Transportation Investment Generating Economic Recovery Program (TIGER)

MT Highway 64 – Rural Commuter Corridor Project

Safe and Efficient Transportation Options for a Rapidly Growing Region

Submitted by:

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On behalf of:

Big Sky, Montana

To:

Office of the Secretary of Transportation U. S. Department of Transportation

October 16, 2017

Cover Page Photos (starting from top of cover-top right corner)

#1 – View of U.S. 191 (between Big Sky and Bozeman). Gallatin River in the foreground, and Gallatin Range (Mountains) in the background. Photo shows the potential for environmental issues related to increasing traffic volumes. Further, photo shows narrow corridor of the roadway with limited options for improvements. Source: Neil Hetherington, Western Transportation Institute.

#2 – Skyline public transportation bus (25-passenger body on chassis vehicle) with Lone Mountain (Lone Peak) in the background. Source, David Kack, Big Sky Transportation District.

#3 – Big Horn Sheep on MT 64, approximately ¼ mile east of the U.S. 191 and MT 64 intersection. Big Horn Sheep are drawn to the side of the road due to salt being used as a deicer.

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Project Narrative

I. Project Description

Overview

Gallatin County, Montana, and our state and local partners are pleased to present a proposal for the Rural Commuter Corridor Project. The project will rehabilitate, bolster and enhance an essential corridor that connects a growing number of visitors (tourists) to recreational opportunities, as well as residents to new jobs in the community of Big Sky, Montana. The project combines highway installations, transit additions, and trail upgrades to strengthen the transportation backbone of the region, and alleviates congestion by expanding transportation alternatives in a rural region with few alternative routes. The project advances all five of the USDOT's primary selection criteria, with a particular emphasis on enhancing safety and expanding economic opportunities for the fastest growing county in the state and one of the fastest growing in the nation. Given the regional importance of implementing these corridor improvements, the Rural Commuter Corridor project has the strong support of the state, two counties, and private economic development organizations.

Project Need

Gallatin County in southwest Montana is home to approximately 105,000 residents (see Section II Project Location for an expanded description). Most of the rural communities of Gallatin County are connected and served by two primary corridors: U.S. Interstate 90 (east to west) and U.S. Highway 191 (north to south).

Historically, the majority of the population has resided at the northern half of the county, particularly in Bozeman and surrounding communities. Currently, however, one of the fastest growing communities is Big Sky, which lies, in part, along U.S. 191 midway between Bozeman to the north and West Yellowstone to the south. Big Sky's population has averaged growth of more than 5% per year since 2000. In addition to the permanent population of approximately 3,000, the community hosts more than 15,000 visitors at a time who stay in Big Sky for the skiing in winter, and numerous other recreational opportunities in summer and winter.

Daily traffic to Big Sky on U.S. 191 and through the community on MT Highway 64 has increased dramatically in recent years due to numerous factors:

- As Big Sky expands its tourism and resort facilities, it also requires a rapidly growing workforce that exceeds its supply of affordable housing. 83% of Big Sky workers commute from other locations.
- Big Sky lies on the segment of the U.S. 191 corridor that connects visitors from Interstate 90, Bozeman and the regional airport to Yellowstone National Park.

Visitation to YNP has increased more than 20% since 2014, and **YNP estimates that** more than 1 million vehicles used U.S. 191 to visit the park in 2016 alone.

• Commercial and construction traffic has increased and will continue to grow with ongoing development in Big Sky. Four major resorts and a significant mixed-use development, Big Sky Town Center, have building and development projects scheduled through at least 2025.

Therefore, Gallatin County needs a robust travel corridor to and through Big Sky that serves current and future needs of commuters, residents, and visitors. This project is necessary to:

- Ease congestion and expand capacity on a corridor with limited expansion options. Canyon location and mountain topography prevents lane additions in most locations.
- Enhance safety on roads with challenging driving conditions, including severe weather, limited visibility, and large numbers of unfamiliar drivers.
- Expand cost-effective travel alternatives for lower income commuters to enhance their access to job opportunities.
- Support continued growth of the local, regional and state tourism industry, which is a major economic driver. Gallatin County welcomes 4.8 million visitors/year who spend \$668 million annually. Statewide, visitors spend \$3.5 billion each year and directly support more than 38,000 jobs.

Overview of Existing Infrastructure

This project focuses on the corridor that connects northern Gallatin County (including the greater Bozeman area and the Bozeman/Yellowstone International Airport) to Big Sky, Montana. In terms of infrastructure, the corridor consists of:

- U.S. 191. Approximately 45 miles of rural highway from the I-90/U.S. 191 interchange in the Bozeman area to Big Sky. For the majority of its length, from Four Corners to the junction with MT 64, U.S. 191 has one travel lane in each direction with virtually no shoulders and a very limited number of pull-outs. The limited road width is due to the Gallatin River being on one side of the roadway, and the Gallatin mountain range on the other side of the roadway.
- MT 64. Approximately 10 miles of state highway from the intersection of U.S. 191/MT 64 to the Big Sky Resort. This segment has a single travel lane in each direction, and left turn lanes exist at only three intersections. AADT has increased 43% on MT 64 from 2010 to 2015. While owned and maintained by MDT, MT 64 is an off-network route, so while there is state funding for the maintenance of the highway, there is no dedicated source of funding for highway improvements.

The current infrastructure faces the following challenges:

• Traffic volumes: expected to increase in Big Sky at an estimated 4.34% per year (historic growth of 4.7% per year) until AADT grows from just under 7,500 to over 18,000 by 2036.

- Safety: Speed variation, crashes, animal vehicle collisions
- Insufficient signage, or vehicles parked on the shoulder blocking signage
- Lack of alternative routes: U.S. 191 and MT 64 provide the only public access to the Big Sky community.
- Limited funds for transit vehicles: Montana receives just \$1.75 million per year in FTA Section 5339 (Bus and Bus Facilities) funds for its 39 rural providers.
- Growing demand for safe bike/pedestrian options: The Big Sky Community Organization (BSCO) has worked to increase the number and quality of trails in the community, but needs safe ways for people to cross MT 64. State Highway 64 (MT 64) bisects the community, with two major centers of commercial and residential activity (the Town Center and Meadow Village Center) on either side of the highway.

Previous and ongoing improvement projects

In recognition of the growing traffic volumes on this corridor, state, local and private interests have initiated and sponsored projects to identify and address targeted transportation needs on the corridor.

- Skyline. Big Sky has a year-round bus service called Skyline, established in 2006. It includes the Link Express service, which provides a transit connection between Bozeman and Big Sky (on U.S. 191 and MT 64) with several stops in each location, as well as the "local service", which provides connections to all major areas in Big Sky, from the Canyon through the Meadow Village and Town Center, up to the major resorts and recreational destinations at Big Sky Resort's Mountain Village. Skyline service is provided seven days a week during winter and summer seasons and Monday-Friday during the shoulder-season (late April- May and late September-November). Ridership on the Link Express (used by those commuting from the Bozeman area to Big Sky for work, increased 13.6% between FY 16 and FY 17, providing an additional 9,783 rides in FY 17. Demand is expected to continue to grow as more and more opportunities for employment are realized in Big Sky. If the needed funding is available in the future, it is projected that ridership would increase by about 5% per year.
- **Speed studies** To identify safety issues and potential mitigations, the Montana Department of Transportation (MDT) is conducting a speed study on MT 64 at the request of Gallatin and Madison Counties.
- **Parks and trails** There is already 19 miles of trails within the corridor noted in the application, including 5 miles of paved trails connecting the Meadow Village to the Canyon (including the public schools). Further, there were over 400,000 users of the parks and trails in Big Sky during Fiscal Year 2017. The Big Sky Community Organization is currently drafting a Big Sky Parks and Open Space Plan, and updating the Big Sky Master Trails Plan, which have identified key projects for improving connectivity to parks and trails for pedestrian and bicycle users. The pedestrian tunnel,

included as part of this application, has already been identified as a key issue in linking the north and south sides of the Big Sky community (those divided by MT 64).

- **Big Sky Transportation Study** Sponsored by the Big Sky Chamber of Commerce, the Big Sky Transportation Study was conducted in 2017 to identify and recommend key improvements to a 10-mile segment of MT 64 corridor from the U.S. 191 interchange through Big Sky. The study included a thorough evaluation of existing conditions relative to traffic operations and safety. It included a review of available historic traffic data from Montana Department of Transportation (MDT), collection of new peak hour turning movement counts at major intersections, and review and analysis of crash data provided by MDT for the past 10 years. This study was funded by Gallatin and Madison Counties, as well as the Big Sky Resort Area District (Resort Tax Board). The study, conducted by Sanderson Stewart, is available at (https://www.dropbox.com/sh/e3meut68r5dgr2w/AABaJdSNknAqnjT0D0dy8X2ta?d l=0&preview=Big+Sky Report DRAFT_080217.pdf).
- **Traffic Signal** To address the growing traffic and safety concerns in Big Sky's Town Center area, community stakeholders came together in a public-private "partnership" to install a traffic signal at the intersection of MT 64 and Ousel Falls Road/Two Moons Road in order to improve safety for all forms of transportation. Due to the fact that MT 64 is an "off network" route, meaning that the Montana Department of Transportation does not have a dedicated source of funding for improvements on the roadway, the community decided it had to take on this challenge on its own. Working with Sanderson Stewart, the community, and funding partners including: Big Sky Resort Area District, Big Sky Town Center, Lone Mountain Land Company and Yellowstone Club; installed a traffic signal at the intersection, which cost approximately \$439,500 (all costs included). While MDT reviewed and approved the plans and installation, this was truly a grassroots community effort to address a critical transportation issue.

Project Components

This project will build on the foundational transportation network which includes U.S. Highway 191, Montana Highway 64, and the Skyline transit system. Through strategic investments at high priority locations, and expansion of transit/HOV options, the project will develop a more robust system that can accommodate rapidly growing traffic along the corridor, in a safe and sustainable manner. Specific components include:

Install left turn lanes at key intersections to ease congestion and enhance safety.

The Big Sky Transportation Study included the evaluation of turn lane guidelines at each of the corridor intersections using existing, 10- year and 20-year volumes based on the methodology outlined in MDT's Traffic Engineering Manual (November 2007). Turn lanes are warranted at many of the intersections based on existing volumes alone. Additional turn lanes will become warranted with each incremental increase in traffic volume up to the point where they are essentially all warranted for 20-year future volume projections. (see Table 1).

TURN LANE WARRANTS		MT 64 & Conoco/ Chamber	MT 64 & Powder Light Sub (Ace Hardware)	MT 64 & Little Coyote (East)	MT 64 & Big Sky Medical	MT 64 & Huntley	MT 64 & Big Pine	MT 64 & Andesite	MT 64 & Little Coyote (West)	MT 64 & Big Sky Resort	MT 64 & Sitting Bull
	EB Right-Turn Lane	 Image: A set of the set of the		-	x	✓	 Image: A set of the set of the	x		x	x
2017 Volumes	EB Left-Turn Lane	x	✓	~				x		-	
2017 Volumes	WB Right-Turn Lane	x	x	x				x	x		
	WB Left-Turn Lane	 Image: A second s			x	 Image: A set of the set of the	 Image: A set of the set of the	 Image: A set of the set of the	x	~	x
	EB Right-Turn Lane	✓			x	✓	×	x		x	x
2027 Volumes	EB Left-Turn Lane	x	✓	~				x		-	
2027 Voltaries	WB Right-Turn Lane	x	✓	~				x	x	-	
	WB Left-Turn Lane	 Image: A set of the set of the		-	x	 Image: A set of the set of the	 Image: A set of the set of the	 Image: A set of the set of the	 Image: A second s	~	 Image: A set of the set of the
	EB Right-Turn Lane	✓			x	✓	✓	x		x	x
2027 V-h-	EB Left-Turn Lane	x	✓	×				x			
2037 Volumes	WB Right-Turn Lane	x	✓	✓				x	x		
	WB Left-Turn Lane	 Image: A set of the set of the			x	✓	 Image: A set of the set of the	 Image: A set of the set of the	 Image: A set of the set of the	 Image: A set of the set of the	 Image: A set of the set of the
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Table 1: Proposed Left Turn Improvements

Based on current and projected future traffic volumes, seven proposed left turn lanes are included in the project to ease congestion, expand capacity, and reduce risk of transportation related crashes. These turn lanes are in addition to installing a left-turn signal (creating a left-turn signal phase) on the existing signal at U.S. 191 and MT 64. The work, from east to west, is as follows:

- Install NB lead left-turn phasing & associated work (MT 64/U.S. 191)
- Left-turn lanes at Powder Light Subdivision (Ace Hardware East)
- Left-turn lanes at Powder Light Subdivision (Ace Hardware West)
- Left-turn lanes at Market Place (Meadow Village)
- Left-turn lanes at Huntley Drive
- Left-turn lanes at Big Pine Drive
- Left-turn lanes at Andesite Road
- Left-turn lanes at Big Sky Resort Road

Install signage and related improvements to enhance road safety conditions

- Wildlife signage and pull-outs
- Curve warning signage
- Eliminate unauthorized roadway shoulder parking by Conoco (MT 64)

Expand safe facilities for pedestrians and non-motorized users

- Grade separated pedestrian crossing tunnel at MT 64 & Little Coyote Road
- Extend trail and add pedestrian crossing to access the Big Sky Community Park and connect the existing multi-modal trail system.

Expand and enhance transit alternatives on U.S. 191 corridor

- Purchase four motor coaches for Skyline
- Purchase six vans for Skyline's vanpool program

Benefits

The benefits of these projects are summarized in Table 2.

 Table 2: Benefit Summary of Project Components

Improvement	Benefits
Left Turn Lanes	Safety (reduce crashes); Travel time savings
Wildlife Signage and Pull-outs	Safety (reduce crashes); Travel time savings
Curve Warning Signage	Safety (reduce crashes)
Pedestrian Tunnel	Safety; Travel time savings (for vehicles)
Motor coaches and Vanpool	Travel time savings (fewer cars on road), expand cost-
Vans	effective travel alternatives, support growth of local
	economy

II. Project Location

Big Sky, Montana is an approximately 120 square mile census-designated place that straddles both Gallatin and Madison Counties in the southwest region of the state. The geospatial information for Big Sky is:

The coordinates are for the mid-point of the intersection of MT-64 and Ousel Falls and Two Moons roads. Ousel Falls Road is the heart of the Town Center area in Big Sky.

The project corridor encompasses two highways:

- U.S. Highway 191 travels in the north and south direction through the Gallatin Canyon along the Gallatin River. This project aims to increase capacity of the transit services along U.S. 191 between Bozeman and Big Sky. Therefore, the project encompasses the 45-mile segment of U.S. 191 from roughly downtown Bozeman to the intersection of U.S. 191 and MT Highway 64. Figure 1 shows the regional location.
- Montana Highway 64 (also known as Lone Mountain Trail) provides the only public access to the majority of the Big Sky community. As illustrated in Figure 2, the segment of Highway 64 included in this project area extend from Highway 191 on the east end to the terminus of Highway 64 near Moonlight Basin Resort, approximately 10 miles to the west.



Figure 1: Regional location of the Big Sky Corridor.



Figure 2: Hwy 191 and MT 64 – the Big Sky Corridor

III. Grant Funds, Sources and uses of Project Funds

While the SF424C provides a categorization of the costs, the general costs of the project are summarized in Table 3.

 Table 3: Summary of Project Costs

Project Item	Costs (all eligible costs)
Install NB lead left-turn phasing & associated work (intersection of U.S. 191 and MT 64)	\$10,500
Eliminate unauthorized roadway shoulder parking by Conoco (MT 64)	\$421,700
Wildlife signage and pull-outs	\$115,500
Left-turning lanes (seven in total)	\$5,943,645
Grade separated pedestrian crossing (MT 64 & Little Coyote Road)	\$659,450
Extend existing paved trail & pedestrian bridge (Little Coyote Road)	\$643,500
Curve warning signage	\$10,500
Motor coaches for Skyline bus (four total)	\$2,107,800
Vans for Skyline's vanpool program (six 4x4 vans)	\$379,405
Total	\$10,292,000

The total costs for all elements of the project are \$10,292,000. It is anticipated that the TIGER funds (grant funds) will cover all the costs associated with all elements noted in this application. As noted herein, while there have been improvements made to MT 64, the Skyline public transportation system, and the trails in the community with non-Federal funds, those prior projects do not count toward this project/request.

As noted in the Notice of Funding Opportunity, since this project is to take place in a rural area, no match is required, and the community believes that its previous, current and future commitments to the on-going support of entities such as the Big Sky Community Organization and Big Sky Transportation District show its commitment to improving Big Sky.

The budget for this project is based on 100% Federal (TIGER Grant) funds. It is anticipated that no other funds will be needed for the projects noted herein.

IV. Merit Criteria

Primary Criteria

a. Safety

Due to the multifaceted components of the project, multiple safety outcomes will be recognized. A thorough evaluation of existing conditions relative to traffic operations and safety was conducted by Sanderson Stewart to establish a baseline for this project. It included a review of available historic traffic data from Montana Department of Transportation (MDT), collection of new peak hour turning movement counts at major intersections, and review and analysis of crash data provided by MDT for the past 10 years.

Figure 3 on the following page is an excerpt from the Big Sky Transportation Report and summarizes crash data for the corridor based on various characteristics such as location, weather and road conditions, crash type, and vehicle type. Figure 4 provides a graphical representation of the same crash data by location along the corridor.

During the ten-year analysis period, three (3) fatal crashes were reported. The first fatal crash was a single-vehicle rollover collision where an impaired driver ran off the road while negotiating a curve. The second fatal crash was the result of a distracted driver crossing the centerline while negotiating a curve and colliding head-on with another vehicle. The third fatal crash was a single-vehicle rollover collision where the driver exceeded the posted speed limit and ran off the road when trying to make a right-hand turn.

2017-TIGER GRANT

MT Highway 64 – Rural Commuter Corridor Project

Collision Type

Month	Crashes	%
January	28	15.4%
February	24	13.2%
March	17	9.3%
April	14	7.7%
May	4	2.2%
June	6	3.3%
July	7	3.8%
August	14	7.7%
September	13	7.1%
October	13	7.1%
November	19	10.4%
December	23	12.6%
Totals	182	100.0%

Day	Crashes	%
Sunday	21	11.5%
Monday	23	12.6%
Tuesday	15	8.2%
Wednesday	26	14.3%
Thuesday	30	16.5%
Friday	41	22.5%
Saturday	26	14.3%
Totals	182	100.0%

Junc. Relation	Crashes	%
Intersection	32	17.6%
Driveway/Alley	4	2.2%
Non-Junction	146	80.2%
Totals	182	100.0%

Weather	Crashes	%
Clear	72	39.6%
Cloudy	56	30.8%
Snow	43	23.6%
Sleet	1	0.5%
Rain	2	1.1%
Fog	1	0.5%
Blowing Snow	5	2.7%
Unknown	2	1.1%
Totals	182	100.0%

Road Conditions	Crashes	%
Dry	84	46.2%
Wet	22	12.1%
Ice	20	11.0%
Snow/Slush	55	30.2%
Unknown	1	0.5%
Totals	182	100.0%

Year	Crashes	%
2006	6	3.3%
2007	9	4.9%
2008	3	1.6%
2009	21	11.5%
2010	20	11.0%
2011	14	7.7%
2012	13	7.1%
2013	26	14.3%
2014	24	13.2%
2015	27	14.8%
2016	19	10.4%
Totals	182	100.0%

2015	- 21	14.070
2016	19	10.4%
Totals	182	100.0%
Crash Severity	Crashes	%
Crash Severity Fatal	Crashes 3	% 1.6%
Crash Severity Fatal Injury Crash	Crashes 3 30	% 1.6% 16.5%
Crash Severity Fatal Injuey Crash Prop. Damage Only	Crashes 3 30 149	% 1.6% 16.5% 81.9%

Tiead On	+	2.270
Rear End	28	15.4%
Right Angle	16	8.8%
Sideswipe SD	3	1.6%
Sideswipe OD	3	1.6%
Roll Over	37	20.3%
Left Turn OD	2	1.1%
Fixed Object	56	30.8%
Not Fixed Object	6	3.3%
Wild Animal	25	13.7%
Rear to Front	2	1.1%
Totals	182	100.0%

Crashes

%

Vehicle Type	Vehicles	%
Motorcycle	2	1.1%
Passenger Car	60	33.0%
SUV	71	39.0%
Van	7	3.8%
Pickup	31	17.0%
Bus	1	0.5%
Truck/Tractor	8	4.4%
Other	2	1.1%
Totals	182	100.0%

Light Conditions	Crashes	%			
Dawn	2	1.1%			
Daylight	103	56.6%			
Dusk	5	2.7%			
Dark-Lighted	4	2.2%			
Dark-Not Lighted	68	37.4%			
Totals	182	100.0%			

Milepost	Crashes	%
0.0 - 0.5	32	17.6%
0.5 - 1.0	21	11.5%
1.0 - 1.5	10	5.5%
1.5 - 2.0	8	4.4%
2.0 - 2.5	10	5.5%
2.5 - 3.0	15	8.2%
3.0 - 3.5	7	3.8%
3.5 - 4.0	8	4.4%
4.0 - 4.5	8	4.4%
4.5 - 5.0	6	3.3%
5.0 - 5.5	5	2.7%
5.5 - 6.0	13	7.1%
6.0 - 6.5	7	3.8%
6.5 - 7.0	5	2.7%
7.0 - 7.5	6	3.3%
7.5 - 8.0	5	2.7%
8.0 - 8.5	11	6.0%
8.5 - 9.0	4	2.2%
9.0 - 9.8	1	0.5%
Totals	182	100.0%

rata	3	1.0
Injury Crash	30	16.
Prop. Damage Only	149	81.9
Totals	182	100.

Note: Crash data summarized	
from 7/1/06 through 6/30/1	16

Time of Day	Crashes	%
Before 6:00 am	28	15.4%
6:00 am - 9:00 am	31	17.0%
9:00 am- 12:00 pm	26	14.3%
12:00 рт - 3:00 рт	23	12.6%
3:00 pm - 6:00 pm	31	17.0%
6:00 pm - 9:00 pm	22	12.1%
After 9:00 pm	21	11.5%
Totals	182	100.0%

Figure 3: Summary of Highway 64 Corridor Crash Data from the 2017 Sanderson Stewart Report



Figure 4: Crash Data by Location from the Big Sky Transportation Study

Left Turn Lanes

As shown in the data of the project description section, seven left turn lanes are included in the project primarily to increase safety (reduce crashes) and ease congestion (reduce travel time). These seven turn lanes already meet warrants at current traffic levels, which are expected to more than double in the 20-year planning horizon. These left-turn lanes will help with economic sustainability and development, as they provide a safe way to access existing, expanding and new businesses that have access from MT 64.

Curve Warning Signage

MDT has recently been working on a statewide project to re-evaluate horizontal curves relative to current design standards and to upgrade curve warning signs to meet the latest MDT standards. Highway 64 is not included in that statewide effort due to MT 64's off-network status, but it would benefit from curve warning signage upgrades – note that two of the three fatalities in the ten-year study period were curve related.

Eliminate On-Street parking on Highway 64 by Conoco

It is a common occurrence for large trucks to park along both sides of Highway 64 just west of Highway 191 adjacent to the Conoco station (Figure 5). The drivers of those trucks on the north side then cross the highway as pedestrians mid-block to go to the Conoco station. This is an informal parking area not intended for this purpose because the surface is rough and uneven. **Pedestrian crossings in this location are an obvious concern**. The existing light poles in this area have been hit and damaged by the trucks many times and the trucks also limit visibility of the speed limit signs, wildlife crossing warning signs, and the new Big Sky wayfinding signage.

By extending the existing curb and gutter along the Chamber of Commerce and Conoco frontage further to the west or re-grading the shoulder and installing no-parking signs, the on-street parking could be eliminated. In order to eliminate this on-street parking, Gallatin County would work to pass an ordinance to restrict parking in this area and work with MDT to request installation of no-parking signs.



Figure 5: Trucks parked along Highway 64 just west of highway 191 adjacent to the Conoco Station

Wildlife Signage and Pullouts

There were twenty-five (25) reported crashes involving a wild animal over the ten-year period, making up 13.7% of the total crashes. The community has noted concerns about animal-vehicle collisions, and there is a clear concentration of animal-vehicle collisions that occurred within the first 1.5 miles of Highway 64 west of Highway 191. There is a known issue in this location with Big Horn Sheep being attracted to the salt on the roadway during winter months, and there have been deer, elk and moose collisions on this segment as well.

Elimination of the on-street truck parking just west of Highway 191 (mentioned above) will help to improve the visibility of the existing wildlife crossing sign in this location. However, there are additional measures that could be taken to enhance visibility of the signs at both ends of the wildlife crossing zone.

If curb and gutter were installed to eliminate the on-street truck parking, the wildlife crossing sign could be moved closer to the roadway. A new over-sized sign face could be installed, as well as a yellow flasher on top of the sign to catch drivers' attention and improve visibility.

As part of this project, pullouts are included for designated wildlife viewing areas since many drivers are currently stopping in the middle of the highway to take pictures. These pull-outs would also allow drivers to pull over to use their cell phones before or after driving through the Canyon where cell phone service is limited. The pull-outs will be installed on both sides of the highway just west of the bridge that is located 1,000 feet west of U.S. 191.

Grade Separated Pedestrian Crossing (MT 64 & Little Coyote Road)

To enhance bike and pedestrian safety and accessibility *across* the MT 64 corridor, the project proposes to install a grade-separated crossing at Little Coyote Road (East). This is a project that the community has been working on for some time, including a recent application for funding through the Transportation Alternatives (TA) program administered by MDT. Although the community has already spent over \$175,000 on engineering for the tunnel, unfortunately the project was not selected for funding through the TA program, which is why this critical safety project is included in this application. A grade separated crossing provides the safest way for pedestrians to cross MT 64, and would not add any travel time delay to the motorist, as could be expected with an at-grade crossing. As noted elsewhere in this application, this "pedestrian tunnel" will provide a critical linkage between two of the community's largest and most used parks, and commercial and residential areas in Big Sky.

Transit Facilities (Vehicles)

If funded through the TIGER grant, the four new motor coaches would mean that the transit system would not have to lease buses, and the increased capacity of the Skyline buses would mean that smaller buses would not have to be operated at a higher rate (headway) to get the same capacity. Further, five of the six vanpool vans used in Skyline's program range in mileage from 120,000 to 160,000 miles, and are within a year of exceeding their useful life. The transit system and vans provide an economical commute (average roundtrip of 100 miles), but these alternatives also provide a factor of safety by taking traffic off of U.S. 191 and MT 64.

Bike and Pedestrian Facilities

In addition to the "pedestrian tunnel," the new crossing at the high traffic intersection of MT 64 and Little Coyote Road, this project will extend a trail to the north, and allow for construction of a pedestrian bridge over the West Fork of the Gallatin River in the Meadow Village, which will help to connect two of the community's most used parks, Big Sky Community Park (on the north side of MT 64) and Kircher Park (on the south side of MT 64). This component of the project will provide a critical connection to the parks noted, as well as filling in a gap, so that there will then be a network of trail access to the Town Center, Meadow Village and Canyon (including the community's two public schools).

b. State of Good Repair

While the Montana Department of Transportation (MDT) has State funds to maintain MT 64, the reality is that this is an "off network" route, meaning that Federal funds are not typically allocated to improvements on this roadway. This is one reason why the TIGER funds are critical to address many of the needed improvements noted in this application. While not part of this project, MDT has committed funds, as noted in the most current Statewide Transportation Improvement Program (STIP), to improve the two bridges on MT 64 (see page 64 of the document, available at http://www.mdt.mt.gov/publications/docs/plans/stip/2017stip_final.pdf). The condition of these two bridges was noted in the Big Sky Transportation Study by Sanderson Stewart.

As noted throughout this application, MT 64 provides the only public access to the Big Sky community, and it is therefore critical that the roadway be improved, and maintained in a state of good repair so that community and the region can continue to thrive. **If MT 64 were to fail, the community would essentially fail.**

The proposed transit improvements provide an example of an asset that if left unimproved, could threaten the future transportation network efficiency, including the accessibility and mobility of people, and economic growth of the community. As noted herein, over 80% of Big Sky's workforce commutes to work every day, with more than 1,400 commuters coming from the northern part of Gallatin County. While the Big Sky Transportation District (dba, Skyline) has the funding for the operations and maintenance of its vehicles, it is not often able to procure the vehicles it needs through the Montana Department of Transportation. As noted elsewhere in this application, the State of Montana receives a limited amount of Federal Transit Administration (FTA) funds for the procurement for buses and bus facilities for all its 39 rural transit systems (Skyline being one of those). Skyline has been unsuccessful in obtaining full size motor coaches, and has had to settle for smaller (less costly) vehicles. The current Skyline buses have reached capacity and are not able to keep up with demand. The current van pool vans that transport employees on a daily basis from Four Corners to Big Sky to work each day are at the end of their useful life, and may soon be inoperable. Again, due to the limited amount of FTA funds for Montana, Skyline has been unable to procure additional vans through the Montana Department of Transportation.

c. Economic Competitiveness

As noted throughout this application, **MT 64 provides the only public access** to the Meadow, Town Center and Mountain Village Center portions of the Big Sky community, and MT 64 is connected to U.S. 191, so if these roadways should fail, then the economic competitiveness of the community, in fact the entire community, would essentially fail. The project components noted in this application will decrease transportation costs and improve access to businesses in Big Sky, a rural community, thereby allowing a meaningful connection to the many job opportunities that exist in the community. The project will improve the reliability and efficiency of connecting the community to the region, of both people and goods, which will result in further growth and job opportunities.

One component noted in this application is to obtain new, and higher capacity vehicles for the Skyline transit service. By obtaining higher capacity and newer vehicles for Skyline's Link Express service, which connects the greater Bozeman area to Big Sky, more employees will be able to access the job opportunities in Big Sky is a safe and efficient manner. Using figures from the American Automobile Association (AAA) it can be show that the cost of the commute between Bozeman and Big Sky (50 miles each way) could cost an individual between \$8,140 and \$12,960 depending upon what (vehicle) vear. car the person driving per was (https://publicaffairsresources.aaa.biz/YDC/).

While the Skyline service provides a safe and efficient connection between Bozeman and Big Sky, sometimes a fixed route transit service isn't the most cost-effective way for commuters to access jobs. Van pools are often the most cost-effective way to link people to jobs. This is especially true during off-peak times (swing shifts or night shifts) when there isn't a high demand for transit. Skyline needs new vans for its vanpool program, or the current program with six vans may close. This program has provided an average of over 16,000 rides per year over the last two years, providing a cost-effective way for people to access the job opportunities in Big Sky.

How will increasing the above referenced transit services improve economic competitiveness? For the 1,400 commuters that travel this corridor every day, transit offers significant savings. One of the primary challenges in the Big Sky area is the lack of affordable workforce housing. As a result, 83 percent of workers commute along the Big Sky Corridor (U.S. 191/MT 64) from other locations, primarily northern parts of Gallatin County, such as Bozeman and Belgrade according to the Big Sky Housing Development Plan (<u>http://bigskychamber.com/wp-content/uploads/2014/05/FINAL-EPS-REPORT.pdf</u>).

Offering commuting members of the Big Sky workforce with an affordable transit option will improve efficiency and reliability, and will decrease transportation costs. Based on a 100-mile round trip work commute over 250 days each year, Figure 6 provides a cost comparison of operating a private vehicle versus utilizing alternative options.



Figure 6: Comparison of private vehicle ownership to alternative modes of transportation.

<u>The Big Sky, Montana "Situation"</u> *More than 80% of Big Sky workforce commutes *67% earn less than \$25K annually (2014) *Over 1,400 people per day travel the treacherous Gallatin Canyon corridor (U.S. 191/MT 64) to work in Big Sky

The Big Sky situation epitomizes the relevance of rural transit. Long commutes, predominate lowwage service jobs, and the high cost of car ownership combine to keep those service employees from achieving economic independence. An efficient, affordable transit system would greatly improve the chances for socio-economic advancement. Employment centers within the corridor will experience greater employee retention and greater recruitment successes with the ability to demonstrate the transit options as a benefit.

d. Environmental Sustainability

As described in detail in the Safety section, there were twenty-five (25) reported crashes involving a wild animal over the ten-year period, making up 13.7% of the total crashes, with a concentration of animal vehicle collisions in the first 1.5 miles of MT 64 west of U.S. 191. Figure 7 provides a map of the animal vehicle crash sites along the corridor. By implementing the proposed measures outlined in Safety, this project could also provide environmental sustainability. Wildlife signage and pullouts will improve habitat connectivity by encouraging safer passage for wildlife moving through this corridor.

The proposed new motor coaches and vans will aid with congestion mitigation on the corridor and could reduce the number of daily commuters by 100, a reduction of approximately 7 percent. These options would reduce the CO2 emissions of these 100 commuters by between 54.8 and 84.5 tons per year, or a reduction between 72 and 90 percent. Increased routes and safe crossings for cyclists and pedestrians will lead to decreased vehicle usage, which should reduce emissions and ease congestion (improve travel times).



Figure 7: Animal Impact Crashes along the Highway 64 corridor.

e. Quality of Life

As the only public access to the Big Sky community, MT 64 serves as the backbone of the community. If MT 64 fails, the community essentially fails. Enhanced transit options in this corridor will have a significant positive impact on this isolated rural area and play a major role in improving quality of life by improving access to employment and other

Transit is a great equalizer. Everyone benefits, but the lower income brackets benefit at proportionally higher levels.

services in the area. While the Skyline bus system provides access to the recently opened hospital in Big Sky, it also provides a connection to the larger hospital and additional health services in Bozeman (the hospitals in Big Sky and Bozeman are owned by Bozeman Health).

And while the quality of life in Big Sky is highly desirable, it is still a relatively small community, and many times people want to travel to Bozeman (the 4th largest city in Montana), and the Skyline transit systems allows people to safely and efficiently travel from Big Sky to Bozeman, where they can take advantage of Bozeman's public transportation system Streamline, to get to wherever they want to in the community.

Parks and trails create a higher quality of life, healthier environment and more livable community by establishing public places, community infrastructure, and programs that bring the community together to participate in sports, recreate, learn about Big Sky's culture and history and engage with others. The benefit for both year-round residents and visitors is evident with studies nationally and locally. National studies show parks and trails as one of the number one criteria sought out when people are deciding where to live and vacation, while local studies show that 93% of individuals use our local park and trail system, with over half of those individuals using these amenities more than 2 times per month. With Big Sky's largest industry being focused on tourism and recreation, having parks, trails and critical community programs accessible to all has a positive

effect on almost every business in our community by supporting revenue growth and quality of life for retaining employees.

While recommended for safety concerns, the "pedestrian tunnel," the grade separated crossing of MT 64, and the additional trail improvements will also provide better access and connectivity to the network of trails in the community. As noted elsewhere, these trail improvements will help connect the two largest and most used parks in the community. This livability enhancement will provide greater freedom of mobility choices by allowing safe travel by bicyclists and pedestrians.

Secondary Criteria

a. Innovation

The community of Big Sky understands the necessity of innovation in this rural area with only a single public road leading in or out – MT 64. The lack of a dedicated funding source, and MT 64's off-network status and subsequent lack of funding from the state for improvements, have moved this rural community to develop innovative partnerships and solutions to keep the corridor operating safely.

Big Sky has consistently demonstrated capacity to implement innovative approaches. When the community reached the point of needing their first traffic light, the Resort Tax Board and local stakeholders came forward to provide funding. Gallatin and Madison counties, the Chamber of Commerce, and the growing development community have worked tirelessly to identify ways to improve safety, even utilizing resources at Montana State University over the last 14 years to assist with improving the public transportation system, and transition from the Snow Express to Skyline systems; to listening sessions which ultimately resulted in the Big Sky Transportation Study by Sanderson Stewart.

One of the more unique components of the overall corridor project is the van pool program and public transit system. Van pools are common in urban areas to move multiple commuters in one vehicle, often giving them the ability to use high occupancy vehicle (HOV) lanes. Cooperation between the Big Sky Transportation District and major employers in the area led to the development of the van pool program as an innovative approach in a rural area to bring employees through the corridor, providing access to jobs.

b. Partnership

This project brings together Gallatin County and The Big Sky Transportation District (dba Skyline) as the primary partners with major support from the Montana Department of Transportation, Madison County, and public and private stakeholders representing related interests from the Big Sky community.

Gallatin County, the most populated and fastest growing county in scenic southwest Montana, covers over 2,500 square miles of mountain lands varying in topography and climate from temperate river valleys to snow-capped peaks and open ranch lands in the heart of the Rocky Mountains. Nearly half of all the land in Gallatin County is under public ownership by the Gallatin National Forest, State of Montana, Bureau of Land Management or the National Park Service.

The Big Sky Transportation District (dba Skyline) is an Urban Transportation District, established in 1991 under the laws of the State of Montana. The District began with a service known as Snow Express, a transit system that operated from mid-December to mid-April, to serve locals and winter

visitors to Big Sky. Today, as Skyline, the system includes year-round service (averaging 335 days of service per year), and provides service to all major destinations/activity centers in the community: from the Canyon through the Meadow Village Center and Town Center; all the way to the Mountain Village Center. Further, the Link Express service connects Big Sky to Gallatin Gateway, Four Corners, and Bozeman (including Montana State University) by utilizing the MT 64 and U.S. 191 corridors.

The Montana Department of Transportation (MDT) will play a key role in executing the road improvements as Highway 64 is a Montana state highway. If this application is selected for funding, Gallatin County and MDT will work together so that all improvements noted herein will be implemented. This relationship may be formalized in a Memorandum of Understanding or some other agreement, or MDT may simply need to review and approve the plans for the "roadway improvements" noted herein.

A unique component to the partnership is the role of community engagement. Recognizing they live in a rural environment with an "off-network" backbone (Hwy 64), and host an additional 15,000+ visitors at a time during the peak seasons, which is five times the size of the base population of 3,000, the community has helped to identify greatest needs as well as potential funding sources. For example, The Yellowstone Club and the Resort Tax Board are covering operational expenses for the van pool.

Neighboring Madison County is also a financial supporter of these efforts. A portion of Big Sky lies in Madison County, however there is no direct public access road that connects Big Sky to Madison County services (schools, emergency services). Madison County recognizes the impact of the proposed enhancements on the residents and employees of Big Sky.

V. Project Readiness

The timing of the Notice of Funding Opportunity for the FY 17 TIGER grant comes at a most opportune time for the Big Sky community. The Big Sky Transportation Study was just completed, and highlights the need for necessary improvements along the MT 64 corridor. Further, the community has been working together with public-private partnerships to address transportation issues, highlighted by the installation of the traffic signal at the MT 64 and Ousel Falls Road/Two Moons Road intersection.

Technical Feasibility

Gallatin County has the technical feasibility to complete the project (all project components) as noted in this application. The County has worked with MDT and the other partners noted herein to address transportation issues in Big Sky and elsewhere in the County. The report from Sanderson Stewart has highlighted the immediate and long-term issues along the MT 64 corridor, and given the projected growth in traffic in the area, the time has come to address these issues.

Project Schedule

A detailed project schedule identifying major project milestones for the first two years of project funding is provided in Table 4 and Table 5. All planning, agreements, permitting, reviews, and approvals have been considered. The schedule was created based on an assumed start date of March 2021, with a final project close-out occurring in November 2022. These dates are based on

having an TIGER Grant Agreement signed no later than September 30, 2020, and beginning relatively soon thereafter. The timeline shows that the project will be able to be implemented quickly, and the schedule could even be accelerated, once Gallatin County is notified of being selected. It is not anticipated that any major expenses would be incurred, however, until the TIGER Grant Agreement is signed.

Phase 1 occurs primarily in the first year of project funding and includes topographic survey and base mapping, environmental review (MEPA/NEPA), geometrics/roadway design, project manual/specifications/bid docs, cost estimate, preliminary design submittal, MDT/County review, and final design submittal. It is anticipated that the vans for the vanpool program would be purchased in Year 1.

Phase 2, Construction Bidding and Management Services, occurs in the second year. Activities will include facilitating the bidding process, contract docs/pre-construction meeting, construction inspection/administration, and project close-out. The motor coaches for the Big Sky Transportation District would be delivered in Year 2. While the order would be placed in Year 1, there is typically a "build time" for these vehicles that can be anywhere from 12 to 18 months.

As noted herein, most of the components of this project should occur within the existing right-ofway of MT 64. However, if additional right-of-way is needed, all real property and right-of-way acquisition will be completed in a timely manner in accordance with 49 CFR part 24, 23 CFR part 710, and other applicable legal requirements.

Table 4: Project Schedule for Year 1 of TIGER Funding

Project Schedule	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Phase 1: Design Development												
Topographic Survey and Base Mapping												
Environmental Review (MEPA/NEPA)							•		•			
Geometrics/Roadway Design												
Project Manual, Specifications and Bid Docs												
Cost Estimate												
Preliminary Design Submittal												•
MDT/County Review												
Final Design Submittal												
Phase 2: Construction Bidding and Management Services												
Facilitate Bidding Process												
Contract Docs/Pre-Construction Meeting												
Construction Inspection/Administration												
Project Close-out												
Indicates anticipated meetings and submittals												

Table 5: Project Schedule for Year 2 of TIGER Funding

Project Schedule	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Phase 1: Design Development												
Topographic Survey and Base Mapping												
Environmental Review (MEPA/NEPA)												
Geometrics/Roadway Design												
Project Manual, Specifications and Bid Docs												
Cost Estimate												
Preliminary Design Submittal												
MDT/County Review												
Final Design Submittal		•										
Phase 2: Construction Bidding and Management Services												
Facilitate Bidding Process												
Contract Docs/Pre-Construction Meeting				•								
Construction Inspection/Administration										•		
Project Close-out											•	
Indicates anticipated meetings and submittals												

Required Approvals

a. Environmental Permits and Reviews.

Gallatin County anticipates that it will be able to work with the Montana Department of Transportation and all other relevant partners to obtain all necessary environmental approvals and permits for the project to proceed to construction on the timeline specified in the project schedule and necessary to meet the statutory obligation deadline, including satisfaction of all Federal, State and local requirements and completion of the NEPA process. Most of the "roadway improvement" projects, the left-turn lanes, will be constructed within existing right of way.

Since the need for the roadway projects were not quantified until the completion of the Big Sky Transportation Study, the NEPA process hasn't begun. However, given that all of the turn lanes and the other work (signage, etc.) will occur within the existing right of way on MT 64, it is anticipated that all projects are likely to receive a Categorical Exclusion. The purchase of the transit vehicles as part of the project will certainly receive a Categorical Exclusion. If awarded funding from the TIGER program, it is anticipated that the NEPA process will be conducted in a timely manner, so that the projects can be implemented according to the schedule.

As noted herein, MT 64 is a State Highway, and the Montana Department of Transportation (MDT) would need to review and approve the plans for modifications of the roadway. However, as indicated on their letter of support, MDT looks forward to working with Gallatin County on the project, should funding be obtain through the TIGER program.

The anticipated project impacts will primarily occur during the construction of the turning lanes and other roadway improvements. All possible strategies will be used to minimize and mitigate these impacts.

As noted herein, and in MDT's letter of support, Gallatin County will work with MDT (both Headquarters and the Butte District Office), and applicable Federal officials to ensure the project's compliance with NEPA and other applicable Federal environmental reviews and approvals.

There have been several rounds of public engagement regarding the project and its various components. Engagement started in early 2016 (January 27, February 3 and February 4) when A total of three community meetings (listening sessions) were held in Big Sky. The result of these community meetings and other analysis led to the publishing of the Big Sky Transportation Review (http://bigskychamber.com/wp-content/uploads/2016/04/Big-Sky-Transportation-

<u>Report Final1.pdf</u>.). The information from this report highlighted transportation issues in the community, and a focus by the community to address the various issues. With leadership by the Big Sky Chamber of Commerce, and funding support by Gallatin and Madison Counties and the Big Sky Resort Area District (Resort Tax Board), Sanderson Stewart was hired and completed the Big Sky Transportation Study in July 2017. The process during the Study, provided several opportunities for public engagement. Finally, during discussion of applying for TIGER Grant funds, numerous individuals and organizations have been engaged in the process. The public engagement process will be continued should this application be selected for funding.

b. State & Local Approvals

As noted herein, the Montana Department of Transportation (MDT) is scheduled in FY 19 to improve the two bridges on the MT 64 corridor. If awarded this TIGER grant, Gallatin County anticipates that it will be able to quickly work with MDT to get the Statewide Transportation Improvement Program (STIP) amended to include the components noted herein. Given that MT 64 is an off-network road, MDT would be delighted to participate in a project that would address the issues on MT 64 noted herein. As evidenced by the letters of support included with this application, there is broad public support for this project and its components.

c. Federal Transportation Requirements Affecting State and Local Planning

Applicants should demonstrate that a project that is required to be included in the relevant State, metropolitan, and local planning documents has been or will be included in such documents. If the project is not included in a relevant planning document at the time the application is submitted, the applicant should submit a statement from the appropriate planning agency that actions are underway to include the project in the relevant planning document. To the extent possible, freight projects should be included in a State Freight Plan and supported by a State Freight Advisory Committee (49 U.S.C. 70201, 70202), if these exist. Applicants should provide links or other documentation supporting this consideration. Because projects have different schedules, the construction start date for each TIGER grant must be specified in the project-specific agreements signed by relevant operating administration and the grant recipients, based on critical path items that applicants identify in the application and will be consistent with relevant State and local plans.

Assessment of Project Risks and Mitigation Strategies

Project risks, such as procurement delays, environmental uncertainties, increases in real estate acquisition costs, uncommitted local match, or lack of legislative approval, affect the likelihood of successful project start and completion. The applicant should identify all material risks to the project and the strategies that the lead applicant and any project partners have undertaken or will undertake in order to mitigate those risks. The applicant should assess the greatest risks to the project and identify how the project partners will mitigate those risks.

To the extent it is unfamiliar with the Federal program, the applicant should contact the appropriate DOT operating administration field or headquarters offices, as found in contact information at <u>www.transportation.gov/TIGERgrants</u>, for information on the pre-requisite steps to obligate Federal funds in order to ensure that their project schedule is reasonable and that there are no risks of delays in satisfying Federal requirements.

VI. Benefit Cost Analysis

The Benefit Cost Analysis (BCA) provided herein takes a very conservative approach, while still providing a positive Net Present Value (NPV) for the project. Instead of trying to capture (calculate) every potential benefit, it was decided to use a basic and conservative approach, meaning that the true NPV is likely much higher than what is shown. For example, the BCA indicates that fatalities will be reduced by 50% over the twenty-years after completion of the

project (an overall reduction of three fatalities). The benefits of those reduction are shown in Years 10, 15 and 20, reducing the overall value of the savings. If, for example, the benefits of those reductions were shown in Years 3, 7, and 10, the NPV would increase by \$4,025,134. As shown in Table 6, the NPV is calculated to be \$5,507,902, which is a very conservative estimate of the net present value of the project.

The NPV calculation also is very conservative regarding the reduction of injury and property damage only crashes. The NPV calculates benefits on a reduction of one injury crash per year and 5 property crashes per year (both equating to a 30% reduction at current traffic volumes). As noted in this application, AADT is expected to more than double during the next twenty years, so given the increase in traffic volumes, it is likely that more crashes would occur, and the corresponding 30% reduction would have higher values in the "out years."

The travel time savings is based on a very small amount, starting at just 3.6 seconds per vehicle after construction is completed, and growing to just 1.2 minutes (72 seconds) per vehicle 20 years after the project is completed. This is believed to be a very conservative figure, and could easily be increased to show a higher NPV.

The discounted transit savings is based on the cost of leasing the vehicles needed for the transit system (a total of four buses), as opposed to owning them. The lease cost of \$3,500 per bus (motor coach) is based on leasing a used bus, as opposed to a new vehicle. Further, the cost of operating an extra run on a smaller capacity bus to meet the demand is calculated at \$39,000 per year (for only 150 days of service). These are again very conservative values that could be justified at a higher level to increase the NPV. The newer vehicles, the buses and vans obtained through this grant, would initially lower the maintenance costs of the transit system, but those savings are not shown herein, as a very conservative approach was taken regarding the NPV calculations.

It is anticipated that the various "road components" of this project, the turn-lanes and pullouts, will add ten percent to the maintenance of MT 64. The current maintenance costs of the roadway were obtained from the Montana Department of Transportation (MDT). An inflation factor of 3 percent per year was then used to show an increase in costs. Finally, 50 percent of the incremental increase in maintenance costs was shown in Year 2, when most construction will occur, and 100 percent of the incremental increase in maintenance costs was shown in the year after construction is completed.

Detailed information on the BCA/NPV calculation is provided in a "BCA Calculation Narrative" provided as part of the application, as well as the Excel spreadsheet, on which the calculations were completed (submitted through Grants.gov).

				Di	scounted							
		Di	scounted		Crash	Di	scounted	D	iscounted	Di	iscounted	
		Tr	avel Time	R	eduction		Transit	Construction		Operations &		
Calendar	Project		Savings		Savings		Savings	/Vehicle		Maintenance		
Year	Year		(@7%)		(@7%)		(@7%)	Со	sts (@7%)	Co	sts (@7%)	NPV @ 7%
2017	-2											
2018	-1											
2019	0											
2020	1											
2021	2							\$	1,159,272			\$ (1,159,272)
2022	3							\$	6,254,622	\$	11,857	\$ (6,266,479)
2023	4	\$	34,166	\$	97,459	\$	137,933			\$	22,828	\$ 246,731
2024	5	\$	66,632	\$	91,083	\$	128,909			\$	21,974	\$ 264,650
2025	6	\$	97,461	\$	85,125	\$	120,476			\$	21,153	\$ 281,909
2026	7	\$	126,721	\$	79,556	\$	112,594			\$	20,362	\$ 298,509
2027	8	\$	154,462	\$	74,351	\$	105,228			\$	19,601	\$ 314,440
2028	9	\$	180,739	\$	69,487	\$	98,344			\$	18,868	\$ 329,702
2029	10	\$	205,625	\$	64,941	\$	91,910			\$	18,163	\$ 344,314
2030	11	\$	229,160	\$	60,693	\$	85,898			\$	17,484	\$ 358,267
2031	12	\$	251,394	\$	56,722	\$	80,278			\$	16,830	\$ 371,564
2032	13	\$	272,375	\$2	,553,889	\$	75,026			\$	16,201	\$ 2,885,090
2033	14	\$	292,170	\$	49,543	\$	70,118			\$	15,595	\$ 396,236
2034	15	\$	310,802	\$	46,302	\$	65,531			\$	15,012	\$ 407,623
2035	16	\$	328,333	\$	43,273	\$	61,244			\$	14,451	\$ 418,399
2036	17	\$	344,802	\$	40,442	\$	57,237			\$	13,911	\$ 428,571
2037	18	\$	360,244	\$1	,820,887	\$	53,493			\$	13,391	\$ 2,221,234
2038	19	\$	374,714	\$	35,324					\$	12,890	\$ 397,147
2039	20	\$	388,241	\$	33,013					\$	12,408	\$ 408,845
2040	21	\$	400,855	\$	30,853					\$	11,944	\$ 419,763
2041	22	\$	412,600	\$	28,835					\$	11,498	\$ 429,937
2042	23	\$	423,521	\$1	,298,268					\$	11,068	\$ 1,710,721
	Totals	\$5	5,255,019	\$6	,660,046	\$1	,344,220	\$	7,413,894	\$	337,489	\$ 5,507,902

Table 6: Summarized Net Present Value Calculation

It was believed that showing a positive NPV with a very conservative calculation should be enough to show the value of the project, and obtain TIGER funding. The critical nature of this project (project components) is noted throughout the narrative in this application, and highlights that the TIGER funding will help Gallatin County and Big Sky improve the critical MT 64 and U.S. 191 corridor.

VII. Cost Sharing or Matching

As noted herein, MT 64 is an "off-network" route, meaning that there isn't a dedicated source of funding for the necessary improvements noted in the Big Sky Transportation Study. While the Montana Department of Transportation is scheduled to improve the two bridges in the MT 64 corridor in FY 19, there are currently no other improvements in the current STIP on that corridor. That is why the TIGER funds are critical to improve this roadway. As noted numerous times in this application, **MT 64 provides the only access (public access) to the Big Sky community**. While there are State funds for the maintenance of MT 64, and the community has provided funding for critical items, such as the traffic signal at the MT 64 and Ousel Falls Road/Two Moons Road intersection, there is no readily available funding to address the items noted in this application.

Given that this project will take place in a rural area, no cost sharing is necessary, and no other funds are anticipated for the project noted herein, beyond operating and maintenance of the components of the project. Further, given the past and future investment along this corridor by private entities and MDT, it is believed that the projects noted herein warrant funding through the TIGER program.

While no local monies are used as part of project noted in this application, Gallatin County uses local money (primarily obtained through property taxes) for transportation projects (road and bridge projects). Gallatin County has also supported the Big Sky Transportation District with County funds for its procurement of vehicles, as Federal Transit Administration funds typically require a "local match" of approximately 16-20 percent. Gallatin County does receive some funding from the State for county transportation projects.

As noted herein, the State of Montana has funding to maintain MT 64, but because it is an offnetwork route, there isn't dedicated funding for improvements on that roadway. That is why the TIGER funding is critical. Further, the Big Sky Transportation District has on-going funding from the State of Montana (both Federal pass-through funds and State funds), as well as support from the Big Sky Community (primarily through the Big Sky Resort Area District) for the operations of the transit system, including maintenance of the vehicles.

I. Federal Wage Rate Certification (a Certification, Signed by the Applicant(s), Stating That It Will Comply With the Requirements of Subchapter IV of Chapter 31 of Title 40, United States Code [Federal Wage Rate Requirements], as Required by the FY 2017 Appropriations Act)

Gallatin County will sign a Federal Wage Rate Certification, Stating That It Will Comply with the Requirements of Subchapter IV of Chapter 31 of Title 40, United States Code [Federal Wage Rate Requirements], as Required by the FY 2017 Appropriations Act). If selected for TIGER Grant Funding, Gallatin County will comply will all applicable Federal, State and local regulations, as may be noted in the TIGER Grant Agreement, or other applicable documents/rules/regulations.

Summary

Gallatin County, Montana is pleased to be able to submit this application for TIGER Grant funding on behalf of the Big Sky community. As noted herein, most of the components of the project noted herein are "warranted" as indicated by the recently completed Big Sky Transportation Study.

In addition to working to improve the roadway where possible (given the mountainous terrain, improvements are often impossible or cost prohibitive), this application includes multi-modal options, including improved transit service for longer trips, and improved trail options for shorter trips.

Further, the TIGER funding is critical, as it has been noted that traffic volumes on MT 64 are growing rapidly, and MT 64 is an "off-network" route, meaning that the Montana Department of Transportation does not often allocate funds to make improvements to the road/roadway.

Finally, it should be noted that MT 64 provides the only public access to Big Sky. If this roadway were to fail, the entire community of Big Sky would fail.

Attachments

In addition to this application (document), five attachments are provided within the SF424 document, and are part of this application. Those attachments are as follows:

- SF424C (Budget Information for Construction Projects)
- Benefit Cost Analysis Net Present Value Calculation Excel Spreadsheet
- Benefit Cost Analysis Narrative
- Letters of Support (for this application)
- Letters of Support (for pedestrian tunnel project, based on the application, that was denied, for Transportation Alternatives funding).