Chapter 4

Transportation

Tracked Changes Version - Showing Changes Accepted by City Council
This Version is for Consideration by City Council at the June 26 Hearing

CONTENTS

4.1 INTRODUCTION 2
4.2 VISION AND VALUES 12
4.3 GOALS, POLICIES, AND ACTIONS 14
4.4 MODAL ELEMENTS 36
4.5 IMPLEMENTATION 62
4.6 FUTURE CONDITIONS 85

4.1 INTRODUCTION

2017 Transportation Chapter Update

The last major update of the City's long range / 20 year transportation plan occurred as part of the development of the 2001 Comprehensive Plan. The first steps of the 2017 update were to review the adopted plan and the implementation of strategies it recommended over the past 16 years. Overall, the theme of the transportation plan has largely stayed the same.

Items that were the focus of the 2017 update include:

- Recognition and incorporation of new plans and studies completed since 2001. A full list of these plans and studies is found in Volume V.
    - Pedestrian Master Plan adopted in November of 2015.
    - The Bicycle Master Plan last adopted in 2008 and amended in 2015 is updated with new bicycle facility classifications and an updated bike facility map.
- Review of available funding sources, land development, land use changes, and circumstances that determine if new changes in the transportation system are needed or warranted, and to what extent could be afforded.
    - Updated and prioritized the 20-year transportation capital project lists.
    - Created an open and transparent project prioritization tool to assist in capital programing based upon the goals of this chapter and the rest of the Comprehensive Plan.
    - Incorporated the resources provided by the vote of the public from a new twenty-year property tax levy for Improved and Integrated Streets approved in November of 2014.
- Further detailed ongoing efforts for developing a multi-modal transportation system.
- Inclusion of a system that outlines the steps for integrating transportation planning with other utility needs within the right of way. This integrated infrastructure planning process is branded as "LINK Spokane" and incorporates the goals of the 2014 Integrated Clean Water Plan.
- The framework and guidance for the update to the City's Street Design Standards.

Despite the many updates to the 2001 Transportation Chapter, it continues to be relevant today as part of the 2017 Comprehensive Plan. The Vision, Values,, Goals, and Policy have been incorporated into this document in Volume V, Appendix D, Part

7 to provide background, content, and further clarification of the intent of the visions, goals, and policies and contained herein. ~~"Shaping Spokane."~~

Regional Context

While this plan focuses on the city's transportation system, Spokane's regional setting is important. Spokane is the state's second largest city, and is the financial, cultural, and retail center for the "Inland Northwest", a large area of Washington, Idaho, and western Montana. In addition, Spokane is only 92 miles south of the US-Canada border (Map TR 1). ~~Given this strategic location, transportation conditions in Spokane are strongly influenced by forces beyond the City's control.~~

Institutional Coordination

~~Planning and operating the transportation systems of Spokane is not an insular task. Instead, there~~ There are many entities involved in ~~the~~ planning for the region~~'s~~ and the area around the City~~'s future~~ including the Washington State Department of Transportation, Spokane Transit Authority, the City of Millwood, the City of Airway Heights, the City of Spokane Valley, Spokane International Airport, Spokane County and the Spokane Regional Transportation Council. With continued growth expected throughout the region, ~~these agencies~~the City must collaborate effectively to maximize investment efficiencies and identify solutions beyond what the City of Spokane can accomplish alone to meet the transportation needs of residents and employees in the region.

Transportation: Shaping Spokane's Future

In planning for Spokane's transportation future, citizens discussed the many components of Spokane's transportation system, including ~~driving~~the automobile, bicycling, walking and taking ~~the bus~~transit. Citizens also recognized that transportation has key relationships to other planning ~~topics~~ efforts such as land use, urban design, neighborhood character, and social health. They acknowledged 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 future years. It recognizes the need to look to the future and not limit the flexibility of tomorrow's transportation options by what is done today.

Key Themes

The key themes expressed by the citizenry in 2001 were not very different from what was heard by participants during this update. Key themes from the 2001 Transportation Chapter:

- 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.

Several themes emerged during the update to the transportation chapter and the updated Vision, Values, Policies, and Actions. The key themes from this update that closely align with the 2001 plan include:

Making Spokane a City of Transportation Choices

- Provide viable transportation choices
- Continue creating active transportation infrastructure (Bicycle and Pedestrian)
- ~~Recognize that the car will remain the primary mode of transportation~~

Health and Safety

- Promote health through transportation choices
- Leverage investments to enhance public safety and promote positive health outcomes
- Right size appropriate streets to enhance safety
- Build active transportation choices back into our daily lives

Livable Streets

- Match street design to the adjacent land use
- Enhance neighborhood livability and mobility
- Livable streets are:
    - Safe and convenient for all users
    - Economically active in centers and along corridors
    - Designed for live, work, play
    - Multi-purpose and multi-functional

The following additional themes from this update begin to set a slightly different direction than the 2001 plan.

Integration – Maximize Public Benefits / Fiscal Responsibility

- Leverage transportation investments to meet multiple objectives (e.g. new stormwater systems combined with transportation projects, permeable bike lanes, separated sidewalks, improvements in Combined Sewer Overflow systems)
- Improve the movement of goods without sacrificing ~~liveability~~livability
- ~~Lower maintenance costs~~Improve maintenance efficiency
- Support economic development efforts and foster vibrant ~~business~~ districts
- Save households $ (~~i.e. the "green" dividend~~)

Fix it First

- Maintain our existing transportation assets and continue to address the maintenance backlog
- Enhance and optimize existing infrastructure before expanding the system

Balanced Transportation Approach

Mobility choice improves our health and connections to our neighbors, promotes economic prosperity through connecting people to goods, services, and jobs, and serves as the backbone for vibrant communities. This balanced approach can safely move all users of the transportation system, while demonstrating fiscally responsible use of resources and adding lasting value to Spokane's neighborhoods, adjacent land uses and open spaces, and the broader transportation system.

In order to achieve a vision that lives within a future with limited funds for transportation, this plan outlines an approach to creating a balanced transportation system that accommodates many needed uses within the right of way. The balanced transportation approach continues to further a goal expressed in the 2001 Comprehensive Plan, which stated a ~~desire~~ priority to design transportation systems that protect and serve the pedestrian first as everyone is a pedestrian at some time in their daily travel. One question that the Link Spokane process seeks to address going forward is how an integrated infrastructure approach can be used to build, maintain or repurpose our streets to achieve a balanced multi-modal approach while addressing other needs of the space within the right of way. While the automobile will continue to be a part of the transportation system in the Spokane region, the City is examining opportunities to include other uses and users of the streets in their design – ensuring the size and design of the street is sized appropriately to the surrounding land use and transportation context. As Figure TR 1 below illustrates, the City is moving away from the more conventional approach to transportation planning and towards a more comprehensive approach that considers the multiple desires and outcomes expected of a modern transportation system.

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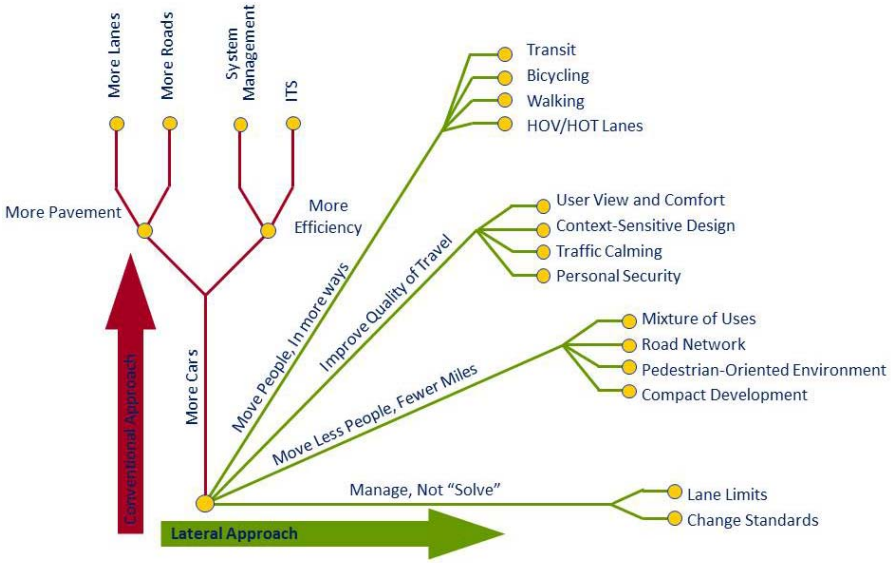


Figure TR 1. A Balanced Approach to Transportation Planning

City Building Context: Neighborhoods, Centers, and Corridors

Community context is a critical component in determining how to select transportation initiatives. Future growth will continue to occur in areas with vacant land and within concentrated areas in neighborhood centers, district centers, employment centers and corridors designated on the land use plan map. While this growth occurs in centers and corridors, established single-family residential neighborhoods will remain largely unchanged. The following contextual components were significant in the development of a policy and implementation framework for Spokane to use moving forward.

Interrelationship of Transportation and Land Use

In addition to transportation, land use policies and development patterns play a critical role in shaping cities. Land use patterns and how they interact with

transportation infrastructure have significant influence on travel behaviors. For example, a compact neighborhood in which daily needs are met in a close proximity is conducive to walking or transit use, while neighborhoods where destinations are spread out typically result in a reliance on driving. As such, it is important that land use and transportation policies and decisions are developed in a mutually supportive fashion.

To realize its transportation goals, Spokane must take advantage of opportunities for development in walkable areas that are currently well-served by transit, such as within and around downtown, where commuting via alternative modes of transportation is a reasonable and attractive option. In addition, locating new housing and employment opportunities in areas near diverse transportation options will help to facilitate alternative transportation use. This will continue to be a challenge, as current projections show residential growth being spread throughout the urban area (Map TR 2).

As Spokane grows (Map TR 3), the transportation system will face increased demand. In many areas of the City there are limited opportunities to expand vehicular right of way without significant disruption and cost. As such, strategic investments must be made to serve a growing population and employee base, while maintaining the quality of life sought out by residents.

LINK Spokane / Integrated Infrastructure Planning

Spokane was incorporated in 1881 and there is infrastructure that is nearing the end of its life. This includes:

- Streets, Water, Sewer, Storm water, Sewer Overflow; and
- Public and Private Utilities

The presence of inadequate services may hinder redevelopment in parts of the city. This is where an integrated approach to infrastructure comes in. An integrated streets approach considers:

- Pavement, sidewalk, and infrastructure condition
- Multi-modal transportation components—bike lanes, pedestrian improvements,
- Mass transit
- Public & private utility infrastructure
- Economic Development opportunities
- Storm water management to get to a Cleaner River Faster
    - Prioritize work that has a greater impact on pollutants.

- Where possible remove pollutants closest to the source
- Implementation of cost-effective & innovative technologies
- Right-size planned projects and existing facilities to reduce carrying costs and requiring "green" technologies and new stormwater solutions be included.
- Holistic integration with other critical infrastructure.
- Solve multiple problems.
- Better streets, new water mains, better parks…

Infrastructure Planning Context

In the recent past, the City had followed a fairly linear process in striving to maintain consistency from Vision to Project Implementation (Figure TR 2).

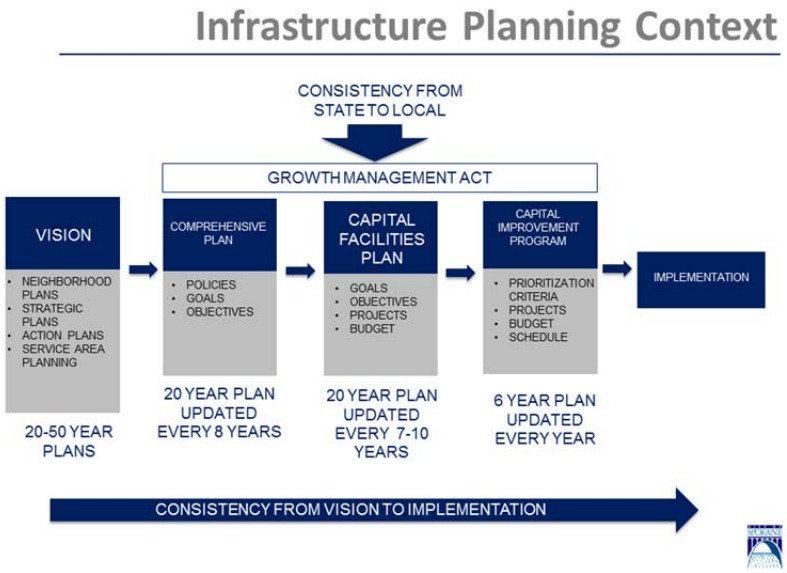


Figure TR 2. Infrastructure Planning Context

However, the question remains, as shown in Figure TR 3, can we, as a city, deliver infrastructure in a more integrated manner? This question leads directly to the development of a stronger integration framework to save money, time, and disruption.

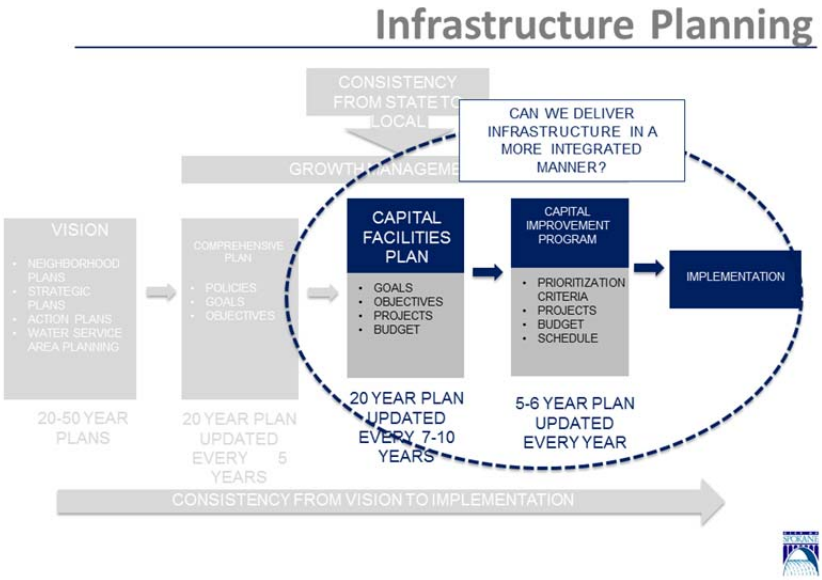


Figure TR 3. Integrated Infrastructure Delivery

Integration Framework

The City of Spokane is in the process of refining its approach to transportation and utility infrastructure planning and management to ensure compliance with state and local laws while improving fiscal ~~accountability~~ efficacy and maintaining a high-level of service for customers. Spokane's future investments support the goals of the Comprehensive Plan and ensure that the Land Use plan for the City can be implemented to support the desired growth and development goals.

Integration sits at the center of the City's approach to infrastructure projects. This is a holistic approach to public works projects that considers how the City can accomplish multiple objectives within a single project.

But what does that really mean?

Consider Figure TR 4, a three-dimensional view of the street. Included in that view are those traditional surface transportation pieces like sidewalks, bike lanes, and vehicle travel lanes. But that view also includes below-ground connectivity for utilities — everything from water, sewage, and stormwater management to natural gas, electricity, and telecommunications.

Integration of work doesn't stop with our streets. The City has used this approach to design wastewater and stormwater improvements that address several pollutants at once and also leave the area better than it was before the project. In Underhill Park, the City built a 1.5 million-gallon underground storage tank to tackle overflows to the River from combined wastewater and stormwater sewers. When the project was complete, the area had a new parking lot and improved grassy fields for the neighborhood. The project helped to meet a regulatory requirement while also creating a neighborhood benefit. To accommodate these approaches, the City organized its finances differently too, with the City's utilities also contributing towards street work to minimize disruption and to ensure a quality protective "lid" to below ground infrastructure. Integration really is about working together to get better outcomes at a better price.

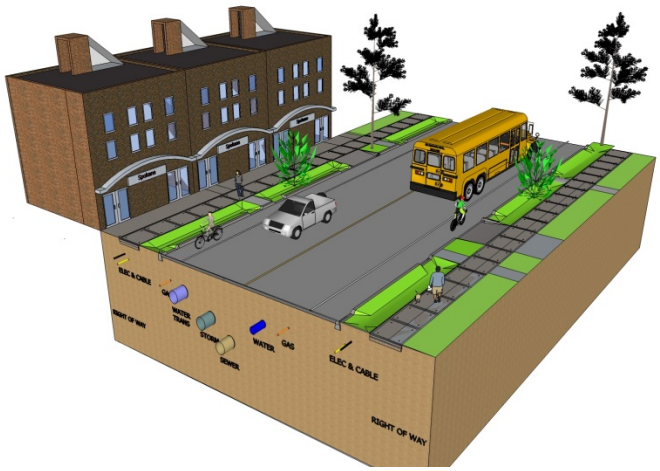


Figure TR 4. Three-Dimensional View of the Street

Under an integrated approach, the City considers all the work that needs to be done along a street—above and below ground—and works to integrate all needs into a single project that is more efficient and affordable and best serves the surrounding land uses.

Opportunity for Innovation

Much of the structure for the Integrated Framework identified is just good infrastructure planning – clearly linking community vision with a process to help realize it. Four innovations stand out as a way for Spokane to innovate above and beyond the status quo including:

1. Annual City Infrastructure Budget (i.e., "live within your means") – Set an annual infrastructure budget, with predictable annual increases, and deliver projects on budget.
2. Leveraging Infrastructure Funding – Leverage multiple funding sources to deliver projects in an economically efficient fashion.
3. Integrated Infrastructure Planning (Figure TR 5) – Utilize an integrated infrastructure strategy to prioritize projects based on budget and community goals as well as identify opportunities for integrated delivery.

4. Integrated Project Delivery – Significant cost savings can be realized by a more coordinated and integrated delivery approach for projects with similar characteristics (i.e., geography).

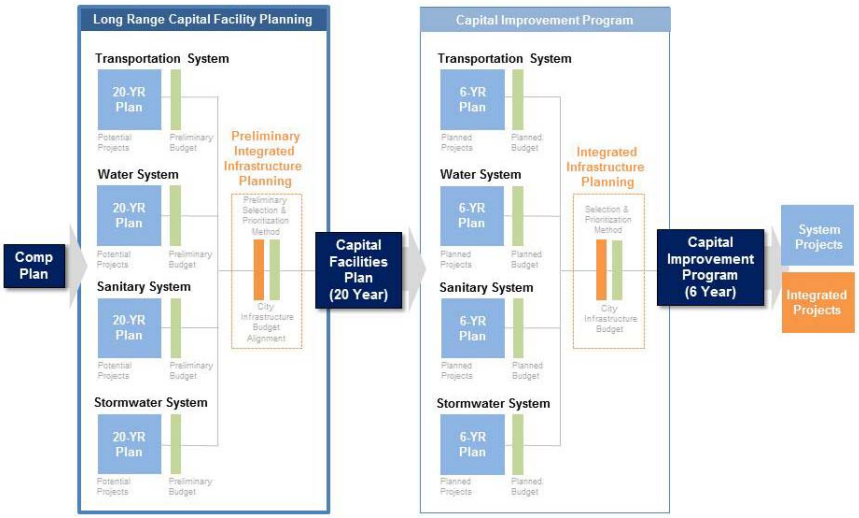


Figure TR 5. Integrated Infrastructure Planning

Done well, these innovations allow Spokane to more cost effectively achieve capital facility plan objectives while providing more predicable infrastructure investments – all benefiting the City's ability to achieve the desired vision of its Comprehensive Plan.

4.2 VISION AND VALUES

VISION

Spokane will have a well-maintained multi-modal transportation system that provides safe and efficient mobility for all, supports economic and community vitality, and promotes a healthy, livable community that respects property and the environment.

VALUES

From the 2001 Comprehensive Plan, the community identified the following important elements of Spokane's future:

- 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.

In addition, in 2016 the community identified the following as ~~The things that are~~ important to Spokane's future: ~~include:~~

Well-maintained multi-modal transportation system

- Year-round accessibility for all people and goods
- Inclusivity
- Diversity

Safe and efficient mobility for all

- Safety, including protecting vulnerable users
- Valuing i~~I~~ndividual t~~T~~ime
- Enhancing personal choice

Economic and community vitality

- Economic Vitality
- Protecting personal rights
- Equitable

- Technological innovation

A healthy, livable community

- Environmental Justice
- Environmental Conservation
- Enhancing the quality of life
- Sustainable
- Stewardship

4.3 GOALS, POLICIES, AND ACTIONS

GOALS

~~NOTE: Goals are designated A through G and Policies are designated as TR 1 through TR 23 for convenience in referencing, but not to reflect any priority. All the goals B through G contribute toward meeting Goal A: "Promote a Sense of Place", and often the Policies contribute toward meeting more than one goal.~~

Since 2001, the Transportation Chapter Goals and Policies section has led off with a Policy stating that transportation decisions are made based on the needs of people using the priority of designing to protect and serve pedestrians first, next consider the needs of public transit and non-motorized modes, and then consider the needs of automobile users. The Discussion section clarified that this is general guidance to be used on a case-by-case basis where pedestrians will not always come first and automobiles last. It is not an anti-automobile policy, but is intended to lead to increased transportation choices, lessen the negative impacts of automobiles as our population increases, and reduce vehicle congestion. It recognized that we are all pedestrians at some point in our moving from point A to point B, and that when traveling outside a vehicle, people, particularly those most vulnerable, need to be safe and comfortable. It recognized that we are auto-dominated and need to improve transportation choices. This policy has served us well since 2001 and has led to noticeable improvements in pedestrian, transit, and bicycle mobility. It has helped to establish design and priority guidance for future projects such as the Complete Streets and Crosswalk Ordinances, the comprehensive Pedestrian and Bicycle and Trail Plans, and funding mechanisms such as the apportionment of part of the TBD Vehicle Tab Fee funds toward pedestrian improvements. The intent of this policy has been retained in this updated Transportation Chapter.

Today, and in our projected future, we must give increasing consideration in our transportation decision making to the need for upgrading the utility systems beneath our roadways and also to project attributes that support economic development. This has led to adoption of an integrated approach to street project design taking all needs, both the components above grade (including sidewalks, streetscapes, crosswalks, bike lanes, transit, and the vehicle roadway) and the utilities below, plus economic development benefits, into consideration in a balanced manner. Thus prioritization of projects has grown more complicated, and to help us make better project decisions we have adopted a Project Evaluation Matrix that helps us more objectively rank projects based on how well they score on a number of specific performance measures which align closely with the Goals and Policies in this chapter.

With the intent of fostering balance and integration, we have chosen not to reflect any priority in these Goals and Policies. Goals are designated A through G and Policies are designated as TR 1 through TR 23 for convenience in referencing only. All Goals B through G contribute toward meeting Goal A: "Promote a Sense of Place", and often the Policies contribute toward meeting more than one goal.

Figure TR 6. City of Spokane Transportation Chapter Goals

TR GOAL A: PROMOTE A SENSE OF PLACE

Promote a sense of community and identity through the provision of context-sensitive transportation choices and transportation design features, recognizing that both profoundly affect the way people interact and experience the city.

INTENT

The term "sense of place" is often used to describe the prevailing character or atmosphere of an individuals' relationship with a place. It describes those qualities and characteristics that make a place special or unique, and that makes people feel

connected to a location. The cultural identity and heritage of a place, through the degree to which it contains visual reminders of its past through preservation, can also help to create a sense of place.

Transportation systems can facilitate a good sense of place by including design features that are sensitive to the context of the place and are tied to surrounding land uses with appropriate streetscape features and elements that meet local community expectations. Unique design features have the ability to set a street or segment of a street apart, helping to create an environment for economic vitality and innovation. Application of place-making design elements should be used in connection with planned land uses and in coordination with stakeholders.

TR GOAL B: PROVIDE TRANSPORTATION CHOICES

Meet mobility needs by providing facilities for transportation options - including walking, bicycling, public transportation, private vehicles, and other choices.

INTENT

The objective is to support the desires of the community to have transportation options by providing options for commuting, recreation and short trips using transit and active modes like walking and biking, as well as other choices such as rideshare, carpooling, taxi/~~lift~~ for hire services, and private vehicles.

Traditional transportation activities focus on the design and construction of facilities– yet travel behavior and mode choice are determined by a broader set of factors~~.~~, The city shall continue to create new, and improve the existing, ~~and an efficient~~ multi-modal system, in order to accommodate~~s the needs for~~ the safe and efficient movement of all people. Effective transportation system management measures should be utilized to support safe and efficient travel for all users.

TR GOAL C: ACCOMMODATE ACCESS TO DAILY NEEDS AND PRIORITY DESTINATIONS

Promote land use patterns and construct transportation facilities and other urban features that advance Spokane's quality of life.

INTENT

Land use type, mix, intensity, and distribution - as a result of on-going development of the City - greatly influences travel choices and decisions on connectivity, placement and investments of transportation facilities. Harmonize the key

relationship between the places where people live, work, learn, access essential services, play, and shop and their need to have access to these places. Transportation investments should help drive economic development, energize activity centers, provide greater food security for residents, and produce quality places/neighborhoods/communities that retain value through time. Creating prosperous and walkable neighborhoods that offer opportunities for people to meet and connect means thinking of streets as people places as much as vehicle spaces.

Spokane recognizes that transportation needs and travel choices may change over time as new alternatives become available. Other modes become viable when land uses are planned in a way that connects to multiple travel options and the distance between daily needs are closer. Coordinating appropriate transportation options and land uses is important. Transportation facilities should be maintained and improved in a manner that equitably serves Spokane.

TR GOAL D: PROMOTE ECONOMIC OPPORTUNITY

Implement projects that support and facilitate economic vitality and opportunity in support of the City's land use plan objectives.

INTENT

The City acknowledges that goods movement is critical to Spokane's economic vitality and well-being. An efficient multi-modal system accommodates the needs for the safe and efficient movement of people and goods on every level – from major industrial areas, to identified centers and corridors, to key neighborhood economic centers.

TR GOAL E: RESPECT NATURAL & COMMUNITY ASSETS

Protect natural, community, and neighborhood assets to create and connect places where people live their daily lives in a safe and healthy environment.

INTENT

Transportation facilities and infrastructure inherently affect the natural environment and character of neighborhoods, business districts, parks, and other community amenities. As such, Spokane recognizes the importance of evaluating transportation projects using objective criteria to reflect community standards and desires.

The city looks to improve livability in residential settings by protecting communities and neighborhoods by encouraging context-appropriate landscaping and beautification of transportation facilities, and improving health and safety for all.

TR GOAL F: ENHANCE PUBLIC HEALTH & SAFETY

Promote healthy communities by providing and maintaining a safe transportation system with viable active mode options that provides for the needs of all travelers, particularly the most vulnerable users.

INTENT

Promote healthy communities in Spokane by implementing a transportation system that provides for the ability to reduce auto mode share, increases the number of active travelers and transit riders of all ages and abilities, and improves safety in all neighborhoods. Work with the Spokane Regional Health District and other agencies to promote active lifestyles through educational and encouragement programs and safe and accessible routes for active travelers of all ages and abilities in all neighborhoods. Consider the needs of all roadway users when applying traffic-calming measures. Implementing safety efforts should be done in a comprehensive manner to safeguard against shifting traffic problems from one neighborhood to another.

Spokane will seek to improve safety through the use of supporting federal and state programs, documents, and policies such as: FHWA Towards Zero Deaths (TZD), the FHWA Highway Safety Improvement Program (HSIP), and Washington State Department of Transportation's (WSDOT) Target Zero: Strategic Highway Safety Plan.

Spokane recognizes the importance of evaluating transportation projects using objective criteria to reflect community standards. An environmental justice approach strives to avoid decisions that can have a disproportionate adverse effect on the environmental and human health of traditionally underserved neighborhoods and vulnerable populations compared to the population as a whole.

TR GOAL G: MAXIMIZE PUBLIC BENEFITS AND FISCAL RESPONSIBILITY WITH INTEGRATION

Design and maintain a fiscally ~~accountable~~efficient, environmentally responsible, and socially equitable transportation system that serves its users through coordinated planning and budgeting with other partners and utilities.

INTENT

The City of Spokane recognizes that transportation has a major effect on the environment and that environmental and fiscal stewardship must be a central focus in establishing and maintaining a transportation system that serves both today's users and future generations.

The 2014 Street Levy identified several key elements:

- Street repair needs are perpetual and ongoing investment is critical to maintain our system
- City will prioritize projects using an integrated approach that considers all needs in the right of way
- City will use a pay-as-you-go approach in maintaining streets

"The City will focus these dollars on improvements on arterials, including both complete rehabilitation of streets and maintenance work, and will use an integrated approach that incorporates all uses of the right of way to leverage dollars and gain greater community benefits."

The intent is to upgrade the arterial roadway system to an average of "good" condition and maintain them there throughout the 20 years. Work would include everything from major reconstruction to sealing cracks. Other dollars, including those generated through the vehicle license tab fee, would be dedicated to repairs on residential and other non-arterial streets, and pedestrian improvements.~~.~~

Spokane will emphasize investments for context-sensitive roadway projects – maintenance, preservation, right-sizing - equitably across the City by seeking funding from a variety of sources and pursuing opportunities for system maintenance revenue for arterials, residential streets, and sidewalks. In addition, the City will remain good stewards of the transportation system by seeking out ways to use cost saving strategies and efficiencies for the best use of the available funds.

POLICIES AND ACTIONS

TR 1 Transportation Network For All Users

Design the transportation system to provide a complete transportation network for all users, maximizing innovation, access, choice, and options throughout the four seasons. Users include pedestrians, bicyclists, transit riders, and persons of all abilities, as well as freight, emergency vehicles, and motor vehicle drivers. Guidelines identified in the Complete Streets Ordinance and other adopted plans and ordinances direct that roads and pathways will be designed, operated, and maintained to accommodate and promote safe and convenient travel for all users while acknowledging that not all streets must provide the same type of travel experience. All streets must meet mandated accessibility standards. The network for each mode is outlined in the Master Bike Plan, Pedestrian Master Plan, Spokane Transit's Comprehensive Plan, and the Arterial Street map.

Key Actions

a. Make transportation decisions based upon the adopted policies, plans, design standards and guidelines, taking into consideration seasonal needs of users, system wide integration, and impacts on the relevant transportation planning decisions of neighboring jurisdictions.
b. Utilize relevant performance measures and adopted level of service standards to track the City's progress in developing the transportation network for all users.
c. Recognize and accommodate the special transportation needs of the elderly, children, and persons with disabilities in all aspects of, transportation planning, programming, and implementation.
    i. Address the community's desire for a high level of accommodation for persons with disabilities by using the applicable and context sensitive local, state, or federal design standards in all projects within the city's right-of-way.
    ii. Implement the City's ADA Transition Plan, pedestrian plan and bicycle plan with a new focus on broader user groups.

TR 2 Transportation Supporting Land Use

Maintain an interconnected system of facilities that allows travel on multiple routes by multiple modes, balancing access, mobility and place-making functions with consideration and alignment with the existing and planned land use context of each corridor and major street segment.

Key Actions

a. Establish and maintain Street Design Standards and Guidelines reflecting best practices to implement designs that effectively support multi-modal transportation while supporting local context and existing and planned land uses.
b. Develop transportation decisions, strategies and investments in coordination with land use goals that support the Land Use Plan and Center and Corridor strategy.
c. Require a transportation plan (which includes connectivity and circulation) as part of any subdivision, Planned Unit Development (PUD), institutional master plan, or other major land use decision – Conduct transportation plans when needed for larger developments or other land uses of appropriate size.

TR 3 Transportation Level-Of-Service (LOS)

Set and maintain transportation level of service standards that align desired growth patterns with optimal choices of transportation modes.

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, bicycle, and pedestrian. In order to encourage development where it is desired, reduced level of service for vehicles, potentially leading to increased congestion, ~~s~~ is permitted in center and corridor areas where growth is being encouraged and where multimodal transportation choices exist. Reducing level of service in these areas has several benefits. Lowering the vehicle level of service in these areas reduces the cost of the infrastructure required to serve these areas. 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-private vehicle modes of transportation in these areas is expected to balance overall transportation needs.

Key Actions

a. Maintain and refine processes to ensure that future developments contribute to mitigation of impacts on local transportation system demand.
b. Ensure that transportation networks adequately serve existing and projected growth by performing periodic review and monitoring. Incorporate Travel

Demand Management strategies into mitigation alternatives in order to maintain acceptable level of services and maximize transportation resources.

c. Measure throughput in terms of number of people passing through an intersection, not vehicles.

~~c.~~d. Partner with Spokane Transit Authority (STA) to meet their established LOS.

TR 4 Transportation Demand Management Strategies (TDM)

Evaluate TDM strategies to optimize transportation options within the context of Complete Streets. Use TDM strategies to gain efficiencies in the transportation system to reduce demand for auto travel.

Key Actions

a. Implement the City's and County's Commute Trip Reduction Plan and explore expansion of reduction plans such as the Growth and Transportation Efficiency Centers (GTEC) plan.
b. Partner with the Spokane Regional Health District (SRHD) to continue (and explore expansion of) programs such as the Walk.Bike.Bus program and pursue funding for additional programs on which to collaborate.
c. Develop partnerships to provide commercial districts with maps identifying multi-modal travel options (transit lines, bike routes, etc).
d. Partner with public (SRTC) and private sector partners to collect and monitor travel pattern data, assess TDM effectiveness and track changes in commute patterns.
e. Coordinate closely with major employers and Spokane County Commute Trip Reduction Program to identify and implement effective TDM measures including incentives for non-SOV commute trips.
f. Incorporate TDM strategies and context sensitive solutions in development projects that impact the City's right-of-way. Design-based TDM measures may include:
    i. Ensuring designs reflect the adopted pedestrian and bicycle plans.
    ii. Ensuring adequate pedestrian, bicycle and transit facilities are addressed in any current codes as well as any anticipated requirements above and beyond the master plan.
    iii. Providing bikeshare/carshare facilities on site for use by the public.
    iv. Orienting development to the street and allowing for a clear path from the front door to pedestrian and transit facilities.
    v. Managing parking in a way that reflects the surrounding land uses and available transit services.
    vi. Participation in neighborhood programs/promotions.

vii. Develop partnerships to provide innovative access to information.

g. Encourage developers who are seeking LEED certification to pursue all points available related to alternative transportation credits.
h. Encourage the expansion of carshare programs in high-density residential areas.
i. Encourage the development and expansion of a bikeshare system.
j. Encourage transportation alternatives through events such as Walk to School Day, or Bike to Work Day.

TR 5 Active Transportation

Identify high-priority active transportation projects to carry on completion/upgrades to the active transportation network.

Key Actions

a. Ensure that the pedestrian and bicycle networks provide direct connections between major activity centers and transit stops and stations.
b. The planning, design and construction of transportation projects should maintain or improve the accessibility and quality of existing and planned pedestrian and bicycle facilities.
c. Implement a network of low vehicle volume, bike-friendly routes throughout the city.
d. Support the development of a bike-share program within the city core.
e. Seek grant funding for projects and programs such as Safe Routes to School, Transportation Alternatives, and other active transportation initiatives.
f. Utilize the Bicycle Plan and the Pedestrian Plan to guide the location and type of bicycle and pedestrian facilities developed in Spokane to:
    i. Provide safe, attractive, convenient and quality pedestrian and bicycle linkages to transit stops and stations.
    ii. Provide safe, attractive, convenient and quality pedestrian and bicycle linkages between major activity areas where features that act as barriers prevent safe and convenient access.
    iii. Provide safe, attractive, convenient and quality pedestrian and bicycle facilities and an aesthetically pleasing environment on bridges.
    iv. Enhance the pedestrian and bicycle environment along routes to schools to provide a safe walking and riding environment for children Means of accomplishing this include:
        - Encouraging school routes not to cross arterials.
        - Having user-activated signals at arterial intersections.

- Implementing safety patrols with traffic-control signs at busy intersections.
- Working with schools to promote walking groups.
- Strengthening and enforcing pedestrian right-of-way laws.

~~iv.~~v. Enhance the pedestrian, bicycle and transit environment along routes to desirable destinations for seniors.

~~v.~~vi. Enhance the pedestrian, bicycle and transit environment along routes in communities with a high percentage of underserved populations.

~~vi.~~vii. Provide safe bicycle and pedestrian access to city parks from surrounding neighborhoods.

g. Provide viable facilities for active transportation modes as alternatives to driving:
   i. Ensure gaps in the bicycle network are identified and prioritized to complete and expand the connected bicycle network.
   ii. Ensure sidewalk gaps are not present and 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.
   iii. Use pedestrian safety strategies on high bicycle and pedestrian traffic corridors.
   iv. Establish and maintain crosswalks at key locations where active transportation facilities cross collector and arterial roadways.

h. Provide secure parking for bicyclists at key destinations (i.e. Downtown, identified Centers and Corridors, schools and universities, community centers, key transit locations) and ensure future developments include bicycle parking on site that adheres to City-established design and siting standards.

i. Work with local and regional partners to implement the "Spokane County Wayfinding and Gateway Feature Placement & Design Plan".

j. Coordinate with other departments and partner agencies to combine related projects for the purpose of cost-sharing.

TR 6 Commercial Center Access

Improve multi-modal transportation options to and within designated district centers~~s~~, neighborhood ~~mini~~ centers, employment centers, ~~activity centers,~~ corridors, and downtown as the regional center.

Key Actions

a. Maintain Street Design Standards and Guidelines to support pedestrian activity and pedestrian-supportive amenities such as shade trees, multi-modal design, street furniture, and other similar amenities.
b. Maintain street design guidelines reflecting best practices to implement designs that effectively manage traffic flow within designated Centers and Corridors while ensuring designs correspond to and support local context.
c. Designate and develop neighborhood greenways and low vehicle volume bicycle routes that parallel major arterials through designated Centers and Corridors.
d. Establish and maintain bicycle parking guidelines and standards for Centers and Corridors to provide sufficient and appropriate short- and long-term bicycle parking.
e. Provide transit supportive features (e.g. sidewalks, curb ramps, ~~bus~~ transit benches, etc.) in support with STA.

TR 7 Neighborhood Access

Require developments to have open, accessible, internal multi-modal transportation connections to adjacent properties and streets on all sides.

Key Actions

a. Increase connectivity by providing walking and biking pathways where roadways do not connect.
b. Ensure future connectivity to adjacent future development on vacant and/or underutilized parcels.
c. Work with STA to plan for access to ~~bus~~ transit stops and consider the location and design of transit ~~bus~~ stops and transit user needs in site design where appropriate.

TR 8 Moving Freight

Identify a freight network that respects needs of businesses as well as neighborhoods. Maintain an appropriate arterial system map that designates a freight network that enhances freight mobility and operational efficiencies, and increases the City's economic health. The needs for delivery and collection of goods at businesses by truck should be incorporated in to the freight network, and the national trend of increased deliveries to residences anticipated.

Key Actions

a. Designate truck freight routes through the city that provide appropriate access without compromising neighborhood safety and livability.
b. Periodically work with commercial freight mapping services to update their truck route information.
c. Provide an easy to find freight map on the City's website.
d. Explore establishing delivery time designations/restrictions in specified areas
e. Support intermodal freight transfer facilities (land to air, rail to roadway, interstate trucking to local delivery).

TR 9 Promote Economic Opportunity

Focus on providing efficient and affordable multi-modal access to jobs, education, and workforce training to promote economic opportunity in the City's designed growth areas, develop "Great Streets" that enhance commerce and attract jobs.

Key Actions

a. Ensure street designs support business activity-and thus jobs creation-to ensure that travelers feel comfortable to stop and shop.
b. Coordinate closely with STA and area colleges and universities to provide convenient, cost-efficient transit service for students.
c. Use new technology when feasible to increase efficiency in all transportation modes, such as:
    i. intelligent feedback to users
    ii. dynamic traffic signals
    iii. priority ~~bus~~ transit routes and signaling
    iv. information sharing about capacity
d. Coordinate closely with STA to identify opportunities for service improvements in designated land use areas.
e. Coordinate with Visit Spokane and other relevant groups to support and promote bicycle tourism in the city and region.
f. Partner with business entities and organizations to educate them and their members on the economic benefits of transit and active transportation oriented development.
g. Implement the city's bicycle master plan for improved city-wide mobility.

TR 10 Transportation System Efficiency & Innovation

Develop and manage the transportation system to function as efficiently as possible while exploring innovative opportunities and technologies.

Key Actions

a. Develop Access Management Strategies for arterials.
b. Ensure coordinated, efficient and safe movement of all roadway users through proper signal spacing traffic control timing, and other intersection controls such as roundabouts and new traffic control coordinating technology where appropriate.
c. Implement Intelligent Transportation System (ITS) improvements as identified by the Spokane Regional Transportation Management Center (SRTMC).
d. Work with WSDOT to implement TDM, ITS, and transportation system management strategies developed through the Corridor Sketch Initiative (CSI).

TR 11 Transit Operational Efficiency

Support efficient transit operations through street and transit stop designs on transit priority streets that comply with standards and include transit-supportive elements, such as shelters, lighting, and schedule information. Assist in implementing the STA Comprehensive Plan.

Key Actions

a. Work with STA on transit system improvements, prioritizing improvements along the designated High Performance Transit Network and coordinating pedestrian and bicycle facilities around designated transit stops and stations.
b. Reference STA's standard plans for the design of all transit stops.
c. Provide appropriate right-of-way, paving and wiring for High Performance Transit Network improvements.
d. Prohibit parking within ~~bus~~ transit stop zones.
e. Prioritize STA fixed routes in city's snow removal planning and operations.

TR 12 Prioritize & Integrate Investments

Prioritize investments based on the adopted goals and priorities outlined in the comprehensive plan.

Key Actions

a. Maintain and update as needed the metrics tied to the long range transportation prioritization matrix used to help determine transportation system capital investments.
b. Link transportation investments with investments made under the Integrated Clean Water Plan to manage stormwater and wastewater.

c. Utilize a least-cost planning approach in prioritizing and integrating the City's investments in infrastructure.

TR 13 Infrastructure Design

Maintain and follow design guidelines (including national guidelines such as MUTCD, NACTO, AASHTO) reflecting best practices that provide for a connected infrastructure designed for our climate and potential emergency management needs, and respecting the local context. Local context may guide signage and elements such as traffic calming, street furniture, bicycle parking, and community spaces. Accessibility guidelines and emergency management needs will be maintained.

Key Actions

a. Require that Urban Context streets be designed to provide a pleasant environment for walking and other uses of public space, including such elements as shade trees; plantings; well-designed benches, trash receptacles, news racks, and other furniture; pedestrian-scaled lighting fixtures as appropriate; wayfinding signage; integrated transit shelters; public art; and other amenities.
b. Maintain street design guidelines reflecting best practices to implement designs that effectively manage traffic flow, reduce the need for street expansions, and make roadways safe for all road users, while ensuring designs correspond with local context.
c. Collaborate with key agencies to plan the locations of arterials, ensuring compatibility with and satisfy the needs of existing and future land uses.

TR 14 Traffic Calming

Use context-sensitive traffic calming measures in neighborhoods to maintain acceptable speeds, manage cut-through traffic, and improve neighborhood safety to reduce traffic impacts and improve quality of life.

Key Actions

a. Work with neighborhood councils and other interested and concerned groups to identify, assess, and respond to unique traffic issues and needs
b. Maintain and improve the neighborhood traffic calming program.
c. Explore implementing lower residential speed limit standards.

i. Many communities, including Seattle, Portland, Washington D.C., and Tucson, among others, are adopting 20 mph for some or all residential streets.

d. Implement / review adopted neighborhood plans.

TR 15 Activation

Build great streetscapes and activate public spaces in the right-of-way to promote economic vitality and a sense of place, with a focus on the designated Centers and Corridors identified in the Land Use chapter

Key Actions

a. Maintain ability for businesses to utilize excess sidewalk capacity for seating as long as an accessible walk route is provided and the sidewalk's use and design is in conformance with the neighborhood plan.
b. Encourage local organizations to develop fun and engaging programming in the community.

TR 16 Right-of-Way Maintenance

Keep facilities within the public rights-of-way well-maintained and clean year-round for the benefit of all while focusing on complete rehabilitation of streets on arterials, and maintenance work on both residential and arterial streets, using an integrated approach that incorporates all uses of the right of way to leverage dollars and gain greater community benefits.

Key Actions

a. Continue to maintain and improve as needed a process for identifying and prioritizing maintenance needs to keep the arterial roadway system at an average of a "good" condition.
b. Develop and maintain a process for keeping priority (arterial, plus other priority streets) streets and sidewalks clear of debris (including snow) and well maintained for the benefit of pedestrians, bicyclists, and drivers.
c. Develop a strategy to identify and address general right-of-way maintenance, including noxious weed control and removal.
d. Increase the understanding and awareness of whose responsibility it is to maintain pedestrian buffer strips, sidewalks, medians, traffic circles and other streetscape right of way elements to improve the maintenance of these elements.
e. Develop public outreach strategies to educate business owners about the benefits of maintaining sidewalks.
f. Develop and institute a process for identifying and repairing broken and uneven sidewalks in conjunction with the responsible adjacent land owner.
g. Develop partnerships to assist neighborhoods facilitate snow removal and other right-of-way maintenance needs.

TR 17 Paving Existing Unpaved Streets

Identify and prioritize resources for paving existing dirt and gravel streets and alleyways to reduce air pollution and prioritize infill and economic development.

Key Actions

a. Collaborate with local and regional agencies and citizens to prioritize roadways and alleyways to be paved.
b. Work with City Council to revisit the threshold required to form a Local Improvement District to fund new paving.

TR 18 Parking

Develop and administer vehicle parking policies that appropriately manage the demand for parking based upon the urban context desired.

Key Actions

a. Conduct outreach to businesses to educate them on the benefits of a smart parking management approach.
b. Implement recommendations from area parking studies such as the Downtown Parking study and the U-District Parking Study.
c. Provide the option of reducing parking supply requirements for development that is designed close to transit and in a manner that supports transit.
d. Develop a system for reducing on-site parking requirements, whereby developers can instead adopt TDM practices such as subsidized transit passes for residents or employees, provision of bicycle parking, or other Commute Trip Reduction practices.
e. Require that bicycle parking and bicycle corrals are designed and sited according to the City-specified standards as illustrated in the City of Spokane Bicycle Parking Application.
f. Review parking minimums to ensure they are not resulting in a disconnect between the amount of parking provided and land use goals.
g. Consider parking maximum policies to limit how much parking is developed.
h. Enforce on-street parking in areas where there are spill over parking from neighboring development to ensure that driveways are not blocked.
i. Develop shared parking strategies to explore:
    i. Where parking is already overprovided, new businesses do not need to create additional supply, but rather can share existing supply.
    ii. Ways to incentivize integrated parking.

iii. Ways to incentivize collaboration among private businesses to co-share parking, particularly in neighborhood districts.
iv. The development of preferred parking districts in areas where on-street parking is difficult for residents to ensure residents are given priority. Charge for parking of non-residents that do not have a parking permit.

TR 19 Plan Collaboratively

Work with partner agencies to achieve a regional transportation plan that meets the goals and requirements of the Growth Management Act (GMA) but also reflects the visions and values of the City of Spokane.

Key Actions

a. Coordinate with SRTC and neighboring jurisdictions on transportation planning, projects and policies to ensure efficient, multi-modal transportation of people and goods between communities regionally.
b. Coordinate the setting and maintaining of transportation level of service standards with other agencies and private providers of transportation to ensure coordination and consistency when possible.
c. Coordinate with WSDOT in areas where Highways of Statewide Significance (HSS) intersect/impact the local roadway network.
d. Use the adopted Countywide Planning Policies (CWPP) as additional guidance for transportation planning.
e. 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.
f. Share information between transportation entities on a regular basis and during appropriate phases of projects and comprehensive plan updates and amendments.
g. Coordinate with Spokane Transit Authority to ensure and support an efficient transit system.

TR 20 Bicycle/Pedestrian Coordination

Coordinate bicycle and pedestrian planning to ensure that projects are developed to meet the safety and access needs of all users.

Key Actions

a. Coordinate City of Spokane departments and other agencies to efficiently provide transportation alternatives and facilitate the accomplishment of the City's transportation priorities.
b. Incorporate bicycle/pedestrian facilities as early as possible into development and roadway plans to reduce costs and take advantage of cooperative opportunities.
c. Seek funding sources for active transportation projects.
d. Maintain Street Design Standards and Guidelines to ensure that public and private developments meet a variety of transportation needs. Refer to national references (such as NACTO) for facilities design when updating the standards and guidelines.
e. Develop transportation-related educational programs for both non-motorized and motorized transportation users.
f. Consistently update and implement the pedestrian and bicycle master plans for active transportation users.

TR 21 Safe & Healthy Community Education & Promotion Campaigns

Promote healthy communities by providing a transportation system that protects and improves environmental quality and partner with other agencies to implement innovative and effective measures to improve safety that combine engineering, education, evaluation, and enforcement.

Key Actions

a. Develop educational campaigns that promote alternatives to driving alone for the purpose of reducing environmental impacts and travel costs.
b. Develop partnerships with local agencies to implement public safety campaigns aimed at driver, pedestrian, and bicyclist awareness of and respect for each other. Campaigns should focus on maintaining safe speeds, practicing safe behaviors on the road, and calling attention to vulnerability of some road users.
c. Develop partnerships to educate residents on the economic and health benefits of active transportation.

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

TR 22 Law Enforcement & Emergency Management

Partner with other agencies to bolster enforcement efforts to protect the safety of all users, particularly the most vulnerable, while identifying and addressing emergency management needs

Key Actions

a. Develop partnerships with local fire departments, law enforcement, and emergency management providers to incorporate quantitative based targeted decision-making with the purpose of prioritizing efforts towards the greatest need between commercial motor vehicle (CMV) enforcement, traffic patrols, and education.
b. Work with local and regional partners and emergency management providers to maintain reliable mobility and access for emergency management needs.
c. Identify locations for targeted enforcement efforts throughout the City in partnership with the Police Department, City Council, and Community Assembly.
d. Work with the Police Department to integrate greater understanding and enforcement of pedestrian and bicycle regulations into officers' regular duties and activities.
e. Educate residents on their rights and responsibilities as roadway users, regardless of mode choice.
f. Develop a red light and speed enforcement placement model to ensure that the city's automated enforcement program does everything it can to protect Spokane residents.

TR 23 Effective and Enhanced Public Outreach

Assess the effect of potential transportation projects on gathering places or destinations such as schools, community centers, businesses, neighborhoods, and other community bodies by consulting with stakeholders and leaders that represent them. These effects are to be mitigated as possible in collaboration with stakeholders.

Key Actions

a. Develop community engagement plans for projects to ensure opportunity is provided for all potentially impacted parties to make concerns known.
b. Provide multiple opportunities for stakeholders to provide input on projects (before they are planned, while they are being scoped or planned and during design).
c. When significant changes or impacts are anticipated as a result from a proposed project, a community advisory group may be established to ensure representative stakeholders have a role in mitigating impacts.

4.4 MODAL ELEMENTS

The Transportation Element of the Spokane Comprehensive Plan integrates all transportation modes to ensure Spokane is a place that provides residents with multiple travel options. To reach the City of Spokane's Transportation Vision and achieve the transportation goals, protection of the environment is essential. Protection addresses 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. This chapter reviews high level concepts that impact the use of various transportation modes, and reviews the multiple networks – existing and planned – that utilize the roadway system simultaneously.

CENTERS AND CORRIDORS

To establish active destination centers and lively corridors that bring together residents of Spokane via multiple modes of transportation, a few key objectives must be considered. Density, transit access, and walkability are important factors to introduce alternative modes of transportation, encourage development fitting for Spokane's character, and facilitate economic development in these identified areas.

Bikeability and Walkability

Establishing a well-connected pedestrian and bicycle network of bicycle facilities, sidewalks and recreational paths is essential for creating a lively environment. In neighborhoods, pedestrian and bicycle networks connect people to residences, schools, and local retail destinations without being forced to walk along the street. Such networks are critical for the success of activity centers and active corridors as they allow for high levels of non-motorized~~pedestrian~~ traffic to remain safe while soliciting local businesses and completing shorter trips.

Along some corridors, vehicle speed, sidewalk conditions, and lack of crossing opportunities create a barrier to bikeability and walkability. In these cases, traffic calming and sidewalk improvements are necessary tools to activate bicycle and pedestrian space.

Density

The quantity of people concentrated in an area has a significant impact on the levels of activity and liveliness of an area. Centers where people can "live, work and play," are often successful due to the density that accompanies these spaces. While not all neighborhoods must be dense, specific centers and corridors, such as downtown Spokane, could benefit from increasing the number of residents and destinations. Infill development in these areas should be encouraged as much as possible. By adding residences to already active areas where jobs and recreational opportunities

are located, Spokane can encourage the use of alternative modes of transportation such as walking, bicycling, and transit.

Transit

Facilitating transit access has the significant potential for helping large volumes of people to reach their destinations without a car, especially when linking neighborhood communities to major destinations. Increasing transit service, frequency, span and coverage are key tools that can improve ridership, these are typically costly ongoing investments. There are also smaller capital investments that can be made to improve transit. ~~Bus~~ Transit shelters and real-time information availability are noted as desired improvements that can be used to improve ridership. These improvements focus on the ridership experience, by providing riders with a comfortable place to wait, as well as with information to allow people to make the most of their time.

~~Walkability~~

~~Establishing a well-connected pedestrian network of sidewalks and recreational paths is essential for creating a lively environment. In neighborhoods, pedestrian networks connect people to residences, schools, and local retail destinations without being forced to walk along the street. Such networks are critical for the success of activity centers and active corridors as they allow for high levels of pedestrian traffic to remain safe while soliciting local businesses and completing shorter trips.~~

~~Along some corridors, vehicle speed, sidewalk conditions, and lack of crossing opportunities create a barrier to walkability. In these cases, traffic calming and sidewalk improvements are necessary tools to activate pedestrian space.~~

DEMAND-SIDE APPROACHES

TDM measures help to increase efficiency within the transportation system by collectively working to change how, when, where, and why people travel. Supporting alternative modes - cycling, walking, transit, and carpooling - gives employees, residents, and visitor's incentives to reduce reliance on the single-occupant vehicles. TDM approaches can be an important, cost-effective solution to overall transportation challenges, both reducing vehicular impact and parking demand, while improving the accessibility and success of a new development. A successful TDM approach typically includes a variety of strategies. These strategies work together to achieve a more sustainable transportation system by making the most of the existing infrastructure.

Incorporating TDM strategies in a new development serves not only to make better use of transportation infrastructure, but also to reduce the demand for new roadway capacity. It can also result in better place-making and community building; TDM can help make developments and neighborhoods more attractive places to live, work, and visit. Workplaces and developments that have a vested interest in making places more accessible to employees and residents often emerge as vibrant, walkable neighborhoods with desirable amenities.

Many of the transportation demand management strategies listed below have synergistic effects (i.e., a combination of strategies will be more effective together than individually). Results, such as mode split changes or reductions in traffic or parking demand, vary depending not only on the context, but also on how strategies are implemented in relation to one another.

The City should continue to improve upon TDM strategies that are already being used in the region and continue to explore implementation of other TDM strategies covered in Volume V. TDM strategies appendix.

PEDESTRIAN NETWORK

Pedestrian Priority Zones

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

Walking is the most fundamental transportation choice -- the starting place for all journeys, even as people walk to their cars, transit, or bicycle to move between the places they visit throughout the day. Due to the importance of walking and the fact that nearly all Spokane residents walk at some point the importance of focusing on and improving the walking environment has been a focus of the transportation update effort that culminated in the 2015 Pedestrian Plan.

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

The City created and adopted the Pedestrian Plan in 2015 to ensure that the pedestrian realm of a multi-modal transportation system was addressed as the City continues to pursue implementation of its Complete Streets ordinance.

The pedestrian plan vision and goals are included here to ensure that they are integrated into the overall transportation chapter. These goals are also used to guide the content of the street design standards. These pedestrian plan and pedestrian needs are further criteria used when prioritizing capital projects and ranking these priorities in the 20 year capital project list.

Pedestrian Master Plan Goals

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

- **Goal 1 Well Connected and Complete Pedestrian Network** - Provide a connected, equitable and complete pedestrian network within and between centers and corridors and Pedestrian Priority Zones that includes sidewalks, connections to trails, and other pedestrian facilities, while striving to provide barrier-free mobility for all populations.

- **Goal 2 Maintenance and Repair of Pedestrian Facilities** - Provide maintenance for and improve the state of repair of existing pedestrian facilities.
- **Goal 3 Year-Round Accessibility** - Address the impacts of snow, ice, flooding, debris, vegetation and other weather and seasonal conditions that impact the year-round usability of pedestrian facilities.
- **Goal 4 Safe and Inviting Pedestrian Settings** - Create a safe, walkable city that encourages pedestrian activity and economic vitality by providing safe, secure, and attractive pedestrian facilities and surroundings.
- **Goal 5 Education** - Educate citizens, community groups, business associations, government agency staff, and developers on the safety, health, and civic benefits of a walkable community.

Project Identification/Pedestrian Improvement Methodology

The Pedestrian Priority Zones (Map TR 4) provide guidance for identifying high priority areas for future pedestrian improvements. The Pedestrian Priority Zones were identified using the pedestrian needs analysis. The Pedestrian Needs Analysis compares pedestrian demand indicators with existing pedestrian infrastructure, and is used to compare different locations to help make data-driven decisions that are equitable and fair. This is only one tool to assist with prioritizing locations for pedestrian projects; it should not be used as the sole determinant for making decisions. An integrated approach that includes availability and stipulations of funding, community support, and cost sharing opportunities with other planned projects will be considered in the decision making process. Pedestrian projects and other street projects are identified in the Six-Year Comprehensive Street Program which is updated annually.

Adopted Pedestrian Master Plan – Ordinance C35315

The adopted City of Spokane Pedestrian Master Plan was adopted by City Council on November 2, 2015. The document includes the following sections:

- Existing guiding documents
- Best practices for pedestrian-friendly design
- Pedestrian Needs Analysis
- Crash Analysis
- Programmatic Recommendations
- Project Identification / Pedestrian Improvement Methodology
- Potential Funding Sources

Americans with Disabilities Act (ADA) Transition Plan

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

BICYCLE NETWORK

The Spokane Bicycle Master Plan creates a vision for enhancing bicycling opportunities for all residents of Spokane. 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.

Riding a bicycle is the most efficient form of personal transport. The city recognizes this, and recent planning efforts have focused on finding a way to make cycling safe, accessible, convenient, and attractive.

Spokane is working towards 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 the Master Bike Plan, a living document that will provide guidance and serve as a reference as this vision becomes reality.

Bicycle Master Plan Policies

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

- **BMP 1:** Continually increase the bicycle mode share for all trips.
- **BMP 2:** Complete and maintain connected bikeways that provide safe transportation for Spokane cyclists throughout the City.
- **BMP 3:** Provide convenient and secure short-term and long-term bike parking to connect people to popular destinations and transit throughout Spokane and encourage employers to provide shower and locker facilities.
- **BMP 4:** Increase bicycling by educating people using all transportation modes about the benefits of bicycling to the entire community.. Enhance the

safety of people riding bicycles through effective law enforcement, education and detailed crash analysis.

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

2017 Bike Master Plan Update

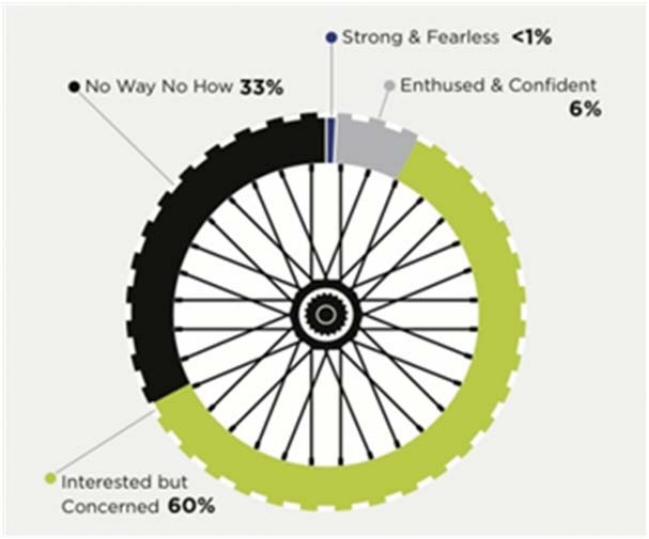


Figure TR X. Categories of Bicyclists

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

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

- **Strong & Fearless:** Representing the smallest portion of the population, this group is willing to ride on roads regardless of the speed and volume of traffic or the facilities provided.
- **Enthused & Confident:** Representing a larger portion of the population than the Strong & Fearless category, this group is comfortable riding in the road next to cars, but appreciates designated bicycle facilities.
- **Interested but Concerned:** Representing the largest segment of the population. This group likes to ride bicycles, but do not ride regularly due to safety concerns. They

generally will not ride on higher volume and higher speed roads such as arterials without facilities that buffer them from automobile traffic. These riders perceive traffic, safety, and other issues as significant barriers to bicycling.

- **No Way No How:** This category typically represents about a third of the population. This group does not bicycle due to a lack of interest or ability.

Bikeway Network Definition

Implementation of this Plan will establish roughly a 300-mile network of bikeways throughout the city of Spokane. This Bikeway Network is composed of all of the locations throughout the city where specific improvements have either already been made or are proposed in the future to accommodate bicycles.

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

Table TR 1 identifies the type of bicycle facilities identified in the Bicycle Master Plan.

TABLE TR 1 – BICYCLE FACILITY CLASSIFICATIONS

Class	Description
Shared Roadway	A Shared Roadway designation is typically found on important roadways where bicycle lanes may not be feasible. The High and Moderate designation provides an indication of the level of traffic and/or conflict the cyclist can expect to experience.
Bike Lane (High or Moderate Traffic)	A bike lane is identified by on-street striping. Buffered bike lanes are also included in this category. The High and Moderate designation provides an indication of the level of traffic and/or conflict the cyclist can expect to experience. The actual design will depend on the roadway width and traffic conditions. A 5 foot bike lane with a 2 foot buffer is preferred.
Neighborhood Greenways	Neighborhood Greenways are low-volume and low-speed streets that have been optimized for bicycle and pedestrian travel. Neighborhood Greenway treatments can be applied at several different intensities, which should be identified in detail during project design.
Bike-Friendly Routes	A bike-friendly route is a low-volume route marked by bicycle signage and/or the use of shared lane markings. These routes are attractive to beginning and intermediate level riders.
Shared Use or Multi-Use 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

Spokane's Bikeway Network

Map TR 5 shows the future bikeway network along with proposed facility types.

Shared Use Paths

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

Children of the Sun

The Children of the Sun trail is the pedestrian and bicycle trail provided through the North Spokane Corridor that will connect neighborhoods along the corridor to other

trails along the route. This trail will connect neighborhoods to other major trails including the Centennial Trail, Tuffy's Trail in the Chief Gary Park neighborhood, the Ben Burr Trail, and the eventual Spokane Valley-Millwood Trail. The facility may also provide connections from the Ben Burr Trail to the west to the east along the I-90 corridor, connecting to new pedestrian and bicycle bridges over I-90.

Ben Burr Trail

The 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 Health Sciences Campus and the Centennial Trail to the north.

Fish Lake Trail

The Spokane Parks and Recreation Department owns a railroad right-of-way between the City of Spokane and Fish Lake. The Fish Lake Trail leaves West Spokane (southeast corner of Government Way and Sunset Highway) and runs south through open forest to reach Queen Lucas Lake, which is 1.5 miles north of the trail's ultimate planned destination, Fish Lake Regional Park. The remaining 2.5 miles of the trail will cross active railroad tracks and connect to Fish Lake Park and Cheney's trail. A safe way to get people across the tracks is needed. Most likely bridges will be the safest solution, although expensive at a cost of approximately $6 million. Upon completion of this gap, two bridges over active rail lines will join this trail to 3.5 paved miles of the Columbia Plateau Trail, serving as a corridor for commuting and recreation between Spokane and the college town of Cheney.

Spokane Valley-Millwood Trail

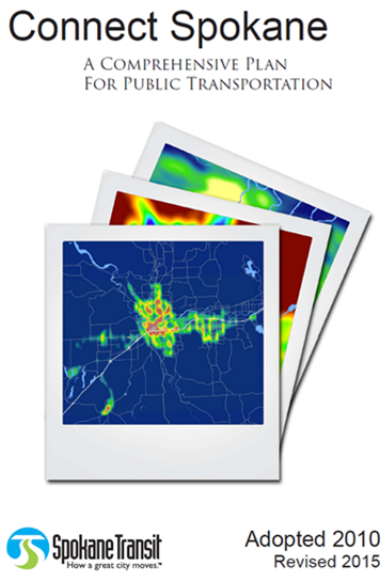
The Spokane Valley-Millwood trail will connect on both ends to the Centennial Trail, providing a loop and access for residents of Spokane and Spokane Valley to the non-motorized network of trails in Spokane. The trail will use the abandoned Great Northern Railway right-of-way that is now owned by Spokane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

Centennial Trail

The 39-mile Centennial Trail parallels the Spokane River from Nine Mile to the Idaho border. The trail continues in Idaho through Post Falls and Coeur d'Alene. Currently, the trail has several gaps within the city of Spokane. Gaps include:

- Mission Avenue - Crossing Mission Avenue and continuing east on Upriver Drive is a safety challenge requiring special design attention. Mission Avenue is a major east/west four-lane arterial over the Spokane River. From Mission Park, Centennial Trail users are faced with BNSF railroad track crossing, a challenging pedestrian crossing and a tight right turn to deteriorating sidewalks next to congested west-bound traffic to reach Upriver Drive.
- Summit Blvd to Pettet Drive – Currently an on-street segment, this segment will ultimately connect to the shared-use path along Pettet Drive constructed in 2016.
    - Future alignment plans called for the construction of a high-deck bridge over the Spokane River from to the property formerly owned by the Sisters of the Holy Names. This would remove much of the on-street section of the Centennial Trail next to Summit Blvd and Pettet Drive.

TRANSIT NETWORK



The Spokane Transit Authority (STA) is the Spokane region's municipal corporation set up to provide public transportation services within the Spokane County Public Transportation Benefit Area. STA's latest long range Comprehensive Plan titled "Connect Spokane" originally adopted in 2010 was developed after extensive public feedback and in cooperation with the jurisdictions STA serves.

STA's ongoing shorter term planning process called STA Moving Forward is a 10-year planning effort that outlines the High Performance Transit network and the next phase of the transit system implementation strategy of Connect Spokane.

Based on years of input from citizens and technical preparation, STA's plan aims to largely maintain the existing transit system while adding more resources where needed to improve service levels throughout the region. With more jobs and people on the way, the community

has consistently told Spokane Transit that it is ready to continue building the transit network to support a growing population and economy.

Every major planning document in the Spokane region calls for improvements in transit services to support development and enhance transportation options. The Metropolitan Transportation Plan, Horizon 2040, explicitly calls for many of the projects contained in the STA Moving Forward Implementation Plan. The City of Spokane's Comprehensive Plan calls for more transit to support the Centers and Corridors focused land use plan. STA has coordinated closely with the City to develop an improvement plan that aligns with the City's land use and transportation goals.

By adding transit service where it is needed, constructing park and ride lots, and enhancing the speed and reliability of transit service, this plan is estimated to increase ridership of STA's fixed route system by more than 3.3 million rides a year by 2024, more than a 30% increase over today.

The STA Moving Forward plan proposes the implementation of two full High Performance Transit lines, improved night and weekend service, service expansion to new areas, new commuter service, new or expanded park and rides/transit centers, new shelters and passenger amenities among other improvements. Spokane Transit has taken steps to improve the quality of service by investing in real-time vehicle tracking technologies to help customers make better travel decisions, preserving the quality and cleanliness of its fleet and facilities and making incremental improvements within the financial means currently anticipated.

Spokane Transit is proposing to maintain and expand the regional transit system by adding more transit routes and service and improving fixed route bus, paratransit and vanpool services. This new service will result in increased ridership and economic vitality for the region.

High Performance Transit Network

The High Performance Transit Network (HPTN) (Map TR 6) is a network of corridors providing all-day, two-way, reliable, and frequent service which offers competitive speeds to the private automobile and features improved amenities for passengers. The HPTN defines a system of corridors for heightened and long-term operating and capital investments.

High Performance Transit Principles

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

High Performance Transit Corridors

Map TR 6 identifies the proposed routes of the High Performance Transit Network as of 2016. Short descriptions of some of the corridors are found below.

Cheney Corridor

Implementation of High Performance Transit between Cheney and Downtown Spokane will enhance service on the West Plains by improving the frequency, hours of service, passenger amenities and the operation of an enhanced bus along the path of current Route 66 Cheney. Additionally, the West Plains Transit Center would be constructed and existing Route 62 Medical Lake would be modified to serve the Transit Center, creating all-day connections between Cheney, Airway Heights and Medical Lake without having to go to Downtown Spokane.

Central City Line

The creation of the Central City line will move more people without more cars, help grow the Central City economy and optimize financial investments in Central City infrastructure. Running from Browne's Addition through Downtown Spokane and Gonzaga University to Spokane Community College, the Central City line will provide frequent service, expand the hours of service, provide improved passenger amenities and operate with electrically powered buses. This line will allow more transit options

throughout the region for people who don't need to travel through downtown to reach their destination. Additionally, the Central City Line will change transit operations at the downtown Plaza. The line will not dwell for five minutes at the Plaza, like most routes do today, but load passengers and continue on. Operating the line with high frequency enables an enhanced network where fewer routes travel downtown and dwell at the Plaza. The adopted route is shown in Map TR 7.

High Performance Transit Corridors in Transition

North Monroe-South Regal Line

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

North Division Line

The enhancement of existing Route 25 Division would add needed capacity by increasing the size of the buses and improve reliability of the route. The busiest route in the system would also see some interim passenger amenity improvements until a study regarding how full High Performance Transit would be implemented on Division is complete. In the interim, Route 25 will shift away from laying over at the Plaza, improving reliability and enhancing transit operations at the Plaza.

FREIGHT NETWORK

One of the objectives of the Freight Element (as identified in the Washington State Freight Mobility Plan) is the development of an urban goods movement system that supports jobs, the economy, and clean air for all; and provides goods delivery to residents and businesses. Map TR 8 identifies the primary routes used by freight and estimated total tonnage along those routes in 2015 (http://www.wsdot.wa.gov/Freight/FGTS/)

Arterial Network

The City of Spokane has identified a Heavy Haul Arterial Network (Map TR 9) to support commerce and freight and goods movement within and trough the City. These arterial routes require roadway designs in line with the function of carrying the highest volumes of truck traffic. In addition, the Spokane Municipal Code provides a map of truck routes throughout the City to guide trucks for local delivery. This network establishes corridors within the City's transportation network to support freight and goods movement through the City and to areas supporting industrial

uses, warehousing and trucking operations. The needs of vehicles supporting local goods delivery will be balanced with the context of the areas to be served.

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

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

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

- Havana Street Bridge connection from Broadway to Trent.
- Martin Luther King, Jr Road - wide load detour route from Trent to Riverside.
- Washington State Department of Transportation projects:
    - North Spokane Corridor
    - Highway 2
    - US 195 Safety Improvements
    - Trent Bridge replacement

North Spokane Corridor

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

The bulk of the remaining design on the project will occur from 2017 through 2023 with the facilities construction being completed within the Washington State 2027-2029 biennium, according to the state adopted budget plan.

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

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

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

Bridge Inventory

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

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

Rail Network

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

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

Factors that could significantly affect future rail volumes include:

- **New bulk exports.** The most significant near-term development facing Washington's rail system is the introduction of additional coal traffic that would be exported from the Pacific Northwest to Asia. The source of this coal

would be the Powder River Basin, which now has an excess of production capacity following declines in domestic demand.

- **Shifting modal economics between rail and truck.** The modal economics of ground transportation are in flux. Some developments will tend to increase the relative mode share of rail, while other developments will tend to decrease the relative share of rail.
- **Fluctuating fuel costs and potential conversion to alternative sources of energy.** Presently, fuel comprises more than 20 percent of rail operating costs and more than 40 percent of motor carrier costs, making transportation costs very sensitive to fuel prices. The advent of low cost natural gas offers a potential savings on an equivalent energy basis of as much as 70 percent. For example, rapidly falling costs of liquefied natural gas, which is now approximately one-third the cost of diesel fuel, have encouraged a new look at using this fuel for powering trains. In 2013 BNSF reported that it will begin testing a small number of locomotives using LNG. While the incentive to convert is strong at present, technological hurdles for both railroads and long-haul truckers are substantial.

Air Network

Air cargo consists of both air freight, which includes all non-mail items shipped in the belly of passenger planes and on planes dedicated to freight, and air mail. Air freight makes up approximately 90 percent of total air cargo volume in Washington.

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

The Airport is located in an area often referred to as the West Plains within Spokane County. The Airport is located within a large area of industrial zoned lands that the region in focusing on expansion of aerospace, logistic warehousing, and other manufacturing and industrial uses.

GEG serves scheduled and charter commercial passenger airlines, scheduled and charter commercial freight airlines, military users, and general aviation. The Airport

offers non-stop service to destinations across the Western, Midwestern, and Central United States, and onward connections to the rest of the country and the world.

Service Area

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

Roadway Access Considerations

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

Airport management has identified three concerns pertaining to existing and future vehicle access and circulation. The first concern is that peak traffic volumes on eastbound U.S. Highway 2 cause delays to left-turning traffic at the Spotted Road intersection. Vehicle accidents along U.S. Highway 2 have elevated the safety concerns in this area. The second concern is that Geiger and Flightline Boulevards routinely experience congestion associated with heavy truck traffic. The third concern is that development of the planned new runway at the Airport could result in the need to realign roadways that provide access to GEG, which could influence terminal building development.

Summary of Major Improvements

Major landside improvement projects at GEG are expected to occur during the long-term, and several street access projects are being conducted by other organizations. Airport-specific landside improvement projects include the following.

By 2020:

- Construct a separate commercial vehicle pick-up and drop-off lane, improve signage access road signage, and street side and median landscaping.
- Relocate and expand the parking garage office.
- Relocate 280 rental car spaces to Parking Garage One.
- Construct access and internal roadways within the Airport Business Park.
- Continued safety improvements and project support on surface roads.

By 2030:

- Construct additional surface parking as needed between inbound and outbound Airport Drive.

Beyond 2030:

- Realign Hayford Road to accommodate new runway.
- Combine inbound and outbound Airport Drive at Spotted Road; and construct an overpass.
- Realign Airport Drive to access new midfield terminal, provide additional infill space for parking, improve terminal complex circulation.
- Preserve a corridor to connect new midfield terminal with potential regional high performance transit.

AUTO NETWORK

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

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

Street Network Classification

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

Arterial Classification

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

Table TR 2 identifies the various roadway classes and descriptions for Spokane, as defined by the FHWA[1].

TABLE TR 2 – ARTERIAL STREET CLASSIFICATIONS

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

The cities arterial street map is shown in Map TR 12. Upon adoption of the Transportation Plan the changes on this map are forwarded to WSDOT for approval at the state level. The city intends to have its own arterial street map be the same at the one adopted at the state level. Any variation between the two may be due to a difference in traffic volume, where a street may be treated as a collector by the city but there is insufficient traffic for it to meet the standards for a collector at the state level.

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

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

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

State Highways and Highways of Statewide Significance

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

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

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

US 195 corridor

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

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

The City of Spokane has identified several projects along the entire I-195 corridor within the City that will require future study. The study will be a collaborative effort between the City and WSDOT and will utilize a least-cost planning approach in identifying practical solutions for future corridor needs and improvements

WSDOT Corridor Sketch Initiative

The Corridor Sketch Initiative is a new way for the Washington State Department of Transportation to work jointly with partners to capture and document consistent baseline information about each transportation corridor around the state in order to inform future investment decisions. A corridor sketch will contain information that describes the characteristics of each corridor, its current and future function, as well as its performance expectations. The corridor sketches will ultimately identify cost-effective strategies for future consideration. A corridor sketch is not a substitute for detailed planning and analysis, nor is it a list of investments or projects. The Corridor Sketch Initiative provides an opportunity for enhanced collaboration with WSDOT's partners to achieve a common understanding and to develop a set of strategies for all state highways.

Forecasts & Growth

The Growth Management Act (GMA) requires that this plan support the land uses envisioned in the Comprehensive Plan (RCW 36.70A.070(6)(a)(i), RCW 36.70A.070(6)(a)(iii)(E), WAC 365-196-430(2)(f).) The land uses have been incorporated into the regional travel demand model that is maintained by the Spokane Regional Transportation Council. The model provides a traffic forecast that is typically 20-25 years into the future, depending on the horizon year selected by the region. At this time the model forecasts traffic in 2040.

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

Level-of-Service Standards

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

For vehicles, LOS is a qualitative measure describing operational conditions within a traffic stream, based on service measures such as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, as defined in the TRB Highway Capacity Manual. The City of Spokane requires analysis of control delay for each movement at two-way stop unsignalized intersections and aggregated average control delay for signalized intersections and all-way stop intersections. This measure is then equated to a letter value, LOS A through LOS F. With the exception noted in the concurrency section, this standard applies to both the AM and PM peak hours.

Locally Owned Facilities

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

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

State Highways

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

- LOS D for all arterial intersections on HSS routes as established by the 2007-2026 Highway System Plan (Appendix G). When a development affects an

intersection where the LOS is already below the applicable threshold, the pre-development LOS will be used instead.

- LOS D for all arterial intersections on Non-HSS routes as established by the 2007-2026 Highway System Plan (Appendix G). Typically the level of service for non-HSS routes is defined by the MPO/RTPO in the Metropolitan Transportation Plan. However, since this MPO/RTPO standard has not been set, the LOS for the HSS routes will apply. When a development affects an intersection where the LOS is already below the applicable threshold, the pre-development LOS will be used instead.

Non-Motorized LOS

The City has adopted a level-of-service for non-motorized facilities based on a percent of network completed. This level-of-service standard is used for concurrency purposes only.

Concurrency

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

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

The City's concurrency system has historically focused solely on vehicular traffic. But it is now being expanded to include non-motorized transportation modes and corresponding improvement projects. This is encouraged by state regulations such as RCW 36.70A.108 and WAC 365-196-840(4)(b).

Vehicle Policy

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

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

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

Non-Motorized Policy

The department shall perform a concurrency test for non-motorized transportation on an annual basis at the end of construction season.

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

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

Pavement Management

Currently Spokane has nearly 2100 lane miles of paved streets and more is often added with new development. Arterial streets account for approximately 760 of the total lane miles. The Street Department manages its pavements by regularly assessing their condition and performing routine maintenance as far as budget constraints will allow. City streets are visually inspected to document their existing condition. After roads are inspected, a condition index is calculated from 0-100. Generally, streets rated 70-100 are considered "Good." One of our goals is to keep "good" streets in "good" condition. When roads begin to fail, they fail quickly and the costs to repair them increases dramatically. While it might be tempting to fix all "failed" streets first, it would be so expensive no money would be left for preventive maintenance or rehabilitation of "fair" to "good" streets.

PASSENGER RAIL NETWORK

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

4.5 IMPLEMENTATION

20 Year Transportation Project Lists

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

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

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

- The projects listed in the previous version of the transportation chapter of the Comprehensive Plan
- Adopted Neighborhood and Sub-Area Plans
- The Downtown Plan & the U-District Plan
- The Spokane Regional Transportation Council – Horizon 2040
    - Transportation Plans for jurisdictions surrounding the City
    - Spokane Airports Master Plan
- Spokane Transit Authority – Connect Spokane & STA Moving Forward
    - High Performance Transit Network / Central City Line
- City Bicycle and Pedestrian Plan
    - Spokane Area Safe Routes to School
- City Transportation Impact Fee Project List
- Joint West Plains Transportation Study
- WSDOT Plans and Projects
    - North Spokane Corridor, Route Development Plans, Washington Transportation Plan

- Current Arterial Pavement Conditions and Utility Conditions

20 Year Integrated Project Funding Strategy

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

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

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

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

The Integrated Clean Water Plan specifies that as part of the City's long term effort to reduce pollution to the rivers, stormwater removal systems (Green Infrastructure) are to be incorporated into street projects. This helps to reduce the amount of stormwater in the Combined Sewer Overflow system and reduces the

amount of water to be treated at water reclamation facilities or that flows straight to a river. These projects use different technologies and often involve using street right of way for either storage facilities or piping to move water from a source to a treatment facility. This combination of treatment techniques achieves greater pollution reduction than would have been possible if these water investments were implemented just to meet regulatory requirements. When these projects are coordinated and integrated with transportation projects the public is able to have multiple system improvements while disrupting the local area only once.

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

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

Examples of projects incorporating or testing new Green Infrastructure / Storm Water systems include:

- Havana Street Rebuild including stormwater improvements and dedicated bicycle lanes using permeable pavement.
- 37th Avenue Stormwater Pipe Upsizing
- Crestline Complete Street Construction

2014 Street Levy

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

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

2014 Water and Sewer System Utility Contribution

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

The City is approaching its work in the right of way in an "integrated" fashion, considering all uses of the street right of way with each project. The effort focuses on incorporating public and private utility work, stormwater management, economic development opportunities, and facilities to support multiple modes of transportation from vehicles to bikes and pedestrians to mass transit and freight mobility. To support that integrated approach, the City has committed an annual $5 million investment in maintaining the condition of the street from the City's utilities, which use City right-of-way to serve customers.

Financial Outlook Projection

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

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

New sources for the next 20-years include the previously mentioned Street levy and the sewer system utility contribution.

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

TABLE TR 3 – PROJECTED REVENUE

Revenue Source	Low	High
Local Funds (Levy, Utility, REET)	$265,000,000	$275,000,000
Grant Funds	$50,000,000	$70,000,000

TABLE TR 3 – PROJECTED REVENUE		
Revenue Source	Low	High
TOTAL	$315,000,000	$345,000,000

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

20 Year Project Prioritization

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

Financially Constrained Project List

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

In developing the financially constrained lists, it was necessary to make assumptions regarding future available funds based on best available data in 2017.. The number of projects to be considered financially constrained will necessarily change based upon actual future funding.

Transportation Goals Used as Evaluation Categories

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

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

Project Categories

Within the prioritization matrix, projects are organized as follows:

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

20-Year Arterial Strategy

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

- Integrated Street Rebuilds
    - o ~~Roadway~~Transportation Projects of Significance
- Maintenance / Overlays
- Everything has its Place

Integrated Street Rebuilds

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

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

TABLE TR 5 – INTEGRATED STREET REBUILDS

ID	Project Name	Project Location	Project Description
1	Main Avenue	Monroe to Wall	Full depth reconstruction, SW repair, structural sidewalk mitigation, stripe bike lanes, redo lighting (parking funds)
2	Sprague	Howard to Browne	Full depth reconstruction, SW repair, structural sidewalk, stripe bike lanes, redo lighting (parking funds)
3	Spokane Falls Blvd.	Post to Division	Full depth reconstruction, SW repair, structural sidewalk, redo lighting (parking funds)
4	1st Ave	Wall to Bernard	Full depth reconstruction, SW repair, structural sidewalk, redo lighting (parking funds)
5	27th Avenue	SE Blvd to Ray	Full depth reconstruction, SW repair
6	Howard Street	SFB to Riverside	Full depth reconstruction, SW repair, structural sidewalk, redo lighting (parking funds)
7	Howard Street	Sprague to 4th	Full depth reconstruction, SW repair, structural sidewalk, redo lighting (parking funds)
8	Washington	SFB to 4th	Full depth reconstruction, SW repair, structural sidewalk, redo lighting (parking funds)

TABLE TR 5 – INTEGRATED STREET REBUILDS			
ID	**Project Name**	**Project Location**	**Project Description**
9	Main Avenue	Cedar to Monroe	Full depth reconstruction, SW repair, structural sidewalk
10	Maxwell	Maple to Monroe	Full depth reconstruction, SW repair
11	4th Avenue	Jefferson to Division	Full depth reconstruction, SW repair
12	Mallon	Monroe to Howard	Full depth reconstruction, SW repair
13	Monroe	Maxwell to Indiana	Full depth reconstruction, SW repair
14	Post St.	Main to 3rd	Full depth reconstruction, SW repair, structural sidewalk, redo lighting
15	Belt	Garland to Rowan	Full depth reconstruction, new sidewalk, SW repair, crosswalks, bike lane
16	Stevens	SFB to 4th	Full depth reconstruction, SW repair, structural sidewalk, redo lighting
17	Cedar	11th to 15th	Full depth reconstruction, SW repair, bike lane
18	Broadway Avenue	Cedar to Post	Full depth reconstruction, SW repair
19	Riverside Ave	Hemlock to Maple	Full depth reconstruction, SW repair
20	Cowley St.	4th to Rockwood	Full depth reconstruction, SW repair, add sidewalk
21	Summit Blvd - Mission	A St. to Pettit	Full depth reconstruction, SW repair
22	Boone	Maple to Monroe	Full depth reconstruction, SW repair
23	Howard Street	Mallon to Maxwell	Full depth reconstruction, SW repair
24	Indiana Avenue	Ash to Monroe	Full depth reconstruction, SW repair, bike lanes
25	Wellesley	Division to Nevada	Full depth reconstruction, SW repair
26	Boone	Summit Blvd to Ash	Full depth reconstruction, SW repair
27	Maple-Walnut	5th to 11th	Full depth reconstruction, SW repair
28	Rowan	Division to Nevada	Full depth reconstruction, SW repair
29	SE Blvd	29th to 31st	Full depth reconstruction, SW repair
30	Monroe	Garland to Wellesley	Full depth reconstruction, SW repair
31	Havana	Broadway to Sprague	Full depth reconstruction, SW repair

TABLE TR 5 – INTEGRATED STREET REBUILDS			
ID	**Project Name**	**Project Location**	**Project Description**
32	Freya (Phase 1)	Wellesley to Francis	Full depth reconstruction, SW repair
33	Rowan	Crestline to Market	Full depth reconstruction, SW repair
34	17th Avenue	Grand to Upper Terrace	Full depth reconstruction, SW repair
35	Boone	Washington to Division	Full depth reconstruction, SW repair
36	Howard Street	Maxwell to Buckeye	Full depth reconstruction, SW repair
37	Havana	3rd to Hartson	Full depth reconstruction, SW repair
38	Nevada	Magnesium to Holland	Full depth reconstruction, SW repair
39	Havana	Sprague to 3rd	Full depth reconstruction, SW repair
40	14th Avenue	Bernard to Grand	Full depth reconstruction, SW repair
41	Frederick	Freya to Havana	Full depth reconstruction, SW repair
42	Bernard - Ben Garrett - Grove	9th to 14th	Full depth reconstruction, SW repair
43	Freya paving	37th to 42nd	Full depth reconstruction, SW repair
44	Hartson	Freya to Havana	Full depth reconstruction, SW repair
45	Wellesley	Crestline to Haven	Full depth reconstruction, SW repair
46	Freya paving	17th to 29th	Full depth reconstruction, SW repair
47	Wellesley	Driscoll to A St.	Full depth reconstruction, SW repair
48	Freya	Upriver to Euclid	Full depth reconstruction, SW repair
49	Sharp-Atlantic	Boone to Pearl	Full depth reconstruction, SW repair
50	Empire / Garland	Crestline to Market	Full depth reconstruction, SW repair
51	Summit Blvd	Boone to Broadway	Full depth reconstruction, SW repair
52	Rowan	Assembly to Driscoll	Full depth reconstruction, SW repair
53	Cedar - High Drive	15th to 29th	Full depth reconstruction, SW repair
54	Central Ave	Wall to Division	Full depth reconstruction, SW repair
55	Summit Blvd	A St. to Boone	Full depth reconstruction, SW repair
56	14th Avenue	Monroe to Grand	Full depth reconstruction, SW repair

TABLE TR 5 – INTEGRATED STREET REBUILDS			
ID	**Project Name**	**Project Location**	**Project Description**
57	Freya	Wellesley to Euclid	Full depth reconstruction, SW repair
58	Indiana Avenue	Monroe to Division	Full depth reconstruction, SW repair
59	Bernard	29th to High Drive	Full depth reconstruction, SW repair
60	Sunset Blvd	Hwy 2 to Rustle	Full depth reconstruction, SW repair
61	14th Avenue	Cedar to Monroe	Full depth reconstruction, SW repair
62	Illinois	Perry to Market	Full depth reconstruction, SW repair
63	Lincoln	Division to Nevada	Full depth reconstruction, SW repair
64	Belt	NW Blvd to Montgomery	Full depth reconstruction, SW repair
65	25th Avenue	Bernard to Grand	Full depth reconstruction, SW repair
66	Empire	Nevada to Crestline	Full depth reconstruction, SW repair
67	Milton-14th	16th to Lindeke	Full depth reconstruction, SW repair
68	Rockwood Blvd	Grand to Cowley	Full depth reconstruction, SW repair
69	Wellesley	Nevada to Crestline	Full depth reconstruction, SW repair
70	Rowan	Nevada to Crestline	Full depth reconstruction, SW repair
71	6th-7th Avenue	Inland Empire to Walnut St.	Full depth reconstruction, SW repair
72	Perry	Wellesley to Euclid	Full depth reconstruction, SW repair
73	Empire	Division to Nevada	Full depth reconstruction, SW repair
74	Wellesley	Freya to Havana	Full depth reconstruction, SW repair
75	Strong Road	Five Mile to Cedar	Full depth reconstruction, SW repair
76	Cozza Drive	Division to Nevada	Full depth reconstruction, SW repair
77	Lindeke Street - 16th	Sunset Blvd to 195	Full depth reconstruction, SW repair
78	Qualchan Dr	Cheney Spokane to 195	Full depth reconstruction, SW repair
79	Rustle-Garden Springs	Sunset to City limits (near Assembly)	Full depth reconstruction, SW repair

~~*Roadways of Significance*~~ *Transportation Projects of Significance*

Projects that the City designates as a "~~Roadway~~ Transportation Project of Significance" ~~are~~must meet three specific criteria:

- Provide a unique economic development opportunity
- Are located in a Council-defined area targeted for economic growth
- Do not score well on the prioritization matrix

~~arterials with a unique economic opportunity within a Council identified area target for economic growth.~~ On approval from City Council, t~~T~~hese projects are allowed to be placed within the ~~6~~Six-~~year~~ Year ~~street~~ Street ~~program~~ Program to begin seeking funding and eventual construction, even though they may not be identified as next in line in the City's 20-year capital project list based upon the ranking criteria used. The expectation is that there will be very few projects that will be promoted over the projects that rank higher according to the criteria used to develop the prioritized 20-year capital project list and that there should be no more than one "Transportation Project of Significance" in the Six-Year Program at one time. Resources dedicated towards "~~Roadway~~Transportation Projects of Significance" are by necessity no longer available for other priority projects within the ~~six~~Six-~~year~~ Year ~~program~~Program.

A ~~Roadway~~"Transportation Project of Significance" will be pursued recognizing that it will likely be a phased project with ~~an~~ incremental improvement towards an eventual complete street. The first stage of the project will typically address only the most pressing transportation elements first with other integrated elements added over time. These projects recognize unique circumstances where a project is desired to fulfil a shorter term community objective, while being designed to eventually meet the objectives of the city's Transportation Plan and Complete Street ordinance.~~.~~

In summary "~~Roadway~~Transportation Projects of Significance" projects and designations:

- Provide or support a special economic development opportunity
- Are located in a Council-defined areas targeted for economic growth
- Will be the least-used approach to having a project promoted to the 6-Year Street Program
- Provide features that may only be the minimum work needed to serve the near term need
- Recognizes that this designation will slow the completion of a project that was deemed a higher priority following the goals of the transportation plan

- Council must approve ~~the~~ promoting the project over other projects that ranked higher on the 20 Year Transportation Capital project list
- Upon completion of the "Transportation Project of Significance" project, the remaining improvements will be re-scored and re-ranked within the 20-Year Transportation Capital project list

Maintenance

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

Keep the "good" streets "good"

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

Keep "poor" streets together until they can be rebuilt

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

Selecting grind and overlay to manage poor streets, reviewing:

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

Active Transportation Projects

With a move towards more integrated project delivery, many of the planned active transportation projects will be implemented along with street rebuilds and annual

maintenance activities. However, there will always be some stand-alone active transportation projects that are a priority for the city and its residents, such as the recently completed Ben Burr Trail. For those projects, a portion of the federal funding received, along with grant funding, will be used to complete these projects. The pursuit and development of the active transportation projects listed below in Table TR 6 will be opportunity driven, and thus the projects are not ranked. For many of these projects, a study determining feasibility and alignment will be the necessary first step. It should be noted that not all of these projects will be completed in the next 20-years.

TABLE TR 6 – ACTIVE TRANSPORTATION PROJECTS		
ID	**Project Name**	**Project Location**
1	Downtown Bike Share Program	Downtown & U District
2	Thornton Murphy Park pathway and crossing improvement	Ray/23rd to 27th/Fiske
3	Hillyard / NSC Pedestrian Bridge Study	NSC
4	Southeast Sports Complex pathway	Regal to Altamont
5	Centennial Trail - Boone to Pettet Drive	Connect from Boone to Pettet Drive
6	Downtown Structural Sidewalk Repair	various locations downtown
7	Ben Burr under SFB Bridge	Builds the Ben Burr connection underneath the SFB Bridge
8	Centennial Trail to Fish Lake Connection	Connect from Sandifur Memorial Bridge to the Fish Lake Trailhead
9	Centennial Trail / Mission Ave ped bridge	Make Crossing Improvements at Mission Ave
10	Spokane Valley/Millwood Trail	Western leg from Greene St. to Felts Field
11	Everett Street Greenway	Division to Market
12	Elm Street Greenway	Summit Parkway to NW Blvd
13	Canon Pool Area - sidewalk infill	Elm, Sinto, Oak, Cannon as needed
14	N Monroe area sidewalk infill	gaps on Madison, Euclid
15	Fort George Wright sidewalk	south side from River Ridge Blvd to SFCC entrance

TABLE TR 6 – ACTIVE TRANSPORTATION PROJECTS		
ID	**Project Name**	**Project Location**
16	Stairway Repair and Replacement	various locations
17	N Hillyard Area - sidewalk infill	Haven, Bismarck, Regal, as needed
18	S Hillyard Area - sidewalk infill	Haven west side, Rich, Regal
19	East Sprague area sidewalk infill	gaps on Helena, Madelia,
20	34th-35th Avenue Greenway	Arthur to Regal
21	Indian Trail pathway	Lowell to Kathleen
22	US 2 - Shared Use Path - Spotted to frontage road	North Side of US 2 b/w Sunset Frontage Rd and Spotted Rd
23	US 2 - Shared Use Path - Assembly to frontage road	Sunset Blvd Corridor between Assembly and the west end of Sunset Frontage Rd.
24	Division sidewalk Weile to Lincoln	gaps on eastside of Division from Weile to Cozza
25	North River Drive sidewalk	Construct sidewalk on the south side of North River Drive
26	Cook Street Greenway	SE Blvd to 49th
27	US 2 - Shared Use Path - Spotted to Flint	North Side of US 2 b/w Spotted Rd and Flint Rd.
28	US 2 - Shared Use Path - Flint to Hazelwood	North side of US 2 b/w Flint and Hazelwood
29	Division sidewalk Cozza to Lincoln	gaps on west side of Division from Cozza to Lincoln
30	Division sidewalk Rhoades to Houston	gaps on westside of Division from Rhoades to Houston

TABLE TR 6 – ACTIVE TRANSPORTATION PROJECTS		
ID	**Project Name**	**Project Location**
31	33rd Avenue Greenway	High Drive to Arthur
32	East Central Comm Center area - sidewalk infill	Lee, Stone, Cook, Napa
33	North Hill (Garland) sidewalk infill	Lincoln, Rockwell, Lacrosse, longfellow
34	Arthur Street Greenway	
35	21st Avenue Greenway	Cedar to Rockwood Blvd.
36	Havana sidewalk	gaps from Havana to 3rd
37	Ferris/Adams/Palouse Hwy Student Trail	Along Freya crossover ROW, connecting south to Palouse Highway
38	Holy Family Area - sidewalk infill	Central, Standard, as needed
39	Belt St sidewalk	east side Wellesley to Longfellow
40	US 195 Shared Use Path	Spokane-Cheney commercial area to Meadowlane
41	Trolley Trail acquisition and improvement	Complete the Trolley Trail from the northern terminus of the publicly owned trail (running from Assembly northeast for 1.5 miles) to Milton Street
42	17th Avenue Greenway	Cedar to Rockwood Blvd
43	Hartson Ave sidewalk infill	gaps from Regal to Freya
44	Rowan Ave sidewalk	north side Napa to Crestline
45	Greene/Upriver area - sidewalk infill	west of Greene, Jackson, Market, Carlisle

TABLE TR 6 – ACTIVE TRANSPORTATION PROJECTS		
ID	**Project Name**	**Project Location**
46	Alberta St. sidewalk	east side gaps from Wellesley to Francis
47	Francis sidewalk gaps	Sutherlin to Winston (both sides)
48	Alberta-Cochran sidewalk	infill from NW Blvd to Gordon
49	Driscoll Blvd sidewalk	Alberta to Garland
50	Alberta St. Sidewalk	east side from Driscoll to Longfellow
51	Perry St. sidewalk	east side Bridgeport to Empire
52	Cliff Dr sidewalk	gaps from Bernard to Grand
53	Alberta St.sidewalk	west side from Driscoll to Garland
54	Perry St. sidewalk	east side Empire to Wellesley
55	Helena St. sidewalk	both sides Rowan to Olympic
56	Fish Lake Trail Gap I	Sandifur Bridge to Fish Lake Trailhead
57	Fish Lake Trail Gap II	Queen Lucas Lake to Fish Lake Regional Park

Capacity Improvement Projects

The GMA authorizes impact fees for adding needed capacity for streets and roads. The fees must be based on, and used for, specific improvement projects in the Transportation Plan. The projects must be "system improvements" that provides additional system capacity service and benefits to the community, and not "project improvements" that provide service and benefits only to the individual development. Table TR 7 is a snapshot in time and will change based on the city's needs over time based on actual and forecasted growth.

TABLE TR 7 – CAPACITY IMPROVEMENT PROJECTS

Region	Project Name	Project Location
D	5th Ave / Sherman St	Intersection - Install new traffic signal
D	Trent / Hamilton intersection	modifications due to new traffic patterns with NSC
D	Downtown Bike Share	Paid bike share program
D	D Bicycle Improvements	stripe bike facilities on arterials
D	D Pedestrian Improvements	install pedestrian facilities on arterials
D	Ash Street 2-way from Broadway to Dean	Convert Ash Street to a 2-way street to allow access to Maple Street Bridge SB.
NW	Assembly St / Francis Ave (SR291)	Intersection - Construct Roundabout
NW	Indian Trail Rd - Kathleen to Barnes	Widening - Construct to 5-lane section
NW	Francis/Alberta	modify NB and SB lanes to allow protected phasing
NW	Francis/Maple	add WBR lane
NW	NW Bicycle Improvements	stripe bike facilities on arterials
NW	NW Pedestrian Improvements	install pedestrian facilities on arterials
S	29th Ave / Freya St	Stripe EBL and WBL turn lanes, and widen for NB and SB left turn lane. Keep 4-way stop.
S	29th Ave TWLTL	between Martin and Stone

TABLE TR 7 – CAPACITY IMPROVEMENT PROJECTS		
Region	**Project Name**	**Project Location**
S	37th Ave / Freya St	Construct traffic signal
S	37th Ave / Ray St	Construct traffic signal and WBR channelization
S	Ray-Freya ~~Crossover~~ Preferred ~~Alternative~~Alternative	~~Segment - construct road project~~Study scope within general area of 17th Ave. to 57th Ave., and from Crestline St. to Freya St.
S	44th Ave from Crestline to Altamont	new collector road section
S	44th/Regal	Widen northbound approach to 2 lanes
S	Freya / Palouse Hwy	roundabout (or turn lanes)
S	S Bicycle Improvements	stripe bike facilities on arterials
S	S Pedestrian Improvements	install pedestrian facilities on arterials
NE	Lincoln Rd / Nevada St	Intersection Improvements - Construct separate eastbound and westbound left-turn lanes; include west leg widening and construction of 5-lane east of Nevada 1000'
NE	Hamilton St Corridor - Desmet Ave to Foothills Ave	Segment Improvements - Construct traffic signal modifications to accommodate protected or protected/permitted signal phasing. New signal at Desmet.
NE	Mission/Havana	signal
NE	Nevada / Magnesium	left turn phasing, additional lanes
NE	Greene/Ermina	New signal to accommodate SCC access for transit and future NSC (mostly funded by STA)
NE	NE Bicycle Improvements	stripe bike facilities on arterials
NE	NE Pedestrian Improvements	install pedestrian facilities on arterials
W	US 2 / Deer Heights Signal	new signal
W	21st Avenue: Deer Heights to Flint/Granite	segment - construct new 3-lane arterial

TABLE TR 7 – CAPACITY IMPROVEMENT PROJECTS		
Region	**Project Name**	**Project Location**
W	Deer Heights Road: south end to 18th/21st	segment - construct new 2-lane arterial
W	12th Avenue: Deer Heights to Flint/Granite	segment - construct new 2-lane arterial
W	US 2 Bike Path	bike path from Deer Heights to Sunset Hill
W	W Bicycle Improvements	stripe bike facilities on arterials
W	W Pedestrian Improvements	install pedestrian facilities on arterials

Bridges

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

TABLE TR 8 – BRIDGE PROJECT LIST	
Project Name	**Year Built**
Post Street Bridge	1917
Latah Bridge	1913
Mission Street Bridge	1909
Greene Street Bridge	1955
Hatch Bridge	1919

20-Year Residential Strategy

Non-Arterial Street Maintenance

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

The TBD governing board (currently the City Council) established a Citizen's Transportation Advisory Board (CTAB) as per resolution "RES 2010-0002". The TBD Board recognized that successful implementation of the City's TBD required transparency and accountability regarding the revenue generated by the vehicle tab fee as well as the projects on which these funds are spent. The volunteer citizens of the CTAB are responsible for the review of transportation projects under consideration for TBD funding and make recommendations to the TBD governing board.

4.6 FUTURE CONDITIONS

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

Technological

Ride Sourcing

Transportation network companies (TNC) are providing ride sourcing options with apps such as Uber and Lyft, which have introduced a new dynamic to the transportation system. They provide a quick and relatively affordable alternative for completing short trips, adding another tool to facilitate alternatives to car ownership.

TNC's have seen rapid growth, increasing operations by 360% from 2013-2014, and are expected to continue in an upwards trajectory[2].

Impacts of Autonomous Vehicles

In recent years, the anticipation and questions around autonomous vehicles have intensified. As transportation technology continues to rapidly evolve, major benefits such as improved safety, increased mobility, and maximized efficiency are on the horizon. However, autonomous vehicles will bring several challenges for jurisdictions as technology integrates with existing infrastructure and human drivers.

Though it is expected that safety will be improved as a result of automation limiting accidents, it will take decades for roadways to become fully automated, potentially resulting in friction between autonomous and human drivers in the near future. In addition, there are concerns of negative impacts autonomous vehicles may have on VMT and emission levels as a result of empty cars travelling to cheaper parking areas away from the owners' destination, which would also add to local congestion. As technology has the potential to increase the capacity of existing roadways and intersections through more efficient signal timing and tighter vehicle spacing, reducing congestion concerns, it may encourage individuals to utilize their own vehicles more often and as an alternative to transit services. Planning ahead and implementing policies to curtail VMT in the presence of autonomous vehicles can

[2] SOURCE: Reuters // Uber, Lyft, Sidecar sites, compiled by http://quoted.thezebra.com/

prevent such concerns from materializing. Potential system features that could be set up to prevent increases in VMT include the following:

- Pay per mile
- Facilitating and encouraging the sharing economy
- Establish autonomous vehicles as support for transit and active modes, not a replacement
- Ensure high quality transit is available, especially along major corridors, as quality will be more important than ever to encourage ridership

In addition, though automation will bring many benefits assuming negative impacts are curtailed, it may not bring the same level of benefits related to improved public health, economic development, and quality of life, as seen with active transportation. Modal balance of the transportation system will be as important in the future as it is today for residents.

Parking is another key component of the transportation system that is likely to be impacted as autonomous vehicles emerge. A system of shared autonomous vehicles could reduce, or perhaps even eliminate, the need for parking. This presents tremendous opportunity, because of the significant amount of land underutilized by being dedicated to parking, which negatively impacts walkability and the overall vibrancy of an area. If predictions of lowered parking demands materialize, cities and developers could rapidly eliminate or reduce the amount of parking in projects, opening the door to projects that bring along the benefits of density, availability of more affordable housing, and walkability. With technology expected to evolve to complete autonomous capability in the next decade, and 100% autonomous penetration as soon as 2045, cities like Spokane may consider creating dramatically less parking for the future, especially when considering the long term costs and life span of parking structures[3].

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

[3] Morgan Stanley. (2013). "Autonomous Cars: Self-Driving the New Auto Industry Paradigm." Retrieved from: http://orfe.princeton.edu/~alaink/SmartDrivingCars/PDFs/Nov2013MORGAN-STANLEY-BLUE-PAPER-AUTONOMOUS-CARS%EF%BC%9A-SELF-DRIVING-THE-NEW-AUTO-INDUSTRY-PARADIGM.pdf

Economic

Expected Increases in Delivery Freight

Shoppers are making fewer trips to stores, instead opting to shop from their keyboard. The digital footprint will continue to grow, and more goods are likely to come directly to residences. This may result in an increased number of delivery vehicles making their way into urban neighborhoods.

Role of the Sharing Economy

Technology has enabled the growth of the sharing economy. There are mobile applications that enable ride sourcing as previously described, short term car rentals such as ZipCar, and temporary home or auto sharing opportunities such as Airbnb and Turo. These new markets provide alternatives to traditional auto ownership and may result in changes to transportation behaviors.

Demographics[4]

People Driving Less Overall

VMT per capita is not increasing like it has in the past, suggesting that people are more open to alternatives to driving in congested conditions than before. While lower gas prices and a rebounding economy led to an uptick in total vehicle miles traveled (VMT) in 2015, vehicle miles traveled per capita rose at a slower rate than total driving, and remains over 6% off its 2004 high.

Younger Generations Are Driving Less

Younger age groups are exhibiting strong preferences for alternative modes and methods of transportation, suggesting that vehicle ownership and driving trends may not stay as it has been in the past. Millennials are more likely than previous generations to use transit, walk, and bike, and less likely to drive.

Decreased Licensing Rates

Younger generations are waiting longer to obtain drivers licenses. This trend showcases that driving is not as important to young people today as it was in the past. Between 1998 and 2008, the proportion of teenagers with a license dropped by 28%. In addition, only 79% of individuals between the ages of 20-24 had a driver's license in 2011, compared to 92% of individuals within that same age group in 1983.

[4] SOURCES: http://www.nielsen.com/us/en/insights/news/2014/millennials-prefer-cities-to-suburbs-subways-to-driveways.html // http://gizmodo.com/millennials-will-live-in-cities-unlike-anything-weve-se-1716074100 // : http://usa.streetsblog. org/2014/09/02/behind-fhwas-dubious-vmt-announcement-and-call-for-highway-investment/ // : https://www.washingtonpost.com/news/wonk/wp/2014/10/14/the-many-reasons-millennials-are-shunning-cars/

Renewed Desire to Live in Urban Areas

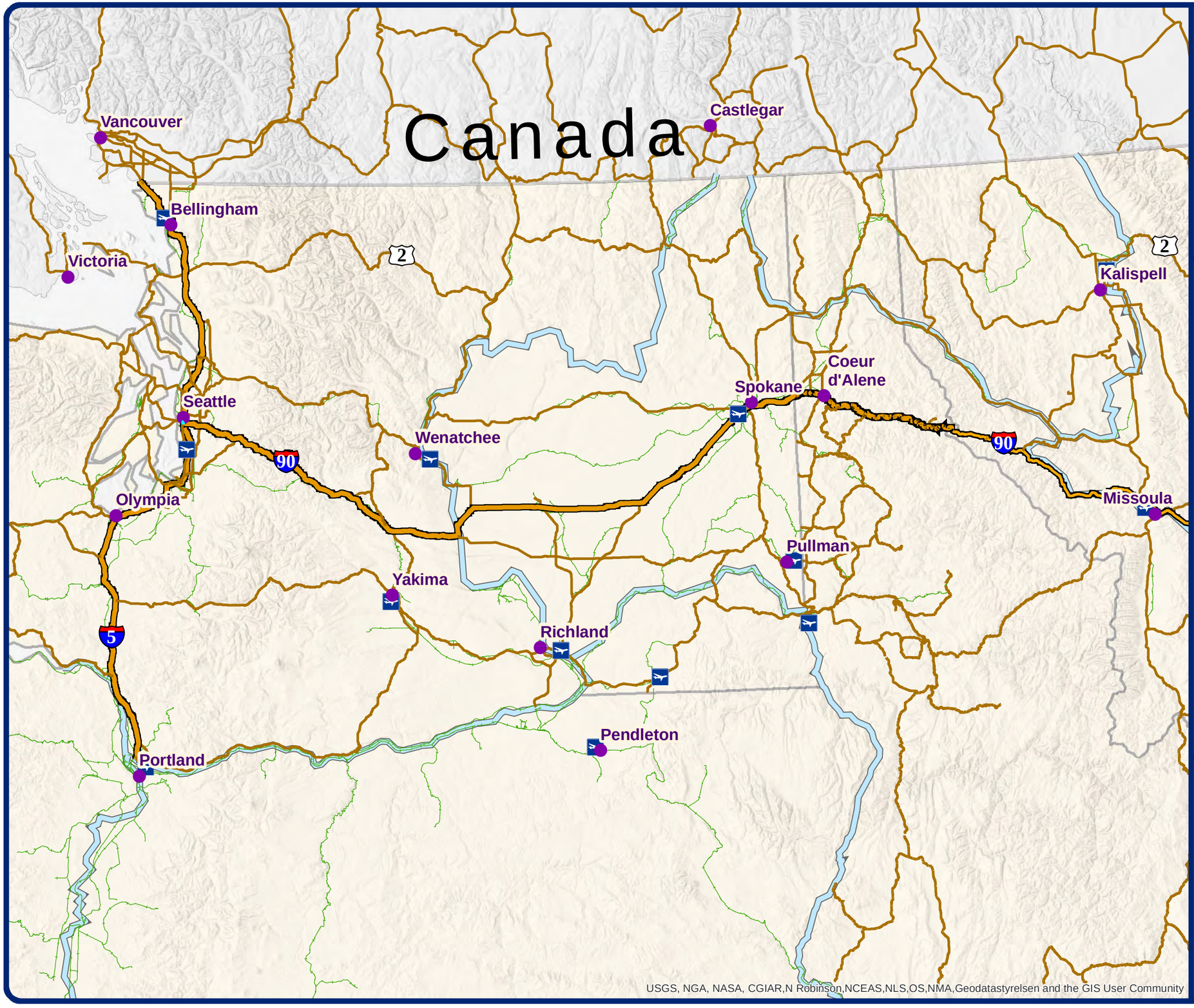
With today's technology, millennials have grown accustomed to having the world at their fingertips. As cities resurface as centers of economic energy and vitality, millennials are opting to live in urban areas over the suburbs of rural communities, with 62% of millennials indicating they prefer to live in the type of mixed-use communities found in urban centers, where they can be close to shops, restaurants, and employers. Millennials are currently living in urban areas at a higher rate than any other generation. As a result, for the first time since the 1920's, growth in U.S. cities outpaces growth outside of them.

Demand for Transit is Up

Nationwide, transit ridership has increased consistently since 2010. Though this may be tied to the Great Recession, other trends suggest that younger generations are actively relying on alternatives to driving.

More Single Households

Younger generations are waiting longer than before to get married and have children. This means that housing preferences and travel patterns observed in family households are not emerging as strongly as before.



Regional Map

Map TR1

Legend

- Major Cities
- Airports

Roadways

- Interstate
- Highways
- Major Rail Lines
- Rivers

0 12.5 25 50 75 100 Miles

Source: GIS
Date: 09/2016

N
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Housing Unit Density Change

Map TR 2

Legend

Housing Unit Density (2010-2040)

Higher

Lower

Base Map Layers

- County Adopted Urban Growth Area
- Municipal Boundary
- County Boundary
- Rivers
- State Routes
- Arterials
- Future North Spokane Corridor

1 0.5 0 1 2 Miles

N W E S

Source: GIS
Date: 09/2016

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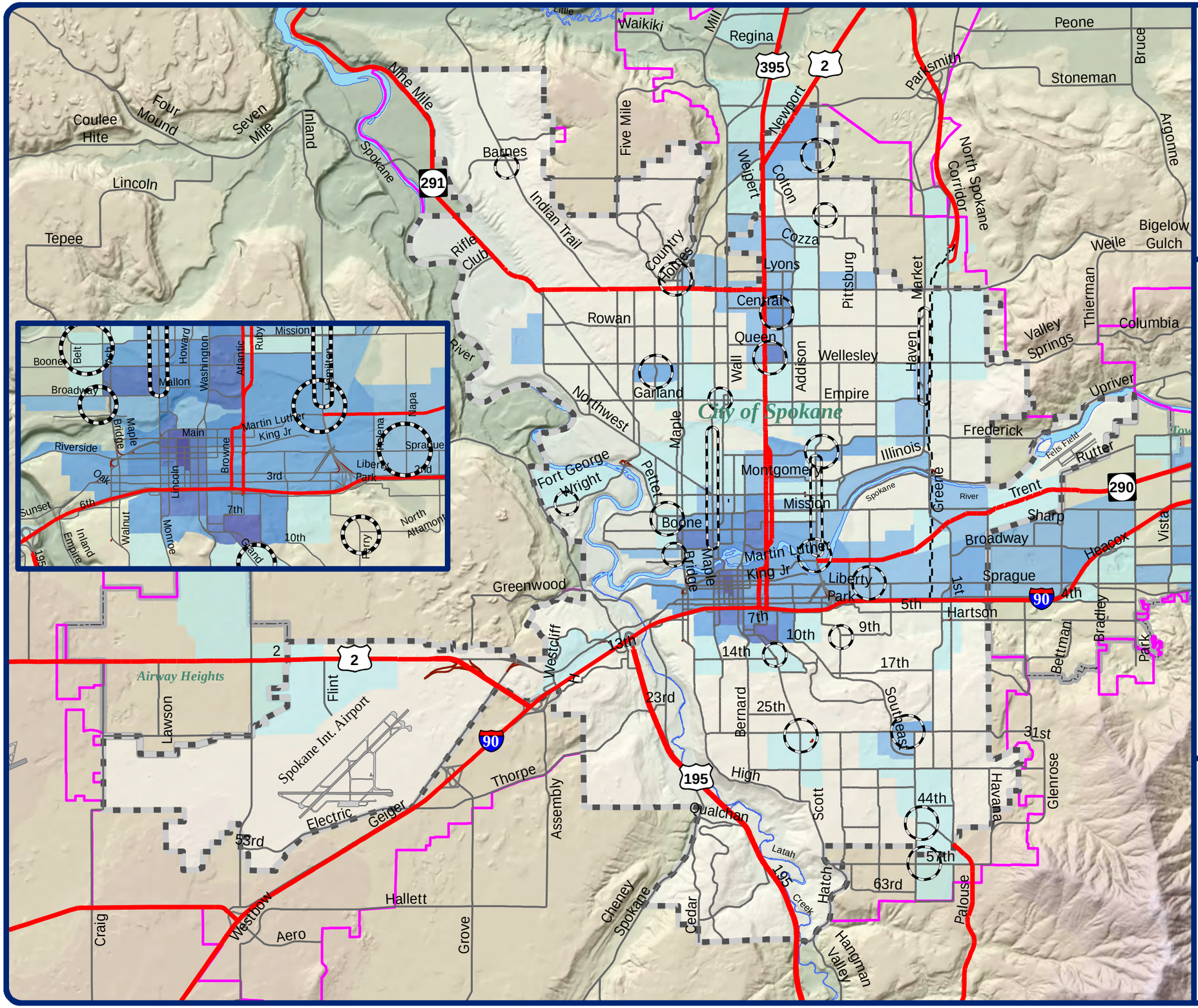
City of Spokane
Airway Heights
Medical Lake
Hallett
Latah Creek
Spokane River
Spokane Int. Airport
Fort George Wright
Martin Luther King Jr
Indian Trail
North Spokane Corridor
Country Homes
Valley Springs
Felts Field
Liberty Park
Greenwood
Qualchan
Eagle Ridge
Cheney Spokane
Hangman Valley
Regina
Stoneman
Bruce
Argonne
Bigelow Gulch
Weile
Thierman
Columbia
Upriver
Frederick
Rutter
Mission
Sharp
Broadway
Heacox
Vista
Havana
Sprague
Bradley
Park
Bettman
Glenrose
Coulee Hite
Four Mound
Seven Mile
Inland
Garfield
Tepee
Spokane
Nine Mile
Barnes
Rifle Club
Five Mile
Webert
Colton
Cozza
Lyons
Central
Rowan
Northwest
Garland
Wellesley
Empire
Montgomery
Boone
Greene
Pittsburg
Market
Haven
Division
Wall
Maple
Pettet
Illinois
Trent
Havana
1st
3rd
7th
9th
10th
14th
16th
17th
23rd
25th
31st
44th
63rd
Bernard
Southeast
Scott
Hatch
Palouse
Grove
Assembly
Thorpe
Geiger
Electric
53rd
Westbow
Craig
Aero
Melville
Lawson
Flint
Westcliff
High
Cedar
Creek
Mill
Bridge
Boone
Belt
Ash
Howard
Mallon
Broadway
Washington
Atlantic
Ruby
Mission
Hamilton
Napa
Helena
Sprague
Liberty Park
2nd
3rd
Main
Martin Luther King Jr
Riverside
Bridge
Maple
Oak
Lincoln
Browne
Sunset
6th
7th
10th
Walnut
Monroe
Grand
Perry
North Altamont
Inland Empire
195
2
90
291
395
290

Employment Density Change

Map TR 3



Legend

Employment Density (2010-2040)

Higher

Lower

Base Map Layers

- County Adopted Urban Growth Area
- Municipal Boundary
- County Boundary
- Rivers
- State Routes
- Arterials
- Future North Spokane Corridor
- Centers & Corridors
- Targeted Growth Areas

1 0.5 0 1 2 Miles

Source: GIS
Date: 09/2016

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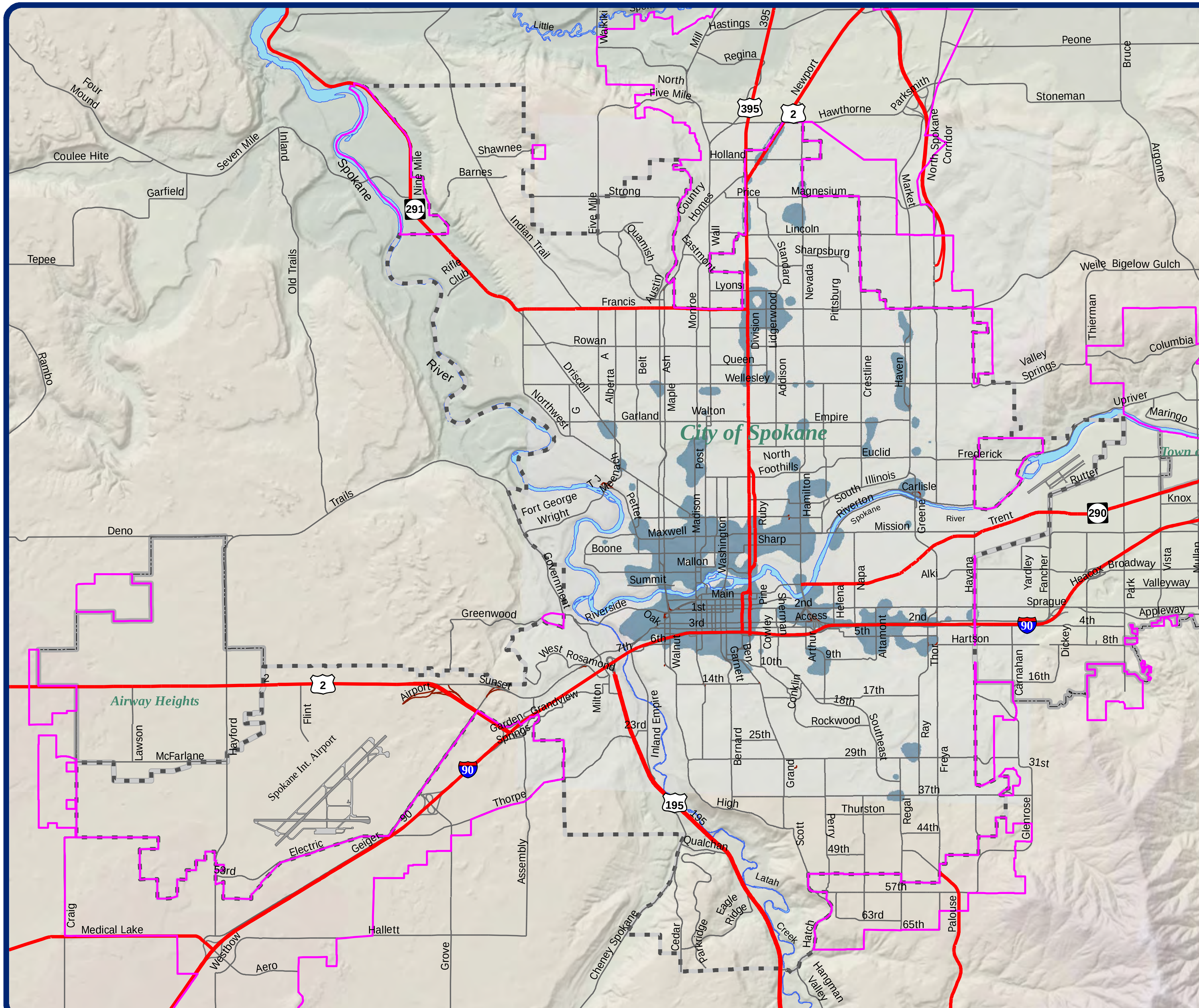

Composite Needs Map: Pedestrian Priority Zones

Map TR 4

Legend

Pedestrian Priority Zone

Highest Priority Zone

Lowest Priority Zone

Base Map Layers

- County Adopted Urban Growth Area
- Municipal Boundary
- County Boundary
- Rivers
- State Routes
- Arterials
- Future North/ South Corridor

1 0.5 0 1 2 Miles

Source: GIS
Date: 09/2016

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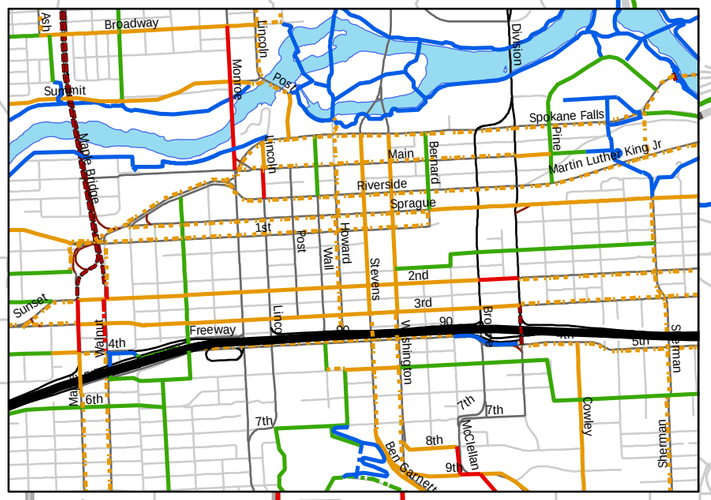
Proposed Bike Network Map

Map TR 5



Legend

Proposed Bike Network

- Closed to Bikes
- Difficult Connection
- High Traffic (Bike Lane)
- High Traffic (Shared)
- Moderate Traffic (Bike Lane)
- Moderate Traffic (Shared)
- Bike Friendly Route
- Neighborhood Greenway
- Shared Use Path
- Soft Surface Path

Base Map Layers

- County Adopted Urban Growth Area
- Municipal Boundary
- County Boundary
- Rivers
- State Routes
- Arterials
- Future North/ South Corridor

0.85 0.425 0 0.85 1.7 Miles

N W E S

Source: GIS
Date: 09/2016

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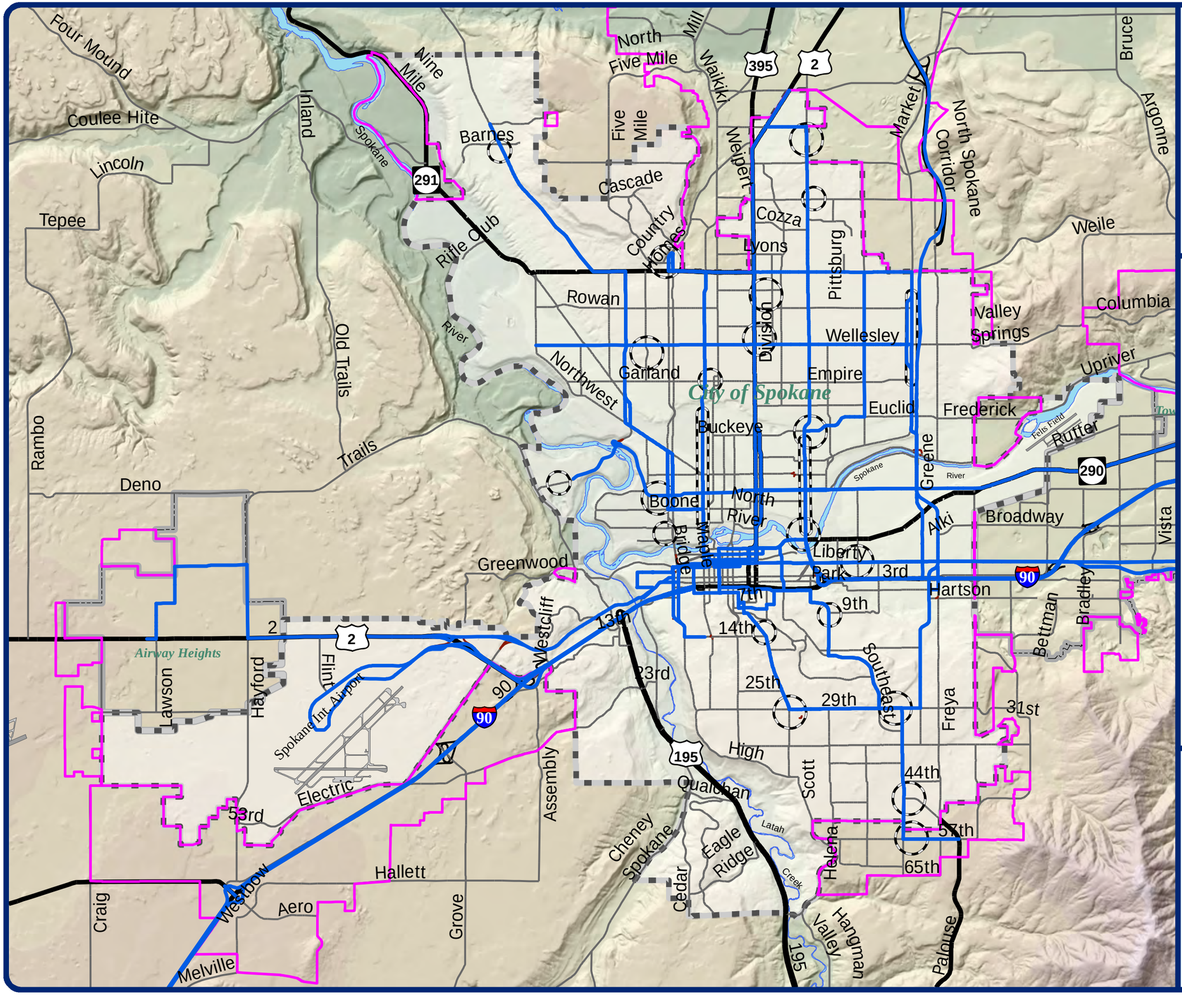
STA: High Performance Transit Network

Map TR 6



Legend

High Performance Transit Network

- High Performance Transit Network

Base Map Layers

- County Adopted Urban Growth Area
- Municipal Boundary
- County Boundary
- Rivers
- State Routes
- Arterials
- Future North/ South Corridor
- Centers & Corridors

1 0.5 0 1 2 Miles

Source: GIS
Date: 09/2016

N W E S

CITY OF SPOKANE

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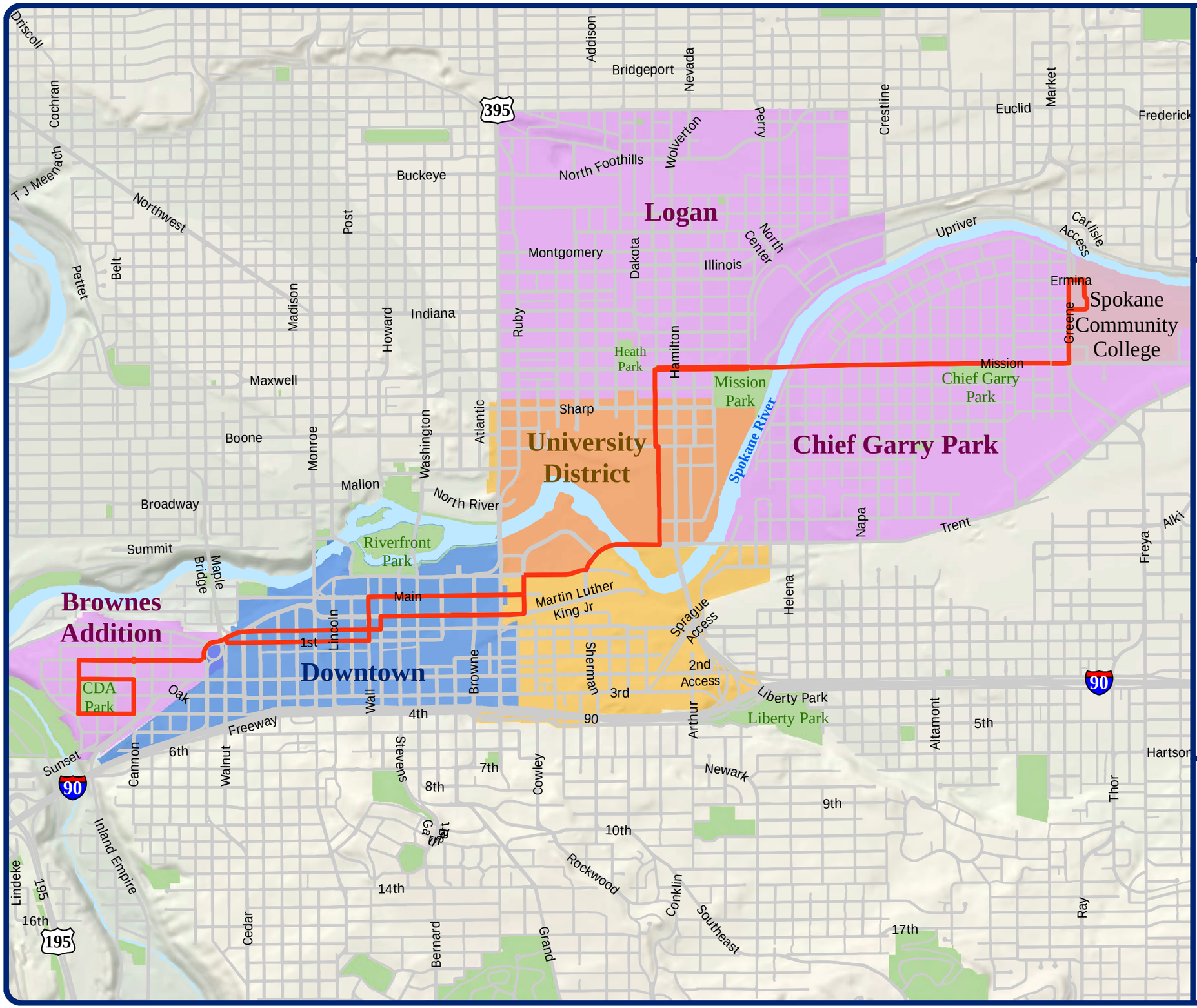
Central City Line Route

Map TR 7



Legend

Central City Line

Base Map Layers

- County Adopted Urban Growth Area
- Municipal Boundary
- County Boundary
- Rivers
- State Routes
- Arterials
- Future North/ South Corridor

0.25 0.125 0 0.25 0.5 Miles

N W E S

Source: GIS
Date: 09/2016

CITY OF SPOKANE

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Freight & Goods Tonnage Volume

Map TR 8

Legend

Freight and Goods Transportation

- T-1: more than 10 million tons per year
- T-2: 4 million to 10 million tons per year
- T-3: 300,000 to 4 million tons per year
- T-4: 100,000 to 300,000 tons per year
- T-5: at least 20,000 tons in 60 days and less than 100,000 tons per year

Base Map Layers

- County Adopted Urban Growth Area
- Municipal Boundary
- County Boundary
- Rivers
- State Routes
- Arterials

1 0.5 0 1 2 Miles

Source: GIS
Date: 09/2016

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Heavy Haul Network

Map TR 9

Legend

Future NSC/395

Heavy Haul Routes

Heavy Haul

State Route

Railroad

Main Track

Spur Track

City Zoning

Heavy Industrial

Light Industrial

Base Map Layers

County Adopted Urban Growth Area

Municipal Boundary

County Boundary

Rivers

State Routes

Arterials

Future North/ South Corridor

1 0.5 0 1 2 Miles

Source: GIS

Date: 09/2016

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CITY OF SPOKANE

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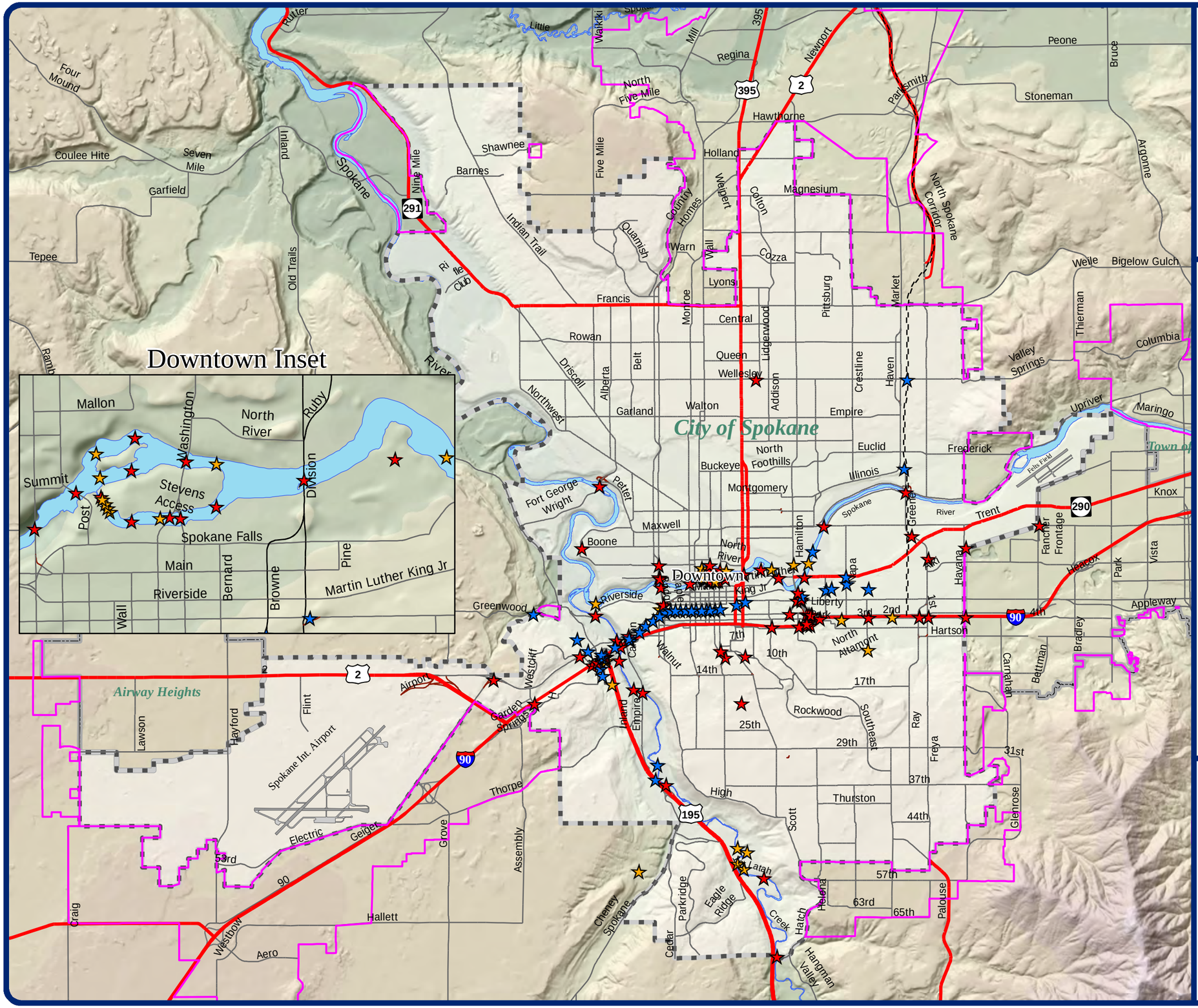
Bridge Inventory Map

Map TR 10



Legend

Bridge Type

- Vehicular Bridge
- Pedestrian Bridge
- Railroad Bridge

Base Map Layers

- County Adopted Urban Growth Area
- Municipal Boundary
- County Boundary
- Rivers
- State Routes
- Arterials
- Future North/ South Corridor

1 0.5 0 1 2 Miles

Source: GIS
Date: 09/2016

N W E S

CITY OF SPOKANE

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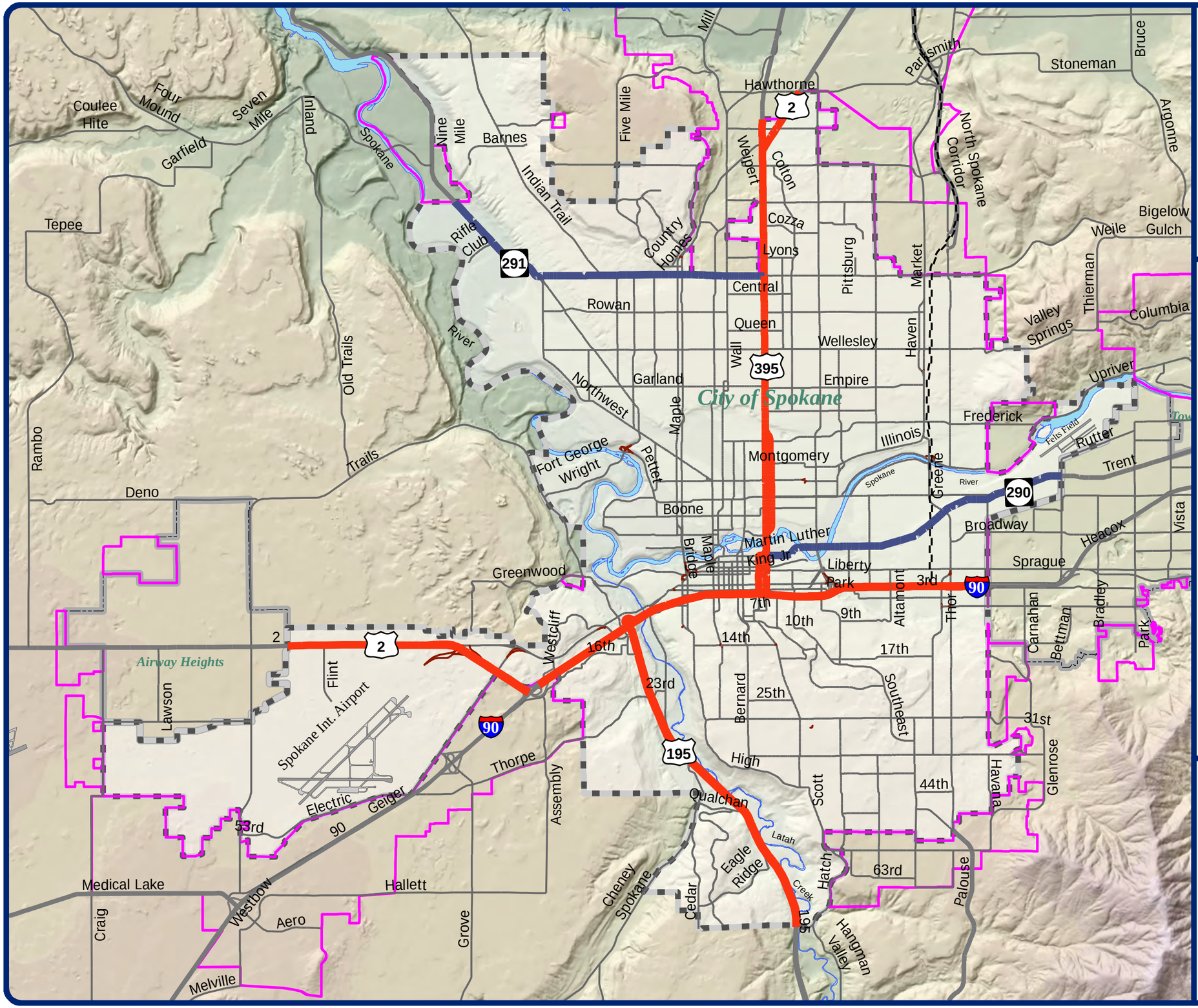
State Owned Facilities

Map TR 11



Legend

- Highways of Statewide Significance
- Other State Highways

Base Map Layers

- County Adopted Urban Growth Area
- Municipal Boundary
- County Boundary
- Rivers
- State Routes
- Arterials
- Future North/ South Corridor

1 0.5 0 1 2 Miles

N W E S

Source: GIS
Date: 09/2016

CITY OF SPOKANE

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Proposed Arterial Network Map

Map TR 12

A small correction to this map was accepted by the City Council at their June 19 hearing.

Legend

Arterial Network

- Proposed Urban Minor Collector
- Proposed Urban Major Collector
- Proposed Urban Minor Arterial
- Proposed Urban Principal Arterial
- Proposed Urban Freeways and Expressways
- Urban Local Access
- Urban Minor Collector
- Urban Major Collector
- Urban Minor Arterial
- Urban Principal Arterial
- Urban Other Freeways and Expressways
- Urban Interstate
- Full Interchange - Existing
- Partial Interchange - Existing
- Full Interchange - Proposed
- Partial Interchange - Proposed

Base Map Layers

- County Adopted Urban Growth Area
- Municipal Boundary
- County Boundary
- Rivers

1 0.5 0 1 2 Miles

Source: GIS
Date: 09/2016

N W E S

CITY OF SPOKANE

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