

FHWA Office of Federal Lands Highway

West Yellowstone Connector Trail

Planning and Design Study: Final Report



South Fork of the Madison River, Custer Gallatin National Forest

Prepared for:
Town of West Yellowstone, Montana

Prepared by:
**Federal Highway Administration
Western Federal Lands Highway Division**

June 2023

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Project Information

The West Yellowstone Connector Trail Planning and Design Study is a collaborative project between the Town of West Yellowstone, US Forest Service Custer Gallatin National Forest, and FHWA Western Federal Lands. The project was funded through the Federal Lands Access Program (Project ID: MT FLAP WYELLS 2021(1)), selected in the 2021 Call for Projects.

The Federal Lands Access Program was established in 23 U.S.C. 204 to improve transportation facilities that provide access to, are adjacent to, or are located within Federal lands. The Access Program supplements State and local resources for public roads, transit systems, and other transportation facilities, with an emphasis on high-use recreation sites and economic generators.

Project Team

- Cole Grisham, AICP | Transportation Systems Planner | FHWA Western Federal Lands
- Dan Walker, AICP | Town Manager | Town of West Yellowstone
- Jason Brey | District Ranger, Hebgen Lake Ranger District | USFS Custer Gallatin National Forest

Technical Support

Additional technical support provided by the following staff:

- Ellen Butler | Earthquake Lake Visitor Center Manager | USFS Custer Gallatin National Forest
- Jamie Lemon, AICP | Transportation Planner | FHWA Western Federal Lands
- Sean Kilmartin, PE | Highway Safety Engineer | FHWA Western Federal Lands
- Y-Thao Truong, PE | Highway Designer | FHWA Western Federal Lands



U.S. Department
of Transportation
**Federal Highway
Administration**

Introduction

Project Background

The Town of West Yellowstone, Montana, has several separate trails that the town would like to see connected. West Yellowstone seeks to design and construct a trail network system through its town to connect the currently separate Yellowstone Shortline, Frontier, Boundary, Rendezvous Nordic Ski, and Riverside Trails to create a complete network for users to recreate or commute on. Indeed, West Yellowstone serves as the nexus of multiple trail systems currently and even provides an unofficial path to connect trails through town on posted signs (see Figure 1).

This study therefore proposes conceptual designs and cost estimates for the proposed trail through the Town of West Yellowstone, known as the West Yellowstone Connector Trail.

Study Area

The study area includes the Town as well as the trail network connecting to the Town from adjacent US Forest Service and National Park Service lands. Figure 2 below shows the study area, existing trails, and proposed trail route the project team started with based on current Town preferences, such as the sign in Figure 1.



Figure 1. Posted sign in West Yellowstone at Alley A and Canyon Street showing a recommended path in purple to connect existing trails.

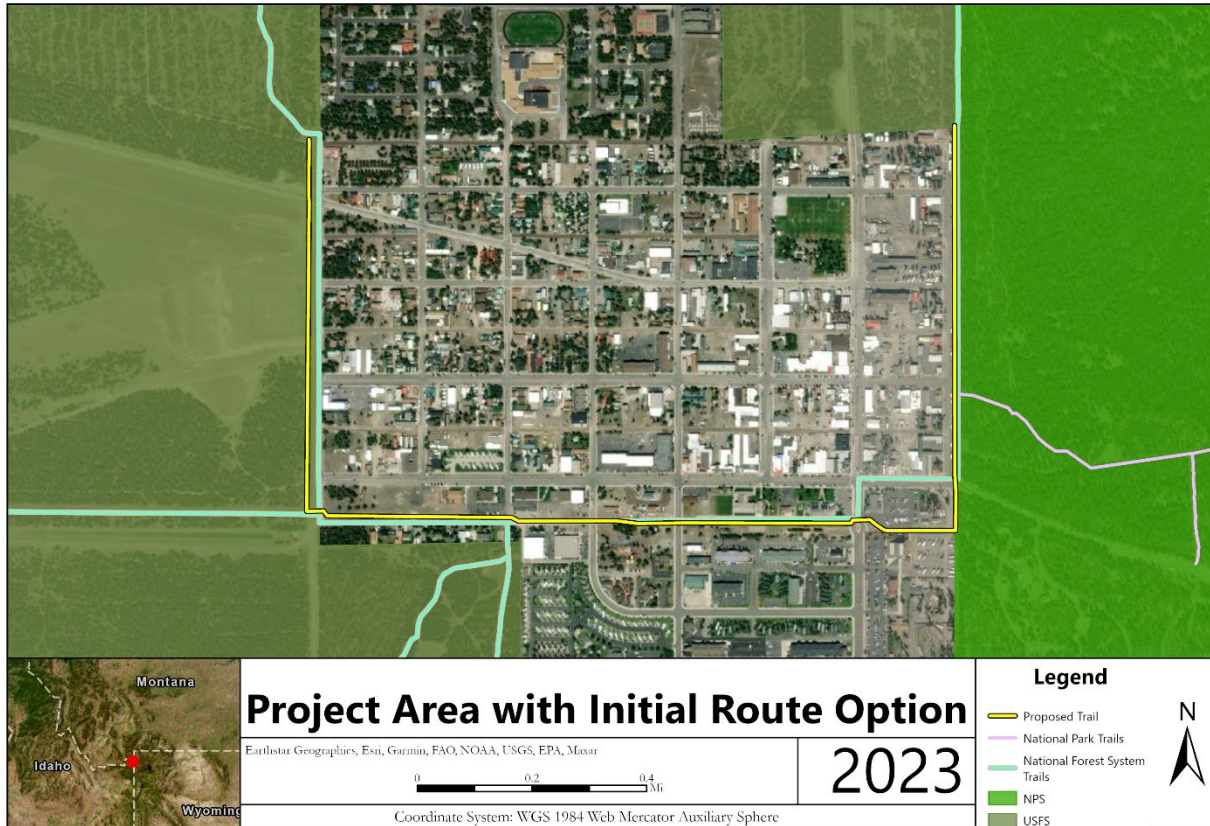


Figure 2. Study area, including the Town, adjacent federal lands, existing US Forest Service and National Park Service trails, and proposed trail route.

Study Goals

This study develops conceptual designs for a trail that connects the different trails in the Town of West Yellowstone into a cohesive trail network. The specific project goals are to:

1. Identify a proposed trail route connecting existing trail and recreation facilities in the Town of West Yellowstone
2. Produce conceptual designs and cost estimates for future design and construction grant applications
3. Ensure proposed trail route, design, and other considerations reflect the interest of Town residents, visitors, and stakeholders

Structure of Report

The Final Report is structured as follows. First, we summarize the study approach used by the project team. Second, we synthesize stakeholder and public feedback received throughout the study development process and how it informed final recommendations. Third, we outline the project findings and recommendations, including the proposed trail route, design recommendations, and associated costs. Lastly, we identify additional considerations and future work collected during the study development process.

The Final Report serves as the synthesis of all study development work completed and final recommendations. For more information on any aspect of the study development process or decision making, see the relevant appendices included at the end of this report.

Study Approach

Overview

The project team developed the study in four phases with stakeholder and public feedback at key milestones: Study scoping, existing conditions, conceptual design alternatives, and report development. This section summarizes each phase of the study.

Study Scope Development

The project team conducted a site visit in May of 2022 to understand the study scope, site conditions, and any major stakeholder or public concerns that could influence the study's development. The site visit included the project team as well as representatives from the National Park Service, Yellowstone Shortline Trail, and Museum of West Yellowstone. Other organizations that had written letters of support for the study to be funded by FHWA were invited but unable to attend. Figure 3 below shows the project route taken. Attendees conducted the site visit on bicycle and foot to better understand how both users experience the route currently. Appendix A provides complete details of the initial site visit.



Figure 3. Initial project site visit route and stops, May 2022.

Existing Conditions

Beginning in Fall of 2022, the project team developed a (1) study engagement strategy to structure stakeholder and public engagement and a (2) existing conditions memo to provide

foundational information on the study contexts and considerations.¹ The engagement strategy outlined the applicable federal regulations, project goals, key stakeholders, and engagement activities planned by study milestone. At each study milestone, the project team updated the engagement strategy with activities conducted, feedback received, and how the feedback was addressed within the study.

The existing conditions memo outlined the information available about the study area that may influence study recommendations. The memo summarizes relevant plans and studies, economic generators, site design and use conditions, safety issues, and the proposed route. The information from the existing conditions were shared with stakeholders and the public in January and February of 2023 through an in-person and virtual public meeting and public comment period. The existing conditions memo and revisions from the engagement activities found that, among other considerations, the study needed to address:

- How the trail would cross applicable highways safely
- Whether the trail would go through the 80-acres of undeveloped land west of Town
- Whether the trails could connect to the school and Madison Addition trail
- Whether snow mobiles would be allowed on the trail

Snowmobile use is regulated by the Town's code, outside the scope of the study, and was therefore easily addressed in the final existing conditions memo. Winter uses of the trail should align with existing winter recreation trails that it connects to, subject to Town code for when and where snowmachines are allowed. Motorized use of the trail during winter months is governed by the West Yellowstone Municipal Code under sections 10.12 (Snowmobiles) and 12.20 (Snow Removal). In summary, snowmobiles would be allowed on the proposed trail during the winter months when enough snow has accumulated to allows snowmobiles to operate on the trail without damaging the underlying trail infrastructure, similar to the Town regulations for snowmobiles on roadways.²³

Conceptual Design Alternatives

The conceptual design alternatives task examined (1) trail route alternatives and design considerations and (2) alternatives to safely cross US20 and US191 based on the findings of the existing conditions work and the project goals.⁴

The route task illustrated the primary route as examined in the initial site visit, alternative connections around the 80-acres area and connecting to the school, and design and material considerations for stakeholder and public discussion. The alternative for the trail to cross the

¹ See Appendices B and C for detailed information on both tasks.

² Town of West Yellowstone Municipal Code, Chapter 10.12 (Snowmobiles).

<https://www.codepublishing.com/MT/WestYellowstone/#!/WestYellowstone10/WestYellowstone1012.html#10.12>

³ Town of West Yellowstone Municipal Code, Chapter 12.20 (Snow Removal).

<https://www.codepublishing.com/MT/WestYellowstone/#!/WestYellowstone12/WestYellowstone1220.html#12.20>

⁴ See Appendix D for further details on the conceptual design work.

applicable highways included four alternatives with associated costs for stakeholder and public discussion:

- Striped bicycle and pedestrian crossing with pedestrian-activated Rectangular Rapid Flashing Beacons (RRFBs)
- Pedestrian-activated hybrid beacons
- Roundabouts
- Grade-separated crossings (i.e, tunnels)

All trail and crossing work was shared with stakeholders and the public at an all-day open house on May 8th, 2023 at the Povah Community Center in the Town. Attendees discussed alternatives and considerations with the project team and one another, provided comments and questions on study posters, and followed up with an online public comment period through May 22nd, 2023. The key preferences heard from attendees were (among others):

- A roundabout at the intersection of US20 and Iris Street
- A RRFB crossing at US191 and Yellowstone Avenue
- Trail route as originally proposed by the Town and project team, with opportunities for future connections

Final Report Development

The final task for the project team was to compile and synthesize study development materials, stakeholder and public input received, additional considerations identified, and final recommendations into a Final Report. This report is submitted to the project team for final review and comment before publishing on applicable media and distributing to all interested parties.

Stakeholder and Public Perspectives

Stakeholder and public perspectives on the study were gathered throughout the the project as outlined in the previous section. This section summarizes the activities conducted, what the project team heard, and how it informed the study’s recommendations.⁵ Engagement activities for this study were organized around key project milestones and consisted of:

- A stakeholder site visit before starting the study,
- A public meeting, webinar, and online public comment period, and
- An in person open house followed by an online public involvement period

Figure 4. Attendees at the May 8th, 2023, open house event.



Stakeholder Site Visit

The stakeholder site visit was held May of 2022 and consisted of the Town, US Forest Service, National Park Service, Yellowstone Shortline Trail, Musuem of the Yellowstone, and Federal Highway Administration. The stakeholder groups toured the project route on bicycle and on foot and discussed key issues throughout. The site visit intent was to understand the project as proposed by the Town, develop an initial scope, and identify any challenges, opportunities, and engagement actions that may need to be addressed. The key themes from the site visit are summarized as follows, along with how they were addressed in the study.

Table 1. Summary of Site Visit themes

Theme	Response
Focus on network completeness between Town, US Forest Service, National Park service, and other partner trail systems.	All trail alignments and designs connect to all USFS and NPS trailheads adjoining the Town.

⁵ For complete details of the engagement activities and all comments received, see Appendix B.

Ensure consistent signage, design, and wayfinding for proposed trail and connections.	All signs shall be consistent with AASHTO Bicycle and Pedestrian Guide standards and Shortline Trail designs. Signs shall comply with MUTCD standards.
Ensure ADA accessibility	All trail designs shall be in accordance with AASHTO design standards, including ADA accessibility.
Ensure parallel education and infrastructure efforts are pursued, such as trail education and bicycle maintenance.	Where identified, these opportunities are gathered in the Additional Considerations section of the Final Report.
Evaluate grade separation for bicycle and pedestrians from vehicles.	Evaluated through the Conceptual Designs work and open house feedback.
Ensure continuous and comprehensive engagement with public and stakeholders throughout project.	Accomplished through engagement strategy and related activities.
Align trail improvements with Shortline Trail improvements.	Accomplished through Shortline Trail volunteer member participation and alignment with Shortline Trail design concepts.

Public Meeting, Webinar, and Online Comment Period

The project team held a hybrid meeting in January of 2023 to outline the project, existing conditions, and remaining work for public feedback. The attendees had the option of attending in person at the Town’s office or online through Zoom. Following the meeting, the project team provided a two week comment period from February 1st through 15th online where user could view project materials and provide written feedback on the project.

The key themes from the public meeting, webinar, and virtual public involvement are summarized as follows, along with how they were addressed in the study.⁶

Table 2. Summary of Public Meeting and related feedback.

Theme	Response
Address trail options on Iris Street and through 80-acres parcel. Comments received expressed interest in the trail route running through the 80-acres rather than along Iris Street.	Project team presented an alignment option that goes around the 80-acres property, including costs, safety considerations, and related challenges opportunities to stakeholders and public. Responses were split, but the prevailing perspective was to maintain the original proposed alignment

⁶ For further detail and complete feedback, see Appendix B.

	and allow for future addition as the 80-acres develops.
Highway crossing designs. Comments received expressed support for addressing highway crossing designs, safety for the proposed trail, especially at US 20 and Iris Street. Many comments requested grade-separated designs, which may or may not be the appropriate option for the trail base on design, cost, and safety issues.	Project team developed and presented four highway crossing options of increasing safety benefit and total cost for public and stakeholder discussion. While the feedback was not uniform, the prevailing theme was in favor of a roundabout at US20 and Iris Street and a Rectangular Rapid Flashing Beacon at US191 and Boundary Street.
Connections to school and Madison Addition. The proposed trail ends at Iris Street and Alley D/D Parkway, with users continuing on to USFS Trails around the northern boundary of the Town. Comments received suggested extending the trail route to connect with the West Yellowstone Elementary and Junior/Senior High schools as well as to the Madison Addition Walking Path.	The project team presented an addition to the trail alignment that connected to the school for stakeholder and public discussion. The Town perspective was that unpaved alleys serve as low speed, multi-use trails currently and further trail improvements over the unpaved surface is not preferred.
Additional Park Features. Comments received recommended additional design features to support bicycle and ski equipment storage along the route and improving the Shortline Railbed segment to become a linear park.	While these elements are not within the design scope of this project, the project team gathered recommendations like these for Town consideration and implementation.

Open House and Virtual Public Involvement

The project team held an in person open house in May of 2023 to outline the trail designs, highway crossing options, and cost estimates for all project elements. The meeting was held at the Povah Community Center between 12PM and 7PM with a presentation provided periodically throughout the day.

The key themes from the open house and virtual public involvement are summarized as follows, along with how they were addressed in the study.⁷

Table 3. Summary of Open House and related feedback.

Theme	Response
Allow for phasing of trail alignment construction, including: <ul style="list-style-type: none"> • Possible future trail additions • Park features • Drinking water 	Project team has included all elements that could be added post-study in the Findings and Additional Considerations sections of this report.

⁷ For further detail and complete feedback, see Appendix B.

<ul style="list-style-type: none"> • Parking needs 	
Split perspectives on concrete, asphalt, or unpaved trail surfaces.	To ensure ADA accesibility and long-term use, the project team proposes maintaining a paved surface. Both contrete and asphalt are viable options, but the project team and many open house attendees seem to prefer the lower impact of asphalt on pedestrian users over the possibly longer lifespan of a concrete facility.
<p>For highway crossings and cost estimates, preferences for:</p> <ul style="list-style-type: none"> • High visibility • Low cost • Improved safety • Low maintenance needs • ADA accessibility • Roundabout at US20 and Iris Street 	The preferences noted favor RRFBs (lowest cost, high visibilty option) at US191 and Boundary Street and a roundabout (highest safety and traffic improvement relative to cost) at US20 and Iris Street.
<p>For highway crossings and cost estimates, preferences against:</p> <ul style="list-style-type: none"> • Roundabouts generally (from student drivers) • High cost, low feasibility options • Multiple maintenance considerations • Tunnel option 	The preferences noted favor the least complex options overall, with different improvements at each location.
Evaluate and address additional parking needs.	Project team has included all elements that could be added post-study in the Findings and Additional Considerations sections of this report.
Develop trail alongside a linear park in former rail bed.	Project team has included all elements that could be added post-study in the Findings and Additional Considerations sections of this report.
Evaluate other traffic and crossing needs in Town.	Project team has included all elements that could be added post-study in the Findings and Additional Considerations sections of this report.

Findings and Recommendations

Following the existing conditions, conceptual design options, and engagement efforts, the project team proposes the following improvements based on public and stakeholder perspectives and project team analysis, as shown in Figure 5 and Table 4 below. Findings refers to information gathered during the study to inform project decision making and recommendations refers to decisions on trail and highway crossing options.

Figure 5. Proposed improvements to complete the West Yellowstone Connector Trail.

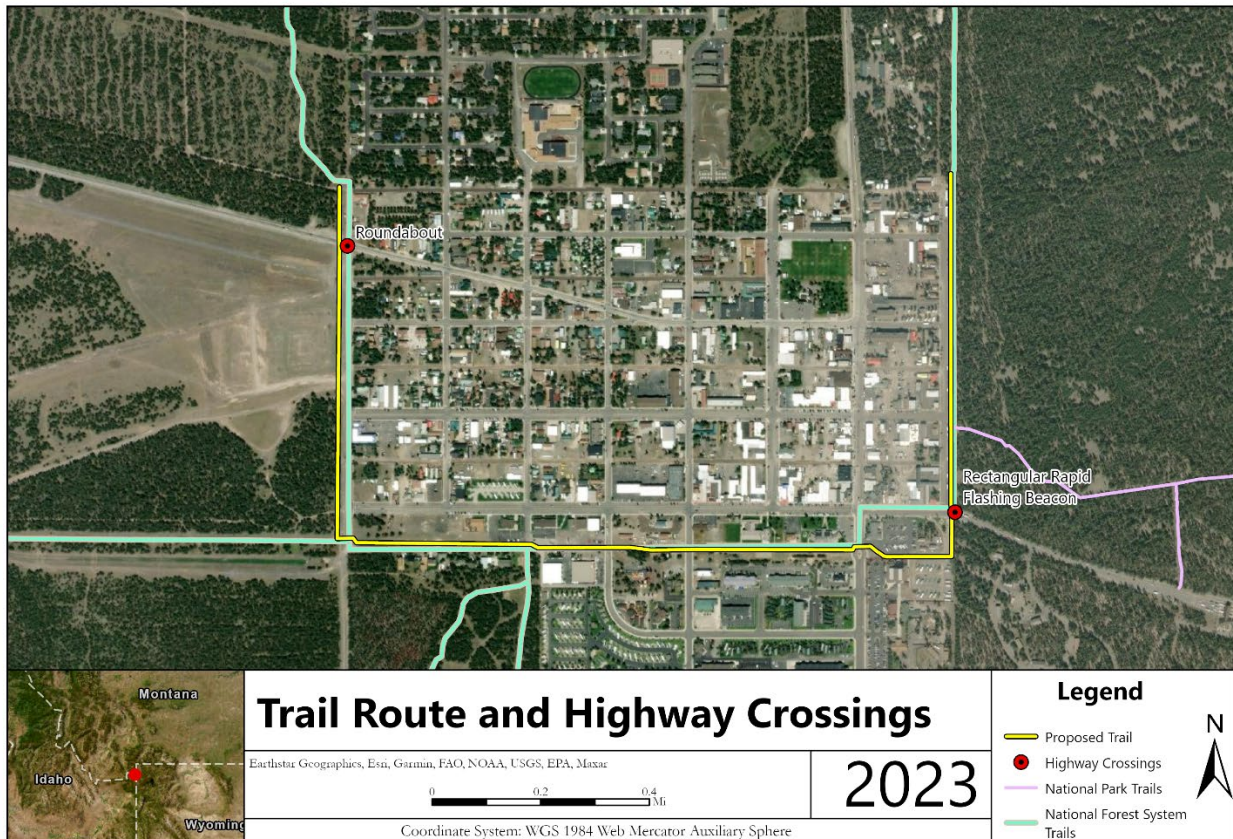


Table 4. Cost estimates for proposed improvements.

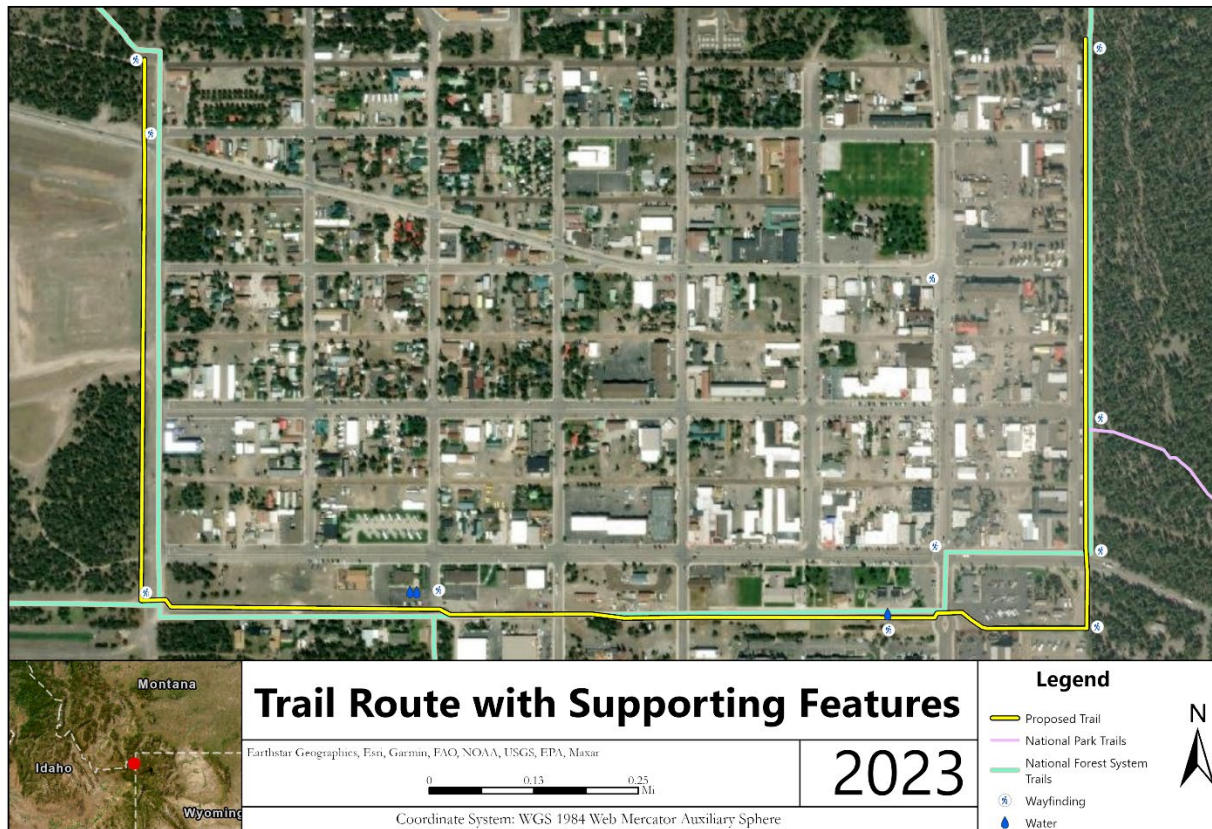
2023 Estimate								
	Feet	Construction	30% Contingency	Total Construction	Design	CE	CM	Total
					15%	10%	10%	
					<i>Expressed in millions</i>			
Trail	10,381	\$1.500	\$0.450	\$1.950	\$0.293	\$0.195	\$0.195	\$2.633
Rapid Flashing Beacon		\$0.015	\$0.005	\$0.020	\$0.003	\$0.002	\$0.002	\$0.026
Roundabout		\$1.500	\$0.450	\$1.950	\$0.293	\$0.195	\$0.195	\$2.633
2028 Estimate (4% inflation)								
	Feet	Construction	30% Contingency	Total Construction	Design	CE	CM	Total
					15%	10%	10%	
					<i>Expressed in millions</i>			
Trail	10,381	\$1.830	\$0.549	\$2.379	\$0.357	\$0.238	\$0.238	\$3.212
Rapid Flashing Beacon		\$0.035	\$0.011	\$0.046	\$0.007	\$0.005	\$0.005	\$0.061
Roundabout		\$1.830	\$0.549	\$2.379	\$0.357	\$0.238	\$0.238	\$3.212
2033 Estimate (4% inflation)								
	Feet	Construction	30% Contingency	Total Construction	Design	CE	CM	Total
					15%	10%	10%	
					<i>Expressed in millions</i>			
Trail	10,381	\$2.165	\$0.650	\$2.815	\$0.422	\$0.281	\$0.281	\$3.800
Rapid Flashing Beacon		\$0.040	\$0.012	\$0.052	\$0.008	\$0.005	\$0.005	\$0.070
Roundabout		\$2.165	\$0.650	\$2.815	\$0.422	\$0.281	\$0.281	\$3.800

Trail Route

The project team recommends the trail route follow the original alignment as shown in Figure 6 below. The trail should be 10 feet wide and constructed of asphalt, per the *AASHTO Guide for the Development of Bicycle Facilities (2012)*. Through analyses completed in the existing conditions task and discussions during engagement activities, the project team also finds the following:

- Ensure ADA accessible infrastructure, signage and markings, and lighting at highway and non-highway crossings
- Consider a consistent wayfinding systems that integrates the new trail with existing trail systems, including a “trail head” located at the Museum of the Yellowstone that incorporates trail maps, trail history, and bicycle and pedestrian education for users
- Ensure any final design aligns with Shortline Trail aesthetics
- Ensure coordination with water and natural gas utilities at applicable locations, per Appendix C – Utilities
- Install public drinking water stations along route, including bottle filling capabilities
- Promote bicycle maintenance facilities at or near trail head
- Consider any new parking demand that may be generated through completing the proposed trail
- Plan for additional trail connections around the 80-acres area, to the West Yellowstone Elementary and Junior-Senior High School, and to Madison Addition as applicable land use considerations support

Figure 6. Trail route and supporting infrastructure.



Highway Crossing – US20 and Iris Street

The project team recommends a one-lane roundabout facility as the trail crossing improvement for US20 and Iris Street. This improvement balances the needs for traffic calming and safety with cost effectiveness, while also providing a possible entrance feature for the west end of the Town.⁸ Figure 7 below show the approximate location of the roundabout. The project team also finds the following:

- Nearly all objections to roundabouts were from high school students who were unsure about how to navigate them. This suggests additional training and education may be needed before, during, and after any roundabout installation. The Montana Department of Transportation and FHWA provide helpful training materials the Town may consider.⁹¹⁰

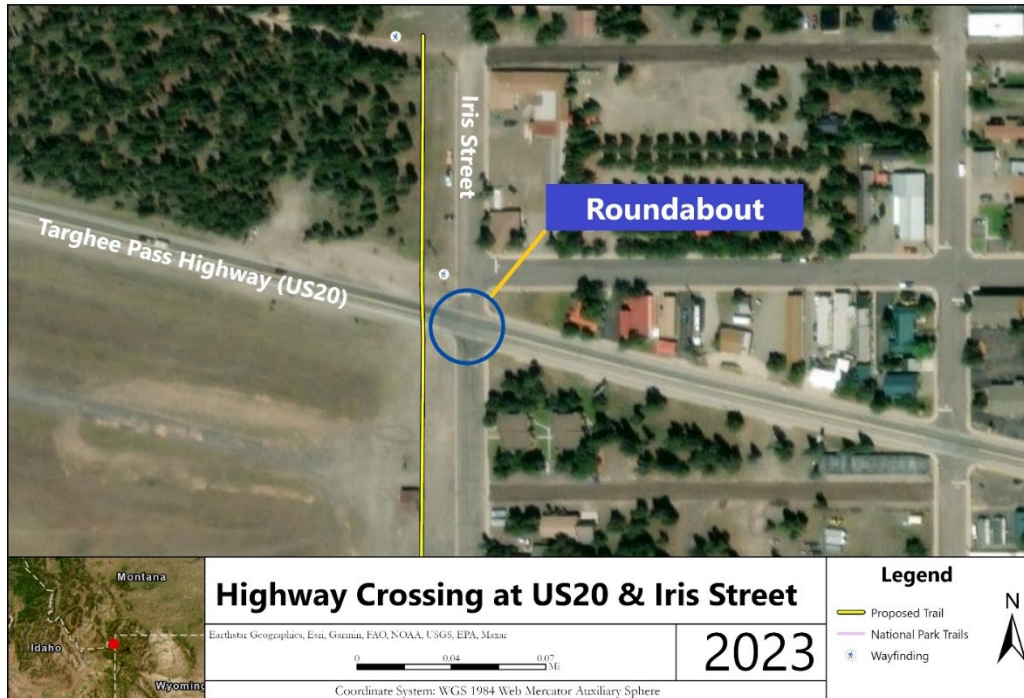
⁸ An additional traffic and engineering analysis may be needed during future preliminary design phases for a roundabout.

⁹ Montana Department of Transportation. *Driving with Roundabouts*. <https://www.mdt.mt.gov/pubinvolve/armingtonjunction/docs/Roundabouts-Rack-Card.pdf>

¹⁰ FHWA. 2023. Proven Safety Countermeasures: Roundabouts. <https://highways.dot.gov/safety/intersection-safety/intersection-types/roundabouts> (Many of these resources were provided as printed document during the open house and were taken mostly by student drivers).

- Since the open house, a new resource on roundabouts has been published by the Transportation Research Board that provides the latest planning and stakeholder considerations, conceptual design, and implementation resources.¹¹

Figure 7. Highway crossing at US20 and Iris Street.

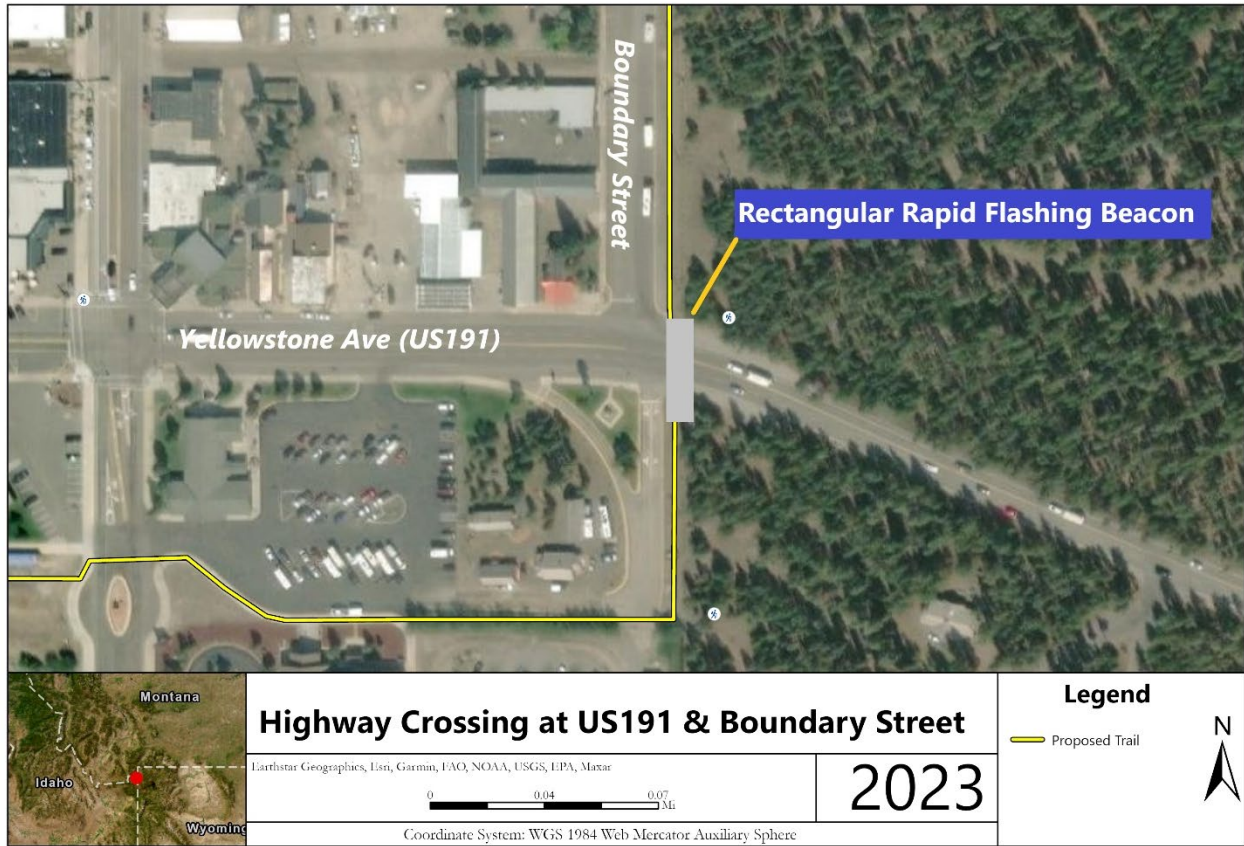


Highway Crossing – US191 and Boundary Street

The project team recommends a RRFB facility as the trail crossing improvement for US191 and Boundary Street. Recognizing the stakeholder and public interests in low-cost, high safety improvements, a RRFB provides the most flexible improvement. Unlike the US20 crossing where highway traffic is changing rapidly entering the crossing, traffic at US191 and Boundary Street is much lower and is coming from a nearby traffic signal (west) or the National Park Service gate (east). Figure 8 below shows the approximate location of a RRFB crossing.

¹¹ National Academies of Sciences, Engineering, and Medicine. 2023. *Guide for Roundabouts*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/27069>.

Figure 8. Highway crossing at US191 and Boundary Street.



Conclusion and Additional Considerations

The analysis and findings of this study provide a foundation for future preliminary engineering design and construction by synthesizing the project team analyses along with stakeholder and public preferences. The study's goals were to (1) identify a proposed trail route connecting existing trail and recreation facilities in the Town of West Yellowstone, (2) produce conceptual designs and cost estimates for future design and construction grant applications, and (3) ensure proposed trail route, design, and other considerations reflect the interest of Town residents, visitors, and stakeholders. The project team accomplished these goals through the work shown in the Appendices with final recommendations shown in this report.

Additional Considerations

In addition to the findings and recommendations in this report, two additional planning efforts were identified by stakeholders and the public for the Town to consider in the future (both shown in Figure 9 below).

Figure 9. Future planning considerations identified through Open House.



The first is a pedestrian access and traffic calming study in the Targee Pass Highway (US20) corridor in Town, including the cross streets connecting to the school (shown in Figure 9 with orange lines). Open house participants noted that, much like US20 and Iris Street, the other

crossings of US20 in town can be difficult for pedestrians during peak traffic times and warrant RRFB crossings or similar interventions. The Town may consider a further traffic study to investigate traffic calming and pedestrian access improvements, including examining existing pedestrian safety resources available through FHWA.¹²

The second consideration is a linear park plan for the former Shortline rail bed on public lands. A linear park refers to any park that is longer than it is wide, usually due to being built over another former use, such as a railroad. Participants suggested that any trail along the former rail bed should be accompanied by a plan for a public park as well. This includes landscaping, benches, and tables, and other amenities appropriate to the context. The Town may consider a further planning and design effort to develop a linear park plan. Depending on the goals of the linear park, the Town could review the briefing papers from the American Planning Association's City Parks Forum, which outline parks planning for community engagement, economic development, public health, tourism, and other possible goals.¹³

¹² FHWA Pedestrian and Bicycle Safety. <https://highways.dot.gov/safety/pedestrian-bicyclist>

¹³ APA City Parks Forum: Briefing Papers. <https://www.planning.org/cityparks/>

Appendices

Appendix A – Site Visit Report

Appendix B – Engagement Strategy

Appendix C – Existing Conditions

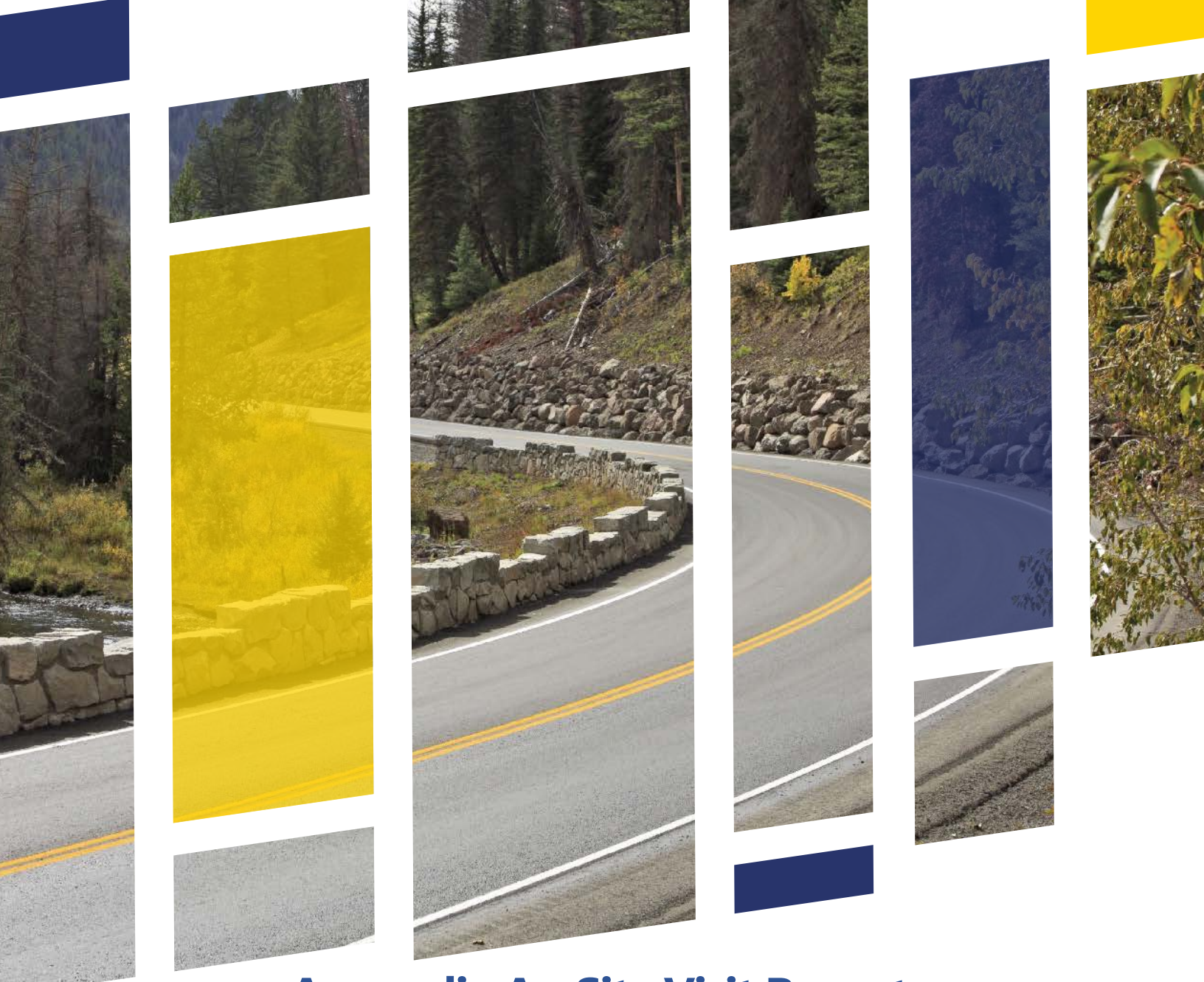
Appendix D – Conceptual Designs and Cost Estimates

FHWA Office of Federal Lands Highway

West Yellowstone Trail Planning and Design *Appendices*



Custer Gallatin National Forest



Appendix A - Site Visit Report

TOWN OF WEST YELLOWSTONE TRAIL

PLANNING AND DESIGN



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SITE VISIT DETAILS

The Town of West Yellowstone seeks to design and construct a trail network system through the city to adjoining Yellowstone Shortline, Frontier, Boundary, Rendezvous Nordic Ski, and Riverside Trail to create a complete network for travelers. To do so requires working both with adjoining Federal Land Management Agency (FLMA) partners, understanding user and community preferences, and ensuring context-sensitive design solutions.

The site visit seeks to better understand the project context, issues, and opportunities as they inform study development. Attendees met to discuss the project as a whole, walk the proposed route, and discuss key route connections, safety issues, and design considerations.

ATTENDEES

- Brandi Burns, Museum of the Yellowstone
- Cole Grisham, FHWA Western Federal Lands
- Dan Walker, Town of West Yellowstone
- Ellen Butler, Yellowstone Shortline Trail
- Jason Brey, US Forest Service
- Jon Simms, Town of West Yellowstone
- Michael Manship, Museum of the Yellowstone Board
- Rich Jehle, National Park Service

SITE VISIT SCOPE

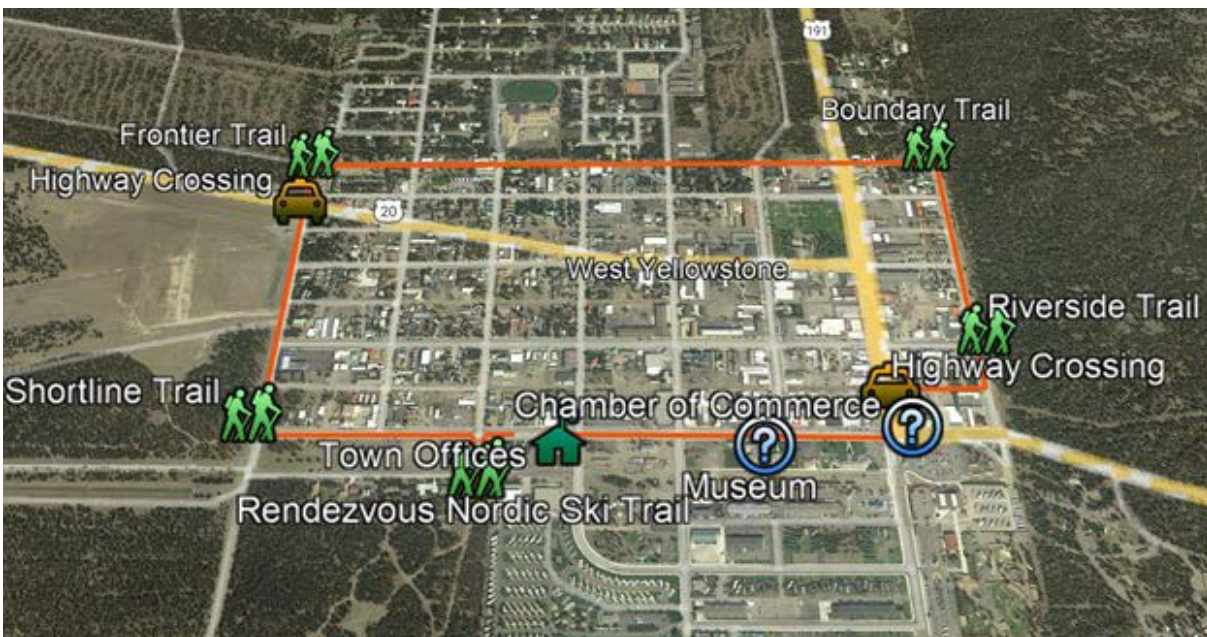
- Safety (Highway crossings)
- Economic Generators (Museum, Chamber of Commerce, Freeheel and Wheel)
- Trailheads and Connections
- ADA Accessibility
- Design (Materials, wayfinding, common signage between USFS and in-town trails, rail bed, alignment with historic corridor design)
- Right of Way and Easements
- Drainage and culverts
- Utilities



SCHEDULE

May 2 nd , 2022		
Time	Topic	Location
9:00 AM	Pre-Site Visit Brief and Logistics	Town of West Yellowstone Government Offices 440 Yellowstone Ave, West Yellowstone, MT 59758
10:00 AM	Departure (Bicycle)	
	<i>Site 1 – Rendezvous Ski Trail</i>	
	<i>Site 2 – Yellowstone Shortline Trail</i>	
	<i>Site 3 – Highway Crossing</i>	
	<i>Site 4 – Frontier Trail (West Connection)</i>	
	<i>Site 5 – Boundary Trail - Frontier Trail (East Connection)</i>	
	<i>Site 6 – Riverside Trail</i>	
	<i>Site 7 – Highway Crossing, Chamber of Commerce, and Museum</i>	
12:00 PM	Site Visit Debrief and Next Steps	Town of West Yellowstone Government Offices 440 Yellowstone Ave, West Yellowstone, MT 59758

MAP & ROUTE



On all subsequent figures, the proposed trail alignment is marked with a green dashed line where applicable. Other markings on figures are noted in the respective figure description.



SITES

1. Rendezvous Ski Trail

Site Visit Element	Observations
Safety	None.
Economic Generators	Rendezvous Ski Trail serves winter skiers, biathlon training, and connections to shooting range. Is under-utilized for summer use. The current trail is not used frequently for hiking, but attendees said the trail could be used as such
Trailheads and Connections	Connects Town and future trail to US Forest Service Rendezvous Ski Trail.
ADA Accessibility	Not specifically designed for ADA accessibility, but otherwise flat and level trail.
Design	US Forest Service trail design standards
Right of Way and Easements	US Forest Service owned trail. Trail head between a privately-owned building and a Rendezvous Ski Trail service facility.
Drainage and culverts	None.
Utilities	None.



Figure 1.1. Rendezvous Ski Trail head and adjacent skier service building.
Source: Google Earth, 2022.

2. Yellowstone Shortline Trail

Site Visit Element	Observations
Safety	Bears in the area in spring. Some 'out-of-bounds' camping noted in US Forest Service lands along trail, which is technically day-use only.
Economic Generators	Major cross-country race in winter on Shortline Trail, which the US Forest Service grooms trail for.
Trailheads and Connections	Connects to Shortline Trail, which is on US Forest Service lands. The Shortline Trail is a rail line across US Forest Service lands that was abandoned in the late 1980s. Documents regarding rail abandonment available from US Forest Service as needed.
ADA Accessibility	The USFS portion of the Yellowstone Shortline Trail will be paved with ADA accessibility in mind. Many hope to see the in-Town portion equally accessible
Design	On Town right of way; likely AASHTO design standards. Separate development and design effort underway for Shortline Trail (https://yellowstoneshortlinetrail.org/the-trail).
Right of Way and Easements	<p>The Town has annexed 80 acres into the Town for future residential use west of Iris Street. The future trail's western segment would likely be entirely located on the Town-owned parcel.</p> <p>US Forest Service willing to accommodate parking on Forest lands, if needed.</p> <p>Town interested in delineation of use in Town-owned portion of rail bed and future linear park and trail. Currently a mixture of public works, empty lot, and other uses.</p> <p>There is a Preservation/Conservation Easement between the Town of West Yellowstone and SHPO for the Union Pacific Dining Lodge property, which includes a portion of the YST. This is a 50-year easement that began in 2008 after the Dining Lodge received federal funding for a preservation project. A copy of the easement is available from Yellowstone Shortline Trail.</p>
Drainage and culverts	None.
Utilities	Town notes a water line approximately four feet north of Obsidian Avenue in former rail bed. Unclear where water line terminates or turns at Iris Street.



Figure 2.1. Intersection of Obsidian and Iris Streets, looking south to Plateau Rd. (FS 1700).



Figure 2.2. Intersection of Obsidian and Iris Streets, looking north.



Figure 2.3. Intersection of Obsidian and Iris Streets, looking west to Shortline Trail (US Forest Service).



Figure 2.4. Intersection of Obsidian and Iris Streets, looking east to Town-owned lands and site of proposed linear park.



Figure 2.5. Intersection of Obsidian and Iris Streets, looking north. This land to the west of Iris Street includes 80 acres of recently annexed Town land proposed for residential uses.

3. Highway Crossing (US 20)

Site Visit Element	Observations
Safety	<p>High congestion during peak travel season, which can back up vehicle traffic for miles at intersection. Vehicles often cut across adjacent southern property to get around congestions, which the Town has addressed with a wooden fence barrier (Figures 3.1, 3.2, 3.4).</p> <p>Proposed trail would need to cross US 20, creating vehicle, bicycle, and pedestrian conflicts.</p>
Economic Generators	None.
Trailheads and Connections	None.
ADA Accessibility	Trail crossing would likely follow AASHTO design standards for ADA accessibility

Design	<p>AASHTO design standards. Any proposed changes to intersection require input from Montana Department of Transportation. Attendees preferred options are a grade-separated crossing, roundabout, or similar safe traffic calming designs.</p> <p>Project team should review any Montana DOT plans that relate to this corridor or intersection.</p>
Right of Way and Easements	The highway is owned and maintained by Montana DOT.
Drainage and culverts	None.
Utilities	Town waterline may run under the west side of Iris Street, north-south.



Figure 3.1. Intersection of Iris Street with US 20 (Targhee Pass Highway), looking north. The wood barricades on the left side of the image were placed by the Town to deter drivers from cutting through the adjacent lot when highway is congested.



Figure 3.2. Intersection of Iris Street with US 20 (Targhee Pass Highway), looking north. The wood barricades on the center of the image were placed by the Town to deter drivers from cutting through the adjacent lot when highway is congested.



Figure 3.3. Intersection of Iris Street with US 20 (Targhee Pass Highway), looking north.



Figure 3.4. Intersection of Iris Street with US 20 (Targhee Pass Highway), looking west.



Figure 3.5. Intersection of Iris Street with US 20 (Targhee Pass Highway), looking south from adjacent Town lot with wood barricades.

4. Frontier Trail (West Connection)

Site Visit Element	Observations
Safety	May not be a safety issue so much as a usage issue, but Town and Forest Service noted 'transient workforce' camping is common in adjacent Forest lands. About one to three campers live in the Forest in peak travel seasons due to housing shortages in Town.
Economic Generators	Two Top Snowmobile Rentals and Tours is adjacent to Town-owned parcel and proposed trail route. Customers often use the Town-owned parcel for parking when visiting the business.
Trailheads and Connections	Connects to Frontier Trail and Powerline Road (both US Forest Service).
ADA Accessibility	None. Primarily used by local dog walkers.
Design	Frontier Trail is US Forest Service Trail design standards. US Forest Service plans to improve Frontier Trail alongside any Town trail improvements. US Forest Service interest in using GAOA and FLTP funds for trail improvement.
Right of Way and Easements	Proposed trail would be on Town-owned parcel.
Drainage and culverts	None.
Utilities	Town water line runs north-south and east-west under the west side of Iris Street and north side of D Parkway (Figure 4.5)



Figure 4.1. Intersection of Iris and Alley D/D Parkway, looking south to US 20. The area to the right of the street is the 80-acre parcel owned by the Town.



Figure 4.2. Intersection of Iris and Alley D/D Parkway, looking northeast.



Figure 4.3. Intersection of Iris and Alley D/D Parkway, looking east.



Figure 4.4. Intersection of Iris and Alley D/D Parkway, looking southeast. The company shown is Two Top Snowmobile Rentals and Tours, whose customer often park across the street in Town-owned land proposed for future trail.



Figure 4.5. Intersection of Iris and Alley D/D Parkway, looking southeast. The utility access shown is a Town water line that aligns with the two streets as approximated by the dashed line.



Figure 4.6. Intersection of Iris and Alley D/D Parkway, looking west-northwest. The snow-covered road at left is Powerline Road, which connects to other US Forest Service roads and the southern portion of the Yellowstone Airport. The trailhead at center-right is the Frontier Trail.



Figure 4.7. Intersection of Iris and Alley D/D Parkway, looking west-northwest. The snow-covered road is Powerline Road, which connects to other US Forest Service roads and the southern portion of the Yellowstone Airport.

5. Boundary Trail - Frontier Trail (East Connection)

Site Visit Element	Observations
Safety	Frontier Trail crosses US 191 north of Town at truck stop (not within scope of project, but a concern for system completeness).
Economic Generators	Skier parking in area common.
Trailheads and Connections	Boundary Trailhead and connections to Frontier Trail to the north through US Forest Service lands. Forms the east trailhead for Frontier Trail in Town. Adjacent to Yellowstone National Park western boundary.
ADA Accessibility	None.
Design	<p>US Forest Service trail design standards. The short width of Town-owned land where proposed trail would be suggests bicyclists would likely ride on adjacent road instead of trail; consider in-road bicycle markings.</p> <p>Proposed trail location used for snow storage (see Figures 5.5 and 6.1), making future trail unusable in winter months. Town says they have no plans to maintain trail in winter and usually maintain about four inches of snow cover in roads as well in winter to allow for winter recreation uses.</p>
Right of Way and Easements	<p>Future trail to be located on Town-owned land for eastern trail segment along Boundary Street.</p> <p>Large lot at Boundary Trailhead is split between Town and privately owned. Town engineer can provide tax lot lines for area, but onsite suggested lot is split at about midway across Boundary Street.</p>
Drainage and culverts	None.
Utilities	<p>Natural gas line located in proposed trail route (see Figure 5.5). Unclear where the natural gas line routes to and from connection, but Town engineer can provide these details.</p> <p>Water line from D Parkway reaches Boundary Street but turns south on west side of street. Does not interfere with proposed trail alignment.</p>



Figure 5.1. Intersection of D Parkway and Boundary Street, looking south.



Figure 5.2. Intersection of D Parkway and Boundary Street, looking north to the entrance to the Boundary Trail. The Frontier Trail connects to the Boundary Trail and terminates at this intersection.



Figure 5.3. Intersection of D Parkway and Boundary Street, looking north to the entrance to the Boundary Trail. The Frontier Trail connects to the Boundary Trail and terminates at this intersection.



Figure 5.4. Intersection of D Parkway and Boundary Street, looking west.



Figure 5.5. Intersection of D Parkway and Boundary Street, looking north. The area to the left (east) of the fence shown is Yellowstone National Park. The area to the right of the fence shown and street are Town-owned. Note the natural gas connection center.

6. Riverside Trail

Site Visit Element	Observations
Safety	None.
Economic Generators	Fly fishing connections in Park.
Trailheads and Connections	<p>Riverside Trail is a National Park Service trail and is approximately 1.1 miles long. Connects to Barnes Hole Road and Madison River in Yellowstone National Park with further fly fishing uses.</p> <p>One of the only non-paved National Park Service facilities that allows bikes, due to the historical use of the trail facility as a road.</p>
ADA Accessibility	None.
Design	<p>Unclear what standards used in trail design and maintenance. Figures 6.2, 6.4, and 6.5 provide examples of trail markings and signage.</p> <p>Proposed trail in Town-owned land may be too narrow for bicycles. Users may instead ride on adjacent Boundary Road.</p>
Right of Way and Easements	Proposed trail would be in Town-owned land adjacent to Riverside Trailhead.
Drainage and culverts	None.
Utilities	None.



Figure 6.1. Boundary Street at the Riverside Trail entrance, looking south. The area to the right (east) of the fence shown is Yellowstone National Park.



Figure 6.2. Boundary Street at the Riverside Trail entrance. The signs shown are to indicate trail markings used currently.



Figure 6.3. Boundary Street at the Riverside Trail entrance, looking east.



Figure 6.4. Boundary Street at the Riverside Trail entrance. The signs shown are to indicate trail markings used currently.



Figure 6.5. Boundary Street at the Riverside Trail entrance, looking north.



Figure 6.6. Boundary Street at the Riverside Trail entrance, looking north.



Figure 6.7. Boundary Street at the Riverside Trail entrance, looking west to Madison Avenue.

7. Chamber of Commerce, Highway Crossing (US 191), and Museum

Site Visit Element	Observations
Safety	<p>High vehicle congestion during peak travel seasons at Yellowstone Avenue (US 191) and Boundary Street. Attendees preferred options for intersection are (1) grade-separated crossing, (2) roundabout, or (3) other safe traffic calming designs.</p> <p>No safety issues for Chamber of Commerce or Museum sites</p>
Economic Generators	<p>Yellowstone National Park (West Entrance), Chamber of Commerce and Visitors Center, Museum of the Yellowstone, Yellowstone Giant Screen Theatre, Grizzly and Wolf Discovery Center, other business district restaurants and shops.</p>

<p>Trailheads and Connections</p>	<p>Yellowstone Avenue (US 191) connects to Yellowstone National Park (West Entrance) to the east.</p> <p>The portion crossing through Chamber of Commerce property would connect the proposed trail back to the Museum and former rail bed property.</p>
<p>ADA Accessibility</p>	<p>Sidewalks and curb ramps exist in some areas. AASHTO design standards.</p>
<p>Design</p>	<p>AASHTO design standards. Proposed trail route partially or entirely within historic district and would need to comply with Montana State Historic Preservation Office (SHPO) requirements (https://mhs.mt.gov/Shpo/).</p> <p>Yellowstone Shortline Trail is engaged in separate design effort for Historic District signs, wayfinding, and other elements through a contract with Sea Reach (http://www.seareach.com/the_firm/contact.asp). Yellowstone Shortline Trail expects design guidelines to be available in 2022, which proposed trail design and wayfinding can align with.</p> <p>Additional work on the redesign for the Casting Pond group is also through Sea Reach, which may be led by the Town.</p>
<p>Right of Way and Easements</p>	<p>Proposed trail would be on Town-owned land.</p> <p>The Museum identified building the proposed trailhead as part of a wider landscaping improvement to the area behind the Museum in the former rail bed. Additionally, a redesign and landscaping of the casting pond is already planned (see Figure 7.13). Town also identified the Chamber of Commerce parking area as the proposed trail head, but peak season traffic may make this unfeasible.</p>
<p>Drainage and culverts</p>	<p>None.</p>
<p>Utilities</p>	<p>None identified, but project team should verify with Town engineer.</p>



Figure 7.1. Intersection of Boundary Street and US 191 (Yellowstone Avenue), looking south.



Figure 7.2. Intersection of Boundary Street and US 191 (Yellowstone Avenue), looking north.



Figure 7.3. Intersection of Boundary Street and US 191 (Yellowstone Avenue), looking west at the Town entrance signs.



Figure 7.4. Intersection of Boundary Street and US 191 (Yellowstone Avenue), looking west at the Town entrance signs and highway.



Figure 7.5a. Intersection of Boundary Street and US 191 (Yellowstone Avenue), looking west at the Town entrance monument (covered), titled “Union Pacific Pylon.”



Figure 7.5b. Example of Union Pacific Pylon town Monument when uncovered (Source: Museum of the Yellowstone, 2022).



Figure 7.6. Intersection of Boundary Street and US 191 (Yellowstone Avenue), looking south at the Chamber of Commerce parking.



Figure 7.7. Intersection of Boundary Street and US 191 (Yellowstone Avenue), looking east to the entrance to Yellowstone National Park.



Figure 7.8. South Canyon Street, looking east to the Chamber of Commerce and parking.



Figure 7.9. Area behind Museum of the Yellowstone, looking east to Canyon Street and Chamber of Commerce parking.



Figure 7.10. Area behind Museum of the Yellowstone, looking east to Canyon Street. The railcar shown is located behind the Museum on the former rail line.



Figure 7.11. Area behind Museum of the Yellowstone, looking east to Canyon Street. The railcar shown is located behind the Museum on the former rail line.



Figure 7.12. Area behind Museum of the Yellowstone, looking south to casting pond.



Figure 7.13. Area behind Museum of the Yellowstone, looking west.

CONCLUSION AND NEXT STEPS

The May 2nd site visit provided the project team with valuable information and images to inform future trail design and construction. This final section outlines engagement opportunities, possible project goals and assumptions, and other overall site visit reflections.

ENGAGEMENT

In addition to the information shown in the Sites section, attendees identified the following groups to engage with in the public and stakeholder engagement process:

- Sea Reach
- Freeheel and Wheel
- Town of West Yellowstone Council
- West Yellowstone School (K-12)
- Montana DOT
- Chamber of Commerce
- Greenup West Yellowstone
- Greater Yellowstone Trail
- Town of West Yellowstone Parks and Recreation Advisory Board
- Town of West Yellowstone Planning Board
- Town of West Yellowstone Business Improvement Advisory Board
- Gallatin County
- Yellowstone Shortline Trail Committee
- Yellowstone Historic Center Board of Directors
- Casting Pond project team
- West Yellowstone Tourism Business Improvement District (TBID)
- West Yellowstone Ski Education Foundation (WYSEF)

The project team will use this list as basis for developing the project engagement strategy as well as any specific engagement activities.

GOALS AND ASSUMPTIONS

The site visit generated a number of considerations that could be translated into project goals going forward. They include, but are not limited to:

- Network completeness between Town, US Forest Service, National Park service, and other partner trail systems
- Consistent signage, design, and wayfinding for proposed trail and connections
- ADA accessible
- Parallel bicycle and pedestrian education programming, possibly through and in collaboration with the Museum
- Parallel bicycle repair stations, possibly in collaboration with Museum and other local partners
- Grade separation for bicycle and pedestrians from vehicles
- Trail construction materials that can withstand snow cover for long portions of the year
- Prioritize trail construction on Town-owned lands only
- Identifying opportunities for improving proposed and existing trail usage in under-utilized seasons
- Ensure continuous and comprehensive engagement with public and stakeholders throughout project
- Bike Repair Stations - The Yellowstone Shortline Trail Committee does have plans to install 2-3 bike repair stations along the Yellowstone Shortline Trail. Exact locations or designs have not been determined yet, but project should coordinate related designs Bike Repair Stations - The YST Committee does have plans to install 2 or 3 bike repair stations along the Yellowstone Shortline Trail. YST Committee has not determined exact locations yet or the specific design or type, but will coordinate with the Town to have a consistent design throughout both trails.

For questions or further information about the content of this report, contact the following staff:

Cole Grisham, AICP | Transportation Planner

Western Federal Lands Highway Division

202.839.1409 | nicholas.grisham@dot.gov

<https://highways.dot.gov/federal-lands/programs-planning>

Appendix B - Engagement Strategy



Students participating in study open house at Povah Community Center

To: West Yellowstone Trail Planning and Design Project Management Team
From: FHWA Western Federal Lands Highway Division
Subject: Memo 1: Engagement Strategy
Project Name: West Yellowstone Trail Planning and Design
Date: October 26, 2022 (Updated June 6th, 2023)

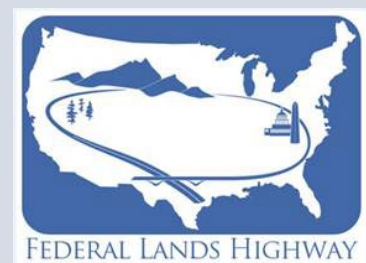


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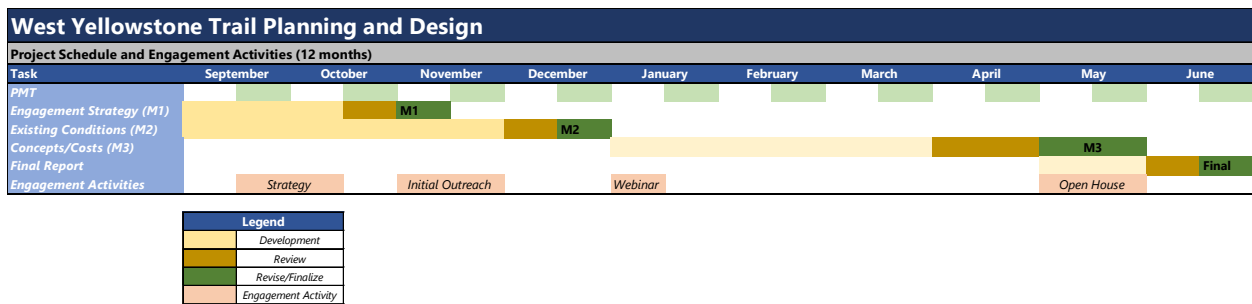
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Introduction

This document outlines the engagement strategy for the West Yellowstone Trail Planning and Design project. The engagement strategy describes how the Project Management Team (Town of West Yellowstone, Western Federal Lands Highway Division, and US Forest Service) will engage with the public and key stakeholders. This document includes the proposed engagement goals, milestones, engagement tools, timeline, and outcomes for this project.

The study area encompasses the Town of West Yellowstone, Montana, and a proposed trail within the Town boundaries. The study considers connection with the trails connecting to and passing through West Yellowstone as well. The relevant trails to this project include the Yellowstone Shortline Trail, Frontier Trail, Boundary Trail, Rendezvous Nordic Ski Trail, and Riverside Trail.

Figure 1. Project schedule and engagement milestones.



Applicable Federal Regulations

The engagement strategy for the West Yellowstone Trail Planning and Design project must comply with federal regulations for Section 508 of the Rehabilitation Act of 1973, Environmental Justice, and Title IV of the Civil Rights Act of 1964.

Section 508

Section 508 of the Rehabilitation Act of 1973 (Section 508) is a federal law that requires Federal agencies to make their information and communication technology (ICT) accessible to people with disabilities in accordance with standards issued by the U.S. Access Board.

<https://www.fhwa.dot.gov/508/authorities.cfm>

Environmental Justice

Executive Order 12898 requires that "each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations in the United States...."

https://www.environment.fhwa.dot.gov/env_topics/environmental_justice.aspx

Title VI

Title VI of the Civil Rights Act of 1964 –prohibits discrimination based upon race, color, and national origin. Specifically, 42 USC 2000d states that "No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance." The use of the word "person" is important as the protections afforded under Title VI apply to anyone, regardless of whether the individual is lawfully present in the United States or a citizen of a State within the United States.

In addition to Title VI, there are other Nondiscrimination statutes that afford legal protection. These statutes include the following: Section 162 (a) of the Federal-Aid Highway Act of 1973 (23 USC 324) (sex), Age Discrimination Act of 1975 (age), and Section 504 of the Rehabilitation Act of 1973/Americans With Disabilities Act of 1990 (disability).

https://www.fhwa.dot.gov/civilrights/programs/title_vi/

Engagement Goals

The engagement goals for the West Yellowstone Trail Planning and Design project aim to keep the public and stakeholder voices actively involved from beginning to the end of the process. Making sure community input is fostered and accurately represented through the entirety of the project ensures that the final designs achieve community concerns and needs.

- Goal 1** Ensure continuous and comprehensive engagement with public and stakeholders throughout project
- Goal 2** Understand user and community preferences to ensure context-sensitive design solutions
- Goal 3** Address and incorporate public and stakeholder feedback into project decisions and deliverables

Key Stakeholders

The following stakeholders have been identified as key groups to engage with during the scope of the project. However, engagement is not limited to these groups and new groups may be added to this list as the project continues.

Table 1. Identified project stakeholders

Government agencies and institutions	<ul style="list-style-type: none"> • Town of West Yellowstone Council • Montana Department of Transportation • Chamber of Commerce • Town of West Yellowstone Parks and Recreation Advisory Board • Town of West Yellowstone Planning Board • Town of West Yellowstone Business Improvement Advisory Board • Gallatin County • West Yellowstone School (K-12) • National Park Service • US Forest Service
Business Community	<ul style="list-style-type: none"> • Sea Reach • Freeheel and Wheel • Polaris West • Yellowstone Adventures • Backcountry Adventures • Yellowstone Vacations • 3 Bear Rentals • Hi Mark Rental • Three Bear Lodge/Yellowstone Tour & Travel
Non-profit organizations	<ul style="list-style-type: none"> • Museum of the Yellowstone • Greenup West Yellowstone • Yellowstone Shortline Trail Committee • West Yellowstone Ski Education Foundation

Engagement Strategy

WFL shall facilitate and lead public engagement activities over the proposed twelve-month study period. Engagement activities shall reflect engagement goals and align with the four planned milestones.

Table 2. Proposed engagement timeline and activities

	Milestone 1	Milestone 2	Milestone 3	Milestone 4
Purpose	Develop Engagement Strategy	Existing conditions	Conceptual designs and cost estimates	Final report
Timing	September 2022 – November 2022	January 2022	January 2023 – May 2023	June 2023 – August 2023
Engagement activity	Introduce project elements to public and stakeholders to begin initial dialogue and feedback process.	Introduce project elements to public and stakeholders to begin initial dialogue and feedback process.	Solicit public and stakeholder feedback on project route, designs, and other decisions.	Produce a report summarizing findings and incorporating all public feedback on project.
Engagement tool	<ul style="list-style-type: none"> • Website • Initial email messaging to identified stakeholders 	<ul style="list-style-type: none"> • Website • Webinar on Existing Conditions 	<ul style="list-style-type: none"> • Webinar on proposed designs • Open house (in-person/online) prior to final report 	<ul style="list-style-type: none"> • Public comment period prior to completion of final report

The proposed engagement activities shall form the foundation of project engagement. Additional stakeholders and engagement opportunities may be identified over the course of the project by the project team, engagement activities, or otherwise. These improvements to the engagement strategy shall be incorporated as they arise.

Engagement Summary for Milestone One

The first project milestone was to introduce project elements to public and stakeholders to begin initial dialogue and feedback process as well as share the project website. The initial email to stakeholders is shown below, which was also adapted for the general public through the Town's social media.

****Feel free to share with your networks****

Hello everyone,

My name is Cole Grisham and I'm with FHWA Western Federal Lands and I am managing the [West Yellowstone Trail Planning and Design](#) project alongside Dan Walker (copied), Town Manager for the Town of West Yellowstone, and Jason Brey and Wendi Urie, District Rangers for Custer Gallatin National Forest. The project is only just starting, but we are reaching out to a number of organizations to share the project's scope, schedule, and engagement.

The project team identified a number of agencies, organizations, boards, and businesses we are especially interested gathering perspective, needs, and interests on the proposed trail project. To that end, I have included a few items below of interest:

1. **Project Overview and Goals.** The project will develop a proposed route, conceptual design, and cost estimates for a future in-town trail that connects the Yellowstone Shortline, Frontier, Boundary, Rendezvous Nordic Ski, and Riverside Trails. The goals are to:
 - I. Identify a proposed trail corridor route connecting existing trail and recreation facilities in the Town of West Yellowstone
 - II. Produce conceptual designs and cost estimates for future design and construction grant applications
 - III. Ensure proposed trail route, design, and other considerations reflect the interest of Town residents, visitors, and stakeholders
2. **Project Website and Documents.** We developed a project website that includes the scope of the project and a printable project overview (also attached). As the project progresses, we will add further information and documents to this page. **Website:** <https://highways.dot.gov/federal-lands/projects/mt/flap-wyells-2021-1>
3. **Save the Date.** Please hold **January 18th, 2022, from 12PM – 1PM (MST)** for an introductory webinar. More information and the webinar link will be available as we get closer, but this public webinar will cover the project background, goals, existing conditions, and [planned engagement activities](#). There will also be plenty of space for questions and discussion about your own organization's perspective, interests, and needs.

Lastly, if you have any questions or concerns, please reach out to me (Nicholas.grisham@dot.gov; 202.839.1409) or [Dan Walker](#) directly and we would be happy to talk with you. Otherwise, we look forward to engaging with you on this community project going forward!

Best,

Cole Grisham

Engagement Summary for Milestone Two

The sections above were shared with the public and stakeholders through two formats for feedback. The first was a public webinar with option for viewing and participating from the Town’s Administrative Offices as well as online. The webinar featured an overview of the project background, purpose, and existing conditions followed by questions and discussion between the project team and attendees. The second format was a virtual public involvement approach that provided the draft Existing Conditions document along with a link to provide section-by-section and overall feedback to the project team. The comments received and the project team’s response is included below.

Table 3. Summary of Public Webinar (January 18th, 2023)

Comment Received	Project Team Response
Why wasn't the east side of the 80-acres parcel considered?	Navigating the trail through the 80-acre parcel instead of directly along Iris Street is certainly an option and will be considered during the design task. The need to cross US 20 at Iris Street regardless due to vehicle speeds along with the uncertainty of how the 80-acres will develop put the initial route option along Iris Street for consideration.
Will plowing and storing of snow on Boundary damage a paved surface along Boundary Street?	The plowing and storing of snow on the Boundary Street segment should cause no damage to the trail facility.
People can drive into the Old Airport from pretty much any point off Iris Street. Will there be designated crossings off of Iris to get to the Old Airport field or will vehicles still be able to cross the paved trail at any point still?	Access to the 80-acre parcel from Iris Street will likely change over time with the development of the trail system as well as development of the property. It is likely that access routes will become more specific over time.
What is water table depth? is it feasible to put underpass culvert under Hwy 20?	The water table shows approximately 40' below ground for wells within or near the project area. ¹ Project team engineers will determine whether an underpass or other engineering solutions for crossing US20 are feasible for water table and other engineering considerations.
What is the timeline?	The project is expected to be completed by June 2023.
How will safety be addressed for a multi-use trail. Specifically non-motorized combined with motorized during all four seasons?	Safety of different users will be addressed through facility width and signage during snow-free seasons. Motorized users, such as snowmachines, are only allowed during certain times of the year per Town code.
Will the final project proposal include wayfinding?	Yes, the trail will include signage and wayfinding for users that aligns with similar features designed for the Yellowstone Shortline Trail.
I think it will be important that we do not exclude the motorized trail opportunities that also may be used by hikers, walkers, bikers, and others. West Yellowstone has extensive trails of all types that all begin within the community.	The project team agrees and is designing the trail for all possible users. Paved facilities within Town boundaries are subject to Town code regulations on when where they may operate, which the proposed trail complied with.

¹ See the Montana Bureau of Mines and Geology for information on specific wells in the area. <https://gis-data-hub-mbmg.hub.arcgis.com/apps/d226763591a0433285c0057031d22d60/explore>

The virtual public comment period included the following questions for participants:

1. First and Last Name (Optional)
2. Organization (If applicable; optional)
3. What feedback do you have for the project team on the Existing Conditions: Planning Context (Pages 3-9)?
4. What feedback do you have for the project team on the Existing Conditions: Site Conditions and Considerations (Pages 10-20)?
5. What would you add, remove, or revise in the Existing Conditions and why?
6. What other comments, questions, or considerations do you have for the project team on the Existing Conditions or any other aspect of the project?

Where applicable, comments have been edited to ensure anonymity of participants.

Table 4. Summary of Virtual Public Involvement (February 1st through 19th, 2023)

Comment Received	Project Team Response
<p>I wish the trail would follow the west perimeter of the 80 acres instead of the east side of it. It would be great if the trail was infused into the 80 acres design providing both its original intended use and also offering a great trail for those that will reside in the 80 acres. It would seem more peaceful to follow the western perimeter than to follow Iris street, I would be more inclined to use it the more it is immersed or bordering a more rustic part of town, similar to the Boundary Trail.</p>	<p>Navigating the trail through the 80-acre parcel instead of directly along Iris Street is certainly an option and will be considered during the design task.</p> <p>The project team will need to address this option for the next public and stakeholder engagement milestone.</p>
<p>I love that our town is considering this project, I think it is a great idea and I look forward to using the trail and sharing it with others.</p>	<p>Thank you for your support.</p>
<p>Relocating the Western section of the trail currently running N/S along west side of Iris Street. The trail will experience far less vehicle vs pedestrian/bicycle conflict if it is relocated to the western most portion of town property. Still running N/S however avoiding future conflicts with the development of the "80" acre egress and ingress to and from Iris Street (possibly 6 or more points of conflict) Similar to the section on the eastern portion of town adjacent to Boundary Street.</p>	<p>Navigating the trail through the 80-acre parcel instead of directly along Iris Street is certainly an option and will be considered during the design task.</p> <p>The project team will need to address this option for the next public and stakeholder engagement milestone.</p>
<p>The map on page 12 has crash clusters circled on the east end of Yellowstone Ave on the proposed route but on page 11 you show the proposed route as south of those locations. The proposed route shown on page 11 is Obsidian Ave extending east so those crash clusters would not be on the route.</p>	<p>That is correct; the trail route would be between Yellowstone and Obsidian Streets, crossing Obsidian Street south of, but very close to, the clusters shown. The North-South segment along Iris Street would be adjacent to the clusters shown. Without knowing the causes of these crashes, the project team seeks to be cautious of any bicycle and pedestrian activity crossing a roadway with known crashes nearby.</p>
<p>[Identifying information removed] I believe a key stakeholder and meaningful destination that has not</p>	<p>The project team very much agrees with this comment. We have included the school administration in the</p>

<p>been highlighted in the plan is the West Yellowstone K-12 school. The school is not directly on the trail route but students living in town and future students living in the Old Airport land need to cross Highway 20. It should always be the goal of the school and the community that children are encouraged to safely travel to school on foot or on bicycles. Safe Routes To School is a national organization, with a Montana chapter, that has terrific resources to help communities incorporate safe routes in their street and trail design. There may also be grant money available to offset costs of signage, paving, pedestrian bridge, etc. The success of Safe Routes depends on using the 6 E's: Engineering, Education, Enforcement, Encouragement, Evaluation and Equity. More information can be found at saferoutespartnership.org</p>	<p>stakeholder outreach to ensure their perspective is included.</p> <p>The feedback provided is also very helpful for the project team's design considerations, considering possible users, and implementation tasks for funding considerations.</p>
<p>I applaud the work that is being done and am thrilled that the trails will be connected someday. I have a home in West Yellowstone and I use my bike for recreation and chores in and around town. A dedicated, connected trail will be useful for people like me but also a bonus for those tourists who have been in their car all day in the Park.</p>	<p>Thank you for your support and consideration for how the trail could be used.</p>
<p>It will be important to thoroughly consider winter use of the connected trails. The Rendezvous Ski Trails, Boundary Trail, and Riverside Trail are all groomed for Nordic skiing and snowshoeing in the winter. Creating a connection among these trails would be beneficial to users. With the popularity of snowmobiling in West Yellowstone, it is also important to consider multi-use connectors. The in-town portion of the Yellowstone Shortline Trail along with the other proposed trail routes could provide safe paths through town for both motorized and non-motorized users in the winter. To allow for both uses, the design would need to focus on heavily on safety to avoid potential incidents between motorized and non-motorized users.</p>	<p>Yes, the winter uses of the trail should align with existing winter recreation trails that it connects to, subject to Town code for when and where snowmachines are allowed.</p>
<p>Correction: The Yellowstone Historic Center was founded in 1998, not 1908. Construction of the historic depot, which houses the Museum of the Yellowstone, was completed in 1909.</p>	<p>Thank you for the correction. The dates have been corrected to reflect this comment.</p>
<p>Several of the maps throughout have the north part of the Town of West Yellowstone shaded as US Forest Service Lands.</p>	<p>Madison Addition, the area of the Town North of D Parkway, is indeed within the boundaries of the Custer Gallatin National Forest.</p>
<p>Parking is often an issue when town is busy during the summertime. Another benefit of this project would be alleviating some traffic/parking issues through improving options for pedestrians and better promoting such options.</p>	<p>Thank you for your comment and consideration for how this trail might be used.</p>
<p>This project can also be used to improve the aesthetics and appearance of portions of West Yellowstone. The part of the Yellowstone Shortline Trail going through the town could be transformed into a greenway and/or</p>	<p>The project team agrees and address some aspects of aesthetics through the design process within the scope of this study but further aesthetic considerations and decisions will occur in later stages post study as well.</p>

linear park (similar to the High Line of NYC) that provides more than pedestrian path. The path could include plants and trees, public art, benches, water features, and more.

I have been involved in trail planning in West Yellowstone since 1996. The studies included in the Planning Context have all concluded that we need this pathway connecting all of the existing trails. Decades of work and collaboration with the Forest Service have created these recreation and transportation opportunities. We now need the town to create a safe and comprehensive system for moving visitors and locals through and around town. The children in our community have also expressed a desire for safe routes to school and parks and areas for gathering that are safe and away from the high volume of traffic Highway 20 and 191 generate year around. The city park is currently the only area in town where youth can gather and play but that park is sandwiched by both extremely busy highways.

In terms of existing conditions I support the early stages of development of this connecting trail system. I would like to expand on the anticipated users of this trail to include people with baby joggers, roller skiers, roller bladers, skate boarders, roller skaters, bird watchers, photographers, handicapped users in wheel chairs or hand cycles, and dog walkers.

I would highly recommend that consideration is given for pedestrian/bike underpasses for the highway crossings. The volume of traffic is so high that vehicles have a hard time crossing and entering the highway. Many students have to cross highway 20 to get to school. I would also recommend development of the trail which will connect the Museum of the Yellowstone to the Shortline Trail on Iris Street as a greenbelt through our community. The community has expressed a desire for areas along this corridor (which is partly the historic district) to be a series of picnic areas, a dog park, a skate park, a story telling fire pit as well as the paved pathway connecting the Boundary, Rendezvous and the Yellowstone Shortline Trail. This corridor also passes next to the Little Rangers Learning Center and the Povah Community Center. This is the headquarters for our Summer Recreation Program. Developing this corridor as a park will create a safe and fun environment for the kids and visitors alike. This area is away from both highways and is much less congested than the City Park in the center of town.

I would ask that the team please consider multiple meetings for community input. The seasonal nature of our town means that many residents are gone or traveling during the shoulder seasons. If meetings are held during the shoulder seasons you may not get

Thank you for your comment and consideration for how this trail might be used. Safety of all users, especially children, is a key consideration for the engineering design options to be considered and proposed for public and stakeholder feedback at the next project milestone.

Thank you for your comment and consideration for how this trail might be used. The users you identify are also included in the design considerations for trail users and will continue to be so.

Design considerations for an underpass at applicable highway crossings will need to be considered in the design task of the project.

The Town envisions the segment of trail adjoining the Museum of the Yellowstone and related community facilities on the former rail bed being a linear park long term, with the proposed trail as one element. Design of the linear park in the former railbed is outside the scope of the current project but this comment will be considered in the trail design and otherwise be provided to the Town for future planning considerations.

The project does and will have several opportunities for public and stakeholder engagement before project completion and we do recognize the shoulder season considerations. The project team will review your

<p>good attendance or feedback. I would like to include all ideas and developments in order to develop a "master plan" for West Yellowstone's parkways and pathways. Implementation of the plan may then follow in phases. Thank you so much for this opportunity.</p>	<p>recommendations further and revise our Engagement Strategy as needed.</p>
<p>"In summary, snowmobiles would be allowed on the proposed trail during the winter months when enough snow has accumulated to allow snowmobiles to operate on the trail without damaging the underlying trail infrastructure, similar to the Town regulations for snowmobiles on roadways."</p> <p>I propose limiting the trails to non-motorized traffic, even in the winter. Snowmobiles are already able to use most roads throughout the town all winter. The speed and noise of snowmobile traffic may deter use of the trails by skiers/hikers/bikers for concerns of safety, especially in lower visibility conditions.</p>	<p>This project does not directly allow or disallow snowmobiles on the trail, but Town code regulations would allow snowmobiles on the trail facility in certain seasons of the year as currently written.</p> <p>That said, the Town can restrict motorized use of the proposed trail when complete as it has done with other roadway facilities.</p>
<p>"For these locations, a variety of design options are possible depending on site conditions, cost, community preference, and other criteria. Options the project team can consider include improved signage, pavement markings, crossing center islands, rapid flashing beacons, roundabouts, and other possible designs.""</p> <p>Crossing highway 20, especially in busy summer months, is a deterrent for cycling and walking into town. Crossing options should enable hikers/bikers/skiers of all ages to be able to cross safely. Tunnel below highway 20 at Iris Street would be incredible.</p> <p>In the summer, traffic to enter Yellowstone sometimes goes as far back as Iris Street, on numerous side streets, which should also be taken into consideration when designing safe road crossings.</p>	<p>Design considerations for an underpass at applicable highway crossings will need to be considered in the design task of the project.</p> <p>The initial site visit, follow on project discussion, and public and stakeholder feedback all support a design solution to address bicycle and pedestrian safety at highway crossings, especially during peak travel seasons for Yellowstone National Park.</p>
<p>The route will do an excellent job enabling the connection of a number of different trails in town and will facilitate greater access to the town from surrounding houses/hotels/campgrounds.</p>	<p>Thank you for your comment and consideration for how this trail might be used.</p>
<p>Two things to consider to facilitate broader use.</p> <ol style="list-style-type: none"> 1. Connection to the paved multiuse trail that runs through the Madison Addition. This trail provides access to the local school, Safe Routes to Schools may have additional funding available for creating additional trail connections. 2. Greater availability of bike and ski racks in town for use while bikers/skiers visit local businesses and restaurants. 	<p>Thank you for identifying the connection to the Madison Addition trail. The project team will need to address the possibility of this connection in the design task for the next engagement milestone.</p> <p>The addition of bike and ski racks helps address access by different users and recreators. The project team will need to address this in the design task for the next engagement milestone.</p>
<p>I think stressing the importance of connecting the town of West Yellowstone with the locals and visitors through</p>	<p>Thank you for your comment and consideration for how this trail might be used.</p>

<p>pathways and trails is very important. By providing safe ways to travel in and around west Yellowstone with developed pathways and roadways will promote a healthier lifestyle. Not only will outdoor enthusiasts enjoy the proposed trail but also summer employees as well as the youth will enjoy an easier and safer way to move through town and access the public areas</p>	
<p>As far as the road crossings, I think the consideration of two underpasses on Hwy 20 and Hwy 191 are very Important. This would allow safer travel throughout the greater West Yellowstone area including the proposed trail, all of west Yellowstone, the proposed 80 acres, other trailheads and Yellowstone National Park.</p>	<p>Design considerations for an underpass at applicable highway crossings will need to be considered in the design task of the project.</p> <p>The initial site visit, follow on project discussion, and public and stakeholder feedback all support a design solution to address bicycle and pedestrian safety at highway crossings, especially during peak travel seasons for Yellowstone National Park.</p>
<p>I would add and stress the importance of including the planning of the "Parkway" in this addition of the West Yellowstone Trail Planning and Design. The Parkway is the connector from downtown West Yellowstone to the Yellowstone Shortline Trail. It begins behind the West Yellowstone Museum and follows the old railroad grade till it meets the YST. It is important to note that this section should be considered a Greenbelt through town, including the casting pond, benches, tables, landscaping, possible dog park and skate park, etc.</p>	<p>The Town envisions the segment of trail adjoining the Museum of the Yellowstone and related community facilities on the former rail bed being a linear park long term, with the proposed trail as one element. Design of the linear park in the former railbed is outside the scope of the current project but this comment will be considered in the trail design and otherwise be provided to the Town for future planning considerations.</p>
<p>It is Important to break all of these additions and changes be done in stages.</p>	<p>Yes, the design and cost estimates will consider how to phase the trail design and construction just as you describe.</p>
<p>On page 8 (and I believe in a couple of other locations as well), Three Bear Lodge/Yellowstone Tour & Travel are not mentioned. This business is directly across the street from some of the Union Pacific Buildings and is a principal snowmobile and snowcoach business and has been since the early 1970's. Somehow it was missed.</p>	<p>Thank you for this. The project team has included both in the applicable sections of the Existing Conditions and Table 1 of this document.</p>
<p>Motorized use of Forest Service trails that all start from West Yellowstone need to have more emphasis. In many cases they will cross the proposed trail. They will need to be addressed in several aspects including wayfinding (like to the Two Top Trail that is the First National Recreational Snowmobile Trail), safety, and acknowledgement of the very large current and future economic impacts they have for the community.</p>	<p>The winter uses of the trail should align with existing winter recreation trails that it connects to, including applicable signage, subject to Town code for when and where snowmachines are allowed.</p>
<p>Mention of the great work and creativity that was brought forth by the art classes of the West Yellowstone School as they considered the trail, especially along the Yellowstone Avenue corridor. Possible incorporation of some of their ideas and designs would be worth some of the team's time.</p>	<p>The project team will include this feedback in our engagement with the West Yellowstone School.</p>
<p>For the parkway that connects the museum to the Shortline, youth in our community were invited to develop ideas of what they envisioned for this space. Students created and exhibited artworks that illustrated</p>	<p>The project team will include this feedback in our engagement with the West Yellowstone School.</p>

beautiful ideas. Some of the favorites that are still being discussed and hoped for by youth and community members include interesting benches, a gazebo, covered area with picnic tables, fire pits, interactive splash area or fountain, a big kids park, a skatepark, a dog park, a sculpture garden, and landscaping the path with rocks, endemic plants, and wildflowers. The overall vision was making this area a beautified place that offered opportunities for people to connect, gather and be inspired by nature and creativity. Our hope is that some of these visions of our youth can be realized, experienced, and enjoyed.

Engagement Summary for Milestone Three

The final engagement activity was conducted in two parts: In person open house and a virtual public comment period. The open house was conducted on May 8th, 2023, at the Povah Community Center in the Town of West Yellowstone, which was an all-day event featuring posters of the trail overview, designs, and highway crossing options. The open house posters included QR codes to the virtual public comment materials as well. About 60 attendees participated, including the business community, local officials, high school students, and town residents.

The virtual public comment period featured the same materials as the open house and ran through May 22nd. The comments received and the project team’s response is included below. Images from the open house are included following Table 5.

Table 5. Summary of Open House Feedback by Topic (May 8th, 2023)

Comment Received
<i>Trail Background and Proposed Route</i>
<ul style="list-style-type: none"> • I like the idea of the trail going around both sides of the 80 acres, not just one. • If the trail is done in phases, it would be helpful to start with the area from the Chamber to Shortline. This is a high traffic and used area. There are already ideas to have this area improved and made into a parkway. Casting pond, skate park, trailhead for Shortline. • I love the extension around the 80 acres! • Angle parking on trail side (east) on boundary, picnic tables! No RVs! • Greenbelt and “beautification” along the trail. Perhaps some interpretive signs (wildlife, geology, and history) – what would winter plans be? Grooming? • Please include the planning for a “greenbelt”/linear parkway along the trail route from the Museum to the Iris Street/YST trail. Community needs picnic areas, possibly dog park, skate park, and quiet areas away from highways 191 and 20. <ul style="list-style-type: none"> ○ Yes!! ○ Agree! • Don’t forget that we have a number of snowmobile trails that interact with the proposed trail and need to be included on all the wayfinding signage. • A preliminary plan for parks includes vehicle parking on both sides of Iris and possible dog & skate parks and improved picnic facilities. • Section of this for RV parking & trail! • Access to drinking water! For both people and dogs. Maybe by the casting pond? • Area along southern alignment is used to store snow in winter and truck parking in summer. Can this be changed or more organized?
<i>Trail Designs and Cost Estimate</i>
<ul style="list-style-type: none"> • Does paved mean asphalt or concrete? Hopefully asphalt! • Prefer concrete – asphalt is too hot! • Leave Boundary and Iris <u>natural</u> or bed gravel • Consider “thirsty” asphalt. Also a possible grant source. • Our history includes railroad! Suggest adding “crossbucks” as part of the signage at each location where interacts with road. • Access to public drinking water. • Water filling station at the Chamber?? • Train park/skate park/water at location of public works shops • Color scheme is nice.

- Where will people park their cars to unload bikes, etc.? And access trail maps and info – is the chamber parking lot the best option for parking? Or Boundary St.?
- Will there be public restrooms along the trail route?
- Will there be lights in the tunnel and parking?
- What will the entrance look like, if there is one?
- I agree with extending the trail around the perimeter of the 80 acres.

Highway Crossing Designs and Cost Estimate

Option 1 – Rapid Flashing Beacons

- Flashing signals like this can be found near Montana State University in Bozeman, MT. They are a good alternative – activated by push button and can be solar powered.
- Prefer just beacons at 191 and Boundary.
- I like Option 1 – low impact, effective, and easy to change.
- Flashing beacon is fine.

Option 2 – Pedestrian Hybrid Beacons

- I like the hybrid beacons.
- I’ve seen great results in other places with Option 2.
- Like Option 2.
- Option 2 makes the most sense with the speed limits on road dropping some distance before the crossing each way.
- Prefer Option 2 at Boundary Street and Yellowstone Street.
- Seems like Option 2 makes the most sense for US 20 and Iris, safety and cost-wise.

Option 3 – Roundabout

- I don’t think it would be a good idea to have a roundabout.
- No roundabout please!
- Roundabout not good.
- Send the roundabouts to Jackson Hole.
- LOVE roundabout at Highway 20 and Iris (slow traffic + “Welcome” monument sign”
- Imagine Mack Trucks trying/needing to slow down on Highway 20 for Iris Street crossing on a ROUNDABOUT ???!
- No roundabouts!
- Roundabout on Iris might help with speeding and look more like an entrance.
- I think the roundabout offers multiple benefits for safety and traffic management coming into town, but if it proves unpopular or challenging to implement, Option 1 and 2 crossings both represent improvements over existing conditions that will likely meet the needs of the trail system.

Option 4 – Grade-Separated Crossings

- Consider the impact of snow on the tunnels – West Yellowstone experiences 8 months of snow and winter. Need to think about snow removal.
- Tunnel not a good option.
- I like the idea of Option 4.
- How to prevent bison from being in the tunnel?
- Could snowmobiles use the tunnel?
- Tunnel cost is too high.

General Questions/Comments	Project Team Response
Have ADA ramps been included at street crossings in the design cost estimates?	Yes, all designs and cost estimates include ADA accessibility.
Will need doggie bag stations along the trail to encourage people to clean up after dogs.	Thank you for the suggestion!
Could there be a full traffic light installed at Iris Street and Highway 20?	Yes, that is an option subject to final traffic and engineering analysis in the project design phase.

Table 6. Summary of Virtual Public Comment Period (May 8th-22nd, 2023)

Comment Received	Project Team Response
I absolutely love the idea of this community enhancement project!! Hope to see other projects like picnic areas, pump track (for BMX bikes), playground equipment, dog park, etc. along the implemented trail system.	Thank you for your support and suggestions!
Love the look of the trail and how it is being incorporated into town	Thank you for your support!
I support the trail expansion. It is a good opportunity to create more nonmotorized recreation and to create protected green space in the city limits.	Thank you for your support and suggestions!
I think this is a great idea and will make the town better for locals. Will the trails be plowed in the winter? Overall I think the trail is a great idea.	Thank you for your support! The trails will likely not be plowed in the winter. They would be maintained per the Town's snow maintenance policies.
Tunnels are the safest, but I'm not sure they are financially feasible? I would rather see the tunnels than just crosswalk markings. Marking will get plowed off. Other options would require a lot of maintenance potentially.	Thank you for your considerations. Your thoughts fit with the project team's considerations proposed.
I think trail design is good. I would like to see some green space around the trail with sitting benches and maybe picnic tables. It would be nice also to incorporate an area for a potential skate park and dog park. Maybe down near Obsidian and Iris. Is there going to be some added parking in this area? If not I would recommend parking down at the start of the Short Line Trail into the Forest Service. It would help to not have so many people parked all along the roads, etc.	Thank you for your support and suggestions! There are not specific proposals within this study to add more parking to accommodate the trail, but we will add this suggestion to the study's implementation and further considerations list.
The town needs pedestrian beacons throughout the city center. They should exist at street crossings for parking pedestrian safety.	The trail identifies these improvements at the highway crossings, but beacons could be a further improvement to strategic locations on and off the proposed trail. The project team will include locations off the trail identified by open house attendees that could warrant crossing beacons.
I think the tunnel is a bad idea 1. Potential wildlife conflicts 2. Issues with snow in the extreme winter conditions West Yellowstone can experience 3. Attractive to homeless transients as shelter potentially creating problems I think the roundabout is a bad idea: 1. Visitors as well as local and regional residents may be unfamiliar with using roundabouts and will be focused on how to navigate the roundabout instead of looking out for pedestrians. 2. It would use too much land in a place where land is too valuable to be used for pavement.	Thank you for your feedback and the considerations noted. Thank you for your feedback and considerations noted. The safety concerns and familiarity noted are common hesitations with roundabouts but generally are small relative to the actual improved safety of all users and increased traffic calming.

The best option of those presented is an at grade crossing with ample signage and lights plus hand held, high visibility flags for pedestrian to use while crossing, but highway traffic is known to enter town well above posted speed limits and this option still leaves too much risk to the pedestrian. Complete separation between pedestrians and highway traffic is the only way to ensure safety. If at grade crossings are used, they should be located as close to town as possible, this is the location where traffic both entering town and leaving town will be going the slowest.

This seems to be what we heard for the US191 and Boundary crossing, which is our proposed improvement now.

A better option is one that was not presented. I would like to see an ADA compliant pedestrian overpass that would fit a larger overall vision and project that the crossing designer was unaware of when this plan was created. The pedestrian overpass would also serve as a visual gateway to West Yellowstone where visitors, as they enter town, can park in the public parking lots and take their "selfies", a practice that is already common with the "Welcome to West Yellowstone" sign at the edge of town.

A grade-separated pedestrian bridge was considered early on but was not advanced due to the need for long slope lengths (similar to the tunnel option) and no interest from the public during the January public meeting, webinar, and virtual public involvement. The public interest in grade-separated was entirely for the costs and benefits of a tunnel option.

Roundabout on Iris/Hwy 20. Option 2 at Yellowstone and Boundary

Thank you for your feedback!

My preferred options would be the tunnels, but I understand the money aspect of this. Would it be possible to do the tunnel option at Iris/Highway 20 and the pedestrian beacon at Yellowstone/Boundary? Cars are going much faster when they enter town at Iris and 20 and have a hard time even seeing the flashing speed limit sign

Thank you for your feedback! Yes, both suggestions are possible.

The Shortline Trail project provides a unique opportunity for the city to expand its own trail system and we need to take this opportunity.

Agreed—thank you for your feedback!

I am in charge of a proposal to develop the section of the new 80 acres that is north of highway 20 into a Dog Park that will include public restrooms and parking for both the Dog Park and the Frontier Trailhead. I am presenting the proposal to the West Yellowstone Parks and Rec Board at their next meeting on June 21. The proposal documents are not yet complete, but I would be happy to forward a copy to the trail design team if they would like to see it. The town of West Yellowstone will have my contact info if needed.

Thank you for this information and your support!

Figure 2. Selection of Open House images





Appendix C - Existing Conditions



Custer Gallatin National Forest

To: West Yellowstone Trail Planning and Design Project Management Team
From: FHWA Western Federal Lands Highway Division
Subject: Memo 2: Existing Conditions
Project Name: West Yellowstone Trail Planning and Design
Date: March 16, 2023

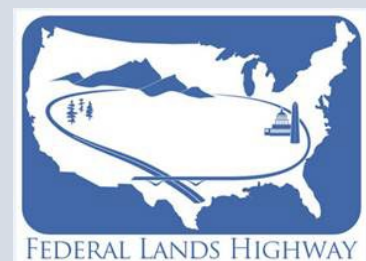


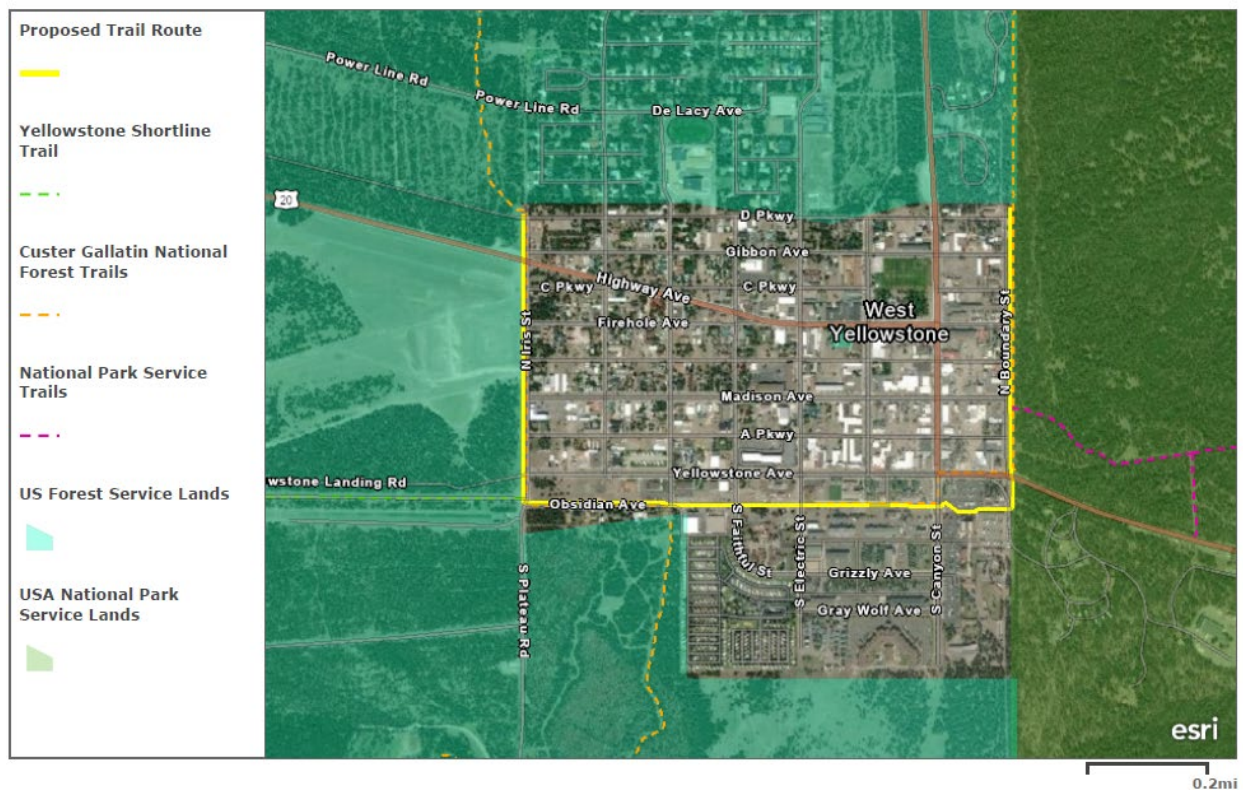
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Introduction

The Town of West Yellowstone Trail Network Planning and Design project is a Federal Lands Access Program (FLAP) funded project to develop a trail network connecting the currently separate Yellowstone Shortline, Frontier, Boundary, Rendezvous Nordic Ski, and Riverside Trails with a goal of creating a complete network for users to recreate or commute on while in West Yellowstone. The project will therefore develop a plan to engage and gather public input, an analysis of existing conditions, and conceptual designs and costs for the proposed trail system through the Town of West Yellowstone. Figure 1 below shows the project area.

Figure 1. Approximate project area with proposed trail route shown in yellow solid line. Adjoining trails shown in dashed lines.



Maxar | Esri Community Maps Contributors, © OpenStreetMap, Microsoft, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA

The scope of this study is divided into the following:

1. Develop an engagement plan to gather stakeholder input on proposed trail network that is focused on key project milestones
2. Document existing conditions as related to current and future potential use of the project area
3. Develop conceptual designs and construction cost estimates for proposed trail network

4. Summarize findings in a final report that includes any limitations, applicable future work, and future opportunities

The outcome from this project is to create a connection of trails for the Town of West Yellowstone where residents, visitors, and people recreating can safely navigate all the different trails in the Town. This project will allow the Town of West Yellowstone and its partners to proceed from planning and design to the construction phase. This project will provide background and research as it further defines the needs and existing conditions of the area.

Planning Context

This section analyzes relevant plans and studies that could inform the West Yellowstone Trail Planning and Design project's outcome, which we term the 'planning context.' The project team seeks to understand any existing plans, opportunities, and constraints developed through partners' work that might strengthen this project's findings. Analysis of the planning context includes the document's purpose, scope, and findings as relevant to this project's outcomes. Documents reviewed are shown in Table 1 below.

Table 1. Planning documents reviewed.

Plan	Year	Agency
West Yellowstone Gateway Study	2019	Town of West Yellowstone
Town of West Yellowstone's 80 Acre Expansion Planning Report	2019	Town of West Yellowstone
West Yellowstone, Montana Growth Policy Update 2017	2017	Town of West Yellowstone
Envision Gallatin: Gallatin County Growth Policy	2021	Gallatin County
Connecting Communities: Gallatin County Trails Report and Plan	2002	Gallatin County
Oregon Short Line Rail Trail Decision Memo	2019	USFS
Custer Gallatin Land Management Plan - (Forest Plan Revision)	2022	USFS

Common themes throughout the plans included enhancing bike, pedestrian, and trail access throughout Gallatin County to Federal lands, and planning transportation systems to address current issues and future travel, especially as visitation and tourism increases to Yellowstone National Park and therefore, the Town of West Yellowstone.

West Yellowstone Gateway Study¹

The West Yellowstone Gateway Study is a study "designed to help the Town of West Yellowstone and Yellowstone National Park (YNP) officials better understand the current and future issues related to transportation in the area and provide recommendations for system improvements within the community that enhance mobility and encourage economic growth".² The study's stated goals include:

- Improving circulation through and within the Town for residents, visitors, & pass-through traffic.

¹ Town of West Yellowstone. (2019). *West Yellowstone Gateway Study*.

² Ibid.

- Providing safe and efficient networks for all modes of transportation, including automobiles, bicycles, and pedestrians.
- Ensuring transportation improvements compliment the Town’s economic development strategies and support the economic viability of new and existing businesses.
- Enhancing parking management strategies and wayfinding signage to make it easier for visitors to find their way to their destinations and nearby available parking.³

The West Yellowstone Gateway Study is a transportation study, therefore there are several ways this study relates to the project. The study provided recommendations for bicycle and pedestrian facilities which may be important when considering trail designs for this project. Recommendations include enhancing north-south connections across US-20, enhancing pedestrian crossings with high-visibility crosswalk markings, rectangular rapid flashing beacons (RRFB), and adding curb extensions. The study also recommended specific locations for bike and pedestrian paths including in places identified for the proposed trail alignment, such as at the intersection of US-20 and Iris Street, as well as the intersection of Yellowstone Ave. and Boundary Street. The study also looked at improving transportation circulation and wayfinding signage, both of which may end up interacting with the proposed trail.

Town of West Yellowstone’s 80 Acre Expansion Planning Report⁴

The Town of West Yellowstone’s 80 Acre Expansion Planning Report considers alternatives and potential for the recently acquired 80 acres of land located on the western boundary of the town. The study primarily considers the impact of different housing and economic development alternatives for developing the newly acquired 80 acres. The Town of West Yellowstone has worked with US Forest Service, and they have identified easements that can be accessed or may need to be relocated as they relate to development. How the 80 acres are developed is important because the location and development will directly interact with the proposed alignment (along Iris Street) of the West Yellowstone Trail Design and Planning project.

West Yellowstone, Montana Growth Policy Update 2017⁵

The West Yellowstone Growth Policy Update 2017 provides direction towards managing growth within the Town. The growth policy update includes chapters on key issues like housing affordability and availability, short-term commercial rentals, developing the recently annexed 80 acres, and the economy. The policy update also includes chapters on implementation, coordination, and the wildland-urban interface. Increasing recreation opportunities, in coordination with Custer-Gallatin Nation Forest, were identified as possible recreational growth

³ Ibid.

⁴ *Town of West Yellowstone’s 80 Acre Expansion Planning Report*. (2019). Town of West Yellowstone, https://www.townofwestyellowstone.com/wp-content/uploads/2019/08/WY-80-Acres-Expansion_Planning-Report_FINAL_2.25.19-source-added-to-page-15.pdf. Accessed 23 November 2022.

⁵ *West Yellowstone, Montana Growth Policy Update*. (2017). Town of West Yellowstone, <https://www.townofwestyellowstone.com/wp-content/uploads/2017/12/Adopted-West-Yellowstone-Growth-Policy-12-1-17.pdf>. Accessed 23 November 2022.

opportunities around West Yellowstone. Specific recreation opportunities included creating longer non-motorized routes to Driggs, Idaho, and Reas Pass, Idaho.

Envision Gallatin: Gallatin County Growth Policy⁶

The Gallatin County Growth Policy 2021 document is an overarching document that guides Gallatin County's land use decisions and how the county will plan for growth. Gallatin County includes the cities of Bozeman, Belgrade, and Three Forks, as well as the towns of Manhattan and West Yellowstone, and has a population of 118,960 people. The Gallatin County Growth Policy document includes several goals and policies that align with other plans reviewed for this project, especially in relation to Gallatin County's recreation and transportation goals and policies. For example, a stated recreation goal of Gallatin County is to "support creation of a regional recreation network" with supporting policies that include promoting design and development that connects multimodal facilities and trails to meaningful destinations, as well as encouraging public access to trails, parks, and recreation.⁷ Additionally, a transportation goal of Gallatin County is to "plan for a safe and efficient transportation system" by promoting connectivity, multimodal opportunities, and pedestrian-friendly opportunities.⁸ These themes and goals compliment the Town of West Yellowstone's Growth Policy Update 2017.

Connecting Communities: Gallatin County Trails Report and Plan⁹

The Connecting Communities: Gallatin County Trails Report and Plan serves as a guide and vision creating a countywide trails network. The Plan further identifies trails in Gallatin County, a plan for a countywide trail network, and explains how trails can connect communities while providing an alternative to motorized travel. Although not directly discussing trail planning in West Yellowstone, the Gallatin County Trails Report and Plan speaks to the overall vision of trail planning in the county and may therefore be useful to consider when planning trails in the Town of West Yellowstone. Potential partners that have been identified from this plan are Gallatin County Planning and Bozeman Planning Departments, which review subdivision proposals for potential and open space and public trails, and Gallatin County Trails Advisory Committee, who prepared this report.

Oregon Short Line Rail Trail Decision Memo¹⁰

This memo documents the decision made by the US Forest Service in 2019 to move forward with implementing the Oregon Short Line Rail Trail, a 9.25 mile trail that would be part of a the larger, 104-mile long Greater Yellowstone Rail Trail project. This section of the trail is in the

⁶ *Envision Gallatin: Tomorrow Together - Gallatin County Growth Policy*. (September 2021). Gallatin County, https://gallatincomt.virtualltownhall.net/sites/g/files/vyhlif606/f/pages/growth_policy_-_final_full_document_9.1.21.pdf. Accessed 23 November 2022.

⁷ Ibid.

⁸ Ibid.

⁹ *Connecting Communities: Gallatin County Trails Report and Plan*. (January 2002). Gallatin County Trails Advisory Committee, https://gallatincomt.virtualltownhall.net/sites/g/files/vyhlif606/f/pages/trailsplancombined_0.pdf. Accessed 23 November 2022.

¹⁰ USDA Forest Service. (June 2019). *Oregon Short Line Rail Trail Decision Memo*.

Town of West Yellowstone. The addition of this trail allows for more opportunities for visitors and tourists staying in the Town of West Yellowstone to recreate safely and experience the town. The document finds that neither environmental assessment nor an environmental impact statement needed to be completed.

Land Management Plan for the Custer Gallatin National Forest¹¹

The Land Management Plan for the Custer Gallatin National Forest “sets the overall context for informed decision making by evaluating and integrating social, economic, and ecological considerations relevant to management of the national forest”.¹² The Plan does not look at site-specific prohibitions or activities, instead focusing on the direction and vision for the Forest as a whole.⁷ West Yellowstone is referenced within the Land Management Plan in relation to its accessibility to Yellowstone National Park, tourism, and desirability as a snowmobiling and cross-country skiing destination during winter months.¹³ West Yellowstone falls within the Madison, Henrys Lake, and Gallatin Mountains Geographic Area of the National Forest and the Hebgen Winter Recreation Emphasis AREA (HWREA).

1. The Custer Gallatin National Forest works with the community of West Yellowstone to achieve a national and international destination for winter recreation.
2. The Custer Gallatin National Forest seeks partnerships for sustainable operation of the Rendezvous Ski Area and the groomed snowmobile trail system of this recreation emphasis area.
3. The Custer Gallatin National Forest seeks partnerships and interagency cooperation to emphasize winter recreation safety.¹⁴

Plan recommendations for roads and trails that inform the proposed trail include:

- Desired Conditions: Connected to partner transportation systems (02); provides for the health and safety of users, are cost effective, preserve the integrity of road or trail, and protect adjoining natural, cultural, and aesthetic qualities (04); accommodates current and foreseeable recreation demand (05).¹⁵
- Goals: Coordination with partner transportation system managers (01, 02, 03).

Plan recommendations for recreation that informs the proposed trail include:¹⁶

- Desired Conditions: Recreation activities contribute to jobs and income in the local economy, community stability or growth, and the quality of lifestyles in the area (01);

¹¹ *Land Management Plan – Custer Gallatin National Forest*. (January 2022). USDA Forest Service, https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fseprd1008515.pdf. Accessed 23 November 2022.

¹² Ibid.

¹³ Ibid.

¹⁴ Ibid.

¹⁵ Ibid.

¹⁶ Ibid.

promote physical and mental health (02); are adaptable changing trends and demands (03); and support both summer and winter recreation activities.

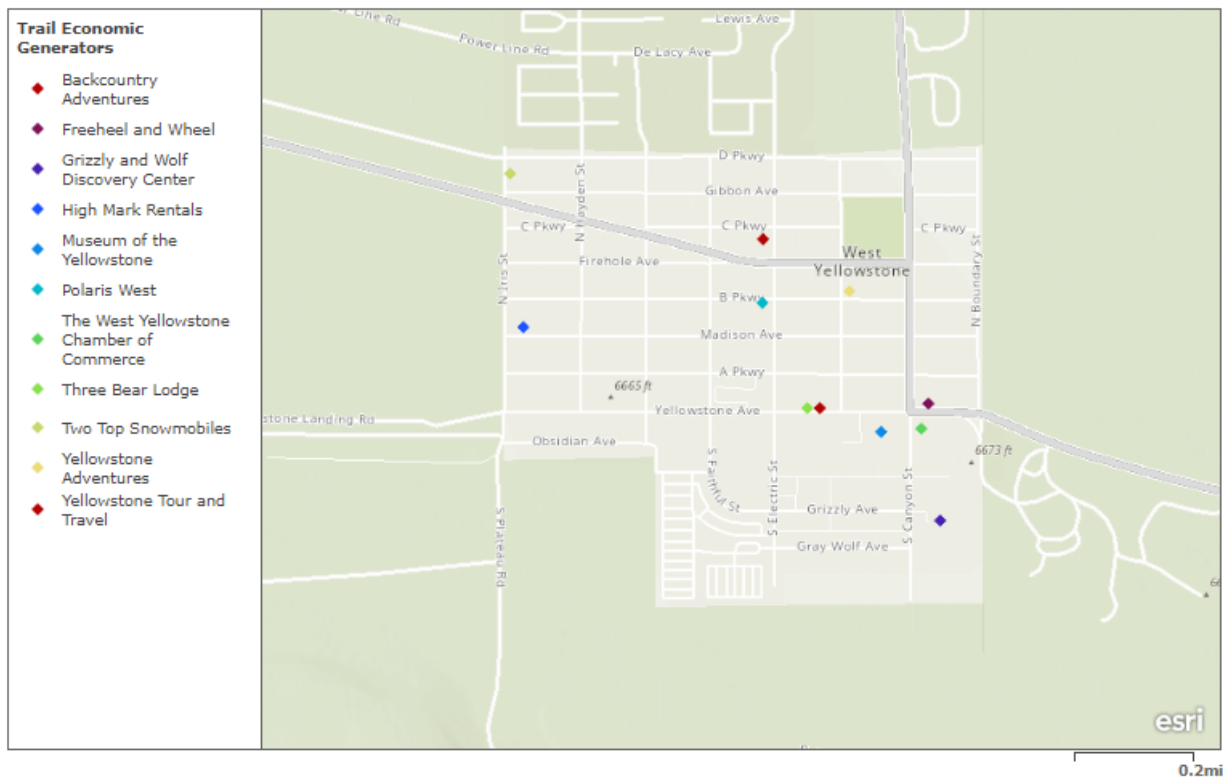
Planning Context Findings

The planning documents reviewed suggest broad but overlapping considerations for this project’s purposes. There are general themes of increased tourism and visitation mentioned the planning documents due to desirable recreation opportunities around West Yellowstone, Yellowstone National Park, and Custer Gallatin National Forest. This increase in visitors suggests a need for better functioning transportation systems including safer facilities for bike users and pedestrians, enhanced wayfinding, and connectivity between meaningful places. Within the Town of West Yellowstone’s 80 Acre Expansion Planning Report there is a focus on affordable housing, development, and connectivity to the rest of the Town to create a vibrant community that can continue to welcome new residents and tourism for years to come.

Economic Generators

The project team identified a number of economic generators that may impact the proposed trails use and/or be impacted by its development. While not exhaustive, this list is meant to highlight businesses and organizations that have a clear relationship with the trail’s potential use. Figure 2 shows each listed organization in relationship to the proposed trail.

Figure 2. Selected economic generators related to the trail’s expected use.



Esri, NASA, NGA, USGS, FEMA | Esri Community Maps Contributors, © OpenStreetMap, Microsoft, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA

Museum of the Yellowstone, founded in 1998, is focused on the history of Yellowstone National Park. The museum is managed by the non-profit Yellowstone Historic Center and the YHC is an active partner in this project. The Museum is a fixture in the community and will continue to be a tourist site and economic generator with the location of the proposed trail. The Museum is located on Yellowstone Avenue and would adjoin the proposed trail. Museum management indicated an interest in hosting trail education features and being a possible “hub” or “start” of the trail and related amenities.

The West Yellowstone Chamber of Commerce, located on Yellowstone Avenue, not only supports local businesses in West Yellowstone, but are also a destination marketing organization. This means that they are actively working to target and attract visitors to the area by branding West Yellowstone as a vacation destination. The Chamber is located in the southeast corner of the proposed trail route, with the trail assumed to follow existing sidewalk facilities in the Chamber parking lot.

Grizzly & Wolf Discovery Center, located just south of the West Entrance to Yellowstone National Park, is a not-for-profit wildlife park and educational facility where visitors can see grizzly bears, gray wolves, otters, birds of prey, and other animals. The center offers different opportunities to learn about and experience the animals native to the Yellowstone area. The trail is not planned to adjoin Discovery Center property but will cross Canyon Street just north.

Freeheel and Wheel is an outdoor recreation shop located near the West Entrance of Yellowstone National Park. They offer bike, ski, and snowshoe rentals and services, as well as coffee and gear for sale. Freeheel and Wheel is an active part of the West Yellowstone community and partner of this project. Freeheel and Wheel is located across from the Chamber.

Polaris West is a snowmobile and ATV store in West Yellowstone that offers vehicles for purchase, as well as rentals. The Town of West Yellowstone attracts snowmobile enthusiasts from all over the world which makes Polaris West a resource and economic generator for the community. Polaris West is not located on the trail.

Yellowstone Adventures offers snowmobiles and ATVs for purchase and rental, as well as guided snowmobile tours. Yellowstone Adventures also sells customizable vacation packages for visitors to West Yellowstone. Polaris West is not located on the trail.

Backcountry Adventures is a snowmobile shop that offers rentals, snowmobile tours, and snowcoach tours through Yellowstone National Park and Gallatin National Forest. Backcountry Adventures is not located on the trail.

High Mark Rental provides rentals for a broad range of outdoor gear including ATVs and UTVS, snowmobiles, jackets, boots, helmets, and gloves. High Mark Rental also provides

servicing for ATV, UTV, and snowmobiles. They are located near the corner of Iris Street and Madison Avenue on the west side of the Town and would adjoin the proposed trail.

Two Top Snowmobile Rentals and Tours is a private company providing snowmobile and tours within Yellowstone National Park. The company is located on North Iris Street where the proposed trail connects with the Frontier Trail and Powerline Road and would adjoin the proposed trail

Yellowstone Tour and Travel is a guided tours company associated with Three Bear Lodge, providing users access to Yellowstone National Park by snowmobile, snowcoach, and van in winter and summer seasons. The company is located on Yellowstone Street, across from the historic Union Pacific Dining Lodge.

Three Bear Lodge is a hotel associated with Yellowstone Tour and Travel, providing residents access to Yellowstone National Park and US Forest Service lands. The company is located on Yellowstone Street, across from the historic Union Pacific Dining Lodge.

Site Conditions and Considerations

This section summarizes the site conditions that inform future alignment, design, and construction of any proposed improvements. We outline the considerations for the proposed trail route, safety, trailheads and connections, ADA accessibility, design, right of way and easements, drainage and culverts, utilities, and any gaps in site condition information. Where possible, we include information and images gathered during the May 2nd, 2022, site visit.

Proposed Trail Route

The project team assumes the trail route will follow the rights of way adjoining North Boundary Street, Obsidian Avenue, and North Iris Street as shown in Figure 3 below.

Figure 3. Approximate project area with proposed trail route shown in solid yellow line. Adjoining trails shown in dashed lines.



Current and Anticipated Uses

Trail users in West Yellowstone and surrounding areas consist of recreation hikers, bikers, and runners; daily users (such as dog walkers); and winter recreation users (such as cross-country skiing). Other users are likely, but the three groups noted were the primary users identified by project partners. Partners noted that users of the Frontier and Boundary Trails (north of Town) are primarily dog walkers and similar activities. Users of the Riverside Ski Trail are typically day

users accessing the western areas of Yellowstone National Park and, in winter months, cross country skiers.¹⁷ Rendezvous Ski Trail sees year round use but is most known for cross country skiing and snowshoeing in winter months. Indeed, the trail is host to many winter recreation events like the Yellowstone Rendezvous Race and Yellowstone Ski Festival.¹⁸ The Yellowstone Shortline Trail sees daily as well as recreation users, such as hikers and bicyclists and connects to the wider Greater Yellowstone Trail network.

The proposed trail is intended to connect the current users of each existing trail as they travel from one system to the other within the Town. To that end, the trail is expected to serve bicyclists, pedestrians, and, in winter months, motorized and non-motorized recreation as well.

Feedback received from stakeholder and the public through the project webinar January 18th, 2023, requested greater clarity on whether and how snowmobiles can use the proposed trail in winter months. Motorized use of the trail during winter months is governed by the West Yellowstone Municipal Code under sections 10.12 (Snowmobiles) and 12.20 (Snow Removal). In summary, snowmobiles would be allowed on the proposed trail during the winter months when enough snow has accumulated to allow snowmobiles to operate on the trail without damaging the underlying trail infrastructure, similar to the Town regulations for snowmobiles on roadways.^{19,20}

Safety

The project team evaluated safety concerns that may be applicable to the project, summarized in Table 2 and Figure 4 below. In the Town of West Yellowstone from 2011-2020 there has been one fatal motor vehicle crash in 2019.²¹ During 2016-2018, there was one crash with a pedal cyclist each year in West Yellowstone.²² According to federal Motor Vehicle Crash Data (2011-2020), there have not been any pedal cyclists killed in fatal crashes.²³ Using spatial information from the Montana Department of Transportation (MDT), we can also see groupings of traffic incidents on or adjacent to the proposed trail route.

¹⁷ NPS. 2020. Yellowstone National Park: Riverside Ski Trail. Retrieved December 2022 from: <https://www.nps.gov/thingstodo/yell-riverside-ski-trail.htm>

¹⁸ Rendezvous Ski Trails. 2022. Come ski the Rendezvous Trails! Retrieved December 2022 from: <http://www.skirunbikemt.com/ski.html>

¹⁹ Town of West Yellowstone Municipal Code, Chapter 10.12 (Snowmobiles). <https://www.codepublishing.com/MT/WestYellowstone/#!/WestYellowstone10/WestYellowstone1012.html#10.12>

²⁰ Town of West Yellowstone Municipal Code, Chapter 12.20 (Snow Removal). <https://www.codepublishing.com/MT/WestYellowstone/#!/WestYellowstone12/WestYellowstone1220.html#12.20>

²¹ Montana DOT (2021). All Montana crashes (Data from 2011-2020). MDT. <https://www.mdt.mt.gov/publications/datastats/crashdata.aspx>

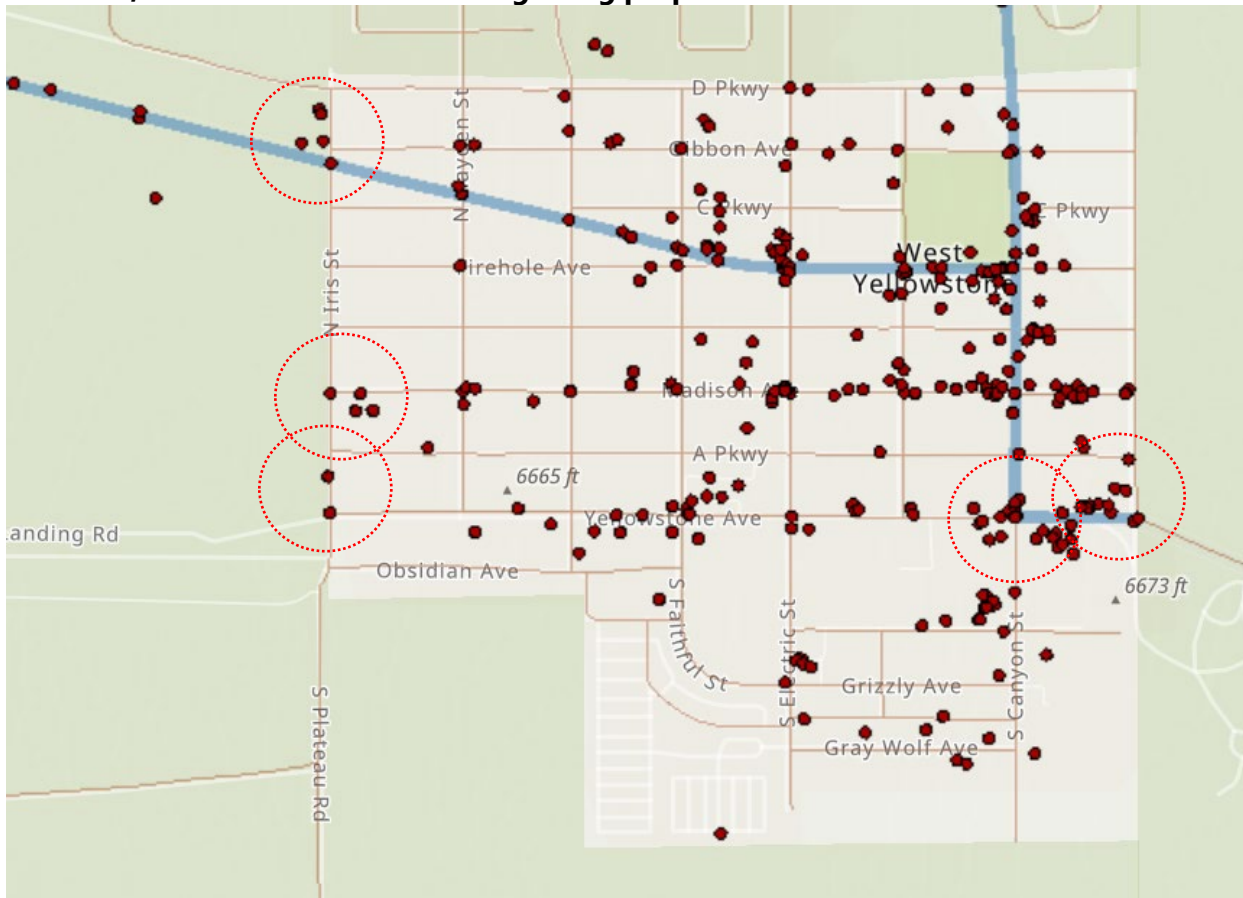
²² Ibid.

²³ National Highway Traffic Safety Administration (NHTSA). (2022). *National Highway Traffic Safety Administration (NHTSA) Motor Vehicle Crash Data Querying and Reporting*. (Fatality and Injury Reporting System Tool (FIRST)). NHTSA. <https://cdan.nhtsa.gov/query>

Table 2. Summary of vehicle crashes in West Yellowstone, Montana, between 2011-2020.

Year	Total Crashes	Fatal Crashes	Crashes Involving Cyclists
2011	12	0	0
2012	11	0	0
2013	12	0	0
2014	9	0	0
2015	25	0	0
2016	58	0	1
2017	68	0	1
2018	67	0	1
2019	64	1	0
2020	55	0	0

Figure 4. Approximate locations of reported vehicle crashes near West Yellowstone, Montana, 2016-2020. Crash clustering along proposed route are circled in red.²⁴



²⁴ Montana DOT. 2023. Montana Crash Data: Statewide Data Map. Retrieved December 2022 from: <https://www.mdt.mt.gov/publications/datastats/crashdata.aspx>

While the number of fatal crashes in West Yellowstone is low, there has been a focus on making facilities safer for drivers, pedestrians, cyclists, and all users. For example, goals for the proposed trail include grade separation for cyclists and pedestrians from vehicles, safe intersection crossing for users, and utilization of traffic calming features at intersections to eliminate conflicts.

Figure 5. Bicycle and Pedestrian Crashes between 2011-2020.²⁵



Maxar | Esri Community Maps Contributors, © OpenStreetMap, Microsoft, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA | DiExSys

Examination of bicycle and pedestrian crashes show incidents primarily occurring off the proposed route and on state highway facilities. Public feedback during the January 18th, 2023, webinar suggested rerouting the Iris Street trail segment further west into the 80-acre public lands. The concern from the project team is, regardless of whether the Iris Street segment moves or remains, that the actual highway crossing remains at Iris Street and not further west on the highway. As the map shows, there have been at least two pedestrian crashes further west of the intersection. Montana Department of Transportation shows the facility speed for this highway as 70 MPH, dropping to 55 and then 45 MPH at about the location of the known pedestrian crashes, and then 25 MPH in town.²⁶ This high-to-low speed transition makes any potential

²⁵ Vision Zero Suite 2022, available through ArcGIS Online open data.

²⁶ Montana Department of Transportation. MDT Speed Studies Database. Retrieved January 2023 from: <https://experience.arcgis.com/experience/8995b56fcac04914a171c3f63b85b85f/>

pedestrian crossing more dangerous the further west it is placed on the highway facility from Iris Street.

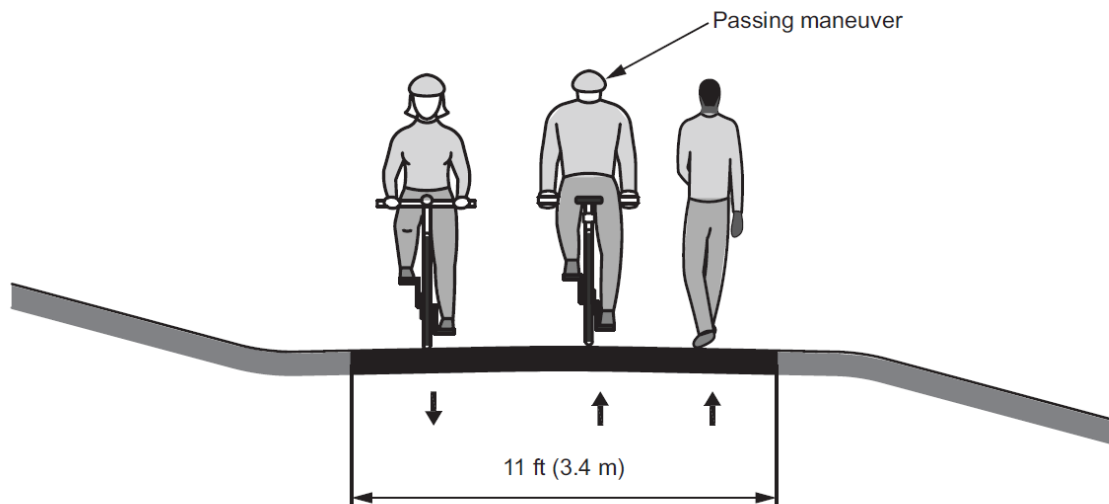
The project team also noted trail specific safety concerns on the Yellowstone Shortline Trail during the team’s site visit, including bears in the area in the springtime, as well as some ‘out-of-bounds’ camping in US Forest Service lands along the trail on day-use-only areas.

Design Considerations

The proposed route shall be designed in accordance with *AASHTO Guide for the Development of Bicycle Facilities (4th Edition)*, Chapter 5: Shared Use Paths. For the purposes of design, the proposed route is considered a “shared use path” instead of a “trail,” due to the latter generally indicated unpaved surface. Where the trail connects to USFS and NPS trail systems, the project team shall also incorporate USFS Standard Trail Plans and Specifications.²⁷ Considerations for the project team’s design include the following elements.

Typical Cross Section. The minimum paved width for shared use path is 10 feet. The width can vary 10-14 feet, depending on context. A reduced width down to 8 feet is allowed if bicycle traffic is low enough, pedestrian traffic is occasional, passing is easy, and low vehicle-use for maintenance is expected. For the proposed route the project team assumes with a 10 foot paved surface throughout. Figure 6 below provides a typical cross section of shared use path with space for passing.

Figure 6. Shared use path cross section with passing space.²⁸



²⁷ USFS. 2022. *Standard Trail Plans and Specifications*. Retrieved December 2022 from: <https://www.fs.usda.gov/managing-land/trails/trail-management-tools/trailplans>

²⁸ AASHTO. 2012. *Guide for the Development of Bicycle Facilities (4th Edition)*, Chapter 5.

Materials. Best practices for shared use paths in city contexts is to use cement or asphalt paved surfaces. Advantages of cement include longer service life, reduced susceptibility to cracking and deformation from roots and weeds, and a more consistent riding surface after years of use and exposure to the elements. The disadvantages include higher cost and lower contrast for pavement markings than asphalt. Asphalt provides a lower construction cost, generally softer surface for runners and walkers, and greater contrast for pavement markings than cement. The disadvantage is a generally less durable surface compared to cement, leading to repair or replacement after 15-20 years.²⁹

Signage and Wayfinding. The project team shall follow best practices for signage on and along shared use paths as described in the *AASHTO Guide for the Development of Bicycle Facilities (4th Edition)* and *Manual on Uniform Traffic Control Devices for Streets and Highways*. Considerations for the proposed route signage and wayfinding include:

- Designate a system of routes in the Town
- Connection to important origins and destinations, such as:
 - Economic generators
 - Transit connections
 - Other intermodal connections
- Provide wayfinding guidance and connectivity between two or more major bicycle facilities, such as a street with bike lanes and a shared use path
- Provide guidance and continuity in a gap between existing sections of a bikeway, such as a bike lane or shared use path.
- Provide location-specific guidance for bicyclists such as:
 - How to navigate through an area with a complex street layout.
 - Where the route diverges from a way used by motorists.
 - How bicyclists can navigate through a neighborhood to an internal destination, or to a through route that would otherwise be difficult to find.

Additionally, the signage and wayfinding shall align with those developed by Sea Reach for the Yellowstone Shortline Trail.

Alignment with Historic and Trail Corridor Design. In addition to the plans cited in the Planning Context section, the proposed trails design is informed by the parallel design work for the Yellowstone Shortline Trail. The project team intends for aesthetic, signage, and wayfinding elements to align with the same elements in the Yellowstone Shortline Trail. Figures 7a-7c provide examples of design elements from draft design concepts for the Yellowstone Shortline Trail, prepared by Sea Reach Ltd in the Fall of 2022.

²⁹ Ibid.

Figure 7a. Example color palette and logo.



Figure 7b. Example trail markers and distance design.

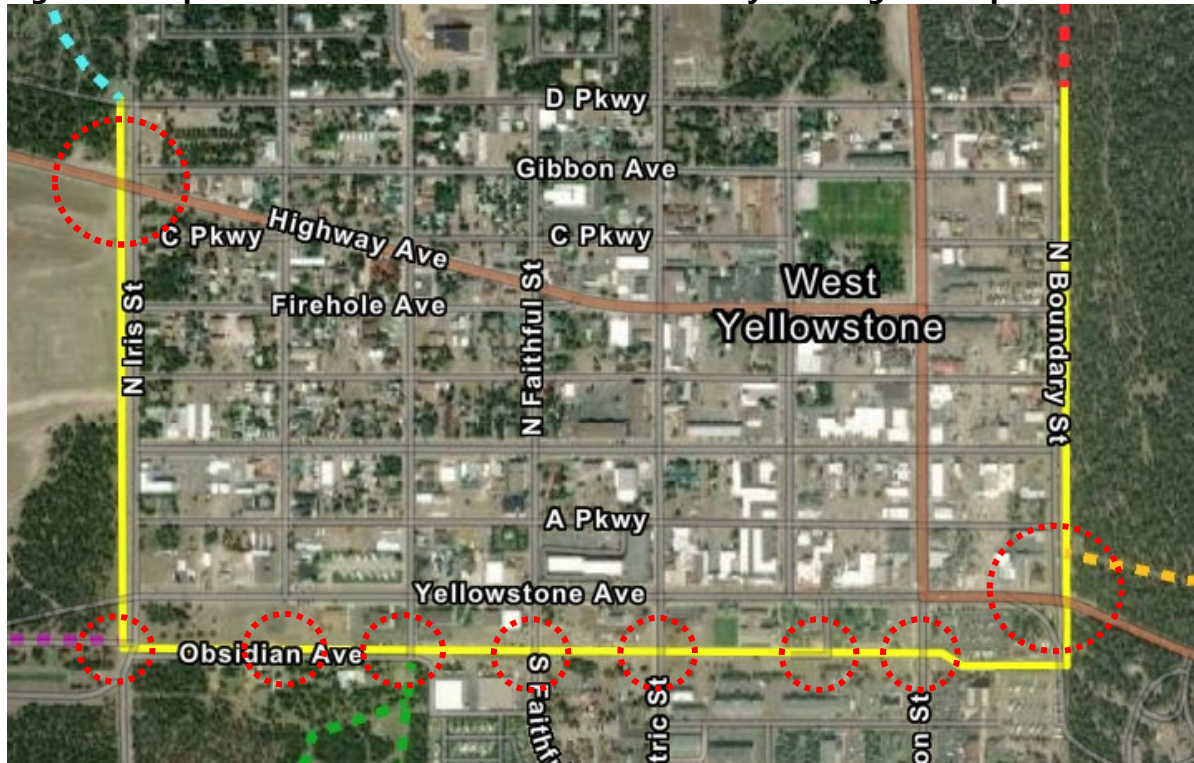


Figure 7c. Example trail amenities design.



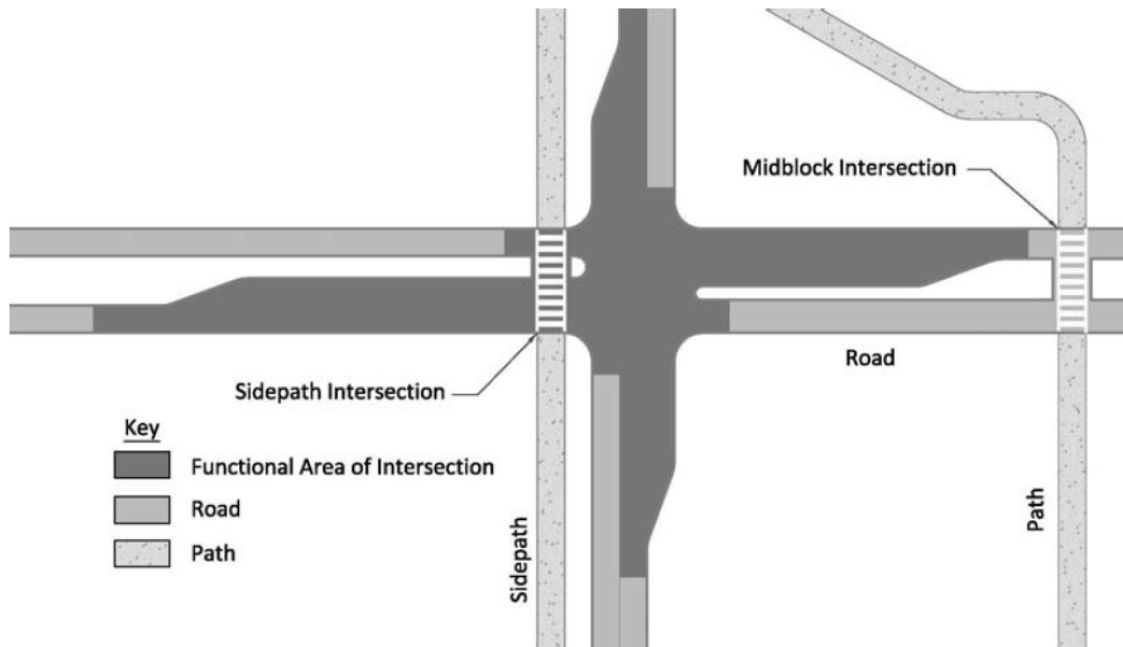
Roadway Intersections. The more complex design issue is how to address road crossings. As Figure 8 below shows, there are nine road crossings, two of which cross state highways (larger red circles below). All locations are at existing intersections and would be considered “side paths” similar to Figure 9 on the following page.³⁰ For these locations, a variety of design options are possible depending on site conditions, cost, community preference, and other criteria. Options the project team can consider include improved signage, pavement markings, crossing center islands, rapid flashing beacons, roundabouts, and other possible designs.

Figure 8. Proposed trail route locations where roadway crossings are expected.



³⁰ AASHTO. 2012. *Guide for the Development of Bicycle Facilities (4th Edition)*, Chapter 5.

Figure 9. Example of “Sidepath” and “Midblock” shared use path crossings. All proposed trail route roadway crossings are sidepaths.



Americans with Disabilities Act (ADA) Accessibility

The proposed trail is assumed to be designed to accommodate users with mobility limitations, per the Americans with Disabilities Act (ADA) and related USDOT regulations. For the purposes ADA Accessibility in design, the project follows Accessibility Requirements for Shared Use Paths as outlined in the *AASHTO Guide for the Development of Bicycle Facilities (4th Edition)* and *Public Rights-of-Way Accessibility Guidelines (PROWAG)*. These resources identify width, passing space, grade, cross slope, street crossings, surface materials and condition, and other necessary considerations for design.

Issues of grade, width, and passing space should not be an issue for much of the proposed route as it falls in flat, wide public rights of way. The areas of concern are roadway crossings, such as those circled in Figure 8 above. The Iris and Boundary Streets areas also correspond to crash clustering shown in the safety section. The project team should also ensure appropriate ADA Accessibility signage is located along the proposed route.

Right of way and easements

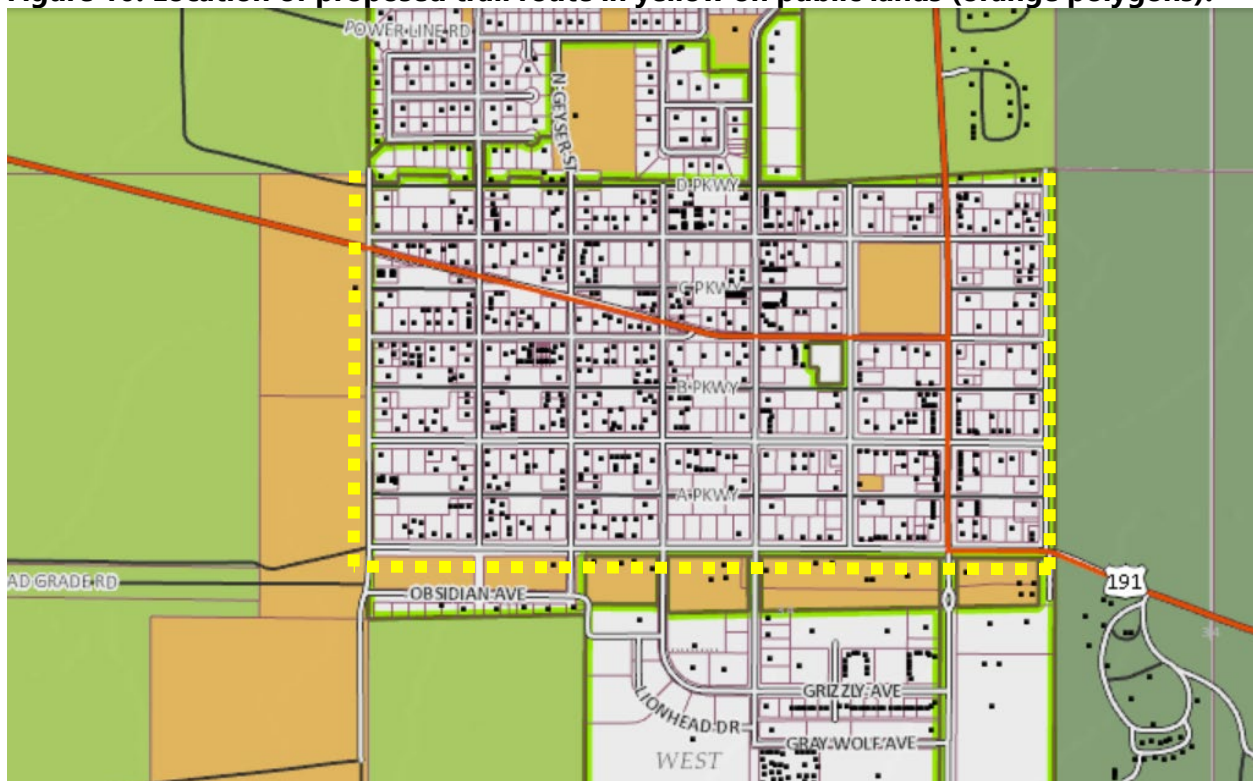
There are therefore no known right of way and easement conflicts to completing the proposed trail. The proposed trail is located entirely on Town-owned property and/or road right of way easements. Figure 10 below shows the proposed route in relation to property ownership.

The western route segment along Iris Street exists within the 80-acres of Town-owned land identified for future development. The Town should designate the trail easement within the 80-acre property prior to any development decisions are made.

The southern route segment follows the former Shortline Railbed through Town property and lots. Similar to the 80-acre property, the Town should designate the trail easement along the southern segment before any other development decisions are made.

The eastern route segment falls into the Boundary Street right of way between the paved roadway and the western boundary of Yellowstone National Park, as shown in Figure 11 below. The width of this area is approximately 30 feet.

Figure 10. Location of proposed trail route in yellow on public lands (orange polygons).³¹



³¹ Gallatin County. 2022. Gallatin County Interactive Maps. Retrieved December 2022 from: <http://webapps.gallatin.mt.gov/mappers/>.

Figure 11. Proposed trail route at Boundary Street connection to Boundary Trail³²



Drainage and Culverts

No known drainage issues exist and there are no culverts on the proposed route. The proposed trail will incorporate appropriate drainage features as applicable to the facility design, per *AASHTO Guide for the Development of Bicycle Facilities (4th Edition)*.³³

Utilities

Information provided by the Town's Public Service Superintendent and Energy West Montana confirms that a natural gas line runs along boundary street north-south along the border with Yellowstone National Park. The gas line roughly 4' east of the curb and gutter along Boundary Street at 36-40" in depth (see Figure 5.5 in Site Visit Report).

Further information from the Town states that water lines operate at a minimum depth of seven feet. For the proposed trail area, a water main runs along Iris Street north-south on the east side of the road. Also, the entire system is a giant looped system (lines do not terminate), which allows a constant flow to purge from the four ejection wells in each corner of the original townsite. The Town notes a water line approximately four feet north of Obsidian Avenue in former Shortline Rail bed.

³² Ibid.

³³ See Chapter 5.2.11 Drainage.

Conclusion

Following public and stakeholder engagement for the Existing Conditions milestone, the project team observed the following feedback themes for consideration in future project deliverables.³⁴

1. **Address trail options on Iris Street and through 80-acres parcel.** Comments received expressed interest in the trail route running through the 80-acres parcel rather than along Iris Street, as depicted in Figure 12 below.

Figure 12. Example alternate route through 80-acres parcel.



2. **Highway crossing designs.** Comments received expressed support for addressing highway crossing safety for the proposed trail, especially at US 20 and Iris Street. Many comments requested grade-separated designs, which may or may not be the appropriate option for the trail base on design, cost, and safety issues addressed.
3. **Connections to school and Madison Addition.** The proposed trail ends at Iris Street and Alley D/D Parkway, with users continuing on to USFS Trails around the northern boundary of the Town. Comments received suggested extending the trail route to connect with the West Yellowstone Elementary and Junior/Senior High schools as well as to the Madison Addition Walking Path.

³⁴ The themes shown in this section are summarized from the public and stakeholder comments addressed in the Engagement Strategy memorandum.

4. **Additional Park Features.** Comments received recommended additional design features to support bicycle and ski equipment storage along the route and improving the Shortline Railbed segment to become a linear park.

The summarized comments shown as well as those responded to in the Engagement Strategy will inform the conceptual design and cost estimate work that follows the Existing Conditions.

Appendix D - Conceptual Designs and Cost Estimates



Mountain Bikers near West Yellowstone

Date: May 20th, 2023
To: Project Management Team
From: Cole Grisham, AICP
Subject: Memo 3: Conceptual Designs
Project ID: MT FLAP WYELLS 2021(1)

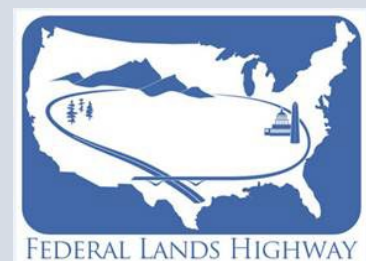


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Additional Design and Construction ConsiderationsError! Bookmark not defined.

Conclusion.....Error! Bookmark not defined.

Introduction

This memorandum outlines the proposed trail route options, highway crossing designs, and related cost estimates. The project team shows development of trail route alternatives, future design and construction considerations, and a summary analysis of each option. Alternatives analysis in this memo includes:

- Mapping materials to show route
- Engineering design estimated cost
- Construction estimated cost
- Advantages and disadvantages compared to analysis criteria

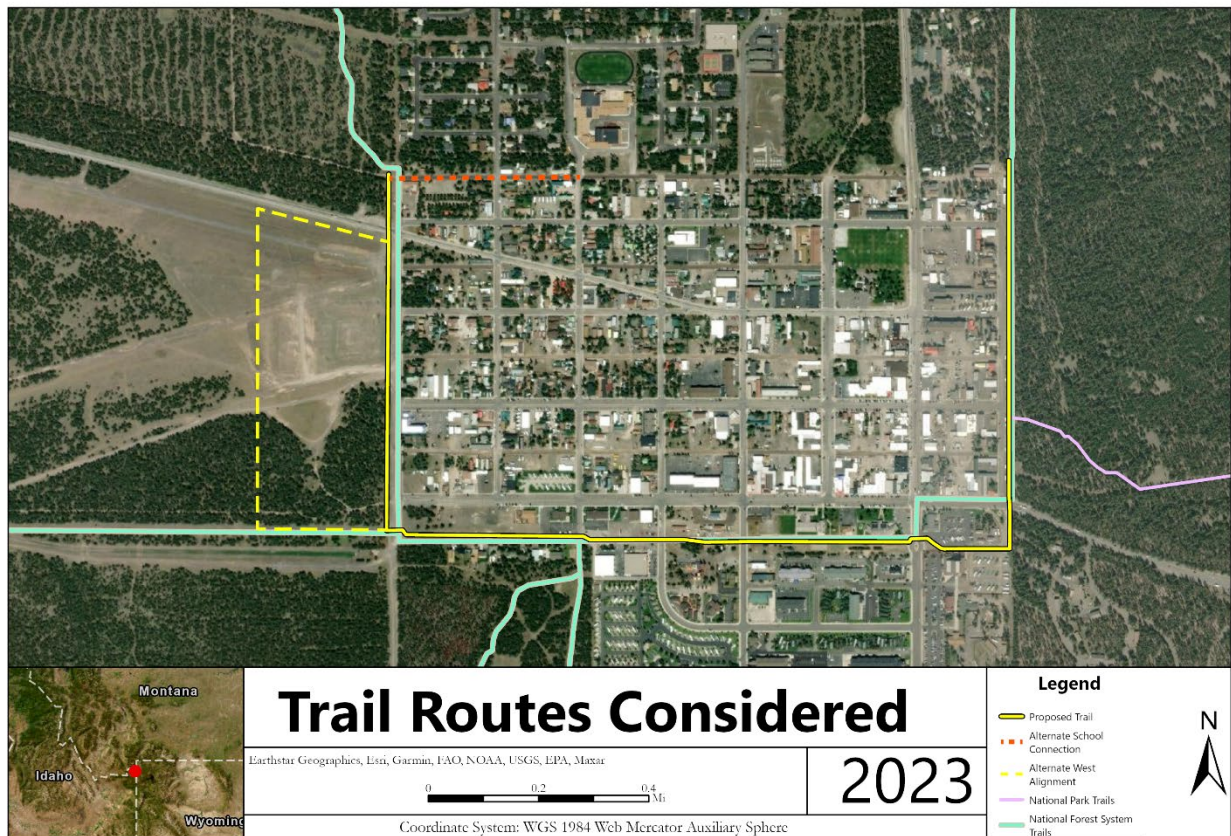
The roadway facilities shown in this design are in accordance with American Association of State Highway Transportation Officials (AASHTO) design standards.

This memorandum and its recommendations are considered draft and for discussion purposes only. Final project designs and recommendations shall be incorporated into the final report at the conclusion of the project.

Trail Routes Considered

The project team examined multiple possible routes to connect the travelling public to regional trail systems through the Town of West Yellowstone. Figure 1 below shows the primary route along with alternate routes and additions considered.

Figure 1. Trail routes considered.

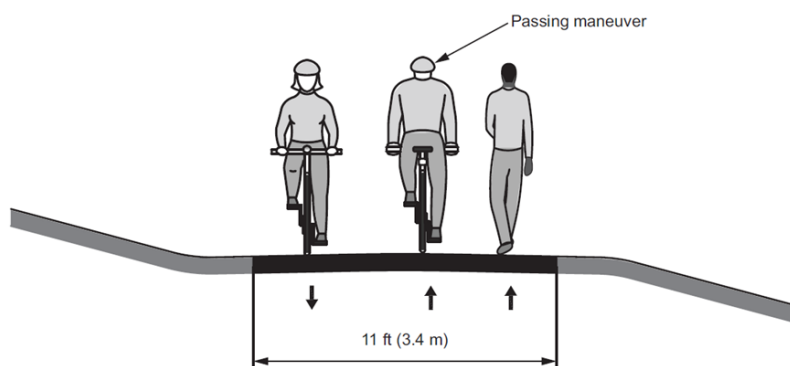


The proposed route connects trails systems around West Yellowstone into a single, cohesive regional trail network. The trail is anticipated to be a 10 foot wide paved path on existing public land only and would be open to bicycles and pedestrians. The route shown includes an alternative western segment (shown in yellow dashed line) that would extend to the boundary of the Town’s 80-acres expansion area rather than along Iris Street. The trail route’s western boundary would need to cross US 20 at Iris Street no matter the final alignment. Additionally, a connection between the northwest terminus of the trail at Alley D to the West Yellowstone School was also considered.

Conceptual Design – Trail Route

The proposed trail is intended to be an approximately 10 foot wide paved surface throughout. The minimum paved width for shared use path is 10 feet. The width can vary 10-14 feet, depending on context. A reduced width down to 8 feet is allowed if bicycle traffic is low enough, pedestrian traffic is occasional, passing is easy, and low vehicle-use for maintenance is expected. The figure below provides a typical cross section of shared use path with space for passing.¹

Figure 2. Typical cross-section of shared-use path,² with example



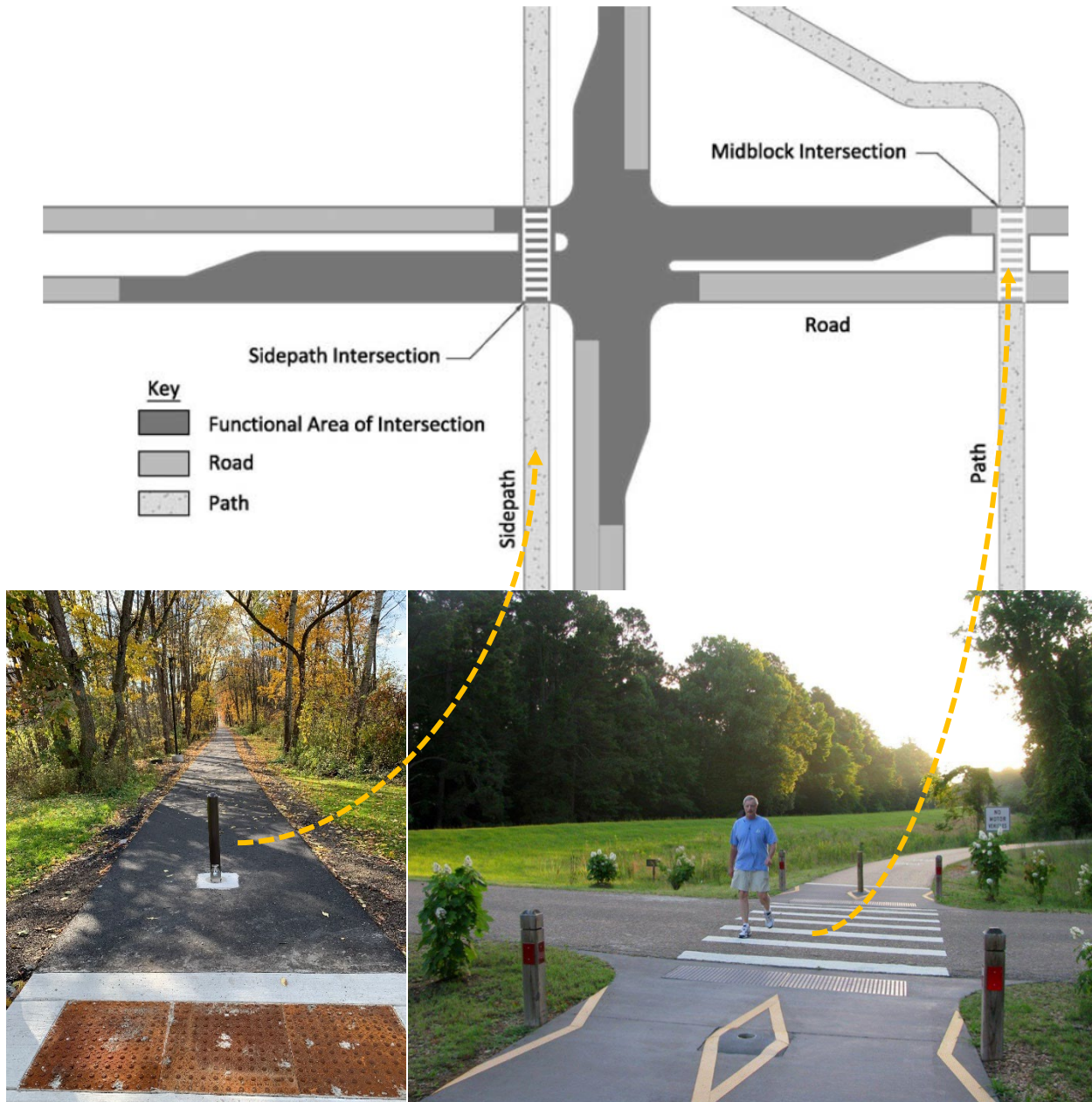
Relationship to Town roadway

The proposed trail will generally follow the side path design shown in Figure 3 on the following page for segments along Boundary Street and Iris Street. As the trail follows the Shortline Railbed it will follow the path design shown, including midblock crossings for neighborhood streets.

¹ For additional details on trail designs and considerations, see Existing Conditions memorandum.

² AASHTO. 2012. *Guide for the Development of Bicycle Facilities (4th Edition)*, Chapter 5.

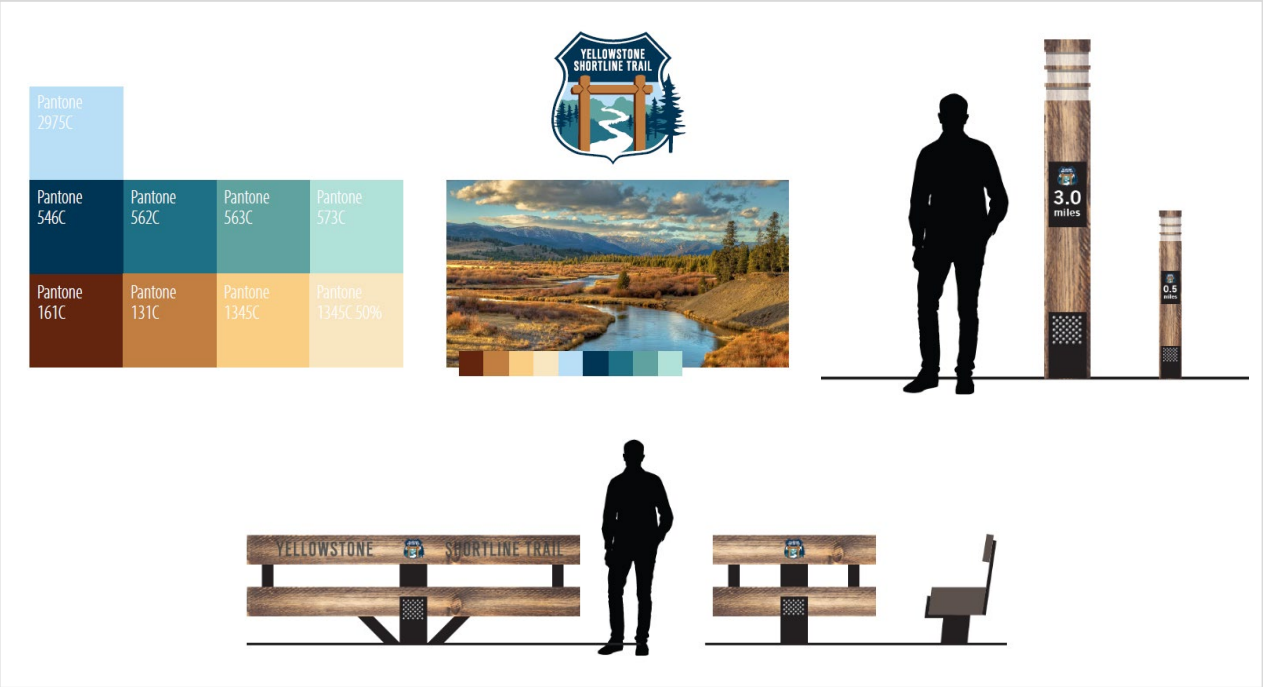
Figure 3. Typical design for side path and midblock crossings with examples



Design Color Scheme

The color scheme for the project, including any possible trail signs and wayfinding, will align with those planned for the wider Shortline Trail, shown in Figures 4 below. The images were developed by Sea Reach, Ltd., for the Shortline Trail and are used for reference only.

Figure 4. Example color palette, logo, and trail markers.



Conceptual Design – Highway Crossing Options

The project team examined design and construction options for bicycles and pedestrians to safely cross US20 and US191 along the trail route. Considerations examined were cost, safety, supporting and variety of user, and alignment with public and stakeholder feedback.

The proposed route crosses busy state highway facilities at two points: (1) US 20 and Iris Street and (2) US 191 (Yellowstone Avenue) and Boundary Street, both shown in Figure 5 below. This section provides four options for crossing both highway intersections that were shared with stakeholder and the public.

Figure 5. Highway Crossing Locations



Option 1 - Rectangular Rapid Flashing Beacons (RRFBs)

RRFBs are a marked crosswalk with pedestrian-activated lights that flash to warn motorists to yield to crossing bicycles or pedestrians. RRFBs are a low cost crossing solution relative to other options with higher visibility than a standard marked crosswalk. Additionally, RRFBs see up to a 47% reduction in pedestrian crashes nationally.³

Other considerations include:

- Few weaknesses; a Pedestrian Hybrid Beacon or grade-separated crossing will provide additional safety, but the RRFBs are very common nationally and cost effective.

³ FHWA. 2021. *Rectangular Rapid Flashing Beacons (RRFB)*. <https://highways.dot.gov/safety/proven-safety-countermeasures/rectangular-rapid-flashing-beacons-rrfb>

Figure 6. Example RRFB design for a four lane road and photo of an installed RRFB



Option 2 - Pedestrian Hybrid Beacons

A Pedestrian Hybrid Beacon (PHB) consists of two red lights above a yellow light, providing signalized intersection-like features but as activated by pedestrians. PHBs are considered where pedestrians need to cross and vehicle speeds or volumes are high, but traffic signals may not be warranted.

PHBs provide up to 95% driver stopping compliance,⁴ 55% reduction in pedestrian crashes, and 29% reduction in total crashes.⁵ PHBs are most effective when speeds are above 35 MPH and where traffic volumes are high (above 9,000 vehicles per day (VPD)). Montana DOT traffic volumes indicate between 5,000-5,500 VPD (current) at the two major crossing locations, but likely much higher in the future as park visitation continues to grow.⁶ Seasonal volumes, when it is assumed there would be bicycle and pedestrian use, appear to be closer to 9,000-10,000 per day, based on spot counts.

Other challenges and consideration include the following:

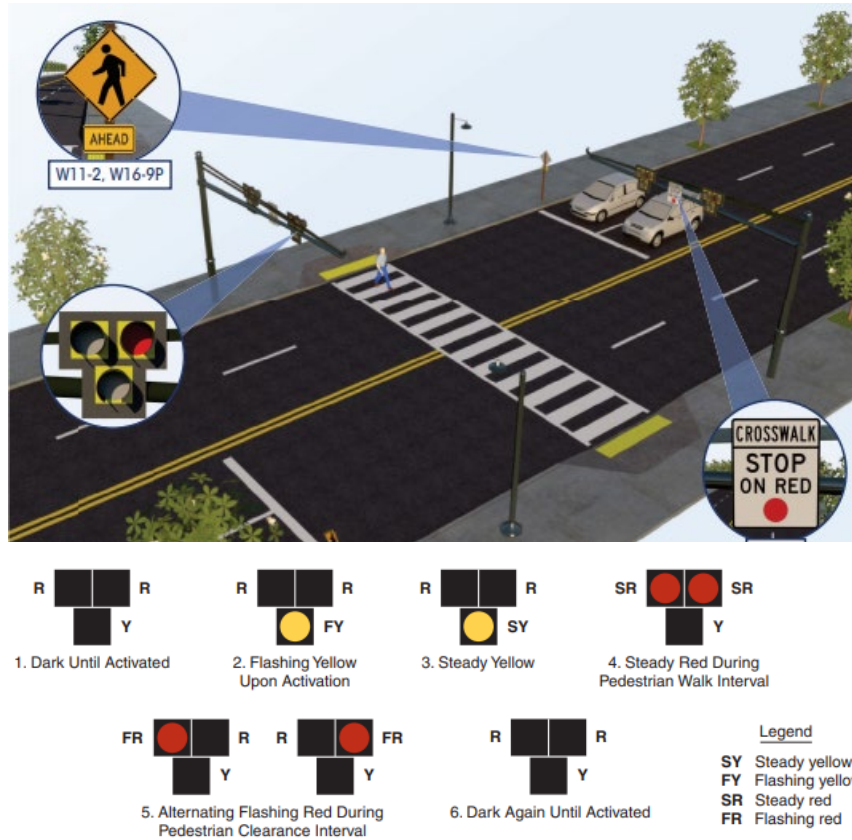
- Requires a source of electricity, but could be attached to Town power source or battery
- Gaining acceptance across the USA, but the signal pattern may be unfamiliar to some
- More expensive than the below at-grade options, but perhaps not prohibitively so
- Annual maintenance costs are likely less than a four-way traffic signal system since it's just two signal heads, but probably on that order of magnitude
- Not considered as safe as grade separated or other alternatives

⁴ NACTO. 2014. *Urban Bikeway Design Guide*. <https://nacto.org/publication/urban-bikeway-design-guide/bicycle-signals/hybrid-beacon-for-bike-route-crossing-of-major-street/>

⁵ FHWA. 2021. *Pedestrian Hybrid Beacons*. <https://highways.dot.gov/safety/proven-safety-countermeasures/pedestrian-hybrid-beacons>

⁶ Montana Department of Transportation. 2022. *Transportation Data Management System*. https://mdt.public.ms2soft.com/tcds/tsearch.asp?loc=Mdt&mod=tcds&local_id=16-5-006

Figure 7. Example PHB design for a four lane road and example signal indicators⁷



Option 3 - Roundabouts

Roundabouts provide significant benefits for safety of motorized traffic. Roundabouts are meant for intersections improvements rather than simply pedestrian crossings like the former options. They therefore provide benefits beyond bicycle and pedestrian safety, including an estimated 82% decrease in fatal and serious injuries nationally and slower vehicle speeds.⁸ There are available concepts that help bicycle and pedestrian traffic navigate a roundabout safely as well as other technical and educational materials to support introducing users to new roundabouts.⁹

The project team assumes a single lane roundabout for consideration at US20 and Iris Street and a two lane roundabout at US191 (Yellowstone Avenue) and Boundary Street. Figure 8 below provides two typical designs for a roundabout while Figure 9 shows a completed trail crossing at a roundabout, designed and constructed by FHWA Office of Federal Lands Highway.

Additional considerations include:

⁷ MUTCD Section 4F.02

⁸ FHWA. 2021. *Roundabouts*. <https://highways.dot.gov/safety/proven-safety-countermeasures/roundabouts>

⁹ Ibid.

- High cost compared to RRFB and PHB options
- High right of way needs generally, although it is not known how much if any right of way would be needed for either crossing
- Further traffic and engineering analysis would be required before a decision can be made to convert either intersection to a roundabout

Figure 8. Typical design for a one-lane roundabout with bicycle and pedestrian crossings

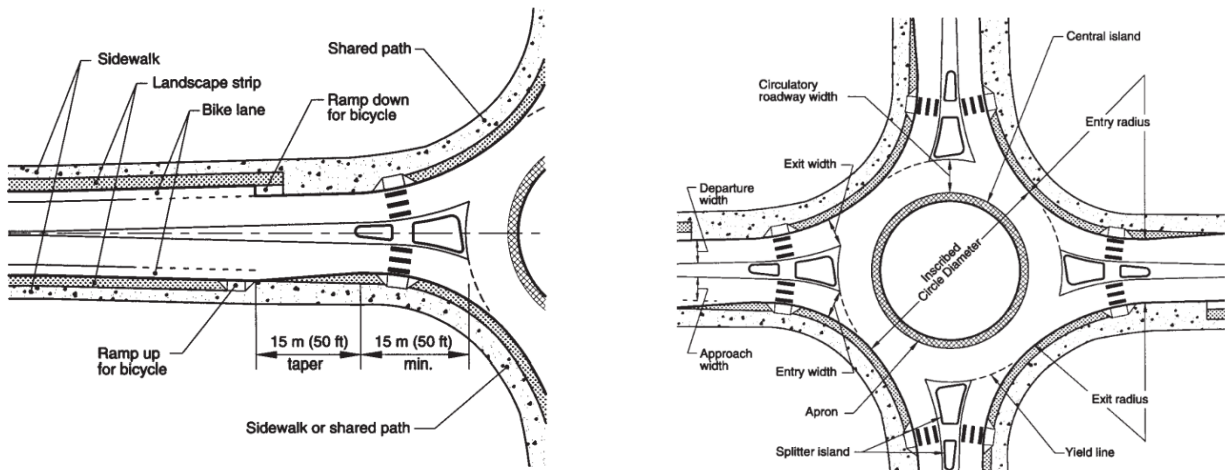


Figure 9. Gros Ventre roundabout, Grand Teton National Park. Designed and constructed by FHWA Western Federal Lands



Option 4 – Grade-Separated Crossings

Stakeholders and the public suggested a grade-separated crossing at one or both of the highway intersections in the form of a tunnel. A tunnel provides the highest level of safety, as it removes all vehicle to non-motorist interaction at the crossing.

Additional challenges and considerations include

- Very high cost relative to all other options considered
- May need to acquire right of way
- Tunnel would need to be approximately 12 feet underground with a 5% maximum slope to enter the tunnel that may be 250 feet long to allow for safe, ADA-accessible access and drainage.

Figure 10. Typical cross-section of a grade-separated crossing.

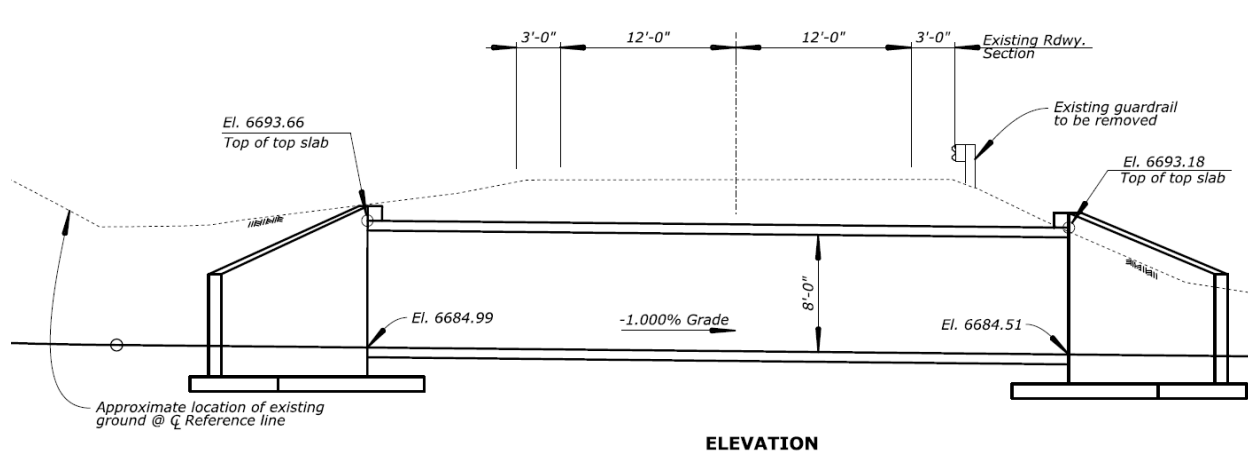
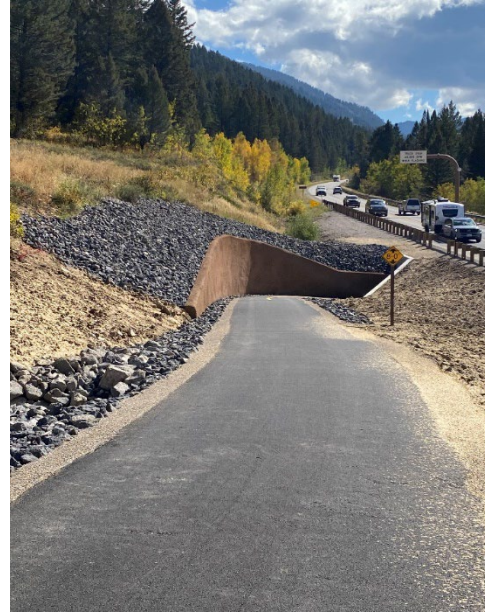


Figure 11. Two maps showing the approximate locations of grade-separated crossings along with the anticipated length of 250' long entry tunnels.



Figure 12. Example of grade-separated crossings at Idaho-Wyoming Border (ID-33 and WY-22), designed and constructed by FHWA Western Federal Lands



Cost Estimates for Trail and Highway Crossings

In 2023, the average cost of similar corridor projects in Montana is \$2.11 million per mile. Table 1 below summarizes the design and construction cost estimates in the year 2023, 2028, and 2033, using 4% annual inflation. Because this is a scoping level estimate, 30% contingency has been added to the total construction cost. For programming purposes, Preliminary Engineering (PE) is estimated at 15%, Construction Engineering (CE) is estimated at 10%, and Contract Modification (CM) is estimated at another 10% of total construction cost.

Table 1. Cost estimates for trail facility (\$ millions)

2023 Estimate							
	Construction	30% Contingency	Total Construction	PE	CE	CM	Total
	<i>expressed in million</i>			15%	10%	10%	
Concrete trail (1.8 MILE)	\$1.500	\$0.450	\$1.950	\$0.293	\$0.195	\$0.195	\$2.633
<i>Highway crossing treatment option</i>							
RRFB (EACH)	\$0.015	\$0.005	\$0.020	\$0.003	\$0.002	\$0.002	\$0.026
Traffic Signal (EACH)	\$0.300	\$0.090	\$0.390	\$0.059	\$0.039	\$0.039	\$0.527
Roundabouts (EACH)	\$1.500	\$0.450	\$1.950	\$0.293	\$0.195	\$0.195	\$2.633
Pedestrian tunnel (EACH)	\$1.700	\$0.510	\$2.210	\$0.332	\$0.221	\$0.221	\$2.984
2028 Estimate (4% inflation)							
	Construction	30% Contingency	Total Construction	PE	CE	CM	Total
	<i>expressed in million</i>			15%	10%	10%	
Concrete trail (1.8 MILE)	\$1.830	\$0.549	\$2.379	\$0.357	\$0.238	\$0.238	\$3.212
<i>Highway crossing treatment option</i>							
RRFB (EACH)	\$0.035	\$0.011	\$0.046	\$0.007	\$0.005	\$0.005	\$0.061
Traffic Signal (EACH)	\$0.375	\$0.113	\$0.488	\$0.073	\$0.049	\$0.049	\$0.658
Roundabouts (EACH)	\$1.830	\$0.549	\$2.379	\$0.357	\$0.238	\$0.238	\$3.212
Pedestrian tunnel (EACH)	\$2.075	\$0.623	\$2.698	\$0.405	\$0.270	\$0.270	\$3.642
2033 Estimate (4% inflation)							
	Construction	30% Contingency	Total Construction	PE	CE	CM	Total
	<i>expressed in million</i>			15%	10%	10%	
Concrete trail (1.8 MILE)	\$2.165	\$0.650	\$2.815	\$0.422	\$0.281	\$0.281	\$3.800

<i>Highway crossing treatment option</i>							
RRFB (EACH)	\$0.040	\$0.012	\$0.052	\$0.008	\$0.005	\$0.005	\$0.070
Traffic Signal (EACH)	\$0.445	\$0.134	\$0.579	\$0.087	\$0.058	\$0.058	\$0.781
Roundabouts (EACH)	\$2.165	\$0.650	\$2.815	\$0.422	\$0.281	\$0.281	\$3.800
Pedestrian tunnel (EACH)	\$2.460	\$0.738	\$3.198	\$0.480	\$0.320	\$0.320	\$4.317

Evaluation of Proposed Alternatives

The project team evaluated the proposed route alternatives and highway crossing alternatives based on project criteria and engagement feedback received as shown in Tables 2-3 below. The criteria used to evaluate alternatives are a synthesis of themes from the original project proposal, project scope of work, existing conditions, and public and stakeholder feedback as follows:

- Cost Effective – Balance of cost relative to future design and construction feasibility
- Safety – Ensure project improves safety of bicycle, pedestrian, and other users
- Connected trail system – Ensure final route connects to all trails adjoin the Town
- Variety of Users – Provide a final route and design that accommodates a variety of users

Table 2. Evaluation of trail route facilities with project criteria. Icons for each evaluation reflects positive (+), negative (-), or unknown (?) association with criteria.

Criteria	Proposed	80-Acre Alignment	School Connection
Cost	(+) Shortest route to connect all trails with a single paved route. Construction cost would not change significantly if changed to unpaved surface.	(-) Connects all trails but also extends route around future 80-acre development. Adds about \$1.58M (60%) to design and construction cost.	(-) Connects all trails but also extends route around future 80-acre development. Adds about \$500,000 (24%) to design and construction cost. Provides paved trail over unpaved roadway, which does not align with Town's "parkway" intentions for alleys.
Safety	(+) Route provides bicycle and pedestrian crossing improvements at know vehicle, bicycle, and pedestrian collision locations.	(+/-). Provides same safety improvements as Proposed; does not address additional issues.	(+/-) Provides same safety improvements as Proposed but would also provide new paved connection to school. Does not address additional issues.
Connected Trail System	(+) Shortest route to connect all trails with a single paved route.	(+/-) Longest route to connect all trails with a single paved route..	(+) Shortest route to connect all trails with a single paved route, with an additional connection to school.
Variety of Users	(+) Provides for bicycle and pedestrian uses along with ADA accessible design. Allows for snowmobile and/or skiing and other winter uses in snow conditions.	(+/-) Same as Proposed	(+) Same as Proposed routes to allow for lowest maintenance cost.

Table 3. Evaluation of highway crossing options with project criteria. Icons for each evaluation reflects positive (+), negative (-), or unknown (?) association with criteria.

Criteria	RRFB	Hybrid Beacon	Roundabout	Tunnel
Cost	(+) Least costly option	(+/-) Moderately more expensive than RRFB	(+/-) Much more costly than RRFB or Beacons	(-) Most costly option; possible cost-prohibitive.
Safety	(+) Known to reduce crashes by up to 47% nationally. Estimated motorist yield to pedestrian improvement by 98% nationally	(+/-)Known to reduce crashes by up to 55% nationally	(+) Known to reduce crashes by up to 82% nationally	(+) Completely removed vehicle and bicycle/pedestrian interaction
Connected Trail System	(+) Completes trail route	(+) Same as RRFB	(+) Same as RRFB	(+) Same as RRFB
Variety of Users	(+) Provides for bicycle and pedestrian uses along with ADA accessible design. Allows for snowmobile and/or skiing and other winter uses in snow conditions.	(+) Same as RRFB	(+) Same as RRFB	(+) Same as RRFB

Recommendations

Based on the analysis above, along with stakeholder and public feedback received, the project team proposes the following recommendations (Table 5 and Figure 13).

Table 5. Recommendations

Issue	Recommendations
Route	<p>Project team recommends original proposed route for design and construction</p> <p><u>Additional information:</u> Designing and constructing the original proposed route does not preclude adding other segments at a later time. Future development of the 80-acres area could include an additional trail segment to connect to the proposed line.</p> <p>Adding a connection between the northwest terminus and the school is possible if the Town moves forward with plans to pave east-west alleys as well.¹⁰ Until such time, the Town’s unpaved alleys are intended to serve as “parkways” currently, thereby provided east-west trail connections as is.</p>
Highway Crossing – US20 and Iris Street	<p>Project team recommends installing a roundabout</p> <p><u>Additional Information:</u> The highway speeds entering town from the west, need for traffic calming, and greater concern for non-motorized safety improvements at this intersection suggested a need for a larger improvement than RRFB or Hybrid Beacons offers. Public and stakeholder comments seems to agree, noting that a roundabout at this intersection would slow vehicles down while also providing a natural ‘entrance’ to the Town from the West.</p> <p>The most common concerns were:</p> <ul style="list-style-type: none"> ➤ Whether the higher cost of a roundabout compared to RRFBs or Hybrid Beacons would limit feasibility ➤ Highschool students did not like roundabouts in general, mostly due to unfamiliarity with how to properly navigate them as motorists
Highway Crossing – US191 and Boundary Street	<p>Project Team recommends installing a Rectangular Rapid Flashing Beacon</p> <p><u>Additional information:</u> Unlike the US20-Iris Street crossing, the highway speeds are considerably slower entering this crossing, with motorists either coming from the US191 (Yellowstone Avenue) and Canyon Street traffic light or from the Yellowstone National Park West Entrance gate. Public and stakeholder comments therefore suggested a lower cost, high visibility option that could be rapidly developed. The RRFB was favored over the Hybrid Beacons due to lower cost and greater relative familiarity of RRFBs over Hybrid Beacons.</p>

¹⁰ See: *West Yellowstone Growth Policy* (2017), Page 56: “Public Facilities – Roads.”
<https://www.townofwestyellowstone.com/wp-content/uploads/2017/12/Adopted-West-Yellowstone-Growth-Policy-12-1-17.pdf>

Figure 13. Map of recommended route and highway crossings

