

Trail Visitor Survey

DEPARTMENT OF NATURAL RESOURCES





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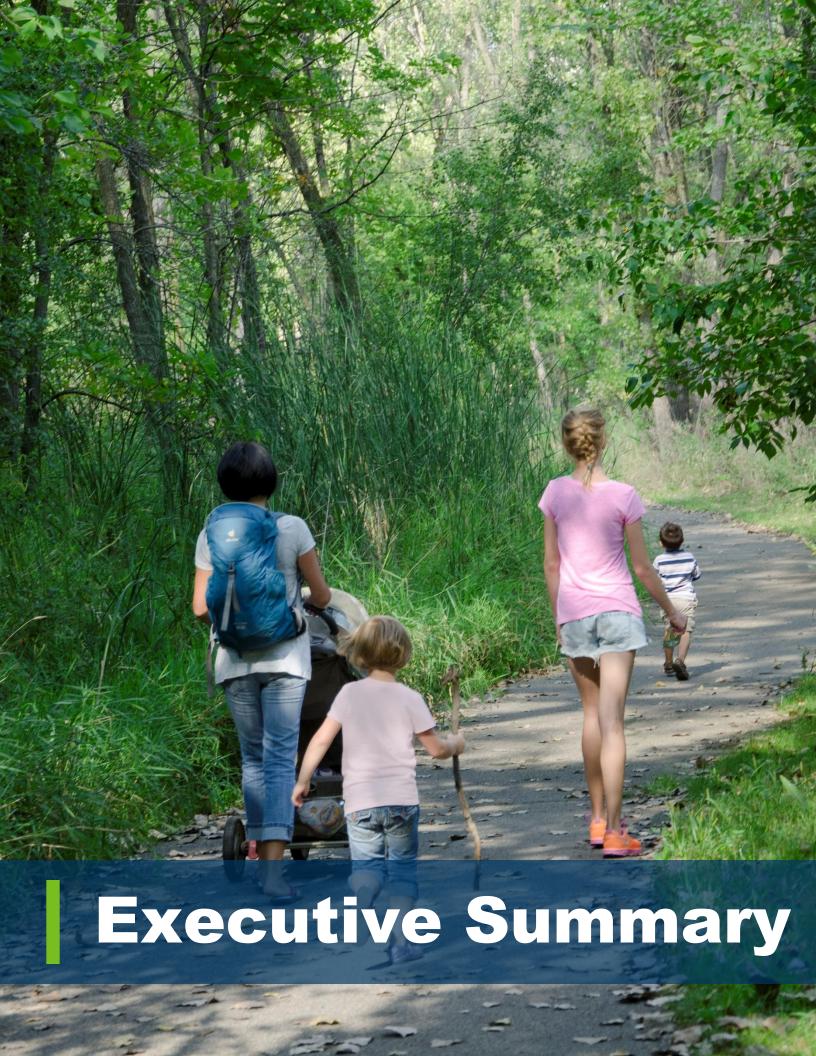
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EXECUTIVE SUMMARY

The 2024 Minnesota (MN) State Trails Visitor Survey provides critical information on how both residents and out-of-state travelers utilize the trail system. A statistically valid intercept survey with an online post-visit survey was conducted across the four regions of Minnesota. Surveyors approached visitors, asked to share their experience on-site, and then given a more in-depth survey to complete once they returned home that included questions about their spending both during their experience and preparing for it. Over 2,200 intercept surveys and 900 post-visit surveys were collected during the 2024 summer season. The key findings from the study are below.

State trail visitors are highly satisfied and use trails frequently



- With over 2.3 million visits to Minnesota's state trails in 2024, usage for these important resources is high across the state. Visitors are generally familiar with the trails they have been on, as 92% of those surveyed had been to the trail before, and nearly all repeat visitors (93%) have been in the past year.
- Visitors were very satisfied with their overall experience, with nearly all respondents (97%) saying they were either "somewhat" or "very" satisfied. Only 3% of respondents shared any dissatisfaction.



State trails are perceived as safe, with visitors feeling welcome and likely to recommend the trail to others

- 92% of visitors said they felt safe during their visit to the state trail, with a small percentage (4%) disagreeing.
- 90% of visitors said they felt welcome during their visit to the state trail, and 94% of them are likely to recommend it to friends and family.



Trails contribute \$102.5 million in annual economic output

- Visitors to Minnesota state trails spend \$84.6 million throughout the year.
- \$54.2 million is spent while on the trip to the trail with an additional \$30.4 million being spent at home preparing for the trip.



Economic benefits are seen across the state from visitor spending

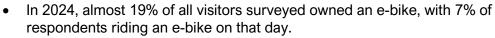
- Over 626 full- and part-time jobs are supported by trail spending in multiple industries.
- The central region accounts for 48% of all trail use and 50% of all spending, but tourism represents higher proportions of use in areas such as the northeast and northwest, bringing new dollars into the economy.

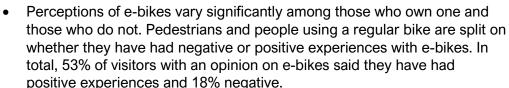


Maintenance and expansion of existing trails are top priorities

- Over 80% of respondents prioritized maintaining trails as the top priority for state trails, ahead of topics such as building new trails and trail connectivity.
- 80% of respondents agreed that Minnesota should invest in more state trail maintenance.

Current topics such as e-bikes are relevant for policy decisions





 Speed limits for e-bikes for all visitors, along with specific e-bike class regulations, were the most commonly supported rules for state trails.



- 74-78% of visitors rated the availability and quality of parking areas as either "good" or "very good," with over 60% of visitors rating rest areas similarly.
- Toilet facilities and bike repair stations show the most room for improvement. While under 25% rate their availability or quality as "poor" or "very poor", these two amenities have a higher percentage only rating them as "acceptable".

Demographic trends on state trails mirror those of other outdoor recreation areas

- Trail visitor demographics are similar to those found in other outdoor recreation studies. Over 68% of visitors are over the age of 45, with 32% over 65 years old. This represents a significantly older demographic who use trails compared to the general population of Minnesota adults.
- Approximately 51% of respondents identified as female, and 93% identified as White/Caucasian. Approximately 80% of all Minnesotan adults identify as White/Caucasian, indicating a potential opportunity to diversify and expand the state trail user base.
- State trail visitors tend to have higher educational attainment and household income, where over 62% of visitors have at least a Bachelor's degree and 48% earn over \$100,000 annually.







INTRODUCTION



The Minnesota Department of Natural Resources is committed to better understanding and enhancing visitors' outdoor recreation experiences. To that end, the DNR conducted a trail intercept survey in summer 2024 to gather information from and about state trail visitors, including their demographics, activities, frequency of usage, barriers, motivations, satisfaction, trip spending, and opinions about trail management and funding. This report presents findings from that survey.

The 2024 State Trail Visitor Survey continued to build on the state's commitment to better understanding what residents and visitors desire in their trails system and the economic contributions made from trail visitation. This project provides an opportunity to explore state trail trends since visitors were last surveyed on state trails in 2019.

The data collected from this study can inform strategic management decisions, and planning for the long-term development of Minnesota's state trails system. With over 2.3 million visits covering 16 million miles of trail use during the warm season, understanding this diverse and active user base is key to meeting future demands and maintaining the high quality of Minnesota's trail system. The project team worked closely to implement changes in the study, providing better quality data and addressing new challenges in trail management.

Additionally, the study aimed to quantify the economic contributions made by trail visitors to the state and its associated regions. The DNR contracted with RRC Associates to update the survey tool, facilitate data collection, conduct analysis and report findings. The DNR was responsible for data collection and sampling plan development in consultation with RRC Associates.

RESEARCH METHODS

The research methods employed in this study involved a multi-step process to gather statistically valid data across multiple scales. The sections below outline the methodological components of the study.

SURVEY IMPLEMENTATION

The survey was conducted using a two-step approach for contacting visitors to state trails. Two distinct surveys were used to collect data at specific times from visitors:

1) Intercept survey:

- a. Conducted via tablet with visitors on paved and hardened Minnesota state trails throughout the summer season (Memorial Day weekend through Labor Day).
- b. A five-to-seven-minute survey that collected data about trip characteristics, demographics, and activity participation.

2) Post-visit survey:

- a. An online survey completed by participants of the intercept survey once they returned home from their trail visit.
- b. A ten-minute survey that captured details about the full trip to the state trail.

This two-step survey approach allowed the study to gather a very large sample size for questions on the intercept survey as respondents were able to respond directly on-site. The post-visit survey then was used as a way to capture details from their visit to the state trail after returning home. Questions on the post-visit survey were meant to be topics that could not be answered without full experience such as spending, ratings of their experience, and specific details about their trip. This methodology is common in survey research for parks and recreation as it ensures that responses are from visitors who were verified to be on-site.

To obtain better sample sizes for the survey, two postcards were utilized to boost response. The details of these two postcards are described below:



Figure 1. Post-visit survey postcard

Post-visit Survey Postcard: The post-visit survey postcard was given to respondents after completing the intercept survey. The postcard had a custom URL to the post-visit survey and a unique access code. Additionally, a QR code was added for easy access to the URL. Finally, a description of the incentive for completing the post-visit survey was included (a chance at 1 of 15 \$50 VISA gift cards). As the surveyor handed the postcard to the respondent, the access code was attached to their intercept survey for matching the two back together.

Full Survey Postcard: Added to boost

developed that included the entire intercept

offered to any possible respondents who did

not participate in the intercept survey at all.

directed participants to an online survey that had the intercept and post-visit survey all in

one place. Over 100 responses were gathered

from this methodology, increasing the overall

sample size and allowing more visitors to

participate.

and post-visit survey. This postcard was

This postcard had a different URL that

participation among potential nonrespondents, a separate postcard was



Figure 2. Full survey postcard

Over the course of the entire season, responses to each survey, including the online survey option for non-respondents, were strong and presented below:

1) Total Intercept Surveys: 2,236 completed

2) Total Post-visit Surveys: 943 completed

3) Total Online Full Surveys (online intercept and post-visit): 118 completed

Overall, the post-visit survey had just under a 50% response rate, which is very strong and representative of the overall user base. The dataset collected throughout the summer season in 2024 allows for a variety of crosstab and analyses due to the large sample size. The following section details the survey scheduling, sampling methods, and weighting.



SURVEY SAMPLING AND DATA WEIGHTING

The survey team for the 2024 Minnesota State Trail Survey was comprised of seven dedicated surveyors throughout the state, with other rotating surveyors as needed. Surveyor locations were rotated throughout the season to ensure representation across trail and time segments. The following steps were taken to represent use as best as possible across the system:

- 1) Sample representatively by weekend and weekday use.
 - a. Using trail counters and big data sources, the schedule took into account the amount of use on weekends vs. weekdays.
- 2) Sampling by trail segments.
 - a. While the results are meant to be only aggregated down to the individual trail level, some trail segments see different types of use than others. To account for these possible differences, the survey schedule rotated, which means that a segment of the trail was surveyed throughout the season.
- 3) Representing various times of day on the trail.
 - a. Like weekends versus weekdays, the time of day can also have an impact on trail use. Surveyors were scheduled at various start and end times to account for these possibilities.

Figure 3. 2024 Minnesota state trail survey schedule

Trail segment	Weekends / Holidays	Weekday
Alex Laveau	3	1
Blazing Star	1	2
Brown's Creek	1	2
Camp Ripley/Veterans	0	2
Casey Jones	0	5
Central Lakes: Osakis to Garfield	1	7
Central Lakes: Garfield to Fergus Falls	3	8
Cuyuna Lakes	1	3
Douglas	1	4
Gateway: Capitol to I-694	1	5
Gateway: I-694 to Pine Point Park	2	3
Gitchi-Gami: Silver Creek Cliff to Silver Bay	1	3
Gitchi-Gami: Silver Bay to Grand Marais	2	3
Glacial Lakes	4	5
Goodhue Pioneer	1	4
Great River Ridge	1	2
Harmony-Preston Valley	3	3
Heartland: Park Rapids to Akeley	2	4
Heartland: Akeley to Wilkinson	2	5

Trail segment	Weekends / Holidays	Weekday
Heartland: Detroit Lakes to	1	1
Frazee	1	7
Luce Line: Wayzata to Winsted	1	/
Luce Line: Winsted to Cosmos	3	4
Mill Towns	0	2
Minnesota River	2	1
Minnesota Valley	2	1
Munger: Hinckley to Carlton	4	8
Munger: Carlton to Duluth	2	5
Paul Bunyan: Crow Wing to Brainerd	3	3
Paul Bunyan: Brainerd to Pequot Lakes	1	4
Paul Bunyan: Pequot Lakes to Heartland	4	9
Paul Bunyan: Heartland to Bemidji	4	7
Root River: Fountain to Whalan	3	5
Root River: Whalan to Houston	3	4
Sakatah: Faribault to Waterville	2	4
Sakatah: Waterville to Mankato	2	6
Shooting Star	2	6
Total	69	148

Data Preparation and Weighting

Intercept data collection concluded on Labor Day, 2024, and post-visit collection closed two weeks after Labor Day, to allow any last travelers to return home and complete the survey. Data were cleaned, and intercept and post-visit responses were joined on a common identification variable assigned to each respondent. The cycle of surveyors at different trails throughout the summer season resulted in a robust sample that was already strongly representative of the proportion of total visitation held by each trail segment. However, in order to ensure the data were as representative as possible, weighting was applied to a variety of components, including:

- Trail Visitation: the share of total summer visits held by each state trail, per the averaged percent of warm season Trail Miles Traveled (TMT) from automated count data and locationbased services data. Counts from these two sources were averaged to bolster instances in which counter data were out of date (more detail in <u>Appendix A: State Trail Use</u>).
- Mode of Trail Use: the share of visits by mode of transportation (e.g., walking, biking, or other) made by individuals on the trail, to account for the increased likelihood of encountering a cyclists while surveying. Visits by mode are obtained by:
 - a. Applying the share of pedestrians/cyclists to total TMT (68% cyclists/32% pedestrians, per ten permanent automated trail counters), to obtain TMT by mode.
 - b. Dividing TMT by the estimated median cycle/pedestrian miles traveled per trip (per unweighted survey data), to obtain visits by mode. Pedestrians included visitors who reported their primary activity on the trail as walking with or without a mobility assist device, dog walking, or running or jogging. Cyclists were visitors who said their primary activity was cycling with a regular bike or an e-bike.
 - c. Calculating the share of total visits made by cyclists/pedestrians.
- 3. **Weekday/Weekend:** the share of total visits to state trails made on summer weekdays and summer weekends/holidays.

Figure 4. Weighting proportions by trail, mode, and day of week

Visits by Trail	Raw	Weighted
Alex Laveau	1.0%	0.3%
Blazing Star	0.8%	0.6%
Brown's Creek	7.2%	6.6%
Camp Ripley/Veterans	0.4%	0.1%
Casey Jones	0.7%	0.4%
Central Lakes	5.7%	6.5%
Cuyuna Lakes	2.7%	2.3%
Douglas	3.1%	4.6%
Gateway	13.3%	12.5%
Gitchi-Gami	3.2%	4.4%
Glacial Lakes	3.0%	2.9%
Goodhue-Pioneer	1.9%	1.5%
Harmony-Preston Valley	2.2%	1.8%
Heartland	6.9%	6.3%

Visits by Trail	Raw	Weighted
Luce Line	7.6%	7.3%
Mill Towns	0.5%	0.8%
Minnesota River	0.2%	0.2%
Minnesota Valley	2.0%	1.8%
Munger	5.8%	6.1%
Paul Bunyan	13.8%	14.1%
Root River	8.8%	11.6%
Sakatah Singing Hills	7.0%	5.9%
Shooting Star	0.8%	0.6%
Total	100%	100%

Total	100%	100%
Pedestrian	29.3%	75.6%
Bicycle	70.8%	24.4%
Visits by Mode	Raw	Weighted

Weekend (Sa-Su)	36.0%	40.0%
Weekday (M-F)	64.0%	60.0%
Visits by Day of Week	Raw	Weighted



Figure 5: Map of Minnesota state trails and DNR regions



SURVEY RESULTS

The following section details the results from both the intercept and post-visit survey. The results from each survey are presented intertwined throughout this section. The results for the intercept survey have a much larger sample size than those from the post-visit survey due to response rates. Demographic variables are compared to the 2023 American Community Survey (ACS) which is conducted by the U.S. Census and seen as the most comparable year-to-year database for demographics outside of the decennial Census.

DEMOGRAPHICS

Compared to the 2023 ACS data, trail visitors tend to be older, have higher household incomes and educational attainment, and more often identified as white. Similar results are found across other parts of the Minnesota state parks and trails system.

The following figures show the reported age, gender, race/ethnicity, education and household income of trail visitors compared to the Minnesota adult population per the 2023 American Community Survey.

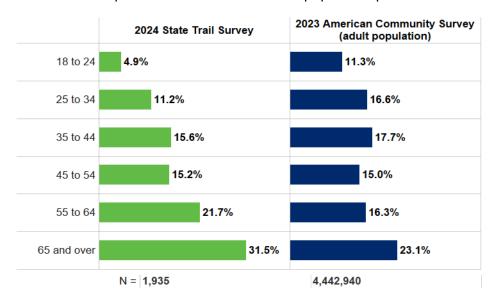


Figure 6. Age of adult visitors compared to the Minnesota adult population - intercept survey

- 68.4% of adult trail visitors were 45 or older, and just under a third (31.5%) are 65 and older.
- In contrast, 54.4% of the Minnesota population is over 45, and less than a quarter (23.1%) are 65 and older.
- The largest differences in use are among younger people on state trails. For instance, only 4.9% of those surveyed on a trail were aged 18 to 24, compared to that age range representing 11% of the state population. A similar difference is observed among those aged 25 to 34.

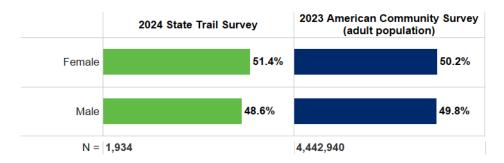


Figure 7. Gender of adult visitors compared to the Minnesota adult population - intercept survey

- Over half (51.4%) of intercepted trail visitors were female, whereas the Minnesota population is more evenly split between males and females. Nonetheless, survey results by gender track closely to the adult population.
- The survey included gender selections for male, female, non-binary, or open-entry. Overall, less than 1% identified as non-binary or with another descriptor.

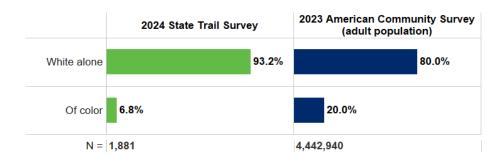


Figure 8. Race/ethnicity of adult visitors compared to the Minnesota adult population - intercept survey

- Over 90% of visitors were white (93.2%), despite white adults making up only 80% of the Minnesota adult population.
- Approximately 1% of respondents identified as American Indian or Alaska Native, Asian or Asian American, Black or African American, and/or Hispanic or Latino. Less than 1% identified as Middle Eastern or North African, or Native Hawaiian or Pacific Islander.

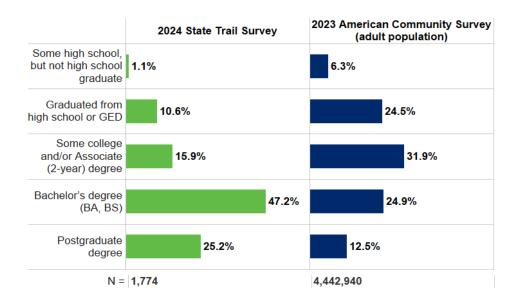


Figure 9. Educational attainment of adult visitors compared to the Minnesota adult population - intercept survey

- Trail visitors tend to have high educational attainment, with 88.3% having at least some college experience and over two-thirds (72.4%) having a bachelor's degree or higher.
- The overall Minnesota adult population has a more varied level of education attainment, with 37.4% having a bachelor's degree or higher.

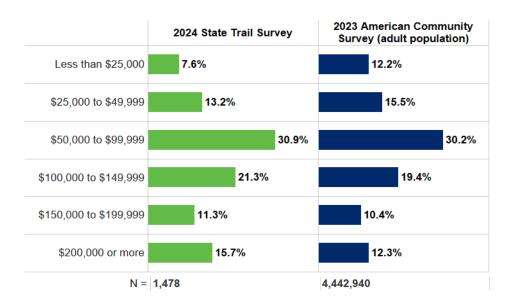


Figure 10. Household income of adult visitors compared to the Minnesota adult population – intercept survey

- Trail visitors tend to have higher household incomes than the full population, with almost half (48.3%) of sampled trail visitors having incomes \$100K or higher compared to 42.1% of the population.
- Conversely, 20.8% of visitors have incomes less than \$50K, compared to 27.7% of the population.

GROUP COMPOSITION AND GROUP CHARACTERISTICS

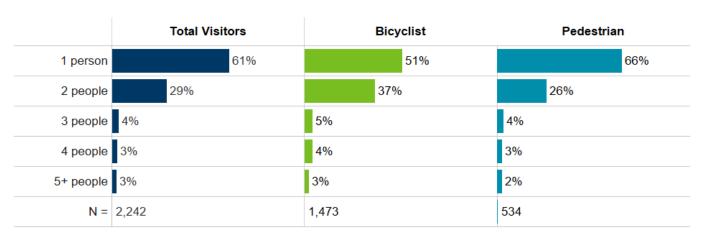


Figure 11. Group size on Minnesota state trails – intercept survey

- Over half of survey respondents (61%) indicated that they visited the trail alone and another 29% visited with one other person. Only 10% visited in groups larger than two people.
- By mode of trail use, 66% of pedestrian groups only contained one person, compared to only 51% of bicyclists.
- Both bicyclists and pedestrians were unlikely to have groups of three people or more (12% or less each).

Respondents were also asked to provide the total number of people in their group, by age category, including any children or teenagers present.

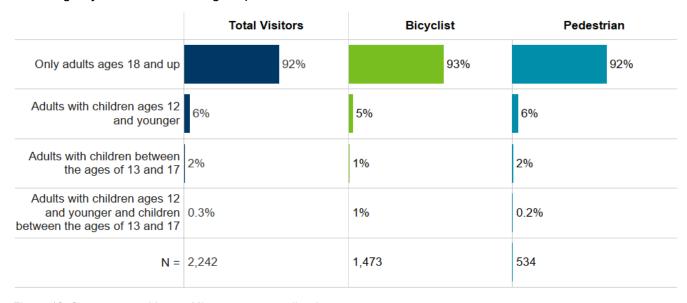


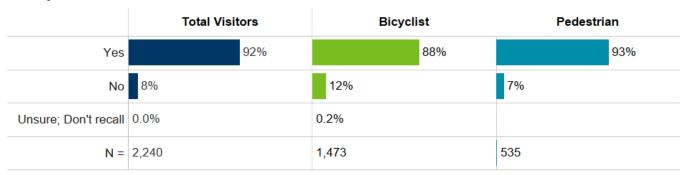
Figure 12. Group composition on Minnesota state trails - intercept survey

- The presence of minors in trail groups was relatively uncommon, with only 8.3% overall indicating that their group contained at least one person below the age of 18.
- Adults with children ages 12 and younger were more common (6%) than adults with teenagers (2.3%). While minors were not eligible as survey respondents, the DNR intercepted 192 children under the age of 18 without an adult present (4.5% of all individuals stopped by staff).

 Respondents of color were more likely to be visiting the trail in a group including children, particularly children ages 12 and younger. The presence of children did not significantly differ between modes of trail use.

Respondents were also asked if they had visited the state trail before and, if so, when their last trip to the trail occurred.

Have you visited this state trail before?



[If have visited before] When was the last time you visited this state trail?

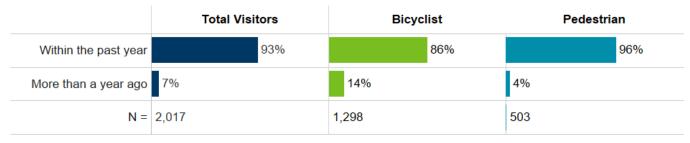
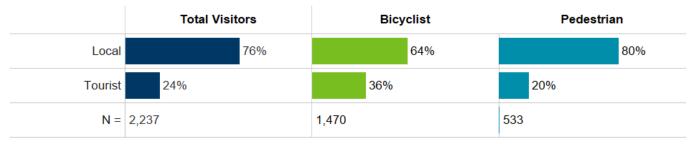


Figure 13. Repeat/first-time visitation and frequency of use among repeat visitors – intercept survey

- For most visitors (92%), this was not their first trip to the trail, which is consistent with data reported in the 2019 study.
- Among repeat visitors, nearly all (93%) have visited the trail sometime within the past year, suggesting evidence of a fairly high level of familiarity with the trail from past experience.
- Cyclists (including e-bikers), adults accompanied by children, respondents of color, and
 visitors to trails in the northeast region were more likely to report being a first-time visitor to
 the trail.

Given that most respondents have visited the trail at least once before, it is informative to also consider the extent to which visitors are traveling to visit the trails. Visitors may be categorized as either local or tourist. In this context, Locals refer to those who traveled less than 50 miles from home and did not stay overnight in the area of the trail. Tourists refer to those who stayed overnight in the area of the trail and/or traveled more than 50 miles from home to get to the trail.

Local/Tourist (Tourist = a respondent that stayed overnight or traveled more than 50 miles from home)



^{*}Local - a respondent that traveled less than 50 miles from home and did not stay overnight *Tourist - a respondent that stayed overnight and/or traveled more than 50 miles from home

Respondent Origin - Trail Region

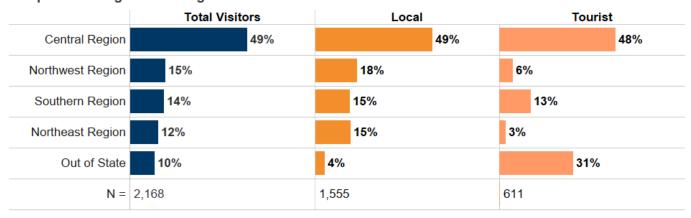


Figure 14. Visitation by locals/tourists and respondent origin – intercept survey

- As suggested by the high level of repeated trail use, 76% of all respondents were locals to the trail area, and 24% were tourists.
- Bicyclists held a larger share of tourists (36%) than pedestrians (20%). This suggests that traveling to utilize trails is more common among those who cycle.
- Among all tourists, 48% were from the central region (i.e., central region residents who
 traveled more than 50 miles and/or stayed overnight in the area of the trail), and 31% were
 from out of state visiting Minnesota.
- Demographically, tourists tend have higher household incomes, are more likely to be male, and are more likely to be older than 45 than local visitors. No significant differences emerged for tourists by group composition or race/ethnicity.

STATE / COUNTRY

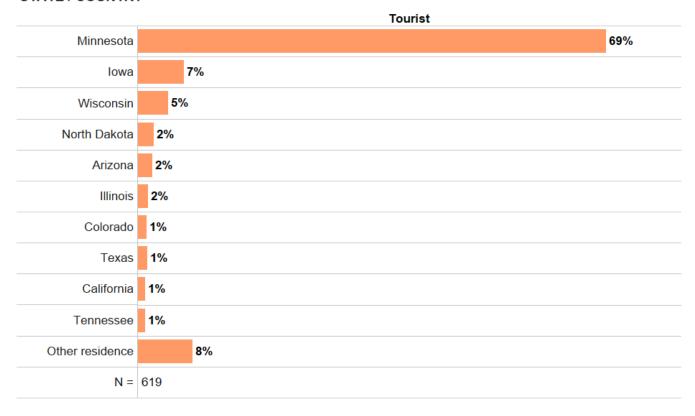


Figure 15. State of origin by tourists to Minnesota state trails - intercept survey

- Among tourists (24% of total visitors), 69% originated from Minnesota and 31% originated from out of state.
- Seven percent of all tourists were from Iowa, while 5% were from Wisconsin. Small percentages of tourists were from North Dakota, Arizona, and Illinois (a collective 6%).



TRIP PLANNING

The following section outlines questions related to trip planning prior to arriving at the trail. These results can help inform the DNR with how best to communicate and provide relevant information to visitors coming to Minnesota state trails.

How did you get to the trail today?

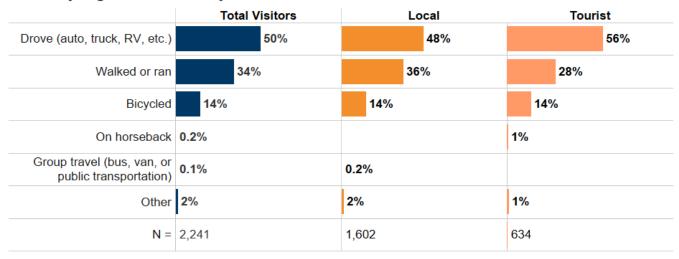
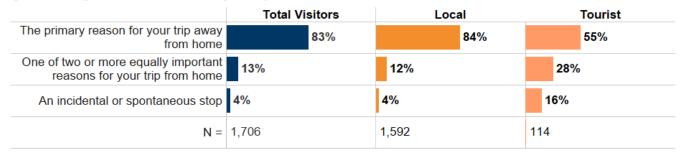


Figure 16. How visitors arrived at the trail – intercept survey

- Half of all visitors (50%) drove to the trail using a car, truck, or RV. An additional 34% of all
 visitors bicycled to the trail, while 14% walked or ran. A very small percentage used other
 means such as horseback or group travel.
- Tourists were more likely to drive to the trail (56%) than locals (48%). Because tourists likely
 drove to the site from their homes, it would be more likely that they would also drive to the
 site. However, 14% of tourists biked to the trail, potentially from some accommodation nearby
 or via a long-distance route.
- "Other" reported ways of getting to the trail (N=17 responses provided) included wheelchairs, scooters and rollerblades.

[If returning home after trail visit] Was your visit to this state trail...?



[If not returning home after trail visit] Was your visit to this state trail...?

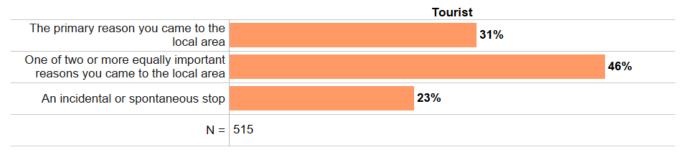


Figure 17. Reason for trail visit – intercept survey

- Among all visitors planning to return home on the same day of their trail visit, 83% indicated that visiting the trail was the primary reason for a trip away from home, with only four percent reporting that the trail was incidental.
- Just over half (55%) of tourists planning to return home on the day of their visit indicated that the trail was their primary reason for the trip away from home, with 28% reporting that it was among one of multiple equally important reasons. Conversely, tourists *not planning to return home* after their trail visit were more likely to indicate that they were visiting the trail as one of multiple reasons (46%).



How did you find out about this trail? (Please select all that apply)

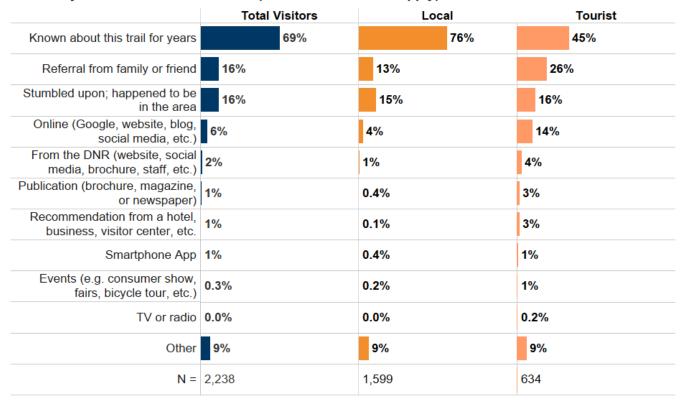


Figure 18. How locals/tourists find out about the trail – intercept survey

- Over two-thirds (69%) of all visitors indicate that they have known about the trail for years, corroborating results that show the majority of visitors have visited the trail more than once.
- Locals were particularly more likely to indicate that they have known about the trail for years (76%) compared to 44% of tourists. This finding is expected, but it still demonstrates that even locals require information sources to locate trails.
- While the plurality of tourists have known about the trail for years, over a quarter received a
 referral about the trail from family or friends (26%), and another combined 30% found out
 online or stumbled upon it while in the area.
- Pedestrians, visitors on day trips, white visitors and older visitors were more likely to have predominantly known about the trail for years; whereas cyclists, visitors on overnight trips, people of color and young adults (aged 18 to 24) were comparatively more likely learn about the trail from family/friends. Cyclists and people of color also tended to learn about the trail by happening upon it while in the area more often than other groups.
- "Other" reported means of finding out about the trail (N=205 responses provided) included primarily elaborations for certain items listed above. For example, the majority of this group indicated that they currently live in the area or used to live in the area, which could be encompassed under "known about this trail for years". A smaller subset of responses provided elaborations for online (e.g., AllTrails, Google Maps) or referral-based means (e.g., boy scouts, doctor, word of mouth). Other miscellaneous means included Boy Scouts or other outdoor clubs or seeing signs along the road.

When you obtain information about Minnesota state trails, what are your most important information sources? (Please select all that apply)

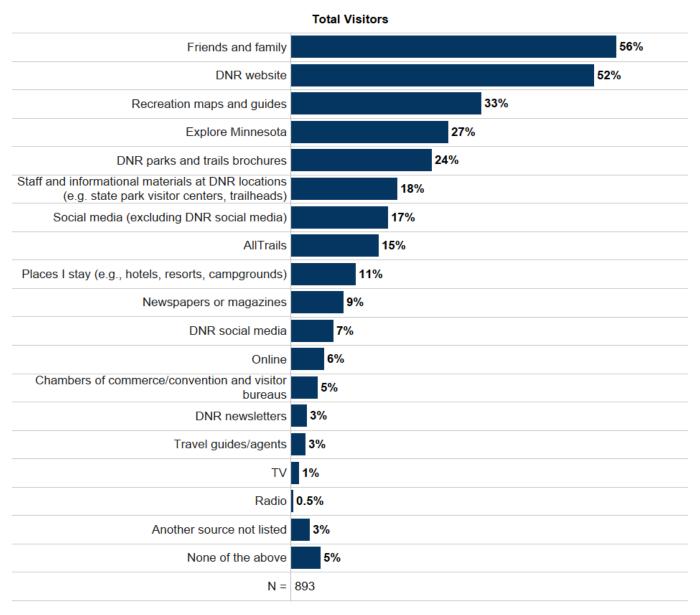


Figure 19. Important information sources used by locals/tourists - post-visit survey

- Over half of visitors received information from family and/or friends (56%) or used the DNR website (52%) as a primary source of information about the trail.
- Approximately a quarter or more of visitors used a combination of recreation maps and guides (33%), Explore Minnesota (27%), and/or DNR parks and trail brochures (24%).
- Primary information sources did not strongly differ between locals and tourists, though tourists were more likely to utilize the DNR website (58%), and recreation maps and guides (37%), and Explore Minnesota (34%).
- Younger visitors were more likely to obtain information from non-DNR social media or to utilize AllTrails.
- "Other" information obtained (N=118 responses provided), included elaborations to online sources, such as Google Maps, general web searches, Reddit and Trail Link. Other nononline sources that were called out included the Minnesota Trails magazine.

Respondents were also asked to rate the quality of various sources of information about the trail.

How would you rate the quality of the following types of trail information? (1 - Very poor; 5 - Very good)

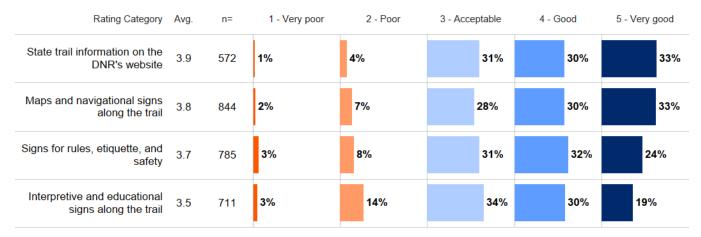


Figure 20. Quality of trail information - post-visit survey

- Visitors had largely positive experiences with trail information on the website and along the trail, with over 83% of visitors rating each type of trail information as acceptable, good or very good.
- Visitors were most complimentary of state trail information on the DNR's website (3.9/5.0).
- While visitors were least complimentary of interpretive and educational signs along the trail (3.5/5.0), 84% still found this aspect to be acceptable, good or very good.
- Ratings did not significantly differ between bicyclists and pedestrians, or locals and tourists.

Which of the following reasons describe why you are using the trail today? (Select all that apply)

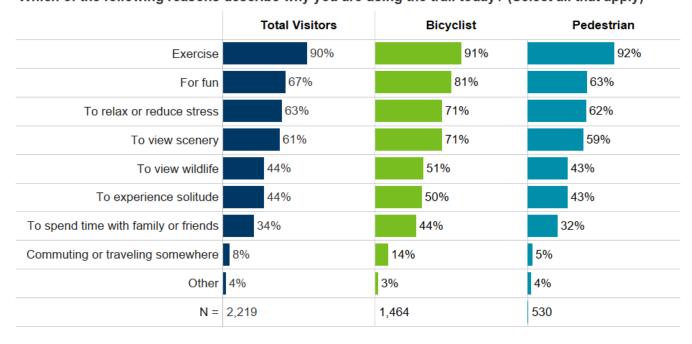


Figure 21. Motivations for using the state trail – intercept survey

- Visitors come to the trail for a variety of reasons, most predominantly exercise (90%), fun (67%), relaxation (63%) and viewing scenery (61%).
- Bicyclists were more likely to cite a wider variety of motivations in addition to exercise.

- Between locals and tourists, locals were more likely to come to the trail specifically for exercise (91%) while tourists had a higher propensity to select spending time with family and friends (50%) than locals (25%).
- By demographics, visitors aged 55 and older were more likely to indicate using the trail for exercise (91-94%); visitors of color were more likely to use the trail to relax (75%), view wildlife (59%) and/or experience solitude (53%); and women were more likely to use the trail to spend time with family or friends (40%).
- Comments on "Other" motivations for visiting the trail (N=86 responses provided), included exploration, dog walking, non-specified health needs, it being an ideal day for outdoor activities, and training.



TRAIL EXPERIENCES

Which of the following activities is your group participating in during today's visit on the trail? (Please select all that apply)

	Total Visitors	Bicyclist	Pedestrian
Walking, without a mobility assist device	50%	4%	74%
Bicycling, with a regular bike	25%	80%	8%
Dog walking	16%	1%	23%
Running or jogging	14%	1%	21%
Viewing or photographing wildlife or scenery	8%	7%	9%
Bicycling, with an e-bike	7%	26%	0.4%
Visiting historic sites or other points of interest	6%	9%	4%
n-line-skating, skateboarding, roller-skiing, or scooter	5%	0.4%	1%
Walking, with a mobility assist device	2%		3%
Camping	2%	3%	0.4%
Hunting or fishing	1%	1%	0.3%
Part of an organized event	1%	0.3%	0.5%
Horseback riding	0.3%		0.2%
Other	6%	6%	2%
N =	2,239	1,473	535

Which of the following is your primary activity for today's visit on the trail?

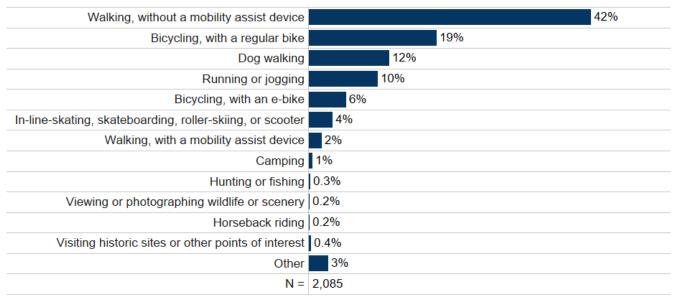


Figure 22. Activities and primary activity on the trail - intercept survey

- Like motivations for using a state trail, visitors participated in variety of activities on state trails, most predominantly walking, without a mobility assist device (50%), with a quarter biking on a regular bicycle (25%).
- Listed activities largely reflected one's mode of moving through the trail (i.e., biking or walking), but other activities were also listed, including dog walking (16%), running or jogging (14%) and viewing or photographing wildlife or scenery (8%).

- Among all visitors, 7% indicated that they bicycled with an e-bike, and 6% indicated that biking with an e-bike was their primary activity.
 - Among all bicyclists, e-bikers represented 26% of all activities and 23% of the primary activity.
- Tourists, male visitors and white visitors cycled more often than other types of visitors. However, cycling with an e-bike did not significantly differ between males and females.
- By trail, Root River sees a significantly higher share of bikers (23%) compared to pedestrians (6%) when looking at the distribution of the total of all visitors in their respective activity groups. Most other trails are fairly similar in their distribution of activities.
- "Other" activities reported (N=114 responses provided), included eating and or shopping at a
 nearby establishment or otherwise visiting a nearby town, foraging, and water-based activities
 such as swimming or kayaking.

(Intercept) Which statement most closely reflects your feelings about today's visit?

	Total Visitors	Bicyclist	Pedestrian
1 - Very dissatisfied	0.3%	0.1%	0.1%
2 - Somewhat dissatisfied	1%	0.3%	1%
3 - Neither satisfied or dissatisfied	2%	3%	2%
4 - Somewhat satisfied	16%	19%	14%
5 - Very satisfied	81%	77%	83%
N =	2,210	1,456	525

(Post-Visit) Which statement most closely reflects your feelings about your state trail visit?

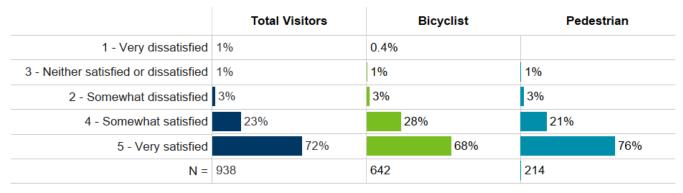


Figure 23. Satisfaction with visit to trail - intercept and post-visit survey

- Both survey versions had a similar question about the respondent's satisfaction with their state trail visit. The question was asked in both places to determine if their satisfaction changed over time.
- Largely, respondents were very satisfied both while intercepted on the trail and after they returned home. On the intercept, 97% of respondents were either "somewhat" or "very satisfied" compared to 95% on the post-visit. Respondents were more likely to say they were "very satisfied" on the intercept, however.
- Bicyclists had slightly lower satisfaction ratings than pedestrians on both the intercept and post-visit, but the difference is small enough that it may not be meaningful in management settings.

• Per the intercept (in which the sample is larger), satisfaction was noticeably higher than average at the following trails compared to the overall (4.77): Brown's Creek (4.93), Heartland (4.89), Paul Bunyan (4.86), Gateway (4.83) and Luce Line (4.83).

How would you rate the quality of the following aspects of the trail? Rate on a scale of 5 - Very good; 4 - Good; 3 - Acceptable; 2 - Poor, 1 - Very poor; or N/A - No opinion

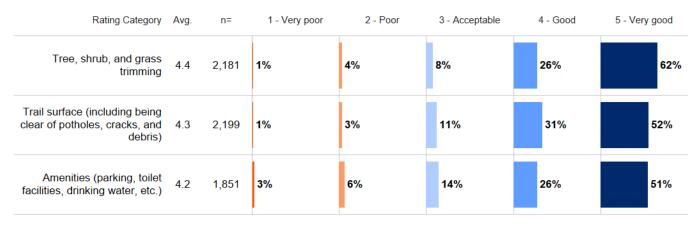
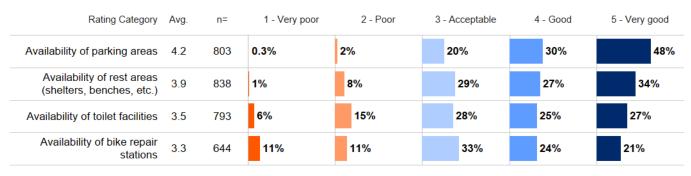


Figure 24. Quality of aspects of the trail – intercept survey

- Similar to satisfaction, respondents were asked about their ratings of the quality of various trail aspects while intercepted. All aspects scored highly in ratings, with tree, shrub, and grass trimming receiving the highest rating (77% rating "good" or "very good").
- Amenities such as parking, toilets, facilities, and drinking water received 77%, either rating it "good" or "very good," with 83% rating trail surface the same.
- The topic of trail surface contained the most variety of responses across response segments, with cyclists, locals, and visitors on day trips being more critical of the surface than their counterparts.
 - The trail surface was most highly rated at Luce Line (4.6/5.0).

How would you rate the availability of the following trail amenities? (1 - Very poor; 5 - Very good)



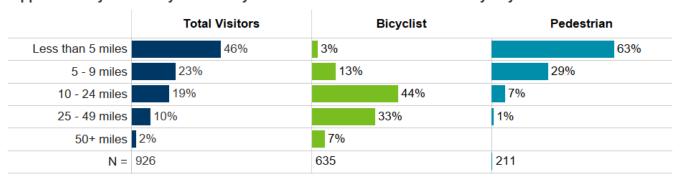
How would you rate the quality of the following trail amenities? (1 - Very poor; 5 - Very good)

Rating Category	Avg.	n=	1 - Very poor	2 - Poor	3 - Acceptable	4 - Good	5 - Very good
Quality of parking areas	4.1	776	1%	2%	23%	33%	41%
Quality of rest areas (shelters, benches, etc.)	3.9	807	2%	7%	26%	32%	33%
Quality of toilet facilities	3.5	700	5%	10%	36%	26%	24%
Quality of bike repair stations	3.5	541	9%	8%	36%	24%	23%

Figure 25. Availability and quality of trail amenities - post-visit survey

- The post-visit survey asked a similar series of rating categories around trail amenities. Two
 separate aspects were asked about four primary trail amenities: 1) the availability of the
 amenity and 2) the quality of the amenity. Using these two ratings, the results can show
 where respondents may feel like the DNR is delivering to the demand compared to the
 quality provided.
- Parking areas were seen as having the highest availability (78% "good" or "very good") and quality (74% "good" or "very good"). Rest areas followed in both categories with 61% rating the availability "good" or "very good" and 65% rating the same for quality.
- Toilet facilities and bike repair stations were the lowest rated in both availability and quality, but the majority of respondents still rated both "good" or "very good" in both availability and quality. However, these two areas would be the most impactful to focus on to improve the trail experience.
- Pedestrians were more critical of both the availability and quality of toilet facilities (3.4/5.0), though rating averages did not strongly differ across other response segments.

Approximately how many miles did you travel on the state trail on the day of your visit?



Approximately how many hours did you spend on Minnesota State Trails on the day of your visit?

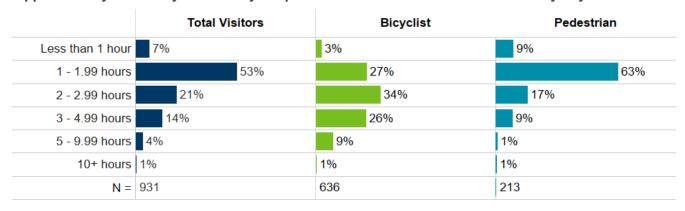


Figure 26. Miles traveled and hours spent on the trail – post-visit survey

- Most respondents traveled up to 24 miles on average on the state trail during their visit.
 Approximately 12% traveled more than 25 miles, while 46% traveled less than five miles.
- Miles traveled is heavily influenced by the mode of transportation used on the trail. For instance, 84% of bicyclists traveled at least 10 miles, with 44% of these visitors traveling between ten and 24 miles. As expected, the majority (63%) of pedestrians traveled less than five miles, with an additional 29% traveling five to nine miles. Thus, the overall totals are split based on these modes of transportation.

• In terms of hours spent on the trail, most spent between one to two hours (53%), followed by two to three hours (21%) and three to five hours (14%). Bicyclists were more likely to spend two to three hours (34%), while pedestrians averaged one to two hours (63%); additionally, ebikers spent about a half hour longer on the trail than visitors using regular bikes.

Visit Type	Distance Traveled (miles)	Time Spent (hours)
Bicyclist	20	2
Pedestrian	4	1
Day Trip	5	1
Overnight Trip	9	2
Local	4	1
Tourist	10	2
Overall	5	1.5

Figure 27. Median distance traveled and hours spent on the trail – post-visit survey

- Cyclists, visitors on an overnight trip, and tourists traveled further on the trail and spent more time on the trail than pedestrians, visitors on day trips, and locals.
 - Males also tended to travel further and spend slightly more time on the trail than other types of respondents.

To what extent do you agree with the following statements? (1 - Strongly disagree; 5 - Strongly agree)

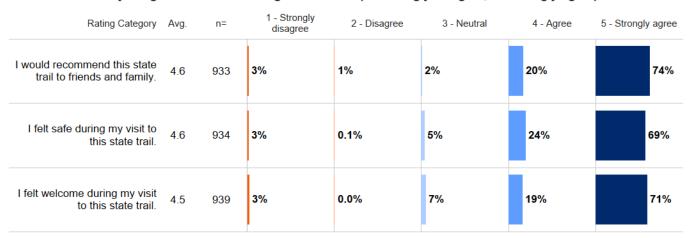
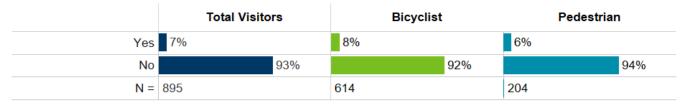


Figure 28. Agreement with statements on likelihood to recommend, feeling safe, and feeling welcome - post-visit survey

- Respondents were asked to rate their agreement with three key statements about their state
 trail visit. All three statements received strong support, with the statement "I would
 recommend this state trail to friends and family" receiving 94% of respondents' agreement or
 strong agreement.
- "I felt safe during my visit to this state trail" and "I felt welcome during my visit to this state trail" both received high agreement ratings too (93% and 87% agreement, respectively).
- Five percent or fewer of respondents disagreed with any of the statements.

Did you have any problems or conflicts during your visit on the trail?



(If conflict occurred) State Trail Visited

Total Visitors

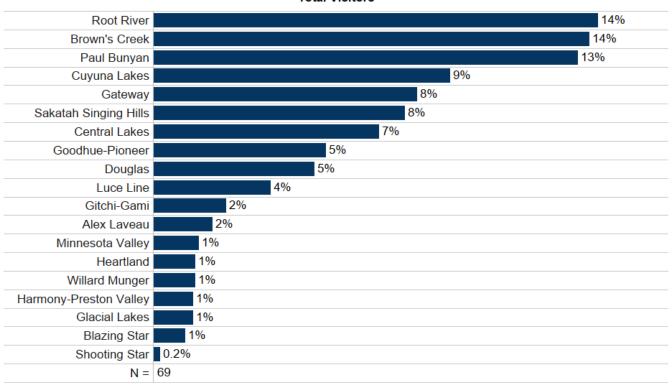


Figure 29. Conflicts on the state trail – post-visit survey

- The vast majority of respondents (93%) didn't encounter any problems or conflicts while on the trail. Both bicyclists and pedestrians experienced nearly the same level of problems or conflict as well with only 6 - 8% reporting.
- If a problem or conflict occurred, the state trail was identified to understand if there was an area that was more prevalent. Root River (14%), Brown's Creek (14%), and Paul Bunyan (13%) saw the highest percentages of problems or conflicts. However, the total number of problems or conflicts was still very small overall.
 - Of the top three trails on which visitors experienced problems or conflicts, two (Paul Bunyan and Root River) contributed more than 10% of visitors to the trail system total. Indeed, state trails with more visitors and concentrated use may be associated with higher rates of reported problems or conflicts.
 - Additionally, flooding events in the summer of 2024 may have led to more comments on poor trail conditions on trails in southeast Minnesota than typical.

Do you or anyone in your group have a physical or cognitive disability or condition? (Please select all that apply)

	Total Visitors	Bicyclist	Pedestrian
No one in my group has a disability	86%	89%	86%
Hearing	6%	5%	5%
Ambulatory	2%	1%	3%
Vision	2%	1%	3%
Cognitive	1%	0.4%	1%
Other disability not listed	2%	2%	2%
Prefer not to answer	3%	2%	3%
N =	862	589	197

[If someone in group had a disability] Did you or anyone in your group experience any barriers in using trail amenities and/or services related to this/these disabilities?

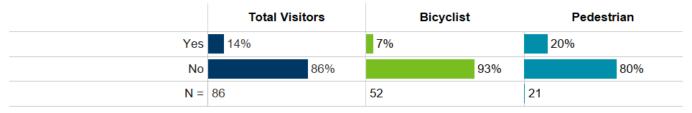
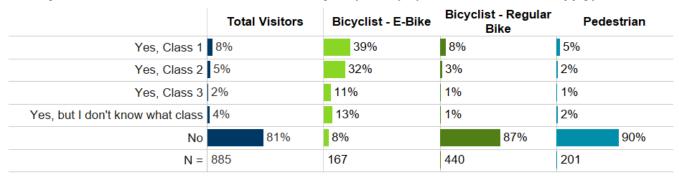


Figure 30. Physical or cognitive disabilities – post-visit survey

- Approximately 14% of respondents reported that someone in their group had a physical or cognitive disability. A hearing-related disability (6%) was most common among those who reported having a disability, followed by ambulatory (2%), vision (2%) and other disabilities not listed (2%).
- Pedestrians had a slightly higher percentage of respondents who identified as having a disability (14%) than bicyclists (11%); however, the difference was minor.
- Eight respondents provided elaboration on the barriers encountered during their visit. While barriers were disparate in nature, topics that emerged included: restroom availability/quality, more benches to rest, high-speed passing without notice, and state park passes.

OPINIONS ON STATE TRAIL REGULATIONS AND PRIORITIES

Does your household have an electric-assist bicycle (e-bike)? (Please select all that apply)



Does your household have any of the following electric mobility devices? (Please select all that apply)

	Total Visitors	Bicyclist - E-Bike	Bicyclist - Regular Bike	Pedestrian
Electric scooter	5%	2%	1%	5%
Hoverboard	2%		1%	2%
One-wheel	0.1%			0.2%
Other	1%	0.4%	0.4%	1%
None of the above	93%	98%	98%	93%
N =	839	148	419	197

Figure 31. Physical or cognitive disabilities - post-visit survey

- Electric-assist bikes (e-bikes) have become a major topic for trail management across the country over the past several years. Visitors were asked a series of questions about their use and ownership of e-bikes. Approximately 19% of all visitors have an e-bike, with a Class 1 e-bikes (8%) being the most common. Class 2 (5%) and Class 3 (2%) e-bikes are owned by a slightly smaller subset of visitors, while four percent don't know the class of their e-bike¹.
- As expected, the largest percentage of those who reported having an e-bike were those who
 were riding an e-bike when they were intercepted on the trail (95% own their own). A small
 portion of e-bike visitors borrowed or rented their bikes (8%). Thirty-nine percent of e-bike
 riders had a Class 1, 32% a Class 2, 11% a Class 3, and 13% did not know the class.

¹ E-bikes have two or three wheels, have a saddle and fully operable pedals for human propulsion, and are equipped with an electric motor that has a power output of not more than 750 watts. In Minnesota, e-bikes are categorized into three classes:

[•] Class 1: a bicycle equipped with an electric motor that provides assistance only when the rider is pedaling and ceases to provide assistance when the bicycle reaches the speed of 20 miles per hour.

[•] Class 2: a bicycle equipped with an electric motor that is capable of propelling the bicycle without the rider pedaling and ceases to provide assistance when the bicycle reaches the speed of 20 miles per hour.

[•] Class 3: a bicycle equipped with an electric motor that provides assistance only when the rider is pedaling and ceases to provide assistance when the bicycle reaches the speed of 28 miles per hour.

- Among regular bike visitors and pedestrians, ownership of an e-bike was much lower, at 13% for bicyclists and ten percent for pedestrians. However, results do indicate a substantial uptick in overall e-bike ownership among households on state trails. Almost 20% of all households have one, which represents a significant portion of the user base.
- Only eight percent of respondents have other electronic mobility devices like electric scooters, hoverboards or one-wheels.

How would you describe your experience with e-bikes?

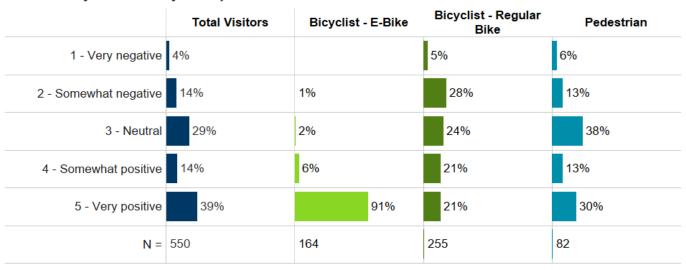


Figure 32. Experience with e-bikes – post-visit survey

- Experiences with e-bikes varied across the sample, among visitors with opinions on the matter (i.e., did not respond "N/A, I have not had experience on or with e-bikes"). Most respondents reported a positive experience, with 39% describing it as "very positive" and 14% as "somewhat positive."
 - Among the full sample, including N/A respondents, 41% of cyclists and 59% of pedestrians had no experience or encounter with e-bikes.
- However, there are large differences when comparing e-bike visitors to both regular bike
 visitors and pedestrians. E-bike visitors rate their experience, as you would expect, extremely
 positively, with 91% having a "very positive" experience compared to only 21% of regular
 bike visitors and 30% of pedestrians. Conversely, 33% of regular bike visitors and 19% of
 pedestrians have a negative experience with e-bikes.

How do you feel about the following rules on DNR state trails? (1 - Strongly oppose; 5 - Strongly support)

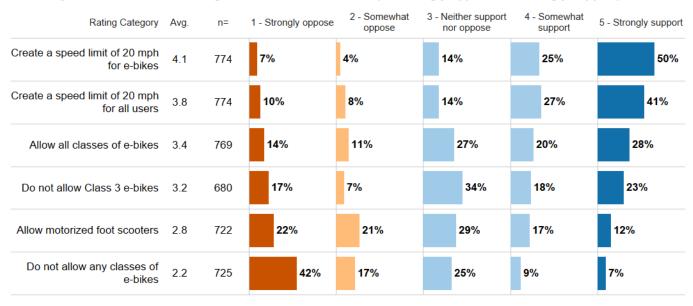


Figure 33. Experience with e-bikes – post-visit survey

- Various potential e-bike rules were presented to respondents for DNR state trails.
 Respondents rated on a scale where 1="Strongly oppose" to 5="Strongly support".
- "Creating a speed limit of 20 mph for e-bikes" received the most support at an average of 4.1 out of 5.0. "Creating a speed limit of 20 mph for all visitors" followed in support with 3.8.
- "Allowing all classes of e-bikes" received mixed support at an average of 3.4 with more people supporting (48%) than opposing (25%).
- Two statements received more opposition than support: "Allow motorized foot scooters" at an average of 2.8 and "do not allow any classes of e-bikes" at an average of 2.2 overall.
- E-bikers were least supportive, on average, for rules pertaining to e-bike restrictions (e.g., "Do not allow any classes of e-bikes", 'Do not allow Class 3 e-bikes"), but were not significantly less opposed to speed limit regulations than regular cyclists or pedestrians.

Please indicate your level of agreement with the following statements about Minnesota state trails. (1 - Strongly disagree; 5 - Strongly agree)

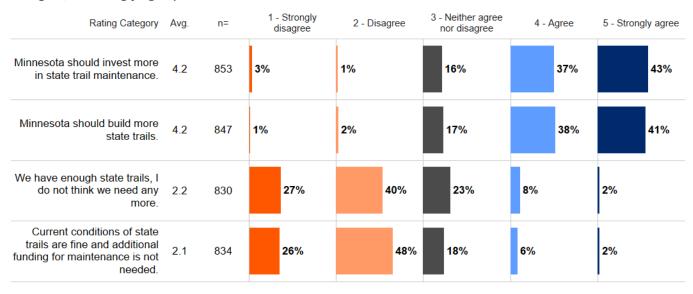


Figure 34. Agreement with state trail statements on maintenance and conditions - post-visit survey

- The final set of agreement statements focused on the maintenance and development of trails in Minnesota. Statements were asked on a scale where 1="Strongly disagree" to 5="Strongly agree".
- "Minnesota should invest in more state trail maintenance" saw overwhelming support, with 80% of respondents agreeing to a degree. Only three percent disagreed with the statement, with 16% neutral. "Minnesota should build more state trails" also had high agreement with 79% agreeing and only one percent disagreeing.
- Two statements had an opposite level of agreement. "We have enough state trails, I don't
 think we need any more," saw 67% disagree to an extent. Furthermore, "Current conditions
 of state trails are fine and additional funding for maintenance is not needed" saw even lower
 agreement with 74% disagreeing. Overall, respondents were supportive of funding for both
 maintenance and new development for state trails.

Please rank the following potential state trail investments by priority.

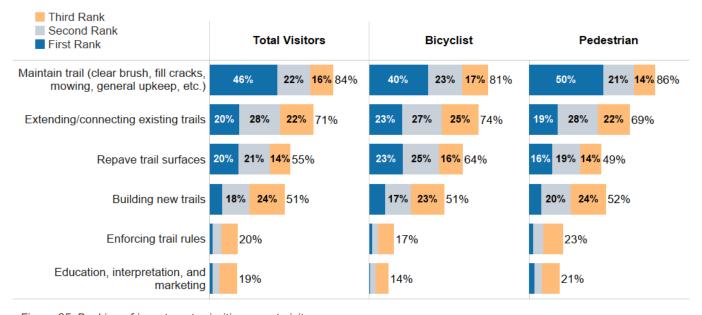


Figure 35. Ranking of investment priorities – post-visit survey

- Respondents were asked to rank which investment priorities they preferred among a large list of options. The top priority when combining the first, second and third ranks together was "maintain trail (clear brush, fill cracks, mow, general upkeep, etc.)" with a ranking of 84%. "Extending or connecting existing trails" was followed at an overall priority of 71%. "Repaving trail surfaces" (55%) and "building new trails" (51%) were next in line. Fewer respondents selected investment priorities of "enforcing trail rules" (20%) and "education, interpretation, and marketing" (19%).
- Priorities were consistent among modes of transport.
 Pedestrians had a slightly less favorable ranking for repaving trail surfaces, which typically makes a greater difference for bikers than for those on foot.



OPEN-ENDED COMMENTS

Throughout the post-visit survey, respondents were given multiple opportunities to provide feedback regarding their levels of satisfaction on the trail, any conflicts encountered during their visit, trail improvement/maintenance ideas, perceptions of e-bikes, and other reactions to the trail or their trail experience. Themes within each of these topics are explored in this section.

If a respondent indicated that their level of satisfaction with their trail visit was at least 4.0/5.0, they were asked to remark on the primary factors that contributed to their satisfaction (n=777). Primary themes of satisfaction included:

- Beauty of trail's scenery and natural features: Many comments praised the trail's beautiful natural scenery, pleasant weather during their trip, and wildlife.
- Trail maintenance: Satisfied commenters complimented the smooth terrain, paving, and
 overall condition of the trail. Some satisfied respondents did take the time to point out where
 grooming could be improved, trails patched, or branches/grasses trimmed along the sides of
 the trail.
- Convenience: Many commenters, especially locals, expressed appreciation for the trail's convenient availability for exercise or commuting.
- Serenity: Commenters also expressed appreciation for the serenity the trail brings and the fact that the trail is a good place to ride/walk away from cars.

Peaceful, well-maintained trail that has good stops along the way. Love that it goes through several small towns so I can stop for a beer or a snack and support local businesses!

Nice, smooth paved trail. Brush debris from recent storms cleared off the trail. Recently mowed so weeds etc. we're not encroaching or overgrown. Beautiful scenery. Several areas to stop, rest, and relax along the trail.

It was really nice being able to enjoy a trail for a full century - especially the parts which were divided from the highway. We saw lots of wildlife, enjoyed the shade of the trees, and just being out. It was really great - and I feel really lucky to have such an amenity available to me.

I live within two blocks of the Luce Line trail and use it almost daily. I am 80 years old and use my E-bike. Sometimes I go alone and sometimes I ride with a friend. I love the trail!!

Conversely, if a respondent indicated that their level of satisfaction with their trail visit was 2.0/5.0 or less, they were asked to provide feedback about what made their visit dissatisfactory (n=34). Strong dissatisfaction was very uncommon among respondents, but those who did express dissatisfaction primarily commented on the trail condition and rough surface. Nearly all comments from dissatisfied visitors pertained to the condition of the trail, such as cracks in the surface, overgrown foliage, or debris on the path (e.g. roots, branches):

The trail is getting overgrown with branches it made meeting on coming bikers difficult in places. lots of branches and debris on the trail

Trail not clear of debris, pot holes and weeds growing up along trails not mowed

Visitors were also given an opportunity to rate the degree to which they felt welcome and safe on the trail. As shown previously in the report, respondents rarely indicated that their visit felt unwelcome or unsafe; but if they rated either question 1 (Strongly disagree) or 2 (Disagree), they were given an opportunity to elaborate on what would have made them feel more welcome or safe.

- 12 visitors provided a substantive comment about feeling welcome during the visit. Among these few responses, most generally pertained to keeping the trail maintained.
- 14 visitors provided a substantive comment about feeling safe during the visit. These comments also largely pertained to trail maintenance and signage.

I wish the sides of the trail were moved a little more often.

The mud on trail surface is dangerous for riders. The trees with low hanging branches not safe to rider under them. Saw other trees where limbs were snapped they could fall on riders in a strong breeze.

Like dissatisfactory experiences and unsafe/unwelcome experiences, conflicts or barriers on the trail were rather uncommon for visitors. Among respondents that left a comment regarding either barriers or conflicts encountered (n=77), themes included:

- Trail maintenance and closures: About one-third of these comments pertained to the surface
 of the trail, overgrowth, damage due to recent storms, or segment closures encountered
 during the visit.
- *E-bike and other motorized vehicle usage*: Approximately a quarter of these comments regarded concerns around e-bikes or other motorized vehicles. Specifically, these comments spoke of safety concerns around the speed of travel, reckless driving, or passing behavior.
- Dogs and other groups: A small share of comments referenced issues around dogs, such as
 dogs being off-leash or visitors not cleaning up after dogs, or issues around large groups of
 people blocking the path.

Dried mud from recent flooding made lithe trail very treacherous just east of Whalen. I realize that employees were probably overworked due to the flooding, but if a skid loader is not available to clear the trail, at the least there should be warning signs.

Groups of people stopping in the middle of the trail and not off to the side.... difficult to get around them. Maybe have area for groups to stop at.

I think some electric bikes pass at a very high rate of speed and give no warning. Some of the trails are very rough, making it a hazard

E-biking and the use of motorized vehicles can be contentious topic for public spaces. Trail visitors were asked to describe their perception of e-bikes on state trails (n=658). Themes of their feedback included:

- E-Bikes are acceptable, if used within reason: Many respondents perceive e-bikes as acceptable on the trail, as long as riders are respectful of other trail visitors, do not go faster than they can control/are careful, and follow common rules.
 - Class limitations: Some visitors indicated that acceptability depends on the Class of the e-bike, with Classes 1 and 2 being regarded as acceptable and Class 3 pushing the boundaries of what is appropriate on the trail.
- *E-Bikes get more people outside:* Another collection of responses reflected positively on the proliferation of e-bikes, complimenting the fact that e-bikes are getting more people on the trail, outside, and exercising when they otherwise might not be able to do so due to age, physical limitations, or lack of interest.
- Poor experience with speeding and/or trail courtesy: While most respondents were neutral or spoke positively on the topic, a subset of respondents noted that some e-bikers they have encountered go too fast on the trail, do not effectively indicate their approach, and may be inexperienced with trail courtesy. While very few respondents indicated that e-bikes should

be outright banned on trails, this concern by long-time visitors may reflect the need for learning opportunities for new trail visitors or for the implementation of speed regulations.

Fine as long as they are respectful. At least they are on the trail and outside.

Great way to make trails accessible for those that may otherwise be physically unable to utilize full trail space.

They seem to be great for seniors to enjoy biking on the trails, but not if they go too fast, and only if they observe the rules on the trail for everyone's safety.

Class 2 and 3 are fine but as long as the rider is in control and is trained on proper etiquette.

Lastly, respondents were given an opportunity to describe their priorities regarding how DNR should improve Minnesota state trails (n=498). Topics for respondents included:

- Maintenance of existing trails: As seen in other open-ended topics, trail maintenance was at
 the forefront of many respondents' priorities. Activities such as making repairs to cracks,
 patching holes, clearing brush, and (re)paving where needed were all mentioned. Overall,
 respondents were more likely to indicate focusing on maintaining current trails over creating
 new trails.
- Adding trail amenities: A smaller segment of respondents sought more trail amenities, primarily restrooms, trash cans, and water fountains.
- Other improvements: Respondents also mentioned longer-term goals of connecting existing trails for extended travel, adding more educational signage about the area, and promoting trail use and trail locations throughout the state.

Continue what is being done... We need more bike trails and we need to continue to maintain the great trails we currently have. I would like to see more trails being built, but not at the expense that we ignore the upkeep of what we currently have.

Stations with bags for picking up dog poop along with garbage cans. More bathroom facilities. Water fountains. Keep up the good work with maintenance! MN trails are wonderful!





ECONOMIC IMPACT OF STATE TRAILS

Similar to the study conducted in 2022 for Minnesota State Parks, the 2024 survey included a quantification of spending by state trail visitors. Where feasible, the following economic impact assessment (EIA) employed methods and assumptions similar to those used for state parks, ensuring comparability. Significant departures from the methods and definitions used in the 2022 study are noted throughout the text. Following the identification of the magnitude of spending by visitors, IMPLAN's Input-Output (I-O) modeling software is used to estimate the additional economic impact of that spending as it circulates throughout state and local economies.

This report captures spending and economic impacts associated with visits to paved Minnesota state trails throughout the warm season (April through November). Impacts from spending associated with use on natural surface state trails (e.g. off-highway vehicle riding) and use from December through March (e.g. snowmobiling or cross-country skiing) are not included.

Additional methodological details are included in <u>Appendix B: Economic Impact Analysis and Methodology.</u>

ECONOMIC IMPACT RESULTS

In 2024, Minnesota's paved state trails saw 2.3 million visits during the warm season (April – November), with 20% of those trips involving overnight stays away from home. Of these overnight visitors, 32% came from outside the state. Meanwhile, 80% of users took day trips, with 95% of them being Minnesota residents. Regardless of trip length or origin, many trail visitors spend money on essentials such as food, transportation, lodging, souvenirs and entertainment. This spending plays a vital role in supporting local economies, not only in areas directly adjacent to the trails but also throughout the entire state.

To better understand the economic contribution of these expenditures, the survey gathered data on visitors' spending patterns both in preparation for and during their trail visits. This information, combined with annual usage data, enabled the creation of comprehensive estimates for the total expenditures across the state and within the four DNR regions.

While the aggregate figures alone highlight the substantial economic impact of trail visitors, the influence extends beyond immediate spending. Local businesses benefit directly from this revenue, which is passed on to their suppliers and employees. As these suppliers and employees spend their earnings, the economic effect ripples outward, contributing to the ongoing health of local economies in many trail-adjacent communities.

This section summarizes the various types of expenditures and the different groups of visitors responsible for them. These aggregate expenditures then serve as the "inputs" in the IMPLAN input-output model, which we use to provide a more comprehensive view of the economic impact of Minnesota's state trail systems on statewide and regional economies.

Visitor spending totals over \$84 million per year in economic activity related to state trail use across Minnesota. This includes \$54.2 million in spending while on the trip and \$30.4 million in at-home spending for the outing.

Visitors spend an average of about **\$26 per person per day** during their trips to Minnesota's paved state trails.

- Overnight visitors spend \$88.61 per person per day,
- Day-use visitors (traveling from home) spend \$10.23 per person per day,
- Minnesota residents on overnight trips spend \$44.18 at home in preparation for the trip, and
- Minnesota residents on day trips spend \$11.35 at home in preparation for the trip.

SPENDING PROFILES OF STATE TRAIL VISITORS

After removing incomplete and outlier survey responses a spending profile was developed based on the data from 884 trail visitors. Figure 36 and Figure 37 provide detailed spending profiles for two specific groups of visitors, offering insight into their economic impact. These groups differ from those in the state park report, which categorized visitors into three distinct groups based on whether they stayed overnight within the state park or in other accommodations. For this analysis, the focus is on the following two groups:

- Overnight visitors who are on extended trips away from home
- Day-use visitors who are on short, same-day trips and do not stay overnight

The figures present the average spending for each of 10 categories, such as food, fuel, lodging and entertainment. In addition to these categories, expenditures are split into two key types: "at-home spending," which refers to costs incurred during trip preparation before leaving home, and "away from home spending," which refers to costs incurred while traveling to and along the trail. Understanding these two categories is essential for analyzing regional economic impacts and tracing the flow of spending across different regions.

State trail visitors contribute to several local industries, including hospitality (lodging and dining), gas stations, retail and entertainment. For those on overnight trips, the average spending per person was \$132.80 per day. The largest expenditure categories for this group were lodging (\$34.16) and dining at restaurants (\$27.22) (Figure 36). In contrast, day-use visitors spent an average of \$21.58 per person. For these visitors, the largest spending categories were on dining (\$4.67) and recreational equipment, either purchased or rented (\$6.12) (Figure 37).

These figures reveal how spending patterns differ between overnight and day-use visitors, providing a clearer picture of the economic activity generated by different types of visitors. By understanding the breakdown of these expenses, we can better assess the broader economic effects on local economies and the industries that support these activities.

Expense	Away-from-home spending	At-home- spending ^a	Total spending
Overnight accommodations in the private sector (Camping, Hotels, Short Term Rentals)	\$34.16	\$0.00	\$34.16
Restaurants	\$21.14	\$6.08	\$27.22
Groceries	\$9.80	\$15.65	\$25.45
Gasoline and other Fuels	\$10.82	\$7.13	\$17.96
Other transportation-related expenses	\$0.50	\$0.79	\$1.29
Shopping (clothes, souvenirs, gifts, etc.)	\$5.02	\$1.68	\$6.70
Recreational equipment, purchased of rented	\$2.57	\$10.94	\$13.51
Entertainment (including casinos)	\$1.07	\$0.43	\$1.50
All other trip related Spending	\$0.53	\$0.31	\$0.84
Subtotal (excluding payments to public agencies)	\$85.61	\$43.01	\$128.63
Payments to public agencies (park fees, licenses, camping fees, etc.)	\$3.00	\$1.17	\$4.17
Total (mean per person per day)	\$88.61	\$44.18	\$132.80

Figure 36. Spending profile of overnight visitors away from home (mean \$ per person per day)

^a Expenditures of out-of-state tourists are not included in at-home spending estimates because those funds were spent outside Minnesota and do not directly contribute to the state or regional economies. Their spending values were entered as zeros for the purpose of calculating the at-home expenditure mean, to ensure the use of the same denominators within each combination of visitor group and spending category.

Expense	Away-from-home spending	At-home-spending ^a	Total spending
Overnight accommodations in the private	\$0.00	\$0.00	\$0.00
sector (Camping, Hotels, Short Term			
Rentals)			
Restaurants	\$3.22	\$1.45	\$4.67
Groceries	\$1.26	\$1.11	\$2.38
Gasoline and other Fuels	\$2.05	\$1.43	\$3.47
Other transportation-related expenses	\$0.12	\$0.18	\$0.30
Shopping (clothes, souvenirs, gifts, etc.)	\$0.36	\$0.08	\$0.44
Recreational equipment, purchased of	\$0.84	\$5.29	\$6.12
rented			
Entertainment (including casinos)	\$0.12	\$0.02	\$0.14
All other trip-related Spending	\$0.04	\$0.04	\$0.07
Subtotal (excluding payments to public	\$8.01	\$9.59	\$17.60
agencies)			
Payments to public agencies (park fees,	\$2.22	\$1.76	\$3.98
licenses, camping fees, etc.)			
Total (mean per person per day)	\$10.23	\$11.35	\$21.58

Figure 37. Spending profile of day visitors traveling from home (mean \$ per person per day)

Cumulatively, trail visitors spend about 2.3 million days on Minnesota state trails during the warm season, and they directly spend an estimated \$84.6 million per year during their visits to trails (not including amounts directly paid to parks or other public agencies; Figure 38). Approximately 80% of visits to paved state trails are part of a single day outing from home; however, these visitors on day trips contribute only about 37% of visitors' total spending. The 20% of visitors that are on overnight trips make up 63% of total spending.

Visitor Groups	Trail Use (1,000s of visitor days)	Percent of trail use	Aggregate spending (\$ millions) ^a	Percent of Spending
User on Day Trip	1,847	80%	\$31.7	37%
User on Overnight Trip	460	20%	\$53.0	63%
Total	2,307	100%	\$84.6	100%

Figure 38. Distribution of trail use and spending by trip type

^a Expenditures of out-of-state tourists are not included in at-home spending estimates because those funds were spent outside Minnesota and do not directly contribute to the state or regional economies. Their spending values were entered as zeros for the purpose of calculating the at-home expenditure mean, to ensure the use of the same denominators within each combination of visitor group and spending category.

^a These expenditures exclude payments to state parks and other public agencies, but they include all other at-home and away-from-home spending by Minnesota residents, in addition to away-from-home spending by nonresidents.

Residents of the DNR's central region were responsible for nearly half of state trail visitors (48%) and visitor expenditures (50%) (Figure 39); which is not surprising given that the Twin Cities metro area is home to the majority of Minnesota residents, and is included in the central region.

Region of Origin (visitor's home region)	Trail Use (1,000s of visitor days)	Percent of Trail Use	Aggregate Spending (\$ millions)	Percent of Spending	Share of Minnesota population that resides in region
Central Region	1,116	48%	\$41.9	50%	73%
Northeast Region	278	12%	\$6.9	8%	7%
Northwest Region	342	15%	\$7.0	8%	8%
Southern Region	328	14%	\$12.2	14%	12%
Outside of Minnesota	243	11%	\$16.6	20%	NA
Total	2,307	100%	\$84.6	100%	100%

Figure 39. Distribution of spending and trail use by visitors' home region

Tourists from outside Minnesota are responsible for 11% of user days on Minnesota state trails, and they contribute an even higher proportion (20%) of trail-related spending.

REGIONAL SPENDING PATTERNS AND FLOWS OF TOURISM DOLLARS

Figure 40 illustrates the total spending by all trail visitor groups statewide and by region.

Among the four regions, the central region leads in trail visitor spending, with \$50.1 million, surpassing the combined total of the other three regions (\$34.6 million), accounting for 59% of the total statewide spending. The central region also hosts the largest number of trail visitors, with 1.2 million visits each warm season, representing 54% of total statewide trail use.

Figure 41 separates spending into that of tourists and local visitors, a key distinction when analyzing how state trail visitors contribute to the flow of funds both within the state and from other states into Minnesota. Of the \$84.6 million spent by state trail users annually, Minnesota residents contribute about \$68 million, while non-resident tourists spend \$16.6 million.

In the statewide analysis, all Minnesota residents are considered "local visitors," but for regional analysis, a "local visitor" is defined as someone from the same region as the trail being visited. In the northeast and northwest regions, tourist spending exceeds local spending, with the northeast region showing a particularly sharp contrast—tourists account for over 72% of the \$15.2 million in annual trail-related spending, or \$11 million. The central region, which includes the Twin Cities metro area, is an exception to this trend, as nearly 51% of its \$50.1 million in annual spending comes from local visitors.

Location of Spending	Trail use (1,000s of visitor days)	Spending by local visitors ^a (\$ millions)	At-home spending by departing locals ^b (\$ millions)	Spending by tourists ^c (\$ millions)	Total spending in the region (\$ millions)
Statewide	2,307	\$68.0	N/A	\$16.6	\$84.6
Central Region	1,241	\$25.4	\$6.0	\$18.6	\$50.1
Northeast Region	288	\$3.4	\$0.8	\$11.0	\$15.2
Northwest Region	457	\$4.0	\$1.2	\$8.4	\$13.6
Southern Region	321	\$2.6	\$2.2	\$1.0	\$5.7

Figure 40. Aggregate annual trip spending of Minnesota state trail visitors by region in which spending occurred

Note: Local visitors live in the region of the trail they visited; tourists live outside the region of the trail they visited. All Minnesotans are "local visitors" at the statewide scale; only non-Minnesotans are tourists at the statewide scale. This definition will result in the regional "spending by local visitors" not summing up to the statewide "spending by local visitors".

INPUT-OUTPUT ANALYSIS

The multiplier effect illustrates how an initial expenditure triggers a series of additional economic activities, creating more value as money circulates through the economy. When consumers spend money, it doesn't just stay within one business; it flows through the community, supporting other businesses, creating jobs, and generating further economic activity. Economists use a tool called input-output analysis to quantify this effect. The input-output analysis tracks how each dollar spent moves through the local economy, revealing the additional economic value generated at each stage. The economic modeling platform IMPLAN is used for this analysis. IMPLAN is one of the most commonly relied-on tools for such analyses across the industry.

Within input-output analysis, three key economic indicators are used to measure the impacts:

- Output refers to the total value of goods and services purchased, representing the gross revenue
 or total of all purchase prices. Output includes three types of economic effects: direct (the initial
 spending), indirect (the subsequent spending by businesses on supplies and services), and
 induced (the spending by employees who earn wages from these activities). When we talk about
 the economic impact of trail visitors, their spending generates over \$102.5 million in total output
 annually, encompassing all three types of effects.
- Value-added is a subset of output and is considered a better measure of economic production.
 While output reflects the total amount of money that changes hands, it doesn't always represent
 the amount of actual production, as businesses often hold inventory, leading to a gap between
 output and production. Value-added, on the other hand, captures the economic activity that truly
 generates something of value—whether that's through the creation of goods or the provision of

^a Spending by local visitors includes both at-home and away-from-home spending when using within-region trails, as both types of spending occurred in the same region.

^b At-home spending by departing locals refers to the spending by a region's residents in preparation for a trip to a trail in another region. They are referred to as "locals" because their spending is assumed to have occurred in the resident's home region.

^c Away-from-home spending by tourists is assumed to have occurred in the region where the trail is located.

services. State trail visitors' spending results in \$58.9 million in value-added each year, reflecting the real production impact of their activities.

• **Jobs** refers to the number of full- and part-time jobs supported by the economic activity triggered by spending. The input-output model shows that trail visitors' spending support of 636 jobs in the local economy, not including public sector jobs at state parks and other public agencies.

These economic impacts ripple through more than 500 different industries, with total output impacts ranging from over \$21.7 million for the restaurant industry to \$16.3 million for lodging. While smaller industries, such as Household Appliance Manufacturing, may see only a few dollars, the overall effect of state trail visitors' spending is felt across a broad spectrum of local businesses and sectors. This widespread economic impact illustrates the significant contribution that visitors make to the health and growth of local economies.

Visitor Type	Spending (\$ millions)	Economic Output (\$ millions)	Value-Added (\$ millions)	Employment (full- and part-time jobs)
Local Visitor ^a	\$68.0	\$79.2	\$44.7	493.6
Tourist ^b	\$16.6	\$23.4	\$14.2	142.0
All Users	\$84.6	\$102.5	\$58.9	635.6

Figure 41. Estimated economic impacts of spending by state trail visitors

REGIONAL PROFILES

The remainder of this section reviews the region-specific profiles of trail users and spending, including the results of the input-output analysis for each DNR region.

Central Region

Figure 42 provides a summary of trail visitor profiles and spending in the central region. Each year, visitors make approximately 1.2 million visits to state trails in the central region. Of these, 79.6% are made by residents of the central region, and 85.4% are day trips taken from home.

In terms of spending, trail visitors in the central region contribute approximately \$44 million annually, with an additional \$6 million spent by residents of the central region at home in preparation for trips to trails in other regions. This brings the total trail-related spending in the central region to \$50 million each year.

The \$50 million in spending generates a total of \$61 million in annual economic output as it reverberates throughout the local economy. Additionally, it contributes \$36 million in value-added annually, reflecting the true economic production resulting from this activity. This spending supports 360 jobs in the central region, not including the jobs at state parks and other public agencies (Figure 43).

Although day trips account for the majority of visitor-days (85.4%) in the central region, they represent nearly half (44.7%) of the spending. The remaining 55.3% of spending comes from visitors on overnight trips, who account for just 14.6% of the total visitor-days in the central region.

^a All Minnesotans are "local visitors" at the statewide scale; only non-Minnesotans are tourists at the statewide scale.

^b At-home expenditures of out-of-state tourists are not included in these estimates because those funds were spent outside Minnesota and do not directly contribute to the state or regional economies.

Visitor profile	Visitor-days (1,000s)	Percent of region's visitor-days	Trip spending (\$ millions)	Percent of region's trip spending
Visitor Group:				
Visitor on Day Trip	1,060	85.4%	\$20	44.7%
Visitor on Overnight Trip	181	14.6%	\$24	55.3%
Home region of visitors to central region trails:				
Central	988	79.6%	\$25.44	57.8%
Northeast	3	0.2%	\$0.20	0.4%
Northwest	3	0.2%	\$0.20	0.4%
Southern	158	12.7%	\$10.28	23.3%
Outside Minnesota	89	7.2%	\$7.93	18.0%
Central region residents' at-home spending for trips to trails in other regions	N/A	N/A	\$6.01	N/A
Total	1,241	100.0%	\$50.05	100.0%

Figure 42. Profile of trail visitors and trip-related spending in the central region

Note: Spending percentages refer to the percentages of spending by visitor on the region's trails (i.e., their denominator is the total spending minus the at-home spending for trips to trails in other regions). Due to rounding, components may not sum to the totals shown.

Spending	Economic Output	Value Added	Employment
(\$ millions)	(\$ millions)	(\$ millions)	(full- and part-time jobs)
\$50	\$61	\$36	360

Figure 43. Estimated economic impacts of spending by state trail visitors, central region

Northeast Region

Each year, visitors in the northeast region account for approximately 288,000 visitor-days on state trails (Figure 44*Error! Reference source not found.*). Of these, 50.3% are by residents of the northeast region, 20.6% by residents of the central region, and 30.9% are part of overnight trips.

In terms of spending, visitors in the northeast region contribute approximately \$14.4 million annually, with an additional \$780 thousand spent by northeast region residents on trips to trails in other regions. This brings the total trail-related spending in the northeast region to \$15.2 million each year.

The \$15.2 million in spending generates a total of \$16 million in annual economic output as it reverberates throughout the local economy. Additionally, it contributes \$9 million in value-added annually, reflecting the true economic production resulting from this activity. This spending supports 119 jobs in the northeast region, not including the jobs at state parks and other public agencies (Figure 45).

Although day trips account for a majority of visitor-days (69.1%) in the northeast region, they represent only 28.5% of the spending. The remaining 71.5% of spending comes from visitors on overnight trips, who account for 30.9% of the total visitor-days in the northeast region.

Visitor profile	Visitor-days (1,000s)	Percent of region's visitor-days	Trip spending (\$ millions)	Percent of region's trip spending
Visitor Group:				
Visitor on Day Trip	199	69.1%	\$4	28.5%
Visitor on Overnight Trip	89	30.9%	\$10	71.5%
Home region of Visitors to Northeast region trails:				
Northeast	145	50.3%	\$3.37	23.4%
Central	59	20.6%	\$4.05	28.1%
Northwest	30	10.3%	\$2.02	14.0%
Southern	4	1.4%	\$0.27	1.9%
Outside Minnesota	51	17.5%	\$4.71	32.7%
Northeast region residents' at- home spending for trips to trails in other regions	N/A	N/A	\$0.78	N/A
Total	288	100.0%	\$15.20	100.0%

Figure 44. Profile of trail visitors and trip-related spending in the northeast region

Note: Spending percentages refer to the percentages of spending by visitor on the region's trails (i.e., their denominator is the total spending minus the at-home spending for trips to trails in other regions). Due to rounding, components may not sum to the totals shown.

Spending	Economic Output	Value Added	Employment
(\$ millions)	(\$ millions)	(\$ millions)	(full- and part-time jobs)
\$15	\$16	\$9	119

Figure 45. Estimated economic impacts of spending by state trail visitors, northeast region

Northwest Region

Each year, visitors to state trails in the northwest region make approximately 457,000 visits (Figure 46). Of these, 55.6% are made by northwest region residents, 15.6% from out-of-state visitors, and 71.3% are day-trip visits.

In terms of spending, trail visitors in the northwest region contribute about \$12.4 million annually, with an additional \$1.2 million spent by northwest region residents at home in preparation for trips to trails in other regions. This brings the total trail-related spending in the central region to \$13.6 million each year.

The \$13.6 million in spending generates a total of \$12 million in annual economic output as it reverberates throughout the local economy. Additionally, it contributes \$6 million in value-added annually, reflecting the true economic production resulting from this activity. This spending supports 106 jobs in the northwest region, not including the jobs at state parks and other public agencies (Figure 47).

Although day trips account for the majority of visitor-days (71.3%) in the northwest region, they represent a smaller proportion of the spending, at 35.6%. The remaining 64.4% of spending comes from visitors on overnight trips, who account for 28.7% of the total visitor-days in the northwest region.

Visitor profile	Visitor-days (1,000s)	Percent of region's Visitor-days	Trip spending (\$ millions)	Percent of region's trip spending
Visitor Group:				
Visitor on Day Trip	326	71.3%	\$4	35.6%
Visitor on Overnight Trip	131	28.7%	\$8	64.4%
Home region of visitors to Northwest region trails:				
Northwest	254	55.6%	\$4.04	32.6%
Northeast	39	8.5%	\$1.42	11.5%
Central	84	18.3%	\$3.05	24.6%
Southern	9	1.9%	\$0.32	2.6%
Outside Minnesota	72	15.6%	\$3.56	28.7%
Northwest region residents' at- home spending for trips to trails in other regions	N/A	N/A	\$1.23	N/A
Total	457	100.0%	\$13.63	100.0%

Figure 46. Profile of trail visitors and trip-related spending in the northwest region

Note: Spending percentages refer to the percentages of spending by visitors on the region's trails (i.e., their denominator is the total spending minus the at-home spending for trips to trails in other regions). Due to rounding, components may not sum to the totals shown.

Spending	Economic Output	Value Added	Employment
(\$ millions)	(\$ millions)	(\$ millions)	(full- and part-time jobs)
\$14	\$12	\$6	106

Figure 47. Estimated economic impacts of spending by state trail visitors, northwest region

Southern Region

Each year, visitors make approximately 321,000 visits to state trails in the southern region (Figure 48). Of these, 72.1% are spent by residents of the southern region, 18.0% by residents of the central region, and more than nine in ten (92.8%) are day-trip visits.

In terms of spending, trail visitors in the southern region contribute about \$3.56 million annually, with an additional 2.18 million spent by southern region residents at home in preparation for trips to trails in other regions. This brings the total trail-related spending in the southern region to \$5.74 million each year.

The \$5.74 million in spending generates a total of \$5 million in annual economic output as it reverberates throughout the local economy. Additionally, it contributes \$2 million in value-added annually, reflecting the true economic production resulting from this activity. This spending supports 42 jobs in the southern region, not including the jobs at state parks and other public lands (Figure 49).

Although day trips account for a large majority of visitor-days (92.8%) in the southern region, they represent a smaller 74.6% of the spending. The remaining 25.4% of spending comes from visitors on overnight trips, who account for just 7.2% of the total visitor-days in the southern region.

Visitor profile	Visitor-days (1,000s)	Percent of region's visitor-days	Trip spending (\$ millions)	Percent of region's trip spending
Visitor Group:				
Visitor on Day Trip	298	92.8%	\$3	74.6%
Visitor on Overnight Trip	23	7.2%	\$1	25.4%
Home region of visitors to central region trails:				
Southern	232	72.1%	\$2.57	72.1%
Northeast	O ^a	0.0%	\$0.00	0.0%
Northwest	O ^a	0.0%	\$0.00	0.0%
Central	58	18.0%	\$0.57	16.0%
Outside Minnesota	32	9.8%	\$0.42	11.9%
Central region residents' at-home spending for trips to trails in other regions	N/A	N/A	\$2.18	N/A
Total	321	100.0%	\$5.74	100.0%

Figure 48. Profile of trail visitors and trip-related spending in the southern region

Note: Spending percentages refer to the percentages of spending by visitor on the region's trails (i.e., their denominator is the total spending minus the at-home spending for trips to trails in other regions). Due to rounding, components may not sum to the totals shown.

Spending	Economic Output	Value Added	Employment
(\$ millions)	(\$ millions)	(\$ millions)	(full- and part-time jobs)
\$6	\$5	\$2	42

Figure 49. Estimated economic impacts of spending by state trail visitors, southern region

^a Zero Visitor days shown for both the northwest and northeast to the southern region is reflective of not having captured visitors from these regions in the survey, rather than an absolute assumption of zero visitors.

CONCLUSIONS

Minnesota's state trail system is vast and widely used. With almost eight million visits in 2024, locals and out-of-state visitors use the trails for a variety of uses across the year. The 2024 State Trail Visitor Survey allowed Minnesota DNR to monitor how use trends, opinions, and visitor characteristics have changed since 2019. Of course, there were a lot of changes in recreation from 2019 to 2024 as outdoor areas felt pressure during the COVID-19 pandemic. However, it was unknown to what extent trail use had changed over that time period.



The 2024 survey combined two distinct

survey methods to gain both real-time information from trail visitors and their entire trip characteristic profile to better understand where improvements could be made, the impacts their spending have on the local economy, and key feedback on relevant topics such as e-bike policy. From these two feedback channels, the following were identified by the research team as overarching conclusions from the data.

1. High Visitor Satisfaction and Frequent Use

- The majority of visitors had a highly positive experience on Minnesota state trails, with 97% of respondents reporting that they were either "somewhat" or "very satisfied" with their visit. This satisfaction level remained consistent both during the intercept survey and after visitors returned home.
- Repeat visitation is strong, with 92% of respondents having visited the trail before and nearly all repeat visitors (93%) having been to the trail at least once within the past year.
 This indicates that Minnesota's trail system has loyal and regular visitors who enjoy returning frequently.
- o 76% of visitors were classified as locals (traveling less than 50 miles and not staying overnight), whereas 24% were considered tourists (either traveling over 50 miles or staying overnight). The strong presence of local visitors suggests that state trails play an important role in community recreation, daily outdoor activity, and commuting while also attracting a meaningful proportion of out-of-state and regional tourism.

2. Demographic Trends of Trail Users

- Compared to the general Minnesota adult population, state trail visitors tend to be older, higher income earners, and more highly educated. Specifically, 68% of trail visitors were age 45 or older, with a particularly high representation of seniors—32% were 65 or older, compared to just 23% in the statewide population.
- The study found that trail visitors have significantly higher household incomes than the average Minnesotan. 62% of visitors reported household incomes above \$100,000, compared to 42% of the state population. Conversely, only 21% of visitors had incomes below \$50,000, compared to 28% of the general population.

Outdoor recreation in Minnesota's state trail system remains predominantly white, with 93% of respondents identifying as white, despite the Minnesota adult population being only 80% white. Other racial and ethnic groups were underrepresented, highlighting a potential area for increased outreach and engagement.

3. Primary Trail Activities and Motivations for Use

- Walking was the most common activity on trails (50%) with biking the clear second activity (25%). While bikers travel more miles on trails, walking is more common as an overall activity. Dog walking (16%) and running/jogging (14%) followed in activity participation.
- Visitors used the trails for a variety of reasons, but the most frequently cited motivations were exercise (90%), fun/recreation (67%), relaxation (63%), and viewing scenery (61%).
 Locals were much more likely to visit the trail for exercise than tourists, who were much more likely to be there for scenery and spending time with family and friends.
- Trail usage patterns showed that most visitors traveled less than five miles per visit (46%).
 60% of bicyclists traveled at least ten miles with another 33% traveling 25-49 miles.
 Pedestrians, by contrast, tend to travel shorter distances, with 63% walking less than 5 miles and 29% traveling between five to nine miles.

4. Trail Experience and Infrastructure Ratings

- The availability and quality of trail parking areas (78 and 74% "good" or "very good" respectively) and rest areas (61% availability and 65% quality) were rated the highest among amenities. However, despite overall decent ratings, two areas of potential improvement emerged:
 - Bike repair stations, while not universally used, were rated the lowest in both availability and quality, suggesting improvements in this amenity could be beneficial.
 - Toilet facilities also received lower ratings and could potentially use some improvements on trails.
- Safety and inclusivity ratings were high, with 93% of respondents agreeing that they felt safe on the trail and 90% feeling welcome.

5. Growing Presence and Mixed Perceptions of E-Bikes

- E-bike use is increasing, with 19% of trail visitors owning an e-bike, and among bicyclists specifically, 28% were riding e-bikes during their visit. This represents a substantial shift in how trails are being used compared to previous years.
- Perceptions of e-bikes are mixed, with 75% of respondents supporting a 20-mph speed limit for e-bikes, while support for allowing all classes of e-bikes was more divided (48% in favor, 25% opposed).
- E-bike riders themselves had overwhelmingly positive experiences (97% positive ratings), but regular bicyclists and pedestrians were more likely to have negative interactions with e-bikes (33% and 19%, respectively).

6. Maintenance and Expansion Identified as Investment Priorities Identified by Visitors

- Visitors overwhelmingly supported maintaining and improving existing trails rather than building entirely new ones. The top-ranked investment priority was "maintaining trails" (84%), followed by "extending and connecting existing trails" (71%), which was favored over building completely new trails (51%).
- Enforcing trail rules (20%) and increasing education/marketing efforts (19%) ranked the lowest among investment priorities, suggesting that trail visitors prioritize physical improvements over administrative or promotional efforts.

7. State Trail Users Generate Over \$102 Million in Annual Economic Impact

- Spending by visitors to Minnesota's state trails totals \$84.6 million annually during the warm season (April-Nov), including \$54.2 million in direct spending while on the trip and \$30.4 million in at-home spending for trip preparation.
- Overnight visitors have the largest economic impact, spending an average of \$88.61 per person per day, compared to \$10.23 per day for day-use visitors. Even before they leave home, overnight visitors spend an additional \$44.18 per person on trip preparation.

8. Significant Economic Ripple Effects Across the State

- Trail-related visitor spending supports 636 full- and part-time jobs across multiple industries, including hospitality, retail, and transportation.
- The restaurant industry benefits the most, with over \$21.7 million in annual revenue attributed to trail visitors, followed by lodging (\$16.3 million).
- While the central region (including the Twin Cities) accounts for 48% of all trail use and 50% of all spending, tourism is proportionately more impactful in the northeast and northwest regions, where out-of-state visitors contribute the largest shares of spending.

RECOMMENDATIONS FROM RRC TO DNR

The following section outlines a series of recommendations from the research team to help improve the state trail experience and to continue to maintain the system to its currently high standards. Respondents were overwhelmingly positive about their experience on Minnesota state trails, but improvements are always possible.

Enhancing Visitor Experience and Trail Infrastructure

1. Upgrade Key Amenities on State Trails as Possible

- DNR should focus on improving toilet facilities and bike repair stations, which received the lowest ratings in both availability and quality. For many areas, these types of amenities are frequently in need of constant attention as they are heavily used and subject to more maintenance than other amenities. However, these amenities are still rated fairly high amongst visitors.
- Consider adding more shaded rest areas and drinking water stations, particularly along longer trail segments. As Minnesota's summers continue to get warmer over time, strategically placed shaded areas and water stations will be more important than ever.

2. Promote More Inclusive and Diverse Trail Use Across the State

- Since trail visitors tend to be older, wealthier, and predominantly white, implement targeted outreach programs to encourage younger and more diverse user groups.
 Outdoor recreation as an industry has made this issue as key factor moving forward and state trails should consider how best to serve new visitors.
- Improve multilingual trail signage and online resources to be more accessible to non-English speakers and underrepresented communities.

3. Develop Clearer Guidelines and Infrastructure for E-Bikes

- Given mixed opinions on e-bikes, establish clearer regulations where possible. Some regulations and provisions (e.g., mandatory speed limits) should be carefully considered how they can be enforced and any adverse impacts that they may have on the experience for visitors.
- Increase educational efforts for both e-bike and regular bike visitors to mitigate conflicts on shared-use trails. Based on both the quantitative and qualitative responses, misconceptions still exist between groups around e-bikes, their perceived uses, and possible regulations.

4. Expand and Improve Trail Connectivity

Since visitors prioritize extending and connecting existing trails over building new ones, focus funding on closing key gaps in the trail network to allow for longer continuous routes. Trail connectivity is vital in urban areas since it allows visitors to both have longer exercises and travel between their points of interest more efficiently.

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Economic and Funding Strategies

5. Leverage Economic Impact Data to Secure More Funding

- Use the \$410 million annual economic impact figure to advocate for greater state and federal funding. Economic impact studies represent important figures for making the case of added recreational funding and the benefits that come back to the community.
- A strong likelihood exists that some visitors are not aware of the difference between Minnesota state trails and other trails managed by various agencies. Having a recognizable brand with support for the state system may bring more awareness and support for their future.

6. Enhance Marketing to Attract More Out-of-State Visitors

- Since 21% of total spending comes from out-of-state tourists, increase regional marketing efforts, especially in nearby states like lowa and Wisconsin. Traveling for trail use has only increased across the country. Working with Explore Minnesota and other partners to advance the promotion of trail use, other activities in the area, and itineraries that could round out the out-of-state experience is a powerful strategy to move forward with over time.
- Promote multi-day trail itineraries and packages in collaboration with local tourism organizations to encourage overnight stays.

7. Continue Data Collection and Real-Time Monitoring

- The DNR could consider a more regular way to collect feedback from visitors, as a lot can change in five years. Periodic pulse checks of visitor satisfaction and opinions could be helpful for more short-term planning.
- Monitor changes in demographics and use once outreach efforts have taken place to see if a new type of trail user emerges.

These recommendations are but a few ideas to propel state trails into the future. Results indicate a high level of support already with room to grow. Residents and visitors alike appreciate the amenities and work that goes into the system, but they also have high expectations for more. As sports like biking continue to grow through the addition of e-bikes, the user base will also change. Understanding how these changes impact the use of state trails is important to monitor.

APPENDIX A: STATE TRAIL USE

The DNR works with partners to complete automated trail counts, and the following findings are based on data gathered at over 150 locations between 2019 and 2024. These data were used to determine the sampling strategy for the visitor study.

AUTOMATED TRAIL COUNT METHODS

Visits to trails are more difficult to count than visits to parks, which have defined boundaries and a limited number of access points. People who visit trails travel different distances and may begin and end their trail visit at any number of access points.

Automated counting across the trail network helps overcome this challenge. The DNR and partners gathered counts using automated trail counting equipment, including infrared and inductive loop sensors. Some of these counters have been permanently installed as "reference sites" that monitor trail use 365 days a year. Most counts were gathered between April and November at temporary count locations over a period ranging from one to four weeks. These temporary counts were extrapolated to seasonal estimates using data from permanent count locations and following accepted and established methodology. Temporary counts completed in the winter have not been extrapolated to annual estimates.

Automated counting and extrapolations provide a measure of traffic and gauge overall trail activity. This process has been adapted from how transportation agencies monitor motor vehicle use. Traffic is commonly reported as average daily traffic (ADT) for a given period, such as summer. Summer ADT can be interpreted as the number of times someone passes a particular trail segment on an average summer day.

Miles traveled are calculated by multiplying ADT by the number of days in a season and the length of the trail segment. An estimate of visits to each trail is calculated by dividing miles traveled by the median trip lengths reported by bicyclists and other trail users on the survey.

The survey results likely overestimate trip lengths due to several factors, such as the following: people who traveled farther on the trail were more likely to be surveyed; people likely reported miles traveled on non-state trails on the survey; and people tend to overestimate trip lengths. If trip lengths are shorter than reported on the visitor survey, then the number of estimated visits would be larger. Using the median trip lengths reduces the impact of outliers, but the visitation estimates likely remain conservative.

PAVED STATE TRAIL USE ESTIMATES

People travel over 16 million miles on paved state trails each warm season (April through November). About 10 million of those miles traveled occur in the summer (Memorial Day weekend through Labor Day). This translates to an estimated 2.3 million visits to state trails during the warm season. About 1.4 million of these visits take place in the summer. These figures do not include use that takes place on natural surface state trails that are used mostly for snowmobiling or motorized recreation.

Bicyclists are responsible for a majority of miles traveled because they travel much farther per visit than people who walk or participate in other activities. However, non-cyclists make up a majority of trail visits. The median trip distance for bicyclists is 20 miles per visit and the median for other visitors is three miles. Over the warm season, pedestrians make an estimated 1.7 million visits, compared to 560,000 bicyclist visits. Survey responses confirm that many state trail visitors are repeat users, so the number of unique people who visit trails is lower than the total number of visits.

Most state trails are maintained for snowmobiling between December 1 and April 1 of each year, as snow conditions permit. The DNR has gathered some information about winter trail use. However, more research is needed before making system-wide estimates of winter visits or winter miles traveled because use patterns are significantly different between winter and summer activities.

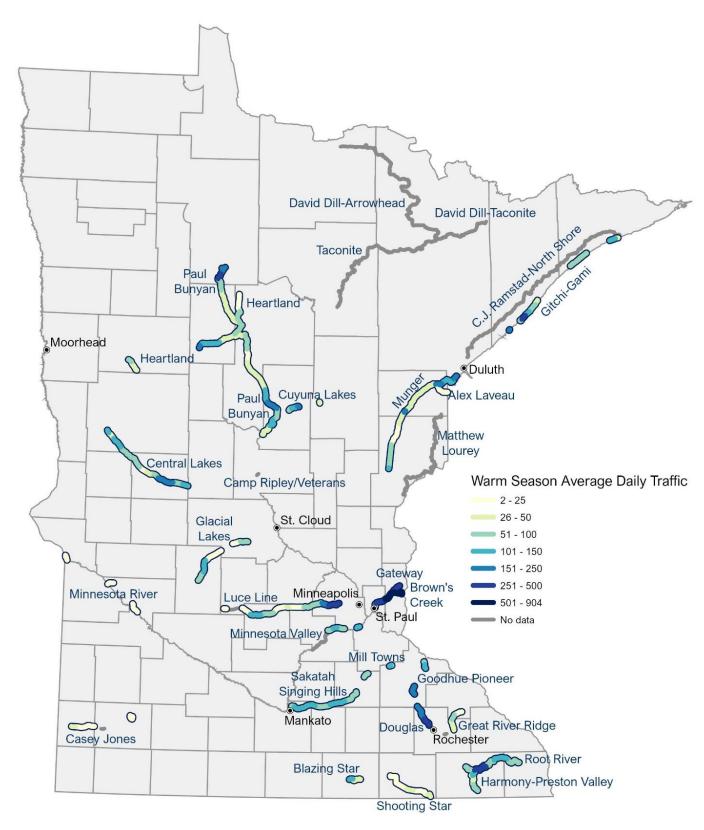


Figure 50. Map of Warm Season Average Daily Traffic

Summer ADT is a measure of the intensity of use on a given state trail segment, while summer visits are an estimate of total use of the entire trail. The Brown's Creek and Gateway state trails are the most intensely used and see traffic of more than 500 on an average summer day. Even though it is not used as intensely, the Paul Bunyan State Trail sees about the same number of visits as the Gateway State Trail because it is much longer trail.

There is a tremendous amount of variation in use levels across the state trail system. The most popular section of the Brown's Creek State Trail is more than 100 times busier than some remote segments of other state trails. Even along a single state trail, use is concentrated on popular segments. The busiest state trail segments tend to be located near large population centers. Traditional tourist destinations, near state parks and resorts, are also associated with higher trail traffic. Figure 47 shows the variation of use and Figure 48 shows estimated miles traveled and visits for each paved state trail.

State Trail	Trail Length (miles)	Summer TMT	Summer Visits	Warm-season TMT	Warm-season Visits
Paul Bunyan	115	1,660,000	233,000	2,469,000	347,000
Gateway	19	1,200,000	169,000	2,233,000	314,000
Root River	42	888,000	125,000	1,386,000	195,000
Central Lakes	72	667,000	94,000	1,195,000	168,000
Luce Line	51	710,000	100,000	1,178,000	166,000
Munger	72	757,000	106,000	1,106,000	156,000
Brown's Creek	6	629,000	89,000	1,019,000	143,000
Sakatah Singing Hills	39	525,000	74,000	916,000	129,000
Heartland	47	642,000	90,000	913,000	128,000
Gitchi-Gami	29	555,000	78,000	888,000	125,000
Douglas	13	428,000	60,000	746,000	105,000
Glacial Lakes	30	275,000	39,000	502,000	71,000
Goodhue Pioneer	9	223,000	31,000	388,000	55,000
Minnesota Valley	10	162,000	23,000	268,000	38,000
Harmony-Preston Valley	18	157,000	22,000	263,000	37,000
Cuyuna Lakes	8	148,000	21,000	248,000	35,000
Great River Ridge	13	83,000	12,000	163,000	23,000
Blazing Star	7	76,000	11,000	148,000	21,000
Mill Towns	5	59,000	8,000	105,000	15,000
Casey Jones	18	68,000	10,000	100,000	14,000
Shooting Star	25	74,000	10,000	97,000	14,000
Minnesota River	12	27,000	4,000	39,000	6,000
Alex Laveau Memorial	9	13,000	2,000	20,000	3,000
Total Paved State Trails		10,026,000	1,411,000	16,390,000	2,308,000

Figure 51.. Estimated Trail Miles Traveled and Visits for Paved State Trails

APPENDIX B: ECONOMIC IMPACT ANALYSIS METHODOLOGY

The economic impact analysis relied on data from the post -trip portion of the survey, which included a set of detailed questions about respondents' trip-related expenditures, both prior to and during their trip (See Appendix C: Survey Instrument for specific question phrasing). This approach (similar to the 2022 State Parks analysis) allows for capturing complete information about respondents' expenditures for the full length of their trip. Survey weights were applied in accordance with those measures shown in Table 2.

The analysis includes the two main visitor groups, which include day-use visitors (traveling from home and returning that same day), and those using the trail while on an overnight trip away from home.

As able, this analysis follows the protocols and methods implemented in the 2022 State Parks study; however, some differences do exist. The first difference is in the handling of spending outliers. In the 2022 study, outliers at the top and bottom end of the spending distribution, within each visitor group, were dropped from the sample. In order to maintain as much valid data as practical, in this 2024 study we capped the responses (Windsorized) within each spending category at the 98% percentile.

Payments made to public agencies (e.g., vehicle passes, camping fees, etc.) are not included in the economic impacts. They are however, shown as individual entries on spending totals for informational purposes.

AT-HOME AND AWAY-FROM-HOME SPENDING

Minnesota residents were asked to separately report their trip-related spending (a) at home, in preparation for their visit, and (b) during their visit to the trail. Non-residents were only asked about their expenditures during the trip in Minnesota. At-home purchases are treated differently based on residency. In line with the 2022 study, out-of-state visitors' at-home purchases are excluded from the analysis since these funds are assumed not to contribute to Minnesota's economy. For Minnesota residents, all at-home purchases are included in state-level analyses, regardless of the region of the trail visited. In regional analyses, only the at-home spending of visitors from the same region as the trail is included, with those from outside the trail region treated like out-of-state visitors.

This approach accounts for economic "leakages," or losses when purchases are made outside the region, by allowing the funds to flow into other regions within the study area rather than being entirely excluded. As a result, at-home spending by all Minnesota residents is counted as an economic impact in their home region, and the economic impacts of trail visitors are considered in the context of each region's economy.

For example, imagine a Minnesota resident from the Twin Cities region visits a trail in northern Minnesota. They spend money on supplies before their trip (at-home spending) and during their visit to the trail (on-site spending).

- **At-home spending**: The resident buys new tubes and repair kits for their bike from a store in the Twin Cities.
- On-site spending: The same resident spends money on accommodations, food, and miscellaneous retail goods in northern Minnesota.

In a traditional analysis, only the on-site spending in northern Minnesota would be considered as an economic impact for that region. However, using IMPLAN's Multi-Regional Input-Output (MRIO) model, the at-home spending in the Twin Cities is also considered as part of the economic impact. The MRIO model accounts for the fact that the economic activity in the Twin Cities is interconnected with northern Minnesota, and it allows the expenditure to be counted as an economic contribution to the Twin Cities' economy, not just the northern region.

This method helps capture the full economic impact of tourism, even if some spending occurs outside the immediate area of the trail.

SPECIFICATIONS OF IMPLAN ANALYSIS

This subsection reviews the detailed specifications of the IMPLAN model. The input-output analysis was completed using IMPLAN's MRIO model, based on 2022 IMPLAN data and measured in 2024 US Dollars.²

Custom regions were generated as groups of counties, based on the four DNR regions: central, northeast, northwest, and southern.

Central	Northwest	Northeast	Le Sueur
Anoka	Becker	Aitkin	Lincoln
Benton	Beltrami	Carlton	Lyon
Carver	Cass	Cook	McLeod
Chisago	Clay	Crow Wing	Martin
Dakota	Clearwater	Itasca	Meeker
Fillmore	Douglas	Koochiching	Mower
Goodhue	Grant	Lake	Murray
Hennepin	Hubbard	Pine	Nicollet
Houston	Kittson	St. Louis	
Isanti	Lake of the Woods		Nobles
Kanabec	Mahnomen	Southern	Pipestone
Mille Lacs	Marshall	Big Stone	Redwood
Morrison	Norman	Blue Earth	Renville
Olmsted	Otter Tail	Brown	Rice
Ramsey	Pennington	Chippewa	Rock
Scott	Polk	Cottonwood	Sibley
Sherburne	Pope	Dodge	Steele
Stearns	Red Lake	Faribault	Swift
Todd	Roseau	Freeborn	Waseca
Wabasha	Stevens		
Washington	Traverse	Jackson	Wantonwan
Winona	Wadena	Kandiyohi	Yellow Medicine
Wright	Wilkin	Lac qui Parle	

We include separate IMPLAN "events" (referring to each spending amount entered separately into the model) for eight different spending categories. Within each of the eight categories, several industries are aggregated from the IMPLAN 546 Index:

- Restaurants
 - Full-service restaurants
 - Limited-service restaurants
 - All other food and drinking places
- Gasoline

² As in the 2022 study, the 2024 analysis uses Multi-Region Input-Output (MRIO) modeling. MRIO analyses models the interdependent economic impacts across multiple regions, accounting for "leakages" or economic losses when purchases are made outside a specific region. This method allows for economic activity to flow into other regions within the study area, ensuring that expenditures, such as at-home spending by residents, are appropriately reflected in the economic impact estimates of the relevant regions.

- Petroleum refineries
- Other transportation costs
 - Transit and ground passenger transportation
 - Automotive repair and maintenance, except car washes
- Groceries³
 - Retail food and beverage stores
- Lodging
 - Tenant-occupied housing
 - Hotels and motels, including casino hotels
 - Other accommodations
- Shopping
 - Retail Health and personal care stores
 - Retail Clothing and clothing accessories stores
 - Retail General merchandise stores
 - Retail Miscellaneous store retailers
- Recreational equipment
 - Retail Sporting goods, hobby, musical instrument and bookstores
 - General and consumer goods rental except video tapes and discs
 - Retail Motor vehicle and parts dealers
- Entertainment
 - Scenic and sightseeing transportation and support activities for transportation
 - Motion picture and video industries
 - Performing arts companies
 - Museums, historical sites, zoos, and parks
 - Amusement parks and arcades
 - Gambling industries (except casino hotels)
 - Other amusement and recreation industries
 - Bowling centers

With the exception of gasoline, all events were entered as changes in "Industry Output". The gasoline category event type was "Commodity Output", with margins set to "purchaser price". The remaining categories were entered as Industry Output events.

³ For this 2024 study, groceries were entered a retail industry, deviating from the 2022 study in which assumptions were made about the spending breakout (based on USDA estimations of a typical basket of goods) such that the goods could be entered as commodity outputs. Here, groceries are treated like other retail sectors and only a portion of the spending leads to direct output on the industry.

APPENDIX C: SURVEY INSTRUMENT



2024 State Trail Visitor Survey – Questionnaire

Note: This document contains annotations for the project team; scripts to be read by staff; as well as instructions, and survey questions and responses for respondents to view first-hand. The survey will be administered digitally in Qualtrics, either on-site via a tablet, or athome via an online survey. No participants will use this document to submit responses.

YELLOW = Surveyor observation questions and other metadata.

GREEN = Logic-based responses.

Metadata

Section is filled out by staff or automatically coded

State Trail Visited: Alex Laveau, Blazing Star, Brown's Creek, Camp Ripley/Veterans, Casey Jones, Central Lakes, Cuyuna Lakes, Douglas,
Gateway, Gitchi-Gami, Glacial Lakes, Goodhue-Pioneer, Great River Ridge, Harmony-Preston Valley, Heartland, Luce Line, Matthew
Lourey, Mill Towns, Minnesota River, Minnesota Valley, Paul Bunyan, Root River, Sakatah Singing Hills, Shooting Star, Willard Munger
Surveyor name:

[Smile, wave, approach group...] Hi, would you mind stopping to tell me about your trip...

[After they stop...] Thanks for stopping. My name is [NAME]. I'm working with the Minnesota Department of Natural Resources to gather feedback from state trail visitors this summer. I would like to take 5 minutes to ask you about your trip, and if you are willing, there are additional questions for you to complete after you return home. We have stickers for participating and you can enter yourself to win one of 15 \$50 gift cards.

Are you willing to participate?

- Yes
- No: refused
 - (If no) May I ask you one question about you to help improve our trails?
 - Yes
 - (IF yes) What is the ZIP code of your permanent residence?
 - (If yes) Did you travel 50+ miles or more from your permanent home to the trail?
 - Yes
 - o No
 - No
- No; did not stop
- No; not 18 or over
- No; language barrier
- No; other

SURVEYOR OBSERVE: (If refuse, did not stop, language barrier, other) Was the person on a bicycle or on-foot or other mode?

- o Bicycle
- On-foot
- Other

(IF REFUSAL) That's OK! We appreciate you stopping. In case you're able to complete the survey at home, we ask you to please take one of our postcards that has the link to the survey and an access code to participate. Thank you!

ACCESS CODE FROM POSTCARD A: _______(Skip to end of survey)



Intercept Survey

Section is administered verbally by staff and coded on tablet

How did you get to the trail today?

- Drove (auto, truck, RV, etc.)
- Bicycled
- Walked or ran

Approximately how far is the trail from your permanent home?

- 1 mile or less
- 1.1 to 10 miles
- 10.1 to 50 miles

- On horseback
- · Group travel (bus, van, or public transportation)
- Other, please describe:
- 50 1 to 100 miles
- More than 100 miles
- Unsure, don't know

Did you travel from, and plan to return to your permanent home after your visit to the trail today?

- Yes
- No (I stayed/am staying overnight at a cabin, hotel, campground, etc.)
- Unsure, don't know

What is your 5-digit Zip code? If international, please enter "00000".

(If travel from home = no or Unsure) Was your visit to this state trail...?

- The primary reason you came to the local area
- One of two or more equally important reasons you came to the local area
- An incidental or spontaneous stop

(If travel from home = yes) Was your visit to this state trail...?

- The primary reason for your trip away from home
- . One of two or more equally important reasons for your trip away from home
- An incidental or spontaneous stop

Which of the following activities is your group participating in during today's visit on the trail? (select all that apply)

- Bicycling, with a regular bike
- Bicycling, with an e-bike
- Walking, without a mobility assist device
- Walking, with a mobility assist device
- Viewing or photographing wildlife or scenery
- Running or jogging
- Dog walking
- Camping

- In-line-skating, skateboarding, roller-skiing, or scooter
- Visiting historic sites or other points of interest along the trail
- Hunting or fishing
- · Part of an organized event (fundraiser, guided ride, etc.)
- Horseback riding
- Other, please describe:

(Carry forward selections from prior question) Which of the following is your primary activity for today's visit on the trail?

- Bicycling, with a regular bike
- Bicycling, with an e-bike
- Walking
- Walking, with a mobility assist device
- · Viewing or photographing wildlife or scenery
- Running or jogging
- Dog walking
- Camping

- In-line skating, skateboarding, or roller-skiing
- Visiting historic sites or other points of interest along the trail
- Hunting or fishing
- Part of an organized event (fundraiser, guided ride, etc.)
- Horseback riding

Have you visited this state trail before?

- Yes
- (IF yes) When was the last time you visited this state trail?
 - Within the past year
 - More than a year ago
- No
- Unsure, don't recall

How did you find out about this trail? (Please select all that apply)?

- Known about this trail for years
- Stumbled upon; happened to be in the area
- · Referral from family or friend
- Recommendation from a hotel, business, visitor center, etc.
- From the DNR (website, social media, brochure, staff, etc.)
- Online (Google, website, blog, social media, etc.)
- Smartphone App
- · Publication (brochure, magazine, or newspaper)
- TV or radio
- Events (e.g. consumer show, fairs, bicycle tour, etc.)
- Other (If you recall hearing about the trail from any source, please describe: ______)

Which statement most closely reflects your feelings about today's visit?

- 5 Very satisfied
- 4 Somewhat satisfied
- 3 Neither satisfied or dissatisfied
- 2 Somewhat dissatisfied
- 1 Very dissatisfied

How would you rate the quality of the following aspects of the trail?

Rate on a scale of: 5 - Very good; 4 - Good; 3 - Acceptable; 2 - Poor; 1 - Very poor; or N/A, No opinion

- The trail surface (including being clear of potholes, cracks, and debris)
- Tree, shrub, and grass trimming
- · Amenities (parking, toilet facilities, drinking water, etc.)

(Randomize options) Which of the following reasons describe why you are using the trail today? (select all that apply)

- For fun
- Exercise
- Commuting or traveling somewhere
- To relax or reduce stress
- To spend time with family or friends

- To view scenery
- To view wildlife
- To experience solitude
- Other, please describe

Please enter the number of people in your group for each applicable age group. Your group includes anyone you traveled to/from the trail with. Enter '0' if your group does not have anyone in any age range.

- Children aged 12 or under
 Teens aged 13-17
- _____ Adults aged 18-40
- _____ Adults aged 41-64
- _____ Adults aged 65+

Email request and Tennessen Warning from staff

[Email request and privacy notice script] Thanks for your time and feedback. We have additional questions for you to answer after you finish your visit. This is an opportunity for you to share opinions on trail management and tell us about trip spending, which is important to support trails. After completing the at-home portion you can enter yourself into a drawing for 1 of 15, \$50 gift cards. We are asking for your first name and email address, so we can send a link for you to share your feedback at home.

Your email and demographic information are private data. You do not have to share this information, there are no consequences for providing this information or not. This information will only be shared with staff and partners managing this research project, those court ordered to, or as otherwise provided by law.

First name:	
Email:	
[IF THEY GIVE EMAIL] – Thank you! Here is a postcard that has the URL an in the next few days. You can use this to go to the URL and enter your acc	•
[IF THEY REFUSE EMAIL] – We understand that you may not be willing to	provide your email address. Please take this postcard that has
the URL and access code on it for you to participate at home. If you can, p	lease complete the survey online using the link from the
postcard and entering the access code.	
ACCESS CODE B:	
and the second s	-
DEPARTMENT OF Continue your survey!	
2024 State Trails Survey	-
You have been selected to participate in the Minnesota State Trails Visitor Survey!	
1) Please take a few minutes to continue your survey online at:	
MNStateTrails.org	
ACCESS CODE: XXXXX	
E-1506/224	
Your feedback is very	
Important! Important! Improve trails across you can be entered into a drawing for 1 of 15 \$50 VISA gift cards!	
FOR INTERVIEWER ACCESS CODE: XXXXX	
	_

Verbal introduction about demographics from staff, then hand tablet to participant to selfadminister

[Demographic introduction script] This next set of questions are about you. It is important for us to know that we are hearing from all different types of people so we can better understand trail visitors. Please fill these out yourself and hand the tablet back to me when you are done.

Demographics

These demographic questions are optional. It's important for us to know that we are hearing from all different types of people so we can better understand trail visitors. Please fill these out yourself and return the tablet when you're done.

Privacy notice: Your email and demographic information are private data. You do not have to share this information, there are no consequences for providing this information or not. This information will only be shared with staff and partners managing this research project, those court ordered to, or as otherwise provided by law.

What is your gender?

- Male
- Female
- Non-binary
- Prefer to self-identify:
- Prefer not to answer

What is your age group?

- 18 to 24
- 25 to 34
- 35 to 44
- 45 to 54
- 55 to 64
- 65 and over
- Prefer not to answer

What is your race/ethnicity? (PLEASE SELECT ALL THAT APPLY.)

- American Indian or Alaska Native
- Asian or Asian American
- Black or African American
- Hispanic or Latino
- Middle Eastern or North African

What is the highest level of education you have completed?

- Some high school
- Graduated from high school or GED
- Some college
- Associate (2-year) degree
- Please indicate your total household income before taxes last year from all sources.
 - Less than \$25,000
 - \$25,000 to \$49,999
 - \$50,000 to \$99,999
 - \$100,000 to \$149,999

- Native Hawaiian or Pacific Islander
- White
- Prefer to self-identify:___
- Prefer not to answer
- Bachelor's degree (BA, BS)
- Postgraduate degree
- Prefer not to answer
- rom all sources.
 - \$150,000 to \$199,999
 - \$200,000 to \$250,000
 - More than \$250,000
 - · Prefer not to answer

Thank you for your response! Please hand the tablet back to the surveyor.

Final confirmation from staff before submitting survey

Complete survey?

- Yes
- No

[DISMISSAL script] Thanks again, feel free to take a sticker. Please look for the email link/finish the survey after your trip. Enjoy the trail!

At-Home Survey

Thank you for sharing your feedback with us! The information you provide is valuable for the DNR to improve state trail opportunities. As a reminder, after completion of the survey, you will be able to enter into a drawing for 1 of 15 \$50 VISA Gift Cards. Please answer the following questions based on your experience on the state trail on the day you were asked to participate.

Approximately how many total miles did you travel on the state trail on the day of your visit? (leave blank if you are unsure) ____ miles

Approximately how many hours did you spend on Minnesota State Trails on the day you were surveyed? _____ number of hours

Which statement most closely reflects your feelings about your state trail visit?

- 5 Very satisfied
- 4 Somewhat satisfied
- 3 Neither satisfied or dissatisfied
- 2 Somewhat dissatisfied
- 1 Very dissatisfied

What was the primary factor that contributed to your satisfaction/dissatisfaction?

To what extent do you agree with the following statements?

Matrix: 5 - Strongly agree; 4 - Agree; 3 - Neither agree nor disagree; 2 - Disagree; 1 - Strongly disagree

(If feel welcome = 1 or 2) What would have made you feel more welcome during your visit?

- I have felt welcome during my visit to this state trail.
- I felt safe during my visit to this state trail.
- I would recommend this state trail to friends and family.

If feel safe = 1 or 2 What would have made you feel safer during your visit?_____

Trip Spending Questions

Are you a permanent or seasonal resident of Minnesota?

- Yes
- No

The following questions ask you for information related to the money you and your group spent on the trail and in the surrounding area during your trip to the trail, including costs for your travel to and from the area. Your responses to these detailed questions are very valuable, as they help the DNR to understand the impact of trails on local economies across the state

Approximately how much money did you and your group spend during this trip that included a state trail visit? For each spending item below, please fill in the approximate dollar amount for:

- a. Travel spending in MN for day(s) using trail(s): Please estimate how much money your group spent for the day(s) using the state trail(s), during the trip when we contacted you. Include expenses for traveling to/from the trail; while using the trail; and in the general area of the trail, including lodging.
- At home spending: Please estimate the money spent at home getting ready for the trip (e.g., gasoline, groceries, gear, etc.)

Group definition:
Your group includes anyone you traveled to/from the trail with

Spending Item	A: Travel spending MN for day(s) using trails(s)	B: (If resident of MN) At home spending
State park vehicle permit fees	\$	\$
Other state park fees (e.g., program, firewood, rentals)	\$	\$
Licenses for fishing, hunting, boating	\$	\$

Camping fees at a publicly-owned campground (state, federal campground)	\$ \$
Camping fees at a privately-owned campground, RV site	\$ \$
Indoor lodging/rental homes (privately owned)	\$ \$
Restaurant food, beverages, and snacks	\$ \$
Groceries and convenience foods (including pop, beer, and other beverages)	\$ \$
Gasoline and other fuels (e.g., auto, RV, boat, etc.)	\$ \$
Other transportation-related expenses (e.g., oil change, vehicle repair)	\$ \$
Entertainment (including casinos)	\$ \$
Shopping, souvenirs, gifts	\$ \$
Recreational equipment purchase (e.g., tent, hiking boots, sleeping bag, camp	\$ \$
Recreational equipment rental from private business (e.g., bike, tent, boat	\$ \$
All other trip-related spending (e.g., medical, locksmith)	\$ <u>\$</u>

[IF ALL SPENDING = 0] You did not enter any expenditures for the trip to this trail. Please indicate why you didn't provide any spending to help us categorize your visit:

- 1) I didn't spend any money.
- 2) I don't know or remember how much I spent.
- 3) Prefer not to answer / Not applicable

How many					
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How many days did you spend away from home on this trip that included your visit to this trail? (If you traveled from home and returned home the same day as your visit to the trail, please enter 1) _____ Number of days

(If away from home >1) Of these days, how many days were spent using Minnesota State Trails?

When you obtain information about Minnesota state trails, what are your most important information sources? (Please select all that apply.)

DNR sources:

- · Staff and informational materials at DNR locations (e.g. state park visitor centers, trailheads)
- DNR website

General sources:

- Friends and family
- Social media (excluding DNR social media)
- Newspapers or magazines
- Radio
- Places I stay (e.g., hotels, resorts, campgrounds)
- Recreation maps and guides
- Chambers of commerce/convention and visitor

- **DNR** newsletters
- DNR social media
- DNR parks and trails brochures
- Explore Minnesota
- Travel guides/agents
- AllTrails
- Online (please specify):___
- Another source not listed (please specify):__
- None of the above

Do you or anyone in your group have a physical or cognitive disability or condition? (Please select all that apply.)

- Hearing
- Vision
- Cognitive
- Ambulatory

- Other disability not listed
- No one in my group has a disability
- Prefer not to answer

(if any selected) – Did you or anyone in your group experience any barriers in using trail amenities and/or services related to this/these disabilities?

- No
- Prefer not to answer

How would you rate the availability of the following trail amenities?

Matrix: 5 - Very good; 4 - Good; 3 - Acceptable; 2 - Poor; 1 - Very poor; N/A, No opinion

- Availability of toilet facilities
- Availability of parking areas
- Availability of rest areas (shelters, benches, etc.)
- Availability of bike repair stations

How would you rate the quality of the following trail amenities?

Matrix: 5 - Very good; 4 - Good; 3 - Acceptable; 2 - Poor; 1 - Very poor; N/A, No opinion

- Quality of toilet facilities
- Quality of parking areas
- Quality of rest areas (shelters, benches, etc.)
- · Quality of bike repair stations

How would you rate the quality of the following types of trail information?

Matrix: 5 - Very good; 4 - Good; 3 - Acceptable; 2 - Poor; 1 - Very poor; N/A, No opinion

- Maps and navigational signs along the trail
- · Signs for rules, etiquette, and safety
- Interpretive and educational signs along the trail
- Information about how to get to the trail
- Information on the DNR's website

Did you have any problems or conflicts during your visit on the trail?

- Yes (If yes, please describe:_____)
- No

Electric-assisted Bicycle Definitions and Rules:

The following section asks questions about electric assist bicycles (e-bikes). E-bikes have two or three wheels, have a saddle and fully operable pedals for human propulsion, and are equipped with an electric motor that has a power output of not more than 750 watts. In Minnesota, e-bikes are categorized into three classes:

- Class 1: a bicycle equipped with an electric motor that provides assistance only when the rider is pedaling and ceases to provide
 assistance when the bicycle reaches the speed of 20 miles per hour.
- Class 2: a bicycle equipped with an electric motor that is capable of propelling the bicycle without the rider pedaling and ceases
 to provide assistance when the bicycle reaches the speed of 20 miles per hour.
- Class 3: a bicycle equipped with an electric motor that provides assistance only when the rider is pedaling and ceases to provide
 assistance when the bicycle reaches the speed of 28 miles per hour.

Current DNR rules allow Class 1, 2, and 3 e-bikes and segways on state trails. Other power-driven mobility devices such as golf carts and motorized foot scooters are prohibited unless these devices are being used with a permit by individuals with mobility disabilities. Your feedback on e-bikes will help guide management of state trails.

Does your household have an electric-assist bicycle (e-bike)?

- Yes, class 1
- Yes, class 2
- Yes, class 3

Does your household have any of the following electric mobility devices?

- Electric scooter
- Electric skateboard
- Hoverboard
- One-wheel

- Yes, but I don't know what class
- No
- Segway
- Other (Please specify:
- None of the above

How would you describe your experience with e-bikes?
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- 5 Very positive
- 4 Somewhat positive
- 3 Neutral
- 2 Somewhat negative
- 1 Very negative
- N/A, I have not had experience on or with e-bikes

What is you	r overall perception	n of e-bikes on state trails?	
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How do you feel about the following rules on DNR state trails?

Matrix: (5 - Strongly support, 4 - somewhat support, 3 - neither support nor oppose, 2 - somewhat oppose, 1 - strongly oppose)

- Allow all classes of e-bikes
- Do not allow any classes of e-bikes
- Do not allow class III e-bikes

- · Create a speed limit of 20 mph for all users
- Create a speed limit of 20 mph for e-bikes
- Allow motorized foot scooters

Opinions on State Trail Investment Priorities

DNR is seeking your opinion on funding and investment priorities for state trails. Since 2009, the DNR has added about 150 miles of paved state trails. The budget for operations and maintenance has not kept pace with growth of the system during this time.

Please indicate your level of support or opposition to the following statements about Minnesota state trails.

Matrix: 5 - Strongly agree; 4 - Agree; 3 - Neither Agree nor Disagree; 2 - Disagree; 1 - Strongly Disagree; N/A, No Opinion

- Minnesota should invest more in state trail maintenance.
- Minnesota should build more state trails.
- We have enough state trails, I do not think we need any more.
- Current conditions of state trails are fine and additional funding for maintenance is not needed.

Please rank the following potential state trail investments by priority. (Pick your top choice, second choice, and third choice)

- Building new trails
- Extending/connecting existing trails
- Repave trail surfaces

- Maintain trail (clear brush, fill cracks, mowing, general upkeep, etc.)
- Education, interpretation, and marketing
- Enforcing trail rules

How would you invest funding for maintaining existing trails and expanding the trail system? Use the slider bar to indicate your priorities. Maintain existing trails – slider scale from 1-10 – Develop new trails/expand trails

How could the DNR improve Minnesota state trails? Feel free to submit additional feedback about your visit, or information you would like the DNR to consider as we manage the state trail system.

Thank you for your input!

Would you like to be entered in the drawing for one of 15 \$50 VISA Gift Cards?

- No

Privacy notice: We will use your email address to contact you if you are selected in the gift card drawing. Email addresses are private data. You do not have to provide an email address, but we cannot include you in the gift-card drawing if you do not provide it. Your email address will only be shared with staff and partners managing this research project, those court ordered to, or as otherwise provided by law.

This survey is being conducted throughout the summer and study results will be available on the DNR's Website. If you have further questions or comments, please contact: Darin Newman, principal planner, DNR Parks and Trails Division, at darin.newman@state.mn.us or 651-259-5611.

Visit the Minnesota State Trails Web page for more information.