DRAFT *Connect Spokane*

Redline Chapters – Phase 1

April 2022

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~~ maximum 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 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

FR 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~~<To Be Determined Location>: 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~~most 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 or ~~/~~near 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.

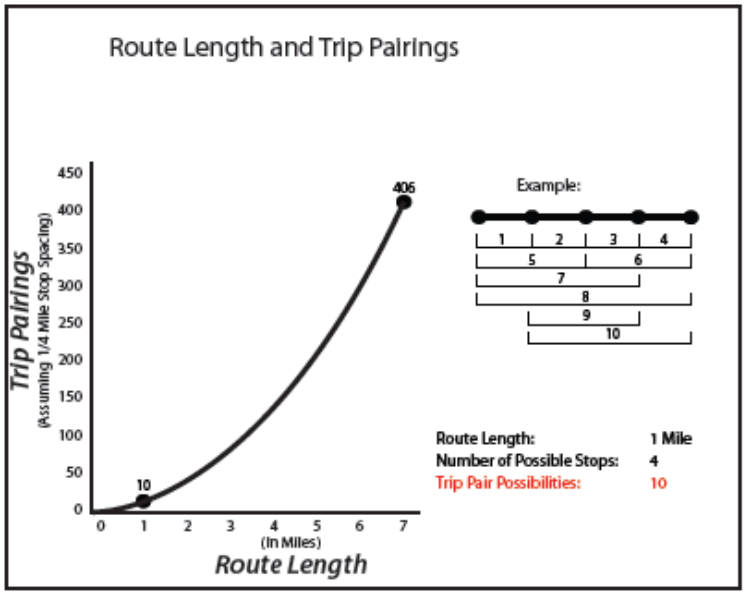

Figure 3- Route Length and Trip Pairings

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.

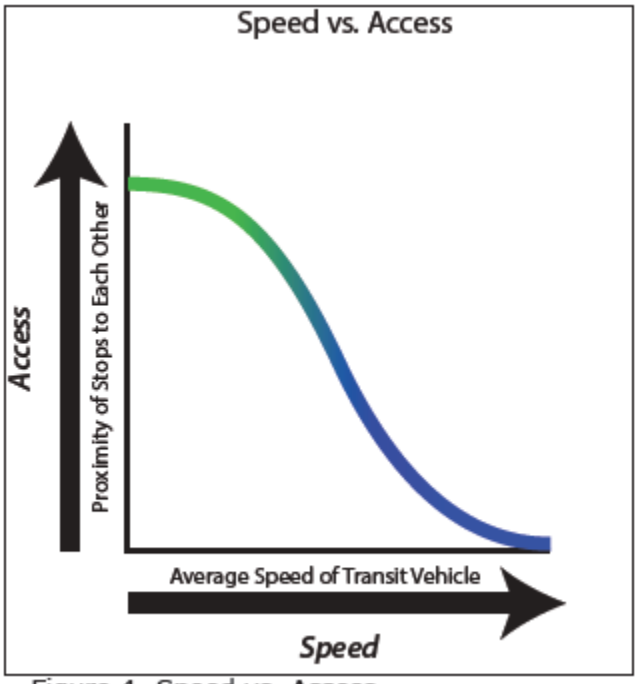

Figure 4- Speed vs. Access

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. 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.

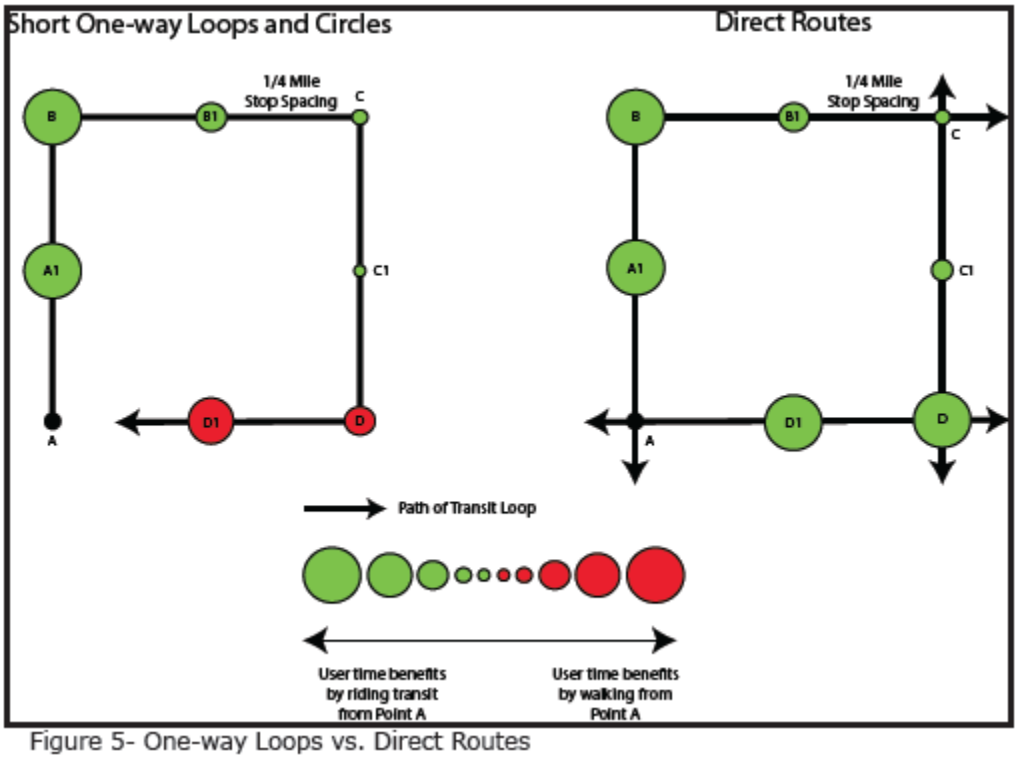

Figure 5- One-way Loops vs. Direct Routes

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.

Policy Summary (to be updated)	
System-wide Policies	
FR-1.0 Major Service Types	These policies define the types of service found in the fixed-route network.
1.1 HPT~~N~~	This is a network of routes selected for higher capital and operating investment
1.2 Regular~~Basic~~	This is the basic service level STA provides.
1.3 ~~Commuter Peak~~Targeted	This service is focused on ~~peak demands for~~ specific travel markets and destinations, with limited service span commensurate with demand.
~~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 HPT~~N~~.
Route-specific Policies	
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-1.0 – Major Service ~~Types~~Classes

STA ~~shall~~ provide~~s~~ ~~four~~ three major ~~types~~ classes of fixed-route service: High Performance Transit (HPT) Service, ~~Basic Fixed-route~~Regular Service, ~~Commuter Peak Service, and Basic Service in Transition.~~and Targeted Services

HPT and ~~Basic~~ Regular s~~S~~service ~~types~~ classes are generalized service~~s~~ that are designed to serve the greatest number of people within the region's geographic area and STA's financial ~~limitations~~capacity. The ~~Commuter Peak~~Targeted ~~S~~service~~s~~ class is a specialized service focused on attracting and accommodating targeted audiences, such as peak demand travelers to employment and education centers, as well as special shuttles that may operate~~d~~ intermittently or bridge service gaps ~~for a period of time~~either temporarily or geographically. ~~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~~ provide a basic policy framework on which the attributes of each service ~~type~~ class is constructed.

1.1 High Performance Transit (HPT) Service

The ~~This generalized service~~~~This~~High Performance Transit ~~HPT~~ service class 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~~. ~~They~~HPT routes also support regional growth plans and centers of education and employment. There are two general HPT configurations, Urban and Regional. Urban configurations primarily operate on arterials and are typically a single route providing end-to-end service on most if not all trips. Regional configurations operate principally on freeways and highways, with significant segments with limited or no access. More details can be found in the High Performance Transit element.

Routes serving HPT corridors as identified in this plan may be designated ~~High Performance Transit~~HPT service only after 1) a corridor development plan has been prepared and approved by the STA Board of Directors and 2) service levels along the route adhere to the minimum service levels for the respective mode or corridor configurations.~~, Urban and Regional (see HP 2.0).~~ Elevated branding and wayfinding investments for HPT service is commensurate with the implementation of corridor service plans.

1.2 ~~Basic Fixed-route~~Regular Service

~~This~~ The Regular service class comprises the majority of STA's existing service and is ~~the basic service level STA provides as general purpose~~general-purpose service. It is intended to be sufficient ~~enough~~ to meet ~~basic~~ general demand that exists in an area served while still being robust enough to meet many purposes throughout each day. The service class provides for flexibility in service span and frequency to accommodate the range of corridor circumstances, from newly minted service to routes envisioned to become part of the High Performance Transit network. ~~.~~ For the purposes of service attributes of frequency and ~~stop spacing~~span, the ~~Basic Fixed-route~~Regular s~~S~~ervice class is sub~~classified~~ divided into ~~two types~~four families: ~~Basic Urban and Basic Interurban~~Frequent, Standard, Basic, Downtown Shuttle.

~~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 favorably transit compares to the operating costs of the automobile.~~

Service Family	General Attributes
1.2.1 Frequent	Routes that warrant greater frequency based on demand and network capability. These routes ~~are~~may serve ~~identified~~corridors identified for future High Performance Transit ~~corridors~~investments or ~~are~~ may be candidates for future designation.~~ typically candidates for High Performance Transit designation~~
1.2.2 Standard	~~Tried~~Routes that contribute to overall network effectiveness and operate daily, providing half-hourly frequency for most hours on weekdays and operating seven days a week.~~ and true service on important corridors, geographic areas~~
1.2.3 Basic	Basic access for a variety of users at different times of day, basic is appropriate for fledgling travel markets and areas with medium density and limited commercial/mixed use activity. Service may gradually increase to reach Standard service definition as performance improves.
1.2.4 Downtown Shuttle	Elements of standard and frequent service with a span appropriate for travel market. May operate daily or weekday only

1.3 ~~Commuter Peak Route Service~~Targeted Services

The Targeted service class~~is is a service that~~ features routes that are tailored to serve ~~important~~a specific commute market or ~~s and~~ destinations on a limited basis, typically with limited or express stop patterns. ~~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, but not exclusively, operate one ~~-~~way in ~~each~~ a given peak period. Routes in this class~~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. Targeted Services also includes shuttles for special events, interim worksite connections, and supplementary connections and is tailored to the specific circumstances.

~~Service Family~~	~~General Attributes~~	~~Minimum Frequency~~

1.3.1 Commuter Express	Conventional express service for downtown commutes with limited stops. May provide reverse-peak trips as part of service design.	At least three trips in the peak period, peak direction
1.3.2 EWU Express	Service oriented to EWU, the single most concentrated destination outside of downtown Spokane, limited stops	At least 2 trips in AM peak
1.3.3 Special Shuttles	For special events, interim worksite connections, supplemental frequency connections, and to address other special route numbering needs	Tailored to circumstances

Commuter Peak routes should generally 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 or students.

1.4 Basic Service in Transition

Basic Service routes that coincide with identified High Performance Transit 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 High Performance Transit. 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 transitguide 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 Regular or HPT service shall be available within no more than one-half mile of at least 80% 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.

2.2 Service ~~Type~~ Class Allocation

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

An effective allocation of investment across the three classes of fixed route service will favor ~~High Performance Transit~~HPT on a per-route-mile basis, by virtue of the greater demand served. Regular services may represent the highest proportion of service until many of the HPT corridors are in operation. Because Targeted services have more limited operating profiles (e.g. number of trips, span of service) they should represent ~~less~~fewer than 10% of service hours ~~The following minimum and maximum allocation rates are as follows:~~

~~1) At least 55~~60% ~~of annual fixed-route revenue service hours should be allocated to Basic~~ Regular ~~Service.~~

~~2 No more than 10% of annual fixed-route revenue service hours should be allocated to Commuter Peak~~Targeted ~~Service.~~

~~3) No more than 30% of annual fixed-route revenue service hours should be allocated to HPT 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~~classes~~, the policy is intended to provide checks and balance to service planning and implementation. Constraining the extent of Commuter Peak~~Targeted Service and HPT service types families is reasonable given their higher capital investment requirements compared to Basic ~~Regular~~ Service. Maintaining at least 60% of the service as Basic Regular Service ensures coverage to areas that do not justify HPT or Commuter Peak~~Targeted service. While current routes have not been developed with the three major service types in mind, existing service reflects the following make-up: 95% Basic Service; 5% Commuter Peak; and 0.5% undefined service.~~

2.3 Geographic Allocation

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

The following allocations of service should be observed in ~~allocating~~ distributing service among Travel Shed Partitions, as detailed below:

1) Each Travel Shed Partition should have at least one ~~Commuter Peak~~Targeted ~~S~~service class route serving the partition so long as it meets service performance standards.

2) Within 15 years of implementation of the first HPT corridor service, HPT service should operate within each T~~t~~ravel ~~s~~Shed ~~p~~Partition. Travel Shed Partitions will be defined as a service design ~~tool~~ criterion in meeting ~~this criteria~~this ~~criterion~~objective. Conceptually these partitions 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~~classes. 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~~ group~~ing~~ component travel needs ~~in order to~~to ensure a ~~minimum level of need satisfaction~~reasonable distribution of HPT investments.

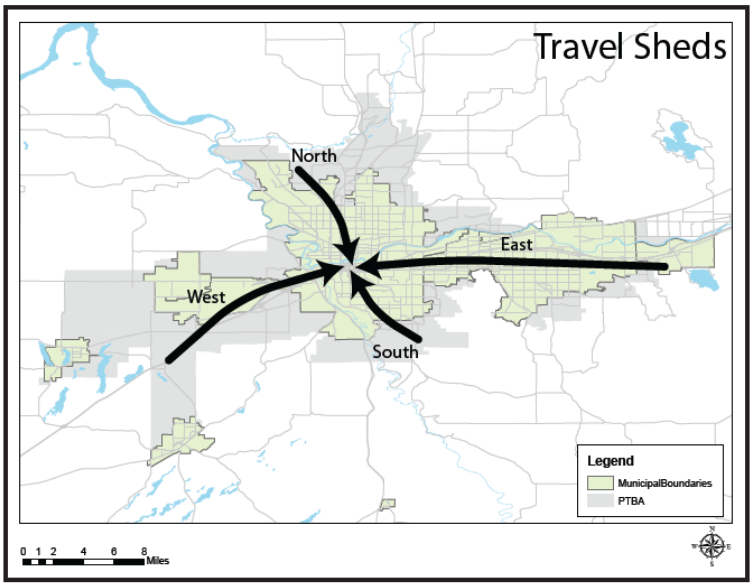

Figure 7- Geographic Allocation

FR -3.0 – Service Span Policy

3.1 ~~Basic System~~Regular Hours of Service (Span)

STA shall provide the maximum possible span of service for ~~its Basic System~~the Regular Service ~~family~~class.

3.1.1 Frequent / Standard System Hours of Service

The extent of each day in which the ~~Basic System~~Frequent and S~~ervice~~tandard families are~~is~~ in operation is as follows, generalized to the nearest hour of the day:

Day	Span
Weekdays	5~~6~~ -am to 11 pm
Saturdays	6 am to 11 pm
Sundays/Holidays	8 am to 8 pm

3.1.2 Basic / Downtown Shuttle System Hours of Service

The minimum extent of each day in which the Basic and Downtown Shuttle families are in operation is as follows:

Day	Span
Weekdays	6 am to 6 pm
Saturdays	Route dependent
Sundays/Holidays	Route dependent

3.2 HPT Hours of Service (Span)

Whenever operationally feasible, STA shall provide an HPT span of service greater than that of the ~~Basic~~ Regular System.

Day	Span
Weekdays	5 am to 12 am
Saturdays	6 am to 12 am
Sundays/Holidays	~~7~~ 6 am to ~~9~~ 10 pm

FR -4.0 – Headways for HPT Service~~/ Basic~~ and Regular 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~~Regular service families and HPT modes and corridor configurations. 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.

Maximum Headways (minutes)				
Service Class	Variable	Peak	Base	Sub-Base
HPT	Mode: Bus Rapid Transit	10	15	30
	Corridor Configuration: Urban	15	15	30
	Corridor Configuration: Regional	30	30	60
Regular	Service Family: Frequent	15	30	60
	Service Family: Standard	30	30	60
	Service Family: Basic	60	60	120
	Service Family: Downtown	30	30	60

FR 5.0 Service Reliability and Operability

STA ~~shall~~ develops schedules to include sufficient time for recovery to ensure reliability and provide for operator respite.

The schedule blocking process creates recovery periods and ensures that the ~~bus~~ operator has enough time in the round trip to stay on schedule. If a route's cycle time is not long enough for adequate recovery time, it is commonly interlined with another route that has greater opportunity for recovery time.

FR -6.0 – Stop Spacing and Placement

STA ~~shall~~ balances 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. 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.

Service	Average Stop Spacing	Minimum Stop Spacing	Maximum Stop Spacing
HPT – Frequent	¼ - ½ mile	800' – 1300'	1500' – 3000'
HPT – Express	2.5 miles	1300'	N/A
Basic Urban	¼ mile	800'	1500'
Basic Interurban	½ mile	800'	N/A

	Spacing	Process
HPT	Generally greater spacing than regular service it is replacing with a target of ½ mile outside the downtown core. (Minimum spacing of ¼ mile between most stations)	Develop as part of corridor plan. General station locations are subject to formal board approval (not required for other stops)
Regular	**Arterials and local streets:** 800'-1500' seeking an average quarter-mile stop spacing Highway environments where speed limits exceed 40mph: as much as one mile where speed limits are greater than 40mphminimum ½ mile and where activity centers and infrastructure will support **Rural/Limited access:** subject to suitable location	Implemented as part of normal service development. No formal consultation process except for stop closure or major upgrades as part of integrated improvements
Targeted	Subject to specialized service needs	Same as Regular service

FR 7.0 Vehicle Load Standards

STA adjusts bus and trip assignments to meet demand.

Ideally, a seat should be available for every STA passenger during all periods of operation. However, this is not always possible because of funding constraints or limited vehicle or driver availability. From the passenger's perspective, passenger loads reflect the comfort level of the on-board vehicle portion of a transit trip. The purpose of load guidelines is to ensure that most passengers will have a seat for at least the majority of their trip.

Load standards are thresholds of the ratio of passengers on board to seats available. Historically, STA's standards have been categorized based on ~~Local~~ Basic Service and Targeted~~Express Commuter~~ service with the most recent standard being 150% of seating capacity during weekday peak/off-peak and 110% of seating capacity at all times for Express Commuter service. For example, a bus that has 40 seats would have no more than 20 standees for a total of 60 passengers.

Today, depending on the type of bus, STA will attempt to address any load where passenger loads exceed 150% of seating capacity or the legal weight limit of the bus during all periods of the day for local service. This translates into 20 standees for a total of 60 passengers. For ~~Express Commuter service~~routes utilizing freeways for substantial portions of their trips, STA will attempt to address any load where passenger loads exceed 125% of seating capacity as measured at the peak load point and occurring on a regular basis. ~~It would be lower compared to local service due to high-speed travel on I-90~~. This translates into 10 standees on a 40-foot coach and 16 standing on a 60-foot articulated coach

FR -8.0 – Route Numbering

STA ~~shall adopt~~maintains a route numbering ~~policy~~ practice 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 route numbers are used to identify service types (HPT Lines, Regular Service, and Targeted Service) and may be organized further using geography for additional communication. ~~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, and symbols ~~can~~ may also be used to distinguish HPT or specialized routes as well as route variants.

The use of colors, ~~and~~ numbers, or symbols; when introduced, should fit within a systems-approach to service communication and branding.

High Performance Transit

High Performance Transit (HPT) is STA's term for core lines serving local and regional corridors that are all-day, two-way, frequent and easy to use. Together, the lines represent STA's High Performance Transit Network, a focus for integrated investment in infrastructure and supporting land use. ~~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~~HPT 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 HPT 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~~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 HPT.

4. System Effectiveness

HPT 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

HPT 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 HPT network reflects the fact that the Spokane region's urban layout, density and fiscal capacity are unique. ~~In order to~~To be functional and achievable, design of the HPT network 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 HPT.

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~~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~~

HPT Network that can enhance its competitiveness with other modes, particularly the private automobile.

High Performance Transit Policies

In addition to the policies listed below, policies addressing HPT service levels and infrastructure can be found in Fixed Route (FR) and System Infrastructure (SI), respectively.

HP 1.0 ~~HP-1.0~~ - ~~-~~Corridor Development Plan~~s~~

To be recognized as an HPT ~~high performance transit~~ line, a corridor development plan should first be approved by the STA Board of Directors. ~~STA shall identify service corridors with sufficient ridership to warrant HPT service.~~

The HPT ~~routes~~ lines ~~are located in~~are in major corridors where there is sufficient need to justify significant investments in passenger amenities and information. The corridor development planning process provides a method to determine the appropriate scale of investment, the service design and the implementation steps toward plan realization. It engages stakeholders including existing and future passengers, property owners and agencies in envisioning the future state of a corridor and ways to make progress, even if incremental. It also may identify the locations of stations and stops and infrastructure requirements.

HP 2.0 - -Corridor Characteristics

2.1 ~~-~~Vehicle Type Assumption

Unless otherwise evaluated or identified in a corridor development plan, rubber-tired buses are the standard HPT vehicle.

~~-~~2.2 ~~-~~Corridor Configuration

STA configures a corridor's service architecture in response to geographic context, reflecting particular conditions that affect speed, service, frequency, and access.

There are two general corridor configurations, Urban and Regional. Urban configurations primarily operate on arterials and are typically a single route providing end-to-end service on most if not all trips. Regional configurations operate principally on freeways and highways, with significant segments with limited or no access. While speeds are higher in Regional corridors than in Urban corridors, limited access reduces overall travel possibilities. To enhance service usefulness and effectiveness, Regional corridors may feature two or more routes that work together to provide HPT service, with operational techniques to provide greater frequency along the most traveled portions of a corridor. Regional corridors may have longer headways (less frequency) than Urban corridors and configured with service branching while maintaining all other HPT elements.

2.3 — Mode Selection ~~(conventional buses, including different types like DD, Artics, 40', BEB; BRT, Rail commuter and light)~~

~~HP-2.0 – HPT Service~~ Corridor Configuration~~Type~~ Family ~~Selection~~

~~*STA shall assign*~~ *configures a corridor's service architecture in response to geographic context, reflecting* ~~*particular conditions that affect*~~ *various a HPT service types* ~~*family to reflect distinctions in speed, service, frequency, and access.*~~

~~Two~~ Three ~~service~~ families~~categories – Frequent and Express~~Bus Rapid Transit (BRT), Plus Line, and ~~Line~~There are two general corridor configurations, Urban and Regional. Urban configurations primarily operate on arterials and are typically a single route providing end-to-end service on most if not all trips. Regional configurations operate principally on freeways and highways, with significant segments with limited or no access. While speeds are higher in Regional corridors than in Urban corridors, limited access reduces overall travel possibilities. To enhance service usefulness and effectiveness, Regional corridors may feature two or more routes that work together to provide High Performance~~HPT service, with operational techniques to provide greater frequency along the most traveled portions of a corridor. Regional corridors may have longer headways (less frequency) than Urban corridors and configured with service branching while maintaining all other HPT elements of High Performance Transit. – have been identified to reflect appropriate distinctions in speed, service frequency, and access (distance between stops) for each route or family of routes.. 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 families. in terms of speed, access, frequency and purpose.

When evaluating modes, STA shall consider the strengths and weaknesses of various vehicle types in relation to the demands of the corridor being served.

Modal selection can generally be classified into two categories, conventional bus and rail. Conventional bus includes a variety of buses that may be categorized by vehicle type (including double-deckers, articulated buses, 40' passenger buses, etc) propulsion (battery electric buses, diesel hybrids, etc) and service characteristics (e.g., bus rapid transit). Rail includes both commuter rail and light rail vehicles. Each mode has 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. In Spokane, 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.

Service Type	Speed	Access	Frequency	Purpose
Frequent	Moderate	Higher	7-10 minutes	High quality transit serving urban corridors and regional activity centers. Backbone of the STA system with convenient transfers to other routes First/last mile connections - pedestrian/bicycle/ multimodal/ accessibility improvements
Express	Higher	Limited	15 minute (peak) 30 minute (off-peak)	Direct, limited-stop routes to reduce travel time Frequent, commuter-style services All-day service reflecting peak period and seasonal demand

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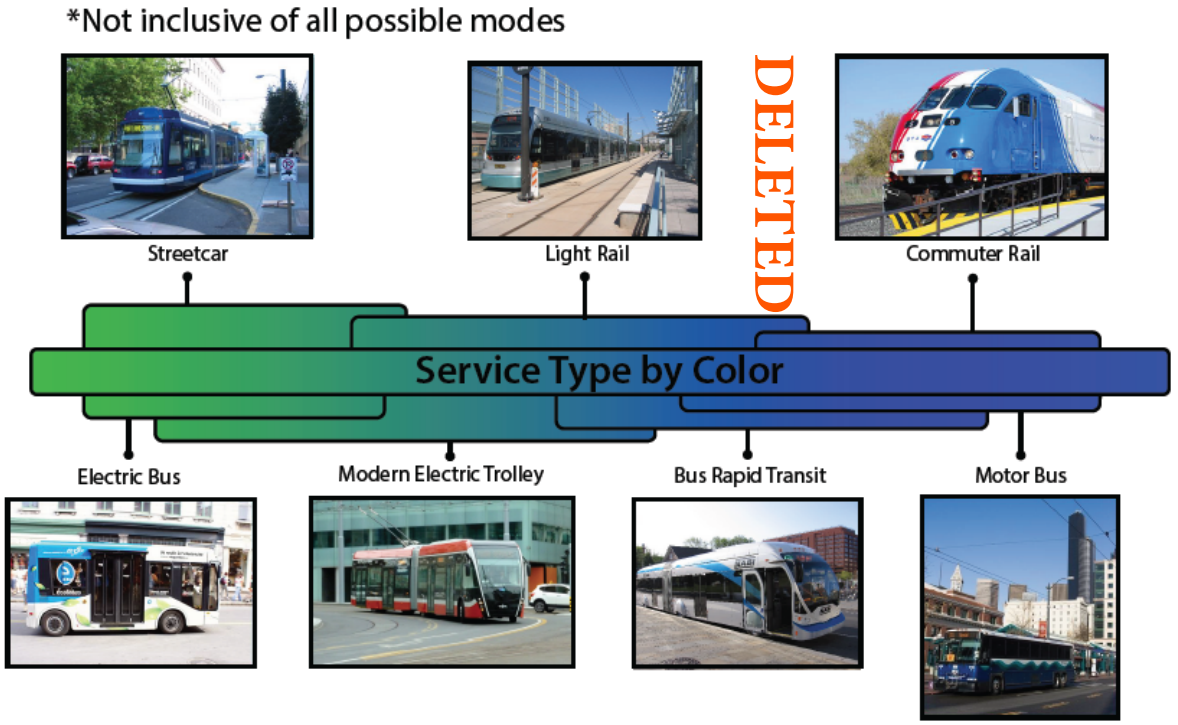
~~HP-3.0 – HPT Mode Selection~~

~~When evaluating modes beyond the bus, 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.Unless identified otherwise in a corridor development plan, rubber-tired buses are the standard HPT vehicle for High Performance Transit.~~

Figure 1- Service Type by Color



Mode	Strengths	Weaknesses
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
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
Conventional bus (Urban Transit)	Flexibility in routing; readily serviceable due to knowledge, parts, etc	Localized emissions,
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
Modern Electric Trolley	Rubber-tired, 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
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
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
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

~~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~~

HP-4.0 High Performance Transit (HPT) Implementation

4.1 Prioritization

STA will prioritize the implementation of HPT corridors and selection of service types based on the principles outlined in this ~~element~~section.~~2.~~

4.2 Speed and Reliability

STA will advance measures to improve the speed and reliability of HPT corridors to improve service efficiency and ~~increase ridership~~increasing mobility and access for STA riders.

STA will actively seek to improve policies, roadway design and operating practices that influence the speed and reliability of HPT service. This includes measures such as transit signal priority, exclusive or semi-exclusive transit lanes, traffic queue jumps, and optimize stop placement. STA also seeks to reduce elements of travel time within its control by measures such as all-door boarding and stop spacing and design.

4.3 Land Use Implementation

In addition to the policies in ~~Chapter XX~~Regional Transportation and Land Use Coordination, STA will actively pursue partnerships, policies and other measures that result in greater access to HPT.

STA will promote policy changes, such as reducing or eliminating minimum parking requirements, reducing regulatory burdens and upzoning that allows more housing and activity near HPT stations and stops. Additionally, STA will partner with agencies and organizations to provide more urban activity, particularly affordable and market-rate housing, near HPT stations and stops.

4.4 HPT Standards and Guidelines

STA may develop additional standards and guidelines to support ~~the~~HPT implementation ~~of High Performance Transit~~.

Standards and guidelines for HPT planning, implementation and operation may address the following:

- Process and contents of a corridor development plan
- Branding specifications and the criteria for when HPT corridors receiving branding elements
- Standard station elements and typical plans and specifications
- Resources for partner agencies and contractors

HP-5~~4~~.0 - High Performance Transit Network Map

The ~~High Performance Transit~~HPT network map is the foundation, framework, and basis for future service improvements.

The following map depicts how the ~~High Performance Transit~~HPT 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~~This map will continue to take shape incrementally as directed by the policies found within this element. ~~This version of the High Performance Transit Network map has been updated to include modifications as a result of the first two phases of the STA Moving Forward planning process that took place in 2012 and 2013. It has been revised in 2017 to simplify the depiction of the corridors in two categories of frequent and express service products.~~

~~High Performance Transit Facility Design and Service Communication Standards~~

~~*Develop standard guidelines for facility design and service branding communications for HPT.*~~

~~Nested within STA's overall branding strategy, distinctive facilities and branding for HPT communicate its unique attributes to customers and those developing the built environment.~~

~~HP-5.0 – Prioritization~~

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

Figure 2- Preliminary HPT Proposal

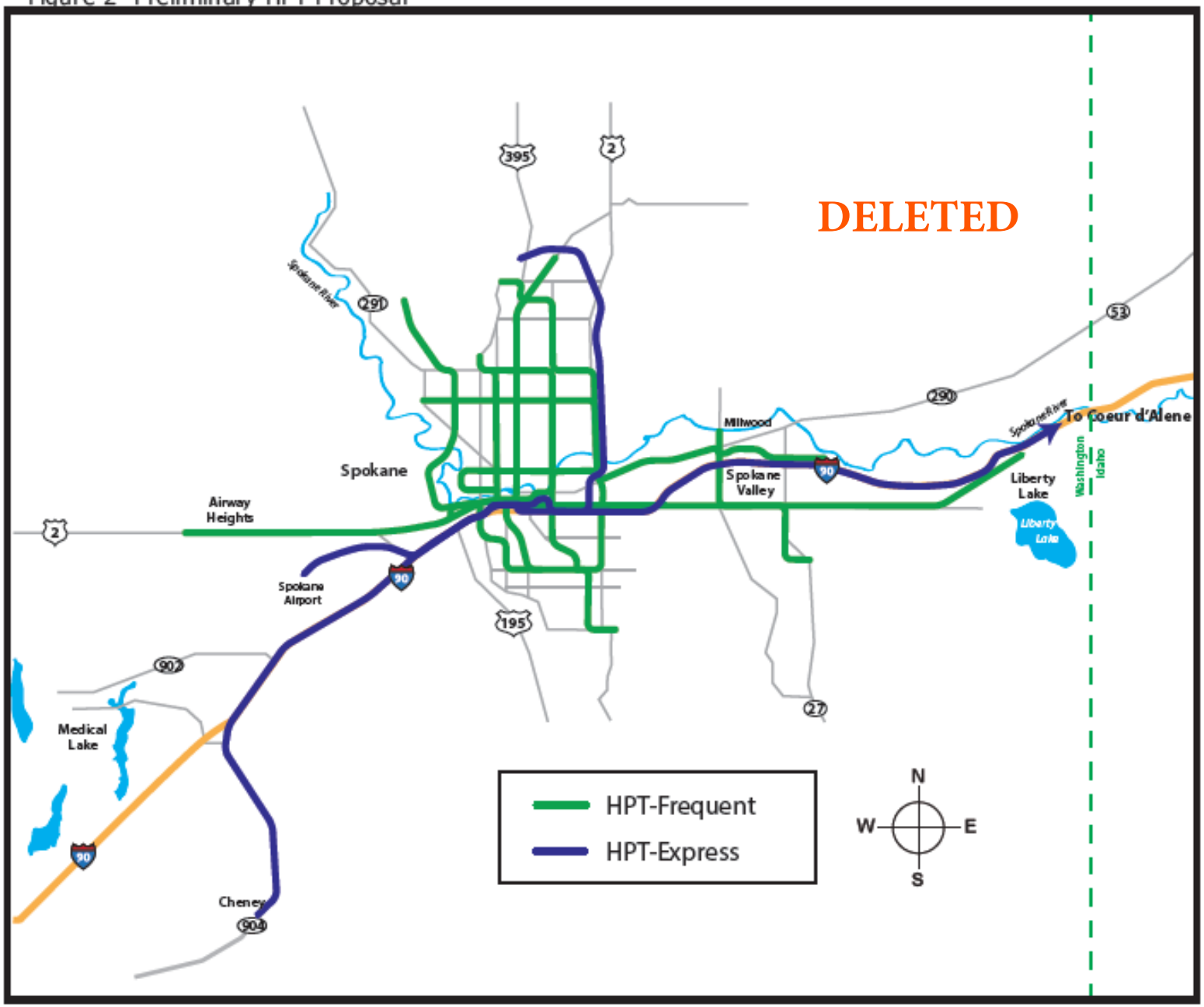
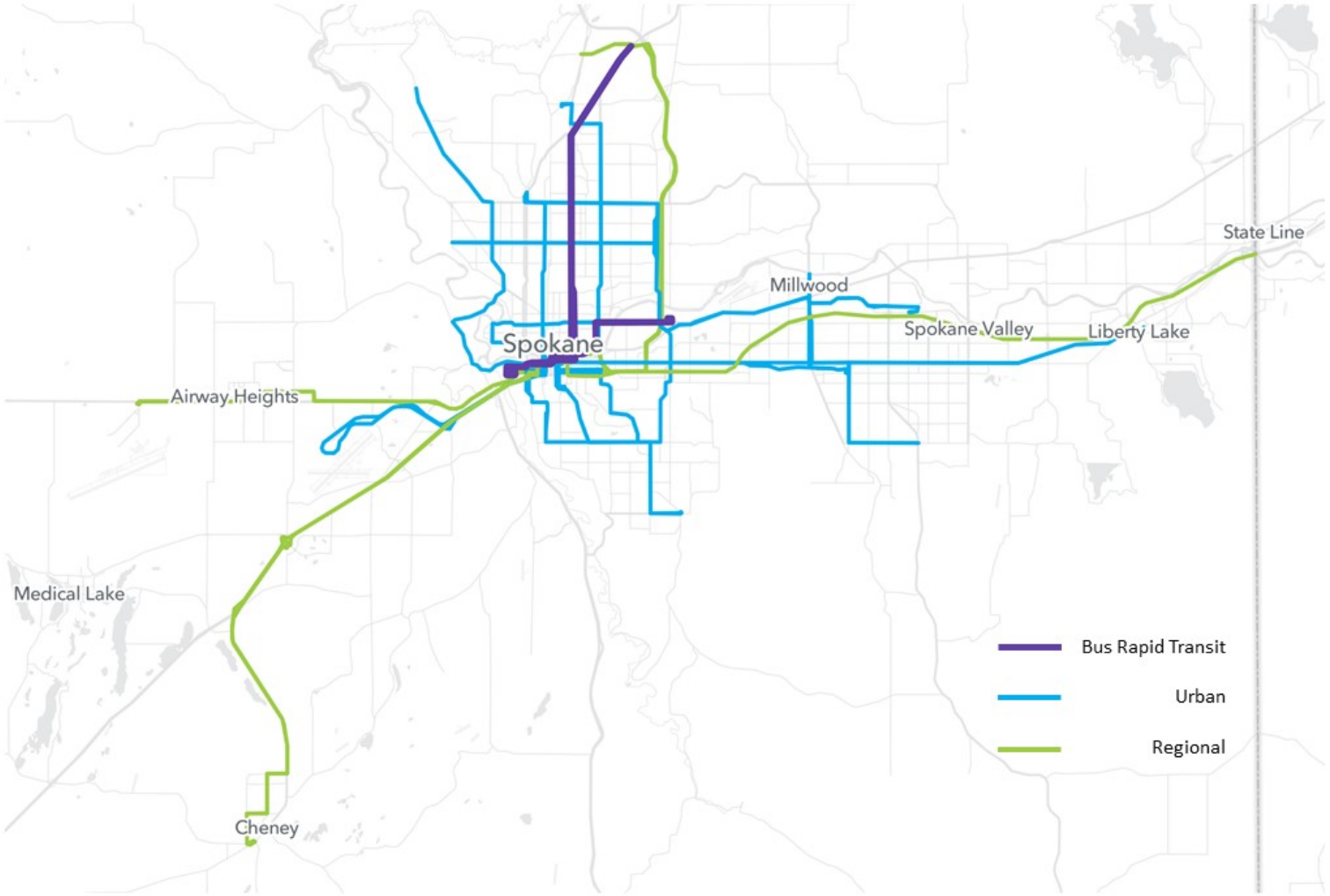


Figure 2. Conceptual HPT Network



Route	Terminals	Via	Implementation Strategy and Challenges
E1H PT2	Cheney / EWU <> Hastings Park & Ride	I-90, Downtown Spokane, SCC, North Spokane Corridor	**Near-term**- Branded articulated bus or double-decker bus; ensure frequency and span between Downtown Spokane and Cheney meets HPT Express standards; restructure service to Medical Lake; construct West Plains Transit Center. **Mid-term**- Introduce express service on the North Spokane Corridor once completed. **Long-term**- Branded articulated bus or double-decker bus; ensure service to Hastings Park & Ride meets HPT Express span and frequency standards.
E2H PT 3	Spokane Int'l Airport <> Coeur d'Alene, ID	Downtown Spokane, Mirabeau, Liberty Lake, Post Falls	**Near-term**- Articulated bus; consider expansion of select trips to Coeur d'Alene; construct Liberty Lake Park & Ride. **Mid-term**- Articulated bus or double-decker bus; construct Argonne Park & Ride. **Long-term**- Articulated bus or double-decker bus; install HPT stations and stop amenities; evaluate service options for extension to Spokane Int'l Airport.

Route	Terminals	Via	Implementation Strategy and Challenges
F1B RT 2	Downtown Spokane <> Newport Hwy & Hawthorne	Downtown Spokane, Division Street, Newport Hwy.	**Near-term**- Regular bus; improve daytime capacity issues and night and weekend frequency; construct improved passenger amenities; Business Access and Transit (BAT) lanes between N. Foothills Dr. and the Spokane River. **Mid-term**- Enhanced bus; meet HPT Frequent frequency and span standards; construct Farwell Park & Ride; construct HPT station and stop amenities. **Long-term**- electric BRT-style vehicles; construct center-running transit-only lanes.
F2H PT5	Airway Heights <> Liberty Lake	Sunset Blvd., I-90 Corridor, Sprague Ave., Spokane Valley, Greenacres	**Near-term**- Regular bus; expand service on Route 173 VTC Express with more peak frequency and hourly mid-day service; simplify Route 61 Highway 2 through Airway Heights; construct improved stop amenities. **Mid-term**- Enhanced bus; ensure frequency and span meet HPT Frequent standards with BRT service along semi-exclusive right of way. **Long-term**- Light rail.
F3H PT7	VA Hospital <> Indiana & Evergreen	Wellesley, Market, SCC, Trent, Millwood, Spokane Valley Mall	**Near-term**- Regular bus; improve frequency during nights and weekends on Route 33 Wellesley. **Mid-term**- Regular bus; modify Routes 32 and 33; add 15 minute daytime weekday frequency throughout the length of the corridor. **Long-term**- Enhanced bus; meet HPT Frequent frequency and span standards; install HPT station and stop amenities.

F4H PT8	Whitworth University <> South Hill Park & Ride	Hawthorne Rd., Division St., Nevada St., Francis Ave., Market St., Freya St., 29th Ave.	**Near-term-** Improve frequency during nights and weekends along Route 26 Lidgerwood and 28 Nevada. **Mid-term-** Regular bus; modify parts of Route 26 Lidgerwood, 28 Nevada and 34 Freya; add 15 minute daytime weekday frequency. **Long-term-**Enhanced bus; ensure frequency and span meet HPT Frequent standards; install HPT stations and stop amenities.

Route	Terminals	Via	Implementation Strategy and Challenges
F5H PT1	Five Mile Park & Ride <> 57th & Regal	Monroe St., Downtown Spokane, Grand Blvd., 29th Ave., Lincoln Heights, Regal St.	**Near-term-** Enhanced bus interline Routes 24, 44G and portion of Route 45; construct Moran Prairie Park & Ride; construct improved passenger amenities along route; improve intersection at 29th and Regal to allow for proposed alignment **Mid-term-** Enhanced bus; ensure frequency and span meet HPT Frequent standards; install HPT amenities at stops and stations. **Long-term-** Expand capacity as warranted.
F6B RT1	Browne's Addition <> Spokane Community College	Downtown Spokane, Riverpoint Campus, Hamilton St., Mission Ave.	**Near-term-** Electric Bus Rapid Transit; develop service plan to modify existing routes; ensure frequency and span meet HPT Frequent standards. **Mid-term-** Improve connections along corridor to support integration with other HPT corridors as they develop. **Long-term-** Expand capacity as warranted.
F7H PT4	Downtown <> Valley Transit Center	Sprague Ave.	**Near-term-** Regular bus; improve passenger amenities at bus stop locations. **Mid-term-** Enhanced bus; ensure frequency and span meet HPT Frequent standards **Long-term-** Expand capacity as warranted.
F8H PT6	Indian Trail <> 29th & Grand	Alberta St., SFCC, Gov. Way, Maple St., 14th Ave., Lincoln St., 29th Ave.	**Near-term-** Regular bus; improve service on Route 23 to provide mid-day and evening service to Indian Trail. **Mid-term-** Regular bus; restructure Routes 20, 23, 33, and 43; improve weekday daytime frequency to every 15 minutes; construct Indian Trail Park & Ride. **Long-term-** Enhanced bus; ensure frequency and span meet HPT Frequent standards; install HPT station and stop amenities where appropriate.

~~F9~~HPT9	~~Five Mile Park & Ride <> South Hill Park & Ride~~	~~Francis Ave., Nevada St., Hamilton St., Riverpoint Campus, Perry St., Southeast Blvd.~~	~~**Near-term-** Regular bus; improve frequency through South Perry District.~~ ~~**Mid-term-** Regular bus; connect N. Hamilton to S. Perry; create 15 minute weekday daytime frequency.~~ ~~**Long-term-** Enhanced bus; ensure frequency and span meet HPT Frequent standards; install HPT station and stop amenities where appropriate.~~
~~F10~~ HPT	~~Monroe & Broadway <> Mission & Hamilton~~	~~Broadway, A St., Maxwell Ave., Mission Ave.~~	~~**Near-term-** No identified improvements.~~ ~~**Mid-term-** Regular bus; restructure bus routes to create basic service along corridor.~~ ~~**Long-term-** Enhanced bus; ensure frequency and span meet HPT Frequent standards.~~
~~F11~~ HPT	~~Millwood <> SR 27 & E 32nd (South Valley)~~	~~Argonne Rd., Valley TC, Sprague Ave., Pines Rd.~~	~~**Near-term-** No identified improvements.~~ ~~**Mid-term-** Regular bus; restructure service in the Valley to create basic service along route.~~ ~~**Long-term-** Enhanced bus; ensure frequency and span meet HPT Frequent standards.~~

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 ~~sustainable~~resilient, self-sustaining transit agency.

To ensure that infrastructure investments are sustainable, cost-effective, useful, equitable, 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 sustainable system infrastructure improvements have long-term implications ~~for~~ on operating costs and ensuring equity and efficiency.

3. Fiscal Responsibility

The public expects transit agencies to improve its infrastructure in a fiscally responsible, ~~sustainable~~resilient 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, and ensures climate resiliency.

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 designed to provide the greatest benefit. Cost effectiveness will vary and may not be subject to the same metrics.

System Infrastructure Policies

SI 1.0 – Capital Investment Considerations

Use the following list of considerations to help evaluate the benefits of proposed capital projects.

Capital projects are required as a part of an assortment of services which are provided. STA does not have the resources to complete all of the capital projects identified. However, the following list of considerations help STA evaluate the benefits of each project. These considerations are in addition to the other policies in this plan.

Impact to Operations
Consider the impacts on operational cost, STA staff requirements, speed and reliability of service, and how the project supports the transit network and system.

Impact to the Customer Experience
Consider the impacts on ridership, customer comfort and usability of the system.

Resilient/Value Engineering/ Expected Lifetime
Consider options that create resilient networks and infrastructure, providing greater elasticity in operations and faster recovery times. Consider options which may increase durability, reduce maintenance needs and add value relative to the cost. Also consider the expected useful life span of the capital investment. Lower initial capital outlays may not be the best value when operations, maintenance, and replacement cycles are also factored as costs of ownership

Impact to Safety and the Environment
Consider the safety, sustainability, environmental and other impacts related to how the project will impact the surroundings of employees and customers throughout the lifecycle- design, construction, use, and demolition – of the facility.

~~SI 2.0 – Transit Asset Management Plan~~

~~*In compliance with state and federal law, STA will maintain an asset management plan certified by the WSDOT Transportation Commission.*~~

~~The asset management plan will include:~~

- ~~An inventory of all transportation system assets~~
- ~~A preservation plan based on state of good repairs methodologies~~

SI ~~3~~2.0 – ~~Specific~~ Facility Infrastructure

~~3~~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 Transit Centers

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

A transit center is a designated facility where multiple~~two or more~~ routes intersect to provide passenger transfers and where significant physical improvements for customers are constructed outside the public right-of-way. Transit centers are geographically distributed to provide customer and operating needs across the region. 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.~~At minimum, transit centers should include:

- Sheltered, lighted passenger waiting areas
- Real-time and static route, wayfinding and customer information
- Operator relief amenities
- Vehicle layover and staging capacity for planned and future requirements

~~Transit centers may also include public restrooms and interior waiting areas.~~

~~3~~2.2.1 The Plaza

Invest in capital improvements that work toward 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. In spring of 2017, STA completed a renovation of The Plaza to improve the customer experience. STA should continue to support The Plaza by pursuing additional 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.

~~3.3 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.~~

SI 2.3 Transit Station

Enhance the transit system by investing in transit stations where appropriate to enable connections and improve the customer experience.

A transit station consists of 2 or more stops or bays at a location where 2 or more routes intersect. Less investment than a Transit Center. Station can be on STA property or in the public right-of-way. The station should have an anchoring stop that has 75 boardings or more or is associated with a larger transit facility, such as a park and ride. These facilities may include a ~~P~~park ~~a~~& r~~R~~ide, off-street layover or operator comfort facility.

~~3~~SI 2.4 Park and Ride Lots

New park and ride facilities should be considered an accessory to a transit center, transit station, or STA stop, and 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 2.5 High Performance Transit (HPT) Station

Enhance the HPT system by investing in stations along the HPT corridor to improve ~~legibility~~certainty and experience.

An HPT station is generally in the public right-of-way but can be ~~on~~located on STA property or other private ROW per agreement. The HPT station location should coincide with neighborhood or other development center designations and/or where placement at the location supports a balanced distribution of station investments along an HPT corridor.

SI 2.6 Transit Lanes and Transitways

STA will coordinate with local and state jurisdictions to identify appropriate locations for, installation of, and enforcement of dedicated rights-of-way for transit vehicles.

Transit lanes are a portion of the street designated by signs and markings for the preferential or exclusive use of transit vehicles, sometimes permitting limited use by other vehicles. Transitways are running ways dedicated to the exclusive use of transit vehicles, protected from incursion by physical separation. Transitways often involve a higher level of investment than transit lanes, but can provide the highest level of transit reliability, speed, and comfort available for transit operations and customers.

SI 2.~~6~~7 Stops

All STA bus stops shall feature signs mounted in a uniform manner to identify the area as a stop and provide 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. May also include transfer opportunities.

2.~~6~~7.1 Design Standards for Bus Stop Areas

Coordinate with local and regional jurisdictions to establish, maintain and implement uniform design standards for the bus stop environment.

Standardization of the elements that make up the bus stop area – including (but not limited to) benches, shelters, and lighting - results in less confusion for coach operators, passengers and other users of the street right-of-way. Established, agreed-upon standards can also streamline the design of street improvements and the review of private development proposals.

2.~~6~~7.2 Accessibility

When making improvements and/or designing bus stops, STA shall partner with local and regional jurisdictions to assure that bus stops promote usability for all passengers, including passengers who use mobility devices.

Inaccessible bus stops can effectively prevent the use of fixed-route bus service by people with disabilities, thus limiting their mobility and potentially leading to increased paratransit costs. Accessibility improvements for people with disabilities can enhance the usability of the transit system for all riders. The accessibility and utility of public transportation resources will become increasingly important in the future as our population ages

SI 2.~~7~~8 ADA Transition Plan

Develop a plan to systematically address obstacles to accessibility at bus stops.

Many more barriers to accessibility at STA bus stops exist than possibly ~~be~~ can be addressed all at once with available resources. STA ~~must~~will coordinate with local and regional jurisdictions to identify barriers, prioritize addressing them and to outline funding and a timeline to do so.

SI 34.0 - Passenger Interface Components

~~4.1 Stops~~

~~*All STA bus stops shall feature signs mounted in a uniform manner to identify the area as a stop and provide 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.~~

~~4.2~~3.1 Benches

STA ~~shall work with local authorities to~~will ensure that 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 proportion of riders with limited mobility

~~4.3~~3.2 ~~Placement and Maintenance~~Shelters and Awnings

~~4.3~~3.2.1 ~~Placement~~3.2.1 Placement and Maintenance

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 as funding allows and consistent with Title VI requirements. Shelters and awnings can encourage ridership by protecting waiting patrons from adverse weather elements. Shelters also provide an appropriate location for posting important ridership information. Stops with new shelters will comply with the Americans with Disabilities Act. Stops ~~to have~~with 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 proportion of riders with limited mobility

~~4.3~~3.2.2 Removal

The removal of shelters may occur after a review of ridership data and/or physical condition.

In the programmed shelter replacement plan, STA reviews stops with less than 10 boardings per day and considers those locations for shelter removal. STA will also review a shelter's physical condition based on a point rating of the frame, roof, panels, bench, and the concrete foundation.

~~4.4~~3.3 Lighting

STA works to provide pedestrian-scale lighting at stations, shelters, and general stops~~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 streetlights.

~~4.5~~3.4 Bicycle Facilities

Bicycles, including bicycle share, 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 bike share and bicycle ridership through short- and long-term bicycle parking, greater bicycle capacity racks on coaches, and other supportive efforts, STA is able to increase options for those who choose to travel by more than one mode.

~~4.6~~3.5 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

~~4.7~~3.6 ~~Rideshare~~ Flexible Services Infrastructure

When making improvements and/or designing and designating mobility hubs, STA shall partner with local and regional jurisdictions to assure that appropriate locations for drop-off and pick-up are co-located within or adjacent to the mobility hub.

~~4.8 Accessibility~~

~~*When making improvements and/or designing bus stops, STA shall partner with local and regional jurisdictions to assure that bus stops promote usability for all passengers, including passengers who use mobility devices.*~~

~~Inaccessible bus stops can effectively prevent the use of fixed-route bus service by people with disabilities, thus limiting their mobility and potentially leading to increased paratransit costs. Accessibility improvements for people with disabilities can enhance the usability of the transit system for all riders.~~

3.7 Information Systems Infrastructure

Information Systems Infrastructure - including digital wayfinding, smart phone applications, real time information, and fare system components - shall be developed ~~and installed at appropriate stations and stops~~ and designed to provide a direct and tangible benefit to customers accessing transit.

As STA grows the transit network throughout the region, providing additional information to passengers at key stops will increase passenger knowledge and comfort level with the transit system, ultimately increasing confidence in and usage of the transit system.

~~4.9~~3.8 HPT Station Amenities~~s and Stops~~

The permanence of the HPT Corridor shall be expressed to customers and those developing the built environment with distinctive amenities at HPT stations and stops.

Enhancements that distinguish stations in High Performance Transit (HPT) Corridors from other types of transit stops are a critical part of the High Performance Transit principles.

~~4.10~~3.8.1 HPT Station Identification Customization

STA strives to maintain a consistent "kit of parts" look, feel and branding of station locations for all HPT corridors while providing for certain limited elements to be customized based on input from recognized neighborhood councils and business associations. Customization improves station identification and integration with the existing surrounding environment.

In reviewing requests for customization, the following shall be the process followed by STA:

- Minor adaptations to sizing and scaling of design elements based on input from property owners, businesses and those directly using the service may be approved by the CEO.
- Major customization requests (such as commissioning independent station design, etc.) ~~should~~ shall be approved by the Board and only under the following conditions:
    - The requested customization is submitted by a recognized community organization or institutional partner; and,
    - The customization will not interfere with essential STA branding placement; and,
    - The proponent of said customization agrees to pay for design and construction expenses that are above the expected costs for the typical shelter design, OR the station will be constructed on institutional property, subject to a third-party agreement and other considerations.

SI ~~5~~4.0 – Capital Improvement Programming

~~5~~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.

~~5~~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.)

~~5~~4.3 Capital Programs

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

A capital program is a series of projects aimed to achieve common objectives. This strategy allows for greater flexibility in the delivery of capital investments.

~~5~~4.4 Program Categories

Capital Improvement Program Categories are established to organize and communicate overall capital plans.

These program categories are as follows:

1. Vehicles
2. Facilities - Maintenance & Administration
3. Facilities - Passenger & Operational
4. Technology
5. High Performance Transit Implementation

SI 5.0 Maintenance and Administration Facilities

SI 5.1 Facility Master Plan

STA ~~shall~~ maintains a Facility Master Plan that is updated routinely every 4-6 years.

A facility master plan provides the direction for how STA will physically grow and add facilities to provide the necessary infrastructure to support the planned network system growth. The facility master plan will address current needs and future agency growth in several areas, including:

- Garages and maintenance facilities – identifying strategic locations throughout the region.
- Charging infrastructure –supporting additional battery electric bus purchases with appropriate charging infrastructure across the region.
- Facility infrastructure – a collaboration between Facilities and Capital Development, identifying where appropriate facility infrastructure (SI 2.0) should be located within the region, and what are other needs, such as operator comfort stations and maintenance sheds, that can co-located at different passenger facilities.
- Administrative facilities – Identifying strategic path forward for how STA grows and accommodates additional staff (administrative, maintenance, facilities, drivers, etc)

~~System Infrastructure Connect Strategies~~

~~Design Standards for Bus Stop Areas~~

~~*Coordinate with local and regional jurisdictions to establish, maintain and implement uniform design standards for the bus stop environment.*~~

~~Standardization of the elements that make up the bus stop area – including (but not limited to) benches, shelters, and lighting - results in less confusion for coach operators, passengers and other users of the street right-of-way. Established, agreed-upon standards can also streamline the design of street improvements and the review of private development proposals.~~

~~ADA Transition Plan~~

~~*Develop a plan to systematically address obstacles to accessibility at bus stops.*~~

~~Many more barriers to accessibility at STA bus stops exist than possibly be can be addressed all at once with available resources. STA must coordinate with local and regional jurisdictions to identify barriers, prioritize addressing them and to outline funding and a timeline to do so.~~

~~Periodic Review of Conditions~~

~~*Conduct a periodic review of bus stop area conditions.*~~

~~Implement procedures to periodically review the location and condition of bus stop areas and bus stop amenities, paying particular attention to the lighting of the pedestrian's path to the transit stop. Compile a report of the findings at minimum every 5 years and make it available to the public and decision-makers to inform subsequent bus stop area investments.~~

~~Identify Mobility Hubs~~

~~*Spokane Transit shall evaluate the designation of mobility hubs at all new stations and transit centers, and assess existing stations and stops for upgrade to mobility hubs.*~~

~~Mobility hubs are multimodal transportation connection points intended to integrate various transit and emerging mobility services (such as carshare, bikeshare, and Transportation Network Companies) by facilitating a wide range of linked trips. Research shows that shared travel modes, including carshare, bikeshare, and TNCs, are significantly more likely to use public transit than the general public, have lower car ownership rates, and have lower overall transportation spending.~~

~~STA will continue to focus on their core mission of providing fixed-route transit service where it is most cost-effective, while exploring opportunities for relying on partnerships with providers of emerging mobility services to fill in gaps in the fixed-route transit system.~~

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

Revenues and Fares

STA maintains a convenient, reasonably priced fare structure aimed at increasing ridership access to public transit within its service area. This fare structure is governed by a Board approved fare policy which is reviewed periodically. As a part of an ongoing effort to balance revenue with services, a multi-phased change to the entire fare schedule began in July 2017 and will continue through 2018.

A variety of methods exist for fare payment, designed to create the best value for STA's customers by ensuring they pay the right fare for the way they ride transit. These changes help address fare inequities and increase access to public transit for all by reducing financial barriers. To reduce the time required for on-board fare collection, the use of one of STA's pre-payment methods is encouragedAvailable fare media include:

Fare Media	Description
Cash	Exact fare required in cash or coin – no change will be given and pennies are not accepted
Connect Card	Connect Cards are chip-embedded cards holding data that allows a vast array of potential fare opportunities. The first Connect Card for a customer will be provided free of charge. Replacement card fees will be based on STA's cost to provide the cards. Connect Cards can also serve as an identity card (by adding a photo and other basic information). Connect Cards can be reloaded with additional value or time and reused indefinitely. The card is read by passing the card near or "within proximity" of the validator hardware.
Mobile App	Manage your fare account or pay with your virtual Connect Card through the STA mobile app.
Limited Use Ticket	Paper RFID ticket that can be read by holding near the fare validator hardware. Available through Group sales only.
Barcoded Paper Ticket	Paper barcoded ticket issued by a Ticket Vending Machine.
Contactless Credit Card	Discover, Mastercard and Visa contactless credit cards read by passing the card near or "within proximity" of the validator hardware.
NFC-based Payments	NFC-based payments such as Apple Pay and GooglePay on a mobile phone can be read by passing the device near or "within proximity" of the validator hardware.

- Smart Card – A card that has funds stored and can quickly be tapped to fare box for payment.
- 31 Day Rolling Pass – Covers all transfers in a 31 day period starting on the day of activation. These passes include
- Adult (19 and over) - $50
- Youth (6-18) – $35
- Reduced Fair (Photo ID or Paratransit eligibility required) - $25
- 7 Day Rolling Pass – For $15 this card covers all transfers for 7 days.
- Employer-sponsored – Discounted rates through participating organizations

- ~~Student – Prepaid through tuition fees such as EWU's Eagle Card~~
- ~~Summer Youth – Covers June – August for youth 6-19. $50~~
- ~~City Ticket – For $35, this covers shuttle to, and parking at Spokane Arena for drivers who commute downtown.~~

~~Passes can be purchased multiple ways~~Money can be added to the Connect Cards in multiple ways:~~.~~

- ~~The Plaza Customer Service Desk - Smart cards can be made at this location. All fare types can be purchased here.~~
- ~~For individuals who may not be able to purchase passes~~get to the Plaza ~~during the Plaza's operating hours, select area grocery stores and gas stations sell both 7- and 31-Day Passes~~can load cash onto an STA Smart Card
- ~~The Pass-by-Mail program – For Riders who are unable to purchase the Plaza or area grocery stores.~~
- ~~Vending machines located at the STA Plaza~~, ~~and the Valley Transit Center~~, ~~and along certain routes further encourage the pre-payment of fares.~~
- ~~Cash and coin are accepted at fare boxes aboard all STA vehicles.~~

Passenger fares are an important revenue source for Spokane Transit. Traditionally, they have paid for about 20% of the cost to provide transit service in the Spokane region. Without them, simply put, the region would have less transit to serve those who need and want it. ~~Numerous other~~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, and 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~~can 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, 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 consider future advertising mechanisms as a revenue opportunity consistent with jurisdictional and community standards.

Advertising has the potential to provide 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 at least 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 Transportation Benefit Area.
2. Customers use time-limited passes (~~two hour~~two-hour, day, monthly, etc.) to accomplish multi-route/directional trips. ~~Transfers are not used.~~
~~2.~~3. Utilize fare capping, providing customers with the best options for daily and weekly travel

2.4 ~~Pre-Payment of Fares~~Fare Payment

2.4.1 Increase ~~P~~pre-~~P~~payment of Fares ~~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 mobile ticketing, smart cards, institutional bus pass programs, and day passes.

2.4.2 All Door Boarding

All door boarding will be introduced on select lines to support the use of smart cards and the pre-payment of fares.

All door boarding, in conjunction with the use of smart cards and the pre-payment of fares, helps reduce delay at stops and stations, increasing speed and reliability of the service. All door boarding may require fare enforcement to be successful for the agency.

2.5 Low-income Fares

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

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.*~~

~~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. Options to explore include (but are not limited to):~~

- ~~Mobile ticketing;~~
- ~~Seamless payment between travel modes (i.e. bus to bike share);~~
- ~~Rolling monthly passes;~~
- ~~Smartcard improvements, etc.~~

~~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.~~

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 play 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

The overall function of a product or process is important to keep in mind when developing appropriate monitoring tools.

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.~~< Location to be determined>

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~~shall develop performance measures ~~annually and present performance results to the Board of Directors quarterly~~and update the Board of Directors on a regular basis to help inform agency success, direction, and progress.

MI 3.0 – Resiliency Planning

STA shall develop resiliency planning efforts for when circumstances dictate a change in operations outside of normal periods.

To plan for unforeseen circumstances to the best of the agency's ability, STA shall develop resiliency planning efforts and update the Board of Directors on a regular basis.

MI ~~3~~4.0 – Revisions and Adaptation

~~3~~4.1 Comprehensive Plan Update

STA shall update Connect Spokane routinely.

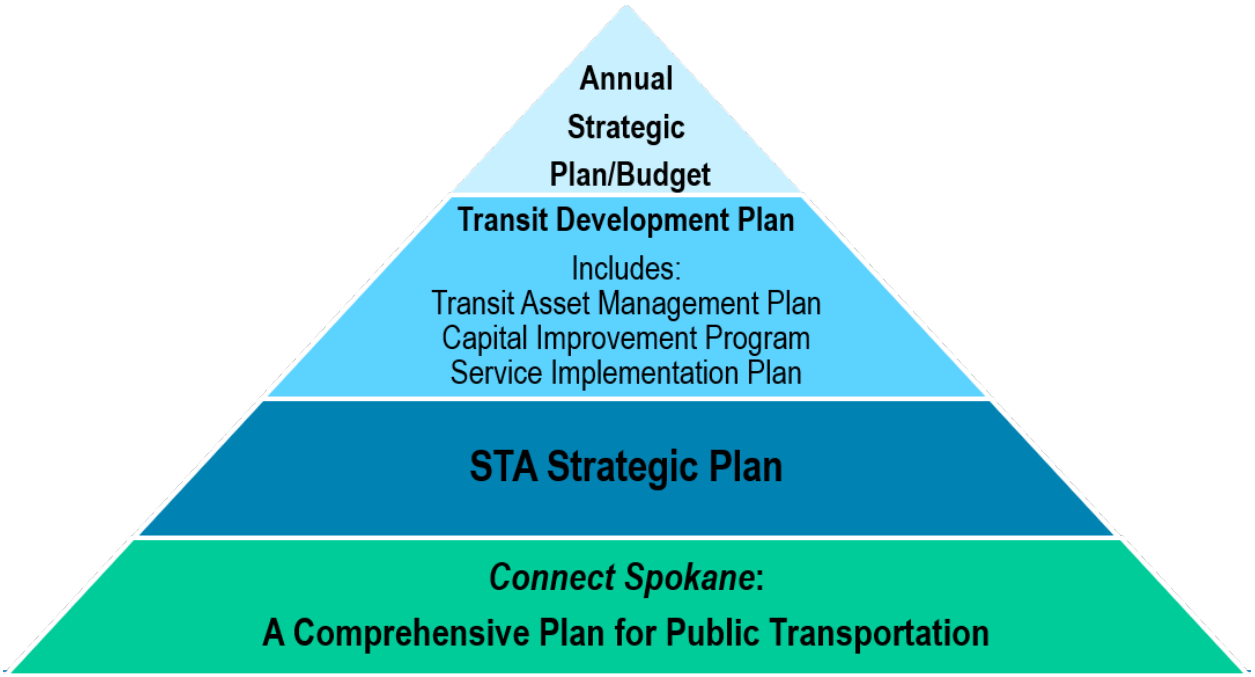
Spokane Transit will review and update as appropriate the Comprehensive Plan for Public Transportation beginning no later than three years following the last major adoption and/or revision. Significant public outreach shall be required as part of the update process, consistent with the policies of the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

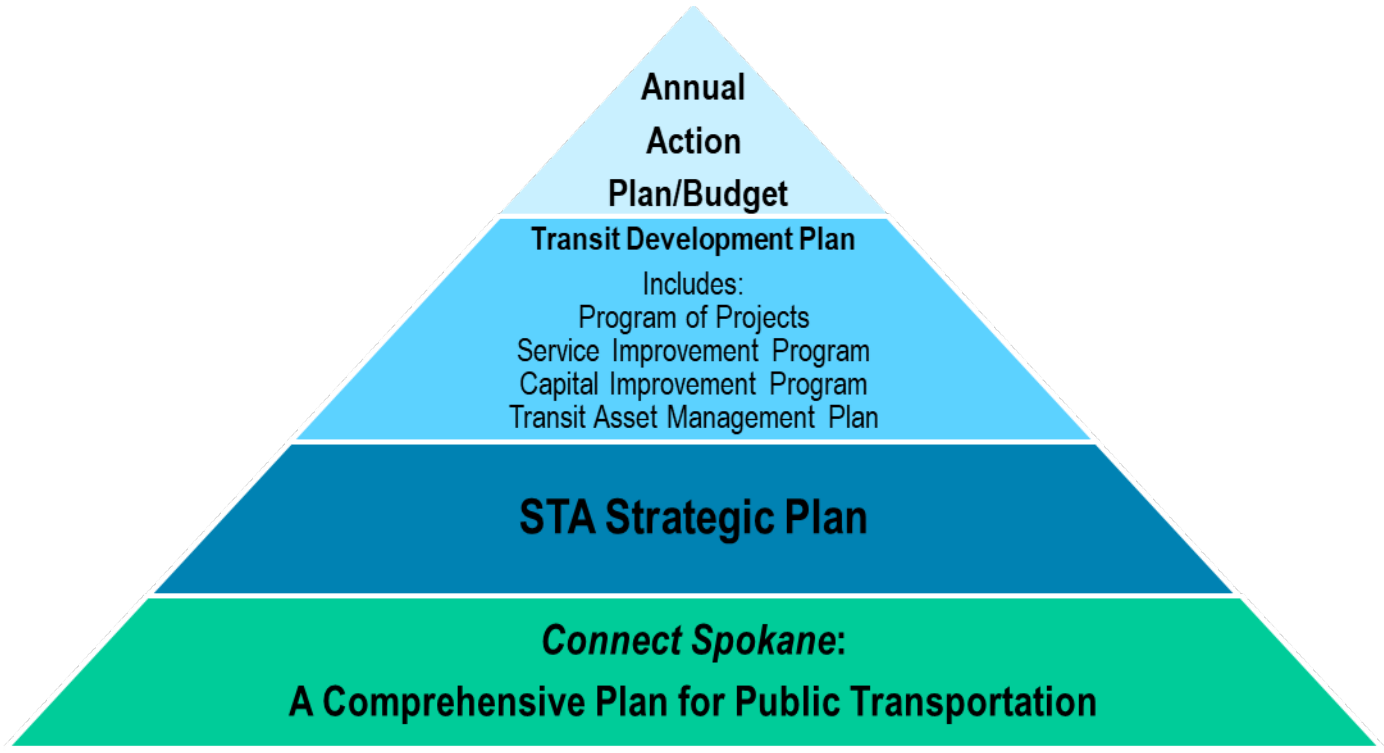
~~3~~4.2 Comprehensive Plan Amendments

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~~4.3 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*.





Hierarchy of STA Plans

34.3.1 STA Strategic Plan

The STA Strategic Plan is a 10–15-year plan with short- to mid-term strategies and objectives for a fixed target year. This document acts on the policies and visions within *Connect Spokane*, and the projects are identified in the Transit Development Plan for implementation.

~~3~~4.3.~~1~~2 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~~4.3.2.1 Program of Projects

Details of the proposed Program of Projects for Sections 5307 (Urbanized Area Formula Funding program), 5310 (Enhanced Mobility for Seniors and Individuals with Disabilities), and 5339 (Bus and Bus Facilities Discretionary program) are included in the TDP annually and are included in the TDP public hearing.

~~3~~4.3.2.2 Capital Improvement Program

The Capital Improvement Program (CIP) enables STA to make educated, coordinated, and financially sound capital investments. The 6-year CIP includes capital projects, ~~programs~~programs, and program categories. The CIP is updated annually.

~~3~~4.3.2.3~~3~~ Service ~~Implementation Plan~~Improvement Program

Developed with and included in the Transit Development Plan, this document guides the delivery of Fixed-Route service. The SIP describes service revisions proposed for the three calendar years following adoption, plus additional concepts to consider for years 4-6 of the program.

~~3~~4.3.2.4 Transit Asset Management Plan (TAM)

The Transit Asset Management Plan is included as an Appendix to the Transit Development Plan. The TAM is updated in its entirety no less than once every 4 years, and covers a horizon period of at least 4 years, and includes:

- Projected targets for the next fiscal year
- Condition assessments and performance results; and
- A narrative report on changes in transit system conditions and the progress toward achieving previous performance targets

In addition, the TAM is submitted to the state and MPO on a regular schedule, generally within 30 days of Board approval.

~~3~~4.3.~~5~~3 Annual ~~Strategic~~ Action Plan

As part of the annual budget adoption process, STA will prepare a concise annual ~~strategic~~ action 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.

3.4 Update Schedule

Document	Horizon	Revision Schedule
Connect Spokane	20-30 Years	Begin update no later than three years from last major update
Strategic Plan	10-15 years	Development of next plan starts no later than three years prior to sunset of current plan
Transit Development Plan	Current calendar year plus six years	Adopt before September 1 of each year
Program of Projects	Current calendar year plus six years	Included in annual update of Transit Development Plan
Capital Improvement Program	Six Years	Included in annual update of Transit Development Plan
Service Improvement Program	Three Years	Included in annual update of Transit Development Plan
Transit Asset Management Plan	Current calendar year plus six years	No less than once every four years
Annual Action Plan	One year	Publish draft by October of each year and adopt before January 1

~~Document~~	~~Horizon~~	~~Revision Schedule~~
~~Comprehensive Plan for Public Transportation~~	~~20-30 Years~~	~~Begin update no later than three years from last major update~~
~~Transit Development Plan~~	~~Current calendar year plus six years~~	~~Adopt before September 1 of each year~~
~~Transit Asset Management Plan~~	~~Current calendar plus six years~~	~~3 year updates~~
~~Service Implementation Plan~~	~~Three Years~~	~~Included in annual update of Transit Development Plan~~
~~Capital Improvement Program~~	~~Six Years~~	~~Included in annual update of Transit Development Plan~~
~~Annual Strategic Plan/ Budget~~	~~One Year~~	~~Publish draft by October of each year and adopt before January 1~~