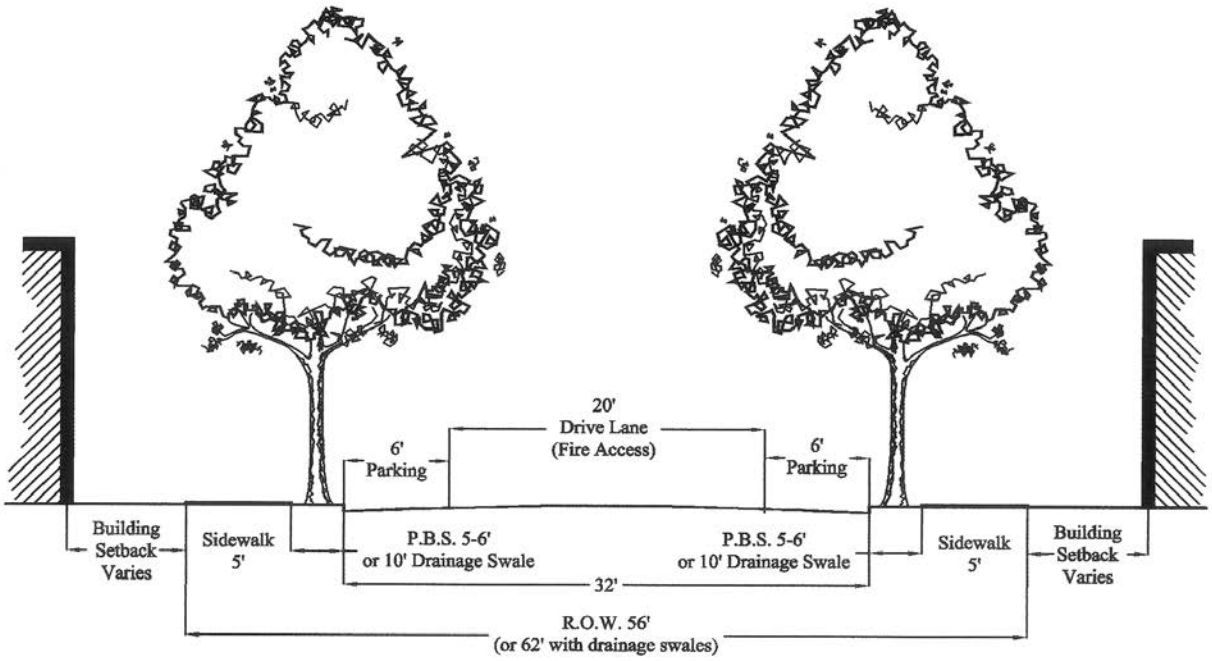


Figure TR 7 Local Acess Street, Low Density Residential (<10 du/acre): Two-Lane Urbanized and Non-Urbanized Areas

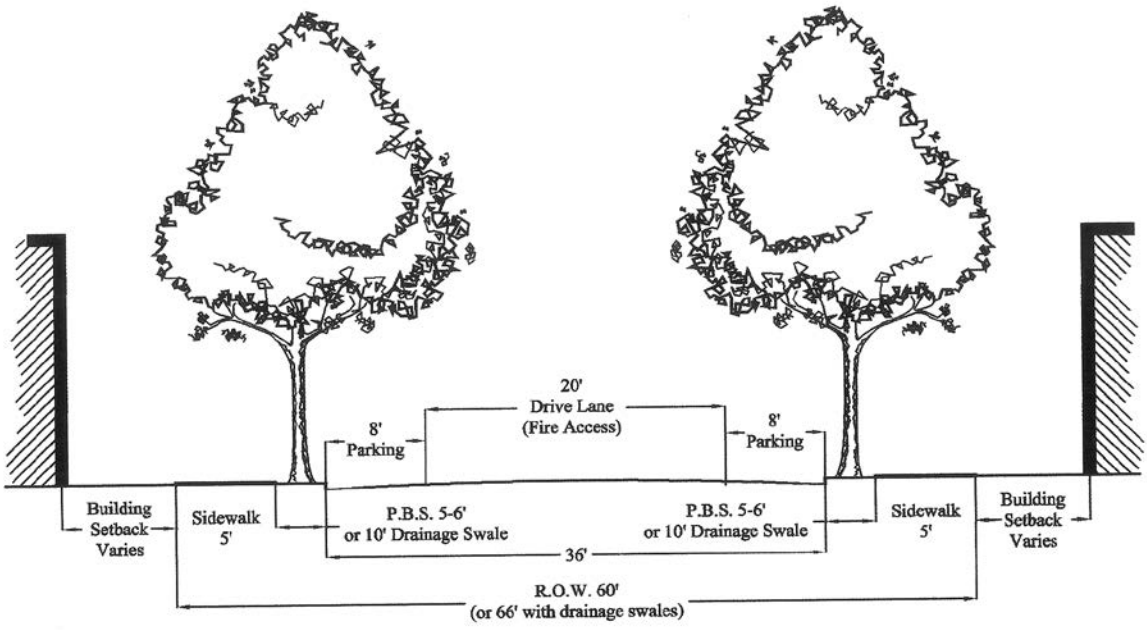


Figure TR 8 Local Acess Street, Medium/High Density Residential (>10 du/acre): Two- Lane All Areas

These illustrations are examples only of potential applications of the street standards to depict the different types of streets and street environments. Refer to the street standards and policies for guidance on applying standards to specific cases.

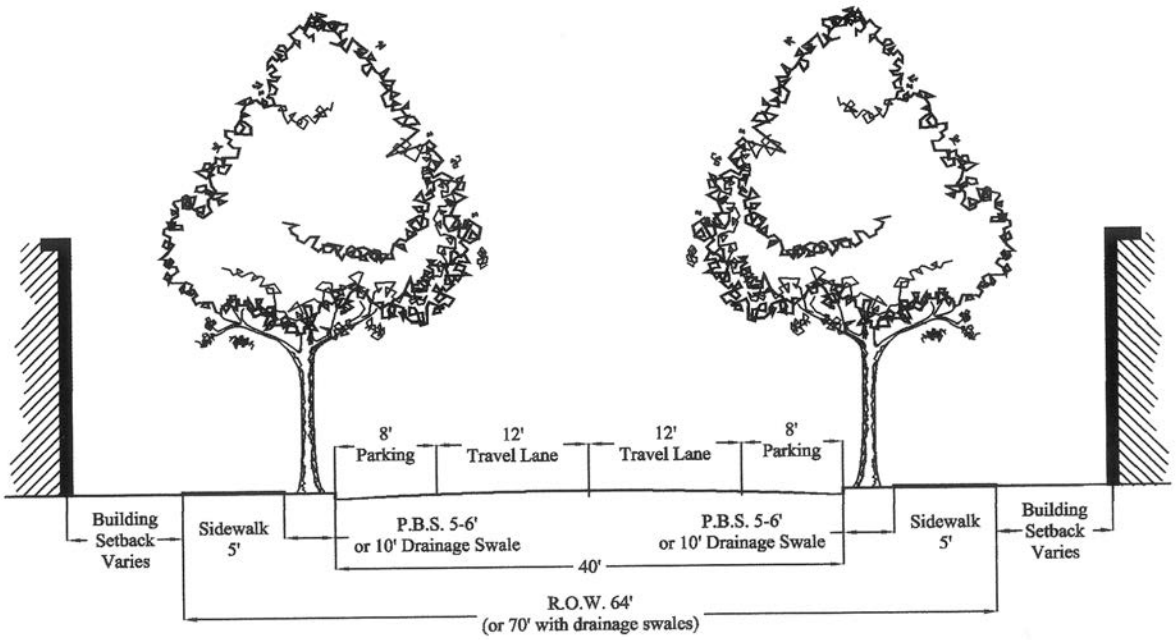


Figure TR 9 Local Acess Street, Commercial/Industrial: Two-Lane
All Areas

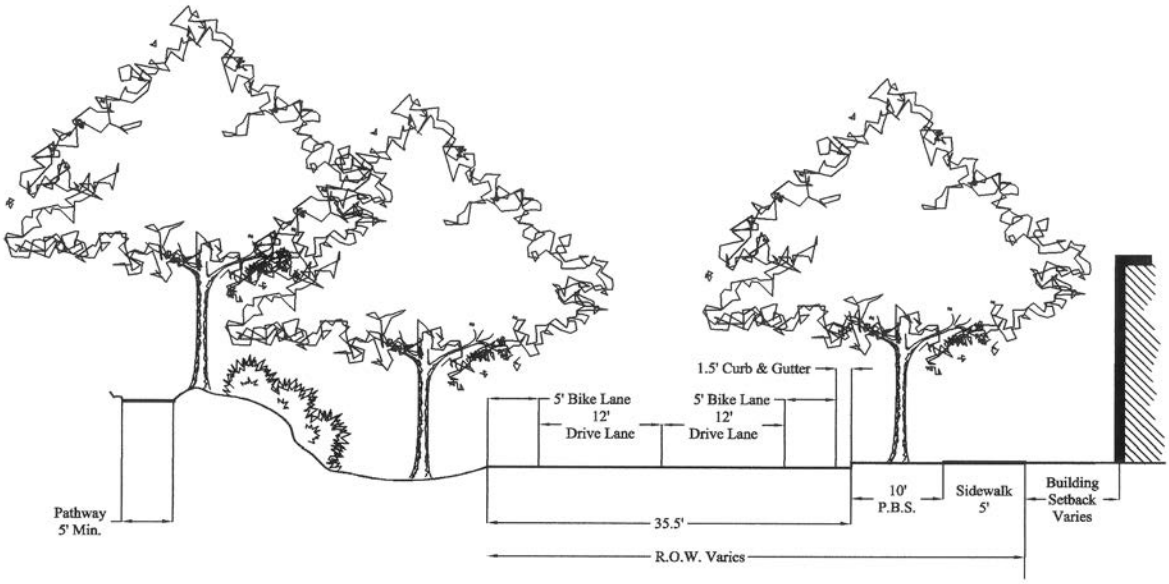


Figure TR 10 Parkway
All Areas

These illustrations are examples only of potential applications of the street standards to depict the different types of streets and street environments. Refer to the street standards and policies for guidance on applying standards to specific cases.

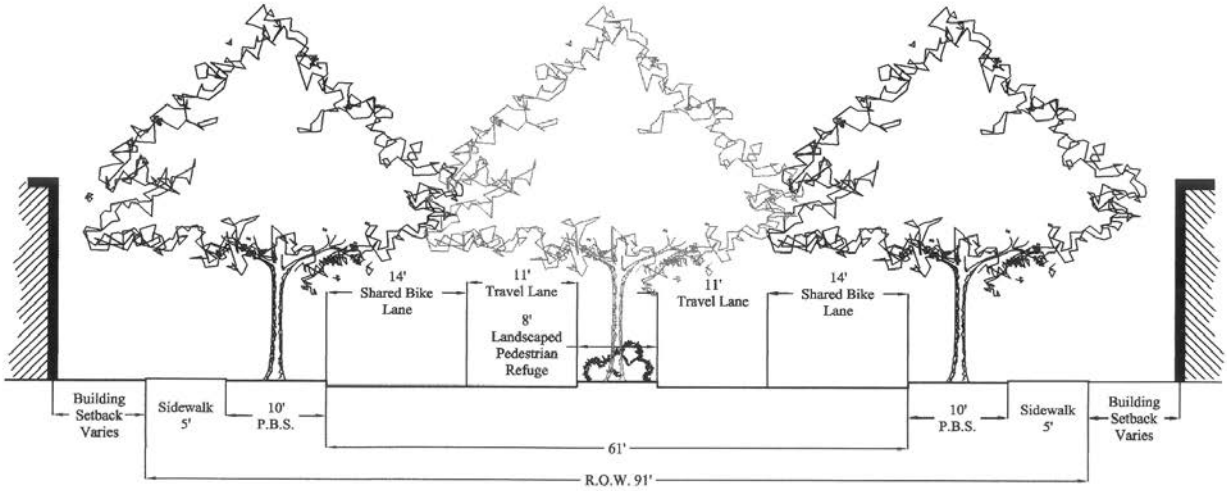


Figure 11 Boulevard
All Areas

These illustrations are examples only of potential applications of the street standards to depict the different types of streets and street environments. Refer to the street standards and policies for guidance on applying standards to specific cases.

4.7 TRANSPORTATION CAPITAL FACILITIES PROGRAM

The Transportation Capital Facilities Program identifies transportation capital projects required to serve the urban study area at the planning horizon of 2020 and to fulfill the regional transportation goals. The program consists of the following types of projects:

- Complete the proposed regional pedestrian, regional bikeway, and arterial street networks.
- Improve existing streets to meet parkway and boulevard standards, and bikeway and vehicle lane width standards.
- Network capacity improvements to maintain proposed LOS standards.

Local access streets and pathways and recreational trails are not included in the program. Also not included are projects under the state's jurisdiction, such as the North Spokane Corridor project and the Centennial Trail.

The 20-Year Capital Facilities Program will be used as a guide in establishing development standards, development mitigations, possible transportation impact fee programs, possible transportation benefit districts, and the Six-Year Comprehensive Street Program.

Development, as it occurs, generally constructs the arterial streets within the boundaries of the development and constructs frontage improvements along adjacent arterials. Development may also be required to construct off-site transportation improvements through the SEPA mitigation process.

Transportation impact fees and transportation benefit districts are mechanisms to fund completion of the 20-Year Capital Facilities Program in certain areas. These programs are used to allow distribution of the costs of transportation improvements within an area to all beneficiaries of the improvements.

The Six-Year Comprehensive Street Program is used to coordinate, prioritize, and schedule the city's transportation projects. The 20-Year Capital Facilities Program is one of the guiding factors for the Six-Year Comprehensive Street Program. The Six-Year Comprehensive Street Program is updated and adopted annually by City Council. This program is hereby adopted by reference as a part of the Comprehensive Plan. Printed copies are available and the programs may be viewed online at www.spokancity.org/services/documents.

The program is separated into eight types of projects as follows:

- **Boulevard/Parkway Improvements:** Provide special emphasis on selected streets with higher street tree standards and other aesthetic treatment as well as providing bicycle facilities and sidewalks to provide a multimodal facility.
- **Capacity Improvements:** Widening or intersection improvements along a corridor required to maintain the Level of Service standards.
- **Construct Sidewalks:** Retrofit sidewalks and complete missing sidewalk links on those streets where other improvements are not required. This project will complete sidewalks on both sides of all arterial streets except where typology or existing bridge structures limit sidewalks to one side.
- **New Routes:** Construct new arterial streets where no street currently exists.
- **New Shared-Use Pathway:** Construct new, shared pathways to complete bicycle and pedestrian network.
- **Reconstruct to Urban Standard:** Reconstruct rural design roads into urban streets with high type pavement, curbs, and sidewalks.
- **Widen to Meet Standards:** Widening to provide adequate street width to meet vehicle and bicycle lane width standards.

- **Pedestrian Facilities Retrofitting Program:** Allocation of funds dedicated to retrofitting the street system to meet the City of Spokane's pedestrian design standards. This program implements policy TR 9.3, "Dedicated Funds for Retrofitting," (see policy discussion section for more information).

The estimated cost of the 20-Year Capital Facilities Program is shown in Table TR 20. Costs are organized by the seven types of projects described above. A detailed summary of the 20-Year Program is included in section 4.8, "Individual 20-Year Transportation CIP Projects." This section consists of seven tables, one for each project type, which lists the individual transportation projects.

TABLE TR 20 20-YEAR TRANSPORATION CAPITAL FACILITIES PROGRAM

(Estimated Costs - $1000s)	
Project Type	
Boulevard/Parkway Improvements	$70,580
Capacity Improvements	$39,050
Sidewalk Construction	$15,124
New Route	$82,666
New Shared Pathway	$1,494
Reconstruct to Meet Urban Standard	$152,101
Widen to Meet Standards	$8,037
Pedestrian Facilities Retrofitting Program	*
Totals	**$369,052**

* Amount will be determined in future planning processes (see policy TR 9.3, "Dedicated Funds for Retrofitting").

Table TR 21 was a summary of the Six-Year Comprehensive Street Program. This summary table has been removed from this chapter. The Six-Year Comprehensive Street Program is available for viewing online at www.spokancity.org/services/documents.

Transportation Funding

This section provides an overview of the funding summary listed in the Six-Year Comprehensive Street Program. These funding sources can be viewed as four main types of funding: local, state, federal, and miscellaneous, as follows:

Local Funding
State Arterial Street Fund
Real Estate Excise Tax

Federal Funding
Surface Transportation Funds
Surface Transportation Project—Bridge Replacement Monies

State Funding
Public Works Trust Fund
Transportation Improvement Account

Miscellaneous

An important note regarding the funding is that not all funds listed in the Six-Year Comprehensive Street Program are guaranteed. Except for the local funding sources (State Arterial Street Fund and Real Estate Excise Tax), none of the funding categories are guaranteed. Federal and state-funded projects are selected on a competitive basis (with state funding competitive either on a statewide or eastern region basis), so their funding is not 100 percent guaranteed. The revenues shown in the Six-Year Comprehensive Street Program are projected revenues, based on historic levels of funding the city has received.

A description of the funding sources follows. A final type of funding is described at the conclusion: Potential Funding Sources. These are funding sources that, though not currently used by the City of Spokane, are potentially available for funding transportation projects.

Local Funding Sources

State Arterial Street Fund (SASF)

This funding is received by the City through its share of the state motor fuel tax. Of the total received, a portion supports the maintenance of city streets. This portion of the fuel tax is called the Street Maintenance Fund. Street maintenance includes street cleaning, leaf pickup, snow plowing, and street repair (potholes, cracks, patching).

Real Estate Excise Tax (REET)

The Real Estate Excise Tax is assessed on sales of real estate. There are two separate funding programs; each assesses real estate sales at a rate of 0.0025 of the sale amount. The first REET fund must be used for infrastructure maintenance and operation. A portion of this fund is used to partially fund the city's street lighting program and the remainder of this fund is used for street maintenance activities. The second REET fund must be used for capital infrastructure projects caused by growth. Growth-related transportation capital improvement projects are eligible for this funding.

Federal Funding Sources

Surface Transportation Funds (STP)

Surface Transportation Funds (STP), in general, are the federal funds from TEA-21 that go to transportation-related projects. ISTEA (Intermodal Surface Transportation Act) was federal legislation passed in 1991 that authorized significant additional funding for both planning and construction of transportation facilities, as well as new planning requirements for Metropolitan Planning Organizations. In June of 1998, Congress authorized an upgrade of ISTEA called the Transportation Efficiency Act for the 21st Century (TEA-21). It carries forth the same basic tenants of ISTEA. Besides general STP funds, there are particular segments of STP funds, such as Bridge Replacement Monies (described below) and Enhancement Funds, which are for the improvement of pedestrian and bicycle facilities, scenic easements, historic sites, and the preservation of railroad corridors.

Surface Transportation Project—Bridge Replacement Monies (STP-BRM)

Surface Transportation Project—Bridge Replacement Monies (STP-BRM) are the federal TEA-21 funds set aside for bridge replacement. The State Bridge Replacement Advisory Committee prioritizes projects based on the rating condition of bridges. The funding policy is 80 percent of first $10,000,000 and 50 percent thereafter. Local match is 20 percent of first $10,000,000 and 50 percent thereafter.

State Funding Sources

Public Works Trust Fund (PWTF)

The Public Works Trust Fund (PWTF) is a program featuring low-interest state loans to eligible local governments. It was established by the legislature in 1985 to provide a dependable, long-term source of funds for the repair and construction of local public works systems. The PWTF is designed around a number of new concepts that distinguish it from existing grant programs. These include an emphasis on local effort as well as project needs in the loan application process, the provision of loans rather than grants, and a solid commitment to increasing local capital planning capacity. The PWTF will make low-interest loans for the repair, replacement, rehabilitation, reconstruction, or improvement of eligible public works systems to meet current standards and to adequately serve the needs of existing population. It is not designed to finance growth-related

public works project expenditures. Eligible project categories include street and road, bridge, domestic water, storm sewer, and sanitary sewer system projects located in the public right-of-way. Approved Public Works Trust Fund-assisted projects must be completed within 24 months of the date of approval.

Transportation Improvement Account (TIA)

The source of Transportation Improvement Account (TIA) funds is an increase in the gas tax that was approved by the Legislature in 1990 (3.04 cents from the 23 cents per gallon collected at the pumps). The purpose of this funding account was to address community growth-related projects with matching funds from the state. The non-state matching funds would come from developers, other agencies, transit, or private individuals and groups. The TIA is administered by the Transportation Improvement Board, which distributes TIA funds based upon community need and availability of matching funds.

Miscellaneous Funding Sources

The miscellaneous funding category covers funding from other agencies, special grants, and private developers. Other agency funding usually comes from a partnership between the city and the other agency to jointly fund a project that is beneficial to both. The city occasionally receives grants under special programs from either the state or federal government. The city also receives mitigation fees and other private development funding to fund specific projects. None of these revenue sources are guaranteed.

Potential Funding Sources

Transportation Impacts Fees

A transportation impact fee program may be enacted by the city to fund the transportation capital needs caused by growth within a specific area. The program will establish the impact areas, the capital program related to growth in each area, and the fee and manner of collection for each transportation impact area. Each new building project in each impact area will be charged a fee for the share of the capital program attributed to the new building.

Local Option Gas Tax

A local option gas tax may be added to the fuel tax within Spokane County to fund street needs. This must be enacted on a countywide basis and requires a public vote. Voters have twice turned down requests for a local option gas tax.

Councilmanic Bonds

Councilmanic bonds may be passed by the City Council for street needs. Revenues raised by the city would repay the bonds. A revenue source for the bond repayment would have to be identified.

General Obligation Bonds

General obligation bonds may be passed by a public vote. A special assessment would be added to the property tax within the city to repay the bonds. In the past, individual general obligation bonds have both passed and failed.

Transportation Benefit District

A transportation benefit district may be created and district obligation bonds passed by a public vote within an identified area within the city. A special assessment would be added to the property tax within the district to repay the bonds. The district is also eligible for state funding through the Transportation Improvement Board. The Liberty Lake area has been the only area in the state to successfully pass a transportation benefit district.

4.8 INDIVIDUAL 20-YEAR TRANSPORTATION CIP PROJECTS

The following seven tables list the projects within the seven categories summarized in the 20-Year Transportation CIP.

TABLE TR 22 BOULEVARD/PARKWAY IMPROVEMENTS

Project	Street	From	To	Estimate ($1000s)
28	29th Avenue (1)	Grand Boulevard	Regal Street	$3,400
15	Assembly Street, Indian Canyon Drive and Greenwood Road	Deska Drive	Government Way	$2,600
16	Government Way and Riverside Avenue	Greenwood Road	Hemlock Street	$3,600
26	Grand Boulevard (1)	29th Avenue	14th Avenue	$2,300
25	Grand Boulevard, 8th Avenue, and Washington Street	14th Avenue	4th Avenue	$1,800
22	Hamilton Street (2)	Mission Avenue	North Foothills Drive	$1,600
89	Ide Avenue (realigned) and Bridge Avenue (realigned)	Cedar Street	Lincoln Street	$600
18	Maxwell Avenue and Mission Avenue	Belt Street	Division Street	$3,300
23	Mission Avenue (1)	Upriver Drive	Greene Street	$2,500
19	Ohio Avenue and Cedar Street	Nettleton Street	Ide Avenue (realigned)	$1,300
29	Regal Street (4)	57th Avenue	29th Avenue	$3,700
27	Riverside Avenue	Monroe Street	Division Street	$5,200
17	Riverside Avenue (3)	Hemlock Street	Maple Street	$1,100
98	Upriver Drive (1)	Mission Avenue	Havana Avenue	$2,800
99	Upriver Drive (2)	Havana Street	Buckeye Avenue	$1,200
61	Upriver Drive (3)	Buckeye Avenue	City Limits	$1,480
21	Wellesley Avenue	Belt Street	Market Street	$8,100
		Total Boulevard/Parkway Improvements		**$46,580**

TABLE TR 23 CAPACITY IMPROVEMENTS*

Project	Street	From	To	Estimate ($1000s)
5	Ash Street and Maple Street	Second Avenue	Northwest Boulevard	--
1	Ash Street, Maple Street, and Country Homes Boulevard	Francis Avenue	Division Street	--
6	Assembly Road, Garden Springs Road, Grandview Road, 16th Avenue, Milton Street, 14th Avenue, Lindeke Street and Government Way	Thorpe Road	Sunset Boulevard	--
3	Buckeye Avenue	Post Street	Ruby Street	--
11	Crestline Street (3)	Illinois Avenue	Euclid Avenue	--
12	Freya Street, Freya Way, Greene Street, Grace Avenue and Market Street	Sprague Avenue	Euclid Avenue	--
10	Hamilton Street (1)	Trent Avenue	North Foothills Drive	--
7	Monroe Street	Main Avenue	Northwest Boulevard	--
4	Northwest Boulevard	Belt Street	Monroe Street	--
611	**LOS Improvements - Total**		**Total Estimate**	**$39.050**
		Total Capacity Improvements		**$39,050**

*This table does not show capacity improvement estimates for the individual projects but rather total per growth scenario.

TABLE TR 24 COMPLETE SIDEWALKS				
Project	**Street**	**From**	**To**	**Estimate ($1000s)**
472	17th Avenue	Latawah Street	Upper Terrace	$8
474	29th Avenue	High Drive	Lincoln Street	$31
476	37th Avenue	Bernard Street	Stone Street	$234
477	37th Avenue	Regal Street	Freya Street	$66
471	43rd Avenue	Scott Street	Grand Boulevard	$25
609	44th Avenue	Altamont Street	Regal Street	$86
478	57th Avenue	Glenrose Road	Willamette Street	$52
479	63rd Avenue	Helena Street	Regal Street	$166
604	65th Avenue	Regal Street	Freya Street	$68
480	A Street	Driscoll Boulevard	Rowan Avenue	$103
481	Addison Street and Standard Street	Lyons Avenue	Lincoln Road	$91
482	Airport Drive	Spokane International Airport Terminal	SR 2 and Sunset Boulevard	$1,119
483	Alberta Street	Driscoll Boulevard	Francis Avenue	$92
484	Alberta St. Cochran St. and Driscoll Blvd.	Northwest Boulevard	Driscoll Boulevard	$137
551	Arthur Street	3rd Avenue	2nd Avenue	$10
487	Ash Street and Maple Street	Boone Avenue	Francis Avenue	$432
510	Assembly Street	Driscoll Boulevard	Francis Avenue	$16
490	Augusta Avenue and Belt Street	Pettet Drive	Northwest Boulevard	$16
491	Belt Street	Garland Avenue	Francis Avenue	$100
492	Bernard Street	High Drive	29th Avenue	$138
570	Broadway Street	Havana Street	Theirman Road	$154
493	Cascade Way	Wall Street	Division Street	$99
494	Central Avenue	Wall Street	Addison Street	$111
495	Cincinnati Street	Little Spokane Drive	Glencrest Drive	$193
496	Clarke Avenue, Maple Street and Main Avenue	Elm Street	Monroe Street	$13
603	Congress Avenue	Freya Street	Havana Street	$33
497	Country Homes Boulevard	Cedar Street	Division Street	$232
498	Cowley Street	Rockwood Boulevard	Fifth Avenue	$27
499	Cozza Drive	Division Street	Nevada Street	$173
500	Crestline Street	63rd Avenue	57th Avenue	$90
501	Crestline Street	44th Avenue	37th Avenue	$116
502	Deska Drive and Westcliff Drive	Assembly Street	West Drive	$29
504	Division Street	Francis Avenue	Westview Avenue	$54
505	Division Street	Westview Drive	Hawthorne Road	$25
506	Division Street	Regina Drive	Wandemere Drive	$339
509	Driscoll Boulevard	Alberta Street	Assembly Street	$354
511	Eagle Ridge Boulevard	Moran View Avenue	Latah Valley Arterial (Meadow Lane)	$42
514	Fancher Road	Broadway	Sharp Avenue	$10
515	5th Avenue, Freeway Avenue South and 4th Avenue	Maple Street	Lincoln Street	$97
457	Fort Wright Drive and Meenach Bridge	Government Way	Pettet Drive	$158
458	Francis Avenue	Nine Mile Road	Indian Trail Road	$173
459	Francis Avenue	Division Street	Market Street	$126
460	Freya Street	37th Avenue	13th Avenue	$152
461	Freya Street	Euclid Avenue	Courtland Avenue	$25
463	Freya Street and Freya Way	Springfield Avenue	Greene Street	$28
464	G Street	Northwest Boulevard	Wellesley Avenue	$182
466	Garland Avenue	Northwest Boulevard	Ash Street	$183
467	Glencrest Drive	Wandermere Road	End of Street	$236
470	Hartson Avenue	Thor Street	Havana Street	$145
524	Havana Street	Hartson Avenue	Broadway	$220
526	Helena Street	63rd Avenue	57th Avenue	$80
527	Helena Street	Sharpsburg Street	Lincoln Road	$30
528	High Drive	21st Avenue	Grand Boulevard	$70
529	Holland Avenue	Division Street	Newport Highway	$26
531	Inland Empire Way	27th Avenue	7th Avenue	$194
553	Liberty Park Place	3rd Avenue	Madelia Street	$21

TABLE TR 24 COMPLETE SIDEWALKS continued page 2				
Project	**Street**	**From**	**To**	**Estimate ($1000s)**
533	Lidgerwood Street	Central Avenue	Lyons Avenue	$89
534	Lowell Avenue	Pamela Street	Indian Trail Road	$37
535	Lucus Drive	Flight Drive	Sunset Highway SR 2	$30
536	Lyons Avenue	Division Street	Lyons Avenue	$54
613	Lyons Avenue and Bruce Avenue	Nevada Street	Pittsburg Street	$132
518	Mallon Avenue	Monroe Street	Lincoln Street	$7
485	Maple Street	Francis Avenue	Country Homes Blvd.	$32
486	Maple Street Bridge	Maple Street and Walnut Street	Ash Street and Maple Street (Dean)	$239
520	Market Street	Francis Avenue	Lincoln Road	$128
519	Market Street, Market Place, Haven Street, and Haven Place	Garland Avenue	Francis Avenue	$297
521	Medical Lake Road SR 902	Craig Road	Geiger Boulevard	$493
468	Milton Street and 14th Avenue	16th Avenue	Lindeke Street	$33
523	Mission Avenue	Sharp Avenue	Railroad Avenue	$49
522	Mission Avenue and Trent Avenue	Havana Street	Mission and Trent Ave.	$29
537	Napa Street	Main Avenue	Trent Avenue	$24
538	Navaho Avenue	Indian Trail Road	Seminole Drive	$117
469	Nevada Street	Francis Avenue	Holland Avenue	$178
539	Newport Highway	Holland Avenue	Hawthorne Road	$78
540	Newport Highway	Hawthorne Road	Shady Slope Road	$543
488	Nine Mile Road	Assembly Street	Francis Avenue	$30
541	Nine Mile Road	Francis Avenue	City Limits	$336
542	Nine Mile Road	City Limits	Urban Study Boundary	$590
544	Northwest Boulevard	Alberta Street	Assembly Street	$108
545	Pacific Park Drive	Forrest Boulevard	Indian Trail Road	$147
546	Pamela Street	Pacific Park Drive	Barnes Road	$55
547	Perry Street	57th Avenue	City Limits (53rd)	$54
548	Perry Street	53rd Avenue	Thurston Avenue	$143
549	Perry Street	Bridgeport Avenue	Wellesley Avenue	$93
552	Perry Street and Perry Place	Mission Avenue	Illinois Avenue	$64
554	Pettet Drive	TJ Meenach Drive	Mission Avenue	$70
555	Pittsburg Street	Magnolia Street	Sharpsburg Avenue	$9
52	Pittsburg Street (1)	Francis Avenue	Bruce Avenue	$66
556	Post Street	Cora Avenue	Gordon Avenue	$23
557	Queen Avenue	Wall Street	Division Street	$66
561	Rockwood Boulevard	Upper Terrace	Southeast Boulevard	$276
513	Rosamond Boulevard and 13th Avenue	F Street	Government Way	$128
562	Rowan Avenue	Assembly Street	Wall Street	$312
563	Rowan Avenue	Division Street	Crestline Street	$117
465	Rustle Street	Sunset Boulevard	Deska Drive	$24
586	Shawnee Avenue	Sundance Drive	Weiber Drive	$224
525	South Riverton Ave. and Ermina Avenue	Sinto Avenue	Greene Street	$117
567	Southeast Boulevard and 18th Avenue	Rockwood Boulevard	Perry Street	$75
568	Sprague Way (Westbound)	Sprague Avenue	S2nd Avenue	$52
516	Springfield Avenue	Fiske Street	Freya Street	$56
569	Springfield Avenue and Broadway	Freya Street	Havana Street	$98
577	Sunset Highway SR 2	Hayford Road	Sunset Boulevard	$1,037
571	Standard St., Colton Pl. and Colton Street	Lincoln Road	Magnesium Road	$133
574	Sundance Drive	Shawnee Avenue	Iroquois Drive	$107
576	Sunset Boulevard	Government Way	Lindeke Street	$15
579	Thurston Avenue	Perry Street	Regal Street	$248
581	Warn Way	Country Homes Blvd	Eastmont Way	$60
582	Waterworks Street	Trent Avenue	Rutter Avenue	$77
583	Weipert Drive and Price Avenue	Country Homes Blvd.	Division Street	$50
584	Wellesley Avenue	Assembly Street	A Street	$112
585	Woodridge Drive	Shawnee Avenue	Bedford Avenue	$136
		Total Complete Sidewalks		**$15,127**

TABLE TR 25 NEW ROUTE

Project	Street	From	To	Estimate ($1000s)
140	21st Avenue	Hayford Road	C Road (New)	$1,100
592	21st Avenue and Scenic Boulevard	Grandview Road	City Limits	$820
591	29th Avenue	Assembly Road	City Limits	$545
590	34th Avenue	Abbott Road	Assembly Road	$513
153	44th Avenue (New)	Abbott Road	City Limits	$3,000
128	51st Avenue	Myrtle Street	Glenrose Road	$231
135	A Road (New)	C Road (New)	Sunset Highway SR 2	$404
190	Aero Road (New)	Westbow Road	Thomas Mallen Road	$1,200
32	Barnes Road (1)	Nine Mile Road	City Limits	$2,200
33	Barnes Road (2)	City Limits	Indian Trail Road	$1,500
34	Barnes Road and Strong Road	Farmdale Road	City Limits	$1,400
131	C Road (New)	Medical Lake Road SR 902	Spotted Road	$6,000
113	Carnahan Road (New Alignment)	Glenrose Road	8th Avenue	$5,000
42	Cascade Way	Quamish Drive	Austin Road	$320
165	D Road (New; alt Hayford)	Medical Lake Road SR 902	Thorpe Road	$2,400
50	Dakota Street and Jay Avenue (Extended)	Holland Avenue	Nevada Street	$610
162	Eagle Ridge Boulevard	Cedar Road	Moran View Avenue	$900
189	F Road (New)	Hayford Road	Aero Road	$647
133	Flint Road or B Road (New)	Airport Drive	Flint Road	$1,100
191	G Road (New)	Aero Road	Hallet Road	$474
180	H Road (New) and Thorpe Road	Hallet Road	Grove Road	$9,100
194	Havana Street (2)	37th Avenue	29th Avenue	$1,100
195	Havana Street (3)	25th Avenue	22nd Avenue	$1,200
51	Helena Street, Weile Avenue and Pittsburg Street	Sharpsburg Avenue	Magnolia Street	$620
172	L Road (New) and Westbow Road	Hayford Road	End of Existing Westbow	$2,750
160	Latah Valley Arterial and Meadow Lane Rd.	Hatch Road	Qualchan Drive	$2,400
154	Latah Valley Arterial, Inland Empire Highway Marshal Road, and 14th Avenue	Cheney-Spokane Road	13th Avenue	$7,100
159	Lincoln Way	Anton Court	Eagle Ridge Blvd.	$1,200
132	Lucas Road	C Road (New)	Flight Drive	$429
178	M Road (New)	End of Road	Electric Boulevard	$7,500
589	N Road (New)	Thorpe Road	Abbott Road	$857
88	Nettleton Street	Ohio Avenue	Bridge Avenue	$206
53	Pittsburg Street (1)	Bruce Avenue	Weile Avenue	$227
43	Quamish Drive and Alberta Street	Five Mile Road	Cascade Way	$433
125	Ray Street Crossover	Freya Street	Ray Street	$2,400
168	Soda Road (1)	Urban Study Boundary	Westbow Boulevard	$1,700
169	Soda Road (2)	Geiger Boulevard	Electric Boulevard	$330
107	Springfield Avenue	Trent Avenue	Ralph Street	$10,900
58	Saint Thomas Moore Way	Nevada Street	Crestline Street	$825
39	Sundance Drive	Barnes Road	150' s/o Shawnee Dr.	$332
593	Trainor Road	City Limits - 44th (New)	Thorpe Road	$693
			Total New Routes	**$82,666**

TABLE TR 26 NEW SHARED PATHWAY

Project	Street	From	To	Estimate ($1000s)
594	Ben Burr Shared-Use Pathway	South River Drive	Ray Street	$595
619	Downtown-SR 90 Pathway	Cedar Street	Jefferson Street	$65
595	Fish Lake Shared-Use Pathway	End of Existing Improvements	Government Way and Sunset Blvd.	$834
			Total New Shared Pathways	**$1,494**

TABLE TR 27 RECONSTRUCT TO URBAN STANDARD				
Project	**Street**	**From**	**To**	**Estimate ($1000s)**
115	29th Avenue (2)	Havana Street	Urban Study Boundary	$420
116	37th Avenue (1)	Stone Street	Regal Street	$616
117	37th Avenue (2)	Freya Street	City Limits	$1,100
608	44th Avenue	Crestline Street	Altamont Street	$236
118	49th Avenue	Perry Street	Crestline Street	$610
181	53rd Avenue	Spotted Road	Cheatham Road	$462
127	57th Avenue and Glenrose Road	Palouse Highway	Urban Study Boundary	$2,600
188	57th Avenue, Hatch Road and Scott Street	Perry Street	43rd Avenue	$1,800
144	Abbott Road	44th Avenue (New)	Abbott Road	$404
152	Assembly Road	44th Avenue (New)	Garden Springs Road	$1,600
145	Assembly Street	Sunset Boulevard	Deska Drive	$1,900
41	Austin Road	600' n/of Five Mile Road	Strong Road	$1,500
607	Boone Avenue	Helena Street	Madelia Street	$40
615	Bruce Avenue	Pittsburg Avenue	Nevada Street	$305
112	Carnahan Road	Glenrose Road	8th Avenue	$1,600
44	Cedar Road and Strong Road	Country Homes Boulevard	Cedar Rd. and StrongRd.	$2,200
158	Cedar Road (1)	City Limits	Cheney-Spokane Rd.	$1,500
45	Cedar Road (3)	Strong Road	Johannson Road	$552
157	Cheney-Spokane Road	City Limits	SR 195	$2,400
87	Clarke Avenue	Riverside Avenue	Elm Street	$1,300
130	Craig Road	Medical Lake Road SR 902	McFarlane Road	$3,000
119	Crestline Street (1)	57th Avenue	53rd Avenue	$305
120	Crestline Street (2)	53rd Avenue	44th Avenue	$725
56	Crestline Street (4)	Francis Avenue	Magnesium Road	$2,600
72	Dartford Road	Little Spokane Drive	Wandermere Drive	$144
111	8th Avenue	Havana Street	Carnahan Road	$807
177	Electric Boulevard and 53rd Avenue	Hayford Road	Geiger Boulevard	$2,900
147	F Street	Sunset Boulevard	Rosamond Avenue	$116
104	Fancher Way	Trent Avenue	Rutter Avenue	$512
76	Farwell Road	Newport Highway	Urban Study Boundary	$2,400
40	Five Mile Road	Austin Road	Strong Road	$4,800
134	Flint Road	Sunset Highway SR 2	Urban Study Boundary	$231
60	Frederick Avenue (2)	Havana Street	Upriver Drive	$1,100
597	Freya Street	49th Avenue	Ray Street Crossover	$918
598	Freya Street	Courtland Avenue	Francis Avenue	$3,465
126	Freya Street (1)	65th Avenue	Palouse Highway	$841
85	Freya Street (2)	Francis Avenue	Market Street	$2,100
588	Garden Springs Road	Geiger Boulevard	Lawton Road	$871
186	Garden Springs Road (1)	Abbott Road	City Limits	$670
187	Garden Springs Road (2)	City Limits	SR 90 Off Ramp	$289
142	Geiger Boulevard	Medical Lake Road SR 902	Sunset Boulevard	$8,800
114	Glenrose Road and Havana-Yale Road	Carnahan Road	12th Avenue	$1,200
148	Grandview Road and 16th Avenue	Garden Springs Road	Milton Street	$1,200
137	Grove Road (1)	Urban Study Boundary	Geiger Boulevard	$1,900
138	Grove Road (2)	Sunset Highway SR 2	Urban Study Boundary	$231
182	Hallett Road	H Road (New)	Spotted Road	$1,800
163	Hatch Road (1)	SR 195	57th Avenue	$1,800
73	Hatch Road (2)	Wandemere Drive	Urban Study Boundary	$1,500
617	Havana Street	Broadway	Mission Avenue	$730
193	Havana Street (1)	Glenrose Road	37th Avenue	$1,300
101	Havana Street (4)	Upriver Drive	Frederick Avenue	$660
82	Hawthorne Road	Nevada Street	Market Street	$2,700
170	Hayford Road (1)	Melville Road	Westbow Road	$924
129	Hayford Road (2)	Geiger Boulevard	Urban Study Boundary	$5,800
69	Holland Avenue	Wall Street	Division Street	$578
36	Indian Trail Road (2)	Ridgecrest Drive	City Limits	$755
155	Inland Empire Way	SR 195	27th Avenue	$575
143	Lawton Road	Geiger Boulevard	Abbott Road	$739
605	Lincoln Road	End of Road	Five Mile Road	$706
55	Lincoln Road (1)	Nevada Street	Crestline Street	$920

TABLE TR 27 RECONSTRUCT TO URBAN STANDARD continued page 2				
Project	**Street**	**From**	**To**	**Estimate ($1000s)**
84	Lincoln Road (2)	Crestline Street	Market Street	$1,000
71	Little Spokane Drive	Dartford Road	Urban Study Boundary	$1,900
54	Magnesium Road (1)	Nevada Street	Crestline Street	$1,200
83	Magnesium Road (2)	Crestline Street	Market Street	$716
77	Market Street	Lincoln Road	Farwell Road	$7,000
618	Marshal Road	City Limits	Latah Valley Arterial	$1,660
599	McFarlane Road	Hayford Road	Airport Dr. (Eastbound)	$1,370
171	Medical Lake Road and Aero Road	Westbow Road	Geiger Boulevard	$606
602	Melville Road	Hayford Road	Thomas Mallen Road	$1,887
74	Midway Road	Hatch Road	Urban Study Boundary	$610
109	Mission Avenue (3)	Railroad Avenue	Urban Study Boundary	$598
81	Nevada Street	Hawthorne Road	Newport Highway	$400
64	North Five Mile Road (1)	Strong Road	Toni Rae Drive	$2,700
66	North Five Mile Road (2)	Toni Rae Drive	Waikiki Road	$1,200
124	Palouse Highway.	Freya Street	City Limits	$432
596	Palouse Highway	City Limits	Regal Street	$302
123	Palouse Highway and Freya Street	61st Avenue	49th Avenue	$1,300
79	Parksmith Road	Hawthorne Road	Urban Study Boundary	$1,300
80	Peone Road	Market Street	Urban Study Boundary	$264
161	Qualchan Drive	Cheney-Spokane Road	Latah Creek Arterial	$680
103	Ralph Street and Greene Street	Trent Avenue	Sharp Avenue	$347
121	Regal Street (1)	65th Avenue	57th Avenue	$813
102	Rutter Avenue	Waterworks	City Limits	$1,700
31	Seven Mile Road	Spokane River	Nine Mile Road	$1,000
75	Shady Slope Road	Newport Highway	Urban Study Boundary	$340
174	Spotted Road (1)	Hallet Road	Westbow Boulevard	$1,400
136	Spotted Road (2)	Airport Drive	Sunset Highway SR 2	$638
37	Strong Road (1)	Indian Trail Rd	City Limits	$532
38	Strong Road (2)	Five Mile Road	Cedar Road	$1,700
141	Sunset Boulevard (1)	Sunset Highway SR 2	Assembly Street.	$2,300
192	Sunset Boulevard (2)	Assembly Street	F Street	$1,700
110	Theirman Road	Broadway	Mission Avenue	$647
166	Thomas Mallen Road (1)	Melville Road	Westbow Boulevard	$2,400
167	Thomas Mallen Road (2)	Geiger Boulevard	Electric Boulevard	$545
139	Thorpe Road	Craig Road	Hayford Road	$2,500
151	Thorpe Road and 23rd Avenue	SR 195	Inland Empire Way	$277
149	Thorpe Road (1)	Grove Road	City Limits	$745
150	Thorpe Road (2)	City Limits	SR 195	$3,100
105	Trent Avenue (1)	Mission Avenue	Fancher Way	$2,300
106	Trent Avenue (2)	Fancher Way	Urban Study Boundary	$1,200
606	Upper Terrace	17th Avenue	Rockwood	$175
70	Wandermere Road	SR 395	Hatch Road	$2,800
616	Wellesley Avenue and Valley Springs Road	Market Street	City Limits	$2,150
146	West Drive and Rosamond Avenue	Westcliff Place	F Street	$855
179	Westbow Boulevard and Thorpe Road	Thomas Mellen Road	H Road (New)	$2,400
173	Westbow Road and Hallet Road	End of Existing 420+616+1100+236+ 610+462+2600+1800+404+ 1600+1900+1500+40+305+ 1600+2200+1500+552+240 0+1300+3000+ Westbow Road	H Road (New)	$1,000
68	Whitworth Drive	Wall Street	Division Street	$1,800
67	Waikiki Drive	Urban Study Boundary	Mill Road	$2,700
108	Yardley Street and Sharp Street	Broadway	Fancher Road	$855
		Total Reconstruct To Urban Standard		**$154,801**

TABLE TR 28 WIDEN TO MEET STANDARDS				
Project	**Street**	**From**	**To**	**Estimate ($1000s)**
587	14th Avenue	Cedar Street	Grand Boulevard	$680
183	Cedar Street and Walnut Place	14th Avenue	10th Avenue	$280
47	Country Homes Boulevard (1)	Ash Street Maple Street	Cedar Road	$68
48	Country Homes Boulevard (2)	Cedar Road	Excell Drive	$200
156	4th Avenue	McClellan Street	Cowley Street	$572
59	Frederick Avenue (1)	Freya Street	Havana Street	$832
185	High Drive	29th Avenue	Lamonte Street	$645
35	Indian Trail Road (1)	Francis Avenue	Kathleen Avenue	$345
46	Maple Street	Francis Avenue	Country Homes Blvd.	$108
93	North Foothills Drive and Euclid Avenue	Division Street	Market Street	$1,800
575	Sunset Boulevard	F Street	Government Way	$1,307
95	Trent Avenue	Pittsburg Street	Regal Street	$1,200
		Total Widen To Meet Standards		**$8,037**
		Grand Total (Of All Seven Categories)		**$301,475**

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:
    - April 22 at Southside Senior Activities Center
    - April 24 at West Central Community Center
    - April 29 at Northeast Community Center
    - 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 29th Ave). Many other arterial streets are also challenging to cross, particularly during peak travel periods. In order to make it possible for bicyclists to travel throughout the city, there needs to be opportunities to cross major streets without disrupting the traffic flow of these important corridors.

Recommended improvements include treatments such as traffic signals, median crossing islands, curb extensions combined with signs, and/or markings. These crossings must also be safe and accessible for pedestrians. While the recommended Bikeway Network map identifies many critical needs, it does not represent a complete inventory of the city's intersections. The city should evaluate the Bikeway Network for other potential bicycle crossing improvements. The first priority will be to improve intersections where existing bicycle facilities cross arterial roadways. Other key crossings should be considered as

each new segment of the Bikeway Network is implemented. In addition, all future roadway improvement projects should address bicycle crossing needs as a routine part of the design process when feasible.

Action 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 repaving 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.

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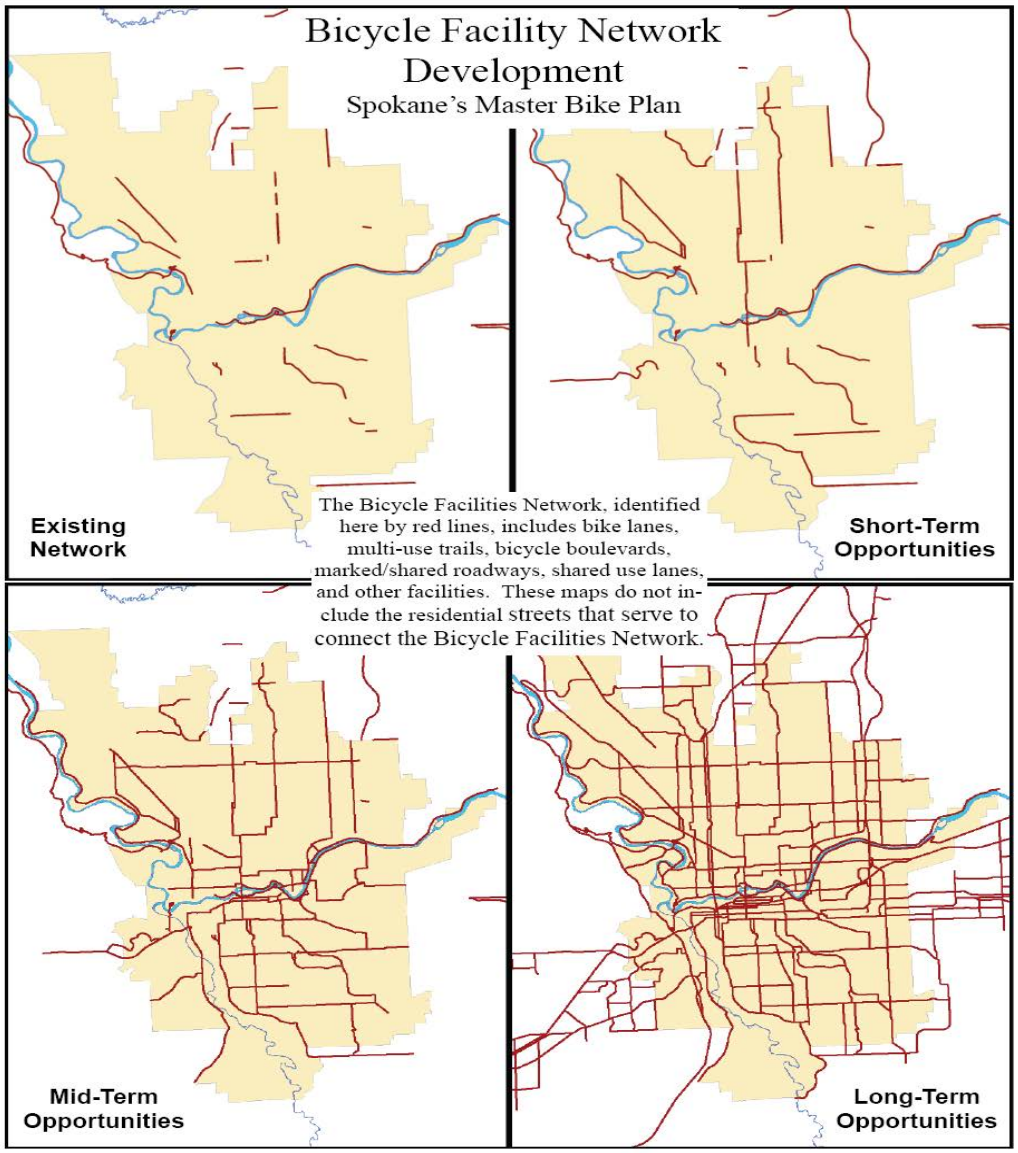
1. **Existing Network Map-** This map shows all of the existing bike lanes and multiuse paths in Spokane at the time of the adoption of the Master Bike Plan.

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:

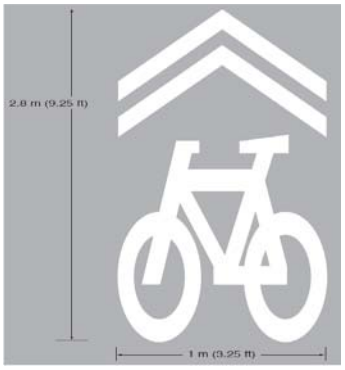
A bike lane is identified by on-street striping. Typically a bike lane is 5 feet wide. However, bike lanes can be 4 feet wide if there is no if there is no curb or gutter. An on-street marking of a bicyclist and/or street signs identifying the bike lane may accompany the striping. Below are examples 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 ten 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.

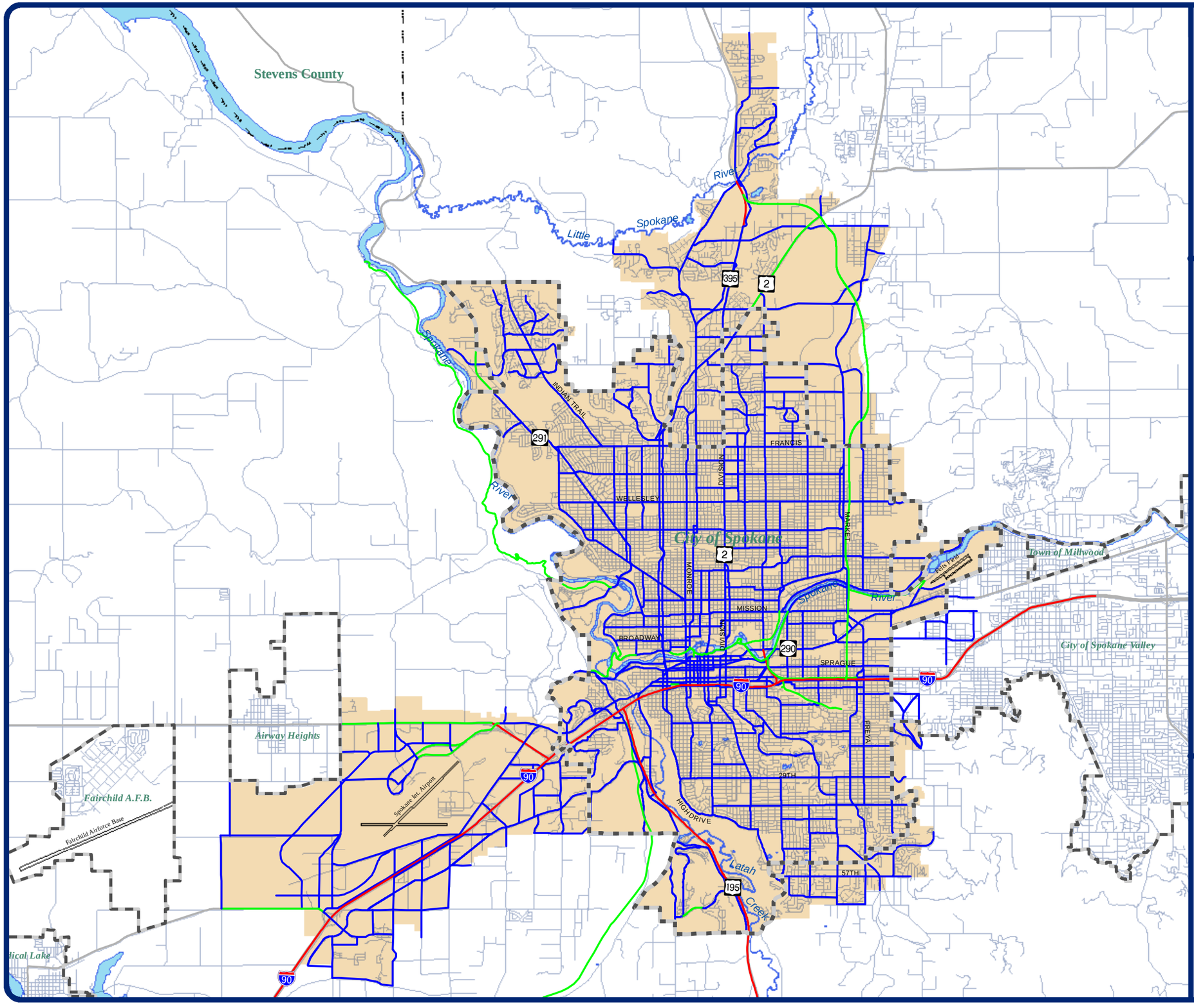
Further Evaluation of Bicycle Facility Recommendations

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.

4.10 MAPS

Regional Pedestrian Network

Map TR 1



Legend

- Shared Use Pathway
- Sidewalk
- Pedestrians Prohibited
- City of Spokane Urban Growth Area

Base Information

- City Limits
- County Boundary
- Highways
- Regional Streets
- Interstate Highway
- Rivers

0.8 0.4 0 0.8 1.6 Miles

N W E S

Source: GIS
Date: 05/30/2006

THIS IS NOT A LEGAL DOCUMENT:
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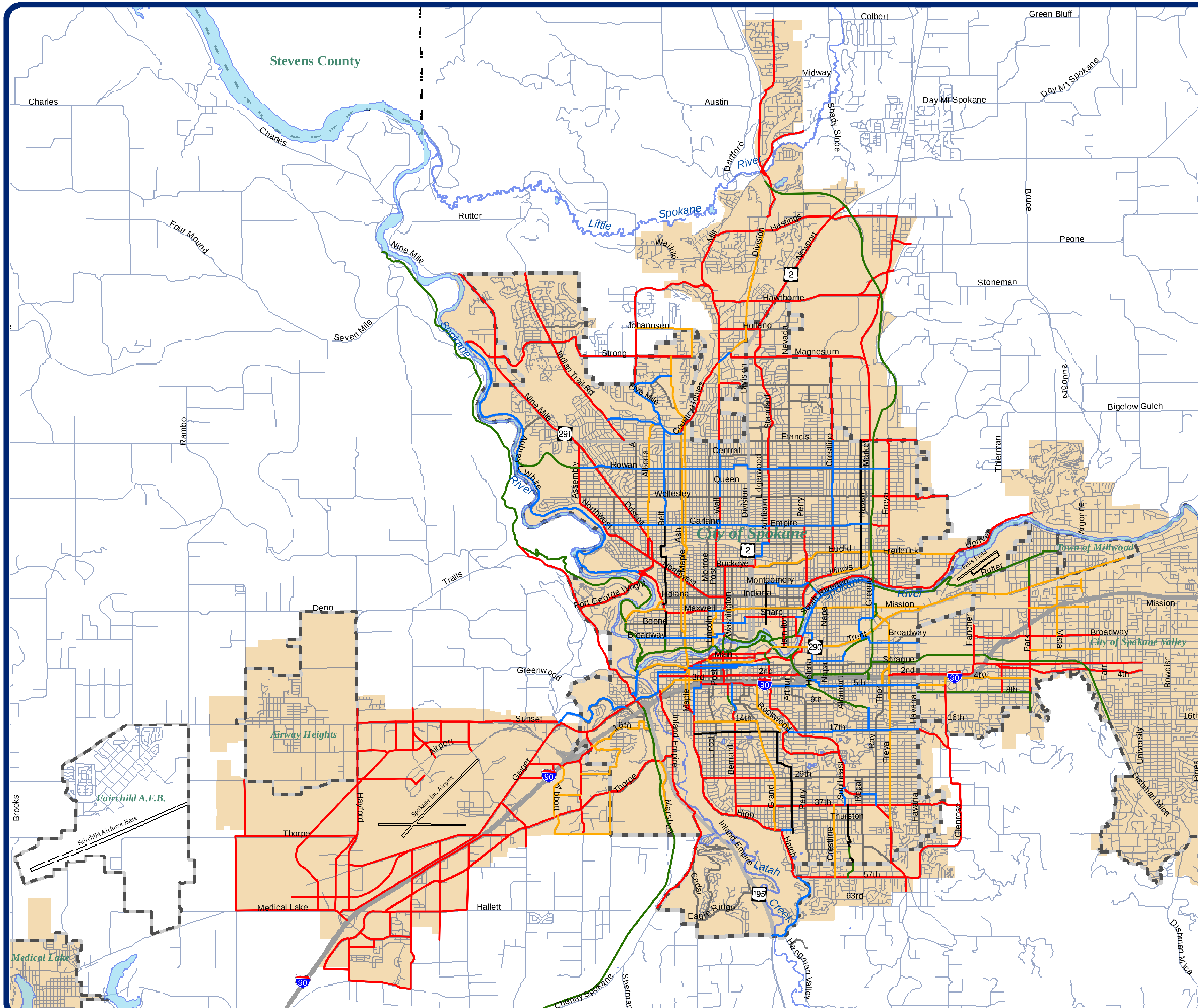

Planned Bikeway Network Map

Map TR 2

Legend

- Bicycle Boulevard
- Bike Lane
- Shared Roadway
- Shared Use or Multiuse Path
- Marked/Shared Roadway
- Urban Growth Area

Base Information

City of Spokane Boundary	Regional Street
Municipal Boundary	Arterial Street
County Boundary	Highway
River	Interstate Highway

** Please consult the Boulevards, Parkways, and Area Classifications Map for additional bicycle facilities.*

1 0.5 0 1 2 Miles

N W E S

Source: Planning Services
Date: 08/28/2009

CITY OF SPOKANE

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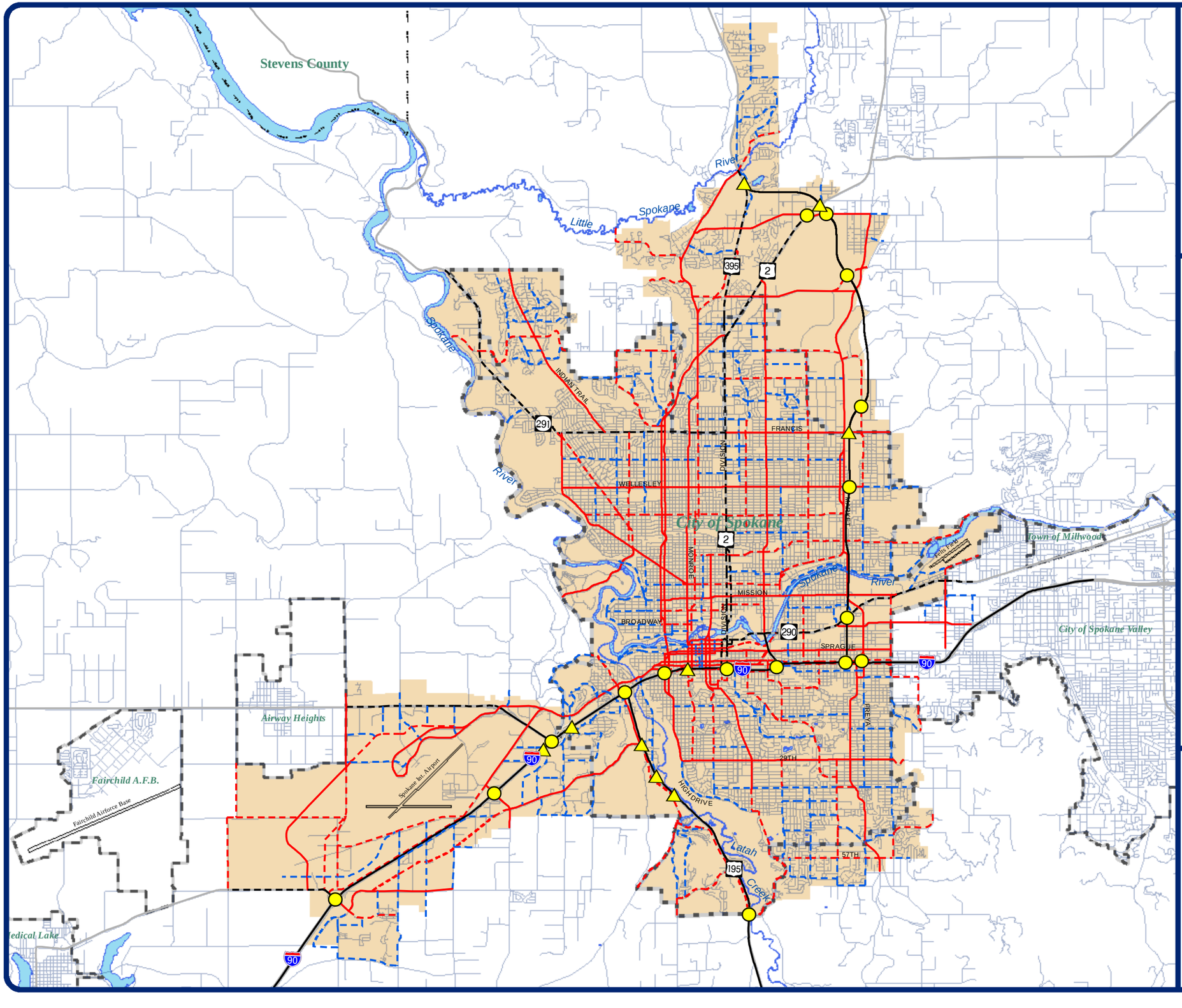
Planned Arterial Network

Map TR 3



Legend

- Neighborhood Collector
- Minor
- Principal
- Principal - Controlled Access High Capacity
- Principal - State Route
- City of Spokane Urban Growth Area
- Full Movement Interchange
- Partial Movement Interchange

Base Information

- City Limits
- County Boundary
- Highways
- Regional Streets
- Interstate Highway
- Rivers

0.9 0.45 0 0.9 1.8 Miles

N W E S

Source: GIS
Date: 05/30/2006

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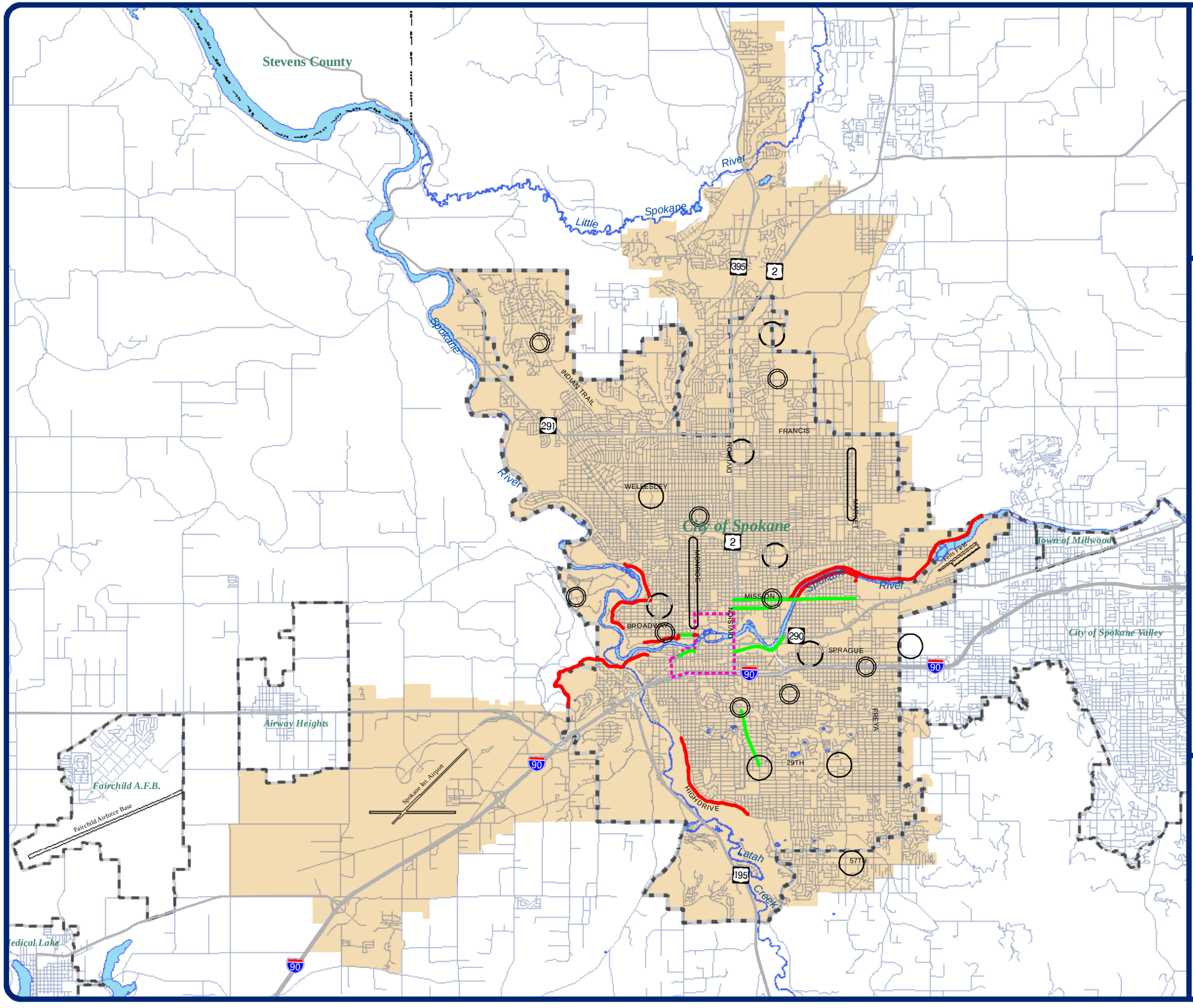
Boulevards, Parkways and Area Classifications

Map TR 4



Legend

- Boulevards *
- Parkways *
- Arterials
- Downtown Boundary
- Neighborhood Center
- Employment Center
- District Center or Corridor
- City of Spokane Urban Growth Area

Base Information

- City Limits
- County Boundary
- Shorelines
- Rivers

* See glossary for definitions of "Boulevards" and "Parkways"

0.9 0.45 0 0.9 1.8 Miles

N W E S

Source: GIS
Date: 05/30/2006

THE CITY OF SPOKANE

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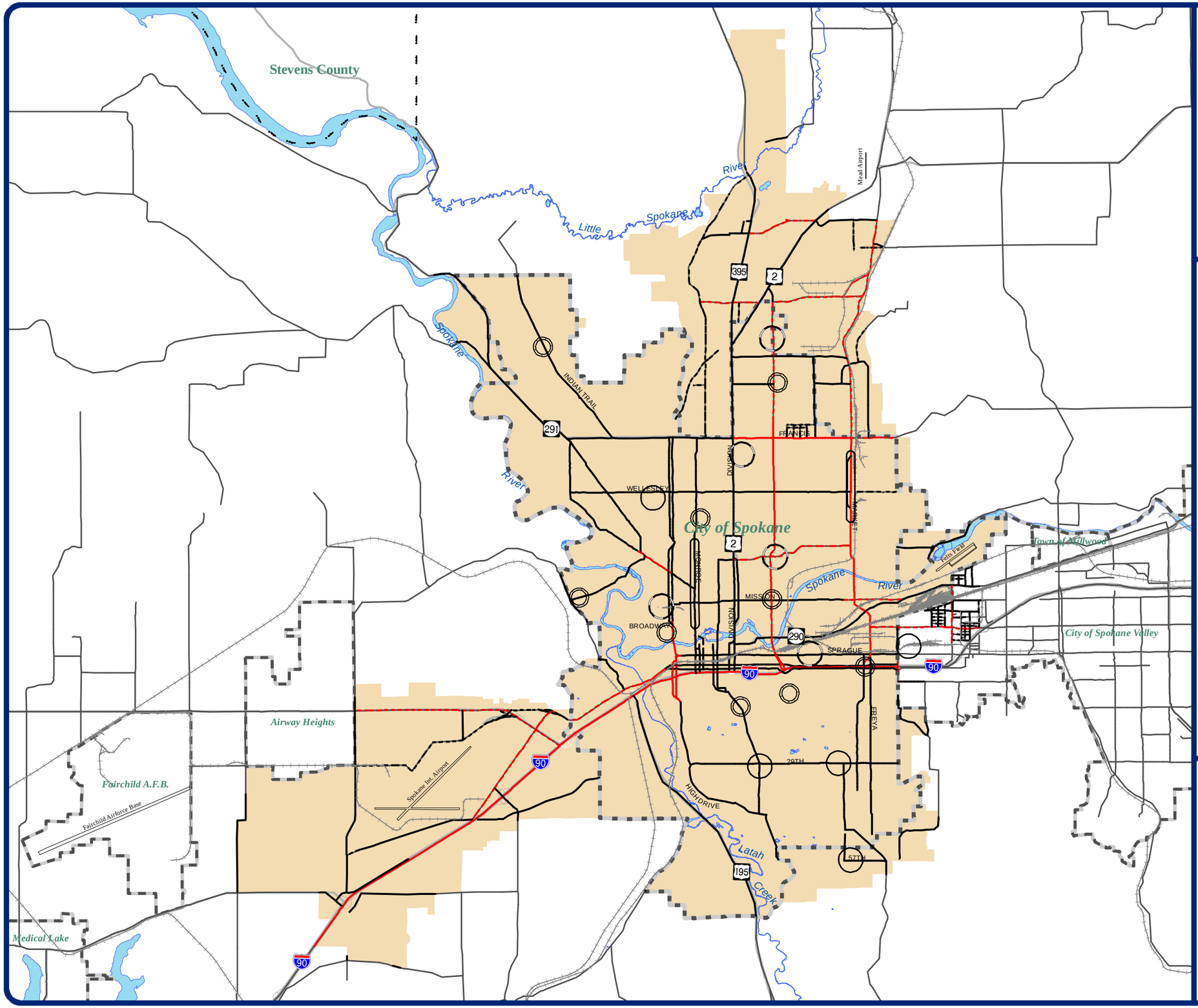
Regional Freight and Goods, Airports, and Railroads

Map TR 5



Legend

- Boulevards *
- Parkways *
- Arterials
- T-4
- Rail Roads
- Airports
- Regional Arterials
- City of Spokane Urban Growth Area

Base Information

- City Limits
- County Boundary
- Shorelines
- Rivers

1 0.5 0 1 2 Miles

Source: GIS
Date: 05/30/2006

N W E S

SPOKANE

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