

STATE MOTORIZED AND NONMOTORIZED TRAILS PLAN



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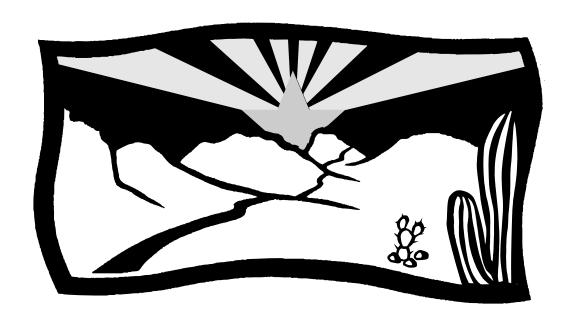


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Arizona Trails 2005

Statewide Motorized and Nonmotorized Trails Plan



November 2004

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Executive Summary

The purpose of this plan is to provide information and recommendations to guide Arizona State Parks and other agencies in Arizona in their management of motorized and nonmotorized trail resources, and specifically to guide the distribution and expenditure of the Arizona Off-Highway Vehicle (OHV) Recreation Fund (A.R.S. § 28-1176), trails component of the Arizona Heritage Fund (A.R.S. § 41-503) and the Federal Recreational Trails Program (23 U.S.C. 206).

This plan includes both motorized and nonmotorized trail information, public involvement results and recommendations for future actions regarding trails in Arizona. This plan was prepared by Arizona State Parks as required by state legislation (State Off-Highway Vehicle Recreation Plan, A.R.S. § 41-511.04 and State Trails Plan § 41-511.22). The 2004 publication of the two plans referenced above has been incorporated into this single document titled *Arizona Trails 2005: State Motorized and Nonmotorized Trails Plan*, which supercedes the *ARIZONA TRAILS 2000 PLAN*.

When the word "trail" is used in this plan, it refers to recreational trails and/or roads used by motorized and nonmotorized trail users.

Specific objectives of the *Arizona Trails 2005: State Motorized and Nonmotorized Trails Plan* include:

 Assess the needs and opinions of Arizona's residents as they relate to trail recreation opportunities and management;

- Establish priorities for expenditures from the Arizona OHV Recreation Fund, Arizona Heritage Fund trails component and Federal Recreational Trails Program;
- Develop strategic directions to guide activities for the Arizona State Parks' OHV and Trails Programs; and
- Recommend actions that enhance motorized and nonmotorized trail opportunities to all agencies and the private sector who provide trail resources in Arizona.

Arizona State Parks implemented an extensive research and public involvement process to determine the final priority recommendations of the plan. A statewide survey of over 5,000 residents was conducted from January to September 2003. The statewide survey had two components, first Arizona residents were contacted via telephone for a short survey and those that agreed were given a longer mail survey. In addition to the statewide surveys, Arizona State Parks facilitated 15 public workshops in order to gain further information from trail users, land managers, recreation and natural resource managers and interested residents.

This plan is written primarily for recreation planners and land managers. The plan also includes information regarding trail users and trends affecting trails in Arizona. The plan first presents background information on trails in Arizona. Next the planning process is described along with findings of the surveys and workshops, and then the recommendations are outlined. The plan also includes accomplishments of the OHV and Trails Programs over the past five years and appendices of relevant information. This information is intended to be a resource to guide trail agencies for the next five years—2005 through 2009.

Findings include:

- Approximately two-thirds of Arizona residents (66.4%) are trail users and one-third (33.6%) are nonusers.
- 62.7% of respondents participated in nonmotorized trail use at some point during their time in Arizona and 56.5% said most of their trail use involved nonmotorized activities.
- 24.5% of respondents participated in motorized trail use at some point during their time in Arizona and 7.0% said most of their trail use involved motorized activities.
- The most important motives for using trails for both nonmotorized and motorized trail users were *to view scenic beauty, to be close to nature*, and *to get away from the usual demands of life*.
- The most popular nonmotorized activities on Arizona's trails are *trail hiking (day hiking)*, *walking, visiting historical archaeological sites*, and *jogging/running*.
- The most popular motorized activities on Arizona's trails are four-wheel driving, driving to sightsee or wildlife viewing/birding, all-terrain vehicle (ATV) riding and motorized trail biking/dirt biking.
- Nonmotorized trail users most often recreate just outside a
 city or town or in a city or town, but said they prefer to use
 trails in a remote area or a rural area. Motorized trail users
 most often recreate in rural and remote settings and most
 prefer those settings.
- Nonmotorized users travel an average of 23 miles and motorized trail users travel an average of 51 miles for the activity they do most often.

- The majority of trail users (62% to 70%) prefer trails of moderate difficulty, though more motorized users (17%) prefer challenging trails than do nonmotorized users (5%).
- Public access to trail opportunities is a concern of Arizona's trail users, especially motorized trail users. Nearly half (48%) of motorized users feel that public access to trails for their preferred activities has declined in the last five years.
- Both nonmotorized and motorized users feel that environmental concerns, such as *litter*, *trash dumping*, *erosion of trails*, *damage to historical or archaeological sites* are slight to moderate problems.
- Social issues that are considered slight to moderate problems by nonmotorized and motorized trail users include *residential/commercial development, unregulated OHV use,* and *lack of trail ethics by other users*.
- Trail support facilities that were important to both nonmotorized and motorized users included *trash cans*, *trail signs*, *restrooms and drinking water*.
- Both motorized and nonmotorized users said the top management priorities were to keep areas clean of litter/ trash, maintain existing trails, repair damage to trails, and enforce existing rules and regulations.
- When asked to rate the top three trail issues in Arizona, nonmotorized users said lack of funding for trails, urban development limiting access, and inadequate trail maintenance. Motorized users replied closure of trails, urban development limiting access, and lack of funding for trails.

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PRIORITY RECOMMENDATIONSDeveloped from the Arizona Trails 2005 public involvement process

MOTORIZED TRAIL USE

NONMOTORIZED TRAIL USE



Comprehensive Planning

First Level Priority Nonmotorized Recommendations				
Renovation and Maintenance of Existing Trails				
Protect Access to Trails/Acquire Land for Public Access				
Develop Signage and Support Facilities				
Second Level Priority Nonmotorized Recommendations				
Second Level Priority Nonmotorized Recommendations				
Second Level Priority Nonmotorized Recommendations Comprehensive Planning				
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Other Priority Recommendations				
Reduce Cultural and Environmental Resource Impacts (both motorized and nonmotorized)				
Seek Additional Funding Sources (both motorized and nonmotorized)				
Interagency Coordination (both motorized and nonmotorized)				
Develop Signage and Support Facilities (motorized)				
Develop New Trails (nonmotorized)				
Coordinated Volunteerism (nonmotorized)				
More Accessible Trails for Individuals with Physical Disabilities (nonmotorized)				
Enforcement of Existing Rules and Regulations/Monitoring (nonmotorized)				



Hikers at Boyce Thompson Arboretum State Park

Four-Wheel Drive Enthusiasts on the Great Western Trail

Chapter 1 Introduction

"The time for trails is now, if we all act now, we can begin to see results. We can realize the vision for a system of trails, connecting people and communities. This can be the era of the recreational interstate system—with a trail within 15 minutes of most of our homes."

American Trails, Trails for All Americans report, 1990



Four-wheel drive enthusiasts, horseback riders, trail motorcyclists, ATV riders, hikers, cross-country skiers, mountain bicyclists and backpackers are all part of Arizona's trails community.

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Chapter One: Introduction

This plan includes both motorized and nonmotorized trail information, public involvement results and recommendations. The plan was prepared by Arizona State Parks as required by state legislation (state off-highway vehicle (OHV) recreation plan, A.R.S. §41-511.04 and state trails plan, A.R.S. § 41-511.22). The 2004 publication of the two plans referenced above has been incorporated into this single document titled *Arizona Trails 2005 Plan*, which supercedes the 1999 publication titled *ARIZONA TRAILS 2000: State Motorized and Nonmotorized Trails Plan*.

Information (narrative and tables) specific to either motorized or nonmotorized trail use is presented separately throughout the chapters.

A substantial part of this plan is composed of findings from motorized and nonmotorized trail users, recreation planners, land and natural resource planners and the general public gathered during the public involvement process. Additional information can be found in Appendices A and B and in the full survey report, *Trails 2005: A Study of Arizona's Motorized and Nonmotorized Trail Users*.

Purpose

The purpose of this plan is to provide information and recommendations to guide Arizona State Parks and other agencies in their management of motorized and nonmotorized trail resources, and specifically to guide the distribution and expenditure of the Arizona Off-Highway Vehicle Recreation

Fund A.R.S. § 28-1176, the trails component of the Arizona Heritage Fund A.R.S. § 41-503, and the Federal Recreational Trails Program (23 U.S.C. 206).

This opening chapter provides general information about recreational trail use in Arizona including definitions, user information, trail management partnerships and trends affecting trail recreation. It is meant to provide a background to the plan findings and recommendations.

Definitions

The term "trail" can be interpreted in many different ways. For this plan, a "trail" is defined as any pathway or roadway, which is usually unpaved, but can include paved pathways, that is used by either motorized or nonmotorized recreational trail users. A trail can be single or double track, dirt or paved, or for single or multiple uses. Trails can be urban, rural or wilderness in their setting.

This plan focuses primarily on recreational trails or roads as linear paths or corridors that are accessible to the public. When the word "trail" is used in this plan, it refers to a "recreational trail" (see page 53 for definition) used by motorized and nonmotorized trail users. Different land managing agencies utilize various definitions for "trail." While this definition of trail highlights trails as a mode of recreational travel, trails also involve natural, scenic, historic and other recreational values.

When the plan mentions "motorized trails" it is addressing off-highway vehicle use. "OHVs" are defined broadly to include all vehicles (licensed or unlicensed) powered by an internal combustion engine that travel off paved surfaces. OHVs include: pickup trucks, sport utility vehicles (SUV)

and other high clearance and four-wheel drive vehicles; all-terrain vehicles (ATV); motocross, Trials, enduro and trail motorcycles; dune buggies or sandrails, and snowmobiles. There are few areas in Arizona that are truly open to cross-country vehicle travel, therefore, the term off-highway vehicle (OHV) is favored over off-road vehicle (ORV).

"Nonmotorized trails" are defined as those trails used for hiking, horseback riding, bicycling, mountain bicycling, walking, backpacking, jogging, running, rollerblading, in-line skating, skate boarding, cross-country skiing, snowshoeing, and hiking with pack stock such as horses, mules and llamas. It also includes water trails for canoes and kayaks.

When referring specifically to the Arizona Heritage Fund, State statute defines trails as "those trails for nonmotorized use nominated for inclusion in the State Trails System, including urban, cross-state, recreation, interpretive or historic trails."

Arizona's Trail Users

This plan recognizes motorized and nonmotorized trail users as those utilizing recreational trails and roads for traditional uses such as four-wheel driving, motorized trail biking, ATV riding, hiking, bicycling and horseback riding.

However, a significant portion of Arizona's trails community is made up of those who use recreational trails and roads as avenues to sightsee, watch wildlife, visit historic sites, access hiking trails, picnic areas, rock climbing sites and hunting and fishing areas, trailer in horses, mountain bicycles or ATVs to trailheads; and in general, explore the outdoors. All of these people are part of the Arizona trails community, but are not necessarily reflected in the following trail use numbers.

The *Arizona Trails 2005* survey (see Figures 1 and 2 and Chapter 2) conducted by Arizona State Parks and Arizona State University found that:

- Over 66.4% of Arizona's residents consider themselves trail users. This translates to approximately 3.7 million Arizonans who use trails in this state, which does not include the millions of visitors who come to Arizona each year and also use trails.
- Over 62.7% of residents participated in nonmotorized activities at some point during their time in Arizona, 56.5% reported that nonmotorized trail use accounted for the majority of their time and are considered 'core users.'
- The percentage of nonmotorized trail core users ranged from a high of 69.4% in Coconino County to a low of 37.2% in Yuma County; overall nonmotorized use ranged from 82% in Coconino to 47% in Yuma.
- Over 24.5% of residents participated in motorized trails activities, 7.0 % reported that motorized trail use accounted for the majority of their time and are considered 'core users.'
- The percentage of motorized trail core users was higher in rural counties and ranged from a high of 25.0% in La Paz County to a low of 5.3% in Pima County; overall motorized use ranged from 50% in Greenlee County to 21% in Pima.
- The remaining 33.6% of Arizonans say they do not use trails at all.
- To determine user type percentages, survey respondents were asked to indicate their predominant type of use (greater than or equal to 51%).

A small percentage (2.9%) of the population said they use trails <u>equally</u> (50/50) for motorized and nonmotorized activities. These respondents were classified as generalists and were left out from the survey findings as they tend to homogenize the results.

The <u>overall trail users</u> are comprised of respondents who answered yes to the question, "Have you ever used a trail for motorized recreation?" and/or yes to "Have you ever used a trail for nonmotorized recreation?" Respondents could answer yes to both questions. The percentages of motorized and nonmotorized trail users is shown in Figure 1.

In short, 24.5% of respondents participate in motorized activities and 62.7% participate in nonmotorized activities. The motorized percentage (24.5%) includes those who said they are motorized users exclusively as well as those who said they use trails for both motorized



and nonmotorized uses. The nonmotorized percentage (62.7%) includes those who said they are nonmotorized users exclusively as well as those who said they use trails for both motorized and nonmotorized uses. These figures exclude the small percentage who say they use both types equally.

<u>Core users</u> are comprised of respondents who said they are predominantly motorized or predominantly nonmotorized trail users. The percentages for each trail use type and for nonusers of trails are shown by individual counties and by the statewide total in Figure 2. (See pages 19-20 for further explanation. Also, see chart on page 81 for participation percentages and number of use days by individual trail activity.)

Motivations for Trail Use

Both motorized and nonmotorized trail users indicated the same top five motivations for using trails:

- View scenic beauty
- To be close to nature
- To get away from the usual demands of life
- Learn more about nature
- Be with family or friends
- For nonmotorized users, the fifth top motivation for using trails also included Improve my physical fitness

Benefits of Trails

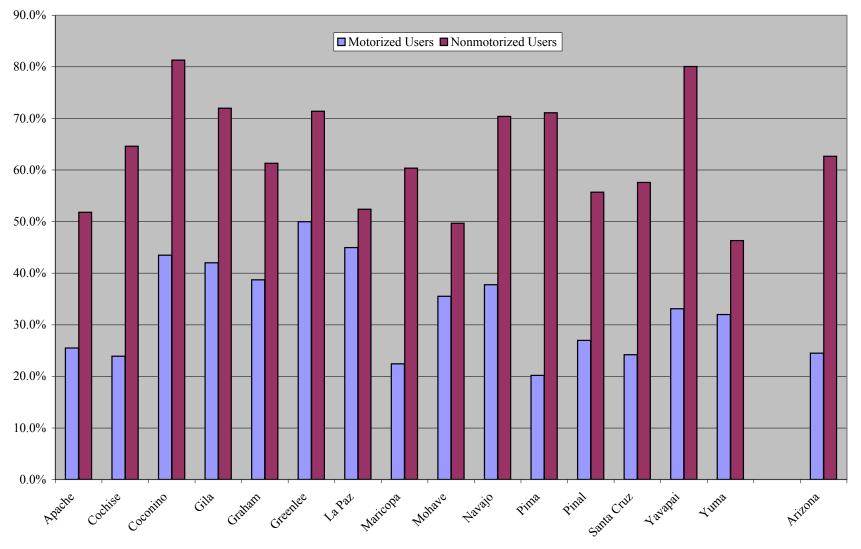
Trails enrich our quality of life by making communities more livable, by highlighting and linking people to areas rich in culture, natural beauty, unique geography, historic significance, and ecological diversity. Trails also provide economic, health and fitness, and education benefits, as well as other recreation opportunities.

Economic. An organized trail system is a desirable amenity that can contribute to the economic soundness of a community. Trails and trail systems have the potential to create jobs, increase property values, expand or attract business, increase local tax revenues, decrease local governmental expenditures and promote a local community. In urban areas, the increased use of trails directly benefits outdoor businesses that provide merchandise associated with trail activities. These trails may increase property values, as many housing developments are located close to trail systems. Trails can enhance property values by providing trail access to owners, making such areas more desirable in which to live. Trails also benefit other, more remote areas of Arizona by serving as recreational destinations supporting tourism and benefiting nearby communities.

Arizona's Overall Motorized and Nonmotorized Trail Use Percentages

24.5% of adult Arizona residents participate in motorized trail activities and 62.7% participate in nonmotorized activities. Overall trail use percentages are comprised of survey respondents who answered yes to the question, "Have you ever used a trail for motorized recreation?" and/or yes to "Have you ever used a trail for nonmotorized recreation?"

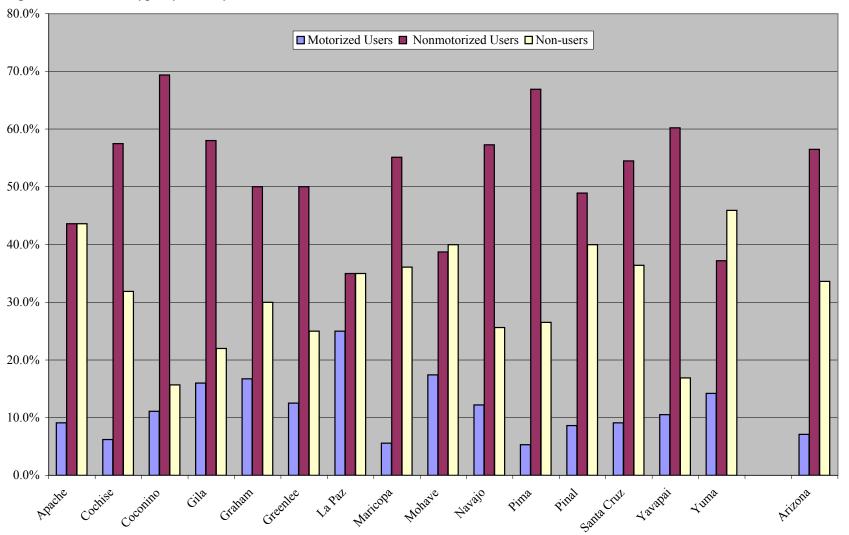
Figure 1: Overall Use Type by County



Arizona's Core Motorized and Nonmotorized Trail Use and Non-use Percentages

<u>Core users</u> are comprised of respondents who said they are predominantly motorized or predominantly nonmotorized trail users. See chart on page 81 for participation percentages and number of use days by individual trail activity such as hiking or four-wheel driving.

Figure 2: Core Use Type by County



Wherever the region in Arizona, the use of trails generates revenue and creates jobs for those living nearby.

Health and Fitness. Recreational trail use has direct benefits that satisfy personal needs of health, fitness and well-being. Trails offer fitness opportunities in natural settings with attractive scenery. Trails also provide an inexpensive, often free, way for individuals to increase their physical activity level, and often these trails are close to home. Many areas

in Arizona offer trails that may be used throughout the year. In addition, trails have the potential to offer alternate forms of nonmotorized transportation that contribute to a healthier environment with less pollution. This has a direct effect on the health of the whole community. The benefits of trails include improvements



to an individual's emotional health and quality of life. Using trails for recreational purposes can lead to the reduction of stress experienced in daily life. Trails also act as a meeting place for the community and can foster community involvement, corresponding pride and the opportunity to interact with people (Active Living–Go for Green).

Education. Trails provide opportunities for citizens to learn about environmental, cultural, historical or geological aspects of a particular area. They offer a means for people of all ages and abilities the opportunity to gain access and insight into the natural world. Increasing use of interpretive trails is an excellent example of how such information can be distributed to the public, resulting in a heightened awareness of an area. Utilizing trails as an avenue for education can nurture appreciation, knowledge and respect for the natural environment.

Resource Protection. Established trails provide a designated area for users, and these trails offer benefits concerning the protection of resources in natural settings. This removes people from critical or sensitive areas, reducing resource impacts. Trails can help in reducing cross-country travel that may have a negative impact on the physical environment. Local trail corridors can serve as buffers between various land uses, such as separating commercial and residential areas. They can be used to define areas where growth is planned or to protect unique environmental areas, such as floodplains, washes and critical wildlife habitats.

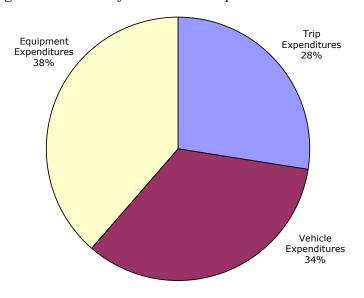
Access and Linkages. Trails in Arizona play a primary role in providing access to many different areas. Recreationists use trails to reach areas for fishing, hunting and rock climbing. Trails also provide the only access to wilderness areas in primitive Arizona settings. Trails may provide valuable linkages throughout the State as well. In certain communities, trails connect neighborhoods, schools, businesses, and parks and recreation facilities.

Economic Benefits of Off-Highway Vehicle Recreation to Arizona

Whether one enjoys exploring Arizona's backcountry driving a truck, dirt bike or quad, or one prefers using their own muscle power to hike the trails, the following information may be of interest. Arizona State University conducted a yearlong economic study of recreational off-highway vehicle use in Arizona in 2002, completing 15,000 telephone surveys and 1,269 mail questionnaires from randomly selected Arizona households. See Appendix F for more detailed results of this survey.

The study findings show the total economic impact (direct and indirect) to Arizona from recreational OHV use is more than \$4 billion annually. OHV recreation activities provide an economic contribution to the State and its 15 counties mainly through direct expenditures for motorized vehicles, tow trailers, related equipment, accessories, insurance and maintenance costs.

Figure 3: Percent of Direct OHV Expenditures-\$3.1 Billion



Additionally, an economic benefit is generated when OHV recreationists spend money in local communities close to areas they recreate in for recreational trip items such as gasoline, food, lodging and souvenirs. These direct purchases (Figure 3) provide indirect benefits by helping to pay for many people's salaries and wages, and contributing to local and State tax revenues.

In 2002, Off-Highway Vehicle Recreation in Arizona:

- Created a statewide economic impact of \$4.25 billion
- Generated over \$3 billion in retail sales (trip expenditures, \$842.3 million; vehicle expenditures, \$1,035.2 million; equipment expenditures, \$1,178.2 million)
- Added \$187 million to annual State tax revenues
- Created household income (salaries and wages) for Arizona residents totaling \$1.1 billion
- Supported 36,591 jobs in Arizona
- Was participated in by 455,453 households or 1.1 million people, which accounts for 21% of Arizona's population
- Accounted for 12.2 million OHV Recreation Days in Arizona and an additional 1.8 million days in adjacent states and countries

The number of OHV households was determined by positive phone survey responses to three specific questions: 1) Do you own an OHV?; 2) Do you drive it off-highway?; and 3) Do you use it for recreation? Totals for vehicle and equipment purchases were factored (reduced) by the percentage owners said their vehicles were used for OHV recreation, not total vehicle cost. The economic model (IMPLAN) used to generate the direct/indirect estimates is more conservative than other frequently used models. Expenditures by OHV visitors to Arizona were not included.

These numbers show that off-highway vehicle recreation is participated in by many more people than just those core users recreating with dirt bikes, ATVs or snowmobiles. The majority of outdoor recreationists use many types of motorized vehicles, such as sport utility vehicles and pickup trucks, to reach their destination and enjoy driving the backroads in their vehicles to sightsee along the way.

Arizona's Trail Partners

The agencies and organizations responsible for conserving and managing Arizona's trail resources include city, town, county, state, federal, tribal and private sector as well as clubs, organizations and individual enthusiasts. Many of the entities above also own the land that trails traverse.

Arizona's Land Ownership

Arizona is the sixth largest state in the nation in terms of land area and includes over 72.9 million acres of land. The greatest portion of land, 30.6 million acres (42%) is federally owned, managed primarily as national forests, parks, wildlife refuges and military lands. The next highest percentage (27%) or 19.9 million acres is tribally owned. There are 12.8 million acres (18%) of privately owned land and 9.3 million (13%) of State Trust land (State Land Dept., 2003). City, town, county, and other State lands account for approximately 0.4% of Arizona's land.

Partnerships

Many of the land managing entities have established partnerships with other agencies or organizations to share resources and improve trails. Of particular note is the partnerships between the Arizona State Parks Board and the many agencies and organizations involved in the planning, development and management of Arizona's trail resources. The State OHV and nonmotorized Trail Programs managed by Arizona State Parks (ASP) actively work with their partners in a variety of ways.

Many agencies have partnered with Arizona State Parks utilizing monies from the State Parks' administered OHV Recreation Fund (Tables 1 and 2), the Trails Heritage Fund (Table 3) and the Federal Recreational Trails Program (RTP)

(Tables 1 and 4) to implement a variety of motorized and nonmotorized trail projects.

The OHV Recreation Fund comes from a fixed percentage of total license tax on motor vehicle fuel. The Arizona Heritage Fund comes from Arizona Lottery revenues. The RTP comes from the Federal Highway Administration and is part of the Transportation Efficiency Act for the 21st Century (TEA-21). The RTP monies administered by Arizona State Parks equally funds motorized and nonmotorized trail projects statewide.

Table 1 shows competitive grants awarded from the OHV Recreation Fund and motorized portion of the RTP. Table 2 shows Partnership Agreements that utilize the OHV Recreation Fund. Table 3 shows competitive grants awarded from the Trails Heritage Fund. Table 4 shows partners awarded with trail maintenance services through the nonmotorized portion of the RTP fund.

Table 1: Arizona OHV Recreation Fund and Motorized RTP Fund Competitive Grant Awards FYs 1993-2003

Partnering Entity	# of Grants	\$ Awarded
Cities/towns	3	\$445,609
Counties	7	\$2,240,085
State	3	\$590,681
Federal	58	\$7,646,814
Nonprofits	1	\$20,000
Totals	72	\$10,943,189*

^{*} The OHV Recreation Fund was redirected to the State General Fund in FYs 2002, 2003 and 2004. This forced the suspension of grants already awarded to recipients across the State.

Table 2: Arizona Off-Highway Vehicle Recreation Fund* Partnership Agreements FYs 2001-2003**

Partnering Entity	Agreement Amount
Forest Service U.S. Department of Agriculture	\$750,000
Bureau of Land Management U.S.Department of Interior	\$750,000
Arizona State Land Department - OHV Recreation Program	\$670,000
Arizona State Land Department - Interagency Inventory and Mapping Project	\$2,500,000

^{*} Arizona OHV Recreation Fund Source: Arizona State Motor Fuel Tax. ** The OHV Recreation Fund was redirected to the State General Fund in FYs 2002, 2003 and 2004, forcing the termination of agreements already awarded to recipients above.

Table 3: Arizona Trails Heritage Fund Competitive Grants Awarded FYs 1994-2003*

Partnering Entity	# of Grants	\$ Awarded
Cities/towns	31	\$2,137,573
Counties	16	\$934,706
Federal/tribes	49	\$2,075,878
Total**	96	\$5,148,157

^{*}Arizona Heritage Fund Source: Arizona Lottery Revenues

Table 4: Nonmotorized Recreational Trails Program Trail Maintenance Partners FYs 2001-2004*

Partnering Entity	# of Projects	RTP Project Amount (estimated**)
Cities/towns	11	\$366,134
Counties	5	\$282,354
State	3	\$84,253
Federal	24	\$1,417,311
Tribal	2	\$32,187
Totals	45	\$2,182,239

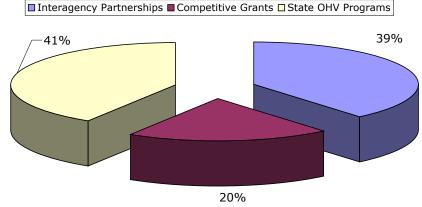
^{*} Federal Recreational Trails Program Source: Transportation Efficiency Act for the 21st Century (TEA-21) from the FHWA.

Figure 4 shows: 1) the overall percentage (41%) of the total OHV Recreation Fund used by State agencies (Arizona Game and Fish Department, Arizona State Parks and Arizona State Land Department) for education and information programs, law enforcement, OHV management of State Trust land, technical assistance and administration, and 2) the overall percentage (57%) of the total Fund awarded by Arizona State Parks to various agencies through the competitive grant process (see Table 1) and partnership agreements (see Table 2). The competitive grant monies have been distributed to National Forests (57%), cities and counties (38%), State agencies (4%), and Bureau of Land Management (1%).

^{**} Since 1994, Arizona State Parks has received 5% of the Trails Heritage Fund annually for nonmotorized trail projects within the State Parks system; ASP did not compete for Heritage trails grant projects in FYs 1994-2003.

^{**} All projects have not yet been completed so the amounts are estimated until expenditures are finalized.

Figure 4: Total OHV Recreation Fund Percent Distribution FYs 1999-2003*



*The OHV Recreation Fund was redirected to the State General Fund in FYs 2002, 2003 and 2004.

Current Trends Affecting Trails Recreation

The findings of the *Trails 2005: A Study of Arizona's Motorized and Nonmotorized Trail Users* report shows the importance of recreational trails to Arizona residents. There are several current trends that affect both the resources available for trails and the user demands for the recreation opportunities.

Arizona's Population Continues to Grow at a Rapid Rate

According to the 2000 Census Bureau, Arizona is the now the 18th largest state with 5.6 million residents estimated in July 2003. The metro Phoenix area has catapulted to the sixth largest city in America, with over 1.3 million residents. With approximately two-thirds of the State residents who consider themselves trail users, more people are utilizing the State's trails every year. Results from the survey indicated several

top priorities for trails that correlate with Arizona's growing population. *Urban development limiting access* and *new development doesn't include trails* were issues that rated high on the survey.

Loss of Access to Trails is Decreasing Recreational Opportunities

Along with the increased population comes increased development. As mentioned above *urban development limiting access* is identified as a priority concern of trail users in the State. Trails are not always considered when planning for a community's growth. Arizonans are losing access to trails on public lands for a variety of reasons including land sales, closed lands, fee increases and urban sprawl. Another priority issue identified in the survey was the need to *acquire new land for public access to trails*.

Public Land Managing Agencies Experiencing Limited Budgets

In the past few years, governmental agencies and particularly land managing agencies have seen their budgets decrease. In their efforts to prioritize needs for their limited budgets, land managers find trails and recreation budgets often fall short of the need.

Obesity and Physical Inactivity Epidemic

While America has seen an increasing level of the population become inactive and overweight for the past two decades, the issue is just recently coming to the forefront and being considered an epidemic. Recreation opportunities including trails are making a natural connection.

In the past few years, National Trails Day themes have focused around the health aspects of hiking and other forms of trail use. National Trails Day is an annual event founded by the American Hiking Society to celebrate trails throughout the country.

The National Recreation and Park Association (NRPA) and the National Heart, Lung, and Blood Institute (NHLBI) founded the Hearts 'N Parks program. It is designed to help park and recreation agencies encourage heart-healthy lifestyles in their communities. The Center for Disease Control has made the beneficial link between physical activity and trails.

Trail use, especially hiking and walking, is effective in preventing or alleviating heart disease, hypertension, back pain, osteoporosis, diabetes and arthritis. A healthier population assisted by an inexpensive, often free, means of exercise can contribute to a decrease in expensive medical care. Trails can be considered a fun and inexpensive way to improve physical activity.

Arizona's Increasing Urban Population Seeks Trails Opportunities Close to Home

In the past, demand for trail opportunities was fulfilled by the State's rural areas and back roads. As the urban areas continue to develop across the State and urban sprawl affects the major cities, there is an increased demand for urban trail opportunities. Residents are seeking trails that are closer to



home and can be utilized before and after work and in free time without considerable travel time.

The survey indicated that for the trail activities done most often by nonmotorized users, 60% preferred locations that were in a city or town or just outside a city or town. For motorized users, 17.8% preferred locations that were in a city or town or just outside a city or town.

Rising Sales of Off-Highway Vehicles

Off-highway vehicle recreation has been increasing every year and this trend is shown through the rising sales of off-highway vehicles. According to the Motorcycle Industry Council (MIC), estimated combined motorcycle and all-terrain vehicle

(ATV) sales for 2003 reached 1,882,000, which is an all-time record up 5.2% over the previous year. As new OHVs are sold the demand for recreational trails and use areas along with effective management of motorized trail use is increased.



Trail Activity Participation

The percentage of Arizonans who say they use trails has decreased somewhat since the ARIZONA TRAILS 2000 survey, however, because the State's overall population has greatly increased, the actual number of trail users in Arizona has also increased. A comparison of trail activity participation percentages from the 2000 and 2005 plans can be found in Table 5 (also see page 81). Of note: ATV use has nearly doubled and bicycling has decreased by nearly two-thirds.

Table 5: Percent of the Population that Participates in Trail Activities

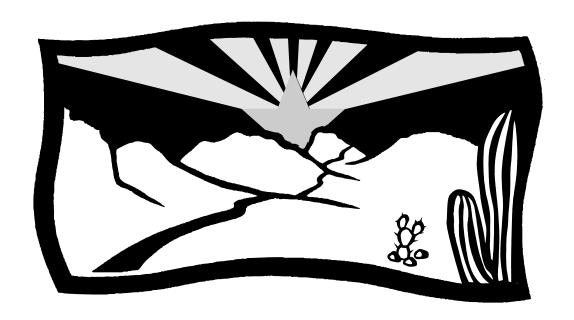
Motorized Trail Users	AZ Trails 2005	AZ Trails 2000	NSRE 2003*	Nonmotorized Trail Users	AZ Trails 2005	AZ Trails 2000	NSRE 2003
Motorized Trail Activity	Perce Respor		% U.S. Pop.	Nonmotorized Trail Activity	Perce Respon		% U.S. Pop.
Four-wheel driving	55.0%	58%	17.4%*	Trail hiking (day hiking)	75.5%	78%	32.7%
Motorized trail biking	16.6%	20%	*	Walking (excluding trail hiking)	67.1%	78%	82.3%
ATV (all-terrain vehicle) riding	42.4%	24%	*	Backpacking	20.7%	19%	26.4%
Dune buggies and sandrails	5.0%	12%	*	Mountain bicycling (natural terrain)	14.3%	19%	21.2%
Snowmobiling	0.5%	3%	5.5%	Bicycling	13.7%	36%	39.4%
High clearance two-wheel driving	10.6%	37%	*	Horseback riding (trail)	13.5%	13%	8.0%
Driving to sightsee or view wildlife	49.8%	N/A	50.6%	In-line skating	5.0%	12%	-
Driving to visit historical/ archaeological sites	40.1%	N/A	-	Cross-country skiing	5.3%	5%	3.8%
*NSRE: 2000-2003 National Survey on Recreation and the Environment of people 16 years and older across the U.S. The survey combines four-		Visiting historical/ archaeological sites	52.1%	N/A	45.3%		
wheel, ATV and motorcycle activities under <i>Driving off-road</i> .		Wildlife viewing/birding	40.0%	N/A	44.1%		
		Canoeing/kayaking (using water trails)	9.3%	N/A	9.6%		
				Orienteering/geocaching (using map, compass, GPS)	1.6%	N/A	-





Arizona Trails 2005

Statewide Motorized and Nonmotorized Trails Plan



November 2004

Chapter 2 Planning Process

"I want to see what's on the other side of the hill-then what's beyond that."

Emma "Grandma" Gatewood, at age 67 first woman to thru-hike the Appalachian Trail (1995), 1887-1973



At least three-quarters of all trail users get out and enjoy the trails with one to three other people; less than 7% go alone.

Chapter 2: Planning Process

Planning Process

In preparation for drafting the 2005 State OHV and nonmotorized Trails Plans, Arizona State Parks staff began a public involvement process in January 2003. State Parks combined much of the public involvement process for the motorized and nonmotorized plans. Staff chose to call the combined process *Arizona Trails 2005* as a follow up to the *ARIZONA TRAILS 2000* Plan.

From January to September 2003, State Parks contracted with Arizona State University to conduct an extensive telephone and mail survey of Arizona residents regarding their participation, motivations, attitudes and preferences about recreational trails. Arizona State Parks staff along with Arizona State University researchers developed the survey questions and pretested them for clarity. Arizona State Parks utilized these survey questions in polling a targeted group of OHV and nonmotorized trail users, recreation planners and agency resource managers. Arizona State Parks staff also conducted 15 workshops or focus groups statewide as an additional way to obtain information regarding trail use and perceptions.

Surveys

In order to gain an understanding of trail perceptions and usage around the State, approximately 5,000 people participated in the phone and mail surveys. The surveys provided information about public satisfaction of trail opportunities, estimates of trail use, preferences and concerns regarding recreational trails. The study included both motorized and nonmotorized trail

users as well as people who do not use trails at all. This allows for preference comparisons between the two user groups.

Staff utilized three different survey tools for the *Arizona Trails* 2005:

- 1) Random phone survey—a statewide, random, digit-dialed telephone survey was conducted with 4,888 Arizona adult residents to determine population percentages of trail user types at the county level and to gather basic information regarding trail usage (4,888 completed phone surveys—54.8% response rate from those who agreed to participate).
- 2) Random mail survey—1,197 households from the phone survey also completed a 12-page written survey to provide detailed information regarding trail usage, preferences and opinions (50.6% response rate).
- 3) Targeted mail survey—the same 12-page survey was completed by 285 "special interest" OHV and nonmotorized trail users, land managers and affected parties. These individuals were targeted because of their expressed interest in trail issues and planning (56.5% response rate).

The telephone survey served two purposes. The first was to obtain population estimates for motorized recreation trail users, nonmotorized recreation trail users and nonusers in each of Arizona's fifteen counties. The second purpose of the telephone survey was to recruit participants to complete the mail survey.

Staff followed a modified Tailored Design Method (Dillman, 2000) for both the general public and target group mail surveys. The survey mailings began in February 2003. The

original mailing contained an introductory letter, survey and the incentives (half-off entrance fee to any of Arizona State Parks and a brochure/map). A second mailing of a reminder postcard was sent two weeks later to those original respondents who had not yet returned surveys. Two weeks after that a third follow-up mailing was sent to the nonrespondents which included a personalized cover letter, replacement survey and postage-paid return envelope. Staff applied the same survey methods and questions to both the target group and the general public so that the groups' responses could be compared. By soliciting input and analyzing the findings from both groups a more accurate picture of Arizona's entire spectrum of motorized and nonmotorized trail users was established.

Focus Group Workshops

Arizona State Parks staff conducted 15 public workshops or focus groups as an additional way to obtain information regarding trail use and perceptions. These regional workshops were held in Flagstaff, Tucson, Pinetop-Lakeside, Lake Havasu City and Phoenix. The focus groups consisted of separate regional workshops for 1) motorized trail users, 2) nonmotorized trail users, and 3) land managers.

Staff sent electronic invitations to land managers, trail organizations and user groups, and known active trail citizens to participate in the workshops. In addition, press releases were sent out in each of the communities where workshops were held. State Parks staff made a concerted effort to include all types of motorized and nonmotorized trail users, representatives from recreational clubs, environmental groups and other organizations interested in or concerned about recreational trail and OHV activities, and staff from local, regional, state, federal and tribal agencies involved with trails and off-highway vehicle recreation.

Staff's intent for the workshops was to facilitate in-depth discussion about motorized and nonmotorized issues with small but diverse groups of interested people in various regions throughout the State. These focus groups allowed State Parks staff to 1) address in more depth questions from the survey, and 2) identify topics related to trails that were not addressed in the survey. Approximately 150 people participated in these workshops.

Additional Public Input

The Arizona State Committee on Trails (ASCOT) and the Off-Highway Vehicle Advisory Group (OHVAG), both advisory committees to the Arizona State Parks Board, were heavily involved in the planning process for the *Arizona Trails 2005 Plan*. State Parks staff presented the process, survey and findings at regular meetings of ASCOT and OHVAG. These meetings were open to the public.

Public Comment

The *Draft Arizona Trails 2005 Plan* was open for public comment from April 19 through June 30, 2004. The draft plan was posted on the Arizona State Parks' website and notification of the draft plan was sent to land managers, trail associations, related list-servs and trail users statewide.

During the public comment period, staff discussed the draft plan with both ASCOT and OHVAG at a joint meeting of the Committees and at separate meetings. The draft plan was also presented and discussed at public meetings of the Arizona Outdoor Recreation Coordinating Commission (AORCC) and the Arizona State Parks Board.

Staff received comments from various groups and land managers including: American Hiking Society, Arizona Trail Riders (who commented on behalf of numerous OHV

organizations in the State), Maricopa County, National Park Service–Rivers, Trails and Conservation Assistance Program, along with individual trail users. For the most part, comments provided for the plan were positive in nature regarding the planning process and results. Some comments suggested changes or clarifications to statements made in the plan. Certain comments requested elaboration of specific issues and additional issues to be addressed, a few comments requested additional information regarding the economic aspects of trails and trail use.

Several comments were received from the OHV community indicating they felt the percentage of motorized trail users was too low to accurately reflect the motorized usage in Arizona.

To help explain the survey findings, faculty at ASU provided clarification and some observations. After close review of this study and the 2000 trails study, one reason for the difference in user percentages may be attributable to differences in the research methods and sampling approaches for the two studies. While the two studies used generally similar methods, there were differences in the sampling strategies.

According to the 2003 survey, <u>24.5% of adult Arizona residents</u> used trails for motorized recreation during the previous year. Based on the 2003 U.S. Census estimate of 3,763,685 adult residents, this finding indicates that nearly one million (922,103) adult Arizona residents used trails for motorized recreation during the previous year. The 2003 study also found that a total of 7.0% of adult residents used trails predominantly for motorized use (i.e., greater than 50% of all their trail use was motorized). This represents more than a quarter million adult residents and this estimate <u>does not</u> include residents less than 18 years of age or visitors from out of state.

Of all trail users responding to the phone survey, 24.5% indicated that they had engaged in motorized activities on trails at some point during their time in Arizona (Figure 1). The 24.5% motorized trail use estimate is consistent with other estimates defining a motorized trail user based on any such use, such as the economic impact study described in Appendix F. However, in the current study, a smaller percentage (7.0%) of the trail users said that motorized use accounted for the *majority* of their trail use (Figure 2). Although the estimate that 7.0% of trail users are predominately motorized users is lower than some other previous studies, close inspection of the data reveals some insights.

For example, while 24.5% of trail users engage in motorized recreation, just 15.3% of that group was *exclusively* motorized users. The remaining 84.7% of people who engage in motorized trail use *also* participate in nonmotorized trail activities (see Figure 1). This nonmotorized use accounted for a greater percentage of total use for most respondents. That is, while nearly one quarter of all respondents did participate in motorized trail use at some point, for most, nonmotorized activities accounted for the majority of their overall trail use.

Therefore, while categorizing trail users as motorized *or* nonmotorized is useful for comparison and planning purposes, it should be noted that most motorized trail users participate in a variety of motorized and nonmotorized activities while engaging in their motorized trail pursuits.

In addition, the population of Arizona continues to grow at a tremendous rate, with the most pronounced growth occurring in urban and urbanizing areas, especially Maricopa County and northern Pinal County. This growth is a critical factor impacting this plan's trail figures. The major influx of

residents has been to urban and urbanizing areas and, as this and previous studies show, residents in urban areas are less likely to be motorized trail users and significantly less likely to be *enthusiastic or core motorized trail users*.

Since 1990, Arizona's population has increased 40%, gaining nearly 2 million more people. The State's largest and most urban county, Maricopa County, has increased 45%, gaining 1.3 million people. Maricopa County has consistently had the lowest percentage of motorized trail users and with most of the State's population growth occurring in this one county, one would expect the statewide motorized use figures to drop substantially, but instead they went up from 17% (417,482 adult motorized trail users) in 1990, to 21% (666,494) in 1997, to 24.5% (922,102) in 2003. This 7.5% increase in motorized users statewide from 1990 to 2003 represents an increase of 282,276 new adult motorized trail users than if the 17% had remained constant.

Thus, motorized trail use is increasing in terms of the <u>percentage</u> of State residents that participate. And, with the State's growth, that percentage increase represents an even more dramatic increase in the total <u>number</u> of motorized users, but the core group of OHV enthusiasts may be a smaller overall percentage of motorized trail users, as this core group has been joined by a growing number of more casual motorized users.

These findings reflect the continued growth in popularity of motorized trail use; a finding that is corroborated by the intuitive observations of land managers, planners and trail users. Also, many popular OHV use areas have been closed in the past few years resulting in a higher concentration of users in areas that remain open, making the growth in motorized recreation even more noticeable.

These factors are of critical importance to land managers who are charged with managing and providing quality recreation experiences for this increasingly popular activity.

Note: While there have been no recent studies regarding children under age 18, the 1994 Arizona Statewide Comprehensive Outdoor Recreation Plan surveyed children ages 9-18 regarding their participation in recreational activities. More than 50% of the children said they had participated in motorized trail activities in the last year and motorcycle and ATV riding ranked number 8 (out of 47) as their favorite activity; four-wheel driving ranked 16th; snowmobiling ranked 40th. More than 75% said they had participated in nonmotorized trail activities (walking, jogging, bicycling) and horseback riding (55%) ranked number 6 as their favorite activity; trail hiking (69%) ranked 12th; mountain bicycling (32%) ranked 24th. Hanging out, basketball and attending sport events were the top favorites and the most frequently participated activities. For the 1994 study, the findings estimated that 210,757 children ages 9-18 participated in motorized and 316,135 children in nonmotorized trail activities. While not statistically valid, extrapolating these estimates to Arizona's 2003 population provides a "guestimate" of 320,896 children participating in motorized trail activities and 481,345 children in nonmotorized trail activities.

Final Plan

State Parks staff incorporated changes to the final plan based on the comments received and prepared the document for final design and layout. In September and October 2004, staff submitted the *Arizona Trails 2005 Plan* to AORCC, ASCOT and OHVAG for approval and recommendation to the Arizona State Parks Board for final action in November 2004.

Chapter 3 Priorities Identified By The Public

"We will be known by the tracks we leave behind."

Dakota Proverb



31% of nonmotorized trail users and 17% of motorized trail users prefer trails that are limited to a single activity.

Chapter 3: Priorities Identified by the Public

One of the objectives of this plan is to identify the most significant issues related to motorized and nonmotorized trail use in Arizona. This chapter presents priorities from the combined general public and target group surveys and the focus group workshops. This chapter and the *Trails 2005: A Study of Arizona's Motorized and Nonmotorized Trail Users* survey data provide sources of information for land managers and trail users to determine the issues and needs on which to focus their efforts and resources.

Survey Priorities

The *Arizona Trails 2005* survey was organized to produce the following types of information from Arizona's citizens:

- Satisfaction with trail opportunities in Arizona.
- Estimates of trail use in Arizona with participation broken into specific recreational types and activities.
- Motivations for using trails.
- Preferences for recreation settings.
- Environmental and social concerns on trails in Arizona.
- Importance and satisfaction for trail support facilities in Arizona.
- Priorities for trail management and planning in Arizona.

The following information is provided separately for motorized and nonmotorized trail user responses. The responses listed are representative of the 7.0% of Arizonans surveyed who identified themselves as motorized trail "core users" and the 56.5% of Arizonans surveyed who identified themselves as nonmotorized trail "core users" since these are the users for whom the resources and facilities are planned and managed.

Satisfaction with Trails

The majority of all trail users are satisfied with recreational trails in Arizona (see Table 6). Overall satisfaction levels of nonmotorized trail users appears to be slightly higher, as more nonmotorized users report being very satisfied or extremely satisfied.

Table 6: Overall Satisfaction with Trails

Satisfaction with	Motorized	Nonmotorized		
Trails	Trail Users	Trail Users		
Not at all satisfied	4.6%	0.2%		
Slightly satisfied	6.0%	6.2%		
Satisfied	72.7%	58.8%		
Very satisfied	15.3%	35.1%		
Extremely satisfied	1.4%	3.4%		
Total	100%	100%		

Public Access to Trails

Survey participants were asked to respond to the following question regarding access to trails—What is your opinion about the trend in public access to recreation trails in the past five years in Arizona (i.e., the public's right to use trails)? Table 7 shows that nearly half (48.3%) of motorized users feel that public access to trails has declined for their preferred activities

in Arizona in the past five years. In contrast, less than 20% of nonmotorized users feel that access has declined.

Table 7: Perceptions of Trend in Public Access to Trails

Public Access Trend	Motorized Trail Users	Nonmotorized Trail Users
Access is declining; fewer trails are open for my preferred activities	48.3%	18.7%
Access is about the same	19.5%	34.5%
Access is improving; more trails are open for my preferred activities	8.8%	13.0%
Not sure	23.4%	33.8%
Total	100%	100%



Public Access by Region

In addition, respondents were asked how satisfied they were with access in 1) the region of the State they used the most, and 2) the region of the State they enjoyed the most.

Table 8: Satisfaction with Public Access to Trails in Regions

Satisfaction with	Motorized Trail Users		Nonmotorized Trail Users	
Access to Trails	Region used most	Region enjoyed most	Region used most	Region enjoyed most
Not at all satisfied	7.8%	7.3%	0.6%	0.7%
Slightly satisfied	18.0%	17.0%	8.9%	10.0%
Satisfied	47.5%	50.0%	55.7%	58.7%
Very satisfied	21.7%	19.9%	27.2%	21.8%
Extremely satisfied	5.1%	5.8%	7.1%	8.8%
Total	100%	100%	100%	100%

Overall both motorized and nonmotorized trail users were generally satisfied with access in both of those regions (see Table 8). It is interesting to note that no single region of the State was reported to be of greater preference than any other.

Q: Overall, how satisfied are you with public access (i.e., your ability to use trails) in the State?

Trail Usage and Activities

One of the primary objectives of this study was to estimate trail use in Arizona with participation broken down into specific types and activities. Respondents were asked to report their participation in an extensive list of motorized and nonmotorized activities on Arizona's trails last year. The results are displayed in Tables 9 and 10 and on page 81.

Based on the percentage of respondents who participated in an activity at least once in the past 12 months, the most popular motorized activities for motorized trail users were *four-wheel driving* (55.0%), *driving to sightsee or view wildlife/birding* (49.8%), and *all-terrain vehicle* (ATV) riding (42.4%).

Based on the percentage of respondents who participated in an activity at least once in the past 12 months, the most popular nonmotorized activities for nonmotorized trail users were *trail hiking (day hiking)* (75.5%), *walking (excluding trail hiking)* (67.1%), and *visiting historical/archaeological sites* (52.1%).

It is interesting to note that 12% to 20% of nonmotorized users participate in various motorized activities and 43% to 54% of motorized users participate in various nonmotorized activities (see page 81).



Table 9: Motorized Activity Participation in the Past 12 Months

Motorized Trail Users					
Motorized Trail Activity	Valid Percent	Mean Number of Days			
Four-wheel driving	55.0%	22.3			
Driving to sightsee or view wildlife/birding	49.8%	15.2			
ATV (all-terrain vehicle) riding	42.4%	31			
Driving to visit historical/ archaeological sites	40.1%	8.9			
Motorized trail biking/dirt biking	16.6%	21.2			
High clearance two-wheel driving	10.6%	12			
Dune buggy or sandrail driving	5.0%	10.2			
Competitive events	0.9%	2.6			
Snowmobiling	0.5%	0.7			

Table 10: Nonmotorized Activity Participation in the Past 12 Months

Nonmotorized Trail Users							
Nonmotorized Trail Activity	Valid percent	Mean number of days					
Trail hiking (day hiking)	75.5%	16.4					
Walking (excluding trail hiking)	67.1%	39.5					
Visiting historical/archaeological sites	52.1%	5.8					
Wildlife viewing/birding	40.0%	17.1					
Backpacking	20.7%	4.4					
Jogging/running	15.8%	23.1					
Mountain biking (natural terrain)	14.3%	10.9					
Bicycling	13.7%	16.3					
Horseback riding	13.5%	8.3					
Canoeing/kayaking (using water trails)	9.3%	5.3					
Cross-country skiing or snowshoeing	5.3%	1.1					
In-line skating	5.0%	4.8					
Orienteering/geocaching (using map, compass, GPS)	1.6%	2.3					
Hiking with pack stock (horses, mules, llamas, etc.)	0.7%	2.5					

To assess the frequency of participation for each activity, respondents were also asked to estimate the number of days they had engaged in each activity in the previous 12 months (see Tables 9 and 10 and page 81). Motorized users spent the most days on trails engaging in motorized activities such as *ATV riding* (31 days), *four-wheel driving* (22.3 days) and *motorized trail biking/dirt biking* (21.2 days).

Nonmotorized users spent the most time on trails walking (excluding trail hiking) (39.5 days), jogging/running (23.1 days) and wildlife viewing/birding (17.1 days).

Environmental Concerns

Perceptions of environmental concerns are important to identify as they can affect both trail users' satisfaction as well as ecological integrity of the recreation setting. Mail survey respondents were asked to rate each of fourteen environmental concerns on a five-point scale ranging from 1 (not a problem) to 5 (very serious problem). Findings are displayed in Tables 11 and 12 and Figure 5.

Based on mean scores, motorized and nonmotorized users have similar primary concerns: *litter* (M=3.2; NM = 2.92), *trash dumping* (M = 2.92; NM = 2.57) and *erosion of trails* (M = 2.69, NM = 2.53). Motorized users also find *vandalism* (2.60), *damage to historical or archaeological sites* (2.58) and *trampling of vegetation* (2.2) to be of concern. Nonmotorized users rate *trampling of vegetation* (2.42), *damage to historical and archaeological sites* (2.40) and *vehicle emissions* (2.40) as slight to moderate problems.

Table 11: Motorized User Environmental Concerns on Trails

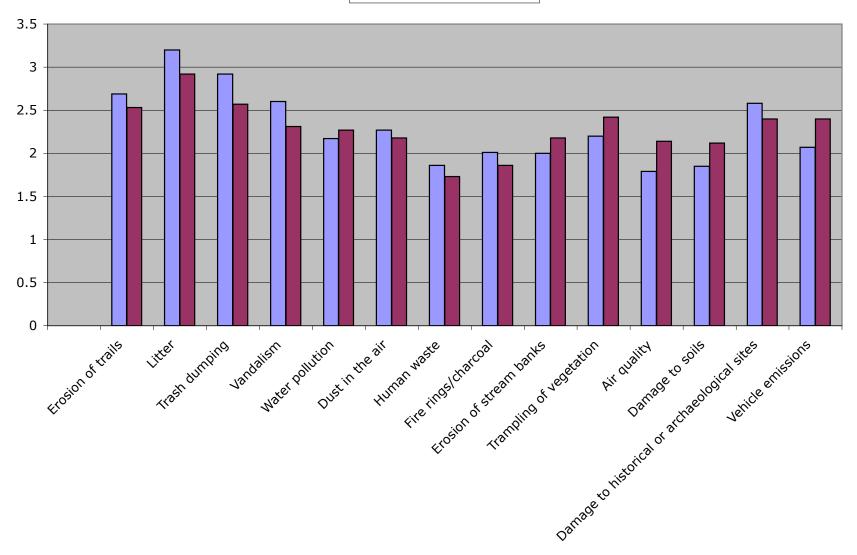
Mot	Motorized Trail Users								
Environmental Concerns	Not a problem	Slight problem	Moderate problem	Serious problem	Very serious problem				
			Valid percen	t		Mean			
Litter	8.4%	25.5%	20.6%	28.8%	16.7%	3.20			
Trash dumping	12.4%	28.1%	23.8%	24.3%	10.9%	2.92			
Erosion of trails	12.0%	32.2%	37.3%	12.3%	6.3%	2.69			
Vandalism	20.4%	24.8%	35.6%	12.3%	6.9%	2.60			
Damage to historical or archaeological sites	28.8%	22.7%	17.9%	23.3%	7.3%	2.58			
Dust in the air	24.8%	36.2%	28.8%	9.2%	1.9%	2.27			
Trampling of vegetation	32.0%	32.9%	24.6%	3.4%	7%	2.20			
Water pollution	33.4%	36.8%	14.5%	9.9%	5.4%	2.17			
Vehicle emissions	42.2%	27%	18.2%	6.9%	5.7%	2.07			
Fire rings/charcoal	36.3%	34.5%	21.8%	6.6%	0.7%	2.01			
Erosion of stream banks	40.1%	34%	16.7%	3.8%	5.4%	2.00			
Human waste	48.4%	32.5%	9.5%	3.6%	6.1%	1.86			
Damage to soils	44.8%	35.2%	11.1%	7.7%	1.2%	1.85			
Air quality	46.6%	36.1%	9.5%	7.4%	0.4%	1.79			

Table 12: Nonmotorized User Environmental Concerns on Trails

Nonmotorized Trail Users								
Environmental Concerns	Not a problem	Slight problem	Moderate problem	Serious problem	Very serious problem			
			Valid percen	t		Mean		
Litter	11.3%	25.6%	33%	20.2%	9.9%	2.92		
Trash dumping	23.1%	27.6%	28.6%	10.8%	9.9%	2.57		
Erosion of trails	14.1%	34.6%	37.8%	11%	2.5%	2.53		
Trampling of vegetation	23.0%	35.6%	23.9%	10.9%	6.6%	2.42		
Damage to historical or archaeological sites	30.2%	29.2%	17.9%	15.3%	7.4%	2.4		
Vehicle emissions	28.5%	32.3%	20.6%	8.5%	10.1%	2.4		
Vandalism	27.3%	35.5%	21%	11.5%	4.6%	2.31		
Water pollution	32.8%	32.9%	15.1%	13.4%	5.9%	2.27		
Dust in the air	35.1%	30.3%	20.2%	10.4%	4%	2.18		
Erosion of stream banks	32.0%	32.7%	24.8%	6.2%	4.3%	2.18		
Air quality	38.2%	27.6%	21.8%	7%	5.4%	2.14		
Damage to soils	32.1%	38.8%	18.7%	5.9%	4.5%	2.12		
Fire rings/charcoal	44.0%	34.4%	13.9%	7%	0.6%	1.86		
Human waste	52.0%	29.2%	12.2%	3.3%	2.%3	1.73		

Figure 5: Environmental Concerns on Trails





Social Concerns

The survey also asked respondents to rate social concerns that may reduce the overall quality of trail users' recreation experience. Respondents ranked 13 different social concerns on a scale from 1 (not a problem) to 5 (very serious problem). Findings are displayed in Tables 13 and 14 and Figure 6.

Based on mean scores, trail users considered *residential/ commercial development* (M = 2.85; NM = 2.59) as the greatest concern. *Unregulated OHV use* (M = 2.25; NM = 2.47), *lack of trail ethics* (M = 2.48; NM = 2.40) and *too many people* (M = 2.13; NM = 2.16) were also considered slight problems.

Table 13: Motorized Users Social Concerns on Trails

Motorized Trail Users								
Social Concerns	NP	SP	MP	SP	VSP			
		Valid percent						
Residential/commercial development	36.3%	6.8%	12.8%	23.3%	20.8%	2.85		
Lack of trail ethics	23.0%	32.0%	23.4%	17.8%	3.8%	2.48		
Unregulated OHV use	37.1%	29.3%	12.2%	14.2%	7.1%	2.25		
Too many people	26.4%	32.9%	33.3%	6.5%	0.9%	2.23		
Unskilled people	24.0%	51.9%	17.4%	5.0%	1.7%	2.08		
Uncontrolled dogs	44.1%	24.5%	17.9%	7.7%	5.9%	2.07		
Target shooting	45.5%	27.1%	10.5%	11.2%	5.7%	2.05		
Personal safety	45.5%	27.2%	21.2%	5.3%	0.8%	1.89		
Noise disturbance	44.9%	39.0%	5.9%	5.4%	4.8%	1.86		
Vehicle noise	46.6%	36.1%	8.1%	4.4%	4.8%	1.85		
Conflict between users	48.9%	38.7%	9.9%	2.2%	0.3%	1.66		
Damage to/loss of personal property	54.1%	30.2%	14.0%	1.5%	0.2%	1.63		
Recreational livestock	64.9%	29.5%	4.0%	1.6%	0.0%	1.42		

 \overline{NP} = not a problem, SP = somewhat of a problem, MP = moderate problem, SP = serious problem, VSP = very serious problem.

Table14: Nonmotorized Users Social Concerns on Trails

	Nonmotorized Trail Users									
Social Concerns	NP	SP	MP	SP	VSP					
		V	alid percei	nt		Mean				
Residential/commercial development	34.0%	14.0%	24.5%	14.5%	13.0%	2.59				
Unregulated OHV use	32.1%	20.2%	25.4%	12.7%	9.6%	2.47				
Lack of trail ethics	26.3%	31.9%	22.5%	13.8%	5.5%	2.4				
Too many people	33.7%	28.4%	27.9%	8.4%	1.7%	2.16				
Uncontrolled dogs	38.4%	33.5%	14.4%	8.3%	5.4%	2.09				
Vehicle noise	40.2%	31.7%	18%	5.6%	4.6%	2.03				
Noise disturbance	39.0%	34.3%	18.2%	5.4%	3.2%	2				
Unskilled people	35.9%	9.2%	20.3%	2.9%	1.7%	1.95				
Target shooting	51.5%	22.8%	13.3%	4.8%	7.6%	1.94				
Personal safety	46.8%	34.1%	11.6%	4.8%	2.7%	1.82				
Conflict between users	49.2%	35.9%	11.7%	2.5%	0.7%	1.7				
Recreational livestock	60.2%	31.5%	5.5%	1.8%	1.0%	1.52				
Damage to/loss of personal property	64.6%	23.5%	9.6%	2.2%	0.1%	1.5				

 \overline{NP} = not a problem, SP = somewhat of a problem, \overline{MP} = moderate problem, SP = serious problem, VSP = very serious problem.

Hiking with recreational livestock (pack stock such as mules, horses or llamas) is a popular way to enjoy trails, letting the pack stock carry the heavy overnight equipment and supplies. It also carries with it a user responsibility to properly manage the livestock to reduce negative impacts to the environment and other trail users, including overgrazing high use areas, reducing the introduction of nonnative weed species through livestock feed, and damage to trees from tying livestock up for the night.

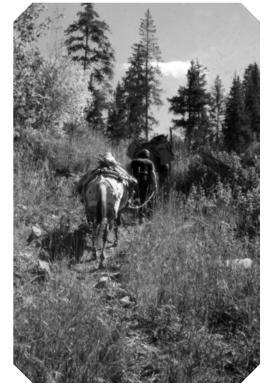
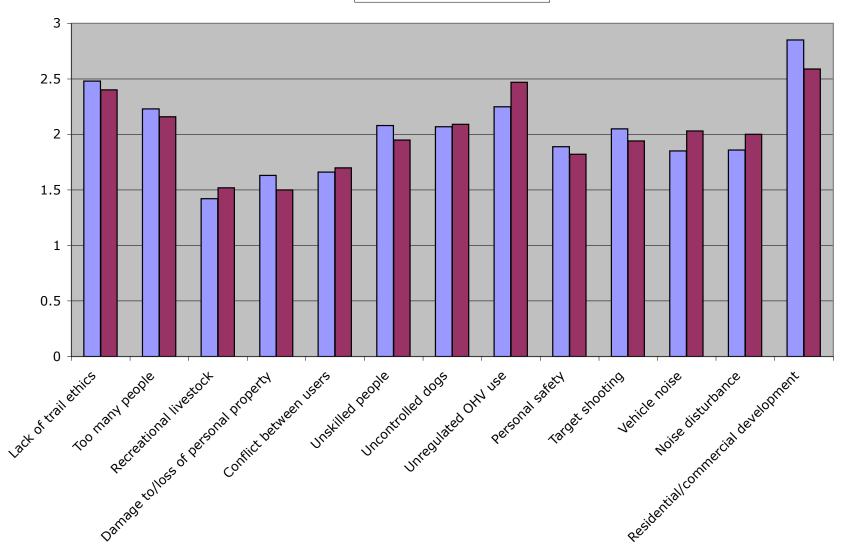


Figure 6: Social Concerns on Trails





Trail Management and Planning Priorities

Trail managers have limited resources to develop and maintain trails. To inform management decisions regarding resource allocation and issue prioritization, one section of the survey included a series of questions that allowed respondents to rate the importance of various trail issues.

Trail Management

Respondents were asked to rate the importance of 11 trail management priorities as well as their satisfaction with current conditions. The results are displayed on Table 15 and Figure 7 for motorized users and Table 16 and Figure 8 for nonmotorized users.

Based upon mean scores, both motorized and nonmotorized users felt that *keep area clean of litter/trash* (M = 4.37; NM= 4.21) was the greatest priority. Also of high importance were to *maintain existing trails* (M = 3.93; NM = 4.15), *repair damage to trails* (M = 3.82; NM = 4.05) and *enforce existing rules/regulations* (M=3.95; NM = 3.76). The item of least importance for both groups was to *provide landscaping along trails and in support areas* (M= 2.24; NM = 2.54).

When asked in an open-ended format, given limited funding which <u>one</u> of the trail management priorities is the most important, motorized users most frequently replied *enforce* existing rules and regulations, keep area clean of litter and trash and acquire new land for public access to trails.

When asked in an open-ended format, given limited funding which <u>one</u> of the trail management priorities is the most important, nonmotorized users most frequently replied

maintain existing trails, keep area clean of litter and trash and acquire new land for trails.

Table 15: Motorized Users Importance and Satisfaction with Trail Management Priorities

	Motorized Trail Users				
Trail Management Priorities	Importance Satisfaction				
	Mean Score (out of 5)				
Keep area clean of litter/trash	4.37	2.70			
Enforce existing rules/ regulations	3.95	3.75			
Maintain existing trails	3.93	3.05			
Repair damage to trails	3.82	2.90			
Develop new trails	3.63	2.74			
Acquire new land for trails	3.53	2.74			
Develop support facilities	3.51	2.94			
Acquire new land for public access to trails	3.49	2.79			
Provide law enforcement/ safety	3.41	2.61			
Provide educational programs	3.22	2.98			
Provide landscaping along trails and in support areas	2.24	3.22			

Figure 7: Importance and Satisfaction of Trail Management Priorities for Motorized Users

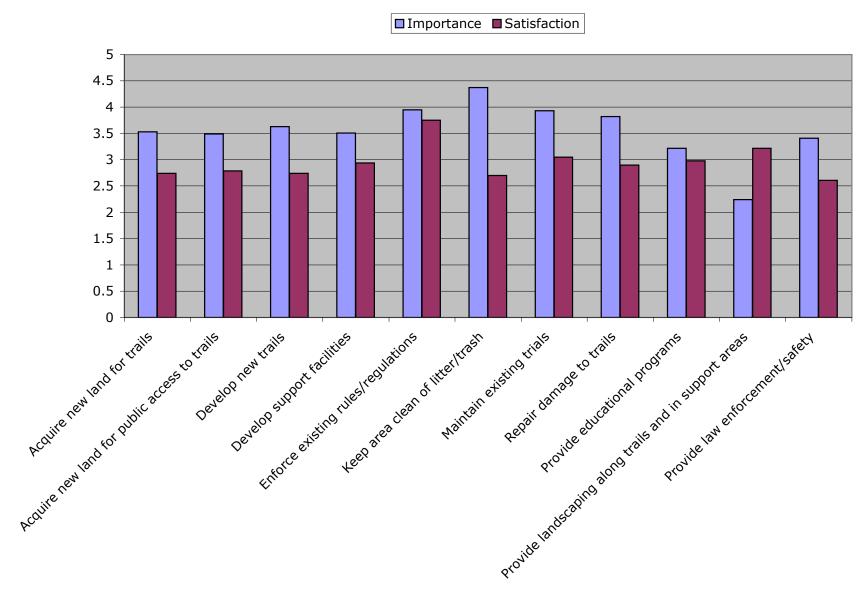


Table 16: Nonmotorized Users Importance and Satisfaction with Trail Management Priorities

	Nonmotorized Trail Users				
Trail Management Priorities	Importance	Satisfaction			
	Mean Scor	e (out of 5)			
Keep area clean of litter/trash	4.21	2.95			
Maintain existing trails	4.15	3.25			
Repair damage to trails	4.05	3.15			
Enforce existing rules/ regulations	3.76	2.99			
Develop support facilities	3.52	2.90			
Develop new trails	3.33	3.05			
Provide law enforcement/ safety	3.32	2.98			
Acquire new land for public access to trails	3.30	2.95			
Acquire new land for trails	3.21	3.03			
Provide educational programs	3.17	3.12			
Provide landscaping along trails and in support areas	2.54	3.25			

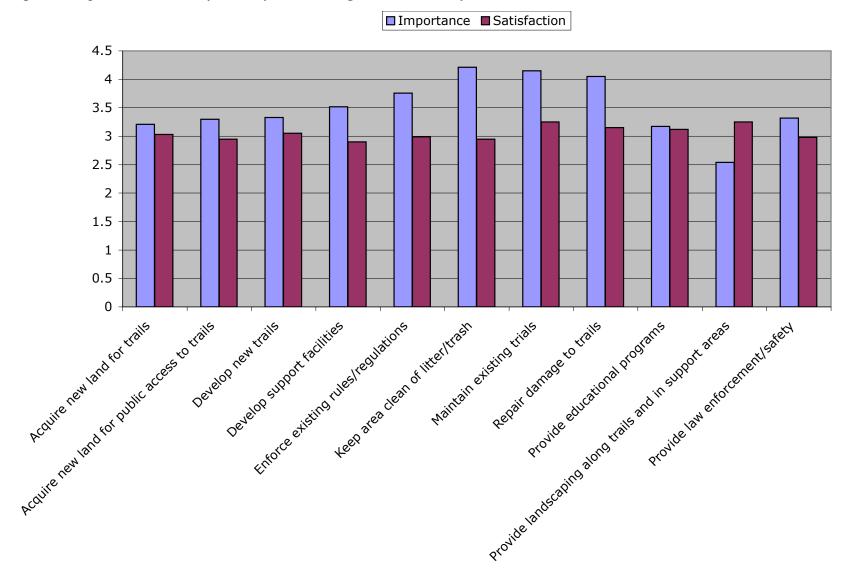
Importance - Performance Analysis

The importance–performance analysis (IPA) is a widely used analytical technique that combines measures of an attribute's importance and level of performance into a two-dimensional grid in an attempt to ease data interpretation and derive practical suggestions.

The IPA plot is straightforward, as four different suggestions are made based on the importance-performance measures. The four quadrants are: 1)'keep up the good work', are issues that are considered important and have high satisfaction in current performance, 2) 'possible overkill' indicates that the issues are relatively less important but were still performed well, 3) 'low priority' because both importance and performance ratings are lower than the average, and 4) 'concentrate here' that indicate the issues that are important to participants but where satisfaction of current performance is low. These are areas where resources and time should be allocated to improve performance.

Based on the survey data the issues that fall into 'concentrate here' for motorized respondents are: develop new trails, enforce existing rules and regulations and keep area clean of litter and trash. The 'concentrate here' issues for the nonmotorized respondents are: keep area clean of litter and trash, enforce existing rules and regulations and develop support facilities.

Figure 8: Importance and Satisfaction of Trail Management Priorities for Nonmotorized Users



Trail Support Facilities

Respondents were also asked to rate importance and current satisfaction with 14 trail support facilities. Results are shown in Table 17 and Figure 9 for motorized and Table 18 and Figure 10 for nonmotorized users.

Based on mean scores, priority trail support facilities for motorized users are *trash cans* (4.14), *trail signs* (3.95), *restrooms* (3.46) and *drinking water* (3.31). When asked in an open ended format, given limited funding which <u>one</u> of the trail support facilities is the most important, motorized users most frequently responded *trash cans, trails signs* and *developed campgrounds*.

Based on mean scores, priority trail support facilities for nonmotorized users are *trash cans* (4.04), *trail signs* (3.90), *drinking water* (3.82) and *restrooms* (3.74). When asked in an open ended format, given limited funding which <u>one</u> of the trail support facilities is the most important, nonmotorized users most frequently responded *drinking water, trash cans* and *trail signs*.

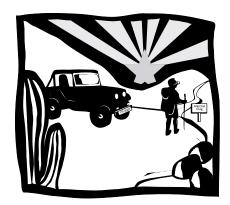


Table 17: Motorized Users Importance and Satisfaction of Trail Support Facilities

	Motorized Trail Users				
Trail Support Facilities	Importance Satisfacti				
	Mean Score (out of 5)				
Trash cans	4.14	2.69			
Trail signs	3.95	2.82			
Restrooms	3.46	2.78			
Drinking water	3.31	2.76			
Motorized staging areas	3.13	2.89			
Picnic facilities	3.08	3.05			
Backcountry camping sites	3.04	3.00			
Developed campgrounds	3.03	3.03			
Ramadas	2.99	2.79			
Parking spaces	2.77	2.97			
Group camping areas	2.55	2.93			
RV dump station	2.45	3.08			
Showers	2.28	3.15			
Equestrian staging area	1.76	3.18			

Figure 9: Importance and Satisfaction of Trail Support Facilities for Motorized Users

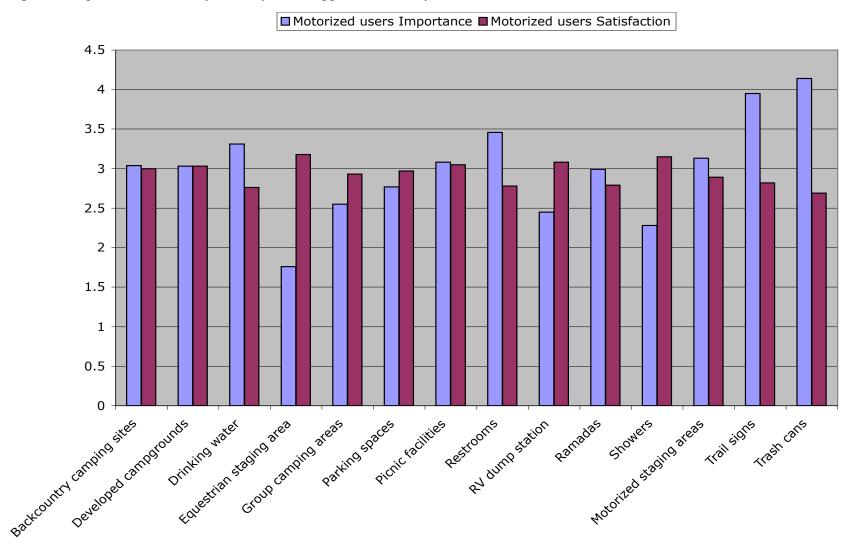


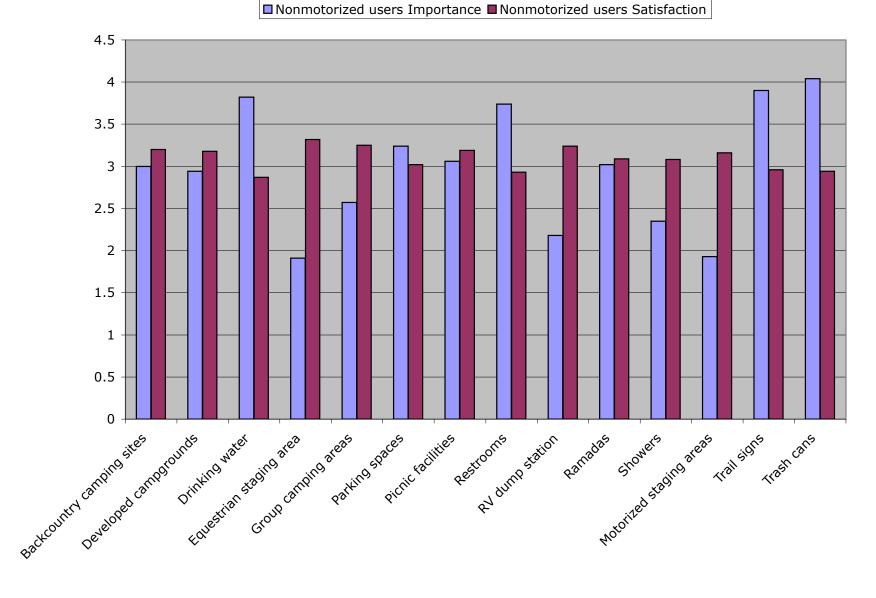
Table 18: Nonmotorized Users Importance and Satisfaction of Trail Support Facilities

	Nonmotorized Trail Users				
Trail Support Facilities	Importance	Satisfaction			
	Mean Score (out of 5)				
Trash cans	4.04	2.94			
Trail signs	3.9	2.96			
Drinking water	3.82	2.87			
Restrooms	3.74	2.93			
Parking spaces	3.24	3.02			
Picnic facilities	3.06	3.19			
Ramadas	3.02	3.09			
Backcountry camping sites	3.00	3.20			
Developed campgrounds	2.94	3.18			
Group camping areas	2.57	3.25			
Showers	2.35	3.08			
RV dump station	2.18	3.24			
Motorized staging areas	1.93	3.16			
Equestrian staging area	1.91	3.32			

Litter Control-To Can or Not to Can

It is recognized by trail managers that providing trash cans in remote areas is not the most efficient method to control the litter problem, since trash can maintenance is costly and can lead to greater problems when not picked up frequently. In general, trash cans at trailheads are not the answer to the litter problem on trails. Trail managers instead emphasize self-cleanup educational programs such as *Leave no trace* and *Pack it in-Pack it out* for most recreational areas, especially in remote areas. However, when placed appropriately and well-maintained, trash cans can be effective in reducing litter problems in some urban recreation areas.

Figure 10: Importance and Satisfaction of Trail Support Facilities for Nonmotorized Users



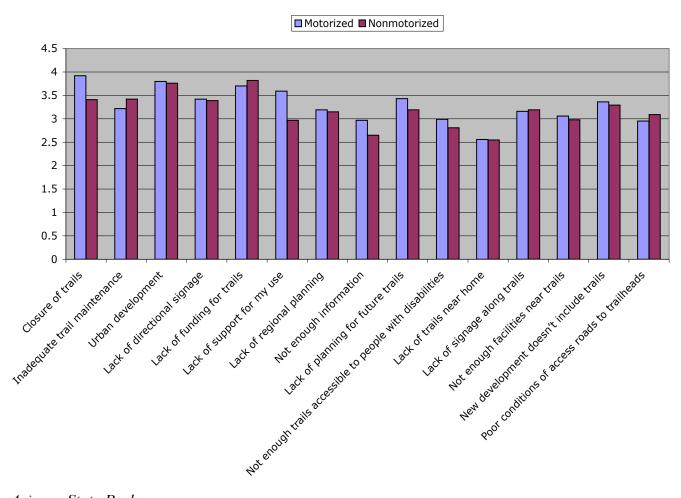
Trail Issues

To provide additional input into the State trail planning process, respondents were asked to rate the importance of 15 broad trail issues and indicate their top three priorities (see Tables 19 and 20 and Figure 11).

Figure 11: Importance of Trail Issues for Motorized and Nonmotorized Users

According to mean scores, motorized users feel that *closure* of trails (3.92), urban development limiting trail access (3.80) and lack of funding for trails (3.70) are primary concerns.

According to mean scores, nonmotorized users feel that *lack* of funding for trails (3.82), urban development limiting trail access (3.76) and inadequate trail maintenance (3.42) are top issues.



Respondents were also asked to list their top three trail issues in rank order by placing a 1 next to the most important issue, a 2 next to the second most important issue and a 3 next to the third most important.

The top three issues for motorized users are closure of trails, urban development limiting trail access and lack of funding for trails.

The three top issues for nonmotorized users are lack of planning for future trails, urban development limiting trail access and lack of funding for trails.

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Table 19: Motorized Users Importance of Trail Issues

	Motorized Trail Users					
Trail Issues	NI	SI	I	VI	EI	
		V	alid perce	ent		Mean
Closure of trails	1.3%	7.3%	21.2%	34.8%	35.2%	3.92
Urban development	2.0%	10.9%	17.9%	43.1%	26.1%	3.8
Lack of funding for trails	1.3%	9.8%	28.8%	38.2%	22.0%	3.7
Lack of support for my use	3.0%	13.5%	33.6%	21.8%	28.1%	3.59
Lack of planning for future trails	2.5%	15.0%	35.8%	30.3%	16.4%	3.43
Lack of directional signage	2.9%	8.8%	42.8%	34.3%	11.3%	3.42
New development doesn't include trails	6.2%	15.2%	33.6%	26.3%	18.7%	3.36
Inadequate trail maintenance	1.8%	22.6%	36.8%	29.5%	9.3%	3.22
Lack of regional planning	3.8%	21.3%	36.9%	27.4%	10.5%	3.19
Lack of signage along trails	8.9%	14.2%	35.3%	34.8%	6.8%	3.16
Not enough facilities near trails	9.7%	18.4%	40%	19.5%	12.4%	3.06
Not enough trails accessible to people with disabilities	12.2%	27%	29.3%	12.3%	19.1%	2.99
Not enough information	6.0%	27.7%	31.5%	32.8%	2.0%	2.97
Poor conditions of access roads to trailheads	10.1%	27.0%	30.9%	22.1%	10.0%	2.95
Lack of trails near home	28.6%	20.0%	25.2%	19.2%	6.9%	2.56

NI = not important, SI = somewhat important, I = important, VI = very important, EI = extremely important

Table 20: Nonmotorized Users Importance of Trail Issues

	Nonmotorized Trail Users					
Trail Issues	NI	SI	I	VI	EI	
		V	alid perce	ent		Mean
Lack of funding for trails	1.9%	5.8%	33.3%	27.0%	32.1%	3.82
Urban development	4.0%	10.7%	22.7%	31.2%	31.5%	3.76
Inadequate trail maintenance	2.3%	9.2%	42.2%	36.7%	9.6%	3.42
Closure of trails	4.0%	11.1%	39.7%	30.1%	15.1%	3.41
Lack of directional signage	3.0%	10.8%	44.3%	27.5%	14.3%	3.39
New development doesn't include trails	8.2%	11.2%	40.3%	23.9%	16.4%	3.29
Lack of planning for future trails	8.2%	14.4%	38.1%	28.3%	10.9%	3.19
Lack of signage along trails	5.4%	22.0%	35.1%	23.1%	14.3%	3.19
Lack of regional planning	6.0%	19.1%	41.5%	20.3%	13.1%	3.15
Poor conditions of access roads to trailheads	7.5%	18.8%	41.4%	21.7%	10.7%	3.09
Not enough facilities near trails	10.5%	20.1%	39.4%	21.2%	8.8%	2.98
Lack of support for my use	12.5%	18.6%	39%	19.7%	10.2%	2.97
Not enough trails accessible to people with disabilities	13.8%	21.6%	44.2%	10%	10.3%	2.81
Not enough information	13.7%	28.6%	40.5%	13.3%	4%	2.65
Lack of trails near home	22.8%	28.2%	27.9%	14.2%	7%	2.55

NI = not important, SI = somewhat important, I = important, VI = very important, EI = extremely important.

Focus Group Priorities

Arizona State Parks staff conducted 15 public workshops throughout the state to gather information from individuals who had expressed an interest in participating in trails

planning. Separate regional workshops were held for representatives of 1) motorized trail users, 2) nonmotorized trail users, and 3) land and resource management agencies.

Through discussions, issues regarding motorized and nonmotorized trail use emerged, including issues that were not addressed in the phone and mail surveys. The issues were then prioritized as each participant was asked to pick his or her top five important issues from the dozens identified. Each participant was given five votes for priority issues and if they felt strongly about an issue they could give that issue more than one vote. Regional results are included in Appendix B.

This section reports the motorized and nonmotorized trail issues that rated the highest from the public workshops. The level of priority was determined by the number of times an issue was in the top issues of each of the regional workshops, indicating the issue was of more than just regional importance. Agency comments and

just regional importance. Agency comments and issues were incorporated in either motorized or nonmotorized sections.



"Share the trail."

Public Workshop Priorities for Motorized Trail Issues

1. More Motorized Trails and Use Areas

More trails, open more use areas, specialized terrain, closed trails, long distance.

2. KEEP TRAILS OPEN

Keep motorized trails open, maintain access to existing trails, land manager recognition of existing or used trails.

3. SIGNAGE AND SUPPORT FACILITIES

Adequate parking, staging areas and signage including: route marking, interpretive, access signs.

4. TRAIL ETIQUETTE AND USER EDUCATION

Education through driver training, education of users, education of nonresidents, education in schools, environmental education.

5. TRAIL INFORMATION AND MAPS

Provide detailed maps, identify where current trails are, better educate users where trails are, GPS information, better communication by agency where trails are.

6. Functional Interagency Cooperation and Partnerships

Better communication between agencies, consistent regulations among agencies, standards for trails, share resources.

7. Enforcement of Use Type/Unregulated OHV Use

Monitoring, enforcement of existing laws, heavier fines, peer patrols, complaint registers, identify enforcement contacts.

8. Planning for Motorized Trail Use

Better long term planning, regional and county-wide planning, money for planning and environmental clearances, develop interconnectivity of trails.

9. More Funds for OHV Trails

Research licensing program, designate fee use areas, restore Arizona OHV Recreation Fund.

10. Environmental/Cultural Resource Impacts

Address wildlife concerns, resource protection while maintaining access, noise pollution.

Priority Motorized Trail Issues from the Public Workshops

1. More Motorized Trails and Use Areas

The most prevalent issue discussed among motorized users at the public participation workshops was the need for more trails and recreation opportunities. Discussions revolved around broad comments for more trails, open more use areas, specialized terrain, closed trials and long distance loops. The need for new trails was also a strong priority for motorized survey respondents. The general public rated *develop new trails* as the fourth most important trail management issue and the target group rated it the highest priority.

2. Keep Trails Open

Workshop participants are concerned about the number of trails or roads previously used as motorized recreational trail use being closed. Participants would like land managers to recognize historic use of these routes or offer other opportunities while taking others away. Similarly, the motorized survey respondents rated *closure of trails* as the highest ranking overall trail issue.

3. Signage and Support Facilities

The need for support facilities was important to workshop

participants. One of the most frequently mentioned support facility was signage. Motorized trail users would like to see additional signage that includes route marking, access signage, interpretive signage, and agency standards for signs. Other support facilities needed



are adequate parking and staging areas. Motorized survey respondents rated the top three most important trail support facilities as trash cans, trail signs and restrooms.

4. Trail Etiquette and User Education

User education was a prevalent theme among all workshops. Education through driver training, education of users, education of nonresidents, education in schools, and environmental education were all identified as areas of need. There is a need for education of environmental ethics including Leave No Trace, Tread Lightly and other resource protection messages. Trail etiquette is also needed, teaching differing user groups to share the trail can help prevent user conflicts and increase user enjoyment. *Lack of trail ethics* was identified as the second highest social concern by motorized survey respondents with *unskilled people* as the fifth highest social concern.

5. Maps and Trail Information

A common need mentioned was for current and accurate maps and information telling users where trails exist. There is a need to better educate where trails are in the State and to have agencies better promote trails within their jurisdiction. Users found that in most cases comprehensive maps and trail information do not exist and when they do, they are difficult to locate. More promotion and awareness of existing trails will promote trail usage and prevent social trails.

6. Functional Interagency Cooperation and Partnerships

Public participation workshop participants expressed concern regarding the inconsistency among land managers in their rules and regulations regarding OHV trail use. OHV

users often have difficulty knowing the differing rules and therefore trouble adhering to them. Land managers need to work together to develop standardized or similar policies regarding OHV use. Better communication between agencies was discussed so that there is clear understanding of agency plans and policies, standards for trails, shared resources and interconnection of trails.

7. Enforcement of Use Type/Unregulated OHV Use

A number of issues regarding enforcement of existing laws and monitoring arose from the public participation workshops. Participants noted that unregulated OHV use was closing access to responsible users. Comments related to enforcement of existing laws, heavier fines, peer patrols, complaint registers, and identifying enforcement contacts. Users would like to see deviant trail behavior penalized knowing their behavior can cause environmental impacts and negative reactions from land managing agencies including closure of trails.

This issue is again consistent with those identified by the motorized survey respondents, *enforce existing rules and regulations* was the second highest trail management issue and *unregulated OHV use* was the third highest social concern.

8. Planning for Motorized Trail Use

Planning for trail systems and access rose as a top priority. Planning aspects included several levels such as long term planning, interconnectivity planning, regional or county planning as well as simply better planning. Discussions focused around long term planning that includes changing needs and continued development. Ideas of planning within regions was also common.

Land managers need to look beyond just their borders and understand how their trails can connect with neighboring lands or communities. The need for funds to aid planning efforts was commonly discussed along with the need for NEPA and other environmental and cultural clearances required in



the planning process. This issue was also a top priority for overall trail issues (*lack of planning for future trails*) by survey respondents.

9. More Funds for OHV Trails

The workshop participants recognized the insufficient funds for OHV trails in Arizona. The participants suggested ways to increase the pool of monies for motorized trails. These included researching OHV licensing which has worked in other states, opening fee use areas and working towards restoring the State OHV Recreation Fund. *Lack of funding for trails* rated fifth highest for overall trail issues by motorized survey respondents.

10. Environmental/Cultural Resource Impacts

The workshops addressed environmental impacts, wildlife concerns and cultural resource and archaeological site protection associated with the use of motorized vehicles as a common concern. The users indicated the need to protect these resources while still maintaining access. There was an expressed need to develop trails away from sensitive areas and plan with wildlife in mind.

PUBLIC WORKSHOP PRIORITIES FOR NONMOTORIZED TRAIL ISSUES

1. TRAIL MAINTENANCE

Maintenance of existing trails, limited budget to maintain trails, clean up current trails.

2. PROTECT ACCESS/ACQUISITION OF LAND FOR TRAILS

Purchase easements, purchase State Trust land for access, protection from development, maintain access in urban areas.

3. TRAIL INFORMATION AND MAPS

Provide detailed maps, identify where current trails are, better educate users where trails are, GPS information, better communication by agency where trails are.

4. TRAIL ETIQUETTE AND USER EDUCATION

More user education regarding environmental education, Leave No Trace, Pack it In, Pack it Out, share the trail, resource protection.

5. VOLUNTEER COORDINATION AND MANAGEMENT

Need for more coordinated volunteer efforts, support for organizing volunteer events, training volunteers to agency standards, outreach efforts for volunteers, agency positions to organize volunteers.

6. PLANNING FOR NONMOTORIZED TRAIL USE

Better long term planning, regional and county-wide planning, money for planning and environmental clearances, develop interconnectivity of trails.

7. SIGNAGE AND SUPPORT FACILITIES

Trail head facilities, parking, trash cans, better signage, standards for signage, more interpretive signage.

8. Enforcement and Monitoring of Trails

Enforcement of existing laws, heavier fines, peer patrols, complaint registers, identify enforcement contacts.

9. More Accessible Trails for Individuals w/Physical Disabilities

Plan for ADA trails, retrofit existing trails for accessibility.

10. Functional Interagency Cooperation and Partnerships

Better communication between agencies, streamline partnerships, standards for trails, share resources.

<u>Priority Nonmotorized Trail Issues from the Public Workshops</u>

1. Trail Maintenance

Trail maintenance and maintenance of existing trails came to the top of most of the public workshops and was mentioned in all 15 workshops. The concern of trail maintenance was also the top priority of the environmental concerns of the survey for both the nonmotorized general public and target group (litter, trash dumping and erosion of trails), trail management issues (maintain existing trails, keep areas clean of litter and trash), and overall trail issues (inadequate trail maintenance). It was noted that in lean economic times, maintenance is often eliminated from tight budgets and also that it is often easier to obtain money for construction of new trails than for maintaining existing trails.

2. Protect Access/Acquisition of Land for Trails

Protecting access for trails was at the forefront of conversations at the public workshops. This discussion included acquisitions of easements to protect access to trails and also to provide protection from encroaching development. Easements and purchase of State Trust land was also common in these discussions. This issue was also a priority for survey respondents (*acquire new land for public access, acquire new land for trails* and *urban development limiting access*). With Arizona's population continuing to grow at such rapid rates there seems to be an urgency to protecting access to trails.

3. Trail Information and Maps

A common need mentioned was for current and accurate maps and information telling users where trails exist. There is a need to better educate where trails are in the state, to have agencies better promote trails within their jurisdiction. Users found that in most cases comprehensive maps and trail information do not exist and when they do, they are difficult to locate. More promotion and awareness of existing trails will promote trail usage and prevent social trails.

4. Trail Etiquette and User Education

User education was a prevalent theme among all workshops. There is a need for education of environmental ethics including Leave No Trace and other resource protection messages. Trail etiquette is also needed, teaching differing user groups to share the trail can help prevent user conflicts and increase user enjoyment. *Lack of trail ethics* was identified as the third highest social concern by nonmotorized survey respondents.

The need to reach out to youth was mentioned in several workshops. Educating children through school programs was a common idea. In addition it was mentioned that the need for environmental education also applied to agency personnel.

5. Volunteer Coordination and Management

The need for coordinated volunteer management was included in the priority issues. The need for alternative sources of labor and increased user involvement has led to increased volunteerism

A common message heard was there was a large pool of willing volunteers to help agencies in all aspects of trails including maintenance, construction and education. What is missing are the agency personnel to coordinate and effectively manage and train volunteers.

6. Planning for Nonmotorized Trail Use

Planning for trail systems and access rose as a top priority for trails. Planning aspects included several levels such as long-term planning, interconnectivity planning, regional or county planning as well as simply better planning. Discussions focused around long term planning that includes changing needs and continued development. Ideas of planning within regions was also common.

Land managers need to look beyond just their borders and understand how their trails can connect with neighboring lands or communities. The need for funds to aid planning efforts was commonly discussed along with the need for NEPA and other environmental and cultural clearances required in the planning process. This issue was also a top priority for overall trail issues (*lack of planning for future trails*) by survey respondents.

7. Signage and Support Facilities

The need for the development of support facilities or existing support facilities enhancement is an important aspect of trails to its users. Trailhead amenities were common issues including restrooms, adequate parking, safety at trailheads, trash cans and availability of potable water.

In addition, the need for more signage, more interpretive signage, directional signage and access signage was a top concern. This is consistent with the fourth highest trail management issue identified by survey participants (develop support facilities). The survey also identified that nonmotorized trail users rated trash cans, trail signs and drinking water as the three most important trail facilities.

8. Enforcement and Monitoring of Trails

A number of issues regarding enforcement of existing laws and monitoring arose from the public participation workshops. Comments related to enforcement of existing laws, heavier fines, peer patrols, complaint registers, and identifying enforcement contacts. Users would like to see deviant trail behavior penalized knowing their behavior can cause environmental impacts and negative reactions from land managing agencies, at most severe closure of trails. This issue is again consistent with those identified by the nonmotorized survey respondents, *enforce existing rules and regulations* was the third highest trail management issue.

9. More Accessible Trails for Individuals with Physical Disabilities

Accessibility for people of differing physical abilities emerged from the workshops as a high priority. Comments from the workshops included that trails should be available for all users including wheelchair users and families with strollers. The issue of obesity and

unprecedented rates of physical inactivity was discussed along with the concern that the baby boomer population is aging and soon will be classified as senior citizens.

10. Functional Interagency Cooperation

Workshop participants consistently identified interagency cooperation and consistency as important. Better communication between agencies was discussed so that there is clear understanding of agency plans and policies, standards for trails, shared resources and interconnecting trails.

Chapter 4 Recommendations

"We are under-exercised as a nation. We look instead of play. We ride instead of walk. Our existence deprives us of the minimum of physical activity essential for healthy living."

John F. Kennedy, address to National Football Foundation, New York City, December 5, 1961

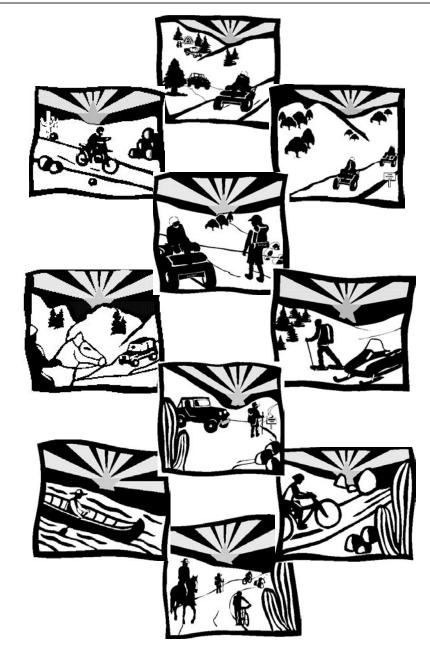
(Off-Highway Vehicle Recreation Fund)...to establish a facility development program based on the priorities established in the OHV Plan."

The recommendations for motorized trail use will be used by all participating agencies to guide distribution of funds administered by Arizona State Parks from the OHV Recreation Fund and the Federal Recreational Trails Program until the next plan, as well as serve as an overall direction for Arizona State Parks, land managers and OHV users in their efforts to improve the State of Arizona's motorized trail opportunities.

Mandate for Nonmotorized Trail Use Recommendations

Arizona legislation A.R.S. §41-511.22 directs the Arizona State Parks Board to 'prepare a trail systems plan that...assesses usage of trails...and recommends to federal, state, regional, local and tribal agencies and to the private sector actions which will enhance the trail systems," and that "five percent of monies received pursuant to Section § 5-522 (Arizona Heritage Fund) shall be spent on local, regional and state trails" (A.R.S. §41-503).

The recommendations for nonmotorized trail use will be used to guide distribution of funds administered by Arizona State Parks from the trails component of the Arizona Heritage Fund and Federal Recreational Trails Program until the next plan, as well as serve as overall direction for Arizona State Parks, land managers and trail users in their efforts to improve the State of Arizona's nonmotorized trail opportunities.





PRIORITY RECOMMENDATIONS

MOTORIZED TRAIL USE

NONMOTORIZED TRAIL USE



FIRST LEVEL PRIORITY MOTORIZED RECOMMENDATIONS

Develop New Trails and Motorized Recreation Opportunities

Protect Access to Trails/Keep Trails Open

Renovation and Maintenance of Existing Trails

Education and Trail Etiquette

SECOND LEVEL PRIORITY MOTORIZED RECOMMENDATIONS

Enforcement of Existing Rules and Regulations/Monitoring

Trail Information and Maps

Comprehensive Planning

FIRST LEVEL PRIORITY NONMOTORIZED RECOMMENDATIONS

Renovation and Maintenance of Existing Trails

Protect Access to Trails/Acquire Land for Public Access

Develop Signage and Support Facilities

SECOND LEVEL PRIORITY NONMOTORIZED RECOMMENDATIONS

Comprehensive Planning

Trail Information/Maps

Education and Trail Etiquette

OTHER PRIORITY RECOMMENDATIONS

Reduce Cultural and Environmental Resource Impacts (both motorized and nonmotorized)

Seek Additional Funding Sources (both motorized and nonmotorized)

Interagency Coordination (both motorized and nonmotorized)

Develop Signage and Support Facilities (motorized)

Develop New Trails (nonmotorized)

Coordinated Volunteerism (nonmotorized)

More Accessible Trails for Individuals with Physical Disabilities (nonmotorized)

Enforcement of Existing Rules and Regulations/Monitoring (nonmotorized)

Motorized Trail Use Recommendations

Managers of motorized recreational trails and roads are encouraged to concentrate on the following actions. Trail users can also assist with many of these recommended actions



First Level Priority Recommendations for Motorized Trail Use

Develop New Trails and Motorized Recreation Opportunities

Issue: The demand for OHV opportunities is increasing. Land managers are behind the curve in planning for OHV demand. Many of the existing trails for recreational OHV use are not designed or constructed specifically for OHV use. Areas historically used for OHV use are often closed without providing alternate areas. Prohibiting use without providing for additional alternatives may lead to further unmanaged and unauthorized OHV use.

Actions:

- a. Develop more managed OHV areas
 - Land managing agencies need to acknowledge and identify motorized trail use as a valid form of recreation on public lands
- b. Consistently sign designated routes and provide up to date maps to users
- c. Before closing an existing OHV trail or area consider adequacy of trails in the vicinity
- d. Seek out grants and partnerships to develop new trails
- e. Inventory existing routes, analyze these trails depending on environmental factors for designation or closure

Protect Access to Trails/Keep Trails Open

Issue: Access refers to the ability of the user to get to the trailhead or area where the recreational opportunities exist. Access is being diminished to OHV trails in two distinct areas. Land managers are closing areas to OHV use that have previously been open for OHV use. These areas may have been available for OHV use although not officially designated or acknowledged by the agency as use area. In addition, the continued development on Arizona's land encroaches on access to trails and OHV areas and can sometimes completely eliminate access.

Actions:

- a. Plan for access and acquire easements
- b. Identify unprotected access points to public recreation areas. Prioritize threatened access points, list protection strategies and develop a protection action plan.
- c. Develop OHV opportunities for specific activities
- d. Consider mitigation and education before closing a trail
- e. Consult with trail users before closing a trail or area
- f. Develop better regional planning
- g. Educate private land owners on recreation issues

Renovation and Maintenance of Existing Trails

Issue: OHV roads and trails receive increasing and often intensive use and these routes are often not originally designed for such use. This use causes deterioration and erosion of the trails. Often badly eroded trails cause users to develop unauthorized alternate routes nearby. Land managers are

facing a lack of financial resources and cut backs on agency-funded crews often resulting in the closure of trails.

Actions:

- a. Identify and prioritize reconstruction and maintenance needs of trails
- b. Incorporate sustainable trail design when reconstructing/maintaining trails
- c. Employ grants, partnerships and volunteers to supplement trail budgets

Education and Trail Etiquette

Issue: Trail users who lack proper trail etiquette and environmental ethics can detract from other trail users' recreation experience and negatively impact the environment. Uneducated OHV users create negative impacts including adding to the negative perception of OHV use and possible closure of use areas for the rest of the OHV users. Littering, excessive speed, not staying on trails, vandalism and an inability of managers to enforce regulations leads to continued user conflicts and environmental impacts.

Actions:

- a. Increase education resources for trail etiquette and environmental education
 - Incorporate OHV recreation use into driver education (especially in high schools)
 - Incorporate trail etiquette and environmental ethics material into school and youth programs
 - Have agencies collaborate on education materials and programs to provide consistent messages and share resources. Educational messages should empahsize self-responsible behaviors, such as *Pack it in-Pack it out*.

- Have regulations posted at trailheads for user reference
- b. Improve land manager training
 - Provide environmental ethics training for personnel
 - Include all resource specialists in OHV training programs to increase awareness of management needs
- c. Encourage shared use on trails
 - Recognize that certain trails are more appropriate for accommodating multiple use and others less so; visibly sign each trail accordingly
 - Promote "share the trail" and emphasize cooperation, tolerance and respect for other trail users
 - Make allowable trail uses known to users through signage

Second Level Priority Recommendations for Motorized Trail Use

Enforcement of Existing Rules and Regulations/Monitoring
Issue: Trail rules and regulations are often unknown or ignored
by users. Land managers do not have the staff or time to
constantly monitor trails or manage a vast number of trails
over large areas and cannot effectively monitor all trails. The
enforcement of existing rules and regulations gives weight and
importance to the rules.

Actions:

- Promote volunteer programs with clubs and individuals to monitor trails use and educate users regarding the rules and regulations (peer patrols)
- Identify enforcement contacts or complaint registers for trail users to report information
- Impose heavier fines for repeat offenders
- Seek additional funding for monitoring and enforcement
- Employ consistent standards and procedures among agencies

Trail Information and Maps

Issue: Trail users need information and accurate maps that inform them where trails exist. In most cases, comprehensive maps do not exist and when they do the information is hard to find. Much of the information available is out-of-date, covers a small area or single trail or is too general.

Actions:

- Use the Internet to post maps and information so it is widely accessible
- Have maps cover regional areas
- Have accurate information on how to get to trailheads and the condition of trails
- Provide GPS coordinates and other location information
- Have fines for OHV offenses earmarked for education

Comprehensive Planning

Issue: There is a lack of long-term planning for trails. Current planning efforts revolve around a single trail and do not focus on the bigger picture of regional trail planning, interconnectivity between trail systems or advance planning to secure access from encroaching development.

Actions:

- Understand the regional aspect of trails when planning specific trails
- Collaborate with neighboring agencies to interconnect trail systems and share resources
- Develop regional trail system plans (emphasize multijurisdictional planning—involve adjacent communities, landowners and governments as well as trail users)
- Identify major trail access points in urban and developing areas and secure use for future generations

Other Priority Recommendations for Motorized Trail Use

Develop Signage and Support Facilities

Issue: In addition to the actual trail corridor, users require support facilities to the area's use and activities. Well-designed support facilities increase the user's experience and satisfaction along with protecting the resource.

Actions:

- Develop signage that includes route marking and access signage
- Develop consistent inter-agency standards for signage
- Develop trailheads with adequate parking, restrooms and litter control (such as individual litter bags and trash cans where appropriate)
- Develop staging areas for motorized use
- Provide bilingual signage

Nonmotorized Trail Use Recommendations

Managers of nonmotorized recreational trails are encouraged to concentrate on the following actions. Trail users can also assist with many of these recommended actions.



First Level Priority Recommendations for Nonmotorized Trail Use

Renovation and Maintenance of Existing Trails

Issue: Nonmotorized trails in the State are often eroded and deteriorated. This can be due to natural causes, overuse, improper design or lack of regular maintenance. Often badly eroded trails cause users to develop unauthorized alternate routes. Other trails are in need of tread maintenance and brush clearing. Land managers are facing a lack of financial

resources and cut backs on agency-funded crews. Trash and litter was identified as one of the public's largest concerns.

Actions:

- a. Identify and prioritize reconstruction and maintenance needs of trails
- b. Incorporate sustainable trail design when reconstructing/maintaining trails
- d. Employ grants, partnerships and volunteers to supplement trail budgets
- e. Provide trash receptacles or other litter control means and provide education about the litter problem

Protect Access to Trails/Acquire Land for Public Access

Issue: Access refers to the ability of the user to get to the trailhead or area where the recreational opportunities exist. The continued development of Arizona's land encroaches on access to trails and can completely eliminate access if trails and access points are not incorporated into general plans.

Actions:

- a. Have more comprehensive planning for access and acquire trail easements
- b. Coordinate trail access needs with users/stakeholders
- c. Have ASCOT and/or other groups host conferences that educate the trails and planning community on how to address access issues
- d. Permanently secure access to public trails, trailheads and other access points
 - Enact city and county ordinances and codes to preserve public access to recreation

Provide incentives to developers to preserve public access to trails

Develop Signage and Support Facilities

Issue: In addition to the actual trail corridor, users require support facilities to the area's use and activities. Well-designed support facilities increase the user's experience and satisfaction along with protecting the resource.

Actions:

- Develop signage that includes route marking and access signage
- Develop inter-agency universal standards for signage
- Provide bilingual signage
- Develop trailheads with adequate parking, restrooms, drinking water and litter control (such as providing individual litter bags or trash cans where appropriate)

Second Level Priority Recommendations for Nonmotorized Trail Use

Comprehensive Planning

Issue: There is a lack of long-term planning for trails. Current planning efforts usually revolve around a single trail and do not focus on the bigger picture of regional trail planning, interconnectivity between trail systems or advance planning to secure access from encroaching development.

Actions:

- Prioritize the regional aspect of trails when planning specific trails
- Collaborate with neighboring agencies to interconnect trail systems and share resources
- Develop regional trail system plans (emphasize multijurisdictional planning–involve adjacent communities, landowners and governments as well as trail users)

- Identify major trail access points in urban and developing areas and secure use for future generations
- Have a trails presence on related planning boards and committees such as the Transportation Board and the Growing Smarter Council

Trail Information/Maps

Issue: Trail users need information and accurate maps that inform them where trails exist. In most cases, comprehensive maps do not exist and when they do the information is hard to find. Much of the information available is out-of-date, covers a small area or single trail or is too general.

Actions:

- Use the Internet to post maps and information so it is widely accessible
- Have maps cover regional areas
- Have accurate information on how to get to trailheads and the condition of trails
- Provide GPS coordinates and other location information
- Incorporate maps into the library system

Education and Trail Etiquette

Issue: Trail users who lack proper trail etiquette and environmental ethics can deter from other trail users' recreation experience and negatively impact the environment. Littering, excessive speed, not staying on trails, vandalism and an inability of managers to enforce regulations leads to continued user conflicts and environmental impacts.

Actions:

- a. Increase education resources for trail etiquette and environmental education
- Incorporate trail etiquette and environmental ethics material into school and youth programs
- Have agencies collaborate on education materials and

- programs to provide consistent messages Educational messages should empahsize self-responsible behaviors, such as *Pack it in-Pack it out*.
- Have rules and regulations posted at trailheads for users
- b. Encourage shared use on trails
- Recognize that certain trails are more appropriate for accommodating multiple use and others less so; visibly sign each trail accordingly
- Promote "share the trail" and emphasize cooperation, tolerance and respect for other trail users
- Make allowable trail uses known to users through signage

Other Priority Recommendations for Nonmotorized Trail Use

Coordinated Volunteerism

Issue: Volunteers can be a valuable supplement to an agency's labor force. Trail users are often willing volunteers to help build and maintain trails along with monitoring or educating users. Land managers lack the time to effectively coordinate, manage and train volunteers to use them to their potential.

Actions:

- Provide volunteer trainings for trail design and maintenance techniques
- Enlist a volunteer to be the liaison between the agency and volunteers and to coordinate trail projects
- Recognize and support the need to allocate staff time to volunteer coordination
- Seek grants and partnerships to support volunteers

Develop New Trails

Issue: There is demand for new trail opportunities in areas experiencing high growth rates. Also, as the types of activities change and new ones emerge, trails that provide for a specific type of activity may be needed.

Actions:

- Develop trail opportunities for specific activities (i.e., single-track trails for mountain bikes, competitive events, geo-caching) where appropriate
- Develop and promote trail networks or long distance trail opportunities
- Develop more close-to-home trail opportunities

Enforcement of Existing Rules and Regulations/Monitoring

Issue: Trail rules and regulations are often unknown or ignored by users. Land managers do not have the staff or time to constantly monitor trails or manage a vast number of trails over large areas and cannot effectively monitor all trails. The enforcement of existing rules and regulations gives weight and importance to the rules.

Actions:

- Promote volunteer programs with clubs and individuals to monitor trail use and educate users about the regulations
- Identify enforcement contacts or complaint registers for trail users to report information
- Impose heavier fines for repeat offenders

More Accessible Trails for Individuals with Physical Disabilities

Issue: The need for trail experiences for people of differing physical abilities is becoming prevalent. Trails should be available to all users including the first time user, wheelchairs users and families with strollers. "Baby boomers" will soon be classified as senior citizens and the rising obesity rate in America brings new issues when designing trails for all populations.

Actions:

- Offer trails of differing difficulty levels that still incorporate the natural setting and experience
- Incorporate standards for barrier-free access to trails as specified in the American with Disabilities Act (ADA)
- Evaluate trails regarding their standards and conditions to accommodate various abilities (i.e., the Universal Trail Assessment Process)

Other Priority Recommendations for both Motorized and Nonmotorized Trail Use

Seek Additional Funding Sources

Lack of funding for trails emerged as a priority. More funds are needed for personnel, volunteer programs, trail maintenance and development, planning

and support facilities. Managers and users often perceive funding as an issue they have no control over and can do little about.

Actions:

- Research and apply for grants and other funding sources
- Encourage volunteerism
- Provide relevant information regarding the importance and benefits of trails to decision-makers and elected officials

Interagency Coordination

Issue: Interagency cooperation and consistency was a common theme throughout the public input process. Better communication between agencies is important to ensure a clear understanding of agency plans and policies. Interagency coordination would allow for shared resources

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and interconnecting of trails and systems. There is a need to standardize trail rules, regulations and enforcement.

Actions:

• Include relevant agencies, organizations and users in all planning efforts

Reduce Cultural and Environmental Resource Impacts

Issue: A balance needs to exist between resource protection while maintaining access to recreational opportunities. Trails that are not properly designed and managed can impact natural, cultural and archaeological resources.

Actions:

- Provide environmental educational information to users
- Consider impacts to the natural and cultural resources, wildlife and sensitive areas when planning and designing trails
- Understand that wildlife viewing and visiting archaeological and historical sites are the top reasons for recreational trail use and plan accordingly

Chapter 5

Accomplishments and Trends Over The Past Five Years

"To learn something new, take the path you took yesterday."

John Burroughs, American essayist and naturalist, 1837-1921

Chapter 5: Accomplishments and Trends Over the Past Five Years

There have been significant accomplishments in trail advocacy, trail information and trail improvements in Arizona over the past five years. Substantial progress was made on the long-distance Arizona Trail and the Great Western Trail. There were also numerous successful trail partnerships made since 2000. This chapter highlights some of the accomplishments of the past five years. This chapter also demonstrates how Arizona State Parks has distributed trail funds according to the priority recommendations of the ARIZONA TRAILS 2000 PLAN.

In addition, the *Trails 2005: A Study of Arizona's Motorized* and *Nonmotorized Trail Users Survey* followed the well-received ARIZONA TRAILS 2000 PLAN and incorporated many of the same questions. This allows for trend analysis and comparison through the years. It also summarizes the differences and similarities of the findings of the two plans.

Accomplishments of the Off-Highway Vehicle Program

"Nature Rules. Stay on the trails." Education Campaign
In June 2001, Arizona State Parks, represented by Cooley
Advertising and Public Relations, launched an OHV
educational campaign known as "Nature Rules. Stay on the
trails." This multi-media statewide campaign was in response
to one of the top priority recommendations in the TRAILS
2000 PLAN, "Promote Trail Etiquette and Environmental

Ethics." Arizona State Parks staff and Cooley PR developed a marketing plan and educational ads for television, radio and print media after conferring with partner agencies and OHV organizations regarding the campaign

The purpose of the campaign was to educate OHV users toward responsible use and respectful recreational attitudes and behaviors. The primary targets for this campaign were adults (≥18 years of age) who own and use a recreational

direction and message content.

off-highway vehicle, and specifically males 18-44 years of age. The campaign was further supported by use of outdoor mediums such as billboards, brochures and trail signage, a comprehensive website accessed on the State Parks' homepage, extensive public relations efforts, and a quarterly newsletter, *TrailScape*, to facilitate open discussions among OHV clubs about key issues. Booths were staffed at many special events.

The second year of the campaign built upon the successes of the first year and expanded the campaign in new directions. Through new TV, radio and print ads, the second year addressed the consequences when OHV recreationists do not stay on designated trails (i.e., area/trail closures, environmental damage, personal injuries, vehicular repairs). New billboard ads were placed along major highways and in four Cactus League baseball stadiums in Phoenix.

The second year also included a series of hands-on four-wheel drive training clinics for new and intermediate four-wheel drive owners and a week-long OHV Management Workshop to bring together land managers and OHV groups to discuss specific issues and establish a common direction for the future.

This educational effort was to be a long-term campaign designed to not only make people more aware of responsible OHV use, but also to change behaviors. Evaluations of the campaign demonstrated successful results, but due to the Legislative sweep of the OHV Recreation Fund, the program was only funded for two years. On a positive note, many of the ads are still in use statewide as public service announcements.

Partnerships

As a result of the last planning process for TRAILS 2000, State Parks modified how Arizona's two motorized trail fund sources administered by State Parks were allocated. The federal partners said they needed to undertake a public involvement process to revise their land management plans to incorporate OHV recreational use management strategies. Both federal and state agencies expressed the need to conduct inventories of OHV routes and implement a determination process of which routes were environmentally and culturally sound.

State Parks entered into partnership agreements with the Bureau of Land Management, U.S. Forest Service and State Land Department to conduct these planning and inventory projects, also requiring them to complete on-the-ground projects such as signing designated routes, improving access and staging areas and creating new trail maps. Three years of the State OHV Recreation Fund were allocated to these efforts, but due to the Legislative sweep of the fund, State Parks was required to cancel the agreements in the second year and turn over any unspent monies to the General Fund. Unfortunately, less than two years of the agreement scopes of work were accomplished. In addition, loss of the OHV Recreation Fund terminated not only State Parks' OHV Program and staff, but also a substantial part of the Game and Fish Department's and State Land Department's OHV management efforts.

Grants

The Arizona State Parks Board awards competitive grants to eligible entities to support motorized trail projects across the State. The grants are recommended to the Arizona State Parks Board by the Off-Highway Vehicle Advisory Group (OHVAG). A task force representing all land management agencies and trail user types was formed to develop criteria based on the needs identified in the *ARIZONA TRAILS 2000 PLAN* for rating motorized grant applications for the next five years. Following are the criterion developed by the task force and the number of projects funded from FY 1999 to FY 2003 that include elements that address that criterion.

Table 21: OHV Recreation Fund and RTP Motorized Portion Grant Project Summary FYs 1999-2003

3. a.m. 1. 3,000 Summary 1.15.1323 2005			
MOTORIZED TRAIL PROJECTS			
Grant Rating Criterion # of Project	Elements*		
Preserve existing motorized trails/areas	9		
Renovate trails/areas	9		
Protect access (acquisition)	1		
Promote trail etiquette and environmental ethics	10		
Develop new trails/areas	6		
Partnership/Donations	5		
Reduce environmental/cultural impacts	12		
Provide information/maps	14		
Enhance support facilities	14		
*A total of 15 grant projects with multiple elements were funded from FY 1999 to FY 2003 for \$3,856,800			

A change to the OHV grant program occurred as the result of public comment and response to the OHV community in

Arizona. Previously, nonprofit organizations were not eligible to apply for motorized grant funds unless as a third party to a governmental agency. In January 2003, the Arizona State Parks Board approved to allow nonprofit entities be eligible for grants funded by the Recreational Trails Program (motorized portion).

Off-Highway Vehicle Economic Impact Study

Arizona State Parks conducted a yearlong OHV Economic Study with the Arizona Game and Fish Department and Arizona State University (ASU) in 2003. The study showed that people who enjoy OHV recreation spend a considerable amount of money buying vehicles, equipment, insurance, repairs and other related expenses. They also spend money in local communities close to areas they recreate in for gasoline, food and lodging. (See Appendix F for more details).

Economic Importance of OHV Recreation in Arizona

- Creates a statewide economic impact of \$4.25 billion
- Contributes \$3.1 billion to local economies through OHV-related retail sales
- Adds \$187 million to annual state tax revenues
- Provides \$1.1 billion in household income (salaries/ wages) for AZ residents
- Supports 36,951 full-time and part-time jobs in Arizona

Other Activities in the Motorized Trail Community

Forest Service Environmental Impact Statement for Cross-County Travel by OHVs

In Spring 2003, the U.S. Forest Service announced a draft environmental impact statement (DEIS) and proposed plan amendment which discloses the potential environmental consequences of managing motorized, wheeled cross-county travel on lands of five national forests—Apache-Sitgreaves, Coconino, Kaibab, Prescott and Tonto National Forests—in Arizona. The Forest Service is proposing to limit/restrict motorized wheeled cross-country travel on lands administered by the agency in Arizona. The purpose of the proposal is to avoid future impacts to public resources likely to result from the increasing use of OHVs on these lands and to provide direction for subsequent site-specific planning for motorized opportunities.

Specifically, the Forest Service is proposing a new rule (36 CFR Parts 212, 251, 261, and 295 – Travel Management; Designated Routes and Areas for Motor Vehicle Use) to identify appropriate uses of off-highway vehicles in the National Forest System.

The Forest Service acknowledges that motor vehicle use is an appropriate way to recreate in the National Forests, access hunting and fishing opportunities, sightsee, and otherwise enjoy recreational experiences on National Forest System lands. The establishment and clear identification of a transportation and use system for motor vehicles on each National Forest will enhance management of National Forest System lands; sustain natural resource values through more effective management

of motor vehicle use; enhance opportunities for motorized recreation experiences on National Forest System lands; address needs for access to National Forest System lands; and preserve areas of opportunity on each National Forest for nonmotorized travel and experiences.

As demand for a greater variety of recreation uses increases, managing an appropriate balance between motor vehicle use and nonmotorized recreational activities has become an important priority. A designated system of trails and areas for motorized use established with public involvement would enhance public enjoyment of the National Forests, while maintaining other important values and uses on National Forest System lands.

The proposed rule defines an OHV as a motor vehicle that is designed or retrofitted primarily for recreational use off-road, including minibikes, amphibious vehicles, snowmobiles, off-

highway motorcycles, go-carts, motorized trail bikes, and dune buggies. Under the rule each Forest would identify roads, trails, and areas that are appropriate for OHV use and include them on the Forest Transportation Atlas. OHV use would be restricted to identified (designated) roads, trails and areas.



The criteria for designating trails and areas would include consideration of effects on the following, with the objective of minimizing: (1) Damage to soil, watershed, vegetation, and other forest resources; (2) Harassment of wildlife and significant disruption of wildlife habitats; (3) Conflicts between

motor vehicle use and existing or proposed recreational uses of National Forest System lands or neighboring Federal lands; and (4) Conflicts among different classes of motor vehicle uses of National Forest System lands or neighboring Federal lands. In addition, the responsible official would consider: (5) Compatibility of motor vehicle use with existing conditions in populated areas, taking into account sound, emissions, and other factors; and (6) Consistency with trail management objectives. The rule requires public involvement in the designation process.

Bureau of Land Management Establishes a National Management Strategy on Motorized OHV Use

In an effort to accommodate growing OHV use on the public lands while protecting natural resources, the Bureau of Land Management (BLM) released its National Management Strategy in January 2001. The strategy offers general guidance to land managers and recommends numerous actions aimed at creating a local framework for reviewing and resolving motorized OHV issues. BLM also has a current workplan that outlines priorities for recreation and visitor services with goals, objectives, milestones and actions. Arizona BLM is in the process of establishing a designated travel network. This will be accomplished through its land use planning efforts currently in progress.

Southwest Motorized Access Work Group

The Southwest Motorized Access Work Group was established in 2004 through a Memorandum of Understanding signed by participating state and federal agencies in New Mexico and Arizona. The group had met informally for several years before formalizing as an interagency group.

Purpose: Consistency in management of off-highway vehicle use is needed by federal and state agencies and tribes to establish effective, uniform, and understandable guidelines for the public. Consistent management is key to the success of management on public, state and tribal lands and other areas of mutual interest.

Mission: This work group will focus on identifying inconsistencies in off highway vehicle management and will recommend ways to standardize management on public, state and tribal lands and other areas of mutual interest.

This work group will work to develop mutual trust, effective communication, and to cooperatively identify solutions to inconsistent off-highway vehicle protocols and regulations in order to provide a common message to the public.

Objectives: Identify and become more knowledgeable with tribal, state and federal off-highway vehicle protocols, procedures, and regulations. Increase commitment and follow-up by federal and state agencies and tribes to effectively address off-highway vehicle issues.

Develop consistency and coordination in:

- laws and enforcement
- vehicle "legality"
- inventory, assessment and monitoring methodology
- designation process for routes
- signage for routes
- information (including mapping and brochures) and education

Accomplishments of the Nonmotorized Trail Program

Arizona State Trails System

New Vision Statement

Arizona's State Trails System is invaluable, offering a diversity of quality nonmotorized trails that inspire people to experience the State's magnificent outdoor environment and cultural history.

The Arizona State Trails System is a partial inventory of Arizona's nonmotorized trails. The State Trails System is a listing of existing and proposed nonmotorized trails in Arizona that have been formally nominated by land managing agencies and accepted by the Arizona State Parks Board, based on established eligibility criteria.

Since 1999, 75 trails have been accepted into the State Trails System bringing the total number of trails in the System to 638.

The fourth edition of the Arizona State Trails Guide was developed in 2003. The guide includes all existing trails in the State Trails System and provides a trail description, map, elevation profile and contact information for each trail. The



Guide has been widely popular around the State.

The Arizona State Committee on Trails (ASCOT) and other volunteers work each year to monitor the trails in Arizona. By monitoring, ASCOT aids the State in assuring the trails in the State Trails System are safe and maintain the quality of the System.

Arizona State Committee on Trails Hosted Workshops

Arizona State Parks and the Arizona State Committee on Trails hosted four workshops in the past five years to bring together the trails community to learn and discuss current trail issues.

The first workshop 'Regional Trails Planning' was held in Spring 2000 and focused on partnerships, funds available and programming steps involved in regional planning for trails. The second workshop "Trail Funding" was held in spring of 2001 to highlight the various sources of funding for trail related projects.

The third workshop "Trail Management in Lean Times" was held in January 2003 and focused on differing opportunities and aspects of trail management in a time of decreasing budgets. The fourth workshop "Trails for All People" was held in February 2004 and focused on the increasing need to make trails physically accessible for all populations.

Recreational Trails Program Trail Maintenance

The nonmotorized portion of the Recreational Trails Program monies was dedicated solely to maintenance of existing trails starting in 2001. The need for maintenance on existing trails in Arizona encompassed the top two priority recommendations of the ARIZONA TRAILS 2000 PLAN. Money for trail maintenance is not available through many sources including agency budgets and grants.

For the first two-year cycle of the RTP Nonmotorized Trail Maintenance Program, Arizona State Parks partnered with 22 agencies across the State (see Table 22).

The program was well received and a second two-year cycle will continue in a revised format putting another \$1.5 million in trail maintenance projects with another 23 agencies in 2004 (see Table 22).

Table 22: Nonmotorized Recreational Trails Program Trail Maintenance Partners FYs 2002-2004*

Partnering Entity	# of Projects	RTP Project Amount (estimated**)
Cities/towns	11	\$366,134
Counties	5	\$282,354
State	3	\$84,253
Federal	24	\$1,417,311
Tribal	2	\$32,187
Totals	45	\$2,182,239

^{*} Federal Recreational Trails Program Source: Transportation Efficiency Act for the 21st Century (TEA-21) from the FHWA.

Arizona Trails Heritage Fund

A task force representing all land management agencies and trail user types was formed to develop criteria based on the needs identified in the *ARIZONA TRAILS 2000 PLAN* for rating Trails Heritage Fund grant applications for the next five years. Following are the criterion developed by the task force and the number of projects funded from FY 1999 to FY 2004 that include elements that address that criterion.

^{**} All projects have not yet been completed so the amount is estimated until expenditures are finalized.

Table 23: Trails Heritage Fund Grant Project Summary FYs 1999-2003

NONMOTORIZED TRAIL PROJECTS			
Grant Rating Criterion # of Project	Elements*		
Renovate trails	27		
Keep trails clean/clear	48		
Promote trail etiquette/environmental ethics	25		
Protect access (acquisition)	7		
Promote partnership/volunteerism	9		
Develop new trail opportunities	24		
Reduce environmental/cultural impacts	34		
Provide information/maps	37		
Enhance support facilities	35		
*A total of 48 grant projects with multiple elements were funded from FY 1999 to FY 2004 for \$2,489,747			

Arizona Trail

The Arizona Trail will eventually be an 800-mile nonmotorized trail that traverses the State from Mexico to Utah. The Arizona Trail is intended to be a primitive, long distance trail that

highlights the State's topographic, biologic, historic and cultural diversity. The cross-state trail now has approximately 700 miles developed. Roughly 200 miles were completed since the last plan.



Trail Construction and Maintenance Trainings

Arizona State Parks partnered with the Arizona Trail Association to host a series of trail construction and maintenance trainings. There is a need to train both agency personnel and trail volunteers in sustainable trail design and maintenance techniques. Land managers, trail partners and volunteers should utilize the resources of the National Trails Training Partnership (NTTP) whose mission is to improve opportunities for training for the nationwide trails community. Visit the website at www.nttp.net for more information and a calendar of events.

National Trails Day

National Trails Day, founded by the American Hiking Society, is held annually on the first Saturday in June. Arizona remains strong in its commitment to National Trails Day. For the past four years, Arizona has lead the way by incorporating the health community into the National Trails Day theme. Arizona averages around 50 events each year. Visit www.nationaltrails day.org for more information regarding National Trails Day.

Trend Analysis of ARIZONA TRAILS 2000 PLAN and the Arizona Trails 2005 Plan

The *Arizona Trails 2005 Plan* employed many of the same topics and questions in the phone and mail surveys as were used in the TRAILS 2000 surveys enabling State Parks staff to gain trend analysis within the trails communities over the past five years. Overall, it seems that many of the same needs, issues and preferences that were priorities the past five years will remain priorities for the next five years.

Trail Designation Preference

Comparison of the two plans' survey results show that motorized and nonmotorized users are going in divergent directions in their trail designation preferences (see Table 24).

Table 24: Preference of Trail Designation

Motorized users show a substantial increase in preferring trails accommodating multiple activities with motorized and nonmotorized uses combined. Nonmotorized users are increasing in the preference of trails accommodating multiple activities with motorized and nonmotorized uses separated or for a single use.

Twoil Designation	Motorized	Motorized	Nonmotorized	Nonmotorized
Trail Designation	2005	2000	2005	2000
Single activity	17.2%	14.0%	30.5%	24.0%
Multiple activities but motorized and nonmotorized separated	34.8%	69.0%	68.0%	55.8%
Multiple activities but motorized and nonmotorized activities combined	40.4%	17.0%	8.0%	5.7%

Trail Management Needs

Trail management needs remain consistent with five years ago. The focus of most responses deal with maintenance of trails and the area around trails (see Table 25).

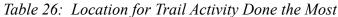
Enforcement of rules and regulations was a top priority for both motorized and nonmotorized in both surveys.

Table 25: Most Important Trail Management Needs

Motorized Users 2005	Motorized Users 2000	Nonmotorized Users 2005	Nonmotorized Users 2000
Keep area clean of trash/ litter	Keep trail clean of litter/ trash	Keep area clean of trash/ litter	1. Maintain existing trails
2. Enforce existing rules and regulations	2. Mitigate or repair damage	2. Maintain existing trails	2. Keep trail clean of litter/ trash
3. Maintain existing trails	3. Maintain existing trails	3. Repair damage to trails	3. Mitigate or repair damage
4. Repair damage to trails	4. Enforce rules and regulations	4. Enforce existing rules and regulations	4. Enforce rules and regulations
5. Develop new trails	5. Renovate deteriorated trails	5. Develop support facilities	5. Renovate deteriorated trails

Preference of Trail Location

For location of trail activity done the most, motorized users are increasingly reporting either rural areas or remote areas since the ARIZONA TRAILS 2000 PLAN. This may be a result of closures in or near urban areas and/or development. For nonmotorized users the location of trail activity done the most has stayed constant.



Location–Done Most	Motorized 2005	Motorized 2000	Nonmotorized 2005	Nonmotorized 2000
In a city or town	5.4%	11.0%	26.0%	35.0%
Just outside a city or town	12.4%	22.0%	33.0%	32.0%
Rural areas	25.7%	23.0%	22.0%	21.0%
Remote areas	56.4%	44.0%	18.0%	13.0%

For location of trail activity enjoyed the most, motorized preference shows a substantial increase in remote areas from *ARIZONA TRAILS 2000 PLAN*. Nonmotorized users show an increase in their preference to recreate in rural or remote areas.

Table 27: Location for Trail Activity Enjoyed the Most

Lagation Enjoyed Most	Motorized	Motorized	Nonmotorized	Nonmotorized
Location–Enjoyed Most	2005	2000	2005	2000
In a city or town	0.2%	8.0%	8.0%	18.0%
Just outside a city or town	6.0%	16.0%	18.5%	27.0%
Rural areas	25.0%	22.0%	35.4%	24.0%
Remote areas	70.9%	54.0%	38.0%	30.0%







Importance of Support Facilities

The need for support facilities such as trash cans, drinking water, restrooms and parking space remains consistent as the most important. For motorized users, they are rating motorized staging areas as of more importance than five years ago.

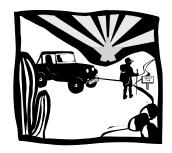


Table 28: Most Important Support Facilities

Rank– Support Facilities	Motorized Users 2005	Motorized Users 2000	Nonmotorized Users 2005	Nonmotorized Users 2000
1.	Trash cans	Trash cans/Dumpsters	Trash cans	Drinking water
2.	Trail signs	Drinking water	Trail signs	Trash cans/Restrooms
3.	Restrooms	Restrooms	Drinking water	Trail signs
4.	Drinking water	Trail signs	Restrooms	Shade structures/ Ramadas
5.	Motorized staging areas	Picnic facilities	Parking space	Parking space

Comparison of Priority Recommendations

The priority recommendations from the two plans show clear themes that remain consistent among the years (see Tables 29, 30 and 31) and can show land managers areas on which issues and actions to concentrate their efforts.

For motorized trail users, the themes are preserving existing trails and OHV areas and keeping them open, planning and developing new opportunities and education of users. Topics that have increased in importance for motorized users are the enforcement of existing rules and regulations and providing trail information and maps to users.

For nonmotorized trail users, trail maintenance and renovation, protecting access to trails, planning for future use of trails and education remain top priorities. Topics that have increased in importance include developing signage and support facilities and providing trail information and maps to users.

Coordinated volunteerism became a priority issue for the first time. Aspects of volunteerism were included in the recommended actions of the *ARIZONA TRAILS 2000 PLAN*, but the issue emerged in a different form for the *Arizona Trails 2005 Plan*.

Table 29: Comparison of Motorized Priority Recommendations for Arizona Trails 2005 & ARIZONA TRAILS 2000 Plans

Arizona Trails 2005 Plan	ARIZONA TRAILS 2000 PLAN
First Level Priority MOTORIZED Recommendations	Priority MOTORIZED Recommendations
Develop New Trails and Motorized Recreation Opportunities	1 Progery Existing Trails and OUV Areas
Protect Access to Trails/Keep Trails Open	Preserve Existing Trails and OHV Areas
Renovation and Maintenance of Existing Trails	Renovate Eroded or Deteriorated Trails
Education and Trail Etiquette	2. Renovate Eroded of Deteriorated Trans
Second Level Priority Motorized Recommendations	3. Protect Access to Trails and OHV Areas
Enforcement of Existing Rules and Regulations/Monitoring	4. Duamata Tuail Etiawatta and Environmental Ethica
Trail Information and Maps	4. Promote Trail Etiquette and Environmental Ethics
Comprehensive Planning	5. Plan for and Develop New OHV Opportunities

Table 30: Comparison of Nonmotorized Priority Recommendations for Arizona Trails 2005 & ARIZONA TRAILS 2000 Plans

Arizona Trails 2005 Plan	ARIZONA TRAILS 2000 PLAN	
First Level Priority NONMOTORIZED Recommendations	Priority NONMOTORIZED Recommendations	
Renovation and Maintenance of Existing Trails	Renovate Eroded or Deteriorated Trails	
Protect Access to Trails/Acquire Land for Public Access	2 Voon Existing Trails Clean and Clear	
Develop Signage and Support Facilities	2. Keep Existing Trails Clean and Clear	
Second Level Priority Nonmotorized Recommendations	3. Promote Trail Etiquette and Environmental Ethics	
Comprehensive Planning	Protect Access to Trails	
Trail Information/Maps	4. Flotect Access to Italis	
Education and Trail Etiquette	5. Incorporate Trails Into Local and Regional Planning	

Table 31: Comparison of Other Priority Recommendations for Both Motorized and Nonmotorized Trail Use for Arizona Trails 2005 & ARIZONA TRAILS 2000 Plans

Arizona Trails 2005 Plan	ARIZONA TRAILS 2000 PLAN
Other Priority Recommendations	Other Recommendations
Reduce Cultural and Environmental Resource Impacts (both motorized and nonmotorized)	Promote Interagency Coordination and Consistency (motorized trail use)
Seek Additional Funding Sources (both motorized and nonmotorized)	Address User Conflicts and Safety Issues (nonmotorized trail use)
Interagency Coordination (both motorized and nonmotorized)	Develop New Trail Opportunities (nonmotorized trail use)
Develop Signage and Support Facilities (motorized)	Reduce Environmental and Cultural Resource Impacts (both motorized and nonmotorized trail use)
Develop New Trails (nonmotorized)	Provide Current Trail Information and Detailed Maps (both motorized and nonmotorized trail use)
Coordinated Volunteerism (nonmotorized)	Enhance Support Facilities (both motorized and nonmotorized trail use)
More Accessible Trails for Individuals with Physical Disabilities (nonmotorized)	Improve User/Manager Communication (both motorized and nonmotorized trail use)
Enforcement of Existing Rules and Regulations/Monitoring (nonmotorized)	Seek Additional Funding Sources (both motorized and nonmotorized trail use)

Appendices

"The thing to remember when traveling is that the trail is the thing, not the end of the trail. Travel too fast and you will miss all you are traveling for."

Louis L'Amour, Western writer, 1908-1988

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APPENDIX A: Summary of Arizona Trails 2005 Surveys-General Public and Target Group

Gender and Age of Survey Respondents

	General Public		Target Group	
Gender/Age	Motorized Users	Nonmotorized Users	Motorized Users	Nonmotorized Users
Male	54.0	35.1	82.0	64.4
Female	46.0	64.9	18.0	35.6
Mean Age	51.9	46.0	54.9	54.0

Overall Satisfaction with Trails in Arizona

	Genera	ıl Public	Target Group		
Satisfaction	Motorized users	Nonmotorized users	Motorized users	Nonmotorized users	
Not at all satisfied	4.6	0.2	4.0	1.0	
Slightly satisfied	6.0	6.2	36.0	21.4	
Satisfied	72.7	58.8	44.0	48.1	
Very satisfied	15.3	35.1	16.0	24.3	
Extremely satisfied	1.4	3.4	0.0	5.2	
Total	100	100	100	100	

Q: Overall, how satisfied are you with recreation trails in Arizona?

Seasonal Use of Trails

	Gen	eral Public	Target Group		
Season	Motorized users	Nonmotorized users	Motorized users	Nonmotorized users	
Spring	86.2	85.5	98.1	97.2	
Summer	65.7	54.7	80.8	79.5	
Fall	92.5	85.0	98.1	98.1	
Winter	63.9	64.4	90.4	89.8	

Q: During which seasons do you use recreation trails in Arizona?

Note: Respondents could check all that apply so columns do not sum to 100%.

Group Size When Using Trails

	Genera	l Public	Target Group		
Group size	Motorized users	Nonmotorized users	Motorized users	Nonmotorized users	
	Valid p	percent	Valid 1	percent	
Alone	1.6	6.2	7.8	13.2	
1 other person	32.4	37.5	19.6	38.7	
2 – 3 other people	50.9	38.3	35.3	30.2	
4 – 5 other people	11.6	13.2	13.7	8.0	
6 – 10 other people	2.6	2.8	13.7	5.7	
more than 10 other people	0.8	2.0	9.8	4.2	
Total	100	100	100	100	

Q: How many people are normally with you when you use trails in Arizona?

Trail Designation Preference

	Gene	ral Public	Targ	et Group
Trail type	Motorized users	Nonmotorized users	Motorized users	Nonmotorized users
Single activity	17.2	30.5	6.0	18.6
Multiple activities, with motorized and nonmotorized uses combined	40.4	5.7	52.0	6.7
Multiple activities, but with motorized and nonmotorized uses separated	34.8	55.8	36.0	70.0
Not sure	7.7	8.0	6.0	4.8
Total	100	100	100	100

Q: Do you think trails should be used for a single activity or for multiple activities?

Trail Activity Participation

		General Public			Target Group			
	Motorize	ed users	Nonmoto	orized users	Motorize	d users	Nonmoto	orized users
Participation	Valid percent	Mean number of days	Valid percent	Mean number of days	Valid percent	Mean number of days	Valid percent	Mean number of days
Nonmotorized Trail Activities:		-		•		•		•
Jogging/running	4.1	11.9	15.8	23.1	7.7	21.5	14.9	68.0
Trail hiking (day hiking)	53.5	14.6	75.5	16.4	48.1	21.7	75.3	37.0
Walking (excluding trail hiking)	42.9	30.9	67.1	39.5	42.3	76.7	56.7	66.3
Backpacking	5.1	3.7	20.7	4.4	11.5	15.8	27.7	9.4
Mountain biking (natural terrain)	4.1	4.2	14.3	10.9	11.5	14.7	24.7	39.4
Bicycling	12.4	8.4	13.7	16.3	7.7	78.0	25.6	28.4
Horseback riding	4.1	6.4	13.5	8.3	15.4	21.0	20.5	70.0
In-line skating	0.9	0.2	5.0	4.8	0.0	0.0	4.2	12.6
Canoeing/Kayaking (using "water trails")	7.8	3.1	9.3	5.3	9.6	5.7	19.1	7.3
Cross-country skiing or snowshoeing	0.9	0.6	5.3	1.1	1.9	0.0	16.7	6.3
Hiking with stock (horses, mules, llamas, etc.)	0.9	2.4	0.7	2.5	0.0	3.0	2.8	23.9
Orienteering/Geocaching (using map, compass, GPS)	8.8	6.0	1.6	2.3	19.2	19.6	9.3	13.5
Visiting historical/archaeological sites	43.3	6.9	52.1	5.8	44.2	15.4	47.4	8.8
Wildlife viewing/Birding	43.3	17.2	40.0	17.1	32.7	43.6	40.5	27.7
Motorized Trail Activities:								
Motorized trail biking/dirt biking	16.6	21.2	5.5	3.4	36.5	25.5	2.3	11.8
Dune buggy or sand rail driving	5.0	10.2	0.4	0.6	9.6	15.9	0.5	5.0
ATV (all-terrain vehicle) riding	42.4	31.0	4.7	5.2	38.5	30.6	5.1	7.6
Snowmobiling	0.5	0.7	2.7	0.5	1.9	1.0	0.5	-
High clearance two-wheel driving	10.6	12.0	2.5	2.2	17.3	53.6	12.6	17.7
Driving to visit historical/archaeological sites	40.1	8.9	15.5	5.0	50.0	17.3	19.5	9.4
Competitive events	0.9	2.6	1.1	0.1	21.2	70	0.5	4.0
Four-wheel driving	55.0	22.3	11.7	7.5	53.8	38.7	20.9	15.8
Driving to sightsee or view wildlife/Birding	49.8	15.2	19.2	10.9	40.4	30.0	20.9	12.4

Q: This question has two parts. **First** check each trail activity that you enjoy.

Then, fill in the approximate number of days you participated in that activity during the past 12 months in Arizona.

Preferred Settings for Trail Activities

	General Public				Target Group			
	Motoriz	ed users	Nonmotorized users		Motoriz	ed users	Nonmotorized users	
Trail location	Done most often	Enjoy the most						
		Valid 1	percent		Valid percent			
In a city or town	5.4	0.0	26.0	8.0	7.8	2.0	22.1	3.4
Just outside a city or town	12.4	6.0	33.7	18.5	3.8	0.0	24.5	13.2
In a rural area	25.7	25.7	22.2	35.4	27.5	14.0	24.5	17.6
In a remote area	56.4	56.4	18.1	38.0	60.8	80.4	28.8	65.9
Total	100	100	100	100	100	100	100	100

Q. Which of the following settings best describes the location for the trail activity that you do most often and that you enjoy the most?

Miles Traveled for Trail Use

	Gene	ral Public	Target Group		
Number of miles traveled for the trail activity	Motorized users	Nonmotorized users	Motorized users	Nonmotorized users	
		Five percent	trimmed mean		
You do most often	51.0	51.0 23.4		18.4	
You enjoy the most	62.5	46.1	65.7	58.7	

Q: Approximately how many miles (one-way) do you travel from your home for the purpose of using a trail?

Note: 5% percent trimmed mean is the arithmetic mean calculated when the largest 5% and the smallest 5% of the cases eliminated. Eliminating extreme cases results in a better estimate of central tendency, especially when extreme outliers are present (e.g., respondents claiming to travel 999 miles one-way to use a trail).

Preferred Level of Trail Difficulty

		Genera	l Public		Target Group			
Preferred	ferred Motorized users			Nonmotorized users		ed users	Nonmotorized users	
level of trail difficulty	Done most often	Enjoy the most	Done most often	Enjoy the most	Done most often	Enjoy the most	Done most often	Enjoy the most
Easy	12.2	9.3	12.2	9.3	3.9	1.9	7.7	4.8
Moderate	62.0	68.6	62.0	68.6	52.9	40.4	66.0	58.9
Hard	21.0	15.2	21.0	15.2	21.6	26.9	18.2	22.0
Challenging	4.9	16.9	4.9	16.9	21.6	30.8	8.1	14.4
Total	100	100	100	100	100	100	100	100

Q: Which of the following best describes the trail difficulty that you prefer

for activities that you do most often and that you enjoy the most?

Perceptions of Trend in Public Access to Trails

	Gene	ral Public	Target Group		
Trend in Public Access	Motorized users	Nonmotorized users	Motorized users	Nonmotorized users	
Access is declining; <u>fewer</u> trails are open for my preferred activities	48.3	18.7	82.7	30.8	
Access is about the same	19.5	34.5	13.5	35.5	
Access is improving; <u>more</u> trails are open for my preferred activities	8.8	13.0	3.8	22.3	
Not sure	23.4	33.8	0.0	11.4	
Total	100	100	100	100	

Q: What is your opinion about the trend in public access to recreation trails in the past five years in Arizona (i.e., the public's right to use trails)?

Satisfaction with Public Access to Trails in Regions of Arizona

	General Public				Target Group			
Satisfaction with	Motorized users		Nonmotorized users		Motorized users		Nonmotorized users	
Public Access	Region used most	Region enjoyed most	Region used most	Region enjoyed most	Region used most	Region enjoyed most	Region used most	Region enjoyed most
		Valid p	percent		Valid percent			
Not at all satisfied	7.8	7.3	0.6	0.7	38.0	34.7	47.8	19.8
Slightly satisfied	18.0	17.0	8.9	10.0	14.0	10.2	24.9	17.4
Satisfied	47.5	50.0	55.7	58.7	20.0	32.7	18.7	44.9
Very satisfied	21.7	19.9	27.2	21.8	24.0	18.4	3.8	2.9
Extremely satisfied	5.1	5.8	7.1	8.8	4.0	4.1	4.8	15.0
Total	100	100	100	100	100	100	100	100

Q: Overall, how satisfied are you with public access (i.e., your ability to use trails) in Arizona?

Environmental Concerns

	General Public		Tai	rget Group
	Motorized users	Nonmotorized users	Motorized user	Nonmotorized users
Environmental Concerns		Mean (out of 5)	
Erosion of trails	2.69	2.53	2.39	2.92
Litter	3.20	2.92	2.90	3.03
Trash dumping	2.92	2.57	3.10	2.73
Vandalism	2.60	2.31	2.54	2.50
Water pollution	2.17	2.27	1.78	2.26
Dust in the air	2.27	2.18	1.65	2.07
Human waste	1.86	1.73	1.67	1.87
Fire rings/charcoal	2.01	1.86	1.73	2.09
Erosion of stream banks	2.00	2.18	1.98	2.36
Trampling of vegetation	2.20	2.42	2.06	2.66
Air quality	1.79	2.14	1.54	2.16
Damage to soils	1.85	2.12	1.80	2.48
Damage to historical or archaeological sites	2.58	2.40	2.17	2.77
Vehicle emissions	2.07	2.40	1.38	2.38

Q 18: To what extent do you think each of the following environmental concerns is a problem on trails in the region of the state you enjoy the most?

Social Concerns on Trails

	Gene	ral Public	Tar	get Group
	Motorized users	Nonmotorized users	Motorized users	Nonmotorized users
Social concerns		Mean ((out of 5)	
Lack of trail ethics	2.48	2.48	2.67	2.70
Too many people	2.23	2.23	2.35	2.47
Recreational livestock	1.42	1.42	1.40	1.80
Damage to/loss of personal property	1.63	1.63	1.59	1.60
Conflict between users	1.66	1.66	2.13	2.45
Unskilled people	2.08	2.08	2.40	2.20
Uncontrolled dogs	2.07	2.07	1.75	2.28
Unregulated OHV use	2.25	2.25	1.92	3.51
Personal safety	1.89	1.89	1.75	1.86
Target shooting	2.05	2.05	2.37	2.42
Vehicle noise	1.85	1.85	1.67	2.45
Noise disturbance	1.86	1.86	1.60	2.45
Residential/commercial development	2.85	2.85	3.06	3.39

Q 20: To what extent do you think each of the following social concerns is a problem on trails in the region of the state you enjoy the most?

Importance and Satisfaction with Trail Management Priorities

	General Public			Target Group				
	Motorize	d users	Nonmotor	rized users	Motoriz	ed users	Nonmoto	orized users
Trail Management Priorities	Importance	Satisfaction	Importance	Satisfaction	Importance	Satisfaction	Importance	Satisfaction
		Mean (out of 5)					
Acquire new land for trails	3.53	2.74	3.21	3.03	3.92	2.62	3.72	2.87
Acquire new land for public access to trails	3.49	2.79	3.30	2.95	3.96	2.47	3.89	2.63
Develop new trails	3.63	2.74	3.33	3.05	4.40	2.06	3.62	1.81
Develop support facilities	3.51	2.94	3.52	2.90	3.27	2.78	3.25	2.89
Enforce existing rules/regulations	3.95	3.75	3.76	2.99	2.62	2.62	3.75	2.66
Keep area clean of litter/trash	4.37	2.70	4.21	2.95	4.02	2.58	4.02	2.68
Maintain existing trials	3.93	3.05	4.15	3.25	4.08	2.70	4.18	2.79
Repair damage to trails	3.82	2.90	4.05	3.15	3.66	2.78	4.04	2.82
Provide educational programs	3.22	2.98	3.17	3.12	3.64	2.55	3.11	2.98
Provide landscaping along trails and in support areas	2.24	3.22	2.54	3.25	1.82	3.40	2.12	3.26
Provide law enforcement/safety	3.41	2.61	3.32	2.98	3.04	2.84	3.20	2.85

Q: This question has two parts and asks about priorities for trail management in your favorite region of Arizona. First indicate how important each of the priorities is to you. Then, indicate your level of satisfaction with the current conditions.

Importance and Satisfaction with Trail Support Facilities

	General Public			Target Group				
	Motorized users Nonmotorized users		Motorized users		Nonmotorized users			
Trail Support Facilities	Importance	Satisfaction	Importance	Satisfaction	Importance	Satisfaction	Importance	Satisfaction
		Mean (d	out of 5)					
Backcountry camping sites	3.04	3.00	3.00	3.20	2.85	3.46	3.05	3.26
Developed campgrounds	3.03	3.03	2.94	3.18	2.49	3.41	2.77	3.20
Drinking water	3.31	2.76	3.82	2.87	2.49	3.13	3.24	3.01
Equestrian staging area	1.76	3.18	1.91	3.32	1.96	3.39	2.15	3.22
Group camping areas	2.55	2.93	2.57	3.25	2.31	3.29	2.33	3.25
Parking spaces	2.77	2.97	3.24	3.02	2.63	3.16	3.18	2.97
Picnic facilities	3.08	3.05	3.06	3.19	2.24	3.36	2.52	3.23
Restrooms	3.46	2.78	3.74	2.93	2.49	3.11	3.07	3.02
RV dump station	2.45	3.08	2.18	3.24	2.06	3.02	1.78	3.43
Ramadas	2.99	2.79	3.02	3.09	2.08	3.07	2.46	3.14
Showers	2.28	3.15	2.35	3.08	1.76	3.22	1.89	3.27
Motorized staging areas	3.13	2.89	1.93	3.16	3.24	2.52	1.71	3.33
Trail signs	3.95	2.82	3.90	2.96	3.69	2.32	4.03	2.61
Trash cans	4.14	2.69	4.04	2.94	3.57	2.41	3.63	2.76

Q: This question has two parts and asks about priorities for trail support facilities in your favorite region of Arizona. First indicate how important each of the facilities is to you. Then, indicate your level of satisfaction with the current conditions.

Importance of Trail Issues

	Gener	al Public	Target Group	
	Motorized users	Nonmotorized users	Motorized users	Nonmotorized users
Trail Issues	Mean (out of 5)			
Closure of trails	3.92	3.92	4.58	3.81
Inadequate trail maintenance	3.22	3.22	3.10	3.60
Urban development	3.80	3.80	3.73	4.15
Lack of directional signage	3.42	3.42	2.73	3.39
Lack of funding for trails	3.70	3.70	4.22	4.30
Lack of support for my use	3.59	3.59	4.02	3.07
Lack of regional planning	3.19	3.19	3.69	3.54
Not enough information	2.97	2.97	2.98	2.67
Lack of planning for future trails	3.43	3.43	3.84	3.56
Not enough trails accessible to people with disabilities	2.99	2.81	2.78	2.60
Lack of trails near home	2.56	2.55	2.52	2.72
Lack of signage along trails	3.16	3.19	2.86	3.21
Not enough facilities near trails	3.06	2.98	2.46	2.64
New development doesn't include trails	3.36	3.29	3.33	3.74
Poor conditions of access roads to trailheads	2.95	3.09	2.48	2.81

Q: This question has two parts and asks your opinion about a variety of trail issues. First, indicate how important each of the issues is to you. Then, list your top three priorities.

APPENDIX B

Regional Focus Group Workshops— Top 5 Priorities

FLAGSTAFF

Motorized Trail Users

- 1. Maintenance of existing trails
- 2. More long distance loop trails
- 3. Access to existing routes
- 4. Need more interconnectivity of trails
- 5. Need more support facilities

Nonmotorized Trail User

- 1. Separate uses (motorized and nonmotorized)
- 2. Eliminate or reduce use fees
- 3. Acquire more land for trails and easements
- 4. More funds for planning efforts
- 5. Need more volunteer coordination efforts and funding for volunteer

Land Managers

- 1. Build more OHV trails
- 2. Money for planning efforts, project specific planning, NEPA planning
- 3. Money for trail easements
- 4. Volunteer coordination
- 5. Address cultural and natural resource protection

PINETOP-LAKESIDE

No Motorized Trail Users Present

Nonmotorized Trail User

- 1. Unregulated OHV use
- 2. More maps and trail information
- 3. Separate uses on the trail
- 4. Trails etiquette and ethics, user education
- 5. More ADA accessible trails

Land Managers

- 1. Maintenance of existing trails
- 2. Long term planning for trails
- 3. Better and proper signage
- 4. More maps and trail information
- 5. More volunteer programs

Note: These workshops were regional in nature, the city/town listed refers to the meeting location for that general region.

TUCSON

Motorized Trail Users

- 1. Keep trails open
- 2. Education of users
- 3. Rehabilitate resource damage of use areas
- 4. Open more use areas and trails
- 5. Money for trail maintenance

Nonmotorized Trail User

- 1. Develop more trails
- 2. Save access from development
- 3. Support facilities
- 4. More interconnectivity and linkages
- 5. Enforcement of existing rules and regulations

Land Managers

- 1. Urban trail system development
- 2. Protection from development
- 3. Better interagency communication
- 4. Funding should go to priority needs of the state
- 5. Proper trail design, sustainability

LAKE HAVASU CITY

Motorized Trail Users

- 1. User education, trail etiquette and ethics
- 2. Protection of natural and cultural resources
- 3. Litter, trash dumping
- 4. More interagency and private partnerships
- 5. Monitoring and enforcement of use types
 - Keep existing trails/roads open

Nonmotorized Trail Users

- 1. More nonmotorized trails in the area
- 2. More maps and trail information
- 3. Support facilities
- 4. More connector trails and linkages
- 5. Acquire easements and right of ways-State Trust land

Land Managers

- 1. More partnering between agencies
- 2. Funds for planning–master planning, NEPA planning, trail assessments
- 3. Maintenance of existing trails (both motorized and nonmotorized)
- 4. Managed volunteer efforts
- 5. Construction of new trails

PHOENIX

No Motorized Trail Users Present

Nonmotorized Trail User

- 1. Proper trail design education and standards
- 2. Managed volunteerism
- 3. Monitoring of trails/Enforcement of rules
- 4 Maintenance
- 5. Reduce user conflicts

Land Managers

- 1. Maintenance of existing trails
- 2. Support facilities, specifically signage
- 3. Cultural and natural resource protection
- 4. Protect Access
- 5. Money for planning, better and more comprehensive planning

APPENDIX C

Arizona State Trails System Summary

Arizona's State Trails System is invaluable, offering a diversity of quality nonmotorized trails that inspire people to experience the State's magnificent outdoor environment and cultural history.

Arizona State Parks manages the Arizona State Trails System as mandated by legislation A.R.S. § 41-511.23. The State Trails System:

- "1. Identifies on a statewide basis the general location and extent of significant trail routes, areas and complimentary facilities," and
- "2. Assesses the physical condition of the systems." The statute also states "...trail systems means coordinated systems of trails for this state."

Rather than identify trails and assess their condition once every five years (in conjunction with the state trails plan), Arizona State Parks, with the help of the Arizona State Committee on Trails and other volunteers, regularly updates the State Trails System.

The State Trails System was established to recognize and promote nonmotorized trails of special interest or significance to Arizona's residents and visitors. This system consists of nonmotorized trails that are managed mostly by partners of Arizona State Parks. Trails include both land and water (canoe/kayak) trails. Partners include all agencies that manage public

lands in Arizona such as the U.S. Forest Service, Bureau of Land Management, National Park Service, state, tribes, cities, towns and counties.

Trails within the State Trails System are classified as Urban, Recreation, Interpretive, Cross-Sate and/or Historic. For trails, both existing and proposed, to be included in the State Trails System, they must go through the nomination process. This process begins when the trail landowner submits trail nominations for review by Arizona State Parks staff and the State Trails System subcommittee of the Arizona State Committee on Trails. Recommendations are forwarded to the Arizona State Parks Board for review and final approval.

Upon approval, trails become part of the State Trails System. These trails are then eligible to receive Arizona Heritage Fund trail grants and, when construction is completed, are published in the Arizona State Trails Guide, unless specifically requested to be unpublished by the land manager.

It should be noted that this is by no means a comprehensive inventory of trails found in Arizona; it only includes those trails nominated and accepted into the State Trails System.

The State Trails Guide published by Arizona State Parks is divided into four regional publications that contain information such as trail ethics and safety guidelines, general trail location maps, trail managing agency, trail access information, trail highlights, recommended season of use, recommended trail activities and additional contact information regarding the trail.

The Guide is intended to be used by outdoor recreation enthusiasts as an introduction to trails found in the State Trails System.

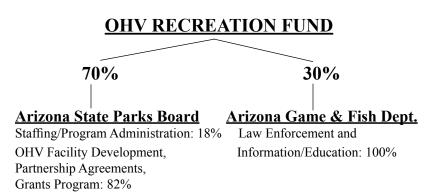
The fourth edition of the State Trails Guide was published in 2004 and can be purchased through Arizona State Parks.

As of April 2004, the State Trails System consists of 638 trails, the State Trails Guide Fourth Edition includes 549 trails.

APPENDIX D

Off-Highway Vehicle Recreation Fund Summary

The Off-Highway Vehicle Recreation Fund, A.R.S. § 28-1176, is allocated fifty-five one hundredths of one percent (0.55%) of the total license tax on motor fuel (A.R.S. § 28-5167) received by the State of Arizona into the Highway User Revenue Fund. The OHV Recreation Fund is then distributed to the following agencies on a monthly basis.



APPENDIX E

Establishing Legislation and Amendments

Arizona Revised Statutes

TITLE 28, CHAPTER 3 ARTICLE 20. OFF-HIGHWAY VEHICLES

§ 28-1176. Off-Highway Vehicle Recreation Fund

A. An Off-Highway Vehicle Recreation Fund is established. The fund consists of:

- 1. Monies appropriated by the legislature.
- 2. Monies deposited pursuant to § 28-5617.
- 3. Federal grants and private gifts.
- 4. Matching monies from federal, state, local or private entities.
- B. Monies in the Off-Highway Vehicle Recreation Fund are appropriated to the Arizona State Parks Board solely for the purposes provided in this Article. Interest earned on monies in the fund shall be credited to the fund. Monies in the Off-Highway Vehicle Recreation Fund are exempt from the provisions of § 35-190 relating to lapsing of appropriation.
- C. The Arizona Game and Fish Department shall spend thirty percent of the monies in the Off-Highway Vehicle Recreation Fund for an informational and educational program on off-highway vehicle recreation and law enforcement activities relating to this Article and for off-highway vehicle law enforcement pursuant to Title 17, Chapter 4, Article 3.¹

- D. On or before December 31 of each year, the Arizona Game and Fish Department shall submit an annual report to the president of the Senate, the speaker of the House of Representatives and the chairmen of the Senate and House of Representatives committees on transportation or their successor committees. The annual report shall include information on:
- 1. The amount of monies spent or encumbered in the fund during the preceding fiscal year for the purposes of law enforcement activities.
- 2. The amount of monies spent from the fund during the preceding fiscal year for employee services.
- 3. The number of full-time employees employed in the preceding fiscal year in connection with law enforcement activities.
- E. The Arizona State Parks Board shall spend seventy percent of the monies in the Off-Highway Vehicle Recreation Fund for the following purposes:
- 1. No more than eighteen percent to fund staff support to plan and administer the Off-Highway Vehicle Recreation Fund.
- 2. To establish a facility development program based on the priorities established in the off-highway vehicle plan.
- 3. To establish a matching fund program for funding off highway related law enforcement, informational and environmental education programs, mitigation of environmental damage, facility development, land acquisition and construction of off-highway vehicle related facilities.
- F. The allocation of the monies in the matching fund program prescribed in Subsection E, Paragraph 3 of this Section and the percentages allocated to each of the purposes prescribed in the program shall be determined by an off-highway vehicle

plan prepared by the Arizona Outdoor Recreation Coordinating Commission and approved by the State Parks Board.

- G. Monies in the matching fund program established under Subsection E, Paragraph 3 of this Section shall be distributed in an amount determined by the Arizona Outdoor Recreation Coordinating Commission to a qualified state or federal agency, city, town, county or tribal government. The Arizona State Parks Board may require additional matching monies that may be direct monies or in-kind services from these entities before the distribution pursuant to this Subsection.
- H. Agencies receiving monies under this Section shall use the monies:
- 1. To designate, construct, maintain and manage offhighway vehicle recreation facilities, off-highway vehicle use areas and off-highway vehicle trails within land under the jurisdiction of the particular agency.
 - 2. For enforcement of off-highway vehicle laws.
 - 3. For mitigation of damages to land.
 - 4. For off-highway vehicle related environmental education.
- I. The Arizona Outdoor Recreation Coordinating Commission shall examine applications for eligible projects and determine the amount of funding, if any, for each project.
- J. The Arizona State Parks Board shall annually report to the Legislature the expenditures made for the projects in conjunction with the report required by § 41-511.12. The annual report shall include the amount of monies spent or encumbered during the preceding fiscal year for the purposes described in Subsection E of this Section.

Amended by Laws 1998, Ch. 20, \S 1.

I Section 17-451 et seq.

Added by Laws 1989, Ch. 204, § 2. Amended by Laws 1997, Ch. 58, § 18.

TITLE 28, CHAPTER 1 ARTICLE 1. DEFINITIONS AND PENALTIES

§ 28-101. Definitions

In this Title, unless the context otherwise requires:

... 15."Department" means the Department of Transportation acting directly or through its duly authorized officers and agents.

TITLE 28, CHAPTER 3 ARTICLE 20. OFF-HIGHWAY VEHICLES

§ 28-1171. Definitions

In this Article, unless the context otherwise requires:

- 1. "Highway" means the entire width between the boundary lines of every way publicly maintained by the federal government, the department, a city, a town or a county if any part of the way is generally open to the use of the public for purposes of vehicular travel.
- 2. "Off-highway recreation facility" includes off-highway vehicle use areas and trails specifically developed and designated for use by off-highway vehicles.
 - 3. "Off-highway vehicle":
- (a) Means a motorized vehicle when operated off of highways on land, water, snow, ice or other natural terrain or on a combination of land, water, snow, ice or other natural terrain.

- (b) Includes a two-wheel, three-wheel or four-wheel vehicle, motorcycle, four-wheel drive vehicle, dune buggy, amphibious vehicle, ground effects or air cushion vehicle and any other means of land transportation deriving motive power from a source other than muscle or wind.
 - (c) Does not include a vehicle that is either:
 - (i) Designed primarily for travel on, over or in the water.
- (ii) Used in installation, inspection, maintenance, repair or related activities involving facilities for the provision of utility or railroad service.
- 4. "Off-highway vehicle trail" means a multiple use corridor that is all of the following:
 - (a) Open to recreational travel by an off-highway vehicle.
- (b) Not normally suitable for travel by conventional twowheel drive vehicles.
- (c) Opened by the managing authority of the property that the trail traverses for the specific designated purpose of recreational off-highway vehicle use.
- 5. "Off-highway vehicle use area" means the entire area of a parcel of land, except for camping and approved buffer areas, that is managed specifically for off-highway vehicle use through the development or designation of off-highway vehicle trails.
- § 28-1172. Applicability; private and Indian lands This Article applies to all lands in this state except private land and Indian land.

§ 28-1173. Enforcement

All peace officers of this state and counties, cities or towns and other duly authorized state and federal employees shall enforce this Article.

- § 28-1174. Operation restrictions; violation; classification
- A. It is unlawful for a person to drive an off-highway vehicle with reckless disregard for the safety of persons or property.
- B. A person who violates this section is guilty of a class 2 misdemeanor.
- C. In addition to or in lieu of the fine prescribed by this section, a judge may order the person to perform at least eight but not more than twenty-four hours of community service or to complete an approved safety course, or both.
- § 28-1175. Instruction course; fee
- A. The Department shall conduct or approve an educational course of instruction in off-highway vehicle safety and environmental ethics. The course shall include instruction on off-highway vehicle uses that limit air pollution and harm to natural terrain, vegetation and animals. Successful completion of the course requires successful passage of a written examination.
- B. Any governmental agency, corporation or other individual that conducts a training and educational course that is approved by the department may collect a fee that is reasonable and commensurate for the training and that does not exceed fifty dollars.

CHAPTER 16

§ 28-5617. Transfer; Off-Highway Vehicle Recreation Fund

Fifty-five one hundredths of one percent of the total license taxes on motor vehicle fuel shall be transferred from the monies collected pursuant to § 28-3606 to the Off-Highway Vehicle Recreation Fund established by § 28-1176 on a monthly basis.

Added by Laws 1995, Ch. 132, § 3, eff. Oct. 1, 1997. Amended by Laws 1996, Ch. 76, § 222, eff. Oct. 1, 1997.

Historical and Statutory Notes

Source: A.R.S. former § 28-1502.03. Laws 1991, Ch. 267, § 2.

Eaws 1991, Ch. 207, § 2.

TITLE 41, CHAPTER 3 ARTICLE 1. ARIZONA STATE PARKS BOARD

§ 41-511.04. Duties; Board; partnership fund; state historic preservation officer

Text of section amended by Laws 1998, Ch. 20; and Ch 242, effective July 1, 1999.

A The Board shall:

... 20. Maintain a statewide off-highway vehicle recreational plan which shall be updated at least once every six years and shall be used by all participating agencies to guide distribution and expenditure of monies under § 28-1176.

TITLE 41, CHAPTER 3 ARTICLE 1. ARIZONA STATE PARKS BOARD HERITAGE FUND

Article 1 was added by initiative measure approved by electors at the November 6, 1990 general election, as proclaimed by the Governor on November 26, 1990.

§ 41-501. Definitions; Heritage Fund In this Article:

... 2. "Trails" are those trails for nonmotorized use nominated for inclusion in the state trails system, including urban, cross-state, recreation, interpretive or historic trails.

§ 41-502. Establishment of fund

A. The Arizona State Parks Board Heritage Fund is established in the office of the State Treasurer consisting of monies deposited from the State Lottery Fund pursuant to § 5-522 and interest earned on those monies.

B. The fund shall be administered by the Arizona State Parks Board and is not subject to appropriation. Expenditures from the fund are not subject to additional approval notwithstanding any provision of § 41-511.05, § 41-511.11 or any other statutory provision to the contrary. Monies received pursuant to § 5-522 shall be deposited directly with the Arizona State Parks Board Heritage Fund. On notice from the Arizona State Parks Board, the State Treasurer shall invest monies in the fund as provided in § 35-311. The State Treasurer shall credit monies earned from those investments to the fund.

- C. The Board shall not use its rights of eminent domain under § 41-511.06 to acquire property to be paid for with monies from the Arizona State Parks Board Heritage Fund.
- D. All monies in the Arizona State Parks Board Heritage Fund shall be spent by the Arizona State Parks Board only for the purposes and in the percentages set forth in this Article. In no event shall any monies in the fund revert to the state general fund and monies in the fund are exempt from the provisions of
- § 35-190, relating to lapsing of appropriations.
- § 41-503. Expenditures from fund; purpose and amounts
- A. Monies in the fund for local, regional and state trails, parks, outdoor recreation and open space shall consist of:
- 1. Five per cent of monies received pursuant to § 5-522 shall be spent on local, regional and state trails.
- 2. Thirty-five per cent of monies received pursuant to § 5-522 shall be spent on local, regional or state parks, for outdoor recreation and open space.
- B. Arizona State Parks Board Heritage Fund monies allocated pursuant to Subsection A, Paragraphs 1 and 2 of this Section shall be spent in accordance with § 41-511.25 and shall be available as matching funds.
- C. No entity receiving funds under Subsections A and B of this Section shall receive more than twenty percent of the monies available in any fiscal year.

- D. Monies received pursuant to § 5-522 shall be spent as follows:
 - 1. Seventeen percent on acquisition of natural areas.
- 2. Four percent of monies on maintenance, operation and management of natural areas administered by the Arizona State Parks Board.
- 3. Seventeen percent of monies on local, regional and state historic preservation projects. Monies provided under this Paragraph shall be administered by the Arizona State Parks Board through the State Historic Preservation Officer.
- 4. Seventeen percent of monies on state park acquisition or development.
 - 5. Five percent on environmental education.
- E. All monies earned as interest on monies received pursuant to § 5-522 shall be spent only in the percentages and for the purposes described in Subsections A through D of this Section or for costs of administering the Arizona State Parks Board Heritage Fund in such amounts as determined by the Arizona State Parks Board.
- F. On or before December 31 each year the Board shall submit its annual report to the president of the senate, the speaker of the house of representatives and the chairmen of the senate and house of representatives committees on natural resources and agriculture, or their successor committees. The annual report shall include information on:
- 1. The amount of monies spent or encumbered in the fund during the preceding fiscal year and a summary of the projects, activities and expenditures relating to:
 - (a) Local, regional and state trails.
- (b) Local, regional or state parks for outdoor recreation and open space.

- (c) Natural areas, including acquisition and maintenance, operation and management of natural areas.
 - (d) Local, regional and state hisotric preservation projects.
 - (e) State Parks acquisition and development.
 - (f) Environmental education.
- 2. The number and location of parcels of property acquired during the preceding fiscal year.
- 3. For personal and real properties acquired with fund monies during the preceding fiscal year, the amount of property tax revenue paid to this state and political subdivisions of this state during the last full tax year prior to acquisition.
- 4. The amount of money spent from the fund during the preceding fiscal year for employee personal services.
- 5. The number of full-time employees employed in the preceding fiscal year in connection with property acquisition, including survey, appraisal and other related activities.

Historical and Statutory Notes

Proposition 200, based on an initiative measure, providing for annual funding from State Lottery revenues for the State Parks Board and the Arizona Game and Fish Commission Heritage Fund, was approved by the electors at the November 6, 1990 general election, as proclaimed by the Governor on November 26, 1990.

Section 1 of Proposition 200 (1990) provided: Declaration of policy

A. The people of Arizona believe it is in the best interest of the general economy and welfare of Arizona and its citizens to set aside adequate state funds on an annual basis to preserve, protect and enhance Arizona's natural and cultural heritage, wildlife, biological diversity, scenic wonder and environment and provide new opportunities for outdoor recreation in Arizona.

B. It is the intention and desire of the people of Arizona in enacting this statute by initiative that the funds provided hereby are in addition to and separate from other funds that are now and shall be annually appropriated by the Legislature.

ARTICLE 1.1 ARIZONA STATE PARKS BOARD

§ 41-511.04. Duties; Board; partnership fund; state historic preservation officer

Text of section amended by Laws 1998, Ch. 20; Ch. 242, effective July 1, 1999.

A. The Board shall:

- ... 2. Manage, develop and operate state parks, monuments or trails established or acquired pursuant to law, or previously granted to the state for park or recreation purposes, except those falling under the jurisdiction of other state agencies as established by law.
- 3. Investigate lands owned by the state to determine in cooperation with the agency that manages the land which tracts should be set aside and dedicated for use as state parks, monuments or trails.
- 4. Investigate federally owned lands to determine their desirability for use as state parks, monuments or trails and negotiate with the federal agency having jursidiction over such lands for the transfer of title to the Arizona State Parks Board.
- 5. Investigate privately owned lands to determine their desirability for use as state parks, monuments or trails and negotiate with private owners for the transfer of title to the Arizona State Parks Board.
- 6. Enter into agreements with the United States, other states or local governmental units, private societies or persons for the development and protection of state parks, monuments or trails.

- . . 15. Prepare, maintain and update a comprehensive plan for the development of the outdoor recreation resources of this state.
- 16. Initiate and carry out studies to determine the recreational needs of this state and the counties, cities and towns.
- 17. Coordinate recreational plans and developments of federal, state, county, city, town and private agencies.
- ... 20. Maintain a statewide off-highway vehicle recreational plan which shall be updated at least once every six years and shall be used by all participating agencies to guide distribution and expenditure of monies under § 28-1176.
- § 41-511.22. Trail systems plan; deposit of monies; definition
- A. The Board shall prepare a trail systems plan that:
- 1. Identifies on a statewide basis the general location and extent of significant trail routes, areas and complementary facilities.
 - 2. Assesses the physical condition of the systems.
 - 3. Assesses usage of trails.
- 4. Describes specific policies, standards and criteria to be followed in adopting, developing, operating and maintaining trails in the systems.
- 5. Recommends to federal, state, regional, local and tribal agencies and to the private sector actions which will enhance the trail systems.
- B. The plan shall be revised at least once every five years.
- C. Monies from gifts, grants and other donations received by the Board for the trail systems plan shall be deposited in a

- separate account of the State Parks fund established by §41-511.11 and may be allocated by the Board for special trail project priorities established annually by the Board.
- D. Monies deposited in the State Parks fund account shall be used for providing state monies up to an amount equal to the amount of cash, materials and labor from any other source for the planning, acquisition, maintenance or operation of the trail and for administrative expenses of not more than twenty percent of total account monies.
- E. For purposes of this Section, "trail systems" means coordinated systems of trails in this state.

RECREATION LIABILITY STATUTE

§ 33-1551. Duty of owner, lessee or occupant of premises to recreational or educational users; liability; definitions

- A. A public or private owner, easement holder, lessee or occupant of premises is not liable to a recreational or educational user except upon a showing that the owner, easement holder, lessee or occupant was guilty of wilful, malicious or grossly negligent conduct which was a direct cause of the injury to the recreational or educational user.
- B. This section does not limit the liability which otherwise exists for maintaining an attractive nuisance, except with respect to dams, channels, canals and lateral ditches used for flood control, agricultural, industrial, metallurgical or municipal purposes.

C. As used in this section:

- 1. "Educational user" means a person to whom permission has been granted or implied without the payment of an admission fee or any other consideration to enter upon premises to participate in an educational program, including but not limited to, the viewing of historical, natural, archaeological or scientific sights. A nominal fee that is charged by a public entity or a nonprofit corporation to offset the cost of providing the educational or recreational premises and associated services does not constitute an admission fee or any other consideration as prescribed by this section.
- 2. "Grossly negligent" means a knowing or reckless indifference to the health and safety of others.
- 3. "Premises" means agricultural, range, open space, park, flood control, mining, forest or railroad lands, and any other similar lands, wherever located, which are available to a recreational or educational user, including, but not limited to, paved or unpaved multi-use trails and special purpose roads or trails not open to automotive use by the public and any building, improvement, fixture, water conveyance system, body of water, channel, canal or lateral, road, trail or structure on such lands
- 4. "Recreational user" means a person to whom permission has been granted or implied without the payment of an admission fee or any other consideration to travel across or to enter upon premises to hunt, fish, trap, camp, hike, ride, exercise, swim or engage in similar pursuits. The purchase of a state hunting, trapping or fishing license is not the payment of an admission

fee or any other consideration as provided in this section. A nominal fee that is charged by a public entity or a nonprofit corporation to offset the cost of providing the educational or recreational premises and associated services does not constitute an admission fee or any other consideration as prescribed by this section.

APPENDIX F

Economic Importance of Off-Highway Vehicle Recreation to Arizona

Whether you enjoy exploring Arizona's backcountry driving your truck, dirt bike or quad, or you prefer using your own muscle power to hike the trails, the following information may surprise you.

Off-Highway Vehicle (OHV) Recreationists

- 21% of Arizonans, or 1.1 million people, consider themselves OHV enthusiasts
- The average OHV household in Arizona spends 25.4 days per year participating in OHV recreational activities, which equates to 13,983,356 OHV Recreation Days annually
- 72% of OHV users are satisfied with their overall OHV recreation experience and are willing to pay \$82 to \$120 more to enjoy the same experience
- OHV recreationists have a positive economic impact to Arizona's economy of \$4.25 billion annually

People who enjoy off-highway vehicle recreation spend a lot of money buying vehicles, tow trailers, equipment, insurance, repairs and other related purchases. They also spend money in local communities while on recreational trips for items such as gasoline, food, lodging and souvenirs, just like other tourists.

In 2002, the Arizona State Parks Board conducted a yearlong economic study of recreational OHV use in Arizona in partnership with the Arizona Game and Fish Department and Arizona State University (ASU) as part of the State's OHV Recreation Program. The results show that OHV recreation is a substantial contributor to Arizona's economy.

ECONOMIC IMPORTANCE OF OHV RECREATION IN ARIZONA

- Creates a statewide economic impact of \$4.25 billion (multiplier effect*)
- Contributes \$3.1 billion to local economies through OHV-related retail sales
- Adds \$187 million to annual state tax revenues
- Provides \$1.1 billion in household income (salaries/ wages) for AZ residents
- Supports 36,951 full-time and part-time jobs in Arizona

*Multiplier Effect: Sum of OHV expenditures, secondary effects generated by local re-expenditures of money, and induced impact from salaries paid by directly and indirectly impacted industries.

OHV Ecomnomic Impact Study

ASU Survey Research Laboratory conducted the telephone and mail surveys of Arizona households. ASU West School of Management used the survey findings to complete the economic impact analysis using the IMPLAN input-output model. Completed surveys included 15,000 telephone surveys and 1,269 mail questionnaires from randomly selected Arizona households

Survey respondents were asked questions regarding their expenditures for off-highway vehicles, tow trailers, equipment, insurance, repairs and other OHV related purchases. They were also asked about OHV recreational trip expenditures for items such as gasoline, food, lodging, souvenirs, special event fees, emergency vehicle repairs and medical injuries.

The number of OHV households was determined by positive phone survey responses to three specific questions: 1) do you own an OHV; 2) do you drive it off-highway; and 3) do you use it for recreation.

Totals for vehicle and equipment purchases were factored (reduced) by the percentage owners said vehicles were used for OHV recreation, not total vehicle cost. The economic model (IMPLAN) used to generate the direct/indirect estimates is more conservative than other frequently used models. Expenditures by OHV visitors to Arizona were not included.

Economic Impact of OHV Recreation in Arizona and its 15 Counties

The study findings show the total economic impact to Arizona from recreational OHV use is more than \$4 billion a year. OHV recreation activities provide an economic contribution to the State and its 15 counties mainly through direct expenditures for motorized vehicles, tow trailers, related equipment, accessories, insurance and maintenance costs (\$2.2 billion).

Additionally, an economic benefit is generated when OHV recreationists spend money in local communities close to areas they recreate in for items such as gasoline, food, lodging and souvenirs (\$842 million). These direct purchases provide indirect benefits by helping to pay for many people's salaries and wages (\$1 billion), and contributing to local and state tax revenues (\$187 million). Specific information regarding these elements is available for Arizona and its 15 counties.

(\$ in millions)	Vehicles/Equipment Purchases for OHV Use	Trip Expenditures for OHV Recreation	Total Multiplier Effect*	Indirect Impacts (salaries, wages)	State Tax Revenues	# Jobs Created
Apache	\$46.5	\$47.6	\$101.9	\$12.8	\$2.9	842
Cochise	\$70.8	\$27.7	\$116.1	\$19.6	\$4.5	1,009
Coconino	\$108.9	\$106.4	\$258.3	\$51.7	\$10.5	2,580
Gila	\$53.4	\$67.1	\$137.6	\$22.3	\$4.2	1,322
Graham	\$19.9	\$12.4	\$37.5	\$6.2	\$1.4	348
Greenlee	\$6.4	\$5.3	\$12.0	\$0.8	\$0.1	50
La Paz	\$24.6	\$19.5	\$49.7	\$8.3	\$1.9	459
Maricopa	\$1,127.9	\$230.2	\$1,787.1	\$428.9	\$78.5	13,113
Mohave	\$132.1	\$49.9	\$219.5	\$40.7	\$9.2	1,929
Navajo	\$66.3	\$48.7	\$128.5	\$20.1	\$3.3	1,099
Pima	\$251.9	\$71.7	\$403.5	\$84.3	\$17.7	3,307
Pinal	\$95.1	\$40.2	\$152.7	\$24.2	\$5.9	1,099
Santa Cruz	\$6.5	\$20.8	\$32.8	\$6.9	\$1.3	399
Yavapai	\$112.4	\$70.6	\$222.7	\$43.9	\$9.2	2,067
Yuma	\$90.4	\$24.1	\$136.5	\$25.1	\$5.5	1,094
Arizona	\$2,213.4	\$842.3	\$4,252.0	\$1,080.0	\$187.0	36,951

Participation in Outdoor Recreation Activities During OHV Recreation Trips

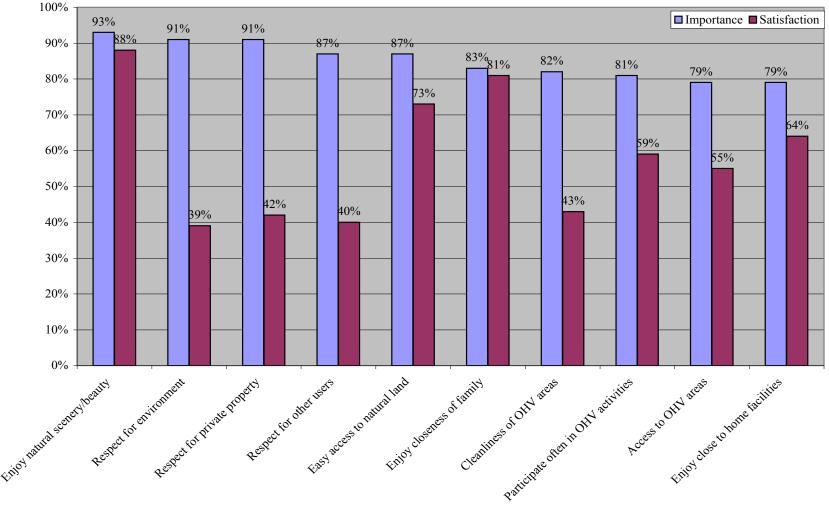
Interestingly, many OHV recreationists do not list an obvious OHV activity as the main reason for their last OHV trip. They participate in a wide variety of recreation activities while they are on an OHV trip.

When asked what recreation activities they participated in during their last OHV recreation trip and what <u>one</u> activity was the main reason for going, survey respondents said:

Recreation Activity	Participated in during last trip	Recreation Activity	Main Reason for trip
Driving backroads	75%	Sightseeing	14%
Sightseeing	52%	Driving backroads	11%
Hiking or walking	40%	Camping	11%
Picnicking	37%	Trail riding-ATVs	11%
Camping	31%	Hunting	9%
Trail riding-ATVs	27%	Fishing	6%
Hill climbing	24%	Hiking or walking	4%
Photography	23%	Picnicking	3%
Driving in open areas	21%	Visiting historic/archaeologic sites	3%
Wildlife/bird watching	20%	Trail riding-motorized dirt bikes	3%
Visiting historic/archaeologic sites	17%	Driving in open areas	2%
Fishing	17%	Wildlife/bird watching	2%
Hunting	13%	Hill climbing	1%
Trail riding-motorized dirt bikes	11%	Photography	1%
Target shooting	11%	Target shooting	1%
Rock crawling (with an OHV)	9%	Rock crawling (with an OHV)	1%
Swimming	8%	Swimming	1%
Boating	6%	Boating	1%
Rock climbing	5%	Rock climbing	<1%
Backpacking	4%	Backpacking	<1%
Mountain biking	3%	Mountain biking	<1%
Horseback riding	3%	Horseback riding	<1%
River running	3%	River running	<1%
Entered competitive events	1%	Entered competitive events	<1%
Snowmobiling	1%	Snowmobiling	<1%

Evaluation of Survey Respondents' Last Off-Highway Vehicle Recreation Trip

The following chart shows the "Top Ten" objectives—out of 37 objectives—that were rated by survey respondents as the most important to them (first bar) as it related to their last OHV recreation trip. The second bar in the chart shows the respondents' level of satisfaction with each objective. The findings yielded some surprisingly results, especially regarding respondents' low level of satisfaction with respect for the environment, private property and other users.



OHV Recreationists and OHV Recreation Days

The following table includes: 1) the percentage of households in each county that are OHV users; 2) the percent of total AZ OHV recreation days that occur in that county; 3) the number of OHV recreation days spent yearly in that county by those OHV households living in that county; 4) the number of OHV recreation days spent in that county by those traveling there from other counties; and 5) the total number of OHV recreation days spent by Arizonans.

One OHV Recreation Day = One household spending at least part of a day participating in an OHV recreational activity.

Arizona OHV households also take OHV recreation trips to adjacent states and countries.*

Out of State OHV Location	Average OHV Days/Year	Total OHV Days
California	11.3	520,895
Mexico	10.1	555,709
Nevada	5.1	103,372
New Mexico	7.5	356,840
Utah	8.2	221,833
Total		1,758,649*

County	% County Households are OHV Recreationists 1	% AZ OHV Days that occur in County ²	OHV Days Spent by County Residents ³	OHV Days Spent by Others Traveling ⁴	Total OHV Days ⁵
Apache	34%	7.3%	153,125 (17%)	743,354 (83%)	896,479
Cochise	24%	3.5%	180,697 (42%)	254,437 (58%)	435,134
Coconino	35%	16.2%	390,421 (20%)	1,583,874 (80%)	1,974,295
Gila	36%	10.3%	228,071 (18%)	1,034,536 (82%)	1,262,608
Graham	34%	1.7%	66,020 (31%)	143,692 (69%)	209,711
Greenlee	48%	0.7%	32,787 (37%)	56,139 (63%)	88,926
La Paz	34%	2.8%	191,319 (55%)	153,231 (45%)	344,550
Maricopa	19%	17.1%	1,856,560 (89%)	230,334 (11%)	2,086,893
Mohave	26%	6.4%	604,266 (77%)	175,845 (23%)	780,111
Navajo	36%	6.1%	438,831 (59%)	305,799 (41%)	744,630
Pima	17%	6.8%	535,245 (64%)	301,549 (36%)	836,802
Pinal	22%	4.9%	197,918 (33%)	402,102 (67%)	600,020
Santa Cruz	19%	3.3%	35,152 (9%)	371,918 (91%)	406,935
Yavapai	27%	9.8%	416,824 (35%)	778,918 (65%)	1,195,742
Yuma	23%	3.0%	172,552 (48%)	189,319 (52%)	361,871
Arizona	21%	100%	5,499,797	6,724,910	12,224,707

Total OHV Recreation Days in Arizona by Arizonans

12,224,707

Total OHV Recreation Days out of state by Arizonans

+ 1,758,649*

Total OHV Recreation Days of Arizonans

13,983,356

Type of Vehicle(s) Used on last OHV Recreation Trip

Many households take more than one type of vehicle on their OHV recreation trips. Some vehicles are used primarily to tow smaller ATVs and dirt bikes; sometimes the larger vehicle is the primary recreation vehicle. Survey respondents said they used the following vehicles on their last trip:

Four-Wheel Drive Pickup Truck	48%
All-Terrain Vehicle (ATV)	35%
Sport Utility Vehicle (SUV)/Jeep	33%
Trail Motorcycle/Dirt Bike	11%
Dune Buggy/Sand Rail	7%
Two-Wheel Drive Pickup Truck	6%
Snowmobile	1%

Net Economic Value of OHV Recreation in Arizona

The net economic value, or consumer surplus, reported here is the appropriate measure of economic value of the benefit to individuals from participation in recreation and is useful in cost-benefit analyses, damage assessments, and project evaluations involving off-highway vehicles used for recreation. Net economic value is measured as participants' "willingness to pay" above what they actually spend to participate.

As part of the 2003 Off-Highway Vehicle Economic Impact Survey, respondents were asked to report their total trip expenditures to participate in their most recent recreation trip during which an OHV was used. After reporting trip expenditures, respondents were asked the following question. This is a hypothetical question. Assume that recreation using an OHV became more expensive due to an increase in gas prices or something else. The total estimated trip expenses for your travel party are listed in the previous question. Now think about your portion of the trip expenditures. What is the maximum amount you would be willing to pay to experience your last recreation trip using an OHV in addition to your portion of the trip expenditures as listed above?

For example, if the trip expenditures above were \$500, there were 5 people in your travel party, and your portion of the expenditures was \$100, how much money above \$100 would you be willing to pay to experience the recreation trip?

Study findings show that OHV recreation by Arizona residents produces a high value of net economic value to the users, ranging from \$120 to \$82 per trip depending on the type of vehicle used. Vehicles that tend to be more focused on OHV recreation or do not have multiple purposes (ATV and Motorcycle/Dune Buggy/Dirt Bike) have substantially higher net economic values per trip, \$120 and \$106, than those vehicles that have multiple purposes (4-Wheel Drive Truck at \$89 and SUV at \$82).

Estimated Willingness To Pay (WTP) Above Trip Expenditures to Experience OHV Recreation

VEHICLE TYPE	WTP/OHV TRIP	WTP/OHV DAY
Pooled Sample-all vehicles	\$ 90.81	\$ 51.05
All Terrain Vehicle (ATV)	\$ 106.2	\$ 51.36
4-Wheel Drive Truck	\$ 89.42	\$ 46.81
Sport Utility Vehicle (SUV)	\$ 82.10	\$ 49.26
Motorcycle or Dune Buggy	\$ 120.38	\$ 56.75

These dollar estimates are an indicator of the value that participants place on their OHV recreation experience.

Off-highway vehicle recreation may be an economically competitive use for public recreation lands. Devotees of off-highway vehicle recreation in Arizona receive substantial net economic benefits per trip and per day.

These net economic benefits should be considered in the controversy over use of public recreation lands by off-highway vehicles. Strengths of this study include the breadth of information that was gathered on Arizona residents using an off-highway vehicle for recreation, and the large number of respondents randomly selected.



