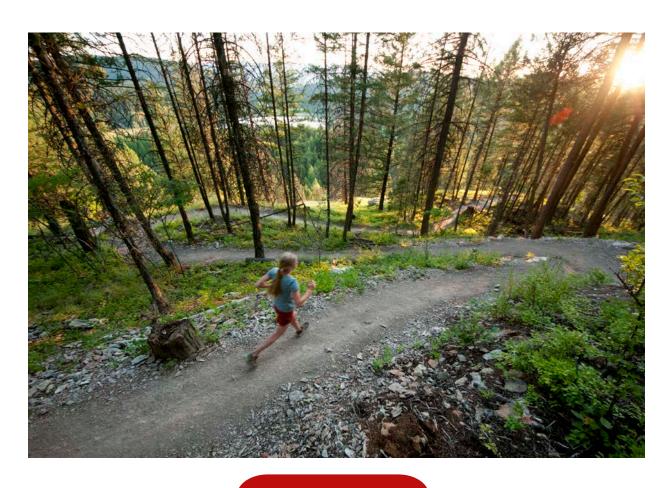
A Research Paper by



The Economic Impact of Outdoor Recreation and the Whitefish Trail in Whitefish, Montana



April 2018

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ABOUT HEADWATERS ECONOMICS

Headwaters Economics is an independent, nonprofit research group whose mission is to improve community development and land management decisions.

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I. EXECUTIVE SUMMARY

This study measures the economic impact of outdoor recreation and the Whitefish Trail, a system of trails near Whitefish, Montana, to understand the trail's impact on local businesses and residents' quality of life, and to understand how the trail fits into the bigger picture of outdoor recreation in the area. This study combined data from trail counters, in-person interviews, and a fitness tracking app, Strava.

From this analysis, we learned the following key takeaways:

- Outdoor recreation is the most important reason why visitors come to Whitefish and why locals stay in the community.
- The Whitefish Trail contributes \$6.4 million in annual spending by visitors who come to enjoy the trail and by locals who purchase or rent outdoor gear at local stores. Spending by visitors who use the Whitefish Trail translates to 68 additional jobs and \$1.9 million in labor income in Whitefish
- Spending by people visiting Whitefish mainly for outdoor recreation in the area amounts to approximately \$101 million, 1,460 jobs, and \$41.1 million in labor income annually.

We estimate that of the 72,966 total annual uses at the four sampled Whitefish Trail trailheads, 22,188 (30%) were visitors. Although trail use drops significantly in the winter, the four trailheads sampled still average 100 uses daily. During the summer season, trail use at Whitefish Mountain Resort is even higher than on the Whitefish Trail: nearly 47,000 uses compared to 41,000 uses.

Outdoor recreation is 65 percent of visitors' primary purpose for visiting the area. Visitors whose primary purpose is outdoor recreation have significantly greater spending than those who are not in Whitefish for outdoor recreation (\$278 per day versus \$227). People visiting for outdoor recreation also tend to stay in the area longer: 5.8 days per trip compared to 4.2 days per trip. Together, longer stays and greater daily spending result in roughly \$670 more spent per trip for people visiting Whitefish for outdoor recreation.

Local trail users use the trail an average of 1.8 times per week. When local trail users were asked to identify their favorite aspects of the Whitefish Trail, the most common response is its proximity to town (44 percent), followed by well-maintained trails (39 percent). Fifty-one percent report exercising more since the Whitefish Trail was built. Local residents who report having used the Whitefish Trail during the previous year spent more than twice the amount on outdoor gear at Whitefish stores: \$1,403 for trail users versus \$660 for non-trail users. This finding supports anecdotes from local business owners that sales have increased since the Whitefish Trail opened, particularly for equipment related to mountain biking.

We estimate that the Whitefish Trail contributes annually to \$6.4 million in consumer spending in the area: \$2.7 million from local residents spending on outdoor gear and \$3.6 million by visitors. Spending from visitors alone translates to 68 additional jobs and \$1.9 million in labor income in the community.

The Whitefish Trail is one of many outdoor recreation destinations in the area, including Glacier National Park and Whitefish Mountain Resort. Seventy percent of visitors stated that they planned to use the Whitefish Trail and 74 percent stated that they will visit Glacier National Park. The Whitefish Trail plays a part in bringing visitors back for another trip: it is an important role in 21 percent of repeat visitors' decisions to return to town. While the other destinations are substantial economic engines driving much of the local economy, the Whitefish Trail also contributes meaningfully while remaining a valued asset for locals.

The economic impact of the Whitefish Trail will continue to grow as the community completes its vision for a 55+ mile loop trail around Whitefish Lake.

II. INTRODUCTION

In 2004, the Whitefish Neighborhood Plan was written and adopted by Flathead County, the City of Whitefish, and the Montana State Land Board and set forth creative conservation and recreation strategies for the management of 13,000 acres of Montana State Trust Lands surrounding Whitefish, Montana (population 6,859 in 2016). The long-term vision, developed by key public and private partners, places local lands into permanent conservation, secures public recreation access, and maintains a working forest.

Whitefish Legacy Partners (WLP) is a non-profit organization that collaborates with the City of Whitefish to ensure conservation, recreation, and education on local lands for future generations. In 2006, the Whitefish Trail (WT) Master Plan laid out a strategy for a 55+ mile trail corridor that encircles Whitefish Lake and connects the community to areas of conservation. WLP is the community organization executing the vision of the WT project.

In the last decade, WLP and project partners have protected 6,100 acres of local land in permanent conservation, built and maintained 42-miles of the WT accessed by 12 trailheads, and developed a thriving outdoor education program centered at the WT Learning Pavilion. This extensive front-country trail network, only 30 miles from Glacier National Park, has become an invaluable part of local quality of life while also attracting visitors to the area who contribute to the local economy.

The purpose of this study is to measure the economic impact of outdoor recreation and the Whitefish Trail, to understand the trail's impact on local businesses and residents' quality of life, and to understand how the trail fits into the bigger picture of outdoor recreation in the area. This information can be used by WLP to communicate its role in the community's character and economy.

III. METHODS

Economic impact analyses are based on the idea that something—whether a new trail, new business, or a new policy—can bring new money to town by attracting visitors who otherwise would not have come to the area. This new money, in turn, supports local businesses that employ residents, pay taxes, and support other businesses. These analyses require measuring the number of new people drawn to the area and how much they spend.

To accurately characterize the role of outdoor recreation in the local economy and estimate the economic impact of the Whitefish Trail, we collected three types of primary data: counts of trail users, in-person interviews at trailheads, and in-person interviews in downtown Whitefish. We also used secondary data from Strava, a fitness tracking app, to estimate total trail uses at Whitefish Mountain Resort and other areas outside the Whitefish Trail network.

Throughout this study, we distinguish between trail uses and trail users. The infrared counters capture trail uses, not individual users.

Study Design Overview

We installed Eco-Counter infrared trail counters (Figure 1) at the four most popular Whitefish Trail trailheads during July 2016: Lion Mountain, Beaver Lakes, Swift Creek, and Spencer Mountain (Map 1). These counters sum the number of people that pass by the counter every 15 minutes, regardless of travel mode.

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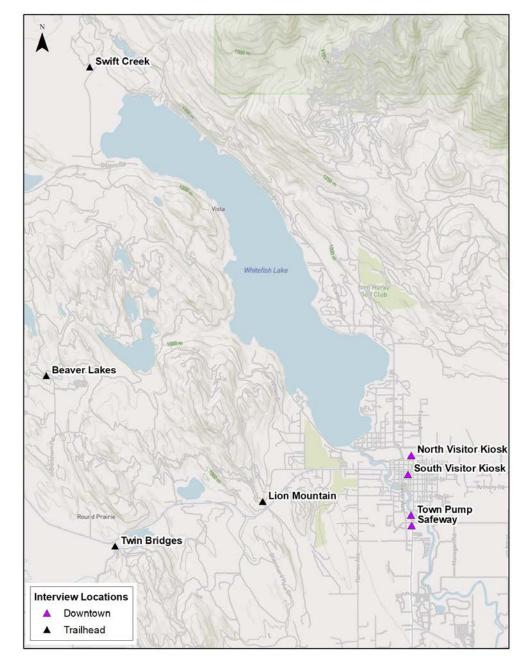


Figure 1. Example trail counter installation along the Whitefish Trail.

Using average daily trail use estimates over a six-month period, we developed an interview schedule to reflect the relative intensity of use. For example, if 50 percent of trail use is at the Lion Mountain trailhead, we developed the interview schedule such that 50 percent of the time field staff spend interviewing people occurs at Lion Mountain.

We sampled at four locations in town (Map 1): two information kiosks in downtown Whitefish and two gas stations close to town. We sampled these sites because they are frequented by visitors and locals.

Field staff conducted interviews from May 1, 2017 through October 31, 2017. Sampling occurred between 8 am and 8 pm. Interviews were conducted using the QuickTap app on iPads.



Map 1. Locations for downtown and trailhead interviews.

Estimating How Many People Use the Whitefish Trail

Using data from the infrared counters, we calculated the raw total number of trail uses from November 1, 2016 through October 31, 2017. To verify the infrared counters' accuracy, we conducted hour-long manual counts. By comparing these manual counts with counts reported by the infrared counters, we adjusted the infrared counter totals to account for dogs that were captured accidentally by the counters. "Dog counts" accounted for approximately four percent of total counted uses.

In-Person Surveys

We conducted in-person surveys at the four trailheads and four in-town locations from May 1 through October 31, 2017. Table 1 summarizes the number of interviews and the breakdown between locals and visitors at each site.

Table 1. Completed interviews by interview location and locals versus visitors

	Interviews with locals	Interviews with visitors	Total interviews	Share of interviews with locals
All trailhead interviews				
Lion Mountain	342	198	540	63%
Beaver Lakes	51	55	106	48%
Swift Creek	49	51	100	49%
Spencer Mountain	33	24	57	58%
All downtown interviews				
North Visitor Kiosk	116	106	222	52%
South Visitor Kiosk	155	125	280	55%
Safeway Gas Station	258	94	352	73%
Town Pump Gas Station	74	63	137	54%
Total interviews	1,078	716	1,794	60%

The survey questions differed depending on whether the interview was at the trailhead or in town, and whether the respondent was a visitor or local resident. Local residents are defined as people who live in Flathead County.

The locals' survey asked respondents how long they had lived in Whitefish, their reasons for living in Whitefish, whether the Whitefish Trail had affected how much they exercise, and how much they spend locally on outdoor gear. The visitors' survey asked respondents their primary reason for visiting Whitefish, how much they spent on different types of goods and services, and how they had heard about Whitefish.

The trailhead survey had several questions asking users how often they use the trail, why they use the trail, what they like about it, and what could be improved upon. Interviewers also recorded respondents' mode (e.g., bicycle, equestrian, foot). The in-town survey asked whether they had heard of the Whitefish Trail and, if they had, whether they planned to use it during their visit.

All surveys asked respondents where they recreate in the greater Whitefish area and what other activities they do in the area such as Farmer's Markets, dining, or shopping.

Share of Trail Use by Visitors

To estimate the economic impact of the Whitefish Trail, we need to know how many visitors come to Whitefish to use the trail.

From the infrared counter data, we have monthly total uses. From the trailhead surveys, we knew the share of trail uses made by visitors from May through October (Figure 2). To determine how many trail uses are from visitors year-round, we extrapolated a linear trend based on the observed data between May and October. We estimate that locals made up 85 percent of uses in April and November and 90 percent of uses in December through March.

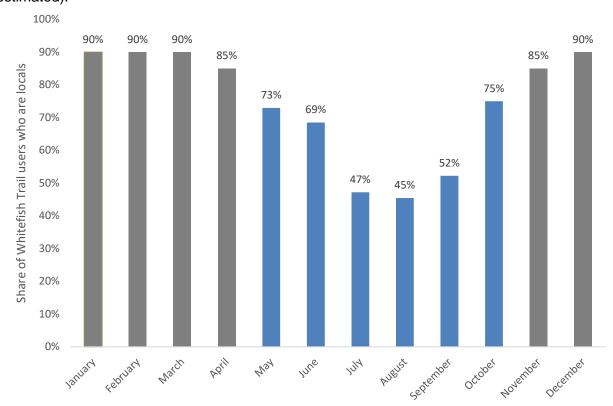


Figure 2. Share of trail uses on the Whitefish Trail by non-locals (blue is actual, grey is estimated).

We estimated that of the 72,966 total annual uses at the four sampled Whitefish Trail trailheads, 22,188 were by visitors. Detailed estimates of trail use by location are in a later section.

Estimating Trail Uses Beyond the Whitefish Trail

With infrared counters at the four most frequently used trailheads, we can estimate the majority but not all trail use. To estimate total uses in other areas, we used data from Strava, a fitness tracking app.

Strava provided counts of how many Strava uses occurred on a particular trail segment on a given date. Not all trail users also track their activities with Strava, but by comparing the average number of Strava uses near an infrared counter to the average number of uses the infrared counter records, we estimated the proportion of trail uses made up by Strava uses. We applied this proportion to Whitefish Mountain Resort and Haskill Basin, where we did not have infrared counters installed, but do know how many Strava uses occurred.

Table 2 summarizes the calculations used to extrapolate from observed infrared counter and Strava data at the four trailheads to estimate uses on Whitefish Mountain Resort and Haskill Basin where we had only Strava data available. These calculations are for an example of 400 uses counted.

Table 2. Example calculation of multipliers to apply Strava data to estimate trail uses.

		Proportional Usage by Category from Surveys	Calculated # Activities	Strava Activity Count	Computed Multiplier
Bike					
	Local	20%	80	10	8.0
Nor	n-local	25%	100	5	20.0
Pedestrian					
	Local	40%	160	3	53.3
Nor	n-local	15%	60	7	8.6
Totals		100%	400	25	

Using the example in Table 2 to estimate the number of uses by locals based only on Strava data, we multiply the number of uses by locals on bikes using Strava by a factor of 8 to estimate total uses.

Estimating Economic Impact

We estimated the economic impact of spending by visitors using the Whitefish Trail using the IMPLAN modeling computer program along with 2016 industrial sector data for Flathead County.

Economic impact modeling allows us to better understand what happens to the dollars spent by visitors in a local area like Whitefish, Montana. Using the estimates of local trail use and visitor expenditures, we estimated economic impacts in terms of jobs created, value added, and total industrial output using the principle of the multiplier effect. The multiplier effect accounts for the multiple rounds of spending that result from the original purchase. For example, when a visiting trail user purchases gasoline from a local retailer, the purchase has a direct effect on the local economy. Then when the retailer purchases gas from its supplier, the original purchase by the trail user indirectly influences the local economy through the wholesale, distribution, and refining supply chain. In addition, the retailer and the supply chain pay their employees' salaries. When the employees spend those paychecks, it generates additional (induced) activity in the local economy. All these rounds of spending resulting from the original purchase by the visitor can be accounted for in economic impact modeling using the IMPLAN computer software and sector-specific industrial data for Flathead County.

We separately measured local spending on outdoor equipment. This spending is not included in the modeling of new jobs and income in the community because it is not necessarily new money coming into the community. Results from the survey, however, and conversations with business owners suggest that the trail has substantially increased locals' spending on outdoor gear, particularly mountain bikes. We also quantified spending by Whitefish Legacy Partners to build, maintain, and support the trail.

IV. TRAIL USE

We counted 72,966 trail uses on the four trailheads we sampled from November 2016 through October 2017, 30 percent of which (22,188) were from visitors. This estimate does not include several other popular trailheads like Skyles Connection, and likely accounts for roughly 80 percent of overall trail use. 2

The University of Montana's Institute for Travel and Recreation Research (ITRR) estimates that nearly 680,000 non-resident visitors spent at least one night in Whitefish in 2017.³ Thus, visitors who use the Whitefish Trail comprise roughly three percent of total overnight visitors in the area.

Figure 3 shows the monthly trail uses, with local use in blue and visitor use in red. While use drops by about half in the winter, the four trailheads still average about 100 uses per day during the lowest-use months.

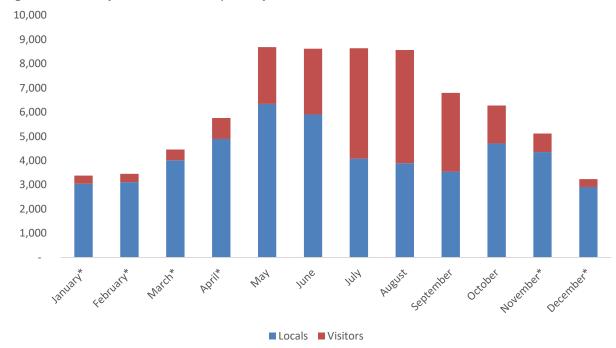


Figure 3. Monthly trail use at four primary trailheads.

For the months of November through April, the share of trail uses that are local is estimated based on trends between May and October.

Lion Mountain is the most popular trailhead, with 33 percent more uses than the other three trailheads combined. In February and March, Lion Mountain has more than twice the use of the other trailheads. In

¹ We distinguish between trail "users" and "uses." "Users" refers to individuals who are on the trail at least once during the year. "Uses" refers to each occasion people are on the trail. The analyses in this report focus largely on uses

² Observations by WLP Volunteer Bike Patrol members indicates that the Skyles Connection typically has at least the same number of users as Beaver Lakes Trailhead, which accounts for 11% of observed uses. Five other trailheads comprise the remaining uncounted trail use.

³http://www.tourismresearchmt.org/index.php?option=com_nonresidentreports&view=nonresidentreports&Itemid= 115

August and September, Lion Mountain has about the same level of trail use as the other three trailheads combined (Figure 4).

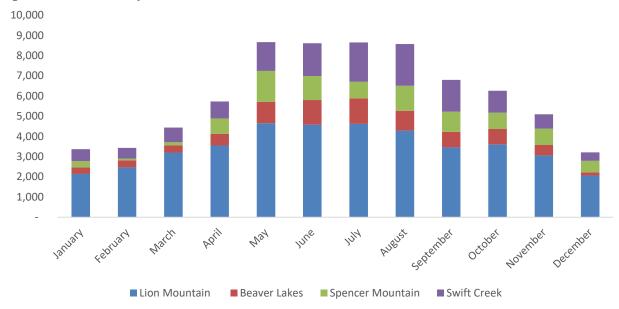


Figure 4. Trail uses by trailhead and month.

Whitefish Mountain Resort is also a very popular destination for visitors to Whitefish. Using data from Strava, we estimated that there were approximately 47,000 uses between May and September 2017, about 15 percent greater than the uses estimated on the Whitefish Trail during the same period. Seventy-two percent of these uses were made by visitors, compared to 42 percent of uses on the Whitefish Trail during the same time period.

Trail use averages 70 percent pedestrian from May through October (Figure 5). Although we do not have data on mode of use for November through April, it is likely the share of pedestrians is at least 70 percent in the winter.

100% 90% 80% 70% 64% 70% 74% 75% 60% 50% 40% 30% 20% 10% 0% Spring (May & June) Summer (July & August) Fall (Sept & Oct) May-Oct ■ Bicycle ■ Equestrian ■ Foot

Figure 5. Mode of trail use by season.

Mode varies substantially across trailheads, with Lion Mountain and Swift Creek the main destinations for pedestrian users (Figure 6). Spencer Mountain is two-thirds mountain bikers, and Beaver Lakes is roughly half bicycles and half pedestrians. The freeride trails at Spencer Mountain⁴ and the 20 miles of single-track with stacked loops at Beaver Lakes make these areas popular destinations for mountain bikers. The Whitefish Bike Retreat, located in Beaver Lakes, is also contributing to increased mountain biking and is a prime example of a recently established and thriving business that is bringing economic value to the community as a direct result of the Whitefish Trail.

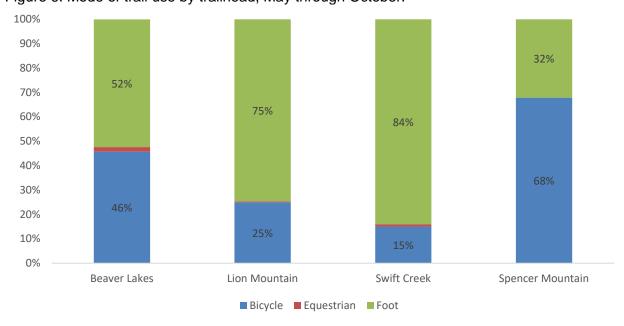


Figure 6. Mode of trail use by trailhead, May through October.

⁴ The freeride trails at Spencer Mountain are developed and managed by Flathead Area Mountain Bikers in partnership with the City of Whitefish.

Groups using the trail average around two people, with visitors slightly more (2.5 users per group) and locals slightly less (1.9 users per group) (Table 3). Visitors and locals have similar numbers of kids in their group, and locals tend to have more dogs in their group.

Table 3. Characteristics of groups using the trail.

	All trailhead respondents	Visitors	Locals
Average group size	2.2	2.5	1.9
Average number of adults	1.8	2.1	1.7
Average number of kids	0.3	0.4	0.3
Average number of dogs	0.5	0.2	0.6

Ninety-five percent of people interviewed drove to the trailhead; locals were slightly more likely than visitors to have driven (94 percent of visitors and 96 percent of locals). At Lion Mountain, the trailhead easiest to access by bike or foot, 94 percent of respondents drove a vehicle to the trailhead.

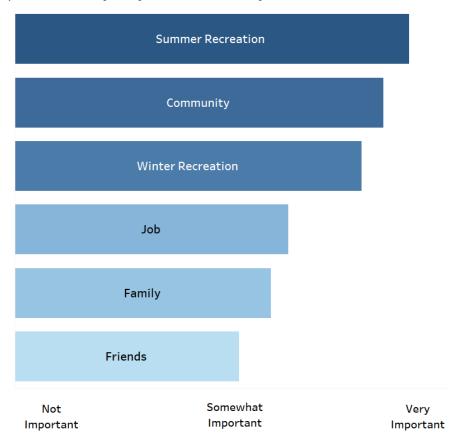
V. ROLE OF OUTDOOR RECREATION

Outdoor recreation is essential to the community character, quality of life, and economy of Whitefish. The following section summarizes results from interviews with locals and visitors.

Locals

Outdoor recreation is integral to life in Whitefish. We asked locals to rate the importance of different factors in their reason to move to or stay in Whitefish. Summer recreation is rated highest, followed by community character and winter recreation. Job, family, and friends rate significantly lower (see Figure 7).

Figure 7. Responses to "Why did you move to or stay in Whitefish?"



The Whitefish Trail is an essential part of local outdoor recreation. When local respondents in town were asked whether they had heard of the Whitefish Trail, 89 percent said yes. Locals who had heard of the trail or were interviewed at the trailhead used the trail an average of 1.8 times per week. Fifty-one percent of locals stated that they recreate more since the Whitefish Trail was built (49 percent stated they recreate the same and none said they recreate less).

The Whitefish Trail plays a big role in residents' health and lifestyle. When asked why they use the Whitefish Trail, "health" was identified by 43 percent of respondents. Access to open lands close to town was the second-most-common reason why locals use the trail (40 percent), followed by quality of life (37 percent) (Figure 8).

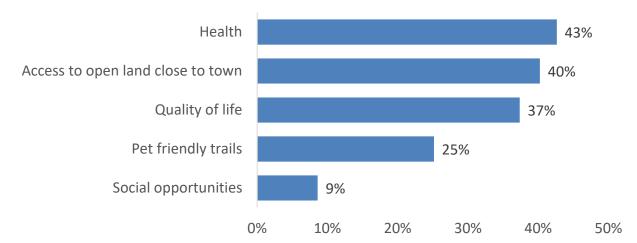


Figure 8. Share of local respondents who identified these as reasons they use the trail.

When local trail users were asked to identify their favorite aspects of the Whitefish Trail, the most common response is its proximity to town (44 percent), followed by well-maintained trails (39 percent). Open lands, dogs off leash, singletrack, and solitude are favorite aspects for roughly one-quarter of local trail users (Figure 9).

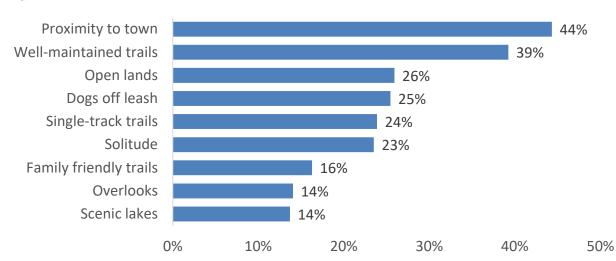


Figure 9. Share of local respondents who identified these as favorite aspects of the Whitefish Trail.

Visitors and Outdoor Recreation

Outdoor recreation is the main driver bringing visitors to Whitefish, and the Whitefish Trail plays an important role in attracting people. According to the study, 65 percent of all visitors who travel to Whitefish indicate that outdoor recreation is the primary purpose for their visit while 72 percent of first-time visitors to Whitefish indicated that outdoor recreation was their primary purpose for visiting.

Fifty-eight percent of visitors have been to Whitefish before. These repeat visitors are more likely to state that the Whitefish Trail played a very important role in their reason to visit Whitefish: the trail is very important for 21 percent of return visitors and 15 percent of first-time visitors. This result suggests many visitors might learn about the trail during their first visit and it plays a valuable part in getting them to come back.

Seventy percent of visitors interviewed in town say they have heard of the Whitefish Trail. Fifty-six percent of visitors said the trail is a very or somewhat important reason for their visit. Median visitor stay in Whitefish is three days and they spend one of those days on the Whitefish Trail.

Popular Destinations

The Whitefish Trail is one of several popular outdoor recreation destinations for locals and visitors. Figure 10 summarizes the share of locals and visitors who visited these destinations during the previous year (for locals) and during their visit (for visitors). Seventy percent of visitors stated that they planned to use the Whitefish Trail and 74 percent stated that they will visit Glacier National Park. The share of visitors on the Whitefish Trail may be somewhat high if visitors were referring to any trail in the Whitefish area.

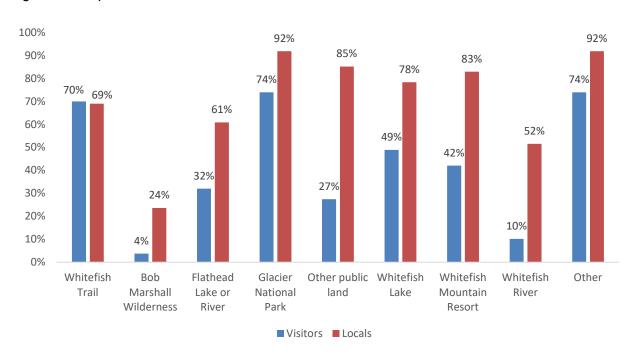


Figure 10. Popular recreation destinations for locals and visitors to Whitefish.

Popular Activities

Outdoor recreation is central to both visitors' and locals' experience in Whitefish, but many locals and visitors also participate in shopping and dining (Figure 11). Local events like the Farmers Market are enjoyed by 72 percent of locals and 30 percent of visitors. Cultural and performing arts are popular with locals (62 percent) but relatively few visitors participate (13 percent).

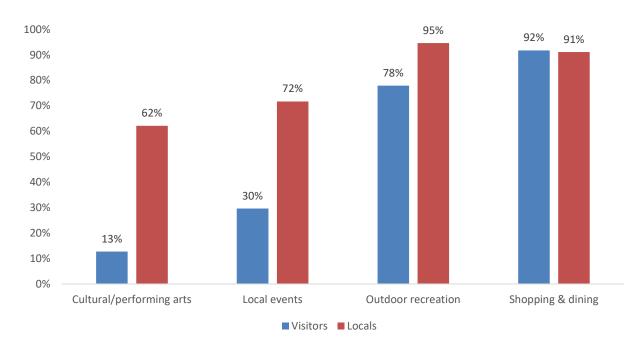


Figure 11. Share of visitors and locals participating in Whitefish activities.

VI. WHITEFISH LOCALS

More than three-quarters (77 percent) of respondents at the trailheads were from Whitefish. Kalispell and Columbia Falls were the next most common hometowns with 13 percent and 9 percent of trailhead respondents (see Figure 12).

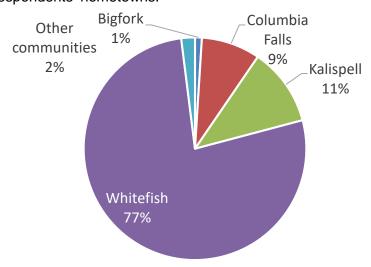


Figure 12. Local respondents' hometowns.

Locals interviewed at the trailheads are relatively long-term residents: 61 percent of locals interviewed have lived in Flathead County for longer than five years; 25 percent have lived in Flathead County longer than 20 years (Figure 13).

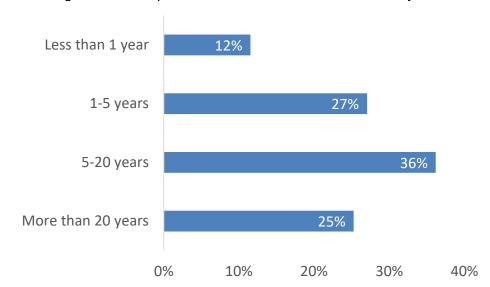


Figure 13. How long trailhead respondents have lived in Flathead County.

VII. VISITORS TO WHITEFISH

The following section describes detailed information about visitors to Whitefish using data from interviews in town and at the trailhead.

Forty-six percent of visitors to Whitefish are from Montana, the Pacific Northwest, and Alberta (see Map 2). Nearly one-third of visitors are from Montana and Alberta alone. After Montana and Alberta, California is the third-largest source of visitors, accounting for eight percent of visitors interviewed.



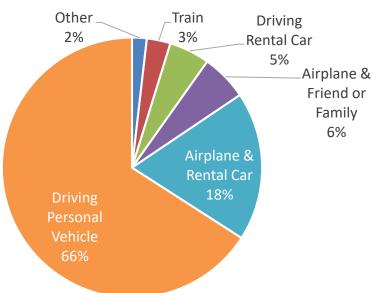
Table 4 summarizes the most common home residences for visitors to Whitefish.

Table 4. Ten most common home states and provinces for visitors to Whitefish.

	Number of visitors interviewed	Share of visitors interviewed	
State			
MT	129	19%	
AB	83	12%	
CA	55	8%	
WA	45	7%	
FL	33	5%	
TX	26	4%	
OR	23	3%	
BC	22	3%	
CO	22	3%	
MN	21	3%	

Two-thirds of visitors arrive in Whitefish by driving their own car, reflecting Whitefish as historically a drive market (Figure 14).

Figure 14. Visitors' transportation to Whitefish.



Whitefish attracts visitors largely through word of mouth: three out of four visitors learned about the area through "family and friends" and "word of mouth" (Figure 15).

Family or Friends 51% Word of Mouth 25%

Figure 15. How visitors heard about Whitefish.

Visitors to Whitefish are most interested in returning during the summer, followed by winter and fall at similar rates and then spring. In-state visitors are more likely to return than out-of-state visitors across all seasons, although this gap is the smallest for the summer (Figure 16).

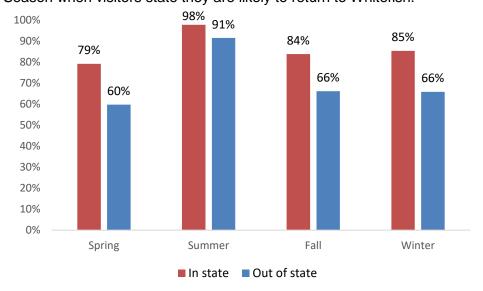
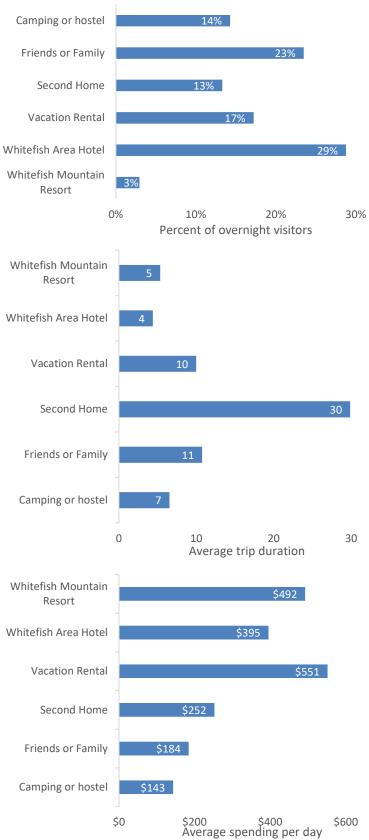


Figure 16. Season when visitors state they are likely to return to Whitefish.

Most visitors to the area stay in hotels, but these trips tend to be relatively short. Second homes and vacation rentals have the longest duration of trip, greatest spending, and therefore large per-trip spending (Figure 17).

Figure 17. Share of visitors by lodging type, trip duration, and spending per day.



VIII. ECONOMIC IMPACTS OF OUTDOOR RECREATION

Visitor Spending

The average visitor spends \$261 per day in Whitefish. The following table summarizes the share of spending by category. Table 5 also reports results from a study by the University of Montana's Institute for Travel and Recreation Research (ITRR) on visitors to Flathead County in 2016 to determine whether these findings are comparable to a similar study.

Table 5. Share of visitor spending in Whitefish, by category

Category	Share of daily spending, Intercept survey	Share of daily spending, ITRR survey*
Accommodations (incl. hotels,	intercept survey	TTKK survey
rentals, campgrounds)	29.0%	18.0%
Restaurants	19.6%	24.0%
Groceries	15.5%	11.0%
All Retail**	20.0%	20.0%
Retail: Outdoor recreation		
equipment and clothing	14.5%	Not estimated separately
Gas	6.8%	8.0%
Transportation (incl. car rental,		
vehicle repairs)	3.0%	2.6%
Licenses and entrance fees	3.0%	6.0%
Outfitter/Guides	2.2%	10.0%
Farmers Market	0.8%	0.2%

^{*} From ITRR Report, "2016 Economic Contribution of Nonresident Travel Spending in Montana Travel Regions and Counties,"

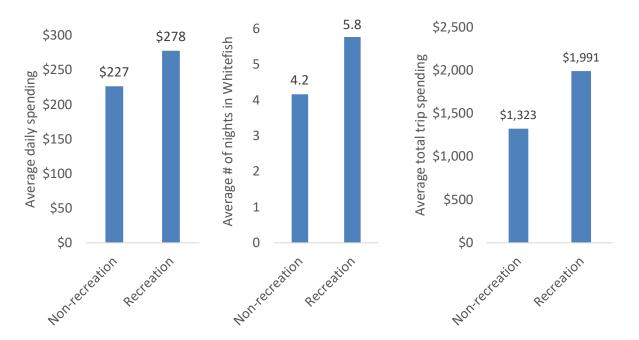
https://scholarworks.umt.edu/cgi/viewcontent.cgi?article=1361&context=itrr_pubs

With a few exceptions, we find the allocation of spending in this study is similar to ITRR's findings, with two significant exceptions: respondents to this study allocate more of their spending to accommodations and less to guides and outfitters.

We find that visitors whose primary purpose is outdoor recreation have statistically significantly greater spending than those who are not in Whitefish for outdoor recreation (Figure 18). They also tend to stay in the area longer: 5.8 days per trip compared to 4.2 days per trip. Together, longer stays and greater spending per day result in roughly \$670 more spent per trip by people visiting Whitefish for outdoor recreation.

^{**}This study asked respondents specifically about spending on outdoor recreation equipment and clothing. The remaining retail expenditures are estimated from the ITRR findings for Flathead County.

Figure 18. Average daily spending, trip duration, and total trip spending for visitors whose primary purpose is recreation versus non-recreation.



Economic Impact of the Whitefish Trail and Outdoor Recreation

Consumer spending translates into additional jobs and income for the Whitefish economy. Based on spending by the 59 percent of visitors using the Whitefish Trail who identify the trail as a somewhat or very important reason for their visit, the Whitefish Trail directly supports 50 new jobs and \$1.3 million in income each year. The businesses frequented by these visitors—such as wholesalers, maintenance, and other service providers—support an additional eight jobs and \$267,000 in additional income. Employees of the businesses supported by Whitefish Trail users, because they have jobs in town, are then able to support an additional 10 jobs through their spending in the community (Table 6).

Table 6. Economic impact of visitors who visited Whitefish for the Whitefish Trail.

Economic impact measure	Employment	Labor income
Direct impacts (jobs and income at businesses	50	\$1,278,000
visitors use)		
Indirect (spending at other businesses, like suppliers, by the businesses that visitors use)	8	\$267,000
Induced (spending by those employed by the businesses visitors use)	10	\$373,000
Total	68	\$1,918,000

This employment and income would not have been present in the community without the Whitefish Trail and the visitors it attracts. In a community with 3,813 working-age residents, the Whitefish Trail is supporting jobs for two out of every 100 working-age residents.⁵ Businesses such as the Bike Retreat,

⁵ U.S. Department of Commerce. 2017. Census Bureau, American Community Survey Office, Washington, D.C., using Headwaters Economics' Populations at Risk, https://headwaterseconomics.org/tools/populations-at-risk/

built specifically to host bicycle tourists and Whitefish Trail users, add jobs and income by attracting visitors who might not have come to the area otherwise.

This estimate is based on only the number of visitors observed at the four main Whitefish Trail trailheads. We know that this underestimates total trail uses by roughly 20 percent and therefore likely underestimates total economic impact by a similar proportion.

Outdoor recreation beyond the Whitefish Trail supports even more jobs and income in the community. We assume that 54 percent of ITRR's estimated 677,892 overnight visitors to Whitefish visited with the primary purpose of outdoor recreation. This figure reflects the 54 percent of visitors interviewed downtown whose primary purpose for visiting is recreation. Using these figures, we estimate that outdoor recreation generates \$101.2 million in spending annually and contributes approximately 1,460 jobs and \$41.1 million in income in the community (Table 7). This includes visitors to Whitefish drawn for the Whitefish Trail as well as other destinations like Whitefish Mountain Resort and Glacier National Park.

Table 7. Economic impact of visitors who visited Whitefish for outdoor recreation.

Economic impact measure	Employment	Labor income
Direct impacts (jobs and income at businesses	1,068	\$27,400,000
visitors use)		
Indirect (spending at other businesses, like	170	\$5,731,000
suppliers, by the businesses that visitors use)		
Induced (spending by those employed by the	222	\$7,999,000
businesses visitors use)		
Total	1,460	\$41,130,000

Local Spending

We asked locals how much they spent purchasing and renting outdoor gear in Whitefish stores in the previous 12 months. On average, local households spent \$1,383 in local stores during the previous 12 months. Local households that are also trail users spent more than twice the amount that households that do not use the trail: \$1,403 for trail users versus \$660 for non-trail users (see Figure 19).

\$1,400 \$1,200 \$1,000 \$800 \$600 \$400 \$200 \$0

Figure 19. Average spending by locals on outdoor gear purchases and rentals in Whitefish stores, for trail users and non-trail users.

This household spending on outdoor gear translates into approximately \$2.74 million in spending at local gear stores annually by Whitefish Trail users. Not all of this can be attributed to Whitefish Trail alone—some of this spending is for gear to be used at other destinations in the area like Whitefish Mountain Resort—but anecdotes from local shops suggest that they have seen increased sales particularly for equipment related to mountain biking. Because this spending cannot be attributed to the Whitefish Trail alone, it is not included in the estimates of jobs and income created by the Whitefish Trail.

■ Trail users
■ NOT trail users

We can conclude that the Whitefish Trail contributes \$6.4 million in consumer spending in the area each year: \$2.74 million from local residents and \$3.62 million by visitors.

Whitefish Trail Spending

Whitefish Legacy Partners (WLP) has leveraged state and federal grant monies with community fundraising to develop and maintain the Whitefish Trail. Since 2009, the Whitefish Trail has spent \$1.89 million on planning, and design, new construction, materials, labor, and ongoing maintenance. (Table 8). This is an average of \$210,000 spent within the community each year.

Table 8. Whitefish Trail Expenses, 2009-2017.

Table 6: William Trail Expended, 2000 2017.				
Trail-related expenses	Share of budget	Expenditures		
WT Planning & Design	8%	\$148,000		
Construction - Trail	36%	\$684,500		
Construction - Trailheads & amenities	22%	\$407,000		
WT Annual Operations & Maintenance	20%	\$391,500		
WLP Recreation & Education Programs	14%	\$259,000		
Total	100%	\$1,890,000		

These Whitefish Trail infrastructure expenses are not included in the economic impact modeling because they represent the community's upfront investment and only an average of \$35,000 recur annually for operations and ongoing maintenance. The Whitefish Trail expenditures, however, amount to a substantial economic contribution to our local economy, the Schools and Universities of Montana, and the area's recreation assets.

In addition, the conservation and recreation strategies outlined in the 2004 Whitefish Neighborhood Plan have contributed approximately \$19 million to the community and State. A community benefit of \$7 million has been generated through land exchanges, local philanthropy, and endowment contributions, while \$11.9 million has been contributed directly to Montana Schools and Universities through recreation licenses, outright easement purchases, and land banking through the Montana Department of Natural Resources and Conservation. Additionally, these investments provide an annual return to our Montana Schools and Universities totaling over \$450,000, every year, in perpetuity.

IX. CONCLUSIONS

Outdoor recreation is essential to the economy and quality of life in Whitefish. In just more than ten years since the first section of the Whitefish Trail was constructed, the trail has become an essential component of summer and winter recreation offerings in the area.

Visitors engaged in outdoor recreation stay longer and spend more per day, on average, than those who are not participating in outdoor recreation. For local residents, summer and winter recreation are what brings them to Whitefish and keeps them there. This helps businesses recruit and retain employees and sustains school enrollment. Locals most appreciate the trail's proximity to town, and this proximity has led to more than half of locals interviewed exercising more because of the trail.

The Whitefish Trail is one destination among many in Flathead County, including Whitefish Mountain Resort, Glacier National Park, and substantial public lands. The trail's success in becoming an attraction for visitors in a short time is likely due, in part, because visitors are drawn first to these other well-known destinations. The Whitefish Trail appears to play a part in bringing back visitors for another trip; playing an important role in 21 percent of repeat visitors' decision to return to town. While the other destinations are substantial economic engines driving much of the local economy, the Whitefish Trail also contributes meaningfully while remaining a valued asset for locals.

Presently, the Whitefish Trail contributes to \$6.4 million in annual spending from local residents and visitors. A campaign is underway to complete the 55-mile loop around Whitefish Lake. As the trail's size and reputation continue to spread, its impact will continue to grow. The Whitefish Trail's economic contribution builds on the broader economic foundation created by the collective destinations in the area that support approximately \$101 million in spending annually.

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