

Research Report

Giants Ridge 2023 Trail Visitor Survey

PREPARED FOR Iron Range Tourism Bureau

BY Parks & Trails Council of Minnesota

April 2024





About Parks & Trails Council

Parks & Trails Council of Minnesota is a 501(c)(3) organization dedicated to acquiring, protecting, and enhancing critical land for the public's use and benefit. Founded in 1954, Parks & Trails Council acquires threatened and critical parcels of land, advocates at the Minnesota Capitol, supports volunteers, and produces original research on issues and trends facing Minnesota's parks and trails.

More information about Parks & Trails Council is available at www.parksandtrails.org.

About Iron Range Tourism Bureau

Iron Range Tourism Bureau is a nonprofit destination-marketing organization serving the communities of Aurora, Biwabik, Buhl, Chisholm, Eveleth, Gilbert, Hibbing, Hoyt Lakes, Mountain Iron, and Virginia. Iron Range Tourism Bureau is governed by a 15-member board of directors serving three-year terms.

More information about Iron Range Tourism Bureau is available at www.ironrange.org

Contents

Acknowledgments	iv
Executive Summary	v
Introduction	1
Visitor Demographics	4
Trail Experience	7
Rider Characteristics	14
Trail Tourism	18
Methodology	29
Appendix A: Survey Script and Questionnaire	33
Appendix B: Responses to open-ended questions	36

Acknowledgments

This report is a collaborative effort and wouldn't have been possible without the input, guidance, support, patience, and hard work of many people. Thank you to the staff and volunteers who collected surveys and to Linda Picone for her excellent editing support.

Project Team:

- Beth Pierce, Iron Range Tourism Bureau
- Steve Rahkola, Giants Ridge
- Bridgit Maruska, City of Chisholm
- Jordan Metsa, Minnesota Discovery Center
- Andrew Oftedal, Parks & Trails Council
- Brett Feldman, Parks & Trails Council

About the Author

Andrew Oftedal is the Research and Policy Manager at Parks & Trails Council, where he leads research on the issues, trends, and attitudes shaping Minnesota's parks and trails. Andrew earned his bachelor's degree at Iowa State University and his Master of Science in Natural Resources Science and Management from the University of Minnesota, Twin Cities.

Parks & Trails Council's research program is made possible by generous support from its members.

Photo credits: All photos courtesy Iron Range Tourism Bureau and Giants Ridge.

Published April 2024

Executive Summary

Giants Ridge 2023 Trail Survey



About: Giants Ridge, located in Biwabik, is one of the Midwest's premier lift-served mountain biking parks. The recreation area offers 10 gravity trails and 10 miles of cross-country trails that wind through Superior National Forest. Giants Ridge also offers two golf courses, hiking trails, a climbing wall, disc golf, on-site restaurants and lodging, conference space, and winter recreation. The trail survey focused on visitors using the Giants Ridge trails when the chairlift was operating.



Visitor Demographics

- + Men 74%
- + Women 26%
- + Average age ≈ 35
- + Income over \$100k 58%
- + Gen Z 31%
- + Millennials 33%
- + Gen X 27%
- + Baby Boomers 9%



Love the variety of riding on the range!

~ Visitor from Saint Paul, MN



Trail Experience

Primary trail activity



90%

Mountain biking



0 / (

70%

Rated experience "very good"

What would improve Giants Ridge?

Pump track / skills course



More trail miles

Bike wash station



4:45

Avg. time spent on trail



33%

Visiting with children



Rider Characteristics

Preferred trail difficulty rating

- O Beginner 12%
- Intermediate 20%
- ☐ Intermediate Plus 40%
- Black Diamond 24%
- Oouble Black Diamond 4%

Favorite type of trail



,6%

Downhill or jump lines





19%

All-mountain or enduro



8%

Cross-country trails





85%

of Giants Ridge visitors were tourists



of tourists at Giants Ridge visited another city on the Iron Range



26%

of tourists were visiting Giants Ridge for the first time



93%

of tourists said Giants Ridge was a significant reason they visited the Iron Range



68%

of tourists ate out on the Iron Range during their trip



55%

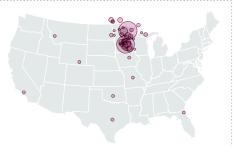
of tourists participated in another outdoor activity on the Iron Range during their trip

Where visitors were from









Twin Cities 39%

Duluth-Superior 15%

(°) Iron Range **10%**

Grand Rapids area 4%

Lodging preferences



Hotel / resort 39%



Camping 35%



Private home / cabin 22%



Airbnb / VRBO 10%

3.0 Avg. # of nights

Visitor spending



\$446

Average household spending on the Iron Range during trip

Top spending categories:



Lodging

Restaurants / bars

Transportation / gas

What does the Iron Range need more of to increase tourism?



60%

of tourists said more bars, restaurants, or coffee shops



51%

or tourists said more lodging options

Methodology: In 2023, Iron Range Tourism Bureau, in collaboration with Giants Ridge, contracted with Parks & Trails Council to conduct a visitor survey of trail visitors at Giants Ridge. Trained surveyors collected 163 surveys at the main chalet area between August 9, 2023 and October 14, 2023. Surveys were collected during hours when the chairlift was operating. Results are representative of visitors using Giants Ridge's lift-served trails in 2023, with a margin of error of +/-7.7 percentage points.

For full results and methodology, see the full report.

Introduction

Giants Ridge, located in Biwabik in northwestern Minnesota, is a year-round family vacation destination. The recreation area features two 18-hole championship golf courses; downhill and cross-country mountain bike trails; hiking trails; alpine and Nordic ski trails; a climbing wall; disc golf; on-site lodging and restaurants; and wedding, banquet, and conference venues. Giants Ridge is owned by the Department of Iron Range Resources & Rehabilitation, a state economic development agency dedicated to promoting and investing in northeastern Minnesota's businesses, communities, and workforce development, and is operated by private concessionaires.

This report focuses on visitors using Giants Ridge lift-served mountain bike park, one of the largest in the Midwest. The bike park offers 10 purpose-built gravity trails descending forested slopes overlooking Sabin and Wynne lakes. The trails range in difficulty from beginner to Double Black Diamond and offer something for everyone, including steep, technical descents, flowy downhills, and thrilling jump lines. The Sarajevo Express chairlift serves the gravity trails and is open every weekend (Friday -Sunday), plus select holidays and Thursdays during the summer and fall. In addition to

the lift-served gravity trails, Giants Ridge has over 10 miles of cross-country mountain biking trails that wind through the rolling hills and boreal woods of the Superior National Forest. The Giants Ridge trail system also includes 6.5 miles of hikingonly trails, and the 165-mile paved Mesabi Trail runs through the recreation area (Figure 1).

In 2023, Iron Range Tourism Bureau contracted with Parks & Trails Council of Minnesota to survey visitors using the Giants Ridge trail system. Iron Range Tourism Bureau is a destination-marketing organization supporting, serving, and promoting the communities of Aurora, Biwabik, Buhl, Chisholm, Eveleth, Gilbert, Hibbing, Hoyt Lakes, Mountain Iron, and Virginia. The survey was conducted to understand Giant Ridge's trail visitors particularly tourists — and inform planning and marketing of the recreation area.

The visitor survey was collected systematically by intercepting visitors at Giant Ridge's main chalet when the Sarajevo Express chairlift was operating. Surveying occurred between August 9, 2023, and October 14, 2023. Trained Giants Ridge staff administered the survey. Respondents

had the choice of completing the survey on paper or electronically on a tablet.

The sampling plan was designed for results to be representative of visitors using the Giants Ridge trails when the chairlift is operating. The survey location was chosen to target visitors riding the gravity trails. Visitors using the cross-country and hiking trails were also eligible to complete the survey. However, due to the sampling plan and survey site, such visitors are likely underrepresented in our sample. Results for the full sample (n=163) have a margin of error of +/- 7.7 percentage points at the 95% confidence level.

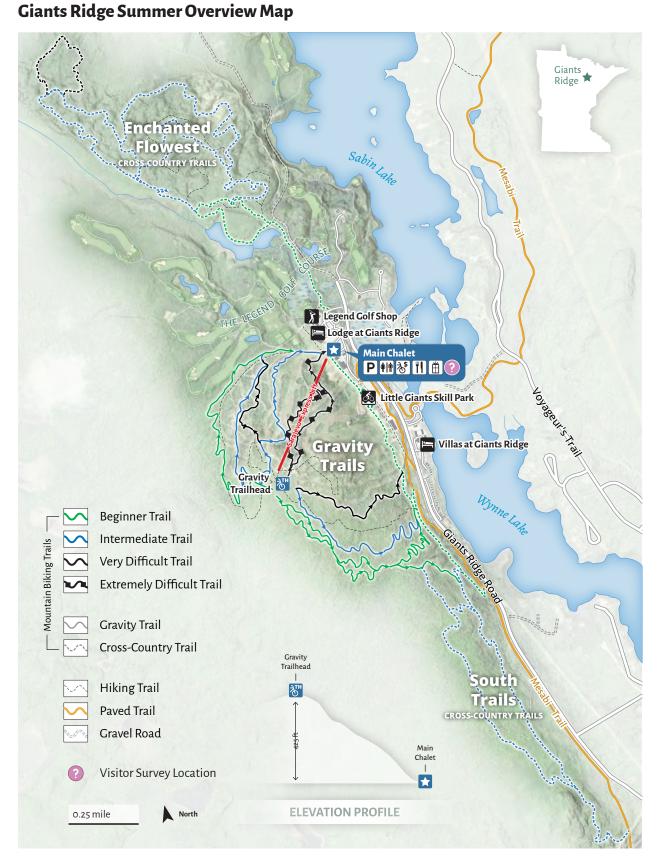
Giants Ridge is a year-round destination and hosts many visitors who don't use the trails. This report focuses exclusively on visitors using the trail system during the non-winter months.

This report uses a much narrower definition of "Iron Range" than is typical. "Iron Range" is broadly used to describe a vast geographical area, including the Cuyuna, Mesabi, Vermillion, and Gunflint ironore ranges (stretching from Cuyuna to Hibbing to Ely and the Canadian border). In contrast, whenever this report refers to the "Iron Range," it is referring specifically to the service area of Iron Range Tourism Bureau (Aurora, Biwabik, Buhl, Chisholm,

Eveleth, Gilbert, Hibbing, Hoyt Lakes, Mountain Iron, and Virginia).

For more details on this report's methods, see our methodology.

Figure 1



Visitor Demographics

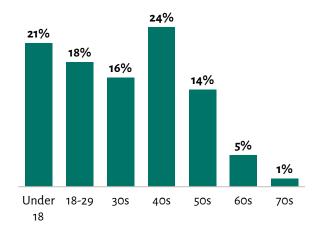
Visitors using the trails at Giants Ridge span a wide range of ages

Adult visitors ranged in age from 18 to 73 years old. The average adult trail visitor at Giants Ridge was between 39 and 44 years old (median = 40.5; mean = 40.8; 95% C.I. [38.7, 43.0]). Among all adult visitors, the majority (51%) were in their 30s or 40s.

The average age of all trail visitors, however, was significantly younger. The survey did not directly ask for the ages of children visitors, but it did ask how many children were in each visitor group. Overall, 21% of all visitors were children under 18 (Figure 2). If it's assumed the average age of children visiting was 12, the average age of all visitors was approximately 35 years old.

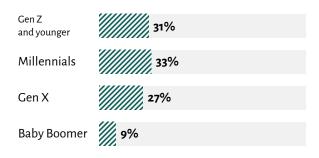
Another method of understanding visitors is to look at their place in life, whether they are young adults, middle-aged, or retired. Looking at generations is helpful because it provides a way to understand how different formative experiences (e.g., world events, technological advances) interact with visitors' life stages to form recreational preferences. Giants Ridge's trail visitors were split roughly evenly between Generation Z (age 26 and younger; 31% of

Figure 2 **Visitors by age**% of all visitors



Visitors by generation

% of all visitors



Q29: What year were you born? (n = 136)

Notes: Ages were only asked of adult visitors. Percentage under 18 is calculated based upon group composition (Q7) and includes non-respondents and groups without adults. Generations are defined as Gen Z and younger (born 1997 or after; Age 26 and younger), Millennials (born 1981-96; Age 27-42), Gen X (born 1965-80; Age 43-58), and Baby Boomer (born 1946-64; Age 59-77). Percentages don't add up to 100% due to rounding.

¹ The survey asked visitors how many children were in their group, and each household in a group was eligible to complete a survey. Consequently, visitors in large groups are slightly overrepresented in the data on visitor age.
2 The Loppet Foundation, a large organization that serves youth in Minneapolis, offers mountain biking camps for kids starting at age 7. Assuming a normal distribution of ages between 7 and 17, children on the trail have an average age of 12.

visitors), Millennials (aged 27-42; 33%), and Generation X (aged 43-58; 27%). Baby Boomers (aged 59-77) were the smallest generational cohort, accounting for only 9% of visitors.

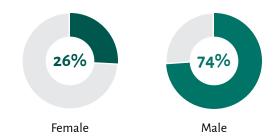
Males account for a significant majority of Giants Ridge's trail visitors

Nearly three-quarters (74%) of adult visitors identified as male, compared to only 26% of visitors who identified as female (Figure 3). Studies conducted on other trail systems support the finding that mountain biking is predominantly a male activity.

Figure 3

Visitors by gender identity

% of adult visitors



Q28. What is your gender identity? (n = 160)

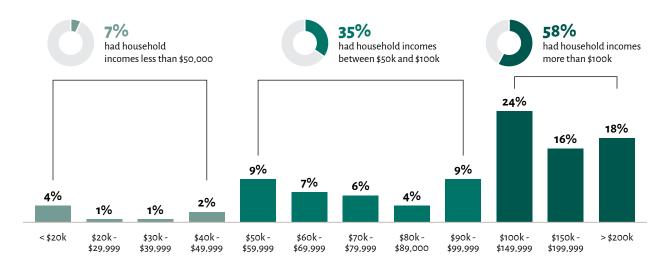


Loading bike onto the chairlift at Giants Ridge.

Figure 4

Visitors by annual household income

% of adult visitors



Q30. Please indicate your total household income before taxes last year (n = 138)

Note: Percentages don't add up to 100% due to rounding.

The majority of visitors are high-income

Visitors using the trails at Giants Ridge had disproportionately high incomes compared to the statewide and local average; over half (58%) had annual household incomes of \$100,000 or higher (Figure 4). For comparison, only 41% of Minnesota households and 29% of St. Louis County households make over \$100,000 annually.³ Visitors also were less likely to have belowaverage incomes. Only 7% of Giants Ridge trail visitors had household incomes below \$50,000 annually, compared to 29% of Minnesota households and 41% of St. Louis County households.

³ U.S. Census Bureau, 2022 estimate (American Community Survey 1-year estimates)



Trail visitors use Giants Ridge for many different outdoor activities

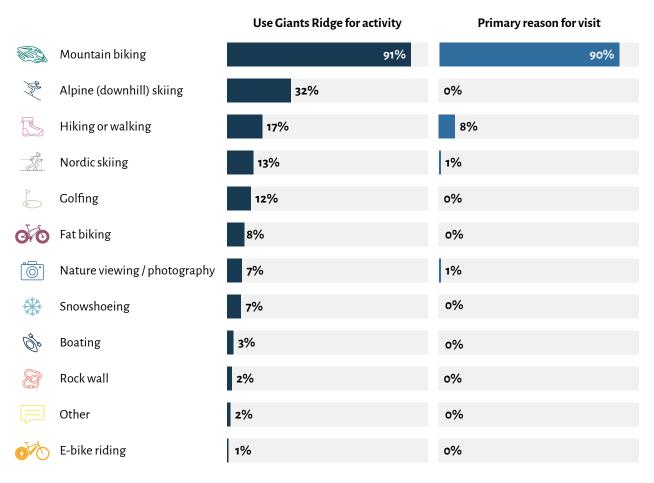
Giants Ridge offers a wide range of activities (Figure 5). Nearly everyone surveyed (91%) used Giants Ridge for mountain biking, but alpine skiing (32%), hiking (17%), Nordic skiing (13%), and

golfing (12%) are all relatively common reasons trail visitors visit Giants Ridge. Small minorities of trail visitors have visited for a wide range of other activities: fat biking (8%), nature viewing or photography (7%), snowshoeing (7%), boating (3%), rock wall (2%), and e-bike riding (1%).

Figure 5

Participation in trail activities during visit

% of all visitors



Q1. What activities do you use Giants Ridge for? Select all that apply [Answers presented in randomized order] (n = 161)

Q2. Which activity was your primary reason for visiting Giants Ridge today? (Includes non-respondents and groups without adults; n = 160)

Mountain biking and hiking were the primary reasons nearly all trail visitors came to Giants Ridge: 91% were visiting primarily to mountain bike, and 8% were visiting primarily to hike.

There's a gender split across trail activities

Mountain biking was the primary trail activity for both male and female visitors; 96% of men and 76% of women said mountain biking was their primary reason for visiting Giants Ridge (Figure 6). But women were significantly more likely than men to visit for other activities. Nearly three-quarters (73%) of hikers were women. Only 19% of mountain bikers were women.

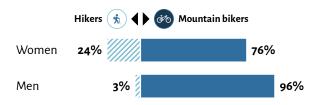
Nearly all trail visitors visit Giants Ridge in groups of two or more people

Most trail visitors (88%) were recreating with other people (Figure 7). However, most groups were relatively small: 33% of visitors were with just one other person, and 36% were in groups of three to four people. Trail visitors were equally likely to visit alone (12% of trail visitors) as in a large group (seven or more people; 12%).

The average visitor was in a group of 3.7 people (median = 3; mean = 3.7, 95% C.I. [3.2, 4.1]). Approximately a third of visitors (33%) were recreating with children, and such groups tended to be larger than groups without children. The average group Figure 6

Gender split by trail activity

% of adult visitors



Q2. Which activity was your primary reason for visiting Giants Ridge

Q28. What is your gender identity? Women (n=33), Men (n=107)

Notes: Percentages don't add to 100% because other activities not shown

v < 0.001

with children had 5.5 people compared to 2.7 people in the average group without children (*p* < 0.001).

Most trail visits last four or more hours

On average, visitors spent approximately 4.8 hours on the trail per visit (median = 5; mean = 4.8, 95% C.I. [4.4, 5.1]). Most visitors (72%) spent four or more hours on the trails (Figure 8). Giants Ridge trail visitors spent twice as long on the trail as visitors at other nearby mountain bike parks, a finding that speaks to the park's unique focus on liftserved gravity trails. While visits to most mountain biking trail systems tend to be 2 to 2.5 hours, most visitors at Giants Ridge were making close to a full day of it.1

Mountain bikers with advanced or expert skills spent an hour longer on the trail

¹ Comparable data has been collected at nearby Redhead (average visitor spends 2.4 hours on the trail), Tioga (2.3 hours), Split Rock Wilds (2.6 hours), Britton Peak (2.5 hours), and the Duluth Traverse (2.2 hours). See P&TCs 2021, 2022, and 2023 visitor survey reports for more detail.

than beginner and intermediate riders (5.6 hours vs. 4.6, p < .001). Comparisons of other visitor subgroups (recreating with or without children, tourists or locals, firsttime or repeat visitors, income, or age)

Figure 7

Group size and composition



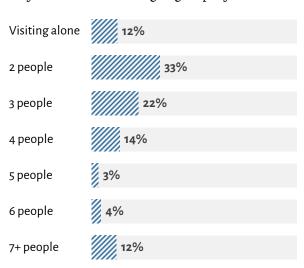
Average visitor is in group of:

3.7 Total people

2.9 Adults

0.8 Children

% of adult visitors visiting in groups of...





Q7. Including yourself, how many people are in your group today? [Adults 18 years and older, including yourself; Children under 18] (Includes non-respondents and groups without adults; n = 170)

found no significant differences in how long each subgroup spent on the trail.

Nearly a quarter of visitors were visiting Giants Ridge for the first time

Giant Ridge completed a major trail expansion a few years ago that is still attracting new visitors. Nearly a quarter of visitors (23%) using the trails were visiting Giants Ridge for the first time (Figure 9). How often trail visitors visit Giants Ridge depends on whether or not they are locals or tourists. Local trail visitors were split

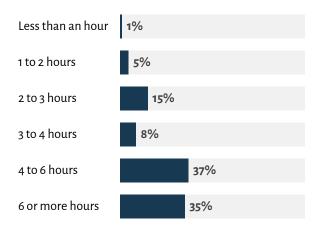
Figure 8

Duration of trail visit



The average visitor spent 4.8 hours on the trail

% of all visitors spending ____ at the trail



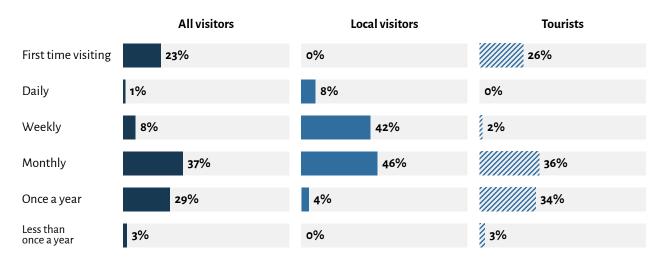
Q8. Approximately how much time did you spend on the trail during today's visit? [Hours: Minutes] (n = 155)

Note: Percentages don't add up to 100% due to rounding.

Figure 9

Visitation frequency

% of adult visitors



Q9. Approximately how often do you visit Giants Ridge during the spring, summer and fall?

Q13. Do you live more than 50 miles from this trail?

Q14. Are you on a trip where you have or plan to stay at least one night away from home?

All visitors (n = 155), Local visitors (n = 24), Tourists (n = 131)

Notes: "Tourist" defined as visitor who lives more than 50 miles away and/or is spending a night away from home. Percentages calculated by column and don't add up to 100% due to rounding.

roughly in half between those who visited weekly (42%) and those who visited monthly (46%). No local visitors surveyed were visiting Giants Ridge for the first time.

Most trail tourists visit infrequently. A quarter of tourists (26%) were visiting Giants for the first time, and another third (34%) said they visit only once a year. Some tourists do visit frequently, however. Over a third of tourists (36%) said they visit monthly, and a handful (2%) visit weekly.

Trail visitors gave Giants Ridge very high ratings

Visitors rated their trail experiences at Giants Ridge very highly. Nearly threequarters (70%) said their trail experience was "very good," and another 27% rated it as "good." Only 3% of visitors had a "fair" experience and no visitors rated their trail experience as "poor" or "very poor" (Figure 10).

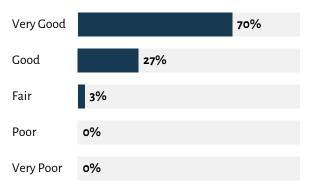
Very few significant differences in trail ratings were observed across visitor subgroups. Visitors tended to give the trails similarly high ratings regardless of whether they were men or women, young or old,

Figure 10

Visitor ratings of trail experience



% of adult visitors who rated overall trail experience as...



Q10. Overall, how would you rate your trail experience today? (n = 154)Note: Overall rating based on scale where 5 = very good, 4 = good, 3 = fair, 2 = poor, and 1 = very poor

first-time or repeat visitors, tourists or locals, recreating with or without children, or beginners or advanced riders. The only statistically significant difference found across visitor subgroups was that mountain bikers had better trail experiences than hikers; 73% said their experience was "very good," compared to only 30% of hikers who said the same.

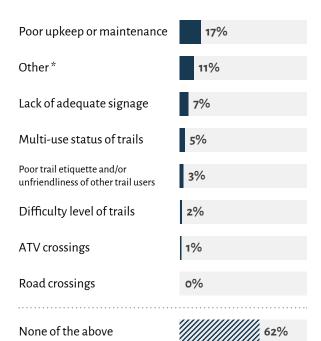
The most frequently cited negative impact was poor trail maintenance

Most visitors (62%) said nothing negatively impacted their trail experience at Giants Ridge. Visitors who said something negatively impacted their experience cited poor trail maintenance more than any other factor (17%) (Figure 11). Mountain bikers with advanced or expert skills were the most

Figure 11

Negative visitor experiences

% of adult visitors who said _ ____ negatively impacted their trail experience



Q12. Did any of the following negatively impact your trail experience today? Select all that apply [Answers presented in randomized order] (n

Note: See Appendix B for open-ended responses to "other"

likely to say poor maintenance impacted their experience (29%, compared to only 10% of beginner and intermediate riders, p < .01).

Small minorities of visitors cited other items that negatively impacted their trail experience. Only 7% (or fewer) of visitors said that signage, the multi-use status of trails, poor trail etiquette by other users, the difficulty level of trails, ATV crossings, or road crossings negatively impacted

their trail experience. "Other" items that negatively impacted their experience were reported by 11% of respondents. Openended responses to "other" were varied but focused on closed trails and loose rocks (see Appendix B).

Few differences across visitor subgroups emerged regarding negative trail experiences, with a few exceptions. Women and visitors over age 55 were disproportionately likely to report inadequate signage, and locals were disproportionately likely to report poor trail etiquette of other users.

Visitors were split on which amenities would improve their Giants Ridge trail experience

Approximately a third of visitors (36%) said adding more trail miles would improve their experience, while 27% said a pump track or skills park would improve their experience. Giants Ridge already has a skills park, so it's striking that over a quarter of visitors said a skills course would improve their experience. It's possible some visitors didn't know the skills park existed. Or perhaps visitors were indicating they'd like to see the skills park expanded. Or maybe they were indicating that the existing skills park had improved their experience. More research would be needed to understand this response.

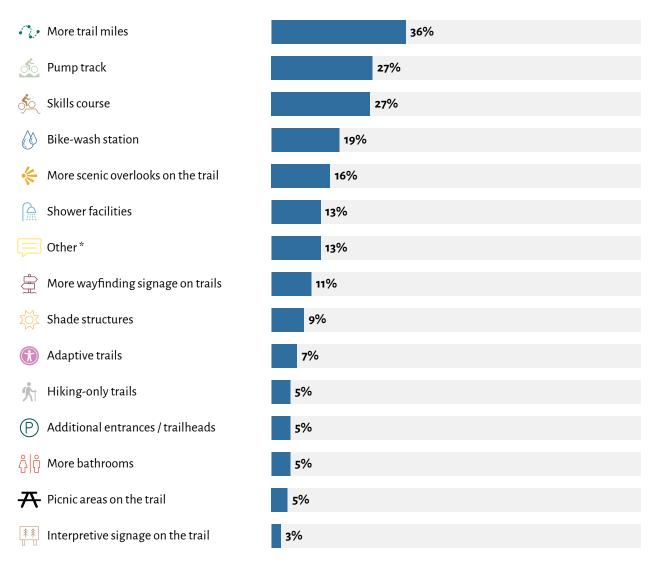
Between 10% and 20% of trail visitors said a bike-wash station, more scenic overlooks, shower facilities, or more wayfinding signage would improve their experience. Fewer than 10% of respondents said adding shade structures, adaptive trails, hikingonly trails, additional trailheads, more bathrooms, picnic areas, or interpretive signage would improve their experience (Figure 12).

Note that the percentage of visitors who said any particular amenity would improve their experience differs from asking visitors to prioritize potential amenities. For example, visitors may think Giants Ridge should prioritize adding adaptive trails or shade structures even if doing so wouldn't improve their own experience.

Figure 12

Amenities that would improve visitor experience

% of adult visitors who said _____ would improve their trail experience



Q11. Which amenities would improve your trail experience at Giants Ridge? Select all that apply [Answers presented in randomized order] (n = 157) Note: See Appendix B for open-ended responses to "other"



Half of mountain bikers at Giants Ridge are intermediate riders

A large majority of mountain bikers classified themselves as either intermediate or advanced riders. Half of riders (49%) reported having intermediate skills, while another third (31%) said they had advanced skills. Relatively few visitors were beginners (12%) or expert riders (8%) (Figure 13).

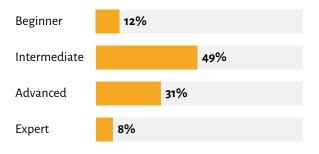
Visitors of differing skill levels were similar across most socio-demographic and trip characteristics. Mountain biking skills were similar across different ages, income, visitation frequency, home region, and group size. However, more advanced riders were disproportionately men (48% of male riders said they were advanced or expert riders, compared to only 12% of female visitors; p < .001).

Skill levels on the survey were self-reported, and the survey did not provide skill level definitions or descriptions. As such, results are based on each respondent's perception of their skills and what each skill level entails. Results should be interpreted with this in mind.

Most riders prefer blue-rated trails, although preferences vary by skill level

Preferences for trail difficulty rating tracked closely with self-reported rider skill levels.





Q3. What is your mountain biking skill level? (n = 147)

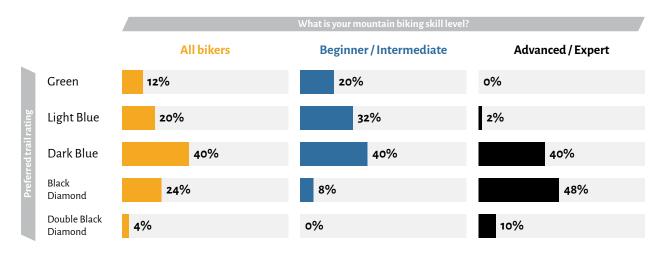
Overall, the majority of riders (60%) said they prefer riding blue-rated trails (20% said "light blue or intermediate," and another 40% prefer "dark blue or intermediate plus"). Approximately a quarter of riders (24%) said they prefer Black Diamond (very difficult) trails. Green (beginner) trails were preferred by 12% of riders. Only 4% of riders preferred Double Black Diamond (extremely difficult) trails (Figure 14).

Mountain bikers with more advanced skills prefer to ride trails with higher difficulty ratings. Most riders with advanced or expert skills (58%) preferred riding Black Diamond or Double Black Diamond trails, compared to only 8% of beginner or intermediate riders.

Figure 14

Preferred trail difficulty ratings

% of adult visitors who prefer to ride trails of _____ difficulty rating, by skill level



Q3 What is your mountain biking skill level?

Q4. Which type of trail difficulty rating do you prefer to ride?

All mountain bikers (n = 147), Beginner/intermediate riders (n = 89), Advanced/expert riders (n = 58)

Notes: Skill levels grouped to increase sample size for comparisons. Percentages calculated by column.

Downhill gravity trails top the list of favorite trail types

Nearly half of riders (46%) at Giants Ridge said either downhill trails or jump lines are their favorite. Since Giants Ridge is one of the few mountain biking parks in the Midwest with lift-served downhill trails, it makes sense that riders who prefer downhill trails would visit (Figure 15).

Flow and cross-country trails are also relatively popular among Giants Ridge mountain biking visitors. In contrast to downhill trails and jump lines — which focus on gravity power and intentionally designed launch ramps — cross-country and flow trails generally traverse undulating terrain with gentler slopes. Flow trails are

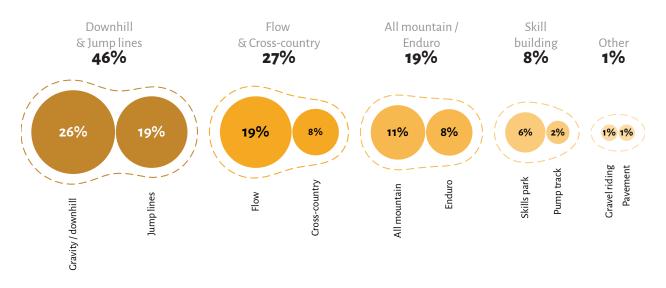
characterized by a roller-coaster kind of experience, where momentum from rollers and berms allows riders to "flow" from one section to the next with minimal pedaling. 19% of riders at Giants Ridge said flow trails are their favorite. Cross-country trails can include flow features but traditionally traverse more natural terrain with some technical features and are more taxing to ride; 8% of riders at Giants Ridge said crosscountry trails are their favorite.

All-mountain and enduro trails combine elements of both cross-country and downhill trails and typically include larger obstacles, rougher terrain, and steeper ups and downs. Nearly a fifth of riders at Giants

Figure 15

Favorite trail type

% of adult visitors, mountain bikers only



Q5. 5. Which type of trail is your favorite to ride? (n=145) Notes: Percentages don't add up to 100% due to rounding.

Ridge (19%) said all-mountain trails or enduro trails are their favorite.

Very few riders said either skill parks (6%) or pump tracks (2%) are their favorite types of trail. Both skill parks and pump tracks are generally small areas designed for riders to practice and develop riding skills and techniques.

Jump lines and enduro trails were especially popular among riders with advanced or expert riding skills. Nearly a third of riders (29%) with advanced or expert skills said jump lines were their favorite (compared to 13% of beginner or intermediate riders), and nearly a fifth (17%) said enduro trails

were their favorite (compared to only 1% of beginner or intermediate riders). Conversely, beginner and intermediate riders were likelier than advanced or expert riders to say flow trails are their favorite (23% vs. 14%). All three differences make sense, as jump lines require significant practice, enduro trails are typically associated with racing, and flow trails generally require the fewest technical skills to enjoy.

The survey did not define each trail type, and mountain biking trail classifications are loosely defined and often overlapping. Downhill trails, for example, often include many "flow" features. As such,

different riders likely interpreted each trail classification slightly differently, and results should be interpreted with that in mind. Still, the results help give a broad understanding of the types of trails and experience Giants Ridge riders most prefer.

Summer and fall are the most popular seasons for mountain bikers

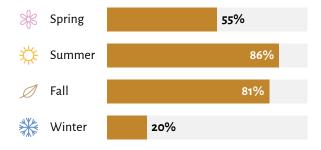
Nearly all visitors said they mountain bike in the summer (86%) and fall (81%). Significantly fewer riders said they ride in the spring (55%) or winter (20%) (Figure 16).

The survey was only conducted during the summer and fall months. Therefore, riders' preferences for those seasons are likely overestimated (i.e., riders who only ride in the spring or winter had no chance of being included in the survey sample). We suspect, however, that the vast majority of riders who ride in the colder, muddier months also ride in the summer and fall. As such, results are likely a good indication of how riding fluctuates throughout the year.

Figure 16

Mountain biking by season

% of adult visitors who mountain bike in each season



Q6. What seasons do you typically mountain bike? (n=142)



The majority of trail visitors at Giants Ridge are tourists

Most trail visitors (85%) at Giants Ridge were tourists, defined as someone 50 miles or more away from home or staying at least one night away from home. Most tourists (61%) were on overnight trips. Overall, 52% of visitors were tourists staying overnight, 33% of visitors were tourists on day trips, and 16% of visitors were locals (Figure 17).

These numbers represent unique trail visitors rather than trail visits. Because locals visit more frequently than tourists (e.g., many locals visit weekly during the warmer months; see Figure 9 on page 10), they accounted for a disproportionate number of visits. Based on how frequently respondents reported visiting and the share of local and non-local visitors, our tentative estimate is that locals accounted for approximately 57% of trail visits to Giants Ridge.

Giants Ridge visitors come from all over the country (and Canada)

Giants Ridge hosts visitors from all over the country; survey respondents were from 12 states and two provinces (Figure 18). Visitors came from as far away as California, Texas, and Florida. International visitors were from Canada (Ontario and Manitoba).

Figure 17

Visitor travel segments

% of adult visitors







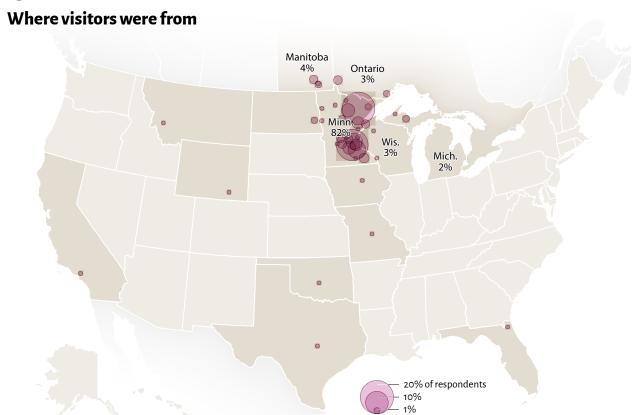
Q13. Do you live more than 50 miles from this trail? (n = 160)Q14. Are you on a trip where you have or plan to stay at least one night away from home? (n = 159)

Note: "Local Visitor" defined as someone who lives within 50 miles and is not spending a night away from home. "Day Visitor" is someone who lives more than 50 miles away but is not spending a night away from home. "Overnight visitor" is someone spending at least one night away from home, regardless of how far away they live.

Note: Percentages don't add up to 100% due to rounding.

While visitors arrived from both coasts, the vast majority of visitors were from Minnesota and other Midwestern areas. Most visitors (82%) were from Minnesota: another 5% were from bordering states (Iowa, North Dakota, South Dakota, and Wisconsin). Manitoba and Ontario accounted for 7% of visitors.

Figure 18



Q27. What is the zip code of your home address, or what is your country of residence? (Data displayed at county level; n = 158)

The primary tourist market for Giants Ridge is the Twin Cities

Over a third of visitors (39%) were from the Twin Cities metropolitan area. Within the Twin Cities metro, Hennepin County accounted for the most visitors (45% of metro visitors), followed by Dakota County (16%), Anoka County (15%), Carver County (10%), and Ramsey County (8%).

Outside the Twin Cities, 15% of all visitors came from Duluth and 10% from Iron Range local communities. The largest out-of-state

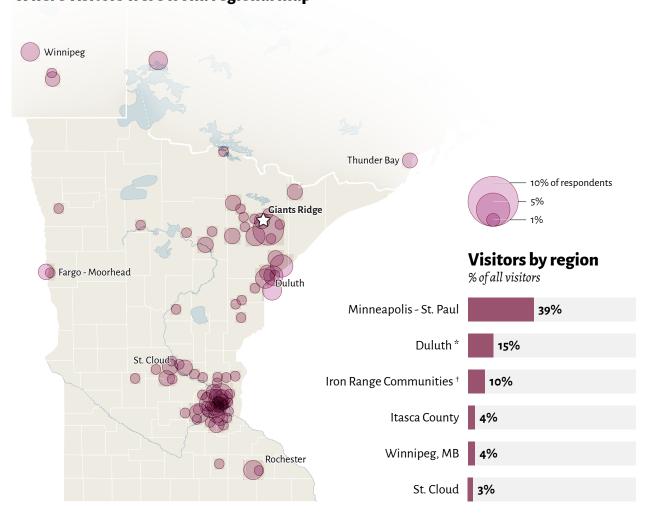
market was Winnipeg, Manitoba; 4% of visitors came from there (Figure 19).

Day tourists and overnight tourists tended to be from different places. Among visitors from the Twin Cities, 65% were on overnight trips, and 34% were on day trips. In contrast, 80% of visitors from Duluth were on day trips. Overall, the Twin Cities accounted for 50% of trail visitors on overnight trips.

Most overnight visitors were staying on the **Iron Range**

Most trail visitors on overnight trips away

Figure 19 Where visitors were from: regional map



Q27. What is the zip code of your home address, or what is your country of residence? (Data displayed by zip code; n = 158)

^{*} Includes St. Louis County (excluding Iron Range communities), Carlton County, and Douglas County (WI)

[†] Includes Hibbing, Chisholm, Buhl, Mountain Iron, Virginia, Eveleth, Gilbert, Biwabik, Aurora, and Hoyt Lakes

from home (87%) spent at least one night in Iron Range communities during their trip.1

Overnight visitors most often spend between one and three nights on the Iron Range

Nearly half of trail visitors (44%) at Giants

Figure 20

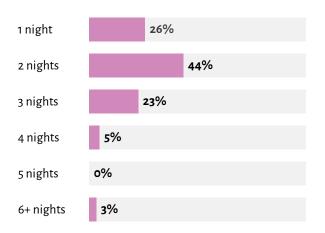
Where tourists stay the night

% of tourists on overnight trips



Nights stayed on the Iron Range

% of overnight tourists staying on Iron Range



Q15a. Do you plan to spend at least one night in this area during your

Q15b. How many nights are you spending in this area during your trip?

Note: "Iron Range" defined as Hibbing, Chisholm, Buhl, Mountain Iron, Virginia, Eveleth, Gilbert, Biwabik, Aurora, Hoyt Lakes and the immediate surrounding area. Respondents were provided a map when answering question. Percentages don't add up to 100% due to rounding.

Ridge on overnight trips spent two nights on the Iron Range. Another 26% spent only one night on the Iron Range and 23% spent three nights (Figure 20). Only 8% of overnight visitors spent four or more nights on the Iron Range.

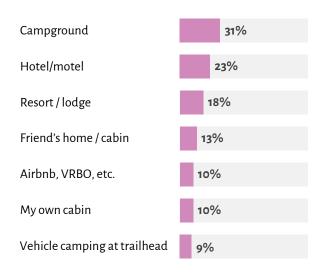
The majority of overnight visitors stay in paid accommodations

Over three-quarters (78%) of Giants Ridge overnight trail visitors stayed in paid accomodations. Overnight visitors were about equally likely to stay in commercial lodging (e.g., hotel, motel, resort, or lodge; 39% of overnight visitors) as they were to camp (35% of overnight visitors). Relatively few overnight visitors (10%) stayed in

Figure 21

Visitor overnight accommodations

% of overnight tourists



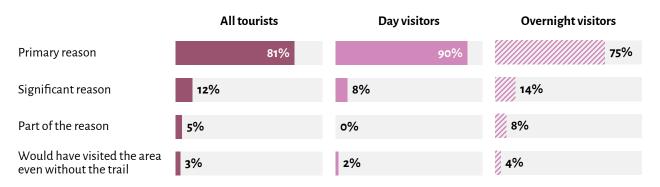
Q18. What type of overnight accommodations are you staying in during your trip? Select all that apply [Answers presented in randomized order] (n = 77)

¹ Only 10 respondents in our sample were staying outside the Iron Range, 9 of which provided data on where they were staying. 4 were staying in Duluth, 2 in Tower/Soudan, 1 in Babbit, 1 on the North Shore, and 1 said "other."

Figure 22

Importance of trail in decision to visit the Iron Range

% of adult visitors, tourist visitors only



Q19. How important was this trail in deciding to visit the area? All tourists (n = 130), Day visitors (n = 50), Overnight visitors (n = 80)

Note: "Tourist" defined as visitor who lives more than 50 miles away and/or is spending a night away from home. "Day Visitor" is someone who lives more than 50 miles away but is not spending a night away from home. "Overnight visitor" is someone spending at least one night away from home, regardless of how far away they live. Percentages calculated by column and don't add up to 100% due to rounding.

vacation rentals by owner (e.g., Airbnb, VRBO) (Figure 21).

Approximately a fifth of overnight visitors (22%) stayed in private residences for at least part of their stay on the Iron Range. Visitors staying at private residences were split between those staying at a friend's home or cabin (13% of overnight visitors) and those staying in their own cabin (10%).

Most tourists using the trails say Giants Ridge was the primary reason for their decision to visit the Iron Range

For tourists using the trails, Giants Ridge was usually the primary reason for making the trip to the Iron Range (Figure 22). Among all tourists, 81% said Giants Ridge was the primary reason they visited the Iron Range; another 12% said it was a significant reason. Only 3% of tourists said they would

have visited the Iron Range regardless of the trails at Giants Ridge.

Trail quality and variety are both key reasons riders choose to visit Giants Ridge

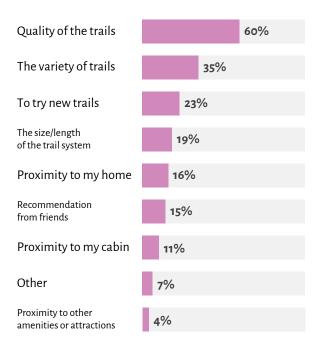
The quality of the trails at Giants Ridge is their biggest selling point, evidenced by most tourists (60%) saying that trail quality influenced their decision to visit. Riders were also drawn by the variety of trails offered (an influencing factor for 35% of tourists). Another 19% of tourists were influenced to visit Giants Ridge by the number of trails, and 15% were influenced to visit through recommendations from friends (Figure 23).

Wanting to try new trails also was an important reason tourists visit. Many of Giants Ridge trails are relatively new and 23% of tourists said trying new trails

Figure 23

Why visiting Giants Ridge

% of tourists saying _ _ influenced their decision to visit Giants Ridge



Q20. Which of the following factors influenced your decision to visit this trail? Select all that apply [Answers presented in randomized order] (n = 124)

influenced their decision to visit (26% of tourists were first-time visitors). Convenience is also a factor for some tourists; 16% of tourists said proximity to their home influenced their decision to visit, and another 11% said proximity to their cabin was an influencing factor.

The Iron Range's many attractions were not a major draw for most trail visitors. Only 4% of tourists said the proximity of Giants Ridge to other amenities or attractions influenced their decision to visit the area.

Tourists use a wide variety of information sources to learn about Giants Ridge

Tourists relied more on the Giants Ridge website than any other information source when planning their trip. Over half (58%) of trail tourists used the Giants Ridge website, significantly more than the next most common information sources: trail apps (used by 35% of tourists for trip planning), friends and family (28%), and prior knowledge (28%). Social media sites were also relatively common information sources. 18% of trail tourists used Facebook to plan their trip, 17% used YouTube, and 11% used Instagram (Figure 24).

Relatively few visitors used other information sources. Only 6% of tourists used the Ride the Range website to plan their trip, 2% used traditional media sources (e.g., TV, radio, magazines, or newspapers), 2% used Ironrange.com, and 1% used Explore Minnesota Tourism.

Among tourists who used trail apps, Trailforks (used by 59% of app users) dominated the market, although MTB Project (29%), TrailBot (25%), and Strava (23%) were also relatively common. Few app users used Singletracks (9%) or All Trails (5%).

Where else on the Iron Range do Giants Ridge's trail visitors go?

Most tourists (54%) on Giants Ridge trails visited at least one other city on the Iron Range other than Biwabik. However, there

Figure 24

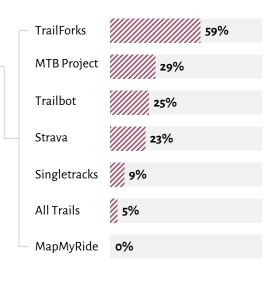
Information sources about the trail

% of tourists who used information source to plan trip

Giants Ridge Website 58% Trail app Friends and family 28% 28% Known about for years Facebook 18% YouTube 17% 11% Instagram RidetheRange.com 6% Other 4% Media coverage 2% (e.g., tv, radio, magazine, newspaper) Ironrange.com 2% Explore Minnesota Tourism 1%

Most popular trail apps

Of trail app users, % who use...



Q21. What information sources did you use to plan your trip to Giants Ridge? Select all that apply [Answers presented in randomized order] (n = 127). Only the following the properties of the properties oftourist visitors were asked question.

was no other city that attracted the majority of visitors. Approximately 27% of tourists using the trails said they also visited Virginia and 26% visited Chisholm (where Redhead Mountain Bike Park is located). Aurora was visited by 16% of tourists using Giants Ridge trails and Hibbing was visited by 13%. Fewer trail visitors said they visited the cities of Eveleth (9%), Gilbert (9%), Mountain Iron (7%), or Hoyt Lakes (6%) during their trip (Figure 25).

Outside of Iron Range communities, tourists were most likely to visit Grand Rapids. Nearly a fifth of tourists (18%) using Giants Ridge trails said they also visited Grand Rapids, where another mountain biking park (Tioga Recreation Area) is located.

The survey did not define "visit," and respondents may have defined it differently. Results should be interpreted with that in mind.

Most tourists eat at a bar or restaurant during their trip and participate in other outdoor activities

Tourists using Giants Ridge trails don't just mountain bike when visiting the Iron Range. Over two-thirds of tourists (68%) ate at a bar or restaurant on the Iron Range during their trip, and over half (55%) participated in at least one other outdoor recreation activity. There's a wide range of other outdoor activities Giants Ridge's trail visitors participated in during their trip: 20% went to Redhead, 20% hiked, 19% went canoeing or kayaking, 14% biked the Mesabi Trail, 13% golfed, 11% went fishing, and 8% went ATVing.

Fewer Giants Ridge trail visitors visited cultural, retail, or educational attractions during their Iron Range trip. Only 9% went shopping, and 7% (or fewer) visited the U.S. Hockey Hall of Fame, Minnesota Discovery Center, Minnesota Museum of Mining, or the Hull Rust Mine View (Figure 26).

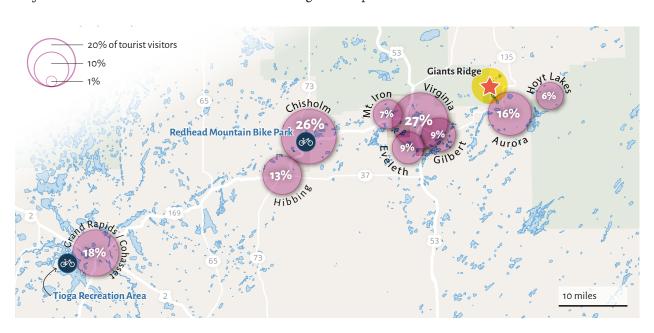
The Iron Range needs more food and drink options and camping to increase visitation

Survey results suggest that adding more bars, breweries, restaurants, and coffee shops to the Iron Range would encourage tourists to visit more often and stay longer. Nearly two-thirds of tourists using Giants Ridge trails (60%) said having more bars, breweries, restaurants, or coffee shops on

Figure 25

What other cities do Giants Ridge visitors visit?

% of tourist visitors who visited selected cities during their trip

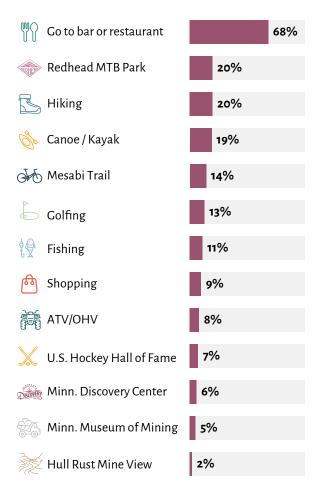


Q22. Have you visited, or do you plan to visit, any of the following cities during your trip? Select all that apply [Asked if respondent was a tourist] (n = 128) Note: Since all surveys were completed within Biwabik city limits, Biwabik was not listed as an answer option.

Figure 26

Participation in other activities during trip to Iron Range

% of tourists who participated in selected activities during their trip



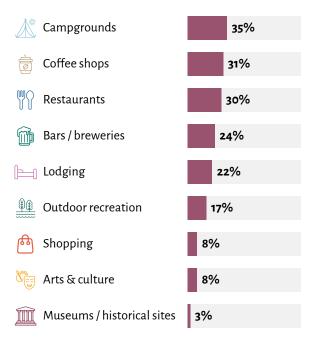
Q23. What other activities will you participate in while you are on the Iron Range? Select all that apply (n = 128)

the Iron Range would encourage them to visit more and have extended stays. Visitors didn't express a clear favorite type of food or drink: 31% of trail visitors said having more coffee shops would encourage more or longer stays, whereas 30% said more restaurants would, and 24% said more bars

Figure 27

Encouraging more frequent visits and longer stays to the Iron Range

% of tourists who said more encourage more and/or longer visits



Q25. What does the Iron Range need more of to encourage you to visit more frequently and/or have longer stays? Select all that apply [Answers presented in randomized order] (n = 121)

or breweries would (Figure 27). Most tourists (51%) also desired more lodging accommodations on the Iron Range. More campgrounds were the most desired lodging option; 35% of tourists said having more campgrounds would encourage more and longer visits. Nearly a quarter of tourists said having more

lodging (e.g., hotels, resorts, Airbnbs) would encourage more visits.

Other attractions were less desirable for Giants Ridge trail visitors. Only 17% of tourists said the Iron Range needed more outdoor recreation opportunities, 8% said more shopping options were needed to encourage visitation, and 8% said more arts and culture were needed. Fewer tourists (3%) said having more museums or historical sites would encourage more visitation.

The average household visiting Giants Ridge trails spent nearly \$450 on the Iron Range during their trip

On average, households spent \$446 on the Iron Range during their trip (median = \$300, 95% C.I. [\$326, \$566]). Overall, household spending varied between households that didn't spend any money on the Iron Range during their visit and those that spent \$4,000 on the Iron Range. Households on overnight trips spent significantly more than households on day trips (\$608 vs. \$170, p < .05).

Lodging was the largest expense for overnight visitors (\$239 per household



Family enjoying the trails at Giants Ridge.

per trip, 95% C.I. [\$114, \$364]), followed by restaurants, transportation, groceries, entertainment or attractions, shopping, miscellaneous, and equipment rentals (Figure 28). Overnight tourists spent more than day-trippers on restaurants and bars, transportation, and groceries. Spending on other categories did not differ significantly

between overnight tourists and daytrippers.

Figure 28

Tourist spending on the Iron Range

Average household total trip spending on the Iron Range among Giants Ridge trail visitors



Methodology

Questionnaire development

The questionnaire was designed collaboratively between Iron Range Tourism Bureau, the City of Chisholm, Minnesota Discovery Center, Giants Ridge, and Parks & Trails Council. Iron Range Tourism Bureau designed a draft questionnaire based on project goals and past visitor surveys, which was then reviewed and revised by project partners to improve questionnaire clarity, focus, and length. The questionnaire was designed to be used at Giants Ridge and Redhead Mountain Bike Park, with minor differences in question-wording and answer choices to reflect both locations. Whenever possible, questions were designed to collect data comparable to visitor survey data collected by the Greater Minnesota Parks and Trails Commission, the Metropolitan Council, and the Minnesota Department of Natural Resources.

The final questionnaire was 30 questions long (15 questions were asked of all visitors, with four additional questions for mountain bikers and 11 additional questions for tourists). Question topics included trail activities, overall quality of the trail experience, group characteristics, trip planning, information sources, and demographics (Appendix A).

The questionnaire was available only in English and was offered via tablet or paper. Approximately a third of the surveys (36%) were completed on an electronic tablet using QuestionPro (a professional online survey software). The survey was stored on the tablet and did not require Wi-Fi or cellular phone service. Skips and data validation were programmed into the survey to help speed up completion and improve the accuracy of data entered by the visitor. Survey responses were stored on the tablet and uploaded to the online account for Parks & Trails Council. The other twothirds of respondents (64%) completed the survey on paper. Validation testing didn't find any systematic differences between visitors who completed the survey electronically and those who completed the survey on paper.

Data collection protocol

Giants Ridge staff administered the survey questionnaire. One staff member attended a training session and was responsible for training other surveyors. All surveyors received an 18-page training manual that reviewed project purpose, study design and procedures, checklists, and frequently encountered issues.

Surveys were conducted at the main chalet building near the restrooms and on the patio overlooking the chairlift. Only adult visitors (age 18 and older) using the trail system were eligible to take the survey. Surveyors were trained to screen all visitors to determine visitor eligibility (Appendix A). Each household was eligible to complete the survey; for households with multiple adults present, the adult with the most recent birthday was asked to complete the survey. Households were only allowed to complete the survey once during the summer.

At the beginning of each survey shift, surveyors set up a station to welcome visitors. The station provided a visual presence for staff and included a large "Trail Survey" sign, maps, and a trash bag.

During each survey shift, surveyors tried to talk to each visitor entering or leaving the area. Surveyors would approach each visitor group, introduce themselves, explain the purpose of the survey, and ask them to participate. If the visitor agreed, they were handed the tablet (or paper questionnaire) and self-administered the questionnaire. If the visitor asked to have the questionnaire read aloud, surveyors read the questionnaire verbatim and recorded responses on the tablet. All visitors were assured their participation was completely voluntary and that their identities would be anonymous. Visitors who refused

to participate were logged to track any potential non-response bias. As an incentive to complete the survey, respondents could enter their name and address in a random drawing for a \$100 Giants Ridge gift card. Names and addresses were never associated with survey answers.

When high traffic volumes made it impractical to approach every visitor, the "next to pass method" was used to select respondents. During these periods, surveyors selected and approached the next group or person to pass the survey site after a questionnaire had been completed by someone else.

Sampling schedule

Sampling was designed to be representative of visitors using the lift-served downhill trails at Giants Ridge. Visitors were intercepted and asked to complete the survey on 18 days between August 9, 2023, and October 14, 2023 (four Fridays, eight Saturdays, five Sundays, and Labor Day). Surveys were only collected during hours the chairlift was operating.

Response rate and margin of error

A total of 181 eligible visitor households were approached and asked to complete the questionnaire. Additionally, two groups were observed where no adults were present. Of the 181 eligible households, 163 completed the survey for a response rate of 90%. This response rate is exceptionally high and sufficient to ease any concerns of nonresponse bias (in which results are biased due to systematic differences between people willing to complete the survey and those not).

Whenever a potential respondent declined to participate, the surveyor recorded the group size and primary activity and asked if they would be willing to answer two quick "non-response questions." These questions aimed to test if visitors who declined to participate systematically differed from those who participated. Respondents and non-respondents were equally likely to be mountain biking. However, nonrespondents tended to be recreating in smaller groups than respondents (2.3 vs. 3.9, p < .05). Visitors recreating in smaller groups were thus likely underrepresented in our sample, although only marginally so. Across all observed groups, the average group size was 3.7 people, compared to an average of 3.9 people in groups that completed the survey.

The final sample size (n=163) provides 95% confidence that the sampling error does not exceed plus or minus 7.7 percentage points. The margin of error differs for every question depending on the sample size, the proportion of responses, and the population size. Margins of error are higher in subgroups (Figure 29).

Figure 29 Margin of error for selected subgroups

Member segment	Sample size	Plus or minus (percentage points)
All adult visitors	163	7.7
Activity		
Mountain bikers	147	8.1
Tourism		
Local visitors	28	18.5
Tourist	141	8.3
Day Visitor	52	13.6
Overnight Visitor	83	10.8
Gender		
Male	118	9.0
Female	42	15.1
Skill Level		
Beginner/Intermediate	89	10.4
Advanced/Expert	58	12.9

In addition to sampling error, questionwording and other biases can introduce errors in surveys. Answer orders were randomized for non-ordinal answer choices on the electronic version of the questionnaire to help reduce answer option order bias.

Data analysis

Survey data were downloaded from the QuestionPro server and prepped for import into the statistical software SPSS using Microsoft Excel. Data entry for the paper questionnaires was completed by Parks &

^{1 (1)} Are you a local or a tourist? and (2) What year were you born? Unfortunately, only two non-respondents offered their age and only 7 answered if they were tourists or locals.

Trails Council staff and volunteers. SPSS was used for accuracy checks, recoding, descriptive statistics, cross-tabulations, and statistical significance testing.

Throughout the report, means are provided where informative, with an accompanying confidence interval. Confidence intervals are written as 95% C.I. [#, #], where the bracketed numbers refer to the upper and lower bounds of the 95% confidence interval for the reported mean.

Statistical hypothesis tests are included throughout the report to indicate statistically significant differences between visitor subgroups (e.g., locals and tourists, men and women, skill levels, etc.). Probability values (p-values) are included alongside these tests to indicate the probability that the observed (or greater) difference would be observed if no actual difference existed in the population of Giants Ridge visitors. We use the standard threshold of 5% to indicate "statistical significance" (p < 0.05), meaning there is less than a 5% chance the difference would have been observed in our sample if no actual differences existed between the two subgroups. Due to small sample sizes, statistical tests comparing different visitor subgroups had limited statistical power. There are likely additional group differences that were missed by this study. Visitor

segments may differ in more ways than this study was able to conclude.

Responses to the open-ended questions were loosely grouped into categories (see Appendix B).

Appendix A: Survey Script and Questionnaire

Survey Script:	
Hi, my name is and I'm working with conducting a visitor survey to understand visitor experiences at [Redhead / Giants Ridge]. Are you using any of the trails here today?	
 ☐ Yes [Continue] ☐ No [Discontinue; thank visitor and let them continue on their day] 	
Are you willing to participate in the survey? It will take 5 to 7 minutes. All your answers are voluntary and confidential, and respondents can enter a drawing for free trail merch.	
If <u>YES:</u>	If <u>NO</u> :
Are you 18 years old or older?	That's okay, no problem. Thanks for your time.
☐ Yes [Continue]	Do you mind if I ask you just two quick questions before you go?
□ No [Discontinue; log Non-Response]	☐ Yes [Ask questions, log Non-Response Qs]
Have you already taken this survey at this trail this summer?	1. Are you a local visitor or a tourist?
 ☐ Yes [Discontinue survey] ☐ No [Hand visitor the tablet and let them complete the questionnaire; For households 	(Tourist is anyone more than 50 miles away from home or staying at least one night away from home)
with multiple adults present, ask the adult with the nearest birthday to complete the	2. What year were you born?
survey]	☐ No [Discontinue; log Non-Response]

Green (easy) Light blue (intermedia Dark blue (intermedia Black Diamond (experiments) Double Black Diamond Don't know hich type of trail is year Jump lines Cross-country All mountain Flow Gravity / downhill Enduro hat seasons do you to be lect all that apply) Spring Summer Id any of the following typerience today?	ting do you prefer to ride? te) te plus) rt, very difficult) d (expert, extremely difficult)
Beginner Intermediate Advanced Expert hich trail difficulty ra Green (easy) Light blue (intermedia Black Diamond (expert Double Black Diamond Don't know hich type of trail is year Jump lines Cross-country All mountain Flow Gravity / downhill Enduro hat seasons do you telect all that apply; If you're jur last visit) Lack of adequate sign	tting do you prefer to ride? te plus) rt, very difficult) d (expert, extremely difficult) our favorite to ride? Pump track Skills park Gravel riding Pavement Other: Don't know typically mountain bike? Fall Winter g negatively impact your trail
Intermediate Advanced Expert hich trail difficulty ra Green (easy) Light blue (intermedia Dark blue (intermedia Black Diamond (expert Double Black Diamon Don't know hich type of trail is year Jump lines Cross-country All mountain Flow Gravity / downhill Enduro hat seasons do you telect all that apply; Spring Summer Id any of the following typerience today? elect all that apply; If you're jur last visit) Lack of adequate sign	te plus) rt, very difficult) d (expert, extremely difficult) our favorite to ride?
Advanced Expert hich trail difficulty ra Green (easy) Light blue (intermedia Dark blue (intermedia Black Diamond (expei Double Black Diamon Don't know hich type of trail is yo Jump lines Cross-country All mountain Flow Gravity / downhill Enduro hat seasons do you telect all that apply) Spring Summer d any of the following typerience today? elect all that apply; If you're jur last visit) Lack of adequate sign	te plus) rt, very difficult) d (expert, extremely difficult) our favorite to ride?
Expert hich trail difficulty ra Green (easy) Light blue (intermedia Dark blue (intermedia Black Diamond (expei Double Black Diamon Don't know hich type of trail is you Jump lines Cross-country All mountain Flow Gravity / downhill Enduro hat seasons do you to elect all that apply) Spring Summer Id any of the following typerience today? elect all that apply; If you're your last visit) Lack of adequate sign	te plus) rt, very difficult) d (expert, extremely difficult) our favorite to ride?
hich trail difficulty ra Green (easy) Light blue (intermedia Dark blue (intermedia Black Diamond (experiments) Double Black Diamon Don't know hich type of trail is you Jump lines Cross-country All mountain Flow Gravity / downhill Enduro hat seasons do you to elect all that apply) Spring Summer Id any of the following typerience today? elect all that apply; If you're you'r last visit) Lack of adequate sign	te plus) rt, very difficult) d (expert, extremely difficult) our favorite to ride?
Green (easy) Light blue (intermedia Dark blue (intermedia Black Diamond (experiments) Double Black Diamond (experiments) Double Black Diamond (experiments) Intermedia Black Diamond (experiments) Intermedia Black Diamond (experiments) Jump lines Cross-country All mountain Flow Gravity / downhill Enduro hat seasons do you to be a seasons do you	te plus) rt, very difficult) d (expert, extremely difficult) our favorite to ride?
Light blue (intermedia Dark blue (intermedia Dark blue (intermedia Black Diamond (experious pouble Black Diamond Don't know hich type of trail is you hich type of trail is you hich type of trail is you have been supported by the property of the property	te plus) rt, very difficult) d (expert, extremely difficult) our favorite to ride?
Light blue (intermedia Dark blue (intermedia Dark blue (intermedia Black Diamond (experious pouble Black Diamond Don't know hich type of trail is you hich type of trail is you hich type of trail is you have been supported by the property of the property	te plus) rt, very difficult) d (expert, extremely difficult) our favorite to ride?
Dark blue (intermedia Black Diamond (experimental black Diamond) (experimental black Diamond) Don't know hich type of trail is you have been been been been been been been be	te plus) rt, very difficult) d (expert, extremely difficult) our favorite to ride?
Double Black Diamon Don't know hich type of trail is ye Jump lines Cross-country All mountain Flow Gravity / downhill Enduro hat seasons do you telect all that apply) Spring Summer d any of the following typerience today? telect all that apply; If you're yelect all that apply; If you're	d (expert, extremely difficult) our favorite to ride?
Don't know hich type of trail is ye Jump lines Cross-country All mountain Flow Gravity / downhill Enduro that seasons do you te elect all that apply) Spring Summer d any of the following typerience today? elect all that apply; If you're you're last visit) Lack of adequate sign	our favorite to ride? Pump track Skills park Gravel riding Pavement Other: Don't know typically mountain bike? Fall Winter
hich type of trail is you Jump lines Cross-country All mountain Flow Gravity / downhill Enduro hat seasons do you to elect all that apply; Spring Summer Id any of the following typerience today? elect all that apply; If you're you're last visit) Lack of adequate sign	☐ Pump track ☐ Skills park ☐ Gravel riding ☐ Pavement ☐ Other: ☐ Don't know typically mountain bike? ☐ Fall ☐ Winter g negatively impact your trail
Jump lines Cross-country All mountain Flow Gravity / downhill Enduro that seasons do you telect all that apply) Spring Summer Id any of the following typerience today? elect all that apply; If you're jur last visit) Lack of adequate sign	☐ Pump track ☐ Skills park ☐ Gravel riding ☐ Pavement ☐ Other: ☐ Don't know typically mountain bike? ☐ Fall ☐ Winter g negatively impact your trail
Cross-country All mountain Flow Gravity / downhill Enduro hat seasons do you telect all that apply) Spring Summer d any of the following sperience today? elect all that apply; If you're jur last visit) Lack of adequate sign	☐ Skills park ☐ Gravel riding ☐ Pavement ☐ Other: ☐ Don't know typically mountain bike? ☐ Fall ☐ Winter g negatively impact your trail
All mountain Flow Gravity / downhill Enduro hat seasons do you telect all that apply) Spring Summer dd any of the following sperience today? elect all that apply; If you're jur last visit) Lack of adequate sign	☐ Gravel riding ☐ Pavement ☐ Other: ☐ Don't know typically mountain bike? ☐ Fall ☐ Winter g negatively impact your trail
Flow Gravity / downhill Enduro hat seasons do you telect all that apply) Spring Summer id any of the following sperience today? elect all that apply; If you're jur last visit) Lack of adequate sign	☐ Pavement ☐ Other: ☐ Don't know typically mountain bike? ☐ Fall ☐ Winter g negatively impact your trail
Gravity / downhill Enduro hat seasons do you telect all that apply) Spring Summer id any of the following sperience today? elect all that apply: If you're jur last visit) Lack of adequate sign	☐ Other: ☐ Don't know typically mountain bike? ☐ Fall ☐ Winter g negatively impact your trail
Enduro that seasons do you to elect all that apply) Spring Summer dd any of the following to perience today? elect all that apply: If you're jur last visit) Lack of adequate sign	□ Don't know typically mountain bike? □ Fall □ Winter g negatively impact your trail
hat seasons do you to elect all that apply) Spring Summer Id any of the following to perience today? elect all that apply; If you're jur last visit) Lack of adequate sign	typically mountain bike? Fall Winter g negatively impact your trail
spring Summer id any of the following sperience today? elect all that apply: If you're jur last visit) Lack of adequate sign	□ Fall □ Winter g negatively impact your trail
Spring Summer d any of the following typerience today? telect all that apply; If you're tur last visit) Lack of adequate sign	☐ Winter
Summer d any of the following typerience today? elect all that apply; If you're jur last visit) Lack of adequate sign	☐ Winter
d any of the following experience today? elect all that apply; If you're jur last visit) Lack of adequate sign	g negatively impact your trail
sperience today? elect all that apply; If you're jur last visit) Lack of adequate sign	
sperience today? elect all that apply; If you're jur last visit) Lack of adequate sign	
elect all that apply; If you're j ur last visit) Lack of adequate sigr	just starting out, please answer based on
Lack of adequate sign	
Poor upkeep or maint	•
•	
	or unfriendliness of other trail users
ATV crossings	
Road crossings	.,
Multi-use status of tra	
Difficulty level of trails	•
None of the above	
Other:	ail hoforo
i ve never used this th	all before
hat is your home ZIP	code?
SA ZIP Code:	
AN Postal Code:	or country
hat is your gender?	
Female	lale
i ciniaic 🗆 IVI	L Ouici
hat year were you bo	orn?
ease indicate your to	otal household income before
xes last year	
Less than \$20,000	□ \$70,000 - \$79,999
\$20,000 - \$29,999	□ \$80,000 - \$89,999
\$30,000 - \$39,999	□ \$90,000 - \$99,999
\$40,000 - \$49,999	□ \$100,000 - \$149,999
\$50,000 - \$59,999	□ \$150,000 - \$199,999
\$60,000 - \$69,999	□ \$200,000 or more
. , , , , , , , , , , , , , , , , , , ,	
you live more than	
iles from this trail?	trip away from home?
nes nom uns uan?	•
Yes	□ Yes
Yes	□ Yes
Yes	□ Yes
Yes No	□ Yes
۱ı.	

Appendix A: Survey Script and Questionnaire

How important was this trail in deciding to visit this area? The trail was the primary reason why I visited the area The trail was a significant reason why I visited the area The trail was part of the reason why I visited the area The trail was part of the reason why I visited the area I would have visited this area even without the trail Don't know What does the Iron Range need more of to encourage you to visit more frequently and/or have longer stays? (Select all that apply) Lodging Restaurants Bars, breweries, and night clubs Coffee shops Campgrounds Outdoor recreation. Please describe: Museums and historical sites Shopping Arts & culture (galleries, live music, theater, etc.) Other:	What information sources did you use to plan your trip to Giants Ridge? (Select all that apply) Facebook Instagram YouTube Giants Ridge website Friends and/or family I've known about this trail for years Media coverage (e.g., tv, radio, magazine, newspaper) RidetheRange.com Ironrange.org Explore Minnesota Tourism Trail app/website: MTB Project Trail Forks Singletracks Strava MapMyRide All Trails Trailbot
Have you visited, or do you plan to visit, any of the following cities during your trip? (Select all that apply) Hibbing (e.g., Maple Hill Mountain Bike trails) Grand Rapids / Cohasset (e.g., Tioga Recreation Area) Mountain Iron Virginia (e.g., Lookout Mountain trails) Eveleth Gilbert Chisholm (e.g., Redhead Mountain Bike Park) Aurora Hoyt Lakes Other: What other activities will you participate in while you are on the Iron Range? (Select all that apply) Canoe / Kayak	Which of the following factors influenced your decision to visit this trail? (Select all that apply) Proximity to my home The variety of trails offered Proximity to my cabin Recommendation from friends Quality of the trails The size/length of the trail system To try new trails Proximity to other amenities or attractions Please estimate your household's spending in the Iron Range region during your trip: Lodging Restaurants / bars Groceries Transportation (including gas) Shopping (souvenirs, clothing, etc.) Entertainment / Attractions Equipment rentals Miscellaneous
Answer only if on an overnight trip Mountain Sala Biwabik Aurora	Why aren't you spending a night in this area during your trip? In which of the following cities/regions are you staying overnight during your trip? (Select all that apply) Grand Rapids / Cohasset nights Brainerd Lakes / Cuyuna nights Duluth / Hermantown nights Tower / Soudan nights Babbitt nights Babbitt nights Bly nights North Shore of Lake Superior nights Other: nights

Appendix B: Responses to open-ended questions

Q11. Which amenities would improve your trail experience at Giants Ridge?

Responses to "Other"

Flow trails - fast - wide	Camping RV
Jump lines - Just more trail	More cross-country trails; Adventure van
Less rock gardens (too many boulders)	overnight parking
More downhill	On site camping!
More jump lines	
More jumps	Keep building!
Progressive jump lines	Kid activities while parents ride
Sessionable / short jump line	Rest area tables
······	Water station
Better maintenance of trails	Super
Fix trails every 2 years to get rid of washboard, rocks in trail, washed out landings, weeds in trail.	Tool stand
More trail grooming	
Trail maintenance	

Q12. Did any of the following negatively impact your trail experience today?

Responses to "Other"

Some rock gardens are really rough	Closed trails (3)
Loose gravel	Construction and rain = mud, closed hike
Loose rocks small	one trail
Poor surface condition on Goliath	Trail closures for other events
Rocks = hand pump	
Too much loose rock	Brake bumps
Too much rock	Broken rental
	Long drive
Hikers on bike trail	

Appendix B: Responses to open-ended questions

Q16. Why aren't you spending a night in this area during your trip?

Asked if the visitor was on an overnight trip but NOT staying in the local area (edited slightly for clarity)

Visitor staying elsewhere:
Duluth
Coming from Wisconsin
Staying in Silver Bay
Cabin in Tower
Own adventure van
Headed elsewhere
Visitor staying with family outside local area:
Family
Family in Cook
Family in Duluth
Visitor found better/cheaper lodging outside local area:
Not enough affordable options near by
(within 30 miles)
Everything reasonably price is booked
earlier these days and I don't usually plan
further out than a week

Q31. Is there anything else you would like us to know about your experience at Giants Ridge?

Generally positive comments about trail	Comments about the rental experience:
experience: Awesome AWESOME!	I would love to have more rental flexibility beyond 1/2 day. Maybe a discounted full day or half-day with additional hour(s)
First time visitor for mountain biking and was impressed. Great way to get	option. Rental guys did a great job! No option for a
in lot of rides for jumps and increasing	full day rental is odd.
skills without getting tired out to get back uphill. Great place	Wish there was a military discount on daily passes. OTT its my favorite destination
I think the trails are great Love it	Comments about trail maintenance: Better weed whacking
Love everyone who works here. everyone very happy and helpful Love THE VARIETY of riding on the range Perfect :)	Fix the ruts please and pack the trails. Def will recommend the trail if it is well groomed. Widen the berms would also be fun
Thanks for the trails	Have pathfinders come fix the trails
The best, Awesome! The Race The Grind Rocks. Very great experience	More maintenance of the XC bike trails. Website is very difficult to use and often inaccurate.
We love it here!	More trail and upkeep would be awesome
Overall very good. Use trails also for ATV and snowmobile. Giant's Ridge website	

very difficult for users and hard to

navigate events, etc. Educating users (on trail etiquette) through signs would be

helpful. Spectrum of users - casual to hard

core.

Appendix B: Responses to open-ended questions

Q31. Is there anything else you would like us to know about your experience at Giants Ridge? (Continued)

Suggestions for improving Giants Ridge:

More kid's activities would make me more likely to bring my whole family. More camping that is good for tents (e.g., more woods, more space between sites, less RVs) would make me more likely to stay more than one day.

Open more often for biking and skiing Spirit is closer but Giants is less rocky and hard on the bike. Would prefer less pedaling on the more advanced jump trails - Goliath, Return to Sender

The boulder gardens are sort of brutal / ruin flow (i.e. end of sector 12 and Goliath). Goliath needs to run faster at the end. Unfortunately, could not ride Featherly's as it was closed.

The lips on the only jump trail are to steep, an there are too many doubles. Make another bike jump trail. Featherlys is the best trail, one more trail like that would be awesome. Yearly maintenance on each trail would be huge as far as keeping the trails smooth on areas like berms where numerous rocks pop through which can be dangerous and cause injury.

Would love to see a few more trails added. Skills area would be awesome (that can be sessioned). Great flow trails, would like to see more natural technical trails. Your website does not work well with some browsers.

Miscellaneous comments:

Microwave

Locating cross country trail entrance seems difficult

For more information:



Iron Range Tourism Bureau

111 Station 44 Road Eveleth, MN 55734 218.749.8161

www.ironrange.org



Parks & Trails Council of Minnesota

275 East 4th Street, Suite #250 St. Paul, MN 55101 651.726.2457

www.parksandtrails.org