June 2012

Spokane Central City Transit Alternatives Analysis

PROCESS SUMMARY REPORT

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CITY OF SPOKANE

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1. Introduction

This report documents the process by which the Spokane Transit Authority (STA), the City of Spokane and their partners evaluated options for and selected the Spokane Central City Transit Project's Locally Preferred Alternative (LPA) following the Alternatives Analysis (AA) process prescribed by the Federal Transit Administration (FTA). The LPA – unanimously adopted by the STA Board of Directors and the Spokane City Council in 2011 – is a Modern Electric Trolley (MET) that connects historic Browne's Addition and Gonzaga University via downtown Spokane.

The purpose of this AA effort was to define a High Performance Transit corridor[1] that will:

- Serve Central City Spokane and increase transit ridership to, from, and among existing and emerging activity areas in the downtown core;
- Help stimulate development in downtown Spokane in a manner that supports local and regional land-use goals, objectives, and plans; and
- Maximize regional support of and investment in the transportation system, while being environmentally sensitive and garnering broad public support.

Downtown Spokane at S. Lincoln Street and W. Sprague Avenue

The selected corridor was 1 of 11 potential corridors that connected various residential, employment, medical, and commercial activity centers in the Central City. The selected mode was 1 of 8 modes considered by the project, ranging from streetcar to light rail transit to aerial tram. Chapter 2 of this report describes the purpose and need for the project, the overall project objectives, and a travel market assessment. Chapter 3 reports the universe of alternatives that were considered and how they were screened against the project's purpose and need. Chapter 4 details the evaluation process used to narrow these corridors and modes to the LPA, Chapter 5 provides detail on the LPA's corridor and mode. Chapter 6 provides a summary of public involvement activities, including committees, open houses, and the project website. Chapter 7 highlights funding considerations to be assessed in future project.

The following section discusses the history and context of the project and provides an overview of the process and timeline for the AA.

[1] This effort defines High Performance Transit as frequent, reliable, all-day mass transit service.

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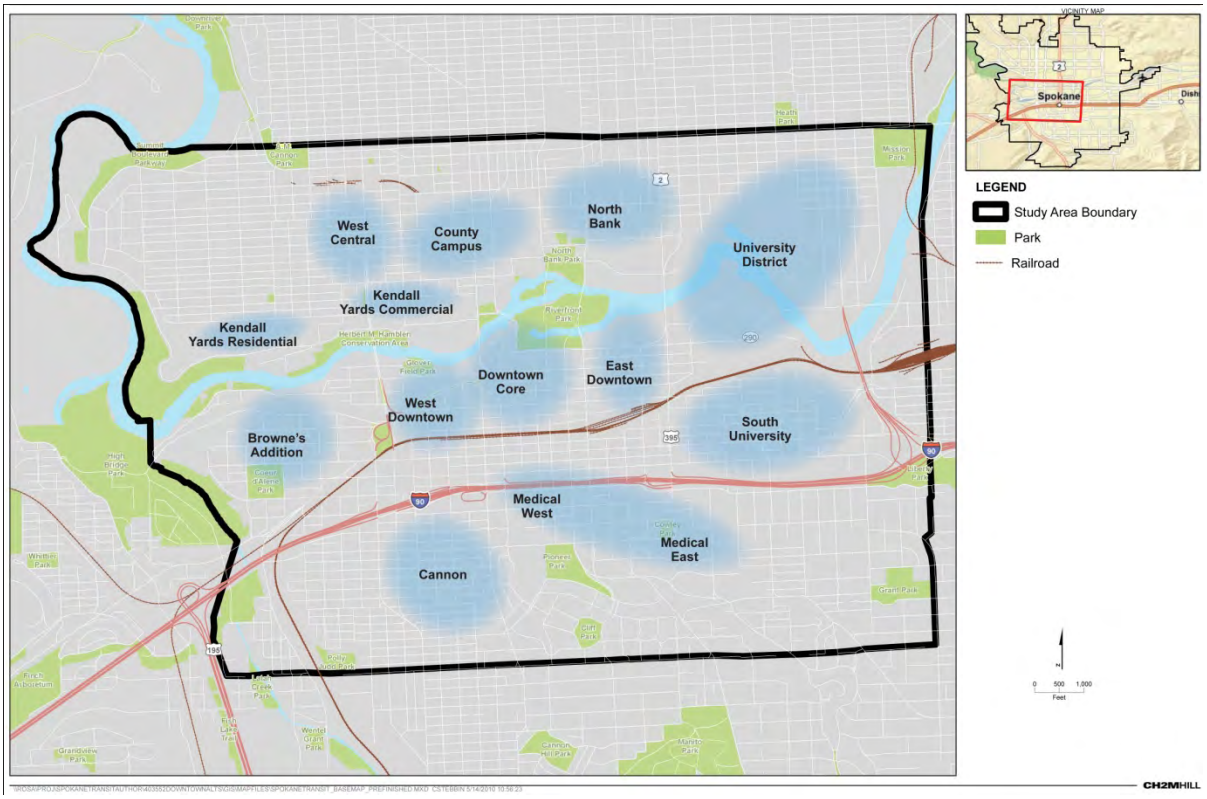
2. Description of the Project

This section describes the project study area and the activity areas identified as having high levels of housing, employment, and/or service activities. It also provides the project purpose and need statement and the project objectives.

Project Study Area

Figure 2-1 shows the project study area and activity areas within its boundary. The study area is approximately 2 miles wide (north to south) by 3 miles long (east to west); and encompasses the core of downtown Spokane and several of the region's primary trip producers and attractors. This area is generally bounded by Mission Avenue to the north, Perry Street to the east, 14th Avenue to the south, and the Spokane River to the west. It is bisected by Interstate 90 (I-90), railroad tracks owned by Union Pacific Railroad and used by freight trains and Amtrak, and the Spokane River. The study area was agreed upon by the Core Stakeholders early in the process.

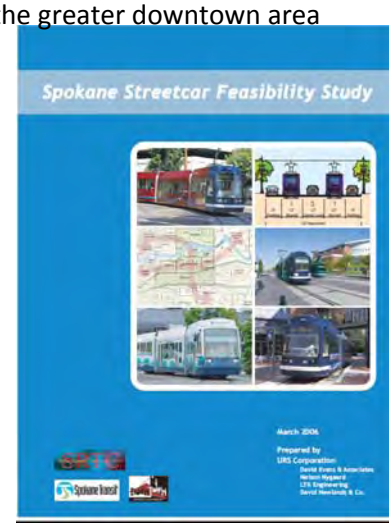
Figure 2-1
Study Area Boundary and Activity Areas



History and Context

Previous Studies

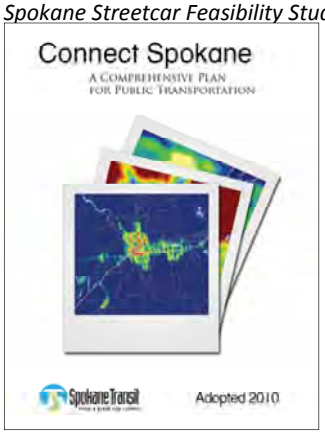
Multiple plans and studies over the past 20 years have identified transit investments that would improve mobility, increase accessibility, and support land-use decisions for the Central City. Over the past decade, as transit ridership has burgeoned and reinvestments in the greater downtown area have grown, so too has the interest and desire to move forward with capital and operational transit investments.



Spokane Streetcar Feasibility Study

The ***Spokane Streetcar Feasibility Study***, completed in 2006 for the Spokane Transit Authority, Spokane Regional Transportation Council (SRTC), and Downtown Spokane Partnership, provided a purpose and context for a streetcar system in downtown Spokane. It also provided information on representative vehicle types, discussed alignment alternatives, and provided conceptual design and station locations for an initial segment of an alignment that would connect the County Campus area (northwest quadrant of the Central City area, north of the Monroe Street bridge) with the Riverpoint campus (southeast quadrant of the Central City, east of Division Street).

The ***2008 Fast Forward Spokane: Downtown Plan Update*** references the *Spokane Streetcar Feasibility Study* and confirms the need for greater transit service in Spokane's central city. It notes that multimodal transportation is a key part of the vision the community has put forward for the downtown area. This plan was adopted by the City of Spokane City Council as a subarea plan to the City's Comprehensive Plan.



Connect Spokane

The Spokane Transit Authority's ***Connect Spokane: A Comprehensive Plan for Public Transportation,*** adopted in 2010, establishes the framework for Spokane's High-Performance Transit (HPT) Network. The HPT Netword is envisioned to incorporate multiple high demand travel corridors with premium, frequent, all-day transit service to activity centers throughout the region, including the Central City.

Fast Forward Spokane: Downtown Plan Update

Activity Areas

Important activity areas in the Central City that could benefit from High Performance Transit service are illustrated in Figure 2-1. Not to be confused with "Centers and Corridors," a formally adopted strategy in the City's Comprehensive Plan, these 13 neighborhood and/or business activity areas were identified in the AA as places of intensive human activity in the downtown area, existing and envisioned in the future. The primary use within each activity area ranges from predominantly residential to primarily commercial, with some of the areas exhibiting a mix of jobs and housing. Following is a brief description of each activity area.

Kendall Yards Residential: identified in plans as a major future residential area. It is located to the north of the river, on the western edge of the study area.

Kendall Yards Commercial: a commercial area north of the river and west of Monroe Street. It is expected to incorporate a mix of uses, including hotels, offices, and retail. This activity area was considered distinct from the Kendall Yards Residential activity area because it is expected that the two areas will be developed at different times.

County Campus: Spokane County government offices and the Public Safety Building are at or within two to three blocks of the Courthouse on Broadway Avenue, a few blocks west of Monroe Street. The area is defined broadly to also include the commercial activity along Monroe Street from Boone Avenue to Bridge Avenue and spans to the north and east to include the Spokane Veterans Memorial Arena.

Spokane County Courthouse

North Bank: A mixed used area north of the Spokane River between Monroe and Division streets. It currently includes a mix of commercial, hospitality, and cultural facilities. Plans developed over the past several decades call for further intensification of this area.

University District: includes both Gonzaga University and Riverpoint campus (which hosts academic services for Washington State University, Eastern Washington University, Whitworth University, and Community Colleges of Spokane) and spans the areas to the north and south of the river. While the campuses provide the primary loci of activity, there are residential areas around the Gonzaga campus. This area also includes the Hamilton Street commercial area.

Gonzaga University

South University District: currently a light industrial/commercial area that includes 2nd and 3rd Avenues and has been designated as the southern portion of the University District. Residential and biomedical services uses are expected to grow in this area as the University District expands south.

East Downtown: an area with a mix of retail and housing to the east of the Downtown Core that also includes the Intermodal Facility (intercity bus and Amtrak).

Downtown Core: a regional center that includes the Central Business District, government buildings, Retail District, Financial District, and Davenport Arts District. The core has always been the central location for mass transit, with stations generally located between Howard and Monroe Streets and

adjoining Main or Riverside Avenues. Today, Spokane Transit Authority's Downtown Plaza transit center is located on Sprague and Riverside avenues between Post and Wall streets.

West Downtown: a mixed-use area immediately to the west of the Downtown Core.

West Central: a mixed-use residential and commercial area north of the Kendall Yards Commercial area.

Browne's Addition: a residential neighborhood at the western edge of the study area and one of the oldest neighborhoods in the city. Originally developed with expansive mansions built by Spokane's elite, residential density intensified during the early 20th century and particularly through World War II, as significant levels of transit service connected the neighborhood to downtown and destinations to the west, including military installations. Today, the density in Browne's Addition remains higher than most Spokane neighborhoods. The neighborhood has become a destination for seekers of recreation opportunities and restaurants.

Browne's Addition neighborhood
Source: www.spokanephotos.com

Cannon's Addition: a relatively dense residential area in the southwest corner of the study area.

Medical District: located south of I-90. It incorporates mostly service-oriented uses, including the Deaconess and Shriners Hospitals, Lewis and Clark High School, Providence Sacred Heart Medical Center, Rockwood Clinic, and the 5th and Browne Medical Center. There are pockets of multifamily residential buildings included in this center (Central Lower South Hill neighborhood).

Purpose and Need Statement

The project team and Technical Advisory Group developed the project purpose and need statement. This statement was reviewed by both the Core Stakeholder Group, the Sounding Board, and the general public. It was ultimately approved by the Core Stakeholder Group at a meeting on September 1, 2010, and is as follows:

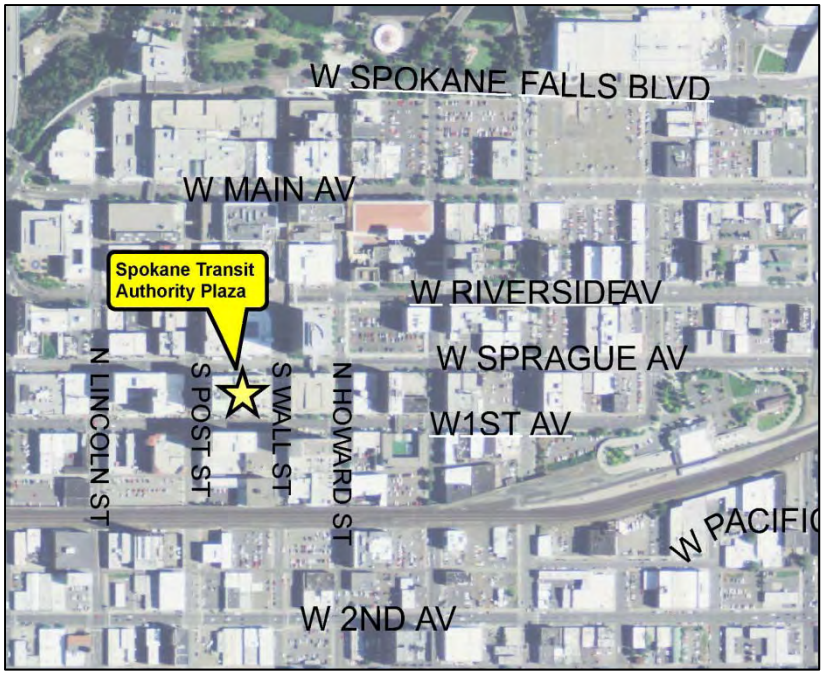
The **Purpose** of the Central City Transit AA Project is to: increase transit ridership to, from, and between existing and emerging activity areas within the Spokane downtown area, including the Downtown core, the University District, and the Medical District; directly connect residential areas with major employment centers; help stimulate development in downtown Spokane that is in support of local and regional land use goals, objectives and plans; and maximize regional support of and investment in the transportation system; while being environmentally sensitive and garnering broad public support.

The **Need** for this project arises from the opportunity to focus infrastructure investments within the City of Spokane's Targeted Area Development (TAD) districts that are within the Central City , in order to encourage development in the downtown area. Many corridors and markets within the study area have potential for new development but lack amenities, including transit service, which

would stimulate development. In 2009, the retail opportunity gap[2] within the City of Spokane was about $816.7 million. Planning and economic development policy within the City of Spokane has identified key districts for revitalization. The City's Comprehensive Plan identified Centers and Corridors for infill development and city staff have developed TAD districts as an economic development tool. One goal of the Centers and Corridors strategy is to work with the community to revitalize the pedestrian-oriented commercial districts in Spokane while strengthening and diversifying Spokane's economy. The goal of the TAD approach is to maximize capital investment by aligning infrastructure development with economic opportunity. Spokane's Comprehensive Plan identifies the downtown area as the Regional Center, containing the highest density and intensity of land use. Three of six TADs within the city are located in the study area: two within the University District and one within North Bank. Two of the three TADs within the study area are tax increment finance districts, providing the opportunity for funding for public infrastructure as redevelopment occurs.

The opportunity to improve transit accessibility, efficiency, and competitiveness for trips within the downtown core. The public transportation system in Spokane is currently designed as a hub-and-spoke system, with most routes in the study area converging on the downtown Plaza. While this design provides a high level of transit accessibility in the heart of downtown, connections to other activity nodes within the downtown core often require a transfer. The lack of direct service and inconvenience of transfers adversely impacts the competitiveness of transit for shorter journeys within the downtown core. For example, there currently is no direct connection between the WSU Spokane campus in the University District and Deaconess Hospital in the Medical District; travelers must transfer at the Downtown Plaza to make that connection with a convenient transfer (less than 10 minutes wait time) feasible only once an hour.

The opportunity to increase regional transit accessibility of downtown activity and employment centers. Downtown activity nodes like the Medical District attract trips from across the region. However, the existing hub-and-spoke transit network provides significantly less regional accessibility for activity nodes that are not within walking distance of the Plaza. Destinations within walking distance of the Spokane Transit Authority Plaza (see photo to right) have a significantly higher transit mode share than those that are not within walking distance. This is in spite of the fact that activity nodes like the University and Medical Districts have other transit supportive factors such as constrained/paid parking and employer-sponsored



Spokane Transit Authority Plaza Location

[2] The retail opportunity gap is the difference between the 2009 demand (consumer expenditures) and the supply (retail sales). This gap includes all retail sales, including eating and drinking places.

Commute Trip Reduction (CTR) or other transportation demand management programs. Through improved transit accessibility of these activity centers to the regional transit system, more travelers will elect to use transit for commuting and other trip purposes.

The demand for convenient downtown transit service outside of peak periods. As a 24-hour live, work, and play destination, downtown Spokane has considerably more transit demand in off-peak periods than the region as a whole. However, the infrequent nature of regional 'hub and spoke' services outside of the peak periods underserves the demand for non-commute trips within downtown. For example, during weekday and Saturday evenings, service is only provided every 30-60 minutes between Gonzaga University and the Plaza, with service ending at 9 PM on Saturdays. While a trip from Gonzaga University to the Medical District takes only 16 minutes during peak hours, on weekday evenings this trip can take as long as 50 to 60 minutes. Transit trip times such as these are too long to attract non-commute riders during off-peak hours.

The need to overcome existing barriers to pedestrian mobility. Interstate 90, the Union Pacific and Burlington Northern Santa Fe Railroads, and the Spokane River are physical barriers to pedestrian movements in downtown Spokane. These barriers subdivide the downtown area into multiple districts that are challenging or uncomfortable for pedestrians to travel between. Transit can extend the range of the pedestrian by overcoming these barriers and providing practical, comfortable, non-automotive travel options among downtown activity nodes.

The challenges that new riders encounter in understanding the existing transit system. Downtown Spokane is a regional activity center that attracts residents and visitors from across eastern Washington and beyond for services, special events, shopping, and entertainment. The current bus system serves the larger Spokane area beyond the downtown area and can be intimidating and prohibitively complicated to new transit users who may also be unfamiliar with the layout of the city. A system is needed that provides comprehensible transit service in the downtown area to meet the travel needs of new and infrequent users.

The projected future traffic congestion in the downtown core. Congestion and circulation issues are projected to worsen with further population and employment growth and continued economic development in the Spokane area. Since 1999, the vehicle miles traveled per day have doubled in the area and residential homes currently generate more than 10 person trips per day (Source: 2008 Spokane Metropolitan Transportation Plan [MTP]). The population of Spokane County is projected to grow by 22 percent, from 441,600 in 2005 to 563,700 by 2030, at a minimum (Intermountain Demographics). Employment is also expected to increase by about 90,000 employees in Spokane County by 2030, with 45,000 additional jobs (a 25 percent increase) in the Spokane area (Spokane MTP). The 2008 Update of the Spokane MTP reports that several intersections and roadway segments within the downtown area are expected to be functioning below standard in 2015. Additionally, the MTP lists several priority projects that are not currently scheduled for funding; without these improvements, traffic in downtown Spokane will function below standard by 2015 and will worsen by 2030.

Project Objectives

The project objectives were developed by the Sounding Board and validated by the Core Stakeholder Group and the Technical Advisory Group:

Objective A: Increase the effectiveness and efficiency of transit within Central City Spokane.

Objective B: Provide improved transit connections to, from, and between Central City activity areas.

Objective C: Support and help stimulate central city development and redevelopment.

Objective D: Comply with and support local and regional adopted goals, objectives, and plans.

Objective E: Optimize fiscal investments in central city transit infrastructure and service.

Objective F: Optimize the engineering design and environmental sensitivity of the project.

Travel Market Assessment

The project team conducted a travel market assessment to determine travel patterns and characteristics of travelers in the study area. This assessment supports the project purpose and need statement, presented in Section 2, by providing technical details about the mobility issues that proposed transit improvements are intended to address. The key conclusions from the travel market assessment are as follows:

- The study area includes a diverse array of regionally significant businesses, educational institutions, government facilities, retail districts, and medical services.
- The Downtown Core contains more than 13 percent of Spokane County's workforce.
- Attractions in the study area generate travel demand for 18+ hours per day, including demand by students, shift workers, special events patrons, and others outside of conventional peak morning and evening commuting periods.
- There are approximately 187,000 trips per day between downtown and other parts of the study area (Source: SRTC travel model data).
- There are large numbers of trips within the study area that are farther than ¼ mile apart. One-quarter mile is considered a reasonable walking distance, so this means that there are many trips within the study area that are farther than people are likely to walk.
- Many trips within the study area are separated by significant pedestrian barriers such as the Spokane River gorge, wide arterial streets, and/or the I-90 and Burlington Northern Santa Fe Railroad (BNSF) viaducts.
- Overall, approximately 4 percent of all trips within the study area use transit(Source: SRTC travel model data). This is higher during the peak commute hours.
- Commuting trips from home to work are the most likely to use transit.
- Other key travel destinations, most notably the University District and the Central Business District, have higher than average numbers of transit trips.
- The percentage of trips taken by transit declines significantly for destinations that are not located in the Downtown Core (that is, within walking distance of the Spokane Transit

Authority's Plaza hub), even for institutions with constrained/paid parking in the University and Medical districts.

- Many key travel destinations in the study area have constrained/paid parking that can support growth in transit use.
- Many of downtown Spokane's more than 9,700 parking spaces are shared use. These spaces could serve multiple destinations, particularly for special events, if a downtown "circulator" system were to provide ways to connect between these parking spaces and major destinations.

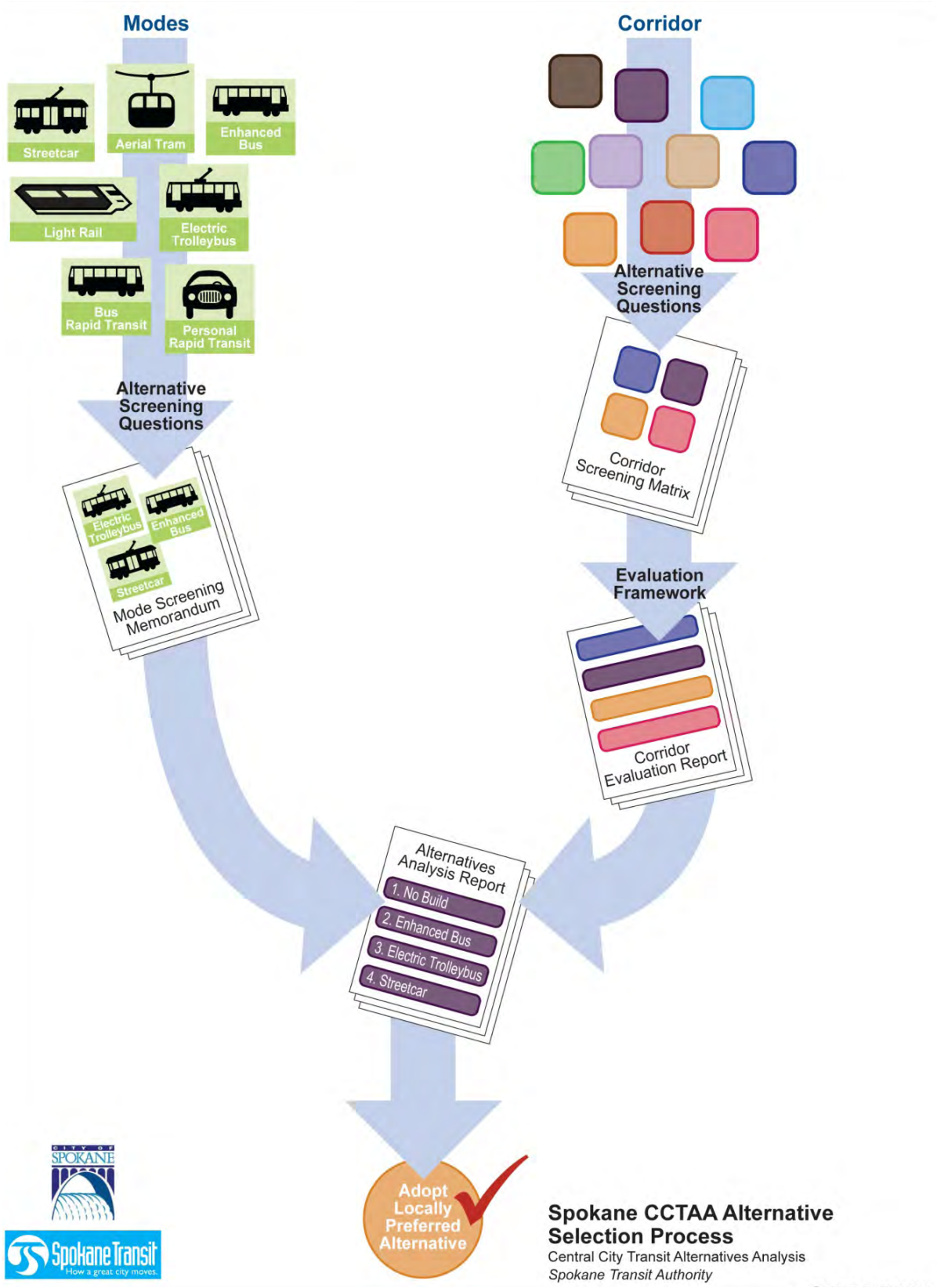
3. Identification and Screening of Alternatives

This section describes the range of alternative corridors and modes that were considered and how options were screened. The range of alternative corridors and modes considered in the AA was developed in coordination with stakeholders and the community. Once the purpose and need and objectives were determined, the project team began by identifying the activity areas described in Section 2. The team then used those activity area definitions to complete the travel market assessment described in Section 2.

After completing the initial travel market assessment, the Core Stakeholders, in conjunction with the Technical Advisory Group and Sounding Board, prepared a set of eight initial corridors that could meet project objectives, listed in the previous section. These were developed following a workshop on May 6, 2010. Eight corridors were presented to the public for comment at the June 2010 open house, and three more corridors were added as a result of public comments at the open house for a total of eleven.

Corridors and modes were evaluated in two steps: initial screening and a detailed evaluation. This process is illustrated as Figure 3-1 on the following page. The purpose of the screening process was to dismiss alternatives that did not meet the project purpose and need before developing them in great detail. The project team used several questions (listed in Section 3.1), based on the purpose and need statement, to screen corridors and modes. The alternatives that passed the screening process were then analyzed more fully for the potential to meet project objectives. The section that follows describes the long list of corridors considered and the results of the screening process for both corridors and modes. The evaluation results are described in Section 4.

Figure 3-1 Screening and Evaluation Process



Screening Questions

The purpose of the initial screening of corridors and modes was to identify a wide range of alternatives and to then efficiently rule out alternatives that did not meet the project purpose and need or that were not reasonable (that is, not prudent or feasible). The following screening questions were used to evaluate each alternative's ability to meet project objectives, which define key elements of the project purpose and need and define reasonableness:

- **Question 1A:** Would the alternative generally decrease transit travel times to activity centers in the corridor from what they are today?
- **Question 1B:** Would this alternative perform similarly or better than other alternatives that serve the same activity centers (for example, have a low cost, provide a reduced travel time, or avoid major impacts)?
- **Question 1C:** Is this alternative configured in an efficient and logical way? If not, could parts of the alternative be combined with parts of another alternative to make it more efficient or logical?
- **Question 2A:** Would the alternative serve the Downtown Core and either the University District or the Medical District?
- **Question 2B:** Would the alternative create a more direct transit connection to activity centers than exists today?
- **Question 3:** Would the alternative serve at least one Targeted Area Development District?
- **Question 4:** Would the alternative improve and extend pedestrian mobility in the downtown area?
- **Question 5A:** Would the alternative avoid major physical or geographic constraints that would cause it to be significantly more expensive to build than other alternatives?
- **Question 5B:** Could the alternative be developed in logical and cost-effective phases?
- **Question 6:** Is the alternative feasible to build?

Corridors Considered

Each of the 11 alternative corridors described and illustrated in the following pages were considered in the initial corridor screening process. These corridors were developed as a result of evaluating travel markets and through feedback received at the June 2010 public open house.

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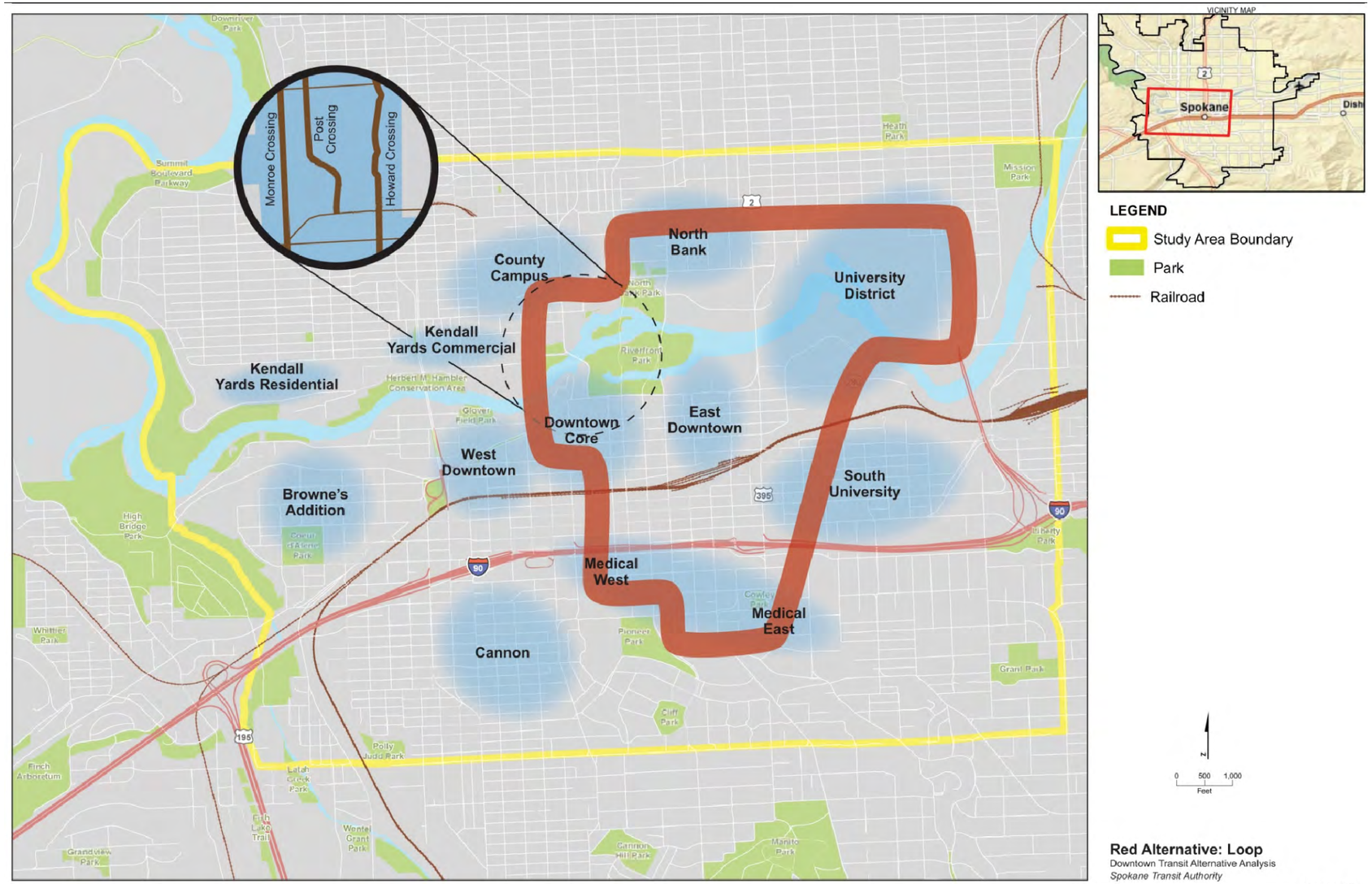

LEGEND

- Study Area Boundary
- Park
- Railroad

Red Alternative: Loop
Downtown Transit Alternative Analysis
Spokane Transit Authority

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Red Alternative:

Loop

This alternative would provide a looped transit route connecting key areas in the city, including the Downtown Core, North Bank, Medical District, and University District. It includes two design options:

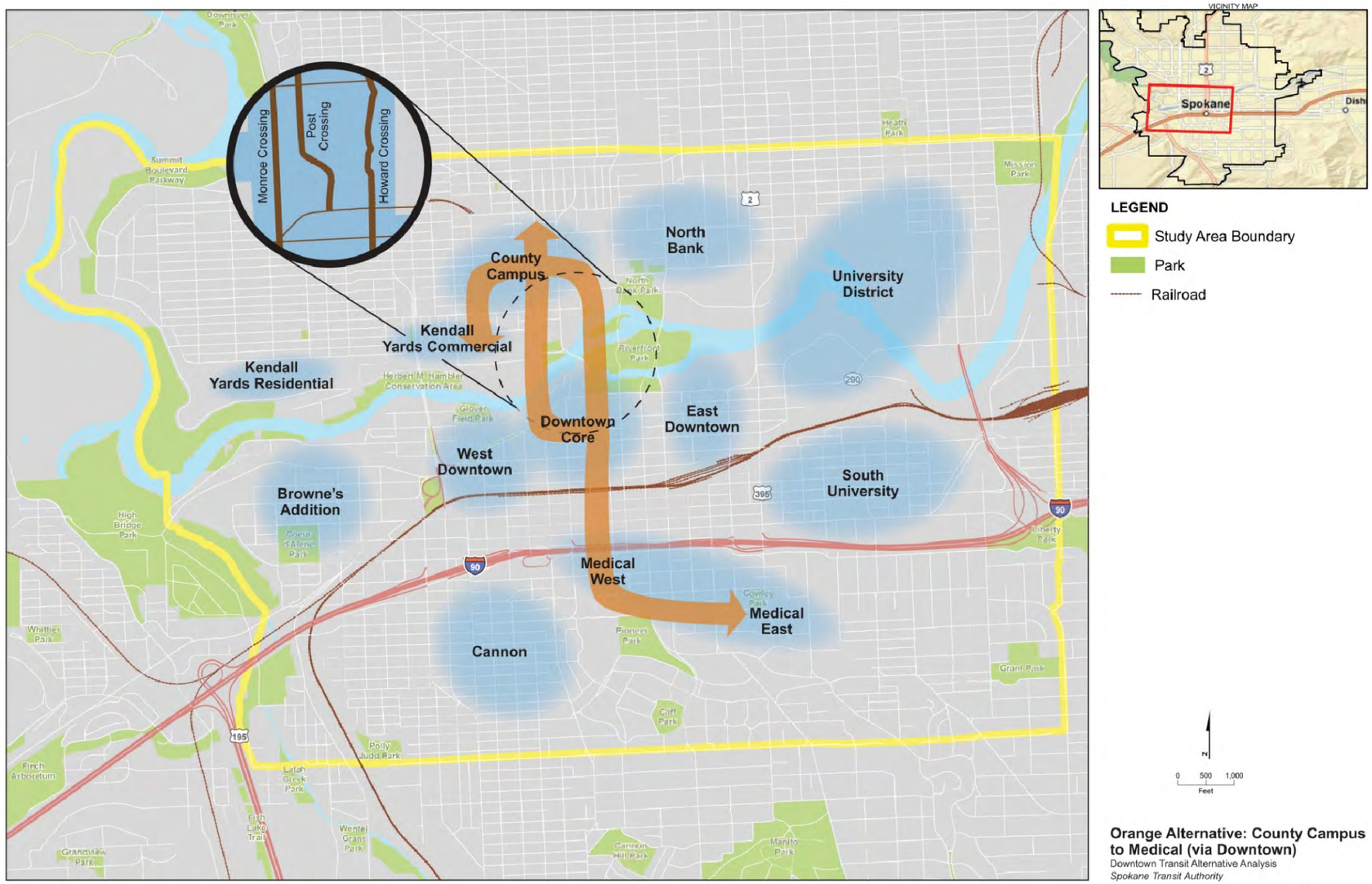
Smaller Loop: The smaller loop would extend north from the Downtown Core, over the Monroe Street Bridge to the North Bank area. The loop would extend east along Boone Avenue to the University District before heading south along either Hamilton or Cincinnati to cross the river over Spokane Falls. The smaller loop would then extend through the University District south of the river and East Downtown before connecting back to the Downtown Core. (note: the smaller loop is not depicted on the map)

Larger Loop: The larger loop would follow the same route from the Downtown Core north and west, but—instead of connecting from East Downtown to the Core—it would extend south to the Medical West and East areas along Division or Browne streets before heading north on either Howard or Wall to connect back to the Downtown Core.

Orange Alternative:

County Campus to Medical

This alternative would extend from the County Campus to the Medical District (both the west and east portions). The north–south movement from the Downtown Core to the Medical District would be along Howard or Wall streets. It would cross over the river into the County Campus using the Monroe, Post, or Howard Street Bridges.



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Orange Alternative: County Campus to Medical (via Downtown)
Downtown Transit Alternative Analysis
Spokane Transit Authority

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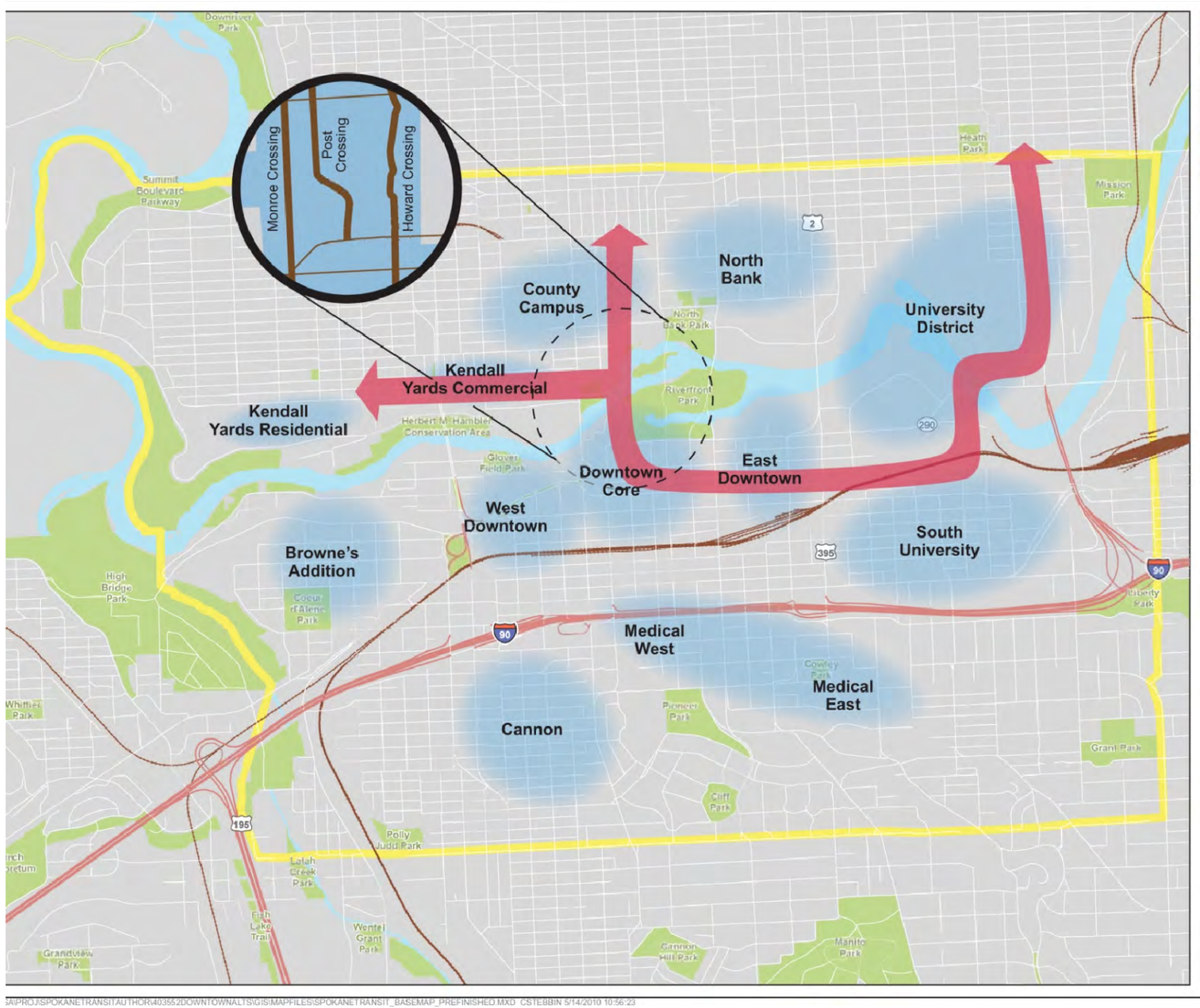
Pink Alternative:

County Campus to University

This alternative would extend from the County Campus to the University District south of the river along either Main or Riverside. From the Downtown Core to County Campus, the river could be crossed using the Monroe, Post, or Howard Street Bridges.

Extensions of the alternative could reach to these areas:

- Kendall Yards Commercial
- University District, north of the river (over the Spokane Falls bridge, north along Cincinnati or Hamilton Streets)



LEGEND

- Study Area Boundary
- Park
- Railroad

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Pink Alternative: County Campus to University (via Downtown)

Downtown Transit Alternative Analysis

Spokane Transit Authority

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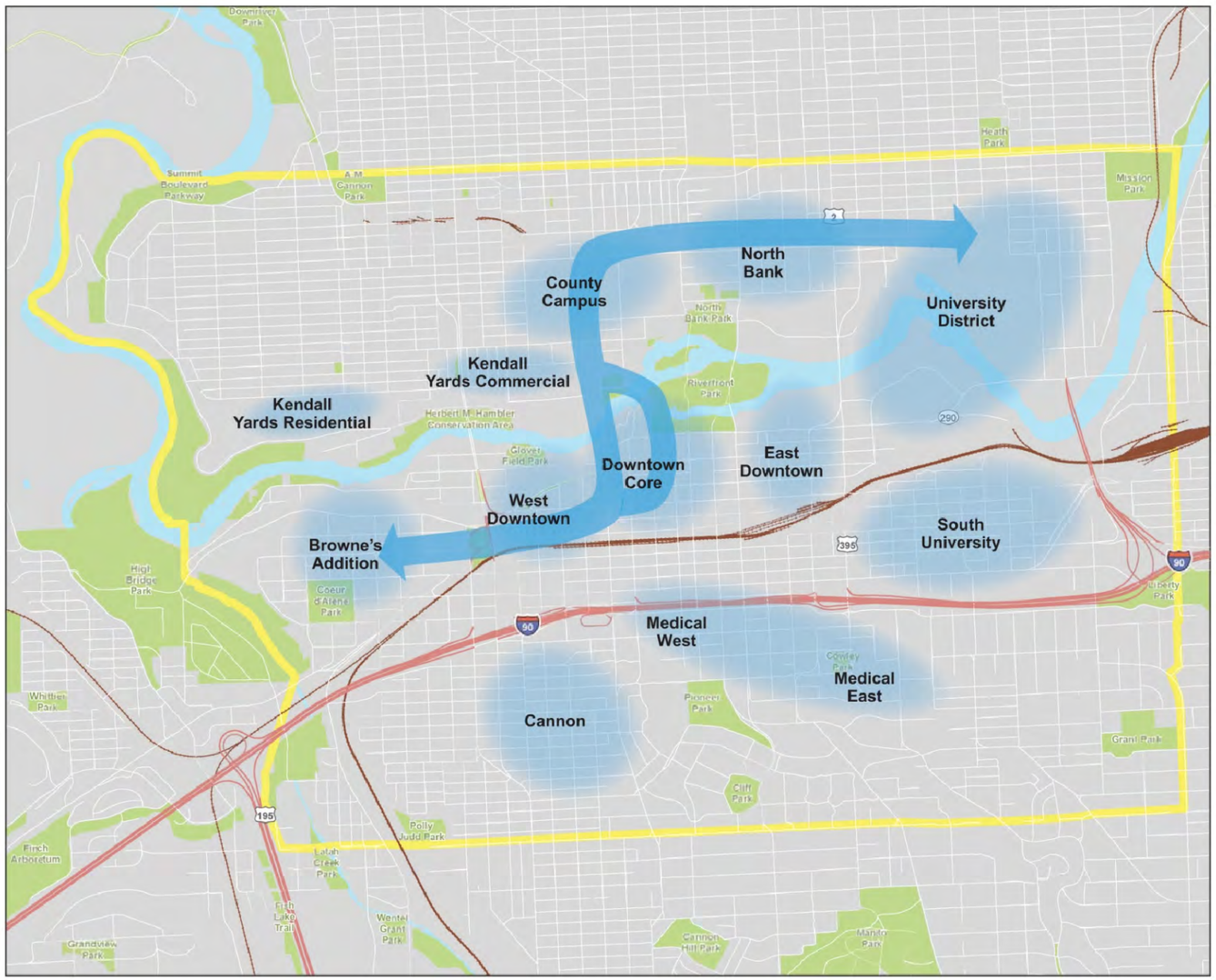
Turquoise Alternative:

Browne's Addition to University (via North Bank)

The core of this alternative would extend from Browne's Addition to the University District north of the river. The route from Browne's Addition to the Downtown Core would then cross the river on either the Monroe or Post Bridges to extend west to the University District.



LEGEND

- Study Area Boundary
- Park
- Railroad

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Turquoise Alternative: Browne's Addition to University (via North Bank)

Downtown Transit Alternative Analysis

Spokane Transit Authority

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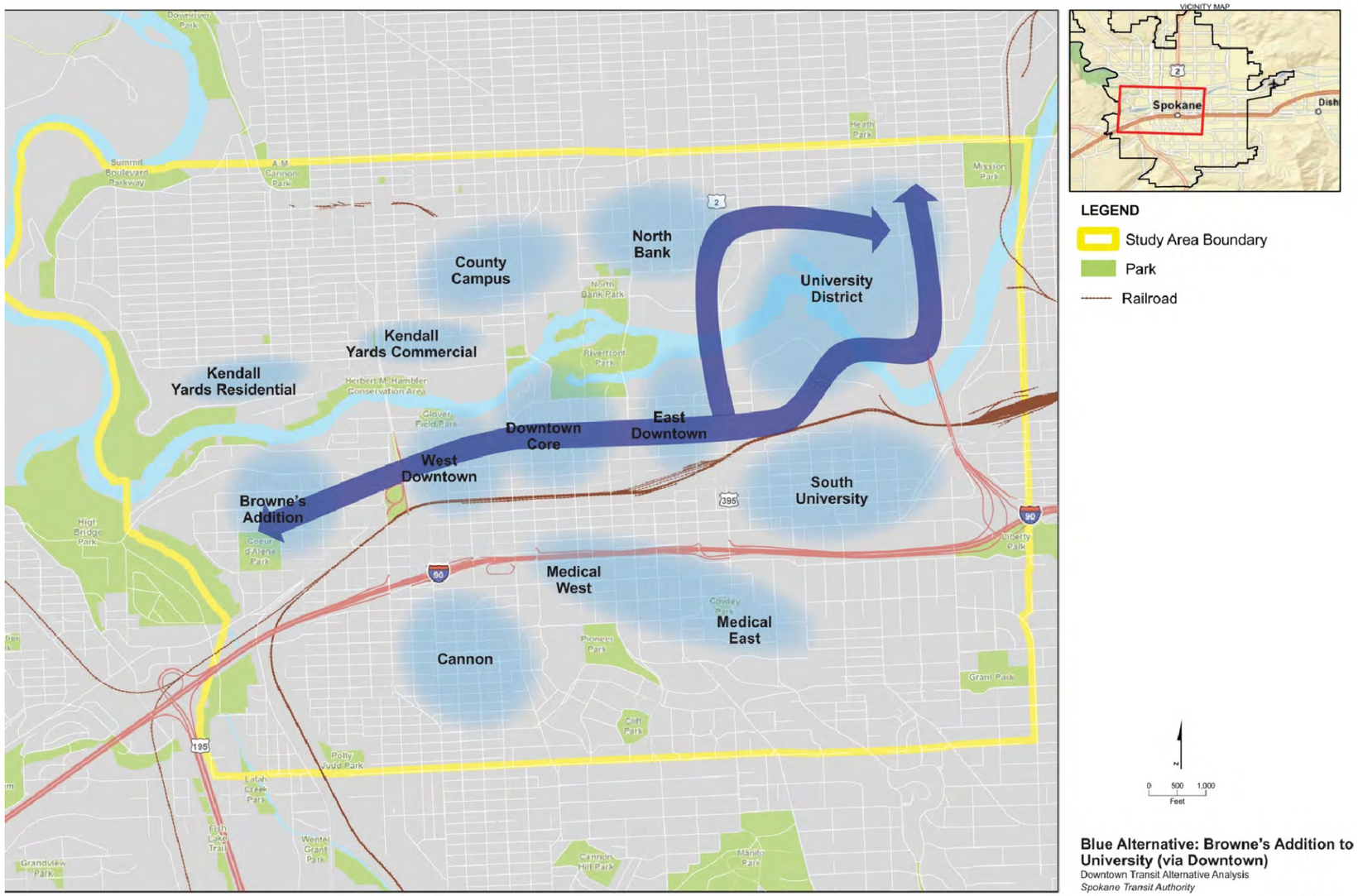

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Blue Alternative: Browne's Addition to University (via Downtown)
Downtown Transit Alternative Analysis
Spokane Transit Authority

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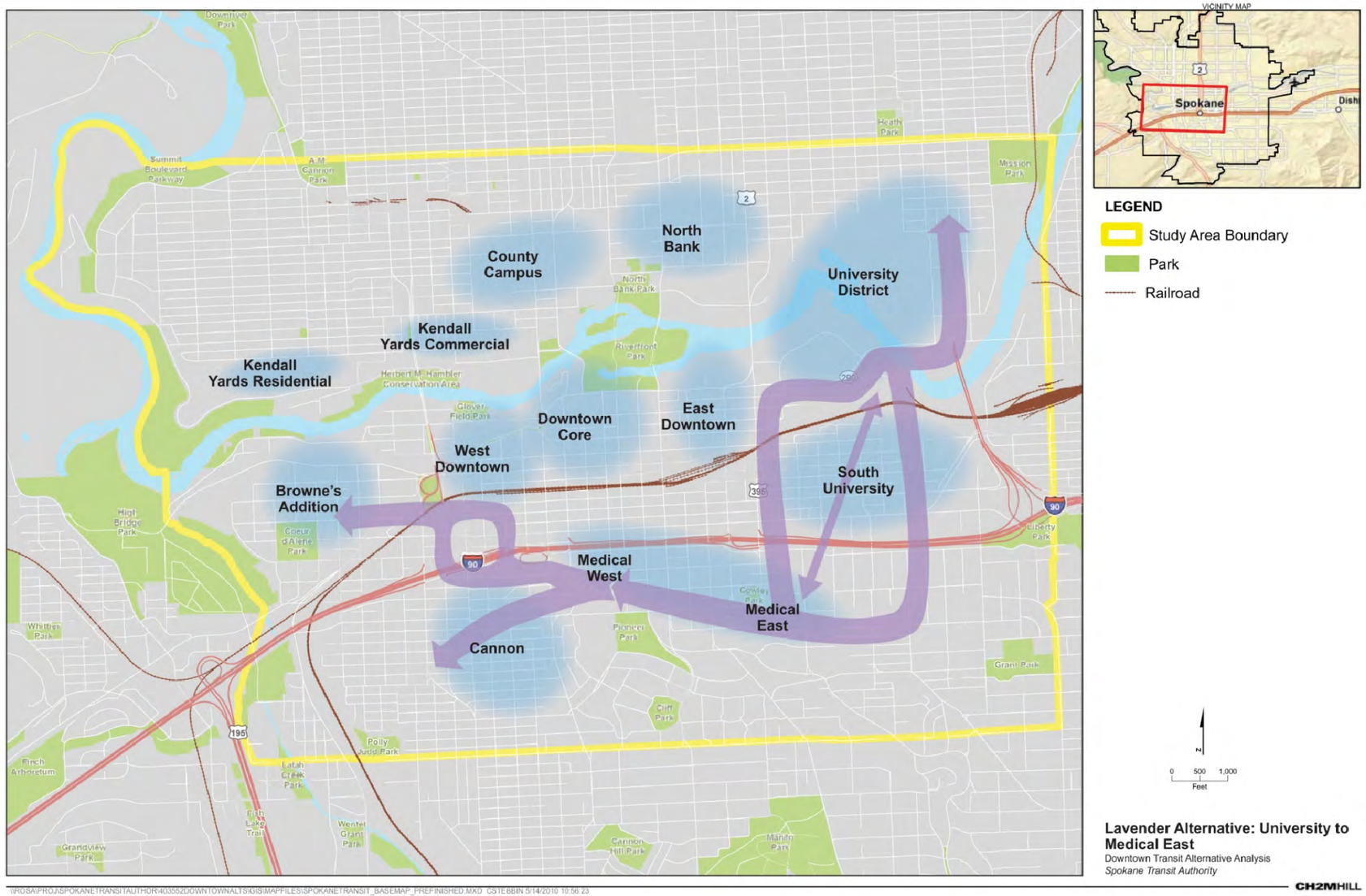
Blue Alternative:

Browne's Addition to University

The core of this alternative would extend from Browne's Addition to the University District north of the river along Main Avenue, Spokane Falls Boulevard, or Riverside Avenue. The route from Browne's Addition into the Downtown Core would follow First, Sprague, or Riverside Avenues. The alternative would extend from the west to the east of downtown, crossing the river either on the Division Street or Spokane Falls Boulevard Bridges (extending north along Cincinnati or Hamilton Streets).



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Lavender Alternative:

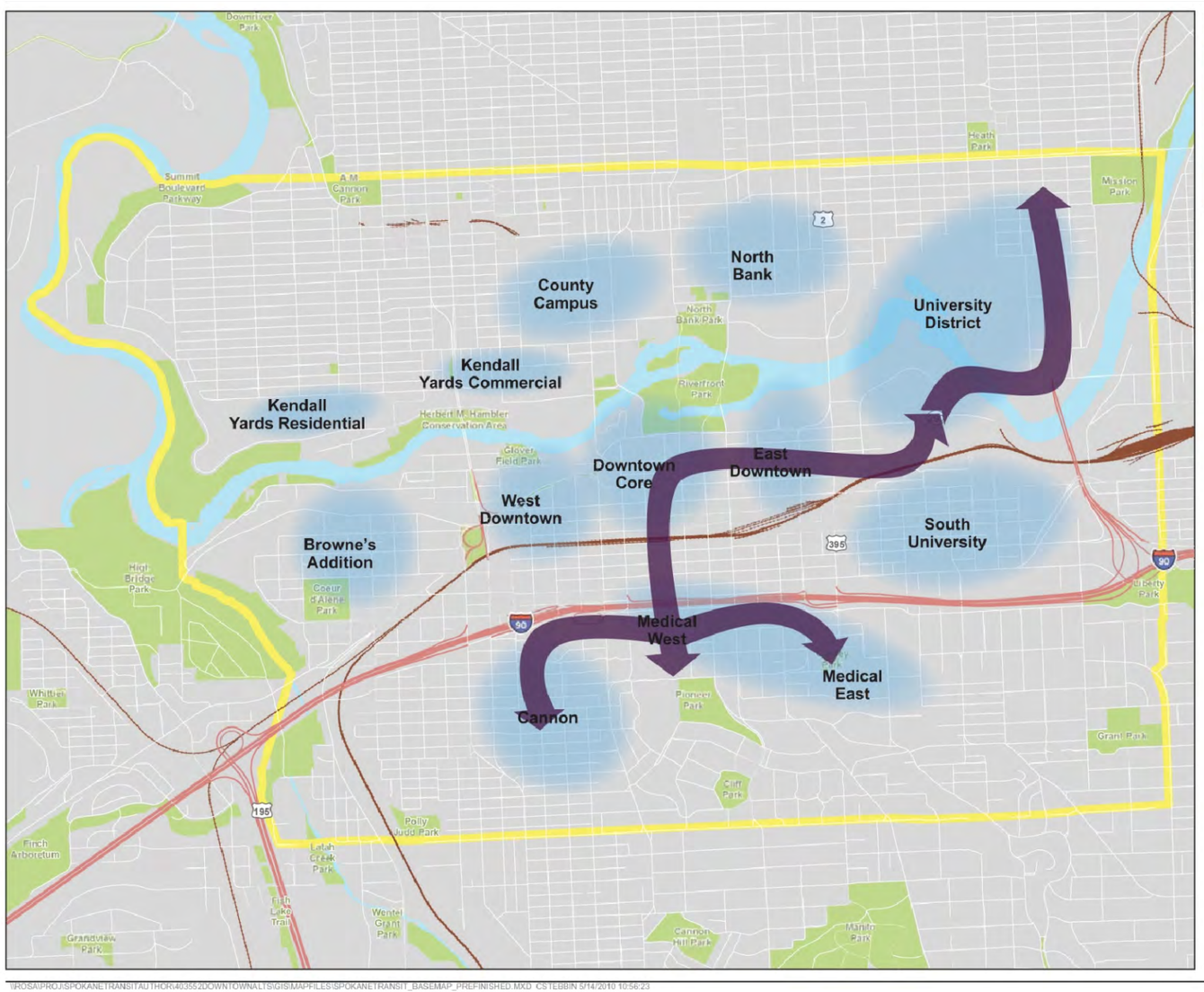
University to Medical East

The core of this alternative would extend from the University District south of the river to the Medical East area. This could be achieved in three ways:

- A direct route between the two points using a non-street-based mode (such as aerial tram)
- Sherman Street (from the University District to the Medical East area)
- Division Street (from the University District to the Medical East area)

From Medical East, the alternative could be extended to the Medical West area, then either reach south to Cannon's Addition or extend northwest into Browne's Addition (along either Walnut or Jefferson Streets).

Another possible extension to the University District would be made possible by crossing over the Spokane Falls Boulevard Bridge and extending north along Cincinnati or Hamilton Streets.



LEGEND

- Study Area Boundary
- Park
- Railroad

N

0 500 1,000
Feet

Plum Alternative: University to Medical West (via Downtown)
Downtown Transit Alternative Analysis
Spokane Transit Authority

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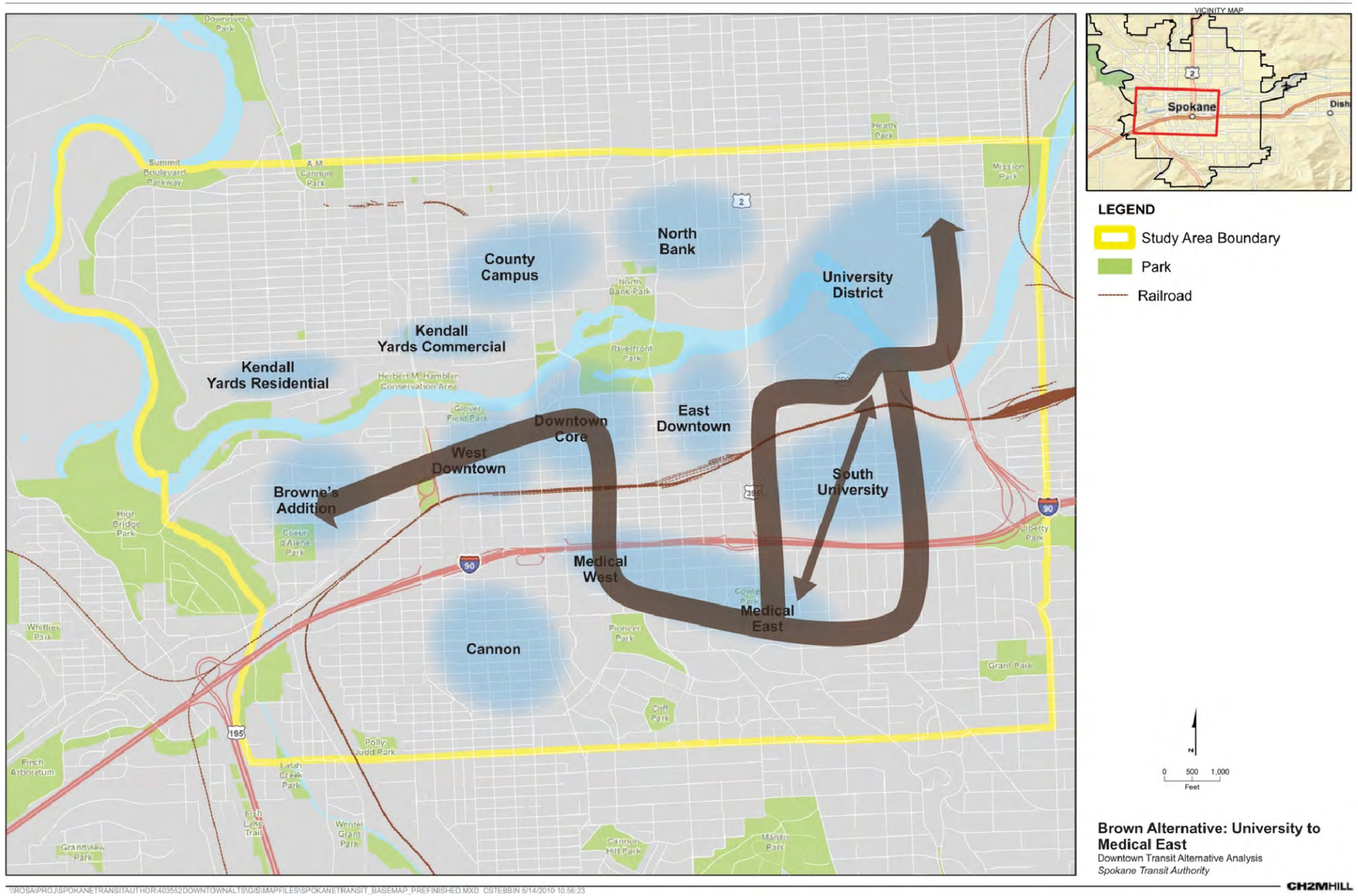
Plum Alternative:

University to Medical West

The core of this alternative would extend from the University District, south of the river, to the Medical West area by crossing under the freeway at either Wall or Howard Streets.

Extensions of the alternative could reach to these areas:

- Cannon's Addition
- Medical East
- University District, north of the river (over the Spokane Falls Boulevard Bridge, north along Cincinnati or Hamilton Streets)



LEGEND

- Study Area Boundary
- Park
- Railroad

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Brown Alternative: University to Medical East
Downtown Transit Alternative Analysis
Spokane Transit Authority

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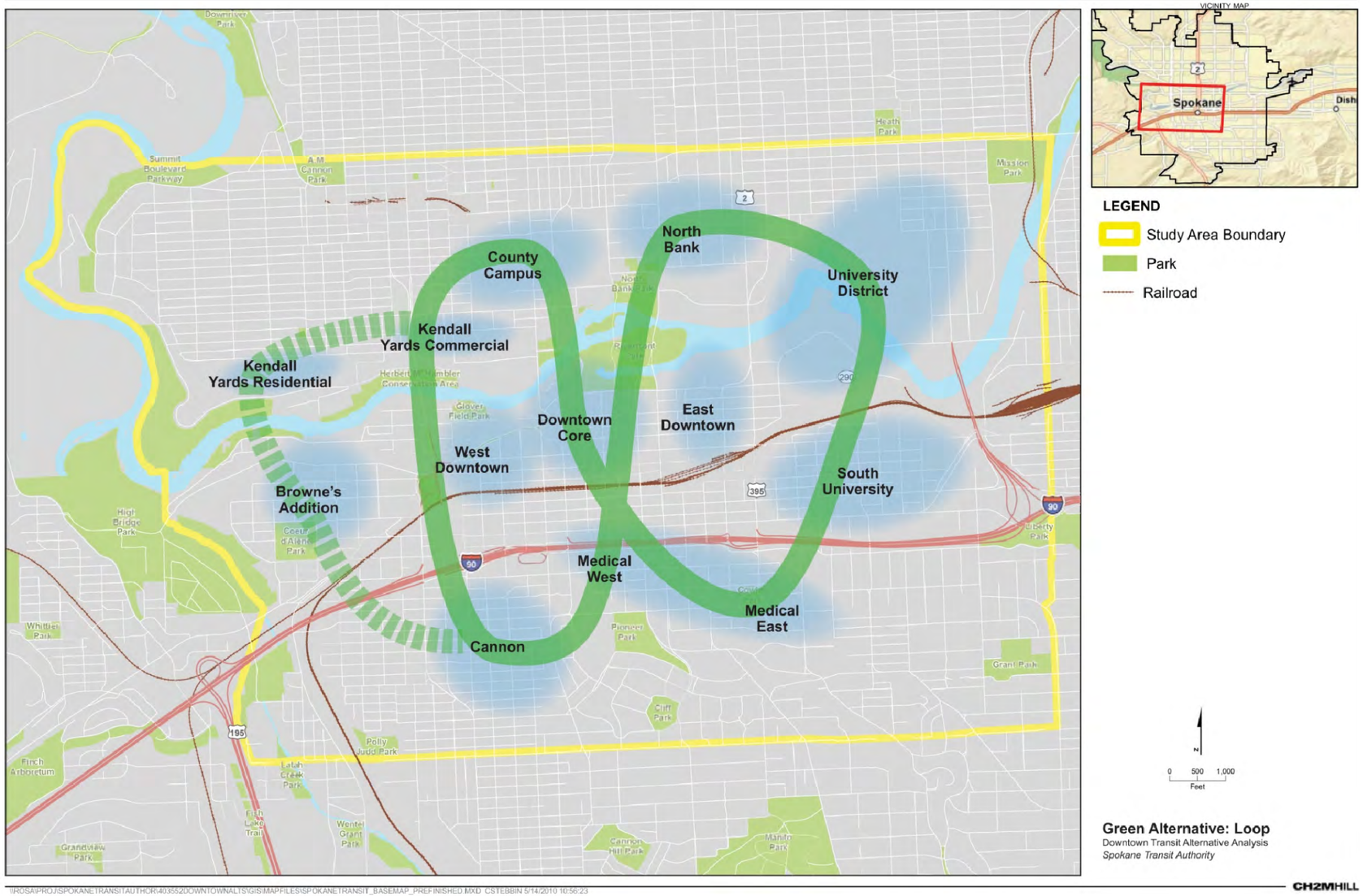
Brown Alternative: Browne's Addition to University District (via Downtown and Medical District)

This alternative would extend from Browne's Addition at the west to the University District at the east, serving the Downtown Core and the Medical District in between. The route from Browne's Addition into the Downtown Core would need to follow First, Sprague, or Riverside Avenues. The north–south movement from the Downtown Core to the Medical District would be along Howard or Wall Streets. The extension from the Medical District to the University District could be achieved in three ways:

- A direct route between the two points using a non-street-based mode (such as aerial tram)
- Sherman Street (from the University District to the Medical East area)
- Division Street (from the University District to the Medical East area)

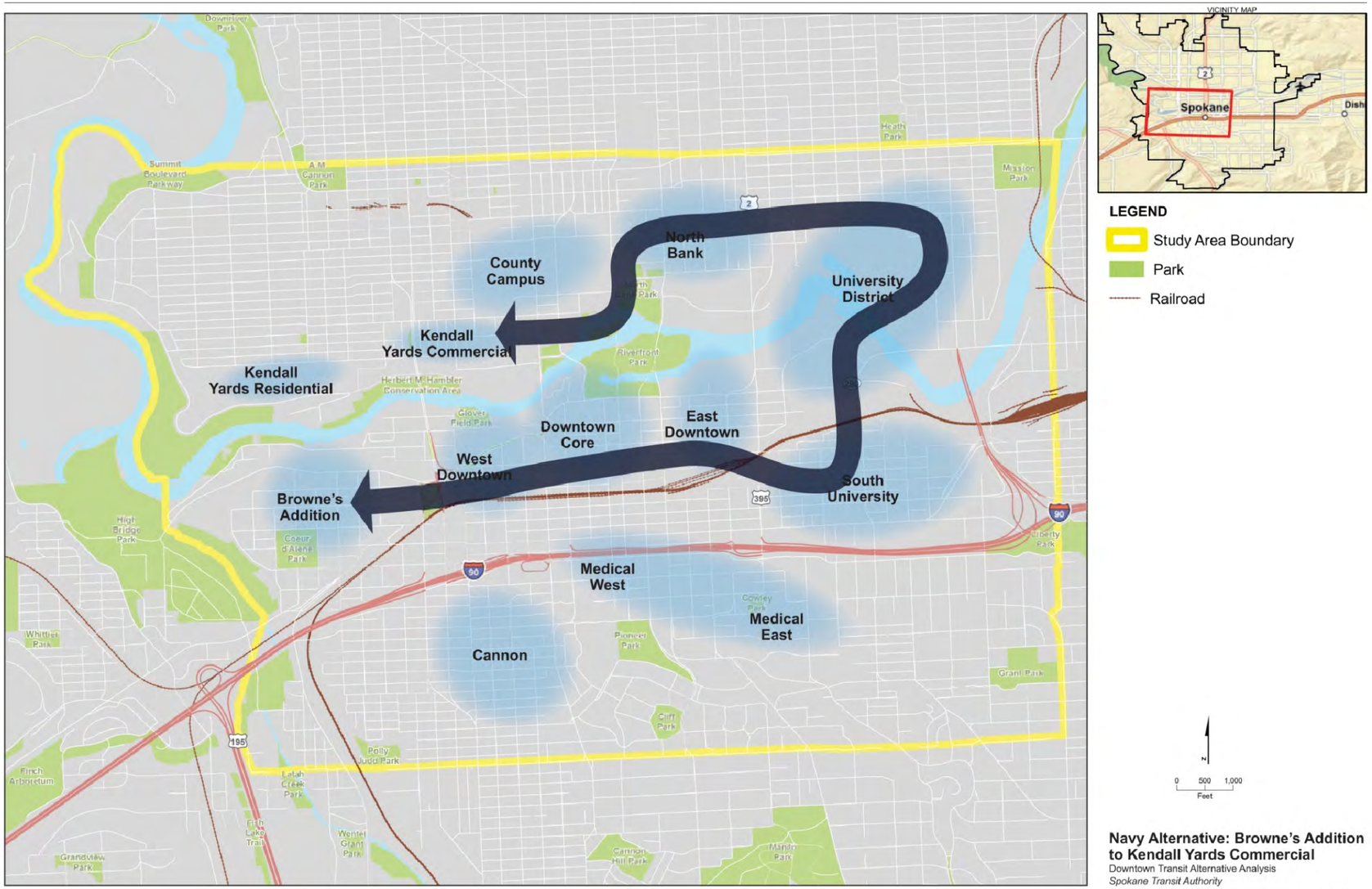


Green Alternative:

Double Loop

This alternative would connect nearly all of the major activity centers in the project area. It would connect Cannon's Addition in the south to the Medical West area, then continue north to North Bank and east to the University District. From the University District, it would travel south to the South University District and continue south to Medical East. From Medical East, it would travel northwest to the Downtown Core, crossing the tracks that connect Medical West to North Bank. From the Downtown Core, it would travel north to County Campus, and southwest to Kendall Yards Commercial. Between Kendall Yards Commercial and Cannon's Addition, it would take one of two paths:

- Travel south directly from Kendall Yards Commercial to Cannon's Addition, touching the western boundary of west downtown
- Travel farther west to serve Kendall Yards Residential, southeast to serve Browne's Addition via a new bridge, and then continue southeast to Cannon's Addition



LEGEND

- Study Area Boundary
- Park
- Railroad

N

0 500 1,000
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Navy Alternative: Browne's Addition to Kendall Yards Commercial
Downtown Transit Alternative Analysis
Spokane Transit Authority

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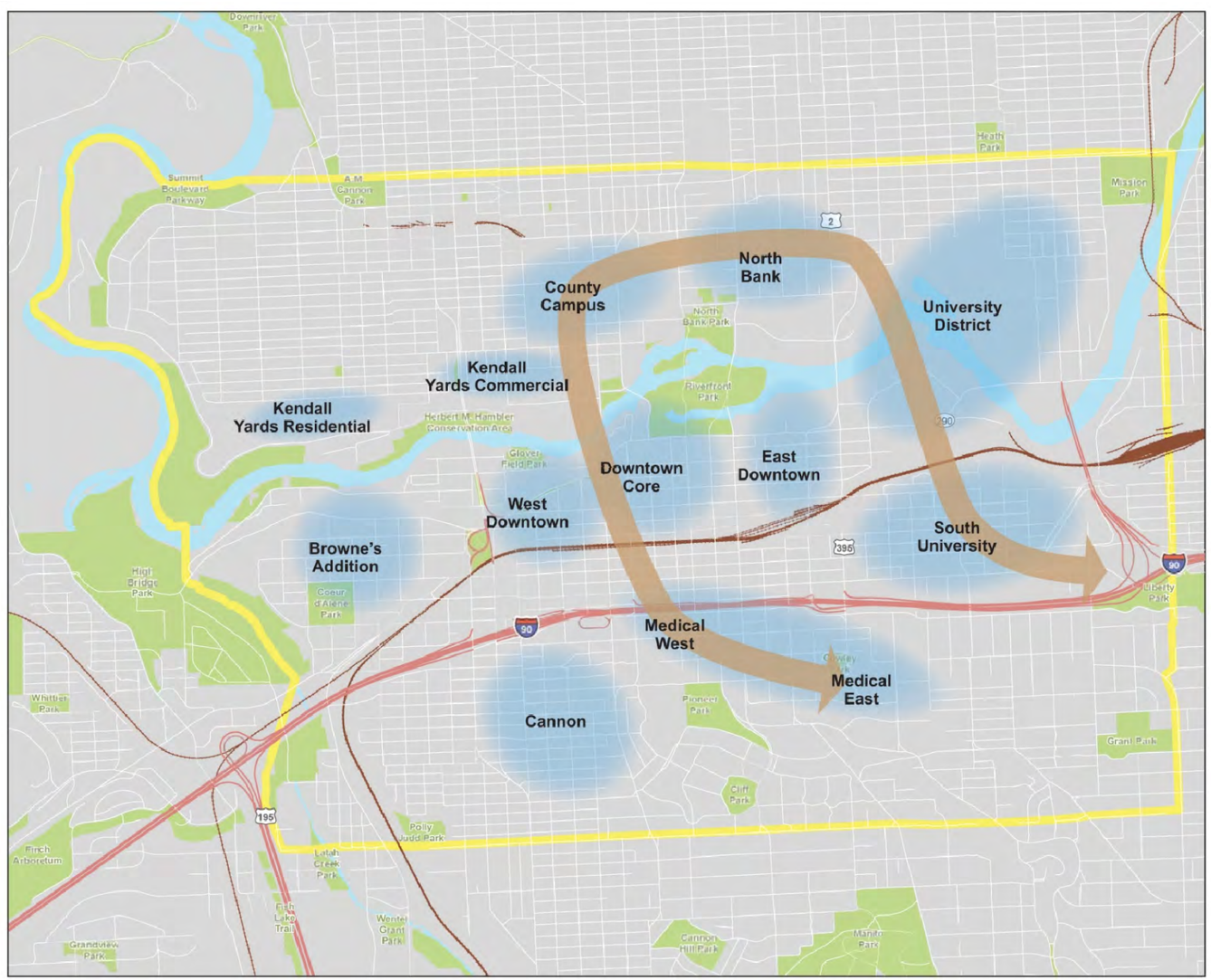
Navy Alternative:
Browne's Addition to Kendall Yards Commercial

This alternative would connect Browne's Addition to West Downtown, the Downtown Core, East Downtown, and the South University District. It would extend north from the South University District to the University District, then travel west to serve North Bank and southwest to Kendall Yards Commercial.

Taupe Alternative:

Medical East to South University

This alternative would originate in the Medical East area. It would travel northwest to the Medical West area and continue north to the Downtown Core. It would then cross the river and continue north to County Campus, then travel east to North Bank and southeast to the University District. It would then travel south to the South University District and have an eastern terminus there.



Taupe Alternative: Medical East to South University
Downtown Transit Alternative Analysis
Spokane Transit Authority

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Corridor Screening Results

Of the 11 corridors considered, 4 were advanced to a full evaluation: Blue, Orange, Pink, and Plum alternatives. Each of the four corridors was chosen for further study because it addressed all of the screening questions. Table 3-1 presents the detailed analysis of the full list of alternatives.

Table 3-1

Results of Alternative Screening Process

		Does the Alternative Pass the Screening Question?										Forward to Full Evaluation?
		1A	1B	1C	2A	2B	3	4	5A	5B	6	
	BLUE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	BROWN	Yes	Yes	Yes	Yes	Yes	Yes	Yes	**No.** The alternative would require construction of a new street to provide the eastern connection from Medical East to the University District. The western connection would require a freeway crossing and a railroad crossing, which are both substantial constraints.	Yes	Yes	No
	GREEN	**No.** The alternative would increase travel times from the Downtown Core to the University District.	Yes	Yes	Yes	**No.** The alternative would not serve the University District better than it is currently served.	Yes	Yes	**No.** The alternative would require three railroad crossings--south of the Downtown Core, north of South University, and west of West Downtown. These are substantial physical constraints.	Yes	Yes	No
	LAVENDER	**No**. The alternative would not improve the travel time from the Downtown Core to the University District.	**No.** The Blue Alternative is a better way to serve the University District and Browne's Addition. The Orange and Plum alternatives are better ways to serve the Medical District.	Yes	**No.** The alternative does not serve the Downtown Core. This is a fatal flaw.	**No.** The alternative would not serve the University District better than it is currently served.	Yes	Yes	**No.** The alternative would require two railroad crossings (south of West Downtown and north of South University). It would also require two crossings of I-90. These are substantial physical constraints.	Yes	Yes	No
	NAVY	Yes	**No.** The Blue Alternative is a better way to connect the University District and the Downtown Core because it would avoid the two railroad crossings.	Yes	Yes	Yes	Yes	Yes	N**o.** The alternative would require two railroad crossings (west and north of South University). These are substantial physical constraints.	Yes	Yes	No
	ORANGE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	PINK	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	PLUM	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

		Does the Alternative Pass the Screening Question?											Forward to Full Evaluation?
		1A	1B	1C	2A	2B	3	4	5A	5B	6	
	RED	**No.** The alternative would increase travel times from the Downtown Core to the University District.	**No.** The Blue Alternative is a better way to serve the University District and Browne's Addition. The Orange and Plum alternatives are better ways to serve the Medical District.	**Yes**	**Yes**	**No.** The alternative would not serve the University District better than it is currently served.	**Yes**	**Yes**	**No.** The alternative would require two river crossings (in the University District and north of the Downtown Core), two railroad crossings (south of the Downtown Core and north of South University), and two crossings of I-90. These are substantial physical constraints.	**Yes**	**Yes**	**No**
	TAUPE	**No.** The alternative would increase travel times from the Downtown Core to the University District.	**No.** The Blue Alternative is a better way to serve the University District and Browne's Addition. The Orange and Plum alternatives are better ways to serve the Medical District.	**Yes**	**Yes**	**No.** The alternative would not serve the University District better than it is currently served.	**Yes**	**Yes**	**No.** The alternative would require two river crossings (in the University District and north of the Downtown Core). It would also require two railroad crossings (south of the Downtown Core and north of South University). These are substantial physical constraints.	**Yes**	**Yes**	**No**
	TURQUOISE	**No.** The alternative would increase travel times from the Downtown Core to the University District.	**No.** The Blue Alternative is a better way to serve the University District and Browne's Addition. The Orange Alternative is a better way to serve County Campus.	**Yes**	**Yes**	**No.** The alternative would not serve the University District better than it is currently served.	**Yes**	**Yes**	**Yes**	**Yes**	**Yes**	**No**

NOTE:

Question 1A: Would the alternative generally decrease transit travel times to activity centers in the corridor from what they are today?

Question 1B: Would this alternative perform similarly or better than other alternatives that serve the same activity centers (e.g., have a low cost, provide a reduced travel time, or avoid major impacts)?

Question 1C: Is this alternative configured in an efficient and logical way? If not, could parts of the alternative be combined with parts of another alternative to make it more efficient or logical?

Question 2A: Would the alternative serve the Downtown Core and either the University District or the Medical District?

Question 2B: Would the alternative create a more direct transit connection to activity centers than exists today?

Question 3: Would the alternative serve at least one Targeted Area Development District?

Question 4: Would the alternative improve and extend pedestrian mobility in the downtown area?

Question 5A: Would the alternative avoid major physical or geographic constraints that would cause it to be significantly more expensive to build than other alternatives?

Question 5B: Could the alternative be developed in logical and cost-effective phases?

Question 6: Is the alternative feasible to build?

Modes Considered

The project team considered a total of **eight** modes:

- Streetcar
- Enhanced Bus
- Electric Trolley bus
- Bus Rapid Transit
- Light Rail Transit
- Personal Rapid Transit
- Aerial Tram
- Transportation System Management

The list of modes to be considered was developed as a result of an evaluation of the potential range of feasible modes, discussion at the May 6, 2010, workshop of Technical Advisory Group and Sounding Board members, and public feedback received at the June 2010 open house. A brief description of each mode follows and Figure 3-2 presents a comparison of modes.

Streetcar. A modern streetcar system includes tracks inlaid into pavement and vehicles that run on electric power drawn from overhead catenary wires. Streetcars are typically installed in existing vehicular lanes along local arterial or collector streets and operate at the speed of traffic.

Enhanced Bus. An enhanced bus system would involve a typical city bus operating on the chosen transit alignment, with these departures from typical Spokane Transit Authority infrastructure:

- Transit signal priority
- Station improvements and signage

Electric Trolley bus. Electric trolley bus systems are similar to streetcars in that they use electric power drawn from overhead catenary wires. However, they do not require installation of tracks and, therefore, are less expensive to construct.

Bus Rapid Transit (BRT). BRT typically includes dedicated lanes for bus travel, transit signal priority, articulated buses with higher capacity, and substantial stations that are similar to those of a light rail transit system.

Light Rail Transit (LRT). LRT is similar to a modern streetcar system in that it requires tracks inlaid into pavement and it runs on electric power drawn from overhead catenary wires. It is different from a streetcar system in that the vehicles are typically heavier and have a larger capacity, it can run at a higher speed, and it has wider required vertical and horizontal turning radii.

Personal Rapid Transit (PRT). PRT systems include small vehicles that travel on specially built guideways that are grade separated. PRT vehicles typically carry 3 to 6 passengers, but they can be designed to carry up to 20 passengers. They do not have drivers and are similar in operation to an elevator.

Aerial Tram. An aerial tram consists of vehicles that are supported by a fixed cable and transported by a moving cable. Aerial trams are typically used in areas of steep terrain, where traveling at the level of the roadway is not feasible.

Transportation System Management (TSM). TSM represents the best way to meet the goals of the project without a *major* capital investment, although it may include *minor* capital investments such as transit signal priority. For this project, a TSM approach would be a standard Spokane Transit Authority bus that would run along the preferred route, with standard shelters where warranted.

The TSM mode differs from Enhanced Bus in that it does not include station improvements and signage.

Figure 3-2
A "Thumbnail" Comparison of the Modes Considered

Central City Transit Alternative Analysis
Attributes of Potential Transit Modes

Spokane Transit
How a great city moves.

Image	Typical Speed	Vehicle Capacity	Stop Spacing	Density	Cost
Regular Bus			Typically 1/4 to 1/2 mile	low density needed	$ capital costs $$ operating costs
Electric Trolley Bus			Typically 1/4 to 1/2 mile	medium density needed	$$ capital costs $$ operating costs
Streetcar			Typically 1/4 mile	medium density needed	$$$ capital costs $$$ operating costs
Bus Rapid Transit (own right-of-way)			Typically 3/4 to 5 miles	medium density needed	$$$ capital costs $$ operating costs
Bus Rapid Transit (in street)			Typically 1/4 to 1/2 mile	medium density needed	$$ capital costs $$ operating costs
Rubber Tire Streetcar			Typically 1/4 to 1/2 mile	low density needed	$ capital costs $$ operating costs
Light Rail Transit (LRT)			Typically 1/2 mile	high density needed	$$$$ capital costs $$$ operating costs
Aerial Tram			Typically 3/4 to 5 miles	low density needed	$$$$ capital costs $$$ operating costs
Personal Rapid Transit			Typically 1-2 miles	high density needed	$$$$ capital costs $$$ operating costs

Mode Screening Results

Table 3-2 depicts the results of the screening process for the eight modes considered.

Table 3-2

Results of Initial Mode Screening[3]

Objective 1: Increase transit efficiency and effectiveness	Objective 2: Improve transit connections	Objective 3: Support downtown development	Objective 4: Comply with land use goals	Objective 5: Optimize local fiscal investments	Objective 6: Optimize engineering design and environmental sensitivity	Forwarded for further evaluation?
Streetcar						
1A: Yes **1B: Yes** **1C: Yes**, depending on alignment selection	**2A: Yes**, depending on alignment selection **2B: Yes,** depending on alignment selection	**Yes,** depending on alignment selection	**Yes**	**5A: Yes,** depending on alignment selection **5B: Yes**	**Yes**	**Yes**
Enhanced Bus						
1A: Yes **1B: Yes** **1C: Yes,** depending on alignment selection	**2A: Yes**, depending on alignment selection **2B: Yes,** depending on alignment selection	**Yes,** depending on alignment selection	**Yes**	**5A: Yes,** depending on alignment selection **5B: Yes**	**Yes**	**Yes**
Electric Trolley Bus						
1A: Yes **1B:** Yes **1C:** Yes, depending on alignment selection	**2A: Yes,** depending on alignment selection **2B: Yes,** depending on alignment selection	**Yes,** depending on alignment selection	**Yes**	**5A: Yes,** depending on alignment selection **5B:** Yes	**Yes**	**Yes**
Bus Rapid Transit						
1A: Yes **1B: No.** Enhanced bus or electric trolley bus would perform	**2A: Yes,** depending on alignment selection **2B: Yes,**	**Yes,** depending on alignment selection	**No.** BRT typically includes stations that are spaced farther apart than other modes, in order	**5A: Yes,** depending on alignment selection	**Yes**	**No**

[3] Objectives listed in this table are paraphrased. They are provided in full in section 2. The full list of screening questions is provided in section 3.

Objective 1: Increase transit efficiency and effectiveness	Objective 2: Improve transit connections	Objective 3: Support downtown development	Objective 4: Comply with land use goals	Objective 5: Optimize local fiscal investments	Objective 6: Optimize engineering design and environmental sensitivity	Forwarded for further evaluation?
similarly at a lower cost, because these modes would not require right-of-way (ROW) acquisition. **1C: Yes,** depending on alignment selection.	depending on alignment selection		to maximize speed. This may not be as conducive to pedestrian mobility in the Downtown Core as other modes.	**5B: Yes**		
Light Rail Transit						
1A: **1B: No.** Streetcar would perform similarly at a lower cost, because it would not require ROW acquisition. **1C: Yes,** depending on alignment selection.	**2A: Yes,** depending on alignment selection **2B: Yes,** depending on alignment selection	**Yes,** depending on alignment selection	**No.** LRT typically includes stations that are spaced farther apart than other modes in order to maximize speed. This may not be as conducive to pedestrian mobility in the downtown area as other modes.	**5A: Yes,** depending on alignment selection **5B: Yes**	**Yes**	**No**
Personal Rapid Transit						
1A: Yes **1B: No.** The impacts required to install a new infrastructure necessary to operate PRT would represent significant impacts to traffic and adjacent land uses in the study area. **1C: Yes.**	**2A: Yes,** depending on alignment selection **2B: Yes,** depending on alignment selection	**Yes,** depending on alignment selection	**Yes**	**5A: Yes,** depending on alignment selection **5B: Yes**	**Yes**	**No**
Transportation System Management						
1A: Yes. **1B: Yes.** **1C: Yes.**	**2A: Yes** **2B: Yes**	**Yes**	**Yes**	**5A: Yes** **5B: Yes**	**Yes**	**Yes**

The mode screening process produced these conclusions:

- **Streetcar, Enhanced Bus, Electric Trolley Bus, and TSM passed** the screening questions and were advanced to full evaluation.
- **BRT was dismissed** from consideration for two reasons:
    1. BRT typically runs in an exclusive guideway, and this would require right-of-way acquisition or dedication of existing vehicle lanes, resulting in a higher cost to construct than other modes and/or in impacts on vehicle capacity of existing streets.
    2. BRT typically has fewer stations spaced farther apart than streetcar or bus and, therefore, would provide reduced access compared to the modes forward to full evaluation.
- **LRT was dismissed** from consideration for two reasons:
    3. LRT typically runs in an exclusive guideway, and this would require right-of-way acquisition or dedication of existing vehicle lanes, resulting in a higher cost to construct than other modes and/or in impacts on vehicle capacity of existing streets.
    4. LRT typically has fewer stations, spaced farther apart, than streetcar or bus and, therefore, would provide reduced access compared to the modes forward to full evaluation.
- **PRT was dismissed** from consideration because it is anticipated that the installation of new guideways for PRT would result in significant impacts on traffic or adjacent land uses in the area. New guideways would be inconsistent with existing city policy to enhance street-level amenities in order to encourage pedestrian activity.
- **Aerial tram was dismissed** from consideration for two reasons:
    5. Aerial trams are anticipated to be more expensive to construct per mile than streetcar or bus.
    6. Aerial trams cannot logically be developed in phases.

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4. Evaluation of Alternatives

The four short-listed corridors and four short-listed modes were evaluated in detail using the evaluation framework presented in Table 4-1. The evaluation framework was used to provide a more detailed measurement of each alternative's ability to meet the project objectives. Section 4.1 summarizes the findings of these evaluations, and the subsections that follow discuss the results in more detail.

Table 4-1

Evaluation Framework

Objective/ Criteria	Measures
A. Increase the effectiveness and efficiency of transit within Central City Spokane	
Travel time	Actual travel time between selected central city locations
	Perceived travel time between selected central city locations
Ridership potential	Likely ridership response
Ease of use	Ability of new and infrequent riders to understand the service and find stops
Reliability of service	Ability of transit service to be maintained in the event of scheduled or unscheduled events or severe weather conditions
Accommodation of growth	Ability of mode to serve new land-use changes in the central city area
	Ability of mode to accommodate growth in demand
Efficiency of the transit network	Travel-time savings for the existing system
B. Provide improved transit connections to, from, and between Central City activity areas	
Transit accessibility	Number of major activity centers served
	Number of residential units located within ¼ mile of the alternative
	Number of jobs located within ¼ mile of the alternative
Pedestrian accessibility	Number of significant pedestrian barriers crossed
C. Support and help stimulate new central city development and redevelopment	
Potential to create jobs and business opportunities	Number of districts identified by the City of Spokane as priority job-creation areas (City-designated Targeted Area Developments, or TADs)
	Percentage of parcels within ¼ mile of the alternative that are considered "developable but underutilized"
Urban form and activity	Increased pedestrian activity at street level

Objective/ Criteria	Measures
D. Comply with and support local and regional adopted goals, objectives, and plans	
Land-use plans and economic development goals	Consistency with the City of Spokane's Comprehensive Plan
	Support of Targeted Area Development Districts
Transportation plans	Consistency with Spokane Transit Authority's High Performance Transit Network Plan
	Consistency with Metropolitan Transportation Plan
E. Optimize fiscal investments in Central City transit infrastructure and service	
Affordability	Projected capital cost
	Projected operating cost
Availability of funding	Potential capital cost funding source(s)
	Potential operating cost funding source(s)
Leverage	Potential to leverage other public/private investments
F. Optimize the engineering design and environmental sensitivity of the project	
Environmental impacts	Number of parcels of land directly affected by the project
	Number of historic properties potentially adversely affected
	Number of 4(f) properties potentially impacted
	Number of noise-sensitive land uses adjacent to the alternative
Equity	Approximate number of low-income persons within ¼ mile of the alternative
	Approximate number of persons of a minority race or ethnicity within ¼ mile of the alternative
	Approximate number of transit-inclined[4] persons within ¼ mile of the alternative
Constructability	Number of new river crossings needed
	Major design considerations
Energy conservation	Reduction in greenhouse gases

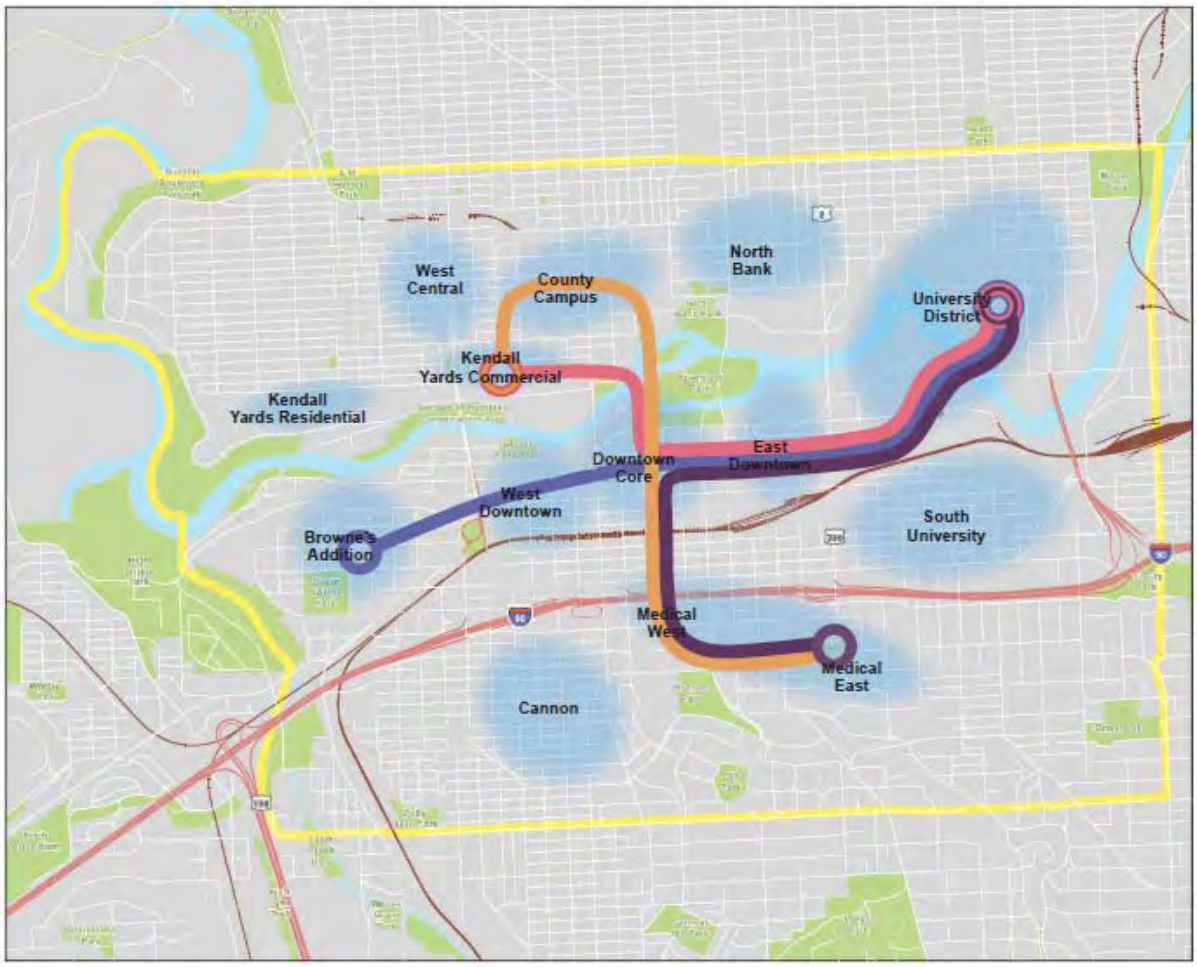
[4] Transit inclination was calculated using five demographic variables: population density, auto ownership, median household index, number of households with children aged 5 to 17 years, and number of households aged above 65 years. More information is available in the *Spokane Central City Transit Alternatives Analysis: Travel Market Assessment,* available under separate cover.

Summary of Results

Corridors

The Pink, Plum, Orange, and Blue alternatives met the project goals and objectives. A more detailed description of the corridor analysis is included as Section 4.2. Figure 4-1 depicts all four of the short-listed project corridors.

Figure 4-1
Short-listed Corridors



Modes

A full description of the process for evaluating modes provided in Section 4.3. The detailed evaluation of modes resulted in these findings:

Enhanced Bus:

- The enhanced bus mode would have high route flexibility and the highest flexibility to accommodate changes in demand.

- The enhanced bus mode would have the lowest development potential of any of the short-listed modes.
- Enhanced bus would be less expensive than either an electric trolley bus or a streetcar, and would be approximately $3 million to $4.5 million per mile (in 2011 dollars).[5]

Electric Trolley Bus:

- The Electric Trolley Bus mode would have less route flexibility than the enhanced bus mode but more than the streetcar.
- Electric Trolley Bus would cost approximately $6 million to $12 million per mile (in 2011 dollars).
- Overhead wires could be prone to icing and have the potential to alter the visual character of the environment.

Streetcar:

- The streetcar mode would have the highest ride quality.
- Streetcar would likely have the highest development potential.
- Overhead wires could be prone to icing and have the potential to alter the visual character of the environment.
- Streetcar would have the lowest route flexibility of all modes considered.
- Streetcar would cost approximately $34 million to $51 million per mile (in 2011 dollars).

TSM:

- The TSM mode would provide a lower cost version of the Enhanced Bus mode.

Detailed Corridor Evaluation

The project team evaluated the Blue, Pink, Plum, and Orange alternatives in detail. The results of the evaluation of each alternative against each project objective follows. Detailed results from the corridor evaluation are provided in Appendix A.

Objective A:

Increase the effectiveness and efficiency of transit within Central City Spokane

To measure performance against this objective, the team evaluated alternatives' abilities to improve transit efficiency and effectiveness as measured by transit travel time, ease of use, reliability, and accommodation of future growth. Highlights of the evaluation are as follows:

Travel time: The Pink and Plum alternatives would be likely to decrease actual and perceived transit travel times to a greater extent than the Blue and Orange corridors because they would connect areas of town that are not currently served by a continuous transit line.

[5] Cost estimates for enhanced bus, electric trolley bus, and streetcar are based on an order of magnitude estimate on a per mile basis, and have been derived from examples of other systems. More detailed cost estimates would be prepared during the preliminary design phase of the project.

Ridership potential: The Pink and Plum alternatives would likely increase ridership potential to a greater extent than the Blue and Orange alternatives because they connect areas with higher population and employment densities.

Ease of use: All alternatives would fare equally in the potential to increase the ability for new and infrequent riders to understand the system and find stops. All corridors would have the potential to be equally served by wayfinding maps and signage.

Reliability of service: The Orange and Plum alternatives would be at a slightly increased risk for service interruptions due to the steep grades on the South Hill. This could present problems during winter operations.

Efficiency of the transit network: All corridors would fare equally in providing overall travel time savings for the existing Spokane Transit Authority network. Existing bus service could be reallocated to efficiently accommodate any of the corridors.

Accommodation of growth. All corridors would fare equally under this evaluation measure. This criterion is more of a differentiator among modes.

Objective B:
Provide improved transit connections to, from, and between Central City activity areas

For this objective, the team evaluated how alternatives would serve existing and targeted future activity areas within Spokane's Central City area, and potential improvements to pedestrian accessibility. Highlights of the evaluation are as follows:

Transit accessibility: The Blue and Plum alternatives would improve transit accessibility to a greater extent than the Orange and Pink alternatives because the Blue alternative would serve a high number of activity areas and a high number of existing and forecast residential units. Similarly, the Plum alternative would serve a high number of activity areas, a high number of existing residential units, and a high number of existing and forecasted jobs.

Pedestrian accessibility: The Plum alternative would improve pedestrian accessibility to the greatest extent because it would provide a crossing of more substantial pedestrian barriers than the other corridors.

Objective C:
Support and help stimulate Central City development and redevelopment

Measuring against this objective involved analyzing how the alternatives would serve areas of targeted growth and future development as defined by the City of Spokane, potential redevelopment along the corridor, and potential pedestrian improvements. Highlights of the evaluation are as follows:

Potential to create jobs and business opportunities: The Pink alternative has the greatest potential to create jobs and business opportunities because it serves the greatest number of Targeted Area Development (TAD) Districts and the greatest number of Tax Increment Financing (TIF) Districts, and because it has the greatest number of vacant parcels within 1/4-mile of its potential footprint.

Urban form and activity: The Orange alternative would provide a slightly increased potential for pedestrian activity because it serves areas with high pedestrian-orientation rankings.

Objective D:

Comply with and support local and regional adopted goals, objectives, and plans

Evaluation against this objective involved evaluating how each alternative complied with adopted plans and policies. Highlights of the evaluation are as follows:

Land use plans and economic development goals: The Blue alternative and Pink alternative support existing plans to the greatest extent.

Transportation plans: All alternatives highly support existing transportation plans.

Objective E:

Optimize fiscal investments in central city transit infrastructure and service

Measuring alternatives against this objective involved consideration of the costs and potential funding sources for each short-listed alternative and mode. Highlights of the evaluation are as follows:

Affordability: All corridors fare equally under this evaluation measure. This criterion is more of a differentiator among modes.

Availability of funding: Capital cost and operating cost funding sources are anticipated to be equally available to all corridors.

Objective F:

Optimize the engineering design and environmental sensitivity of the project

To evaluate alternatives against objective, the team assessed the potential environmental impacts, equity considerations, and constructability considerations associated with each short-listed corridor and mode. The team also evaluated how each short-listed alternative would address energy conservation. Highlights of the evaluation are as follows:

Environmental impacts: All alternatives could potentially impact historic resources and noise-sensitive properties. The Pink and Plum alternatives have the lowest potential to impact a park. The Blue alternative has the lowest number of potential 90-degree turns. Overall, the Pink alternative fares best in this category.

Equity: All alternatives would serve a high percentage of minority and low-income persons. However, the Pink alternative would serve the highest percentage of minority and low-income persons, as well as the greatest concentration of transit-inclined persons (which also considers access to vehicles and age considerations [youth, elderly]).

Constructability: The Blue and Plum alternatives would present fewer engineering constraints than the Orange and Pink alternatives.

Energy conservation: All alternatives fared equally under this evaluation measure. The key differentiators among the four short-listed corridors are expected capital costs, ridership, and development capacity of land uses along each corridor.

The results of the evaluation for each alternative are summarized in Table 4-2.

Table 4-2

Summary of Detailed Corridor Analysis

Corridor	Pros	Cons
Blue	Serves a high number of activity areas and residences	Smaller reduction in existing transit travel time than Pink or Plum
	Highly compatible with existing land use plans	
	Few engineering constraints	
	Likely ridership response is moderate	
Orange	Highest presence of pedestrian-friendly features along alignment	Not as reliable during inclement weather due to the steep grades on South Hill
	Likely ridership response is moderate	Less reduction in transit travel time than Pink or Plum
		More engineering constraints than Blue and Plum
Pink	High reduction in transit travel time	Serves fewer activity areas than Blue and Plum
	Serves greatest number of TAD and TIF districts, and has the most vacant parcels	More engineering constraints than Blue and Plum
	Highly compatible with existing land-use plans	
	Serves highest percentage of low-income and minority residents	
	Likely ridership response is moderately high	
Plum	High reduction in transit travel time	Less reliable in inclement weather due to steep grades on South Hill
	Serves a high number of activity areas and existing residences	Travel time between University District and Medical District still substantially higher than driving
	Bisects the greatest number of pedestrian barriers	Engineering challenges (especially for streetcar) associated with reaching Medical District
	Serves a high number of existing and forecasted jobs	
	Likely ridership response is moderately high	

Corridor Selection

At its February 17, 2011, meeting, the Core Stakeholder Group selected the Blue alternative as the preliminary preferred corridor for public input. The selection was based on input and recommendations received from the Technical Advisory Group, Sounding Board, and general public. The rationale for selection of the Blue alternative was that it best meets the objectives of the project. Important features for the stakeholders were as follows:

- The Blue alternative connects the major activity centers, including the Downtown Core, the University District, and Browne's Addition.
- Existing transit ridership is high.
- The corridor is not technically difficult to build.
- Although other alternatives meet the project objectives on paper, the Core Stakeholder Group prefer the Blue corridor alternative for the first investment in High Performance Transit in the Central City area.

Detailed Mode Evaluation

The mode screening process resulted in the selection of four modes for further consideration:

- Enhanced Bus
- Electric Trolley Bus
- Streetcar
- Transit System Management (TSM)

These four modes are described in the next sections of this report, and evaluation results are presented in Section 4.3.5.

Example Enhanced Bus – Everett, WA

Enhanced Bus

The enhanced bus mode would have a carrying capacity of 35 to 90 people and a maximum operating speed of 60 miles per hour. Key infrastructure components of this mode include: buses, right-of-way improvements, stations and amenities, signal technology and systems, and (potentially) fueling infrastructure. The ride quality in this mode would vary and depend heavily on the surface conditions of the right-of-way.

Example Electric Trolley Bus – Lyon, France

Electric Trolley Bus

The Electric Trolley Bus mode would have a carrying capacity of 50 to 90 people and a maximum operating speed of 40 miles per hour. Key infrastructure

components of this mode include: trolley bus vehicles, right-of-way improvements, overhead wire, electric substations, stations and amenities, signal technology and systems, and a maintenance facility. The ride quality in this mode would vary and depend heavily on the surface conditions of the right-of-way.

Streetcar

The Streetcar mode would have a carrying capacity of 120 to 140 people and a maximum operating speed of 40 miles per hour. Key infrastructure components of this mode include: streetcar vehicles, in-street tracks, overhead wire, electric substations, stations and amenities, signal technology and systems, and a maintenance facility. Because the Streetcar would run on in-street tracks, the ride quality would be high.

Streetcar in Seattle, WA

TSM

Spokane Transit Authority bus

The TSM alternative is included in the CCTAA pursuant to FTA regulations for an Alternatives Analysis. The TSM alternative is defined as the best that can be done for mobility without constructing a new transit guideway. The TSM alternative is included in order to ensure that the alternative selected represents a cost-effective option for addressing the transportation need. For this project, the TSM alternative differs from the Enhanced Bus option because it does not include new station amenities. The TSM mode would consist of a "branded" bus route traveling along an alignment similar to that of the locally preferred alternative, described in more detail in section 5. The proposed route would travel from 4th Avenue on Spruce Street to Pacific Avenue. It would continue east to Maple Street and use First Avenue/Sprague Avenue between Maple Street and the Plaza. It would run on Post Street/Wall Street before traveling along Main Avenue/Spokane Falls Boulevard. Eastbound, from Main Avenue, the route would turn north on Division Street and turn east on Spokane Falls Boulevard toward Hamilton. Westbound, the route would continue on Spokane Falls Boulevard to Wall Street. Finally, the bus would travel between Trent and Sharp avenues on Hamilton Street before turning around.

For this mode, Spokane Transit would need to purchase seven new 40-foot buses (six vehicles for operation plus one spare vehicle). They could be branded with the same downtown shuttle markings as those that serve Route 1 Plaza–Arena Shuttle today.

The relationship of the TSM mode to the existing bus network would be as follows:

Route 26: Continue routing on North River Avenue, Division Street, Ruby Street, and Sharp Street between downtown Spokane and Hamilton. This routing avoids duplication of the new route; however, it does not reduce the number of buses needed. This route would continue to operate with 30-minute frequency during the day.

Route 28: Continue routing on North River Avenue, Division Street, Ruby Street, and Sharp Street between downtown Spokane and Hamilton. This routing avoids duplication of the new route; however, it does not reduce the number of buses needed. This route would continue to operate with 30-minute frequency during the day.

Route 29: Continue the same routing along Sprague Avenue, Riverside Avenue, Division Street, Ruby Street, Spokane Falls Boulevard, Riverpoint Boulevard, and Trent Road. This route would continue to operate with 30-minute frequency during the day.

Route 60: Discontinue routing through Browne's Addition and along Sprague and First Avenues. Instead, the route would travel on Monroe Street, Lincoln Street, and Second and Third Avenues between the Plaza and Sunset Highway. This routing avoids duplication of the new route and provides 2 to 3 minutes of travel time savings for those traveling to the West Plains and Spokane International Airport from downtown Spokane. This route would continue to operate with 30-minute frequency during the day.

Route 61: Discontinue routing through Browne's Addition and along Sprague and First Avenues. Instead, the route would travel on Monroe Street, Lincoln Street, and Second and Third Avenues between the Plaza and Sunset Highway. This routing avoids duplication of the new route and provides 2 to 3 minutes of travel time savings for those traveling to the West Plains from downtown Spokane. This route would continue to operate with 30-minute frequency during the day.

Results of the Detailed Mode Evaluation

The enhanced bus, electric trolley bus, and streetcar modes were evaluated against project objectives, as described below. The criteria listed below are those that apply to modes.

Objective A:

Increase the effectiveness and efficiency of transit within Central City Spokane

Reliability of service: Enhanced Bus would be the most likely mode to provide reliable service because of its high level of route flexibility and its ability to operate on steep grades and in winter weather. An Enhanced Bus vehicle would be able to divert service to different streets in the event of a snow storm blocking its regular route. An Electric Trolley Bus can run off-wire and therefore may be able to accommodate small changes in route, but a streetcar cannot run off-rail. Electric Trolley Bus would be the next most likely mode to provide reliable service, followed by streetcar.

Accommodation of growth: Enhanced Bus would be the most flexible mode to serve land-use changes within all corridors. Enhanced Bus would be the most flexible mode to accommodate growth in demand within all corridors.

Objective B:

Provide improved transit connections to, from, and between Central City activity areas

Transit accessibility: All modes fare equally under this evaluation measure because any of the modes could apply to the corridors that were found to be highly transit accessible (Blue and Plum). This criterion is more of a differentiator for corridors.

Pedestrian accessibility: All modes fare equally under this evaluation measure because any of the modes could apply to the corridor that was found to be highly pedestrian accessible (Plum). This criterion is more of a differentiator for corridors.

Objective C:

Support and help stimulate new central city development and redevelopment

Potential to create jobs and business opportunities: All modes fare equally under this evaluation measure because any of the modes could apply to the Pink corridor, which was found to have the highest potential to create jobs and business opportunities. This criterion is more of a differentiator for corridors.

Urban form and activity: All modes fare equally under this evaluation measure.

Objective D:

Comply with and support local and regional adopted goals, objectives, and plans

Land-use plans and economic development goals: All modes fare equally under this evaluation measure because all are consistent with the currently adopted local land use and economic development planning documents.

Transportation plans: All modes fare equally under this evaluation measure because all are consistent with the currently adopted local transportation planning documents.

Objective E:

Optimize fiscal investments in central city transit infrastructure and service

Affordability: Enhanced Bus is the least expensive mode, with estimated capital costs of $3 million to $4.5 million per mile and estimated operating costs of $99 per vehicle revenue hour. Electric Trolley Bus is more expensive than Enhanced Bus, but less expensive to build than Streetcar, with estimated capital costs of $6 million to $12 million per mile and estimated operating costs of $108 per vehicle revenue hour. Streetcar is the most expensive mode, with estimated capital costs of $34 million to $51 million per mile and estimated operating costs of $202 per vehicle revenue hour.

Availability of funding: It is anticipated that capital cost and operating cost funding sources are equally available to all modes.

Objective F:

Optimize the engineering design and environmental sensitivity of the project

Environmental impacts: All modes fare equally under this evaluation measure because all modes could apply to any of the corridors under consideration. All modes would be subject to a detailed analysis under the National Environmental Policy Act and the Washington State Environmental Policy Act before implementation.

Equity: All modes fare equally under this evaluation measure because all modes could apply to any of the corridors under consideration.

Constructability: All modes are feasible to construct on the selected corridor and therefore fare equally under this evaluation measure.

Energy conservation: Electric Trolley Bus has a slightly higher likelihood of reducing greenhouse gas emissions during operations for all corridors than Enhanced Bus or Streetcar.

Mode Selection

In order to narrow down the list from three to one preferred mode, the Core Stakeholder Group established overall preferred attributes of the mode, and the project team expanded on the differences among the three modes by applying an evaluation process.

Preferred Mode Attributes

The Core Stakeholder Group recommended these following preferred attributes of the mode at its March 3, 2011 meeting.

Substantial Stations with Off-Vehicle Fare Collection. The Spokane Central City system will include easy-to-find stations with passenger amenities such as benches, lighting, and signage. Fare collection will be done outside of the vehicles in order to streamline boarding processes and enhance travel time reliability.

Low Floor Boarding at all Doors. The Spokane Central City Line will be ADA-compliant and easily accessible for all riders.

Renewable Energy Source. The Spokane Central City Line will become an icon of environmental sustainability in the Spokane region.

High-frequency service. The Spokane Central City Line will have 10 to 15 minute headways at all hours of operation.

Distinctive branding. The Spokane Central City Line will be a unique, easy-to-find system with identifiable vehicles and clear wayfinding to stations, that residents and visitors alike can use.

Each of the three shortlisted modes could be designed to meet the preferred attributes. However, there are important differences between the electrically powered and the Enhanced Bus modes.

Permanence. Both electric modes would run on an overhead catenary wire. This would be a visual indicator of the permanence of the mode. Streetcar would also have rail embedded into the street.

Ride comfort. The Electric Trolley Bus and the Streetcar would provide a more comfortable ride than the enhanced bus mode due to the electric power and, for streetcar, the use of steel wheels and rail.

Cost. The Enhanced Bus mode would be substantially less expensive than the Electric Trolley Bus or Streetcar. The Enhanced Bus mode is estimated to have capital costs of $3-$4.5 million/mile, Electric Trolley Bus is estimated to have capital costs of $6 - $12 million/mile, and Streetcar is estimated to have capital costs of $34 - $51 million/mile.

Attributes of Electric Trolley Bus and Streetcar Modes

The two electric modes have many characteristics in common, but there are also some key differences. Table 4-3 provides a summary comparison of the physical and operating characteristics of the electric trolley bus and streetcar options.

Table 4–3

Attributes of Electric Trolley Bus and Streetcar

Attribute	Streetcar	Electric Trolley Bus
Expandability and Modification of Service	• Most difficult and expensive given infrastructure costs	• Moderate capital expense and flexibility • May be able to operate off-wire under battery power
Traction Power	• Electric traction power delivered through overhead wire • Traction power substations located along route • May be able to operate off-wire under battery power	• Electric traction power delivered through overhead wire • Traction power substations located along route • May be able to operate off-wire under battery power
Inclement Weather Performance	• Need to keep overhead wires free of ice • Plowing and sanding of routes recommended • Little experience in heavy snow climates with modern streetcars • Potential impact of ice on grade performance • Turnouts/switches may be heated	• Need to keep overhead wires free of ice • Plowing and sanding of routes required • Vehicles may be chained

Attribute	Streetcar	Electric Trolley Bus
Maintenance Requirements	• New rail right-of-way maintenance requirements • New overhead wire maintenance requirements • New rail vehicle maintenance facility and requirements	• New electric trolley bus wire maintenance requirements • Vehicle maintenance requirements
Ride Quality	• Smoothest ride surface (steel on steel) • Quiet electric motor • Smoothest acceleration and braking	• Dependent on road surface quality • Quiet electric motor • More dependent on driver behavior (braking, steering, etc.)
Presence of Overhead Wires	• Single overhead wire along entire right of way	• Double overhead wire along entire alignment • May be able to operate off-wire under battery power
Complement to Urban Land Use and Development	• Perceived permanence of the transit investment and electric power may be seen as a positive factor	• Perceived permanence of the transit investment and electric power may be seen as a positive factor
Greenhouse Gas and Environmental Impacts	• Can have 'zero-carbon' operations if electric power is from a renewable source • GHG emissions offset by energy consumed in infrastructure construction	• Can be "zero-carbon" if electric power is from a renewable source
Infrastructure Requirements and Cost	• Highest cost : ▪ Typical $34 - $51 million/mile ▪ High capital cost for rail, traction power, vehicles, and maintenance facilities	• Moderate cost: ▪ Typical $6 to $12 million/mile ▪ Upfront capital costs include electric traction power and vehicles
Maturity of Technology	• Moderate number of operating examples • Domestic manufacturing available • High level of interest among U.S. cities	• No recent systems conducted "from scratch" • Rail-guided variants more risky; involve proprietary technologies

Mode Characteristics and Project Objectives

Because the enhanced bus mode lacks substantial infrastructure other than stations, is not electrically powered, and does not have a high level of ride quality, it would not meet the project objectives to the same degree that the electric trolley bus or streetcar would. The Core Stakeholder Group therefore recommended dropping the alternative from further consideration.

This project was initiated by the City of Spokane and Spokane Transit Authority in response to the aspirations of residents and businesses for a vibrant and economically successful Central City. At the beginning of the study, the Core Stakeholder Group and the Sounding Board established objectives for a Central City circulator and incorporated these into the formal purpose and need statement. There are several objectives, summarized as follows:

- Stimulate economic growth and pedestrian activity in the Central City through new development, revitalization of existing buildings and attraction of jobs, new residents and shoppers
- Connect major activity areas within the Central City with the University District, Downtown, and the Medical District having the highest priority
- Reduce reliance on the automobile.

Table 4-4 illustrates the relationship of the mode characteristics to the project objectives.

Table 4–4
Relationship of Mode Characteristics to Project Objectives

	Stimulate Development	Connect Activity Areas	Reduce Auto Reliance
Substantial Stations	X		X
Vehicle Branding	X		X
Frequency and Travel Time	X	X	X
Low Floor Boarding	X		X
Permanence	X	X	X
Electric Power	X		
Ride Comfort	X	X	X

The evidence from programs in other cities is that predictability and reliability of a public transit investment can influence development decisions. There is ample documentation of this relationship for the Portland and Seattle Streetcar projects, but it has also been demonstrated for light rail projects in multiple cities across the country. In smaller communities such as Walla Walla, investments in downtown streetscape improvements have helped retain and attract retailers, restaurants, and employers. Anecdotal information and numerous studies in these and other communities confirm that the permanence of the investment provides certainty for property owners, businesses, and developers.

The other distinguishing feature of electric trolley buses and streetcar modes that is not present in the enhanced bus mode is electric power. Electrically powered vehicles tend to be quieter, ride comfort is better, and they integrate more easily into urban environments that include a lot of street level retail, restaurants, and other pedestrian-level activities. Because a good portion of the electric power in the Northwest is generated by hydroelectric sources, electric power is, in reality and perception, more sustainable than fossil-fueled vehicles. Thus, combined with

Overhead catenary system

branding and uniquely designed vehicles, there may be a “coolness” factor that goes with electrically powered vehicles and a perception of greater environmental benefits.

Public Feedback on Mode Options

Public involvement on the decision on mode technologies resulted in the following feedback:

Sounding Board: In a brief verbal poll of members in December 2010, a slight majority favored the streetcar mode, others split between enhanced bus and electric trolley bus modes.

March 2011 Open House: A majority of attendees favored a streetcar mode with “don’t know” and electric trolley bus mode ahead of the enhanced bus mode.

Downtown Stakeholder Groups: Survey results from May 2011 indicate that a strong majority prefers the electric trolley bus mode (62%), most could accept the streetcar mode, and the enhanced bus mode was the least acceptable option. 80% of the survey respondents believe the project is important for the vitality of the Central City in Spokane. Detailed results from this survey are provided in Appendix B.

5. The Locally Preferred Alternative

This section describes the locally preferred alternative (LPA) for the Spokane Central City Transit project. The LPA has been adopted by resolution by the STA Board of Directors and the Spokane City Council in July 2011. The LPA has been included in the 2012 updat eto the Metrpolitan Transportation Plan of the Spokane Regional Transportation Council.

Mode

The preferred mode is an electric trolley bus using enhanced vehicles that have styling and features similar to a streetcar. Because of this distinction, the vehicles are referred to as a "Modern Electric Trolley" or MET. The MET would operate with high frequency of service and offer substantial stations, off-board fare collection and other features generally associated with Light Rail, Streetcar or BRT modes.

Corridor

The LPA travels from Gonzaga University to Browne's Addition. Along the way, it connects the Riverpoint campus, Spokane Convention Center, East Downtown activity area, Downtown Core activity area, and West Downtown activity area. Some of the route would use the same street for both directions of travel, but—given the presence of couplets in the downtown area—some of the route would use different streets.

The final alignment for the LPA will not be determined until the project moves into the design phase. However, for planning purposes, the following alignment is assumed:

From east to west:

- Starting from the intersection of E. Boone Avenue and N. Cincinnati Street
- Travel south on Cincinnati Avenue to E. Spokane Falls Boulevard
- Travel west on E. Spokane Falls Boulevard across the Spokane River
- Continue west on E. Spokane Falls Boulevard to S. Wall Street
- Travel south on S. Wall Street to W. Sprague Avenue
- Travel west on W. Sprague Avenue to S. Maple Street
- Travel south on S. Maple Street to W. Pacific Avenue
- Travel west on W. Pacific Avenue to S. Spruce Street
- Travel south on S. Spruce Street to W. Fourth Avenue

From west to east:

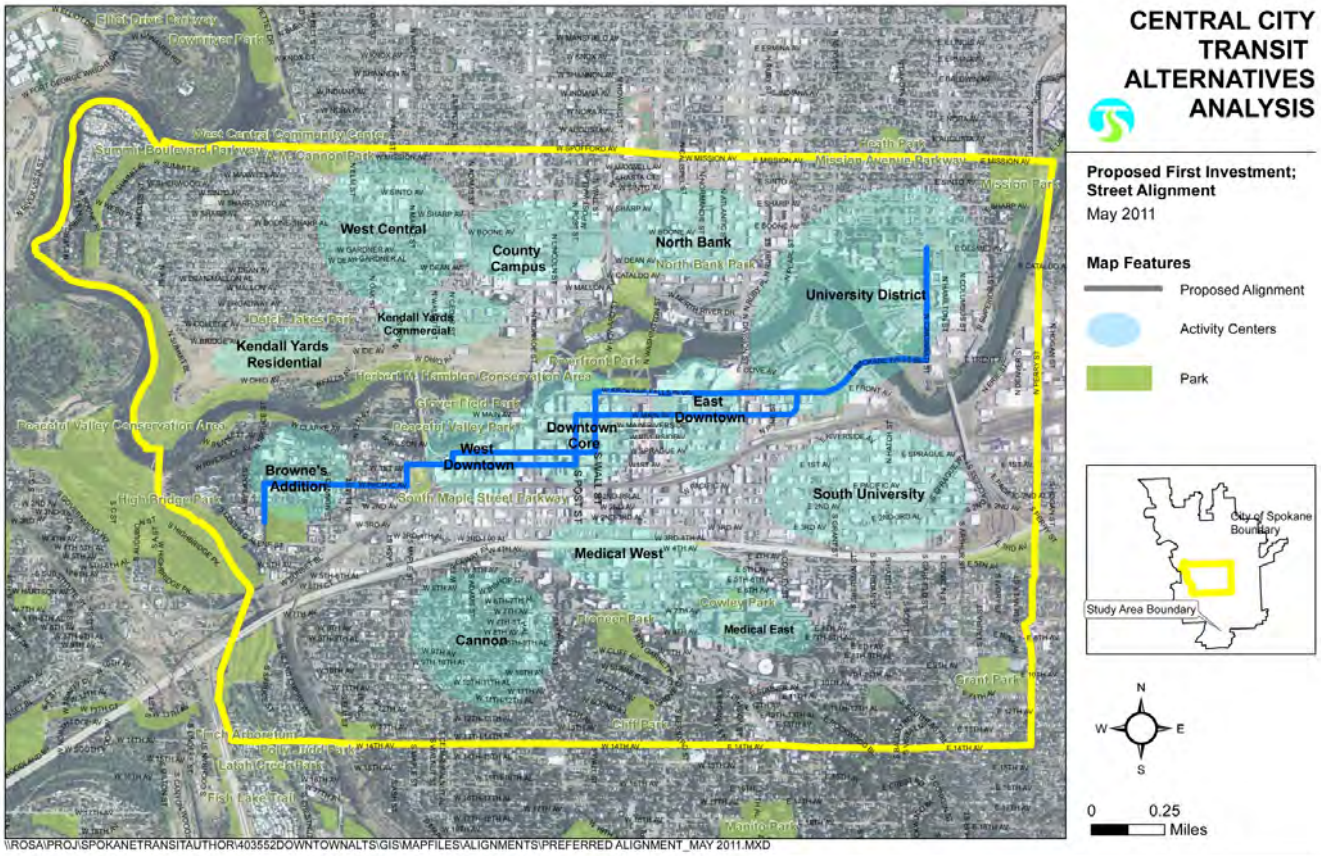
- Starting from the intersection of W. Fourth Avenue and S. Spruce Street
- Travel north on S. Spruce Street to W. Pacific Avenue
- Travel east on W. Pacific Avenue to S. Maple Street
- Travel north on S. Maple Street to W. First Avenue
- Travel east on W. First Avenue to S. Post Street
- Travel north on S. Post Street to W. Main Avenue
- Travel east on W. Main Avenue to N. Pine Street
- Travel north on N. Pine Street to E. Spokane Falls Boulevard
- Travel east on E. Spokane Falls Boulevard across the Spokane River to N. Cincinnati Street
- Travel north on N. Cincinnati Street to E. Desmet Avenue

Figure 5-1 depicts the LPA alignment (station locations for the LPA were not determined as part of the AA process).

Appendix C contains resolutions adopting the Locally Preferred Alternative.

Figure 5-1

LPA Alignment



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6. Summary of Public Involvement Activities

This section describes the committees involved in the project, the three major open houses conducted during the course of the project, the content and use of the project Web site, and the ways in which the project provided access to Title VI and environmental justice populations.

The AA process began in March 2010 and was conducted over three major phases: "Understand," "Analyze," and "Select," as illustrated by the project schedule in Figure 6-1.

Phase I: Understand
(March 2010 – September 2010) involved:

- Preparation of the purpose and need statement and project goals and objectives
- Identification of the key activity areas for residential, employment, medical, and shopping locations
- Travel market assessment
- Development of the universe of alternatives

This phase included a public open house on June 29, 2010, to gather public input on the list of alternative modes and corridors to be considered. Three additional corridor alternatives were added on the basis of feedback received at this meeting.

Phase II: Analyze
(October 2010 – January 2011) involved the screening of a long list of alternative corridors against the purpose and need statement and evaluation of the short list of alternative corridors and modes against a detailed set of evaluation criteria. This phase also included a public open house on October 26, 2010, to gather public feedback on the short list of alternative modes and corridors.

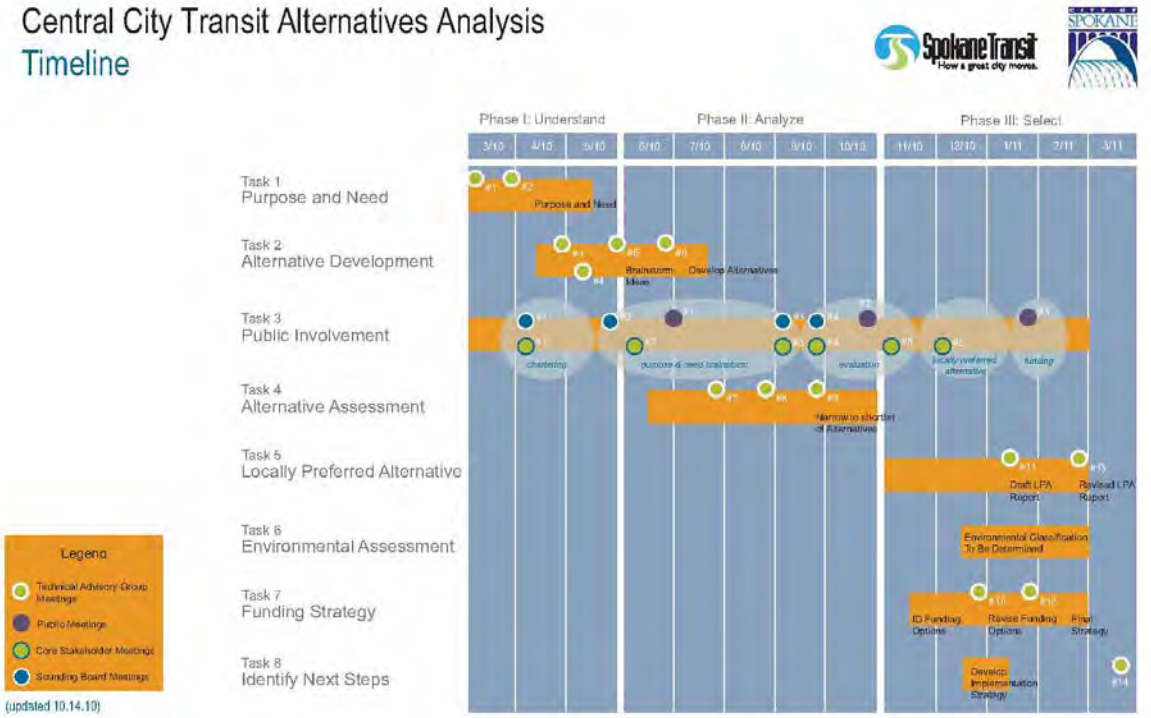
June 2010 Open House

October 2010 Open House

March 2011 Open House

Phase III: Select
(February 2011 – May 2011) involved selection of the corridor and mode LPA, targeted outreach to business and community stakeholder groups, and selection of the preferred mode. This phase included a public open house on March 29, 2011 to present and gather public feedback on the corridor and mode LPA, and numerous presentations to residential and business groups.

Figure 6-1
Project Timeline



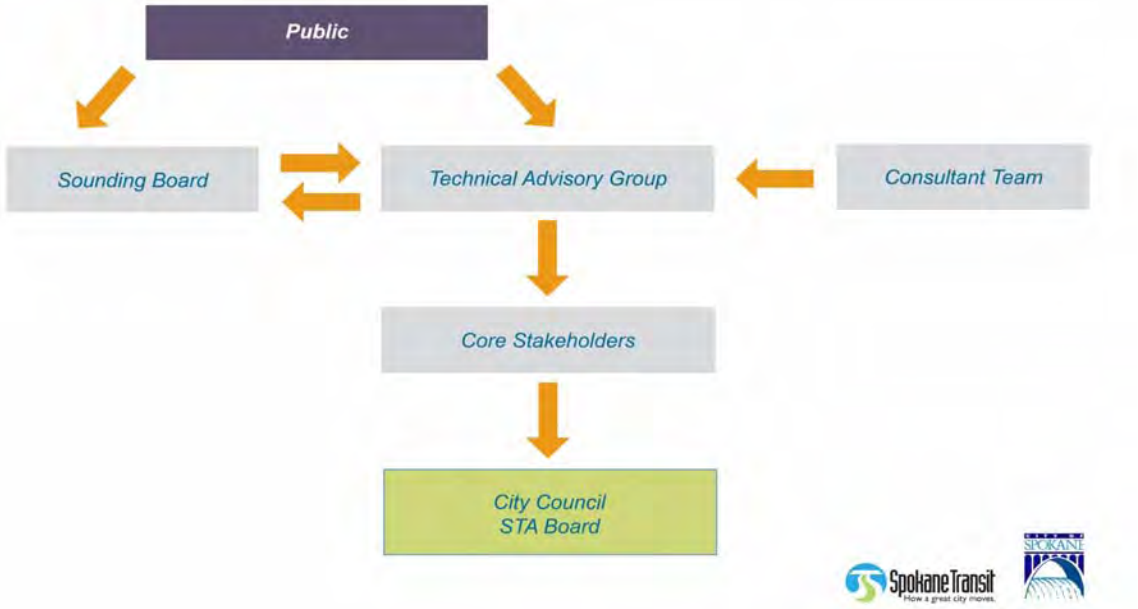
Project Committees

The project convened three separate committees to guide project development:

- Core Stakeholder Group
- Technical Advisory Group
- Sounding Board

Figure 6-2 depicts the relationship among the three groups, the public, the consultant team, and the governing bodies. The sections that follow include the membership lists for each group and describe the discussions and outcomes of meetings conducted by each group.

Figure 6-2
Project Committee Structure



Core Stakeholder Group

The Core Stakeholder Group (CSG) includes decision makers of stakeholder organizations in Spokane. Table 6-1 lists the group members.

Table 6-1
Core Stakeholder Group Roster

Name	Affiliation
E. Susan Meyer, CEO*	Spokane Transit Authority
Mary Verner, Mayor* Teresa Brum Sheila Collins JoAnne Wright	City of Spokane
Mark Rohwer Glenn Miles	Spokane Regional Transportation Council
Kevin Twohig	Spokane Public Facilities District
Judy Cole Latisha Hill	Avista Corporation
Marty Dickinson	Downtown Spokane Partnership
Brian Pitcher	Washington State University, Spokane
Elaine Couture	Providence Sacred Heart Medical Center
William Gilbert	Deaconess Hospital
Project Management and Support	
Karl Otterstrom, Spokane Transit Authority	
Joel Soden, Spokane Transit Authority	

* indicates the two co-chairs of the Core Stakeholders Group

The CSG met nine times over the course of the project:

Meeting 1 was held on April 6, 2010, at the Spokane YMCA/YWCA Building (930 N. Monroe Street). The purpose of this meeting was to discuss the role of the CSG, provide an overview of the project, and discuss project goals and objectives. **This meeting represented a key milestone because it formally convened the CSG.**

Meeting 2 was held on May 25, 2010, at the Spokane Public Library. The purpose was to review project goals and objectives and discuss the long list of alternatives and the meeting plan for the first public open house (held on June 29, 2010).

Meeting 3 was held on September 1, 2010, at Spokane City Hall. The purpose was to review the long list of alternatives, present a framework for screening the long list of alternatives and the draft

evaluation framework, and present a revised purpose and need statement. **This meeting was a key milestone because in it the CSG formally approved the purpose and need statement for the project.**

Meeting 4 was held on September 28, 2010, at Spokane City Hall. The purpose of this meeting was to review changes made to the alternative screening questions and to present the short list of alternatives.

Meeting 5 was held on November 3, 2010, at Spokane City Hall. The purpose of this meeting was to review feedback heard at the second public open house (held on October 26, 2010), to discuss the short list of modes, and to discuss the process for project decision making.

Meeting 6 was held on December 7, 2010, at Spokane City Hall. The purpose of this meeting was to review and discuss preliminary evaluation results of the short-listed corridors and modes.

Meeting 7 was held on February 17, 2011, at Spokane City Hall. The purpose of this meeting was to recommend the corridor to be advanced into project development, and to review results of the detailed mode evaluation. **This meeting was a key milestone because it resulted in the advancement of the Blue alternative as the preferred corridor alternative.**

Meeting 8 was held on March 3, 2011, at Spokane City Hall. The purpose of this meeting was to review and vote on a recommendation for preferred characteristics of the mode.

Meeting 9 was held on June 28, 2011, at Spokane City Hall. The purpose of this meeting was to select a preferred mode.

Technical Advisory Group

The Technical Advisory Group (TAG) was made up of technical staff members from agencies represented on the CSG. Table 6-2 lists the group members.

Table 6-2
Technical Advisory Group Roster

Name	Affiliation
Karl Otterstrom Molly Myers Joel Soden	Spokane Transit Authority
Ted Horobiowski	Avista Corporation
Andrew Rolwes	Downtown Spokane Partnership
Teresa Brum Louis Mueler Jo Anne Wright Ray Wright Gerry Gemmill	City of Spokane
Ryan Stewart	Spokane Regional Transportation Council

Name	Affiliation
Matt Gibson	Spokane Public Facilities District
John Schad	Washington State University
Mark Olson	Deaconess Hospital
Mike Kelly	Sacred Heart Hospital

The TAG met 11 times through the duration of the project:

Meeting 1 was held on March 5, 2010, at the Spokane Transit Authority Plaza. The purpose of this meeting was to identify project goals, objectives, and critical success factors and to discuss roles and responsibilities of the TAG.

Meeting 2 was held on March 31, 2010, at the Spokane Transit Authority Plaza. The purpose was to review agendas for upcoming chartering meetings with the CSG and the Sounding Board and to discuss best practices in developing a purpose and need statements.

Meeting 3 was held on April 22, 2010, at the Spokane Transit Authority Plaza. The purpose was to review preliminary findings from the travel market assessment and to discuss a preliminary purpose and need statement for the project.

Meeting 4 was held on May 20, 2010, at the Spokane Transit Authority Plaza. The purpose was to review the preliminary long list of alternatives and to discuss the first public open house (held on June 29, 2010).

Meeting 5 was held on June 24, 2010, at the Spokane Transit Authority Plaza. The purpose was to review the travel market assessment and the alternatives initiation package and to discuss final preparations for the first public open house (June 29, 2010).

Meeting 6 was held on August 26, 2010, at the Spokane Transit Authority Plaza. The purpose was to discuss the long list of alternatives, to review the revised purpose and need statement and evaluation framework, and to begin discussing project funding.

Meeting 7 was held on October 13, 2010, at the Spokane Transit Authority Plaza. The purpose was to discuss the agenda for the second public open house (October 26, 2010), to discuss evaluation methodologies, and to review the evaluation process, documentation procedures, and timeline.

Meeting 8 was held on November 18, 2010, at Spokane City Hall. The purpose of this meeting was to review preliminary findings from the alternatives evaluation.

Meeting 9 was held on December 16, 2010, at the Spokane Transit Authority Plaza. The purpose was to review the revised findings from the alternatives evaluation process and to discuss next steps for the project.

Meeting 10 was held on February 3, 2011, at the Spokane Transit Authority Plaza. The purpose was to discuss the preliminary corridor recommendation and to review findings of the detailed mode analysis.

Meeting 11 was held on August 8, 2011, at the Spokane Transit Authority Plaza. The purpose was to discuss the STA Board of Directors and Spokane City Council adoption of the LPA, and to review the draft Alternatives Analysis Summary Report.

Sounding Board

The Sounding Board is made up of citizens in the Spokane region. Citizens were selected through an application process, and the board was designed to include geographic and demographic diversity. Table 6-3 lists the members of the Sounding Board.

Table 6-3
Sounding Board Roster

John Barber	Judy Gardner	Gary Pollard
Don Barbieri	Cindy Green	Diana Smith
Kennet Bertelsen, P.E.	Tobby Hatley	Kay Stoltz
Rebecca Bishop	Phyllis Holmes	Harold Vanderpool
Karen Byrd	Ami Keiffer	Evan Verduin
Christopher Cargill	Ross Kelley	Liz West
Paul Delaney	Paul Kropp	Jason Wheaton
Marian Evenson	Mike McLeod	Robert Zimburean
Nick Flett	Pasert Moua	

The Sounding Board met seven times over the course of the project:

Meeting 1 was held on April 6, 2010, at the Spokane Public Library. The purpose was to introduce Sounding Board members and establish the charge of the committee, to provide an overview of the project, and to discuss the project's goals and objectives.

Meeting 2 was held on May 25, 2010, at the Spokane Public Library. The purpose was to discuss the long list of alternatives and the plan for the first public open house (held on June 29, 2010).

Meeting 3 was held on August 31, 2010, at the Global Credit Union (1520 W. Third Avenue). The purpose was to discuss the long list of alternatives, review the revised purpose and need statement and evaluation framework, and begin discussing funding for the project.

Meeting 4 was held on September 28, 2010, at the Spokane Public Library. The purpose was to review changes made to the alternative screening questions and to present the short list of alternatives.

Meeting 5 was held on December 7, 2010, at the Spokane Public Library. The purpose was to review and discuss the preliminary evaluation results of the short-listed corridors and modes.

Meeting 6 was held on March 3, 2011, at the Global Credit Union. The purpose was to review the detailed mode evaluation results and to recommend characteristics of the preferred mode.

Meeting 7 was held on June 28, 2011, at the Spokane Public Library. The purpose was to review and vote on a preferred mode.

Public Open Houses

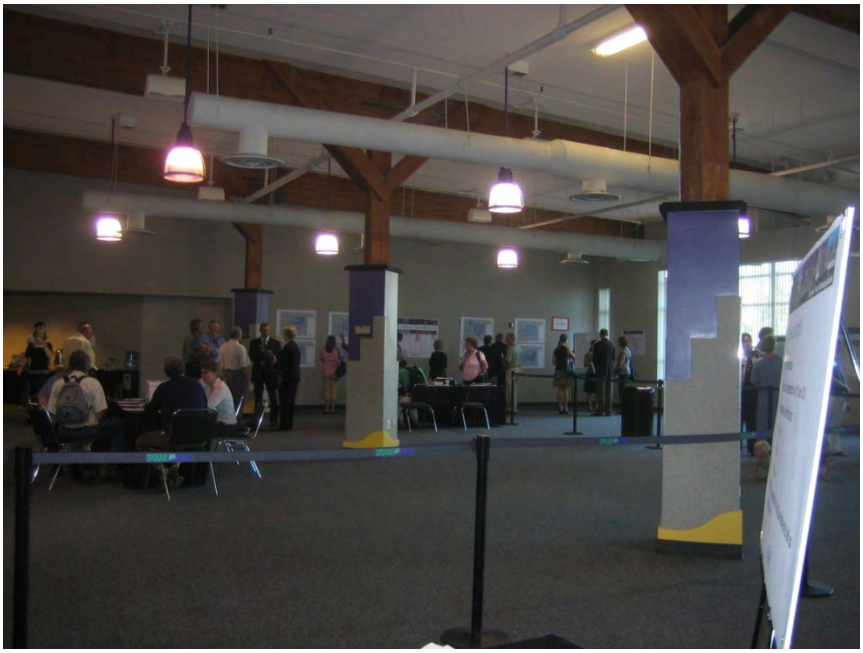
The Spokane Central City Transit Alternatives Analysis held three public open houses between the project's beginning in March 2010 and June 2011. The meetings were held at key milestones in the project's development. Each open house was held at a different location, in order to encourage representation from as many citizens as possible. The open houses are described in the following subsections.

Open House #1 – June 29, 2010

The first open house was held on June 29, 2010, from 6:00 to 8:00 p.m. at the Spokane Arena, located at 720 West Mallon in downtown Spokane. The purpose was to:

- Share information and collect feedback about the draft evaluation framework, purpose and need statement, and goals for the project
- Gather input about the draft concepts and determine whether there are any missing concepts that should be evaluated
- To share information about the project's next steps

Approximately 85 people attended this open house. Public comment was collected through a written comment form and by staff members on flip-chart pads.



Open House #1, June 2010

Open House #2 – October 26, 2010

The second project open house was held on October 26, 2010, at the Washington State University bookstore (known as "the Bookie") on the Riverpoint campus, at 412 E. Spokane Falls Boulevard. The purpose was to present and solicit feedback on the short-listed alternatives and modes. This open house was presented in coordination with other active projects in Central City Spokane, including the East Sprague Redevelopment Study and the University District Bicycle and Pedestrian Bridge. Approximately 140 people attended this open house. Public comment was collected through a written comment form and by staff members on flip-chart pads.

Open House #2, October 2010

Open House #3 – March 29, 2011

The third project open house was held on March 29, 2011, at Spokane City Hall, 808 W. Spokane Falls Boulevard. The purpose was to present the recommended corridor and the attributes of the preferred mode. Like the October 2010 open house, this open house was presented in coordination with other active projects in the area. Public comment was collected through a written comment form and by staff members on flip-chart pads.

Open House #3, March 2011

Web Site

The project Web site is located at www.connectspokane.org. It has been active since March 2010 and is updated regularly. This Web site was developed using five major sub-pages, entitled: "home," "project information," "resources," "get involved," and "comment."

Project Website

- The **Home** page (http://www.connectspokane.org/home.aspx) welcomes visitors to the site and provides a short description of the project, goals, and ways to get involved. This page also includes a sidebar labeled "What's New?" that announces recent publications or upcoming meetings.
- The **Project Information** page (http://www.connectspokane.org/ProjectInfo.aspx) provides a more detailed description of the project, project history, description of the agencies and organizations involved, project timeline, and a list of frequently asked questions.
- The **Resources** page (http://www.connectspokane.org/Resources.aspx) provides project reports and documents, materials provided at project meetings, and project maps and graphics.
- The **Get Involved** page (http://www.connectspokane.org/GetInvolved.aspx) lists details of public open houses and summarizes past open houses. It also provides a form for joining the project mailing list.The **Comment** page (http://www.connectspokane.org/Comment.aspx) provides a form for submitting a comment on the project, as well as contact information for the Spokane Transit Authority project manager.

Approximately 90 comments were received through the project Web site between June 2010 and July 2011.

Targeted Outreach Events/Business Community Events

The CCTAA project team conducted various meetings with stakeholders within the study area as well as business and community leaders who have an interest in transportation and economic development. Several key events are identified below.

February 17, 2011: Downtown Spokane Partnership Annual Meeting. The first investment alignment corridor, as agreed to by the Core Stakeholders, was displayed in an information booth at the annual meeting of the Downtown Spokane Partnership, which had more than 100 attendees.

March 30, 2011: Business Community Breakfast Forum. A breakfast forum at the Spokane Convention Center was conducted specifically to discuss the CCTAA effort with the business community. The meeting was open to the general public with invitations mailed to property owners

along the Blue alternative as well as other business and community leaders. Approximately 60 members of the business community attended this meeting. The meeting was approximately 90 minutes long and included a presentation on the preferred first investment (alignment corridor), a discussion of the three mode options, and a question and answer session facilitated by the president of the Downtown Spokane Partnership.

April 18, 2011: Presentation to the Greater Spokane Incorporated Board Meeting. Spokane Transit Authority staff presented the CCTAA to the Greater Spokane Incorporated board meeting and fielded questions about the purpose and need, alignment, and mode options.

May 25, 2011: Presentation to the Downtown Spokane Partnership (DSP). Spokane Transit Authority and City of Spokane staff presented to the boards of the Downtown Spokane Partnership, Business Improvement District, and the University District Development Association at a combined meeting. The purpose was to answer questions on the modes, including costs and funding strategies. In advance of this meeting, the DSP circulated a survey to board members and association members with property interests in the corridor concerning the project and mode options. Spokane Transit tabulated the results, which are provided in Appendix B of this report. Approximately 30 members of the Downtown Spokane Partnership attended this meeting.

July, 2011: Presentations to the Spokane City Council (various). Spokane Transit Authority and City of Spokane staff presented to the Spokane City Council at a briefing July 18, at a study session July 21, and at a public hearing July 25th on the recommended LPA. At its regular July 25th meeting the Spokane City Council voted unanimously to adopt the project's LPA.

July, 2011: Presentation to the STA Board of Directors. Spokane Transit Authority and City of Spokane staff presented to the STA Board of Directors on the recommended LPA. At its regular July 20th meeting the STA Board of Directors voted unanimously to adopt the project's LPA.

Title VI Outreach

The proposed project, Spokane Central City Transit Alternatives Analysis, has complied with all regulations provided in the Americans with Disabilities Act of 1990 (ADA) as well as the ADA Amendments of 2008, Title VI of the Civil Rights Act of 1964, and Executive Order 12898 ("Federal Actions to Address Environmental Justice in Minority and Low-Income Communities.") These regulations require that all persons, including people with disabilities and people who do not speak English, be able to engage in and submit comment on a publicly funded process.

The following steps have been taken to ensure equal access during the life of this project:

- All public meetings were held at ADA-accessible locations.
- Translation services were available upon request.
- The neighborhood associations near the project area were contacted before each open house to advertise the event.

Each public open house was advertised on City Cable 5, a local public-access cable channel.

7. Funding

STA intends to fund the capital costs for this project through a combination of local, state, and federal funds. Federal funds will be sought through FTA's Small Starts program.

At this time, Spokane Transit intends to submit a funding request for this project's capital costs through the FTA Small Starts program. Small Starts, authorized through SAFETEA-LU,[6] is designed for projects having total cost of $250 million or less and for grant requests of less than $75 million. FTA requires a project be the result of a rigorous analysis of alternatives leading to the selection of an LPA. FTA's Small Starts rating measures and criteria will be used to enable FTA to determine the costs and benefits of the project and the level of local financial commitment to it. FTA will also assess the Spokane Transit Authority's and the project's readiness to advance from AA into project development. Financial assistance under Section 5309 for construction of a Small Starts project would be provided through a Project Construction Grant Agreement (PCGA) that would be negotiated during project development. Additional information on FTA's Small Starts Section 5309 grant funding process may be found at http://www.fta.dot.gov.

Local funding is anticipated to come from diverse sources. At the time of this report's completion, STA has begun conversations with the community about local funding sources but these sources have not been confirmed. Potential local funding sources may include a local improvement district or sales tax increases.

STA intends to develop a funding plan for operations and maintenance of the system in future phases of the project, once the environmental analysis and preliminary engineering have been completed and more specifics are known about the system.

[6] Safe Accountable Flexible Efficient Transportation Equity Act: A Legacy for Users

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Spokane Central City Transit Alternatives Analysis
Preliminary Alternatives Evaluation

Draft as of December 3, 2010

High = favorable rating; Low = unfavorable rating

		BLUE CORRIDOR		ORANGE CORRIDOR		PINK CORRIDOR		PLUM CORRIDOR	
CRITERION	**MEASURE**	***Justification***	***Rating***	***Justification***	***Rating***	***Justification***	***Rating***	***Justification***	***Rating***
Objective A: Increase the effectiveness and efficiency of transit within central city Spokane									
Travel Time*	Actual travel time	1,102	*Mediu*	1,057	*Medium*	1,654	*High*	1,540	*High*
	Perceived travel time	1,416	*Medium*	1,438	*Medium*	2,155	*High*	2,005	*High*
**Travel time values are unitless index values that represent a weighted aggregate travel time savings for a set of Origin-Destination pairs.*									
Ridership Potential	Likely ridership response	Medium	*Medium*	Medium	*Medium*	High	*High*	High	*High*
Ease of use	Ability of new and infrequent riders to understand the service and find stops	- A single route replaces multiple existing STA services, simplifying connections to Browne's Addition and University District - More frequent service during peak periods (10 minutes) - Extends higher quality service to weekends/off peaks (minimum 15 minute service)	*Medium*	- A single route replaces multiple existing STA services, simplifying connections to County Campus and Medical District - More frequent service during peak periods (10 minutes) - Extends higher quality service to weekends/off peaks (minimum 15 minute service)	*Medium*	- A single route replaces multiple existing STA services, simplifying connections to County Campus, Kendall Yards, and University District - More frequent service during peak periods (10 minutes) - Extends higher quality service to weekends/off peaks (minimum 15 minute service)	*Medium*	- A single route replaces multiple existing STA services, simplifying to University District and Medical District - More frequent service during peak periods (10 minutes) - Extends higher quality service to weekends/off peaks (minimum 15 minute service)	*Medium*
Reliability of service (Alignment)	Ability of transit service to be maintained due to scheduled or unscheduled events or weather conditions	Low Risk	*High*	Moderate Risk -Grades on South Hill during winter operations -Events at Riverfront Park including Hoopfest	*Medium*	Low Risk -Events at Riverfront Park including Hoopfest	*High*	Moderate Risk -Grades on South Hill during winter operations	*Medium*
Reliability of service (Mode)	Ability of transit service to be maintained due to scheduled or unscheduled events or weather conditions	EhB: Low Risk: - High degree of route flexibility - Low impact of grades/winter weather ETB: Moderate Risk - Some route flexibility if batter equipped - Overhead electric wires prone to icing Streetcar: Higher Risk - Lowest Route Flexibility - Overhead electric wires prone to icing	*Enhanced bus: High* *Electric trolleybus: Medium* *Streetcar: Low*	EhB: Low Risk: - High degree of route flexibility - Low impact of grades/winter weather ETB: Moderate Risk - Some route flexibility if batter equipped - Overhead electric wires prone to icing Streetcar: Higher Risk - Lowest Route Flexibility - Overhead electric wires prone to icing	*Enhanced bus: High* *Electric trolleybus: Medium* *Streetcar: Low*	EhB: Low Risk: - High degree of route flexibility - Low impact of grades/winter weather ETB: Moderate Risk - Some route flexibility if batter equipped - Overhead electric wires prone to icing Streetcar: Higher Risk - Lowest Route Flexibility - Overhead electric wires prone to icing	*Enhanced bus: High* *Electric trolleybus: Medium* *Streetcar: Low*	EhB: Low Risk: - High degree of route flexibility - Low impact of grades/winter weather ETB: Moderate Risk - Some route flexibility if batter equipped - Overhead electric wires prone to icing Streetcar: Higher Risk - Lowest Route Flexibility - Overhead electric wires prone to icing	*Enhanced bus: High* *Electric trolleybus: Medium* *Streetcar: Low*
Accommodate growth	Ability of mode to serve new land use changes in the downtown area	EhB: High Flexibility There is no power/guidance infrastructure to relocate ETB: Medium Flexibility Overhead electric wires may need to be relocated; Alternatively some dual-mode vehicles can run on battery or diesel off wire Streetcar: Low Flexibility High cost of track expansion, modification and relocation Overhead electric wires must also be relocated	*Enhanced bus: High* *Electric trolleybus: Medium* *Streetcar: Low*	EhB: High Flexibility There is no power/guidance infrastructure to relocate ETB: Medium Flexibility Overhead electric wires may need to be relocated; Alternatively some dual-mode vehicles can run on battery or diesel off wire Streetcar: Low Flexibility High cost of track expansion, modification and relocation Overhead electric wires must also be relocated	*Enhanced bus: High* *Electric trolleybus: Medium* *Streetcar: Low*	EhB: High Flexibility There is no power/guidance infrastructure to relocate ETB: Medium Flexibility Overhead electric wires may need to be relocated; Alternatively some dual-mode vehicles can run on battery or diesel off wire Streetcar: Low Flexibility High cost of track expansion, modification and relocation Overhead electric wires must also be relocated	*Enhanced bus: High* *Electric trolleybus: Medium* *Streetcar: Low*	EhB: High Flexibility There is no power/guidance infrastructure to relocate ETB: Medium Flexibility Overhead electric wires may need to be relocated; Alternatively some dual-mode vehicles can run on battery or diesel off wire Streetcar: Low Flexibility High cost of track expansion, modification and relocation Overhead electric wires must also be relocated	*Enhanced bus: High* *Electric trolleybus: Medium* *Streetcar: Low*
	Ability of mode to accommodate growth in demand	EhB: High Flexibility - Low marginal cost of adding additional vehicles and service ETB: Medium Flexibility - Moderate marginal cost of adding additional vehicles and service within system design capacity - Expansions beyond design capacity may require expensive upgrades of traction power infrastructure Streetcar: Low Flexibility - Relatively high cost of adding vehicles and service - Expansions beyond design capacity may require expensive upgrades of traction power infrastructure	*Enhanced bus: High* *Electric trolleybus: Medium* *Streetcar: Low*	EhB: High Flexibility - Low marginal cost of adding additional vehicles and service ETB: Medium Flexibility - Moderate marginal cost of adding additional vehicles and service within system design capacity - Expansions beyond design capacity may require expensive upgrades of traction power infrastructure Streetcar: Low Flexibility - Relatively high cost of adding vehicles and service - Expansions beyond design capacity may require expensive upgrades of traction power infrastructure	*Enhanced bus: High* *Electric trolleybus: Medium* *Streetcar: Low*	EhB: High Flexibility - Low marginal cost of adding additional vehicles and service ETB: Medium Flexibility - Moderate marginal cost of adding additional vehicles and service within system design capacity - Expansions beyond design capacity may require expensive upgrades of traction power infrastructure Streetcar: Low Flexibility - Relatively high cost of adding vehicles and service - Expansions beyond design capacity may require expensive upgrades of traction power infrastructure	*Enhanced bus: High* *Electric trolleybus: Medium* *Streetcar: Low*	EhB: High Flexibility - Low marginal cost of adding additional vehicles and service ETB: Medium Flexibility - Moderate marginal cost of adding additional vehicles and service within system design capacity - Expansions beyond design capacity may require expensive upgrades of traction power infrastructure Streetcar: Low Flexibility - Relatively high cost of adding vehicles and service - Expansions beyond design capacity may require expensive upgrades of traction power infrastructure	*Enhanced bus: High* *Electric trolleybus: Medium* *Streetcar: Low*

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		BLUE CORRIDOR		ORANGE CORRIDOR		PINK CORRIDOR		PLUM CORRIDOR	
CRITERION	**MEASURE**	***Justification***	***Rating***	***Justification***	***Rating***	***Justification***	***Rating***	***Justification***	***Rating***
Efficiency of the transit network	Travel time savings for the existing system	-Connection to other STA services via The Plaza - Potential expansions to future STA HPTN routes - Potential modifications to existing Browne's Addition Routes 60, 61 to provide more efficient regional service - Potential to optimize/improve Route 29 services for outlying areas	*Medium*	-Connection to other STA services via The Plaza - Potential expansions to future STA HPTN routes - Potential to optimize/express Monroe Corridor Services - Replacement/modification of the Route 2 Medical Shuttle	*Medium*	-Connection to other STA services via The Plaza- Potential expansions to future STA HPTN routes - Potential to optimize/express Monroe Corridor Services - Potential to optimize/improve Route 29 services for outlying areas	*Medium*	-Connection to other STA services via The Plaza- Potential expansions to future STA HPTN routes - Potential to optimize/improve Route 29 services for outlying areas - Replacement or modification of the Route 2 Medical Shuttle	*Medium*
Objective B: Provide improved transit connections to, from, and between downtown activity areas									
Transit accessibility	Number of major activity centers served	5 (2 are priority areas)	*High*	5 (2 are priority areas)	*High*	4 (2 are priority areas)	*Medium*	5 (3 are priority areas)	*High*
	Number of residential dwelling units located within 1/4 mile of the alternative (2008)	5,100	*High*	3,900	*Medium*	3,400	*Medium*	4,700	*High*
	Forecasted number of residential dwelling units located within 1/4 mile of the alternative (2030)	8,100	*High*	6,300	*Low*	7,600	*Medium*	7,700	*Medium*
	Number of jobs located within 1/4 mile of the alternative (2008)	26,600	*Medium*	31,300	*High*	21,800	*Low*	33,400	*High*
	Forecasted number of jobs located within 1/4 mile of the alternative (2030)	35,800	*Medium*	42,200	*High*	30,300	*Low*	45,000	*High*
Pedestrian accessibility	Number of significant pedestrian barriers crossed	3	*Medium*	4	*Medium*	4	*Medium*	6	*High*
Objective C: Support and help stimulate new central city development and redevelopment									
Potential to create jobs and business opportunities	Number of districts identified by the City as priority job creation areas	1	*Medium*	1	*Medium*	2	*High*	1	*Medium*
	Number of TIF districts served	1 (University District)	*Medium*	1 (West Quadrant)	*Medium*	2 (University District and West Quadrant)	*High*	1 (University District)	*Medium*
	Percentage of vacant parcels within 1/4 mile of the alternative	23%	*High*	16%	*Medium*	22%	*High*	20%	*Medium*
Urban form and activity	Increased pedestrian activity at street level: Pedestrian-orientation rankings by alternative	2.8. Rating is an average of the pedestrian orientation ratings for each street within the corridor. Streets were ranked on a scale of 1 to 4 (4 being best) based on the presence of pedestrian-friendly features.	*Medium*	3 Rating is an average of the pedestrian orientation ratings for each street within the corridor. Streets were ranked on a scale of 1 to 4 (4 being best) based on the presence of pedestrian-friendly features.	*High*	2.3 Rating is an average of the pedestrian orientation ratings for each street within the corridor. Streets were ranked on a scale of 1 to 4 (4 being best) based on the presence of pedestrian-friendly features.	*Low*	2.3 Rating is an average of the pedestrian orientation ratings for each street within the corridor. Streets were ranked on a scale of 1 to 4 (4 being best) based on the presence of pedestrian-friendly features.	*Low*
	Increased pedestrian activity at street level: Percentage of vacant parcels directly adjacent to each alternative alignment	15.9%	*Medium*	19.4%	*Medium*	21.4%	*High*	16.7%	*Medium*
Objective D: Comply with and support local and regional adopted goals, objectives, and plans									
Land use plans and economic development goals	Consistency with the City of Spokane's Comprehensive Plan	Consistent with 1 out of 1 applicable policies - Encourage use of alternative forms of transportation (in the University District)	*High*	Consistent with 0 out of 0 applicable policies. - The orange corridor does not enter the University District and is therefore not applicable to policies specifically for the University District	-	Consistent with 1 out of 1 applicable policies - Encourage use of alternative forms of transportation (in the University District)	*High*	Consistent with 1 out of 1 applicable policies - Encourage use of alternative forms of transportation (in the University District)	*High*
	Consistency with the Riverpoint Campus Master Plan	Consistent with 7 out of 7 applicable policies.	*High*	Consistent with 7 out of 7 applicable policies. - Orange Corridor exclusive objective in compliance: Improve access to Riverfront Park and Spokane River for all modes of travel	*High*	Consistent with 8 out of 8 applicable policies. - Pink Corridor exclusive objective in compliance: Develop Kendall Yards and establish strong links to Downtown Core	*High*	Consistent with 7 out of 7 applicable policies	*High*
	Consistency with the Fast Forward Spokane: Downtown Plan Update	Consistent with 6 out of 6 applicable policies	*High*	Consistent with 0 out of 0 applicable policies. - The orange corridor does not enter the Univeristy District and is therefore not applicable to policies specifically for the University District	-	Consistent with 6 out of 6 applicable policies	*High*	Consistent with 6 out of 6 applicable policies	*High*

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CRITERION	**MEASURE**	***Justification***	***Rating***	***Justification***	***Rating***	***Justification***	***Rating***	***Justification***	***Rating***
Transportation plans	Consistency with the University District Master Plan	Serves 1 out of 7 TAD Districts and 1 TIF district. - This includes the University District TAD and the University District Revitalization Area TIF.	*Medium*	Serves 1 out of 7 TAD districts and 1 TIF district. - This includes the North Bank TAD and the West Quadrant TIF.	*Medium*	Serves 2 out of 7 TAD districts and 2 TIF districts. - This includes North Bank and University Districts TADs and the West Quadrant and University District Revitalization Area TIFs.	*Medium*	Serves 1 out of 7 TAD districts and 1 TIF district. - This includes the University District TAD and the University District Revitalization Area TIF.	*Medium*
	Consistency with Shoreline Master Program	The Shoreline Master program dictates that every effort must be made to protect views of the water. - The Blue corridor may include a view of the water from the Spokane Falls Bridge, and may potentially obstruct views temporarily for some pedestrians. However, this is less than the potential impact from the Pink corridor, which crosses the river twice.	*High*	The Shoreline Master program dictates that every effort must be made to protect views of the water. - The Orange corridor may include a view of the water from the Monroe St Bridge, and may potentially obstruct views temporarily for some pedestrians. However, this is less than the potential impact from the Pink corridor, which crosses the river twice.	*High*	The Shoreline Master program dictates that every effort must be made to protect views of the water. - The Pink corridor may include a view of the water from both the Monroe St Bridge and the Spokane Falls bridge, and may potentially obstruct views temporarily for some pedestrians in both places.	*Medium*	The Shoreline Master program dictates that every effort must be made to protect views of the water. - The Plum corridor may include a view of the water from the Spokane Falls bridge, and may potentially obstruct views temporarily for some pedestrians. However, this is less than the potential impact from the Pink corridor, which crosses the river twice.	*High*
	Support of Targeted Area Development districts	Corridor aligns with 7 HPTN routes: - G2 and G5 from Browne's Addition to the University District - B1 and B2 from West Downtown to the University District - R1 from West Downtown to East Downtown - R2 and G3 from Downtown Core to East Downtown	*High*	Corridor approxmately aligns with 2 HPTN routes: - G1 and G4 from Medical West to County Campus * Many of the HPTN routes through downtown run east-west and and include the University District; the Orange Corridor doesn't score well here because it runs north-south and doesn't include the University District	*Medium*	Corridor aligns with 7 HPTN routes: - G2, G5, B1, and B2 from Downtown Core to the University District - R1, R2, and G3 from the Downtown Core to East Downtown	*High*	Corridor aligns with 7 HPTN routes: - G2, G5, B1, and B2 from Downtown Core to the University District - R1, R2, and G3 from the Downtown Core to East Downtown	*High*
	Consistency with STA's HPTN Plan	- G2 and G5 from Browne's Addition to the University District	*High*	- G1 and G4 from Medical West to County Campus * Many of the HPTN routes through downtown run east-west	*Medium*	- G2, G5, B1, and B2 from Downtown Core to the University District	*High*	- G2, G5, B1, and B2 from Downtown Core to the University District	*High*
	Consistency with Metropolitan Transportation Plan	- Development focused along transit corridors - Enhance major activity centers currently served by	*High*	Consistent with 6 out of 6 applicable policies * see Blue Corridor for the 6 policies	*High*	Consistent with 6 out of 6 applicable policies * see Blue Corridor for the 6 policies	*High*	Consistent with 6 out of 6 applicable policies * see Blue Corridor for the 6 policies	*High*
	Consistency with the Spokane Regional Pedestrian Plan	- Increase pedestrian trips from 8.5% to 10% - Provide pedestrian infrastructure	*High*	Consistent with 6 out of 6 applicable policies * see Blue Corridor for the 6 policies	*High*	Consistent with 6 out of 6 applicable policies * see Blue Corridor for the 6 policies	*High*	Consistent with 6 out of 6 applicable policies * see Blue Corridor for the 6 policies	*High*
	Consistency with the Growth and Transportation Efficiency Plan	Consistent with 5 out of 5 applicable policies: - Reduce drive alone trips by 10% and VMT by 13% for employees at CTR-affected work sites - Reduce drive alone trips by 10% for employees at unaffected work sites - Reduce drive alone trips by 10% among selected residential groups - Convert an additional 1,000 commuters to drive-alone travel options for the entire GTEC area - Reduce drive alone trips by 10% and VMT by 13% for the entire city	*High*	Consistent with 5 out of 5 applicable policies * see Blue Corridor for the 5 policies	*High*	Consistent with 5 out of 5 applicable policies * see Blue Corridor for the 5 policies	*High*	Consistent with 5 out of 5 applicable policies * see Blue Corridor for the 5 policies	*High*
	Consistency with Connect Spokane - Comprehensive Plan for Transportation	Consistent with 7 out of 7 applicable policies: Consistent with: - Routes should not travel along corridors that have physical barriers, such as rivers - Routes to have utility independent of transfers - Routes to focus on generalized service - Routes to serve multiple destinations - Serve The Plaza - Accommodate bicycles - Provide pedestrian infrastructure	*High*	Consistent with 7 out of 7 applicable policies: Consistent with: - Routes should not travel along corridors that have physical barriers, such as rivers - Routes to have utility independent of transfers - Routes to focus on generalized service - Routes to serve multiple destinations - Serve The Plaza - Accommodate bicycles - Provide pedestrian infrastructure	*High*	Consistent with 7 out of 7 applicable policies * See Orange Corridor for 7 policies	*High*	Consistent with 7 out of 7 applicable policies * See Orange Corridor for 7 policies	*High*
Objective E: Optimize fiscal investments in central city transit infrastructure and service									
Affordability	Projected capital cost	Enhanced Bus: $3m - $4.5m per mile Electric Trolley Bus: $6m - $9m per mile Streetcar: $34m - $51m per mile	*Enhanced Bus: High* *Electric Trolley Bus: Medium* *Streetcar: Low*	Enhanced Bus: $3m - $4.5m per mile Electric Trolley Bus: $6m - $9m per mile Streetcar: $34m - $51m per mile	*Enhanced Bus: High* *Electric Trolley Bus: Medium* *Streetcar: Low*	Enhanced Bus: $3m - $4.5m per mile Electric Trolley Bus: $6m - $9m per mile Streetcar: $34m - $51m per mile	*Enhanced Bus: High* *Electric Trolley Bus: Medium* *Streetcar: Low*	Enhanced Bus: $3m - $4.5m per mile Electric Trolley Bus: $6m - $9m per mile Streetcar: $34m - $51m per mile	*Enhanced Bus: High* *Electric Trolley Bus: Medium* *Streetcar: Low*
	Projected operating cost*	Enhanced Bus: $7.18 per vehicle revenue mile Electric Trolley Bus2: $14.61 per vehicle revenue mile Streetcar: $12.12 per vehicle revenue mile	*Enhanced Bus: High* *Electric Trolley Bus: Medium* *Streetcar: Low*	Enhanced Bus: $7.18 per vehicle revenue mile Electric Trolley Bus2: $14.61 per vehicle revenue mile Streetcar: $12.12 per vehicle revenue mile	*Enhanced Bus: High* *Electric Trolley Bus: Medium* *Streetcar: Low*	Enhanced Bus: $7.18 per vehicle revenue mile Electric Trolley Bus2: $14.61 per vehicle revenue mile Streetcar: $12.12 per vehicle revenue mile	*Enhanced Bus: High* *Electric Trolley Bus: Medium* *Streetcar: Low*	Enhanced Bus: $7.18 per vehicle revenue mile Electric Trolley Bus2: $14.61 per vehicle revenue mile Streetcar: $12.12 per vehicle revenue mile	*Enhanced Bus: High* *Electric Trolley Bus: Medium* *Streetcar: Low*

**Operating costs for electric trolleybus are based on a small sample size, and therefore they should be considered less reliable than estimates for streetcar and enhanced bus.*

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		BLUE CORRIDOR		ORANGE CORRIDOR		PINK CORRIDOR		PLUM CORRIDOR	
CRITERION	**MEASURE**	***Justification***	***Rating***	***Justification***	***Rating***	***Justification***	***Rating***	***Justification***	***Rating***
Availability of funding	Potential capital cost funding source(s) Potential operating cost funding source(s)	FTA Potential Sources: -Section 5309 Capital Investment Grant program* -Urban Circulator -TIGER/TIGGER *Note: Small Starts federal funding allocation is limited to $75 million. Any funds needed above that will need to come from other sources. State funding sources: -WSDOT Public Transportation Grant -WSDOT Regional Mobility Grant A high rating indicates more potential funding sources. Examples from other systems include: -fares -sales tax -payroll tax -corporate sponsorship of stations -endowments -parking meter revenues	*Enhanced Bus: Low* *Electric Trolleybus: High* *Streetcar: High*	FTA Potential Sources: -Section 5309 Capital Investment Grant program* -Urban Circulator -TIGER/TIGGER *Note: Small Starts federal funding allocation is limited to $75 million. Any funds needed above that will need to come from other sources. State funding sources: -WSDOT Public Transportation Grant -WSDOT Regional Mobility Grant A high rating indicates more potential funding sources. Examples from other systems include: -fares -sales tax -payroll tax -corporate sponsorship of stations -endowments -parking meter revenues	*Enhanced Bus: Low* *Electric Trolleybus: High* *Streetcar: High*	FTA Potential Sources: -Section 5309 Capital Investment Grant program* -Urban Circulator -TIGER/TIGGER *Note: Small Starts federal funding allocation is limited to $75 million. Any funds needed above that will need to come from other sources. State funding sources: -WSDOT Public Transportation Grant -WSDOT Regional Mobility Grant A high rating indicates more potential funding sources. Examples from other systems include: -fares -sales tax -payroll tax -corporate sponsorship of stations -endowments -parking meter revenues	*Enhanced Bus: Low* *Electric Trolleybus: High* *Streetcar: High*	FTA Potential Sources: -Section 5309 Capital Investment Grant program* -Urban Circulator -TIGER/TIGGER *Note: Small Starts federal funding allocation is limited to $75 million. Any funds needed above that will need to come from other sources. State funding sources: -WSDOT Public Transportation Grant -WSDOT Regional Mobility Grant A high rating indicates more potential funding sources. Examples from other systems include: -fares -sales tax -payroll tax -corporate sponsorship of stations -endowments -parking meter revenues	*Enhanced Bus: Low* *Electric Trolleybus: High* *Streetcar: High*
Leverage	Potential to leverage other public/private investments	Examples from other systems show that rail-based modes encourage development to a greater degree than bus-based modes.	*Enhanced Bus: Low* *Electric Trolleybus: Medium* *Streetcar: High*	Examples from other systems show that rail-based modes encourage development to a greater degree than bus-based modes.	*Enhanced Bus: Low* *Electric Trolleybus: Medium* *Streetcar: High*	Examples from other systems show that rail-based modes encourage development to a greater degree than bus-based modes.	*Enhanced Bus: Low* *Electric Trolleybus: Medium* *Streetcar: High*	Examples from other systems show that rail-based modes encourage development to a greater degree than bus-based modes.	*Enhanced Bus: Low* *Electric Trolleybus: Medium* *Streetcar: High*
Objective F: Optimize the engineering design and environmental sensitivity of the project									
Environmental impacts	Number of parcels of land directly affected by the project	Up to 7 90-degree turns included. 90-degree turns are likely to necessitate small takings of ROW in order to accommodate electric trolleybus or streetcar. The lower amount of turns in this corridor indicates that there are likely to be fewer ROW takings.	*Enhanced bus: High* *Electric trolleybus: High* *Streetcar: High*	Up to 11 90-degree turns. 90-degree turns are likely to necessitate small takings of ROW in order to accommodate electric trolleybus or streetcar. The amount of turns in this corridor indicates that there are likely to be fewer ROW takings than in the Plum corridor, but more than in the Blue or Pink corridor.	*Enhanced bus: High* *Electric trolleybus: Medium* *Streetcar: Medium*	Up to 9 90-degree turns. 90-degree turns are likely to necessitate small takings of ROW in order to accommodate electric trolleybus or streetcar. The amount of turns in this corridor indicates that there would likely be fewer ROW takings than in the Orange or Plum corridors, but more than in the Blue corridor.	*Enhanced bus: High* *Electric trolleybus: Medium* *Streetcar: Medium*	Up to 16 90-degree turns. 90-degree turns are likely to necessitate small takings of ROW in order to accommodate electric trolleybus or streetcar. The amount of turns in this corridor indicates that there would likely be the most ROW takings of all 4 corridors.	*Enhanced bus: High* *Electric trolleybus: Low* *Streetcar: Low*
	Number of historic properties potentially affected	Quarter mile buffer of the corridor includes: 3 historic districts (Browne's Addition, West Downtown, East Downtown) 14 buildings on the National Register 1 building on the state register	*Low*	Quarter mile buffer of the corridor includes: 2 historic districts (West Downtown, East Downtown) 15 buildings on the National Register Monroe Street Bridge (on the National Register) 1 building on the State Register 1 district on the State Register (River District)	*Low*	Quarter mile buffer of the corridor includes: 2 historic districts (West Downtown, East Downtown) 12 buildings on the National Register Monroe Street Bridge 2 buildings on the State Register 1 district on the State Register (River District) Because there are fewer historic properties in this buffer, the alternative is rated higher due to the lower probability of impacting a historic resource.	*Medium*	Quarter mile buffer of the corridor includes: 2 historic districts (West Downtown, East Downtown) 15 buildings on the National Register 1 building on the State Register Because there are fewer historic properties in this buffer, the alternative is rated higher due to the lower probability of impacting a historic resource.	*Medium*
	Number of 4(f) properties potentially used	Potential to impact parks: Coeur d'Alene Park - No South Maple Street Parkway - Maybe Riverside-Cedar Parkway - Yes, for the North option along Riverside Avenue	*Medium*	Potential to impact parks: North Bank Park - Maybe (Howard Street Option) Riverfront Park - Yes (Howard Street Option) Riverfront Park - No (Monroe Street option) Pioneer Park - No (Stevens Street option)	*Medium*	Potential to impact parks: Riverfront park - Maybe Riverside-Cedar Parkway - No (though directly adjacent, this alternative only impacts the very end of the parkway)	*High*	Potential to impact parks: Riverside-Cedar Parkway - No Pioneer Park - No	*High*
	Number of noise-sensitive land uses adjacent to the alternative	Adjacent to up to 23 noise-sensitive properties (residential areas, churches, day cares, libraries and others)	*Medium*	Adjacent to up to 19 noise-sensitive properties (residential areas, churches, day cares, libraries, and others)	*Medium*	Adjacent to up to 21 noise-sensitive properties (residential areas, churches, day cares, libraries, and others)	*Medium*	Adjacent to up to 21 noise-sensitive properties (residential areas, churches, day cares, libraries, and others)	*Medium*
	Approximate number of low-income persons within 1/4 mile of the alternative	4,300 (70%)	*High*	3,200 (64%)	*High*	2,900 (70%)	*High*	3,300 (68%)	*High*

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CRITERION	**MEASURE**	***Justification***	***Rating***	***Justification***	***Rating***	***Justification***	***Rating***	***Justification***	***Rating***
Equity	Approximate number of persons of a minority race or ethnicity within 1/4 mile of the alternative	1,100 (15%)	*Medium*	1,000 (17%)	*High*	900 (17%)	*High*	900 (15%)	*Medium*
	Approximate number of transit-inclined persons within 1/4 mile of the alternative	The transit inclination map rates areas according to the relative number of transit inclined people. (scale is 1-5, with 5 being the most people). This corridor serves: - Browne's Addition (4) - Riverside (5) - Logan (4)	*Medium*	The transit inclination map rates areas according to the relative number of transit inclined people. (scale is 1-5, with 5 being the most people). This corridor serves: - Riverside (5) - East Central (4)	*High*	The transit inclination map rates areas according to the relative number of transit inclined people. (scale is 1-5, with 5 being the most people). This corridor serves: - Riverside (5) - West Central (3) - Logan (4)	*Medium*	The transit inclination map rates areas according to the relative number of transit inclined people. (scale is 1-5, with 5 being the most people). This corridor serves: - Riverside (5) - East Central (4) - Logan (4)	*Medium*
Constructability	Number of new river crossings needed	Enhanced Bus: • None. Use existing E Spokane Falls Blvd Bridge. Minor modifications required. Electric Trolley Bus: • None. Use existing E Spokane Falls Blvd Bridge. Minor modifications required. Streetcar: • None. Use existing E Spokane Falls Blvd Bridge. Moderate modifications required.	*High*	Enhanced Bus: • None if on N Monroe Street. • None if on N Post Street but major modifications required. • One (south) if on Howard Street. Moderate to major modifications to the middle and north bridges would be required. Electric Trolley Bus: • None if on N Monroe Street. Minor modifications required. • None if on N Post Street but major modifications required. • One (south) if on Howard Street. Moderate to major modifications to the middle and north bridges would be required. Streetcar: • None if on N Monroe Street. Moderate modifications required. • One if on N Post Street. • Two (south and north) if on Howard Street. Moderate to major modifications to the middle bridge would be required.	*Low*	Enhanced Bus: • None if on N Monroe Street. • None if on N Post Street but major modifications required. • One (south) if on Howard Street. Moderate to major modifications to the middle and north bridges would be required. • Use existing E Spokane Falls Blvd bridge with no modification. Electric Trolley Bus: • None if on N Monroe Street. Minor modifications required. • None if on N Post Street but major modifications required. • One (south) if on Howard Street. Moderate to major modifications to the middle and north bridges would be required. • Use existing E Spokane Falls Blvd bridge with minor modification. Streetcar: • None if on N Monroe Street. Moderate modifications required. • One if on N Post Street. • Two (south and north) if on Howard Street. Moderate to major modifications to the middle bridge would be required. • Use existing E Spokane Falls Blvd bridge with moderate modification.	*Low*	Enhanced Bus: • None. Use existing E Spokane Falls Blvd Bridge. Minor modifications required. Electric Trolley Bus: • None. Use existing E Spokane Falls Blvd Bridge. Minor modifications required. Streetcar: • None. Use existing E Spokane Falls Blvd Bridge. Moderate modifications required.	*High*
	Major design considerations	**Enhanced Bus** • Route alternatives should avoid running along Browne, Division and Hamilton due to heavy auto and truck traffic **Electric Trolley Bus** • Same as for Enhanced Bus **Streetcar** • Same as for Enhanced Bus and Electric Trolley Bus plus: - Small traffic concern with introducing a fixed guideway transit mode in the complicated Maple/Walnut/Riverside/Pacific intersection - Design of the bridge deck modification (E Spokane Falls Blvd) will require detailed investigation of the existing structure	*High (all modes)*	**Enhanced Bus** • Fairly high auto and truck traffic on Lincoln and Monroe **Electric Trolley Bus** • Same as for Enhanced Bus plus: - Access to the Medical District via all of the existing access points through the railroad and I-90 would require a dedicated transit lane under the overpasses due to non-code compliant vertical clearance below the trolley wire - Access from east downtown via Stevens or Wall is a fatal-flaw due to the 11′-6″ vertical clearance (Stevens) or 11'-4" vertical clearance (Wall) under the railroad unless major reconstruction of the road or railroad bridge is done **Streetcar** • Same as for Enhanced Bus and Electric Trolley Bus plus: - Grades in excess of 9% south of I-90 limit route options. A Lincoln/Monroe couplet to W 5th Ave appears feasible - Design of the bridge deck modification (N Monroe St) will require detailed investigation of the existing structure	*Enhanced bus: High; Electric Trolley Bus: Medium; Streetcar: Medium*	**Enhanced Bus** • Fairly high auto and truck traffic on Monroe • Route alternatives should avoid running along Browne, Division and Hamilton due to heavy auto and truck traffic **Electric Trolley Bus** • Same as for Enhanced Bus **Streetcar** • Same as for Enhanced Bus and Electric Trolley Bus plus: - Design of the bridge deck modification for E Spokane Blvd and N Monroe Street will require detailed investigation of the existing structure	*High (all modes)*	**Enhanced Bus** • Route alternatives should avoid running along Browne, Division and Hamilton due to heavy auto and truck traffic **Electric Trolley Bus** • Same as for Enhanced Bus plus: - Access to the Medical District via all of the existing access points through the railroad and I-90 would require a dedicated transit lane under the overpasses due to non-code compliant vertical clearance below the trolley wire. - Access from east downtown via Stevens or Wall is a fatal-flaw due to the 11′-6″ vertical clearance (Stevens) or 11'-4" vertical clearance (Wall) under the railroad unless major reconstruction of the road or railroad bridge is done **Streetcar** • Same as for Enhanced Bus and Electric Trolley Bus plus: - Grades in excess of 9% south of I-90 limit route options. A Lincoln/Monroe couplet to W 5th Ave appears feasible - Design of the bridge deck modification (E Spokane Falls Blvd) will require detailed investigation of the	*Enhanced bus: High; Electric Trolley Bus: Medium; Streetcar: Medium*

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		BLUE CORRIDOR		ORANGE CORRIDOR		PINK CORRIDOR		PLUM CORRIDOR	
CRITERION	**MEASURE**	***Justification***	***Rating***	***Justification***	***Rating***	***Justification***	***Rating***	***Justification***	***Rating***
Energy conservation	Reduction in greenhouse gases	Enhanced Bus: - Likely to be dependent on GHG-generating energy source (fossil fuel/biofuel) - Diesel-Electric Hybrid vehicles are highly cost effective per ton of GHG reduced - Low carbon cost of infrastructure development Electric Trolleybus: - Can be a zero-carbon mode depending upon source of electric power - High cost per ton of GHG reduced - Low carbon cost of infrastructure development Streetcar: - Can be a zero-carbon mode depending upon source of electric power - High cost per ton of GHG reduced - Carbon cost of heavy construction needs to be considered	*Enhanced Bus: Medium* *Electric Trolleybus: Medium/High* *Streetcar: Medium*	Enhanced Bus: - Likely to be dependent on GHG-generating energy source (fossil fuel/biofuel) - Diesel-Electric Hybrid vehicles are highly cost effective per ton of GHG reduced - Low carbon cost of infrastructure development Electric Trolleybus: - Can be a zero-carbon mode depending upon source of electric power - High cost per ton of GHG reduced - Low carbon cost of infrastructure development Streetcar: - Can be a zero-carbon mode depending upon source of electric power - High cost per ton of GHG reduced - Carbon cost of heavy construction needs to be considered	*Enhanced Bus: Medium* *Electric Trolleybus: Medium/High* *Streetcar: Medium*	Enhanced Bus: - Likely to be dependent on GHG-generating energy source (fossil fuel/biofuel) - Diesel-Electric Hybrid vehicles are highly cost effective per ton of GHG reduced - Low carbon cost of infrastructure development Electric Trolleybus: - Can be a zero-carbon mode depending upon source of electric power - High cost per ton of GHG reduced - Low carbon cost of infrastructure development Streetcar: - Can be a zero-carbon mode depending upon source of electric power - High cost per ton of GHG reduced - Carbon cost of heavy construction needs to be considered	*Enhanced Bus: Medium* *Electric Trolleybus: Medium/High* *Streetcar: Medium*	Enhanced Bus: - Likely to be dependent on GHG-generating energy source (fossil fuel/biofuel) - Diesel-Electric Hybrid vehicles are highly cost effective per ton of GHG reduced - Low carbon cost of infrastructure development Electric Trolleybus: - Can be a zero-carbon mode depending upon source of electric power - High cost per ton of GHG reduced - Low carbon cost of infrastructure development Streetcar: - Can be a zero-carbon mode depending upon source of electric power - High cost per ton of GHG reduced - Carbon cost of heavy construction needs to be considered	*Enhanced Bus: Medium* *Electric Trolleybus: Medium/High* *Streetcar: Medium*

Appendix B: Summary of Stakeholder Preference Survey Results

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Central City Transit Alternatives Analysis

Stakeholder Preference Survey

Prepared for:
Downtown Spokane Partnership
Business Improvement District
University District Development Association

Prepared by:
Spokane Transit Authority

Final

5/18/2011

Upon request, alternative formats of this document will be produced for people with disabilities. Please call 325-6094 or TTY (509) 232-6555 or email smillbank@spokanetransit.com

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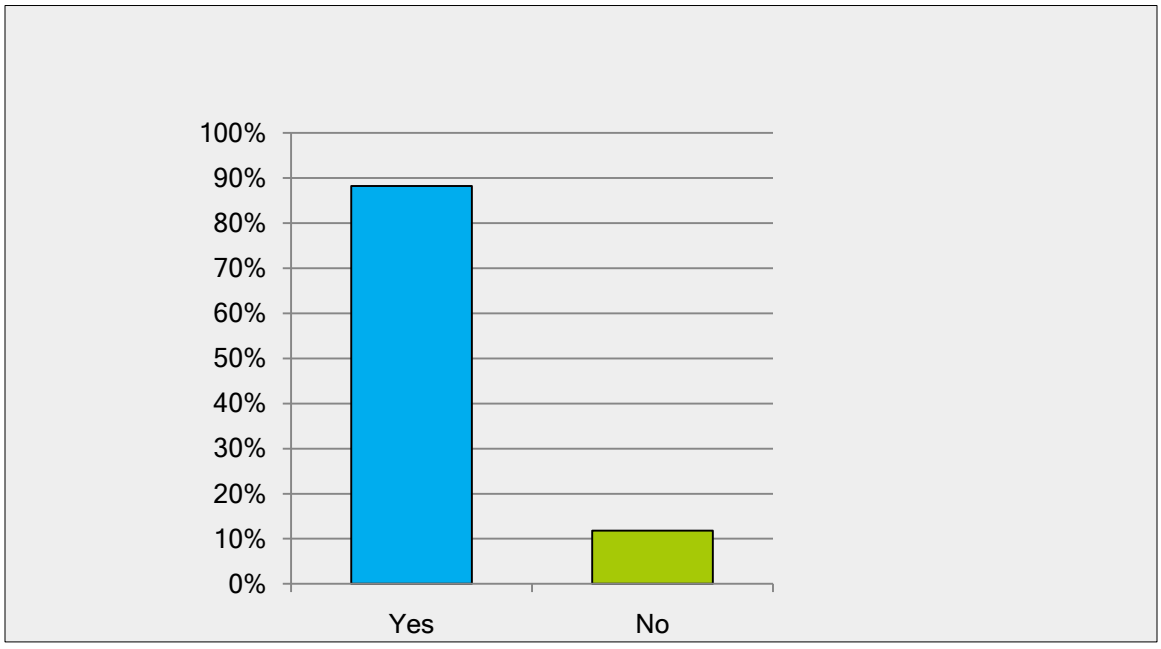
Introduction

The following report provides detailed results from the survey about the modes being considered in the Central City Transit Alternatives Analysis. Members of the Business Improvement District Board, Downtown Spokane Partnership Board, University District Development Association Board and other major property owners along the preliminarily preferred Central City Transit corridor. Responses were collected between April 25th and May 16th of 2011. 51 responses were collected; because some respondents did not answer every question, the number of answers for each question may vary. The numbers associated with each response are for reference purposes only. The responses have been sorted in alphabetical order and therefore each number does not correspond with a particular survey throughout this report.

Survey Question Results

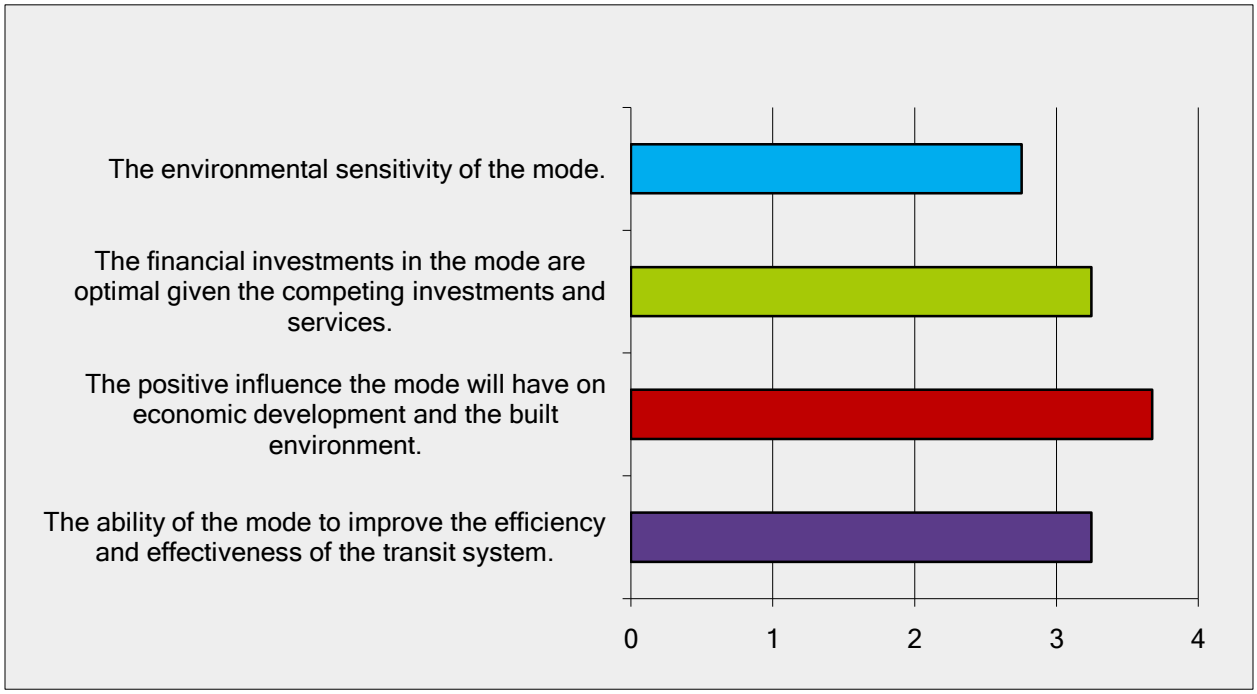
Question 1: Project Understanding

Have you attended a presentation, open house or reviewed information regarding the Central City Transit Alternatives Analysis?



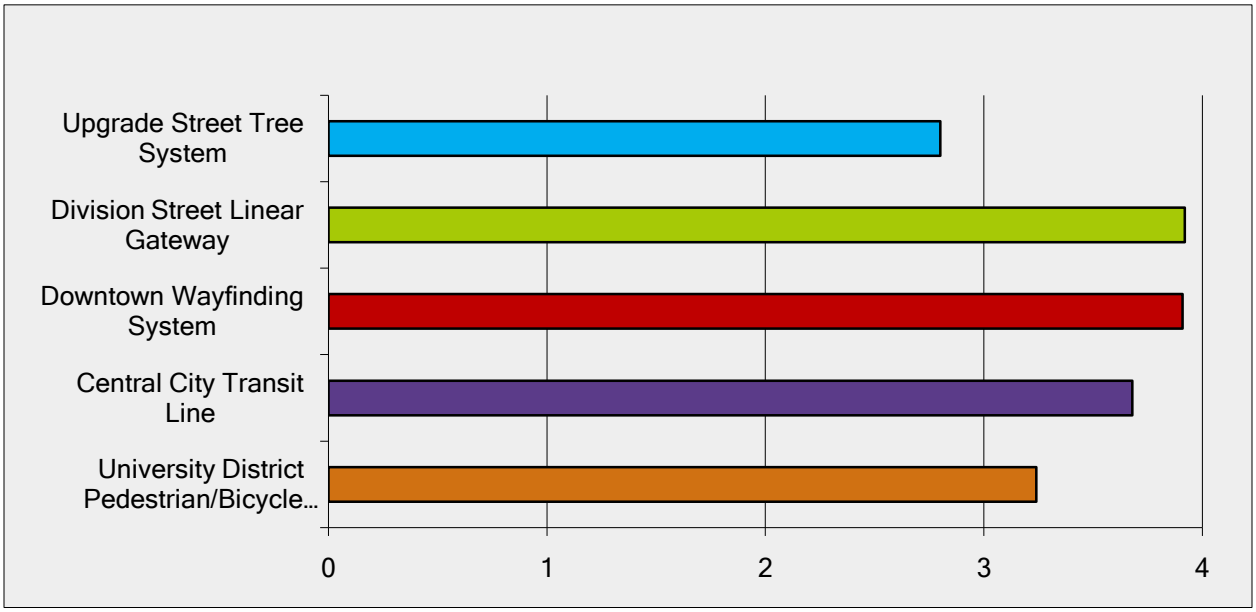
Question 2: Project Criteria

In your opinion, how important are the individual project criteria when deciding which mode should be constructed along the proposed alignment? (4 = Most Important, 1 = Least Important)



Question 3: Downtown Projects

Of the projects currently being planned and considered in the Central City, please rank their importance they merit in improving the Central City. (4 = Most Important, 1 = Least Important)



Question 4: Infrastructure, Policies, Incentives

This project will require a direct investment in transit infrastructure and service operation. What other infrastructure, policies or incentives do you think need to be in place for this transit project to become a success considering the goal of the project?

1	1. Adoption of code elements that permit residential in-fill in urban and near-urban neighborhoods surrounding Downtown. 2. Construction and occupation of 1,000+ more units. We need a clear path to greater residential density before we can consider paying even for a dedicated bus line.
2	A clearly outline development strategy to facilitate the rapid development of infill sites along the route. For example, an incentive program could be that a "new" development could forgo property tax assessment during the life of a 10-year LID contribution. Or perhaps they could simply forgo "increased assessments" for that 10 year period. Building the system is only a portion of the solution to infill the sea of parking lots and one level building in downtown. Incentives, or bottom line motivation, are absolutely necessary to encourage GOOD development.
3	A Port District - to retain the emphasis on measureable economic development improvements instead of efficiency and effectiveness of system wide transit operations. I don't view this as a "transit project". It is a project about continuing the growth of our Downtown as an economic engine and the entire region as a highly sought after, competitive destination.
4	City development standards that encourage and facilitate high density development along the route. Division St. gateway improvements and way finding.
5	Employer incentives for participating in transit ridership
6	Housing on the east end not Sprague
7	I believe the bus stops should be "themed" for the area/district to include "way finding" and merchant advertising.
8	Incentives must be provided to local landowners so they will develop their properties along the route, a plan must be put in place to fairly share the cost among riders and land owners

9	North-South transit, Airport to city transit
10	Not sure, but incentives to private developers who invest in the construction process seems appropriate.
11	Only other infrastructure needed is political will and good leadership from our local electeds. Alas...that will be the toughest hurdle to overcome. Other than that....the city really needs to fix its "change of use" policy...otherwise there will be no development around the transit system because it'll be too difficult and expensive.
12	Park & ride available, friendly bike routes in the same area
13	Parking issues will need to be addressed in the neighborhoods at the east/west ends of the line. Parking overall is a area that the City needs to address seriously, and as over-used as it is as an example, Portland is a great model for the City's involvement in addressing parking needs in the core.
14	Parking policy needs to be resolved and implemented, expansion of BID into surrounding neighborhood business districts, infill and change of use requirements must be updated and ready for implementation
15	Policy of few/no new roads for vehicles; focus on maintaining current street system and providing alternative transportation, including transit.
16	Property tax abatement should be extended for a period of 5 - 10 years to encourage commercial development along the proposed route.
17	Realistic expectations for what this transit line will accomplish; a heavy, creative marketing campaign to excite the community about what this could be; financial responsibility to show the community that STA cares about investment to product ratios...does it make sense to spend hundreds of millions on a train when a really nice and consistent bus system will accomplish what the train will do and more?
18	Regulatory and zoning environment and attitude compatible with the required density to enable it to be successful.
19	Service should include a free zone.
20	The system must be VERY convenient and desirable to the riders; fares cheaper than parking, frequency of pickups (every ten minutes or so), proper security on the mode of transportation.
21	There is a need to encourage the development of more housing in the U-District area. The residents of this new housing would increase ridership.
22	This should be a part of a comprehensive review and fit within the city's comprehensive plan. At this point, given the limited resources, this proposal does not meet the short-term requirements for the city's top needs.
23	Tie workplace incentives to ridership. Get creative on really increasing ridership for all. Incent the behavior to get it to catch on by having businesses have incentives to get employees to ride.
24	Upgrade sidewalk system to remedy safety and major aesthetic deficiencies. Provide density, height, signage or other incentives to property owners along the chosen route who opt in to street level upgrades. If an LID is formed, study including sidewalks.
25	Wayfinding.

Question 5: Streetcar Advantages

What do you believe are the advantages of implementing the streetcar option?

1	A unique character that will attract riders that typically will not use public transit. The fixed track gives greater confidence to developers that the route is there to stay.
2	Aesthetics and the urban feel of a streetcar.
3	Appeal. Greater access for more categories of riders.
4	Connectivity to our most central and important districts. Economic impact on our local economy. Creating a more pedestrian friendly downtown. Just to be cool!
5	Different - somewhat of a tourist attraction. Make them like the San Francisco cable cars so that each stop is short. - many people get on and off quickly.
6	Easier for people to move around downtown
7	Easy to identify route. Allows Spokane to promote itself as a contemporary destination. Keep up with

	the west side.
8	Economic Development
9	Economic development, Civic accomplishment, Making a positive statement that Spokane is really first class city, Better downtown transit
10	Establishing the route with a high degree of permanency, giving property owners and developers confidence that the route chosen will remain the route for the foreseeable future. It also has the most appeal from an emotional standpoint - the tracks differentiate it from other modes of transportation.
11	Fixed route seen as permanent investment
12	Fixed route service encourages economic development
13	Fixed route with increased frequency to high traffic users.
14	From the PowerPoint printout I was handed, my understanding is it's more appealing to users and moves more people. From my experience in other cities, it removes the barrier of feeling like it's being in a car navigating traffic. Speeds flow of traffic and has a "cool factor."
15	Higher ridership due to panache of a street car and the visibility of permanent tracks
16	Increased attractiveness to employers to locate downtown. Enhanced retail environment. Less demand for surface parking. Increased infill development potential. Enhanced property tax base.
17	Increased economic benefits connecting users to the retail/office core.
18	It is the only option that has the permanence to deliver meaningful investment and development activity. It does not crowd Downtown views with a web of wires. It has a "with it" factor that neither of the other modes can deliver.
19	Local transportation and identity of vehicles different from the standard bus.
20	Makes for a natural link between the three different districts. Provides a certain flair to downtown that would help it's appeal to out of town visitors.
21	None
22	None
23	None
24	Overall appeal of riding a streetcar. Gives the city some distinction.
25	Permanency
26	Permanent boarding stations; commitment to transit-oriented development
27	Permanent Infrastructure, a community attraction, a step outside the Spokane "norm,"
28	Permanent transportation, Impressive scope, Consistent routes
29	Quaint feel downtown, alleviate some traffic flow with reliable transportation
30	Safety, eases congestion, environmental impact
31	Sense of permanence for investors
32	Some people apparently really like trains and might vote for them vs. buses. Streetcars have prestige because they are viewed by some as symbols of prosperity and successful urban development.
33	The "cool" factor and the ability to move people through the city.
34	The only advantage I see is the 120-140 passenger aspect (but will we need one that large? If the intervals are every 10-15 minutes?) It does look better than a "Bus" and that may be perceived as an acceptable thing; has more of a commuter feel.
35	The permanence of the streetcar is an advantage. Because of the large investment it is not likely to be moved. This would give more confidence to people looking to invest in projects along the streetcar route. The streetcar also has a "big city" feel and is more classy.
36	The permanentness (I don't know if that is a word) of the rail demonstrates a long term investment.
37	The style of transportation is more conducive to long-term investment around it and higher level of acceptance by users.
38	Unique, dedicated circulator giving the central city something to "buzz" about. Of all three modes, I think it is most likely to draw people to the area, simply as a result of the cool factor.
39	Winter travel through the corridor

Question 6: Streetcar Disadvantages

What do you believe are the disadvantages of implementing the streetcar option?

1	Benefits do not outweigh costs
2	Cost
3	Cost
4	Cost
5	Cost
6	Cost
7	Cost is the primary disadvantage
8	Cost of construction.
9	Cost to property owners should not be disproportionate to long term financial benefits. If a track system is laid, the siting needs to be right the first time as course corrections would be too expensive.
10	Cost. The cost may exceed the immediate return on investment thus discouraging land owners and developers from supporting and funding the system.
11	cost; construction delays
12	Costs too much and who will ride it?
13	Expense
14	Expense, pubic resistance to the cost that may bleed into opposition of the other alternatives
15	Expense; overhead electric lines
16	Fair sharing of costs.
17	Fixed rail is most expensive, routes are inflexible.
18	Fixed route forever
19	Fixed route that may not warrant continued scheduling commitment
20	From what I read in the 2/17/2010 mode evaluation presentation: Not good in winter, most expensive per mile by a factor of almost 10x, least flexible, too much capacity, difficult to grow outside the city core.
21	Gas powered vehicle.
22	High construction cost
23	I have little background in the details of city transit, but my understanding is that it's more expensive.
24	Initial cost!
25	Installation and maintenance of the tracks. Winter might be a real challenge.
26	It is tough to stomach the long term cost of the project. Even with stakeholder contributions, the unknowns around federal and state support are unnerving.
27	It's crushingly expensive.
28	Its very expensive for a small population of people to use
29	None
30	Occasional interference with traffic on streets. Cost.
31	Overhead conductors (wires) and winter and cost
32	Still have condensed traffic base downtown
33	The cost is a big bite. But our City and region are overdue for major Federal investments. Construction period will be most intrusive of the alternatives and will demand a lot of patience.
34	The cost, bike unfriendly nature of rails, and the cost involved.
35	The hassle of the construction of tracks in the street, if that's the way it will be operating, vs. overhead lines.
36	The high cost of construction and the availability of funding is a huge disadvantage.
37	The high initial capital costs, hopefully, these high initial investment levels can be value engineered down some.
38	The initial cost, and the flip side of permanency - the cost of changing the route is necessary in the future.
39	Tracks and the limitations they imply relative to flexibility of route.

Question 7: Streetcar Other Actions

What actions (e.g. property marketing, development, parking policies, etc.) do you believe your property or business might implement based on the construction and operation of a streetcar line in downtown Spokane?

1	1) More effective marketing vs. competing periphery office complexes 2) Strong emphasis in employee recruiting programs.
2	All of them appropriate actions and policies
3	An increase in attendance at the MAC. Easy to get to with a unique mode of transportation.
4	Because we're a professional services firm very few, other to continue to encourage our employees to take advantage of mass transit.
5	Definitely property marketing. Easy to ride the streetcar from business locations just outside the CBD into the downtown.
6	I believe a frequent transit vehicle would encourage employees to park outside the core reducing the demand for surface lots. It would make it more feasible for employees who live in close-in neighborhoods to ride transit to work.
7	If the street car (or trolley or bus) passed our residential or commercial property we would mention that fact in our marketing materials as an additional convenience for tenants and customers.
8	It will not improve the business district
9	Marketing
10	Marketing and development would definitely be impacted. For office space, the streetcar could effectively expand the size of the "core", making outlying buildings that are on or near the line competitive with buildings currently considered to be in the core. The presence of the line might also make development more feasible for some properties along the line.
11	Marketing the ease of movement to and from downtown. Promoting the benefit of park once, catch the "street car" here.
12	Marketing; ie ownership of a streetcar stop
13	N/a
14	N/A
15	N/a
16	N/A
17	N/A
18	No change.
19	None - maybe internal business ridership encouragement
20	Not a property owner
21	Not a property owner or manager
22	Not applicable
23	Probably look to extend passes at reduced rates to employees to get them to exhibit green behaviors
24	The development of property will be entirely dependent upon demand and the ability to deliver.
25	this might lead to changes in parking policies to further discourage students and employees from bringing their cars to campus.
26	Unlikely to change
27	Unsure, but would clearly work to capitalize on the route access.
28	We are tenants and I cannot think of a specific action. Our employees will benefit from the advantages the streetcar offers.
29	We would be much more likely to develop our parking lot into a multi-story mixed use income property- central city infill. Though the whole system will deliver more results once connected to one or more light rail feeder options.
30	We would definitely promote our proximity to the street car line.
31	Would influence attempts to get a major new hotel constructed in the CC district.

Question 8: Streetcar Development

In your opinion, what would be the development changes to downtown Spokane as a direct result of an investment in a streetcar line?

1	"What to do about snow across tracks?
2	broadly speaking I think that there would be a higher density of building and a higher diversity in use, increasing economic activity in the mid and long term. I think the effects of $5+ gas cannot be fully understood at this time. I also think it will further define the entire concept and value of a regional core.
3	Continued improvement of outside perception, increased traffic flow
4	Development along the route
5	Ease of access to business and downtown corridor
6	Easier and convenient mobility. A more interesting street scape including themed bus stops/shelters. Vehicles with an identity.
7	Generally positive -- respecting my prior comments.
8	Higher occupancy downtown, more variety of night life, and day life...and fewer problems with parking since there would finally be a viable option. Hopefully, we would even see some of our surface parking lots developed with new buildings.
9	I do not think it will impact development to a degree that someone specifically seeks to be on the line; but it may improve commutability for those coming and going to any business on the line.
10	I think it would help the periphery of downtown develop to its potential. Retail would be helped, I think, because people who don't normally shop downtown might be brought downtown by the desire to ride streetcar. If parking is handled well, those people might reconsider their aversion to downtown, which is primarily based on a perception of difficult parking now.
11	Increased development density in the U-District, the East Downtown area and the West downtown area.
12	Increased focus on the core neighborhoods connected by the route.
13	Increased opportunities for employees to live and work downtown
14	Increased retail revenue given the number of shoppers able to navigate more easily through downtown; as well as shoppers that may typically not even GO downtown that now would/could.
15	Investments in the open lots along SFB and other parts of the route.
16	It would encourage more downtown residential, which in term would increase property values and cash flow for the City.
17	It would increase access to downtown businesses from the U-District
18	It would increase accessibility throughout downtown, encourage commerce and make it much easier for consumers. Think Portland.
19	It would make downtown a more attractive option for working, visiting, and living. It would enhance development in all sectors and in the University District.
20	Little if any
21	Mobility for people; access to businesses
22	More housing, improved street scape, fewer buildings with empty second, third and fourth floors.
23	More use of downtown by Spokane County and adjoing county residents. Enhanced appeal to potential visitors.
24	No change. I'm not aware of new prospective tenants or developers seeking a streetcar as part of a development plan. Residential developers face huge hurdles to developing modern urban structures in Downtown; in my opinion these should be addressed before we consider implementing even an enhanced bus line.
25	Opportunity sites on the proposed route and adjacent parcels would see major economic investment if the right mode is selected that has longevity.
26	Reduction in surface parking lots. Increased rents. More density. More vibrancy. More housing/urban residents. Spread fixed infrastructure costs over a much larger base so that all services cost each individual less.
27	Reinvestment in vacant or underutilized properties due to proximity to street car line.
28	Significant increase in access would spur retail development

29	Slight improvement in retail shops along the track
30	Spokane is ready for a Street Car system. We are ready for the next step in urban infrastructure so that sprawl and unwise use of resources doesn't continue. In fill is best option and options that support that like mass transit are important enablers.
31	Street level development and infill would accelerate along the line and especially nearest the stops.
32	The shops on the street that used the cars would become more visible and likely increase sales. Skywalk business might return to the street level.
33	Too complex a question to answer in this format.
34	Unsure. Perhaps small business encouragement. Until Kendall Yards comes to fruition with small businesses or as a second downtown area, the need for this system seems suspect.
35	Where to put stations?
36	Who's paying for this?"
37	With Streetcar alone, there will be little change. With streetcar combined with economic incentives to develop property, infill development will take off.

Question 9: Electric Trolley Bus Advantages

What do you believe are the advantages of implementing the electric trolley bus option?

1	"- state of the art - innovative"
2	A nice compromise between traditional buses and steetcars. Dedicated line, reduced difficulty in navigating traffic.
3	Access. Appeal. Getting people out of their cars.
4	Best Option! The initial cost is moderate (considering) yet it gives the feeling of a modern and advanced commute options, will actually improve Spokane's image (other options do not do that).
5	Cost, more permanent than enhanced busses.
6	Efficiency, cost to implement, flexibility to routing to some degree.
7	Fixed route...encourages economic development
8	Flexibility in expansion and the proven use in winter.
9	Great connectivity at a reasonable cost.
10	I think that the concept of "permanence" can be achieved with this mode. It is less costly to build and to operate.
11	If there are no overhead lines, elimination of fuel odors and noise.
12	Interesting, convenient, environmentally friendly, somewhat flexible in that trolleys can leave the route to get to storage/repair facilities, etc. Less expensive than the traditional fixed rail streetcar.
13	It is a good balance between permanent fixed route and cost. If it does not look like a bus it can attract new riders. More availability of federal funding. More affordable.
14	It is more cost effective than fixed rail
15	Kind of gets the feel of the big city now doesn't it
16	Less expensive
17	Lower cost.
18	Lower emissions
19	Most cost-effective and yet still looks nice; has permanence.
20	Much better than a "bus" option, but less than a streetcar. Better acceptance by users, some improvement in infrastructure. Less cost than streetcar.
21	No advantages over buses or streetcars.
22	None
23	None
24	None
25	None
26	None
27	People are "in to" the electric options now
28	Permanent stations; commitment to transit-oriented development; "cool" factor
29	Provides a semi-permanent feel. The mode seems right for introduction to US urban markets. It is

	more near term affordable than street car. Provides some perception of environmentally friendly mode.
30	Same as for streetcar
31	Same as street car, but a lot cheaper! Also, perhaps an innovative solution to high cost of streetcar.
32	Same as streetcar but at a reduced cost.
33	Same as streetcar with rail costs.
34	Sense of permanence, lower cost than rail
35	The electrical lines are permanent enough to have the same advantages of rail, but are much more affordable. You can do more for less. You would also have the ability to promote the "green" element and potentially, could qualify for EPA funding as the electric buses would lower vehicle emissions and reduce PM-10 related challenges.
36	The much lower cost of this option over the streetcar is a big advantage. It is not as permanent but offers a sense of permanence relative to the enhanced bus option.
37	The Overhead wires would still convey some permanence to the trolley bus, and it would have much lower initial capital costs.
38	The permanency of the system is somewhat comparable to the streetcar option. The lower cost compared to the streetcar is a huge advantage. The electric trolley bus option has no advantage unless it looks something like a modern streetcar, and not like a bus. Being the first US city to implement such a system might draw a lot of initial attention to Spokane, but that would likely be short-lived. It also would be a system better suited to an incremental expansion, as seems likely to happen here - the cost is so much lower than a streetcar that it would be more feasible to expand the system across the river or to the hospitals. A larger system is more valuable to it users.
39	You either need to do a full rail system or a flexible bus system -- i don't think the mid-level system is beneficial since there is a significant cost over the bus system without the feel of a real streetcar

Question 10: Electric Trolley Bus Disadvantages

What do you believe are the disadvantages of implementing the electric trolley bus option?

1	- expensive - short - lack of focus and vision
2	A bus is a bus and the Seattle electric trolley busses feel like any other bus inside. Overhead wires will not improve the look of our downtown and neighborhoods.
3	Catenary system is ugly and the cost of the system is high.
4	Conductors and winter cost
5	Connecting points and parking
6	Cost
7	Costs more than the rubber tire mode. Visual impact of overhead wires may be a negative but am willing to consider that impact.
8	Ease of getting on and off, where the stops are located
9	Either trolley bus option generates unsightly electric wires overhead, generating a visual pollution.
10	Electric trolleys are not built in the U.S. so we would not be eligible for federal funds. A bus is a bus is a bus is a bus
11	Expense
12	Fair distribution of costs.
13	fixed route that may not warrant continued scheduling commitment
14	I don't particularly like the overhead electrical grid necessary to make it function.
15	I'm not sure.
16	Initial Cost.
17	It is a "bus" and not a fancy street car. It would be critical to choose a modern looking trolley bus.
18	It is doubtful that permanent economic development would follow the trolley bus, because it does not convey a permanent commitment to transit.
19	It isn't the cheapest mode and some will object to the overhead wires as unsightly. Unresolved is the entire question of the source of these buses.
20	Less infrastructure improvement over a long period of time.

21	None
22	Not as cool as a street car. Overhead wires can be ugly.
23	Not as cool as a trolley. Less potential economic benefit than a trolley.
24	Not permanent enough for investment. The overhead infrastructure and its recurring maintenance will not be popular and will further complicate new development downtown. As it is really a "super enhanced bus" option, it will be difficult to make the case for the incremental investment over straight forward enhanced bus option. O&M expenses will be higher than enhanced bus option.
25	Not sure
26	Overhead lines, if any.
27	Overhead wire system
28	Overhead wires are not attractive
29	Same as for streetcar
30	The opportunity for cheap, hunky, bus-like system. Instead of an ugly bus, it will be an ugly bus with wires.
31	The overhead wires aren't very attractive
32	The potential perception that it is just a bus.
33	The unsightly nature of the electrical wires.
34	Too expensive and no one will ride it
35	UGLY overhead lines.
36	Unsightly power line.
37	Visual concerns of overhead wiring.
38	Wires everywhere; what to do about Hoopfest? Time spent converting from gas engine to electric power during commute

Question 11: Electric Trolley Bus Other Actions

What actions (e.g. property marketing, development, parking policies, etc.) do you believe your property or business might implement based on the construction and operation of an electric trolley bus line in downtown Spokane?

1	Fix the "change of use" policy.
2	I believe a frequent transit vehicle would encourage employees to park outside the core reducing the demand for surface lots. It would make it more feasible for employees who live in close-in neighborhoods to ride transit to work.
3	Incentives for employees to utilize and connect this to other mass transit options.
4	It would give the campus options to consider to further encourage students and employees to not bring their cars to campus.
5	Less direct response than to streetcar improvements
6	Marketing; ownership of a stop
7	N/a
8	N/A
9	N/a
10	N/A
11	No change.
12	No difference.
13	None
14	None
15	None
16	None - maybe internal business ridership encouragement
17	None anticipated
18	None. Concerned about all the new power pole locations that will be required.
19	Not applicable
20	Not interested in seeing this option.

21	Parking structures at both ends of line or somewhere along line
22	Same answer as previous option.
23	Same as fixed rail streetcar listed earlier.
24	Same as for streetcar
25	Same as prior answer to similar question.
26	Same as question #3
27	Same as streetcar
28	Same as with the streetcar
29	Similar to street car.
30	We do not support this alternative.
31	We're a professional services firm. Few actions.

Question 12: Electric Trolley Bus Development

In your opinion, what would be the development changes to downtown Spokane as a direct result of an investment in an electric trolley bus line?

1	Access to business and downtown corridor
2	As stated earlier, easier to move around town encouraging commerce, and breaks down the barriers between Division, Maple Street, etc.
3	Hipper. Attract the folks to start more businesses and increase traffic and ease of use for those that are there.
4	Huge impact on econ development -- bringing awareness to DT, shoppers, and other revenues that may not either ever even come DT or wouldn't come as much given the transportation and parking constraints currently there.
5	I do not think it will impact development to a degree that someone specifically seeks to be on the line; but it may improve commutability for those coming and going to any business on the line
6	I think there would be investment in new projects as a result, but not as much as a trolley system.
7	Improved access to downtown from the U-District
8	Increased capital investment by more diverse group of developers seeing opportunity to capitalize on foot traffic near the route
9	Increased development density in the U-District, the East Downtown area and the West downtown area.
10	Increased opportunities for employees to live and work downtown
11	Infrastructure build, short-term traffic congestion, longer-term attraction, little overall economic value.
12	It will not affect the downtown business district positively
13	Little if any
14	Might produce an uptick in tourism which might be sustainable. I highly doubt there would be any directly attributable, meaningful investments made in Downtown as a result of this mode choice.
15	More reinvestment in vacant/underutilized properties
16	No difference compared to streetcar or bus options.
17	No different than modern rail street car
18	None
19	None
20	None that I know of.
21	Not sure exactly what this question is asking. I do believe that this mode demonstrates a commitment to future of the core and will help make the case to property owners and users that there is value here and that there is more to come
22	Same answer as previous option.
23	Same as for streetcar
24	Same as prior answer.
25	Same as question #3
26	Same as streetcar

27	Same as the rail. The electric trolleys will move people throughout the urban core.
28	Same as with the streetcar
29	See previous answer
30	Themed Bus Shelters would create an opportunity to promote businesses and the unique areas of the CBD and City.
31	Unsure. Perhaps small business encouragement. Until Kendall Yards comes to fruition with small businesses or as a second downtown area, the need for this system seems suspect.
32	With proper marketing, the development changes could be similar to that of a street car. We want to promote a state of the art system, and to do that, we should stop using the phrase "electric trolley bus." We should be saying something more ambiguous like Electric Transit. Call it something "techy" like "The Charge," "The Volt," "the Bolt." An opportunity to promote a new way of sleek/sexy urban circulator.

Question 13: Enhanced Bus Advantages

What do you believe are the advantages of implementing the enhanced bus option?

1	Absolutely none!
2	Access. Connects to current system well.
3	Adaptable and flexible with the ability to terminate without huge sunk cost
4	Best option least cost
5	Better mobility for short trips. Convenience.
6	Cheapest option
7	Cost
8	Cost
9	Cost
10	Cost effective. Simple to implement. Current rider base already familiar. O&M costs understood and addressable.
11	Cost, ease of implementation, flexibility as to routing.
12	Cost.
13	Expands access, reduces traffic congestion; positive environmental impact
14	Flexibility in growth, proven in winter, easier to eliminate if the transit system concept is not proven to be useful as intended or becomes not cost effective. Also requires the same road maintenance as auto so not an additional maintenance requirement.
15	Flexibility--can add/delete resources to lines as demand changes
16	I'm afraid this would not be a "step up" enough over a regular bus or shuttle route to have an advantage. Obviously the lower cost is an advantage.
17	It is not an option worth pursuing.
18	It is the cheapest option
19	Least expensive and utilizes an existing system.
20	Least expensive mode being considered. Most flexible in terms of route modification needs. Least impacted by snow related issues during severe weather.
21	Least expensive,
22	Less expensive
23	Limited
24	Limited, if any.
25	Low-cost
26	Lower cost in a tight budget environment
27	Lower cost to implement
28	Lower cost, More attractive vehicles, Easier to use; system already in place and waiting for improved service
29	Lowest cost alternative
30	Lowest cost option. ti would allow the route to be initiated and interest develop over time.
31	None.

32	None. I think the enhanced bus mode is a waste of money. The perception would simply be that downtown got fancy bus stops and better busses than the rest of the system.
33	None. They can use the shuttle that currently operates to Arena
34	Not as user friendly like the feel of the streetcar/electric bus
35	Not many.
36	Permanent stations; versatility of bus; environmental advantages of hybrid/electric vehicles and no overhead electric lines
37	Seems simple to implement and maintain
38	STA does a good job now and could continue the same level of service to other areas.
39	The enhanced bus, like the other options, creates a dedicated means of traveling efficiently across downtown when it's too far or inconvenient to walk, but too close to warrant driving, finding another parking spot, etc.
40	There are no advantages of an enhanced bus option.
41	They look better on the outside than a regular bus. Easy maintenance without significant new investment by STA in bus barns.

Question 14: Enhanced Bus Disadvantages

What do you believe are the disadvantages of implementing the enhanced bus option?

1	Additional expense without appropriate return. Not an attractive solution for new users.
2	Buses are very large they are not as easy to stop all over downtown I believe people will want transportation that stops every few blocks.
3	Can't think of any
4	confusion to the riders...
5	Cost of service.
6	Does not add anything significant to the transportation system.
7	Enhanced bus has never meant to be a "circulator." They are designed for rapid, longer distance trips. The word 'bus' will never produce economic development.
8	Everything that is positive about a streetcar would not be realized by a bus. A bus is a bus is a bus is a bus. Enough said
9	Feels like a bus and may not get the property owners' support and marketing dollars for an initiative that doesn't seem that much different than what we already have.
10	Few if any
11	Harder to convince developers to make long term investments
12	Harder to get business community and property owner buy-in.
13	It is the cheapest option. We can do better. We need to inspire with this investment and not settle just for cheap. It is hard to demonstrate the commitment to permanence with this choice.
14	It is too much like regular transit to attract a new demographic of riders. Will do little to encourage development.
15	It's just a glorified bus. And in Spokane we don't have a culture of mass transit. I say this as a native New Yorker, and having spent a decade in Boulder, CO where use of transit is engrained in the culture. Buses here for many reasons seem to be used primarily by the disenfranchised. My concern is most would view the enhanced bus as "another bus."
16	Just another bus. Would not do this option.
17	Just feels like more of the same...time to break out! Stop with the attitude that the same stuff will serve us into the future...be progressive! The big issue is cost in the arguments and this is least cost up front so it tends to get the uninterested vote. The visionary thing to do is the hardest some times...not just settle.
18	Just looks like another bus. I don't believe this mode would stimulate any "cool factor" or "buzz" for downtown. Don't think this mode would generate any material capital investment in the core of downtown.
19	Lacks as much "cool" factor as streetcar or trolley
20	Like a rose, a bus, is still a bus. It lacks a certain cache or style of a rail system. We would be setting

	ourselves for failure.
21	Many
22	More of the same. Just not an attractive way to travel.
23	No appeal for tourists. No sex appeal.
24	Nobody cares and there would not be any incremental riders
25	Non exist
26	None
27	Not as sexy as the other options; everyone likes having new toys. Not as clean as electric power
28	Not enough different to encourage the cultural, mindset change required for mass transit to be fully accepted in this market.
29	Not permanent enough and not as much public appeal to draw people to use.
30	Not permanent enough. I would expect limited investment from adjacent property owner's
31	Reliance on fuel and subjected to fuel price fluctuations, sensitive to driver characteristics.
32	See above - the enhanced bus mode is a waste of time and money.
33	The route can change, thus reducing economic development
34	This option does not quite have the appeal as a trolley option would have.
35	Too expensive and not enough riders
36	Why bother -- it is just a higher capacity "bus"
37	Won't appreciably increase ridership or patronage in Downtown as a direct result. Won't be a draw for visitors and won't likely be used by visitors. Won't reduce the demand for surface parking. May not be viewed as sufficiently different from present option to gain support of the tax base.
38	Would likely be viewed as "just another bus route" and so unlikely to attract new users. Does not make for an exciting and new link between the three districts.

Question 15: Enhanced Bus Other Actions

What actions (e.g. property marketing, development, parking policies, etc.) do you believe your property or business might implement based on the construction and operation of an enhanced bus line in downtown Spokane?

1	I believe a frequent transit vehicle would encourage employees to park outside the core reducing the demand for surface lots. It would make it more feasible for employees who live in close-in neighborhoods to ride transit to work.
2	Incentives to employees to utilize and incentives to businesses to participate...we need the alternatives to buy down the cost so its not about cost up front to get usage up.
3	Increased access to public transportation allows reconsideration of campus parking policies to encourage students and employees not to bring their cars to campus.
4	Informing businesses and current ridership
5	Limited initial actions.
6	Limited.
7	Little or none.
8	N.A.
9	N/a
10	N/A
11	N/a
12	N/A
13	No action.
14	No change.
15	None
16	None
17	None
18	None - maybe internal business ridership encouragement
19	None other than helping to fund a top if on our site.

20	None that I could see.
21	None.
22	None.
23	Not sure - but probably some marketing
24	Perhaps change bus passes offered to employees to provide greater incentive to use DT circulator
25	Same as mentioned before.
26	Same as prior answer.

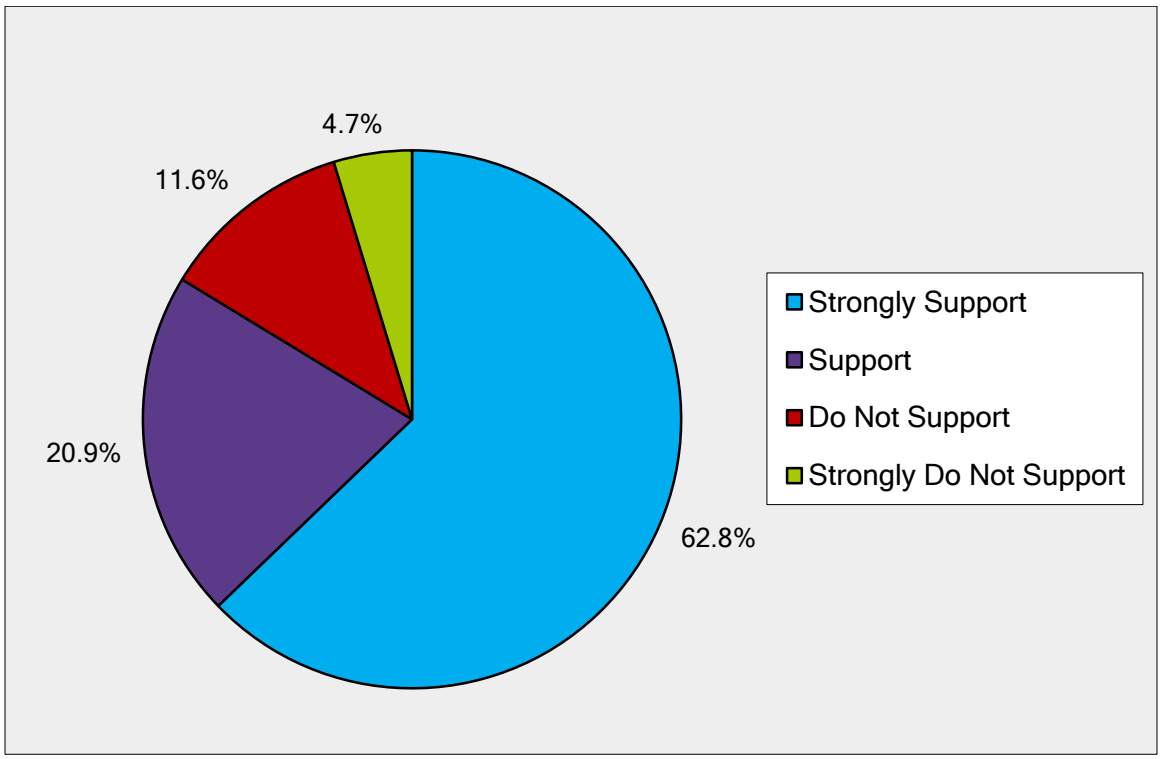
Question 16: Enhanced Bus Development

In your opinion, what would be the development changes to downtown Spokane as a direct result of an investment in an enhanced bus line?

1	Bringing shoppers downtown to spend money
2	Ease of downtown access and thus likely economic enhancement.
3	Far fewer than with the other two options. Yes, provides connectivity between GU and Browne's but that's about it.
4	I do not think it will impact development to a degree that someone specifically seeks to be on the line; but it may improve commutability for those coming and going to any business on the line
5	Improved access to downtown business by students from the U-District.
6	Increased opportunities for employees to live and work downtown
7	Less than zero
8	Limited.
9	Little if any
10	Little or none.
11	May not affect business as bus routes exist. But providing more access points always encourages demand in those areas
12	Minimal
13	Minimal.
14	More consumers
15	More empty buses downtown.
16	N.A.
17	No development changes.
18	No difference.
19	No different than modern rail street car
20	None
21	None
22	None, since a flexible route that is open to change will not provide people any incentive to develop -- only a stable fixed route will provide this
23	None.
24	Not sure -- need more info
25	Nothing material
26	Possibly reduced need for surface parking lots for those working Downtown.
27	Potentially good, but market demand will drive opportunity. It cannot be forced.
28	Reinvestment in vacant/underutilized properties
29	Same as prior answer.
30	Still capture increased foot traffic with better access
31	Unsure. Perhaps small business encouragement. Until Kendall Yards comes to fruition with small businesses or as a second downtown area, the need for this system seems suspect.
32	Very little impact.
33	We'd increase retail activity and restaurant activity = economic development...as that happens more businesses will be attracted to either grow downtown, move downtown or come to the area...it will increase the sense of place like the street car would.

Question 17: Project Support

Many downtown and urban neighborhoods across the country are seeking to construct and operate circulation systems to promote economic development and reduce reliance on the automobile for short trips. Please indicate your level of support for the following statement: "A downtown circulator in Spokane is necessary for the next phase of economic development to occur along with providing connectivity, permanency and efficient transportation."



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Appendix C:
Resolutions Adopting the Locally Preferred Alternative

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RESOLUTION NO. 678-11

A RESOLUTION FOR THE PURPOSE OF ADOPTING A LOCALLY PREFERRED ALTERNATIVE FOR HIGH PERFORMANCE TRANSIT IN CENTRAL CITY SPOKANE

SPOKANE TRANSIT AUTHORITY
Spokane County, Washington

BE IT RESOLVED BY THE SPOKANE TRANSIT AUTHORITY as follows:

WHEREAS, the Spokane Transit Authority (STA) is a municipal corporation operating and existing under and pursuant to the Constitution and Laws of the State of Washington, including RCW Title 36, Chapter 57A, Public Transportation Benefit Area (PTBA); and,

WHEREAS, the City of Spokane is a city wholly within the PTBA; and,

WHEREAS, in 2009 the Spokane City Council approved resolution 09-46 designating STA as the grantee of a Federal Transit Section 5339 alternatives analysis grant and authorizing the City's participation in a planning effort to consider a transit investment in Downtown Spokane; and,

WHEREAS, STA submitted a local Alternatives Analysis initiation package to the Federal Transit Administration (FTA) in October 2010; and,

WHEREAS, STA selected consultant CH2M Hill to conduct the Alternatives Analysis with guidance from the Federal Transit Administration, STA and the City of Spokane, beginning in Spring of 2010; and,

WHEREAS, Core Stakeholders considered all applicable input by the public and the technical team to present the Board with a recommended Locally Preferred Alternative on July 20, 2011; and,

WHEREAS, the consultant team met numerous times with a Sounding Board made up of community members interested in downtown, adjacent neighborhoods and public transportation to provide input to the process; and,

WHEREAS, Core Stakeholders considered multiple potential modes, including modern streetcar, modern electric trolley, enhanced bus as well as a transportation system management (TSM) alternative; and,

WHEREAS, a Modern Electric Trolley vehicle is a high capacity, rubber-tired electric vehicle with the primary energy source transmitted by a fixed guideway, overhead catenary system extending the entire length of the alignment as practicable; and,

WHEREAS, the Core Stakeholders recommend the Modern Electric Trolley mode as the preferred mode for the Central City project; and,

WHEREAS, eleven alignments were considered during the study and subsequently narrowed down to four finalists connecting important places within Spokane's central city; and,

WHEREAS, the Core Stakeholders recommend the general alignment extending between Browne's Addition and Gonzaga University by way of Downtown Spokane and the WSU Spokane Campus at Riverpoint; and,

WHEREAS, in July 2010 the Spokane Transit Authority has adopted a Comprehensive Plan for Public Transportation that envisions a network of High Performance Transit serving the Public Transportation Benefit Area; and,

WHEREAS, the recommendation by Core Stakeholders is consistent with the Comprehensive Plan for Public Transportation and the High Performance Transit Network element of said plan; and,

WHEREAS, the Board received written testimony and oral comments concerning the recommended Locally Preferred Alternative at the Board meeting on July 20, 2011; and,

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of STA as follows:

Section 1. The STA Board of Directors hereby adopts the Locally Preferred Alternative of Modern Electric Trolley along a general alignment extending between Browne's Addition and Gonzaga University by way of Downtown Spokane and the WSU Spokane Campus at Riverpoint.

Section 2. Staff is directed to forward the Locally Preferred Alternative to the Spokane Regional Transportation Council for consideration and adoption into the Metropolitan Transportation Plan.

Section 3. This resolution shall not be construed to indicate project priority or a financial commitment for project implementation.

ADOPTED by STA as a regular meeting thereof held on the 20th day of July 2011.

ATTEST:

Jan Watson
Clerk of the Authority

SPOKANE TRANSIT AUTHORITY

Amber Waldref
STA Board Chair

Approved as to form:

Laura McAloon
Attorney for Spokane Transit Authority

CITY OF SPOKANE

OFFICE OF THE CITY CLERK
808 W. SPOKANE FALLS BLVD.
SPOKANE, WASHINGTON 99201-3342
(509) 625-6350

August 1, 2011

City Clerk File No.:
RES 2011-0055

COUNCIL ACTION MEMORANDUM

RE: RESOLUTION 11-55 ADOPTING A LOCALLY PREFERRED ALTERNATIVE FOR HIGH PERFORMANCE TRANSIT IN CENTRAL CITY SPOKANE OF MODERN ELECTRIC TROLLEY

During its 6:00 p.m. Legislative Session held Monday, July 25, 2011, the Spokane City Council considered Resolution 11-55 adopting a Locally Preferred Alternative for High Performance Transit in Central City Spokane of Modern Electric Trolley along a general alignment extending between Browne's Addition and Gonzaga University by way of Downtown Spokane and WSU Spokane Campus at Riverpoint. Subsequent to presentations by Mayor Mary Verner and STA Chief Executive Officer Susan Meyer, who was accompanied at the podium by STA Director of Planning Karl Otterstrom, Council inquiry and discussion, and public testimony, the following action was taken:

> **Upon 6-1 Roll Call Vote (Council Member Apple voting "no"),** the City Council **adopted Resolution 11-55** adopting a Locally Preferred Alternative for High Performance Transit in Central City Spokane of Modern Electric Trolley along a general alignment extending between Browne's Addition and Gonzaga University by way of Downtown Spokane and WSU Spokane Campus at Riverpoint.

Terri L. Pfister, MMC
Spokane City Clerk

CITY OF SPOKANE

Agenda Sheet for City Council Meeting of*

07/25/2011

Status: CLERK REVIEW

Date Rec'd (Clerk use only)	07/13/2011		
Clerk's File #	RES 2011-0055		
Renews #			
Submitting Dept*:	BUSINESS & DEVELOPMENT SEI	Cross Ref #	
Contact Name & Phone*:	TERESA BRUM X6987	Project #	
Contact E-Mail*	TBRUM@SPOKANECITY.ORG	Bid #	
Add'l Docs Attached? ☑	Resolutions	Requisition #	

Agenda Item Name: Begin with Dept # 0780- RESOLUTION - LPA FOR HIGH PERFORMANCE TRANSIT

Agenda Wording*: (7 character max) ☐ Additional attached?

Resolution to adopt a Locally Preferred Alternative for High Performance Transit in Central City of Spokane to include a Modern Electric Trolley between Browne's Addition and Gonzaga University by way of downtown Spokane and WSU Spokane Campus

Summary (Background)*: (24 character max.) ☑ Additional attached?

In 2009, the Spokane City Council approved Resolution No. 09-46 designating STA as the grantee of a Federal Transit Section 5339 alternatives analysis grant and authorizing the City's participation in a planning effort to consider a transit investment in Downtown Spokane. CH2M Hill was selected to conduct the Alternatives Analysis with guidance from STA and the City of Spokane, beginning in Spring of 2010. An extensive public participation process followed. (continued)

Fiscal Impact | **Budget Account** ☐ Additional attached?

Neutral	$		#	
Select	$		#	
Select	$		#	
Select	$		#	

Approvals

Dept Head	BRUM, TERESA
Division Director	BRUM, TERESA
Finance	LESESNE, MICHELE
Legal	BURNS, BARBARA
For the Mayor	WEBSTER, DOROTHY

Additional Approvals

Purchasing	
Select Dept 1	
Select Dept 2	
Select Dept 3	

Council Notifications (Date) ☐ None

Study Session	3/24/11 & 7/21/11
Other	Admin Reports 6/28/10 & 3/14/11

Distribution List (Emails preferred) ☐ Additional?

tbrum@spokanecity.org
anapolitano@spokanecity.org
mpiccolo@spokanecity.org
jwright@spokanecity.org
pmtaylor@spokanecity.org
scollins@spokanecity.org
dmandyke@spokanecity.org

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Continuation of Wording, Summary, and Distribution

Agenda Item Name: 0780- RESOLUTION - LPA FOR HIGH PERFORMANCE TRANSIT

Agenda Wording (630 character max)

Summary (Background) (326 character max)

(continued) On July 20, 2011, the Core Stakeholder Group considered all applicable input by the technical team and the public to present the STA Board with a recommended Locally Preferred Alternative. The alternative includes both a preferred mode of transportation, which is a modern electric trolley vehicle, and a general alignment extending between Browne's Addition and Gonzaga University by way of Downtown Spokane and the WSU Spokane Campus at Riverpoint. City Council and the STA board are now being asked to consider adopting the LPA.

Fiscal Impact		Budget Account	
Select	$	#	
Select	$	#	
Select	$	#	
Select	$	#	

Distribution List

Save Cancel

Resolution No. 2011-0055

A resolution regarding the City Council's adoption of a Locally Preferred Alternative for High Performance Transit in Central City Spokane.

WHEREAS, the Spokane Transit Authority (STA) is a municipal corporation operating and existing under and pursuant to the Constitution and Laws of the State of Washington, including Title 36 RCW and chapter 57A RCW, Public Transportation Benefit Area (PTBA); and

WHEREAS, the City of Spokane is a first class charter city wholly within the PTBA; and

WHEREAS, in 2009, the Spokane City Council approved Resolution No. 09-46 designating STA as the grantee of a Federal Transit Section 5339 alternatives analysis grant and authorizing the City's participation in a planning effort to consider a transit investment in Downtown Spokane; and

WHEREAS, Spokane Transit Authority selected consultant CH2M Hill to conduct the Alternatives Analysis with guidance from STA and the City of Spokane, beginning in spring of 2010; and

WHEREAS, the consultant team met numerous times with a sounding board made up of community members interested in downtown, adjacent neighborhoods and public transportation to provide input to the process; and

WHEREAS, a Core Stakeholder Group consisting of decision makers from the Spokane Transit Authority, the City of Spokane, the Spokane Regional Transportation Council, and the Downtown Spokane Partnership, as well as representatives of the University and Medical districts was created to help with the decision making process; and

WHEREAS, the Core Stakeholder Group considered all applicable input by the technical team and the public to present the STA Board with a recommended Locally Preferred Alternative on July 20, 2011; and

WHEREAS, a modern electric trolley vehicle is a high capacity, rubber-tired electric vehicle with the primary energy source transmitted by a fixed guideway, overhead catenary system extending the entire length of the alignment as practicable; and

WHEREAS, the Core Stakeholder Group recommends the modern electric trolley mode as the preferred mode for the Central City project; and

WHEREAS, eleven alignments were considered during the study and subsequently narrowed down to four finalists connecting important places within Spokane's central city; and

WHEREAS, the Core Stakeholder Group recommends the general alignment extending between Browne's Addition and Gonzaga University by way of Downtown Spokane and the WSU Spokane Campus at Riverpoint; and

WHEREAS, in July 2010 the Spokane Transit Authority has adopted a Comprehensive Plan for Public Transportation that envisions a network of High Performance Transit serving the Public Transportation Benefit Area; and

WHEREAS, the recommendation by the Core Stakeholder Group is consistent with the Comprehensive Plan for Public Transportation and the High Performance Transit Network element of the plan; and

WHEREAS, the STA Board received written testimony and comment concerning the recommended Locally Preferred Alternative at the Board meeting on July 20, 2011.

NOW, THEREFORE, BE IT RESOLVED by the City Council for the City of Spokane that the City Council hereby adopts the Locally Preferred Alternative for High Performance Transit in Central City Spokane of Modern Electric Trolley along a general alignment extending between Browne's Addition and Gonzaga University by way of downtown Spokane and the WSU Spokane Campus at Riverpoint; and

BE IT FURTHER RESOLVED that this resolution shall not be construed to indicate project priority or a financial commitment for project implementation.

ADOPTED by the City Council July 25, 2011.

City Clerk

Approved as to form:

Assistant City Attorney