

# Connect Spokane

A COMPREHENSIVE PLAN  
FOR PUBLIC TRANSPORTATION



## Board of Directors Adoption Dates

<b>Action</b>	<b>Date</b>	<b>Outcome</b>
Public Hearing	June 16, 2010	Board received public comment.
Board Adoption	July 21, 2010	Board adopted the plan (Resolution No. 665-10).
Public Hearing/Board Adoption	September 15, 2010	Board received public comment and adopted revisions to the plan (Resolution No. 669-10) to include policy SI-3.6 Pedestrian Infrastructure.
Public Hearing	December 15, 2011	Board received public comment.
Board Adoption	January 13, 2012	Board adopted the amendments to the Monitoring and Improvement and Sustainability elements of the plan.

## About the Cover

The photos shown on the cover display a representation of transit access within the Spokane Region. Using data from the transit system as it existed in the fall of 2010, we assigned an accessibility value to every point in the region based upon the number of bus trips that are within walking distance in a day and classified those values to a range of visible light.

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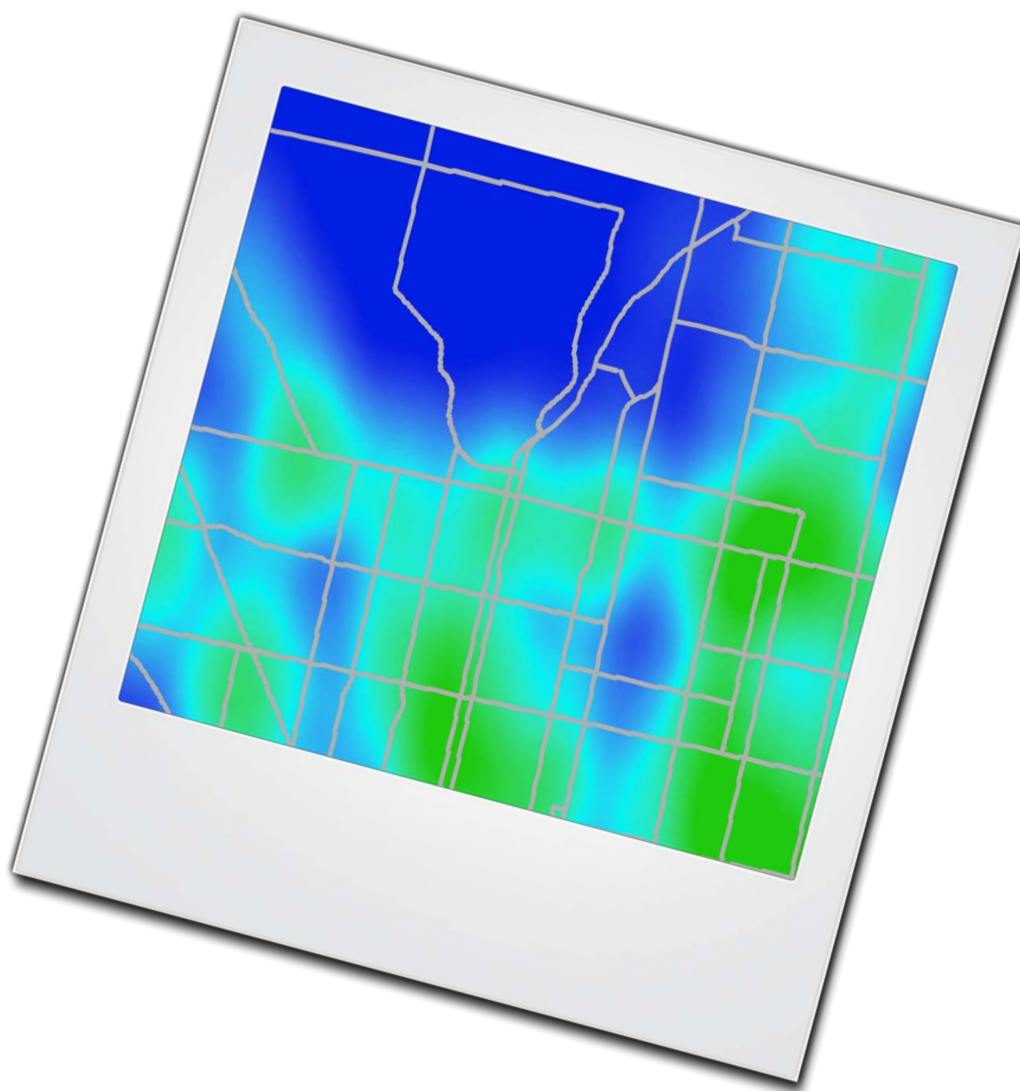
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# Connect Spokane:

A Comprehensive Plan for Public Transportation

## Part I: Introduction



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## Introduction

Planning plays a role in all of our lives. Whether it is career planning, travel planning, or deciding what to have for dinner, planning increases the likelihood of achieving our desired goals. Although the exact course is never known, a good plan can provide the guidance and direction needed to navigate through the unknown.

Like other large organizations, Spokane Transit Authority (STA) also benefits from the process of preparing for the future. STA's complexity requires goals to be set, principles to be acknowledged, and policies to be determined to best ensure the region's envisioned future is realized.

This document intends to serve a number of purposes. It is a guiding policy document, an educational tool, and a description of what transit may start to look like throughout the Spokane Region over the coming decades. As a course-setting document created jointly by the public, other government agencies, and STA, this plan will serve as a reference tool for future decisions related to transit, transportation and land use in the Spokane region.

### Goal of the Comprehensive Plan

***The goal of this plan is to set forth a vision and policy framework to guide decisions made by STA's Board of Directors, its staff, and partnering agencies that will further Spokane Transit's mission for at least the next 20 years.***

STA strives to encourage increased ridership while providing high quality, convenient and reasonably priced services by recognizing STA's mission and by following the goals and policies defined in this plan.

#### **Mission**

1. We are dedicated to providing safe, convenient, and accessible public transportation services to Spokane area neighborhoods, businesses, and activity centers.
2. We are leaders in transportation and a valued partner in the community's social fabric, economic infrastructure, and quality of life.
3. We aspire to be a source of pride for the region.

This comprehensive plan is entitled ***Connect Spokane***, reflecting transit's powerful role and STA's sublime opportunity to connect both the people and geography of this region in a more effective, sustainable, and livable way.

Elements of the Comprehensive Plan

I  
Introduction

	<b>Element/Sub-Section</b>	<b>Summary of Scope and Goal</b>
<b>Part I</b>	<b>Introduction and Goal of Plan</b>	Describes overall effect of plan tied to the agency's mission and priorities
	<b>History</b>	Provides a concise overview of transit history in Spokane
	<b>Regional Context</b>	Discusses regionally significant trends in population, economics, and land use
<b>Part II: Services</b>	<b>High Performance Transit Network</b>	Frames the key service STA intends to create in the future with policies to guide mode and alignment decisions
	<b>Fixed-Route</b>	Provides guidance in designing routes; establishes policies for service attributes by service type
	<b>Paratransit</b>	Identifies compliance with ADA as primary objective with policies expressing existing practices
	<b>Rideshare</b>	Defines types of Rideshare services (Vanpool, Special Use Van) and structures existing practices
	<b>System Integration</b>	Describes how plan elements and STA's services integrate to form a system of public transportation
<b>Part III: Activities and Programs</b>	<b>System Infrastructure</b>	Provides framework for prioritization of capital investments and defines the creation of a Capital Improvement Program
	<b>Communications and Public Input</b>	Identifies methods for communicating to the public and replaces existing public notice/outreach requirements
	<b>Revenues and Fares</b>	Defines policies concerning fares, grants and other revenue sources
	<b>Monitoring and Improvement</b>	Includes general policies that require ongoing monitoring and improvement
	<b>Regional Transportation and Land Use Coordination</b>	Provides guidance to other jurisdictions in making land use and transportation decisions that can be effectively supported by transit; establishes policies for participation in regional decisions and metropolitan transportation plan
	<b>Energy and Environment</b>	To be amended to the plan after the CAC Sustainability Project; will identify policies and practices to support sustainability, as well as identify current policies and practices that achieve said objective

## How to Read the Comprehensive Plan

Each element of Sections II and III of this plan contains three sections: Principles, Policies, and Connect Strategies. Each section serves a specific purpose in guiding and defining STA's service to the community.

### *Principles-What is the underlying foundation of the element?*

Principles are not intended to be policies; rather, they provide necessary concepts, background information and the philosophical foundation for decision makers, customers, and others interested in transit.

Principles are:

- Broad in scope
- Shaping policies and Connect Strategies
- Unchanging

### *Policies-What guidelines should decision-makers follow?*

An element's policies are derived from the principles associated with that element. Policies define more specifically the guidelines decision-makers should follow to guide the agency toward continued improvement.

Policies are:

- More specific
- Shaped by principles
- Adaptable over time

### *Connect Strategies-What are specific approaches that can be taken to reach goals?*

Connect Strategies, developed from the principles and policies, are specific ways in which STA can go beyond current practice. Whether it calls for a policy review, a strategic system plan, or a list of technological tools to pursue, each Connect Strategy aims to continue connecting people with place throughout the Spokane region.

Connect Strategies are:

- Specific and implementable
- Shaped by principles and policies
- Able to change to reflect needs and opportunities

## Washington State Comprehensive Transit Planning Requirements

The State of Washington requires a public transportation benefit area authority (such as STA) authorized pursuant to RCW 36.57A.050 to develop a comprehensive transit plan. The plan must include, but is not limited to, the following elements:

- (1) the levels of transit service that can be reasonably provided for

- various portions of the benefit area,
- (2) the funding requirements, including local tax sources, state and federal funds, necessary to provide various levels of service within the area,
  - (3) the impact of such a transportation program on other transit systems operating within that county or adjacent counties,
  - (4) and future enlargement of the benefit area or the consolidation of such benefit area with other transit systems.
-

## History of Transit in the Spokane Region

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History

Transit service for the Spokane region began in 1883 with independent transit companies operating horse-drawn trolleys. This mode of transportation was replaced with cable cars, followed by electric trolley cars soon after. Real estate developers helped shape much of the early transit network by constructing transit lines to their developments as an incentive for homebuyers. Many of these original developments remain prominent areas in the region today, including Browne's Addition, Lincoln Heights, and the North and South Monroe Corridors. Ridership grew at a rapid pace during the early 20<sup>th</sup> century, hovering near 20 million annual passenger trips before declining in the 1920s. In 1922, the Spokane United Railway Company was formed by the Washington Water Power Company and other transit facility operators, resulting in the first unified transportation network in the region.

As the personal automobile grew in popularity, ridership in the Spokane region declined more than 33 percent between 1922 and 1933. Transit technology also underwent a significant change during this time as internal combustion engine buses replaced the electric trolleys. By 1936, the trolley system in Spokane had been dismantled and by 1940, the last interurban electric train discontinued service. With the phasing out of electricity as a fuel source, the Washington Water Power Company sold its interest in the transit network to Spokane City Lines, a subsidiary of the National City Lines Company.

Transit ridership in the Spokane region was particularly strong during World War II. Bus ridership peaked in 1947 with more than 22 million annual passenger trips. A decade later, ridership had fallen to less than nine million, and to less than four million by 1967, largely due to the popularity and increased affordability in the personal automobile. Struggling with declines in ridership and revenues, citizens of Spokane agreed to take ownership of the transit system and support operations with a \$1 per month household utility tax. Unfortunately, the revenue source was not robust enough to accommodate inflationary factors of the 1970s and a desire for services outside of the City of Spokane.

In 1981, a new municipal corporation, the Spokane County Public Transportation Benefit Area (a.k.a. the Spokane Transit Authority), was formed for the sole purpose of providing public transportation via independent taxing and revenue generating authority granted by RCW 36.57A. That year, voters approved a 0.3 percent sales tax that would be matched by the Motor Vehicle Excise Tax (MVET). Reversing a general downward trend, STA has seen ridership growth since its inception. In 1992, STA reported 7,040,000 fixed-route boardings, increasing to 7,485,275 boardings in 1994.

Since the foundation of STA, the agency has worked to expand its capital investments by building infrastructure and purchasing right of way. One

of STA's most noteworthy projects was the construction of a major transit center, The Plaza, completed in downtown Spokane in 1995. The Plaza provides a centralized transit facility, continuing to serve as the hub for the majority of transit trips in Spokane. STA continued to add transit centers, park and rides, bus shelters, and other passenger amenities throughout the 1990s and by 1997 STA's fixed-route service provided 8,171,000 rides.

STA struggled to maintain levels of service when the MVET was rescinded in 1999 and STA's revenues were reduced by nearly 40 percent. In 2004, voters responded by approving an increase in the local sales tax to provide STA with an additional 0.3 percent sales tax for transit, resulting in a total 0.6 percent sales tax to fund STA's operations. This additional 0.3 percent sales tax was scheduled to expire in 2008, but was continued indefinitely by voters in early 2009. In 2009, STA set an agency ridership record with 11,400,000 annual boardings.

## Regional Context

### Introduction

Looking to our past, understanding our present, and projecting our future can often be challenging and frustrating. Historical facts have been lost or forgotten; we do not have the luxury of third-party analysis for present situations, nor can we accurately predict the world-changing events that will impact our lives in the future. However, that does not mean that planning for the next twenty years cannot or should not take place. Rather, it means that we have to think more critically about past trends, current conditions, and future opportunities to enable our citizens and transit organization to think of creative solutions to the complex problems we face.

Although this plan will be useful for potential scenarios where the population declines and the economy suffers, most of the trends addressed in this section discuss effects related to the projected population growth for our region over the next twenty years. Whether the local population is growing or contracting, finding ways to develop and nurture livable communities is always a challenge. Creating better communities requires focusing on the needs of people; and because one of those needs is transportation, STA can play an important role in the betterment of the region. Among other benefits, transit is able to provide affordable, reliable, and environmentally sustainable transportation. As STA prepares for the future, it must consider changes in population, land use, the economy, travel patterns, energy, and the environment to ensure that it is doing its part to support robust communities within the Spokane area.

Evidenced by significant growth in ridership, STA is becoming more important in the lives of Spokane's citizens. Between 1990 and 2009, STA's total annual ridership increased 65 percent to more than 11 million, an average annual growth rate of more than 3 percent. However, 45 percent of this growth occurred between 2005 and 2008, resulting in an even higher annual growth rate over that short period of time.

This increase in transit use has been influenced by many factors, including demographics, land use, the economy, energy prices, and lifestyle choices. Trends may diverge from their projected paths, but by understanding this context, STA will be enabled to help shape the future rather than to simply react to it.

### Population

Regardless of population changes, working to ensure that people embrace positive connections with the places they inhabit is one of the most important goals of good planning. The world population continues to grow significantly, but the population of cities can fluctuate without much warning due to reductions in jobs, services, or quality of life. The

various possibilities require supporting development to meet the demands of growth while simultaneously readying contingencies if needs should diminish. Whether planning for land use, transportation, and/or facility improvements, population projections are often a driver for perceived future needs. For STA, this means preparing for a certain number of riders, planning for roadway traffic, and making the system more efficient and effective.

Spokane County has experienced relatively consistent growth over the last 20 years. Between 1990 and 2008, Spokane County's population grew from 361,333 to 459,000, an average annual growth rate of 1.5 percent. According to medium estimate projections from the Washington State Office of Financial Management, the 2030 population of Spokane County is expected to grow to 589,623, a 28 percent increase (roughly 130,000 people) over 2008.

To mitigate the challenges associated with such an increase in population, the anticipation of accommodating that growth through thoughtful land use and transportation planning is necessary. Encouraging developers to build for population growth at higher densities can have less of an impact on the environment by reducing the amount of land required while minimizing an individual's need to travel long distances. Since the adoption of the Washington State Growth Management Act in 1990, there has been a noticeable rise in population densities of incorporated areas of Spokane County. In 1990, 46 percent of the population lived in unincorporated areas of the county, versus an estimated 29 percent in 2008. This trend was bolstered by the incorporation of two densely populated unincorporated areas: the City of Liberty Lake in 2001 and the City of Spokane Valley in 2003.

As Spokane County's population has increased in size, its average age has also increased. In 2008, the percentage of Spokane County's population aged 65 and over was 13 percent, slightly higher than the state average of 12 percent. Current forecasts show this figure increasing to more than 18 percent by 2030. Planning for these changing demographics will be an increasingly important part of STA's future services. As the number of elderly people increases, senior transportation services such as paratransit will need to accommodate a larger number of customers.

## Land Use

Land use has a significant impact on how transportation networks perform. Densely-populated, mixed-use, pedestrian-oriented land uses complement public transit and vice versa. This type of development offers a greater potential for providing cost-effective and efficient transit service, versus transit routes that serve low-density, residential areas on the edge of cities. All of the jurisdictions STA serves are required to plan under the Washington State Growth Management Act, and therefore must work to encourage development within Urban Growth Areas. The City of Spokane has incorporated "Centers and Corridors" policies into its Comprehensive

Plan with the intent of promoting mixed-use growth within a number of key areas throughout the city, while the City of Spokane Valley has completed a plan to promote denser development along a central corridor.

Nationally, metropolitan regions have seen increased new residential development taking place in the central cities. According to a 2010 Environmental Protection Agency report titled, "Residential Construction Trends in America's Metropolitan Regions", construction of single family units in the 50 biggest metropolitan areas of the United States have declined rapidly, while the construction of multifamily units has fallen less drastically. For the longer term, the trend toward growing urbanization will increase demand for rental and multifamily housing. In Spokane County, the number of housing units is expected to reach more than 240,500 by 2030, an increase of 23 percent over the current total. Despite the conclusions of national reports of growing urbanization, local projections conclude that single-family housing units are estimated to comprise approximately 75 percent of this total. Areas projected to experience major future residential growth are on the eastern, western, and northern edges of the existing urbanized area. In particular, this includes the Liberty Lake area, the Airway Heights/West Plains area, and the northern portion of the North/South Corridor.

## Economy

STA relies on sales tax revenue generated in the Public Transportation Benefit Area to fund capital and operating expenses. Although historically a stable funding source, Spokane's economy is tied to the global marketplace and is therefore subject to the same fluctuations that other areas face. Spokane County's economy continues to be shaped by the area's historic role as a regional center of services for the surrounding rural population of Eastern Washington and Northern Idaho. Regional services include: government, higher education, medical services, and finance. Manufacturing has also been prominent in the area, largely due to the availability of inexpensive energy (hydroelectricity), the rail systems, and Interstate 90.

The job growth rate in Spokane County between 1990 and 2008 has trended at a slightly higher annual average than population growth according to the most current data. Between 1990 and 2008, Spokane County's non-farm employment grew from 151,394 jobs to 221,300, an average annual growth rate of 2.6 percent. During the early part of the 21st century, the majority of job growth occurred in the industries of construction and health care. As the residential construction and finance industries have slowed due to credit and mortgage issues as well as an economic downturn, other industries have emerged to fill this gap. In particular, firms specializing in research, development, biotechnology, and green technology are expected to play an increasingly important role in defining the area's economy. Due to fluctuating tax revenue, STA will need to work with citizens to evaluate the needs of the community and match those needs with available economic resources.

STA's operational budget is dependent on local sales tax revenues generated within the Public Transportation Benefit Area, customer fees, federal and state grant money, and other revenue sources. Traditionally, money generated by customer fees and grant money have made up the minority of STA's operating budget. The majority of STA's revenue comes from local sales tax, creating a direct correlation between consumer spending and revenue generated for STA. This correlation means that fluctuations in the economy can have severe impacts on the operating budget of the agency. Recent trends have shown much weaker consumer spending and STA must prepare for this to be a long-term trend. Other sources of revenue may need to be explored if recent spending trends continue.

### Travel

Adequate travel opportunities are an essential piece of a healthy society and understanding general travel patterns is a key to STA's success as a transit agency. New policies to encourage shorter trips and to reduce the number of miles traveled in vehicles have been adopted by Washington State. In 2008, Governor Gregoire signed an executive order that recognizes the need to reduce vehicle miles traveled (VMT) and mandates a 50% reduction of projected VMT over the course of the next 40 years. However, from 1990 to 2008, personal travel in Spokane County's most urbanized areas grew 15 percent. A number of factors fueled this increase, including increases in two-worker households and longer commute distances. According to data from the 2007 U.S. Census American Community Survey, 61 percent of households in Spokane County possessed two or more personal vehicles, with 24 percent possessing three or more. It is estimated that by 2030 the number of total annual VMT will grow by more than 58 percent over 2008 levels.

According to data from the 2007 U.S. Census American Community Survey, 78 percent of workers aged 16 years and over in Spokane County commuted to work alone in their own vehicles. This is slightly higher than Spokane County's 2000 levels (77 percent) and relatively higher than the Washington State average of 73 percent. In addition, Spokane County experienced declines in workers commuting via carpool during the same time period: 10 percent in 2007 versus 12 percent in 2000 while the state average for commuting via carpool was 12 percent in 2007. Three percent of workers in Spokane County commuted to work via public transportation in 2007, the same level as in 2000. This is significantly lower than the 2007 state average of five percent.

Spokane Regional Transportation Council's 2005 Regional Transit Survey provided information on travel patterns for Spokane County. It was estimated that of all the trips originating in Spokane County in 2005, 68 percent of these ended in either the City of Spokane (50 percent) or the City of Spokane Valley (18 percent). Although not all of the development within these two jurisdictions is urban in nature, transit is better suited to serve a higher percentage of trips which have origins and destinations in

dense areas. In addition, less than half of all trips (45 percent) occurred outside of the AM peak (6:00 to 9:00) and PM peak (3:00 to 6:00) periods. The study also revealed the large amount of travel occurring between Spokane County and adjacent Kootenai County, Idaho. Nearly 20,000 residents of Spokane and Kootenai counties cross the state line each day for work, shopping, medical appointments, and other activities. Approximately 58 percent of these residents originate their trips in Kootenai County, with the majority heading to destinations within the cities of Spokane and Spokane Valley.

## Environment

While there is no consensus, scientists around the world point to mounting evidence that human-induced climate change is a reality and represents one of our most pressing environmental problems. Data suggests the planet experienced warming temperatures during the 20<sup>th</sup> century unparalleled to any time since human record keeping began. The past decade appears to have been the warmest in recorded history, and the world's preeminent climatologists have found overwhelming evidence that human activity is the cause. Scientific studies by the University of Washington's Climate Impacts Group predict that allowing this warming trend to continue at present rates could result in decreased agricultural output, increased catastrophic weather events such as forest fires, drought and floods, and the displacement of entire populations due to rising sea levels.

Fossil fuel emissions associated with transportation have played a significant role in this human-induced climate change. The City of Spokane's most recent Greenhouse Gas Inventory provides a local example. In 2005, transportation was found to be responsible for the generation of 1.8 million metric tons of carbon dioxide equivalent (CO<sub>2</sub>e), or 53.5 percent of the community's total greenhouse gas emissions. The large majority (90.0 percent) of these emissions were generated by travel on the City of Spokane's surface streets, while the remainder (10.0 percent) was generated by travel on Interstate 90 and State Route 195.

Although these topics continue to be debated, recently enacted laws, executive orders, and pending legislation are establishing mandates to reduce greenhouse gas emissions. These mandates have many implications for consumer prices, travel patterns, and living arrangements. It is likely that debates will continue into the foreseeable future. But in spite of this debate, it is nearly universally accepted that transit will play a major role in environmental goals of the 21<sup>st</sup> Century.

## Energy

In addition to environmental challenges, communities also must prepare for a possible energy crisis. According to a number of analysts with a variety of political persuasions, peak oil has arrived or is on the near horizon. Those recognizing peak oil understand that, despite the inevitable

peak in global oil production/supply, demand will continue to increase. The decline in production rates does not mean that we are near a time where oil disappears, but it does mean the end of relatively cheap oil, as we switch from a buyer's to a seller's market. For economies or companies leveraged on ever increasing quantities of cheap oil, the consequences may be troubling.

The US Department of Energy released an independent report in February 2005, entitled "Peaking of World Oil Production: Impacts, Mitigation, and Risk Management", which explored the timeframe, consequences and actions to reduce the impacts of peak oil. Although previous energy transitions (i.e. wood to coal and coal to oil) were gradual, the report concluded that peak oil will be revolutionary by abruptly and adversely affecting the global economy due to a spike in fuel prices. Although a few skeptics still believe peak oil is decades away, the evidence describes a different prediction: 9 of 12 oil analysts highlighted in the report project that peak oil will arrive before 2020. Due to the forecasted imminence, the report encourages immediate and decisive action by governments, companies, and individuals for the adverse effects to be minimized.

While some oil companies have resisted acknowledging peak oil, the CEO of the energy company Shell wrote an e-mail to employees in 2008 saying, "...Shell estimates that after 2015 supplies of easy-to-access oil and gas will no longer keep up with demand." That same year the International Energy Agency (IEA) conducted a detailed field-by-field analysis of global oil production finding that in order for the world to maintain current levels of oil production by 2030, the world would have to develop and produce 45 million barrels a day (approximately four times Saudi-Arabia's current daily production). Dr. Birol of the IEA said in a 2009 interview, "One day we will run out of oil...The earlier we start [preparing], the better, because all of our economic and social system is based on oil, so to change from that will take a lot of time and a lot of money and we should take this issue very seriously (<http://www.independent.co.uk/news/science/warning-oil-supplies-are-running-out-fast-1766585.html>)." Under these scenarios and without successful cultural reform, severe economic and social consequences may be inevitable.

According to recent estimates of the IEA, oil currently accounts for about 43% of the world's total fuel consumption, and 95% of global energy used for transportation. If the oil estimates are correct and transportation relies on oil for 95% of its energy, the future of mobility may be in jeopardy if a shift to more sustainable energy does not take place. Unfortunately for the transportation business, vehicles currently consuming liquid fuels have no ready alternatives. The Department of Energy analysis indicates that widespread use of solar, wind, photovoltaics, nuclear power, geothermal, fusion, etc. energy sources to produce power for individual vehicles is at best decades away.

Peak oil has significant ramifications for public transit agencies because of the volatility of fuel prices and lack of suitable alternatives. The annual

average price per gallon of fuel (unleaded and diesel combined) in 2008 was \$3.08; the highest average price paid during this period was \$4.19. Rising fuel prices will not only have a significant impact on this agency's operational budget, it may also result in the need for additional service as more people may migrate from their personal automobiles to public transit. Although a complete shift from oil dependence will not happen overnight, the first steps must begin now. STA recognizes the urgency of the situation and has undertaken a major capital expense project to replace aging diesel buses with buses employing diesel-electric hybrid technology. Future considerations may include the use of fixed-route vehicles powered by overhead electric wires.

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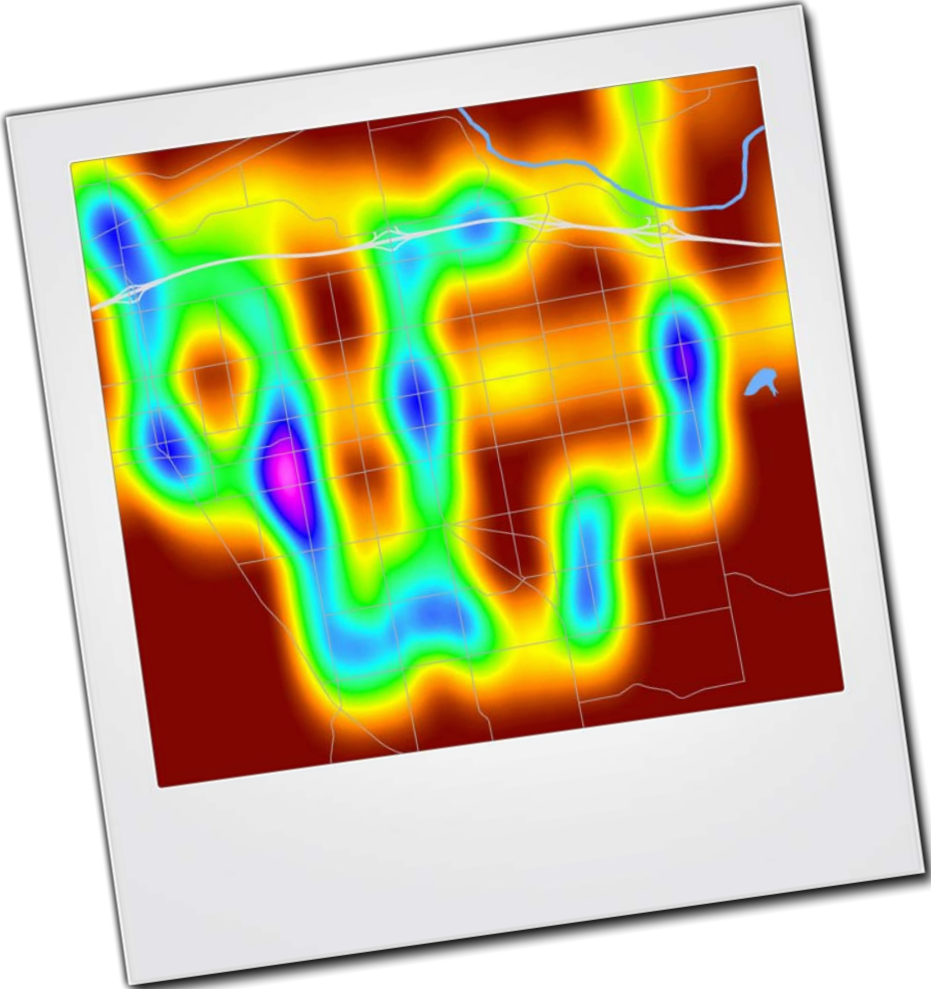
Regional Context

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# Connect Spokane

A Comprehensive Plan for Public Transportation

## Part II: Services



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# High Performance Transit Network

The High Performance Transit Network (HPTN) 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.***

Most studies show that people are comfortable walking a quarter-mile for most activities. As the number of destinations within a mile increase, people are likely to increase the proportion of trips executed by walking. Beyond one-half mile to a mile, most persons will prefer other modes, especially if the trip is for purposes other than exercise. Rather than competing with short walking trips, transit can support greater mobility without dependence on the private automobile. The High Performance Transit Network in particular, with its emphasis on all-day, two-way connectivity at reasonable levels of frequency, supports the pedestrian's mobility beyond normal walking ranges. This emphasis on pedestrian mobility is a more effective way to view HPT mobility than looking at congestion relief or other less tangible societal benefits.

### 2. Ubiquity

***HPT service should attempt to serve the greatest number of people possible and the greatest number of destinations possible.***

The perceived importance of organic and inorganic properties often is proportionate to their availability and visibility. Despite the perception, ubiquity is not synonymous with importance; however, serving a broad geographic coverage and a broad array of transport needs means that the HPTN can be important to many people. Important things in our lives are things we share, value, and seek to take care of.

### 3. Activity Centers

***HPT should connect the region's cities and centers of population and jobs as much as possible.***

Urban studies over the last century have reinforced the intuitive notion that there are hierarchies of place and space. If there are centers, then there are peripheries. For about 50 years, gravity models have been used to express trip distribution in urban areas. Namely, that interaction between two locations declines with increasing distance (or time) between them, but is positively associated with the amount of activity at each location. Another way to say it is a place with more activity is more important to a greater number of places. It is for this reason that connecting activity

centers, particularly those amenable to pedestrian activity, is important with the HPTN.

#### 4. System Effectiveness

***The HPTN should improve the effectiveness of the transportation system.***

While often misunderstood to be simply about moving traffic, the regional transportation system is successful when it provides mobility for people and goods. All the “good ideas” about transit and transportation can be measured from the perspective of system effectiveness. When replacement costs (fiscal and environmental) and investment life cycles are not considered, it is tempting to create infrastructure that may not be founded upon the principles described within this element. Improving the effectiveness of the transportation system may be less about ensuring certain patterns of travel continue to exist, but about encouraging and facilitating only those travel patterns that can be sustained.

#### 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.***

Many factors beyond planning define the infrastructure realities of metropolitan areas. Try as a metropolitan area might, it has a unique politic, demography, geography and climate that make it impossible to replicate the perceived successes of other metropolitan areas. Appropriate scale of the HPTN reflects the fact that the Spokane region's urban layout, density and fiscal capacity are unique. In order to be functional and achievable, design of the HPTN must respect, and even magnify this unique set of circumstances.

#### 6. Mode Neutrality

***Service quality, not mode technology, is the defining feature of HPT.***

Although the vehicle type or mode is often the first topic of conversation during transit corridor discussions, the service type is the most important feature. For this reason, the aggregated service quality (relative to travel needs) and not the mode is the defining feature of the HPTN.

#### 7. Permanence

***HPT features permanence of investments.***

Regardless of mode, HPT should express to the customer through wayfinding, tactile enhancements at stations, or alignments that it will be available in the future. This permanence and definitiveness is also critical in directing those developing the built environment to focus new growth around transit.

#### 8. Integration

***HPT should integrate and provide connections with other modes and transport***

**services.**

While the most critical mode with which transit should be integrated is the pedestrian (walking) mode, integration with other modes is important to expand customer base and make use of synergies that can occur by connecting to modes that connect with transit systems in other urban areas. Integration with other modes can expand the customer base to include customers who may use the system less regularly than typical customers.

**9. Competitive**

***HPT should make desired connections better than competing modes whenever possible.***

Nearly every transportation alignment in cities is no older than the city itself. Often transportation alignments define how sections of a metropolitan area relate to other sections. As a matter of geographic definition it is easy to assume that these alignments are the only option for future transportation investments. Penetrating barriers and making new connections are features of the HPTN that can enhance its competitiveness with other modes, particularly the private automobile.

**High Performance Transit Policies****HP-1.0 – Corridors**

***STA shall identify service corridors with sufficient ridership to warrant HPT service.***

The HPT routes are located in major corridors where there is sufficient need to justify significant investments in passenger amenities and information.

**HP-2.0 – HPT Service Type Selection**

***STA shall assign various HPT service types to reflect distinctions in speed, service, frequency, and access.***

Three service sub-types – Green, Red, and Blue – have been identified to reflect appropriate distinctions in speed, service frequency, and access (distance between stops) for each route or family of routes. At some stage, these service sub-type names may be replaced with more descriptive branding names. A specific route in the HPT service typology is considered a HPT Corridor. The following table describes the general characteristics of the HPT service types in terms of speed, access, frequency and purpose.

Service Type	Speed	Access	Frequency	Purpose
Green Lines	Lower	Higher	6-15 minutes	Support spontaneous travel, short trips and provide quick, easy access to other service types.
Red Lines	Moderate	Moderate	10-15 minutes	Offer direct service to major destinations within a metropolitan area.
Blue Lines	Higher	Limited	15-30 minutes	Cover long distances quickly to connect major regional destinations.

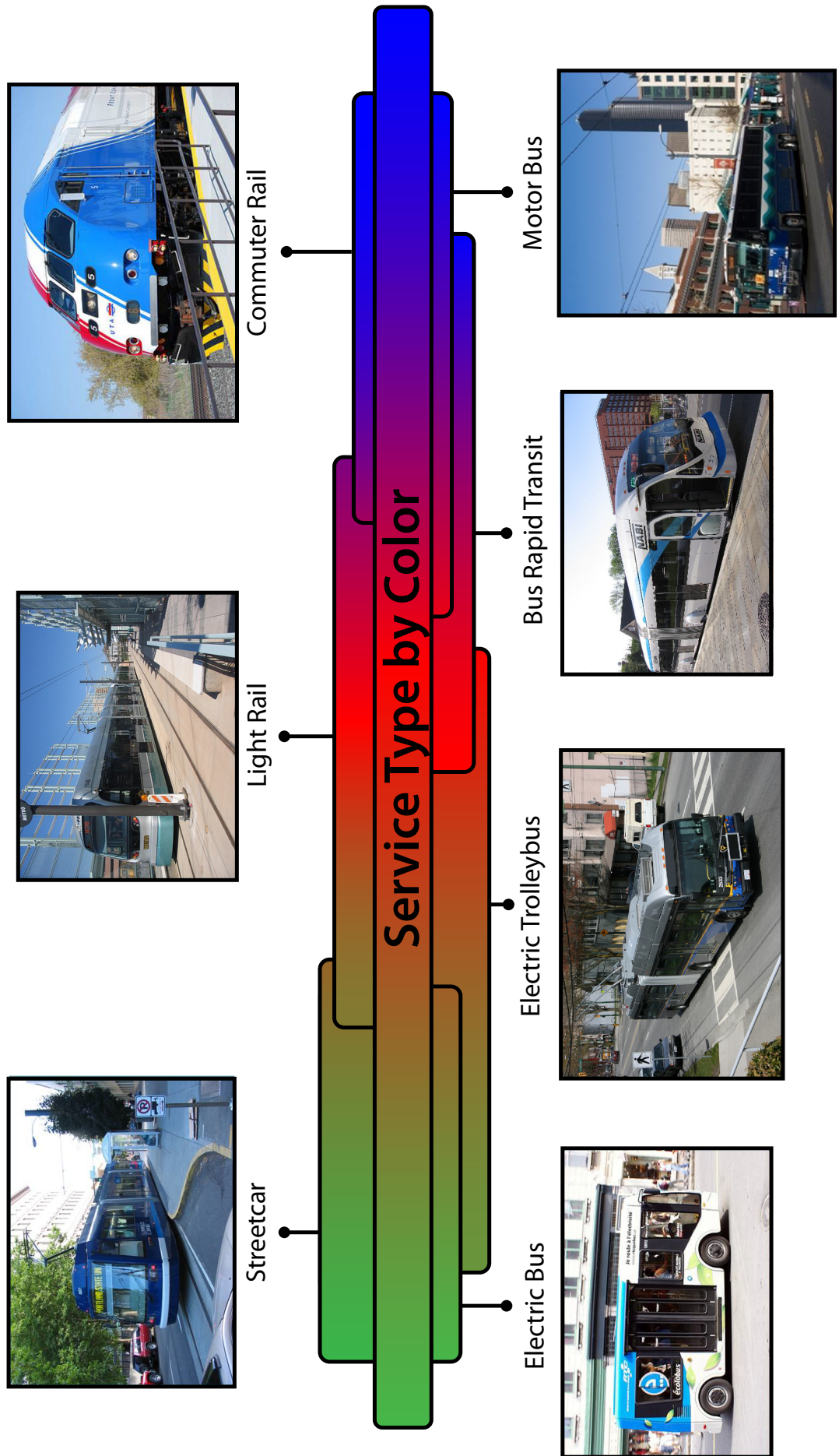
**HP-3.0 – HPT Mode Selection**

***STA shall consider the strengths and weaknesses of various vehicle types in relation to the demands of the corridor being served.***

A variety of transit vehicle types exists, each with its own set of benefits and weaknesses. Some vehicles have the capacity to move a dozen passengers, while others carry several hundred passengers at a time. Of course, these different vehicle types also have significantly different costs. These costs, both up-front and operational in nature, must be considered when selecting appropriate vehicles for HPT service. Mode selection is often part of an “alternatives analysis” conducted in a way to make the corridor project eligible for federal New Starts/Small Starts funding. If such funding is not sought, it may be appropriate to scale the mode selection process to take less time while still providing for public input. This may mean limiting the number of modes to be considered in a particular corridor.

Figure 1 - Service Type by Color

\*Not inclusive of all possible modes



High Performance Transit Network

HP

Mode	Strengths	Weaknesses	Service Type Application
Aerial Tram	Relatively quiet, creates new right of way with less property acquisition; can climb steep grades efficiently	Generally less effective when serving more than two points; costs are high	Red
Commuter Rail	Highest speed when operating in exclusive right of way; high capacity	Limited opportunities to establish right of way; requires tremendously high concentrations of employment to justify costs	Blue
Conventional bus (Urban Transit)	Flexibility in routing; readily serviceable due to knowledge, parts, etc	Localized emissions,	Green, Red
Conventional Bus (Over-the-Road Coach)	High capacity with greater comfort than typically urban buses	Localized emissions; only one egress makes inefficient for loading and unloading	Blue
Electric Trolley Bus	Relatively quiet, quick to accelerate and climbs hills well; can change lanes when necessary	Not as flexible as diesel bus; require more permanent routing over bus	Green, Red
Light Rail Vehicles	Can be coupled for increased capacity without increased labor costs; can operate at higher speeds when traveling on exclusive (or semi-exclusive) right of way	Higher investments costs that are more suitable at higher densities	Red, Blue
Maglev	Can achieve high speeds; subject only to air resistance and electromagnetic drag, making maglev efficient; quieter than conventional trains	Higher investments costs that are more suitable at higher densities; requires a separated right of way	Red, Blue
Streetcar	Relatively quiet, can be coupled for increased capacity without increased labor costs; speeds suitable for operating in street right of way	Cannot change lanes on urban streets; cannot climb steeper hills	Green, Red

#### HP-4.0 – Prioritization

***STA shall prioritize the implementation of HPT corridors and selection of service types based on the principles outlined in this element.***

### High Performance Transit Connect Strategies

#### High Performance Transit Network Map

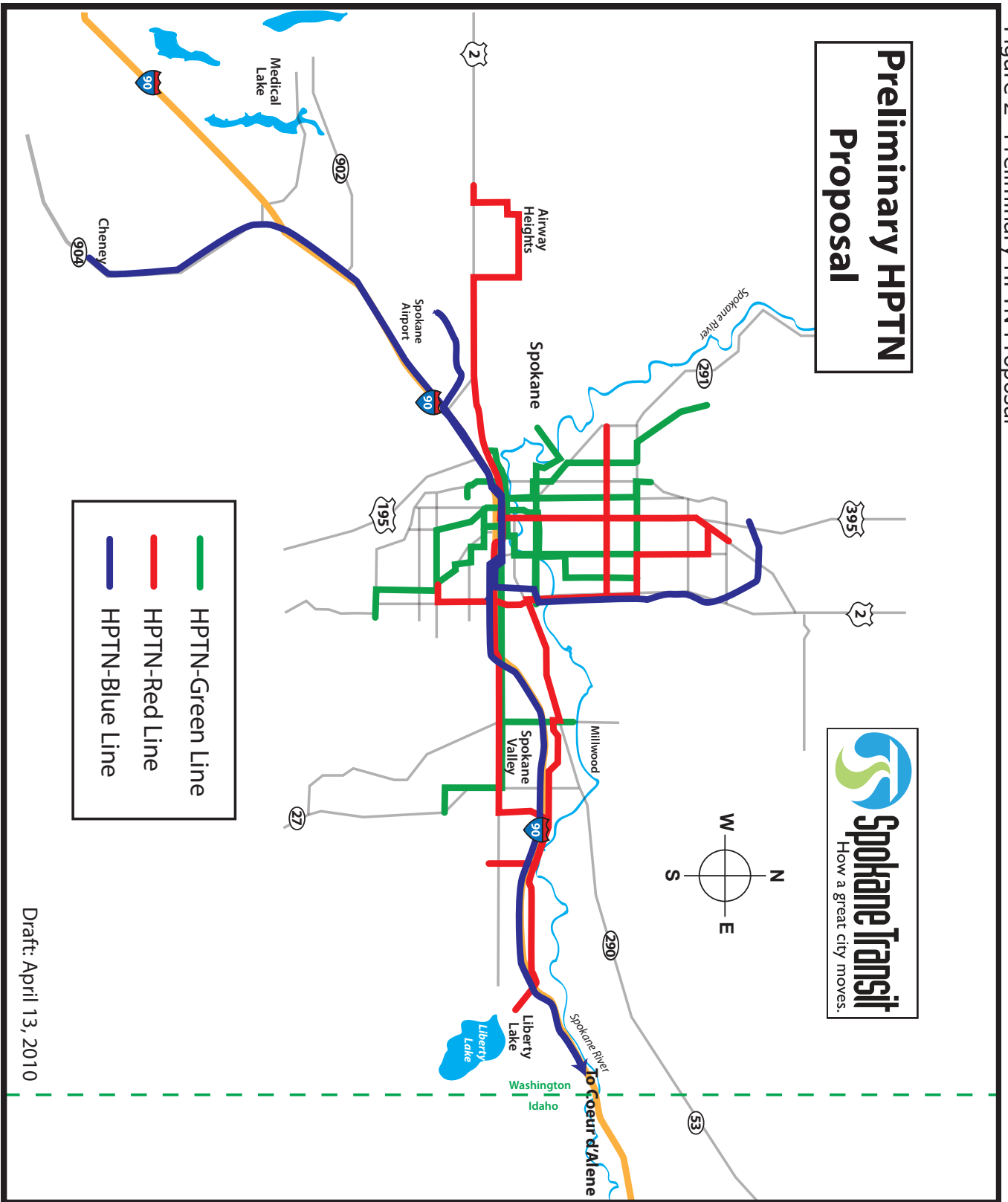
***The High Performance Transit Network map is the foundation, framework, and basis for future service improvements.***

The following map depicts how the High Performance Transit Network may look in 20 to 30 years. Many factors, including but not limited to, economic conditions, ridership demand, funding opportunities, and regional priorities will affect how quickly and where the network begins taking shape. Additionally, modifications to this map are likely after the development of each corridor and as land use patterns change. Although the full build out of this network is presently unfunded, this map will begin to take shape incrementally as directed by the policies found within this element.

HP

High Performance Transit Network

Figure 2 - Preliminary HPTN Proposal



Draft: April 13, 2010

# Preliminary HPTN Proposal Route Descriptions

Route	Terminals	Via	Draft Priority	Implementation Strategy and Challenges
<b>B1</b>	Cheney / EWU <> Hastings Park & Ride	I-90, Downtown Spokane, SCC, North Spokane Corridor	Cheney – Intermediate NSC – Long Range	<b>Cheney – Basic in Transition Service (Interurban)</b> Restructure Cheney and Medical Lake service; improve Cheney frequency; construct West Plains Transit Center. North Spokane Corridor is not expected to be completed for decades.
<b>B2</b>	Spokane Int'l Airport <> Coeur d'Alene, ID	Downtown Spokane, Spokane Valley Mall, Post Falls	Long Range	Coeur d'Alene is currently outside the service area. Future coordination would take place with affected jurisdictions and/or transit agencies.
Route	Terminals	Via	Draft Priority	Implementation Strategy and Challenges
<b>R1</b>	Airway Heights <> Newport Hwy & Hawthorne	Sunset Blvd., Downtown Spokane, Division Street,	Division Street – Near Term Airway Heights – Long Range	<b>Route 25 Division Street – Basic in Transition Service</b> Maintain 15-minute frequency on Division near term. Northern terminal Route 25 at or near Hawthorne and Hwy. 2. Service to Airway Heights will be determined by speed of population growth in the West Plains.
<b>R2</b>	Downtown Spokane <> Liberty Lake	I-90 Corridor, Sprague Ave., Spokane Valley, Greenacres	Intermediate	Engage in Alternatives Analysis to determine alignment, including use of old Milwaukee corridor, past assumptions of shared track with Union Pacific, and service on the north side of I-90 from Pines Road to Harvard Road.
<b>R3</b>	VA Hospital <> Sprague & Sullivan	Wellesley Ave., Hillyard, SCC, Millwood, Spokane Valley Mall	Long Range	Maintain 15-minute frequency on Wellesley and Market Street to SCC, with possible changes to existing Route 33 Wellesley Avenue.
<b>R4</b>	Holland & Division <> South Hill Park & Ride	Nevada St., Francis Ave., Market St., Freya St., 29 <sup>th</sup> Ave.	Long Range	Near-term routing changes may initiate connectivity; increased frequency beyond minimum levels is premature.

Route	Terminals	Via	Draft Priority	Implementation Strategy and Challenges
<b>G1</b>	Five Mile Park & Ride <> 57 <sup>th</sup> & Regal	Monroe St., Downtown Spokane, Grand Blvd., Lincoln Heights, Regal St.	Near Term	<b>Route 24 Monroe and Route 44 Grand – Basic in Transition Service</b> Interline Routes 24 and a modified Route 44. Preserve 15-minute frequency on both routes. Transfer Regal service from Route 45 to Route 44. Requires new terminal in Moran Prairie.
<b>G2</b>	Browne's Addition <> Spokane Community College	Downtown Spokane, Riverpoint Campus, Hamilton St., Mission Ave.	Near Term	Preserve 15-minute frequency to Browne's Addition (Routes 60/61). Modify existing routes providing 15-minute frequency to SCC (Route 29/91). Interline the route pairs. May be revised by Downtown Transit Alternatives Analysis.
<b>G3</b>	Downtown <> Valley Transit Center	Sprague Ave.	Near Term	<b>Route 90 Sprague—Basic in Transition Service</b> Maintain 15-minute frequency of Route 90 up to the Valley Transit Center (VTC).
<b>G4</b>	Indian Trail <> Lincoln Heights Shopping Center	Shadle Park, Downtown Spokane, Perry District, Southeast Blvd.	Intermediate	Restructure routes (22 and 45) to interline service from Northwest Spokane to Southeast Spokane. Basic Service north of Francis Avenue is pre-mature within near term.
<b>G5</b>	14 <sup>th</sup> & Lincoln <> Crestline & Francis	Downtown Spokane, Riverpoint Campus, Hamilton St., Euclid Ave., Crestline St.	Intermediate	Consolidate Routes 42 and 43 below 14 <sup>th</sup> Ave. to provide simpler routing structure. Subject to further analysis in Downtown Transit Alternatives Analysis.
<b>G6</b>	Five Mile Park & Ride <> Southside Medical District	Francis Ave., Nevada St., Hamilton St., Riverpoint Campus, South U District	Long Range	Requires possible major investment to connect Riverpoint Campus, South U District and Medical District. Subject to further analysis in Downtown Transit Alternatives Analysis.
<b>G7</b>	Spokane Falls CC <> Spokane Community College	Maxwell Ave., Mission Ave.	Long Range	Near-term implementation is unlikely given scarce resources and lack of continuous service in this corridor today.
<b>G8</b>	Millwood <> SR 27 & E 32 <sup>nd</sup> (South Valley)	Argonne Rd., Valley TC, Sprague Ave., Pines Rd.	Long Range	Connects activity centers that today lack pedestrian orientation or significant densities. Increased travel demands between these centers will be necessary for implementation.

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Network Performance High

## Fixed-Route Service

Over a century of urban transportation system planning reveals the challenges and opportunities faced by those involved in the field. Economic efficiency, operating conflicts with the private automobile and other roadway users, and serving the general public versus responding to individual needs have made the logical assessment and improvement of fixed-route transit a difficult endeavor.

To illustrate this point, in 1919 the Federal government appointed an eight-member panel to the Federal Electric Railways Commission to investigate the challenges then facing operators of streetcars in American cities. The creation of the commission was preceded by several very difficult years for private companies whose transit systems carried millions of Americans each day. Inflation in energy prices, labor shortages, deferred maintenance, and fixed fares were among the many symptoms of these difficult years. While these more notable symptoms seem unrelated to good service design, the findings of the Commission are startling in their applicability to today's planning problems. Some of the findings and recommendations for streetcar companies include: reduction of stops to improve speeds; elimination of service in low-density areas; consolidation of competing lines; adjustments to fare structures to reflect cost variations that can exist between routes, and so forth.

In 1958 the National Committee on Urban Transportation assembled what was likely the first set of comprehensive standards for transit services and facilities in North America. This document recognized "that [standards, warrants, and objectives] must be directly related to the economical feasibility of providing services." Furthermore, it provided standards for routing which listed desirable routing characteristics such as: offering directness of travel with respect to origins and destinations; being free of duplication, except where routes converge; including a minimum number of turning movements; and so forth.

In 1982 Spokane Transit adopted its first Service Standards for fixed-route service. The standards included minimum frequencies, hours of service (span), loading, stop spacing and access. Service Planning Guidelines adopted by the STA Board in February 2000 made some modifications to these standards while adding additional guidance on service change procedures and service allocation.

This section of Connect Spokane draws from documents highlighted above as well as numerous samples of service guidelines and standards documents from other transit authorities. This document is intended to both express ideals and establish expectations for the design, quality and performance of Spokane Transit's fixed-route system.

The process of creating good transit service is perhaps new to most readers. However, the practice is similar to that of building a good

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Fixed Route

house. For example, first builders must ask, “What makes for a good house?” Most people generally agree that a good house should be energy efficient, comfortable, aesthetically pleasing, and protect its inhabitants from adverse weather. These are the principles of building a good house. Second, they ask, “How do I build a good house?” There are many ways to build a house, but construction of good houses must meet important regulations and standards to ensure safety, utility, consistency and proper urban form. These are the policies to follow when building a good house. Finally, builders ask, “Did I build a good house?” This can be measured by calculating energy efficiency, looking for leaks in the roof or analyzing the market value. These are the performance standards used to evaluate the need for remediation. If they didn’t build a good house, builders must revisit the principles and follow the process again. This “understanding, implementing, and evaluating” analogy illustrates the similar process used to create and maintain first-rate fixed-route transit service.

**There are three questions to ask about fixed-route design:**

**1. Principles-What makes for good service?**

This section describes basic principles that affect the design of service, its utility to the public, and ultimately the performance of the route on many different levels. It is not meant to be policy; rather, it is information prepared to communicate to decision makers, customers and other groups interested in transit service the concepts that should be considered to ensure the most benefit is derived from investment in operating fixed-route service.



**2. Policies-What guidelines do we follow to create good service?**

This section articulates draft policy, based on principles, that defines transit network architecture, extent and service levels for fixed-route transit service. Issues of frequency of service, span (hours of operation), public input, and geographic extent are determined in policies to ensure consistency in service modifications, enhancements, and reductions.



### 3. Performance Standards-Did we build good service? (Located in Annex 1: Performance Standards)

This section contains three primary standards that when not met result in evaluating alternatives for remediation. This may include routing changes, service reductions, or adjustments to related routes. The performance standards measure route performance based on ridership productivity, farebox recovery, and vehicle loads as it relates to the energy consumed for transporting passengers.



## Fixed-Route Service Design Principles

The principles listed below provide guidelines for ensuring the most benefit is derived from investment in operating fixed-route service. Adherence to these principles grows in importance as demand and service expand. Smaller transit systems can afford, with relatively little risk, to design systems outside of the recommended principles below. Larger systems, such as STA, cannot afford the same luxury.

### 1. Network

***Routes should be designed in the context of other routes and transit facilities.***

No route is an island. Designing routes within the context of other routes and transit facilities provides for sound transit networks.

### 2. Independent Utility

***Routes should be designed to access a mix of uses and have utility independent of transfers.***

While route design should reflect network integration, each route should be developed to have utility independent of transfers. For instance, the notion of trunk and feeder suggests that feeders are dependent upon a trunk for utility and therefore taking people to a transit center or park and ride is adequate. STA's experience with such route has shown that they are suboptimal. While in most cases riders will transfer, a route that "feeds" a major line should access a mix of uses so that there are trips that could be served on the line without a transfer.

### 3. Generalized Service versus Specialized Service

***Route design should focus more on generalized service, rather than specialized service, for greater ridership gains based upon equivalent capital investments.***

Generalized service provides service for most of the day and can be folded into the travel patterns of a multitude of customers for many different purposes. Specialized service seeks to go out of its way to reach the front door of a specific employer or housing facility, is scheduled around specific work shifts, or is limited to peak travel times. In most cases, the more

specialized a service, the less capital intensive it should be. In the majority of cases, capital and operating investments in generalized service will result in greater ridership gains over comparable major capital investments in specialized service.

#### 4. Multiple Destinations

***Generalized service routes should be designed to serve multiple origins and destinations.***

A generalized service route should serve multiple origins and destinations. While a downtown area will produce higher trip demand than many other destinations, ensuring a route has intermediate destinations allows for greater seat turnover and utility to riders.

#### 5. Route Terminals

***Routes should be designed with anchors in activity centers with healthy mixes of employment and housing.***

Routes should be anchored in activity centers, ideally with a mix of jobs and housing. As much as possible, routes should not end in low density environments. Without proper anchors a route will chronically be empty at the end of the route and serve fewer people.

#### 6. Interlining of Routes

***Routes should be designed to interline with other routes, rather than terminating in a central business district (CBD).***

It is common practice to radiate routes from a CBD. While it may support defining a route's destination, it provides less mobility than continuing through downtown, either after a pause and/or route number change, or as a singular route. Interlines should reflect utility to the rider; routes that are interlined and serve the same general geography or quadrant of the city (so the bus is effectively turning around downtown) are generally not useful to riders.

#### 7. Route Length

***Routes should be designed to be as long as practicable without being wasteful, unreliable, or inoperable due to the lack of recovery opportunities.***

The longer a route, the more opportunities there are to match origins with destinations without requiring a transfer. This results in a higher load at any given point on a route. Ideally, no route should be less than two miles in length.

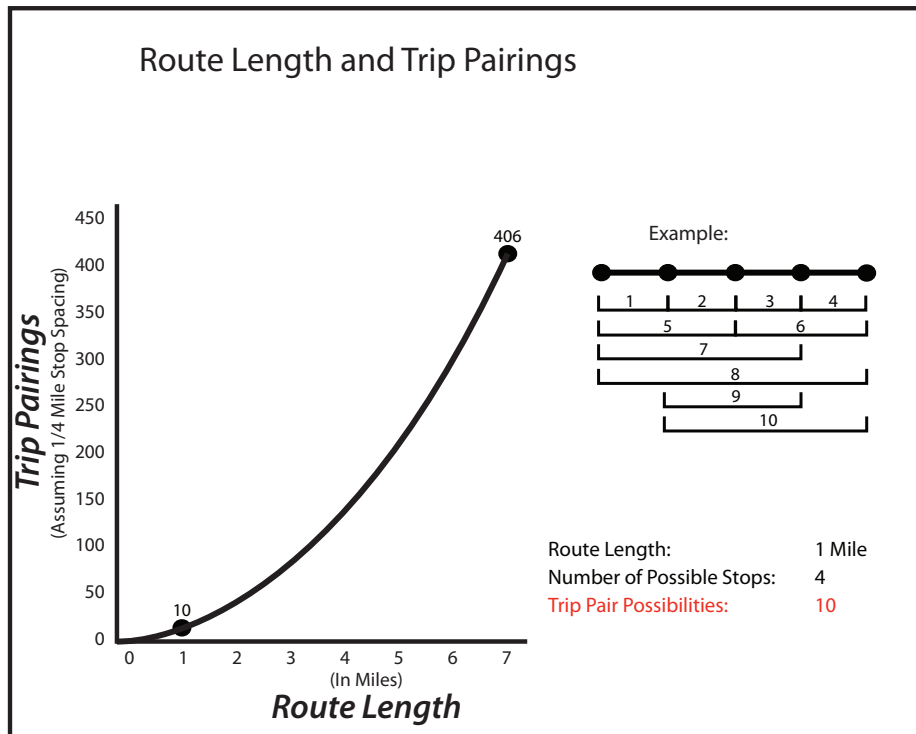


Figure 3- Route Length and Trip Pairings

### 8. Arterial Travel

***Under most circumstances, routes should be designed to travel on arterials.***

Travel on arterials generally provides a good balance between speed and access. Appropriate exceptions include the following: to accommodate route terminals where off-arterial travel is necessary to turn around; an alternative to a segment of arterial where grades or other inherent conditions prohibit regular transit operations; or, where a non-arterial street has been designated as a special transit corridor with enhanced and/or exclusive infrastructure that is amenable to transit operations.

### 9. Speed versus Access

***Routes should be designed specific to the speed and access needs of the areas/ populations they serve.***

While people may prefer the fastest way between two points, point to point (non-stop) service is not available at a scale that would match the ubiquity of the automobile. Adding more access (i.e. pick-ups and drop-offs) can increase utility but can also reduce the service utility for some riders.

Generally, access must decrease in order to increase speed.

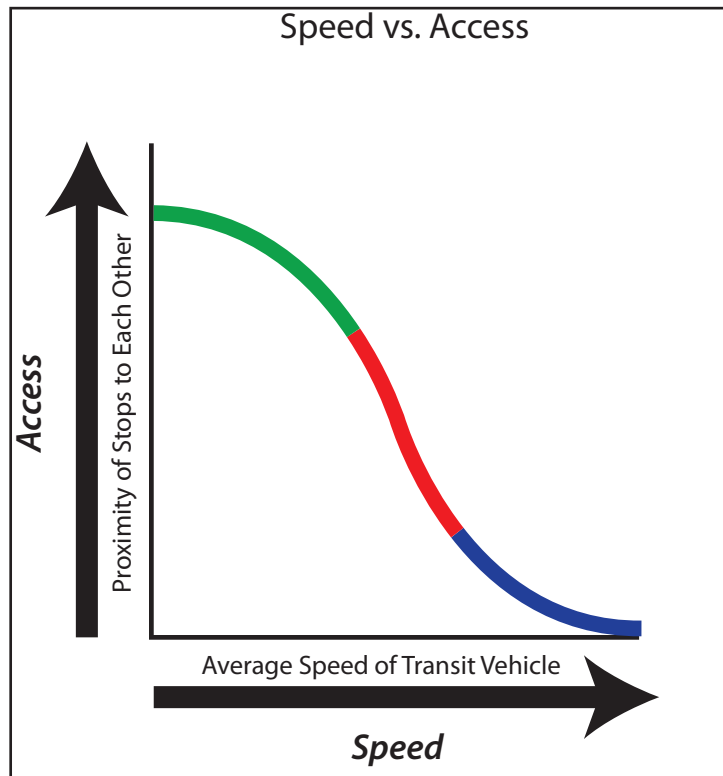


Figure 4- Speed vs. Access

#### 10. Convergence of Routes

***Routes should be designed to converge on higher density centers and corridors to increase frequency and facilitate short, spontaneous trips.***

When approaching on higher density centers and corridors, such as a CBD or university campus, it is appropriate for routes to converge such that the combined frequency increases the capacity and quality of service. Focusing service on a common pathway can allow for very high frequencies that facilitate short, spontaneous trips by people who would otherwise not opt for transit as a preferred mode.

#### 11. Route Spacing

***Parallel routes should be spaced far enough apart so that service is not duplicative.***

Numerous transit studies have shown that people will walk up to ¼ to ½ mile to catch a bus or train. Therefore, spacing of a minimum of ½ mile in most cases eliminates unnecessary duplication of service and simplifies the decision-making process for riders. It also tends to enable higher frequencies on a single corridor rather than a dilution of service over many streets.

#### 12. Loops and Circles

***Under most circumstances, routes should be designed to avoid loops and circles.***

People generally prefer the most direct path between any two points.

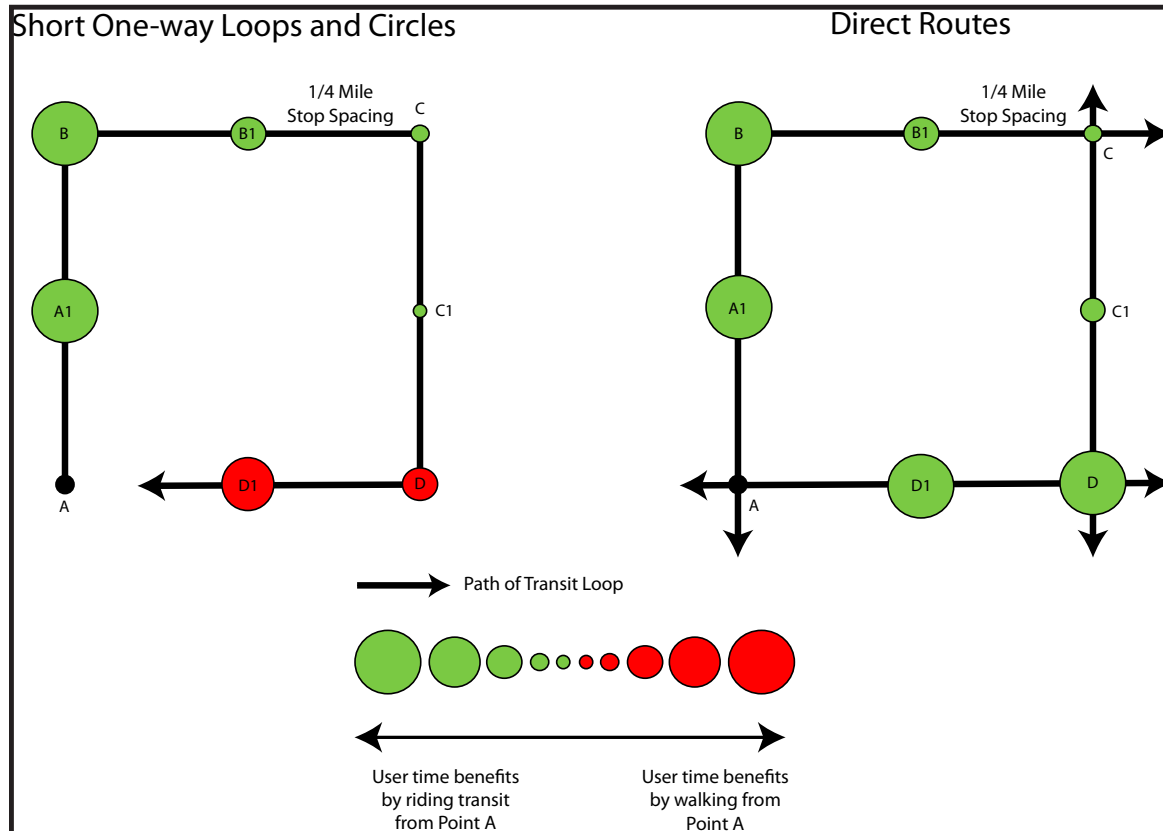


Figure 5- One-way Loops vs. Direct Routes

Providing a circular path, especially in a one-way fashion, can add cost and reduce the attractiveness of service. Some small loops that operate at route terminals or very large two-way loops where the circumference is sizable so that most riders will travel in a straight line or only a medium-sized arc about the loop may be appropriate.

### 13. Middle Ground

**Where possible, routes should travel along corridors which have ridership generators on either side in such a way that the route bisects destinations rather than skirting the periphery or along physical barriers such as rivers, ledges or lakes.**

### 14. Opportunity Cost and Change

**Route design should focus more on providing good service and network design, rather than ridership preservation, to increase overall ridership.**

Reallocation or restructuring of service to better fit good service and network design will typically result in increases in ridership. Despite this opportunity, there will always be pressure to maintain current service in order to preserve current riders' travel habits. Hence, ridership growth will always be pitted against ridership preservation.

## Fixed-Route Service Design Policies

This section articulates policy, based on principles, that defines transit network architecture, extent and service levels for fixed-route transit service. These policies are intended to ensure consistency of existing service and for service modifications, enhancements, and reductions as well. The policies may be used by citizens, staff, and elected officials for the purposes of decision making, maintaining consistency, and network/route building guidelines. The following policies can be classified into two categories. The first set of policies can be applied to the system as a whole. The second set of policies is route-specific. The existing network, routes, and all proposed route changes should be in compliance with all of the policies to the greatest extent practicable.

FR  
Fixed Route

Policy Summary	
<b>System-wide Policies</b>	
FR-1.0 Major Service Types	These policies define the types of service found in the fixed-route network.
1.1 HPTN	This is a network of routes selected for higher capital and operating investment.
1.2 Basic	This is the basic service level STA provides.
1.3 Commuter Peak	This service is focused on peak demands for specific travel markets.
1.4 Basic Service in Transition	Incremental investments in basic service that overlay proposed HPT routes may take place over time.
FR-2.0 Service Allocation	These policies identify targets for the allocation of service across service types and geography.
2.1 Geographic Extent	This policy defines the necessity of geographically extending service to serve the urbanized areas.
2.2 Service Type Allocation	This policy defines the minimum and maximum percentage of revenue service hours allocated to each service type.
2.3 Geographic Allocation	This policy defines the minimum requirements for serving each travel shed within the PTBA.
FR -3.0 Service Span	The Service Span policies identify target hours of operation during each day of the week.
3.1 Basic System Hours	This policy defines the system operating hours requirements for regular basic service.
3.2 Extended System Hours	This policy defines the system operating hours requirements for the HPTN.
<b>Route-specific Policies</b>	
FR -4.0 Headway	This policy defines the maximum headways for service by type.
FR -5.0 Stop Spacing and Placement	This policy states guidelines for stop placement and defines the maximum and minimum distances for stop spacing by service type.
FR -6.0 Route Numbering	This policy defines the standard numbering system for all routes.
FR -7.0 Service Implementation Plan	This describes the service revisions which are planned for the following two years.

## FR-1.0 – Major Service Types

***STA shall provide four major types of fixed-route service: High Performance Transit Network (HPT) Service, Basic Fixed-route Service, Commuter Peak Service, and Basic Service in Transition.***

HPT and Basic service types are generalized service that are designed to serve the greatest number of people within the region's geographic area and STA's financial limitations. Commuter Peak is a specialized service focused on attracting and accommodating peak demand travelers to employment and education centers. Basic Service in Transition recognizes the transition time and investment a Basic Service route may require to develop into HPT-level service. The following descriptions describe a basic policy framework on which the attributes of each service type is constructed.

### 1.1 High Performance Transit Network Service

This generalized service is intended to be considered full-time service, operating in two directions. Spontaneous travel is supported by the relatively high frequency of service. The HPT routes are in major corridors where there is sufficient ridership to justify significant investments in passenger amenities and information. At this stage, three service sub-types – Green, Red, and Blue (see P-5.0 and P-6.0) – have been identified to reflect appropriate distinctions in speed, service frequency, and access (distance between stops) for each route or family of routes. At some stage, these service sub-type names may be replaced with more descriptive branding names. A specific route in the HPT service typology is considered a HPT Corridor.

### 1.2 Basic Fixed-route Service

This is the basic service level STA provides as general purpose service. It is intended to be sufficient enough to meet basic demand that exists in an area served while still being robust enough to meet many purposes throughout each day. For the purposes of service attributes of frequency and stop spacing, Basic Fixed-route Service is classified into two types: Basic Urban and Basic Interurban.

Basic Urban meets travel needs in urbanized areas where the average passenger trip length is less than or equal to three miles long. Basic Interurban provide service between urbanized or suburban areas, possibly traveling through semi-rural areas, where the average passenger trip length is more than three to five miles in length. The rationale for this distinction at three miles is based on the premise that service should generally be more frequent than a walking alternative. That is, if the average passenger can arrive at their destination within the same time as the full wait time in between trips by walking, the service becomes substantially less attractive. This distinction also reflects the financial aspects of basic service: 1) longer routes typically require a higher operating cost to achieve the same frequency as shorter routes and 2) at an equal fare for all basic routes, the longer a passenger trip, the more

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Fixed Route

favorably transit compares to the operating costs of the automobile.

### 1.3 Commuter Peak Route Service

This is a service that is focused on premium/express service to a major employment or education center on weekdays at peak periods for the destination. Such routes are typically one-way in each peak. It may be anchored by a park and ride facility or have a collection segment through residential areas before traveling limited stop to the employment/education center.

Commuter Peak routes should provide no less than five trips per peak in order to be adequate enough to provide for a range of start and quit times for various employees. The exception to this rule would be peak routes that are provided by using buses that would otherwise be out of service (deadheading routes). These routes should provide at least three trips per peak and are considered "Commuter Peak – Subordinate" routes for purposes of performance standards. Service headway for all Commuter Peak routes should be no more than every 30 minutes.

### 1.4 Basic Service in Transition

Basic Service routes that coincide with identified High Performance Transit Network Corridors for the majority of route miles should be the focus of incremental investments in increased frequency and hours of service (span) as well as investments in reliability treatments and enhanced passenger amenities to provide an incremental investment in the High Performance Transit Network. At such time a Basic Service route is more like a HPT corridor than Basic Service, route branding and communications should transition to reflect to the customer the higher quality and quantity of service provided.

## FR -2.0 – Service Allocation

Transit agencies generally provide a service allocation policy to guide transit planning and support the agency's mission and goals. Common policies in other communities relate to geographic extent of service, spatial distribution of service among geographic partitions of an agency's service area, and distribution of operating outlays among service types. The Spokane Transit service allocation policy will include a hybrid of these three methods.

### 2.1 Geographic Extent

***Basic or HPT service shall be available within no more than one-half mile of at least 85% of the PTBA population residing within urban areas.***

Urban areas are defined as the Spokane "urbanized area" (UZA) and "urban clusters," as defined by the last available US Census. This policy recognizes the need to be geographically extended in order to be accessible and functional for the traveling public. It also highlights the position that fixed-route is a service made functional because it serves urban areas.

While rural areas will likely have some service, this service is incidental to a route's design. Using census data and geographical definitions, this policy can be measured.

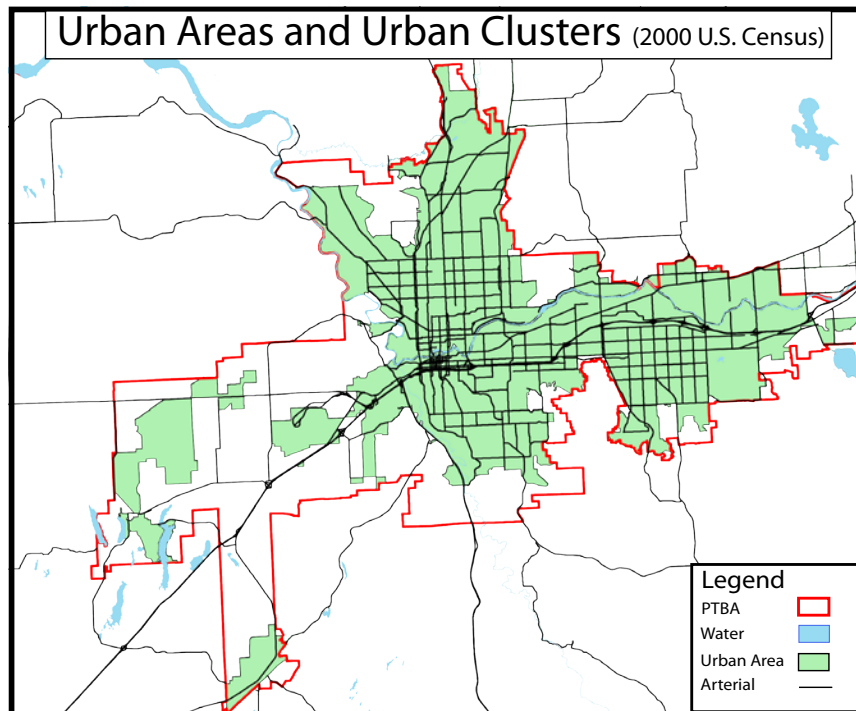


Figure 6- Urban Areas and Clusters

## 2.2 Service Type Allocation

***STA shall allocate service hours in a way which maximizes overall system efficiency.***

The following minimum and maximum allocation rates are considered ideal:

- 1) No more than 15% of annual fixed-route revenue service hours should be allocated to Commuter Peak service.
- 2) No more than 50% of annual fixed-route revenue service hours should be allocated to HPT service.
- 3) At least 35% of annual fixed-route revenue service hours should be allocated to Basic Service.

Past practice has included "blend formulas" that specified a precise percentage distribution among service types of "productivity, coverage, and equity." This sort of policy is neither practicable nor desirable. Rather than being a strict formula for distribution among service types, the policy is intended to provide checks and balance to service planning and implementation. Constraining the extent of Commuter Peak and HPT service types is reasonable given their higher capital investment requirements compared to Basic Service. Maintaining at least 35% of the service as Basic Service ensures coverage to areas that do not justify HPT

or Commuter Peak service. While current routes have not been developed with the three major service types in mind, existing service reflects the following make-up: 93.8% Basic Service; 5.7% Commuter Peak; and, 0.5% undefined service.

**2.3 Geographic Allocation**

***STA shall ensure a geographic distribution among high quality service types.***

The following allocations of service should be observed in allocating service among Travel Shed Partitions:

- 1) Each Travel Shed Partition should have at least one Commuter Peak route originating within the partition so long as it meets service performance standards.
- 2) Within 10 years of implementation of the first HPT corridor service, HPT service should operate within each travel shed partition.

Travel Shed Partitions will be defined as a service design tool in meeting this criteria. Conceptually these will be defined as North, South, East and West Plains. The intent of the partitions is to ensure a geographic distribution among high quality service types. Partition boundaries should not be defined by municipal boundaries; neither should tax revenues raised in a partition determine service provision. Rather, the partitions are merely for grouping component travel needs in order to ensure a minimum level of need satisfaction.

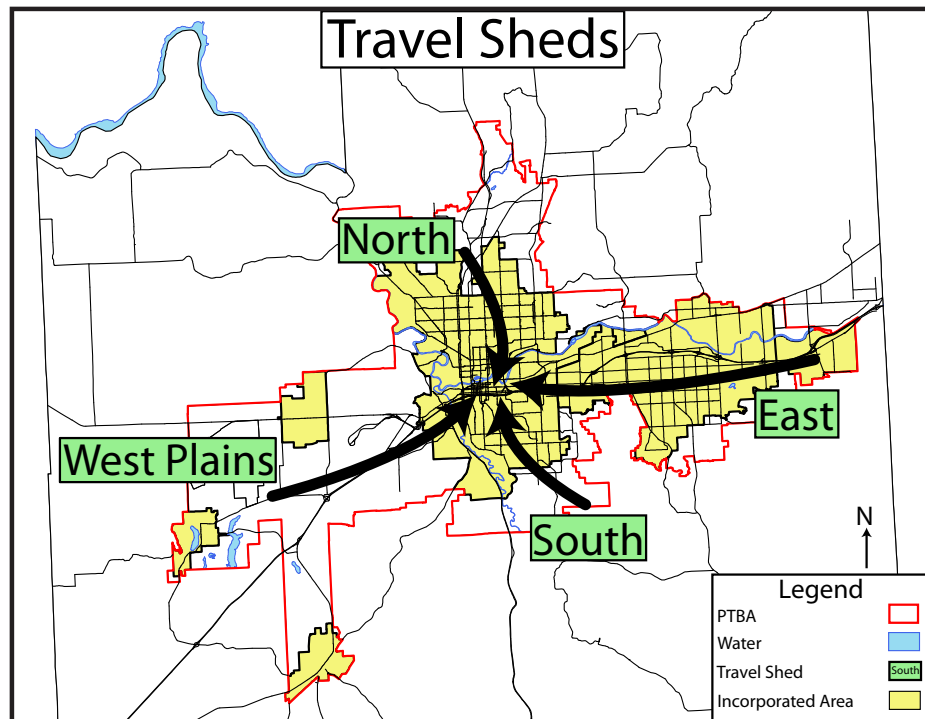


Figure 7- Geographic Allocation

**FR -3.0 – Service Span Policy**

**3.1 Basic System Hours of Service (Span)**

***STA shall provide the maximum possible span of service for its Basic System.***

The extent of each day in which the Basic System is in operation is as follows:

Day	Span
Weekdays	6 am to 11 pm
Saturdays	6 am to 10 pm
Sundays/Holidays	8 am to 9 pm

**3.2 HPTN Hours of Service (Span)**

***Whenever operationally feasible, STA shall provide an HPTN span of service greater than that of the Basic System.***

Day	Span
Weekdays	5 am to 1 am
Saturdays	6 am to 12 am
Sundays/Holidays	6 am to 10 pm

**FR -4.0 – Headways for HPT Service/ Basic Service**

***STA shall adhere to maximum headway standards when determining a route’s frequency.***

The following headways are maximum intervals considered acceptable for the various general purpose fixed-route service types. The definition of Peak, Base and Sub-Base periods are relative to the travel demand, but generally Peak is between 6:30 am and 8:30 am and 4:00 pm and 6:30 pm on weekdays; Base is the period between weekday peaks as well the outside shoulders of Peak travel times; and Sub-Base is late-nights and weekends.

Service	Maximum Headways (minutes)			
	Span	Peak	Base	Sub-Base
HPT – Green	Extended	10	12	15
HPT – Red	Extended	12	15	30
HPT – Blue	Extended	15	30	60
Basic Urban	Basic	30	30	60
Basic Interurban	Basic	60	60	120

**FR -5.0 – Stop Spacing and Placement**

***STA shall balance customer access, service reliability, and system performance when determining the spacing and placement of bus stops.***

The fixed-route service stop defines whether service is provided in a geographic area. The optimal placement of stops plays a critical role in customer access, service reliability, and system performance. Past practice has encouraged the proliferation of stops with the view that the biggest hurdle to increased transit patronage was a lack of access to transit within a convenient walk. The result is that there are instances in STA’s service area where one bus in service may stop more than once on the same block face. The stop spacing policy recognizes the influence access has on speed and ridership. Research and service design changes in other transit markets have taught the following lessons: 1) people are willing to walk greater distances (1/2 mile or more) for higher quality service and 2) stops closer than one-quarter mile generally don’t provide more ridership; in most applications, ridership has grown after stops have been eliminated to meet a greater average distance between stops.

Service	Average Stop Spacing	Minimum Stop Spacing	Maximum Stop Spacing
HPT – Green	¼ mile	1000’	1500’
HPT – Red	½ mile	1300’	8000’
HPT – Blue	2.5 miles	5000’	N/A
Basic Urban	¼ mile	800’	1500’
Basic Interurban	½ mile	800’	N/A

Placement of a stop should consider the following:

- 1) Relationship to high demand destinations
- 2) Proximity to intersecting routes and transit facilities
- 3) The ability for customers to safely access the stop from both sides of the street
- 4) The ability for the bus to efficiently and safely re-enter general purpose traffic

Where considerations 3 and 4 negatively impact the ability to place a stop considered due to 1 and 2, STA will work with the appropriate jurisdiction to provide a solution.

**FR -6.0 – Route Numbering**

***STA shall adopt a route numbering policy consistent with industry standards.***

The following policy provides guidelines on a numbering system for all fixed-routes. A survey of various transit systems suggests that organizing route numbering series by service types and common geography (destination-based or travel-shed-based) is the most prevalent numbering logic outside of simple sequential numbering. A clear numbering system helps customers to make effective travel choices based on the service characteristics which are most important for their particular transportation needs.

STA routes are grouped in series with the first digit reflective of either common geographical attribute or common service characteristic (service type). As a policy, HPT routes, Basic Service in Transition, and Commuter Peak service should be in series reflecting service type while Basic Service can be grouped by common geography. To avoid confusion, no route number should conflict with a numbered Washington State highway passing through the PTBA. Any reintroduction of a route number on a substantially different route than its prior identity should occur after no less than two years of non-use.

Colors and letters can also be used to distinguish HPT or specialized routes. The use of colors and numbers, when introduced, should fit within a systems-approach to service communication and branding.

### FR -7.0 – Service Implementation Plan

***By April of each year, STA shall prepare a draft Service Implementation Plan to cover a three-year period beginning with the September service change.***

This document should be prepared by April and adopted no later than July 1 of each year to guide the delivery of Fixed-Route Service. Developed in close coordination with the agency's six-year financial projections based in the Transit Development Plan, the SIP describes service additions and revisions proposed for the coming September service change and the preliminary proposal for changes in the following two years. The Route Performance Report required in the Monitoring and Improvement Element of the Comprehensive Plan will be incorporated into this document.

## Fixed-Route Connect Strategies

### Sustainable Service Map

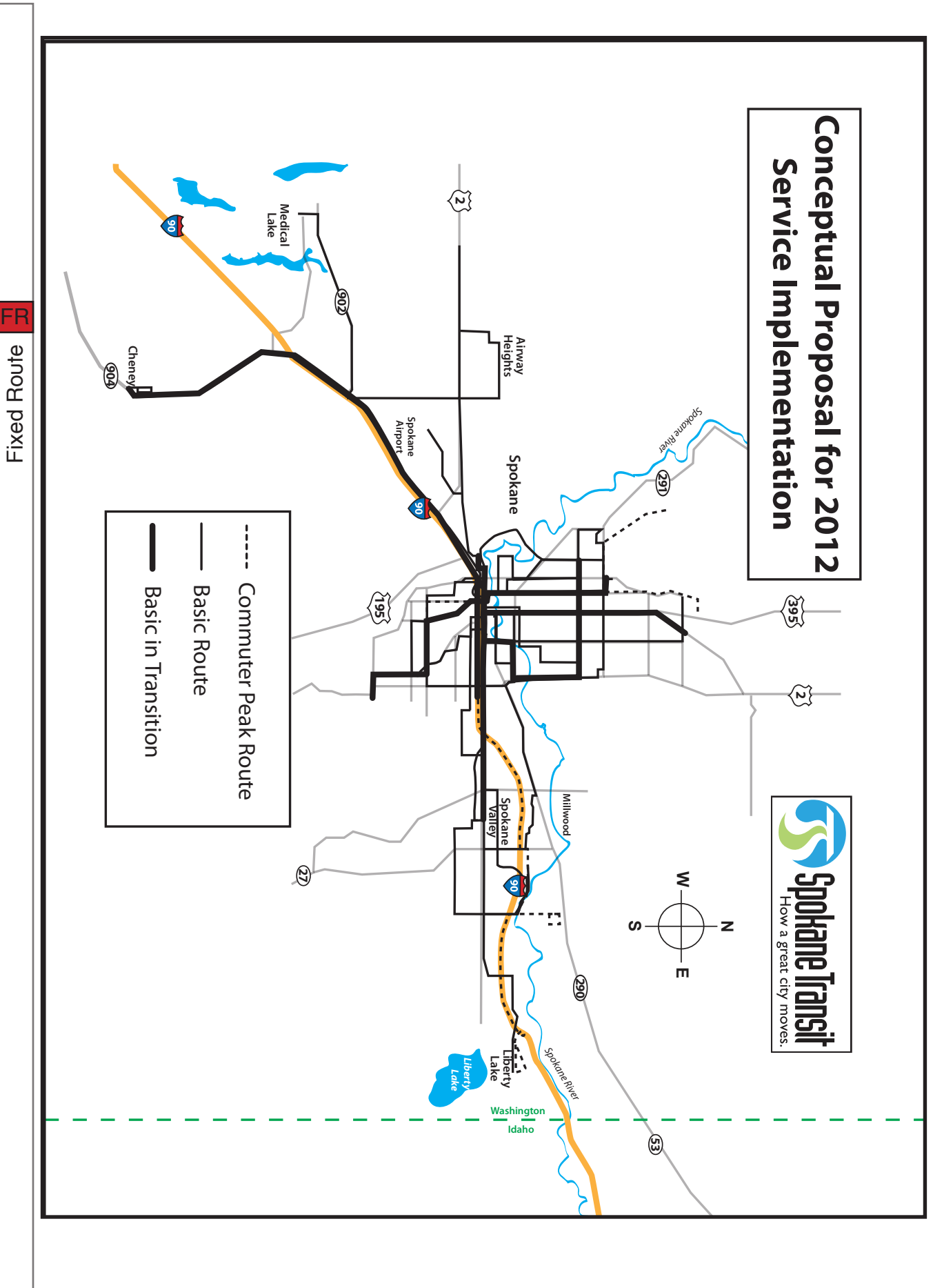
***The following map is a conceptual look at how STA may contract its services to meet revenue streams.***

During challenging economic times, many transit agencies are forced to cut the amount of service provided to meet budgetary needs. Although there are many ways to cut service (days of service, span, frequency, geographic coverage, etc.), a strategic reduction which balances present day ridership with the planned future network is essential to paving the way for a speedier recovery of the transit system in the future. This is an early concept of 2012. With further analysis and public input, the actual outcome will undoubtedly change and more details will emerge.

FR

Fixed Route

Figure 8 - Conceptual Proposal for 2012 Service Implementation



## Paratransit

Paratransit is a wheelchair-accessible shared-ride transportation service for individuals whose disability prevents them from using the regular fixed-route buses. This means that due to a disability a person must be unable to get to or from a bus stop, get on or off a lift or ramp equipped bus, or successfully travel by bus to or from their destination.

STA has a long history of collaboration and support regarding people with disabilities and people who are older. In 1990, the Americans with Disabilities Act (ADA) was passed, ushering in a number of compliances required of public transit agencies, including upgrading/retrofitting fixed-route buses to better accommodate people with disabilities, as well as establishing paratransit services to compliment fixed-route service. STA has consistently fulfilled these requirements. The paratransit fleet has grown to 67 vehicles and additional service is regularly contracted through another provider to meet demand.

Although paratransit service is an essential piece to the transit network, people are encouraged to use fixed-route whenever possible. The 2008 average cost per paratransit trip was \$21.49, compared to \$3.95 per fixed-route trip. Paratransit service expense represents approximately 20 percent of STA's total operating budget, yet accounts for approximately 5 percent of STA's total trips. As a result of a high level of service, as well as a relatively inexpensive fare, STA's paratransit ridership has grown considerably since the inception of ADA regulations. STA's paratransit ridership experienced intense average annual growth (10.1 percent) between 1990 and 1996. Due in part to several initiatives such as conditional eligibility, trip-by-trip scheduling, and mobility training, growth has slowed to an average annual growth rate of 1.2 percent. Balancing quality service with fiscal effectiveness remains a key concern of STA's Paratransit department.

### Paratransit Goal

**Paratransit shall meet ADA standards as a comparable service which compliments fixed-route service.**

### Paratransit Principles

The principles listed below identify the basic concepts of paratransit. These principles are unchanging, define the basic foundation of paratransit, and will continue to serve as guidance for new and existing paratransit policies.

#### 1. Purpose

***Paratransit service is an origin to destination, shared-ride service.***

Paratransit is not a personalized taxi service. Rather, paratransit is a service intended to serve multiple people and destinations using a shared trip. Service begins at the door of a rider's origin and ends at the door of

their destination, usually making stops for other paratransit riders along the way.

## 2. Compliance

***Paratransit service complies with the ADA service criteria.***

As a requirement of operation, STA's paratransit service must comply with the ADA service criteria. Compliance is required in categories that include fares, travel time, eligibility, capacity constraints, service area, response time, transport of common people using wheelchairs, visitor service, no trip restrictions or waiting lists, no shows, and so forth. These compliance categories may change over time, but the principle of compliance requires STA to continually monitor changes at the federal level and adjust policies and practices to meet these requirements.

## Paratransit Policies

Based on the paratransit principles, this section articulates policy and defines the intent and extent of the paratransit services provided by STA. These policies are intended to ensure consistency and coordination between existing service and future enhancements or reductions. The policies should be used for the purposes of decision making, maintaining consistency and service modifications.

### PT-1.0 – Service Area

#### 1.1 Geographic Area

***Strictly adhere to a three-quarter mile geographic buffer around fixed-route lines of service.***

STA provides paratransit service which is geographically comparable to fixed-route service. Paratransit service will be limited to origins and destinations located within a three-quarter mile radius of all fixed-routes.

#### 1.2 Simple Boundary

***Adhere to a consistent boundary for paratransit service availability relative to the maximum fixed-route service footprint and span provided.***

Although paratransit boundaries are allowed to change in response to the specific hours a particular fixed-route is running, STA operates paratransit service within a static boundary of geography and span. The paratransit boundary adheres to the footprint created by the boundary associated with all of the fixed-routes at all times. Additionally, the span of paratransit service will mirror the span of the entire fixed-route system.

### PT-2.0 – Service and Eligibility Standards

#### 2.1 Travel Time

***Travel time for a paratransit ride shall be comparable to a similar fixed-route trip.***

The time of the typical paratransit ride should be comparable to the

time it would take to make the same trip using fixed-route service. The comparable time calculation for the fixed-route trip will consider the time that it would take to walk to the transit stop, wait for the transit vehicle and transfer to another vehicle if necessary.

## 2.2 Call Center

***Provide paratransit call center capacity comparable to that of STA's general call center operation.***

In an effort to offer comparable service to that of fixed-route, the paratransit call center should maintain the same relative capacity for calls as is expected for fixed-route.

## 2.3 Reservation Window

***Provide a seven-day reservation window for paratransit service.***

A seven-day reservation window allows customers to plan ahead. This is especially helpful for paratransit riders bound for medical appointments or other scheduled events.

## 2.4 Eligibility Determinations

***Eligibility determinations will be based on trip-by-trip eligibility.***

For those customers who are conditionally eligible, eligibility will be determined based on key factors of the nature of each particular trip vis-à-vis the customer's physical and cognitive abilities. For example, weather, terrain, accessibility, etc. may determine whether or not a customer with conditional eligibility is able to complete the trip with fixed-route or if they need paratransit service. This policy ensures that public resources are used responsibly and fairly.

## 2.5 Emergency Conditions

***Emergency conditions may require trip prioritization at limited times.***

STA is determined to refrain from prioritizing paratransit trips. However, severe weather or other emergency conditions may require STA to take the step of using prioritization techniques for paratransit vehicle trip assignments.

## 2.6 Safety

***Securements for wheelchairs and safety/seat belts for all riders shall be required on all vehicles making paratransit trips.***

Safety is the primary concern of STA. Requiring the use of securement devices on paratransit vehicles, as well as education on their proper use, is an important step towards keeping our riders and operators safe.

## PT-3.0 – Service Structure

### 3.1 Balance

***Sustain a service delivery architecture that provides for high productivity and operational flexibility (in-house, contracted) to meet the varying levels of service demand.***

Due to an ever-changing operating environment, STA must balance productivity with flexibility when needed.

## Paratransit Connect Strategies

### Pick-up and drop-off locations

***Designated pick-up and drop-off locations for those areas which have high paratransit activity or those locations which have multiple entrance and exit points should be evaluated and identified.***

At times there is confusion about where the paratransit vehicle or passenger should wait at destinations like hospitals, malls, etc. Identifying pick-up and drop-off locations that are easily accessible to the passenger as well as the transit vehicle helps the service be more convenient and efficient for passengers.

### Paratransit policies

***The policies which exceed ADA standards should be reevaluated, including but not limited to implementing a time-dependent dynamic paratransit boundary.***

By law, Spokane Transit Authority is required to provide paratransit service which is comparable to that of the fixed-route service provided. Any policy which exceeds the ADA requirements should be reevaluated.

### New programs or service types

***Evaluate the potential to add additional programs or types of service to paratransit.***

Programs or activities which should be considered may include but is not limited to:

- A free fixed-route for paratransit customers program
- Dial-a-ride/flex-route opportunities in unique situations
- Feeder service opportunities
- Encouraging shared ride scheduling through education and incentives

PT

Paratransit

## Rideshare

To create a balanced and complete transit network, STA employs a variety of services. Just as fixed-route and paratransit services fill unique travel needs, STA's rideshare program offers an array of opportunities that meet needs not served by the other programs. Rideshare has traditionally focused on the vanpool program serving groups of commuters who travel longer distances to their workplace, but there are numerous opportunities to capitalize on the benefits of rideshare. In addition, through the implementation of other shared ride services like special use vans and vanshare, STA will be able to help efficiently improve the mobility of its customers. STA's rideshare program ridership has experienced considerable growth since its inception. Since 1999, vanpool ridership has maintained an average annual growth rate of more than 20 percent, resulting in approximately 210,000 annual passengers in 2009. The rideshare program holds considerable promise for enhancing the effectiveness and efficiency of STA's other services.

### Rideshare Goal

**Spokane Transit Authority's rideshare program will support the overall transit network as well as local and regional commute trip reduction efforts by offering specialized transit services.**

### Rideshare Principles

The principles listed below define rideshare. They provide guidelines for ensuring that the fundamental ideas behind rideshare service are understood by all. These principles are unchanging and will continue to serve as guidance for new and existing rideshare policies.

#### 1. Purpose

***Rideshare meets specialized needs that cannot be met with other transit modes.***

Rideshare is not a fixed-route service. Rideshare is an on-demand shared-ride service which can efficiently move groups of people and can meet the specific needs of its customers while often requiring lower capital, operating, and energy resources.

#### 2. Partnerships

***Spokane Transit Authority's rideshare service is part of a partnership that extends across agencies.***

Coordination between all national, state, and local agencies working towards the goal of reducing vehicle miles traveled is essential. Agencies that organize, advocate, and support rideshare need to work together to achieve statewide goals.

#### 3. Regional Service

***Rideshare is a regional service that can extend beyond the Public Transportation***

## ***Benefit Area, Spokane County and Washington State boundaries.***

As a part of serving specialized transit needs, rideshare services provide for a larger region than fixed-route or paratransit services. Rideshare is able to extend into areas with limited access or into rural areas which cannot be supported by fixed-route transit.

### **4. Benefits Must Outweigh Alternatives**

***To be successful, collective benefits (cost, time, convenience, peace of mind, etc.) of using rideshare must be greater than driving alone.***

Existing and potential riders are continually evaluating options and weighing the collective benefits of each mode of transportation. Riders rarely make decisions based on only one benefit, thus the rideshare program continually considers the collective benefits of its services compared to other options.

### **5. Availability**

***Rideshare is on-demand.***

Rideshare has the flexibility to be scheduled around specific work shifts or events.

## **Rideshare Policies**

The following rideshare policies articulate the guidelines for rideshare service standards and coordination. Each policy contributes to specificity and provides guidance towards reaching the overall goal of rideshare. As a whole, the collection of policies establishes a framework for the future development of rideshare services.

### **RS-1.0 – Service Standards**

#### **1.1 Service Types**

***STA rideshare service types may include vanpool, special use vans, and vanshare.***

Each service is defined as the following:

**Vanpool:** A van provided by STA that is shared by people who live and work in approximately the same areas and can commute together to a place of employment. The driver is not an employee of STA.

**Special Use Vans:** Special use vans are awarded to select service providers in our area who primarily serve residents who travel to, from and within the PTBA. They are used for providing transportation for people with special needs and their caregivers.

**Vanshare:** A van used to bridge gaps between public transit and a group's final destination. It is particularly useful when a place of employment is not within walking distance of a major transit facility.

## 1.2 Geography

**Begin or end all rideshare services within the PTBA.**

Although rideshare trips may be entirely within the PTBA, this policy allows groups of people who live or work outside of the PTBA boundary to reach their destinations inside of the PTBA more efficiently. This policy reflects the reality that the regional employment base, and by extension, the travel shed extends well beyond the PTBA.

## 1.3 Safety

**Support customer safety.**

The safety of STA passengers is of great importance. All rideshare vehicles are equipped with seatbelts and safety devices to help ensure the safety of drivers and riders. Safety education programs for rideshare drivers and riders will help all customers ride more safely and comfortably.

## RS-2.0 – Service Coordination

### 2.1 Complementary Service

**Rideshare shall support fixed-route and paratransit services.**

For STA's transit network to thrive, all services must connect to and complement each other. In cases where fixed-route service cannot meet the service design guidelines, rideshare can be an efficient way to serve places of work or residency with public transportation.

### 2.2 Coordination

**Support rideshare coordination and connections with all modes of transportation, including pedestrians, bicycles, automobiles, and other transit services.**

No transit trip is ever completed without the use of another mode. All trips begin and end with walking, riding a bicycle, or driving to reach the transit network. Improving and enhancing the ability for customers to reach transit can be just as important as the transit trip itself. Promoting coordination and connectivity between modes is essential.

## Rideshare Connect Strategies

### Innovation

**Investigate ways to more efficiently utilize rideshare resources.**

Explore options such as:

- Using vans in the off-peak hours for non-work related trips (possibly drive home).
- Creating a program which operates vans like a Flexcar.
- Exploring enhanced parking options for rideshare customers.

### Promotion

**Promote rideshare services by working with local jurisdictions, businesses and commuters.**

Providing preferred rideshare parking stalls at park & rides and negotiating reduced parking rates with downtown Spokane parking lots and private businesses serving as rideshare destinations increases the collective benefits for riders. Additionally, signs reserving prime parking stalls for rideshare vehicles could entice others to consider using rideshare.

RS

Rideshare

## System Integration

The scope of Spokane Transit Authority's services is broad. Including fixed-route service, paratransit, rideshare, and the High-Performance Transit Network (HPTN), each of these system elements is sufficiently complex to warrant tasking entire departments with their administration. However, the interconnectedness of these elements adds to the system's overall effectiveness to provide public transportation services to the region. For this reason, both internally and in its communications with the public, STA should strive to promote the integration of its various system elements. A few examples of system integration within STA are listed below.

### **HPTN** ↔ **Rideshare**

Members of a rideshare are generally without access to a personal vehicle during the day. The HPTN provides an efficient form of transportation either for commute trip completion or for day-time mobility by making spontaneous transit trips as convenient as those made with a private vehicle.

### **HPTN** ↔ **Other Fixed-Route Service**

Customers of fixed-route service have varying needs. Some riders require more frequent stops to more easily access their destination, while others are willing to walk longer distances to use a faster, more frequent HPT service. The non-HPT routes also often serve to provide the essential "last mile" connection for a rider transferring from another transit vehicle with a higher speed and higher frequency.

### **HPTN** ↔ **Paratransit**

Some paratransit customers may only require paratransit services due to the distance or conditions between their home/destination and the nearest transit stop. By linking HPT stops with Paratransit services whenever possible, overall system efficiency increases by reducing the resources required to provide Paratransit services.

### **Rideshare** ↔ **Fixed-Route Service**

Rideshare, especially in its vanshare form, provides an essential link for riders between the fixed-route system and their final destination. The fixed-route network also provides rideshare customers with an efficient form of transportation for spontaneous trips throughout the day.

### **Rideshare** ↔ **Paratransit**

Many paratransit customers reside in group care facilities. By encouraging the use of rideshare's special use vans, efficiency develops by eliminating redundant trips. Instead of assigning multiple Paratransit vehicles to serve a group home over the course of a day, one special use van could meet riders' needs.

## *Fixed-Route Service* ↔ *Paratransit*

The paratransit service boundary is determined by the scope of the fixed-route service area. Therefore, no paratransit rider's origin or destination is ever more than  $\frac{3}{4}$  of a mile from the nearest transit route. By easing use and accessibility of the fixed-route system, some current customers of paratransit may be able to consider the use of fixed-route service.

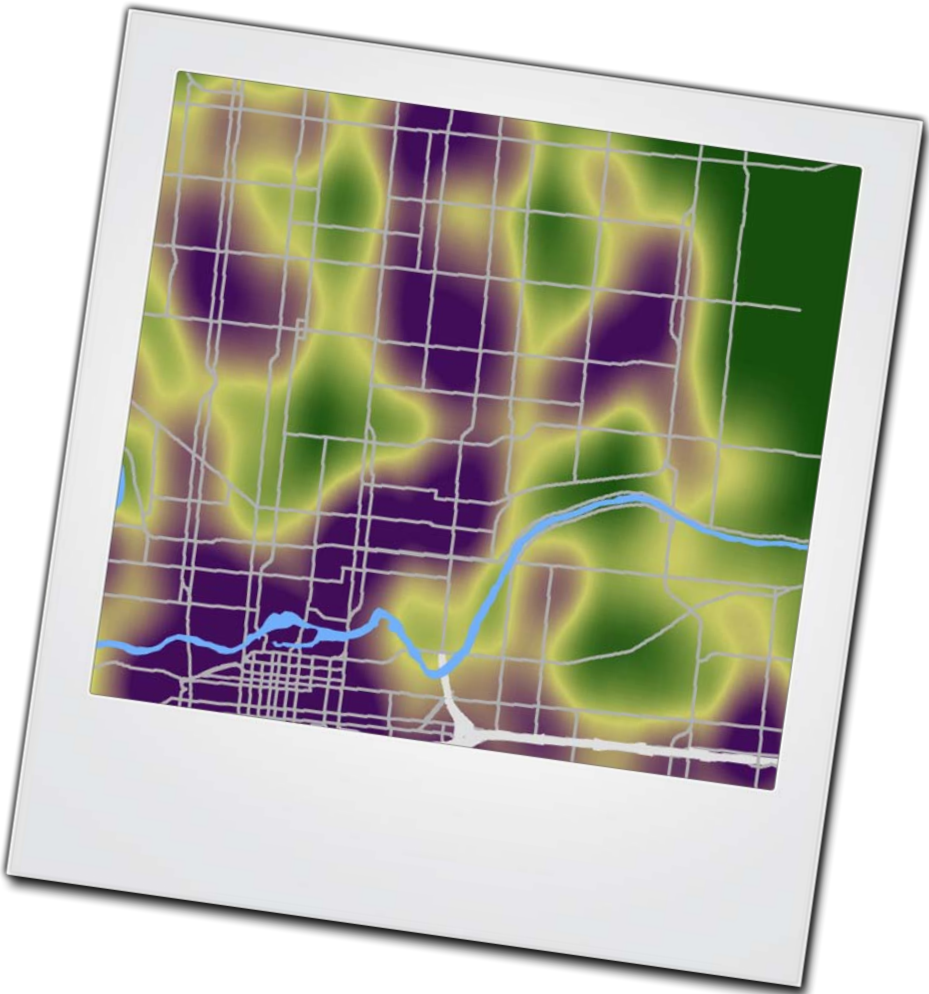
IN

System Integration

# Connect Spokane

A Comprehensive Plan for Public Transportation

## Part III: Activities and Programs



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## System Infrastructure

Transit agencies, including STA, use investments in built infrastructure to provide safe, reliable public transportation. As a part of its budget process, STA annually identifies needs for improvement to the system infrastructure. To ensure that these funds are spent responsibly and methodically, this element defines how decisions about system infrastructure are made and how projects become prioritized. Without following the policies contained within this element, investments in system infrastructure become piecemeal and often prove to be wasteful, resulting in losses of both time and financial resources.

### System Infrastructure Goal

**Invest responsibly in infrastructure that supports STA's Mission Statement and stated Comprehensive Plan goals and policies.**

### System Infrastructure Principles

These principles are designed to help guide investment priorities. They are not intended to note specific projects or investments, but rather to help decision makers understand the context of system infrastructure prioritization within the whole of STA.

#### 1. Support

***Successful infrastructure investments align with the mission, long-term goals, and long-range plan of a transit agency.***

To ensure that infrastructure investments are cost-effective, useful, and efficient, capital projects must support long-term agency objectives. Infrastructure built with the support of the transit agency's coordinated long-range vision is more likely to succeed than infrastructure built independent from system-wide goals.

#### 2. Operating Implications

***The development of system infrastructure has long-term implications for operational functionality.***

Transit infrastructure projects can range in price and scope. Whether an investment is a large or small project, well-planned system infrastructure improvements have long-term implications for operating costs and efficiency.

#### 3. Fiscal Responsibility

***The public expects transit agencies to improve its infrastructure in a fiscally responsible manner.***

Customers and other non-riding taxpayers provide the funding necessary for all of STA's infrastructure improvements. Therefore, STA should ensure that infrastructure expenditures are made in a way which reduces waste

and maximizes benefit.

**4. Strategic Opportunism**

***Transit agencies faced with free or low-cost capital opportunities should consider the long-term operating expenses to prevent those investments from becoming liabilities.***

On the surface, any free or inexpensive land/facility offered to the transit agency may seem too good to pass up. However, if it is not part of a long-range plan or a strategic opportunity to improve service, seemingly excellent development opportunities can become burdensome investments. Refusing donated/inexpensive capital may seem foolish, but it may prevent those projects from becoming an unnecessary strain on the transit agency’s network and finances.

**5. Capital Investment Yields**

***Not every dollar of investment yields the same benefit.***

Capital investments should be made to provide the greatest benefit.

**System Infrastructure Policies**

**SI-1.0 – Capital Investment Considerations**

***Use the following list of considerations to help prioritize capital projects.***

Capital projects are required as a part of an assortment of services which are provided. STA does not have enough money to complete all of the capital projects identified. However, the following list of considerations help STA prioritize which projects should be funded over others. These considerations are in addition to the other policies in this plan.

- ***Operational Cost Change***

*Reduce operational costs or, when operational cost increases are necessary, consider their value with all capital investments.*

- ***Expected Lifetime***

*Consider the anticipated useful life span of the capital investment.*

- ***Value Engineering***

*Consider options which may increase durability, reduce maintenance needs and add value relative to the cost.*

- ***Expected Ridership Outcome***

*Consider the impacts on ridership for all capital investments.*

- ***Safety Enhancement***

*Consider the safety impacts for transit customers and others for all capital project investments.*

- ***Network Enhancement***

*Enhance the transit network identified by investing in capital projects which support the*

transit network.

- **Travel Time Savings/Delay Mitigation**

Consider the impacts on speed and reliability for all capital project investments.

- **Human Resource Requirements**

Consider the impact of capital projects on STA staff requirements, safety, and comfort.

## SI-2.0 – Specific Infrastructure

### 2.1 Property

**Consider the capital investment considerations defined in Policy 1.0 prior to any property acquisition or sale.**

STA should continually look for property investments likely to enhance the transit system. Additionally, the sale of property should be made under the consideration of the goals and policies contained within this Comprehensive Plan for Public Transportation.

### 2.2 The Plaza

**Invest in capital improvements that work towards making The Plaza safe, comfortable, easily accessible, and operationally and economically efficient.**

The Plaza has been recognized as having a positive effect on bus operations, passenger experience, and ridership, and offers connectivity to future network enhancement. STA should support The Plaza by pursuing improvements to the structure, amenities and operational design. Capital improvements to the Plaza should also improve integration within the existing urban form and work with surrounding neighbors to create a more pleasant downtown environment.

### 2.3 Transit Centers

**Enhance the transit system by investing in transit centers where appropriate.**

A transit center is a facility where two or more routes intersect to provide passenger transfers and where physical improvements for customers are constructed outside the public right-of-way. New transit centers should be located in areas that meet Policy 1.0, Capital Investment Considerations. Existing transit centers should be evaluated based on operational cost, ridership impact, safety, network enhancement, and STA staffing requirements.

### 2.4 Park and Ride Lots

**New park and ride facilities should be carefully located to maximize benefit and minimize impacts.**

STA's service area has an abundance of surface parking. Although it may be tempting to build new park and rides in places where land has been reserved or it is inexpensive, STA should first pursue opportunities to develop underutilized or unused parking lots into park and rides to minimize costs, preserve the environment and capitalize on potential pedestrian riders from existing adjacent development. The high per-

passenger cost of park and rides generally reduces the system-wide benefit of these facilities. Any new park and ride lot shall meet at least one of the following criteria:

- 1) Location provides for a logical terminal for High Performance Transit Service.
- 2) Location is collocated with a transit center.
- 3) The parking lot for the park and ride is pre-existing or is shared with other businesses or institutions allowing for a greater all-day utilization of the lot.
- 4) The facility is developed in cooperation with WSDOT adjacent to a major highway facility and operational priority is given to transit vehicles for ingress/egress of said highway.

### SI-3.0 – Passenger Interface Components

#### 3.1 Stops

**All STA bus stops shall feature signs with readable and accurate information.**

Transit stops are one of the most important pieces of the transit network and should be treated accordingly. They determine the access for the customers, so their placement, type, and branding should be carefully considered.

#### 3.2 Benches

**STA shall work with local authorities to ensure that bus benches are placed properly, designed adequately, and serve the needs of customers sufficiently.**

Benches provide comfort for all types of passengers. Although local jurisdictions are responsible for the operations and maintenance of bus benches, coordination with STA increases the likelihood that everyone’s needs are being met. Generally, STA recommends bench locations which meet one of the following criteria:

- 1) 10 or more weekday average boardings
- 2) Transfer point between two or more routes
- 3) Adjacent to ridership generator with a high percentage of riders with limited mobility

#### 3.3 Shelters and Awnings

**The placement and maintenance of shelters or other weather cover for passenger waiting areas where appropriate shall be encouraged.**

STA shall work with local and regional jurisdictions to position bus shelters, awnings and other weather protection which can encourage ridership by protecting waiting patrons from adverse weather elements. Shelters also provide an appropriate location for posting important ridership information. Stops to have shelters funded by STA must meet at least one of the following criteria:

- 1) 25 or more weekday average boardings
- 2) Transfer point between two or more routes

- 3) Adjacent to a ridership generator with a high percentage of riders with limited mobility

### 3.4 Lighting

***Stops, benches, and shelters shall have pedestrian-scale lighting whenever possible.***

While any lighting enhances the safety and security of transit stops, benches, and shelters, lighting designed specifically to illuminate the path of a pedestrian can do a better job than general street lights.

### 3.5 Bicycle Facilities

***Bicycles shall be accommodated at STA's facilities and on STA coaches.***

A good bicycle network and appropriate facilities are similar to a good pedestrian network and facilities. They can couple with transit to extend the range of non-motorized modes of transportation. By supporting bicycle ridership, STA is able to increase options for those who choose to travel by more than one mode.

### 3.6 Pedestrian Infrastructure

***As funding allows, Spokane Transit may partner with local jurisdictions to improve pedestrian infrastructure in locations where there is a direct and tangible benefit to customers accessing a transit stop or other transit facility.***

The vast majority of STA's transit customers use public sidewalks to access transit stops. By allowing people to safely and efficiently reach their destination, pedestrian infrastructure plays a significant role in completing the transit network. STA supports efforts to improve and enhance pedestrian connections to its facilities. Financial contributions to such infrastructure should maximize transit benefit and grant opportunities and should be directly determined by Spokane Transit, and not other jurisdictions or agencies.

## SI-4.0 – Capital Improvement Programming

### 4.1 Capital Improvement Program (CIP)

***STA shall maintain a capital improvement program that shall cover a period of no less than six years and be in general conformance with the Comprehensive Plan.***

To enable STA to make educated, coordinated, and financially sound capital investments, a 6-year capital improvement program must be developed. This program will be reviewed annually.

### 4.2 Capital Projects

***Capital projects shall adhere to the capital investment priorities found in Policy 1.0.***

A capital project is a significant investment project intended to acquire, develop, improve, or maintain a capital asset (such as property, buildings, infrastructure, etc.)

**4.3 Capital Programs**

***Capital programs shall be established to ensure a flexible, prompt, coordinated, and efficient process for completing capital improvements.***

A capital program is a schedule of routine, less-significant projects which share a similar objective. For example, STA annually replaces equipment. Rather than listing each small item for replacement, money could be allocated to the equipment replacement capital program, which would house the group of replacements within one program.

**System Infrastructure Connect Strategies**

***All System Infrastructure Connect Strategies will be/are housed in the Capital Improvement Program.***

SI

System Infrastructure

## Communications and Public Input

As a public agency, Spokane Transit Authority believes that proper communications and public input is of the highest importance. To ensure transparency, accountability, and fairness, STA must use a broad range of communication tools to reach as many people as possible. As technology improves, the amount of information available and the speed at which it can reach those interested increases daily, creating both opportunities and challenges. Fortunately, STA is able to utilize a variety of communications tools to both inform and gather information. The following list is not intended to be a complete list of communications tools which may be used but a sample of some strategies that STA may use for a variety of purposes.

Outreach Tool	Definition
Public Hearing	A meeting during which public testimony may be heard and formal action may be taken on any measure before the STA board of directors
Legal Notice	Public posting or advertising in newspapers to announce a legal action or intent
Display Ads in Newspaper	Paid advertisement in the newspaper to alert readers about an upcoming event or action
Website/Online Social Media	Updates to the website and social media are quick and efficient ways of getting notice to the public quickly
Mobile Device Alerts	Real-time information can alert customers to important real-time information
Signs	Signs on buses, at stop locations, and at transit centers can help to reach people who use transit services
Rider Alerts	Notifications of route, frequency, or other information that is of particular interest to riders
Direct Mailings	Mail sent to an affected group or area to educate, notify, or request input
Workshops/Open Houses/Town Halls	Types of meetings where staff and public interact and discuss various issues
Surveys (scientific and self-selected)	Surveying opinions and ideas can help public agencies understand how to better serve the constituency
On-board Information	Pamphlets and posters that alert riders to information
Displays at Transit Centers	Permanent or temporary displays at transit centers are able to reach a large number of system riders
SEPA	The public outreach requirements of Washington State's State Environmental Protection Act (SEPA) can be an effective tool for communicating with the public about proposed actions

## Communications and Public Input Goal

STA will promote openness, honesty, and fairness through appropriate public outreach efforts.

## Communications and Public Input Principles

These principles describe the foundation for the policies found in this element:

### 1. Continuous Communication

***Open, honest, early, and continuous communication with all stakeholders increases public confidence in STA.***

Changes in STA's operations impact many stakeholders, both within and outside of the agency. For this reason, care should be taken to ensure all stakeholders are identified and remain well-informed.

### 2. Accountable

***A public account of decisions made and responses to public input regarding these decisions increases STA's accountability to its customers.***

Thorough recordkeeping helps to ensure a common understanding of decisions, policies, and responses. Sharing records with the public demonstrates the transparency with which STA conducts its business.

### 3. Accessible Information

***Providing access and non-technical explanations of relevant reports, records, and documents demonstrates STA's commitment to transparency.***

STA conducts its business in a fair, honest, and legal manner. For that reason, providing access to relevant documents broadens the public's perception of STA's high operating standards.

### 4. Two-way Communications

***Consideration of the views of regulators, stakeholders, and the general public in making decisions demonstrates STA's commitment to fairness and equity.***

Transit agencies exist to serve the community. To that end, community members have the right to share their views regarding transit service.

### 5. Timely

***The provision of sufficient time for full public participation, including advance notice of activities and steps in the public process, demonstrates fairness and respect.***

Scheduling events and the overall public process with an appreciation of today's busy lifestyles allows for the broadest public participation process possible.

## 6. Purposeful

**Questions pertinent to issues under consideration should be answered by knowledgeable staff.**

One can appreciate the frustration stemming from poorly-answered questions. Providing complete, accurate information increases the public's confidence in STA.

## Communications and Public Input Policies

### CI-1.0 – Public Outreach

The following policies are intended to serve as a guide describing public outreach/input requirements for each action. In cases where there are federal or state requirements for public outreach/input, STA will meet the minimum requirements. In cases where STA has requirements in addition to those defined by the state or federal government, STA will follow both.

#### 1.1 Service Changes

**In addition to following Federal Transit Administration guidelines for public outreach for service reductions, STA will also comply with the policy found in the following table.**

How to read the following table:

- 1) Determine cost and ridership impacts.
- 2) Consider exceptions.
- 3) The more severe cost or ridership impact determines the category (ex. Cost impacts fall into Category II but ridership impacts fall into Category I, follow the decision making and input/outreach process of Category II)

Any fixed-route adjustment or elimination which would change the paratransit boundary enough to eliminate service from at least one active customer\* will trigger a Category II process.

*\*Active customer is someone who has used paratransit services within a year of the public hearing date.*

## Public Input Categories

		<b>I-Minor</b>			<b>II-Moderate</b>			<b>III-Major</b>		
<b>Cost Impacts</b>	Less than 1.0% growth or reduction in revenue hours of service in any calendar year	1.0% up to 5.0% growth or reduction in revenue hours of service in any calendar year	More than 5.0% reduction in revenue hours of service in any calendar year	<b>OR</b>	<b>OR</b>	<b>OR</b>	<b>OR</b>	<b>OR</b>	<b>OR</b>	<b>OR</b>
	Less than .5% of annualized system ridership negatively impacted by loss of bus stop, trips or route at any given service change	.5% up to 5.0% of annualized system ridership negatively impacted by loss of bus stop, trips or route at any given service change	5% or more of annualized system ridership negatively impacted by loss of bus stop(s), trip(s) or route(s) at any given service change							
	Construction-related or emergency changes necessary for a period not exceeding 180 days for changes that would otherwise be moderate or major	Changes that would normally be classified as minor changes, but require a higher classification because of significant public interest or board involvement	None							
<b>Exceptions</b>	Employee and customer input, etc. Documented informal outreach for feedback on changes; may include survey or other tools	Outreach activities including driver and rider input, surveys, meetings with community groups, or other tools. Report to Board on activities.	Public Outreach Plan approved by Board in advance of outreach, which may include outreach to affected community groups, employers, etc.	<b>OR</b>	<b>OR</b>	<b>OR</b>	<b>OR</b>	<b>OR</b>	<b>OR</b>	<b>OR</b>
	CEO or designee; staff report detailing changes submitted to the Board at least 50 days prior to changes enacted (except for exceptions that are reported at least 30 days after)	Public hearing prior to Operations Committee and Board action.	At least one public hearing. Board action following Operations Committee recommendation with Title VI report.							
<b>Input and Outreach</b>	Running time adjustments	Significant route changes	A large service reduction	<b>OR</b>	<b>OR</b>	<b>OR</b>	<b>OR</b>	<b>OR</b>	<b>OR</b>	<b>OR</b>
	Departure time adjustments	Addition or deletion of service to a large area	A restructure of the network							
<b>Decision Making Process</b>	Minor bus reroutes			<b>OR</b>	<b>OR</b>	<b>OR</b>	<b>OR</b>	<b>OR</b>	<b>OR</b>	<b>OR</b>
	Changes to bus stop locations (Per CI 1.4)									
<b>Examples</b>										

**1.2 Fares**

***Fare increases of more than 10% in any three-year period shall be considered through the public outreach process as a Category III-Major Change as defined in Policy 1.1. For cumulative changes, the Category III-Major Change public process will only be applied to the increase which breaks the 10% threshold, not the previous increases.***

**1.3 Grants**

Grant Condition	Public Process
Grants in Capital Improvement Program (CIP)	Adoption of CIP will serve as the public process
Grants applications less than \$1 million*	Notice on STA's website
Grants applications at least \$1 million*	Adoption by Board of Directors

\*If grant application project is not contained in the Capital Improvement Program

**1.4 Stop Changes**

***If the cumulative stop changes that take place within a calendar year affect the boardings of 10% of the route's annual ridership, STA will use the tools described in the beginning of this element to gather public input before a final decision is made.***

A stop serves as the point at which a rider can access the transit service. The placement of this access is important for the rider, driver, and riders already on board. STA is continually evaluating stop locations along all transit routes by considering safety, stop spacing, and proximity to destinations.

**1.5 Transit Development Plan**

***STA will hold at least one public hearing while developing its program for each annual update.***

As a public transportation benefit area authority in Washington State, STA is required to prepare a six-year transit development plan and annual report. This document provides updated information to the Washington State Department of Transportation on the various activities of STA.

**1.6 Comprehensive Plan**

***STA will undertake public outreach efforts for subsequent updates to the Comprehensive Plan and allow an opportunity for public testimony prior to any substantive amendments.***

Any change which affects the substance of the Comprehensive Plan will require a public hearing and supporting public outreach.

**1.7 Disadvantaged Business Enterprise (DBE)**

***The DBE goals will be available on STA's website for no less than 15 days prior to adoption by the Board.***

### 1.8 Title VI Reporting

***During major service reductions and fare increases, STA will conduct an analysis to verify that no discrimination to protected classes takes place.***

Title VI provides that “no person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.”

### 1.9 Major Capital Projects

***During the annual Capital Improvement Program (See System Infrastructure Policy 4.0) update process, which identifies all major capital projects, appropriate public outreach and a public hearing shall take place prior to adoption. Amendments to the Capital Improvement Program will follow a similar process.***

Any capital project requiring board approval and outside of the normal budgeting process shall be subject to a public hearing to receive public input and testimony.

### 1.10 Alternatives Analysis Public Outreach

***During any Alternatives Analysis, STA or a hired consultant will develop a public outreach plan to both gather input and provide information about the project being evaluated.***

### 1.11 Budget

***STA shall hold at least one public hearing prior to the adoption of the annual budget.***

Each year the Board of Directors adopts an annual budget that outlines how the agency intends to spend tax, fare, grant and advertising monies.

### 1.12 NEPA/SEPA/Environmental outreach

***Where appropriate or required, STA shall incorporate public outreach and SEPA and NEPA evaluations, with the intent to exceed minimum requirements.***

## CI-2.0 – Service Communication

### 2.1 Branding

***All branding shall be part of a coordinated system-wide branding plan developed to better the customer experience.***

Effective branding can help the customer by conveying simple messages about frequency, span, destinations, and connectivity. By creating a larger branding plan, STA will be consistent with branding styles and purposes.

### 2.2 Technology

***Use improving technology to increase the amount of ridership information available to customers.***

By using new and existing technologies, STA can increase ridership by creating a more pleasant experience for transit riders. Technology can decrease wait time, improve decisions about mode choice, increase safety, etc.

### 2.3 Public Education

***Invest resources in educating existing and potential customers about travel options.***

STA offers a variety of transportation services (i.e. fixed-route, paratransit, rideshare) that assist in providing solutions to many different customer needs. By investing in education, STA can help customers ensure that they are best utilizing the transportation services which STA provides.

## Communications and Public Input Connect Strategies

### Improve Customer Information

***Invest in technology and strategies which are able to provide customers with real-time information.***

Customers are constantly looking for the most up to date information available. Whether wanting to know when a bus will arrive, or wondering if their route is on snow detour, real time information plays a crucial role in the effectiveness of the transit services provided by STA. Strongly pursuing these technologies will position STA to provide more efficient services for customers.

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## Revenues and Fares

STA maintains a convenient, reasonably priced fare structure aimed at increasing ridership within its service area. As a part of an ongoing effort to balance revenue with services, a three-phased change to the entire fare schedule began in January 2010 and will continue through 2012.

A variety of methods exist for fare payment. To reduce the time required for on-board fare collection, the use of one of STA's pre-payment methods is encouraged. Employer-sponsored, organization-based, student, Summer Youth, VIP, and City Ticket bus passes all provide customers with easy-to-use access to STA services. The Pass-by-Mail program, The Bus Shop, and The Bus Shop Too are other alternatives for those purchasing pre-paid fare media. Vending machines located at the STA Plaza, Five Mile Park and Ride, and the Valley Transit Center further encourage the pre-payment of fares. Of course, cash and coin are accepted at fare boxes aboard all STA vehicles.

Numerous other revenue sources exist for funding STA's operating costs. Tax revenues, both from Federal and State allocations and from taxes assessed within the Public Transportation Benefit Area, provide a significant proportion of STA's financial resources. Government grants and revenues from advertising and other sources further mitigate operating costs. These revenues should be used in a manner which upholds STA's role as a responsible steward of community funds.

### Revenues and Fares Goal

**STA's revenue structure should appropriately balance farebox, tax, grant, and advertising revenues to provide high-quality service.**

### Revenues and Fares Principles

The principles listed below define STA's fare structure. They provide guidelines to ensure that the fundamental ideas behind the fare structure are understood by all. These principles are unchanging and will continue to serve as guidance for new and existing fare policies.

#### 1. Fares Matter

***Ridership increases are achieved by making public transportation cost effective and simple to use.***

Depending on the operating environment, type of transit service, and current market demand, fare changes can play a role in the increase or decrease of ridership. The imposition of fares for most transit agencies means there is opportunity to provide more service to more people with the additional revenues.

#### 2. Perceived Value

***Fares and "local match" help avoid the pitfalls known to free commodities.***

Thomas Paine said, “What we obtain too cheap, we esteem too lightly.” Fares provide the opportunity for riders to better appreciate the cost of service. This can facilitate better travel choices.

### 3. Revenues and Services

***The amount of revenue collected correlates with the potential amount of services able to be provided.***

The amount of service that STA is able to provide is tied to the amount of revenue from fares, taxes, grants, etc. that is available. When these revenue sources rise or drop, STA must make decisions about the services to provide to maintain a sustainable budget.

### 4. Diverse Ridership

***A range of fare options recognizes the diversity of trips measured in customer attributes, distance, travel times, and purpose.***

Many youth, college students, riders with disabilities, and low-income riders rely upon STA to serve their transportation needs. A fare structure which recognizes the diversity of customers’ needs increases the use of STA services.

### 5. Other Revenues – Supplement Fares

***The collection of tax, funding from grants, advertising income, and other non-fare-based revenues supplement revenue generated by customer-paid fares.***

Although transit agencies often desire to be more dependent upon fares, non-fare-based revenue sources help to keep service levels higher than would be supported by fares alone.

### 6. Fiscal Responsibility

***The fiscally responsible use of revenues increases the public’s confidence in transit agencies.***

A large proportion of STA’s revenues come from tax-based funding sources. To earn taxpayers’ confidence, STA should be viewed as operating in a fiscally responsible way. STA should always strive to achieve its objectives with the greatest efficiency and minimal waste.

### 7. Alignment with Agency Priorities

***Revenue sources should support the priorities of an agency. A funding source (i.e. grant requirements) should not define the priorities of an agency.***

Some revenue sources, such as grants, often have specific stipulations which may not align with STA’s stated priorities and goals. Ensuring that revenue sources support the agency’s priorities reduces wasteful spending and improves STA’s overall public image.

## Revenues and Fares Policies

### RF-1.0 – Revenues

#### 1.1 Revenues State and Federal Funding

***STA will work to maximize funding from state and federal sources as well as support efforts to increase such financial resources.***

State and federal funds are important for STA to be able to maintain a desirable level of service. By supporting efforts to increase the available financial resources, STA may find itself in a position to be better able to provide improved services to the customers throughout the region.

#### 1.2 Pursuit of Grants

***STA shall pursue grants which align with the agency's priorities and the public good.***

Occasionally, grants are pursued simply for the attached dollars. Such grants have the potential to direct the agency's attention away from its stated goals and priorities. By pursuing grants which directly support STA's priorities, the agency helps to ensure the responsible use of revenues.

#### 1.3 Advertising

***STA shall pursue and permit advertising as a revenue opportunity consistent with jurisdictional and community standards.***

Advertising provides an important source of income for STA. However, the negative impacts of advertising on STA riders and other community members can be notable. STA should recognize this and ensure that the attempt to secure revenue does not negatively impact public perception or ridership.

#### 1.4 Debt

***STA will not incur debt.***

STA operates on a pay-as-you-go basis. STA shall not incur debt or agree to other financial commitments beyond the balance of current or projected revenue.

#### 1.5 Non-Traditional Revenue Sources

***STA shall review the appropriateness and purpose of potential non-traditional revenue sources.***

Numerous non-traditional funding sources, ranging from corporate sponsorship to donations-in-kind to partnerships, could potentially support the achievement of STA's goals and policies. Prior to acceptance of such revenues, STA should ensure the legality and implications surrounding such revenue sources.

### RF-2.0 – Fares

The following fare policies articulate the guidelines for determining STA's fare structure and collection. Each policy contributes to specificity and

provides guidance towards reaching the overall goal of fare collection. These policies together establish a framework for the determination and collection of fares.

**2.1 Philosophy**

***STA's philosophy is to encourage increased ridership by providing a convenient and reasonably priced method for citizens to enjoy the advantages of public transportation.***

Fares are only one of many factors which influence ridership numbers. However, STA will encourage increased ridership by following the principles described earlier in this element and providing a sensible fare structure and payment method.

**2.2 Determination of Fixed-Route Fares**

***While the fare structure will provide value to our riding customers, a fixed-route farebox return objective of 20% of the fully allocated costs of this service is maintained.***

Spokane Transit has agreed to a pro-ridership philosophy in determining fares; that is, that ridership should be encouraged, even if that means that riders pay a small share of the actual cost of the service.

**2.3 Complexity of Fare Structure**

***Minimize complexity—emphasize a simple and easily understood system.***

1. Sustain a flat rate fare structure throughout the Public Transit Benefit Area with fixed fares for regular route/service and a differential rate for shuttle routes.
2. Customers use time-limited passes (two hour, day, monthly, etc.) to accomplish multi-route/directional trips. Transfers are not used.

**2.4 Pre-Payment of Fares**

***Increase pre-payment and reduce the use of cash.***

1. By contract, monthly billing and post-payment may be allowed for employers, institutions and other groups participating in special pass programs.
2. When possible, existing identification cards (the EWU Eagle Card, etc.) containing appropriate technology (magnetic stripes, chips, etc.) may be used to develop and implement pass programs for groups.

Pre-payment of fares eliminates delays caused by on-board fare payment, increases the reliability of revenues, and encourages the use of transit for spontaneous trips. Increasing access to methods of pre-payment supports this policy. Examples of pre-payment media include Smart Cards, institutional bus pass programs, and day passes.

**2.5 Low-income Fares**

***STA supports opportunities for low-income individuals to use public transportation at a discounted cost.***

RF

Revenues and Fares

Opportunities for low-income individuals to use public transportation should be made available through community programs that subsidize the purchase of standard fare instruments rather than as direct STA discounts or special fare structures. This strategy helps manage eligibility challenges and supports other strategic objectives.

## Revenues and Fares Connect Strategies

### Continue to research alternative fare media

***STA should continue to evaluate opportunities to improve the ease of fare payment for customers.***

By exploring options such as rolling monthly passes, transit ridership plans, smartcard improvements, etc. STA may be able to improve speed and reliability (quicker payment means the bus may leave the stop sooner), and increase transit attractiveness by simplifying payment options. Additionally, STA should investigate fare structures which charge in proportion to the services provided.

### Grants for the High Performance Transit Network

***STA should pursue grants which work towards implementing or enhancing the High Performance Transit Network.***

In some cases, improvements to a High Performance Transit corridor will take place incrementally. Grants for improved frequency, passenger amenities or coaches should be pursued strategically. This will help foster ridership in corridors which may see a heavier capital or service investment in the futures.

RF

Revenues and Fares

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## Monitoring and Improvement

Customers expect Spokane Transit Authority (STA) to provide reliable and convenient service in a courteous, cost-effective manner. For STA to ensure the reliability, consistency, and proper development of its transit services, it must continually evaluate and understand the strengths and weaknesses of the products offered. Performance measures exist throughout the agency to ensure a high level of customer service and system performance is maintained.

Many behind-the-scenes activities result in improved customer service and performance. The principles and policies applying to agency-wide operations and decisions are, therefore, published separately.

### Monitoring and Improvement Goal

**STA will frequently monitor its performance to ensure the reliability, effectiveness, and efficiency of its services and to promote overall system improvement.**

### Monitoring and Improvement Principles

The principles listed below identify the basic concepts of service monitoring and improvement. These unchanging principles serve as a guide to STA as it continuously monitors and improves its service.

#### 1. Change and Uncertainty

***Change is inevitable and uncertainty a reality in any endeavor.***

While there are many prevailing patterns, change is always in the works. The constancy of change ensures there will always be uncertainty that will foil plans or goals that are too prescriptive over too long of a period.

#### 2. Aim High

***A goal or aim that is lofty yet achievable is necessary to direct improvement.***

Despite uncertainty and the constancy of change, the act of establishing goals is fundamental to positive growth and development.

#### 3. Continuous Feedback

***Measures to collect and analyze continuous feedback encourage adaptation to circumstances while maintaining the pursuit of goals.***

Goal setting does little to bring improvement to an agency unless its actual performance is evaluated against those goals through continuous feedback measures. Whether done bi-weekly, quarterly, or annually, consistent evaluation provides an opportunity to compare actual and desired performance levels within a standard time period, allowing for comparative improvement analysis.

#### 4. Course Corrections

***Course corrections and goal modifications do occur and, if done deliberately, can support dynamic adaptation and improvement.***

No long range planning should assume a step-by-step, year-by-year approach. Rather, regular periods of course correcting and setting should be assumed and unexpected course corrections should be expected.

#### 5. Ownership

***Regardless of title or function, each department and employee plays a role in improving an organization and, therefore, should take ownership.***

Improvement of agency services is not the sole responsibility of one individual or department. Agencies must understand that problems or deficiencies of service are often solved by many people from different departments. Understanding the interconnectedness of the agencies' functions is essential.

#### 6. Respect Diversity

***Although the subjects being monitored may look alike on the surface, in reality they may need to be held to different performance standards.***

When monitoring an agency's products or processes, it is important to keep in mind that sub-groups of the same product may require different resources, serve different purposes and/or function differently. For diverse products and processes, it may be fundamentally necessary to develop the appropriate standards that fit their function.

#### 7. Checks and Balances

***Evaluating more than one measure of performance helps to limit extremism during the implementation of remedial actions.***

By developing a number of complementary performance measures, the results of an evaluation process are more balanced and comprehensive. Measuring just one aspect of a product or process can misguide the suggestions for improvement.

### Monitoring and Improvement Policies

#### MI-1.0 – Fixed-Route Performance Standards

Standards imply accountability, comparison, and remediation in the event of non-compliance. Standards should be straight-forward and derived from a rational, transparent basis. The performance standards set forth herein are directly related to the effectiveness and sustainability of STA's fixed-route system. These performance standards reflect a triple bottom line (TBL) approach that seeks to improve the system's performance as it relates to its riders, the environment, and taxpayers. Literature on the subject of triple bottom line refers to People (social), Planet (environmental), and Profit (economic) as the primary metrics for

evaluating agency performance.

**Fixed-route performance standards are found in Annex 1.**

**MI-2.0—Agency Performance Measures**

***STA shall use performance measures to evaluate the success of the agency.***

To evaluate the success of the broad services provided, STA will establish performance measures annually and present them to the Board of Directors quarterly.

**MI-3.0 – Revisions and Adaptation**

**3.1 Comprehensive Plan Update**

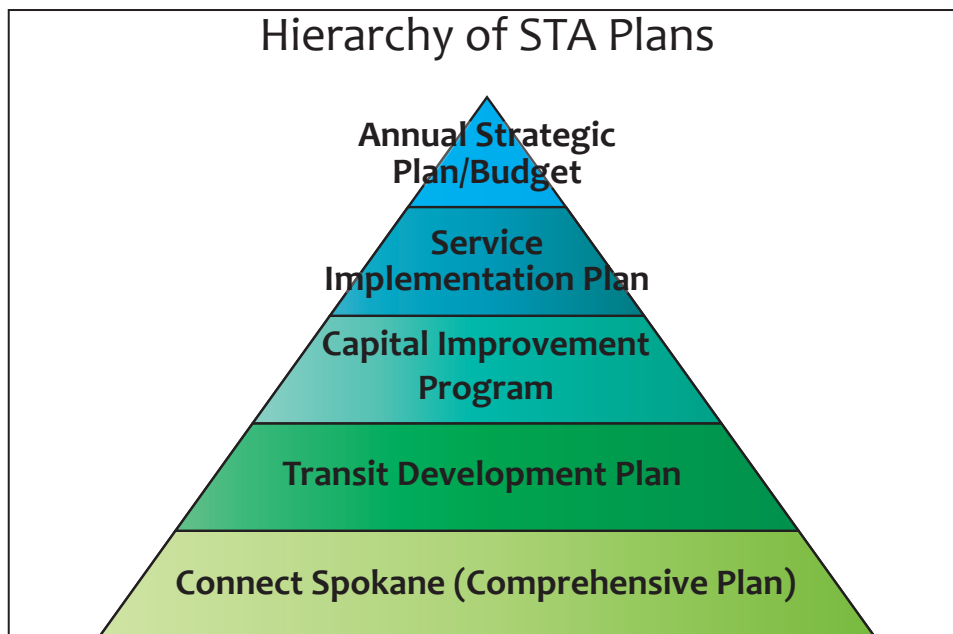
Spokane Transit will review and update as appropriate the Comprehensive Plan for Public Transportation beginning no later than three years following the last major adoption and/or revision. Significant public outreach shall be required as part of the update process, consistent with the policies of the Communications and Public Input Element.

**3.2 Comprehensive Plan Amendments**

Minor amendments to the Comprehensive Plan may take place at any time so long as the change does not significantly change the scope or direction of the plan.

**3.3 STA Planning Documents**

STA prepares for both the near-term and long-term needs by updating and maintaining a series of planning documents. Working in concert, these plans are built upon the goals, principles and policies contained within this document, **Connect Spokane**.



**3.3.1 Annual Strategic Plan**

As part of the annual budget adoption process, STA will prepare a concise annual strategic plan identifying agency priorities for the coming year, including major implementation actions, whether they impact service, infrastructure, or processes. The plan will be a companion to the budget and will be generally consistent with the Comprehensive Plan.

**3.3.2 Service Implementation Plan**

See FR-7.0-Service Implementation Plan

**3.3.3 Capital Improvement Program**

See SI-4.0-Capital Improvement Program (CIP)

**3.3.4 Transit Development Plan**

The Transit Development Plan provides background information on STA, accomplishments during the previous year, and planned projects and programs for the following six years. As a public transportation benefit area authority, STA is required to prepare this plan. The document provides updated information to the Washington State Department of Transportation on the development of the various transit activities undertaken by STA.

**3.4 Update Schedule**

Document	Horizon	Revision Schedule
Comprehensive Plan for Public Transportation	20-25 Years	Begin update no later than three years from last major update
Transit Development Plan	Six Years (current calendar year plus five years)	Adopt before September 1 of each year
Service Implementation Plan	Three Years	Publish draft by April of each year and adopt before July 1
Capital Improvement Program	Six Years	Publish draft by July of each year and adopt before October 1
Annual Strategic Plan/ Budget	One Year	Publish draft by October of each year and adopt before January 1

## Regional Transportation and Land Use Coordination

This Comprehensive Plan for Public Transportation outlines long-term transit related goals and policies for the region. However, long-range transit planning requires the consideration of other jurisdictional plans that overlap the Public Transportation Benefit Area (PTBA). Despite autonomy, coordination between agencies must occur to ensure seamless planning for local and regional improvements.

This section is devoted to the recognition that transit planning cannot be done independent of land use or general transportation planning; and land use or general transportation planning cannot be done independent of transit planning. The following text describes the relationship of the Comprehensive Plan for Public Transportation with other regionally influential planning and policy documents.

### Regional Transportation and Land Use Coordination Goal

**STA will be an active partner in the development and coordination of regional transportation and land use strategies.**

### Regional Transportation and Land Use Coordination Principles

The principles listed below identify the basic concepts of regional transportation and land use coordination. These unchanging principles serve as a guide to STA as it attempts to serve as a leader in shaping regional transportation and land use goals and policies.

#### 1. Transit Disoriented Development

***There is no effective transit panacea for poor land planning and development.***

Too often transit is imagined as a singular solution to make up for poorly-positioned development decisions made over time. While transit helps connect people and places, a myriad host of location-based and design-based variables directly affect the ability of transit to be a meaningful transportation service, irrespective of transit mode or service design. As a result, there are locations that should never expect to be provided a basic level of transit service.

#### 2. Paradox of New and Used

***Despite our inclinations for casting off the old for the latest and greatest, transit has the greatest opportunity for improvement and initial success in existing places rather than upstart developments.***

For over a century, transit has often been developed concurrently with new development as a marketing tool. Success of the transit investment is not always guaranteed, especially given the heavy ongoing operational costs transit demands. Transit will generally have greater success in and around

existing strengths before it can be a powerful influence in travel patterns for new developments. Street grids and land uses established before the automobile heavily influenced land use decisions hold the greatest opportunity for near term transit success.

### 3. Be on the Way

***Development should be focused along or near existing public transportation corridors or in ways that transit can support due to providing for or achieving adherence within the Fixed-Route Design Principles.***

Transit service is most successful when it directly serves many places conveniently throughout the day. Land use and road patterns that require out-of-direction travel increase operating costs and inconvenience riders. Prospective property owners or developers who wish to have good transit service will most likely succeed if they locate along an existing transit route.

### 4. Density

***Land use density and the intensity allows for a mix of land uses. Coordination among stakeholders promotes a mix of uses that can support a greater share of trips made by the pedestrian, bicyclist, and transit customer.***

Transit is effective at serving trips with common origins and destinations or, at minimum, shared travel paths. This is only made possible if there is a level of density at which there is the possibility for a regular and sustained commonality in travel pattern. Density also means there are more destinations that will be within walking distance and facilitates more pedestrian activity. Pedestrian activity both supports and is supported by transit. Some studies have found four dwelling units per acre to be the minimum density to support local bus service. However, in most cases densities need to be two to three times that amount to support viable transit.

### 5. Design

***Infrastructure constructed by developers and municipalities should support the needs of pedestrians and transit facilities.***

Development patterns should support pedestrians and other non-motorized modes to gain easy access to transit. "Complete Streets" principles and design standards that promote a network of local streets and sidewalks, ADA-accessible improvements, and the placement of useful and inviting public spaces near transit support transit use and can reduce dependency on private auto ownership.

### 6. Partnerships

***Fostering partnerships with both public and private entities should be encouraged to cultivate coordinated land use and transportation throughout the region.***

No agency or person alone can ensure that land uses and transportation

investments are made in such a way to be supportive of transit investments. Partnerships are critical to success of any endeavor, particularly those involving private property, public rights of way, and public transportation.

## Regional Transportation and Land Use Coordination Policies

### TL-1.0 – Leadership

#### 1.1 – Proactively Educate

***STA will strive to educate decision-makers and other members of the community regarding the importance of efficient development to successful transit.***

#### 1.2 – Adherence to Service Design Guidelines

***STA shall promote the best practices of land use development by strictly adhering to its adopted Service Design Guidelines.***

### TL-2.0 – Coordination

#### 2.1 – Coordination with Other Agencies

***STA shall encourage two-way coordination with jurisdictions and other agencies including the creation of incentives for development that benefits the transit network.***

Numerous regional jurisdictions and agencies are stakeholders in the broader development and planning of the region. To encourage a positive partnership with these other groups, STA should provide these stakeholders with early and frequent information and opportunities to provide input. In return, STA should expect a similar courtesy to be extended.

#### 2.2 – Coordination with Other Planning Documents and Regulations

***STA shall encourage two-way coordination when documents impacting STA's service goals, principles, and policies are developed and adopted.***

Numerous documents created by municipalities and agencies, including this Comprehensive Plan for Public Transportation, guide land use and transportation decisions throughout the region. To reduce the likelihood of competing plans or policies, interagency communication should be encouraged. Examples of documents impacting STA's operations are included below.

#### *Comprehensive Plans of Municipalities*

Cities within the PTBA who follow adopted comprehensive plans include Airway Heights, Cheney, Spokane, Millwood, Spokane Valley, and Liberty Lake. As a regional service provider, Spokane County also has an adopted comprehensive plan that works to coordinate land uses with cities and unincorporated areas among other purposes. STA holds some interest in most elements of every comprehensive plan adopted by jurisdictions within the PTBA. From housing and utilities to transportation and land use, the policies of each city have an impact on the level of service STA is

able to provide now and in the future. Specific policies that are favorable to transit are always encouraged; however, just as each jurisdiction’s plan was considered during the creation of this plan, STA expects that Connect Spokane be consulted during subsequent updates of each jurisdiction’s comprehensive plan.

*Metropolitan Transportation Plan*

Spokane Regional Transportation Council (SRTC) is the federally-designated Metropolitan Planning Organization for Spokane County. This local intergovernmental agency encourages coordination and collaboration between planning and transportation departments across the region. SRTC annually updates the Metropolitan Transportation Plan (MTP), documenting the blueprint for an inter-modal solution to transportation needs brought about by continued growth and development. The 2009 MTP update calls for system enhancements aimed at increasing transit ridership. Future plan updates or visioning sessions should refer to this plan for guidance.

*Spokane County Coordinated Public Transit-Human Services Transportation Plan*

Prepared jointly by SRTC and STA, the Spokane County Coordinated Public Transit-Human Services Transportation Plan attempts to create a “unified, comprehensive strategy for public transportation service delivery that identifies the transportation needs of individuals with disabilities, older adults, and individuals with limited income, laying out strategies for meeting these needs, and prioritizing services” per the requirements of Federal Transit Administration. STA will continue to work with SRTC on future updates of this document.

*WSDOT Washington Transportation Plan*

At the state level, the Washington State Department of Transportation (WSDOT) adopted the Washington Transportation Plan (WTP) in 2007. The plan is designed to offer policy guidance for all jurisdictions statewide on matters related to the state’s transportation system over the next 20 years. STA operates transit services on state highways and referenced the WTP during the creation of the Comprehensive Plan.

*Growth Management Act*

The Growth Management Act (GMA) was adopted because uncoordinated and unplanned growth posed a threat to the environment, sustainable economic development, and the quality of life in Washington State. All of the preceding plans fall under laws found in the Revised Code of Washington. The GMA requires state and local governments to identify and protect critical and natural areas by guiding urban growth through comprehensive plans, capital investments, and development regulations. STA’s Comprehensive Plan for Public Transportation supports this notion and works to enact the vision of the state while continually working with local jurisdictions. To jointly oversee this planning effort within the urban growth areas, Spokane County established a Steering Committee of Elected

TL

Regional Transportation and Land Use Coordination

Officials charged with defining standards for urban growth area delineation, minimum levels of service, distribution of future growth, and negotiating designations for urban growth areas in the form of a recommendation to the Board of County Commissioners.

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## Sustainability

Spokane Transit's definition of Sustainability is:

*Sustainability at Spokane Transit is about providing services in ways that optimize our ability to meet the needs of present and future generations through actions that balance the region's economic, environmental, and social well-being.*

STA does its part to safeguard the community's current and future quality of life by being socially responsible, preserving the natural environment, and maintaining economic viability. On a day-to-day basis, these guiding principles are a way for STA to become more resource efficient, engage more with employees and customers and grow ridership, market share and funding support.

More than any other element of this comprehensive plan, Sustainability is not a program or activity that can stand alone. By definition, it involves everything the organization does. It is not only included in STA's programs, policies, and business practices; it is also a foundation for STA's role in our region.

### Sustainability Principles

#### 1. Framework

Research reveals several different frameworks that can be applied to the concept of sustainability. Some frameworks encompass broad concepts such as global warming or enabling national energy independence. Others are more narrowly focused on environmental management systems that address specific issues such as reducing an agency's carbon footprint or energy consumption.

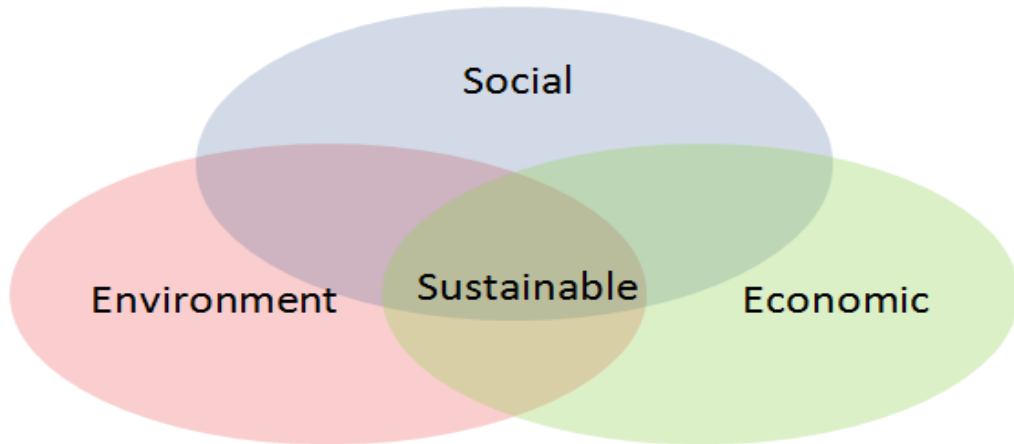
Through the work of its Citizen Advisory Committee, STA chose a conceptual framework for sustainability that could relate general concepts to specific applications within an organization or community.

STA adopted the "Triple Bottom Line" framework.

The phrase was coined by John Elkington in 1994. It was later expanded and articulated in his 1998 book *Cannibals with Forks: the Triple Bottom Line of 21st Century Business*. Sustainability, itself, was first defined by the Brundtland Commission of the United Nations in 1987. The Triple Bottom Line is often abbreviated as "TBL" and referred to as the "3 E's" (economic, environmental, and social equity) or the "3 P's" (people, planet, and profit). More than some other sustainability frameworks, it captures the full spectrum of values and criteria for measuring organizational (and societal) success: economic, ecological and social.

This framework identifies sustainability as being about practices that make

good environmental sense as well as good business sense. Sustainability is essentially responsible resource management: it draws on natural, human and financial resources to find strong, enduring solutions. It recognizes that environmental considerations are not an end in themselves. **True sustainability is the intersection of not only what is good for the environment, but also what is economically feasible and results in benefits to our citizens/taxpayers.**



## Sustainability Policies

Based on the principle of a Triple Bottom Line Framework, this section articulates policy that guides decision-making.

### SU-1.0 – Sustainability should be incorporated into the Services, Activities, and Programs of STA.

#### 1.1 Manage STA services (Fixed Route, Paratransit, Vanpool) to promote sustainability

***Public transportation can play a significant role in achieving sustainability objectives for the region and each of the jurisdictions within the Public Transportation Benefit Area. However, the financial, natural and human resources dedicated to public transportation must be effectively employed and well used in order to achieve this objective.***

- Maintain a high quality of service in order to attract maximum use by the public.
- Ensure basic bus service availability is balanced with emerging Paratransit eligibility requirements. The agency should not spread resources so thin so as to be overextended and unable to maintain quality service to neighborhoods and activity centers that have the highest potential for public transit use.

- Evaluate effectiveness of bus routes based on the social, environmental and financial impacts of STA's services. Existing standards are: Total ridership; energy use compared to passenger miles; and farebox return (see Annex 1: Fixed Route Performance Standards to this Comprehensive Plan).
- Encourage growth of the Vanpool program. This adds flexibility and complements the fixed route system.
- Utilize long-range financial forecasts to continuously measure the level of service that can be maintained given anticipated revenue. The agency's goal is to provide stability and reliability of service.

### 1.2 Build stewardship and service in STA operations

***As a significant user of resources, stewardship must be an essential component of an organization that embraces sustainability. STA should strive to be a leader in conservation programs. The leadership of the organization should actively reinforce a culture that puts a high value on conservation of resources and service to the public. Stewardship also involves a respect for the people who serve and are served by STA.***

- Make good use of tax dollars through most efficient use of resources.
- Establish practices that minimize fuel use and reduce greenhouse gas emissions.
- Review and/or reduce consumption of natural resources against current levels with a goal of continuous improvement.
- Include recycling capabilities as affordable and practical in all facilities.
- Evaluate opportunities presented by the development of alternate fuel sources.

### 1.3 Establish a sustainable purchasing policy

***The agency should have a holistic decision-making process for purchasing equipment and services.***

- Conduct cost/benefit that considers lifespan costs and replacement strategy. Lower initial capital outlays may not be the best value when operations, maintenance, and replacement cycles are also factored as costs of ownership.
- Establish procurement decision process that considers costs involved at each stage of the entire lifecycle of goods purchased; e.g., resource extraction, material processing, product design and manufacturing, transportation and distribution, purchase and use, and end of life disposal or recycling.
- Evaluate the impact of staff resources required to support equipment or new capabilities.

**1.4 Integrate sustainability into facility design, construction, and demolition. The physical plant that supports the agency has a long term effect on the agency's ability to operate efficiently and represents an opportunity to conserve natural and financial resources.**

- Anticipate emerging requirements e.g., ADA.
- Integrate sustainable design criteria into facility design and construction decisions.
- Strive to achieve the Leadership in Energy and Environmental Design (LEED) Silver standard for facilities.
- Construct facilities to the highest defined energy conservation standard justified by net present value analysis of capital and forecast energy costs of at least 30 years.
- Maximize use of recycled building materials.
- Incorporate recycling (deconstruction practices) into the demolition of obsolete STA facilities.

**SU-2.0 –Strengthen connectivity of people and communities**

**2.1 Provide services that are an attractive transportation alternative compared to single occupant vehicles (SOVs).**

**Reliable and predictable service is perhaps the most important characteristic that defines a viable transportation alternative.**

- Conduct route planning and scheduling to get people to destinations in a timely manner.
- Maximize convenience by enhancing route frequency as articulated in the Service Design Principles in this Comprehensive Plan (Part II: Services; Fixed -Route Service, Fixed-Route Service Design Principles).
- Pursue system enhancement technology that makes STA services easier for the public to understand and use.
- Provide transit services to community events to maximize access and use of its services (e.g., additional hours, special fee structure, special routing). This special event service effectively moves large numbers of participants with minimum use of energy resources.
- Take advantage of Washington State and Spokane County Commute Trip Reduction programs that incentivize use of STA services.

**2.2 Serve as regional connection to neighborhoods/jurisdictions, places of employment, community events, and public services in a way that meets the needs of the service area.**

**STA is a major regional asset. Staff should be actively engaged in supporting and informing the land use planning and growth-management activities of the**

***jurisdictions it supports.***

- Educate the region’s planners, developers, and decision makers on the characteristics of urban design that can best be supported by public transportation.

Examples include:

- Use the HPTN concept to communicate a vision of corridors where public transportation services will be consistent and prioritized for further investments (e.g. East Sprague Avenue and Division Street).
- The role of the “built environment” such as streetcars, electrified trolleys, or high quality passenger shelters in helping shape development.
- The impact of residential and employment density on transit effectiveness.
- Maintain a close relationship with the Metropolitan Planning Organizations to ensure transit plans are integrated into overall long-range transportation plans.
- Coordinate with Washington State Department of Transportation to facilitate the integration of public transportation into project planning and design.

### **2.3 Maximize public input and stakeholder engagement in STA’s sustainability initiatives.**

***The success of STA’s sustainability initiatives depends on authentic and transparent efforts to engage all stakeholders. This element reinforces the public process policies as outlined in Part III: Activities and Programs; Communications and Public Input of this Comprehensive Plan.***

- Define a stakeholder as anyone with an interest in STA; e.g., employees, riders, regulators, tax payers, neighborhood residents, activity center tenants and local governments, as well as those who provide services to STA such as suppliers, contractors, and professional services like banking and insurance.
- Strive at all times to balance the long-term perspective of sustainability-related issues against the more short-term needs that arise within our community.

### **2.4 Increase interest in multi-modal connections.**

***The ability to seamlessly transition between various modes of transportation helps expand the public’s use of alternative transportation.***

- Maintain strong connections to the airport and the intermodal center.
- Create accommodations for bicycle and pedestrian interfaces to STA

services. These accommodations should be incorporated in bus stop design and locations as well as the design and capabilities of its vehicles.

- Strategically locate and serve park and ride facilities.

## **SU-3.0 – Foster community resilience and socio-economic health**

### ***3.1 Position transit to mitigate the effect of rising fuel costs on the increasingly large segment of population that is unable to afford other travel options.***

- Keep fares affordable in accordance with the fare policies as outlined in Part III: Activities and Programs, Revenues and Fares of this Comprehensive Plan.
- Regularly review opportunities presented by the development of alternate fuel sources.
- Improve the cost competitiveness of STA services compared with the use of Single Occupant Vehicles (both in terms of an individual's time and energy expended).

### ***3.2 Attend to the social and transportation challenges faced by groups within the community.***

- Include investments in plans and projects for passenger amenities and reduction of barriers that inhibit access to transit stops. The accessibility and utility of public transportation resources will become increasingly important in the future as our population ages.
- Support community efforts to develop a comprehensive set of alternatives to traditional Paratransit service delivery. Paratransit service will face increasing demands in the future as it competes for resources required by other modes.
- Participate in jurisdictions' land use planning and inform supporting transportation infrastructure plans to adapt to meet the changing demographics of our community.
- Make Vanpools available to a variety of groups to meet multiple needs.

## **Sustainability Connect Strategies**

The status of these strategies will be reported by July 2012 with an objective to be completed by the end of 2012.

### **Conduct comprehensive energy, water and waste audits for all facilities in order to establish a baseline.**

- Based on this audit, the agency can assess its posture and develop a plan for improvement.

Assess the agency’s current carbon footprint using the methodology outlined in The Climate Registry. Update annually.

- Use this process, without subjecting the agency to formal audit requirements, to prepare for potential future reporting requirements.

Measure the fleet carbon dioxide equivalent posture to evaluate STA’s status against the Governor’s greenhouse gas reduction goals for Washington State.

Formally assign a point of contact with the responsibility to monitor the agency’s sustainability posture.

Integrate supporting language in STA’s procurement policies that standardizes compliance with the Sustainability Policy.

Integrate supporting language in STA’s personnel policies that encourages compliance with the Sustainability Policy.

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# Annex 1

## Fixed-Route Performance Standards

Standards imply accountability, comparison, and remediation in the event of non-compliance. Standards should be straight-forward and derived from a rational, transparent basis. The performance standards set forth herein are directly related to the effectiveness and sustainability of STA's fixed-route system. These performance standards reflect a triple bottom line (TBL) approach that seeks to improve the system's performance as it relates to its riders, the environment, and taxpayers. Literature on the subject of triple bottom line refers to People (social), Planet (environmental), and Profit (economic) as the primary metrics for evaluating agency performance.

### 1.1 Performance Standard 1: Ridership (Social)

Ridership is a basic indication of a transit route's effectiveness in serving people. There may be a great community dialogue about serving a particular facility, geography, or community, but if the result is a route that has little or no ridership, clearly this goal is not met. It may be that the service is designed poorly or that densities do not justify fixed-route bus service. Only by having a minimum performance standard can these routes be fairly evaluated and remediated.

Productivity is a measure of riders per revenue hour and is used as the framework for the ridership standard.

#### 1.1.1 Basic Routes Ridership Standard

For Basic Fixed-Route Service in Spokane the best indicator of potential performance is a route's relation to the Central Business District (CBD). A route that ties into downtown has more connectivity than other routes. Furthermore, it must meet a higher expectation due to the fact that the downtown Plaza has a finite number of bus bays and overall capacity. Accordingly, it should be focused on routes with a higher level of effectiveness in terms of ridership. The annual performance standard is produced based on the most up-to-date actual annual riders per annual revenue hours figure. For routes traveling into the CBD, the performance standard is **one-half the standard deviation below** the average of the basic routes traveling into the CBD. For all other routes, the standard is precisely one-half this number. By necessity this standard will need to change after substantial changes to the system have been such that one-half the standard deviation is less than 10% of the average ridership productivity. At this time, routes traveling into the CBD that are **one standard below the standard deviation** will be considered inconsistent with this performance measure.

### 1.1.2 HPTN Ridership Standard

The High Performance Transit Network has only a slightly higher standard level since the increased frequency should result in greater frequency but may not necessarily rise to a productivity level significantly greater than the entire system. As a starting point, the high performance transit network routes should be **one-half standard deviation above** the average basic route productivity of similarly situated routes (i.e. that travel to the CBD). For routes that do not travel in the CBD, the standard is one-half the productivity rate for HPT routes that travel in the CBD.

### 1.1.3 Commuter Peak Ridership Standard

From a performance evaluation perspective, Commuter Peak Routes have the benefit of not being in operation in off-peak times when travel demand is lighter. However, peak routes are very capital consumptive in terms of rolling stock and facilities because they only operate six to seven hours per day, increasing the capital cost per passenger. A bus that carries passengers for 12 hours in a day amortizes the capital costs of that bus over more hours of service are spread to many customers over 12 years of such use. For this reason the productivity expectation for Commuter Peak routes should be equal to the HPTN. For routes that operate as a function of what would otherwise be out-of-service time on a route (“Commuter Peak Route – Subordinate”) the standard is equal to one-third the productivity of other Commuter Peak Routes. This reflects the reality that a bus serving passengers in the opposite direction of peak demand will have lower ridership and yet is typically better than operating out of service and providing no transportation benefit.

The performance standards for 2007 and 2008 are illustrated below. Please note that the HPT standard is developed on system-wide data not yet applicable for 2007 and 2008 since no HPT service is in existence.

Service Type	Grouping	2007	2008
Basic	Intersects CBD	22.08	25.45
Basic	No CBD intersection	11.04	12.73
HPTN	Intersects CBD	29.84	33.95
HPTN	No CBD intersection	14.92	16.97
Commuter Peak	Dominant	29.84	33.95
Commuter Peak	Subordinate	9.95	11.32

## 1.2 Performance Standard 2: Comparable Energy Consumption (Environmental)

Since the 1970s, there has been recognition of the value of mass transit as it pertains to environmental sustainability and energy conservation. Often missing from this recognition are any measurable outcomes other than car

trips avoided. Because they are larger and heavier, transit vehicles actually consume more energy per vehicle mile traveled than private automobiles. In order to reap any benefit as it pertains to energy consumption, looking at energy consumed per passenger mile is the easiest to obtain and likely the most effective in measuring outcomes. British Thermal Units (BTUs) are commonly used for similar metrics and will be used here.

A minimum standard for BTUs per passenger mile is useful in evaluating the performance of routes in a different way than the previous standard. While productivity measures gross riders, the "BTUs per passenger miles" metric speaks to the duration of passengers' time on the vehicle. BTUs per passenger miles speaks to energy consumed for a particular vehicle type given a particular trip pattern.

At the very minimum, a bus route should perform equally to the private automobile in terms of energy consumed per mile traveled for each passenger. Assuming a load factor of one person in an automobile and current fuel economy (<http://cta.ornl.gov/data/download28.shtml>), there are 5,500 BTUs consumed for every single-passenger mile traveled in a car. While routes will have trips that can exceed this consumption rate, no route should be worse than an automobile when judged from the cumulative service provided. Translating these consumption rates to buses by size of bus requires looking at average fuel consumption of each major vehicle type in STA's fixed-route fleet as opposed to actual consumption on a route-by-route basis.

The performance standard for energy expressed in passenger miles over platform miles is found below. The numbers are for diesel vehicles. The numbers below are established given fuel economy of the existing fleet and its comparison to private automobiles. Average load factor, or passenger miles divided by platform (vehicle) miles, provides information on how many people are served for every mile of travel. As new propulsion sources come online this table should be amended to reflect those sources. Carbon-based fuel sources have different concentrations of energy. Electrified systems use generally less energy and therefore may have a different ratio which would be a minimum standard in the event such vehicles are added to the STA fleet.

Vehicle Size	Basic	Commuter Peak (Dominant Only)	HPTN
Cutaways	2.84	4.45	4.45
30'	5.35	8.39	8.39
35'	5.16	8.10	8.10
40'	5.48	8.60	8.60
60'	6.65	10.45	10.45

### 1.3 Performance Standard 3: Fares (Economic)

***As a minimum standard of performance, routes shall have a farebox recovery no less than one-half the system average.***

An important performance indicator for medium- to large-sized transit systems is fare revenues. While small agencies often find that the cost of collecting fares is equal to or exceeds the fares potentially collected, STA collects millions of dollars annually from its riders for services rendered. Farebox recovery for this performance standard is the total fixed-route revenue collected as a percentage of the total fixed-route operating cost. It is valuable as a metric since both fares per passenger and cost per hour are not equal for every route. Two routes may have exactly the same ridership but have different farebox recoveries. Routes using larger vehicles traveling longer distances in an hour will cost more to operate. Without a corresponding increase in fares per passenger, farebox recovery is likely to be lower than the comparable route.

### 1.4 Performance Reporting

By April of each year, the Planning Department will report on both the performance of each route for the previous two years and the standards that applied for those years. New service will be evaluated following its development period, typically 18 to 24 months. Any route that falls below the minimum standard for any one of the three performance standards for two consecutive years will be considered out of compliance with the standards. A partial year of operation (e.g. if a route begins operation in September) will not be counted against a route's compliance with these standards. This provides for at least two and not more than three years for a route to mature before any corrective action is required.

The annual report will offer reasons why the route may be below standard and offer preliminary concepts for remediation.

### 1.5 Remediation

Remediation is not simply about eliminating poor performing routes, but instead considering both the route's relationship to the network and other possible network changes that could ultimately improve the entire network. Remedial actions should take place no more than 18 months following a performance report indicating non-compliance.

Non-compliance of routes with respect to performance standards is typically an indication of a route being designed inconsistent with the design principles or adopted service design policies. There may also be changes in land use (e.g. a major mall closes indefinitely) or changes in the network which unintentionally deteriorated service or demand. Remedial efforts should identify how proposed improvements will better align with design principles and adopted policy and provide a rough projection of the relationship to performance standards.

\*End of Document\*