

A Belgrade-to-Bozeman Trail Connection

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Background

The area between Belgrade, Four Corners and Bozeman is proposed to accommodate much of the future development in Gallatin County. Currently it is primarily agricultural, with more than half the area classified as “Prime Farm Land, if irrigated” by the NRCS’s 1996 Bozeman Soil Survey. A network of irrigation ditches traverses the area, along with streams including Middle Creek and Dry Creek. The area supports a large number of wildlife species and provides a wildlife migration corridor from the Horseshoe Hills to the Gallatin National Forest. Views in this area are of the Bridger Mountains to the east, Tobacco Root Mountains to the west, Spanish Peaks and Hyalites to the south, and Horseshoe Hills to the northwest. Recreation between the two towns includes biking, running, horseback riding, four-wheeling, fishing, picnicking, organized sports, and golf. However, the area is currently unsafe for bicyclists and pedestrians, with few trails and narrow or non-existent road shoulders.

A non-motorized trail connection between Belgrade and Bozeman has been identified as a priority in Gallatin County for quite some time. The connection was first established as an important linkage in the Bozeman POST Plan in 1997. The 2000 Gallatin County Trails Plan identified this connection as “the highest-priority proposed trail in Gallatin County”. The 2007 Bozeman PROST plan update again identified this route as a priority. The Greater Bozeman Area Transportation Plan recommends numerous pathways, bike lanes, and wide road shoulders to accommodate non-motorized users in the Belgrade-to-Bozeman corridor. The Gallatin County Interconnect Plan identifies this corridor as among the high priority park and trail projects for this part of the county. A Belgrade-to-Bozeman connection has been identified as a continuing priority by the Gallatin County Parks and Trails Committee, the Gallatin County Park Commission, the Bozeman Area Recreation and Parks Advisory Board, the Bozeman Area Bicycle Advisory Board, the FORParks Citizen Group, and the Gallatin Valley Land Trust, among others.

A 2009 survey conducted by the Gallatin County Parks and Trails Committee established a baseline level of interest in safer pedestrian access to trails and park land in general and a request for more access to recreation amenities that connect towns and business areas. A recent public outreach campaign called the “Interconnect Challenge” looked at non-motorized needs in every community in the county, and confirmed an interest in a Belgrade to Bozeman connection.

¹ The Rivers and Trails (RTCA) Program implements the natural resource conservation and outdoor recreation mission of the National Park Service in communities across America. Gallatin County applied for RTCA assistance to investigate the potential for developing a Belgrade-to-Bozeman trail connection.

Community meetings in 2010 seeking input for the Interconnect Plan generated comments from attendees in support of a Belgrade-to-Bozeman connection

Despite the 13-year history of expressed desire for a Belgrade-to-Bozeman connection, no public consensus has been developed about trail alignment or function (i.e., recreation v. transportation). The 2000 Gallatin County Trails Plan suggested three alternative alignments, all within the I-90/frontage road corridor. This would suggest that, at the time, the desired function was a direct, commuter route. In 2005-06, a group calling itself the Safe Trails Coalition developed a vision of a multi-use paved pathway located mostly along road corridors. The STC held community meetings, identified preferred routes, met with homeowners along these routes, and generated names of over 100 people who supported a Belgrade-to-Bozeman connection, some of whom expressed a possible willingness to help. The group got people talking, but no money was raised for project implementation, and energy was diverted toward revision of the Greater Bozeman Area Transportation Plan.

Overarching Issues

Trail function. Interest in a Belgrade-to-Bozeman trail has been expressed by users seeking very different experiences. Some people commute regularly between the two cities, and probably more would do so if provided with a safe and attractive corridor. Commuters want to be able to travel fast on a paved surface along a fairly direct route. Typically, they would rather use a designated, maintained portion of a roadway than have to contend with slow-moving and sometimes unpredictable pathway users. Recreational users would prefer separate pathways for safety and a higher quality experience of the natural surroundings. Most would be using only short segments of a continuous Belgrade-to-Bozeman route, and would appreciate trails that connect their neighborhood to nearby parks and communities. Survey results indicate a preference among these users for a gravel or earth surface. The Interconnect Plan envisions separate systems for non-motorized transportation in/along road corridors, and for recreation along pathways in a separate right-of-way. Ideally, these systems would interweave.

I-90 as a barrier. I-90 presents a significant constraint to north-south travel near Belgrade. Whereas I-90 runs along the northern boundary of Bozeman, the highway bisects Belgrade. Much of the existing and future growth in and near Belgrade is on the opposite side of the interstate from the downtown area, with access provided only via the Jackrabbit bridge, which is not bicycle-pedestrian friendly.² An additional bridge or tunnel crossing I-90 northwest of Jackrabbit would be of great value to pedestrians and bicyclists. Similarly, the proposed new interchange at the airport³ would provide a critical connection for motorized and non-motorized

² The only sidewalk is on the east side, and it is crossed by interstate on- and off-ramps. Road shoulders are very narrow, and facilities on Jackrabbit adjacent the bridge are similarly inadequate.

³ Approximately one half of the \$40 million estimated cost of this project so far has been allocated.

travel between Belgrade and Bozeman and the unincorporated areas. North Belgrade would be connected to this new interchange via a new bypass off Dry Creek Road.

Narrow county road rights-of-way. Many existing county roads have little or no right-of-way to accommodate non-motorized users. Some county roads are located within “petitioned rights-of-way”, which are easements of a specific width given to the county by landowners in the 1800s. However, many are “roads-by-use”, which were legally created by prescriptive easement after 5 or 6 years of public use. The county’s interest in these road corridors is limited to the existing road footprint, so improvements will require the purchase of additional right-of-way. The current county standard for new roads is to secure a 60’ prescriptive easement, which should accommodate wide shoulders, could include bike lanes, and might even be enough for a pathway, depending on the number of travel lanes. The Greater Bozeman Area Transportation Plan recommends rural street standard right-of-way widths of 90’ to 110’, and more when pathways are included.

Funding. Development of trails within this area will occur through three principal avenues: road improvement, land development, and fundraising by trail advocates.

While the Transportation Plan calls for non-motorized facilities that would create most of the backbone for a non-motorized transportation corridor between the two cities, implementation of this plan will be slow, pending federal appropriations. Federal Aid dollars come through the Montana Department of Transportation (MDT) and are disbursed competitively in a 9-county pool. The county itself has no capital improvement budget for roads. Road improvement money comes from developers as a subdivision requirement. Recent court rulings have held that counties can only charge developers that percentage of the cost of road reconstruction attributable to the traffic generated by their development, usually 5 – 20%. The exact percentage is determined by a traffic impact study, usually funded by the developer.

The creation of separate recreational trails also relies upon development, either as a transportation or a parkland dedication requirement of subdivision. In the current recessionary climate, development of land has slowed down considerably. And in any case, relying upon land development to create a system of recreational trails necessarily will be piecemeal.

Community Transportation Enhancement Program (CTEP) funds are commonly tapped to construct trails used for transportation. In recent years, Gallatin County’s CTEP funds have been used for successive improvements to the Three Forks trail system and Manhattan’s Dry Creek trail. The county’s annual CTEP allocation can be used for any enhancement project related to surface transportation. Trails that are located within the viewshed of a state or federal highway are one way this relationship requirement can be met, but there are others (see

<http://www.mdt.mt.gov/business/ctep/>)⁴. Advocates of a Belgrade-to-Bozeman trail may attend annual commissioner hearings on CTEP allocations and advocate for their preferences. Belgrade CTEP funds have all gone toward sidewalks, and will continue to do so for the foreseeable future.

Leadership. The successful establishment of a Belgrade-to-Bozeman trail system will require sustained citizen advocacy. The Greater Bozeman Area Transportation Plan, the Bozeman PROST Plan, and the Gallatin County Interconnect Plan all contain recommendations for projects that contribute to this connection. Citizen advocacy is needed to make these projects priorities, to raise political will, and to find funding.

The Safe Trails Coalition got people excited about creating a Belgrade-to-Bozeman route, but STC participants were primarily trails advocates from agencies and the non-profit sector. These individuals have many priority issues, and while they likely would support future efforts, they cannot be expected to spearhead a sustained multi-year effort. Leadership must come from citizens who live in the affected areas.

The county considered encouraging formation of a citizen's group to advocate for a Belgrade-to-Bozeman trail network. Such a group's effectiveness would depend upon the sustained, long-term commitment of one or more highly motivated, energetic leaders. However, the scale of this effort, particularly the fact that it involves many sub-projects, may discourage potential leaders. People may prefer to invest their time and energy advocating for trail segments that are closer-to-home and more manageable in scope. A Belgrade-to-Bozeman connection may only be realized as a constellation of smaller projects.

Interest in advocating for sub-projects, perhaps with the broader vision in mind, may be stimulated by the ongoing Valley Center Road improvement project. Once this project is completed, traffic likely will increase, and the utility of the roadside pathway, wide road shoulders, and bike lanes included in the project will become apparent. These events may stimulate interest in local residents to make additional trail connections, expanding upon the non-motorized network.

⁴ Mike Wherley, MT CTEP Supervisor, personal communication.

Potential Alignments for a Belgrade-to-Bozeman Connection

There are several possibilities for a Belgrade-to-Bozeman trail connection. The first three options below serve primarily a transportation function; the second three provide both a transportation and a recreation function. All were derived from recommendations in current and previous plans, and conversations with numerous trails advocates. The last option offers the broadest vision for a Belgrade-to-Bozeman trail network.

	Option	Advantages	Drawbacks/Challenges
1	Pathway between Frontage Road and BN tracks	<ul style="list-style-type: none"> - Direct route (an advantage for commuters). -Single ownership (BN) may provide opportunity to build the entire trail at once, assuming available funds. 	<ul style="list-style-type: none"> - Limited recreational appeal, limited types & numbers of users (mostly commuters), questionable cost/benefit ratio. - Not adjacent many residences, restricting use as a local transportation route; future development along corridor is limited by airport and MT Fish, Wildlife and Parks (FWP) land ownership. - High speed traffic near trail. - BN likely to be resistant - Utility easements under/near trail alignment - Several small bridges needed
2	Pathway within I-90 corridor	<ul style="list-style-type: none"> - Direct route (an advantage for commuters). -Single ownership (MT) may provide opportunity to build the entire trail at once, assuming available funds. - Model exists west of Missoula 	<ul style="list-style-type: none"> - In addition to the first 3 points above: - MDT likely will have safety concerns. - Interchanges will be problematic and require road crossings or tunnels.
3	Shoulder bikeways when frontage road is reconstructed	<ul style="list-style-type: none"> - State highways are eligible for federal aid funds; this project is the county's #3 priority (after Valley Center and new I-90 interchange). - MDT would construct a wide shoulder as a standard specification. 	<ul style="list-style-type: none"> - Limited appeal as a recreational amenity; Probably only attractive to experienced bike commuters. - Less safe than a pathway in same corridor, due to high speed traffic.
4	Pathways along roads	<ul style="list-style-type: none"> - Cost efficiencies in right-of-way 	<ul style="list-style-type: none"> - Likely a very slow, piecemeal

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	reconstructed as per Transportation Plan. Road reconstruction plans envision bike/ped roadway facilities as well as pathways in many instances. (Suggested corridor: Regional Park north to Valley Center to Alaska to new interstate underpass & Belgrade. Alternative route from Valley Center along Harper Puckett to Cameron Bridge to Alaska.)	<p>purchase and construction.</p> <ul style="list-style-type: none"> - Bike commuters can choose to ride with road traffic or on pathways - Reasonably direct route that accesses residential areas. - Potential to construct relatively lengthy trail segments at a time. 	<p>process to complete, as funding for county road improvement projects is scarce (even for the so called “committed” Major Street Network (MSN) improvement projects.</p> <ul style="list-style-type: none"> - Additional right-of-way will need to be purchased to include pathways. - User experience not as pleasant as on pathways through natural areas. - Potentially many driveway crossings
5	Pathways through subdivided large parcels, via transportation requirements and/or parkland dedication. Many possible trail corridors identified in Bozeman’s PROST; also consider abandoned rail line.	<ul style="list-style-type: none"> - Potential to create a higher quality recreational experience, with trails sited off roads and possibly along creeks or through native vegetation. - Trail proximity to residential developments. 	<ul style="list-style-type: none"> - Slow, piecemeal process as parcels are subdivided haphazardly, resulting in interim trail segments with poor connectivity. - Landowner opposition may be an issue.
6	Combine #s 3-5, and use CTEP/SRTS/RTP & other funds as well as donated easements to fill gaps and make connections.	<ul style="list-style-type: none"> - Capitalizes on every opportunity to improve trails. - Eventually creates a multi-purpose trail network serving the triangle area. 	<ul style="list-style-type: none"> - Slow process. - Creates a broader, more amorphous project; programmatic citizen leadership unlikely.

Belgrade-to-Bozeman Trail Recommendations

Greater Bozeman Area Transportation Plan, 2007 Update

The Transportation Plan contains significant verbiage about non-motorized travel, and recommends many projects that would contribute to pedestrian-bicycle transportation within the Belgrade-to-Bozeman corridor.

<i>Bicycle-pedestrian enhancements included in planned road improvements</i>			
Road	Existing right-of-way	Recommended road improvement⁵	Recommended bicycle/pedestrian facilities
Valley Center	State highway	2-Lane urban arterial (One 12’	From the I-90 underpass to Love Lane,

⁵ See Greater Bozeman Area Transportation Plan (2007 Update), Chapter 5: Facility Recommendations

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		travel lane in each direction, 6' road shoulders, curb and gutter, turn-lanes at major intersections, and sidewalks.) (MSN-29 Love Lane to I-90 underpass; CMSN-16 Jackrabbit to Love Lane)	an 8' pathway will alternate with an 8' sidewalk on the south side of the road. Road construction will include 8' road shoulders and bike lanes. This project has been contracted and will occur summer of 2010. Construction from Love Lane to Jackrabbit, to be scheduled when funding becomes available, will continue the 8' pathway and road shoulders.
Harper Puckett	Mostly road-by-use (r/w limited to existing road footprint)	Rural minor arterial roadway (One 11' travel lane in each direction, 8' road shoulders). (CMSN-8)	10' pathway between Baxter and Cameron Bridge, bike lanes between Baxter and Valley Center, 8' road shoulders.
Cameron Bridge	60' petitioned easement	Rural collector roadway (one 11' travel lane in each direction, 5' shoulders) (CMSN-11)	10' pathway Harper Puckett to Jackrabbit; 5' road shoulders.
Frontage Rd.	60'	3-lane rural arterial roadway (One travel lane in each direction and a two-way center turn lane.) (MSN-17)	Roadway shoulders to facilitate bicycle traffic.
East Belgrade I-90 interchange	----	New interchange will include underpass connecting Alaska Road with roads to the north. (MSN-20)	MDT's Environmental Analysis states that the preferred alternative will include either "a wide shoulder or dedicated bike/pedestrian lane."

In addition to the bicycle-pedestrian facilities mentioned above, the Transportation Plan recommends the following enhancements:

<i>Recommended Shared-Use Pathways</i>			
Road	From	To	Length (miles)
Catamont Street	Harper Puckett Road	Stream corridor	0.61
Huffine Lane	West College	Four Corners	3.95
Jackrabbit Lane	Huffine Lane	Belgrade	6.52
South Alaska Road	Cameron Bridge Road	I-90	1.1
Stream Corridor	Vaquero Parkway	Valley Center Road	1.74
<i>Recommended Bike Lanes</i>			
Road	From	To	Length (miles)
Baxter Lane	N 19th Avenue	Jackrabbit Lane	5.69
Catamont Street	Valley Center Road	Harper Puckett Road	1.26
Cottonwood Road	Huffine Lane	Baxter Lane	2

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Davis Lane	Oak Street	Valley Center Road	2.2
Durston Road	Springbrook Avenue	Western terminus	3.2
Fowler Road	West Oak Street	Blackwood Road	3.78
Harper Puckett Road	Valley Center Road	Baxter Lane	2.73
N 27th Ave/Thomas Dr.	Durston Street	Valley Center Road	2.23
N. Ferguson Avenue	Valley Center Road	Durston Road	2.91
Valley Center Road	N 19th Avenue	Jackrabbit Lane	6.35
<i>Recommended Shoulder Bikeways</i>			
Road	From	To	Length (miles)
Cameron Bridge Road	Jackrabbit Lane	Harper Puckett Road	2.97
Frontage Road	North 7th Avenue	Near Belgrade	7.32
Jackrabbit Lane	Huffine Lane	Belgrade	7.7
Love Lane	Valley Center Road	Huffine Lane	4.02

Additional possibilities for Belgrade-to-Bozeman trails

Other potential trail alignments could contribute to a Belgrade-to-Bozeman trail network within the larger context of the triangle area down to Four Corners. The following routes are either part of existing plans or additional routes recommended by the public.

- A pathway could provide a key connection between the Regional Park and Valley Center road by extending the existing short paved trail to the north through 3 large land ownerships. This trail is identified in the Transportation Plan as a recommended shared use pathway along a “stream corridor”.
- A recreational trail could connect Four corners to the Regional Park through the Black Bull golf subdivision, then following an alignment between Durston and Black Streets. This trail is included as a priority in the Interconnect Plan.
- Safe routes are needed from Four Corners to Bozeman and to Belgrade along Huffine and Jackrabbit, respectively. This includes safe crossings at key locations.
- The existing River Rock trail could be extended to Jackrabbit Lane.
- Trails could connect 7th Avenue at the I-90 interchange to the Cherry Creek FWP site along both sides of the Frontage Road. These trails are included in the 7th Avenue redevelopment plan.
- Segments of an abandoned rail corridor (the old ‘low-lying’ steam locomotive tracks) could be used for trails. Much of this rail line runs through active agricultural areas, however, and may not be suitable for public trails.
- The 2007 Bozeman PROST plan identifies numerous potential trail corridors in the unincorporated area between Belgrade and Bozeman, mostly along waterways and through larger parcels. Some of the potential corridors located along ditches may not be suitable for public trails while the land is still in active agriculture. Trails through the large parcels can be developed if and when the land is subdivided.

Sources of Assistance

The following agencies and organizations have been or could be involved in efforts to develop Belgrade-to-Bozeman trails.

- Belgrade Planning Department
- Belgrade Public Works
- Bozeman Area Bicycle Advisory Board
- Bozeman Planning Department
- Bozeman Recreation and Parks Advisory Board
- FORParks Citizen Organization
- Gallatin County Commission
- Gallatin County Parks Commission
- Gallatin County Parks and Trails Committee
- Gallatin County Pedestrian and Traffic Safety Committee
- Gallatin County Planning Board
- Gallatin County Planning Department
- Gallatin County Roads Department
- Gallatin Valley Land Trust
- Montana Department of Transportation
- Montana Nutrition and Physical Activity Program
- Montana State University, Dept. of Public Policy and Administration⁶
- Sonoran Institute
- Streamline Bus System stakeholders
- Western Transportation Institute, Montana State University
- Yellowstone Business Partnership

Recommendations

Belgrade and Bozeman should be connected by a non-motorized trail network, rather than a single trail. Development of this network should be driven by both recreation and transportation needs. While the Interconnect Plan envisions separate systems for non-motorized transportation in/along road corridors, and for recreation on pathways in a separate right-of-way, all of these trails should interweave to create a network within the triangle area.

To accommodate commuters between the two cities, the most effective balance of cost-effectiveness, likelihood and timeliness of construction, safety, and user experience is to ensure

⁶ Master's students in MSU's Department of Public Policy and Administration may provide a resource for community trail planning efforts.

adequate shoulders are included when the Frontage Road improvement project is built. This is a high priority for the county, and is likely to occur within the foreseeable future. The Transportation Plan recommends at least a 4' shoulder at a cost of \$770,000 for 7 miles of shoulder. As part of their EIS, MDT will include a public process and expects to include a bike facility of some kind, built to current standards.⁷ While a pathway between frontage road and railroad would provide a higher quality experience, the considerable added expense and political difficulties counsel against this project.

The appropriate county and city boards and departments, as well as community trail advocates, must work to ensure that bicycle-pedestrian enhancements identified in the transportation plan are included as road projects occur. Cumulatively, these road improvement projects will create the spine of a trail network between the two cities. Pathways recommended in the Transportation Plan would connect the Regional Park to Valley Center to Alaska to the new interstate underpass & Belgrade. An alternative alignment would run from Valley Center along Harper Puckett to Cameron Bridge to Alaska. In either scenario, constructing the new Belgrade I-90 underpass with its planned bicycle-pedestrian facilities is absolutely key. In tandem with the bike lanes and expanded shoulders recommended by the Transportation Plan, a system of non-motorized travel corridors will be created in the triangle area, as funds for road improvement projects are made available. While considered to be transportation infrastructure, these facilities also will serve a recreational function as part of the greater trail network.

Most recreational users are interested in connections within the triangle, but not necessarily trips between the anchor cities. Gallatin County's subdivision regulation will provide the principal mechanism by which these recreational trails are built. As land is developed, developers will be required to provide trail corridors that are identified in the Interconnect Plan. Construction of the trail surface should be required either as a transportation or a parkland dedication requirement.

The Interconnect Plan identifies some recreational trail corridors in the triangle area. The county should identify and map all major recreational trail corridors desired in the triangle area. Specific trail alignments should be identified whenever possible. However, designating a broad swath may be the better course of action whenever a specific preferred alignment is not obvious. As segments of the trail network are constructed, the optimal alignment for other pieces will become clearer.

As the trail network evolves, gaps between segments can be bridged by projects funded through programs such as CTEP, the Recreational Trails Program, and the Safe Routes to School Program. Community trails advocates must take the lead in pursuing these funding sources to complete projects locally important to them.

⁷ Rob Bukvich, MDT, personal communication.

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The Belgrade-to-Bozeman/triangle area trail network is a long-term project that will develop incrementally, as a constellation of projects that coalesce into a system over time. The overall vision should be established by the county, given the size of the area under consideration and the long-term nature of the task. Every mechanism available to improve bicycle-pedestrian facilities should be employed. Community trails enthusiasts can assist by advocating for the projects most important to them.