

Review of the Use of Motorized Devices on State Trails by Individuals With Disabilities

Pursuant to Laws of Minnesota 2003, Chapter 128

*Minnesota Department of Natural Resources
January 15, 2004*

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Legislative Authorization

This plan has been prepared in accordance with the Laws of Minnesota, 2003, Chapter 128, Article 1, Section 174.

“By January 15, 2004, the commissioner of natural resources shall complete a review of the use of motorized devices on state trails by physically disabled individuals and report the results to the chairs of the legislative committees with jurisdiction over natural resources policy and finance.”

In order to establish a framework (context) for this report it was important to define the words “motorized devices”, “state trails” and “physically disabled individuals.” Definitions for these words are further detailed in the body of the report as follows:

“motorized devices” include electric wheelchairs, three and four wheeled scooters, electric-assist bicycles, gasoline powered bicycles, motorized two-wheeled scooters and electric golf carts. (See pages 7 – 10).

“state trails” refer to the eighteen legislatively authorized state trails (Minnesota Statutes 85.015) that are open for public use and managed by the Department of Natural Resources, Trails and Waterways Division. (See page 3).

“physically disabled individuals” - There is no one definition of “disability”. A variety of definitions exist, specific to a particular law, program, service, or survey. For purposes of the recommendations of this report, the definition in Minnesota Statutes, 169.345, Subd 2. Parking privilege for physically disabled will be used. (See page 12).

Overview of the State Trail System

The “state trails” referenced in the legislative authorization for this study, refer to the 26 legislatively authorized state trails (Minnesota Statutes 85.015), of which eighteen are open for public use and managed by the Department of Natural Resources, Trails and Waterways Division. These eighteen trails total 1066 miles. State trails range in length from the 8 mile Goodhue Pioneer State Trail to the 163 mile Taconite State Trail. The average trail length is 59.3 miles. State trails are multi-use trails, however, the combination of uses allowed and the pattern of use varies by trail. Several trails are developed primarily for non-motorized uses such as the Root River, Shooting Star and Gateway. Other trails, such as the Paul Bunyan and Heartland, are non-motorized in the summer and snowmobile trails in the winter. Other trails, such as the Arrowhead, Taconite, and North Shore are primarily snowmobile trails. Trail surfaces vary to accommodate different types of users and have been developed with three different surfaces – asphalt, crushed aggregate, and natural surface (grass). There are 373 miles of asphalt, 36 miles of aggregate, and 635.5 miles of natural surface in the system. See the map on the next page for the location of these trails and their surface type.

State Trail Mission Statement

The mission statement for the state trail system is:

To provide a system of trails that contribute to a sustainable quality of life.

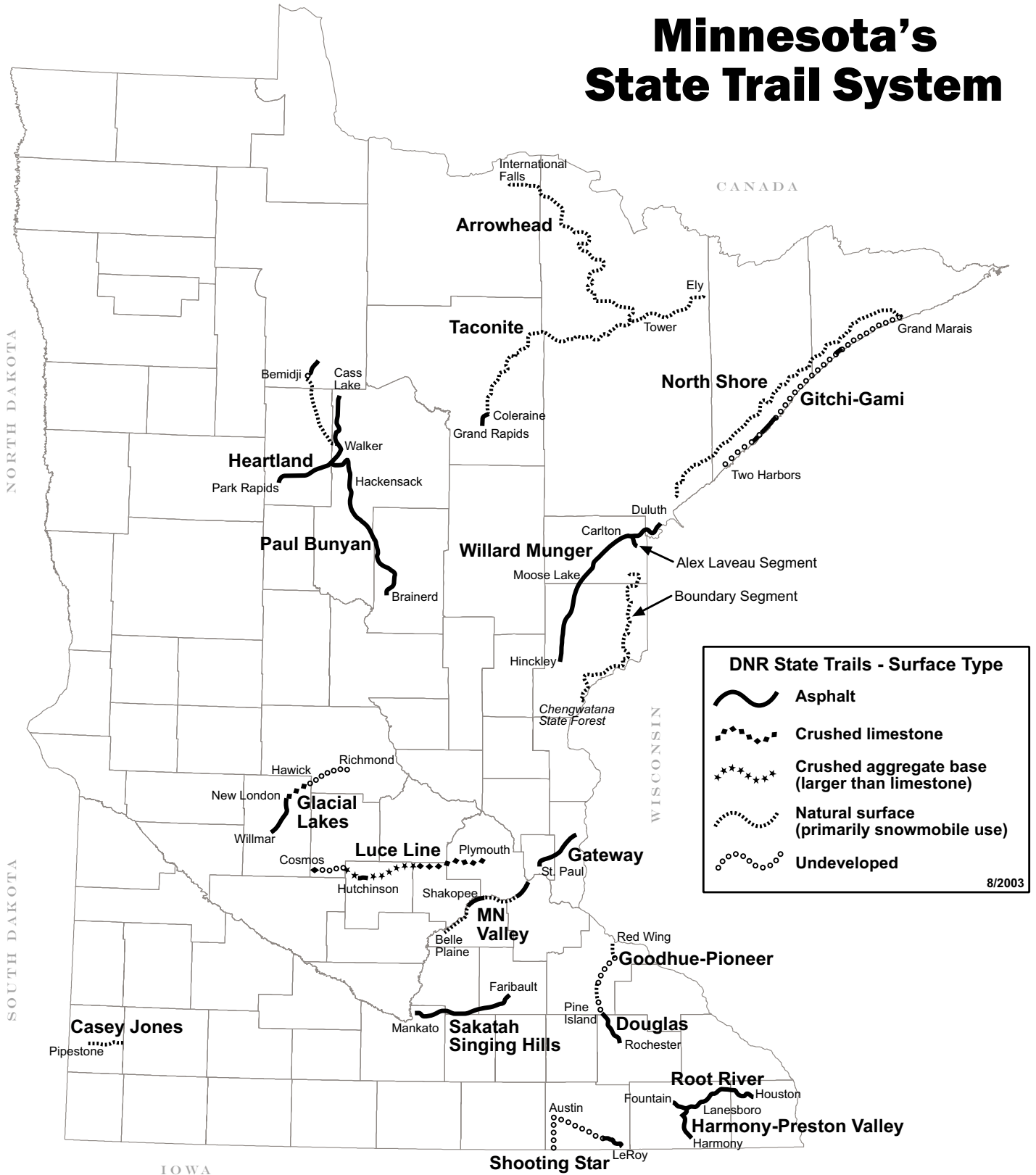
The following goals provide direction of the development and management of state trails.

- Provide access for a wide range of people with varying degrees of capabilities.
- Promote the safety and security of trail users.
- Involve local units of government, user groups, adjacent landowners, and other concerned citizens in the planning, design, and operation of the trail so that their needs are identified and addressed.

To this end, DNR, Trails and Waterways strives to acknowledge the functional role trails play for access and transportation for all and develops and manages state trails to be accessible.

Since 1972, the DNR has been updating its facilities and programs to meet state and federal accessibility standards, opening the outdoors to people with disabilities.

Minnesota's State Trail System



What Uses Are Allowed on State Trails and How Are They Determined?

State trails provide opportunities for a diversity of trail uses including bicycling, hiking /walking, horseback riding, in-line skating, snowmobiling, and cross-country skiing.

Allowable state trail uses are determined by:

- State Trail rules
- State statute
- Master planning process.

State Trail Rules

State Trail rules provide the framework for allowable trail uses as described below.

“6100.3400 TRAIL USES

Subpart 1. In general. Subject to the limitations imposed by these parts and other duly enacted statutes, rules, and ordinances, or unless specifically prohibited by the commissioner, trails may be used for snowmobiling and all nonmotorized forms of recreation, including but not limited to hiking, bicycling, horseback riding, snowshoeing, cross-country skiing, camping, and picnicking.”

Definitions exist in 6100.3300 for bicycle, horseback riding, and snowmobile.

Examples of other uses which are allowed on some segments of state trails in addition to those listed above are dogsledding and carriage driving.

Current State Trail rules prohibit other motorized use except for snowmobiles.

6100.3400 TRAIL USES

Subpart 2. Motor vehicles. No motor vehicle, other than a snowmobile, shall be operated within a trail, except upon a legal road or highway as those terms are identified in Minnesota Statutes, section 160.02, subdivision 26, and except as authorized by the commissioner.

State Statute

In some cases, direction for the trail uses that are allowed on state trails is stated in the authorizing legislation. For example the authorizing language for the Blazing Star State Trail in Minnesota Statutes 85.015, Subdivision 19 states that:

“(b) the trail shall be developed primarily for hiking and nonmotorized riding.”

State Trail Master Planning Process

While all the trails in the system are multi-use, not all trails have the same combination of uses. Which combination of uses exists was determined through a planning process for each trail. The recommendation was determined by demand and the physical characteristics of the trail corridor. The chart on the next page lists the trail uses and mileage available on each state trail.

State Trail	Segment	Total Miles	Bike / In-line skate - asphalt	Bike - limestone	Mountain bike	Hike / Walk	Horseback	Snowmobile	Groomed Ski
Arrowhead	International Falls - Tower	135			69	69	69	135	
Casey Jones	Pipestone	12			12	12	12	12	
Douglas	Rochester - Pine Island	13	13			13	13	13	13
Gateway	Cayuga Ave - Interstate 694	8	8			8			
	Interstate 694 - Pine Point Park	10	10			10	10		10
Gitchi-Gami	Gooseberry Falls State Park	1.2	1.2			1.2			
	Split Rock River - Beaver Bay	8.4	8.4			8.4			1.5
	Tofte - Onion River	2.5	2.5			2.5			
Glacial Lakes	Willmar - New London	12	12			12	12	12	
	New London - Hawick	6		6	6	6	6	6	
	Hawick - Richmond	22							
Goodhue-Pioneer	Red Wing - Hay Creek Unit	4				4	4	4	
	Zumbrota - 4 miles north	4			4	4	4	4	
Harmony-Preston Valley	Root River Trail - Harmony	18	18			18			18
Heartland	Park Rapids - Cass Lake	49	49			49	31	49	
Luce Line	Plymouth - Stubbs Bay Rd.	7		7		7	7		7
	Stubbs Bay Rd. - Winsted	23		23		23	23	23	
	Winsted - Cedar Mills	23			23	23	23	23	
	Cedar Mills - Cosmos	10			10	10	10	10	
Minnesota Valley State Recreation Area Trail	Ft. Snelling - Shakopee	19	6		19	19		19	5
	Shakopee - Chaska	5	5		5	5		5	
	Chaska - Belle Plaine	20			20	20	20	20	
North Shore	Duluth - Grand Marais	146			75	75	75	146	
Paul Bunyan	Brainerd/Baxter - Hackensack	46	46			46		46	
	Hackensack - Bemidji	58	23.5		34.5	58		58	
	East side of Lake Bemidji - Lake Bemidji State Park	5	5			5		5	
Root River	Fountain - Houston	42	42			42			42
Sakatah Singing Hills	Mankato - Faribault	39	39			39	39	39	6
Shooting Star	LeRoy - Taopi	8	8			8			
Taconite	Grand Rapids - Coleraine	4	4			4		4	
	Coleraine - Ely	159			107	107	50	159	
Willard Munger	Boundary Segment	80			80	80	65	80	
	Hinckley - Duluth	63	63			63		63	
	Alex Laveau Segment	6	6			6		6	

Use of Motorized Devices By Individuals With Disabilities on State Trails

Currently, electric wheelchairs are allowed on state trails by extension of the definition of pedestrian found in 169.01 which includes wheelchairs.

“Subd. 24. **Pedestrian.** “Pedestrian means any person afoot or in a wheelchair.”

Individuals with disabilities using other motorized devices are allowed to use a state trail on a case-by-case basis by obtaining a special use permit from the Trails and Waterways Area Manager. Authority to issue a special use permit is found in Minnesota Rules 6100.3400, Subpart 7. Special Events.

“ No special events shall be held within a trail except with a written permit of the commissioner previously obtained. Such a permit may exempt the holder and other participants from the operation of any of the rules contained herein, and may be revoked or suspended by the commissioner at any time.

Approximately 10 – 12 of these special use permits, for use of state trails by individuals with disabilities using a motorized device other than a wheelchair, are issued in a year.

What motorized devices in addition to electric wheelchairs have potential to be used by individuals with disabilities on trails?

There are a variety of motorized devices that are used by individuals with disabilities. They include wheelchairs, three and four wheeled scooters, electric-assist bicycles, gasoline-powered bicycles, electric and gas-powered push scooters, golf carts and all-terrain vehicles.

The pictures on pages 7-10 illustrate the variety of devices. Note the variety of configurations, styles and sizes of each type.

Wheelchairs and Scooters



Images retrieved from the following websites:

1. Retrieved from www.electric-wheelchairs-101.com on 12/23/03
2. Retrieved from www.scootersunlimited.us on 12/23/03
3. Retrieved from www.electric-scooters-101.com on 12/23/03
4. Retrieved from www.phc-online.com on 12/23/03
5. Retrieved from www.familymobility.com on 12/23/03
6. Retrieved from www.pridemobility.com on 12/23/03

These devices generally have a speed of 3-7 miles per hour and vary in width and length. Due to the variety of makes and models, all types cannot be shown. This is only a small sampling of what's available.

Electric-Assist Bicycles



These devices are only a sampling of what is on the market. On average, they can operate at speeds of 13-20 miles per hour. The bicycles can be pedaled faster than 20 miles per hour but the motor assistance will stop after the bike exceeds 20 miles per hour. However, not all electric bicycles operate within these parameters. The rider's weight, terrain, and battery charge are factors in the bicycle's overall speed.

1. Retrieved from www.electricebike.com on 12/23/03
2. Retrieved from www.electricbikenetwork.com on 12/23/03

Gas-Powered Bicycles



These devices are only a sampling of what is on the market. These bicycles can travel up to 30 miles per hour. The speed is dependent on the rider's weight, terrain, and the size of the engine that is mounted on the bicycle.

1. Retrieved from www.bikemotor.com on 12/23/03
2. Retrieved from www.staton-inc.com on 12/23/03

Electric Push Scooters



The electric scooters are similar in speed to the electric bicycles. The same factors (rider's weight, terrain, and battery charge) determine the average speed of these devices. Due to the wide variability in makes and models, not all electric scooters can be shown.

1. Retrieved from www.ediscountwholesalers.com on 12/29/03
2. Retrieved from www.electrikmotion.com on 12/29/03
3. Retrieved from www.quality-scooters.com on 12/29/03

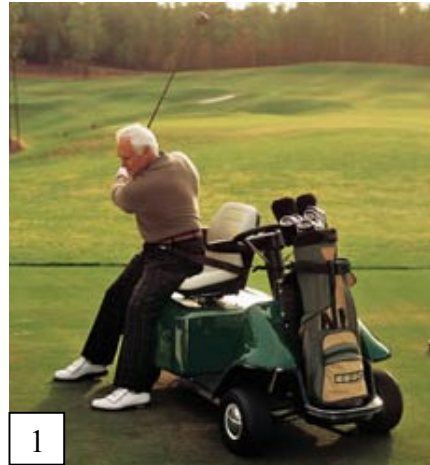
Gas-Powered Push Scooters



Many gas-powered scooters are available and only a small sampling is shown. Most travel between 15 and 22 miles per hour. However, not all gas-powered scooters operate within these parameters.

1. Retrieved from www.edgesports.net on 12/29/03
2. Retrieved from products.zippysport.com on 12/29/03

Electric Golf Carts and Electric Vehicles



Electric golf carts vary in length and width and there are many available models. The model shown (upper left) has an average speed of 12-14 miles per hour. However, the speed is dependent on terrain, rider's weight, and battery charge. Due to the variability of makes and models, not all types can be shown.

The Eagle Single Rider Vehicle (upper right) is a personal golf cart designed specifically for those who have limited mobility. The seat swivels to allow the person the ability to swing a golf club. It averages 12 miles per hour.

The GEM Electric Vehicle comes in different makes and models. The speed varies depending on the terrain. On turf, the GEM averages 12-15 miles per hour while on the street, the GEM can go as fast as 20-25 miles per hour. These are relatively expensive vehicles that are mainly used in warm weather climates, but are being shown as an example of an electric vehicle that could possibly substitute as a golf cart.

1. Retrieved from www.ezgo.com on 12/29/03
2. Retrieved from voltagevehicles.com/Specialty.htm on 12/29/03
3. Retrieved from www.centerjeep.com/newgem.html on 12/29/03

Definition of Individuals With Disabilities

There is no one definition of “disability.” A variety of definitions exist, specific to a particular law, program, service, or survey. To illustrate this point, four definitions are included below; the definition in the Americans With Disabilities Act, the definitions associated with Social Security and the Census Bureau, and the Department of Public Safety definition used for issuing disability license plates and certificates.

Within DNR, there are programs that provide access to hunting and fishing opportunities by individuals with disabilities. These programs include the disability permit to hunt from a standing motor vehicle (Minnesota Statutes 97B.055, Subdivision 3), the Take Big Game and/or Turkey with a Crossbow (Minnesota Statutes 97B.106 and 97B.035(1), and the Permanent Angling License (Minnesota Statutes 97A.441, Subd. 4). Applications for these programs outline qualifying criteria and are included in the Appendix.

Americans With Disabilities Act (ADA)

Under the Americans With Disabilities Act, (ADA), an individual with a disability is a person who:

- (1) Has a physical or mental impairment that substantially limits one or more major life activities; or
- (2) Has a record of such an impairment; or
- (3) Is regarded as having such an impairment

A physical impairment is defined by ADA as “any physiological disorder or condition, cosmetic disfigurement, or anatomical loss affecting one or more of the following body systems: neurological, musculoskeletal, special sense organs, respiratory (including speech organs), cardiovascular, reproductive, digestive, genitourinary, hemic and lymphatic, skin, and endocrine.”

Neither ADA nor the regulations that implement it list all the diseases or conditions that are covered, because it would be impossible to provide a comprehensive list, given the variety of possible impairments.

U.S. Census Bureau

People 5 years old and over are considered to have a disability if they have one or more of the following: (a) blindness, deafness, or a severe vision or hearing impairment; (b) a substantial limitation in the ability to perform basic physical activities, such as walking, climbing stairs, reaching, lifting, or carrying; (c) difficulty learning, remembering, or concentrating; or (d) difficulty dressing, bathing, or getting around inside the home.

In addition to the above criteria, people 16 years old and over are considered to have a disability if they have difficulty going outside the home alone to shop or visit a doctor's office, and people 16-64 years old are considered to have a disability if they have difficulty working at a job or business.

Social Security

Disability under Social Security is based on inability to work. A person is considered disabled if they cannot do work they did before and it was decided that they cannot adjust to other work because of medical condition(s). The disability also must last or be expected to last a year or to result in death.

Minnesota Statutes, 169.345, Subd 2. Parking privilege for physically disabled

Subd.2. Definitions. For the purpose of this section, "physically disabled person" means a person who:

- (1) because of disability cannot walk without significant risk of falling;
- (2) because of disability cannot walk 200 feet without stopping to rest;
- (3) because of disability cannot walk without the aid of another person, a walker, a cane, crutches, braces, a prosthetic device, or a wheelchair;
- (4) Is restricted by a respiratory disease to such an extent that the person's forced (respiratory) expiratory volume for one second, when measured by spirometry, is less than one liter;
- (5) has an arterial oxygen tension (PAO₂) of less than 60 mm/Hg on room air at rest;
- (6) uses portable oxygen
- (7) has a cardiac condition to the extent that the person's functional limitations are classified in severity as class III or class IV according to standards set by the American Heart Association
- (8) has lost an arm or a leg and does not have or cannot use an artificial limb; or
- (9) has a disability that would be aggravated by walking 200 feet under normal environmental conditions to an extent that would be life threatening

How many people with disabilities are there in Minnesota?

According to the Census definition there are 679,236 individuals with disabilities.

According to the Department of Public Safety, there are approximately 200,000 active permits and certificates for parking privileges for physically disabled.

It is unknown how many individuals with disabilities use state trails under any of the definitions.

For purposes of this study's conclusions and alternative actions, the definition used is Minnesota Statutes, 169.345, Subd 2. Parking privilege for physically disabled. This is also the criteria that the Department of Natural Resources, Division of Parks and Recreation uses to issue a \$12 (special Minnesota State Parks Annual Permit designated for people with a State of Minnesota disability license plate.

What are the benefits and the issues/concerns with allowing motorized devices used by individuals with disabilities to use state trails?

Advantages

- Extends the benefits of trail recreation to individuals who are prevented from doing so now under current rules.
- Promotes family outings.
- Acknowledges functional role trails play for access and transportation.
- Acknowledges aging population.
- Most trails can accommodate the use.

Issues/Concerns

- Could create user conflicts by adding more individuals on a trail, especially on already congested trails.
- Motorized devices could create safety issues of speed, width and weight.
- Noise of some motorized devices would diminish the trail experience other users need on state trails.
- Creates confusion with other users (That person is using golf cart, I can too).

What Are Local Units of Government Doing?

As part of the background research done for this report, local units of government in Minnesota were contacted and asked the following questions:

1. Do you allow individuals with physical disabilities to operate motorized devices on your trail system?
2. If so, what kind of motorized devices do you allow?
3. If you do allow motorized devices, have you had any conflicts or problems?
4. Does your ordinance specifically define “motorized device?”
5. Does your ordinance specifically define “physical disability?”

Thirty-one communities, six counties, and Three Rivers Park District were contacted. These communities and counties were located both in the Metro area and out state. The following conclusions and generalizations were made based on these conversations.

1. By ordinance, most communities do not allow motorized devices on their trail system.
2. Most community ordinances do not address the issue of the use of motorized devices by individuals with physical disabilities.
3. Most, (but not all) communities allow electric wheelchairs on their paved trail systems. Some ordinances define individuals using electric wheelchairs as “pedestrian.”
4. Some communities and counties use a permit system to allow for special requests. The individual with a disability can request a special use permit to use a motorized device other than an electric wheelchair. These request are few and no abuse has been reported.
5. Some communities are very open as to what they will allow for use as a motorized device. Some communities and counties have allowed permits for the use of golf carts and small ATV’s.
6. Many communities rely on their enforcement officers to make the assessment as to whether or not the motorized device is creating a problem.
7. Some communities and counties adhere to a strict definition of physically disabled, while others prefer not to quantify the definition. They would rather address it on a case-by-case basis.
8. It is not an issue for communities and counties at this time. They are not experiencing conflicts or overwhelming number of requests.
9. The use of the two-wheeled motorized scooter was identified as the biggest issue communities were dealing with. Some have enacted ordinances against their use.

See Appendix for examples of community and county ordinances and definitions.

What Are Other States Doing?

Five states were contacted regarding the use of motorized devices by individuals with physical disabilities. The same questions were asked of them as were asked of the local units of government. The following conclusions and generalizations were made based on these conversations.

1. Most states will make reasonable accommodations for the use of motorized devices by individuals with disabilities.
2. Some states issue a special use permit similar to Minnesota communities.
3. In Washington, park rangers and enforcement officers have on-the-spot authority to make a decision regarding the appropriate motorized device for use on a specific trail.
4. A few states will not allow ATV's on non-motorized trails, while other states will. Most of the permits given for ATV's relate to hunting access, and are not granted for trail recreation purposes.
5. One state replied that it hasn't been an issue and that they haven't had any inquiries to use a motorized device other than an electric wheelchair.

States contacted:

Illinois, Wisconsin, Washington, Arkansas, Maryland

Conclusions

There is no definition of pedestrians that includes motorized devices used by individuals with disabilities in state trail statutes and state trail rules.

There is not currently a large explicitly expressed demand for use of motorized devices by individuals with disabilities.

Demand could be expected to grow as the population ages because there is a strong correlation between advancing age and increased amount of disabilities.

It is not possible to write a comprehensive definition that includes all motorized devices by individuals with disabilities because of the number of devices and modifications that exist currently and will exist in the future.

Alternative Actions

Alternative 1: No change to status quo.

Electric wheelchairs are allowed on state trails. Use of other motorized devices by individuals with disabilities is allowed by special use permit. A special use permit is granted to an individual or group for a specific use of the trail for a specific time period. Special use permits can be obtained from the Area Trails and Waterways Supervisor responsible for the management and operation of the trail. (There are 15 area offices located throughout the state.)

Alternative 2: Clarify the definition of “pedestrian” to state explicitly that pedestrian (walking/hiking) includes individuals with disabilities using electric wheelchairs and three and four wheeled scooters. This could be done two ways.

(1) Make the clarification in statute.

(a) Amend Minnesota Statutes 85.015 to allow this use on all state trails.

This alternative would clarify the fact that three and four wheeled scooters are allowed on state trails by including definitions of pedestrian and wheelchair and explicitly stating it in law (Minnesota Statutes 85.015). Following is the content of the legislative change.

Pedestrian. “Pedestrian” means any person afoot or in a wheelchair.

Wheelchair. “Wheelchair” is defined to include any manual or electric motorized wheelchair, scooter, or tricycle designed to transport a single individual and used by a person with a disability as a substitute for walking.

The two definitions above are found in Minnesota Statutes 169.01, Subd. 24 and 24a.

The definition of a person with a disability will be that they meet the criteria outlined in Minnesota Statutes 169.345, Subd. 2. (See page 12).

Other motorized devices not covered by this definition could be allowed through use of a special use permit obtained from the DNR, Trails and Waterways Area Supervisor.

(2) Make the clarification in rule.

Amend Minnesota Rules 6100.3300 to include the definitions of pedestrian and wheelchair as stated above as an allowable use on state trails.

Recommendation

A work group comprised of staff from the Department of Natural Resources Trails and Waterways and representatives from the Department's Accessibility Committee discussed the issue, developed alternatives, and recommended Alternative 2:

- (2) Make the clarification in rule. Amend Minnesota Rules 6100.3300 to include the definitions of pedestrian and wheelchair as stated on page 18 as an allowable use on state trails.