

# **Wannigan Regional Park Master Plan Final Draft APPENDIX March 16, 2022**

## ***Vision for Wannigan Park:***

***Wannigan Park is a premier destination for outdoor recreation and cultural preservation that improves quality of life and the land through open space, trails, and storytelling***



**Prepared by the Wannigan Park Committee for  
the City of Frazee, Minnesota and the  
Frazee Community Development Corporation**

## **Summary of Public Plan Review Meetings 2022**

### **January 2022**

January 12, 2022 - Frazee City Council Meeting 6:00 p.m. Frazee City Fire Hall

All Council Members Present and City Administrator, Jordan Roberts

Denise Anderson with the FCDC wanted to reach out on two items, the FCDC Mutual Contract Agreement and appraisal funding.

Council members Mike Sharp and Mark Flemmer have had an opportunity to review the contract through the park and Recreation Committee. The City of Frazee and the Frazee Community Development Corporation Cooperative Management and Program Services Contract was created to move forward with Wannigan park, looking for a partnership with the City. This contract is asking for a partnership with the city and FCDC. Anderson asked if there were any questions or concerns about the contract at this time as she would be asking the Council to make a motion to approve or reject this request at their next scheduled Council meeting. The contract has been sent to the City Attorney and will be included with the Master plan that will be submitted to the MN Greater Parks and Trails Commission in March or April. She asked to be placed on the February Council meeting agenda for consideration of this contract.

The Wannigan Park Board went to the Frazee EDA at the January meeting to ask for \$2,500.00 donation to be applied to the cost of the land appraisal. Consideration of this request was not possible due to 2 EDA members present serve on both committees and two others not in attendance would prohibit a vote for lack of quorum. Becker County had pledged \$2500.00 for the appraisal and the FCDC is asking the EDA for a matching \$2500.00, the total for the appraisal is \$7850.00.

✚ Nicole Strand made a motion for the EDA to donate \$2500.00 for the Wannigan Park appraisal, seconded by Mark Kemper. All in favor, motion carried.

### **February 2022**

February 2, 2022 - 4:00 Park and Recreational Committee – Mark Flemmer, Mike Sharp, Jordin Roberts, Denise Anderson

Denise Anderson presented the final draft of the cooperative services and management contract to the Committee for their review and asked to be placed on the February Council Agenda to present to full Council for their consideration. Sharp and Flemmer both stated that they would instruct Roberts to place this issue on the February Council Agenda. No concerns were stated after review of the contract. No further discussion.

February 3, 2022 - 12:00 Planning and Zoning – Mike Sharp, Tyler Trieglaff, Ben Riewer, Jordin Roberts, and Denise Anderson

Denise Anderson presented the final draft of the cooperative services and management contract to the Committee for their review and asked to be placed on the February Council

Agenda to present to full Council for their consideration. Sharp and Flemmer both stated that they would instruct Roberts to place this issue on the February Council Agenda. No concerns were stated after review of the contract. No further discussion.

February 8, 2022 FCDC Board Meeting - ZOOM

Present Polly Andersen, Anna Potvin, Hank Ludtke and Erik Anderson

Approve Entering into Agreement with West Central Initiative- Motion by Polly Andersen to enter into a Component Fund Agreement with West Central Initiative to assist in managing the capital campaign for Wannigan Park. Second by Anna Potvin. All voted in favor.

Approve Final Payment Owed to Tinjum Appraisal Company - Motion by Erik Anderson to approve payment of the final invoice from Tinjum Appraisal Company in the amount of \$5,350 for appraisal services rendered at the proposed Wannigan Park site. Second by Polly Andersen. All voted in favor.

Open House – final plans for preparation assigned and approved.

February 17, 2022 Burlington Township Board Meeting (rescheduled from February 10, 2022)

Present - All Township Board Members

FCDC members present - Polly Andersen, Denise Anderson, Ashley Renolett.

Frazee City Auditor Jordin Roberts, Becker County Commissioner John Okeson and five adjacent landowners to proposed Wannigan park property.

Denise Anderson presented the Resolution of Support for the Wannigan park along with the final draft of the master plan to be presented to the Greater Minnesota Parks and Trails Commission for approval. The boards concern was access to the property from the north side of the property off 120<sup>th</sup>. Burlington Township Board had passed a resolution in November 2021 to deny access from the north parcels of the property without contacting any member of the FCDC or Wannigan park committee. This action was created by two adjacent property owners which were not identified at the meeting. Heard were concerns of dust and garbage by additional vehicle access to Wannigan park property. There was a lengthy conversation of the fact that this property has a recorded access to the property from 120<sup>th</sup> which was not known by the township board members at the time when they created and passed the previously mentioned resolution. The Township Clerk advised the board to table the discussion and vote on the resolution after further consideration until their next township meeting. The township clerk also instructed the Wannigan Park Committee (FCDC) to attend the Annual Township meeting on March 8<sup>th</sup> to address any further questions and concerns of the citizens of the township. Issue was tabled of consideration of advice of the township clerk until March 10, 2022.

February 22, 2022, Wannigan Park Committee 1:30 p.m. to 3:00 p.m. – Zoom

Review of neighbors' concerns and changes to the master plan and received public comments.

February 24, 2022 - Public Open House 5p.m. to 7p.m. Frazee Event Center

Approximately fifty people attended. The Master Plan draft Concept Plan/Maps were displayed, and a presentation providing an overview of the park plans was given. Public questions were answered after the presentation, and throughout the night from individuals by FCDC Board members and Park committee members. Public comments were overwhelmingly positive. Township Board members expressed concern and questions about the proposed access to the northern trailhead from the Township's road, 120<sup>th</sup> St. This issue will continue to be discussed with the Township Board and a final decision whether to access the northern trailhead or the existing private access road will be determined during the design process.

February 28, 2022 - City of Frazee Council Meeting 6:00 p.m. Frazee Fire Hall

All Council Members Present and City Administrator, Jordan Roberts

Cooperative Agreement Approved

Denise Anderson presented to council asking them to vote in favor of the cooperative services and management contract. City Attorney Tom Winters mentioned this is remarkably like what the City Detroit Lakes did with the Detroit Mountain Ski Park.

The FCDC will have a host couple in the park during the year, and that will assist with the supervision of the park. The city police will help deter horseplay just by cruising through. There are city services that will need to be utilized. Council member Mark Flemmer applauds the FCDC for all the splendid work they have done.

✚ Motion to approve the cooperative management and program services contract by Mike Sharp, second by Mark Flemmer. All in favor, motion carried.

Anderson presented to Council a final draft plan of Wannigan Park and asked them to carefully review the plan and the appendix. She stated that she would like to be placed on the March Agenda to answer any questions they may have and ask for their approval and support of the Master plan.

## **March 2022**

March 2, 2022 4:00 Park and Rec Committee – Frazee Fire Hall

Present Mark Flemmer, Mike Sharp, Jordin Roberts, Ashley Renollet, Denise Anderson, and Barbie Porter

Anderson asked if the Committee had any questions regarding the public review draft of the master plan and committee members stated they did not have any concerns. A brief discussion of camping areas and restroom facilities was held with various ideas explored.

March 8, 2022 - Townships Annual Meeting held at the Frazee Event Center 8 p.m.

Attending FCDC Board Members Hank Ludtke and Ashley Renolett

No questions were asked of Wannigan Park Committee Members (FCDC) attending members. Instructions to attend this meeting to answer any township citizens questions was issued at the Burlington Township Board meeting on February 8, 2022.

March 9, 2022 4:00 Planning and Zoning – Frazee Fire Hall

NO Quorum -Present Mike Sharp, Tyler Trieglaff, Jordin Roberts, Ashley Renollet, Hank Ludke and Denise Anderson

Mike Sharp stated he had read the entire final draft master plan and has no concerns.

March 10, 2022 – Burlington Township Board meeting.

Present - All Township Board Members and Supervisor Elect Tyler Trieglaff

FCDC members present – Denise Anderson

Anderson asked for a motion for support of the resolution of support that was presented on February 17, 2022 and which was tabled until this meeting for further review and consideration. Conversation of the request, and discussion followed.

✚ Motion was approved for the Resolution of Support.

Two in favor.

One opposed.

Motion and resolution passed.

March 11, 2022 - Wannigan Park Project Committee and FCDC meeting – ZOOM

Recap of public comments received from the February 24, 2022 Public Open House.

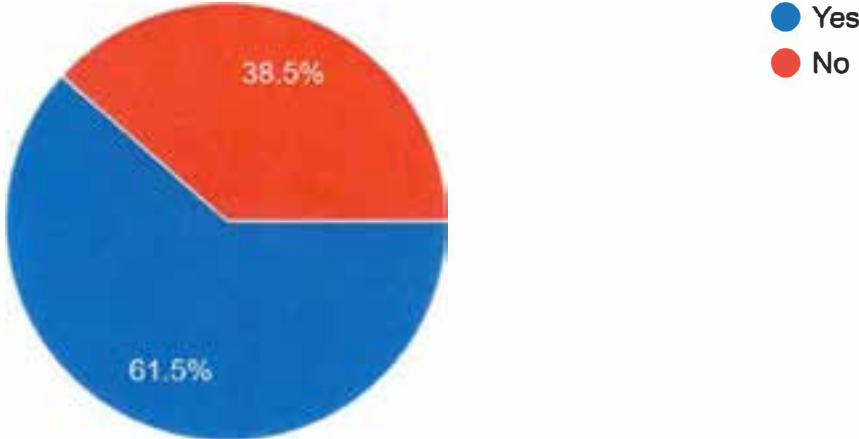
Denise Anderson stated that over 90% were supportive and positive yet two Burlington Township Board members were concerned about the use of 120<sup>th</sup> street on the north side of the park. Reviews of public and township board comments from February and March meetings of addressed issues produced no further major concerns. Other concerns of development costs and acquisition timeline were discussed along with a timeline to complete additional information to present to the Frazee City Council on March 21, 2022.

March 15, 2022 FCDC Board Meeting 4 p.m. Zoom

March 21, 2022 -Frazee City Council Meeting

# Have you heard about the Wannigan Park project before?

221 responses

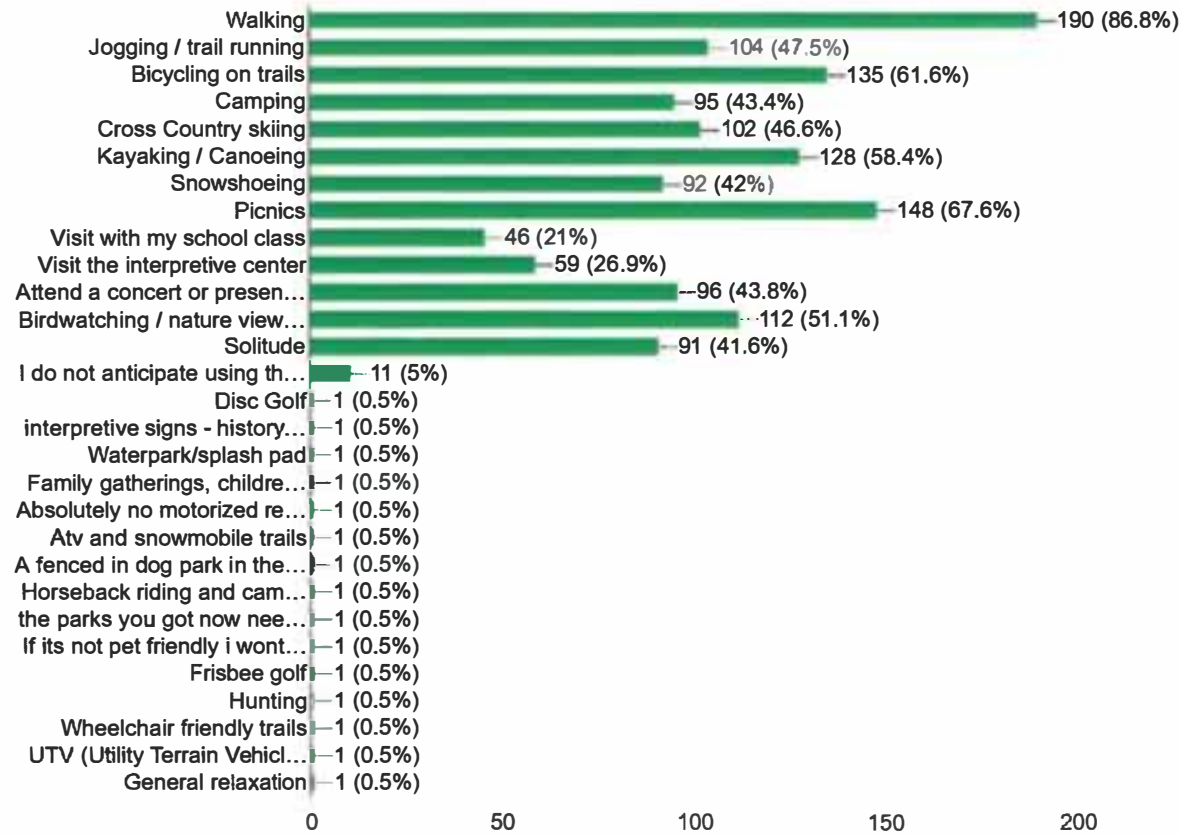


NO: 85  
YES: 136

## Question 2:

What recreational activities would you like to experience at the new park? Select all that apply.

219 responses



Question 2 Other Responses:

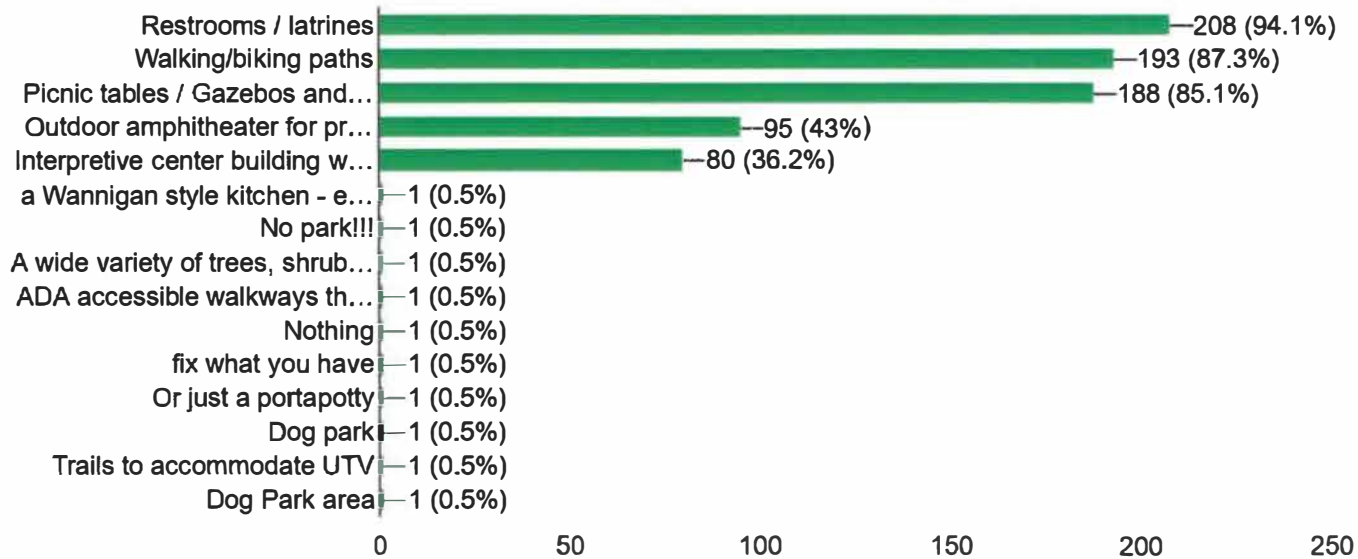
- Disc Golf - 2
- Interpretive signs - history of area - 1
- Waterpark/splash pad - 1
- Family Gatherings, Children's Theaters - 1
- Absolutely no motorized recreation - 1
- ATV/UTV/Snowmobile trails - 2
- Fenced Dog Park/pet friendly - 2
- Horseback riding and camping - 1
- Update the current parks - 1
- Hunting - 1
- Wheelchair friendly trails - 1
- General Relaxation



Question 3:

What amenities should be built in the park? Select all that apply.

221 responses



Other Responses:

- No park/nothing/fix current parks - 3
- Wannigan style kitchen to embrace logging history - 1
- Variety of shrubs/trees/native plants/grasses to serve as food and shelter to attract birds - 1
- ADA Accessible walkways through wild areas - 1
- Just a portapotty - 1
- Dog park - 2
- UTV trails - 1

Question 4: Are there Park features that are not currently available to you and your family that you would like to see?

35 responses

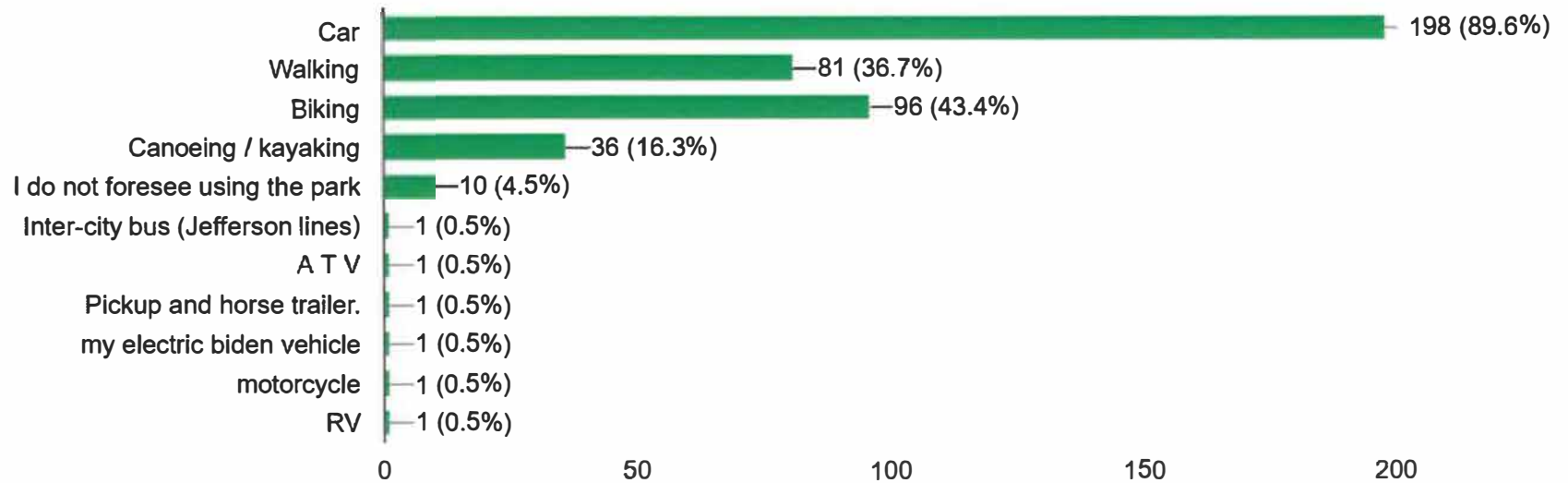
- Toddler size playground
- stroller/wheelchair appropriate path
- Splash pad
- No park!!!
- Scenic zip line. Team building course. Gift shop.
- A large children's playground that is consistently cared for and up-kept. Decent bike bath with a similar feel to the Itasca state park, more like you're riding through woods.
- How about a draw for regulars like Disc Golf?
- Simple activities or brain bursts along a trail. I would love to take my kids out walking or biking and have spots to stop and either answer questions or learn some fun new knowledge.
- Nature trails to explore
- Kayak rental
- Never been there as I didn't know it existed
- Camping
- interpretive signage; ski/snowshoe/binocular rentals
- Bird watching platform
- Yoga? 😊
- Ojibwe camp/ Treaty History. We are all Treaty people, our ancestors (native) signed Treaties with your ancestors (non-native). Treaties are very much alive today as the day they were signed, in-perpetuity obligations still exist. We can no longer deny the truth of our shared history, we must honor the Treaties. Until the Treaties are upheld America is on stolen land (failure to uphold treaty agreement, Treaties are 2 party agreements. It's time to respect the Treaties and live in peace and leave Mother Earth in a better way then we found her as the Treaties intended us to do.

- no park the ones you have need repair
- real jobs in frazee
- Bike repair station, drinking water fountain/bottle refilling, well kept & updated equipment
- Camping if multi day kyak
- No
- Singletrack mountain bike trails
- Natural play area
- Horseback riding
- Waiste of money
- Camping RV and Tent
- Na
- Dino bones
- Disc Golf Course
- Parking area near trail head with sign with map of the trails.
- Reception area, covered pinic area
- UTV trails
- walking paths, picnic areas, playground for kids
- Cross Country ski trails
- You've addressed all in the above

Question 5:

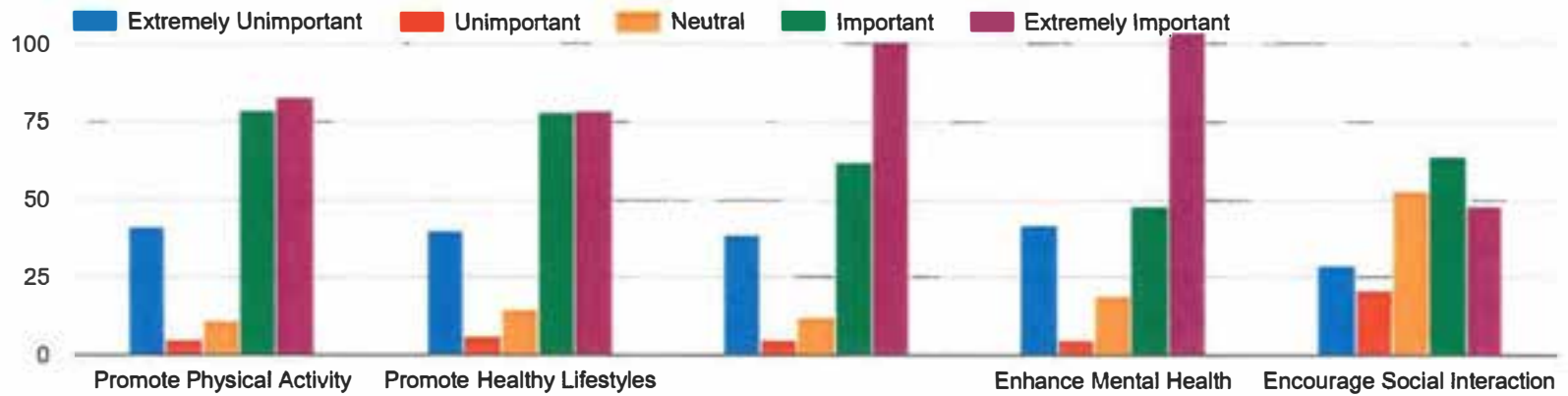
How would you get to the park? Select all that apply.

221 responses



Question 6:

Please rate the public health values below, based upon how important they are to you and your family.

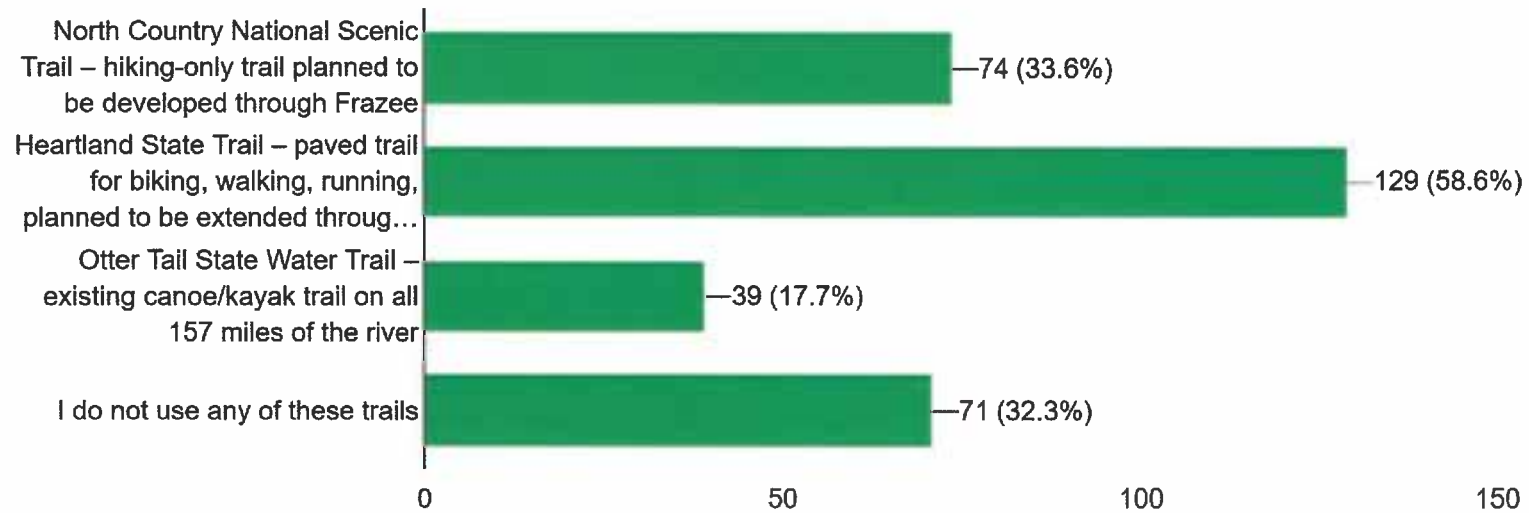


	Ex. Unimportant	Unimportant	Neutral	Important	Ex. Important
Physical Activity	41	5	11	79	83
Healthy Lifestyle	40	6	15	78	79
Connect to Outdoors	39	5	12	62	101
Mental Health	42	5	19	48	104
Social Interaction	29	21	53	64	48

Question 7:

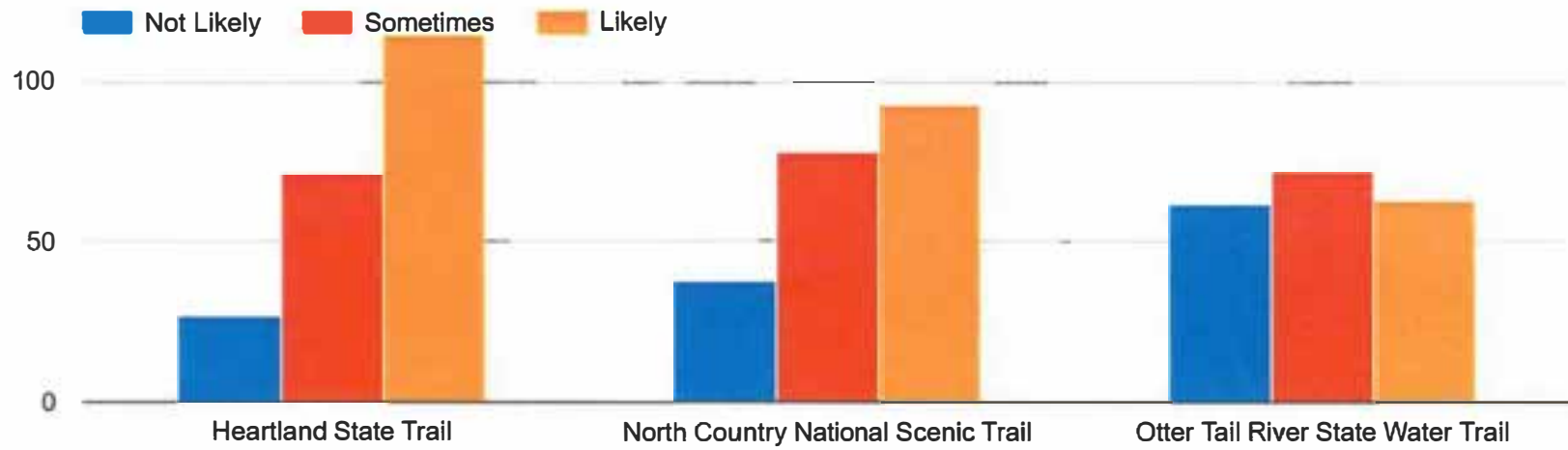
Do you currently use any of the following trails?

220 responses



Question 8:

How likely are you to use the trails?

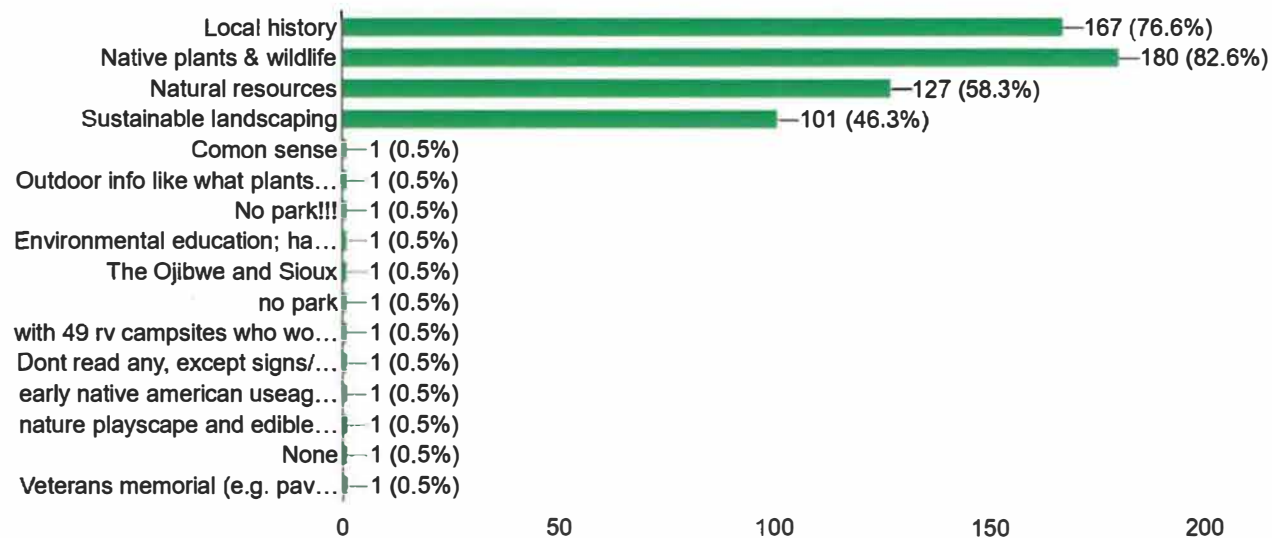


	Not Likely	Sometimes	Likely
Heartland State Trail	27	71	115
North Country	38	78	93
OT River Water Trail	62	72	63

Question 9:

What types of interpretive or educational information would you like to see, such as indoor exhibits, outdoor info, signs and guided walks? Select all that apply.

218 responses



Other Responses:

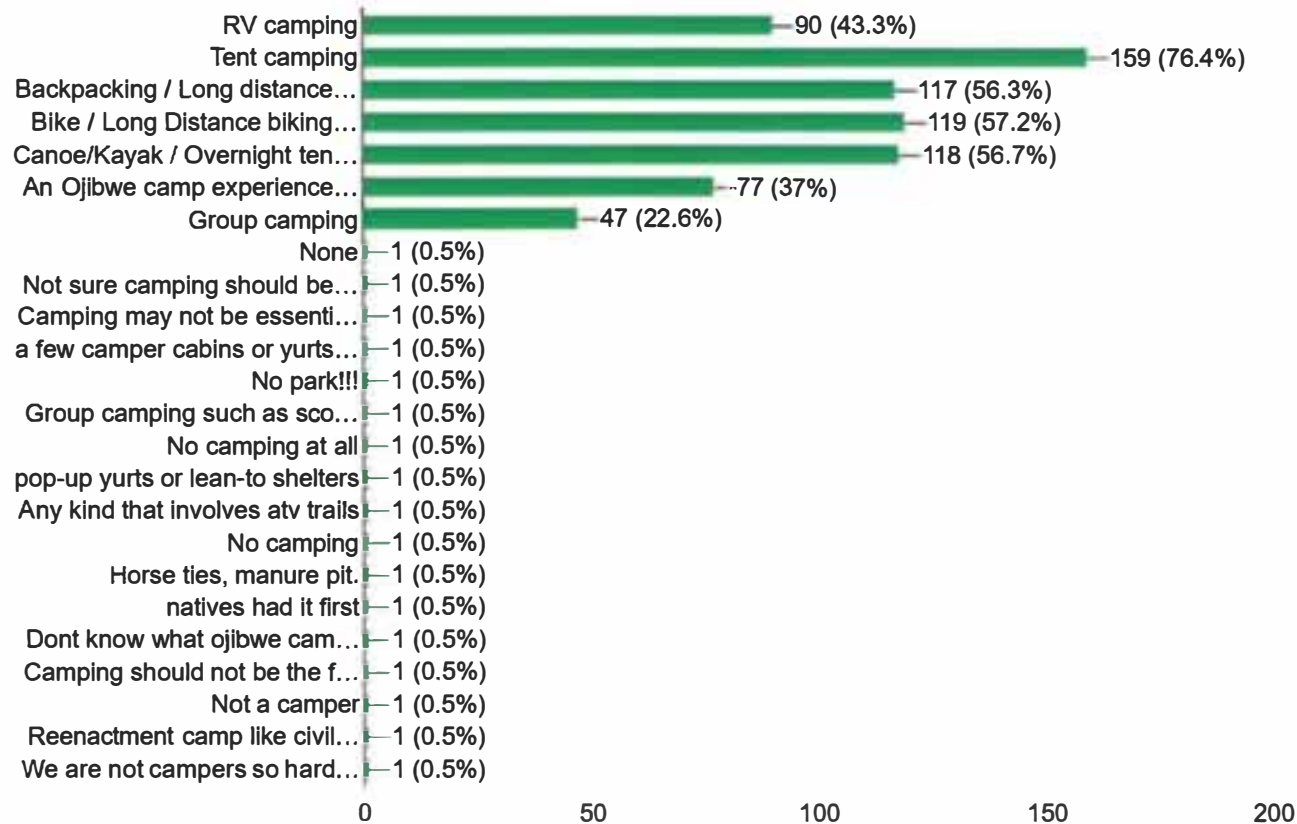
- No Park/None - 5
- Outdoor info like what plants are native to area - 1
- Environmental education/ habitat focus - 1
- Ojibwe/Sioux/Early Settler info - 2
- Signs/blazes along primitive trail - 1
- Nature Playscape and edible garden - 1
- Veterans memorial - 1



Question 10:

What type of camping do you think should be used in the park? Select all that apply.

208 responses



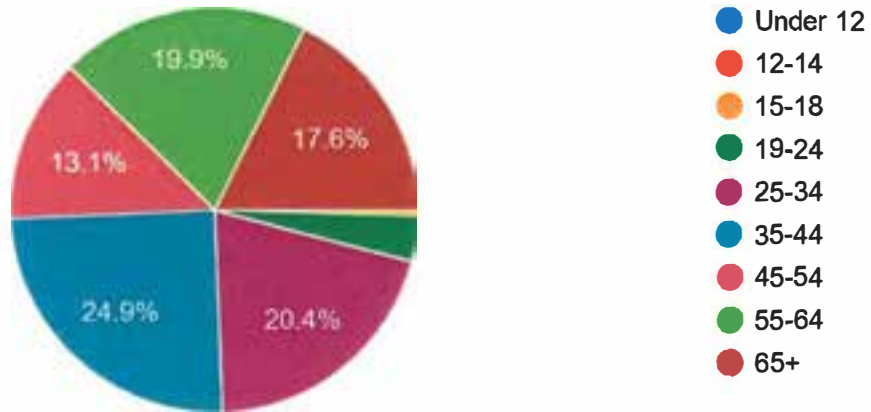
#### Question 10 Responses:

- RV Camping - 90
- Tent Camping - 159
- Backpack / long distance hiking camping - 117
- Bike / Long Distance Biking and tent camping - 119
- Canoe/Kayak/ Overnight tent camping - 118
- An Ojibwe camp experience or other unique camping experience - 77
  - "Dont know what an ojibwe camp experience means but sounds unique. Count me in :)"
- Group camping - 47
  - "Group camping such as scouts, not partying groups"
- Natives had it first - 1
- Any king that involves ATV Trails - 1
- No Camping at all / none / camping is not needed - 9
  - Comments:
    - May not be essential for this park
    - Keep the area as natural as possible with wild flowers and grasses with hiking
    - We are not campers so hard to reply to this one
    - Camping shouldn't be the focus, if camping is available it should be limited and on the outskirts of the park
- Pop-up yurts/ lean-to shelters/camper cabins - 2
- Reenactment camp like civil war times - 1
- Horse ties, manure pit - 1

Question 11:

What is your age group?

221 responses

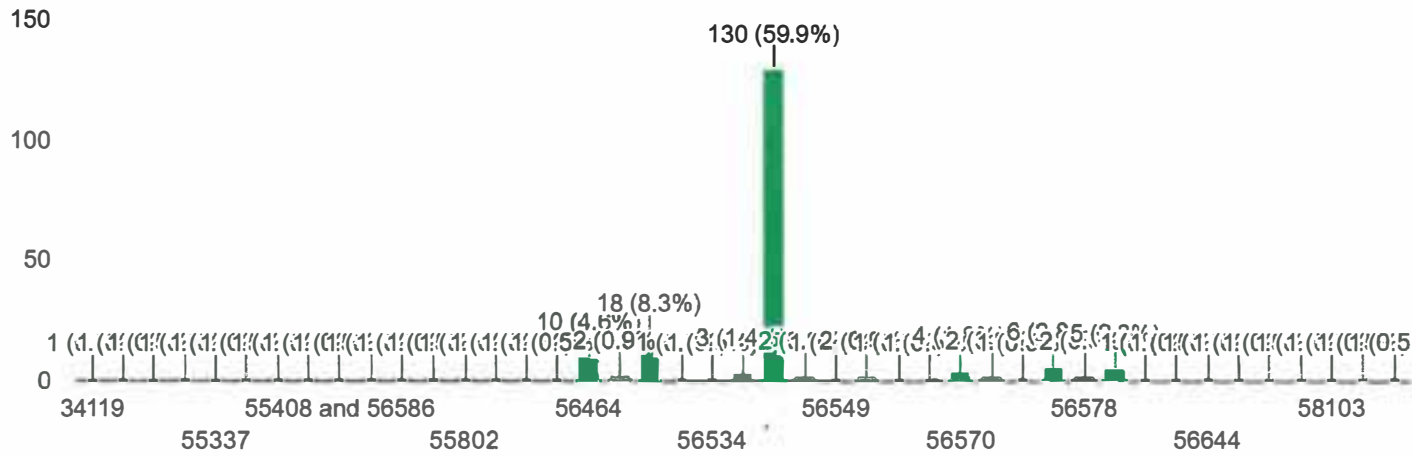


Under 12	12-14	15-18	19-24	25-34	35-44	45-54	55-64	65+
0	0	0	8	45	55	29	44	39

Question 12:

What is your zip code?

217 responses



Zip Code	Number/Count	City	County
34119	1	Naples, FL	
55063	1	Pine City, MN	Pine County
55102	1	Saint Paul, MN	Ramsey County
55118	1	West Saint Paul, MN	Dakota County

55337	1	Burnsville, MN	Dakota County
55340	1	Medina, MN	Hennepin County
55391	1	Wayzata, MN	Hennepin County
55405	1	Minneapolis, MN	Hennepin County
55413	1	Beltrami, MN	Hennepin County
55422	1	Minneapolis, MN	Hennepin County
55792	1	Virginia, MN	St. Louis County
55802	1	Duluth, MN	St. Louis County
56258	1	Marshall, MN	Lyon County
56320	1	Cold Spring, MN	Sterns County
56401	1	Brainerd, MN	Crow Wing County
56464	10	Menahga, MN	Wadena County
56470	2	Park Rapids, MN	Hubbard County
56501	18	Detroit Lakes, MN	Becker County
56514	1	Barnesville, MN	Clay County
56534	1	Erhard, MN	Otter Tail County
56537	3	Fergus Falls, MN	Otter Tail County
56544	130	Frazee, MN	Becker County

56545	2	Gary, MN	Norman County
56549	1	Hawley, MN	Clay County
56554	2	Lake Park, MN	Becker County
56557	1	Mahnomen, MN	Mahnomen County
56560	1	Moorhead, MN	Cass County
56570	4	Osage, MN	Becker County
56571	2	Ottertail, MN	Otter Tail County
56572	1	Pelican Rapids, MN	Otter Tail County
56573	6	Perham, MN	Otter Tail County
56578	2	Rochert, MN	Becker County
56586	1	Underwood, MN	Otter Tail County
56587	5	Vergas, MN	Otter Tail County
56588	1	Vining, MN	Otter Tail County
56601	1	Bemidji, MN	Beltrami County
56644	1	Gonvick, MN	Clearwater County
56716	1	Crookston, MN	Polk County
58072	1	Valley City, ND	
58078	1	West Fargo, ND	

58103	1	Fargo, ND	
59718	1	Bozeman, MT	
61103	1	Rockford, IL	



Question 13:

Would you like to be involved in Wannigan Park Project? If so, please provide your name and email address and phone

(Responses removed for privacy.)



Question 14:

If you have any other comments, please describe:

why is frazee gonna be a trailer park for detroit lakes?

It would be a nice place to ride a horse and camp for a weekend

I think this is a fantastic opportunity for Frazee. Thank you to everyone who has worked on this project!

Thank You

We have enough bike paths that brings 0 money to town Atv riders spend a lot of money in towns the trails go threw plus they pay for licenses for them to help maintain trails bicycles don't pay anything.

I think a park is a great way to get the people of Frazee to interact outdoors, I'm just concerned about the up keep. Frazee already has a few smaller parks that aren't up kept already. If it's locally funded there are certainly other areas of town that need the funds instead.

All are great ideas if there are funds for it to be maintained.

Who would pay for this construction? Who is going to do the upkeep? Who would pay for the concerts or presenter's? Not enough information on the financial backings provided to the public.

Very glad to see a proposal such as this.

Thanks for your efforts

Clean and maintained weekly

Make large RV sites. If you build it they will come. Frazee needs the business.

Even if you decide against horse camping, please put up some horse ties near a picnic and bathroom for those riding in from the Heartland Trail. We would really appreciate that.

Also, if bathrooms are on property, look into outdoor toilets that incinerated waste.

This is a great effort and would be a positive influence on the local community. Overnight activity brings in a whole lot of maintenance, security, and resource needs. Maybe that is something that could come later. Establishing daytime recreation would be a great start.

Thank you for investing in our community!!!

This will be a huge asset for the regional community

Establish a "Friends of the Park" group right away - volunteers to keep clean & safe

Can hardly wait for this to be built!

Great ideas!!

We feel this should be a Becker County project and not a Frazee project.

I am glad to see the opportunity for people to come to our community and see property used along a river for something other than home development

Promote it more. I'm by Evergreen and didn't even know about it. Safety is also a concern for taking walks/hikes

The annual Turkey Trot 5k would be awesome here.

No

I think this would make Frazee a unique and exciting destination.

I no longer live in Frazee, but lived there until I was 18. The only time I remember using those trails is school based activities. I think it would be great to upgrade (while preserving its original landscape) the trails and make them more noticeable. I run there should be signs around town and on the highway entrances indicating the direction to the park. Where I live now we have tons of parks and trails, and signs indicating their location and how to get there. I think this is a great project for Frazee!

Would it be possible to work something out with the tubing outfitters in regards to renting canoes/kayacs from them and ending at this park? Address the need of those who would like to try using the river but are scared to or struggle with not having a vehicle equipped to haul a canoe/kayac. If you go down the river how to get back to your vehicle.

The river is beautiful it would be great to have walking and tent camping opportunities.

A good playground always draws in families

if frazee wants to be a trailer park make it permanent!

I would love to be able to camp at the park! We love camping!

Why doesn't the city buy the huge property Ware's own, right in town and by the river. You've tax valued it at a fraction of the price you want to pay for this park and it's in a much more convenient location with services close by.

Jordin, Nancy and Andrea are amazing women and they all deserve raise and gnarly high fives.

We split our time between Minneapolis and our cabin in Otter Tail County. I'm originally from Fergus Falls.

Excited about this project!

I would love to get involved if possible. I am a forester with the DNR.

Have already volunteered to be on an advisory board

Just use common sense bathrooms some nature signs birding info easy comon sense they rarely use the amphitheater in Detroit lakes so why build one in frazee stuff like that

Where is the money for this project coming from? Is it really close to \$9 million dollars? Where is the revenue from this going to go when/if it makes revenue?

Keep it natural

This is a great opportunity for the City of Frazee - hope it works!

You all are doing a great job from what i read and hear. Thank you for putting your time towards this. The more draws we have in our lakes area, the more all our cities benefit. Frazee needs this to help continue its progress with improving its image. You all will be stealing residents from us and perham soon.

I've always thought that area was so pleasant and wished more people could spend time there just relaxing and visiting with others.

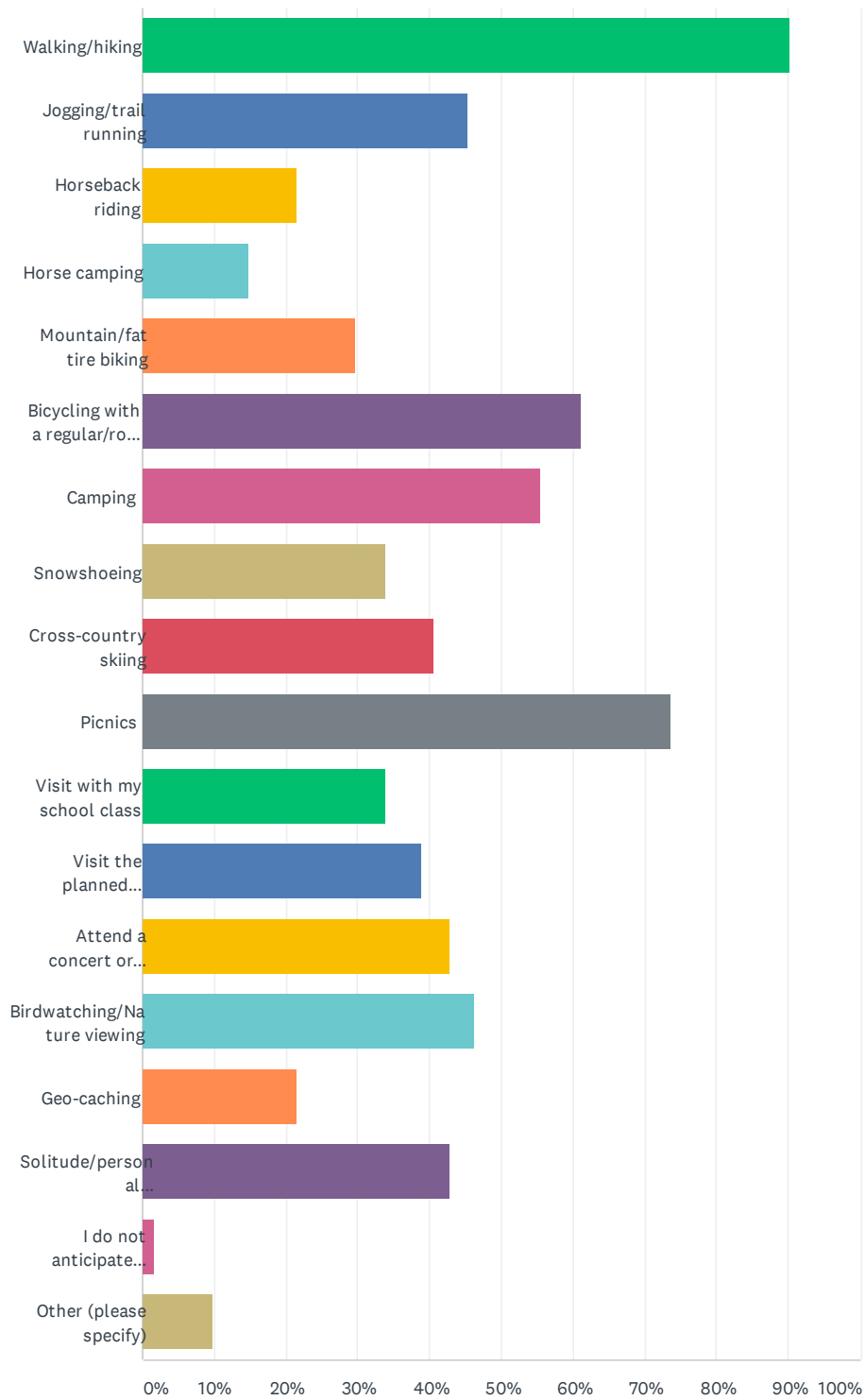
I hope it happens. Frazee deserves to become a vacation destination.

Do not build park!! Waste of money!!

Great Project.

### Q1 What recreational activities would you like to do at the new Wannigan park, after it is developed? (Select all that apply.)

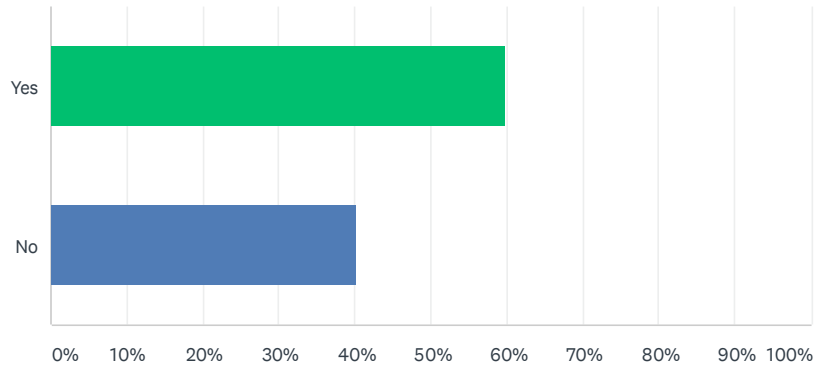
Answered: 121 Skipped: 0



ANSWER CHOICES	RESPONSES	
Walking/hiking	90.08%	109
Jogging/trail running	45.45%	55
Horseback riding	21.49%	26
Horse camping	14.88%	18
Mountain/fat tire biking	29.75%	36
Bicycling with a regular/road bicycle on paved trails	61.16%	74
Camping	55.37%	67
Snowshoeing	33.88%	41
Cross-country skiing	40.50%	49
Picnics	73.55%	89
Visit with my school class	33.88%	41
Visit the planned interpretive center	38.84%	47
Attend a concert or presentation at the amphitheater	42.98%	52
Birdwatching/Nature viewing	46.28%	56
Geo-caching	21.49%	26
Solitude/personal contemplation	42.98%	52
I do not anticipate using the park	1.65%	2
Other (please specify)	9.92%	12
Total Respondents: 121		

## Q2 Are there outdoor recreational activities that you would like to try, if facilities and equipment were available at the park?

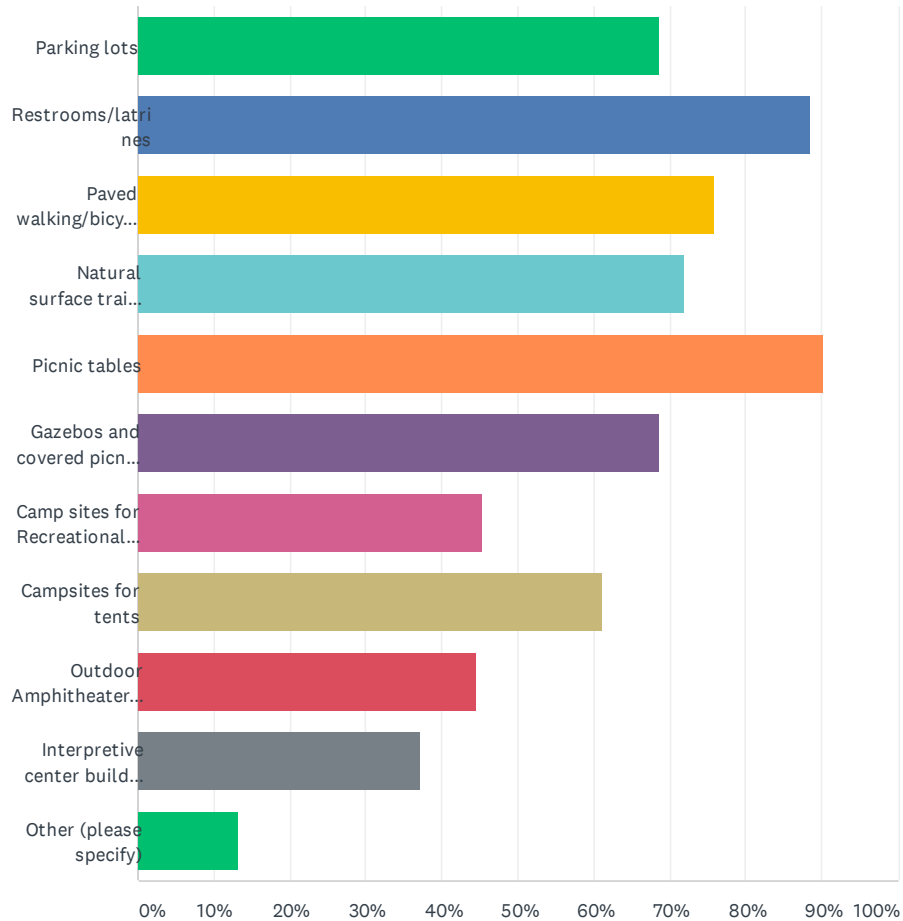
Answered: 107 Skipped: 14



ANSWER CHOICES	RESPONSES	
Yes	59.81%	64
No	40.19%	43
TOTAL		107

### Q3 What amenities should be built at the park? (Select all that apply.)

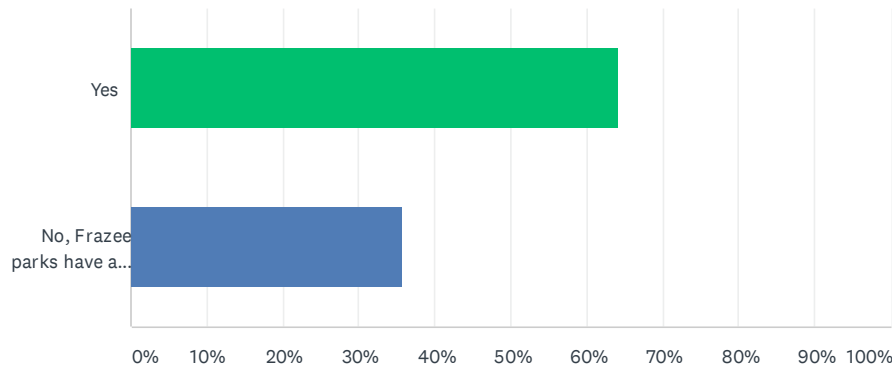
Answered: 121 Skipped: 0



ANSWER CHOICES	RESPONSES	
Parking lots	68.60%	83
Restrooms/latrines	88.43%	107
Paved walking/bicycling paths	76.03%	92
Natural surface trails for mountain bicycling, walking, and/or horseback riding	71.90%	87
Picnic tables	90.08%	109
Gazebos and covered picnic shelters	68.60%	83
Camp sites for Recreational Vehicles (with water & electric hookups)	45.45%	55
Campsites for tents	61.16%	74
Outdoor Amphitheater for presentations and concerts	44.63%	54
Interpretive center building with a small museum and indoor space for presentations	37.19%	45
Other (please specify)	13.22%	16
Total Respondents: 121		

### Q4 Are there park features that aren't available at other parks in Frazee that you would like to see at Wannigan Park?

Answered: 95 Skipped: 26

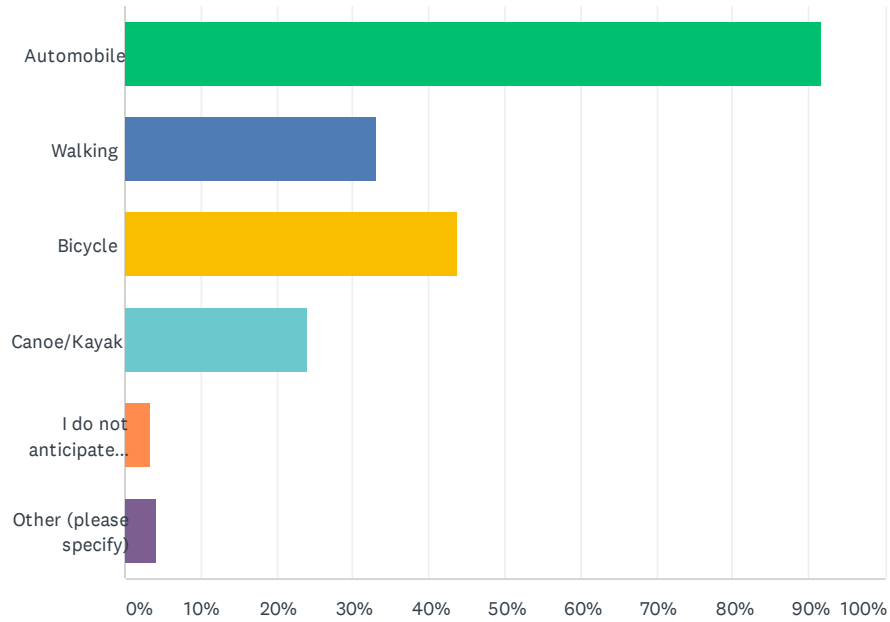


ANSWER CHOICES	RESPONSES	
Yes	64.21%	61
No, Frazee parks have all the features that I want.	35.79%	34
<b>TOTAL</b>		<b>95</b>



### Q5 How would you get to the new Wannigan park? (Select all that apply.)

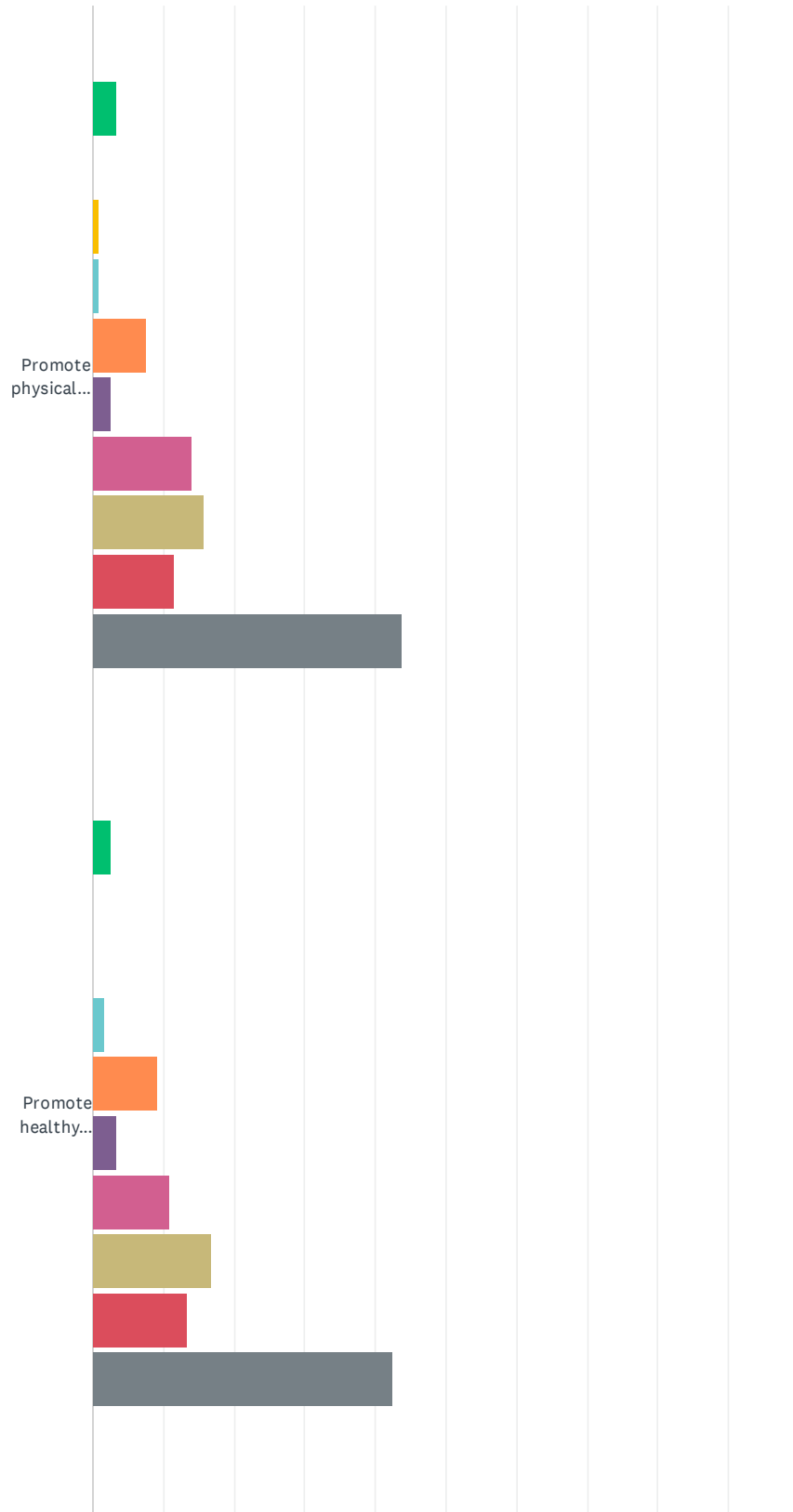
Answered: 121 Skipped: 0

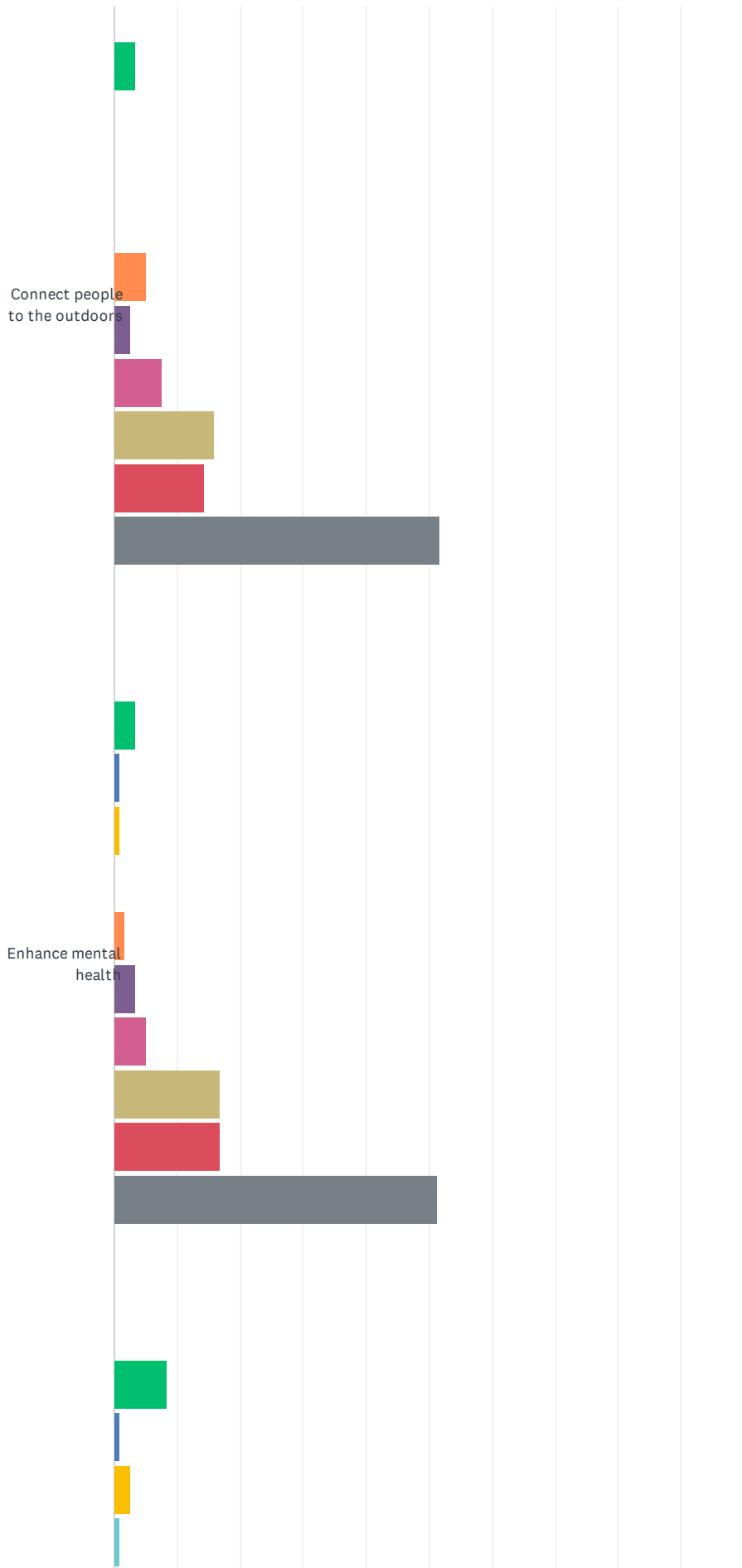


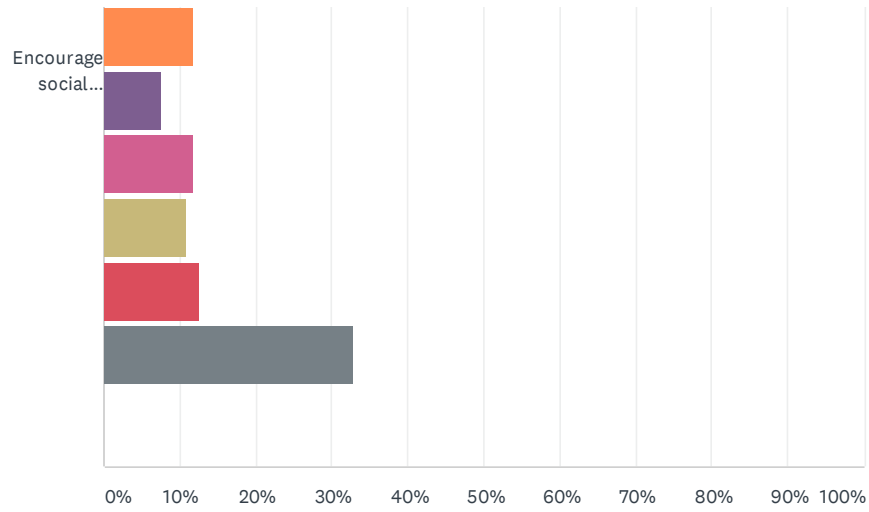
ANSWER CHOICES	RESPONSES	
Automobile	91.74%	111
Walking	33.06%	40
Bicycle	43.80%	53
Canoe/Kayak	23.97%	29
I do not anticipate using the park	3.31%	4
Other (please specify)	4.13%	5
Total Respondents: 121		

Q6 Please rate the following public health values on how important they are to you, from 1 (not important) to 10 (extremely important). Select the appropriate number for each of the public health values below:

Answered: 121 Skipped: 0



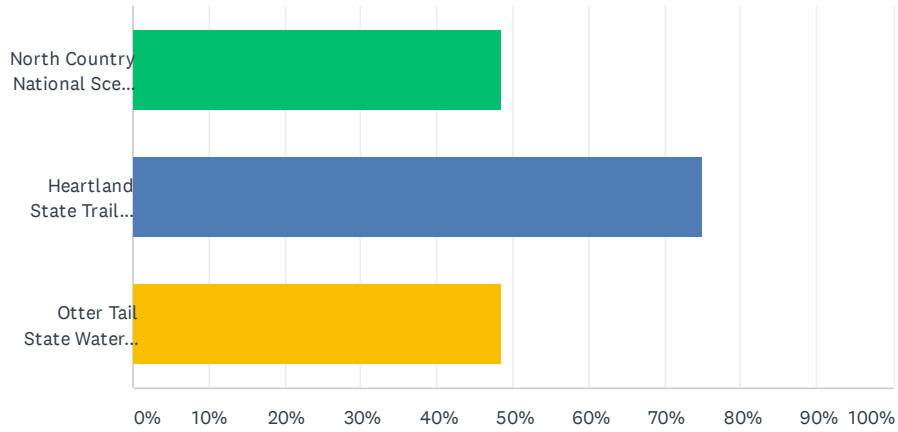




	1 (NOT IMPORTANT)	2	3	4	5	6	7	8	9	10 (EXTREMELY IMPORTANT)	TOTAL	WE AVE
Promote physical activity	3.31% 4	0.00% 0	0.83% 1	0.83% 1	7.44% 9	2.48% 3	14.05% 17	15.70% 19	11.57% 14	43.80% 53	121	
Promote healthy lifestyles	2.50% 3	0.00% 0	0.00% 0	1.67% 2	9.17% 11	3.33% 4	10.83% 13	16.67% 20	13.33% 16	42.50% 51	120	
Connect people to the outdoors	3.33% 4	0.00% 0	0.00% 0	0.00% 0	5.00% 6	2.50% 3	7.50% 9	15.83% 19	14.17% 17	51.67% 62	120	
Enhance mental health	3.36% 4	0.84% 1	0.84% 1	0.00% 0	1.68% 2	3.36% 4	5.04% 6	16.81% 20	16.81% 20	51.26% 61	119	
Encourage social interaction	8.40% 10	0.84% 1	2.52% 3	0.84% 1	11.76% 14	7.56% 9	11.76% 14	10.92% 13	12.61% 15	32.77% 39	119	

### Q7 Do you currently use any of the following trails? (Select all that apply.)

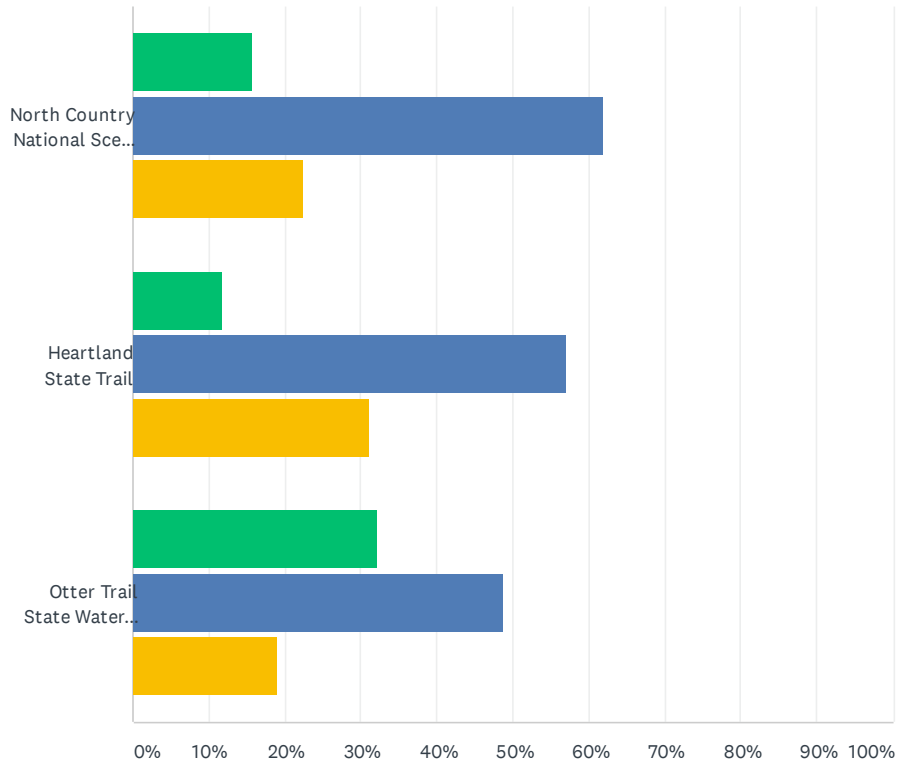
Answered: 64 Skipped: 57



ANSWER CHOICES	RESPONSES	
North Country National Scenic Trail (Hiking only trail planned to be developed through Frazee)	48.44%	31
Heartland State Trail (Paved trail for bicycling and walking/running, planned to be extended through Frazee)	75.00%	48
Otter Tail State Water Trail (existing canoe/kayak trail on the entire Otter Tail River)	48.44%	31
Total Respondents: 64		

### Q8 How likely are you to use the following trails once Wannigan Park is open and the trails are built through Frazee?

Answered: 121 Skipped: 0

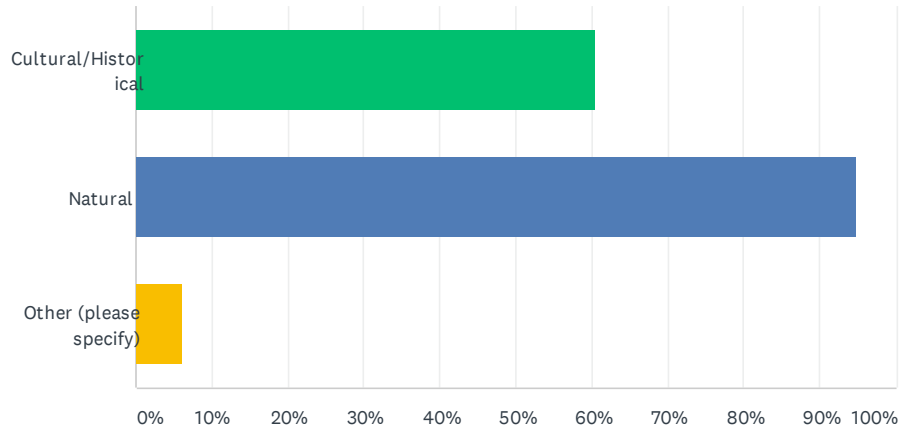


■ Not likely
 ■ Will sometimes use
 ■ Will use often

	NOT LIKELY	WILL SOMETIMES USE	WILL USE OFTEN	TOTAL
North Country National Scenic Trail	15.70% 19	61.98% 75	22.31% 27	121
Heartland State Trail	11.76% 14	57.14% 68	31.09% 37	119
Otter Trail State Water Trail	32.17% 37	48.70% 56	19.13% 22	115

**Q9 What types of interpretive information (indoor exhibits, outdoor information signs, guided walks, etc.) would you like to see? (Select all that apply.)**

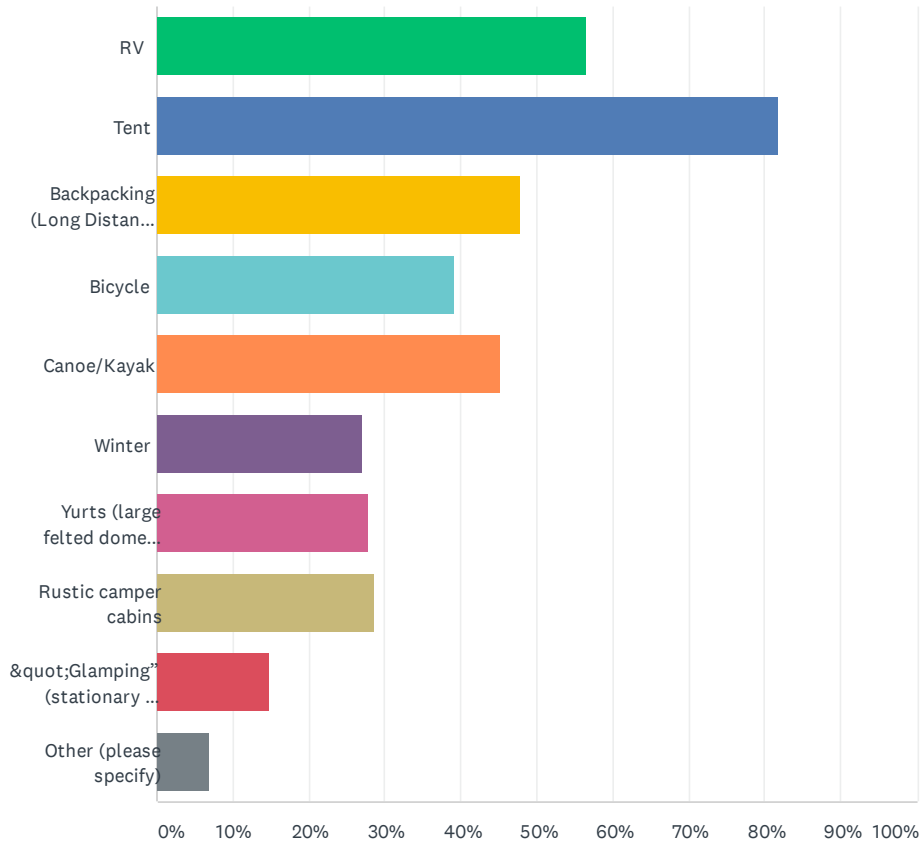
Answered: 114 Skipped: 7



ANSWER CHOICES	RESPONSES	
Cultural/Historical	60.53%	69
Natural	94.74%	108
Other (please specify)	6.14%	7
Total Respondents: 114		

### Q10 What type of camping do you think should be used in the park? (Select all that apply.)

Answered: 115 Skipped: 6

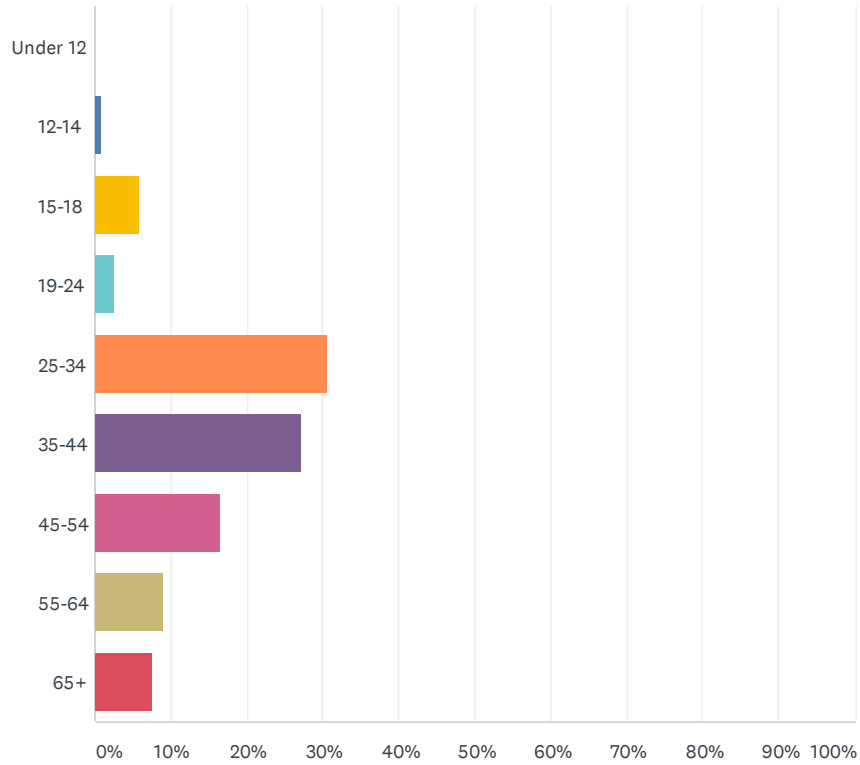


ANSWER CHOICES	RESPONSES
RV	56.52% 65
Tent	81.74% 94
Backpacking (Long Distance Hiking, such as on the North Country National Scenic Trail)	47.83% 55
Bicycle	39.13% 45
Canoe/Kayak	45.22% 52
Winter	26.96% 31
Yurts (large felted dome tents), tipis, or other unique shelters	27.83% 32
Rustic camper cabins	28.70% 33
"Glamping" (stationary RVs for rent, etc.)	14.78% 17
Other (please specify)	6.96% 8
Total Respondents: 115	



### Q11 What is your age group? (Select one)

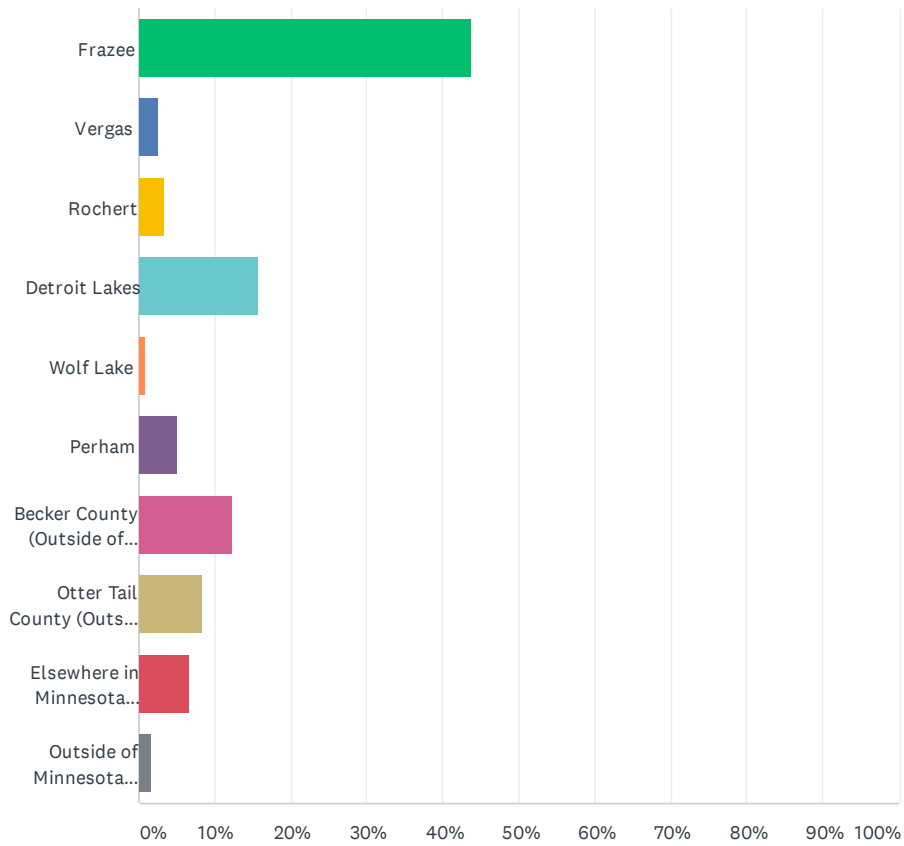
Answered: 121 Skipped: 0



ANSWER CHOICES	RESPONSES	
Under 12	0.00%	0
12-14	0.83%	1
15-18	5.79%	7
19-24	2.48%	3
25-34	30.58%	37
35-44	27.27%	33
45-54	16.53%	20
55-64	9.09%	11
65+	7.44%	9
<b>TOTAL</b>		<b>121</b>

### Q12 Where do you currently reside? (Select one)

Answered: 121 Skipped: 0



ANSWER CHOICES	RESPONSES	
Frazee	43.80%	53
Vergas	2.48%	3
Rochert	3.31%	4
Detroit Lakes	15.70%	19
Wolf Lake	0.83%	1
Perham	4.96%	6
Becker County (Outside of above cities, please specify)	12.40%	15
Otter Tail County (Outside of above cities, please specify)	8.26%	10
Elsewhere in Minnesota (Outside Becker or Otter Tail County, please specify)	6.61%	8
Outside of Minnesota (Please specify)	1.65%	2
<b>TOTAL</b>		<b>121</b>

### Q13 If you would like to be involved with the Wannigan Park Project please provide your contact information below:

Answered: 16 Skipped: 105



























ANSWER CHOICES	RESPONSES	
Name	100.00%	16
Company	0.00%	0
Address	0.00%	0
Address 2	0.00%	0
City/Town	0.00%	0
State/Province	0.00%	0
ZIP/Postal Code	0.00%	0
Country	0.00%	0
Email Address	100.00%	16
Phone Number	100.00%	16

## QuickFacts

### Becker County, Minnesota; Minnesota

QuickFacts provides statistics for all states and counties, and for cities and towns with a *population of 5,000 or more*.

#### Table

All Topics 	Becker County, Minnesota	Minnesota
Population estimates, July 1, 2019, (V2019)	34,423	5,639,632
 PEOPLE		
<b>Population</b>		
Population estimates, July 1, 2019, (V2019)	34,423	5,639,632
Population estimates base, April 1, 2010, (V2019)	32,506	5,303,927
Population, percent change - April 1, 2010 (estimates base) to July 1, 2019, (V2019)	5.9%	6.3%
Population, Census, April 1, 2010	32,504	5,303,925
<b>Age and Sex</b>		
Persons under 5 years, percent	 6.2%	 6.2%
Persons under 18 years, percent	 24.1%	 23.1%
Persons 65 years and over, percent	 21.1%	 16.3%
Female persons, percent	 50.1%	 50.2%
<b>Race and Hispanic Origin</b>		
White alone, percent	 87.2%	 83.8%
Black or African American alone, percent (a)	 0.7%	 7.0%
American Indian and Alaska Native alone, percent (a)	 8.1%	 1.4%
Asian alone, percent (a)	 0.5%	 5.2%
Native Hawaiian and Other Pacific Islander alone, percent (a)	 Z	 0.1%
Two or More Races, percent	 3.4%	 2.6%
Hispanic or Latino, percent (b)	 2.3%	 5.6%
White alone, not Hispanic or Latino, percent	 86.1%	 79.1%
<b>Population Characteristics</b>		
Veterans, 2014-2018	2,695	310,097
Foreign born persons, percent, 2014-2018	1.5%	8.4%
<b>Housing</b>		
Housing units, July 1, 2019, (V2019)	20,066	2,477,753
Owner-occupied housing unit rate, 2014-2018	78.8%	71.6%
Median value of owner-occupied housing units, 2014-2018	\$187,600	\$211,800

Median selected monthly owner costs -with a mortgage, 2014-2018	\$1,338	\$1,547
Median selected monthly owner costs -without a mortgage, 2014-2018	\$458	\$520
Median gross rent, 2014-2018	\$702	\$944
Building permits, 2019	251	28,586
<b>Families &amp; Living Arrangements</b>		
Households, 2014-2018	13,487	2,167,801
Persons per household, 2014-2018	2.47	2.49
Living in same house 1 year ago, percent of persons age 1 year+, 2014-2018	89.3%	85.7%
Language other than English spoken at home, percent of persons age 5 years+, 2014-2018	3.5%	11.7%
<b>Computer and Internet Use</b>		
Households with a computer, percent, 2014-2018	86.1%	90.3%
Households with a broadband Internet subscription, percent, 2014-2018	77.0%	82.9%
<b>Education</b>		
High school graduate or higher, percent of persons age 25 years+, 2014-2018	92.6%	93.0%
Bachelor's degree or higher, percent of persons age 25 years+, 2014-2018	24.5%	35.4%
<b>Health</b>		
With a disability, under age 65 years, percent, 2014-2018	8.9%	7.3%
Persons without health insurance, under age 65 years, percent	▲ 6.7%	▲ 5.8%
<b>Economy</b>		
In civilian labor force, total, percent of population age 16 years+, 2014-2018	64.4%	69.7%
In civilian labor force, female, percent of population age 16 years+, 2014-2018	60.4%	66.0%
Total accommodation and food services sales, 2012 (\$1,000) (c)	57,671	11,722,627
Total health care and social assistance receipts/revenue, 2012 (\$1,000) (c)	149,773	40,403,572
Total manufacturers shipments, 2012 (\$1,000) (c)	455,733	123,076,309
Total merchant wholesaler sales, 2012 (\$1,000) (c)	150,776	104,485,117
Total retail sales, 2012 (\$1,000) (c)	459,672	78,898,182
Total retail sales per capita, 2012 (c)	\$13,929	\$14,667
<b>Transportation</b>		
Mean travel time to work (minutes), workers age 16 years+, 2014-2018	22.1	23.5
<b>Income &amp; Poverty</b>		
Median household income (in 2018 dollars), 2014-2018	\$59,278	\$68,411
Per capita income in past 12 months (in 2018 dollars), 2014-2018	\$29,710	\$36,245
Persons in poverty, percent	▲ 11.1%	▲ 9.0%

## BUSINESSES

### Businesses

Total employer establishments, 2018	921	151,595
Total employment, 2018	10,489	2,729,492
Total annual payroll, 2018 (\$1,000)	409,794	149,373,963

Total employment, percent change, 2017-2018	3.5%	1.7%
Total nonemployer establishments, 2018	2,858	416,487
All firms, 2012	3,773	489,494
Men-owned firms, 2012	2,148	268,710
Women-owned firms, 2012	1,094	157,821
Minority-owned firms, 2012	214	47,302
Nonminority-owned firms, 2012	3,460	428,716
Veteran-owned firms, 2012	526	45,582
Nonveteran-owned firms, 2012	3,042	419,628


 **GEOGRAPHY**


**Geography**

Population per square mile, 2010	24.7	66.6
Land area in square miles, 2010	1,315.20	79,626.74
FIPS Code	27005	27

About datasets used in this table

### Value Notes

 Estimates are not comparable to other geographic levels due to methodology differences that may exist between different data sources.

Some estimates presented here come from sample data, and thus have sampling errors that may render some apparent differences between geographies statistically indistinguishable. Click the Quick Info  icon to the left of each row in TABLE view to learn about sampling error.

The vintage year (e.g., V2019) refers to the final year of the series (2010 thru 2019). *Different vintage years of estimates are not comparable.*

### Fact Notes

- (a) Includes persons reporting only one race
- (b) Hispanics may be of any race, so also are included in applicable race categories
- (c) Economic Census - Puerto Rico data are not comparable to U.S. Economic Census data

### Value Flags

- Either no or too few sample observations were available to compute an estimate, or a ratio of medians cannot be calculated because one or both of the median estimates falls in the lowest or upper interval of an open ended distribution.
- D** Suppressed to avoid disclosure of confidential information
- F** Fewer than 25 firms
- FN** Footnote on this item in place of data
- N** Data for this geographic area cannot be displayed because the number of sample cases is too small.
- NA** Not available
- S** Suppressed; does not meet publication standards
- X** Not applicable
- Z** Value greater than zero but less than half unit of measure shown

QuickFacts data are derived from: Population Estimates, American Community Survey, Census of Population and Housing, Current Population Survey, Small Area Health Insurance Estimates, Small Area Income and Poverty Estimates, State and County Housing Unit Estimates, County Business Patterns, Nonemployer Statistics, Economic Census, Survey of Business Owners, Building Permits.

---

#### CONNECT WITH US



[Accessibility](#) | [Information Quality](#) | [FOIA](#) | [Data Protection and Privacy Policy](#) | [U.S. Department of Commerce](#)



Root River State Trail

# 2019 Minnesota State Trail Visitor Study

---

JULY 2020

Prepared by:

Maria Robinson, Jacob Wascalus, and Edith Gozali-Lee

---



# Acknowledgements

Many staff at the Department of Natural Resources were involved in guiding and implementing this study. Special thanks to the following individuals for completing interviews over the summer: Hannah DeNure, Amy Graves, Margaret Krueger, Thomas Marx, Darin Newman, and Josephine Pickar.

Trail use estimates are the culmination of years of work and coordination among partners in Minnesota. Many individuals and organizations were involved in collecting data on state trails. Michael Petesch and Ian Vaagenes at the Department of Transportation, Dr. Greg Lindsey of the University of Minnesota, Andrew Oftedal at Parks & Trails Council of Minnesota, and Charlie Moore from Arrowhead Regional Development Commission contributed significant time to this project and provided critical guidance over the past several years.

Wilder Research extends our thanks to Darin Newman and other DNR staff who provided information for the methodology overview, wrote the state trail usage section, and provided helpful feedback on the report.

Wilder Research staff who contributed to this report include: Anna Alba, Walker Bosch, Marilyn Conrad, Phil Cooper, Amanda Eggers, Heather Loch, Nicole MartinRogers, Julia Miller, and Dan Swanson.

500 Lafayette Road  
St. Paul, MN 55155-4040  
888-646-6367 or 651-296-6157  
mndnr.gov

The Minnesota DNR prohibits discrimination in its programs and services based on race, color, creed, religion, national origin, sex, marital or familial status, disability, public assistance status, age, sexual orientation, and local human rights commission activity. Individuals with a disability who need a reasonable accommodation to access or participate in DNR programs and services please contact the DNR ADA Title II Coordinator at [info.dnr@state.mn.us](mailto:info.dnr@state.mn.us), 651-296-6157. For TTY/TDD communication, contact us through the Minnesota Relay Service at 711 or 800-627-3529. Discrimination inquiries should be sent to Minnesota DNR, 500 Lafayette Road, St. Paul, MN 55155-4049.

This document is available in alternative formats to individuals with disabilities by contacting [info.dnr@state.mn.us](mailto:info.dnr@state.mn.us), 651-296-6157. For TTY/TDD communication, contact us through the Minnesota Relay Service at 711 or 800-627-3529.

©2020 State of Minnesota, Department of Natural Resources

Printed on recycled paper containing a minimum of 10 percent post-consumer waste and vegetable-based ink.

# Contents

- Introduction.....1
- Minnesota state trail system.....2
- Methodology overview .....3
- Survey findings .....6
- Characteristics of state trail visitors .....6
- State trail trip..... 11
- Satisfaction with the trails..... 21
- Investment and funding ..... 26
- Wilder Research recommendations ..... 32
- Appendix..... 33
- Individual comments on ways to improve Minnesota trails ..... 33
- Additional information ..... 37
- State trail usage..... 41
- Automated trail count methods..... 41
- How many people use state trails? ..... 42
- Which trails do people use? ..... 43
- When do people use trails?..... 45



# Introduction

---

**The Minnesota Department of Natural Resources Parks and Trails Division (DNR) is committed to better understanding and enhancing visitors' outdoor recreation experiences. To that end, the DNR conducted a trail intercept survey in summer 2019 to gather information from and about state trail visitors, including their demographics, activities, frequency of usage, barriers, motivations, satisfaction, and opinions about trail management and funding. This report presents findings from that survey.**

In 2015, the DNR developed a system plan to advance new approaches for managing the DNR's state parks and recreation areas, forest recreation areas, water recreation system, and state trails. This plan helps guide strategic investment decisions according to five principles: invest limited resources strategically, protect and interpret natural and cultural resources, inspire the next generation of stewards, promote tourism, and contribute to Minnesota's quality of life.

To ensure the plan is carried out in accordance with the guiding principles and to support the overall system, the DNR is conducting a series of research projects across these systems. This report shares the

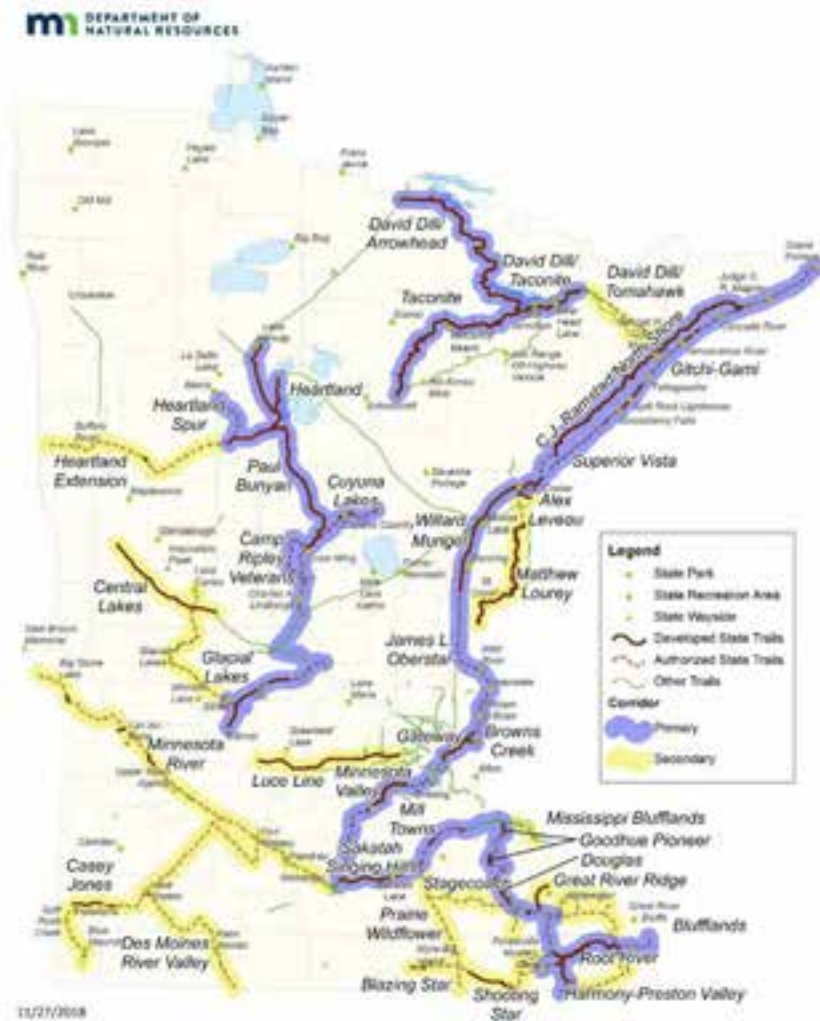
findings focused on the state trail system. In 2017, the DNR conducted a survey of Minnesota state parks visitors, and the DNR plans to study the forest recreation areas and the water recreation system in the years to come.

The DNR has been conducting state trail surveys since the 1990s. These previous studies examined visitors' experiences at one or two trails at a time. This 2019 study was larger in scope and represents opinions of summer visitors to 640 miles of paved and hardened surface state trails.

The DNR contracted with Wilder Research to analyze the survey data and prepare this report.

# Minnesota state trail system

Figure 1. Primary and Secondary State Trail Corridors<sup>1</sup>



State trails included in the survey<sup>2</sup>

## Primary corridors

- Brown’s Creek
- Cuyuna Lakes
- Douglas
- Gateway
- Gitchi-Gami
- Glacial Lakes
- Goodhue-Pioneer
- Harmony-Preston Valley
- Heartland
- Mill Towns
- Minnesota Valley
- Paul Bunyan
- Root River
- Sakatah Singing Hills
- Willard Munger

## Secondary corridors

- Alex Laveau
- Blazing Star
- Casey Jones
- Central Lakes
- Great River Ridge
- Luce Line
- Shooting Star

**“DNR trails are a great resource for Minnesotans. Doing a great job!” – Gateway visitor**

**“The state trails are an asset to Minnesota.” – Paul Bunyan visitor**

<sup>1</sup> Map of all Minnesota State Trails

<sup>2</sup> The primary and secondary corridors guide DNR investment priorities for the state trail system. The DNR applies differentiated guidance to primary and secondary corridors on topics including new development, rehabilitation, maintenance, trailhead amenities, and how partners can best support state trails.

The survey covered non-motorized, summer visitors. Natural-surface trails, motorized trails, and some small and remote trails were excluded from the survey project. The map includes all state trails, but not all state trails were surveyed.





Survey Crew on the Heartland State Trail

## Methodology overview

**The 2019 Minnesota State Trail Visitor Study presents findings from a DNR-designed and -administered survey. The survey was developed to study activity on non-motorized and summer-use trails in Minnesota. The survey did not include trails used only in the winter or trails used predominantly for motorized recreation. Motorized recreation surveys, for example, have been conducted through surveys of registered vehicle owners rather than through intercept surveys.**

In total, 2,973 visitors were intercepted on the trail and invited to participate in the survey; 1,561 visitors (53%) completed the initial survey and 1,412 visitors (47%) declined or were not eligible to participate. Of the 1,561 visitors who completed the initial survey, 841 visitors (54%) completed the follow-up survey. The follow-up survey asked more detailed questions about state trail experiences, including certain aspects of state trails and opinions about funding and trail passes. The follow-up survey respondents were similar in their demographic characteristics to everyone who completed the initial survey ([Figure A2 in Appendix](#)).

The survey was administered by DNR staff during the 2019 summer season (between Memorial Day and Labor Day). It was conducted at 190 locations along 640 miles of state trails. The sampling plan was developed in two phases for the first and second halves of the summer. The DNR randomly selected sampling days for each week of data collection, then assigned trail segments to sampling days with random assignment of time of day for on-site intercepts and interviews.

Since 2015, the DNR and partners have been conducting automated traffic counts of state trail use (see Appendix and the next section for detailed information). The information from the counts was used to inform the sampling plan for this project (e.g., to target the sample size for each trail and for cyclists/non-cyclists; and to estimate counts for data collection on weekdays and weekends). The automated counts measure overall activity on trails, in terms of trail miles traveled. The number of visits is not the same as miles traveled because different user groups travel different distances on a typical trail visit. For instance, bicyclists travel about six times farther than people who walk or run. The sampling plan and survey results are representative of trail activity, but not representative of total visits.

At the determined trail locations, staff intercepted visitors to participate in the survey. If visitors came as a group, the adult with the most recent birthday was asked to participate in the survey. An initial survey was administered onsite via a tablet computer.



From left to right: Paul Bunyan State Trail, Luce Line State Trail, and Gateway State Trail.

The initial survey included questions about visitors' motivation to visit the trail, their demographics, and how the visitors found out about the trail and planned for their trip.

After completing the initial survey, DNR data collectors asked the same respondent to participate in a voluntary follow-up survey that could be taken on-site or at home at a later time. The follow-up survey dug deeper into the visitors' experiences, such as asking about their satisfaction with the various trail amenities and maintenance, and their opinions about funding and trail pass fees.

For a detailed explanation of the survey methodology, please contact the DNR Parks and Trails Division.

## Notes

- As context, this report includes information about Minnesota adult residents – age 18 and older for age, gender, and race/ethnicity and age 25 and older for education attainment - from the 2014-2018 American Community Survey 5-year estimates (“2018 Minnesota adult population”) and relevant results from previous DNR studies. It should be noted that the sample and methodology in the 2019 State Trail Visitor Study is different from previous studies. To read previous reports, please visit the [Minnesota Department of Natural Resources State Parks and State Trails Studies \(https://www.dnr.state.mn.us/aboutdnr/reports/pat/index.html\)](https://www.dnr.state.mn.us/aboutdnr/reports/pat/index.html)
- The survey results reflect the views of adult visitors (age 18 and up) who agreed to participate in the survey. They are referred to as “visitors” in this report. Their responses may not represent opinions of all state trail visitors.
- The term “tourists” and “locals” are used to describe two different groups of visitors. Locals are those who have traveled less than 50 miles from their home and did not stay overnight to visit the trail; and tourists are those who traveled more than 50 miles and/or stayed overnight to visit the trail.
- About half of the visitors in the follow-up survey provided additional comments and suggestions for improving Minnesota state trails. Selected comments are included to illustrate the relevant findings throughout the report as well as in the Appendix.
- Meaningful significant differences among types of visitors (e.g., locals vs. tourists, younger vs. older respondents) are included in the report.

# Survey findings

## Characteristics of state trail visitors

The DNR seeks to better understand who visits state trails. In this section, we describe the demographic characteristics of the trail visitors, the size and composition of the visiting group, prior visits to the trail, and whether the visitors are locals or tourists.

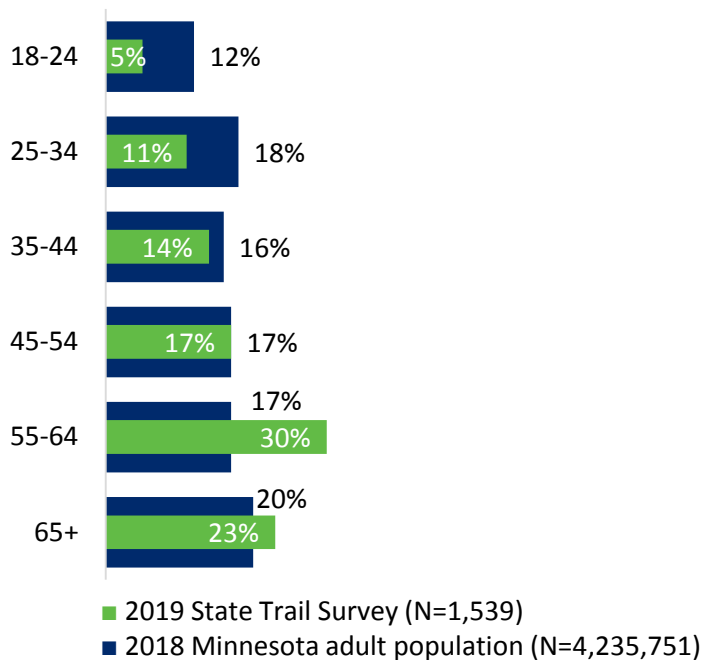
### Demographics

Compared to the Minnesota adult population, **trail visitors were older, had higher incomes, had higher educational attainment, and were more often identified as white.**<sup>3</sup> Their demographic characteristics were similar to the characteristics of respondents in previous state trail and state parks visitor studies, except for income levels (Figure A3 in Appendix).

#### Age

Seventy percent of adult trail visitors were age 45 or older (Figure 2).

Figure 2. Age of adult visitors compared to Minnesota adult population



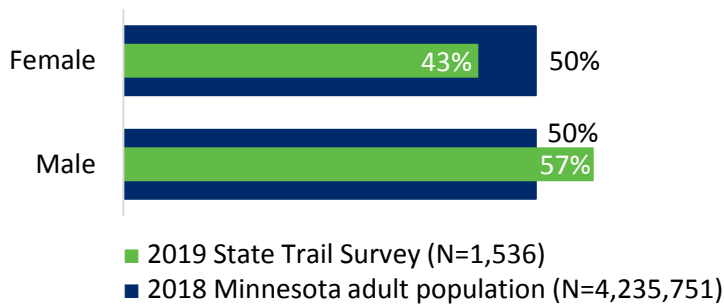
<sup>3</sup> Included a few visitors (14%) who were from out of state.



### Gender

Male visitors make up a larger share of visitors than female visitors (Figure 3).

**Figure 3. Gender of adult visitors compared to Minnesota adult population**

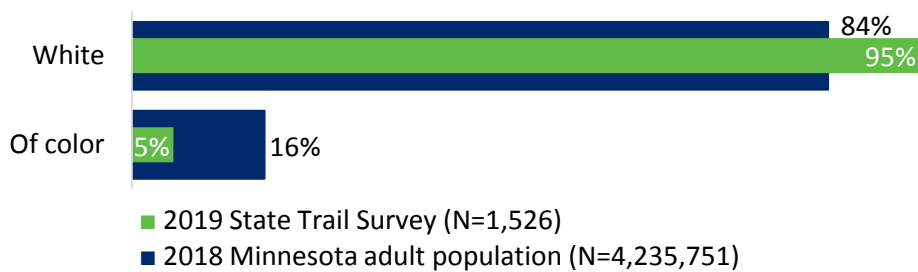


Note. The survey included gender selections for male, female, non-binary, transgender, or none of these. Less than 0.5% of the visitors selected non-binary, transgender, or none of these.

### Race/ethnicity

Nearly all of the trail visitors were white (Figure 4).

**Figure 4. Race/ethnicity of adult visitors compared to Minnesota adult population**



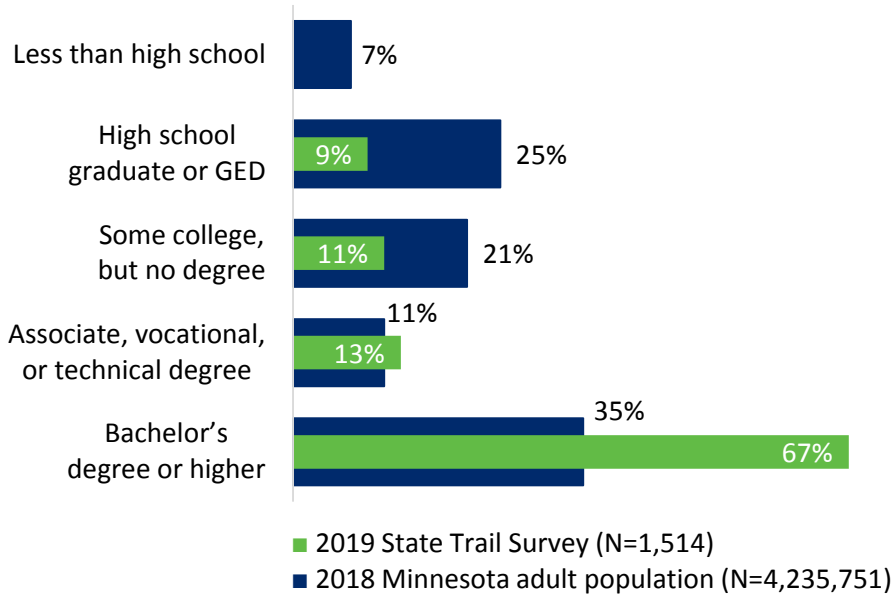
Respondents were asked to describe their race and/or ethnicity as: White, non-Hispanic; Hispanic or Latino; Black or African American; African; Asian; Middle Eastern; Native, First Nation, Alaska Native; Pacific Islander; or Other. Respondents could choose multiple answers. Those who selected White, non-Hispanic only are categorized as White; the remaining groups are categorized as “Of Color.” None of the respondents indicated African or Middle Eastern.

**Visitors of color tended to be younger.** Fifty-eight percent of visitors of color were younger than age 45, compared to 28% of white visitors (Figure A4 in Appendix).

### Educational attainment

State trail visitors tend to have higher educational attainment than the overall Minnesota adult population; 67% of trail visitors have a bachelor’s degree or higher compared to 35% of Minnesota’s adult population (Figure 5).

**Figure 5. Educational attainment of visitors compared to Minnesota adult population**

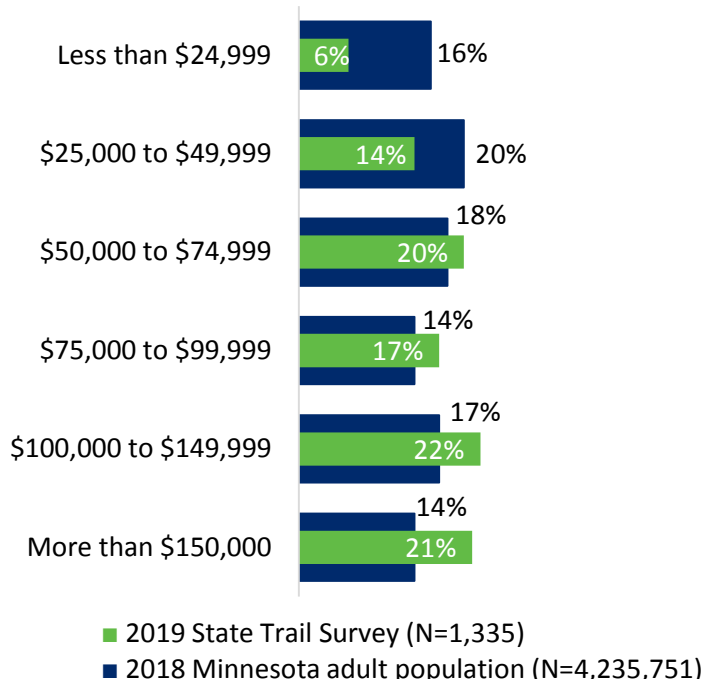


Note. The survey did not include an option for “less than high school.” However, it did include an option of “none of these,” which 0.1% of the survey respondents selected. The figures for the 2018 Minnesota adult population in this chart are for adults age 25 and older.

### Household income

Compared to the Minnesota population, state trail visitors had higher household incomes. Sixty percent of state trail visitors reported a total household income of \$75,000 or more in 2018, compared to 45% of all Minnesota households (Figure 6).

**Figure 6. Household income of visitors compared to Minnesota adult population**

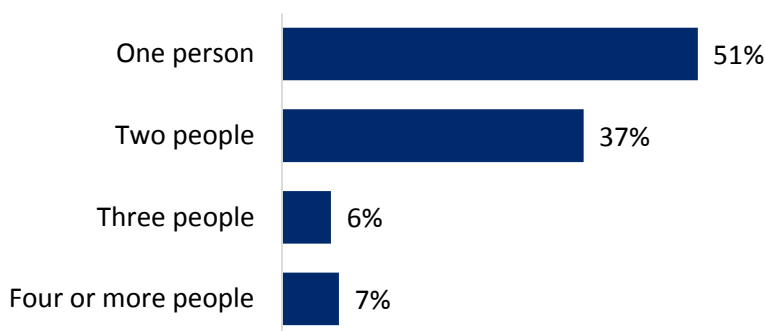


Compared to previous DNR studies (2017 State Parks Visitor Study and 2007-13 State Trail Users), the share of visitors in 2019 with household incomes of \$100,000 or more was higher (43% vs. 32-33%; Figure A3 in Appendix).

### Group size and composition

Half of the survey respondents indicated that they visited the trail alone and another 37% visited with one other person. Much smaller shares of trail visitors came in groups of three, or, four or more (Figure 7).

**Figure 7. Group size**



Note. N=1,561

When survey respondents were asked to describe their visiting group, **most of the respondents (88%) indicated that their group included only adults (this figure includes single visitors)**. The remaining survey respondents were accompanied by children (Figure 8).

**Figure 8. Group composition**

Included in your group are...	N=1,523
Only adults ages 18 and up	88%
Adults with children ages 12 and younger	10%
Adults with children between the ages of 13 and 17	4%

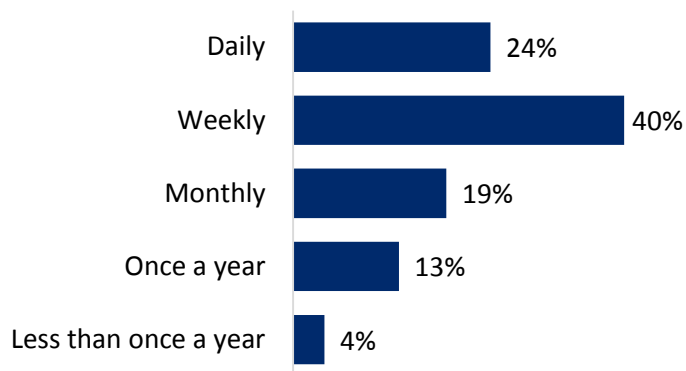
Note. Total percentage does not add up to 100% because survey respondents could select one or both groups of children.

In addition, the DNR intercepted 92 children under the age of 18, without an adult (6% of those who were stopped by DNR staff). They were not eligible to participate in the survey and not included in the sample.

### Repeat and first-time visitors

**For most of the visitors (89%), their trip was not their first visit to the trail.** This result is quite a bit higher than the previous State Parks Visitor Study in 2017, where 59% of the survey respondents were repeat visitors. **Of those repeat visitors, 64% visited the trails on at least a weekly basis** (Figure 9).

**Figure 9. Frequency of use by repeat visitors**



Note. N=1,378

### Local visitors and tourists

Local visitors are those who traveled less than 50 miles from their home and did not stay overnight to visit the trail, and tourists are those who traveled more than 50 miles to the trail and/or stayed overnight during their visit.

**The share of local visitors outnumbered the tourists, 72% to 28%.** The percentage of tourists who visited the trails is lower than the previous trail study (35%) and the 2017 State Parks Visitor Study (68%).

## State trail trip

The DNR seeks to better understand the characteristics of the visitor trips. In this section, we describe the information used by visitors to plan for the trip, their reasons to visit the trail, and ways they get to the trail. We also describe the activities trail visitors participate in during their trip to a Minnesota state trail, equipment used, and the accommodation they use during their visit to the trail. Understanding answers to these and other questions about visitors' trips is helpful for DNR staff to better plan for future trail use.

### Getting to the trail

#### *Sources of information for all visitors*

When asked how the visitors found out about the trail, **the majority of state trail visitors reported that they have known about the trail they visited for a long time (72%)**. Ten percent reported that they received a referral from a family or friend (Figure 10).

**Figure 10. Sources of information for visitors**

Source of information	All visitors (N=1,557)
Known about this trail for years	72%
Referral from family or friend	10%
Stumbled upon; happened to be in the area	7%
Online (Google, website, blog, social media, etc.)	4%
Recommendation from a business, visitor center, etc.	1%
From the DNR (website, social media, brochure, staff, etc.)	2%
Smartphone app	1%
Publication (brochure, magazine, or newspaper)	1%
TV or radio	<1%
Events (e.g., consumer show, fairs, bicycle tour)	<1%
Other	2%

Note. Visitors could select more than one source.

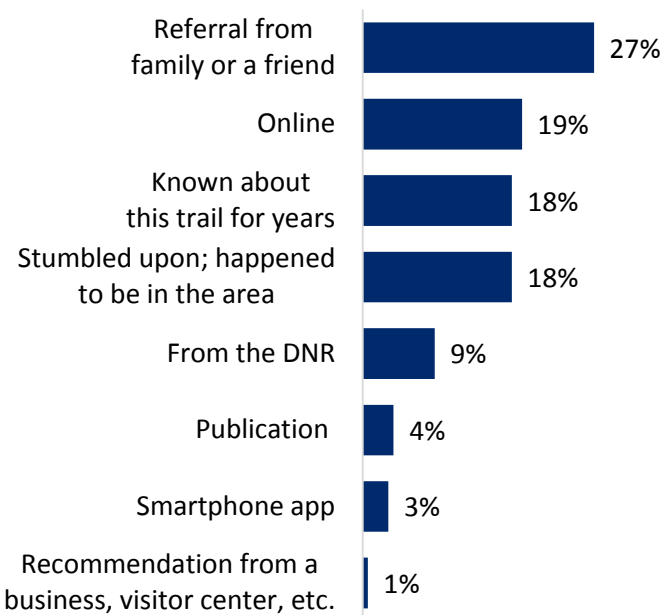


Gitchi-Gami State Trail

*Sources of information for first-time visitors*

Eleven percent of the survey respondents indicated that this was their first visit to the trail where they received the survey. Of those who had never visited the trail before, more than one-fourth were referred by a family member or friend. Other frequently cited sources included online, known about the trails for years, and stumbled upon the trail (Figure 11).

**Figure 11. Sources of information for first-time visitors**



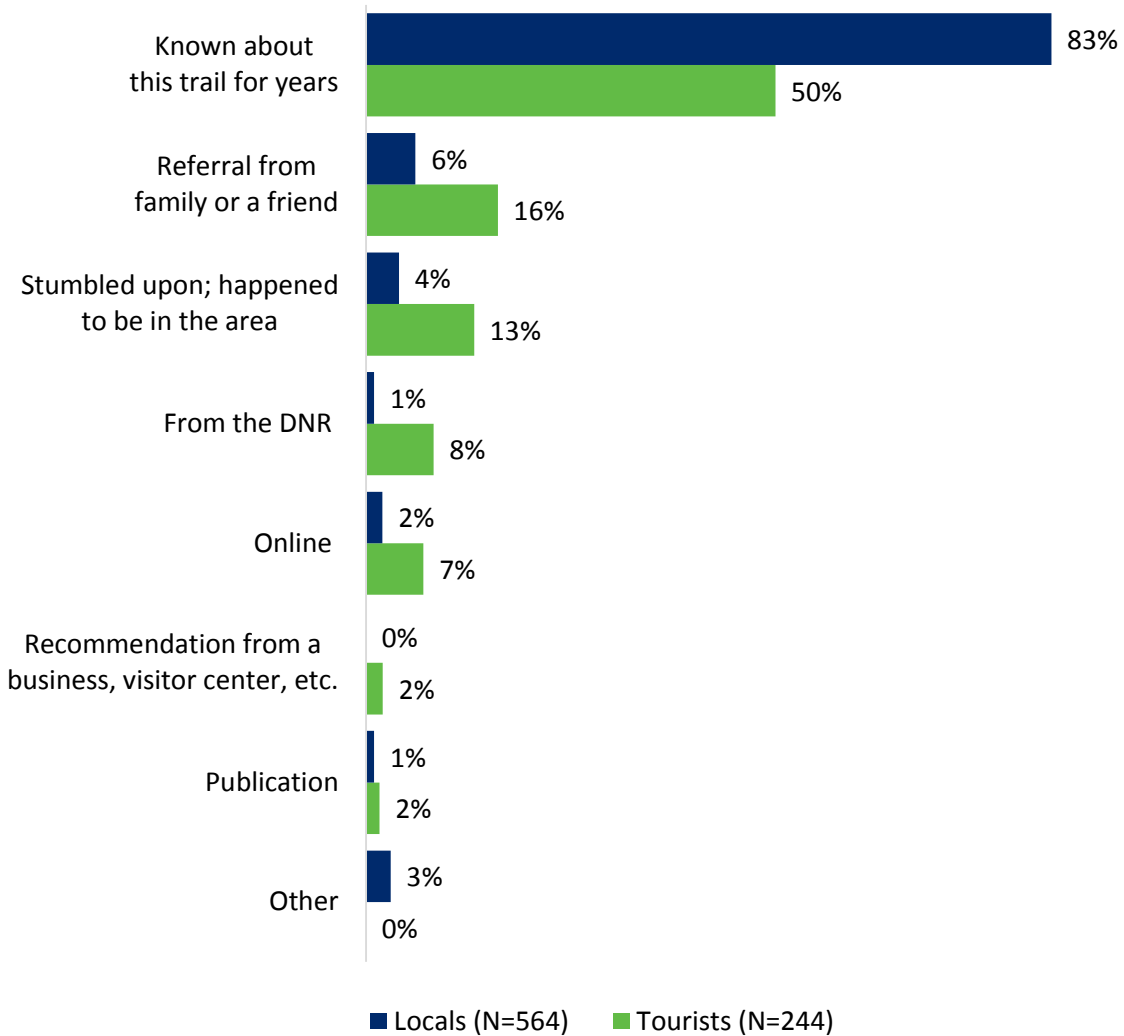
Note. N=164. Visitors could select more than one source.

"From the DNR" includes the DNR website, social media, brochure, staff, etc. Events (e.g., consumer show, fairs, bicycle tour); TV or radio; and "Other" categories are not displayed; each of them was mentioned by one visitor.

### Source of information for tourists

**Half of tourists already knew about the trail they visited.** Eight percent of tourists learned about the trail from DNR-produced media or from DNR staff, as opposed to 1% of locals (Figure 12).

**Figure 12. Information sources for tourists and locals**



Note. The questions used to determine whether a visitor was considered a local or tourist were asked in the follow-up survey. The total number of follow-up survey respondents who responded to this question is 808. "From the DNR" includes the DNR website, social media, brochure, staff, etc. Percentages may not add up to 100% due to rounding.

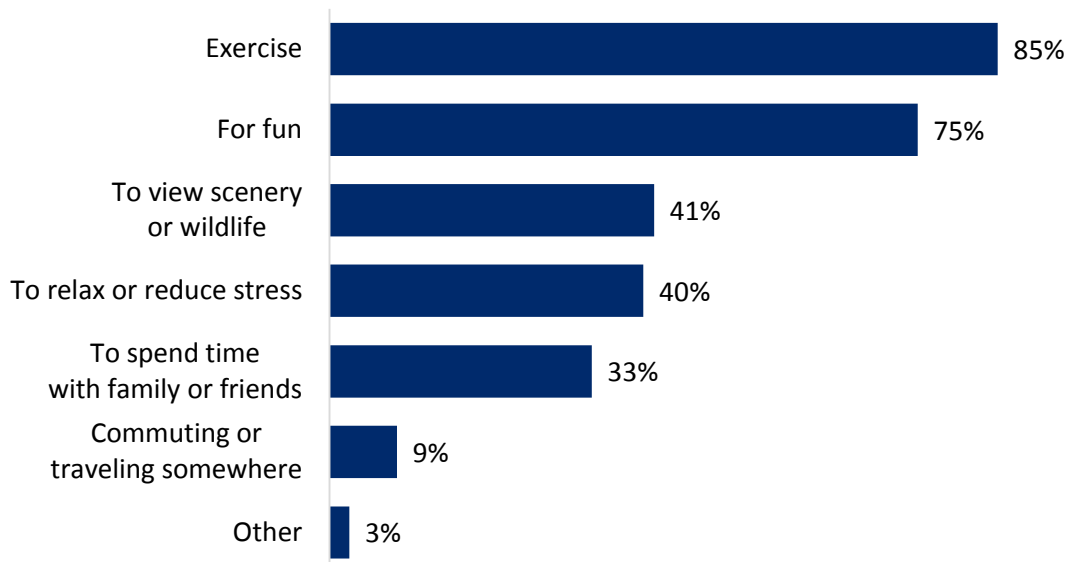


Douglas State Trail

*Reason for using the trail*

**Eighty-five percent of visitors were using the trail for exercise, and 75% were using the trail for fun.** About one in ten visitors used the trail for commuting or traveling somewhere (Figure 13).

**Figure 13. Reasons for using the trail**

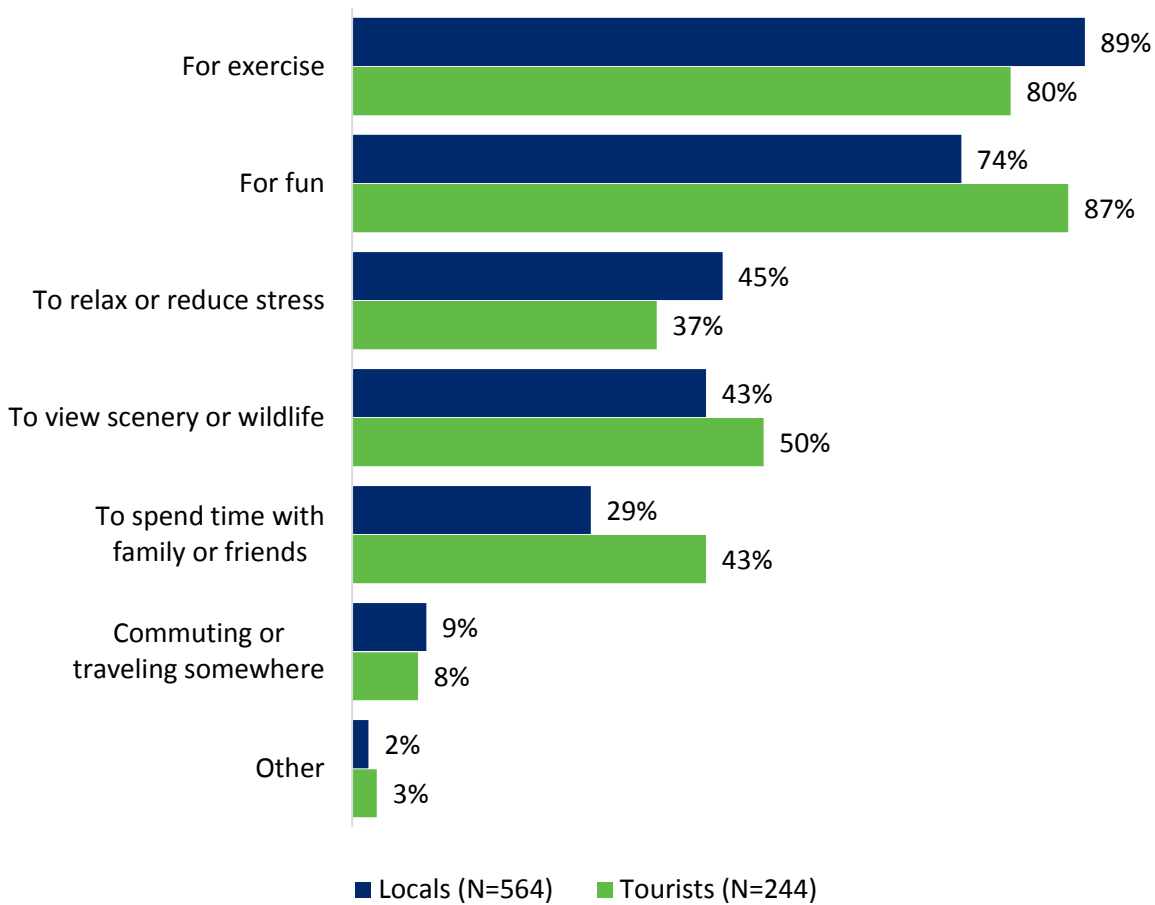


Note. N=1,557. Visitors could select more than one reason.



In addition to using the trails for fun or exercise, a higher share of tourists than locals reported using the trail to spend time with family or friends (43% vs. 29%).

**Figure 14. Locals' and tourists' reasons for using the trail**

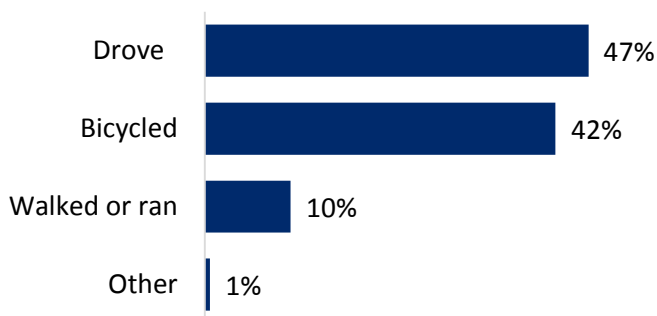


Note. Visitors could select more than one reason for using the trail.

*Ways to get to the trail*

When asked how they got to the trail, **almost half of visitors indicated that they drove (47%) or bicycled (42%).**

**Figure 15. Ways to get to the trail**



Note. N=838

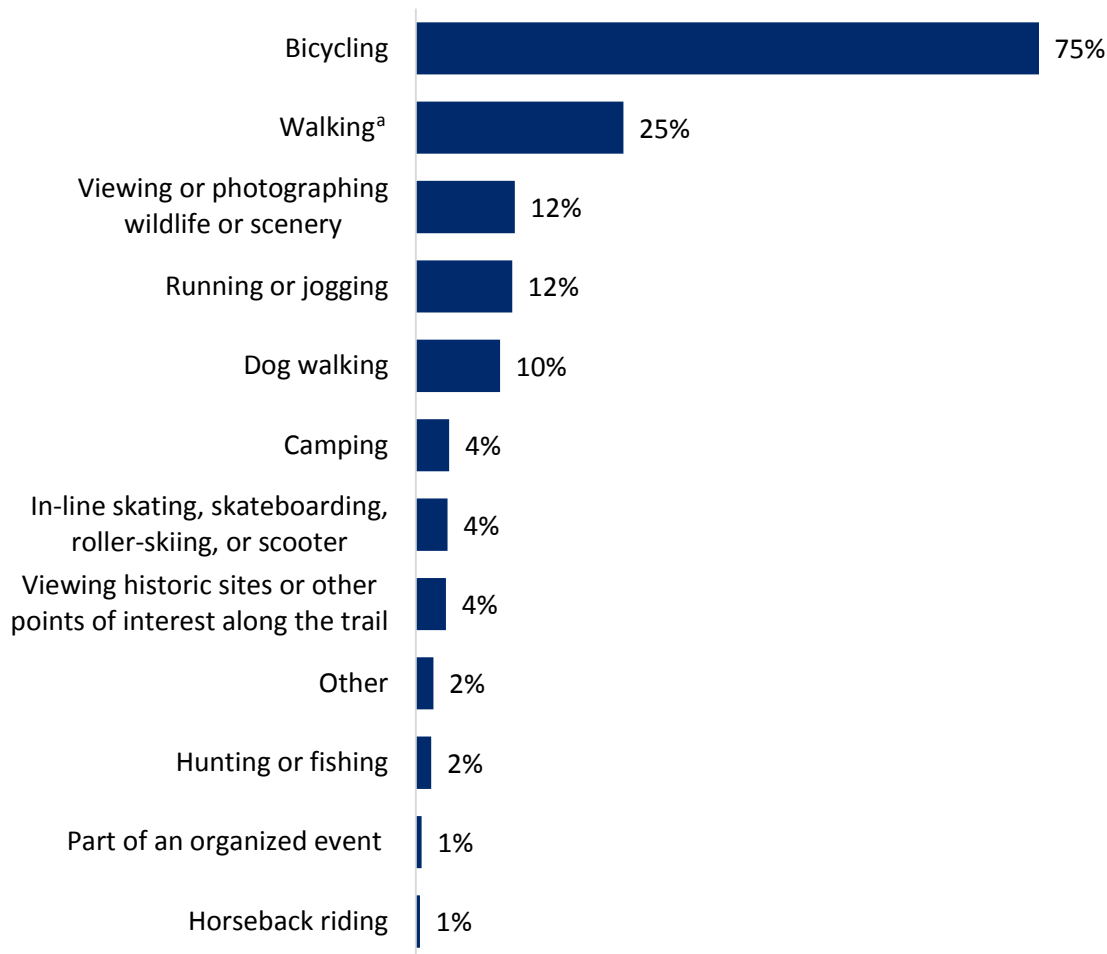
## At the trail

### On-trail activities

Visitors used the trails for a variety of activities. **Bicycling was the most prevalent activity**, with three-quarters (75%) of visitors indicating their group was participating in this activity during their visit. Walking was the second most common trail activity, with one-quarter (25%) of visitors indicating their group was participating in this activity.

*“Minnesota does bike trails right. The Root River Trail had perfect pavement. The towns offered many places to eat and shop. Less than an hour after a windstorm, the trail crew was clearing the trail of fallen tree branches. Thank you Minnesota!” – Root River visitor*

Figure 16. Trail activities during their visit

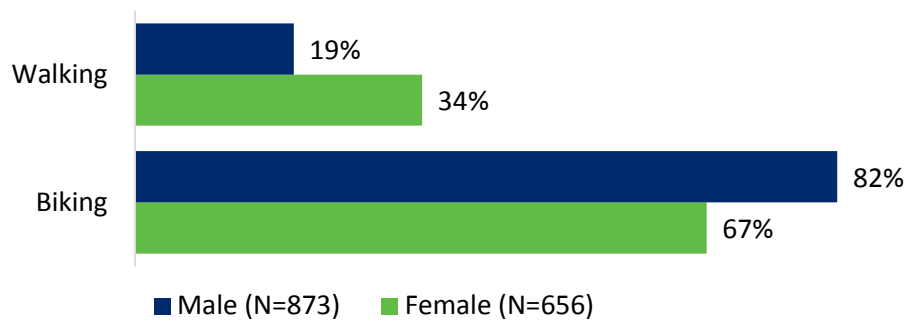


Note. N=1,560. Visitors could select more than one activity.

<sup>a</sup> Including using any type of mobility assist device

While a higher share of men were biking compared to women, a higher percentage of women were walking compared to men (Figure 17).

**Figure 17. Walking and bicycling activities by gender**



Note. The survey included gender selections for non-binary, transgender, or none of these. Less than 0.5% of the visitors selected one of these categories. Percentages may add up to more than 100% due to rounding.

Results also show that:

- Nearly a quarter of non-bicyclists used the trail to walk their dog(s).
- Three-quarters of people who visited primary corridors (75%) reported that their primary activity was bicycling, compared to 55% of secondary corridor visitors. The remaining people who visited secondary corridors (43%) said they run, jog, or walk as their primary activity.
- A higher percentage of tourists indicated bicycling as an activity compared to local visitors (82% to 67%).

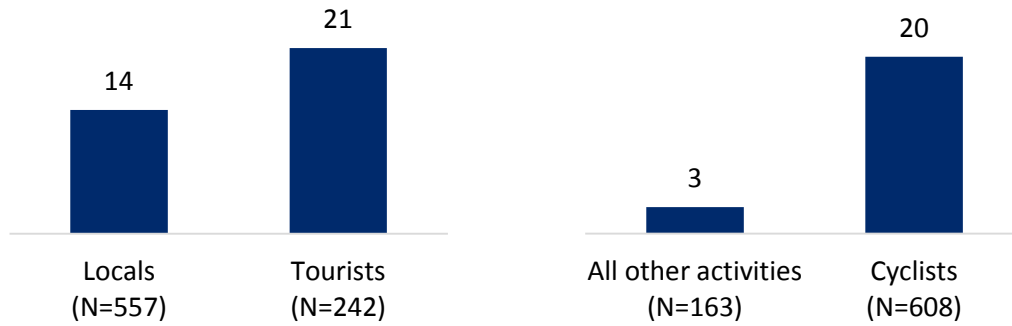
#### *Equipment used during visit*

**Nearly all trail visitors (95%) indicated that they did not use any specialized equipment during their visit.** The majority of the remaining visitors, who were almost entirely adults older than age 55, used an electric-assist bicycle (4%). Other types of equipment, such as wheelchairs and electric scooters, skateboards, or Segways registered less than 0.5% of responses. Non-electric bicycles were not included in the specialized equipment list.

#### *Travel distance on the trail*

The survey asked the visitors to estimate how many miles they traveled on the state trail on the day of their visit. **The median distance that visitors traveled on the trail was 15 miles** (Figure 18); the median for tourists was higher than the median for locals (median for tourists: 21 miles and median for locals: 14 miles). As would be expected, cyclists traveled greater distances than non-cyclists (median of 20 miles vs. 3 miles). Nearly all visitors (99%) indicated that they used paved or limestone trails during their visit and 1% used a trail shoulder or parallel natural surface trail.


**Figure 18. Median distance traveled on trail (miles)**



Of all trail visitors, 85% traveled out-and-back on the trail, 4% traveled one way, and 11% traveled in a loop, using a different trail or route to go one-way.

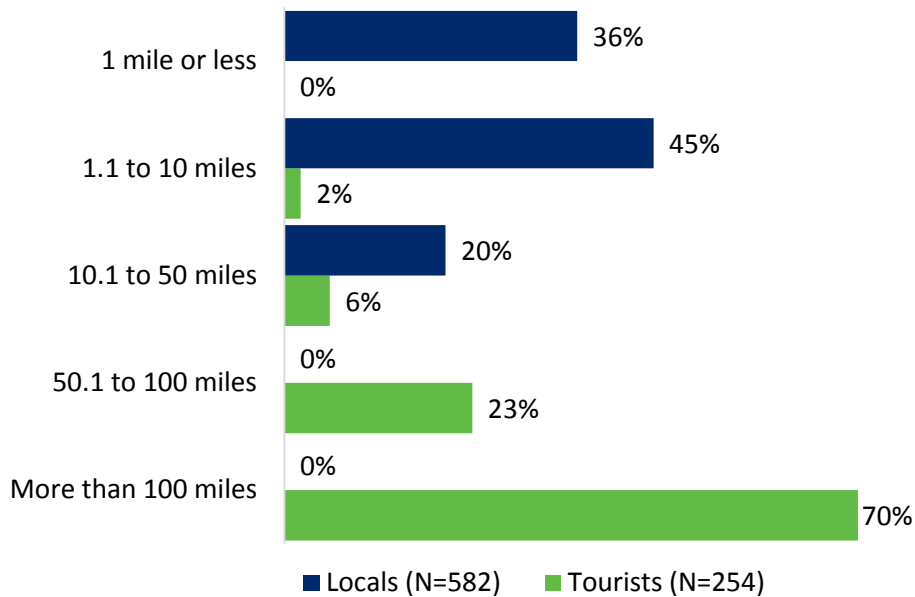
*Travel distance from home*

The survey asked visitors to estimate the distance of the trail from their permanent home. While the majority of locals (81%) indicated that the trail was less than 10 miles from their homes, **70% of tourists indicated it was more than 100 miles.**



In general, higher-income households were more likely than lower-income households to have visited a trail that is farther than 100 miles from their homes.

**Figure 19. Travel distance from home**

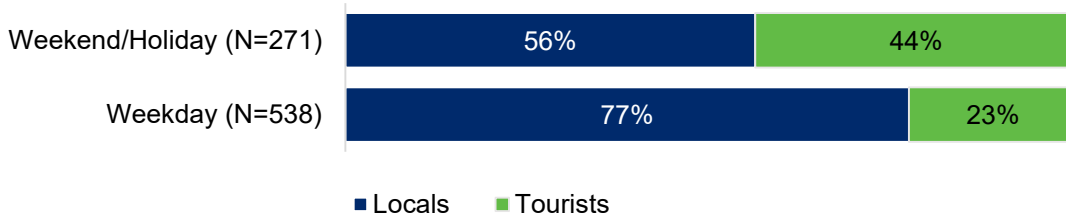


Note. Local visitors are those who traveled less than 50 miles from their home and did not stay overnight to visit the trail, and tourists are those who traveled more than 50 miles to the trail and/or stayed overnight during their visit. Percentages may add up to more than 100% due to rounding.

### Visiting days

Among visitors during weekdays, 77% were locals and 23% were tourists. This difference is smaller during weekends and holidays when 56% of the visitors were locals and 44% were tourists.

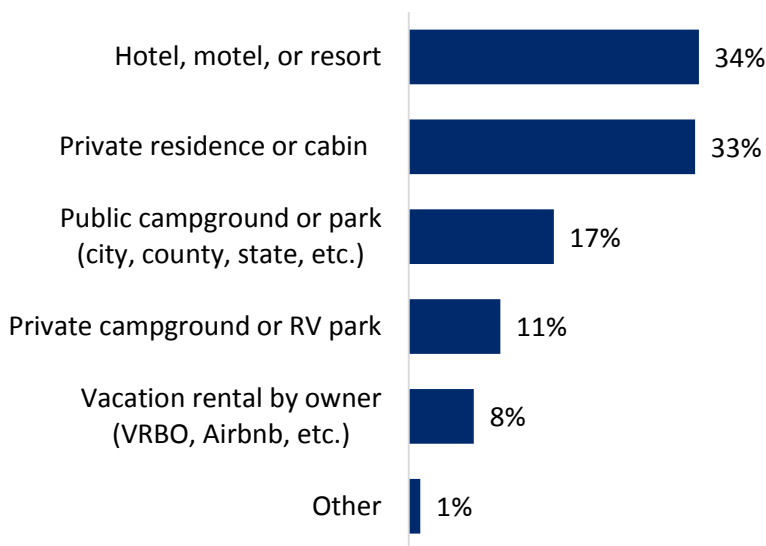
**Figure 20. Visiting days for locals and tourists**



### Overnight accommodations for tourists

**More than half (53%) of tourists who stayed overnight during their visit chose to lodge at private, commercial establishments** (i.e., vacation rental by owner; hotel, motel, or resort; private campground or RV park). Respondents were able to select more than one accommodation type. Fewer than one-fifth (17%) of visitors stayed at a public campground or park (Figure 21). In general, the higher a household's income, the more likely they were to stay in private lodging. For example, 31% of visitors with household incomes of \$75,000 or more reported staying in a hotel, motel, or resort during their visit, compared to 15% of visitors with household incomes less than \$75,000. Also, among income level groups, 64% of visitors with incomes less than \$75,000 reported that they did not stay overnight.

**Figure 21. Overnight accommodations of tourists**



Note. N=229.  
Survey respondents could select multiple answer options.

### Money spent during trip for tourists

Overall, **tourists spent an average of \$525 on their trips to state trails (tourist median: \$204)**. Lodging was the largest expense, averaging \$300 per group (tourist median: \$50). Food and beverages were the second-most expensive expenditure, with tourist groups spending an average of \$113 during their trip (tourist median: \$50; Figure 22).

**Figure 22. Visitors' expenditures**

	<b>All visitors (average)</b>	<b>All visitors median (and range)</b>	<b>Locals (average)</b>	<b>Locals median (and range)</b>	<b>Tourists (average)</b>	<b>Tourists median (and range)</b>
Transportation	\$20	\$1 (\$0-\$500)	\$3	\$0 (\$0-\$80)	\$54	\$30 (\$0-\$500)
Food and beverages	\$43	\$3 (\$1-\$1000)	\$9	\$0 (\$0-\$900)	\$113	\$50 (\$0-\$1,000)
Lodging	\$98	\$0 (\$0-\$7200)	\$1	\$0 (\$0-\$500)	\$297	\$50 (\$0-\$7,200)
Entertainment	\$6	\$0 (\$0-\$500)	\$1	\$0 (\$0-\$500)	\$15	\$0 (\$0-\$400)
Equipment and rental	\$13	\$0 (\$0-\$2000)	\$6	\$0 (\$0-\$2000)	\$26	\$0 (\$0-\$600)
Other expenses	\$7	\$0 (\$0-\$1000)	\$1	\$0 (\$0-\$100)	\$19	\$0 (\$0-\$1,000)
<b>Total spending</b>	<b>\$187</b>	<b>\$10 (\$0-\$8200)</b>	<b>\$22</b>	<b>\$2 (\$0-\$2730)</b>	<b>\$525</b>	<b>\$204 (\$0-\$8,200)</b>

Note. N for all visitors=710-719; N for locals=477-486; N for tourists=233-234.

The survey asked visitors, "Please estimate how much you and your group spent on the following types of expenses during your visit to the trail." While more than half (58%) of tourist groups consisted of two people, the size of the groups ranged from 1 to 15 people. The survey did not capture information related to the duration of overnight lodging or days spent in the area.

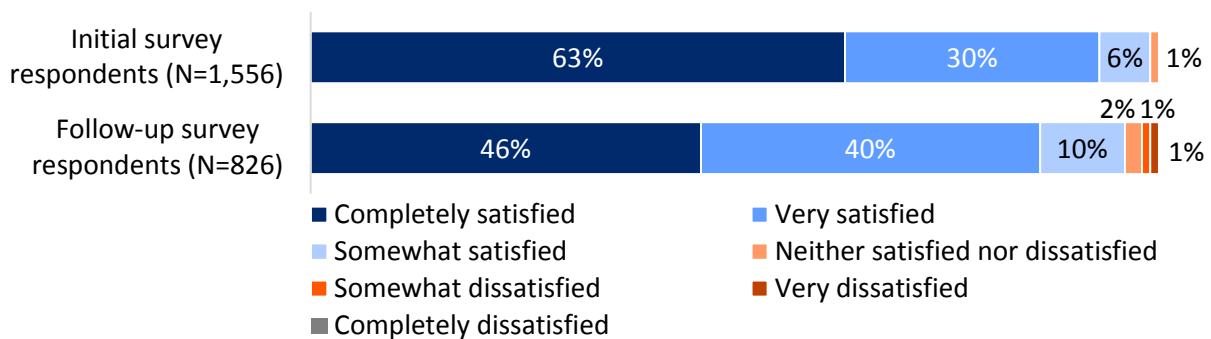
## Satisfaction with the trails

Providing high-quality experiences is a cornerstone of the DNR’s efforts to attract new trail visitors, as well as bring current visitors back to state trails. In general, visitors across the demographic groups and types (e.g., locals or tourists, cyclists or non-cyclists, those who visited primary or secondary corridors) who completed the 2019 survey were highly satisfied with their visit to the trail.

### Overall satisfaction

Most visitors who completed the initial or follow-up survey reported that they were very satisfied or completely satisfied with their visit to the trail (Figure 23). These results are similar to the 2017 State Parks Visitor Survey (89% reporting being very or completely satisfied with their state park visit). When asked whether they would recommend the trail that they visited to a friend or family member, 100% of the respondents in both the initial and follow-up surveys in 2019 answered “yes.”

Figure 23. Overall satisfaction



Note. Visitors in the follow-up survey were asked, “After completing your visit and with further reflection, which statement most closely reflects your feelings about your visit?” The follow-up survey respondents were a subset of the initial survey respondents.

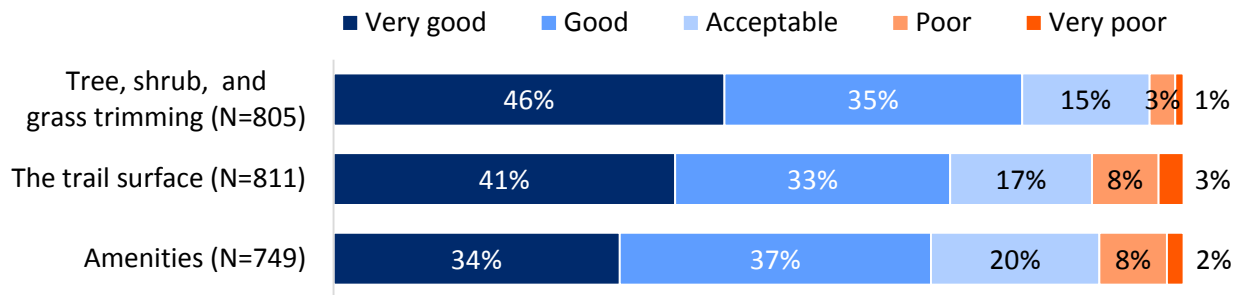


Cracks on the Gateway State Trail

### Satisfaction with aspects of the trail

Visitors in the follow-up survey were asked questions about the quality of three trail aspects: the trail surface (including being clear of potholes, cracks, and debris); tree, shrub, and grass trimming; and amenities (parking, toilet facilities, drinking water, etc.). **Nearly all responding visitors (more than 90%) rated the quality of these aspects of the trail as acceptable, good or very good** (Figure 24).

Figure 24. Quality of trail aspects



Note. The “N/A, No opinion” response was excluded from analysis. Percentages may add up to more than 100% due to rounding.

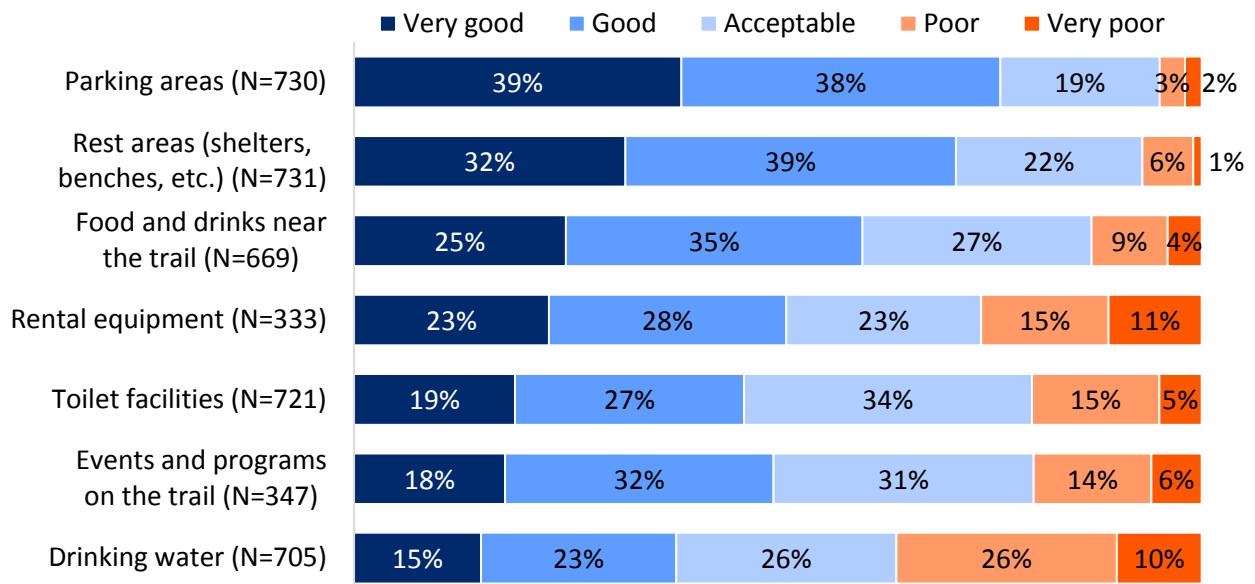
*“MN trails are FAR superior to those we've been on in other nearby Midwestern states. We are so proud of our state for investing in our bike trails, taking good care of them, and building new ones. We hope the state continues to value this wonderful asset. We are a really healthy couple [ages 60+] and credit the ease of access we have to so many great and safe bike trails. Thank you!” – Sakatah Singing Hills visitor*



## Satisfaction with the availability of trail amenities

The visitors were also asked to rate their satisfaction with the availability of different trail amenities. **Most visitors (80% or more) rated the availability of toilet facilities, parking areas, rest areas, food and drinks near the trail, and events and programs on the trail as acceptable, good, or very good.** Availability of parking and rest areas were rated the highest. Drinking water availability was rated the lowest (36% poor to very poor), though 64% of visitors rated it at least acceptable (Figure 25). Looking at primary and secondary corridors, a higher percentage of secondary corridor visitors rated the drinking water availability poor or very poor than the primary corridor visitors (56% vs. 33%).

**Figure 25. Availability of trail amenities**

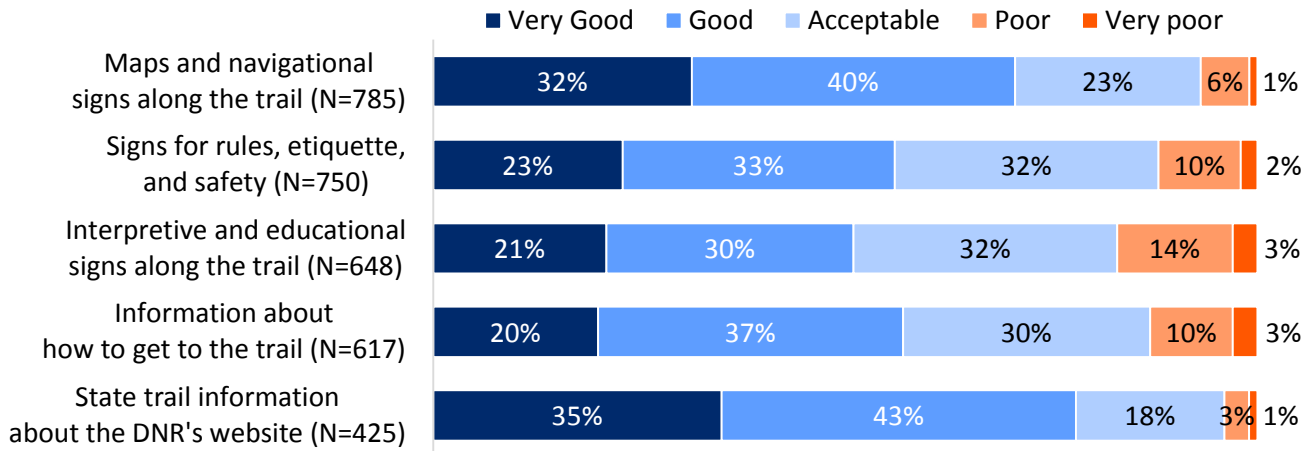


Note. The “N/A, No opinion” response was excluded from analysis. Percentages may add up to more than 100% due to rounding.

## Satisfaction with the trail information

Visitors rated the quality of the trail information positively. The information included 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; and information about the DNR’s website. **More than 80% of visitors rated each of these information types as acceptable, good, or very good** (Figure 26).

**Figure 26. Quality of trail information**



Note. The “N/A, No opinion” response was excluded from analysis. Percentages may add up to more than 100% due to rounding.

## Conflicts with other users

**Most visitors (93%) said that they did not have any problems or conflicts with other trail users.** The few visitors who reported conflicts with other trail users most commonly mentioned poor trail etiquette as the source of the dissatisfaction, including people stopping in the middle of the trail, cyclists taking up too much room on the trail, or cyclists who did not slow down around pedestrians or did not announce themselves when passing, and issues with dogs (e.g., dogs were not leashed or waste was not picked up).

**“Excessive speed, passing too close to pedestrians, no announcements when passing from behind, and loud music from stereos on bikes.” – Central Lakes visitor**

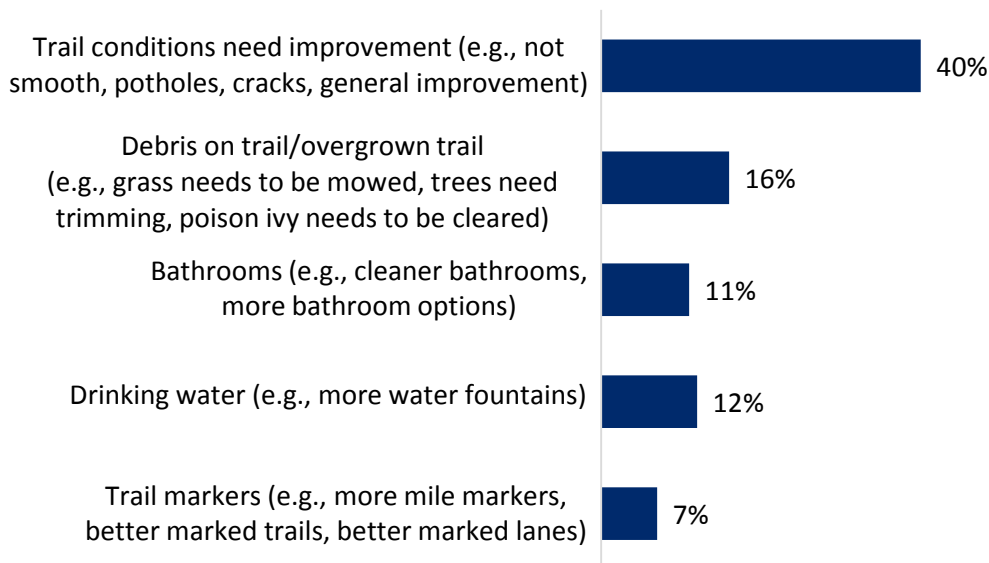
**“Trail etiquette needs to improve and a few more signs about trail etiquette/rules should be posted. Some dog walkers do not control their animals. Some bicyclists are traveling too fast on the trail and don't announce when they approach.” – Douglas visitor**

**“I was surprised at the lack of patience for children from other trail users. It did not feel really welcoming for our young kids on bikes and scooters, who themselves were using proper trail etiquette.” – Root River visitor**

## Ways for improvement

Visitors who indicated that they were less than completely satisfied with their experience were asked for suggestions for improvement. A total of 326 of the 445 visitors (47%) provided one or more answers. Their answers were organized into themes. **The most common themes for improvement are related to trail conditions** (Figure 27).

**Figure 27. Top five improvement themes**



Note. N=326

Other comments noted from visitors about improvements, but not included in the graph above: general trail condition comments (not specified to any of the answers above), flooding on trails, less construction on trails, general facility comments (not specified to any of the answers above), parking options, more garbage cans available, more benches along the trails, more materials/guidance available to trail users, more trail markers, more education flyers or brochures along the trails or at stops, information about the towns along the trails, easily accessible trail maps, more trail maps on the trails, trail etiquette signs, poor etiquette from other users, problems with dogs, poor behavior from bikers, bikers (in general), speeding bikers, need for more trails, more connections amongst trails/connections to current trails, completion of trails, dangerous conditions where trails meet the road, trails too close to the roadways, motorized vehicles on non-motorized trails, food (general), more places to eat along the trails, general safety concerns, addition of more lights on the trails.

***“Access to water, clean and more bathrooms.” – Luce Line visitor***

***“I enjoy the trails a lot. The biggest problems are pavement surface, tree trimming, and weed-whipping that needs to be done. Also, after windy days, lots of sticks on the path never get cleared off. I would like to see more bathrooms along the path, but with more bathrooms come vandalism. [I would like to see] winter plowing or sweeping. Where the trail crosses at Jamaca Avenue in the winter, they don't clear the snow off. [It] would be nice to use the rest of the trail in the winter.” – Gateway visitor***

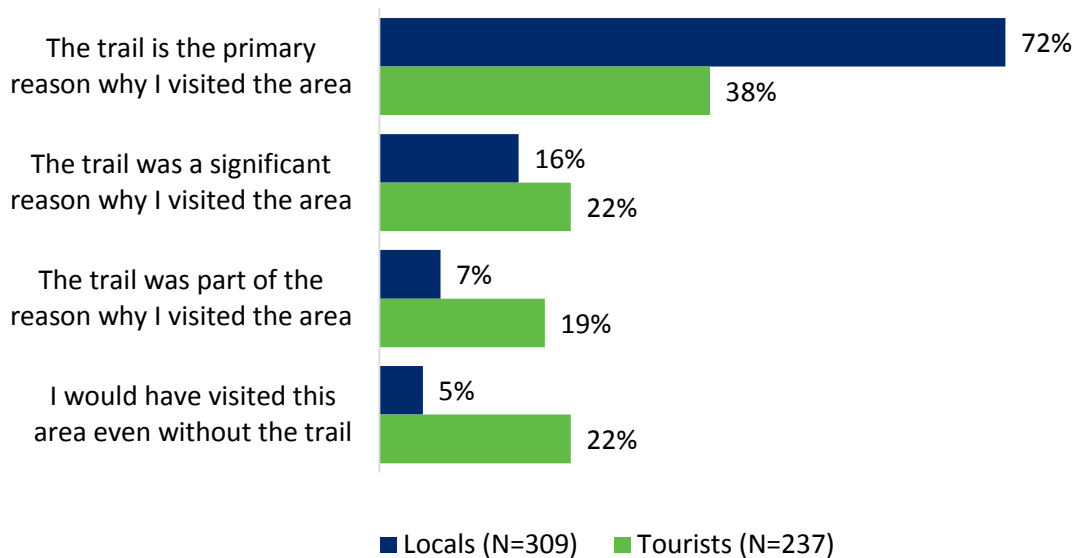
## Investment and funding

### Importance of the trail

State trails are an important reason for visiting the area. When asked how important the trail was in visiting the area, **75% of all visitors indicated that the trail was a primary or significant reason for their visit.** The remaining visitors indicated that the trail was part of the reason why they visited the trail (12%) or they would have visited the area without the trail (12%).

**Among tourists, 60% indicated that the trail was the primary or a significant reason why they visited the area.** Another 19% of tourists indicated that the trail was at least part of the reason why they visited the area. However, a larger share of tourists than locals would have visited the area even if the trail was not there (22% vs. 5%) (Figure 28).

**Figure 28. Trails as a reason for visiting the area**



Note. Percentages may add up to more than 100% due to rounding.

***“Bicycle trails in MN are the reason I'm retiring in MN. The trails are the reason I'm willing to pay the high MN taxes. Construct more trails and maintain them, I'm willing to pay even more taxes. A paved bicycle trail around Leech Lake would be beyond wonderful!” – Paul Bunyan visitor***

## Investment in trails

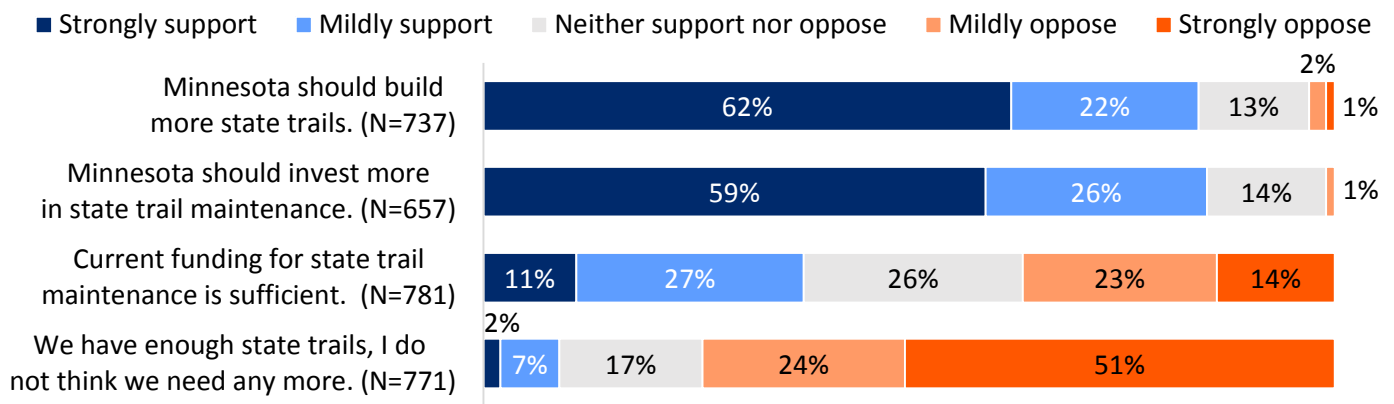
The survey asked trail visitors to indicate their level of support or opposition to a number of investments on state trails and funding-related statements to gauge trail visitor opinion on these topics.

Overall, **the majority of visitors (84%) mildly or strongly support the idea of building more trails, and a majority (85%) mildly or strongly support the idea that the state should invest more in state trail maintenance.** However, visitors were roughly divided on the notion that current funding for state trail maintenance is sufficient, with about equal shares (37%-38%) opposing or supporting current funding levels.

Results also show that:

- There is not a meaningful difference in opinions by household income.
- A majority of both cyclists and non-cyclists mildly and strongly supported the idea of investing more in state trail maintenance, though a slightly higher share of cyclists were in support (88% compared to 74%); similarly, cyclists (86%) and non-cyclists (76%) mildly or strongly supported the idea of building more state trails. There is a slightly higher opposition among cyclists to the statement that current state funding for trail maintenance is sufficient (40% compared to 26%).

**Figure 29. Visitors' views on investments on state trail system**



Note. Percentages may add up to more than 100% due to rounding.

***“We love the trails and they should be available to everyone. Figure out a tax system to support them. Lottery money?” – Paul Bunyan visitor***

## Overall funding opinions

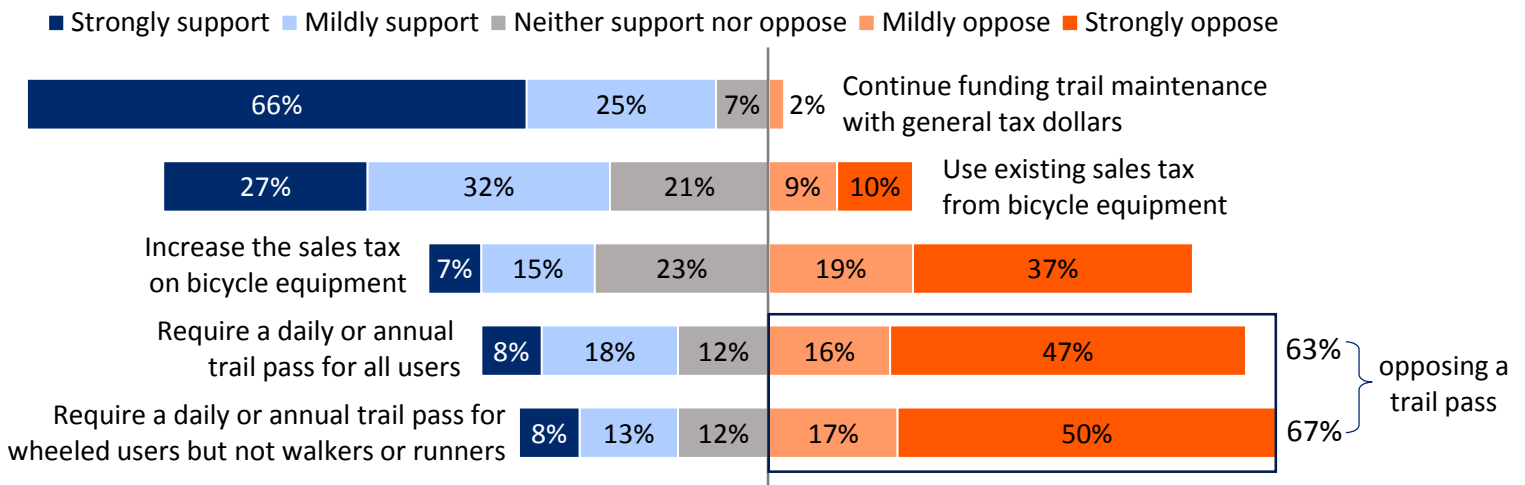
Visitors were asked their opinions on various ways for funding state trails. **Most of the visitors (91%) strongly or mildly supported continuing funding state trail maintenance with general tax dollars.** However, when asked about **their opinions on other methods of funding (e.g., with daily or annual passes or sales taxes from bicycle equipment), visitor support was somewhat mixed** (Figure 30).

For example, when asked specifically about a bicycle equipment tax, 59% of trail users supported the use of existing sales tax to maintain trails, compared to 19% who opposed using existing sales tax. Fifty-six percent opposed an increase in the sales tax on bicycling equipment, compared to 22% who supported it. More than 60% of visitors opposed some kind of required trail pass.

*“I feel very strongly that the beauty of our state is something everyone here should enjoy and our state taxes should pay for that. If additional tax is needed, I'm happy to pay it to live here.”*  
 – Luce Line visitor

*“I use motorized state trails the most. Snowmobilers and ATV users pay their way with license fees. It is time for bicycle riders to pay for their trails too! Taxpayers should not pay for non-motorized trails!”*  
 – Gitchi-Gami visitor

**Figure 30. Funding**



Note. Percentages may add up to more than 100% due to rounding.

There is not a meaningful difference in funding and pass requirement opinions by household income or primary trail activity.

## Trail annual pass opinions

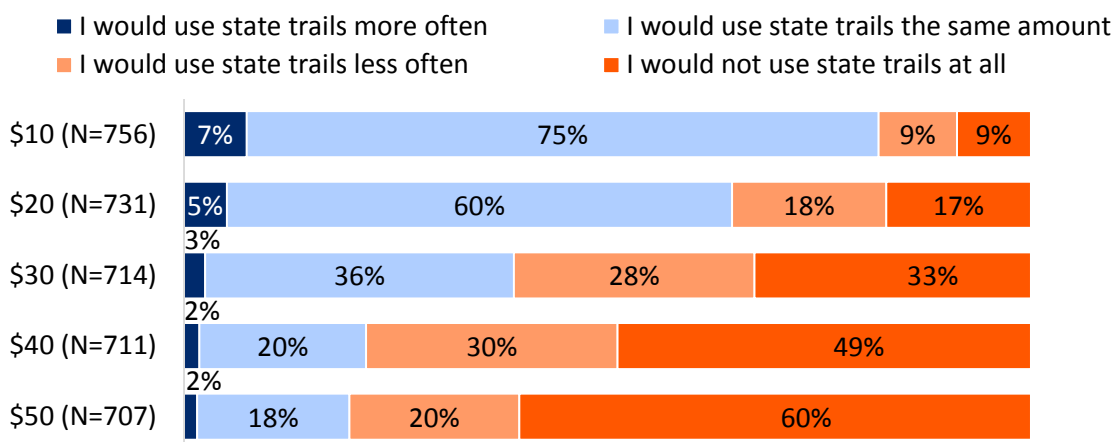
The operation and maintenance of Minnesota state trails is funded from general tax dollars as well as revenue from lottery in-lieu-of-sales taxes. Most state trail visitors are not charged a direct use fee, like the state park permit, that would support at least some of the operation and maintenance costs. Some states, such as Wisconsin, charge state trail visitors for a trail pass, and certain local entities in Minnesota charge fees for the Cannon Valley and Mesabi regional trails. The DNR sought information on visitor’s perspectives on trail passes, since this is a common idea for how to provide funds to support state trail maintenance.

The Minnesota DNR requires snowmobilers, cross-country skiers, and equestrians to have a trail permit to use state recreation facilities. Notably, each of these passes were instituted because of user group advocacy and they apply to other areas besides state trails. Snowmobilers must have a trail registration to legally ride on state or grant-in-aid funded trails. The horse pass gives riders access to horse trails and facilities in state parks, state forest recreation areas, and state trails. The cross-country ski pass is required to ski on groomed trails in state parks, state forests, and on state and grant-in-aid trails.

The DNR was interested in knowing whether different annual pass price points make any difference in visitors’ opinions about their likelihood to visit state trails. Results of this 2019 State Trail Visitor Study show that an annual trail pass could significantly affect use of state trails (Figure 31). The impact on trail usage starts immediately at \$10, with almost 20% of respondents saying they would decrease use or not use the trail at all. As the price increases, the share of visitors saying that they would not use the trail also increases (8%-16% for every \$10 of an increase in fee).

Enforcement of a state trail pass may be challenging because trails are interconnected and cross jurisdictional boundaries. Many trail visitors may not be aware of the difference between state, regional, and local trails and may not know when they are using a state trail. Some trail systems are perceived as a single trail even though they are a patchwork of connected state, regional, and local trails with multiple management authorities.

**Figure 31. Trail pass fee opinions**



Note. Percentages may add up to more than 100% due to rounding.

We also examined the trail fee opinions for visitors with different annual income levels (i.e., less than \$50,000 or more than \$50,000) and for those who reported different primary activities (i.e., bicycling or other activities).

Figure 32 shows that regardless of income, visitors reported they would use trails less frequently as the cost of a proposed trail fee increases, with lower-income visitors registering more price-sensitivity. For both income levels, the biggest drop appears between the price point of \$20 and \$30. When the cost of a proposed fee increased from \$20 to \$30, the share of lower-income visitors who would use the trails the same amount dropped from 50% to 24%, and the share of higher-income visitors dropped from 60% to 38%.

**Figure 32. Trail fee opinions by income level**

	\$10		\$20		\$30		\$40		\$50	
	Income less than \$50,000 N=111	Income \$50,000 or more N=527	Income less than \$50,000 N=105	Income \$50,000 or more N=513	Income less than \$50,000 N=103	Income \$50,000 or more N=499	Income less than \$50,000 N=104	Income \$50,000 or more N=494	Income less than \$50,000 N=102	Income \$50,000 or more N=492
I would not use state trails at all	15%	8%	24%	16%	41%	31%	59%	47%	72%	59%
I would use state trails less often	9%	9%	22%	18%	30%	29%	27%	31%	16%	21%
I would use state trails the same amount	66%	75%	50%	60%	24%	38%	13%	20%	12%	19%
I would use state trails more often	9%	7%	4%	6%	5%	2%	1%	2%	1%	2%

Note. Percentages may not add up to 100% or exceed 100% due to rounding.



Figure 33 shows similar trends among cyclists and non-cyclists. As the cost of proposed annual passes increases, cyclists and non-cyclists would use trails less. When the cost of a proposed fee increased from \$20 to \$30, the share of cyclists who would use the trails the same amount dropped from 62% to 38%, and the share of non-cyclists dropped from 50% to 31%. If the DNR required a trail pass of \$30 annually, 59% of cyclists would use the state trails less often or not at all.

**Figure 33. Trail fee opinions of cyclists and non-cyclists**

Annual trail fee	\$10		\$20		\$30		\$40		\$50	
	Cyclists N=576	Non-cyclists N=156	Cyclists N=554	Non-cyclists N=151	Cyclists N=540	Non-cyclists N=151	Cyclists N=539	Non-cyclists N=149	Cyclists N=534	Non-cyclists N=150
I would not use state trails at all	7%	15%	15%	25%	30%	41%	47%	56%	59%	66%
I would use state trails less often	9%	11%	18%	21%	29%	27%	30%	26%	20%	17%
I would use state trails the same amount	77%	67%	62%	50%	38%	31%	20%	17%	19%	16%
I would use state trails more often	7%	8%	5%	5%	3%	2%	2%	1%	2%	1%

Note. Percentages may not add up to 100% or exceed 100% due to rounding.

***“The state trails should be for anyone, regardless of household income. Putting a price on using the trails would eliminate people who struggle making ends meet. Exercise on the other hand, is a crucial element to all human health and mental well-being. Everyone should have opportunities to use [it for] exercise without a fee attached to it.” – Paul Bunyan visitor***

***“I love having access to the Luce Line! However, I think requiring people to pay for it is not a good idea. If people have to pay, I think there will be a lot less visitors, and we all need to get out more, not less. Personally, I would rather sacrifice facilities that need to be maintained such as drinking fountains and restrooms than pay for a pass. The trail should continue to be funded through tax dollars.” – Luce Line visitor***

# Wilder Research recommendations

---

In general, visitors to Minnesota state trails felt very positive about their experiences at the trails. They used the trails frequently and would want the state to continue funding and making investments in them. In this section, Wilder Research provides recommendations that are based on the survey findings as well as our knowledge about working with diverse communities in Minnesota.

## To attract demographically diverse visitors

- Be intentional when creating more trails, focusing on areas that are more diverse and lack outdoor recreation investments.
- Develop outreach programming for communities of color and low-income communities.
- Provide subsidized or free equipment rentals or passes to younger and lower-income visitors.
- Continue to utilize general tax dollars to care for trail facilities.

We also suggest that the DNR would...

- Advertise in languages other than English.
- Collaborate with partners that focus on diverse groups of people when developing marketing campaigns and advertising strategies.
- Work with school districts and youth organizations to attract younger users (e.g., through DNR programs and field trips to the trails).
- Ensure there is a commitment to hire and retain staff of color at a variety of levels within the DNR to invite a diversity of perspectives.
- Conduct a survey research study to collect data from non-visitors or non-users to understand how to attract new visitors, including more diverse and younger visitors.

## To enhance visitor experiences

- Ensure materials and signage from the DNR and on the trail are offered in a variety of languages.
- Invest in trail maintenance, primarily focusing on surfaces to prevent dangerous conditions for visitors.
- Post trail user etiquette signage along the trail.
- Improve availability of drinking water, especially on secondary corridors.
- Continue to partner with towns/cities on or near trails to provide more facilities (e.g., bathrooms, water fountains).
- Even though the share of visitors using information from the DNR website for planning their trip is small, we recommend DNR continue to update and improve on it.

# Appendix

---

## Individual comments on ways to improve Minnesota trails

Visitors had the opportunity to provide additional feedback at the end of the follow-up survey on ways the DNR could improve Minnesota state trails. Their answers covered a variety of topics, including trail maintenance, facilities, and pass/fee opinions, taxes pertaining to the DNR and trails, and etiquette issues of other users. Their individual comments are presented verbatim, with slight revisions for clarifications and spelling corrections.

### Appreciation of trails

The most common comments were related to the appreciation of the trails and acknowledgement of the DNR's work.

*“I would bike much less if I didn't have the Gateway trail close by and so **I am very appreciative of it.**”*  
—Gateway visitor

*“Overall the **DNR does a great job** with the resources available to them at this time. The improvements that I would like to see would require funding, and I for one feel it is money well spent. Thank you!”*  
—Willard Munger visitor

*“I grew up in Iowa, which does not have much to offer. The trail system in Minnesota has blown me away; **Minnesota's trails are amazing!**”*  
—Root River visitor

*“I really **appreciate** the Minnesota state trail system. I've used many different paved bicycle trails throughout the state for many years. It is an excellent trail system. I feel fortunate to live near enough to utilize Minnesota's trails. **Thank you Minnesota DNR** and other Minnesota municipalities for such a great trail system.”*  
—Paul Bunyan visitor

*“Overall the **trail was very nice and the views were astounding!** Would love to bring my kids here once I settle down cause if you live here in Minnesota it's a must!”*  
—Willard Munger visitor

*“I love the fact we can ride and drive our horses on this trail and the fact that it's close to the lake is a huge bonus.”*  
—Sakatah Singing Hills visitor

*“The trails provide a convenient, safe, and fun way to exercise. When my family and I walk we see many, many other people also enjoying the healthful activities that the trail system provides, so I feel strongly that **state trails are providing a great service towards better health for the people that use them.** Thank you so very much!!”*  
—Paul Bunyan visitor

## Trail maintenance

Satisfaction with trail maintenance was largely positive. But some visitors offered comments on how to improve certain aspects of the trails, including the need for better surfaces, eliminating potholes and cracks, and making the trails smooth for better usability. Additionally, visitors mentioned the need for better clean-up on and around the trails. This could include cutting the grass by the trail, maintaining low-hanging trees and bushes, and keeping the trail clean of any debris.

*“I noticed, as I have in the past, a **lack of trail maintenance**; in some ways I think the **trail is dangerous**; there are quite large gaping holes in the trail (maybe 6 inches across; I saw maybe 5 such holes; but more importantly, the approaches to many of the bridges are not smooth.”*

—Harmony-Preston Valley visitor

*“The Sakatah trail is great in some places and not so good in others. The section between Waterville and Elysian is **dilapidated, dangerous, and disgraceful**. It should have a warning sign as to its condition. Fat tire bikes probably would not have too much of a problem, but I ride a recumbent bike and the wheels are quite small. The broken surface and potholes throw me around. I'm sure there are no roller skaters on this section. **PLEASE RESURFACE THIS SECTION**. Thank you.”*

—Sakatah Singing Hills visitor

*“Continue to **repair/replace damaged trail pavement regularly**; mark/paint potholes and significant cracks/frost heaves until repairs are made.”*

—Root River visitor

*“**Keep up on the maintenance**. We all love to build new, but taking care of what we already have can be a challenge.”*

—Central Lakes visitor

*“Some of the **older sections that have ruts and breaks** (30/35 years old) need replacement or repair, and new construction should be intertwined with this update action.”*

—Paul Bunyan visitor

*“Clear **poison ivy**.”*

—Heartland visitor

## Trail pass fees

Visitors also noted that they did not think the implementation of a trail pass fee was a good idea, with some indicating they would not utilize the trail if a fee were implemented. Visitors also noted that there could be an adverse impact on lower-income people if a trail pass were implemented.

*“I think trail passes would **discourage the less affluent from using the trails**. General taxes should probably be used to fund trails or an extra tax on bike equipment.”*

—Gateway visitor

*“**The state trails should be for anyone, regardless of household income**. Putting a price on using the trails would eliminate people who struggle making ends meet. Exercise, on the other hand, is a crucial element to all human health and mental wellbeing. Everyone should have opportunities to exercise without a fee attached to it.”*

—Paul Bunyan visitor

*“**Do not charge to use state trails!!!!** A family of five who bikes two to three times a year on them for 50.00 each? No!”*

—Paul Bunyan visitor

*“**Do not charge a trail fee**.”*

—Willard Munger visitor

However, not all visitors saw a trail fee as a bad idea.

*“I don’t feel that users should have to pay for access to the trails any more than motorists should pay tolls for access to public roads. I understand that trail users are not using taxable commodities (gasoline) to use the trails, but the person who uses the trails and does not also own a car is rare. We are all paying taxes already and the trails should be managed as an extension of road infrastructure (albeit managed by a different entity, DNR rather than DOT). I personally am a frequent trail user and **would use the trail about as much even if I had to purchase a pass.**”* —Brown’s Creek visitor

*“I love Minnesota state trails. They are super important to me and **I am in full support of a yearly pass** to use them if that helps in the maintenance and further growth of state trails.”* —Douglas visitor

*“I think an **annual pass would be a good option.**”* —Paul Bunyan visitor

*“**I don’t mind paying for use of the trail.** But if you charge bike and rollers skiers and not others, then I would expect some sort of right-of-way from those who pay nothing rather than equal use and space.”* —Gateway visitor

## Funding

Funding was also another topic visitors commented on, with suggestions on where and how to source money.

*“**Collaborate with local municipalities** for maintenance. Do not charge annual fees.”* —Gateway visitor

*“**Partnering with community development organizations** located along the trails seems to be an obvious income source if not already the case.”* —Heartland visitor

*“I always support **general tax revenue** as a funding mechanism for parks and trails. Fees are regressive taxes that adversely impact poor people.”* —Gateway visitor

*“Use state park funding for trails. **Close smaller parks** if necessary. I find some parks, like Lake Louise, disappointing and under maintained anyway.”* —Paul Bunyan visitor

*“I think the **DNR should be charging twice as much for nonresident fishing licenses** to help build a larger budget for trails, parks, and fisheries. Don’t charge people for healthy options like trail riding on bikes, etc.”* —Paul Bunyan visitor

## Amount of trails and expansion of systems

Visitors would like to have more trails and expanded trail systems.

*“I basically use the trail for commuting to St Paul. Occasionally for recreation. We could use **more or an expanded system.** Extend the Vento! I oppose the proposed bus transit way.”* —Gateway visitor

*“I feel like **more is better.** I’m willing to pay for more trails.”* —Gateway visitor

*“**We need more trails.** Connecting trails so you don’t have to ride on the streets. It’s a safety issue. The more trails the better. Motivates people to exercise and will lower health care costs.”* —Gateway visitor

*“We'd really like to see the **Gitche-Gami trail completed soon**, especially going south from Grand Marais! Our son is 4 and started riding a bike this year. Would love to be able to take him there in a few years.”*  
—Gitche-Gami visitor

*“**More rustic**, remote trails.”*  
—Brown's Creek Visitor

*“**Completion of connector trails** is helpful. Small segments need good options for riders to follow to additional segments.”*  
—Sakatah Singing Hills visitor

*“Please work toward **trail connectivity**; county, city, and state. Would like to do longer rides from major urban centers out and between urban centers. Please make sure mowing and brush debris are cleared from trail surface. Sometimes mowed grass and brush make surface unsafe for roller skiing and rollerblading.”*  
—Harmony-Preston Valley visitor

## **Restrooms and drinking fountains**

Visitors also wanted more restrooms and more water fountains or drinking stations along the trails.

*“I really enjoyed the area and small towns around with trails. The **bathrooms need more presence** along trails that go for over 100+ miles. Also, the small town people make bikers feel very uncomfortable by posting negative signs for bikers in their businesses. I was shocked by this. Do they not want tourism? Also, please post on maps if there are eating places in these small towns or post by entrances on bike routes. That will help us decide where to go. Keep the trails up please.”*  
—Central Lakes visitor

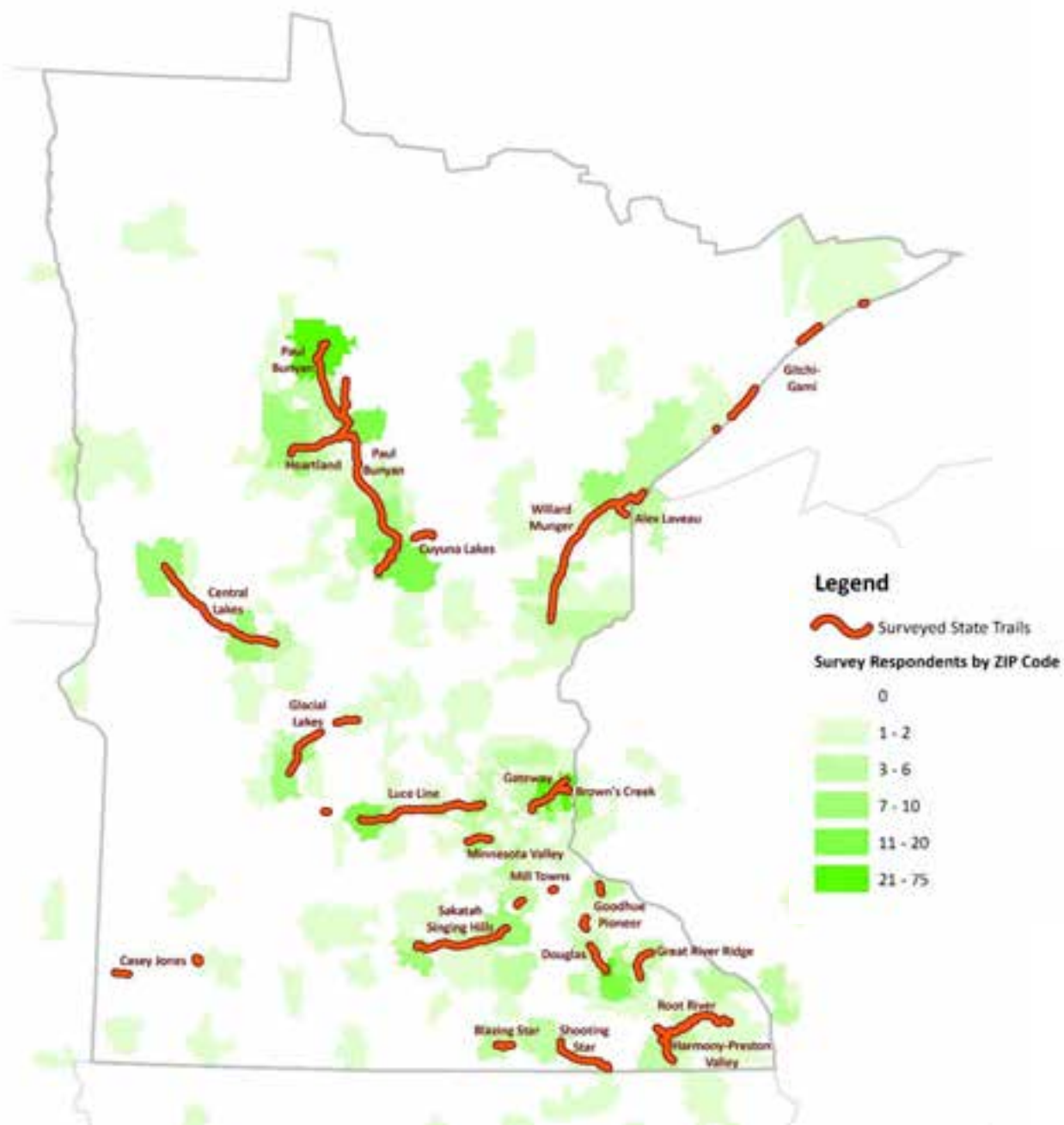
*“**Bathrooms**. Seriously, it would improve the experience for women and make it more equitable.”*  
—Douglas visitor

*“**More drinking fountains**. More bathrooms.”*  
—Glacial Lakes visitor

*“**Increase water stops**. Better signage regarding food, water, and distance involved.”* —Brown's Creek visitor

## Additional information

### A1. Origin of visitors



Source. DNR

Note. 14% of people visited from outside of Minnesota.

## A2. Demographics of 2019 state trail visitors in initial and follow-up surveys

<b>Age</b>	<b>Initial survey N=1539</b>	<b>Follow-up survey N=811</b>
18-24 years old	5%	3%
25-34 years old	11%	10%
35-44 years old	14%	13%
45-54 years old	17%	16%
55-64 years old	30%	33%
65 years or older	23%	26%
<b>Gender</b>	<b>N=1536</b>	<b>N=811</b>
Female	43%	44%
Male	57%	56%
<b>Race/ethnicity</b>	<b>N=1526</b>	<b>N=800</b>
White	95%	97%
Of color	5%	3%
<b>Educational attainment</b>	<b>N=1514</b>	<b>N=811</b>
High school graduate or GED	9%	6%
Some college, but no degree	11%	10%
Associate, vocational, or technical degree	13%	13%
Bachelor's degree	36%	37%
Graduate degree	31%	35%
<b>Annual household income in 2018</b>	<b>N=1335</b>	<b>N=811</b>
Less than \$24,999	6%	4%
\$25,000 to \$49,999	14%	13%
\$50,000 to \$74,999	20%	18%
\$75,000 to \$99,999	17%	20%
\$100,000 to \$149,999	22%	23%
\$150,000 or more	21%	22%



### A3. Demographics of visitors in 2019 State Trails Visitor Study and previous survey studies

	2019 State Trails Visitor Study	2017 State Parks Visitor Study	2007-13 State Trail Users (Kelly, 2014)
<b>Age</b>	<b>N=1539</b>	<b>N=746</b>	-
44 years or younger	30%	40%	-
45-64 years old	47%	42%	-
65 years or older	23%	18%	-
<b>Gender</b>	<b>N=1526</b>	-	<b>N=2565</b>
Female	43%	-	50%
Male	57%	-	50%
<b>Race/ethnicity</b>	<b>N=1526</b>	<b>N=748</b>	<b>N=2565</b>
White	95%	95%	97%
Of color	5%	5%	3%
<b>Educational attainment</b>	<b>N=1514</b>	<b>N=731</b>	<b>N=2565</b>
Bachelor's degree or higher	67%	58%	63%
<b>Household income</b>	<b>N=1335</b>	<b>N=712</b>	<b>N=2565</b>
Less than \$50,000	20%	23%	24%
\$50,000 to \$74,999	20%	25%	26%
\$75,000 to \$99,999	17%	20%	19%
\$100,000 or more	43%	32%	33%

Source. The Research Edge, LLC. (2017). *2017 Minnesota State Parks Visitor Survey*.

Kelly, T. (2014). *Use characteristics and use trends since the 1990s on paved state bicycle trails*. Minnesota Department of Natural Resources, Operations Services Division. Data are presented for the 2007-13 trail users.

Note. The 2019 state trail visitors were asked to describe their race and/or ethnicity as White, non-Hispanic; Hispanic or Latino; Black or African American; African; Asian; Middle Eastern; Native, First Nation, Alaska Native; Pacific Islander; or Other. Respondents could choose multiple answers. Those who chose White, non-Hispanic only are categorized as White; the remaining are categorized as "Of Color."

**A4. Age by race of the visitors**

<b>Age</b>	<b>White N=1435</b>	<b>Of color N=81</b>
18-24 years old	4%	14%
25-34 years old	11%	16%
35-44 years old	13%	28%
45-54 years old	17%	17%
55-64 years old	31%	16%
65 years or older	24%	9%

**A5. Number of survey respondents by trail and corridor**

<b>Primary corridor</b>	<b>N</b>	<b>%</b>	<b>Secondary corridor</b>	<b>N</b>	<b>%</b>
Brown's Creek	118	9%	Alex Laveau	15	6%
Cuyuna Lakes	26	2%	Blazing Star	7	3%
Douglas	66	5%	Casey Jones	7	3%
Gateway	254	19%	Central Lakes	73	31%
Gitchi-Gami	69	5%	Great River Ridge	18	8%
Glacial Lakes	41	3%	Luce Line	102	44%
Goodhue-Pioneer	7	1%	Shooting Star	11	5%
Harmony-Preston Valley	32	2%			
Heartland	92	7%			
Mill Towns	24	2%			
Minnesota Valley	13	1%			
Paul Bunyan	230	17%			
Root River	131	10%			
Sakatah Singing Hills	87	7%			
Willard Munger	138	10%			
<b>Total primary</b>	<b>1328</b>	<b>100%</b>	<b>Total secondary</b>	<b>233</b>	<b>100%</b>
<b>Out of the 1561 total visitors</b>		<b>85%</b>			<b>15%</b>

# State trail usage

---

One of the most common questions about state trails is “How many people use the trails?” This section estimates visitation and summarizes general trail use patterns. The DNR works with partners to complete automated trail counts, and the following findings are based on data gathered at over 140 locations between 2015 and 2019. 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 on trails 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 of time, like 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 have a tendency to overestimate trip lengths. If trip lengths are actually 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.

## How many people use paved state trails?

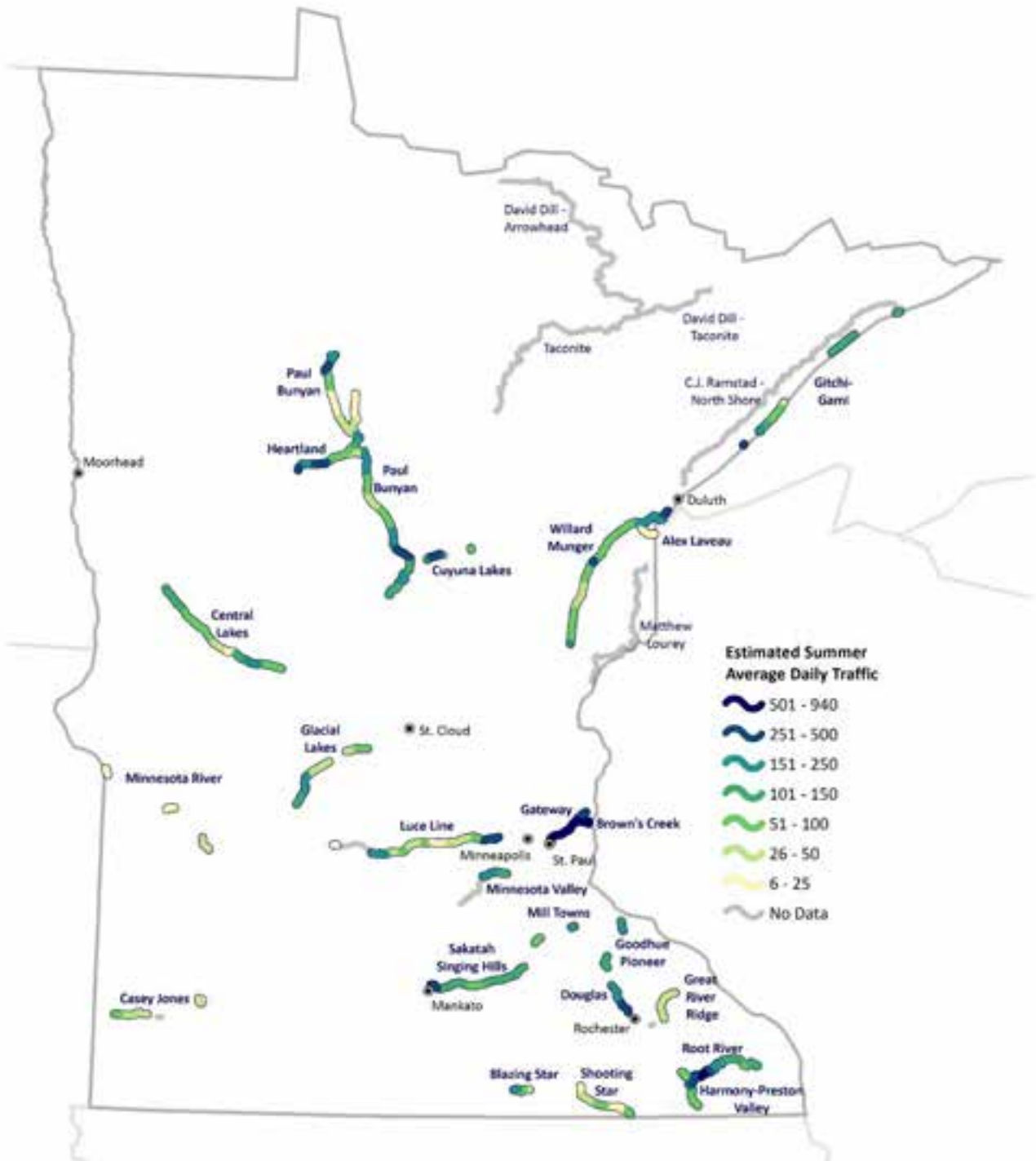
People travel over 13 million miles on paved state trails each warm season (April through November). About 8.5 million of those miles traveled occur in the summer (Memorial Day weekend through Labor Day). This translates to an estimated 2 million visits to state trails during the warm season. About 1.2 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 summer, pedestrians make an estimated 880,000 visits, compared to 290,000 bicyclist visits. Pedestrians and cyclists make 1.6 million and 430,000 visits, respectively, over the entire warm season. 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.

# Which trails do people use?

## A6. Traffic flow



Source. DNR

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. An average paved state trail segment has summer ADT of 151 visits. 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 A7 shows the summer state trail visitation and the number of surveys collected in 2019.

**A7. Summer state trail visitation and 2019 survey**

State trail	Trail length (miles)	Average summer ADT	Summer miles traveled	Summer visits	2019 surveys	% of visits	% of surveys
Paul Bunyan	115	122	1,191,000	164,000	230	14%	15%
Gateway	19	598	1,187,000	164,000	254	14%	16%
Root River	42	240	883,000	122,000	131	10%	8%
Willard Munger	72	139	757,000	104,000	138	9%	9%
Heartland	47	132	527,000	73,000	92	6%	6%
Brown's Creek	6	852	494,000	68,000	118	6%	8%
Luce Line	51	88	480,000	66,000	102	6%	7%
Central Lakes	55	90	468,000	64,000	73	6%	5%
Sakatah Singing Hills	39	120	466,000	64,000	87	6%	6%
Douglas	13	317	373,000	51,000	66	4%	4%
Gitchi-Gami	29	122	305,000	42,000	69	4%	4%
Glacial Lakes	30	97	293,000	40,000	41	3%	3%
Harmony-Preston Valley	18	158	275,000	38,000	32	3%	2%
Minnesota Valley	10	180	185,000	26,000	13	2%	1%
Cuyuna Lakes	8	157	159,000	22,000	26	2%	1%
Goodhue-Pioneer	9	137	123,000	17,000	7	2%	<1%

Source. DNR

**A8. Summer state trail visitation and 2019 survey (continued)**

State trail	Trail length (miles)	Average summer ADT	Summer miles traveled	Summer visits	2019 surveys	% of visits	% of surveys
Blazing Star	7	101	77,000	11,000	7	1%	<1%
Shooting Star	25	34	74,000	10,000	11	1%	1%
Casey Jones	18	38	68,000	9,000	7	1%	<1%
Mill Towns	5	136	57,000	8,000	24	1%	2%
Great River Ridge	13	40	53,000	7,000	18	1%	1%
Minnesota River	12	19	27,000	4,000	0	<1%	0%
Alex Laveau	9	14	13,000	2,000	15	<1%	1%
<b>System Overall</b>	<b>652</b>	<b>151 (mean)</b>	<b>8,500,000</b>	<b>1,200,000</b>	<b>1,561</b>	<b>100%</b>	<b>100%</b>

Source. DNR

Note. Percentages may add up to more than 100% due to rounding.

## When do people use trails?

The following observations are drawn from nine permanent counting locations across the state trail system. When installing these counters, consideration was given to select locations that represent different usage patterns across the state trail system. However, because of the size and complexity of the state trail system, these nine locations may not be representative of overall use. Count data has shown there is a large amount of variability in use levels and patterns between and along state trails. Use of paved and hardened state trails in Minnesota generally aligns with the following use patterns by seasonality, month of year, and day of week.

**State trail visitation is concentrated in the summer**, with 63% of use occurring between Memorial Day weekend and Labor Day at seven permanent counting locations (Figure A9). Winter, from December 1<sup>st</sup> through April 1<sup>st</sup>, makes up 8% of annual use at these nine trail locations. The shoulder seasons have 29% of use, with 12% in the spring and 17% in the fall. Note that these seasons are not of equal length.

Not surprisingly, trails with snowmobiling see a larger share of traffic in the winter (in 2019, most of Minnesota received enough snow for good snowmobiling conditions in February and into March).

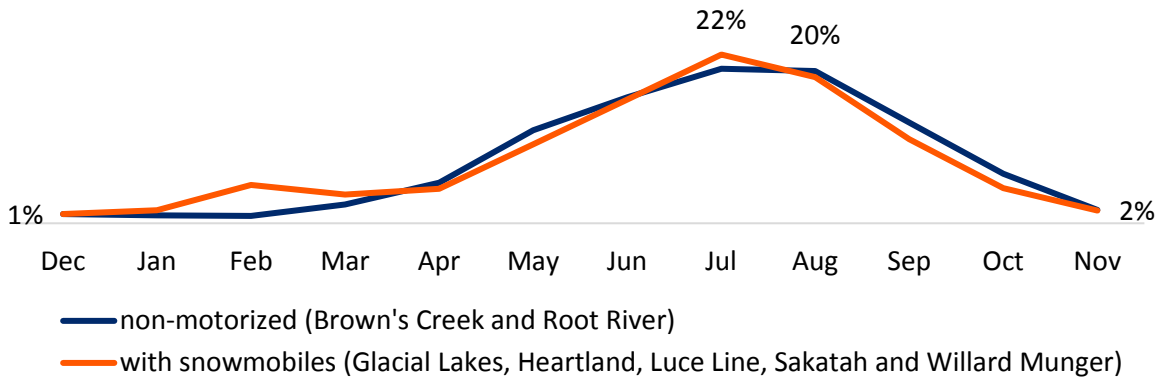
**A9. Season of year**

Season	# of days	% of annual use	ADT
Winter (12/1/2018-4/1/2019)	122	8%	37
Spring (4/2/2019-5/24/2019)	53	12%	121
Summer (5/25/2019-9/2/2019)	101	63%	351
Fall (9/3/2019-11/30/2019)	89	17%	110
Shoulder seasons (spring and fall)	142	29%	114
Annual (12/1/2018-11/30/2019)	365	100%	154

Source. DNR

Note. The Douglas and Paul Bunyan locations were excluded from the seasonality analysis because of lack of winter data due to equipment malfunctions.

**A10. Monthly percent of annual traffic (average of seven permanent counters)**

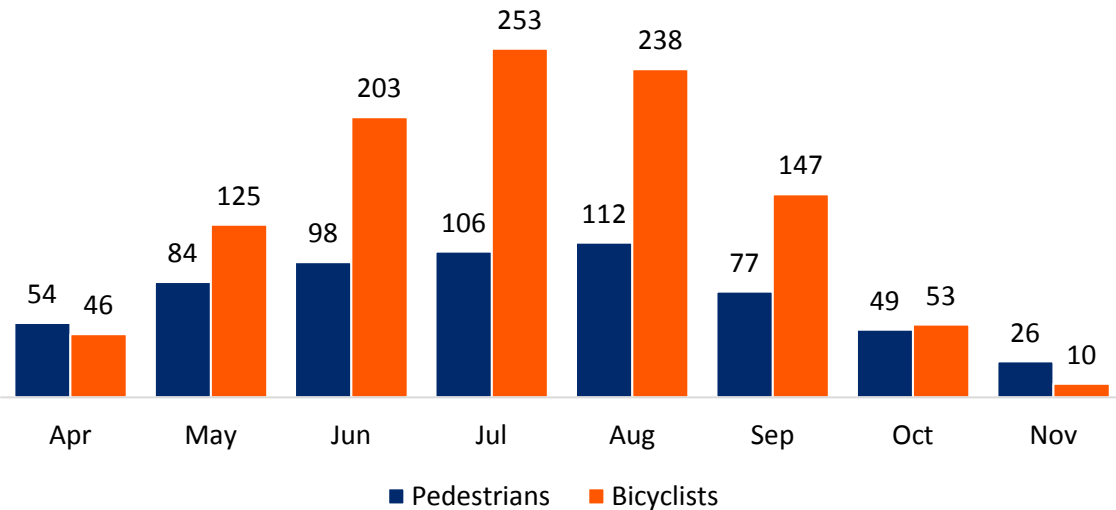


Source. DNR



**A11. Average daily traffic by month (average of nine permanent counters)**

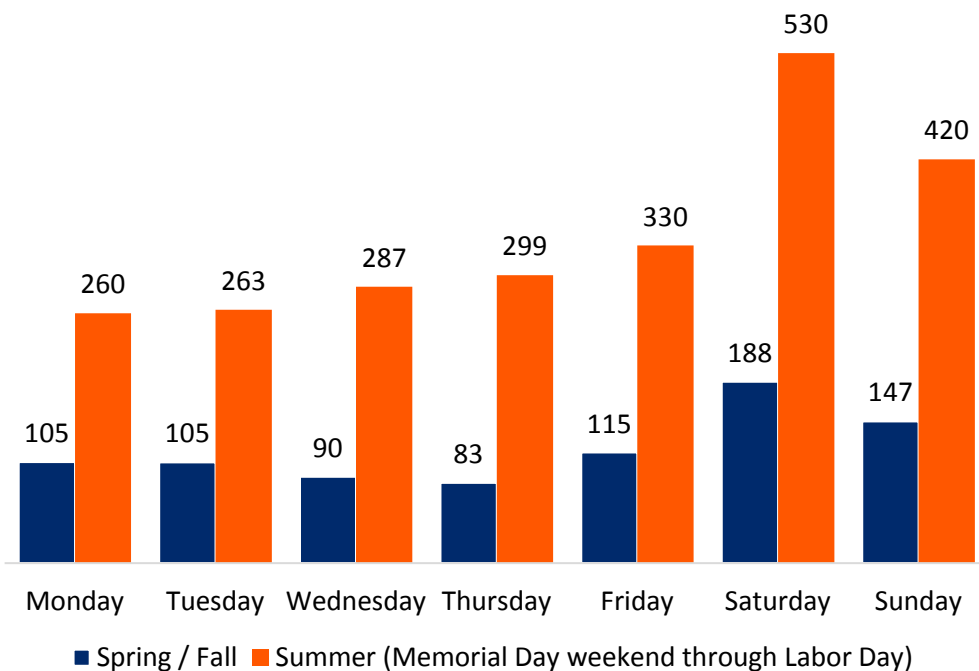
Trail use increases in the summer, with ADT in June, July, and August more than three times that of April and October. Bicyclists make up 69% of trail use over the summer, but only 54% in the shoulder seasons. Pedestrian use is much more stable throughout the year while bicycle traffic increases substantially over the summer months.



Source: DNR. December-March data is intentionally excluded.

**A12. Average daily traffic by day- of week (average of nine permanent counters)**

State trails are used much more heavily on weekends. About 40% of all traffic occurs on either Saturdays or Sundays. Saturdays are nearly twice as busy as typical weekdays, while Sundays are about 1.5 times busier. Pedestrian use is more consistent across days of the week than bicyclist use. Across these nine locations, bicyclists comprised 61% of all traffic on weekends and holidays, but only 52% of all weekday traffic.



Source: DNR

### A13. Permanent counter statistics

State trail (Count location)	Winter ADT	Non- winter ADT	Summer ADT	July ADT	Summer weekend/holiday ADT	Percent bicyclists	Percent pedestrians
<b>Brown's Creek</b> (Stillwater)	94	607	940	1,008	1,314	62%	38%
<b>Douglas</b> (Rochester)	a	304	445	396	489	53%	47%
<b>Glacial Lakes</b> (Spicer)	29	131	219	253	276	48%	52%
<b>Heartland</b> (Nevis)	43	134	263	333	347	74%	26%
<b>Luce Line</b> (Hutchinson)	23	102	155	156	161	59%	41%
<b>Paul Bunyan</b> (Brainerd)	a	116	189	210	227	58%	42%
<b>Root River</b> (Lanesboro)	17	314	548	521	897	78%	22%
<b>Sakatah</b> (Morristown)	17	80	128	124	191	76%	24%
<b>Willard Munger</b> (Mission Creek)	37	119	202	229	285	75%	25%

Source. DNR

<sup>a</sup>The Douglas and Paul Bunyan count locations lack winter data due to equipment malfunctions.

Counting sites on the Brown's Creek, Douglas, and Root River state trails are for non-motorized traffic only. The other locations are all open for snowmobiling during the winter, from December 1 through April 1 of each year. The DNR has gathered snowmobile counts on the C.J. Ramstad-North Shore, David Dill-Arrowhead, David Dill-Taconite, and Taconite state trails but those locations are not included in this table because the counts do not include year-round use.



---








# 2020 FORECASTING REPORT

# TABLE OF CONTENTS

---

<i>The U.S. Outdoor Consumer Segments</i>	3
<i>Introduction</i>	4
<i>The Five Macro-Shifts</i>	
1. <i>Rise of Millennials and Aging Boomers</i>	5
2. <i>Urban Migration</i>	10
3. <i>Obesity</i>	14
4. <i>Heightened Attention on Health</i>	18
5. <i>Hispanic/Latino Growth</i>	23
<i>Summary and Opportunities</i>	28
<i>Methodology and Sources</i>	30

# THE U.S. OUTDOOR CONSUMER SEGMENTS

		PERCENT OF THE U.S. OUTDOOR CONSUMER POPULATION	SPEND PER YEAR ON OUTDOOR EQUIPMENT	HOURS SPENT OUTSIDE PER WEEK
	<b>THE ACHIEVER</b> <i>Everything Outdoors   Performance-driven   Engagement at its fullest</i>	10%	\$799	27
	<b>THE OUTDOOR NATIVE</b> <i>Highly Involved   Experience-driven   Established</i>	12%	\$637	22
	<b>THE URBAN ATHLETE</b> <i>Athletic   Competitive   Stressed</i>	20%	\$781	24
	<b>THE ASPIRATIONAL CORE</b> <i>Adventure Seeking   Aspirational   Moderate engagement</i>	14%	\$476	20
	<b>THE ATHLEISURIST</b> <i>Low-Intensity   Enjoyment   Emotionally Driven</i>	20%	\$284	19
	<b>THE SIDELINER</b> <i>Lessened Involvement   Inhibited   Interested</i>	12%	\$162	13
	<b>THE COMPLACENT</b> <i>Excluded   Unmotivated   Unfit</i>	14%	\$143	11

# THE FUTURE OF THE OUTDOOR CONSUMER

---

The outdoor consumer landscape is evolving, shifting in response to economic, social and demographic changes. As part of the OIA ConsumerVue segmentation research, this report examines the significant impact and opportunities that five macro-shifts will continue to have on the outdoor industry, as well as the seven segments of U.S. outdoor consumer population. Looking toward 2020, the outdoor industry is expected to face unprecedented disruption, induced by the perfect storm of shifting demographics, urban migration, the rise of obesity and a heightened emphasis on healthy living.



## 1. Rise of Millennials and Aging Boomers

According to the U.S. Census Bureau, the youngest Millennials will have reached adulthood by 2020 and will account for 28 percent of the U.S. population, as well as 50 percent of the working population. Meanwhile, every single day, more than 10,000 Boomers reach the age of 65.



## 2. Urban Migration

The U.S. Census Bureau projects the urban population to account for 82.5 percent of the total U.S. population by 2020.



## 3. Obesity

If the obesity trend continues on its current trajectory, 42 percent of the U.S. population will be obese by 2020.



## 4. Heightened Attention on Health

Instigated in part by the obesity epidemic and the rising cost of healthcare, there is a push toward creating a healthier America. Health initiatives aim to reduce the proportion of obese adults to 30.9 percent and increase the proportion of healthy adults to 33.9 percent by 2020.



## 5. Hispanic/Latino Growth

The U.S. Census Bureau projects that the Hispanic/Latino population will grow from 17 percent to represent 19.4 percent of the total U.S. population by 2020 whereas Caucasians will drop to 60.1 percent over that time period.



---

# RISE OF MILLENNIALS AND AGING BOOMERS

*Millennials and their Boomer parents and grandparents represent the world's largest consumer groups. Consumers within these two generations diverge significantly in how they relate to the outdoors, as well as in their attitudes, goals and purchasing habits. As these demographic groups expand and change, so will the size and makeup of the seven U.S. outdoor consumer segments.*

# Millennials: An Idealist Tribe

## Who they are

The U.S. is home to approximately 85 million Millennials, a demographic group born between 1980 and 2000. By 2020, the youngest Millennials will have reached adulthood; they will account for



**28%**  
OF THE TOTAL  
POPULATION



**50%**  
OF THE WORKING  
POPULATION

They control an enormous \$1 trillion in spending power each year. Currently, 11.8 million Millennials live in U.S. households with annual incomes exceeding \$100,000.

Millennials are more likely than members of other generations to be single, and they are also the most ethnically diverse adult generation.

**58%** (compared with  
72% of Boomers and  
62% of Gen Xers)  
CAUCASIAN

**20%**  
HISPANIC

**14%**  
AFRICAN-  
AMERICAN

**5%**  
ASIAN

## What they value

As a whole, Millennials demonstrate an emerging combination of idealism and self-esteem. They have been raised to believe strongly in their own abilities and are convinced that by collaborating with their peers they can achieve anything, including social changes on a global scale. These young consumers crave shared, authentic experiences rather than the accumulation of material things. They seek out brands that help them nurture their relationships and find fulfillment on a broader scale.

## How they experience the outdoors

Millennial consumers believe in the power of the crowd and feel a strong need to be together. The notion of belonging to a tribe defines them, with community goals trumping individual wants. They embrace community events and small groups, such as adult camps, Insta meet-ups, camping festivals and running clubs.



“The Millennial generation has larger buying power than other generations, and they are looking for an experience.”

*Rich Harshbarger, CEO of Running USA*

In addition, Millennials also want to participate in multiple activities. Broadly known as “slashies,” they are true hybrid outdoorists, passionate about many different genres. Millennials often combine multiple activities into one outing, leading to the recent bikepacking phenomenon, as well as the rise of backcountry splitboarding and powder surfing.

## How Millennials will shape the outdoor consumer segments

The Achiever, The Urban Athlete and The Aspirational Core segments skew young, which means Millennials are more likely to be found in these segments, and as they enter adulthood, they are more likely to age through these segments as well. Although Millennials are a diverse demographic, the majority’s mindset tends to mirror that of The Urban Athlete segment, whose main motivations for outdoor activities are social connection with others, thrill-seeking and competition. Also, like The Urban Athlete and The Achiever, Millennials enjoy a broad variety of outdoor activities and are likely to live in urban settings.





# Boomers: Active Individualists

## Who they are

America's 50+ demographic consists of nearly 100 million consumers, growing to 161 million by 2050.



They represent

**40%**

OF TOTAL U.S.  
CONSUMER DEMAND



Own

**80%**

OF THE NATION'S  
FINANCIAL ASSETS



Are responsible for

**1/2**

OF THE COUNTRY'S  
DISCRETIONARY SPENDING

With an average household income of \$67,000, they spend around \$284 per year on outdoor-related products.

Boomers are anywhere between the ages of 52 and 70, born between 1946 and 1964. Every day, more than 10,000 Boomers will reach the age of 65. They are more likely than other generations to be empty nesters, female, Caucasian and living in suburbs or rural areas.

## What they value

Unlike Millennials, Boomers don't worship the power of the crowd, instead they favor individuality. They believe in their earned wisdom and know they have something to contribute, both to society at large and within their family circles. After a lifetime of challenging conventional views of the generation before them, Boomers are not receptive to traditional marketing, preferring personalization and customization that leads to sensible products with clear functions and practical utilities.

“The new face of old age is increasingly healthier, wealthier and more educated.”

*Joseph F. Coughlin, founder of Massachusetts Institute of Technology, "The Upside of Aging"*

Boomers also enjoy engaging younger generations in outdoor activities. They find pleasure and escape in the outdoors, and they want to share that with their children and grandchildren. They believe their best years are ahead of them, and they emphasize family time and exploration.

## How they experience the outdoors

Boomers embrace custom experiences that prove their distinctive voices are being heard. They enjoy both traditional and non-traditional outdoor activities and are often open to learning new skills. Nature tourism is a popular pastime, as Boomers relax outside or explore the natural world in RVs or via prefab luxury-camping experiences.

This older generation is becoming increasingly health and fitness conscious, joining fitness programs, taking advantage of fitness-tracking technologies, such as Fitbit and Lumo Lift, and using the internet to discover or learn new outdoor activities.

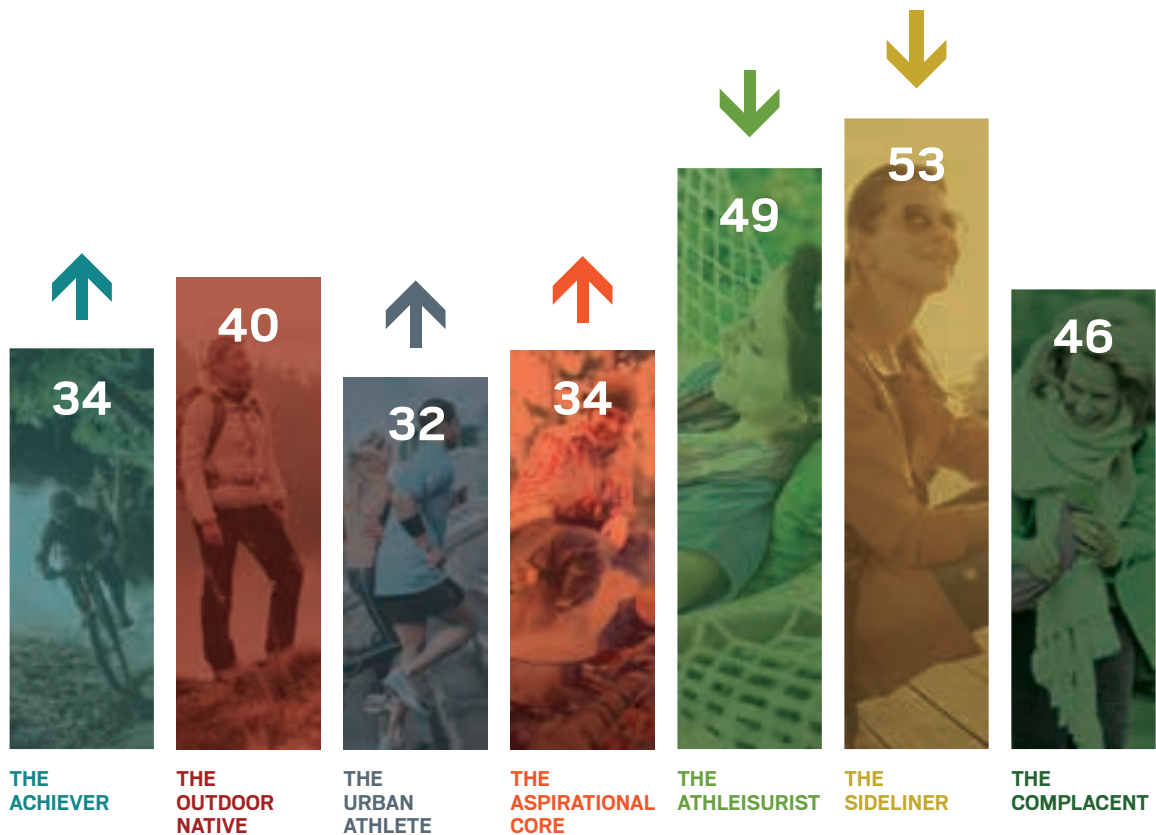
## How Boomers will shape the outdoor consumer segments

Research shows that 61 percent of Boomers feel younger than their actual age, typically by an average of nine years. That statistic coincides with other findings that middle age now lasts nine years longer than traditionally thought, thanks to the increased age of average life expectancy. It also suggests that today's Boomers plan to stay active longer than previous generations of seniors. Because Boomers currently account for a large portion of outdoor consumer segments that skew older—The Athleisurist, The Sideliner and The Complacent segments—as they grow older and their physical abilities decline, it will lead to a decline in the sizes and impacts of these segments on the larger outdoor industry by 2020.

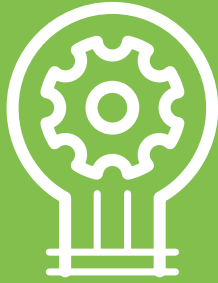


# SEGMENT MEDIAN AGE

- The Achiever, The Urban Athlete and The Aspirational Core segments skew young, which means as Millennials enter adulthood, they are more likely to age through these segments as well.
- The Athleisurist and The Sideliner have the oldest median age - as they grow older and their physical abilities decline, it will lead to a decline in the segment size and impact.



The arrows show an increase or decline in the segments size based on median age. No arrow means the segment in 2020 will not be as heavily impacted by this macro shift and will remain close to the same.



# The Future of Innovation

---

*Keeping up with generational and consumer behavior shifts is a perpetual challenge. The following brands and retailers have tuned in to the mindset of Millennials and Boomers, tailoring their approach to the groups' unique values.*

## **Millennials**

**The North Face.** After sponsoring a successful series of events for Hipcamp called "Under the Stars," The North Face will launch a line targeted to car campers, featuring a cooking shelter for groups, throwback A-frame tents and two-person sleeping bags. These products strive to furnish a social gathering space for everyone to hang out by the fire.

**GetOutfitted.** Offering a streamlined approach to renting outdoor gear, GetOutfitted taps into multiple Millennial-friendly trends: the use of mobile devices and other technology, a willingness to rent versus buy and a willingness to try a variety of sports and activities.

**Under Armour.** Their tenacity and overall brand repositioning has captured the attention of Millennials in the fitness sector, and now their sights are set on the outdoor industry. By aligning with diverse, contemporary athletes and amassing an impressive portfolio of wearable tech start-ups, they are looking to engage future influencers and early adopters while encouraging crossover between team sports loyalists and outdoor enthusiasts.

## **Boomers**

**Tentrr.** Providing customized, curated camping experiences ideal for Boomers, Tentrr takes the work out of camping by scouting new locations, arranging activities and allowing customers to camp in total comfort on platforms with canvas tents, while still immersing themselves in the outdoors.

**Filson.** Continuing to cater to its loyal customer base, Filson takes its online approach to storytelling and iconic merchandise offline in its new flagship location in Seattle. A measured mix of Pacific Northwest heritage and American-made goods, Filson attracts Boomers with authenticity and commitment to quality manufacturing.

**Roadtreking.** More than a million Americans are currently living in a recreational vehicle or motor home, but it is the "gray nomads" who are driving the big bounce in the R.V. industry and have increased ownership rates by 20 percent, to 3.6 million. The Roadtreking blog and forum "celebrates the RV lifestyle" and offers an online community to share stories and connect with on the road.



---

# URBAN MIGRATION

*Urban areas are more attractive than ever before, and even in countries where the population is edging downward, urban areas continue to grow. As of 2007, the majority of Americans were city dwellers, and by 2020, 82.5 percent of the U.S. population is predicted to be urban. With 34 percent of outdoor consumers currently living in cities, a growth in this population will likely foster significant changes in the outdoor the consumer segments.*

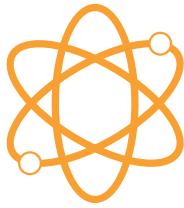


**ur·ban** \ˈər-bən\  
An urban area has a population of 50,000 or more,

according to the U.S. Census Bureau

### Who they are

Urban outdoor consumers tend to be young, ethnically diverse and active. They are outside for 25 to 30 hours per week and spend the most of any consumer on outdoor gear. These city dwellers are also market influencers, providing product recommendations to friends and family.



#### WHAT SCIENCE HAS TO SAY

*Studies have found that urban residents who visit natural environments have lower levels of stress hormones immediately afterward than people who have not recently been outside.*

### What they value

Urban consumers don't see themselves as traditionally outdoorsy; rather, they get outside because the activities they enjoy require them to go outside. The majority weren't raised on typical outdoor activities like hiking or climbing but on team sports, and their participation in outdoor endeavors is as much about fitness, competition, socialization and intensity as it is about connecting with nature. They are style-conscious and seek multifunctional items that fit seamlessly into their lifestyles. A growing contingent of city apartment renters are skipping urban home ownership, choosing to make their first purchase a more rural house, an important gateway to staying active outside, while maintaining their urban address and lifestyles.

### How they experience the outdoors

Busyness is an urban epidemic. Even so, fitness-conscious urbanites are dedicated to staying active to maintain both physical and mental health. They make time to exercise and get outdoors before and after work, as well as midday. Urban residents embrace activities that they can integrate into daily life, like running clubs and organized races, especially those that emphasize socializing. Bike commuting and bike-sharing programs continue to gain momentum, as do indoor climbing and bouldering gyms.



**“Although I love to plan big, adventurous outings, some of them are often just around the corner and right under our noses—even in one of the biggest cities in the world.”**

*Bill Ulfelder, New York executive director of The Nature Conservancy*

City dwellers are also engaging in micro-adventures, choosing quick hits of nature that are easily accessible via public transportation or a short drive, recognizing that simply walking in nature has been linked to heightened physical and mental energy. Also, high-impact experiences, like Tough Mudder, that are just as tough as the city itself provide a significant outlet for urban populations. Mirroring the daily hustle of living in a packed metropolis, these aggressive, rapid and social indoor and outdoor outlets are on the rise.

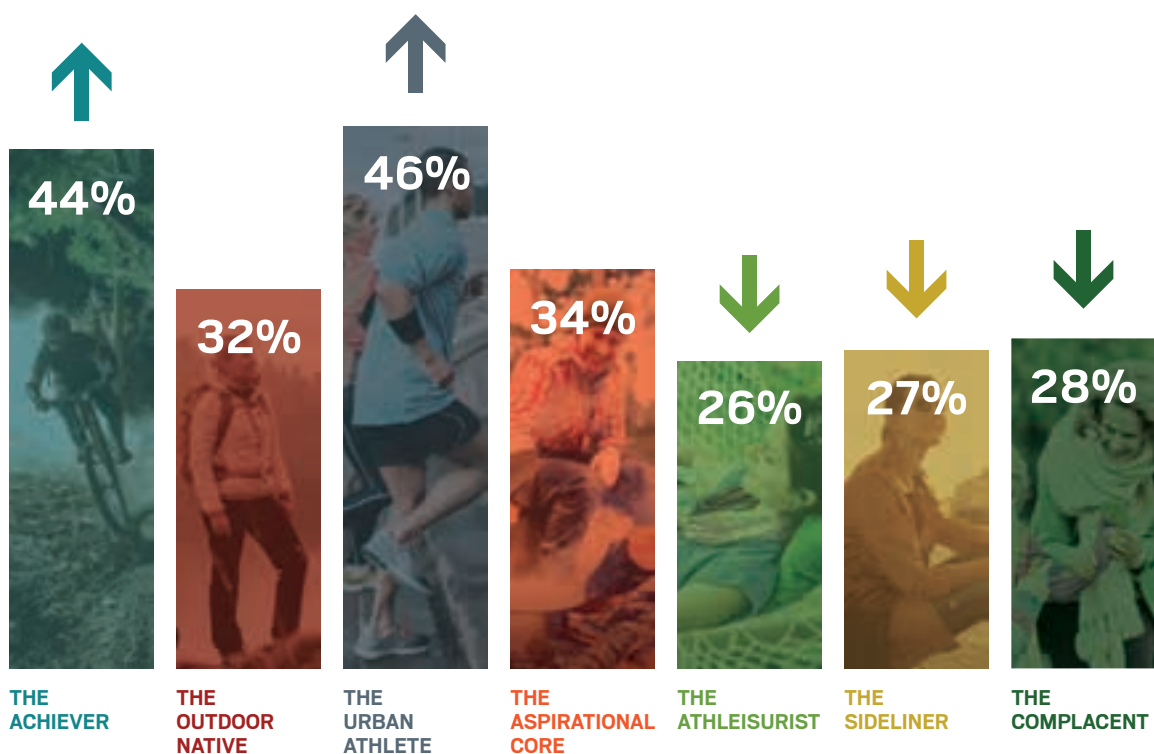


### How urban migration will shape the outdoor consumer segments

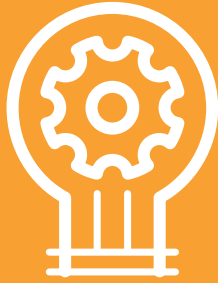
The migration of the U.S. population toward urban environments is likely to have the biggest impact on The Achiever and The Urban Athlete segments, which already draw from an urban population. Approaching 2020, this shift is likely to reduce the size of The Athleisureist, The Sideliner and The Complacent segments, which tend to favor small town and rural environments.

# SEGMENT PERCENTAGE IN CITY CENTERS OR OUTSKIRTS

- The Achiever and The Urban Athlete segments are anticipated to grow since they currently have the largest percentage of urban outdoor consumers.
- The Athleisurist, The Sideline and The Complacent segments tend to favor small town and rural environments and are more likely to decline.



The arrows show an increase or decline in the percentage of the segment that lives in/near city centers. No arrow means the segment in 2020 will not be as heavily impacted by this macro shift and will remain close to the same.



# *The Future of Innovation*

---

*The urban mindset can shift as rapidly as an urbanite's fast-paced lifestyle. The following companies are keeping their fingers on the pulse of change.*

**Fjällräven.** Bringing a Scandinavian approach to outdoor living to the market, Fjällräven has successfully established itself as one of the go-to brands in the U.S. for dependable, long-lasting products. With locations in New York, Chicago and Seattle, as well as in key resort towns including Jackson Hole and Banff, they are successfully bridging the gap between urban and mountain living.

**The KinderBox.** Ingeniously accommodating both hectic metropolitan schedules and the male urban consumer's thirst for adventure, The KinderBox provides monthly deliveries of manly gear, much of it outdoor-inspired. Its slogan—"Be bold. Be brave. Be ready."—reflects the urban outdoor consumers' aim to flow seamlessly from urban to natural settings at any time.

**Outdoorfest.** A multifaceted yearly festival in NYC, Outdoorfest also publishes local trip guides that prove you can live in a city and still enjoy the outdoors. The event has also fostered outdoor enthusiast communities in Washington, D.C. and Calgary, Alberta.

**Outlier.** Hybrid travel, everyday and performance wear that emphasize both function and style is an ideal fit for active city dwellers, as is the company's direct-to-consumer approach.





---

# OBESITY

*Although obesity rates show some signs of slowing, if they continue at the present rate, 42 percent of the U.S. population will be obese by 2020. The reasons for this trend go beyond overeating and sedentary lifestyles, with research suggesting that modern realities such as poor sleep, exposure to pesticides and other chemicals, antibiotic use and hereditary factors also play a role.*



## Obesity statistics

Over the last 40 years, the collective BMI (body mass index) of the American public has shot up dramatically. Childhood obesity has more than doubled in children and quadrupled in adolescents in the past 30 years.

Approximately

**34.9%**

OF U.S. ADULTS ARE CURRENTLY OBESE

with higher rates  
among Hispanics

**52%**

and African-  
Americans

**47.8%**



Overall, the population struggling with obesity tends to be lower income and live in small towns or rural areas. The Midwest is leading the epidemic, accounting for 30.7 percent of the obese population. There is no significant relationship between obesity and education among men. Among women, however, there is a trend: those with college degrees are less likely to be obese, compared with less educated women. Obese or plus-size groups who are active in the outdoors tend to be highly engaged on social media, with an emphasis on Instagram, Facebook and Twitter.

## The obesity mindset

Obese Americans are a complex group, with widely varying levels of activity and outdoor engagement. Some have been more active in the past, but are now hindered by physical limitations, such as injuries or weight issues. Many participate in non-traditional outdoor activities, like simply relaxing outside, barbecuing, picnicking or walking for enjoyment.

But even if this group is not traditionally seen as engaging in performance-based activities, it is clear many overweight people are as interested in getting outside with family and friends as other groups. More than 30 percent of outdoor consumers, including this demographic, want to try new outdoor activities and are making a considerable effort to spend more time outside. Building a sense of self-worth is seen as an important gateway to their ultimate goal of overall health and happiness, and they feel strongly that every person, regardless of size, matters. The obese population doesn't want to be told they can't do something nor have their bodies judged as an automatic indication of how athletic they are.



***Some women believe that because they have curves they can't run or shouldn't run. Running is for every body anytime."***

*Erica Schenk, Women's Running August 2015 cover model*

Plus-size consumers are very supportive of each other, extending their own body awareness to a general sympathetic respect for social issues and other people who have been marginalized by society. They have a group mentality when it comes to their fitness activities and overall lifestyles. They are highly engaged online and find motivation by interacting and sharing information with people who face similar challenges.

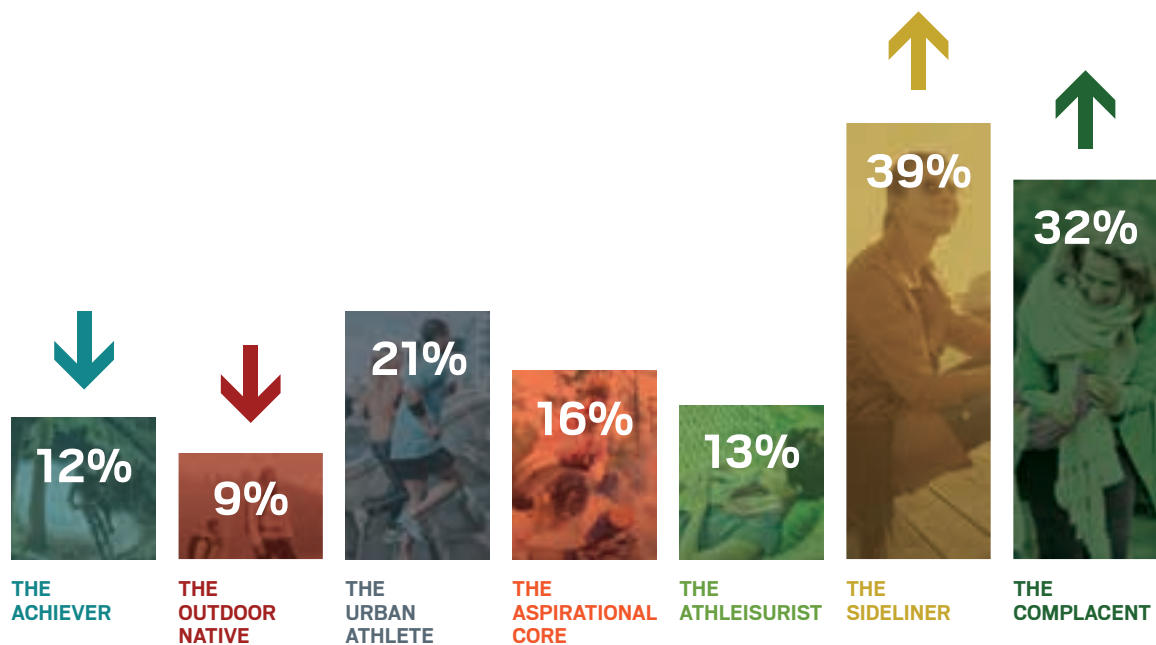


## How obesity will shape the outdoor consumer segments

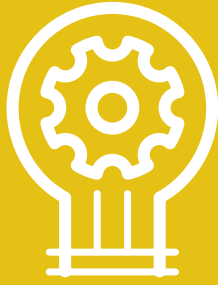
Those in The Sideliner and The Complacent segments are more likely to see themselves as less healthy than their peers, even if they are involved in athletics or a fitness program, a pattern that is reversed among members of The Achiever and The Outdoor Native segments. Rising obesity rates will likely contribute to the growth of The Sideliner and The Complacent segments.

# SEGMENT PERCENT THAT FEEL THEY'RE SOMEWHAT OR LESS HEALTHY THAN THEIR PEERS

- The Sidelineer and The Complacent segments are more likely to see themselves as less healthy than their peers so a potential rise in obesity rates will contribute to the segments growth.
- A rise in obesity rates will have a declining effect on The Achiever and The Outdoor Native segments.



The arrows show an increase or decline in the percentage of the segment that feels they're somewhat or less healthy than their peers. No arrow means the segment in 2020 will not be as heavily impacted by this macro shift and will remain close to the same.



# The Future of Innovation

---

*The plus-size outdoor consumer gravitates toward companies with positive, inclusive messages, as well as toward products that accommodate the needs and concerns of people with larger body sizes. The following companies' open-arms mindset and messaging further inspire people to action.*

**Buddha Body Yoga.** Self-described "fat yoga" studios, like Michael Hayes' Buddha Body Yoga in New York City, strive to fight the industry's skinny-person stereotype, while proving that those struggling with obesity can be both able and active. The studio adapts traditional yoga poses for people who are larger or injured, enabling everyone to succeed and improve.

**#FitCurvesChallenge2016.** Kymberly Nichole, plus-size owner of the holistic wellness coaching service Well Fit Curves, is demonstrating social media savvy with her #fitcurveschallenge2016. Each month, Nichole delivers a new health or fitness challenge, buoyed by the support of an online community and access to Nichole's expertise.

**Penningtons.** This Canadian retailer has become an advocate for body diversity and size acceptance, specifically for active, plus-size women. For example, their ActiveZone brand helps consumers select clothing to suit their shape. Other initiatives include the yoga-focused #iwontcompromise campaign and the Step Forward walking groups, which consist of three organized, 20-minute group walks with a goal of 10,000 steps taken with friends.

**Juno Active.** Anne Kelly founded this specialty retailer after realizing the plus-size market wasn't able to find quality, high-performance activewear. The company gives special consideration to innovative fabrics and performance tailoring, alongside stay-in-place fits, which have resonated with larger consumers.



---

# HEIGHTENED ATTENTION ON HEALTH

*A personal wellness mindset is at the forefront of current fitness and health trends. Consumers are spending record amounts, with categories such as healthy food and nutrition seeing 108 percent growth since 2010. Health and wellness is now a \$3.4 trillion business, backed up by actionable data on the benefits and necessity of achieving an optimal state of health—physically, mentally, emotionally and spiritually. Fitness has become an aspirational, total lifestyle pursuit, impacting people’s associations with what they wear, where they travel—even how they parent their children.*

*Specifically, the concept of “innertainment” is being led by enterprising visionaries taking control of their own destinies, providing the holistic blueprints for living a simple, more balanced life. This change in thinking influences the industry by bringing a focus to brain fitness and the strategies to achieve it, raising awareness of how physical workouts benefit the brain and recognizing that simply getting outside, in any way, can boost mental performance.*

### Health-minded statistics

Nearly three-quarters of consumers think wellness is going to become more important in the future, and more than half of consumers wish they had more support in leading a healthy life. Globally, the optimal age to achieve wellness is 34, and people are twice as likely to agree that it is easier for women to achieve wellness than men, a result of females being predominantly used as the face of this movement. Women say health and wellness goals are of ongoing importance to them and are something they plan to continue to invest in as they move through life.



WOMEN MAKE UP THE  
MAJORITY OF THE WELLNESS  
MOVEMENT ADOPTERS



Women are forecasted to control

**75%**

OF ALL DISCRETIONARY SPENDING  
WORLDWIDE BY 2028

### What the health-minded value

Wellness as a total concept is shifting from a perceived luxury to a fundamental human right. Holistic wellness devotees seek to live healthier, more balanced lives, emphasizing mindfulness, meditation and periodic digital detoxification. They embrace communities of like-minded individuals who practice together to help each other become more self-actualized.

“**Scientific studies have shown that natural environments can have remarkable benefits for human health. Natural environments are more likely to promote positive emotions; walking in nature has been associated with heightened physical and mental energy.**”

*Eva M. Selhub, M.D., and Alan C. Logan, N.D., authors of “Your Brain on Nature”*

Millennials who embrace the wellness movement expect their employers to provide more health benefits and place higher value on companies that support a healthy workplace. Regardless of age, health- and wellness-oriented people are highly educated regarding general medical information and take an active role in monitoring their physical conditions. They favor holistic treatments whenever possible, from beauty and personal care products with 100-percent natural ingredients to juicing and exploring Eastern medicines.



Although they prioritize healthy living, this group also embraces technology through new health and fitness tracking apps, which 17 percent of all outdoor consumers use. Devotees of wellness practices are also very active on social media, and one-quarter of all females 13 to 32 years old, follow a “fitness guru” on social media. Demonstrating their wellness efforts—green juicing, destination yoga retreats or meditation events, for example—is a sign of status on social media, as well as a genuine opportunity to share tips, recipes and strategies.



### How the health-minded experience the outdoors

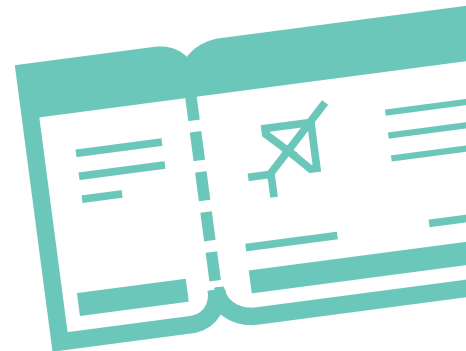
Creative systems designed for hitting pause and engaging in “me time” are increasingly popular, and these outlets encompass a broad range of activities. Popular approaches include personal meditation apps, short nature breaks integrated into the workday and sensory immersion using sound baths, floatation tanks, breathing sanctuaries and color-infused sleep pods.

New mindfulness training communities have emerged that are not about competition or even exercise. This type of group wellness often takes the form of organized meditation groups. Urban retreats and pop-ups offering meditation, alcohol-free evening events, participatory art therapy, sensory baths and yoga in public spaces, instead of private studios, are all new parts of this communal wellness trend.

“I think the whole country needs meditation. I don’t think it’s as much a question of who needs more or less—I just think it’s an important thing for people to be aware of, and to understand that you can have a practice in your busy, modern lifestyle.”

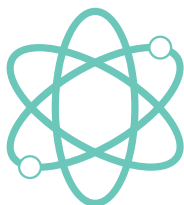
*Jesse Israel, founder of The Big Quiet*

Many wellness enthusiasts embrace eco-therapy, in which they find mental healing and growth through interaction with nature. Destination “fitcations,” close-to-home forest bathing and far-flung eco-camps are all built on the knowledge that simply getting outside is the cornerstone of human fitness. Destination wellness retreats, a \$440 billion industry that currently accounts for 14 percent of profits from tourism, will continue to grow as people look for more than basic vacations. Hotels are already introducing mid-meeting yoga sessions, meditation zones and stress-management therapy for business travelers who understand that emotional health directly affects work performance. Some companies offer employees a cash reimbursement when they go on a morning run or bike ride.



### How the health-minded will shape the outdoor consumer segments

An increased focus on creating a healthy U.S. population has led to a series of health initiatives to reduce the proportion of obese adults and increase the proportion of adults at a healthy weight. If these initiatives are met with success and more people move toward a healthier lifestyle, the larger obesity shift could be offset—as those who make this commitment would likely lead to the growth of The Achiever and The Outdoor Native segments and the decline of The Sidelineer and The Complacent segments.

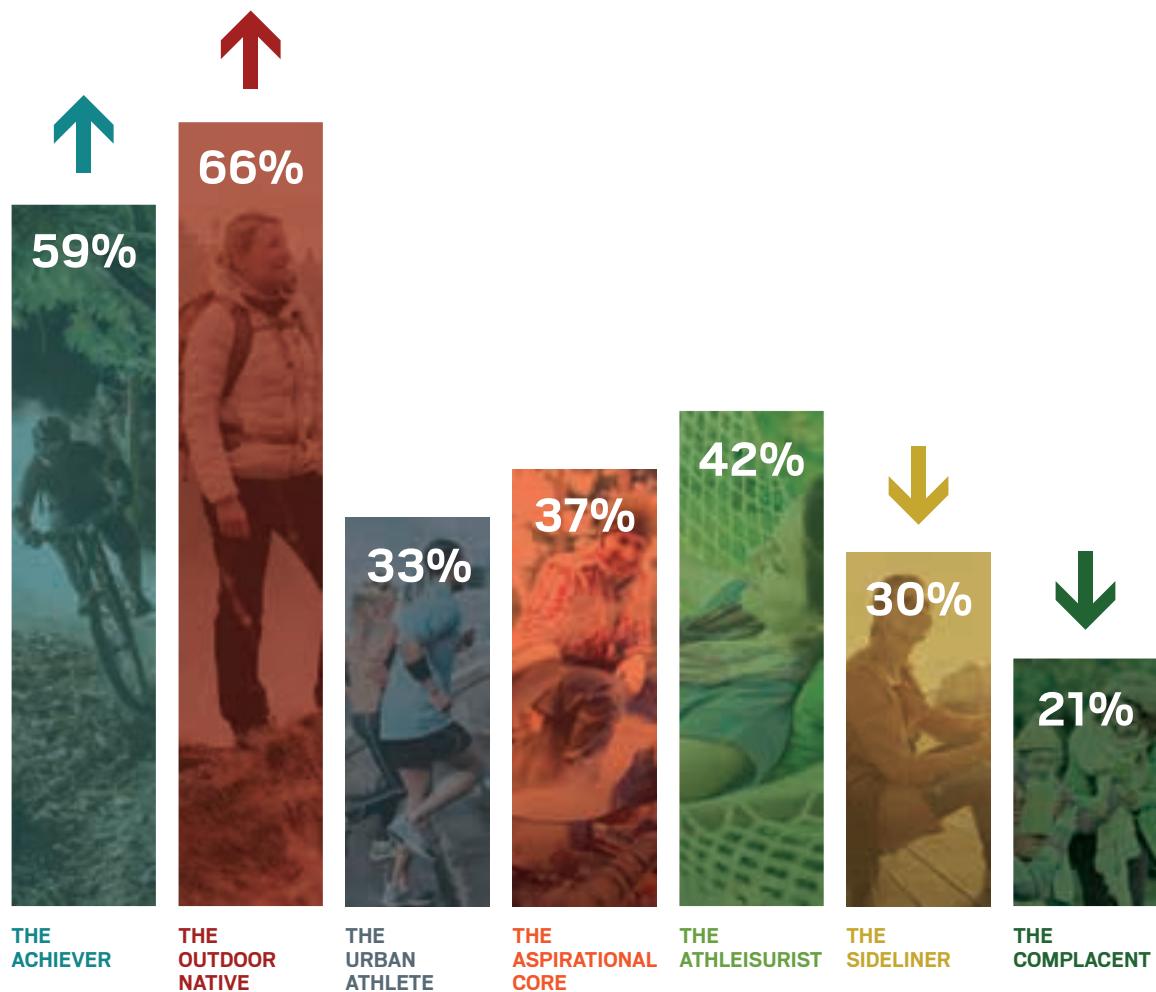


#### WHAT SCIENCE HAS TO SAY

*Studies in the International Journal of Neuroscience and by the American Heart Association have concluded that meditation can help you feel younger, decrease your risk for heart disease and stroke, help you lose weight and make workouts more focused.*

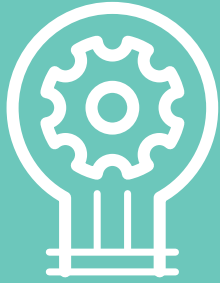
# SEGMENT PERCENT THAT FEEL THEY'RE MAKING A STRONG COMMITMENT TO A HEALTHIER LIFESTYLE

- Strong adopters of a healthier lifestyle, *The Achiever* and *The Outdoor Native* segments are anticipated to grow.
- Committing to a healthier lifestyle will be more difficult for *The Sidelineer* and *The Complacent* segments, leading to a potential decline.



The arrows show an increase or decline in the percentage of the segment that feels they're making a strong commitment to a healthier lifestyle. No arrow means the segment in 2020 will not be as heavily impacted by this macro shift and will remain close to the same.





# *The Future of Innovation*

---

*Many wellness consumers employ technology judiciously, using it in a variety of ways to achieve health and mindfulness goals, but also conscientiously seeking opportunities to unplug. The following companies achieve a similar balance that appeals to health-minded outdoor consumers.*

**87 Degrees.** This innovative program combines surfing lessons, life and business coaching and yoga to push the boundaries of personal and professional development. Participants strive to connect with like-minded people seeking holistic personal growth.

**Restival.** An ideal fit for those who want to unplug, Restival is a five-day, luxury eco-camp wellness festival in the Sahara desert. The gathering bans digital devices in favor of writing workshops, morning raves, sound baths, stargazing and guided meditation.

**Thync.** The first consumer wearable that enables swift shifts in mental states, Thync allows wearers to feel more calm or energized in minutes. The technology brings together innovations in neuroscience and engineering so wearers can better access their own abilities, as well as improve their lives.

**Wanderlust.** Recently opened as a brick-and-mortar arm of the Wanderlust Festival—a conscious gathering of yogis, meditators, sages and artists—is a fusion of classes and experiences, from yoga to nutrition, meditation to film screenings, wine tastings to jewelry making.





---

# HISPANIC/ LATINO GROWTH

*The population of the U.S. Hispanic community is rising rapidly; in fact, 17 percent of outdoor consumers are Hispanic, making it one of the nation's fastest-growing demographics. This population powerfully influences mainstream culture, from food and music to the economy, health and wellness trends and environmental activism.*

## Who they are

Hispanics will make up 19.4 percent of the total population by 2020, whereas Caucasians will drop to 60.1 percent over the same time period.



IN 2015  
THIS GROUP  
YIELDED

# \$1.5 TRILLION

IN AMERICAN BUYING POWER

On average, they currently spend \$592 per year on outdoor apparel, footwear, electronics and gear, compared with \$465 spent by the average outdoor consumer. With a high annual spend and a growing population, Hispanic outdoor consumers will become an increasingly coveted and profitable segment.

At a median age of 28, U.S. Hispanics are young, with Millennials making up 21 percent of their demographic. Although the median household income is 30 percent lower among Hispanics, the gap will shrink as the working-age population increases. In the last decade, the number of Millennial Hispanic households earning between \$50,000 and \$100,000 increased by 89 percent. Female Latinas are the primary purchasers in 86 percent of households and are highly educated, recently exceeding non-Hispanic women in college enrollment. Hispanics are 50 percent more likely to buy new apparel for a new athletic activity, paying up to \$87 for the perfect athletic outfit.

Overall, this group is more likely to live in cities, particularly in California, Arizona, Nevada, Colorado, Texas, Florida and New York, where the majority of the population resides.



**How Latinos are already eating, traveling and shopping is having a big impact on mainstream culture. Understanding Latino attitudes and behavior today is a window into how Americans will think, feel and act in the future.”**

*Holly McGavock, planning director of the Wing Division of Grey Advertising*

As the Hispanic population grows, their levels of obesity are also rising, and they now rank second among the most obese populations. Over 60 percent of all Hispanic populations are either overweight or obese. According to the American Medical Association, the problem is growing in younger generations: 38.2 percent of Hispanic kids are struggling with weight issues, compared with 31.7 percent of all children in the general population. Only one-third of Latinos live within walking distance of a park, as compared with almost half of all white populations.

## What they value



Although Hispanics are likely to engage with environmentalist movements, they often simply associate green choices with a higher quality of life and pleasure, which motivates them to participate in outdoor activities. The Hispanic community overall has a strong focus on family, interacting with a wide range of ages and valuing the knowledge of past generations. In fact, Hispanics are less about conquering nature and instead passing down the value of getting outside to socialize and exercise to younger generations.

More than half of U.S. Hispanics ages 50 and older are foreign-born and have a strong affinity to the cultures of their birthplace, and three-quarters of these Hispanic adults speak at least some Spanish. They appreciate mainstream efforts to incorporate the Spanish language, acknowledge their culture and include the voices of Hispanic influencers in brand messaging and storytelling.



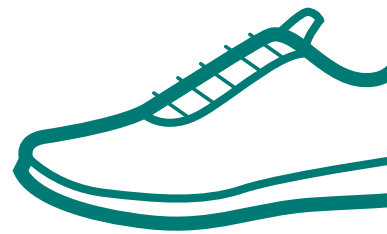
Throughout all of the channels they use to make lifestyle decisions, Hispanics are more ethically and holistically minded than other segments. Sixty-nine percent say it is important for a company to act ethically in their business practices, especially in terms of sustainability. They expect a more holistic approach to beauty, sports and nutrition, preferring alternative medicine to standard medical practices.

Having higher incomes and being early adopters of technology, 80 percent of Hispanic adults are on social media, compared with roughly 72 percent of non-Hispanics. Highly influenced by friends and family, 14 percent share information about a product via a social network, compared with 6 percent of non-Hispanics, and 46 percent take social shopping to the next level, buying products via Facebook on the advice of friends and family.

### **How they experience the outdoors**

There is a rising movement within the Hispanic community to return to a cultural tradition of getting outside together—both as families and with like-minded peers. Hispanics appreciate activities that allow them to be active and spend time with family and friends, whether simply going for a walk or playing with their kids at the park.

Running is the number one outdoor activity among Hispanics for both older and younger generations, and the number of Hispanic runners is up 56 percent in about the last ten years, according to the National Sporting Goods Association. Hispanics and Latinos also embrace biking, dance, soccer, hiking, camping and conservation activities.



“**If women are the current boom of running, are minorities the next boom? As a sport, we absolutely need to be looking at and concerned with and working toward a more multicultural balance.**”

*Rich Harshbarger, CEO of Running USA*

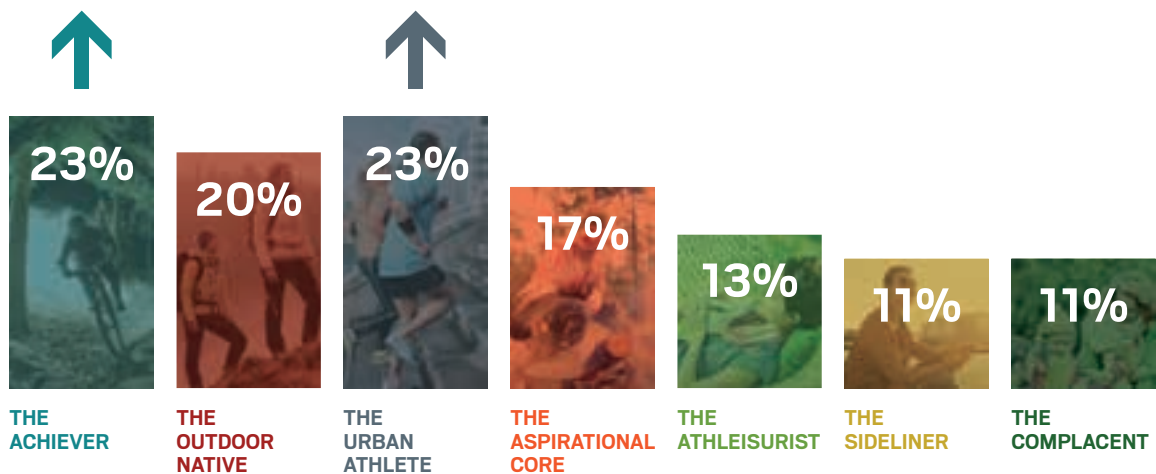


### **How Hispanic/Latino growth will shape the outdoor consumer segments**

Currently, The Achiever and The Urban Athlete segments have the highest proportion of Hispanics, based on their youthful skew and urban influence, whereas The Sideliner and The Complacent segments have the lowest proportions. As the Hispanic population continues to grow, this will likely impact the segments that already have a larger proportion of Hispanics, as well as in segments that skew younger (Hispanics have a median age six years younger than the average outdoor consumer). Taken together, these trends suggest growth for The Achiever and The Urban Athlete segments.

# SEGMENT PERCENTAGE OF HISPANICS/LATINOS

- The Achiever and The Urban Athlete segments have the highest percentage of Hispanics, so Hispanic growth will most likely impact these segments the most.



The arrows show an increase or decline in the percentage of Hispanics/Latinos within the segment. No arrow means the segment in 2020 will not be as heavily impacted by this macro shift and will remain close to the same.



# The Future of Innovation

---

*Companies that appeal to Hispanic cultural values, such as family and sustainability, find success with this demographic.*

**Latinas in Motion.** Inspired by organizations such as Black Girls Run and the National Black Marathoners Association, Elaine Gonzalez Johnson founded the Philadelphia-based group Latinas in Motion, which has grown from her five friends to 2,000 members with chapters in ten states.

**Latino Outdoors.** California-based Latino Outdoors has expanded into an international volunteer network, putting families and youth in touch with outdoor activities and empowering local communities to explore and contribute stories defining their identity as outdoor consumers.

**REI.** A true leader in motivating underserved demographics in the outdoor industry, REI has emerged as a sponsor of multiple Hispanic efforts such as #LetsCamp, in which they worked with well-known chef Aarón Sánchez, who also blogs about his childhood memories of family camping in Mexico, to create campfire cooking contests, blogs, tweets and Instagram posts.

**JC Penney.** By launching an emotional, high-profile campaign tied to last year's World Cup, the retailer focused on Latina shoppers with a multichannel media push targeting female sports titled "Soccer is for girls."



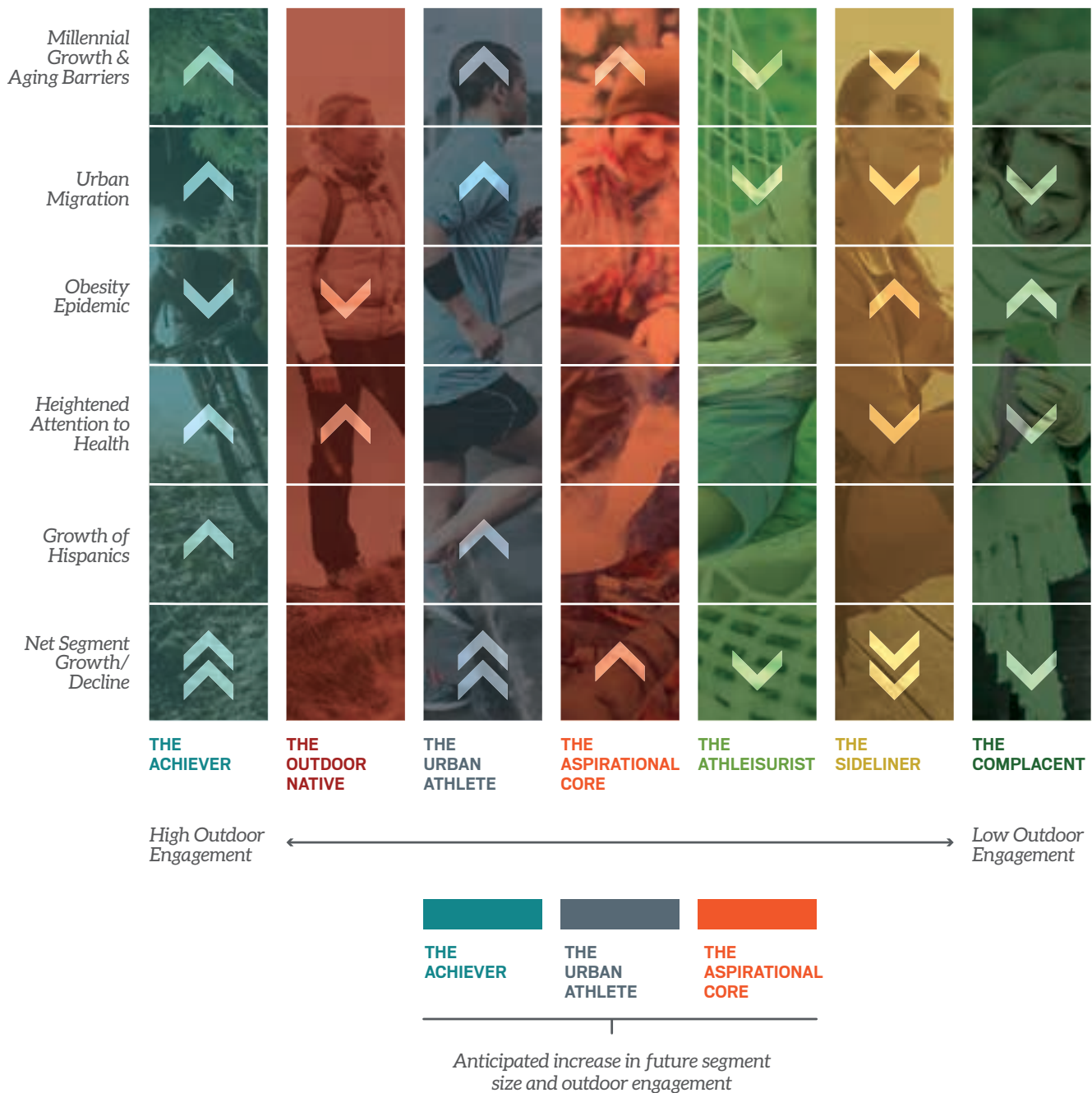
# SUMMARY AND OPPORTUNITIES

*Looking toward 2020, a fundamental challenge for the outdoor industry is that today's core outdoor consumer is not the same as tomorrow's. Understanding and adapting to the shift in values and behaviors of these diverse consumer segments will drive tremendous change and opportunity in both the manufacturing and retail business environments, as these consumers look to have a greater influence on the production, distribution and consumption of goods to meet their needs. The industry must also embrace the impact of technology across all aspects of their consumer's lives, it is intrinsically changing the way they shop, communicate and recreate.*

*The key demographic, economic and social changes facing the U.S. in the next several years are likely to impact the outdoor consumer population and the size of the segments within it. Looking forward to 2020, we expect to see significant increases in the size of The Achiever and The Urban Athlete segments—thanks to the influences of Millennials, urban migration, a growing Hispanic population and a heightened focus on healthy lifestyles—as well as a modest increase in the size of The Aspirational Core, attributed to the rise of the Millennial population. On the other end of the spectrum, we are likely to see significant decreases in the size of The Sideliner segment and moderate decreases in the size of The Athleisure and The Complacent segments—in connection with the influence of Millennials, urban migration and an expanding emphasis on health. Rising obesity rates will likely shrink the numbers of The Achievers and The Outdoor Natives and increase The Sideliner and The Complacent segments, but these effects are expected to be offset by the other four aforementioned shifts.*

## Looking Towards the Future: Macro Shifts

# NET IMPACT ON SEGMENT SIZE



Arrows show an increase or decline in segment size based on the five macro shifts. The more arrows, the greater the anticipated impact in 2020. No arrows means the segment is not expected to be as heavily impacted by the macrosifts and remain close to the same size in 2020.



## **Methodology**

In the summer of 2014, both qualitative and quantitative research was conducted by Egg Strategy. One-on-one interviews, as well as outdoor participation videos from outdoor consumers were analyzed and used to inform the development of the quantitative survey. A total of 2,563 online surveys were completed by a national sample of outdoor consumers ages 18 to 65. Quotas were set for particular ethnic groups to ensure representation similar to the distribution of those groups in the U.S. population (e.g., Blacks/African Americans, Hispanics, Asians). To qualify, respondents were required to meet the following criteria:

- *Spent at least one hour outside per week*
- *Participated in a variety of outdoor activities at least once in the past 12 months (out of 24 traditional outdoor activities and 24 nontraditional activities )*
- *Purchased apparel, footwear or equipment for use in outdoor activities*

Although all surveys are subject to sampling error, the sample of 2,563 provides a high degree of statistical accuracy (plus or minus 1.9 percent at a 95 percent level of confidence). For example, if we estimate that 62 percent of outdoor consumers participated in swimming at least once in the past 12 months, actual participation could be as low 60.1 percent or as high as 63.9 percent. Note that accuracy varies by segment depending on the sample size within each segment.

A weighting technique was used to balance the data to represent the eligible U.S. population ages 18 to 65. The weighting process was designed to ensure that the final sample of completed respondents accurately reflects the population of qualified consumers on key demographic characteristics.

The segment forecasts were yielded through a four-step process:

1. Data were collected from a variety of sources to assess demographic, economic and social shifts expected to happen through 2020.
2. Variables related to these shifts were correlated with segments to provide insight into which variables are likely to be related to changes in segment size over time.
3. The distributions of variables likely to be related to changes in segment size and value over time were examined to identify which segments are most likely to be impacted by which demographic, economic and social shift.
4. Based on all of these analyses, a holistic evaluation was conducted to assess how these macro shifts are likely to impact the size of each consumer segment over time.

## **Acknowledgements**

Segmentation Research: Egg Strategy

Trends Research: Range

Copywriting: Breakaway Research Group and Kellee Katagi

Design: Lisa Wright

## **About the Outdoor Industry Association**

Based in Boulder, Colo., with offices in Washington, D.C., Outdoor Industry Association (OIA) is the leading trade association for the active outdoor lifestyle industry and the title sponsor of Outdoor Retailer. OIA supports the growth and success of more than 4,000 manufacturers, distributors, suppliers, sales representatives and retailers of outdoor recreation apparel, footwear, equipment and services. For more information, go to [outdoorindustry.org](http://outdoorindustry.org) or call **303.444.3353**.



<sup>i</sup>Traditional activities included: trail running, running/jogging (outdoors), mountain biking, bicycling (on a road/paved surface), rafting, bird watching/wildlife viewing, fishing/fly fishing, skiing (alpine/downhill), skiing (cross-country), snowboarding, rock climbing (outdoor), boating/sailing, kayaking, canoeing, stand-up paddle-boarding/windsurfing, surfing, day hiking (not overnight), car camping, camping (e.g., walk-in, hike-in), backpacking (overnight), hunting, water skiing/wakeboarding, swimming (in a pool, lake, ocean, etc.), participating in a running race (e.g., 5K, 10K, marathon, triathlon)

<sup>i</sup>Nontraditional activities included: walking for enjoyment (e.g., around a city, neighborhood), walking for a specific purpose (e.g., walk the dog, run errands), commuting to work/school by bicycle, playing outside, relaxing outside, going to the beach, going to a park or playground, golfing, doing drills, boot camps, etc. outside, outdoor yoga (e.g., on the beach, in a park), horseback riding, geocaching, playing team sports outside (e.g., basketball, soccer, volleyball, frisbee), barbecuing or picnicking, gardening/doing yard work, attending outdoor concerts or festivals, attending community activities (e.g., farmers' markets, fairs, parades), tailgating or spectating an outdoor sporting event, participating in an obstacle race (e.g., Tough Mudder), parkour, paintballing, sightseeing, scenic-driving/road-tripping, skateboarding

© 2016, OIA all rights reserved. All information provided by Outdoor Industry Association. ("OIA"), in any form, ("Information"), is proprietary information that belongs to OIA and is protected by U.S. and international copyright law and conventions.

ConsumerVue utilizes strict data collection methodologies, and the integrity of the data is of utmost importance. The information provided is intended to be used internally by members. If members and third parties seek to cite the information for internal and external materials, please follow the OIA research citation rules:

- All citations must be listed verbatim and attributed to Outdoor Industry Association.
- All citations must be limited in scope. Full reproduction of OIA research is prohibited.
- All citations must come directly from OIA research reports and tools.
- Graphs or data can be briefly summarized when no corresponding text is available.
- All citations of OIA research and tools must be attributed in the following manner: Title, Outdoor Industry Association, Date.

For external usage beyond data and information citation, please work directly with OIA for guidance and approval. For more information, visit [www.outdoorindustry.org](http://www.outdoorindustry.org) or call **303.444.3353**.

---

## Sources

<http://www.bls.gov/opub/mlr/2012/01/art3full.pdf>

### **New Progressive America, The Millennial Generation, Center for American Progress,**

[http://cdn.americanprogress.org/wp-content/uploads/issues/2009/05/pdf/millennial\\_generation.pdf](http://cdn.americanprogress.org/wp-content/uploads/issues/2009/05/pdf/millennial_generation.pdf)

### **Millennials at Work, PWC**

[http://www.pwc.com/en\\_M1/m1/services/consulting/documents/millennials-at-work.pdf](http://www.pwc.com/en_M1/m1/services/consulting/documents/millennials-at-work.pdf)

### **Marketers Are Sizing Up the Millennials, NY Times**

<http://www.nytimes.com/2014/08/22/business/marketers-are-sizing-up-the-millennials-as-the-new-consumer-model.html>

### **Generation X: America's Neglected 'Middle Child', Pew Research**

<http://www.pewresearch.org/fact-tank/2014/06/05/generation-x-americas-neglected-middle-child/>

### **Baby Boomers Stay Active, and So Do their Doctors, NY Times**

<http://www.nytimes.com/2006/04/16/sports/16boomers.html?pagewanted=all>

### **National Recreation and Parks Association**

<http://www.nrpa.org/10MillionKidsOutdoors/>

**Intuit/Bureau of Labor Statistics Study cited in Fast Company article**

<http://www.fastcompany.com/3049532/the-future-of-work/heres-why-the-freelancer-economy-ison-the-rise>

**Forecasting 2020 U.S. County and MSA Populations, Wharton Zell/Lurie Real Estate Center**

<http://realestate.wharton.upenn.edu/research/papers/full/572.pdf>

**Where Will U.S. Population Growth Occur? A Glimpse at 2020 and 2030, NAI Global**

[http://www.naidesco.com/PDFs/Whitepaper\\_Where\\_Pop\\_Growth\\_2020\\_2030\\_9\\_14.pdf](http://www.naidesco.com/PDFs/Whitepaper_Where_Pop_Growth_2020_2030_9_14.pdf)

[http://craveyrealestate.com/wp-content/uploads/2010/04/Where-Will-Growth-Occur-A-glimpse-at-USA-2020-Whitepaper\\_11\\_08.pdf](http://craveyrealestate.com/wp-content/uploads/2010/04/Where-Will-Growth-Occur-A-glimpse-at-USA-2020-Whitepaper_11_08.pdf)

**Intuit 2020 Report, Twenty Trends That Will Shape The Next Decade**

[http://http-download.intuit.com/http.intuit/CMO/intuit/futureofsmallbusiness/intuit\\_2020\\_report.pdf](http://http-download.intuit.com/http.intuit/CMO/intuit/futureofsmallbusiness/intuit_2020_report.pdf)

**Urban Population Growth, Global Health Observatory**

[http://www.who.int/gho/urban\\_health/situation\\_trends/urban\\_population\\_growth\\_text/en/](http://www.who.int/gho/urban_health/situation_trends/urban_population_growth_text/en/)

**The Biggest U.S. Metro Areas in 2025, NBC News**

[http://www.nbcnews.com/id/31130897/ns/business-local\\_business/t/biggest-us-metro-areas/#.VGUqZ1fF9xt](http://www.nbcnews.com/id/31130897/ns/business-local_business/t/biggest-us-metro-areas/#.VGUqZ1fF9xt)

**Real Estate 2020, Building the Future, PWC**

<http://www.pwc.com/sg/en/real-estate/assets/pwc-real-estate-2020-building-the-future.pdf>

**Growth in Urban Population Outpaces Rest of Nation, Census**

[https://www.census.gov/newsroom/releases/archives/2010\\_census/cb12-50.html](https://www.census.gov/newsroom/releases/archives/2010_census/cb12-50.html)

**Urban Population to Become the New Majority Worldwide, Population Reference Bureau**

<http://www.prb.org/Publications/Articles/2007/UrbanPopToBecomeMajority.aspx>

**The State of Aging & Health in America 2013, CDC**

[http://www.cdc.gov/features/agingandhealth/state\\_of\\_aging\\_and\\_health\\_in\\_america\\_2013.pdf](http://www.cdc.gov/features/agingandhealth/state_of_aging_and_health_in_america_2013.pdf)

**Americans Are Fat, And Expected to Get Much Fatter, NPR**

<http://www.npr.org/blogs/health/2011/11/16/142414818/americans-are-fat-and-expected-to-get-much-fatter>

**Cardiovascular Health Behavior & Health Factor Changes and Projections to 2020**

<http://www.ncbi.nlm.nih.gov/pubmed/22547667>

**F As in Fat: How Obesity Threatens America's Future 2012, Trust for America's Health**

<http://healthyamericans.org/report/100/>

**Healthy People 2020 Objective Data Search**

<http://www.healthypeople.gov/2020/data-search/Search-the-Data>

**Current and Future Prevalence of Obesity and Severe Obesity in the United States**

<http://www.nber.org/papers/w13181>

**2020 Global Food Outlook, International Food Policy Research Institute**

<http://www.ifpri.org/sites/default/files/publications/fpr30.pdf>

**On Track to Getting Even Fatter, Northwestern**

<http://www.northwestern.edu/newscenter/stories/2011/11/heart-health-fatter.html>

**The Great Eight: Trillion-Dollar Growth Trends to 2020, Bain**

[http://www.bain.com/Images/BAIN\\_BRIEF\\_8MacroTrends.pdf](http://www.bain.com/Images/BAIN_BRIEF_8MacroTrends.pdf)

**Consumer 2020, Reading the Signs, Deloitte**

<http://www.deloitte.com/assets/Dcom-Tanzania/Local%20Assets/Documents/Deloitte%20Reports%20-%20Consumer%202020.pdf>

**U.S. Population Projections: 2005-2050, Pew Research**

<http://www.pewhispanic.org/2008/02/11/us-population-projections-2005-2050/>

**Who's Hispanic in America?, Census**

[https://www.census.gov/newsroom/cspan/hispanic/2012.06.22\\_cspan\\_hispanics.pdf](https://www.census.gov/newsroom/cspan/hispanic/2012.06.22_cspan_hispanics.pdf)

**Labor Force Projections to 2020, Bureau of Labor Statistics**

<http://www.bls.gov/opub/mlr/2012/01/art3full.pdf>

**Hispanics in the US, Breaking Down the Numbers**

<http://www.npr.org/templates/story/story.php?storyId=4696640>

**The State of Latinos in the United States**

<https://www.americanprogress.org/issues/race/report/2012/08/08/11984/the-state-of-latinos-in-the-united-states/>

**Census Officials, Citing Increasing Diversity, Say U.S. will be a 'Plurality Nation', NY Times**

[http://www.nytimes.com/2012/12/13/us/us-will-have-no-ethnic-majority-census-finds.html?\\_r=0](http://www.nytimes.com/2012/12/13/us/us-will-have-no-ethnic-majority-census-finds.html?_r=0)

**US Hispanic Population to Triple by 2050, USA Today**

[http://usatoday30.usatoday.com/news/nation/2008-02-11-population-study\\_N.htm](http://usatoday30.usatoday.com/news/nation/2008-02-11-population-study_N.htm)

**Median Age for Hispanics is Lower Than Median Age for Total U.S. Population, Pew Research**

<http://www.pewresearch.org/daily-number/median-age-for-hispanics-is-lower-than-median-age-for-total-u-s-population/>

**Becker Soil & Water Conservation District**  
809 8th St. SE, Detroit Lakes, MN 56501  
(218)846-7360



## **Wannigan Park Natural Resource Native Planting**

Prepared by: Marsha Watland & Bryan Malone Becker SWCD



November 4, 2021

## **Wannigan Park Natural Resources Proposed Funding Resources for Native Planting**

### **Land Management Strategic Goals When Land is Purchased**

Goal 2: Restore Natural Spaces to improve wildlife corridors and habitat connectivity.

Objective 2.1: Protect natural areas within 50 ft. of the Otter Tail River

Objective 2.2: Protect wetland areas within the park boundary, prevent access from trails into wetlands.

Objective 2.3: Enhance and develop natural areas with native plants and pollinators

2021 Planted Soybean Acres:  $23.5 + 28.5 + 5 + 8.5 = 65.8$  Acres

### **Site Evaluation: Presented in General Overview of Property**

1. Before construction verify if there are any native stands remaining and mark sites for preservation.
2. The Pre-settlement vegetation of the Hardwood Hills Ecological Subsection include landscapes characterized by maple basswood forests interspersed with oak savannas, tall grass prairies and Oak forests. The site is well set for Hardwood Hills Ecological Subsection on east side of Otter Tail River and establishing tall grass prairies on the west side.
3. Prairie grass and forbs will be collected from native sites in the surrounding region. Becker County also has two native seed collection businesses that could be utilized. FWS collect their seed from native sites in the region.
4. Phase 1:
  - Prepare and seed 3 wetland areas for native planting with FWS native seed harvest
  - Plant soybean fields (Appendix 3: Section A, B & D) into cool season grass and alfalfa for haying that could provide income (Appendix 6). Plant native grass after camping areas is established (Appendix 8).
  - Plant native tree and shrub buffer as shown in (Appendix 3: Section E and Appendix 5).
  - Native grass & forb planting in Oak Savannah area on east side of river (Appendix 4).
  - Plant butterfly and pollinator gardens by observation points.
  - Appendix 10, 11, and 12 show grass and forb species that may be in collection along with cool season species that will need to be purchased for FWS projects.
  - Tree & Shrub plant estimate (Appendix 13)

5. Following Phases: Establishment of Interpretive Center & Amphitheater, Camping Sites and Trails. Incorporate additional native plants along trails in addition to Butterfly Gardens and Bird Observation areas.

### **Native Planting Costs Estimates:**

- On the low end of species diversity, you could expect to pay around \$150/ac. That would include seed and a vendor to seed it. Any additional site preparation would be extra (tillage, herbicide, etc.) and extra expense.
- For more diverse seedings (40+ species), which should be the goal for a site like this, you will be in the range of \$300-\$500/ac for seed and seeding.
- Seedbed preparation will need to be determined. (Ex: tilling, burning and clipping)

### **Possible Financial Assistance Through Grants:**

1. NRCS: Natural Resource Conservation Service-Federal
  - CRP is only available for private landowners not for public owned property. If property is enrolled prior to the City of Frazee purchasing property the contract would be cancelled and city would be required to reimburse Farm Service Agency 100% of CRP expenses plus liquidated damages.
  - Assist with specie selection for seed mixes.
  - (Appendix 3: Section A, B and D) Establish cool season grasses and legumes to provide soil cover and to reduce erosion. May be used for haying to provide funds to improve and maintain livestock/wildlife nutrition and to provide funds.
  - Cost estimate for grass and legume mixture: (Appendix 5 & 6)
2. MN DNR + Becker SWCD: Clean Water, Land and Legacy Outdoor Heritage Fund, Conservation Partners Legacy (CPL) Program
  - MN has one of the few programs like this in the US
  - Geared for projects such as Wannigan Park (must be public ownership or permanent easement)
  - Example: Sucker Creek Native Planting Area project
  - 10-15% Match
  - After Campsites and Interpretive Center are established: Seed the Tall Native Grass Prairie into areas that were established to grass/legumes: refer to Appendix 3: Section A, B and D and Appendix 7 & 8
3. Shoreline Area
  - DNR grants
  - Becker SWCD Shoreline program possible 75 percent match for shoreline restoration projects.

4. Rain Gardens

- Becker SWCD Shoreline program possible 75 percent match to create rain gardens.

5. USFWS-Detroit Lakes Office

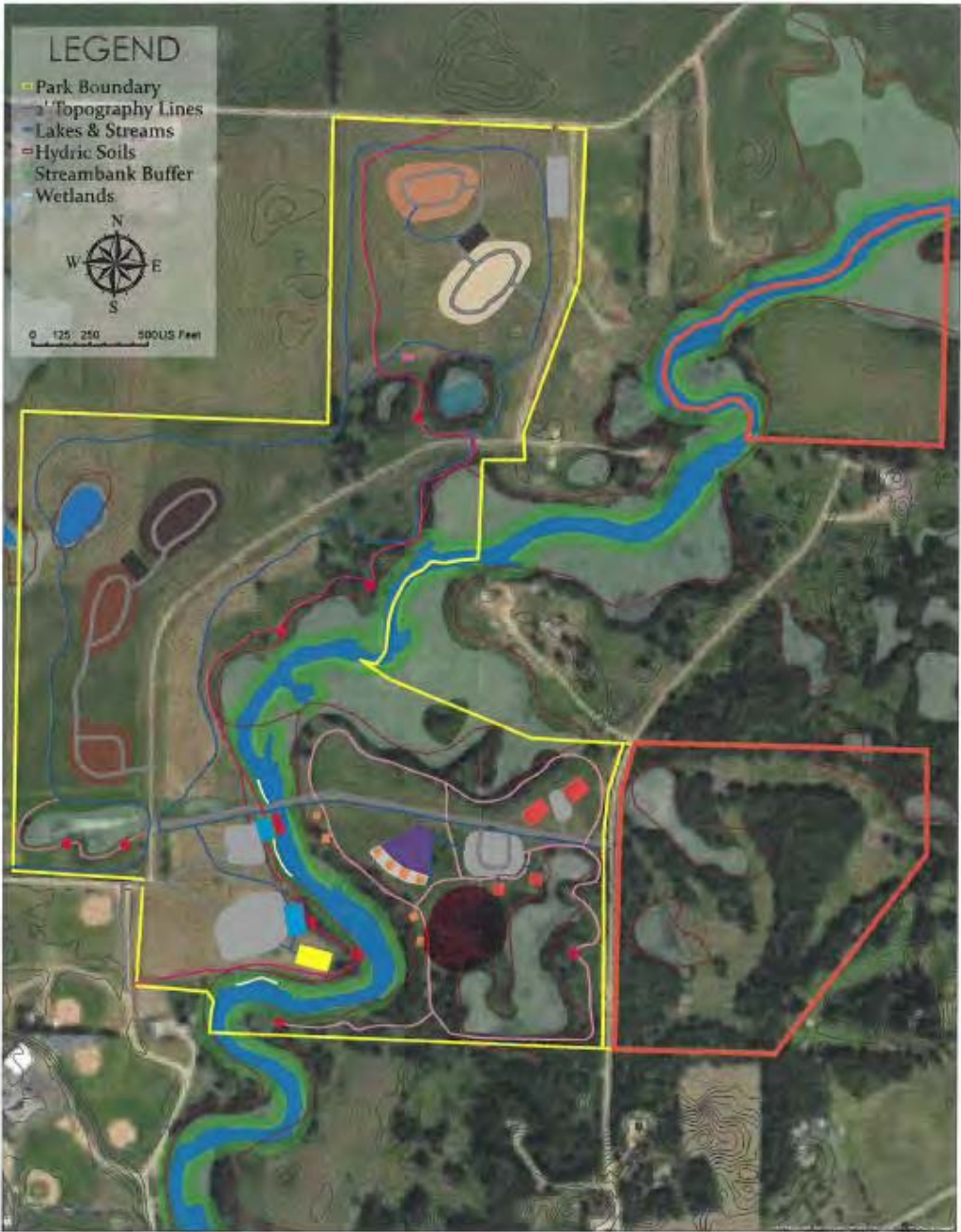
- Can provide plant material: FWS harvest native grass & forb seed from local ecosystems every fall. The 2021 harvest is excellent for mesic area and upland area is good.
- Additional seed will need to be purchased for spring blooming native forbs for the areas that are not supplied by FWS seed mix.
- Wetland and Savannah Area: refer to Appendix 4 for Wetland and Savannah Area
- LSOHC and Federal Funding: Upland (Savannah) planting \$400/acre for seed & labor (Appendix 3: Section C)
- Federal Funding: Wetland planting \$1000/acre for seed and labor (Appendix 4: 3 - Wetland Plantings).

6. BWSR- Becker SWCD

- Otter Tail Comprehensive Watershed Management Plan (AKA 1WIP)
- Plan will not be complete until 2023
- There may be cost share available to establish buffer along Otter Tail River. Native plantings, and shoreline restoration that could possibly fit the water quality protection and restoration goals of the Comprehensive Watershed Management Plan.
- Native Tree & Shrub Planting Site. Becker SWCD can provide a planting plan, trees, cost estimate and possible planting. The SWCD sells tree and has a tree planting service. (Appendix 3: Part E)



# Wannigan Park Revised Concept Plan 3-10-21



**LEGEND**

- Park Boundary
- Topography Lines
- Lakes & Streams
- Hydric Soils
- Streambank Buffer
- Wetlands

0 125 250 500 US Feet

- |                           |                           |                                       |                                |
|---------------------------|---------------------------|---------------------------------------|--------------------------------|
| ■ Amphitheater            | ■ Camping                 | — Trails                              | — Park Roads                   |
| ■ Hard Surface Patio      | ■ RV--Seasonal            | — Paved Trails                        | ■ Canoe/Kayak Launch Area      |
| ■ Picnic Shelters         | ■ RV--Short Term          | — North Country National Scenic Trail | ■ Interpretive Center          |
| ■ Removable Picnic Tables | ■ Tent Camping            | — Natural Surface Trails              | ■ 1836 House                   |
| ■ Parking Lots            | ■ Group Camping           | □ Boardwalk                           | ★ Observation Points/Overlooks |
|                           | ■ Restroom/Shower/Shelter | ■ Trailhead Area                      | □ Shore Fishing Areas          |
|                           |                           |                                       | ■ Potential Future Expansion   |
- \*Note: Elements are not to scale



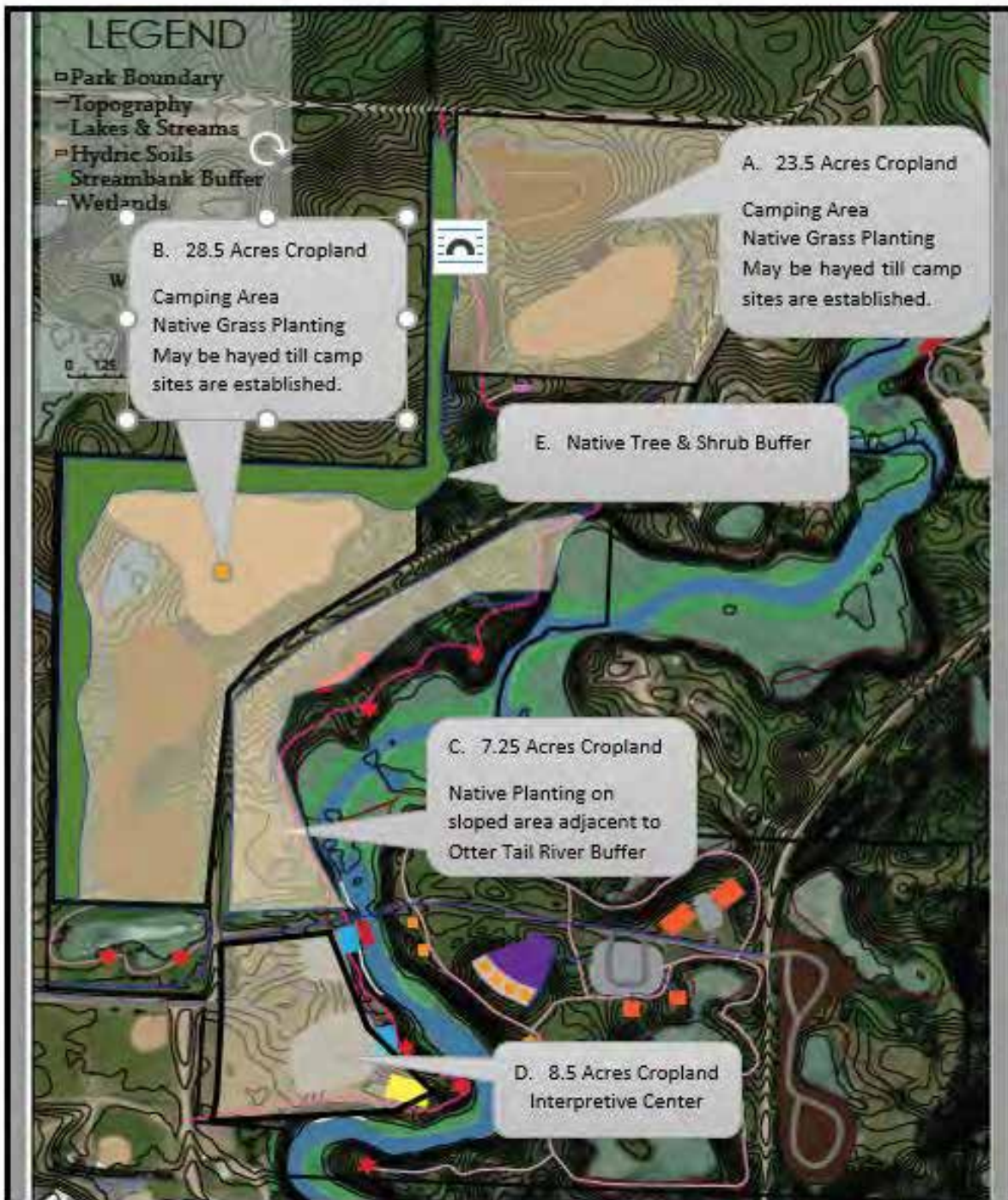
2021 Soybean Planting: Wannigan Phase 1 Planting

Appendix 2





## Wannigan Park Native Planting Phase 1

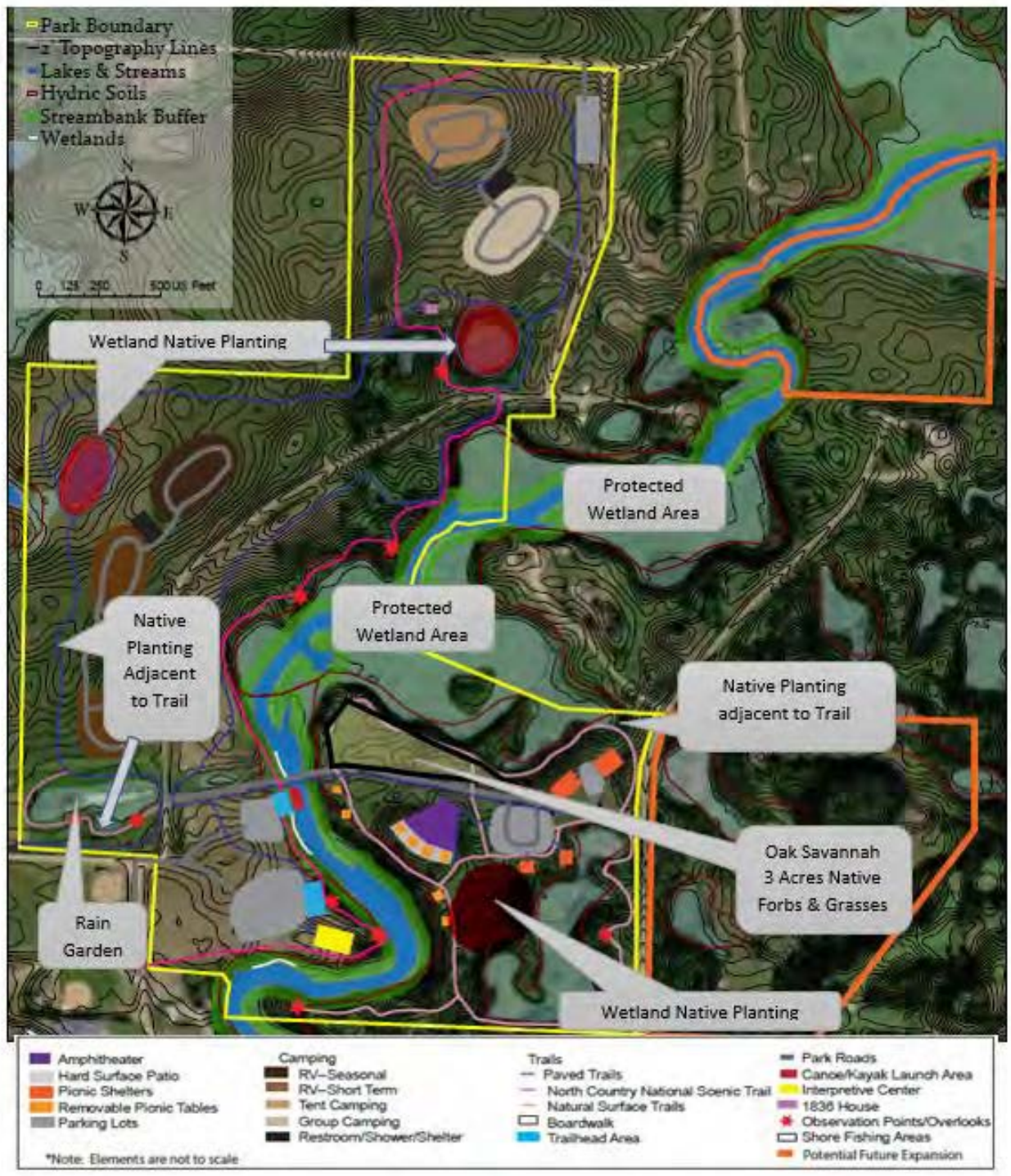


Cropped Soybean Area: Request for native planting cost-acre seeding and preparation.

- Camping and general use Establish a dry native grass mixture: A. + B. + D.
- Native area with more diverse species: C.
- Native Tree and Shrub Buffer: E



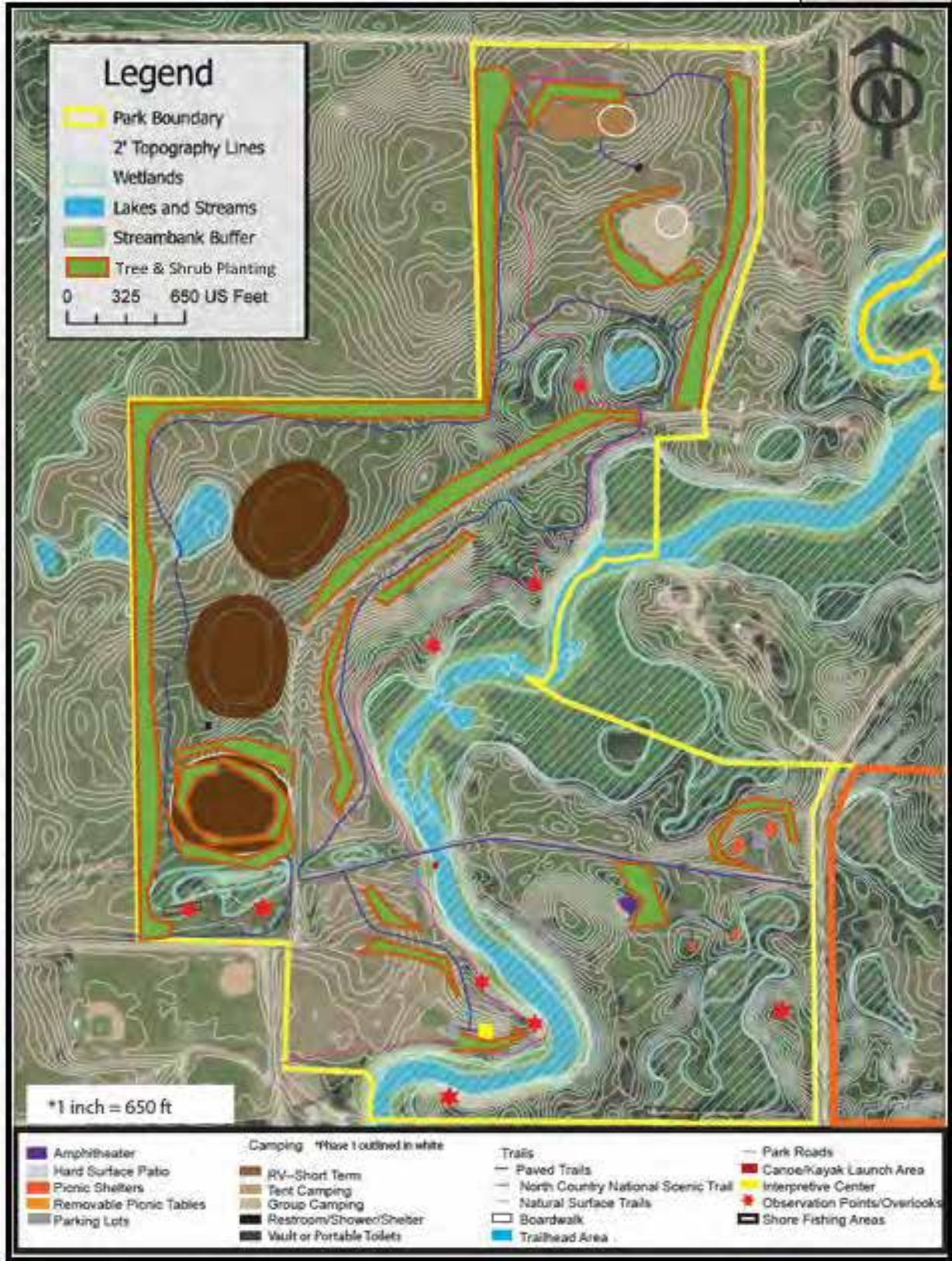
### Wannigan Park Proposed Native Plantings Phase 1 November 4, 2021





# Wannigan Park Native Tree & Shrub Planting Phase 1

Appendix 5



Practice: 512 - Pasture and Hay Planting

Scenario: #5 - Cool Season

**Scenario Description:**

Establish or reseed adapted perennial introduced cool season grasses and legumes to improve or maintain livestock/wildlife nutrition and health, extend the length of the grazing season, and provide soil cover to reduce erosion. Used for either conventional or no-till seeding of perennial introduced cool season grasses for pasture, hayland, and wildlife openings. This practice may be utilized for organic or regular production. This scenario assumes fertilizer, seed, equipment and labor for seed bed prep, tillage, seeding, and spreading.

**Before Situation:**

Poor or nonexistent stand of grass species. Resource concerns may include undesirable plant productivity and health, inadequate feed and forage for livestock, soil erosion and soil quality.

**After Situation:**

Suitable species are established to improve forage quality and quantity and reduce soil erosion on cropland, hayland, pasture, and/or biomass production.

Feature Measure: Acres of Forage and Biomass Plant

Scenario Unit: Acres

Scenario Typical Size: 30.0

Scenario Total Cost: \$5,400.54

Scenario Cost/Unit: \$180.02

**Cost Details:**

Component Name	QTY	Description	Unit	Cost	QTY	Total
<b>Equipment Installation</b>						
Tillage, Light	945	Includes light disking (tandem) or field cultivator. Includes equipment, power unit and labor costs.	Acres	\$10.52	30	\$315.60
Chemical, ground application	948	Chemical application performed by ground equipment. Includes equipment, power unit and labor costs.	Acres	\$5.83	30	\$174.90
Fertilizer, ground application, dry bulk	950	Dry bulk fertilizer application performed by ground equipment. Includes equipment, power unit and labor costs.	Acres	\$6.67	30	\$200.10
Seeding Operation, No Till/Grass Drill	960	No Till drill or grass drill for seeding. Includes equipment, power unit and labor costs.	Acres	\$21.60	30	\$648.00
<b>Materials</b>						
Nitrogen (N), Ammonium Nitrate	69	Price per pound of N supplied by Ammonium Nitrate. Price is not per pound of total product applied, no conversion is needed.	Pound	\$0.52	1200	\$624.00
Phosphorus, P2O5	73	Price per pound of P2O5 supplied by Superphosphate. Price is not per pound of total product applied, no conversion is needed.	Pound	\$0.39	1500	\$585.00
Potassium, K2O	74	K2O supplied by Muriate Of Potash. Price is not per pound of total product applied, no conversion is needed.	Pound	\$0.33	1500	\$495.00
Lime, ENM	75	Fertilizer: Limestone Spread on field.	Ton	\$16.24	60	\$974.40
Test, Soil Test, Standard	299	Includes materials, shipping, labor, and equipment costs.	Each	\$11.76	1	\$11.76
Herbicide, Glyphosate	334	A broad-spectrum, non-selective systemic herbicide. Refer to WIN-PST for product names and active ingredients. Includes materials and shipping only.	Acres	\$9.21	30	\$276.30
Introduced Perennial Grasses, Legumes and/or Forbs, Low Density	2747	Introduced perennial grasses, legumes, and/or forbs, may include a small percentage of annual species for establishment purposes and/or if allowed by the CPS. Planted at lower to medium density (40 pure live seeds/sq ft and less). Includes material and shipping.	Acres	\$30.75	30	\$922.50
<b>Mobilization</b>						
Mobilization, small equipment	1130	Equipment <70 HP but can't be transported by a pick-up truck or with typical weights between 3,500 to 14,000 pounds.	Each	\$172.98	1	\$172.98





### Seed Plan and Record

Date: 10/29/2021 Paddock/Field No: CAMPING AREAS  
 Cooperator: Wannigan Park Conservationist: \_\_\_\_\_  
 Program: \_\_\_\_\_ Practice No: \_\_\_\_\_ Practice Name: \_\_\_\_\_

**Approved Planting Dates:**  
 North: Cool Season Grasses & Legumes -  
 April 1 to June 15 OR July 15 to September 1

Forage Suitability Group(s) Somewhat Excessively Drained

The following seed mix is intended for:					Hay	Planned Acres
Species	Variety	Seeds/Sq ft	PLS Rate Planned / ac	Total lbs PLS		
Intermediate Wheatgrass	Revenue	20.2	10.0			
Alfalfa	Recommended	70.7	14.0		<b>Total PLS lbs of Mix</b>	
					<b>Total Seeds /Sq ft</b>	
					<b>90.9</b>	
OTHER						
OTHER						
OTHER						
		90.9	24.0			

**Disclaimer:** Any deviation from this plan needs approval prior to seeding to be eligible for cost-share through a government program.

PLS = Pure Live Seed. All seeding rates are calculated based on PLS. Total bulk lbs PLS needed = Pounds PLS / % purity / (%germination + % hard seed)

**Companion Crop**

*Companion Crop Notes*

Fertilizer Requirements		
Fertilizer	Rate per acre	Total lbs needed:
Phosphorous (P <sub>2</sub> O <sub>5</sub> )		
Potash (K <sub>2</sub> O)		

*Fertilizer Application Notes*

**NEED SOILS TEST PRIOR TO SEEDING**

Practice: 327 - Conservation Cover

Scenario: #43 - Native Species with Forgone Income

**Scenario Description:**

This practice applies on conventional or organically managed land needing permanent protective cover. This practice typically involves conversion from an intensive cropping system to permanent native vegetation (scenario includes native grass/legume mix). The typical size of the practice is 50 acres. This practice scenario is typically used to reduce soil erosion, reduce soil quality degradation, improve water quality, develop wildlife habitat, and reduce air quality impacts. Applies to conventional or organic systems.

**Before Situation:**

Crops such as vegetables and small fruit crops may be conventionally or organically grown and harvested. Full width tillage is utilized, weeds controlled mainly by cultivation. Soil surface residue amounts average 10% or less. Soil erosion exceeds tolerable rates and sediment may be moving offsite into surface water degrading water quality. Soil quality (soil organic matter) declines over time as a result of tillage practices, low residue, and long periods of bare soil. Air quality may be impacted during field operations by the creation of particulates. The system provides little to no wildlife habitat.

**After Situation:**

The 327 Implementation Requirements have been developed for the site and applied. Managed land covered with permanent native grass/legume mix vegetation has reduced soil erosion, reduced water/sediment runoff, and improved air quality due to the elimination of dust emissions. Plants sown for conservation cover may provide cover for beneficial insects and wildlife. This scenario does not apply to plantings for forage production or to critical area plantings.

Feature Measure: Area planted

Scenario Unit: Acres

Scenario Typical Size: 50.0

Scenario Total Cost: \$23,494.50

Scenario Cost/Unit: \$469.89

**Cost Details:**

Component Name	ID	Description	Unit	Cost	QTY	Total
<b>Equipment Installation</b>						
Tillage, Light	945	Includes light disking (tandem) or field cultivator. Includes equipment, power unit and labor costs.	Acres	\$10.52	150	\$1,578.00
Mechanical weed control, Vegetation termination	957	Mechanical operations, Includes: Roller/crimper, mower, shredder, etc. Includes equipment, power unit and labor costs.	Acres	\$20.58	100	\$2,058.00
Seeding Operation, No Till/Grass Drill	960	No Till drill or grass drill for seeding. Includes equipment, power unit and labor costs.	Acres	\$21.60	50	\$1,080.00

**Foregone Income**

--	--	--	--	--	--	--

**Materials**

Native Perennial Grasses, Low Density	2750	Native perennial grasses, may include a small percentage of annual species for establishment purposes and/or if allowed by the CPS. Planted at lower to medium density (40 pure live seeds/sq ft and less). Includes material and shipping.	Acres	\$111.33	50	\$5,566.50
---------------------------------------	------	---	-------	----------	----	------------

## Seeding Plan

Name WANNIGAN PARK  
 Prepared by NATIVE PLANTINGS

Type of Seeding: CRP CP-38 SAFE      Field Area (acres):

### Seeding Mix Summary 643 TALLGRASS PRAIRIE

Grasses/ Sedges	Common Name	Scientific Name	PLS Lbs/Acre	PLS Lbs
1	Big Bluestem	Andropogon gerardii	1.00	
2	Indiangrass	Sorghastrum nutans	1.00	
3	Little Bluestem	Schizachyrium scoparium	0.55	
4	Sideoats Grama	Bouteloua curtipendula	1.80	
5	Switchgrass	Panicum virgatum	0.05	
6	Slender Wheatgrass	Agropyron caninum	0.70	
7	Western Wheatgrass	Agropyron smithii	0.90	

**SUBTOTAL GRASS/SEDGE**      **6.00**  
**DRILLED RATE<sup>1</sup>**

Forbs/ Legumes	Common Name	Scientific Name	PLS Oz/Acre	PLS Oz	PLS Lbs
1	Culvers Root	Veronicastrum virginicum	0.10		
2	Prairie Cinquefoil	Potentilla arguta	0.20		
3	Canada Milkvetch	Astragalus canadensis	0.10		
4	Evening Primrose	Oenothera biennis	1.60		
5	Hoary Vervain	Verbena stricta	0.05		
6	Leadplant	Amorpha canescens	0.05		
7	Long-headed Coneflower	Ratibida columnifera	3.50		
8	Common Ox-eye	Heliopsis helianthoides	0.05		
9	Golden Alexanders	Zizia aurea	0.05		
10	Wild Bergamot	Monarda fistulosa	0.05		
11	Yellow Coneflower	Ratibida pinnata	0.05		
12	Blue Vervain	Verbena hastata	0.05		
13	Anise Hyssop	Agastache foeniculum	0.05		
14	Black-eyed Susan	Rudbeckia hirta	1.50		
15	Common Milkweed	Asclepias syriaca	0.10		
16	Purple Prairie Clover	Petalostemum purpureum	8.00		
17	Maximilian Sunflower	Helianthus maximiliani	0.05		
18	Stiff Goldenrod	Solidago rigida	0.05		
19	White Prairie Clover	Petalostemum candidum	0.10		

**SUBTOTAL FORBS**      **15.70**  
**DRILLED RATE<sup>1</sup>**

**1/ Broadcast seeding rate is 1.5 times the drilled rate.**

#### Seeding Dates

Native Grasses and Forbs: Statewide 5/15 - 6/30

#### Seeding Method and Seedbed Preparation

Conventional or no-till drill into prepared seedbed: Seedbed should be tilled and clean of all vegetation and weeds, packed and firm enough to make a 1/2" or less boot imprint.

#### Companion Crop

None

**Fertilizer is Only Recommended For Introduced Grass or Grass/Legume Mixtures**





### MNL Pollinator Mix Dry to Mesic Soils

8740 77th Street NE Otsego, MN 55362

Mix approved by the Xerces Society for Pollinator habitat enhancement and restoration.  
For dry and well-drained to mesic soils. Height 2-3'

	Scientific Name	Common Name	% of Mix	Seeds/Sq Ft	PLS lbs/ac	Bloom Season
<b>Grasses:</b>	<i>Bouteloua curtipendula</i>	Side-Oats Grama	16.75	6.12	1.68	
	<i>Bouteloua gracilis</i>	Blue Grama	4.00	5.88	0.40	
	<i>Bromus kalmii</i>	Prairie Brome	3.00	0.88	0.30	
	<i>Elymus trachycaulus</i>	Slender Wheat Grass	2.00	0.51	0.20	
	<i>Koeleria macrantha</i>	Junegrass	0.25	1.61	0.03	
	<i>Schizachyrium scoparium</i>	Little Bluestem	16.00	8.82	1.60	
	<i>Sporobolus heterolepis</i>	Prairie Dropseed	2.00	1.18	0.20	
<b>Sedges/Rushes:</b>	<i>Carex bicknellii</i>	Bicknell's Sedge	1.00	0.62	0.10	
<b>Forbs:</b>	<i>Achillea millefolium</i>	Yarrow	0.20	1.29	0.02	Summer
	<i>Agastache foeniculum</i>	Fragrant Giant Hyssop	0.60	1.98	0.06	Summer
	<i>Allium stellatum</i>	Prairie Onion	0.60	0.24	0.06	Summer
	<i>Amorpha canescens</i>	Leadplant	3.00	1.76	0.30	Summer
	<i>Anemone canadensis</i>	Canada Anemone	0.75	0.22	0.08	Spring
	<i>Asclepias syriaca</i>	Common Milkweed	1.75	0.26	0.18	Summer
	<i>Asclepias tuberosa</i>	Butterfly Milkweed	1.50	0.24	0.15	Summer
	<i>Astragalus canadensis</i>	Canada Milk Vetch	2.00	1.25	0.20	Summer
	<i>Baptisia alba</i>	White Wild Indigo	0.80	0.05	0.08	Spring
	<i>Chamaecrista fasciculata</i>	Partridge Pea	7.00	0.69	0.70	Fall
	<i>Coreopsis palmata</i>	Prairie Coreopsis	0.25	0.09	0.03	Summer
	<i>Dalea candida</i>	White Prairie Clover	5.00	3.49	0.50	Summer
	<i>Dalea purpurea</i>	Purple Prairie Clover	7.50	4.13	0.75	Summer
	<i>Desmodium canadense</i>	Canada Tick Trefoil	4.25	0.86	0.43	Summer
	<i>Echinacea angustifolia</i>	Narrow-leaved Coneflower	1.50	0.39	0.15	Summer
	<i>Heliopsis helianthoides</i>	Common Ox-Eye	4.00	0.93	0.40	Summer
	<i>Helianthus pauciflorus</i>	Stiff Sunflower	0.25	0.04	0.03	Fall
	<i>Lespedeza capitata</i>	Round-headed Bushclover	1.25	0.37	0.13	Summer
	<i>Liatris punctata</i>	Dotted Blazing Star	1.00	0.26	0.10	Summer
	<i>Lupinus perennis</i>	Wild Lupine	0.75	0.03	0.08	Spring
	<i>Monarda fistulosa</i>	Wild Bergamot	0.60	1.54	0.06	Summer
	<i>Monarda punctata</i>	Spotted Bee Balm	0.15	0.50	0.02	Summer
	<i>Penstemon gracilis</i>	Slender Beardtongue	0.15	3.31	0.02	Spring
	<i>Penstemon grandiflorus</i>	Showy Penstemon	0.75	0.39	0.08	Spring
	<i>Pycnanthemum virginianum</i>	Mountain Mint	0.20	1.62	0.02	Summer
	<i>Ratibida columnifera</i>	Long-Headed Coneflower	1.25	1.93	0.13	Summer
	<i>Rudbeckia hirta</i>	Black Eyed Susan	1.80	6.08	0.18	Summer
	<i>Solidago ptarmicoides</i>	Upland Goldenrod	0.15	0.35	0.02	Fall
	<i>Solidago speciosa</i>	Showy Goldenrod	0.25	0.87	0.03	Fall
	<i>Symphotrichum laeve</i>	Smooth Blue Aster	1.00	2.02	0.10	Fall
	<i>Symphotrichum oolentangiense</i>	Sky Blue Aster	1.65	4.85	0.17	Fall
	<i>Tradescantia ohiensis</i>	Ohio Spiderwort	0.50	0.15	0.05	Spring
	<i>Verbena stricta</i>	Hoary Vervain	1.50	1.54	0.15	Summer
	<i>Zizia aptera</i>	Heart-leaf Golden Alexanders	0.20	0.09	0.02	Spring
	<i>Zizia aurea</i>	Golden Alexanders	0.90	0.36	0.09	Spring
			100.00	69.76	10.00	
Seeds/sq ft:	70.00					
Grass Species:	7					
Sedges/Rush Sp:	1					
Forb Species:	35					



**MNL Pollinator Mix  
Wet Mesic Soils**

8740 77th Street NE Otsego, MN 55362

Mix approved by the Xerces Society for Pollinator habitat enhancement and restoration.  
For wet mesic soil sites, height 2-6'

	Scientific Name	Common Name	% of Mix	Seeds/ Sq Ft	PLS lbs/ac	Bloom Season
<b>Grasses:</b>	Andropogon gerardii	Big Bluestem	7.00	2.06	0.56	
	Calamagrostis canadensis	Blue-Joint Grass	0.75	6.17	0.06	
	Elymus virginicus	Virginia Wild Rye	13.00	1.60	1.04	
	Glyceria grandis	Reed Manna Grass	2.50	5.14	0.20	
	Glyceria striata	Fowl Manna Grass	1.00	2.64	0.08	
	Panicum virgatum	Switchgrass	4.00	1.65	0.32	
	Sorghastrum nutans	Indian Grass	9.00	3.17	0.72	
	Spartina pectinata	Prairie Cord Grass	7.00	1.36	0.56	
<b>Sedges/Rushes:</b>	Carex scoparia	Broom Sedge	1.50	3.70	0.12	
	Carex stipata	Common Fox Sedge	1.35	1.35	0.11	
	Carex vulpinoidea	Fox Sedge	2.50	5.95	0.20	
	Scirpus atrovirens	Green Bulrush	0.20	2.70	0.02	
	Scirpus cyperinus	Woolgrass	0.20	9.99	0.02	
<b>Forbs:</b>	Anemone canadensis	Canada Anemone	0.75	0.18	0.06	Spring
	Asclepias incarnata	Swamp Milkweed	7.00	0.99	0.56	Summer
	Asclepias syriaca	Common Milkweed	2.25	0.26	0.18	Summer
	Bidens cernua	Nodding Bur Marigold	0.50	0.31	0.04	Summer
	Chamerion angustifolium	Fireweed	0.15	2.20	0.01	Summer
	Desmodium canadense	Canada Tick Trefoil	4.00	0.65	0.32	Summer
	Eupatorium perfoliatum	Boneset	0.50	2.35	0.04	Fall
	Eutrochium maculatum	Joe-Pye Weed	1.10	3.07	0.09	Summer
	Helenium autumnale	Sneezeweed	0.50	1.91	0.04	Fall
	Helianthus maximiliani	Maximillian's Sunflower	0.45	0.17	0.04	Fall
	Iris versicolor	Northern Blue Flag Iris	1.50	0.06	0.12	Spring
	Liatris ligulistylis	Meadow Blazing Star	1.00	0.29	0.08	Summer
	Liatris pycnostachya	Prairie Blazing Star	2.50	0.81	0.20	Summer
	Lobelia siphilitica	Great Blue Lobelia	0.25	3.67	0.02	Summer
	Lythrum alatum	Winged Loosestrife	0.30	8.33	0.02	Summer
	Mimulus ringens	Monkey Flower	0.30	20.28	0.02	Summer
	Monarda fistulosa	Wild Bergamot	1.00	2.06	0.08	Summer
	Pycnanthemum virginianum	Mountain Mint	0.25	1.62	0.02	Summer
	Ratibida pinnata	Yellow Coneflower	3.00	2.64	0.24	Summer
	Rudbeckia hirta	Black Eyed Susan	4.00	10.81	0.32	Summer
	Silphium perfoliatum	Cup Plant	6.00	0.25	0.48	Summer
	Solidago rigida	Stiff Goldenrod	2.50	3.01	0.20	Fall
	Symphyotrichum novae-angliae	New England Aster	2.25	4.36	0.18	Fall
	Thalictrum dasycarpum	Purple Meadow Rue	1.25	0.73	0.10	Summer
	Verbena hastata	Blue Vervain	2.00	5.47	0.16	Summer
	Vernonia fasciculata	Ironweed	2.50	1.76	0.20	Summer
	Veronicastrum virginicum	Culver's Root	0.20	4.70	0.02	Summer
	Zizia aurea	Golden Alexanders	2.00	0.65	0.16	Spring
			100.00	131.09	8.00	
Seeds/sq ft:	313.00					
Grass Species:	8					
Sedges/Rush Sp:	5					
Forb Species:	28					



### MNL Savanna Mix Mixed Height

8740 77th Street NE Otsego, MN 55362

Great mix for part-sun oak savanna and woodland edge sites  
with 25-50% tree cover. Height 3-6'

	Scientific Name	Common Name	% of Mix	Seeds/ Sq Ft	PLS lbs/ac	Bloom Season
<b>Grasses:</b>	<i>Andropogon gerardii</i>	Big Bluestem	5.00	2.20	0.60	
	<i>Bouteloua curtipendula</i>	Side-Oats Grama	12.00	5.26	1.44	
	<i>Bromus kalmii</i>	Prairie Brome	3.00	1.06	0.36	
	<i>Elymus hystrix</i>	Bottlebrush Grass	6.00	2.01	0.72	
	<i>Elymus villosus</i>	Silky Wild Rye	10.00	2.42	1.20	
	<i>Elymus virginicus</i>	Virginia Wild Rye	9.00	1.67	1.08	
	<i>Koeleria macrantha</i>	Junegrass	0.25	1.93	0.03	
	<i>Schizachyrium scoparium</i>	Little Bluestem	15.00	9.92	1.80	
	<i>Sorghastrum nutans</i>	Indian Grass	10.00	5.29	1.20	
<b>Sedges/Rushes:</b>	<i>Carex bicknellii</i>	Bicknell's Sedge	2.25	1.69	0.27	
	<i>Carex blanda</i>	Eastern Woodland Sedge	1.50	0.83	0.18	
	<i>Carex molesta</i>	Field Oval Sedge	2.25	2.48	0.27	
	<i>Carex sprengei</i>	Long-Beaked Sedge	3.75	1.65	0.45	
<b>Forbs:</b>	<i>Achillea millefolium</i>	Yarrow	0.15	1.16	0.02	Summer
	<i>Agastache foeniculum</i>	Fragrant Giant Hyssop	0.35	1.39	0.04	Summer
	<i>Allium stellatum</i>	Prairie Onion	0.10	0.05	0.01	Summer
	<i>Amorpha canescens</i>	Leadplant	0.50	0.35	0.06	Summer
	<i>Anemone canadensis</i>	Canada Anemone	0.25	0.09	0.03	Spring
	<i>Aquilegia canadensis</i>	Columbine	0.25	0.42	0.03	Spring
	<i>Asclepias syriaca</i>	Common Milkweed	1.25	0.22	0.15	Summer
	<i>Ceanothus americanus</i>	New Jersey Tea	0.50	0.17	0.06	Summer
	<i>Chamerion angustifolium</i>	Fireweed	0.10	2.20	0.01	Summer
	<i>Dalea purpurea</i>	Purple Prairie Clover	3.50	2.31	0.42	Summer
	<i>Desmodium canadense</i>	Canada Tick Trefoil	2.50	0.61	0.30	Summer
	<i>Helianthus maximiliani</i>	Maximilian's Sunflower	0.50	0.29	0.06	Fall
	<i>Lespedeza capitata</i>	Round-headed Bushclover	1.50	0.53	0.18	Summer
	<i>Liatris punctata</i>	Dotted Blazing Star	0.25	0.08	0.03	Summer
	<i>Lupinus perennis</i>	Wild Lupine	0.50	0.02	0.06	Spring
	<i>Monarda fistulosa</i>	Wild Bergamot	0.60	1.85	0.07	Summer
	<i>Oenothera biennis</i>	Common Evening Primrose	0.75	2.98	0.09	Fall
	<i>Rosa arkansana</i>	Prairie Rose	0.25	0.01	0.03	Summer
	<i>Rudbeckia hirta</i>	Black Eyed Susan	1.20	4.87	0.14	Summer
	<i>Rudbeckia triloba</i>	Brown-Eyed Susan	1.25	1.87	0.15	Summer
	<i>Solidago ptarmicoides</i>	Upland Goldenrod	0.25	0.71	0.03	Fall
	<i>Solidago rigida</i>	Stiff Goldenrod	1.00	1.81	0.12	Fall
	<i>Symphotrichum oolentangiense</i>	Sky Blue Aster	1.00	3.53	0.12	Fall
	<i>Verbena stricta</i>	Hoary Vervain	0.75	0.93	0.09	Summer
	<i>Veronicastrum virginicum</i>	Culver's Root	0.15	5.29	0.02	Summer
	<i>Zizia aurea</i>	Golden Alexanders	0.60	0.29	0.07	Spring
			100.00	72.41	12.00	
Seeds/sq ft:	72.00					
Grass Species:	9					
Sedge/Rush Species:	2					
Forb Species:	26					

**Becker SWCD Tree & Shrub Cost Estimate**

75 Norway Pine Bare Root Transplants	\$150
75 Norway Pine Potted	
50 White Pine Bare Root Transplants	\$100
75 Bur Oak Bare Root Transplants	\$150
700 Shrubs Bare Root Transplants	\$1400
75 Tree Tubes for Oaks	\$300
75 Tree Stakes for Tubes	\$75
8 Bags of Mycorrhiza Soil Treatment	\$64

- Mycorrhiza is a beneficial fungus used in soils that have been farmed or have grass and forb structure with no trees. Improves uptake of water and nutrients by attaching to root structure of trees and shrubs. Mycorrhizal fungi attack pathogens or disease organisms entering the root zone.

Fabric Mulch Squares for planting trees	\$300
---	-------

**Hand Planting Rates & Setup**

Set-up/Staking Fee.....	\$200.00
Bareroot Trees.....	\$2.00/tree

### **Natural Resource Participants in Development of Wannigan Park**

Marsha Watland: Becker Soil and Water Conservation District, Wannigan Committee

Dan McLaughlin: Becker County Natural Resources, Wannigan Committee

Rebecca Esser: US Fish and Wildlife Service Wildlife Biologist Detroit Lakes WMD

Ed Clem: Becker Soil and Water Conservation District- Soil Evaluation

Phil Doll: Becker Soil and Water Conservation District- Private Lands Biologist-Vegetation Survey and

Bryan Malone: Becker Soil and Water Conservation District Administrator

Ed Musielewicz: Natural Resource Conservation Service District Conservationist

Shawn May: US Fish and Wildlife Service Partners in Wildlife Biologist-Detroit Lakes WMD