

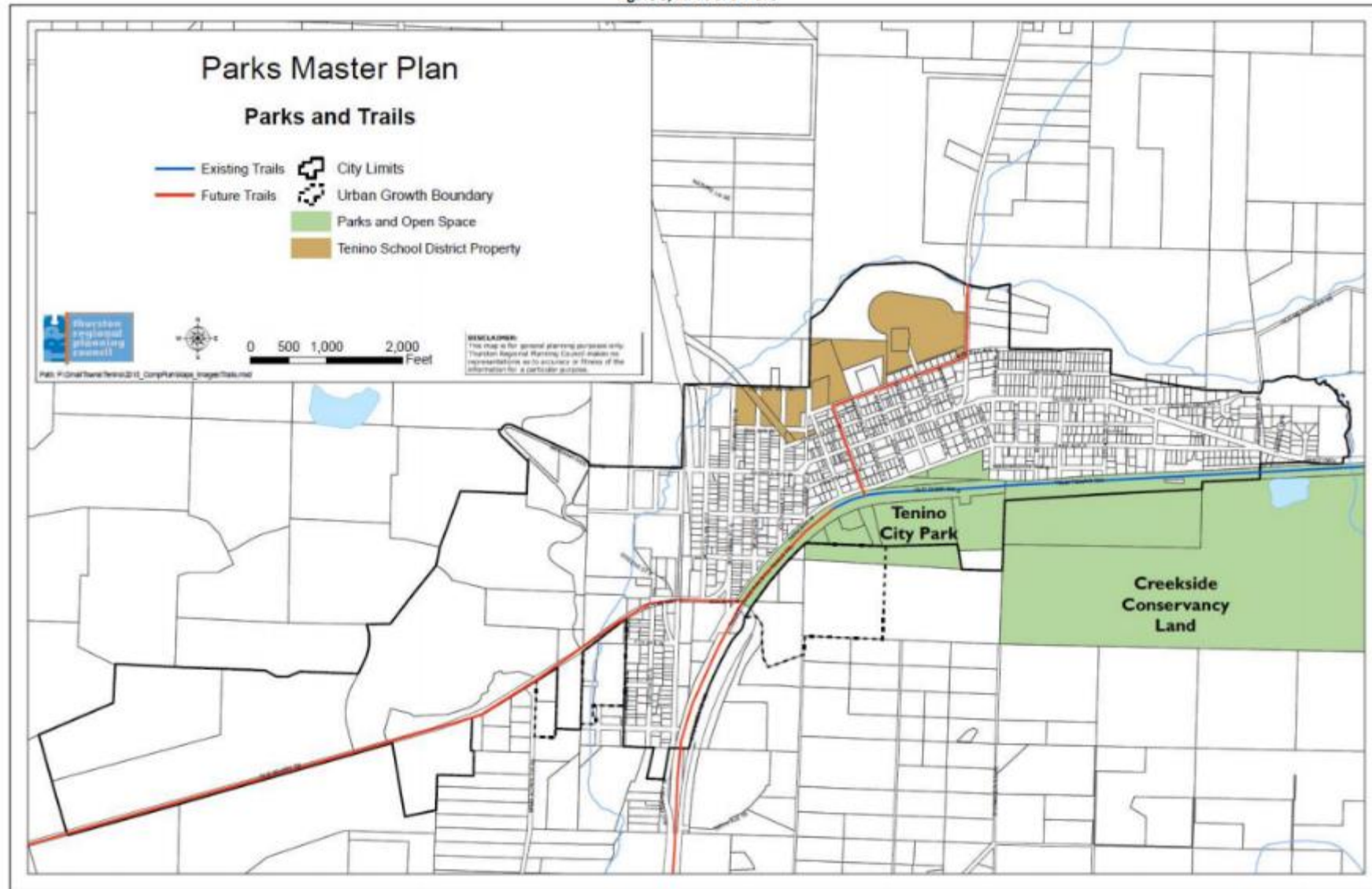


TENINO CITY PARK

Yelm – Tenino  
Trail Extension  
Feasibility Study

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Figure 5, Parks and Trails



# Study Prepared for Bucoda and Tenino

## Funded/Led by Thurston Regional Planning Council

- \$64,875 Federal Transportation Alternatives Program Grant

## SCJ Alliance – Performed the analysis and prepared the report

## Stakeholders

- Bucoda (Mayor Alan Carr)
- Tenino (Mayor Fournier; Clerk/Treasurer John Millard; Planner Katrina Van Every)
- Thurston County (Public Works, Scott Davis; and Parks, Kerry Hibdon)
- WSDOT (Olympic Region Multimodal Planner Theresa Turpin)
- TRPC (Paul Brewster)

# Study Objectives

To identify preferred alignments for extending the trail to inform community decision-making processes for future trail development

- Map and evaluate potential alternative routes
- Recommendations for
  - Trail design
  - Traffic safety
  - Environmental constraints, mitigation, and permitting requirements
  - Archaeological/Cultural resources survey
  - Planning level cost estimates
  - Follow-up studies
  - Funding/Implementation Strategy



**1. South from Tenino City Park to Bucoda**

**2. West from City Park to West Tenino City Limits**

Bucoda

Tenino

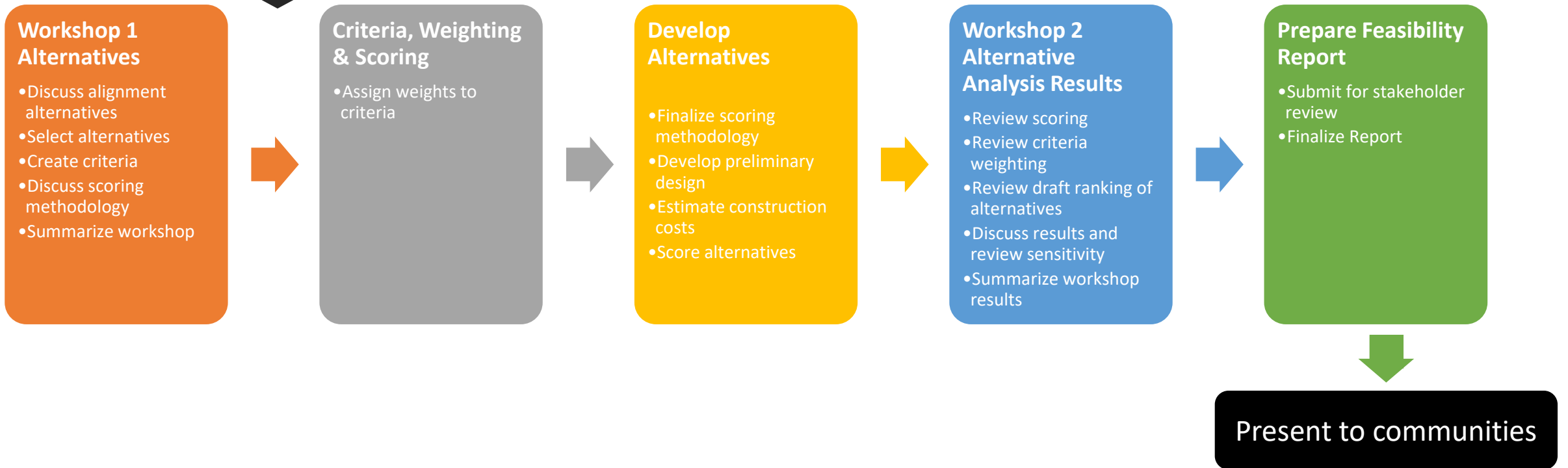
© 2018 Google

Google Earth

1990

Imagery Date: 7/15/2018 46°49'55.59" N 122°53'00.39" W elev 0 ft eye alt 17167 ft

# Study Planning Process and Decision Process Diagram



# Evaluation Criteria



Perceived Safety



Trail Ambiance



Water Resource Conflicts



Directness of Route



Closure due to flooding

# Tenino to Bucoda Extension

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Tenino Depot Museum to Bucoda Town Limits



## Known Issues

- SR 507
- Ditches
- BNSF Railway Mainline Railroad
- Steep Slopes
- Flood plains
- Wetlands
- Creeks and culverts
- Private Property
- Bucoda emergency access/egress during flooding/train blocks

# Tenino to Bucoda

Preferred Alignment

**GR-1 Tenino Depot  
Museum to 184<sup>th</sup> St SE,  
2.5 miles**

Bucoda

Tenino

© 2018 Google

Google Earth



# Tenino to Bucoda

Preferred Alignment

**GR-2B 184<sup>th</sup> St SE to  
Bucoda east of BNSF  
Railroad, 1.1 miles**

**GR-1 Tenino Depot  
Museum to 184<sup>th</sup> St SE,  
2.5 miles**

**Cost Estimate: \$4.2 million**  
(includes design, environmental, ROW, construction)

Bucoda

Tenino

© 2018 Google

Google Earth

# Tenino to Bucoda

Alternative Alignment

GR-2B 184<sup>th</sup> St SE to  
Bucoda, along SR 507 1.5  
miles

Cost Estimate: \$3.1 million  
(includes design, environmental, ROW, construction)

Tenino

Bucoda

# Tenino to Bucoda

Preferred Alignment

GR-2 Trail Design

Crowder Road SE

5 feet

10 feet



# Tenino to Bucoda

Alternative Alignment  
GR-2B Trail Design



10 feet

2-foot Jersey Barrier

SR 507

# West Tenino Extension

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Tenino Depot Museum to Tenino Western City Limits



## Known Issues

- Old Highway 99
- Railroad trestle (SR507/Old Hwy 99)
- Scatter Creek Bridge
- Mazama Pocket Gopher soils/habitat

# West Tenino

Preferred Alignment

GR-4 Parallels Old Hwy  
99 from Scatter Creek  
Bridge to west City  
Limits 1.6 miles

Tenino

# West Tenino

Preferred Alignment

GR-3 From Depot  
Museum, across Park  
Ave, follows 6<sup>th</sup> Ave to  
SR507

GR-4 Parallels Old Hwy  
99 from SR507 to west  
City Limits 1.6 miles

Cost Estimate: \$2.23 million\*

(includes design, environmental, ROW, construction)

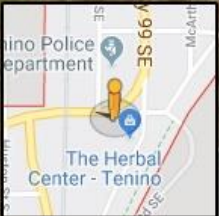
\*Does not include cost of new/replacement bridge for Scatter Creek

Tenino

748 W 6th Ave  
Tenino, Washington

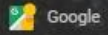


Street View - Aug 2013



16240 Old Hwy 99 SE

Tenino, Washington



Street View - Oct 2018



Google

# West Tenino

Alternative Alignments\*



GR-3B  
GR-3C

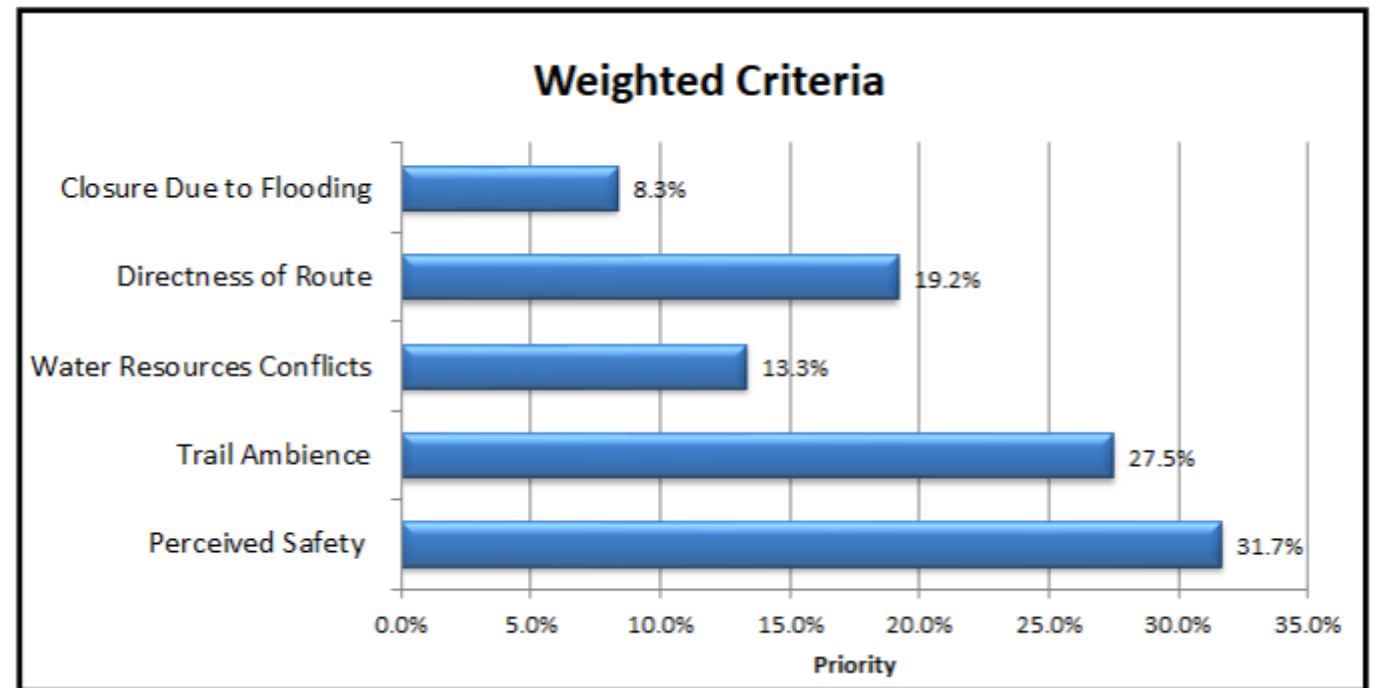
GR-3A\*

GR-3D\*

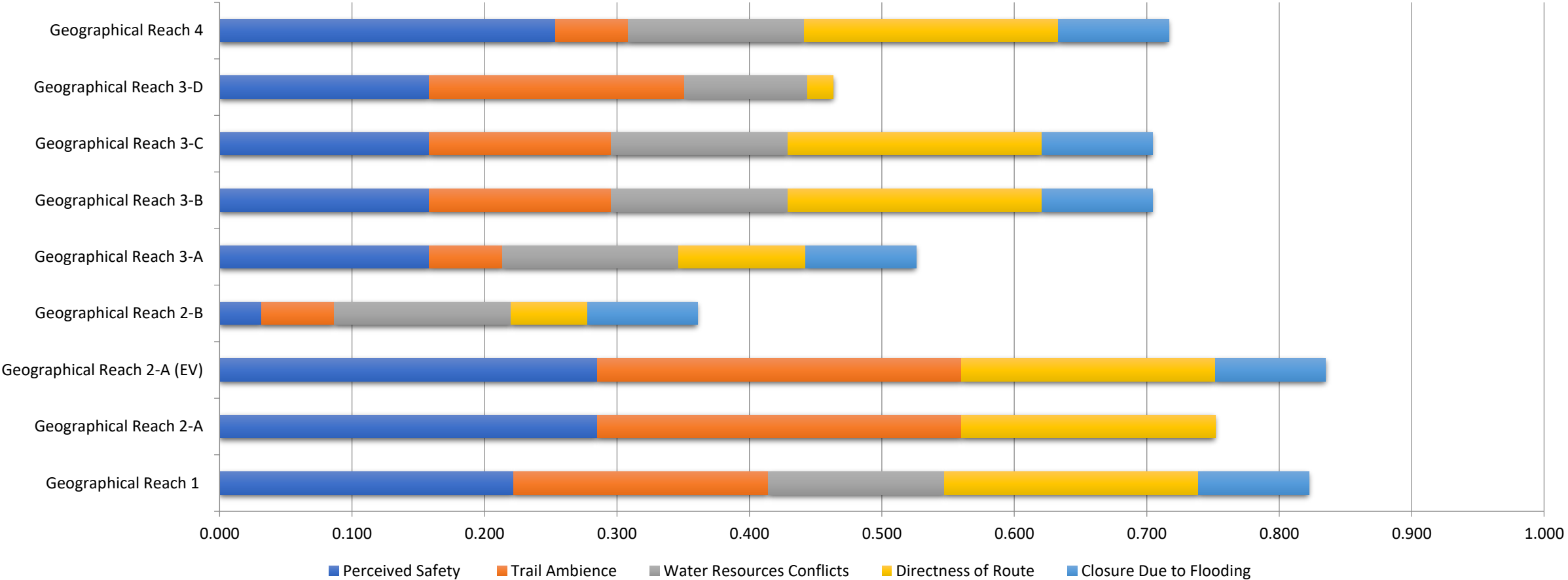
GR-4

# Criteria

Criteria	Description
Closure Due to Flooding	Building a trail in a location where flooding could occur, causing it to be closed.
Directness of Route	Length of route as well as the number of roadway crossings
Water Resources Conflicts	Limiting the negative impact to the environment when constructing in the wetlands and floodplains.
Trail Ambience	The surroundings, views as well as traffic noise.
Perceived Safety	The trail user's experience. This includes the effects of crossings, barriers along the roadway, and overall feel.



# Performance of Alternatives



## Cost Estimates

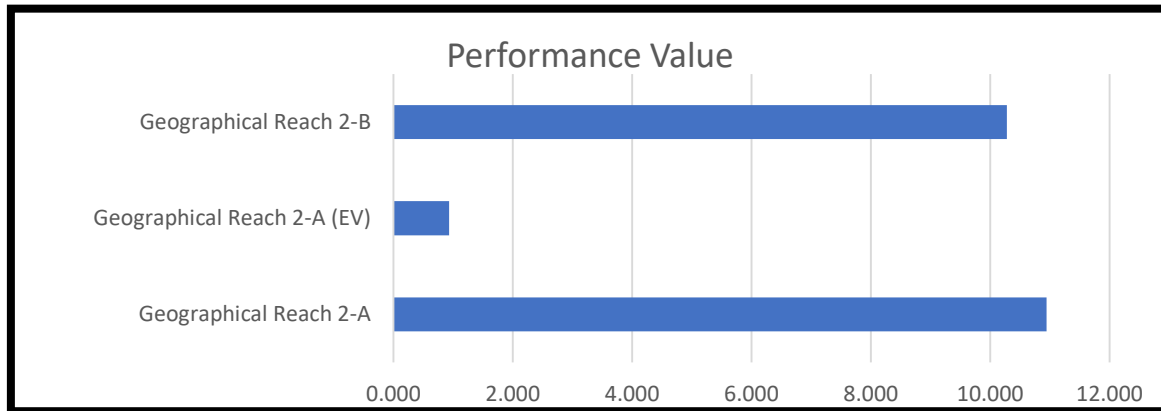
- Includes trailwork, environmental permitting, engineering, right-of-way where needed, and 30% contingency.
- Reaches 2-A, 2-A(EV), and 4 all include bridges. Sargent Engineers was subcontracted to provide bridge concepts and costs which are included.
- Estimated right-of-way costs are based on the assessed value of the properties located near the project vicinity.

Concept Description	Total
Geographical Reach 1	\$1,980,000
Geographical Reach 2-A	\$2,250,000
Geographical Reach 2-A (Emergency Vehicles)	\$29,360,000
Geographical Reach 2-B	\$1,150,000
Geographical Reach 3-A	\$250,000
Geographical Reach 3-B	\$210,000
Geographical Reach 3-C	\$210,000
Geographical Reach 3-D	\$310,000
Geographical Reach 4	\$2,020,000

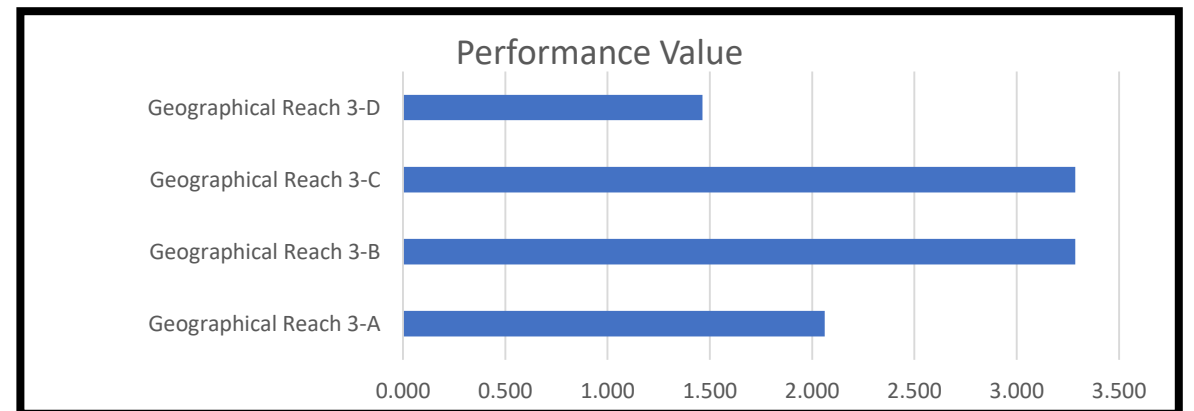
# Value of Alternatives

$$\text{Value} = \text{Performance} / \text{Cost}$$

## Tenino to Bucoda Extension



## West Tenino Extension



# Next Steps

## City of Tenino

- City Council consideration to include Feasibility Study in the City's Park Master Plan and Comprehensive Plan.
- Look for funding opportunities.

## Town of Bucoda

- Adopt Study during a Town Council Meeting.
- Look for funding opportunities.

## Thurston County

- Include the trail extensions in the Parks, Recreation, Trails, and Natural Resource Preserve Plan and in Parks Impact Fee Program.
- Look for funding opportunities.