



# Four Lakes Station



## Project Justification

Four Lakes is an integral component of the Cheney Line and an investment in high performance transit (HPT) in the West Plains. The project will construct accessible, sheltered bus stops along SR 904 in Four Lakes, add sidewalk and lighting and will provide a crosswalk across the highway with a median refuge.

The project will improve the safety of transit operations in Four Lakes and enhance passenger comfort and visibility. It also aims to improve connectivity of the Four Lakes community which has limited pedestrian pathways and is divided by the highway.

A study performed by STA indicates that 10-20 people a day cross SR-904 to ride the bus or shop at the convenience store. Input from community members indicates these numbers would be higher with a well-lit crosswalk.

## Project Location Info

Bus Riders	13-26 Daily
SR 904 Ped Crossings	10-20 Daily
SR 904 Speed Limit	40 mph
Four Lakes Population	520 (2010)
Peak SB Traffic	847 Vehicles*
Peak NB Traffic	813 Vehicles*

**\*Data from STA Traffic Study on 10/15/2019**

## Project Schedule & Next Steps

We will consider and incorporate public feedback before finalizing design.

**The project is scheduled for construction in Summer 2020 as part of the first phase of Cheney Line implementation.**

Proposed Project Element	Purpose
Sheltered Stops	Improve passenger comfort and visibility.
Stop Platform	Improve accessibility and safety.
Lighting Improvements	Safety and visibility for bus riders, pedestrians and motorists
ADA Accessible Sidewalk	Improve access and safety for pedestrians
Crosswalk & Median	Provide a community connection with a well-lit pedestrian crossing of SR 904. A median will improve safety by shortening the crossing distance
Eliminate Left Turns from 1st Avenue to SR 904	<p>Improve intersection safety by rerouting left turn movements to 6<sup>th</sup> Ave (Southbound) and Medical Lake Four Lakes Road (Northbound) which have better lines of sight. Relatively low number of vehicles making these turns currently.</p> <p>4 left turns onto South SR 904 from 1<sup>st</sup> Avenue*            19 left turns onto N. SR 904 from 1<sup>st</sup> Avenue*</p>
Spokane Street Closure between 2 <sup>nd</sup> and 1 <sup>st</sup> Ave	Improve SR 904 intersection geometry and safety.

**\*Data from STA Traffic Study on 10/15/2019 during AM and PM Peak Traffic Hour**

## Preliminary Design Lane configuration

Spokane Transit is seeking input on preliminary design alternatives for the Four Lakes Station. Please provide feedback on your preferred option by reviewing the potential advantages and disadvantages of each along with the design and conceptual renderings.

### Option 1

Option 1 provides a pull-out for the southbound bus stop. Adequate merging distance is provided transitioning to a right-turn only lane for Medical Lakes – Four Lakes Road. The northbound bus stop is in-lane adjacent to the crosswalk.

Advantages	Disadvantages
<ul style="list-style-type: none"> <li>Proximity to the crosswalk decreases likelihood of mid-block crossings by pedestrians to/from the northbound bus stop</li> <li>The in-lane northbound stop reduces dwell time and eliminates the need for buses to pull back into traffic. Reduces sidewalk and retaining wall requirements of the project</li> <li>Better protects pedestrians in the crosswalk while bus is stopped</li> </ul>	<ul style="list-style-type: none"> <li>A vehicle queue will form when a bus is stopped at the in-lane stop.</li> </ul>

### Option 2

Option 2 also provides a pull-out for the southbound bus stop. The key difference is the northbound bus stop is also in a pull-out, setback from the crosswalk to allow for buses to merge back into traffic toward the I-90 interchange.

Advantages	Disadvantages
<ul style="list-style-type: none"> <li>Does not restrict flow of traffic.</li> </ul>	<ul style="list-style-type: none"> <li>Short acceleration/merge lane due to proximity to intersection. Max speed is about 18 mph upon merging while through traffic is traveling around 40mph. This requires the bus to hold for larger breaks in traffic which can be limited during peak periods of travel</li> <li>Increased delay to transit passengers due to delayed re-entry into northbound traffic</li> <li>More likely to have mid-block crossings by pedestrians with platform further away from intersection.</li> <li>Requires more asphalt, sidewalk, retaining wall and drainage improvements.</li> </ul>