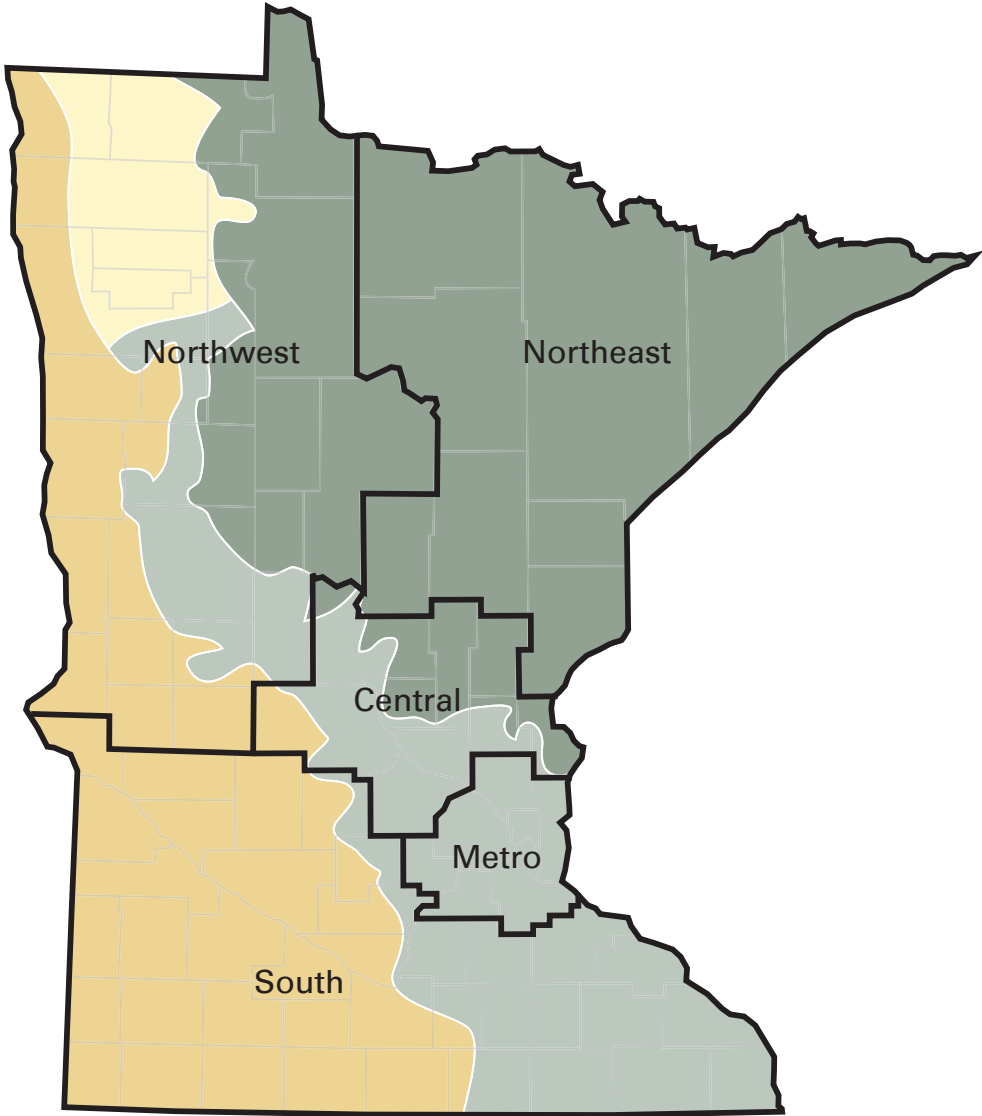


Minnesota's Network of Parks & Trails

An Inventory of Recreation Experience
Opportunities in Minnesota:

Metro Region Profile



Final Report

by

Mae Davenport, Ph.D.
Ingrid Schneider, Ph.D.
Andrea Date, M.S.
Lisa Filter

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COLLEGE OF DESIGN
Department of Forest Resources
College of Food, Agricultural
and Natural Resource Sciences
UNIVERSITY OF MINNESOTA

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Introduction

The University of Minnesota's Center for Changing Landscapes (CCL) was directed by the Minnesota Legislature to create a long-range framework for an integrated statewide parks and trails system. The framework considers existing science and information available on the natural resource-based recreation opportunities throughout the state and will guide statewide parks and trail planning into the future. Specifically, the framework will respond to recreation trends and demographic changes, examine underserved areas and overused facilities, and will identify gaps in the current parks and trails system. As such, the framework will establish opportunities to enhance existing assets, develop new assets, and link those assets together effectively. To inform the framework, an inventory of recreation experience opportunities was conducted in each of five regions across the state and is presented in a series of five regional profiles. The regional profiles offer a snapshot of existing recreation demand by examining county, regional and state population, sociodemographic characteristics, and recreation experience opportunity data available from past research and monitoring efforts. The profiles serve as the baseline for an in-depth analysis of current demand and existing recreation supply (e.g., parks and trail system) in light of (1) relative geographic distribution of resources and facilities, (2) future recreation demand projections (e.g., population, sociodemographics, and recreation participation), and (3) proposed or planned enhancements to the parks and trails system across the state. This report presents a profile of recreation experience opportunities in the Metro Region.

This inventory takes into account several key components of an outdoor recreation opportunity including recreation activities, experiences, and potential constraints. Minnesotans engage in a broad spectrum of activities (e.g., boating or picnicking) in Minnesota's parks and trails and these activities afford recreationists a wide range of individual and social experiences (e.g., solitude or being with family). Understanding and managing for the recreation experiences parks and trails visitors seek and attain is important because high quality experiences can bring about positive psychological outcomes both onsite (e.g., reducing tension) and off-site (e.g., higher productivity at work) for individuals (Driver, 2008). For instance, a 1993 study conducted in six Minnesota State Parks revealed that many recreationists visit parks to experience natural scenery, enjoy the smells and sounds of nature, be with members of their own group, and get away from the usual demands of life (Anderson, 2008). However, in some circumstances these experiences were not fully attained because of the constraints visitors encountered. Some State Park visitors reported problems related to noise, crowding, motorized use, litter, and full campsites. As was confirmed by the State Park study, certain setting attributes or conditions can constrain outdoor recreation opportunities and present problems to visitors. Thus, an integrated parks and trails system must consider both the quality of recreation settings and the quality of recreation experiences visitors have in those settings. More recent studies have shown that parks and trails can also benefit local communities and society (Anderson, Davenport, Leahy, & Stein, 2008). For example, communities can benefit from proximate parks and trails through economic revenue from increased tourism, an enhanced community identity, and higher quality of life for residents. Society benefits from the ecosystem services many recreation and conservation areas provide such as flood control, climate regulation, and air and water purification (Millennium Ecosystem Assessment, 2005).

To inventory recreation experience opportunities and recreation demand across the state, multiple attributes associated with the key components of an outdoor recreation opportunity described above, as well as important population sociodemographic characteristics were selected. These attributes were chosen to embody the range and diversity of recreation opportunities available in the state and Minnesota's diverse population (Appendix 1). To remain current, the recreation experience opportunity component was restricted to published data obtained through research and monitoring efforts conducted in nature-based outdoor recreation settings (i.e., forests, parks, and trails) since 2000.

Recreation Experience Opportunity Inventory Protocol

The recreation experience opportunity inventory was conducted systematically, following specific protocol to ensure consistency in data compilation, analysis and reporting. The inventory assesses previously conducted research and monitoring studies; thus no new data were collected for this inventory.

The recreation experience opportunity inventory tasks were to:

- Establish a recreation experience opportunity inventory protocol,
- Select recreation experience opportunity and sociodemographic attributes for analysis,
- Compile recreation, monitoring and sociodemographic reports conducted in the state since 2000,
- Organize data by county and regions, and
- Assess recreation research, monitoring studies, and sociodemographic data to identify county, regional, and state differences.

The recreation experience opportunity inventory protocol is based on a review of relevant recreation literature and planning documents and responds to the framework objectives outlined by the Minnesota Legislature. Multiple attributes were selected to embody Minnesota's population diversity and the range of recreation opportunities available (Appendix 1). U.S. Census, Minnesota Demographic Center, and recreation research and monitoring reports were obtained through an intensive literature review and in collaboration with state and local officials and stakeholders. Data associated with the selected attributes were analyzed to identify reported frequencies or population proportions at the county, regional and state level (where available) and the magnitude of differences (positive or negative) in frequencies or proportions where available (e.g., population densities, median household income, recreation activity participation). Of specific interest were differences between (1) the counties and the region overall, (2) the counties and the state overall, and (3) the region and the state overall. For site-specific recreation studies, data were analyzed to determine reported recreation activity participation, experiences sought and/or attained, and problems encountered by respondents.

Metro Region Profile

The Metro Region consists of 7 counties (see Appendix 2; Figure 2.1). In the Metro Region a total of nine recreation experience opportunity studies conducted since 1998 were available for analysis: two region-wide studies and seven site-specific studies (see Appendix 3 for list of studies and sites).

Sociodemographics

Population Size and Density

In 2005, the population of the Metro Region was approximately 2,781,000 people and accounted for a little over half (53.6%) of Minnesota’s population (Table 1). Population projections, using 2005 population statistics, predict that by 2035 the Metro Region will grow by 20.6 percent and will account for 52.0 percent of Minnesota’s overall population. The counties with the highest projected growth are Scott, Carver, and Washington Counties. In contrast, Ramsey County is projected to experience a decline in its population by approximately 4 percent.

The population density of the Metro Region (513.1 persons per square mile) is over eight times that of the state overall (61.8 persons per square mile; Table 2). Ramsey, Hennepin and Anoka Counties have the highest population densities in the region. Carver, Scott and Washington Counties have the lowest population densities of the region, but are still greater than that of the state overall.

Table 1
Projected Minnesota Metro Region Population by County, 2005 to 2035

County	2005 Estimate	2035 Projection	% Change 2005-2035
Anoka	328,105	421,060	28.3
Carver	85,981	160,050	86.1
Dakota	388,485	491,580	26.5
Hennepin	1,132,779	1,192,760	5.3
Ramsey	500,609	479,060	-4.3
Scott	121,482	299,660	146.7
Washington	223,158	308,370	38.2
Metro Region	2,780,599	3,352,540	20.6
Minnesota	5,192,122	6,446,270	24.2

Note: Cell shading indicates the 3 biggest positive (dark) and negative (light) differences.
Minnesota State Demographic Center (2007)

Age and Gender

In general, the population of the Metro Region is younger than that of Minnesota as a whole. All of the counties, except Hennepin County, have a greater proportion of younger residents (residents under 18 years of age) than the state. The counties with the greatest proportion of younger residents are Scott, Carver and Dakota Counties (Table 2). Similarly, the Metro Region has a smaller proportion of older residents (residents 65 years of age and older) than Minnesota overall. Scott, Carver, Anoka and Dakota Counties have the lowest percentage of older residents, while Ramsey County has the highest percentage—slightly higher than the state. Gender does not vary significantly between the counties and the Metro Region or the state. Minnesota’s proportion of female residents overall is 50.2 percent.

Median Household Income

The median household income in the Metro Region is about 14 percent more than the median household income in Minnesota overall. Carver, Scott and Washington Counties have the highest median incomes in the Metro Region. Ramsey and Hennepin Counties are the only counties in the region with median household incomes lower than the state average (Table 2).

Table 2
Differences between Metro Counties and the Metro Region/State Overall in Density, Age, and Household Income

Attribute	Difference in Persons / sq mile*		Difference in Persons < 18 (%)**		Difference in Persons ≥ 65 (%)**		Difference in Median household income (\$)***	
	Metro	MN	Metro	MN	Metro	MN	Metro	MN
Anoka	190	641	1.1	2.0	-1.7	-3.9	10,168	1,214
Carver	-316	135	3.2	4.1	-2.3	-4.5	24,374	15,420
Dakota	111	563	1.5	2.4	-1.7	-3.9	18,778	9,824
Hennepin	1,491	1,942	-1.5	-0.6	0.7	-1.5	5,279	-3,675
Ramsey	2,763	3,214	-0.6	0.3	2.7	0.5	-3,861	-12,815
Scott	-262	189	4.8	5.7	-3.6	-5.8	23,549	14,595
Washington	0	451	1.1	2.0	-1.4	-3.6	22,449	13,495
	Metro	MN	Metro	MN	Metro	MN	Metro	MN
Region and State Values:	513.1	61.8	24.9	24.0	10.3	12.5	64,618	55,664

Note: Cell shading indicates the 3 biggest positive (dark) and negative (light) differences for each attribute
*U.S. Census Data (2000). **U.S. Census Data (2008). ***U.S. Census Data (2007).

Race and Ethnicity

Nine of ten (89%) Minnesotans are white. Except for Hennepin and Ramsey County, the percentage of white residents in the Metro Region exceeds Minnesota percentages. Hennepin and Ramsey County are the most diverse counties in the region and state with a greater percentage of black, Asian and Hispanic/Latino residents. The remaining counties in the region have about the same or less diversity than the state as a whole.

Table 3
Differences between Metro Counties and the Metro Region/State Overall in Race and Ethnicity

Attribute	Difference in White (%)		Difference in Black (%)		Difference in American Indian / Alaska Native (%)		Difference in Asian (%)		Difference in Hispanic / Latino (%)	
	Metro	MN	Metro	MN	Metro	MN	Metro	MN	Metro	MN
Anoka	5.9	0.9	-3.8	-0.9	-0.1	-0.4	-1.8	0.3	-2.4	-1.3
Carver	10.6	5.6	-5.9	-3.0	-0.6	-0.9	-3.1	-1.0	-1.5	-0.4
Dakota	5.2	0.2	-3.2	-0.3	-0.4	-0.7	-1.5	0.6	-0.6	0.5
Hennepin	-3.6	-8.6	3.1	6.0	0.3	0.0	-0.1	2.0	1.1	2.2
Ramsey	-6.0	-11.0	2.2	5.1	0.0	-0.3	3.4	5.5	1.3	2.4
Scott	6.0	1.0	-5.1	-2.2	-0.1	-0.4	-0.4	1.7	-1.2	-0.1
Washington	6.0	1.0	-4.3	-1.4	-0.4	-0.7	-0.9	1.2	-2.3	-1.2
	Metro	MN	Metro	MN	Metro	MN	Metro	MN	Metro	MN
Region and State Values:	84.0	89.0	7.5	4.6	0.9	1.2	5.6	3.5	5.2	4.1

Note: Cell shading indicates the 3 biggest positive (dark) and negative (light) differences for each attribute.
U.S. Census Data (2008)

Participation in Recreation Activities

According to a recent statewide recreation participation study (Kelly, 2005), the recreation activities Metro Region residents most frequently participate in are walking or hiking, boating, swimming and driving for pleasure, which parallel statewide participation figures (Table 4). However, Metro Region residents participate to a greater extent than state residents overall in ice skating/hockey, outdoor- and inline-skating, walking/hiking, biking, and running or jogging. Metro Region residents are less likely to participate than state residents as a whole in snowmobiling, hunting, and off-road all-terrain vehicle driving.

Table 4
Recreation Activity Participation by Metro Region and State

Activity	Metro (%)	Statewide (%)	Difference
Walking/hiking	58	54	4
Boating of all types, including fishing from a boat	44	43	1
Swimming or wading (all places)	43	41	2
Driving for pleasure on scenic roads or in a park	38	37	1
Picnicking	37	36	1
Fishing of all types	28	30	-2
Biking (bicycling of all types, including mountain biking)	33	29	4
Camping of all types	25	26	-1
Visiting nature centers	28	25	3
Nature observation of all types (e.g., viewing, identifying)	25	24	1
Golfing	26	24	2
Outdoor field sports (e.g., soccer, softball/baseball, football)	22	21	1
Visiting historic or archaeological sites	23	21	2
Sledding and snow tubing	20	18	2
Outdoor court sports (e.g., volleyball, basketball, tennis)	19	18	1
Hunting of all types	13	16	-3
Running or jogging	18	14	4
Ice skating/hockey outdoors	17	12	5
Inline skating, rollerblading, roller skating, roller skiing	16	11	5
Off-road ATV driving	7	10	-3
Snowmobiling	6	10	-4
Downhill skiing/snowboarding	11	9	2
Gather mushrooms, berries, or other wild foods	7	9	-2
Cross country skiing	9	7	2
Horseback riding	4	5	-1
Snowshoeing	5	4	1

Note: Cell shading indicates the 3 biggest positive (dark) and negative (light) differences (more than three highlighted shades represent ties among differences).

Kelly, T. (2005). Data based on population 20 years of age and older

The recreation activities of walking and hiking were reported at six of the seven sites where recreation experience opportunity studies were conducted and data were available (Three Rivers Park District, 2009a; Three Rivers Park District, 2009b; MN DNR, 2000; MN DNR, 2002; Wilhelm Stanis & Schneider, n.d.a; Wilhelm Stanis & Schneider, n.d.b). Biking and running were popular activities at four of the sites. The next most common activities were horseback riding, family activities and picnicking. The remaining activities were unique to the individual sites (Table 5).

Table 5
Recreation Activity Participation Documented at Recreation Sites in the Metro Region

Activity	Afton State Park	Gateway State Trail	Luce Line State Trail	MN River Valley Area	Powder-horn Park	Three Rivers Park District	Three Rivers Camp-grounds
Walking/hiking	x	x	x	x	x	x	
Biking	x	x	x			x	x
Running	x	x	x			x	
Horseback riding	x	x	x				
Family Activities					x	x	x
Picnicking/barbecuing					x	x	
Cross-country skiing	x						
Boating							x
Fishing							x
Group sports					x		
Nature observation /photography				x			
Relaxing					x		
Self-guided Nature walk				x			
Sightseeing				x			
Skating		x					
Swimming/beach						x	x
Visiting historic/ cultural sites				x			

Note: Five most frequently reported recreation activities respondents participated in at each site (more than five activities presented represent ties among activities).

Three Rivers Park District (2009a); Three Rivers Park District (2009b); MN DNR (2000); MN DNR (2002); Wilhelm Stanis & Schneider (n.d.a); Wilhelm Stanis & Schneider (n.d.b);

Nature-Based Tourism in the Metro Region

A 2008 nature-based tourism study indicates 17.9 million person-visits to the Metro Region¹ from June 2007-May 2008 (Davidson-Peterson, 2008). One-third of these visitors are Minnesota residents (32%), with the largest segment coming from the Minneapolis/St.Paul area (21%). The incidence of these visitors coming from any other area was 5% or less. A small percentage of Metro-area travelers visited a state or national park (7%) or stayed at a campground (2%). However, these visitors constituted 1.3 million person-visits to state or national parks and 358,000 campground stays. One-quarter (27%) of travelers indicated participating in one or more recreation activities. The most common activities were pool swimming (11%), hiking (5%) and fishing (3%; Table 6).

Table 6
Recreation Participation amongst travelers to the Metro Region of Minnesota, 2005-2008

Activity	% Recreation Participation
Pool swimming	11
Hiking	5
Fishing	3
Lake/river swimming	3
Biking	2
Golfing	2
Wildlife viewing or bird watching	2
Canoeing	1
Downhill skiing or snowboarding	1
Hunting	1
Motor boating or water skiing	1
Off-road all-terrain vehicle driving	1

Note: Davidson-Peterson (2008)

¹ The designated Metro Region comprises all of the counties in the DNR Metro Region in addition to Chisago and Wright.

Recreation Experiences

Recreation Experience Motivations

A 2008 trail study revealed that statewide, Minnesota’s recreation trail users are primarily motivated by aesthetics, physical exercise and escape (Schneider, Schuweiler, & Bipes, 2009). While motivations across the state were similar, some regional differences were noted. The largest regional differences are that Metro trail users identified the attributes, “to explore and discover new things” and “to enjoy different experiences from home” as more important than statewide trail users and “to be on my own” as less important (Table 7).

Table 7
Differences between Metro Region and Statewide Trail Users in Experiences Sought

Reasons for participating	Average Importance ^a among Trail Users ^b		
	Metro (n ≥ 1044)	State (n ≥ 3023)	Difference
To view the scenery	4.30	4.27	0.04
To be close to nature	4.24	4.19	0.05
To get away from the usual demands of life	4.22	4.19	0.03
To experience nature	4.19	4.16	0.04
To be physically active	4.14	4.15	-0.01
To explore and discover new things	4.13	4.05	0.07
To get/keep physically fit	3.92	3.91	0.01
To relax physically	3.89	3.92	-0.03
To enjoy different experiences from home	3.88	3.81	0.07
To do something with my family	3.84	3.90	-0.06
To rest mentally	3.71	3.72	0.00
To be with people who enjoy the same things I do	3.68	3.70	-0.01
To experience solitude	3.59	3.65	-0.06
To challenge myself	3.49	3.43	0.06
To experience silence & quiet	3.45	3.51	-0.06
To be with members of my own group	3.33	3.33	0.01
To have thrills & excitement	3.28	3.26	0.03
To test my skills & abilities	3.23	3.19	0.04
To be on my own	3.15	3.26	-0.11
To be away from other people	3.03	3.07	-0.04

^aBased on respondents rating experiences on a scale with 1=very unimportant, 2=unimportant, 3=neither, 4=important, 5=very important. ^bNine types of trail users surveyed include: All-terrain vehicle riders, bikers, cross-country skiers, horseback riders, off-highway vehicle riders, off-road vehicle riders, snowmobilers, runners, and walkers/hikers.

Note: Cell shading indicates the 3 biggest positive (dark) and negative (light) differences between the region and the state. Schneider et al. (2009)

Site-specific data on the experiences and qualities sought by visitors were available from two state trails, two park systems, and one specific park (Table 8). The visitors to the two state trails reported valuing similar experiences while the visitors to the other sites each reported unique experiences and qualities. This differentiation may be partly due to the different qualities each study focused on. Nonetheless, the Minneapolis Park System visitors reported valuing the natural features (e.g., lakes, trails, open spaces), which was also reflected in the Three Rivers Park District visitors who reported valuing the “opportunity to experience nature.” Other qualities shared across sites were personal safety and easy access among the Three Rivers Park District and Powderhorn Park visitors.

Table 8
Experiences/Qualities Sought at Recreation Sites in the Metro Region

Recreation experience/ quality sought	Gateway State Trail	Luce Line State Trail	Minneapolis Park System	Powderhorn Park (Minneapolis Park)	Three Rivers Park District (19 parks)
Personal safety				x	x
Scenery/wildlife	x	x			
Quiet, peaceful	x	x			
No cars or motorized vehicles	x	x			
Good place for exercise	x	x			
Accessible by automobile					x
Closeness of park to my home				x	
Like the trail surface	x				
Little Development		x			
Walking/hiking/biking paths				x	
Easy to get to				x	
Beauty				x	
Well-maintained			x		
Trails			x		
Open Spaces			x		
Lakes			x		
Opportunity to experience nature					x
Low cost of park-based recreation					x
Variety of offerings			x		
Chance to do something with family & friends					x

Note: Five most frequently reported experiences respondents sought at each site
 Three Rivers Parks (2009b); MN DNR (2000); Wilhelm Stanis (n.d.); Design Resources Ltd. (2009)

Problems or Constraints Encountered

Among Minnesota recreation trail users, conflicts happen infrequently, but when they do occur they most often originate with the signs or sounds of other visitors (Schneider et al., 2009). Trail users in the Metro rated the frequency of encountering conflicts similarly to statewide trail users. The greatest regional differences are that Metro trail users more frequently reported “hearing other users on the trail” and “too many other users on the trail” (Table 9). Meanwhile they less frequently reported “seeing off trail/road use.”

At the six sites with data on recreation problems, a variety of issues emerged (Table 10). The most common constraint reported was not having enough time. Differences in problems encountered varied depending on the resource. Additionally, differences can be partly attributed to the different focus of the studies, with some focused upon on-site issues and others including off-site issues.

Table 9
Differences between Metro Region and Statewide Participants in Sources of Recreation Conflict on Trails

Source of Conflict	Average Frequency of Conflict ^a among Trail Users ^b		
	Metro (n ≥ 933)	State (n ≥ 2697)	Difference
Hearing other users on the trail	1.10	1.01	0.09
Seeing evidence of off trail/road use	0.87	0.87	0.01
Litter on or near the trail	0.82	0.85	-0.02
Seeing off trail/road use	0.70	0.74	-0.04
Others going too fast	0.56	0.56	0.00
Too many other users on the trail	0.55	0.46	0.09
Rude or discourteous users	0.55	0.49	0.06
Others not yielding	0.54	0.46	0.08
Others passing too closely	0.50	0.46	0.04
Accessibility issue	0.46	0.43	0.04
Others out of control	0.40	0.37	0.03

^aBased on respondents rating sources on a scale of 0-3 with 0=Never, 1=Sometimes, 2=Many Times, 3=Almost Always. ^bNine types of trail users: All-terrain vehicle riders, bikers, cross-country skiers, horseback riders, off-highway vehicle riders, off-road vehicle riders, snowmobilers, and walkers/hikers.

Note: Cell shading indicates the 2 biggest negative (light) differences.
Schneider et al. (2009)

Table 10
Problems and Constraints Encountered at Recreation Sites in the Metro Region

Problem/ Constraint	Gateway State Trail	Luce Line State Trail	Afton State Park	Powder-horn Park	MN River Valley Area	Three Rivers Campgrounds
Don't have enough time			x	x	x	
Other trail users blocking traffic	x	x				
Other trail users passing without warning	x	x				
Problems with other people's pets	x	x				
Feeling unsafe				x		x
Park is too far from my home			x		x	
Too many family obligations			x			
Friends/family don't have time			x			
Friends/family prefer other activities			x			
Perception of crowding						x
Quiet Time not enforced						x
Other campers being loud						x
Children screaming						x
Gang presence				x		
People drinking alcohol				x		
Don't know enough about the area					x	
Don't know how to access					x	
Area too developed					x	

Most frequently reported problems respondents reported at each site. Three Rivers Parks (2009a); MN DNR (2000); Wilhelm Stanis (nd); Wilhelm Stanis, S.A., Schneider, I.E. & Anderson, D.H. (2009)

In response to problems or conflicts, statewide trail users utilize a variety of responses, but most frequently “follow rules for trail etiquette” (Schneider et al., 2009). Similarly, in the Metro region, trail participants use a variety of responses when they encounter recreation conflict (Table 11). The largest regional differences in responses to conflict are that Metro trail users are more likely report “follow established rules for trail etiquette,” and less likely to report “talk to area personnel about the incident” or “keep others from knowing how bad things were” than statewide trail users.

Table 11
Differences between Metro Region and Statewide Participants in Response to Recreation Conflict on Trails

Response	Response to Conflict ^a among Trail Users ^b		
	Metro (n ≥ 526)	State (n ≥ 1491)	Difference
Follow established rules for trail etiquette	2.53	2.45	0.07
Talk to other members of my group about the incident	1.88	1.87	0.00
Refuse to get too serious about it	1.73	1.71	0.02
Don't let it get to me; refuse to think about it too much	1.70	1.72	-0.02
Wish the situation would go away or be over with	1.51	1.50	0.01
Think about why the incident occurred	1.50	1.49	0.01
Go on as if nothing had happened	1.49	1.48	0.00
Try not to burn bridges	1.47	1.49	-0.02
Try to forget the whole thing	1.38	1.42	-0.05
I try to keep my feelings to myself	1.31	1.35	-0.04
Make light of the situation	1.23	1.25	-0.02
I know what has to be done so double my efforts to make it work	1.19	1.22	-0.03
I make a plan of action and follow it	1.08	1.09	-0.01
Come up with a couple of different solutions	1.00	1.02	-0.03
Alter my pace to avoid others	0.99	0.98	0.00
Leave and go to a different part of the area	0.98	0.98	0.00
Talk to area personnel about the incident	0.92	1.00	-0.08
Plan to avoid the area on my next visit	0.87	0.89	-0.02
Change the time I will use the trail next time	0.82	0.85	-0.03
Stand my ground and fight for what I wanted	0.75	0.79	-0.04
Keep others from knowing how bad things were	0.74	0.82	-0.08
Try to get the person responsible to change their mind	0.68	0.71	-0.03
Leave the area altogether	0.68	0.68	0.00
Express anger to the person who caused the incident	0.61	0.61	0.00

^aBased on respondents rating responses on a scale of 0-3 with 0=Do not use, 1=Use infrequently, 2=Use occasionally, 3=Use frequently

^bEight types of trail users: All-terrain vehicle riders, bikers, cross-country skiers, horseback riders, off-highway vehicle riders, snowmobilers, and walkers/hikers.

Note: Cell shading indicates the 3 biggest positive (dark) and negative (light) differences (more than 3 indicates a tie). Schneider et al. (2009)

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Appendices

Appendix 1

**Table 1.1
Recreation Experience Opportunity Inventory Attributes**

Recreation activity participation	
Recreation activity participation	Region or state-wide: <ul style="list-style-type: none"> • Percent participation Site-specific: <ul style="list-style-type: none"> • Five most frequently reported activities
Recreation experiences	
Experiences (sought or attained)	Region or state-wide: <ul style="list-style-type: none"> • Percent respondents rating experiences as important or very important Site specific: <ul style="list-style-type: none"> • Five most frequently reported important experiences
Problems encountered or sources of conflict	Region or state-wide: <ul style="list-style-type: none"> • Percent respondents reporting conflict source Site-specific: <ul style="list-style-type: none"> • Five most frequently reported problems or sources of conflict
Responses to conflict	Region or state-wide: <ul style="list-style-type: none"> • Percent respondents reporting response Site-specific: <ul style="list-style-type: none"> • Five most frequently reported responses to conflict
Sociodemographics	
Population size	County, Region, and State
Population density	County, Region, and State: <ul style="list-style-type: none"> • Persons per square mile
Age	County, Region, and State: <ul style="list-style-type: none"> • Persons < 18 years of age • Persons ≥ 65 years of age
Gender	County, Region, and State: <ul style="list-style-type: none"> • Percent female
Race and ethnicity	County, Region, and State (percent): <ul style="list-style-type: none"> • White • Black • American Indian/Alaska Native • Asian • Hispanic/Latino

Appendix 2

Counties in the Metro Region

Anoka
Carver
Dakota
Hennepin
Ramsey
Scott
Washington

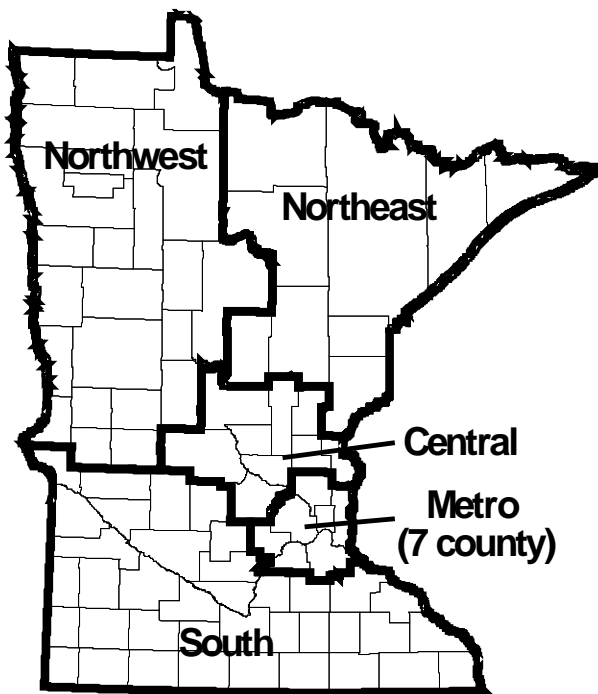


Figure 2.1. Minnesota Regions

Appendix 3

Table 3.1 Recreation Experience Opportunity Studies in the Metro Region

Region-wide studies	
2004 Outdoor Recreation Participation Survey of Minnesotans	
2008 Profile of Recreation Trail Users	
Site-specific studies	Sites included
System Plan Update. 2008 Summer Park Visitor Study: Final Report	<ul style="list-style-type: none"> • Three Rivers Park System (17 parks)
System Plan Update. 2008 Campground Visitor Study	<ul style="list-style-type: none"> • Baker Campground at Baker Park Reserve • Lake Auburn Campground at Carver Park Reserve
State Park Visitors' Leisure Time Physical Activity, Constraints, and Negotiation Strategies	<ul style="list-style-type: none"> • Afton State Park
Health Study DRAFT Results: Powderhorn Park	<ul style="list-style-type: none"> • Powderhorn Park
State Trail Use: Summary of Summer Trail Use and User Surveys Conducted in 1996, 1997 and 1998	<ul style="list-style-type: none"> • Gateway State Trail • Luce Line State Trail
Minneapolis Parks Foundation 2009 Survey of Minneapolis Residents Executive Summary	<ul style="list-style-type: none"> • Minneapolis Parks
Minnesota River Valley Area Survey	<ul style="list-style-type: none"> • Minnesota River Valley Area

Appendix 4

Table 4.1
Metro Region Demographics by County

County/ attribute	Population	Persons / sq mile, 2000	Persons < 18 (%)	Persons ≥ 65 (%)	Female (%)	White (%)	Black (%)	American Indian / Alaskan (%)	Asian (%)	Hispanic / Latino (%)	Median household income (\$), 2007
Anoka	327,090	703	26.0	8.6	49.4	89.9	3.7	0.8	3.8	2.8	65,832
Carver	90,043	196.7	28.1	8.0	49.8	94.6	1.6	0.3	2.5	3.7	80,038
Dakota	392,755	624.4	26.4	8.6	50.4	89.2	4.3	0.5	4.1	4.6	74,442
Hennepin	1,140,988	2,003.9	23.4	11.0	50.3	80.4	10.6	1.2	5.5	6.3	60,943
Ramsey	501,428	3,275.9	24.3	13.0	51.5	78.0	9.7	0.9	9.0	6.5	51,803
Scott	128,937	250.7	29.7	6.7	49.8	90.0	2.4	0.8	5.2	4.0	79,213
Washington	229,173	513.1	26.0	8.9	50.0	90.0	3.2	0.5	4.7	2.9	78,113
Region	2,810,414	513.1	24.9	10.3	50.4	84.0	7.5	0.9	5.6	5.2	64,618
MN	5,220,393	61.8	24.0	12.5	50.2	89.0	4.6	1.2	3.5	4.1	55,664

Note: U.S. Census (2008)

Appendix 5

Table 5.1
Reasons for all-terrain vehicle riding

Reasons for participating	Identified as Important or Very Important		
	% Metro (n ≥ 110)	% Statewide (n ≥ 308)	Difference
To be on my own	36.6	45.8	-9.2
To be away from other people	31.2	36.5	-5.3
To be close to nature	80.5	81.1	-0.6
To get away from the usual demands of life	78.5	77.8	0.7
To relax physically	54.0	64.9	-10.9
To view the scenery	83.9	85.9	-2.0
To experience silence & quiet	42.8	45.3	-2.5
To experience solitude	50.4	51.3	-0.9
To have thrills & excitement	54.5	48.9	5.6
To rest mentally	49.6	51.8	-2.2
To experience nature	83.0	83.0	0.0
To be w/people who enjoy the same things I do	65.7	66.1	-0.4
To challenge myself	33.9	30.9	3.0
To test my skills & abilities	33.9	29.1	4.8
To explore and discover new things	82.1	78.5	3.6
To do something with my family	70.8	71.6	-0.8
To get/keep physically fit	32.1	36.2	-4.1
To be physically active	47.8	55.0	-7.2
To be with members of my own group	50.0	49.4	0.6
To enjoy different experiences from home	73.2	65.3	7.9

Schneider et al. (2009)

Table 5.2
Reasons for bike riding

Reasons for participating	Identified as Important or Very Important		
	% Metro (n ≥ 35)	% Statewide (n ≥ 310)	Difference
To be on my own	27.8	40.3	-12.5
To be away from other people	28.6	30.1	-1.5
To be close to nature	88.9	83.9	5.0
To get away from the usual demands of life	80.5	82.2	-1.7
To relax physically	63.9	75.0	-11.1
To view the scenery	83.3	88.9	-5.6
To experience silence & quiet	50.0	59.0	-9.0
To experience solitude	58.3	62.5	-4.2
To have thrills & excitement	33.3	28.8	4.5
To rest mentally	58.3	66.2	-7.9
To experience nature	88.9	84.4	4.5
To be w/people who enjoy the same things I do	52.8	55.1	-2.3
To challenge myself	63.9	49.7	14.2
To test my skills & abilities	36.1	27.0	9.1
To explore and discover new things	86.1	76.0	10.1
To do something with my family	74.3	74.8	-0.5
To get/keep physically fit	91.7	90.8	0.9
To be physically active	91.7	94.0	-2.3
To be with members of my own group	60.0	35.0	25.0
To enjoy different experiences from home	61.1	68.6	-7.5

Schneider et al. (2009)

Table 5.3
Reasons for cross-country skiing

Reasons for participating	Identified as Important or Very Important		
	% Metro (n ≥ 157)	% Statewide (n ≥ 497)	Difference
To be on my own	31.8	39.0	-7.2
To be away from other people	36.4	33.9	2.5
To be close to nature	94.5	94.1	0.4
To get away from the usual demands of life	81.7	81.1	0.6
To relax physically	72.0	74.7	-2.7
To view the scenery	93.9	94.2	-0.3
To experience silence & quiet	76.7	77.0	-0.3
To experience solitude	66.3	69.0	-2.7
To have thrills & excitement	38.5	34.0	4.5
To rest mentally	69.8	70.4	-0.6
To experience nature	95.1	93.9	1.2
To be w/people who enjoy the same things I do	59.3	54.3	5.0
To challenge myself	64.0	62.6	1.4
To test my skills & abilities	43.2	42.6	0.6
To explore and discover new things	79.5	74.0	5.5
To do something with my family	62.1	63.6	-1.5
To get/keep physically fit	93.3	94.4	-1.1
To be physically active	95.8	96.1	-0.3
To be with members of my own group	36.6	31.5	5.1
To enjoy different experiences from home	73.8	69.5	4.3

Schneider et al. (2009)

Table 5.4
Reasons for horseback riding

Reasons for participating	Identified as Important or Very Important		
	% Metro (n ≥ 150)	% Statewide (n ≥ 445)	Difference
To be on my own	47.8	50.3	-2.5
To be away from other people	39.0	37.9	1.1
To be close to nature	96.7	94.0	2.7
To get away from the usual demands of life	94.8	93.6	1.2
To relax physically	92.3	89.8	2.5
To view the scenery	98.1	96.4	1.7
To experience silence & quiet	74.5	74.9	-0.4
To experience solitude	73.2	70.2	3.0
To have thrills & excitement	42.6	46.4	-3.8
To rest mentally	84.5	81.8	2.7
To experience nature	94.8	93.1	1.7
To be w/people who enjoy the same things I do	85.0	85.7	-0.7
To challenge myself	62.6	60.3	2.3
To test my skills & abilities	59.5	56.4	3.1
To explore and discover new things	92.8	90.0	2.8
To do something with my family	63.4	70.8	-7.4
To get/keep physically fit	83.8	78.3	5.5
To be physically active	87.1	88.0	-0.9
To be with members of my own group	68.3	71.9	-3.6
To enjoy different experiences from home	80.9	80.2	0.7

Schneider et al. (2009)

Table 5.5
Reasons for off-highway motorcycle riding

Reasons for participating	Identified as Important or Very Important		
	% Metro (n ≥ 113)	% Statewide (n ≥ 307)	Difference
To be on my own	43.1	45.9	-2.8
To be away from other people	29.9	32.7	-2.8
To be close to nature	77.9	72.9	5.0
To get away from the usual demands of life	85.5	87.3	-1.8
To relax physically	61.5	66.6	-5.1
To view the scenery	83.8	79.5	4.3
To experience silence & quiet	30.2	30.2	0.0
To experience solitude	43.6	47.9	-4.3
To have thrills & excitement	83.9	81.3	2.6
To rest mentally	52.1	59.7	-7.6
To experience nature	75.7	72.3	3.4
To be w/people who enjoy the same things I do	76.1	74.7	1.4
To challenge myself	78.8	71.9	6.9
To test my skills & abilities	75.0	70.4	4.6
To explore and discover new things	90.6	86.1	4.5
To do something with my family	71.6	74.7	-3.1
To get/keep physically fit	70.1	68.9	1.2
To be physically active	82.0	82.8	-0.8
To be with members of my own group	65.0	64.1	0.9
To enjoy different experiences from home	78.8	77.4	1.4

Schneider et al. (2009)

Table 5.6
Reasons for off-road vehicle riding

Reasons for participating	Identified as Important or Very Important		
	% Metro (n ≥ 123)	% Statewide (n ≥ 369)	Difference
To be on my own	34.9	41.5	-6.6
To be away from other people	27.0	30.9	-3.9
To be close to nature	76.2	78.7	-2.5
To get away from the usual demands of life	85.7	82.7	3.0
To relax physically	61.1	66.7	-5.6
To view the scenery	87.3	85.9	1.4
To experience silence & quiet	35.7	37.7	-2.0
To experience solitude	46.0	50.8	-4.8
To have thrills & excitement	66.6	61.6	5.0
To rest mentally	50.8	55.4	-4.6
To experience nature	75.0	79.7	-4.7
To be w/people who enjoy the same things I do	73.8	71.6	2.2
To challenge myself	63.2	53.1	10.1
To test my skills & abilities	59.5	51.7	7.8
To explore and discover new things	85.7	81.6	4.1
To do something with my family	77.8	79.0	-1.2
To get/keep physically fit	34.9	35.9	-1.0
To be physically active	50.8	54.7	-3.9
To be with members of my own group	66.6	60.7	5.9
To enjoy different experiences from home	77.0	73.8	3.2

Schneider et al. (2009)

Table 5.7
Reasons for snowmobiling

Reasons for participating	Identified as Important or Very Important		
	% Metro (n ≥ 91)	% Statewide (n ≥ 261)	Difference
To be on my own	36.3	37.5	-1.2
To be away from other people	25.9	28.5	-2.6
To be close to nature	89.2	82.1	7.1
To get away from the usual demands of life	85.8	83.2	2.6
To relax physically	60.5	61.7	-1.2
To view the scenery	96.7	91.2	5.5
To experience silence & quiet	31.2	35.7	-4.5
To experience solitude	57.6	53.3	4.3
To have thrills & excitement	66.7	62.4	4.3
To rest mentally	52.7	54.6	-1.9
To experience nature	90.4	84.7	5.7
To be w/people who enjoy the same things I do	75.2	75.3	-0.1
To challenge myself	43.4	39.7	3.7
To test my skills & abilities	32.3	32.7	-0.4
To explore and discover new things	87.1	79.8	7.3
To do something with my family	77.4	79.5	-2.1
To get/keep physically fit	49.5	50.2	-0.7
To be physically active	65.6	67.3	-1.7
To be with members of my own group	72.1	68.1	4.0
To enjoy different experiences from home	76.3	73.0	3.3

Schneider et al. (2009)

Table 5.8
Reasons for walking/hiking

Reasons for participating	Identified as Important or Very Important		
	% Metro (n ≥ 194)	% Statewide (n ≥ 431)	Difference
To be on my own	32.2	43.2	-11.0
To be away from other people	29.1	34.4	-5.3
To be close to nature	91.0	89.9	1.1
To get away from the usual demands of life	79.2	79.8	-0.6
To relax physically	85.0	80.6	4.4
To view the scenery	93.0	91.7	1.3
To experience silence & quiet	65.8	66.7	-0.9
To experience solitude	62.1	64.1	-2.0
To have thrills & excitement	14.8	18.8	-4.0
To rest mentally	77.5	71.8	5.7
To experience nature	88.9	88.3	0.6
To be w/people who enjoy the same things I do	48.2	48.3	-0.1
To challenge myself	32.5	34.2	-1.7
To test my skills & abilities	20.4	23.9	-3.5
To explore and discover new things	75.4	73.2	2.2
To do something with my family	72.0	70.1	1.9
To get/keep physically fit	89.1	87.2	1.9
To be physically active	95.0	94.0	1.0
To be with members of my own group	28.2	28.8	-0.6
To enjoy different experiences from home	71.8	65.4	6.4

Schneider et al. (2009)

Appendix 6

Table 6.1
Observations of potential conflict among all-terrain vehicle riding respondents to a mail questionnaire, 2008

Source of conflict	Observed		
	% Metro (n ≥ 104)	% Statewide (n ≥ 275)	Difference
Others going too fast	53.8	55.6	-1.8
Too many others on the trail	35.8	33.7	2.1
Seeing off trail/road use	56.6	62.9	-6.3
Accessibility issue	35.6	40.7	-5.1
Others out of control	32.1	35.3	-3.2
Litter on or near the trail	56.6	63.3	-6.7
Seeing evidence of off trail/road use (erosion, marks, etc.)	65.1	68.1	-3.0
Rude or discourteous users	40.2	41.6	-1.4
Others passing too closely	32.4	32.1	0.3
Hearing other users on the trail	58.1	61.6	-3.5
Others not yielding	39.6	37.8	1.8

Schneider et al. (2009)

Table 6.2
Observations of potential conflict among biking respondents to a mail questionnaire, 2008

Source of conflict	Observed		
	% Metro (n ≥ 35)	% Statewide (n ≥ 304)	Difference
Others going too fast	41.7	36.5	5.2
Too many others on the trail	47.2	31.2	16.0
Seeing off trail/road use	52.8	50.6	2.2
Accessibility issue	27.8	21.9	5.9
Others out of control	33.3	22.8	10.5
Litter on or near the trail	71.4	74.2	-2.8
Seeing evidence of off trail/road use (erosion, marks, etc.)	63.9	57.4	6.5
Rude or discourteous users	47.2	43.1	4.1
Others passing too closely	55.6	45.4	10.2
Hearing other users on the trail	80.6	71.8	8.8
Others not yielding	66.7	52.3	14.4

Schneider et al. (2009)

Table 6.3
Observations of potential conflict among cross-country skiing respondents to a mail questionnaire, 2008

Source of conflict	Observed		
	% Metro (n ≥ 154)	% Statewide (n ≥ 499)	Difference
Others going too fast	77.6	17.4	60.2
Too many others on the trail	41.9	29.0	12.9
Seeing off trail/road use	51.0	45.7	5.3
Accessibility issue	15.6	11.4	4.2
Others out of control	30.8	22.4	8.4
Litter on or near the trail	49.1	41.8	7.3
Seeing evidence of off trail/road use (erosion, marks, etc.)	56.7	50.8	5.9
Rude or discourteous users	32.7	21.6	11.1
Others passing too closely	31.3	21.1	10.2
Hearing other users on the trail	78.5	73.1	5.4
Others not yielding	34.4	23.8	10.6

Schneider et al. (2009)

Table 6.4
Observations of potential conflict among horseback riding respondents to a mail questionnaire, 2008

Source of conflict	Observed		
	% Metro (n ≥ 152)	% Statewide (n ≥ 439)	Difference
Others going too fast	37.4	41.4	-4.0
Too many others on the trail	32.3	31.6	0.7
Seeing off trail/road use	54.1	55.3	-1.2
Accessibility issue	38.2	35.1	3.1
Others out of control	42.9	40.0	2.9
Litter on or near the trail	69.1	70.3	-1.2
Seeing evidence of off trail/road use (erosion, marks, etc.)	60.5	61.7	-1.2
Rude or discourteous users	53.3	48.0	5.3
Others passing too closely	41.9	41.4	0.5
Hearing other users on the trail	74.2	75.6	-1.4
Others not yielding	39.0	33.3	5.7

Schneider et al. (2009)

Table 6.6
Observations of potential conflict among off-highway motorcycle respondents to a mail questionnaire, 2008

Source of conflict	Observed		
	% Metro (n ≥ 111)	% Statewide (n ≥ 286)	Difference
Others going too fast	60.2	53.1	7.1
Too many others on the trail	46.5	38.3	8.2
Seeing off trail/road use	50.5	51.4	-0.9
Accessibility issue	49.1	45.0	4.1
Others out of control	42.1	37.8	4.3
Litter on or near the trail	50.9	53.7	-2.8
Seeing evidence of off trail/road use (erosion, marks, etc.)	70.2	67.5	2.7
Rude or discourteous users	50.0	42.0	8.0
Others passing too closely	35.4	34.6	0.8
Hearing other users on the trail	78.1	68.8	9.3
Others not yielding	46.0	38.8	7.2

Schneider et al. (2009)

Table 6.7
Observations of potential conflict among off-road vehicle respondents to a mail questionnaire, 2008

Source of conflict	Observed		
	% Metro (n ≥ 107)	% Statewide (n ≥ 324)	Difference
Others going too fast	41.8	46.4	-4.6
Too many others on the trail	38.7	36.9	1.8
Seeing off trail/road use	45.4	50.2	-4.8
Accessibility issue	37.4	35.8	1.6
Others out of control	34.5	34.5	0.0
Litter on or near the trail	58.6	61.3	-2.7
Seeing evidence of off trail/road use (erosion, marks, etc.)	67.6	63.4	4.2
Rude or discourteous users	37.3	39.0	-1.7
Others passing too closely	24.8	31.5	-6.7
Hearing other users on the trail	68.5	68.0	0.5
Others not yielding	30.0	35.4	-5.4

Schneider et al. (2009)

Table 6.8
Observations of potential conflict among snowmobile respondents to a mail questionnaire, 2008

Source of conflict	Observed		
	% Metro (n ≥ 85)	% Statewide (n ≥ 95)	Difference
Others going too fast	85.1	81.1	4.0
Too many others on the trail	72.7	59.8	12.9
Seeing off trail/road use	84.7	80.7	4.0
Accessibility issue	43.2	38.6	4.6
Others out of control	62.5	53.4	9.1
Litter on or near the trail	58.6	58.3	0.3
Seeing evidence of off trail/road use (erosion, marks, etc.)	70.1	71.7	-1.6
Rude or discourteous users	73.9	71.9	2.0
Others passing too closely	65.9	62.7	3.2
Hearing other users on the trail	81.4	77.0	4.4
Others not yielding	69.3	65.9	3.4

Schneider et al. (2009)

Table 6.9
Observations of potential conflict among walking respondents to a mail questionnaire, 2008

Source of conflict	Observed		
	% Metro (n ≥ 196)	% Statewide (n ≥ 438)	Difference
Others going too fast	73.0	42.3	30.7
Too many others on the trail	39.8	38.2	1.6
Seeing off trail/road use	47.0	49.9	-2.9
Accessibility issue	24.4	22.7	1.7
Others out of control	20.0	21.0	-1.0
Litter on or near the trail	81.0	79.0	2.0
Seeing evidence of off trail/road use (erosion, marks, etc.)	62.1	63.1	-1.0
Rude or discourteous users	48.0	44.9	3.1
Others passing too closely	50.2	43.3	6.9
Hearing other users on the trail	80.6	74.0	6.6
Others not yielding	48.2	41.3	6.9

Schneider et al. (2009)

Appendix 7

Table 7.1
Use of coping strategies among all-terrain vehicle riders who experience interference

Coping Strategy	Used Strategy		
	% Metro (n ≥ 24)	% Statewide (n ≥ 58)	Difference
Change the time I will ATV next time	20.7	18.2	2.5
Alter my pace to avoid others	23.3	22.3	1.0
Plan to avoid the area on my next visit	21.6	20.1	1.5
Talk to area personnel about the incident	25.9	26.1	-0.2
Try not to burn bridges	34.5	32.4	2.1
Stand my ground and fight for what I wanted	28.4	24.5	3.9
Think about why the incident occurred	33.6	31.1	2.5
I make a plan of action and follow it	32.8	29.6	3.2
I know what has to be done so I double my efforts to make it work	33.6	30.8	2.8
Make light of the situation	31.0	29.2	1.8
Keep others from knowing how bad things were	24.1	23.9	0.2
Try to get the person responsible to change their mind	27.6	25.5	2.1
Don't let it get to me; refuse to think about it too much	32.8	31.8	1.0
Come up with a couple of different solutions	30.2	28.6	1.6
Leave the area altogether	20.7	20.1	0.6
I try to keep my feelings to myself	32.8	29.2	3.6
Leave the area and go to a different part of the area	26.7	25.5	1.2
Express anger to the person who caused the incident	20.7	19.5	1.2
Wish the situation would go away or be over with	30.2	30.8	-0.6
Talk to other members of my group about the incident	41.4	36.5	4.9
Try to forget the whole thing	29.3	27.4	1.9
Refuse to get too serious about it	37.1	32.1	5.0
Follow established rules for trail etiquette	44.8	43.4	1.4
Go on as if nothing had happened	31.8	27.4	4.4

Schneider et al. (2009)

Table 7.2
Use of coping strategies among bike riders who experience interference

Coping Strategy	Used Strategy		
	% Metro (n ≥ 6)	% Statewide (n ≥ 63)	Difference
Change the time I will bike next time	29.7	26.9	2.8
Alter my pace to avoid others	37.8	28.8	9.0
Plan to avoid the area on my next visit	24.3	25.1	-0.8
Talk to area personnel about the incident	21.6	26.0	-4.4
Try not to burn bridges	29.7	35.6	-5.9
Stand my ground and fight for what I wanted	21.6	25.4	-3.8
Think about why the incident occurred	35.1	36.8	-1.7
I make a plan of action and follow it	21.6	28.8	-7.2
I know what has to be done so I double my efforts to make it work	29.7	32.2	-2.5
Make light of the situation	37.8	36.8	1.0
Keep others from knowing how bad things were	18.9	27.6	-8.7
Try to get the person responsible to change their mind	16.2	19.5	-3.3
Don't let it get to me; refuse to think about it too much	37.8	44.6	-6.8
Come up with a couple of different solutions	27.0	27.6	-0.6
Leave the area altogether	27.0	24.1	2.9
I try to keep my feelings to myself	27.0	25.4	1.6
Leave the area and go to a different part of the area	27.0	28.8	-1.8
Express anger to the person who caused the incident	29.7	21.4	8.3
Wish the situation would go away or be over with	37.8	36.2	1.6
Talk to other members of my group about the incident	37.8	40.6	-2.8
Try to forget the whole thing	29.7	38.7	-9.0
Refuse to get too serious about it	27.0	40.6	-13.6
Follow established rules for trail etiquette	43.2	44.3	-1.1
Go on as if nothing had happened	35.1	41.8	-6.7

Schneider et al. (2009)

Table 7.3
Use of coping strategies among cross-country skiers who experience interference

Coping Strategy	Used Strategy		
	% Metro (n ≥ 27)	% Statewide (n ≥ 91)	Difference
Change the time I will ski next time	46.4	45.5	0.9
Alter my pace to avoid others	53.1	52.3	0.8
Plan to avoid the area on my next visit	48.9	49.8	-0.9
Talk to area personnel about the incident	51.6	52.4	-0.8
Try not to burn bridges	60.9	63.5	-2.6
Stand my ground and fight for what I wanted	28.7	35.8	-7.1
Think about why the incident occurred	70.0	69.0	1.0
I make a plan of action and follow it	47.8	50.2	-2.4
I know what has to be done so I double my efforts to make it work	50.0	57.0	-7.0
Make light of the situation	68.8	68.9	-0.1
Keep others from knowing how bad things were	37.1	49.2	-12.1
Try to get the person responsible to change their mind	30.4	32.0	-1.6
Don't let it get to me; refuse to think about it too much	84.2	80.8	3.4
Come up with a couple of different solutions	50.0	48.6	1.4
Leave the area altogether	39.4	36.9	2.5
I try to keep my feelings to myself	69.6	70.6	-1.0
Leave the area and go to a different part of the area	60.4	50.2	10.2
Express anger to the person who caused the incident	28.3	30.5	-2.2
Wish the situation would go away or be over with	63.5	63.1	0.4
Talk to other members of my group about the incident	71.1	71.4	-0.3
Try to forget the whole thing	71.7	68.8	2.9
Refuse to get too serious about it	84.0	81.3	2.7
Follow established rules for trail etiquette	90.1	87.0	3.1
Go on as if nothing had happened	78.5	74.6	3.9

Schneider et al. (2009)

Table 7.4
Use of coping strategies among horseback riders who experience an interference

Coping Strategy	Used Strategy		
	% Metro (n ≥ 29)	% Statewide (n ≥ 100)	Difference
Change the time I will horseback ride next time	18.7	30.7	-12.0
Alter my pace to avoid others	21.3	20.1	1.2
Plan to avoid the area on my next visit	23.9	25.3	-1.4
Talk to area personnel about the incident	29.0	30.1	-1.1
Try not to burn bridges	35.5	35.5	0.0
Stand my ground and fight for what I wanted	31.6	27.3	4.3
Think about why the incident occurred	41.3	39.6	1.7
I make a plan of action and follow it	31.6	30.1	1.5
I know what has to be done so I double my efforts to make it work	34.2	25.3	8.9
Make light of the situation	33.5	23.3	10.2
Keep others from knowing how bad things were	23.2	24.9	-1.7
Try to get the person responsible to change their mind	26.5	23.3	3.2
Don't let it get to me; refuse to think about it too much	40.6	41.4	-0.8
Come up with a couple of different solutions	31.6	30.9	0.7
Leave the area altogether	18.7	17.1	1.6
I try to keep my feelings to myself	36.8	33.1	3.7
Leave the area and go to a different part of the area	24.5	25.3	-0.8
Express anger to the person who caused the incident	21.3	21.5	-0.2
Wish the situation would go away or be over with	41.3	37.0	4.3
Talk to other members of my group about the incident	51.0	47.0	4.0
Try to forget the whole thing	35.5	35.1	0.4
Refuse to get too serious about it	43.9	41.0	2.9
Follow established rules for trail etiquette	49.7	46.6	3.1
Go on as if nothing had happened	38.7	38.6	0.1

Schneider et al. (2009)

Table 7.5
Use of coping strategies among off-highway motorcycle users who experience interference

Coping Strategy	Used Strategy		
	% Metro (n ≥ 22)	% Statewide (n ≥ 65)	Difference
Change the time I will off-highway motorcycle ride next time	18.6	20.7	-2.1
Alter my pace to avoid others	28.0	27.1	0.9
Plan to avoid the area on my next visit	23.7	25.2	-1.5
Talk to area personnel about the incident	35.6	32.8	2.8
Try not to burn bridges	35.6	35.0	0.6
Stand my ground and fight for what I wanted	22.9	24.5	-1.6
Think about why the incident occurred	37.3	37.3	0.0
I make a plan of action and follow it	36.4	33.8	2.6
I know what has to be done so I double my efforts to make it work	42.4	36.6	5.8
Make light of the situation	36.4	34.7	1.7
Keep others from knowing how bad things were	26.3	27.4	-1.1
Try to get the person responsible to change their mind	29.7	24.9	4.8
Don't let it get to me; refuse to think about it too much	39.8	36.3	3.5
Come up with a couple of different solutions	33.1	34.1	-1.0
Leave the area altogether	22.9	24.5	-1.6
I try to keep my feelings to myself	33.9	34.7	-0.8
Leave the area and go to a different part of the area	30.5	31.8	-1.3
Express anger to the person who caused the incident	25.4	23.9	1.5
Wish the situation would go away or be over with	31.4	34.7	-3.3
Talk to other members of my group about the incident	50.8	45.9	4.9
Try to forget the whole thing	33.9	32.8	1.1
Refuse to get too serious about it	41.5	36.9	4.6
Follow established rules for trail etiquette	52.5	46.8	5.7
Go on as if nothing had happened	36.4	33.1	3.3

Schneider et al. (2009)

Table 7.6
Use of coping strategies among snowmobilers who experience interference

Coping Strategy	Used Strategy		
	% Metro (n ≥ 37)	% Statewide (n ≥ 104)	Difference
Change the time I will snowmobile next time	50.0	52.5	-2.5
Alter my pace to avoid others	65.3	62.1	3.2
Plan to avoid the area on my next visit	54.7	52.3	2.4
Talk to area personnel about the incident	67.1	66.5	0.6
Try not to burn bridges	79.5	75.0	4.5
Stand my ground and fight for what I wanted	60.3	60.1	0.2
Think about why the incident occurred	75.3	77.4	-2.1
I make a plan of action and follow it	60.3	62.4	-2.1
I know what has to be done so I double my efforts to make it work	70.9	70.1	0.8
Make light of the situation	75.6	76.1	-0.5
Keep others from knowing how bad things were	52.6	58.7	-6.1
Try to get the person responsible to change their mind	52.1	54.4	-2.3
Don't let it get to me; refuse to think about it too much	80.0	84.0	-4.0
Come up with a couple of different solutions	68.4	67.0	1.4
Leave the area altogether	49.3	46.2	3.1
I try to keep my feelings to myself	76.9	78.9	-2.0
Leave the area and go to a different part of the area	60.5	55.7	4.8
Express anger to the person who caused the incident	50.0	51.0	-1.0
Wish the situation would go away or be over with	72.2	71.9	0.3
Talk to other members of my group about the incident	87.5	89.4	-1.9
Try to forget the whole thing	77.2	77.6	-0.4
Refuse to get too serious about it	84.8	85.2	-0.4
Follow established rules for trail etiquette	95.0	95.8	-0.8
Go on as if nothing had happened	77.2	78.6	-1.4

Schneider et al. (2009)

Table 7.7
Use of coping strategies among walkers who experience interference

Coping Strategy	Used Strategy		
	% Metro (n ≥ 36)	% Statewide (n ≥ 88)	Difference
Change the time I will walk next time	30.5	30.4	0.1
Alter my pace to avoid others	29.1	28.8	0.3
Plan to avoid the area on my next visit	25.6	27.3	-1.7
Talk to area personnel about the incident	24.6	29.3	-4.7
Try not to burn bridges	33.0	34.1	-1.1
Stand my ground and fight for what I wanted	22.2	25.7	-3.5
Think about why the incident occurred	40.4	40.8	-0.4
I make a plan of action and follow it	29.6	30.2	-0.6
I know what has to be done so I double my efforts to make it work	29.6	33.9	-4.3
Make light of the situation	36.5	35.9	0.6
Keep others from knowing how bad things were	29.6	28.6	1.0
Try to get the person responsible to change their mind	17.7	19.5	-1.8
Don't let it get to me; refuse to think about it too much	52.2	48.8	3.4
Come up with a couple of different solutions	27.1	27.3	-0.2
Leave the area altogether	21.7	22.6	-0.9
I try to keep my feelings to myself	40.9	39.9	1.0
Leave the area and go to a different part of the area	29.1	29.0	0.1
Express anger to the person who caused the incident	20.2	21.7	-1.5
Wish the situation would go away or be over with	39.4	40.1	-0.7
Talk to other members of my group about the incident	45.8	44.3	1.5
Try to forget the whole thing	46.3	44.3	2.0
Refuse to get too serious about it	50.2	48.1	2.1
Follow established rules for trail etiquette	51.2	49.9	1.3
Go on as if nothing had happened	44.3	42.6	1.7

Schneider et al. (2009)