

# **ARIZONA TRAILS 2015 PLAN**

## **A Statewide Motorized & Non-Motorized Trails Plan**

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Draft Plan October 2014

### **ABSTRACT**

The Arizona State 2015 Trails Plan is composed of state Off-Highway Vehicle Recreation Plan and the State Non-motorized trails Plan. The Resources and Public Programs Section of Arizona State Parks prepared this planning document.

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## CHAPTER 1

### INTRODUCTION

Trails are amazingly popular with people of all ages and abilities. In our “Grand Canyon” State, trail use is an attractive outdoor activity available year round and offers a wide variety of environments and experiences from which to choose.

As the Nation’s sixth largest state, Arizona encompasses 113,998 square miles of land spanning fourteen major biotic communities (ADOT 2009). The diversity of Arizona's biotic communities (life zones) are such that a trip from nearly sea level at Yuma to the San Francisco Peaks near Flagstaff will take the traveler through as many life zones as a trip from the Mexican border to the Arctic Circle.

More communities are choosing to embrace trails because of the unique opportunities and benefits they provide. Trails help build strong communities by connecting neighborhoods, providing opportunities for recreation and improving health through exercise. They provide outlets for alternative transportation, protect natural resources, and stimulate economic development by attracting visitors and providing a higher quality of life for residents.

Many of the more populous cities in Arizona are expanding their existing trail systems at the request of residents and smaller towns are beginning to seek assistance in planning local trails and OHV routes that connect their towns to the surrounding public lands. In addition to providing recreational opportunities for their residents, many towns are anticipating that these “regional” trail and OHV networks will attract visitors and tourism dollars.

Many trails and routes in Arizona were not planned for the type and amount of use they now receive nor were they designed with sustainability in mind; they were built to get from Point A to Point B or they just formed through repetitive use. Trail managers are now seeing increased soil erosion, trail widening, trail braiding and an over abundance of invasive species alongside trails. Land managers and trail volunteers alike are seeking out training workshops and other resources to learn about trail planning, sustainable trail design, maintenance techniques and funding sources to help pay for all steps in establishing and maintaining sustainable trails.

To pull together these diverse issues and the needs of agencies, organizations and individuals into a statewide effort, Arizona State Parks conducts a yearlong process of gathering public input, researching issues and developing recommendations for trails and off-highway vehicle recreation in Arizona. This effort becomes the *Arizona Trails Plan*, which is the state’s policy plan regarding non-motorized trails and off-highway vehicle recreation. The Arizona State Parks Board is mandated by state statute to prepare a state trails plan (A.R.S. § 41-511.22) and a state off-highway vehicle recreation plan (A.R.S. § 41-511.04 [20]) every five years.

The purpose of the Plan is to provide information and recommendations to guide Arizona State Parks

and other agencies in Arizona in their management of motorized and non-motorized trail resources and specifically to guide the distribution and expenditure of the trails component of the Off-Highway Vehicle Recreation Fund (A.R.S. § 28-1176) and the Federal Recreational Trails Program (23 U.S.C. 206).

## **DEFINITION OF TRAIL**

Trail, path, track, route, trek—all are words that refer to a trail, but what exactly is a ‘trail’? The United States Forest Service defines a trail as *a route 50 inches or less in width or a route over 50 inches wide that is identified and managed as a trail*. A federal public lands interagency definition between the United States Forest Service, National Park Service, Bureau of Land Management and the Fish and Wildlife Service define a trail as *a linear route managed for human-powered, stock or OHV forms of transportation or for historic or heritage values*. The American Heritage Dictionary broadly defines a trail as anything from an ancient footpath to a shipping route. This definition includes, but is not limited to, bikeways, rail routes and motor roads.

The image of a trail may vary from a narrow path through a forest to a paved sidewalk connecting a school to a housing development. Rivers and streams serve as “paddle” trails for canoes and kayaks. Many historic trails in Arizona were used as transportation or trade routes connecting nomadic groups with each other and later used as wagon routes and highways as settlers moved west.

Consequently, the meaning of the word “trail” is and always has been passionately debated. Every group of users has its own vision of what a trail should be, as well as to whom it should cater and what experiences it should provide. A final definition of “trail” may never be agreed upon, but two things are certain: trails have a richly storied history and are inherently dependent on those who use them.

In Arizona we often distinguish those linear corridors used primarily for non-motorized recreation as “trails”, those used primarily for alternative transportation as “pathways”, and those used primarily for motorized recreation as “routes”.

**However, to simplify the narrative, when we refer to “trail” in this Plan we refer to a corridor on land or through water that provides recreational, aesthetic or educational opportunities to motorized and non-motorized users of all ages and abilities.**

## **BENEFITS OF TRAILS**

Trails provide users a means to improve mental and physical health, are a source of community pride and cohesion, provide a venue for a variety of community, regional, and statewide activities and athletic events and contribute significantly to Arizona’s economic diversity and overall economy. Trails are often unrecognized as an important part of every community’s basic infrastructure, along with schools, roads, utilities and public safety. Trails contribute significantly to the quality of life of Arizona’s residents.

*Better Health-* Trails support an active lifestyle that improves both physical and mental health. Physical activity helps prevent cardiovascular disease, Type 2 diabetes, some cancers, obesity and depression (Centers for Disease Control and Prevention, 2011). An increase in physical activity can save millions of dollars in health care spending. Physical activity also reduces stress and improves mental health. As a result, it is becoming increasingly popular for trail advocates and the health community to develop partnerships and innovative approaches to combat these epidemics. Trails, especially close-to-home systems, provide opportunities to integrate physical activity into daily living by offering settings to walk, run and bike during leisure time or for commuting

Trails are exceptionally well suited to help Arizonans become more physically active. Trails are readily accessible to most Arizonans and inexpensive to use. They are found in a variety of attractive settings and can provide moderate activity or challenging outdoor adventure. They can provide physical activity for a wide range of people, including persons with disabilities, children, youth, elderly and others who are known to be less physically active.

Most towns and cities offer a diverse array of trail opportunities, including pathways for walking, jogging or biking within neighborhoods. There are more challenging trails within desert or mountain parks and preserves, and access to miles of trails and backcountry routes within adjacent State and National Parks, National Forests, and Bureau of Land Management lands.

*Strong People, Strong Economy-* Trails contribute to Arizona's economy by attracting tourists to communities. Tourism creates jobs and puts money into local economies. Many trail and OHV users support local businesses by buying goods such as walking shoes, hiking boots, mountain bikes, ATVs, 'toy haulers', saddles, camping equipment, binoculars, helmets, water bottles, food and gasoline and by renting equipment such as cross-country skis, paddle boards, kayaks and snowmobiles. With the economic decline in 2008 and 2009, Arizonans had less disposable incomes for vacations and staying closer to home was more of a viable option. According to a report provided by the Arizona Office of Tourism, domestic overnight visitors increased from 8.96 million in 2009 to 9.56 million visitors in 2013.

Local areas that contain unique and interesting features and terrain can provide trail guides and tour outfitters with the desired attractions to take tourists into the backcountry where they might not have the opportunity or inclination to explore on their own. Many of Arizona's tour operators offer specialized "jeep" tours into remote regions of the Sonoran Desert and Sedona's Red Rock country, allowing people to experience the rugged splendor of Arizona. Hiking and horseback tours are offered for special areas such as the Grand Canyon, Canyon de Chelly, Havasupai, Superstition Mountains and Aravaipa Canyon, to name a few.

In addition to the financial gains resulting from increased tourist visitation, other economic benefits associated with trail development include enhanced property values and increased local and state tax revenues. A home near a trail can offer a pleasing view, quieter streets, recreational opportunities and a chance to get in touch with nature. In a recent study by Parent and vom Hofe (2012), the data showed that multi-purpose trails have a significant influence on the price of houses when they lie within close

proximity (based on the trail within their study). The study asserts that the averaged priced house devalued the further it is away from the trail.

*Strong Communities-* Trails strengthen the social fabric. When one hikes, bikes or rides trails through neighborhoods and towns, along park or preserve pathways, and along greenways, blueways, canals and other right-of-ways, it can inspire a sense of belonging and appreciation for the local culture. A 2002 survey co-sponsored by the National Association of Homebuilders and the National Association of Realtors found that trails come in second only to highway access when those surveyed were asked about the importance of community amenities.

According to a 1999 study, people believe that backcountry roads are beneficial because they provide access for a wide range of recreational activities, including access for senior citizens and people with disabilities (Bengston and Fan 1999). Access is a priority concern for trails users in Arizona although there are differences among samples (Table 17 and Table 38). Most recently, a 2010 study by Burr, Jamnik and Shaw proposes that OHV recreational users who increase their driving time can meet basic guidelines by the American College of Sports Medicine for sufficient physical activity leading to positive health.

Volunteering is one measure of the vitality of a society. People working together, giving their time freely and sharing in socially valuable, meaningful activities—these are practices that create strong communities. Trails provide opportunities for volunteering throughout Arizona. Volunteers largely built Arizona's non-motorized trail systems. Many cleanup events, sign installations and other trail restoration projects on public lands are co-sponsored by off-highway vehicle clubs, non-profit organizations, corporate volunteer groups and public interest groups such as; Friends of Northern Arizona Forests and Phoenix Weedwackers.

Many trails also depend on the hospitality of private property owners. Some trails cross private lands, with access freely given by property owners who are willing to share their land with trail users. Some owners have even donated their land or granted a perpetual easement to trail or open space organizations. Arizona has a recreational liability statute that limits the responsibility of a landowner regarding recreational users who cross private lands. Trail construction and maintenance builds and solidifies partnerships among community residents, businesses, landowners, federal, state and local governments and trail club members. The state as a whole is also strengthened as people of all income brackets, groups and cultures travel throughout Arizona for trail-based recreational experiences.

*More Valued, Better Preserved Environment* - Trails lead users through the incredibly varied landscapes found in Arizona. They lead people through diverse plant and animal habitats like riparian areas, forests and deserts. In addition, trails lead to historic places like old mining towns, prehistoric settlements, dinosaur tracks or the sites of famous events. Interpretive signage along a trail can educate the public about the sensitivity of natural and cultural areas and raise awareness of the importance of protecting vulnerable resources. Teaching appropriate trail ethics can encourage responsible behavior in any outdoor setting.

Trails also provide a great benefit by limiting damaging cross-country travel and protecting the state's natural environment and resources. By leading users along well-designed sustainable trails and designated routes, trails keep users away from sensitive wildlife habitats and cultural features that might not be able to withstand traffic. Well-designed trails can provide environmental buffers, such as bridges or boardwalks, protecting delicate wetlands and riparian areas while allowing users to experience these important habitats. (Ministry of Health 2005)

Trails in Arizona often give users access to remote backcountry and designated wilderness areas. Indeed, the chance to experience the backcountry is one major appeal of tourism in Arizona. The need to protect and conserve these wild and primitive areas is something all land managers should include in their trail information brochures, websites and maps.

Trails provide meaningful and satisfying outdoor experiences for many users. These experiences reaffirm a sense of connection with the natural environment and provide opportunities for an appreciation of Arizona's natural and cultural heritage. In particular, trails are a good medium for families and children, allowing inexpensive recreational experiences in a natural setting, providing educational opportunities and memories that will last a lifetime. Trails and routes let children learn new skills and gain confidence in their abilities while in a managed situation. Trails can provide students with unique living laboratories to increase understanding of scientific, environmental and cultural issues.

By linking natural and cultural resources in both rural and urban settings, trails provide users, individually and collectively, with a rich learning environment. With a system of trails that traverses Arizona's many natural and cultural regions, trails play an important role in supporting environmental education and building a public commitment to environmental conservation and stewardship.

### **HOW CAN THE PLAN'S INFORMATION BE USED?**

Given the above description regarding the benefits of trails, the information contained within this Plan can be used in many ways.

- Enhance the quality of life of Arizona's residents and the quality of the experience of our visitors by promoting the protection and development of Arizona's trails and routes.
- Promote a common understanding of statewide, regional and local issues and the potential solutions affecting all trail interests.
- Provide a framework for strengthening the roles of trail and OHV advocates, managers and elected officials to be more effective in sustaining Arizona's trail heritage.
- Build a connected, effective constituency for trails and motorized recreation in Arizona.
- Establish and promote a framework for trail and OHV research, education, advocacy and action.
- Assist in justifying budget and personnel requests for trails and motorized recreation projects.
- Recommend funding priorities and actions to improve and maintain Arizona's trails and routes.

**What is in the Plan's Chapters?**

The results of the concurrent statewide motorized and non-motorized trails planning efforts are presented in the following chapters of the *Arizona Trails 2010 Plan*.

<b>Arizona Trails 2015 Plan Chapters</b>
Chapter 1. Introduction—Definition of Trails, Benefits, Current Issues
Chapter 2. Trails 2015 Planning and Public Involvement Process
Chapter 3. Motorized Trails Recreation—Survey Results, Land Manager Survey Results and Recommendations
Chapter 4. Non-Motorized Trails Recreation—Survey Results, Land Manager Survey Results and Recommendations
Chapter 5. Grants and Funding—Partnerships and Funding Sources
Appendices—References, Legislation and Survey Results/Data

## CHAPTER 2

### TRAILS 2015 PUBLIC INVOLVEMENT PROCESS: A CONCURRENT STATE MOTORIZED AND NON-MOTORIZED TRAILS PLANNING PROCESS

There are considerable benefits associated with a concurrent state motorized and non-motorized trails planning process including:

- *Providing user groups with comparative information to emphasize areas of common ground and understanding*
- *Packaging two plans into one volume, providing a comprehensive planning document for recreational planners who often work on both motorized and non-motorized trails*
- *Information to develop grant criteria and expenditures for trails*
- *The collection of professional opinions of land managers regarding agency priorities, concerns and needs*
- *Cost savings from combined motorized and non-motorized trail user surveys*

#### SURVEY QUESTIONNAIRE AND ADMINISTRATION

The purpose of the planning process is to gather information and recommendations to guide Arizona State Parks (ASP) and other agencies in Arizona in their management of motorized and non-motorized trail and riding resources.

In 2013, Arizona State Parks partnered with Arizona State University (ASU) to conduct a series of telephone, targeted and online surveys. A technical report was provided by ASU with findings that were used to inform the 2015 Trails Plan.

The overall study employed four different strategies for data collection, namely *telephonic, targeted, online, and Land Manager* surveys. The different survey strategies, in detail, are as follows:

The **telephonic survey** employed a cross sectional survey design to gather data from a *stratified random sample* of Arizona households. A stratified random sample is meant to be an *unbiased representation* of a group and is well suited to describing the characteristics of a large population. The sample frame used to represent the population included all adult Arizona residents living in households with working landline telephones. To draw a stratified random sample, the state was divided into eight subgroups or strata.

- 1) Arizona Strip—Far northwest Arizona located between the Colorado River and the Utah border. This is a remote area with no large communities but includes the small community of Fredonia. It includes the North Rim of Grand Canyon National Park, Vermillion Cliffs National Monument, Kaibab National Forest and BLM lands.
- 2) Flagstaff/Prescott—Includes the larger communities of Flagstaff and Prescott as well as a number of smaller communities such as Williams, in North Central Arizona. This area encompasses the South

- Rim of Grand Canyon National Park and adjacent Tribal lands, several small National Monuments, Coconino and Prescott National Forest, and several State Parks.
- 3) Metro Phoenix—The metro Phoenix area in Central Arizona is the primary population center in the state. It also includes some smaller communities such as Wickenburg and Maricopa. Tonto National Forest, tribal lands, and BLM lands are included in this region.
  - 4) Metro Tucson—The Tucson metro area in southern Arizona is the second major population center in the state. Nearby public land includes Saguaro National Park, Coronado National Forest, and BLM land. Tribal lands are also proximate.
  - 5) Rim Country—The Mogollon Rim is located in East Central Arizona and includes Tribal Land, Sitgreaves and Apache National Forests as well as tourism destinations such as Pinetop-Lakeside.
  - 6) Southeast Arizona—Southeast Arizona borders Mexico to the south and New Mexico to the east, and includes the communities of Sierra Vista and Safford, as well as some primary tourism destinations such as Bisbee. Additional units of Coronado National Forest and several State Parks are located in this region.
  - 7) Super Desert—Southwestern Arizona consists of large tracks of BLM lands with several designated wilderness areas. There are few communities in this region.
  - 8) West Coast—The western edge of Arizona borders California with the Colorado River serving as its western boundary. The river is a primary recreation resource in the state with several State Parks located on the river. Bullhead City, Lake Havasu City, and Yuma are the primary communities on the river; with Kingman a short distance east of Bullhead City.

The goal was to allow each resident household with a landline telephone in each stratum an equal probability of being represented in the study. Using a database of telephone area codes and exchanges, the O'Neil Associates Inc., Tempe staff generated a separate sample for each region using random-digit-dialing to select individual telephone numbers. In the Random Digital Dialing sample design, every telephone household has an equal chance of being selected. The telephonic survey resulted in approximately 4818 completed interviews with a response rate of 37.8%.

In the case of the **targeted survey**, *purposive sampling* was used. Purposive sample is “is a non-representative subset of some larger population, and is constructed to serve a very specific need or purpose.” These users are typically more involved in their chosen trail activity than a casual trail user, they tend to participate in trail activities more often and they often belong to a trail/OHV related club or organization. Therefore, conclusions drawn regarding this group are representative only of those individuals who participated in the survey and cannot be generalized to any larger population or group. The sample was provided by Arizona State Parks, in the form of e-mail addresses and an invitation to complete a survey, created and hosted by Qualtrics online survey software, was sent to the selective recipients. As the targeted survey had an I.P. address specific link, the particular targeted person could only complete it. Recipients were asked to complete a survey, through a link to Qualtrics, from November 22, 2014 to January 31, 2014. The targeted survey received 200 complete responses out of the total 597 email addresses to which the link was sent.

Similar to the targeted survey, the **online survey** employed *purposive sampling* and was hosted by Qualtrics online survey software. A survey link was provided on the Arizona State Parks website during the same duration as the targeted survey. It received 2532 responses, of which 1703 were complete responses.

Arizona State Parks staff and Arizona State University School of Community Resources and Development faculty members designed the instruments used in the telephonic, targeted and online surveys.

## **SURVEY OBJECTIVE AND CLASSIFICATION**

The main objective of the study was to analyze motorized and non-motorized trail usage and needs in Arizona. Thus, in all the three surveys, each individual was asked a set of two questions at the beginning of the survey to classify user type into three categories. Each individual was asked whether, during his or her time in Arizona, did he or she ever use trails for motorized recreation. This was followed by a question asking if the person ever used trails for non-motorized recreation. Those people, answering *no* to both questions, were categorized as **non-users**. Those who answered *yes* to the first question and *no* to the second question were classified as **motorized trail users**. Similarly, those who answered *no* to the first question and *yes* to the second were classified as **non-motorized trail users**. **Mixed users** were those who answered *yes* to both the questions. The survey included questions on trails usage, satisfaction with trails, information sources, perceptions of environmental and social conditions, trail users' management preferences, trail users' planning and management priorities, volunteerism, and demographics.

Moreover, other classifications were used to describe the respondents. **Core** refers to respondents who reported their trail use was primarily motorized or non-motorized. In addition to being a predominantly motorized or non-motorized trail user, the **core** respondent also includes **mixed users** who report that *50% or more of their time* is spent on motorized or non-motorized trails. **Non-core** represents all users, motorized or non-motorized and all mixed users who report *any percentage of their time* spent on motorized or non-motorized trails.

These questions appeared across all three versions of the study (telephonic, targeted and online). In the telephonic survey, respondents were also asked about their language preference for the interview (English or Spanish) and additional details about their location such as address, region, town, zip code, state, and county.

## **Land Manager Survey**

Land managers with responsibility for multiple aspects of recreational trail and OHV resources in Arizona were asked to respond to an online survey that focused on trail issues from a management perspective. An internal agency database of 472 email addresses was used by Arizona State Parks for the land manager survey. This included city and county parks and recreation departments, state and federal agencies such as; Arizona State Parks, Arizona Game and Fish Department, Arizona State Land

Department, National Parks and Monuments, National Forests, Bureau of Land Management, National Wildlife Refuges, some of the larger tribal governments, several of Arizona's land trust organizations and outdoor recreation organizations (e.g., Arizona Trail Association). The *first* attempt at contacting and eliciting information lasted from November 18, 2013 to December 13, 2013. The attempt produced a sample size of 110 with 53 of those managers *only* representing non-motorized trail managers, 42 managers represent those that managed *both* motorized trails and non-motorized trails, 5 managed *only* motorized trails and 12 did not manage trails.

Of particular concern to Arizona State Parks was the representative sample size of managers that *only* manage motorized trails (5). Therefore, a second, *motorized* version of the initial survey was disseminated from June 9, 2014 to June 23, 2014. Land managers who had already completed the survey were asked not to do so a second time. The second attempt produced an, overall, larger motorized land manager sample size (39). Of the 39 survey respondents, 31 managed *both* motorized and non-motorized trails, 5 managed *only* motorized trails and 3 did not manage motorized trails. Ultimately, the land manager survey produced 140 semi-completed to complete surveys.

A non-probability or purposive sampling strategy was used for the land manager web survey. Therefore, conclusions drawn regarding this group are representative only of those individuals who participated in the survey and cannot be generalized to any larger population or group. While percentages or mean scores of respondents in each response category are reported in the results section of Chapter Three and Chapter Four to illustrate patterns in the responses, caution should be exercised in interpretation due to small sample sizes, especially when considering sub-groups (e.g., "city/county agencies" or "state agencies").

### **Data Analysis**

The data were analyzed using Statistical Package for the Social Sciences (SPSS) Versions 21 and 22 along with Microsoft Excel-2007-2010.

### **Study Limitations**

Survey research is probably the best method available to the social scientist interested in collecting original data for describing a population too large to observe directly (Babbie, 1995). There are advantages and disadvantages to survey research. The objective of this section is to express the study limitations within the 2015 Trails Plan.

First, the methods implemented in the 2015 Trails Plan consist of interview surveys (telephonic) and self-administered surveys (targeted, online and land manager survey). Within these methods are inherent benefits and consequences which impact perceptions that the method of collection is sound and how it affects the subsequent data collected. Self-administered surveys are a method in which respondents are asked to complete the questionnaires themselves; whereas, interview surveys are typically done in a face-to-face fashion or over the telephone. Within this plan, the interview surveys were conducted with

respondents using phones; specifically, only working landline telephones. Statements made regarding study limitations are reflective of method limitations and trends, which cannot be ignored, and not a reflection of agencies involved collecting the data.

### **Interview Surveys (Telephonic)**

With a large portion of the telephonic sample driving the foundation to the 2015 Trails Plan, one must question the potential for bias within the data and whether these results provided are reflective of the population of Arizona residents as a whole. The interview surveys were implemented using landline telephone numbers applying Random Digit Dialing sample design (see above) with over 4,000 respondents. Despite the relatively good sample size, one must question the use of collecting data from households with landline telephones only and the prevalence of wireless-only households.

According to a 2013 study provided by the Centers for Disease Control, 38.0% (weighted data) of *US adults* respondents (37,268) lived in a wireless-only household from January of 2013 to June 2013. As a clarification, wireless refers to cellular phones, cell phones or mobile phones. The study is conducted to yield a nationally representative sample. Therefore, the 38.0% translates to almost 90 million *adults with wireless-only households*. A little over 52% of the 37,268 adults reported having a *landline with wireless*. Only 6.9% of the sample are *landline-only* adults. Being that the Arizona State Parks data collected was solely based on adults with landline phones, it is plausible that as a general comparison to the data portrayed by the CDC, bias exists within the data due to the fact that a large percentage of adults live in a wireless-only household.

Researchers in the Bureau of Labor Statistics are also describing cell phone users as being difficult to contact more than landline counterparts and least likely to complete interviews in certain instances (Meekins & Denton, 2012). Moreover, interview surveys were implemented within this plan and interview surveys are reported to achieve higher completion rates than self-administered ones (Babbie 1995).

### **Self-Administered Surveys (Targeted, Online and Land Manager Survey)**

The targeted, online and land manager surveys employed *self-administered* methods. Self-administered surveys are inquiries where respondents are asked to complete the questionnaires themselves. Unlike the interview surveys, these types of surveys do not have the benefit of an interviewer guiding them through the process over a telephone. Details regarding the implementation of the self-administered surveys are located earlier in this chapter. This section is primarily interested in general study limitations of self-administered surveys within the online realm.

Hung and Law (2011) list the advantages and/or disadvantages of surveys using online tools. The advantages listed are low cost, fast response time, instant data entry, high response rate, easy to communicate with respondents, completeness of survey, convenient for respondents, sample can be representative of the general population and environmentally friendly. Interestingly, the some of the

advantages listed can also be concurrent with disadvantages. The disadvantages listed are representativeness of sample, low response rate and researchers/respondents may encounter technical difficulties. The 2015 Trails Plan experienced some of these advantages and disadvantages.

In particular, the motorized land manager survey (please refer to above for sample numbers) was too small. For future trails plans, if the sample size from any of the land manager surveys, in any management capacity, is too small the author recommends either allowing an outside agency or a trained individual within Arizona State Parks to pursue with a phone call to conduct the survey over the telephone or in person. As previously mentioned, interview surveys are more likely to be completed in their entirety as opposed to self-administered surveys and if self-administered surveys are coupled with a “live” telephone call encouraging a respondent to complete the survey, it is possible that the sample size will increase.

### Arizona Trails 2015 Plan vs. United States Census Data

Statistical weighting, data weighting and/or weighting is a technique to adjust answers to account for over- and under-represented groups. Precisionpolling.com states “It is frequently the case that the people who answered your poll are not fully representative of the region you were polling over.” The technique is commonly used in most statistical analyses (e.g., United States Census Data). The 2005 and 2010 Arizona Trails plans used data weighting as a technique but the 2015 plans did not adopt data weighting in its analysis. Therefore, one must take extra caution when comparing data between previous trails plans. The following tables illustrate how some of the over- and under-represented groups (non-weighted) compare to United States Census Data:

**Table 1: Age Comparison of Survey Respondent vs. US Census Data**

Age Group	AZ Trails 2015 Plan	US Census 2013 ACS Community Survey 1- year Estimates AZ Percent
18-24	1.7%	10.0%
25-34	5.0%	13.3%
35-44	9.6%	12.6%
45-54	14.1%	12.6%
55-64	22.3%	11.7%
65-74	23.2%	8.9%
75+	19.2%	6.5%
Median Age	63.0	36.8

**Table 2: Gender and Marital Status of Survey Respondent vs. US Census Data**

Gender & Marital Status	AZ Trails 2015 Plan	US Census 2013 ACS Community Survey 1- year Estimates AZ Percent
Male	41.6	49.8
Female	57.2	50.2
Married	65.4	47.1

**Table 3: Race of Survey Respondent vs. US Census Data**

Race	AZ Trails 2015 Plan	US Census ACS Demographic Housing Estimates 2008-2012 AZ Percent
White, not of Hispanic origin	62.0%	81.8%
Hispanic/Latino	15.6%	29.7%
American Indian/Alaskan Native	5.2%	5.3%
Asian/Pacific Islander	1.6%	3.6%
Black/African American	1.3%	4.9%

**Table 4: Educational Attainment of Survey Respondent vs. US Census Data**

Education	AZ Trails 2015 Plan	US Census 2013 ACS Community Survey 1- year Estimates AZ Percent
Some High School	8.5%	7.7%
High School Graduate/GED	21.8%	24.8%
Some College, No Degree	24.2%	25.1%
Technical School or Associate's Degree	10.8%	8.6%
Bachelor's Degree	18.3%	17.1%
Graduate or professional degree	16.5%	10.3%

**Table 5: Employment Status of Survey Respondent vs. US Census Data**

Employment Status	AZ Trails 2015 Plan		US Census 2013 ACS Community Survey 1- year Estimates AZ Percent
Currently Employed	29.3%	Employed	53.8%
Currently Unemployed	7.2%	Unemployed	5.3%
Retired	42.2%	Not in labor force	40.7%
Student	1.2%		
FT Homemaker / Stay-at-home parent	7.7%		

**Table 6: Income Status of Survey Respondent vs. US Census Data**

Income	Trails 15	US Census 2013 ACS Community Survey 1- year Estimates AZ Percent
Less than \$50,000	38.5%	51.3%
\$50,000-\$149,000	24.8%	41.3%
\$150,000-\$200,000	1.3%	4.0%
\$200,000+	4.4%	3.5%

## CHAPTER 3

### MOTORIZED TRAIL RECREATION IN ARIZONA

Motorized recreation has a long, rich history in Arizona. In 1914, just two years after statehood, Erwin "Cannon Ball" Baker crossed Arizona during the second day of his record setting 11-day transcontinental motorcycle journey. Common beginnings of off-highway vehicle recreation can be traced back to post WWII soldiers who settled their families in the state and began exploring the back roads in surplus jeeps and even family sedans to see the state's natural beauty. As recreational use of vehicles increased, industry responded by developing products to suit this demand. In 1971, the Parker Dam Chamber of Commerce and National Off-Road Racing Association held the first Dam 500 desert race, covering 500 miles in Arizona and California. The name and length of this popular desert race has changed over the years but it remains an important economic generator for the region with over 277 vehicles entering the race in 2013. Local motorcycle clubs have been hosting a variety of races around the state since the early 1970's as well. The Arizona Motorcycle Riders Association has a schedule of eight races around the state for 2015, and draws in riders from beginner to expert with events for children as young as four. Arizona has changed radically in the 100 years since Cannon Ball's run, but the diverse natural terrain and climates of the state have been popular with motorized trail users for well over six decades. These changes are what drive planning for motorized recreation's sustainable future. This *Trails Plan* provides decision makers and resource planners insight into Arizona's motorized recreational public land use activities and perceptions to help plan for and manage resources to meet the public's needs, achieve economic benefit, build stronger communities, and to sustain land resources.

#### DEFINITIONS, RELATED LEGISLATION AND EXPLANATIONS

**Trails Plan** - Arizona State Parks prepares this plan in accordance with legislative mandate and to promote the statewide development of recreational motorized trails.

A.R.S. § 41-511.04 directs the Arizona State Parks Board to *"maintain a statewide off-highway vehicle recreation plan. The plan shall be updated at least once every five years and shall be used by all participating agencies to guide distribution and expenditure of monies under 28-1176. The plan shall be open to public input and shall include the priority recommendations for allocating available monies in the Off-Highway Vehicle Recreation Fund established by Section 28-1176."*

**Off-Highway Vehicle** - Off-highway vehicles are motorized vehicles that include conventional four-wheel drives, purpose built rock crawlers, motorcycles (dirtbikes, dual sports, adventure touring, trials), all-terrain vehicles (ATVs), utility terrain vehicles (UTVs, side by sides, recreational OHVs or ROVs), sandrails, snowmobiles, dune buggies, and other vehicles.

An OHV as defined in Arizona legislation *"means a motorized vehicle when operated primarily 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 [and] 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. It does not include a vehicle that is either: designated primarily for travel on, over or in the water [or] used in installation, inspection, maintenance, repair or related activities involving facilities for the provision of utility or railroad service.” (A.R.S. § 28-1171)*

Simply put, any motorized vehicle used to travel over unpaved roads and trails is an off-highway vehicle.

**Off-Highway Vehicle Decal Requirements** - Based upon the legal definition of an OHV, there is some confusion as to which vehicles are required to purchase an OHV decal. Arizona legislation further clarifies with the following:

*"A person shall not operate an all-terrain vehicle or an off-highway vehicle in this state without an off-highway vehicle user indicia issued by the department if the all-terrain vehicle or off-highway vehicle meets both of the following criteria:*

- 1. Is designed by the manufacturer primarily for travel over unimproved terrain.*
- 2. Has an unladen weight of eighteen hundred pounds or less." (A.R.S. § 28-1177)*

We encourage land managers to be careful when making reference to the OHV decal requirements on signage describing trail or registration requirements. Conventional vehicles such as SUVs and 4wd pickups are unable to purchase the OHV decal per the legislation. Dual sport and Adventure motorcycles, those machines that are sold street legal from the factory, are not required to buy the OHV decal to operate on a trail, though they may purchase it. There have been several cases of dual sport motorcycle riders being cited or told they are not allowed to ride on trails due to a lack of the OHV decal in error.

Please see Appendix XX for a summary of OHV related legislation relevant to this plan. **{This updated information will be included in the final draft.}**

**Off-Highway Vehicle Advisory Group (OHVAG)** – The Off-Highway Vehicle Advisory Group (OHVAG) is a seven-member committee that provides program direction and recommendations to the Arizona State Parks Board (ASPB). Seven members are appointed by the ASPB to a maximum of two consecutive three-year terms. Five of the seven members must be affiliated with an OHV organization or group; one seat must represent casual OHV recreationists or the general public, and one seat must represent a sportsperson’s group (defined as a member of an organization representing hunting, fishing, or similar sportsperson outdoor activities). Members must be Arizona residents, and no more than two OHVAG members may reside in the same county.

The mission of the OHVAG is to develop and enhance statewide off-highway vehicle opportunities, and

to develop educational programs that promote resource protection, social responsibility, and interagency cooperation. OHVAG and State Parks staff work with OHV partners to evaluate State OHV needs, the *Trails Plan*, and make funding recommendations for the OHV Recreation Fund and Recreational Trails Program revenues to the Arizona State Parks Board.

**Sales of Off-Highway Vehicles** – Motorized vehicles are manufactured for use “off-highway” and have been for over 60 years. These vehicles have rapidly evolved in capabilities and specialization. Perhaps one of the fastest growing type off-highway vehicles is the recreational off-highway vehicle (ROV) or side by side. These are characterized by four low-pressure knobby tires, sit in seats (as opposed to straddle seats as found on motorcycles), and a steering wheel instead of handlebars.

Use of OHVs for recreation continually increases and this trend is clearly revealed through the rising sales of OHVs. Sales of off-highway motorcycles and all-terrain vehicles (ATVs) in Arizona grew steadily from 1995 to 2006, increasing 623% (MIC, 2008). RideNow Powersports, the largest motorsports distributor in Arizona, provided insight into the trends of OHV sales (not including full size vehicles) in Arizona. **{This updated information will be included in the final draft.}**

**Table 7: Arizona New Off-Highway Motorcycle and ATV Retail Sales Units** {This updated information will be included in the final draft.}

Year	ATVs	Off-Highway Motorcycles	Total
1995	3,518	1,605	5,123
1996	4,623	1,890	6,513
1997	5,848	2,116	7,964
1998	7,508	2,883	10,391
1999	10,672	3,483	14,155
2000	14,629	5,396	20,025
2001	17,435	6,133	23,568
2002	18,450	6,341	24,791
2003	20,102	7,081	27,183
2004	21,262	7,463	28,725
2005	25,825	8,583	34,408
2006	28,073	8,981	37,054
2007	19,042	6,993	26,035
2008	10,189	4,449	14,638

Source: *MIC Retail Sales Report*, based on actual sales registration from Arctic Cat, Bombardier, Honda, John Deere, Kawasaki, KTM, Polaris, Suzuki, and Yamaha.

\*ATV sales do not include ROVs/side-by-sides. Off-highway motorcycles includes dual motorsports.

Popularity of side-by-side vehicles (i.e., recreational off-highway vehicle – ROV, also called utility terrain vehicle – UTV) increased with each passing year since its introduction in 2001. Prior to 2001, all-terrain vehicle (ATV) sales were 65% of RideNow vehicle sales. By 2008, side-by-side vehicle sales surpassed ATV sales in Maricopa County.

To address the rise in use of off-highway vehicles and educate their owners on sustainable motorized recreation, the Arizona State Parks’ OHV Program formed partnerships with several dealerships to provide information to their customers on responsible OHV use. This OHV Dealer Program is in the pilot stages and developing materials to distribute to dealerships.

As new vehicle types and capabilities emerge, it is important that land managers provide trails and routes designed for the recreational intent of the user rather than standards based upon transportation

needs. A motorized trail user has unique needs and wants just like a non-motorized trail user. Rock crawlers and trials riders desire highly technical trails that challenge their personal abilities and their vehicles capabilities. ATV and smaller ROV riders need trails that are limited in width to provide a trail experience and to reduce collisions with larger vehicles. Motorcycle riders desperately need trails that are limited to a 24" tread, technical in difficulty, and long distance due to their rate of travel. Sand riders and some snow riders require large open spaces on their preferred surface to enjoy their form of recreation.

### **MOTORIZED TRAIL ACTIVITY PARTICIPATION IN ARIZONA**

Based on the 2014 Telephonic Random Household Survey conducted for this Plan, motorized trail users represent 13% of adult Arizona residents - those that used a trail for motorized use at least once in the last year. "Core" users represent 35% of this group - those whose motorized trail use accounts for the majority (fifty percent or more) of their recreational trail time.

The *2003 Arizona Trails Study* found that 7% of adult Arizonans considered themselves motorized trail "core" users. In 2008, that value increased to 10.7%. The 2010 Trails Plan theorized that this represented an 80% change in the five years between 2003-2008 based upon Arizona population changes. In this plan, we again see a significant statistical increase that affirms that there are more people in Arizona and more of them are enjoying motorized recreation than ever before. The survey findings section of this chapter details motorized activity participation rates of "core" motorized trail users in Arizona.

### **MOTORIZED RECREATION OPPORTUNITY**

Off-highway vehicle opportunities in Arizona incorporate stunning desert and canyon landscapes, plateaus, woodlands, dense forests and alpine meadows. OHV enthusiasts use unpaved roads, trails, and areas for a variety of purposes such as riding trails, sightseeing for pleasure, viewing wildlife, and accessing camping, trailheads, and hunting and fishing areas. Such opportunity allows OHV users a primitive backcountry experience, with opportunities to learn about the ancient cultures, history and environments of Arizona. There are an increasing number of families, Baby Boomers and those with mobility challenges turning to motorized recreation as a way to enjoy Arizona's backcountry areas.

These opportunities largely consist of traveling on old mining, logging, and ranching roads throughout the state. In addition to these routes, there exists a large number of "user created" or "social" trails that developed with advances in OHV technology, increases in population, and a lack of trails that provide the recreational opportunity that trail users desire. The same phenomena can be observed in mountain biking, specifically in the Sedona area. Land managers do provide a smaller inventory of OHV specific recreation areas and trails in various parts of the state in response to high OHV use, resource protection, or user safety issues.

When the federal agencies began implementing travel management, alarming numbers of "social" trails and even official routes began closing for a variety of reasons. This decrease in recreational opportunities continues at a time when demand is higher than ever and increasing. The public saw routes they had used for years closed and became angry. Local land managers find themselves in a difficult situation of complying with national mandates while trying to meet local user demand.

To increase motorized recreation opportunities, Arizona State Parks Off-Highway Vehicle Program is eager to partner with agencies seeking to provide new OHV opportunities and add old routes and areas into the inventory of open areas. The OHV Program provides many forms of assistance such as:

- Grant funding for projects - money
- Trail Tool Loaner Program - tools + volunteers = low cost maintenance and construction
- Sign Program - providing signs instead of grant forms to rapidly address field needs
- OHV Ambassadors - volunteers for OHV management and projects
- Partnership Development - assisting and communicating with every organized OHV club in the state to help establish agency partnership agreements.
- GIS Mapping - online portal for sharing digital trail information with the public statewide

Complete information about Arizona State Parks OHV Program Resources available to land managers and the OHV community are listed at the end of this chapter.

### **Planning for and Construction of Motorized Trails**

In the 2010 Trails Plan, Arizona State Parks offered useful information on topics of interest in planning motorized trails. In the years since its publication, more detailed sources of new information have been made available by our program partner the National Off-Highway Vehicle Conservation Council (NOHVCC). Land managers engaged in planning and construction of motorized trails are encouraged to visit <http://www.nohvcc.org/Materials.aspx> to obtain copies of the latest publications such as Management Guidelines of OHV Recreation, OHV Park Guidelines Manual, Trail Planning, Design and Development Guidelines, and others being developed currently. Printed copies are available for purchase and some are freely available by download. Additionally, Arizona State Parks OHV Program has partnered with NOHVCC to publish a comprehensive expansion of Management Guidelines of OHV Recreation that will include construction and maintenance techniques. The expected publication of this new book is Spring 2015. Free printed copies of the new publication will be made available to all Arizona land managers thanks to this partnership.

The OHV Program is committed to providing planning and design assistance to our land managing partners to expedite the development of OHV recreation opportunities. Currently, a landscape architect leads the program staff with a specialization in trail design and economic development. The program employs the latest GIS technology to coordinate project information and the collection and sharing of data. The program is actively assisting National Forest Service and Bureau of Land Management in partnership with several OHV clubs on developing new projects to be funded by the OHV Recreation

Fund. NOHVCC and numerous private sector companies can also provide design services to land managers who need this specialized assistance.

Additionally, the OHV Program is eager to fund the construction and maintenance of OHV trails and facilities directly through grants, agreements, or direct contracting. Agencies may take advantage of these opportunities directly or by entering into an agreement with Arizona State Parks to develop projects. The OHV Program may contract with non-profits, youth conservation corps, and private businesses in order to expedite construction of projects with the land manager's approval. This arrangement has worked very well in regards to non-motorized trail maintenance, easing the burden on land managers to address needs quickly without having to complete a lengthy application or apply for grants. These arrangements can be made at any time and are addressed immediately.

### **A PROFILE OF MOTORIZED TRAIL RECREATION IN ARIZONA**

This plan intends to identify the most significant issues related to trail use in Arizona. This chapter presents priorities from the Telephonic, Targeted and Online surveys. This chapter and the *2013-2014 Arizona State Parks Trails Study: Final Technical Report* (Budruk, Andereck, Prateek and Steffey 2014) provide sources of information for trail users to determine the issues and needs on which to focus their efforts and resources.

Information provided by Arizona's non-motorized trail users are presented in this chapter includes:

- Estimates of trail use in Arizona with participation separated into specific recreational types and activities
- Satisfaction with trail opportunities in Arizona
- Preferences for trail settings and management level
- Environmental and social concerns on trails in Arizona
- Priorities for trail management and planning in Arizona

Survey methods and definitions are presented in Chapter 2. Additional topics and information from the survey are presented in Appendix XX. **{This updated information will be included in the final draft.}**

### **Participation Rates by Vehicle Type/Activity**

One of the primary objectives of this study is to estimate trail use in Arizona with participation broken down into specific types and activities. Based on the percentage of respondents who participated in an activity more than once a week, the most popular motorized activities for "core" motorized trail users were *quad/all-terrain vehicle driving* (8.8%), *4WD/other high clearance vehicle* (7.5%) and *utility terrain vehicle/modified golf cart* (5.5%). Interestingly, the most popular motorized activities for motorized trail users who participated in an activity once a month were *4WD/other high clearance vehicle* (23.5%), *quad/all-terrain vehicle driving* (22.8%) and *motorized trail biking/dirt biking* (19.5%). *Snowmobiling*

(94.1%), *dune buggy or sand rail driving* (86%) and *rock crawling* (79.2%) have the highest levels of non-participation rates, overall.

**In the last twelve months, how often have you participated in each of the following recreation activities on trails in Arizona?**

**Table 8: Telephonic Motorized Users Participation in a Motorized Trail Activity**

Telephonic Motorized Users Participation in a Motorized Trail Activity	Not at all %	Low Use	Moderate Use		High Use	
		Once a year %	A few times a year %	Once a month %	Once a week %	More than once a week %
4WD/other high clearance vehicle	30.6	5.2	22.5	23.5	10.4	7.5
Quad or all-terrain vehicle driving	28.3	5.2	18.6	22.8	16	8.8
Motorized trail biking/dirt biking	43.3	4.2	16.9	19.5	11.1	4.6
Rock crawling	79.2	5.9	8.1	3.9	2	0
Utility terrain vehicle/modified golf cart (side by side)	65.8	4.6	7.5	9.1	4.9	5.5
Dune buggy or sand rail driving	86	4.2	4.2	4.2	1	0.3
Snowmobiling	94.1	3.3	1.6	1.0	0	0

Mixed users participate in motorized and non-motorized activities. Of the telephonic non-core mixed users, *trail hiking* (90.1%) is the most popular non-motorized trail activity for mixed users followed by *backpacking* (45.2%), *mountain biking* (24.4%), *canoeing/kayaking* (21.3%), *horseback riding* (19.4%) and *cross-country skiing/snowshoeing* (10.4%). The popularity percentages are cumulative between the Low Use and High Use categories.

**In the last twelve months, how often have you participated in each of the following recreation activities on trails in Arizona?**

**Table 9: Telephonic Mixed User Participation in Non-Motorized Trail Activity**

Telephonic Mixed Users Participation in Non-Motorized Trail Activity	Not at all %	Low Use	Moderate Use		High Use	
		Once a year %	A few times a year %	Once a month %	Once a week %	More than once a week %
Trail Hiking	10.0	6.9	36.9	36.3	5.0	5.0
Backpacking	55.0	13.8	18.8	8.8	1.3	2.5
Mountain biking	75.6	5.6	8.8	5.6	2.5	1.9
Horseback riding	80.6	9.4	5.6	2.5	1.3	0.6
Canoeing/Kayaking	78.8	12.5	6.3	1.9	0.6	0.0
Cross-Country skiing/snowshoeing	90.0	5.6	3.8	0.6	0.0	0.0

**Table 10: Telephonic Motorized Trail User Activity by Vehicle Type**

<i>Telephonic Motorized Trail User Activity by Vehicle Type</i>	<i>*2003 Motorized Trail Users</i>	<i>*2008 Motorized Trail Users</i>	<i>2013 Motorized Trail Users</i>
	%	%	%
4WD/other high clearance vehicle	55/10.6	71.6	69.1
Quad or all-terrain vehicle driving	42.4	72.2	71.4
Motorized trail biking/dirt biking	16.6	61.1	56.3
Rock crawling	**	16.6	19.9
Utility terrain vehicle/modified golf cart (side by side)	**	33.3	31.6
Dune buggy or sand rail driving	5	22.2	13.9
Snowmobiling	0.5	5.6	5.9

\* data weighted

\*\*Rock crawling and utility terrain vehicle types were not included on the 2003 survey since they were not considered common in 2003.

The percentage listed in the 2013 Motorized Trail Users column represents the cumulative rates of users who said they participated in that activity at least once in the past year. Based on the telephonic core motorized users, 71.4% percent of the respondents participated in an activity using *quad or all-terrain vehicle driving*. The second and third vehicle types used to participate in an activity are *4WD/other high clearance vehicle* (69.1%) and *motorized trail biking/dirty biking* (56.3%), which is consistent with the most popular motorized activities findings in Table 8. Furthermore, the data from Table 10 concurs that *snowmobiling* (5.9%), *dune buggy or sand riling* (13.9%) and *rock crawling* (19.9%) are least used when participating in a non-motorized activity.

The data, in this table, from 2003 and 2008 can be compared as the data is weighted to represent the state population in both samples. Caution should be used when comparing the data from 2013 due to the fact that this data was not weighted.

### **Participation Rates: Motorized Trail Use to Access or Get to Recreational Sites**

Telephonic “core” motorized respondents were asked, in the last twelve months, how often they have used motorized trails in Arizona for a variety of other purposes. High Use (more than once a week) “Core” motorized users use a motorized vehicle on unpaved roads to access recreational sites to: *go sightseeing* (8.8%), *access to camping or picnicking areas* (6.2%) and *access to wildlife viewing/bird watching area* (4.2%). Similarly, Moderate Use (once a month) respondents use a motorized vehicle on unpaved roads to access recreational sites to: *go sightseeing/driving for pleasure* (23.5%), *camping or picnicking areas* (18.2%) and *other types of recreation* (14.7%). Presumably, using a motorized vehicle on unpaved roads for *other types of recreation* can be gathering mushrooms, berries, etc., visiting nature centers, transporting non-motorized or motorized boats (canoes, rafts, sailboats, kayaks, motorboats or personal watercrafts) or visiting ski areas as reported in the United States Department of Agriculture’s report titled *Off-Highway Vehicle Recreation in the United States and its Regions and States* (2008).

In the last twelve months, how often have you used your motorized vehicle on unpaved roads to access or get to the following types of recreational sites?

Table 11: Telephonic Motorized Users: Used Motorized Vehicle on Unpaved Roads to Access or Get to Recreational Sites

Telephonic Motorized Users: Used Motorized Vehicle on Unpaved Roads to Access or Get to Recreational sites	Not at all %	Low Use	Moderate Use		High Use	
		Once a year %	A few times a year %	Once a month %	Once a week %	More than once a week %
Go sightseeing/driving for pleasure	15.6	6.5	34.9	23.5	10.7	8.8
Camping or picnicking areas	24.1	6.8	38.1	18.2	5.9	6.2
Trailheads	47.6	6.2	22.8	12.7	3.6	3.6
Historic or archaeological sites	42.3	14.3	28.7	9.4	2.9	1.6
Wildlife viewing/bird watching area	52.8	5.5	22.1	10.7	3.9	4.2
Hunting or fishing area	45.6	9.1	26.1	11.7	4.6	2.6
Other types of recreation areas	36.5	6.2	33.2	14.7	4.9	2

**Satisfaction with Trails**

Satisfaction is a multi-dimensional concept that has affective, behavioral and cognitive components. The majority of “core” motorized telephonic trail users are *somewhat satisfied* (43.0%) with motorized trails in Arizona followed by *very satisfied* (33.6%), *very dissatisfied* (11.1%) and *somewhat dissatisfied* (10.7%). Cumulatively, *very satisfied/somewhat satisfied* depict that 76.6% of the “core” motorized telephonic trail users are satisfied with motorized trails and 21.8% are *somewhat dissatisfied/very dissatisfied*.

In contrast, the “core” motorized targeted trail users are *somewhat satisfied* (34.0%) with motorized trails in Arizona followed by *somewhat dissatisfied* (28.4%), *very dissatisfied* (19.1%) and *very satisfied* (17.9%). Cumulatively, 51.9% of the “core” motorized targeted trail users are very satisfied/somewhat satisfied with motorized trails and 47.5% are *somewhat dissatisfied/very dissatisfied*. Land managers should note the comparison between the telephonic and targeted satisfaction levels.

**Overall, how satisfied are you with motorized trails in Arizona?**

Table 12: Satisfaction with Motorized Trails

Satisfaction with Motorized Trails	Very Satisfied %		Somewhat Satisfied %		Somewhat Dissatisfied %		Very Dissatisfied %	
	2013	2008	2013	2008	2013	2008	2013	2008
Survey Year	2013	2008	2013	2008	2013	2008	2013	2008
Motorized Telephonic Trail Users	33.6	22.2	43.0	50.0	10.7	22.2	11.1	5.6
Motorized Targeted Trail Users	17.9	24.4	34.0	44.8	28.4	22.4	19.1	8.5

**Quality of Life**

Quality of life is a physical and psychological component of the well-being of an individual and typically cannot be reported in “bottom line” terms.

Forty-seven percent of non-core motorized telephonic users said trails are *very important* to their quality of life. Interestingly, non-core motorized targeted and non-core online trail users report trails as *very important* to their quality of life with percentage levels at 88.6% and 86.60%, respectively. Notably, of the non-core motorized telephonic users, 3.7%, of respondents report trails as *not at all important* to their quality of life.

### How important are trails to your overall quality of life?

**Table 13: Importance of Trails to Quality of Life**

Importance of Trails to Quality of Life	Very Important %	Somewhat Important %	Not Too Important %	Not At All Important %
Telephonic Motorized Trail Users	47.7	35.7	12.5	3.7
Targeted Motorized Trail Users	88.6	10.5	0.8	0.0
Online Motorized Trail Users	86.6	10.4	1.7	0.1

### Miles Traveled

In 2013, “core” motorized telephonic trail users travel an average of 41.0 miles one-way to reach a motorized trail they *use* often. The same respondents report an average of 39.2 miles one-way to reach a motorized trail they *enjoy* the most.

With the exception of 2008, telephonic respondents traveled further to reach a trail they used often than targeted motorized trail users. One plausible explanation is the fact that the targeted respondents are far more familiar with the availability of motorized trails than random respondents. This may be due to urbanization including complex sprawl patterns, loss of open space, loss of access to public lands and *many* other factors. Curiously, in 2008, targeted respondents, on average traveled the furthest to motorized trail(s) that they *used* the most. One probable explanation is due to fuel prices that dropped dramatically in the latter part of 2008 and remained low for the survey period.

**Table 14: Approximate Miles Traveled from Home for Motorized Trails Used Most**

Approximately how many miles do you typically travel from your home to use motorized trail(s) you <u>use</u> the most?	2013 (Mean Miles)	2008 (Mean Miles)	2003 (Mean Miles)
Telephonic Motorized Trail Users	41.0	42.1	51
Targeted Motorized Trail Users	33.0	69.8	37.8

**Table 15: Approximate Miles Traveled from Home for Motorized Trails Enjoyed Most**

Approximately how many miles do you typically travel from your home to use the motorized trail(s) you <u>enjoy</u> the most?	2013 (Mean Miles)
Telephonic Motorized Trail Users	39.2
Targeted Motorized Trail Users	46.5

In 2013, targeted respondents travel further than the telephonic users to trail(s) that they enjoy the most.

### Trails Managed for Single or Shared Uses

Land managers must determine if trail/route uses should be combined, such as both motorized and non-motorized uses on one trail, or separated. “Core” motorized telephonic respondents respond that motorized and non-motorized activities can be **combined** (53.4%). Conversely, “core” non-motorized telephonic respondents consistently report that motorized and non-motorized activities should be **separated** (53.5%).

**Do you think trails should be managed for:**

**Table 16: Perception of What Trails Should be Managed For**

Trails Should be Managed for:	2013 Telephonic Survey		2008 Telephonic Survey		2003 Telephonic Survey	
	Motorized %	Non-Motorized %	Motorized %	Non-Motorized %	Motorized %	Non-Motorized %
A single activity- EITHER motorized use OR non-motorized use only	5.2	11.8	11	27	17	30.5
Multiple activities with motorized and non-motorized activities COMBINED	53.4	29.3	44.4	13.6	40.4	5.7
Multiple activities with motorized and non-motorized activities SEPARATED	36.8	53.5	38.9	54.4	34.8	55.8

### Public Access to Trails

**In the past five years, do you think that access to off-highway vehicle roads and trails has improved, stayed the same or declined?**

**Table 17: Access to Off-Highway Vehicle Roads and Trails (Motorized Trail User)**

Access to Off-Highway Vehicle Roads and Trails (Motorized Trail User)	Improved %			Stayed the same %			Declined %		
	2013	2008	2003	2013	2008	2003	2013	2008	2003
Telephonic	15.0	11.1	8.8	39.1	33.3	19.5	40.4	44.4	48.3
Targeted	5.0	4.5	3.8	17.6	12.9	13.5	70.3	78.7	82.7

The data, overwhelmingly, supports the notion that the “core” motorized targeted respondents think access to trails has *declined* (70.3%) over the past five years. The “core” motorized telephonic respondents report approximately equally that access has *stayed the same* (39.1%) or *declined* (40.4%). Access to trails, according to the data, has not overwhelmingly improved.

### Perceptions of Recreation Conflict

Recreation conflict can be attributed to another individual’s or group’s behavior. This survey question asked respondents to report how often they experience conflict with other users. For example: “core”

motorized telephonic users *somewhat often* (22.1%) experience conflict with ATV or “quad” riders. The same type of respondents, also, *somewhat often* (19.5%) come into conflict with full size vehicles. Furthermore, the motorized respondents show the least amount of conflict with equestrians/horses (63.8), hikers (58.3%) and mountain bikers (57.7%) reported as *not often at all*. From the perspective of the “core” non-motorized telephonic users, the respondents experience conflict with ATV or “quad” riders (14.2%), hikers (13.9%) and mountain bikers (11.9%) *somewhat often*. These findings illustrate that conflict occurs both within groups as well as between groups.

#### How often do you experience conflict with the following types of recreation users when using trails in Arizona?

**Table 18: Conflict Experience between Recreation Users (Motorized Trail User)**

Conflict with Recreation Users	Very Often %		Somewhat Often %		Not Too Often %		Not Often at All %	
	Motor	Non-Mot	Motor	Non-Mot	Motor	Non-mot	Motor	Non-mot
ATV or “quad” riders	13.4	4.9	22.1	14.2	20.5	20.5	44.0	59.3
Hikers	4.9	10.5	11.1	13.9	25.7	17.6	58.3	57.1
Dirt bikers	4.9	3.2	14.0	10.4	30.0	28.7	50.8	56.4
Full size vehicles	5.9	2.2	19.5	8.7	25.4	19.7	48.9	68.2
Mountain bikers	3.9	2.9	11.1	11.9	27.0	21.8	57.7	62.3
Equestrians/horses	2.3	2.4	11.7	9.3	21.5	23.2	63.8	64.2

#### Group Size and Traveling with Adults and Children

Survey respondents were asked how many adults and children are typically with them when using the trails they use most. “Core” motorized telephonic respondents will travel on trails/routes in groups of two or more adults (36.8%) followed by 34.9% that will travel with at least one adult. Fifty five percent of the “core” motorized users do not travel with children followed by 24.4% of motorized users who do travel with two or more children. These findings support the notion that motorized users are more likely to engage in OHV recreation with one or more adults than with children.

**Table 19: How many people are typically with you when you use trails in Arizona for motorized trail use?**

Travel on Trails/Routes with # of other people	Number of People			
	Zero People %	One Person %	Two, Three, Four People %	More than Five People %
Travel with others age <b>18 and over</b> using motorized trails	12.4	34.9	36.8	14.3
Travel with others age <b>under 18</b> using motorized trails	55.0	14.7	24.4	5.2

#### Preferences Regarding Motorized Trails and Routes

Survey respondents were asked their preferences concerning different types of motorized trails. “Core” motorized telephonic and targeted respondents indicate different priorities. In order of importance, the telephonic sample is most interested in *off-highway vehicle trails and areas near where people live, cross-country travel areas (riding anywhere is permitted) and loop trails*. The targeted sample is most interested in trails that offer *challenge and technical driving opportunity, loop trails and off-highway vehicle trails and areas near where people live*.

Trail managers have limited resources to provide for all types of *motorized trail activities and experiences*. Please tell me how important each of the following are to you personally.

Table 20: Motorized Trail Preferences

Preferences Regarding Motorized Trails	Core Motorized Mean Score	
	Telephonic	Targeted
Off-highway vehicle trails and areas near where people live	<b>1.91</b>	<b>1.82</b>
Cross-country travel areas (riding anywhere is permitted)	<b>1.98</b>	2.49
Scenic backcountry roads maintained for passenger vehicle	2.17	2.72
Loop trails	<b>2.07</b>	<b>1.48</b>
Trails that offer challenge and technical driving opportunity	2.12	<b>1.43</b>
Long distance off-highway vehicle trails (> 100 miles)	2.43	2.03
Children's play areas near staging areas	2.51	3.41
Single track trails (for dirt bikes)	2.50	2.24
Competitive desert racing trails and areas	2.59	2.48

Mean scores are values on a four-point scale where 1=Very important, 2=Somewhat important, 3=Not too important or 4=Not important at all. *Lowest* mean score is most important and represented with bold font.

## Environmental Concerns

Survey respondents were asked to rate a series of seven environmental concerns on a four-point scale ranging from 1-“Not a problem” to 4- “Serious problem” (response options 5 and 6 were not included in the calculation of the mean). Based on mean scores, telephonic, targeted and online “core” motorized users consider *litter or trash dumping, erosion of trails and damage to historical or archaeological sites* as the top three environmental concerns. Land managers should note the fact that all three sample groups agree on the top three environmental concerns.

How much of a problem do you think each of the following environmental conditions is on trails you use most?

Table 21: Perceptions of Environmental Conditions for Core Motorized Users

Perceptions of Environmental Conditions for Core Motorized Users	Mean Scores		
	Telephonic	Targeted	Online
Litter or Trash Dumping	<b>2.71</b>	<b>2.59</b>	<b>2.74</b>
Erosion of Trails	<b>2.35</b>	<b>2.39</b>	<b>2.06</b>
Decreased Wildlife Sightings	1.95	1.79	1.67
Damage to Vegetation	1.98	1.85	1.76
Damage to Historical or Archaeological Sites	<b>2.06</b>	<b>2.01</b>	<b>1.99</b>
Dust in the Air	1.96	1.85	1.67
Loss of Scenic Quality	1.78	1.68	1.70

Mean scores are values on a six-point scale where 1=Not a problem, 2=A slight problem, 3=A moderate problem, 4=A serious problem, 5=Don't know or 6=Refuse to answer. *Highest* mean score is more severe and represented with bold font.

## Social Concerns

Survey respondents were asked to rate a series of nine social concerns on a four-point scale ranging from 1-“Not a problem” to 4- “Very serious problem” (response options 5 and 6 were not included in the calculation of the mean). Based on mean scores, telephonic, targeted and online “core” motorized users consider *closure of trails, urban development limiting trail access or use* and *vandalism* the top three social concerns. Land managers should note the fact that all three sample groups agree on the top three social concerns.

**How much of a problem do you think each of the following social conditions is on trails you use most?**

**Table 22: Perceptions of Social Conditions for Core Motorized Users**

Perceptions of Social Conditions for Core Motorized Users	Mean Scores		
	Telephonic	Targeted	Online
Closure of Trails	<b>2.68</b>	<b>3.51</b>	<b>3.45</b>
Urban Development Limiting Trail Access or Use	<b>2.34</b>	<b>2.98</b>	<b>2.99</b>
Vandalism	<b>2.29</b>	<b>2.51</b>	<b>2.53</b>
Lack of Trail Ethics by Other Users	2.03	2.25	2.27
Unsafe Off-Highway Vehicle Use	1.93	2.00	1.95
Too Many People	1.70	1.72	1.70
Target Shooting	1.83	2.4	2.29
Conflict Between Users	1.61	1.67	1.66
Vehicle Noise	1.56	1.58	1.40

Mean scores are values on a six-point scale where 1=Not a problem, 2=A slight problem, 3=moderate problem, 4=A serious problem, 5=Don't know and 6=Refuse to answer. *Highest* mean scores are the most severe and are represented with bold font.

## Trail and Route Planning and Management Priorities

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

Based upon mean scores of the telephonic “core” motorized users, there is a tie between *keeping existing trails in good condition* and *providing educational programs that promote safe and responsible recreation* as the top priorities. The targeted and online respondents view *acquiring land for trails and trail access* as the top priority.

Trail managers have limited resources to develop and maintain trails and must focus their money and time on the most serious needs first. For each of the following, please tell me how important each item is to you.

**Table 23: Motorized Trail User's Needs from Land Managers**

Motorized Trail User's Needs from Land Managers	Mean Scores		
	Telephonic	Targeted	Online
Acquiring Land for Trails and Trail Access	<b>1.80</b>	<b>1.46</b>	<b>1.44</b>
Keeping Existing Trails in Good Condition	<b>1.68</b>	1.92	2.05
Mitigating Damage to Environment Surrounding Trails	1.77	2.19	2.20
Routine upkeep of existing motorized trails, routes and areas	1.79	<b>1.88</b>	2.04
Establish Motorized Trails and Areas	2.03	<b>1.61</b>	<b>1.71</b>
Enforcing Existing Rules and Regulations in Trail Areas	1.85	2.12	2.23
Providing Trail Signs	1.93	2.23	2.18
Providing Educational Programs that Promotes Safe and Responsible Recreation	<b>1.68</b>	2.17	2.23
Providing Trail Maps and Information	<b>1.80</b>	2.06	<b>2.14</b>
Provide Law Enforcement and Safety for Motorized Trails/Routes	2.19	2.73	2.69
Developing Support Facilities (Restrooms, Parking and Campsites)	2.16	2.63	2.73

Mean scores are values on a four-point scale where 1=Very important, 2=Somewhat important, 3=Not too important or 4=Not important at all. Lowest mean score is most important and is represented with bold font.

## Volunteers

With the lack of staff to adequately manage public land resources, volunteers become crucial to managing motorized trails. Targeted (85.3%) and online (72.4%) “core” motorized users are more willing to volunteer than the general public- telephonic (43.5%).

**In the next year, would you be willing to volunteer your time to benefit trails in Arizona?**

**Table 24: Willing to Volunteer**

Willing to Volunteer (%)	2013 Yes	2008 Yes
Telephonic Motorized Trail Users	43.3	52.9
Targeted Motorized Trail Users	85.3	89.6
Online Motorized Trail Users	72.4	77.6

**MOTORIZED-LAND MANAGERS SURVEY**

Arizona land managers were provided a separate web survey to collect their unique expertise and opinions on trail funding, management priorities, environmental concerns, social concerns and the Arizona State Parks grant administration process, among other topics.

While reviewing the survey data, it became apparent that State Agencies, Federal Agencies and Cities and Counties have different non-motorized trail concerns and needs for the lands they manage. The results of the survey have been separated for each of these groups. In addition, the response rates varied widely, as mentioned in Chapter 2. Please note the sample sizes in the charts provided.

**Motorized Trail Environmental Impacts for Arizona Land Managers**

Managers were asked to rate seven environmental issues that might be impacted by trail use.

The three most problematic environmental conditions on motorized trails (ties do occur based on sample size), for Arizona city and county land managers are: *soil erosion, damage to vegetation, impacts to air quality- especially dust and particulate matter, habitat fragmentation and decreases in wildlife sightings*. The three most problematic environmental conditions, on motorized trails, for Arizona state land managers is *damage to vegetation, increase in invasive species, soil erosion and habitat fragmentation*. The federal land agencies located in Arizona are concerned with *soil erosion, damage to vegetation and increase in invasive species*.

Notably, *impacts to water quality* are the least of environmental concerns to city and county land managers. State agencies report as the least of environmental concerns as *decrease in wildlife sightings*. Motorized federal land agencies report *impacts to air quality- especially dust or particulate* is of least concern.

**For MOTORIZED routes only, how much of a problem are the following environmental concerns are for your agency?**

**Table 25: Environmental Impact Concerns of Land Managers on Motorized Routes**

	#1 Issue	#2 Issue	#3 Issue	#4 Issue	#5 Issue
Cities and Counties (n=6)	Soil erosion	Damage to vegetation Impacts to air quality, especially dust and particulate matter	Habitat fragmentation Decreases in wildlife sightings	Increase in invasive species	Impacts to water quality
State Agencies (n=6)	Damage to vegetation	Increase in invasive species	Soil erosion Habitat fragmentation	Impacts to water quality Impacts to air quality, especially dust or particulate matter	Decrease in wildlife sightings
Federal Agencies (n=54)	Soil Erosion	Damage to vegetation	Increase in invasive species	Habitat fragmentation	Impacts to air quality, especially dust or particulate matter

**Motorized Trail Social Conditions for Arizona Land Managers**

Managers were asked to rate eleven social conditions that might be impacted by motorized trail use.

The three most problematic social conditions on motorized trails for Arizona city and county land managers are: *inappropriate user behavior, vandalism, unsafe or unprepared trail users, conflicts between local users and residents, destruction/removal of signs, trail braiding, users not staying on designated trails, trail widening and fence cutting*. The three most problematic social conditions, on motorized trails, for Arizona state land managers are: *inappropriate user behavior, users not staying on designated trails and destruction/removal of signs*. The federal land agencies within Arizona are concerned with *users not staying on designated trails, inappropriate user behavior and destruction and/or removal of signs*.

Interestingly, federal agencies are least concerned with motorized *trail braiding*. Further inquiry would prove useful as to why federal agencies are least concerned with *trail braiding*.

**For MOTORIZED routes only, how much of a problem are the following social concerns are for your agency?**

**Table 26: Social Concerns of Land Managers on Motorized Routes**

	#1 Issue	#2 Issue	#3 Issue	#4 Issue	#5 Issue
Cities and Counties (n=6)	Inappropriate user behavior Vandalism Unsafe or unprepared trail users	Conflicts between local users and residents Destruction/removal of signs Trail braiding Users not staying on designated trails Trail widening Fence cutting	Too many people on trail	Too many conflicts between users	
State Agencies (n=6)	Inappropriate user behavior	Users not staying on designated trails	Destruction/removal of signs	Fence cutting Vandalism	Trail widening
Federal Agencies (n=54)	Users not staying on designated trails	Inappropriate user behavior	Destruction/removal of signs	Vandalism	Trail braiding

**Motorized Trail Funding Priorities for Arizona Land Managers**

Managers were asked to rate eleven issues that relate to the management of motorized trails.

The top three priority funding issues for motorized trails for city and county agencies are: *development of new trails, developing and printing trail maps and information, construction of new trails, acquisition of land for new trails and trail access and purchase and installation of trail signs*.

The top three priority funding issues for motorized trails for state agencies are: *acquisition of land for new trails and trail access, enforcement of laws and regulations, prevention, restoration and purchase and installation of trail signs*.

The top three priority funding issues for non-motorized trails for federal agencies are: *prevention, restoration and mitigation of damage to areas surrounding trails, enforcement of laws and regulations and purchase and installation of trail signs.*

**For MOTORIZED trails, how important are each of the trail management areas to your agency and trail needs?**

**Table 27: Topic of Importance to Agency and Trail Needs for Motorized Trails**

	#1 Issue	#2 Issue	#3 Issue	#4 Issue	#5 Issue
Cities and Counties (n=6)	Development of new trails Developing and printing trail maps and information	Construction of new trails	Acquisition of land for new trails and trail access Purchase and installation of trail signs	Renovation of existing trails	Routine maintenance of trails Enforcement of laws and regulations Implementation of education programs promoting responsible and safe trail use
State Agencies (n=6)	Acquisition of land for new trails and trail access Enforcement of laws and regulations	Prevention, restoration and mitigation of damage to areas surrounding trails	Purchase and installation of trail signs	Renovation of existing trails and facilities	Completion of environmental/cultural clearance and compliance activities Implementation of education programs promoting responsible and safe trail use
Federal Agencies (n=54)	Prevention, restoration and mitigation of damage to areas surrounding trails	Enforcement of laws and regulations	Purchase and installation of trail signs	Completion of environmental/cultural clearance and compliance activities	Implementation of education programs promoting responsible and safe trail use

**MOTORIZED TRAIL PRIORITY RECOMMENDATIONS — ISSUES AND ACTIONS**

This section presents priority recommendations for motorized trail uses and the issues that support the need for implementation of the recommendations provided. Priority recommendations are based on the Survey Data (Telephonic Random Household, Targeted Users, Online Users, and Land Manager) surveys and on the professional experience of Arizona State Parks staff. Recommendations within each level all have equal weight. Arizona State Parks acknowledges that all ten recommendations are important for effective management of OHV use, are inter-related, and most incorporate specific actions for the protection of Arizona’s natural and cultural resources.

This section also cites the legislative references that mandate Arizona State Parks to prepare the statewide OHV and Trails Plan and make recommendations to agencies and the private sector regarding expenditures from the OHV Recreation Fund.

**Table 28: Motorized Recreation Recommendations**

<b>First Level Priority Motorized Recommendations</b>
Protect Access to Trails/Acquire Land for Public Access
Maintain and Renovate Existing Trails and Routes
Provide and Install Trail/Route Signs
Establish and Designate Motorized Trails, Routes and Areas
<b>Second Level Priority Motorized Recommendations</b>
Develop Support Facilities
Provide Maps and Trail/Route Information
Mitigate and Restore Damage to Areas Surrounding Trails, Routes and Areas
<b>Third Level Priority Motorized Recommendations</b>
Provide Educational Programs
Completion of Environmental/Cultural Clearance and Compliance activities
Increase On-the-Ground Management Presence and Law Enforcement

The recommendations for motorized trail use are 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 is published. These recommendations also 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.

**First Level Priority Recommendations for Motorized Trail Use**

**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 recreational opportunities exist. Access is being diminished due to land agency closure of trails; air quality

ordinances; urban development limiting trail access or use; private landowners closing access roads citing destruction of property, littering, and disrespectful behavior; and variation in rules and trail designations that cross private, public and state lands. Closure of designated trails and routes without providing other designated routes in the same area leads to overuse and impacts in new areas. Access is also an issue of trail/route connectivity between jurisdictions, especially regarding the use of trails and roads on Arizona State Trust lands to access adjacent federal lands. Protecting access is the highest priority for the targeted and online motorized trail user.

Actions:

- Permanently secure access to trails, routes, trailheads, or future motorized recreation areas by acquiring easements, rights-of-way, or land by purchase.
- Work with private landowners on trail issues and solutions and seek granting of easements or donation of land for motorized recreation.
- Acquire lease and/or patent to federal lands via the Recreation and Public Purposes Act
- Implement more comprehensive planning with projections into the future to identify unprotected access points for designated trails and routes, and acquire land for existing and proposed trails and trail access, easements, and right-of-ways.
- Consider increased trail access and parking areas near urbanized areas.

**Maintain and Renovate Existing Trails and Routes**

Issue: Many motorized trails and routes are eroded or poorly aligned, and a top motorized trail priority is to keep existing trails in good condition. Trails are eroded due to natural causes, overuse, improper design or lack of regular maintenance. Often badly eroded or aligned trails cause users to create unauthorized alternate routes.

Land agencies are currently in the process of officially designating trails and routes that are appropriate for recreational motorized use; these “designated” trails and routes will need to be renovated and maintained. Renovation of a trail provides opportunity to address and/or mitigate any resource impacts caused by trail use.

Actions:

- Identify and take action on reconstruction and maintenance needs of motorized trails and routes.
- Identify open mine shafts on, and surrounding, motorized routes and implement proper safety precautions such as signage, fencing and permanent closure of shafts. Coordinate with wildlife officials when considering mineshaft closures.
- Incorporate sustainable trail design when realigning, renovating or maintaining trails.
- Develop programs, including use of volunteers, to provide routine upkeep of designated trails and routes such as the Adopt-A-Trail model.

### **Provide and Install Trail Signs**

Issue: Properly placed signs can keep users on designated trails and routes and inform users why this is important. Users require a number of different kinds of signage to safely and enjoyably pursue their trail experience. There is a lack of adequate signage on motorized routes and areas. Federal land managers are currently in the process of establishing designated motorized routes and are sometimes apprehensive to install signs until designations are complete. Signs are continuously damaged and vandalized and need frequent replacement. There are inconsistent inter-agency standards for signage.

Actions:

- Install locator signs that lead people to trailheads and parking areas, directional signs along the trail, destination signs to let people know they have reached end points, interpretive signs that describe the natural or cultural history of the area, educational signs explaining why environmental and cultural protections are required, and regulatory signs that explain the rules of conduct.
- Adopt consistent interagency universal standards for signage.
- Enlist the help of volunteers to routinely monitor and replace signs as needed. To reduce vandalism, visibly advertise that these signs were installed by volunteers from “X Club”.

### **Establish and Designate Motorized Trails, Routes, and Areas**

Issue: Many motorized roads, trails, and areas currently in use have not been officially designated for motorized use in Arizona. Many OHV routes were once mining, logging or ranch roads, or decades-old exploratory jeep trails. Very few motorized trails were designed to provide the varied and challenging opportunities desired by the OHV user. Compounding this issue is the closure of social trails that existed before travel management was implemented.

Cities, towns and counties do not usually provide OHV recreation opportunity in Arizona – there is a lack of managed OHV destinations near large urban centers. There are few public sites in Arizona that have an area designed specifically for youth OHV riding. There is an increasing population of motorized users with physical disabilities dependent on the use of motorized vehicles for travel “to get into the backcountry.”

Actions:

- Work with local user groups to select and officially designate closed social trails to be added into the official trail system to meet increased demand for motorized trails. Reroute sections as required to meet environmental and cultural requirements.
- Designate and construct the following trail types with local user group input:
  - single track motorcycle trails that typically exceed 10 miles in length and connect to others to create long distance riding opportunities of 30-120 miles.
  - technical to extremely difficult 4x4 and rock crawler routes

- areas open to cross county trials motorcycle riding, particularly boulder outcrops, dry washes with rock faces, limestone ledges, and hillsides with steep gradients and natural obstacles.
- trails restricted to 60" wide and traveling in one direction for ATVs and smaller side by sides to reduce collisions with other vehicles and reduce soil erosion.
- select existing full size vehicle routes as ATV & ROV allowable to avoid issues with out of state/country visitors who are unable to register their vehicle as street legal while promoting connectivity to recreation areas.
- special closed course event use areas for rallies, desert racing, performance riding or driving, and extreme or stunt events.
- Use alternative route designations for recreational trails to highlight their difference from roads and thusly maintenance requirements. Examples include Technical Vehicle trails, Single Track motorcycle trails, 60" ATV/small ROV trails, and snowmobile routes. The preference is that roads are for transportation and trails are for motorized recreation designed for the chosen activity.
- Establish a variety of OHV recreation opportunities that are important to the trail user public including loop trails, trails that offer challenge and technical driving opportunity, scenic backcountry roads maintained for passenger vehicles, and cross-country travel areas.
- Develop OHV connectors and networks to create loop trails or provide longer rides.
- Inventory, evaluate and designate motorized trails, roads and areas.
- Inform the public, through press releases, maps and websites, as soon as OHV routes and trails are officially designated. Involve users in the designation process.
- Encourage or provide preference to cities and counties to become active in OHV management; to provide OHV sites and beginner riding areas near population centers.

## **Second Level Priority Recommendations for Motorized Trail Use**

### **Develop Support Facilities**

Issue: In addition to the actual trail corridor, users require support facilities to aid in the area's use and activities. Support facilities can include restrooms, parking areas, kiosks, water faucets, picnic and campsites, and shelters.

Well-designed support facilities increase the user's experience and satisfaction along with protecting the natural resources, including keeping areas clean and free of litter and waste. Many users do not know land ownership information and facilities help demonstrate the area is "managed" and "owned" by someone.

Actions:

- Develop trailheads with adequate parking areas and litter control (such as individual litter bags), and where appropriate, restrooms, drinking water, and/or other management features such as a sign-in register.
- Develop picnic sites or campsites in conjunction with the trailhead, where appropriate.
- Develop a volunteer host campsite to assist with on the ground presence and user contact.
- Support facilities should be accessible to all users; comply with ADA guidelines.
- Consider facilities along long-distance trails, such as viewing platforms, shelters or planned campsites that could be used to reduce impacts to surrounding areas.

### **Provide Maps and Trails Information**

Issue: Trail users need information and accurate maps that inform them where designated trails exist. Accurate, up to date maps and trail information are difficult to find. There are a limited number of comprehensive OHV trail maps in Arizona, as well as site-specific maps. Federal land managers are currently in the process of establishing designated motorized routes and are sometimes apprehensive to distribute maps until designations are complete. Many current maps do not include routes that cross State Trust lands.

#### Actions:

- Develop maps with current date listed until route designations are complete.
- Develop recreational opportunity guides for specific routes
- Post maps and information on agency websites and trailhead kiosks so they are widely accessible.
- Provide GPS coordinates, rules and laws, and other responsible riding information on maps.
- Coordinate and enter into negotiations with the State Land Department to include on maps the key OHV routes that cross State Trust lands.
- Partner with Arizona State Parks OHV Program to provide GIS information for the OHV Trails GIS portal to assist with distribution of accurate route information to the public.

### **Mitigate and Restore Damage to Areas Surrounding Trails, Routes, and Areas**

Issue: Arizona is experiencing a rapid increase of OHV users, many new to the activity and to Arizona's unique environments. A number of motorized users simply don't understand and/or have a lack of appropriate trail ethics. Cross-county travel occurs and unauthorized trails are created which adversely affect wildlife habitat, watersheds, cultural resources, grazing and other multiple-use activities. Managers perceive damage to vegetation and soil erosion along motorized routes as serious problems. In addition, portions of the state are out of air quality compliance for particulate matter (PM-10/dust) and OHVs contribute to the issue.

Protection of Arizona's natural and cultural resources is important to both the public and land managers. Mitigation includes trail and area closures, signage, fencing and other barriers, restoration of

the land, revegetation, treatment for the spread of invasive species, dust mitigation, prevention of impacts to wildlife and their habitats, and protection of water quality.

Mitigation and restoration actions address environmental impacts after they occur; prevention and protection actions address impacts before they occur. Several of the other priority recommendations address protecting natural and cultural resources before damage occurs.

Actions:

- Rectify or reduce existing damage caused by off-highway vehicles, to natural (vegetation, wildlife, water, soils) or cultural (prehistoric, historic, archaeological) resources or the environment surrounding OHV trails and areas. This may include land restoration, revegetation, invasive species treatment, long-term rehabilitation, barriers, route realignments, or closures.
- Mitigation should be part of any trail or route development or renovation.
- 

*Reduce the need for mitigation and restoration through prevention activities such as:*

- Seek innovative ways to provide education and interpretive signage on the area's environment, and the effects of human and off-highway vehicle impacts on the environment. Kiosks and shelters are a good way to draw attention to interpretive materials, which could inform visitors about conservation practices, treading lightly on the land, and the ethics of watching wildlife to minimize disturbance. Signs, maps and other materials should emphasize the need for users to stay on designated roads and trails.
- Delineate camp areas on long-distance and heavily used trails to focus impacts in one established area, leaving the surrounding area undamaged.
- Minimize impacts of OHV use on grazing and other land uses.
- Explore and implement solutions to reducing particulate matter due to trail/route use, such as dust suppressants.

### **Third Level Priority Recommendations for Motorized Trail Use**

#### **Provide Educational Programs**

Issue: Trail users who lack proper trail etiquette and environmental ethics can detract from other trail users' recreation experience and negatively impact the environment.

Current education efforts are insufficient to meet the need for effective responsible user education (need to target residents, visitors, dealers, buyers, and rental businesses), resulting in negative impacts to land and water resources, cause site closures, and contribute to the negative perception of OHV use. Many users are unaware of new laws relating to dust restrictions, vehicle operation, and registration of

vehicles. More well placed educational materials and targeted programs may reduce the need for increasing law enforcement efforts.

Actions:

- Develop consistent responsible use messages and promote through websites and mass media, and provide OHV related articles for newspapers, magazines, and newsletters.
- Compile a comprehensive list of OHV laws and regulations and also prepare and publicize condensed versions (e.g., brochures, FAQs).
- Partner with motor sport dealer businesses to educate motor vehicle buyers and renters.
- Develop and implement an approved State OHV education curriculum.
- Incorporate OHV recreation use into driver education and school youth programs.
- Improve posting of regulations at trailheads and along routes.
- Maintain and use OHV interest mailing lists to announce new information, messages, policies and regulations.

**Increase On-The-Ground Management Presence and Law Enforcement**

Issue: Enforcing rules and regulations on trails, routes and areas is a high priority for motorized trail users and land managers. There is a lack of on-the-ground management presence and self-policing for safety, information, education and enforcement activities. There is a lack of adequate law enforcement to sufficiently meet resource protection needs and reduce dust emissions. There is no effective mechanism for the public to report illegal operators in a timely manner to appropriate law enforcement agencies. Trail laws and regulations are often unknown or ignored by users. Land managers do not have the staff or time to effectively monitor trails and users or educate recreationists.

Actions:

- With new OHV laws in place, implement a well-coordinated effort across jurisdictions to maximize effort and impact. This coordinated effort should be centralized so there is a consistent enforcement direction and interpretation.
- Encourage State and counties to provide assistance on federal lands for law enforcement.
- Federal agencies should increase on the ground enforcement efforts, particularly for resource protection.
- Educate courts to provide consistency regarding sentencing (e.g., fines, education programs, community service). Heavier fines for repeat offenders are encouraged.
- Identify enforcement contacts or install complaint registers for trail users to report information.
- Increase staff through a variety of means including ranger presence, law enforcement presence, volunteers, and site hosts.
- Promote volunteer programs with clubs and individuals to monitor trail use and educate users regarding rules and regulations (e.g., OHV Ambassadors/peer patrols).

## **Completion of Environmental/Cultural Clearance and Compliance Activities**

Issue: Most user favored motorized roads, trails, and areas currently in use have not been officially designated for motorized use in Arizona due to new federal travel management requirements being implemented. An important step in developing new trails and adopting existing trails into the inventory of allowable trails is compliance with federal policies such as the National Environmental Policy Acts (NEPA) and federal and state requirements to protect cultural resources. Due to reduced staffing and budgets, oftentimes federal land managers are unable to work on compliance activities, and therefore recreational trail development. This sometimes puts the public at odds with land managers when they see blanket closures of long time existing trails or conversion of historically motorized trails to non-motorized uses. Access and new trail construction are top priorities for both users and land managers, but these items cannot be addressed without completing compliance activities first. The public is frustrated at the amount of time it has taken to complete travel management in some areas, weary of the process entirely, or advocating for new trails to be part of any proposals for funding of compliance activities.

### Actions:

- Land managers developing travel management plans should ensure the areas they are designating can be done in a reasonable amount of time. Large area designation projects are difficult for the public to digest and provide meaningful comment on.
- Work closely with the public to insure the recreational trails they favor are incorporated into initial travel management plans. If issues with these existing trails present a problem for inclusion, they should be solved prior to approval of any travel management plans. This could include small reroutes to avoid environmental or cultural conflicts for example.
- Any routes discovered during evaluation determined to be degraded beyond salvage should still be considered for inclusion, especially in vital area of connection such as bordering wilderness areas, between management boundaries, and in areas of urban sprawl. Strategies for continued use include obtaining state funding for repairs, conversion to alternative motorized use for smaller vehicles such as ATVs or single-track motorcycles, or inclusion can be the basis for significant reroutes after a plan is approved.
- Funding requests for compliance activities should include quickly achievable on the ground improvements such as installation of signs, kiosks, OHV staging areas, development of maps, completing small trail reroutes, and new building new connector trails. This will foster good relations with the recreational public and assist trail users in staying on trails.
- Partner or contract with qualified non-profits or the private sector to complete plans and compliance activities. Non-profits such as the National Off-Highway Vehicle Conservation Council (NOHVCC) Management Solutions are recognized for their ability to develop plans and complete studies in balance with agency and motorized trail user's needs.

## **Arizona State Parks OHV Program Accomplishments and Resources**

2014 Single Track Summit Conference: In 2013, the OHV Program began planning a conference to bring motorcycle riding trail users together with land managers to share issues and develop partnerships for the future. The conference was very successful. Attendance reached nearly 80 people from every corner and numerous agencies across Arizona. The two-day event held in Phoenix covered a wide range of topics and most importantly brought a specific type of trail user together with land managers to learn and network. Attendees expressed an interest in making this an annual event and planning has begun for Single Track Summit 2015. Specific targeted user workshops such as these are geared highly focused with the intent of achieving specific outcomes. In the future, the OHV Program hopes to partner with other user groups to offer similar conferences designed for their specific form of recreation.

Partnership Development: Arizona State Parks was able to fill vacancies in the OHV and Grants Programs in 2012 in an effort to renew and develop partnerships to take advantage of the OHV Recreation Fund. The OHV Program actively attends agency, volunteer organization, and OHV club meetings across the state to educate users and land managers about the resources available to them. This outreach has resulted in the early development of cooperative projects in Phoenix, Tucson, Flagstaff, Bouse, Salome, Springerville, and Payson. The program assists users with organizing into clubs as well, with the first such effort resulting in the formation of a group in Prescott in 2014. These efforts are designed to create mutually beneficial relationships between trail users and agencies to enhance motorized recreation opportunities.

Trail Talks: In order to expand public participation beyond weeknight public meetings, the OHV Program developed a low cost outreach program to solicit public involvement and answer questions about OHV issues from people who are unable to come to typical public meetings. These Trail Talks are held at OHV trailheads around the state on Saturdays and Sundays to get greater participation from the involved trail users. Areas around the state where trail users are concerned about particular topics are chosen, and a nearby grant funded OHV area is selected as the meeting venue. After the discussion, participants are then able to enjoy riding a grant funded trail or facility for the remainder of the day while staff completes inspections or other work in the selected area.

Online Trails Map: In the 2010 Trails Plan, land managers expressed the need for a central repository of all motorized trail information that spans agency boundaries. To address this need, the OHV Program at Arizona State Parks stepped up to be that repository and secured funding in 2013 for the development of a web based trail map and supporting GIS infrastructure. Initial equipment purchases were made in 2014 and a new hire has been approved to assist with operations. The system is expected to be an operational beta by fall of 2015 in partnership with the BLM State Office.

Trail Tool Loaner Program: In 2013, the OHV Program deployed a trailer with trail construction tools to the Coconino National Forest and Coconino Trail Riders to provide needed resources for trail construction. Additionally, the Program has purchased two Rokon trail construction motorcycles and

trailers to assist in hauling materials to remote trail building sites. The tools have been used at 10 trail building events resulting in approximately 30 new miles of trail being built.

OHV Website: Arizona State Parks continues to update the existing website information and has enhanced it with a calendar of volunteer events, GPS files of designated OHV areas, and enhanced newsletter signup.

OHV Newsletter: The OHV Program took over publication of this from a contracted marketing company in 2012. Subscriptions have since doubled, readership has quadrupled, and feedback indicates that the content is exactly what OHV subscribers enjoy reading.

OHV Dealer Pilot Program: Initial attempts at starting this program in 2008 failed due to fund sweeps and staff departures. In 2014, efforts to relaunch the pilot have begun with a partner dealership assisting with development of in-store displays and strategies for sharing information such as responsible riding information, state OHV brochures, fire closures, and other critical information needs.

OHV Media Campaign: The OHV Program began development of a media campaign which focused on the "*Our Trails, Our Future*" message including TV commercials, web videos, and graphics which highlight how ASP invests OHV decal money into motorized trails and OHV management for the benefit of the public. Existing resources such as the OHV Ambassador trailer continues to be used at public events to spread the message of how OHV Decal money is used in an effort to increase public understanding and support.

OHV Ambassador Volunteer Program: In 2007, Arizona State Parks, in conjunction with many partners, coordinated the establishment of the volunteer OHV Ambassador pilot program. The program was created as a result of the identified need to increase on-the-ground OHV management presence. This pilot program encompasses local, state, and federal agencies, along with other entities.

The program provides volunteers with the highest level of multi-agency training to 1) conduct small projects such as fence repair and sign installation, 2) monitor trails to document hazards and irresponsible OHV use, and 3) provide information to OHV users at high use OHV staging areas and special events.

The Bureau of Land Management, Forest Service, Arizona State Parks, and volunteers work in partnership to conduct the 3-day OHV Ambassador orientation trainings. Additional trainings are offered to Ambassadors throughout the year. Equipment such as statewide education trailers and radios are used to assist with program activities.

The OHV Ambassador Program received national recognition in its pilot stages.

It was recognized by Joel Holtrop, Deputy Chief, National Forest System, USDA Forest Service during a *House Natural Resources Committee, Subcommittee on National Parks, Forests and Public Lands* hearing as a model travel management implementation strategy.

The Program contributed to receiving the national American Recreation Coalition Beacon Award and is positively identified through multiple media outlets and publications including the USDI People, Land, and Water publication. The OHV Ambassador Program presented at the International Trails Symposium in 2013.

Although agency partners and volunteers greatly assist in maintaining the OHV Ambassador Program, federal and state hiring difficulties put the future of the Program in jeopardy.

## CHAPTER 4

### A PROFILE OF NON-MOTORIZED TRAIL RECREATION IN ARIZONA

Arizona has a rich trail history. The term ‘trail’ includes different functions and uses, including recreational backcountry trails to local urban alternate transportation pathways. These differing functions and uses come with unique planning, design and funding needs.

This plan intends to identify the most significant issues related to trail use in Arizona. This chapter presents priorities from the Telephonic, Targeted and Online surveys. This chapter and the *2013-2014 Arizona State Parks Trails Study: Final Technical Report* (Budruk, Andereck, Prateek and Steffey 2014) provide sources of information for trail users to determine the issues and needs on which to focus their efforts and resources.

Information provided by Arizona’s non-motorized trail users are presented in this chapter includes:

- Estimates of trail use in Arizona with participation separated into specific recreational types and activities
- Satisfaction with trail opportunities in Arizona
- Preferences for trail settings and management level
- Environmental and social concerns on trails in Arizona
- Priorities for trail management and planning in Arizona

Survey methods and definitions are presented in Chapter 2. **Additional topics and information from the survey are presented in Appendix XX. {This updated information will be included in the final draft.}**

#### SURVEY FINDINGS FOR NON-MOTORIZED TRAIL USERS

##### Demographics

Most telephonic survey participants were full-time residents of Arizona (91.7%) and have lived in Arizona an average of 28 years. Non-motorized trail users were mostly *white, not of Hispanic origin* (78.2%) and nearly equally divided between male and female 44.1% and 55.9% respectively with a mean age of 60 years old.

## NON-MOTORIZED TRAIL USER PARTICIPATION BY ACTIVITY

This chapter presents the results for the “core” non-motorized trail users (those whose non-motorized trail use accounts for fifty percent or more of their recreational trail time) with selective comparisons between previous reports and/or snapshot comparisons between telephonic, targeted and online respondents. “Core” non-motorized telephonic respondents were asked a series of questions about their trail use and participation in various trail activities. The percentage reported, below, represents the cumulative responses from the “core” non-motorized telephonic respondents who reported how often they participated in the non-motorized activities (See table 29) as *once a year to more than once a week*. Therefore, 83% of the “core” respondents participate in *trail hiking* as the primary non-motorized activity on trails followed by *backpacking* (26.3%). Interestingly, *mountain biking* (14.5%) and *horseback riding* (14.3%) have similar participation ratings among the “core” respondents. In 2008 and 2013 *mountain biking* and *horseback riding* continue to be distinct favorable non-motorized trail activities.

**Table 29: Non-Motorized Trail Activity – Core Non-Motorized Users**

Non-Motorized Trail Activity	2013 % Non-Motorized Trail Users	2008 % Non-Motorized Trail Users
Trail Hiking	83.0	85.0
Backpacking	26.3	28.9
Mountain Biking	14.5	22.2
Horseback Riding	14.3	15.9
Canoeing/Kayaking	12.8	11.8
Cross-country Skiing/Snowshoeing	7.6	7.1

The tables below are the numbers of all Arizonans (core and non-core) who report their participation rates in non-motorized trail activities, which shows the popularity of trails and provides land managers with a perspective on the use and impact on trails. These numbers of people engaging in trail activities do not include visitors and tourists to Arizona.

### Percentage of ‘All Trail Users’ Participating in a Non-motorized Trail Activity

(includes all non-motorized trail users and mixed trail users who also use non-motorized trails)

**Table 30: Non-Motorized Trail Activity – All Participating Non-Motorized Trail Users**

Non-Motorized Trail Activity	2013 % ALL TRAIL USERS
Trail Hiking	84.4
Backpacking	31.8
Mountain Biking	17.8
Horseback Riding	16.5
Canoeing/Kayaking	15.4
Cross-country Skiing/Snowshoeing	8.5

Note: Includes all telephonic non-motorized trail users (non-core) and telephonic mixed trail users who also use non-motorized trails.

### **Trail Hiking and Backpacking**

*Trail hiking* still comprises the largest trail user group in Arizona; the 2013 survey estimates that 84.4% of all non-motorized trail users used a trail for trail hiking last year. This does not include children under age 18 or the large number of tourists and visitors that travel to Arizona each year and participate in trail hiking.

*Backpacking*, or overnight hiking, is the second largest non-motorized trail activity in the state. Arizona still has plenty of remote primitive areas and wilderness opportunities for the adventurous to explore. The 2013 survey estimates 31.8% of Arizonans who used a non-motorized trail participated in backpacking (see table 30). This number, also, does not include children under age 18 or the large number of tourists and visitors that travel to Arizona each year and participate in organized or personal backpacking trips.

### **Mountain Biking**

With the long tradition of hiking and horseback riding in Arizona, mountain bicyclists are a relatively new user group. The State Trails Advisory Committee was renamed from the Arizona Hiking and Equestrian Trails Committee to the Arizona State Committee on Trails in 1992 to include mountain bicyclists. Mountain biking remains a popular activity on non-motorized trails. According to the 2013 trails survey, 17.8% of adult residents who used a non-motorized trail are mountain bicyclists.

### **Equestrians/Horseback Riding**

Equestrians have a rich history in Arizona. Many people envision the “Wild West” when they think of Arizona—cowboys riding horses. While *horseback* riding is no longer the primary mode of transportation, the tradition is still alive in the state. The *Arizona Trails 2015 Plan* estimates that 16.5% of adult residents non-motorized trail users are equestrians. Trail riding is a popular activity throughout the state and there are many ‘horse camps’ with multiple loop trails situated in both desert and forest environments.

### **Paddle Trail Users**

Arizona is known for its arid landscape, however there is a notable portion of the public that uses paddle or water trails. Use of canoes or kayaks on many of Arizona’s rivers and streams is seasonal, depending on the water flows due to rainfall, snowmelt or upstream release of water from dams.

The major rivers in Arizona that support non-motorized boating are the Colorado, Salt, Verde and Gila Rivers. There are many smaller streams that provide seasonal canoeing and kayaking opportunities during years of heavy precipitation. The 2013 survey estimates 15.4% of adult residents canoe or kayak. Of course, Arizona has many lakes and reservoirs that are available year round to non-motorized boating. Of particular interest to future trails plan is the increase in Stand Up Paddleboarding, which has emerged as a relatively new sport and should be analyzed among non-motorized users.

The Arizona State Trails System added Paddle Trails as a separate category in the early 2000s. In 2004 the first paddle trail, the Gila Box River Trail, was nominated and accepted into the State Trails System. This paddle trail flows through a very scenic desert canyon in southeast Arizona and is a rare treat for paddlers when there is sufficient flow through the Box.

Interest and activity has increased on the upper Verde River. Facilities and opportunities are being developed upstream from the Tuzigoot Bridge. Notably, the Town of Clarkdale in collaboration with Arizona State Parks and Freeport-McMoran Copper & Gold, Inc., officially opened a Verde River access point and received federal funds to promote conservation, stewardship, provide outdoor recreation opportunities and to develop or improve existing non-motorized trails.

The table below shows a more detailed analysis of the non-motorized trail activities that take place by non-motorized users.

**In the last twelve months, how often have you participated in each of the following recreation activities on trails in Arizona?**

**Table 31: Non-Motorized Users Participation in Non-Motorized Trail Activity**

Non-Motorized Users Participation in Non-Motorized Trail Activity	% Not at all	Low Use	Moderate Use		High Use		At Least Once a Year %
		Once a year %	A few times a year %	Once a month %	Once a week %	More than once a week %	
Trail Hiking-Telephonic	16.5	12.2	34.8	17.5	11.8	6.7	83.0
Trail Hiking- Targeted	12.5	2.5	27.5	22.5	12.5	22.5	87.5
Trail Hiking- Online	5.3	6.0	34.2	20.8	19	14.8	94.8
Backpacking-Telephonic	72.7	9.8	10.2	2.9	2.4	1.0	26.3
Backpacking-Targeted	48.6	17.1	25.7	8.6	0.0	0.0	51.4
Backpacking-Online	54.9	17.4	21.6	4.9	0.4	0.8	45.1
Mountain Biking- Telephonic	85.0	2.8	4.8	3.0	2.3	1.6	14.5
Mountain Biking- Targeted	52.8	13.9	11.1	2.8	2.8	16.7	47.3
Mountain Biking- Online	27.5	0.7	4.9	5.6	10.9	50.4	72.5
Horseback Riding- Telephonic	85.3	4.3	5.2	1.5	1.3	2.0	14.3
Horseback Riding- Targeted	95.6	0.4	0.4	1.2	1.2	1.2	4.4
Horseback Riding- Online	78.9	4.9	3.8	1.1	2.6	8.7	21.1
Canoeing/Kayaking- Telephonic	86.8	5.3	5.3	1.5	0.4	0.3	12.8
Canoeing/Kayaking- Targeted	58.3	22.2	13.9	5.6	0.0	0.0	41.7
Canoeing/Kayaking- Online	69.6	11.8	14.4	2.7	1.1	0.4	30.4
Cross-Country Skiing/Snowshoeing-Telephonic	91.9	3.4	2.8	0.4	0.6	0.4	7.6
Cross-Country Skiing/Snowshoeing-Targeted	68.6	0.0	28.6	0.0	2.9	0.0	31.5
Cross-Country Skiing/Snowshoeing-Online	75.8	11.5	10.4	0.4	1.5	0.4	24.2

## Other Forms of Non-Motorized Trail Use in Arizona

In addition to the standard types of non-motorized trail use reported earlier, respondents of the survey were also asked about other purposes for trail use.

Seventy-nine percent of these respondents who used a non-motorized trail in the last twelve months used a trail for *exercise*, 71.3% for *viewing historic or archaeological sites* and 57.3% to *view wildlife or bird watch*. In addition, 30.8% and 20% used a trail to *walk or bike* (respectively) as an *alternative form of transportation*. Land managers, including city and county park managers, need to be aware of all uses of their trails.

**In the last twelve months, how often have you used non-motorized trails in Arizona for the following purposes?**

**Table 32: Non-Motorized Trail Activities**

Used Non-Motorized Trails For These Purposes	2013 Core Non-Motorized Trail Users %
Experiencing Nature	85.8
Exercising	79.5
Visiting Historic or Archaeological Sites	71.3
Wildlife Viewing or Bird Watching	57.3
Walking as a form of alternative transportation	30.8
Bicycling as a form of alternative transportation	20.0

## Satisfaction with Non-Motorized Trails in Arizona

The majority of non-motorized trail users are satisfied with trails in Arizona. A total of 93.5% of all “core” telephonic non-motorized trail users said they are *somewhat* or *very satisfied* with non-motorized trails. A little over 4% of “core” telephonic non-motorized trail users are *somewhat dissatisfied* and *very dissatisfied* with non-motorized trails. Contrary to the telephonic trail users, 79% of “core” targeted non-motorized trail users said they are *somewhat* or *very satisfied* with non-motorized trails. Targeted respondents’ dissatisfaction rates are at 20% reported as *somewhat dissatisfied* and *very dissatisfied*. The difference in satisfaction rates between the two samples should be noted.

As a measure of overall satisfaction, this response may include a number of factors important to the user. The abundance of federal lands, communities planning for trails, and year round climate not available in many parts of the country may be factors influencing Arizona residents’ satisfaction with trails. This question is likely rated high because of the overall availability and diversity of trails in Arizona, not necessarily with their condition. Trail users specific concerns with trails are discussed later in this chapter.

### Overall, how satisfied are you with non-motorized trails in Arizona?

**Table 33: Non-Motorized Trail Satisfaction**

Satisfaction with Motorized Trails	Very Satisfied		Somewhat Satisfied		Somewhat Dissatisfied		Very Dissatisfied	
	2013	2008	2013	2008	2013	2008	2013	2008
Core Non-Motorized Telephonic Trail Users	56.1%	47.3%	37.4%	39.5%	3%	3.9%	1.5%	2.3%
Core Non-Motorized Targeted Trail Users	42%	30.4%	37%	52.2%	18.8%	12.4%	1.2%	4.3%

### Trails Managed for Single or Shared Use

Most non-motorized trails in Arizona are considered “**shared use**” allowing hikers, mountain bikers and equestrians on the same trail. Some trails restrict use to a single activity based on location, terrain, safety or use considerations. There is also the issue of allowing both motorized and non-motorized uses on the same trail. Both motorized and non-motorized respondents were asked if they felt trails should be managed for single or multiple activities. The 2013 data shows the “core” telephonic non-motorized respondents think recreation trails should be managed for *multiple activities with motorized and non-motorized activities SEPARATED* (53.5%). The same sample of respondents is least likely to support the notion that recreation trails should be managed for *a single activity- EITHER motorized use OR non-motorized use only* (11.8%). The “core” telephonic motorized respondent data is available as a comparison between the two groups with regards to their trail management preferences. According to the data, the “core” telephonic motorized respondents think trails should be managed for *multiple activities with motorized and non-motorized activities COMBINED*.

### Do you think recreation trails should be managed for single or multiple trail activities?

**Table 34: Perception of Recreation Trail Management Activities**

Trails Should be Managed for:	2013 Telephonic (Random) Survey		2008 Random Survey		2003 Random Survey	
	Non-Motorized	Motorized	Non-Motorized	Motorized	Non-Motorized	Motorized
A single activity- EITHER motorized use OR non-motorized use only	11.8%	5.2%	27.2%	11.1%	30.5%	17.2%
Multiple activities with motorized and non-motorized activities COMBINED	29.3%	53.4%	13.6%	44.4%	5.7%	40.4%
Multiple activities with motorized and non-motorized activities SEPARATED	53.5%	36.8%	54.4%	38.9%	55.8%	34.8%

### Trail User Preferences Regarding Non-Motorized Trails

One section of the survey focused on respondents’ preferences for different attributes of non-motorized recreation trails; respondents were asked to rate their preference in regards to trail length and the level of difficulty. Overall, “core” telephonic non-motorized trail users prefer trails that are: *1-5 miles in length* (68.7%) *moderately varied with some ups and downs* (64.4%). Whereas, “core” targeted non-

motorized trail users prefer trails that are *6-15 miles* in length (49.3%) with *challenging trails with steep elevation gain or uneven terrain* (41.1%).

**When you use trails for *non-motorized activities* in Arizona, what *length* trail do you *most prefer*?**

**Table 35: Preferred Length of Trail for Non-Motorized Activity**

Preferences Regarding Attributes of Non-Motorized Trails												
LENGTH OF TRAIL	<1 mile			1-5 miles			6-15 miles			>15 miles		
Non-Motorized Users %	Telephonic	Targeted	Online									
	7.9	0.0	0.6	68.7	37	26.2	15.9	49.3	42.0	5.7	13.7	30.5

**When you use trails for *non-motorized activities* in Arizona, what *level of difficulty* do you *most prefer*?**

**Table 36: Preferred Difficulty of Trail for Non-Motorized Activity**

Preferences Regarding Attributes of Non-Motorized Trails									
LEVEL OF DIFFICULTY	Easy, Level or Flat Trails			Moderately Varied with Some Ups and Downs			Challenging Trails with Steep Elevation Gain or Uneven Terrain		
Non-Motorized Users %	Telephonic	Targeted	Online	Telephonic	Targeted	Online	Telephonic	Targeted	Online
	21.1	2.7	2.2	64.4	56.2	49.2	13.1	41.1	48.1

**Quality of Life**

Trails are often said to improve the overall quality of life in residents. Many trail benefits are intangible and cannot be properly reported in budget terms when funding is being decided.

The *2013-2014 Trails Survey* captured Arizona trail users’ importance of trails to overall quality of life to try and objectively report this data to decision makers. A total of 82.3% of non-core telephonic non-motorized trail users said trails are *very* or *somewhat important* to their quality of life. Non-core targeted non-motorized trail users report trails as 100% *very* or *somewhat important* followed by 98.4% for the online sample.

**How important are recreational trails to your overall quality of life?**

**Table 37: Importance of Trails to Quality of Life**

Importance of Trails to Quality of Life	Very Important %	Somewhat Important %	Not Too Important %	Not At All Important %
Telephonic Non-Motorized Trail Users	46.4	35.9	13.6	3.6
Targeted Non-Motorized Trail Users	90.0	10.0	0.0	0.0
Online Non-Motorized Trail Users	92.1	6.3	1.0	0.3

**Trail User Perceptions of Public Access to Trails**

Survey participants were asked to respond to the following question regarding access to trails - *In the past five years, do you think that access to non-motorized trail has improved, stayed the same, or declined?* The table below shows that according to the general public (“core” telephonic sample) almost

28% of the respondents believe trail access has improved. Seventeen percent of non-motorized users feel that access has declined within the same sample.

Notably, 39.2% of the “core” targeted non-motorized respondents believe trail access has improved. The percentage rates between *improved* (39.2%) and *stayed the same* (41.9%) in the targeted sample are very close unlike the telephonic sample between *improved* (27.3%) and *stayed the same* (46.7%) which should be noted by land managers.

**In the past five years, do you think that access to non-motorized trails has improved, stayed the same or declined?**

**Table 38: Improved Access to Non-Motorized Trails (Core Non-Motorized Trail User)**

Access to Non-Motorized Trails (Core Non-Motorized Trail User)	Improved %			Stayed the same %			Declined %		
	2013	2008	2003	2013	2008	2003	2013	2008	2003
Telephonic	27.3	24	13	46.7	44	34.5	17.2	11.2	18.7
Targeted	39.2	25.9	22.3	41.9	24.7	34.5	17.6	40.7	30.8

**Trail Users Perceptions of Environmental Concerns**

Perceptions of environmental concerns are important as these attitudes can affect both trail users’ satisfaction as well as the ecological integrity of the recreation setting. Survey respondents were asked a series of seven environmental concerns on a four-point scale ranging from 1=“Not a problem” to 4=“Serious problem” (5=Don’t know and 6=Refuse to answer and both were not included in the calculation of the mean). Both targeted and online "core" non-motorized users view the *erosion of trails* (M=2.93 and M=2.62 respectively) as their highest priority. The telephonic respondents ranked *litter or trash dumping* (M=2.3) as the highest followed by *erosion of trails* (M=2.24) and *decreased wildlife sightings* (M=1.99). Targeted and online respondents ranked *litter or trash dumping* as second (M=2.78 and M=2.49). The targeted sample shows *decreased wildlife sightings* (M=2.44) as its third concern, while the online sample data shows *damage to vegetation* (M=2.08) as its third highest-ranking issue.

**How much of a problem do you think each of the following environmental conditions is on trails you use most?**

**Table 39: Improved Access to Non-Motorized Trails (Core Non-Motorized Trail User)**

Perceptions of Environmental Conditions for Core Non-Motorized Users	Mean Scores		
	Telephonic	Targeted	Online
Litter or Trash Dumping	<b>2.30</b>	2.78	2.49
Erosion of Trails	2.24	<b>2.93</b>	<b>2.62</b>
Decreased Wildlife Sightings	1.99	2.44	2.00
Damage to Vegetation	1.97	2.34	2.08
Damage to Historical or Archaeological Sites	1.92	2.39	2.03
Dust in the Air	1.87	2.04	1.82
Loss of Scenic Quality	1.68	2.24	1.89

Note: Highest mean score is most important; highest importance for each group is represented with bold font.

### Trail User Perceptions of Social Conditions

Social concerns may reduce the overall quality of trail users' recreational experience. Survey respondents were asked to rate a series of nine social concerns on a four-point scale ranging from 1="Not a problem" to 4="Serious problem" (5=Don't know and 6=Refuse to answer and both were not included in the calculation of the mean).

The "core" telephonic respondents ranked *vandalism* (M=2.12) as the top concern followed by *urban development limiting trail access or use* (M=1.93). Coming in third was *closure of trails* (M=1.91).

Both "core" targeted and online non-motorized respondents ranked *urban development limiting trail access or use* (M=2.92 and M=2.8, respectively) as the highest concern. Online followed with *closure of trails* (M=2.56) and *target shooting* (M=2.41). Targeted respondents rated *target shooting* (M=2.75) as the second social condition of concern followed by *vandalism* (M=2.6). These responses are slightly different from the 2008 survey with target shooting taking on a much higher position.

#### How much of a problem do you think each of the following social conditions is on trails you use most?

Table 39: Perceptions of Social Conditions for Core Non-Motorized Users

Perceptions of Social Conditions for Core Non-Motorized Users	Mean Scores		
	Telephonic	Targeted	Online
Closure of Trails	1.91	2.59	2.56
Urban Development Limiting Trail Access or Use	1.93	<b>2.92</b>	<b>2.80</b>
Vandalism	<b>2.12</b>	2.6	2.40
Lack of Trail Ethics by Other Users	1.86	2.42	2.35
Unsafe Off-Highway Vehicle Use	1.83	2.34	2.08
Too Many People	1.69	1.89	1.84
Target Shooting	1.71	2.75	2.41
Conflict Between Users	1.52	2.08	1.85
Vehicle Noise	1.68	2.07	1.86

Note: Highest mean score is most important; highest importance for each group is represented with bold font.

### Trail User Opinions on Trail Planning and Management 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 nine questions that allowed respondents to rate the importance of various trail issues, management priorities, and support facilities.

Based upon mean scores on a scale of 1="Not a problem" to 4="Serious problem" (5=Don't know and 6=Refuse to answer and both were not included in the calculation of the mean), the top three issues for "core" telephonic non-motorized respondents were *keeping existing trails in good condition* (M=1.35),

mitigating damage to environment surrounding trails (M=1.46) and enforcing existing rules and regulations in trail areas (M=1.61). "Core" targeted non-motorized users rank *acquiring land for trails and trail access* (M=1.53) and *keeping trails existing trails in good condition* (M=1.53) as the highest priority. Based on the tie within the "core" targeted respondent sample, the targeted sample shares the same priorities with the "core" online sample **and** the "core" telephonic sample.

**Trail managers have limited resources to develop and maintain trails, and must focus their money and time on the most serious needs first. How important is each item is to you?**

**Table 40: Importance of Non-Motorized Trail Management and Funding Need**

Non-Motorized Trail Priorities Management and Funding Need	Mean Scores		
	Telephonic	Targeted	Online
Acquiring Land for Trails and Trail Access	1.79	<b>1.53</b>	<b>1.44</b>
Developing Support Facilities- Restrooms, Parking and Campsites	1.86	2.51	2.44
Providing Trail Signs	1.64	2.13	1.90
Providing Trail Maps and Information	1.67	2.30	2.05
Enforcing Existing Rules and Regulations in Trail Areas	1.61	1.99	2.13
Keeping Existing Trails in Good Condition	<b>1.35</b>	<b>1.53</b>	1.63
Mitigating Damage to Environment surrounding Trails	1.46	1.90	1.89
Providing Educational Programs/Promote Safe and Responsible Recreation	1.65	2.20	2.32
Constructing New Trails	1.95	1.91	1.71

Note. Lowest score is most important; highest importance for each group is represented with bold font.

## Volunteerism

An item that is always of challenge for trail managers is achieving more with fewer resources. Trail users see their favorite and most used areas impacted by declining agency budgets, overuse, uneducated users and other factors. A high percentage of trail users are willing to volunteer their time to assist with trail projects. Land managers recognize the value of volunteer labor but often do not have adequate staff time or resources to properly manage volunteer projects. In order for agencies to use volunteer labor more frequently and effectively, the public land agencies need to invest the time to engage and train volunteers who will take a stronger role in coordinating work events and training other volunteers. The coordination of a volunteer event involves logistical planning and pre-event work and is one of the major obstacles in holding more volunteer events.

## Willingness to Volunteer on a Trail Project—2013 Surveys

**Table 41: Willingness to Volunteer – Non-Motorized Trail Users**

Willing to Volunteer (%)	2013 Yes	2008 Yes
Telephonic Non-Motorized Trail Users	36.2	39.3/44.4
Targeted Non-Motorized Trail Users	77.8	80.7/6.8
Online Non-Motorized Trail Users	72.5	69.8/10.1

## LAND MANAGER SURVEY RESULTS

Arizona land managers were provided a separate web survey to collect their unique expertise and opinions on trail funding, management priorities, environmental concerns, social concerns and the Arizona State Parks grant administration process, among other topics.

While reviewing the survey data, it became apparent that State Agencies, Federal Agencies and Cities and Counties have different non-motorized trail concerns and needs for the lands they manage. The results of the survey have been separated for each of these groups. In addition, the response rates varied widely, as mentioned in Chapter 2. Please note the sample sizes in the charts provided.

### Non-Motorized Trail Environmental Impacts for Arizona Land Managers

Managers were asked to rate seven environmental issues that might be impacted by trail use.

The three most problematic environmental conditions, on non-motorized trails, for Arizona city and county land managers are: *soil erosion*, *habitat fragmentation* and *damage to vegetation*. The three most problematic environmental conditions, on non-motorized trails, for Arizona state land managers are *soil erosion*, *increase in invasive species* and *damage to vegetation*. The federal land agencies located in Arizona are concerned with *soil erosion*, *increase in invasive species* with a tie for third place between *damage to vegetation* and *impacts to water*.

Notably, *increase in invasive species* is the least of environmental concerns to city and county land managers in Arizona but to the state and federal land agencies, *increase in invasive species* is the second most notable problem regarding trails. *Decrease in wildlife sightings* is consistently on the lower end of concerns for all three groups.

### Non-motorized Trail Environmental Impacts for Arizona Land Managers

Regarding trails, how much of a problem is each of the following environmental issues to you?

**Table 42: Perceived Environmental Impact Issues for Non-Motorized Trail Users**

	#1 Issue	#2 Issue	#3 Issue	#4 Issue	#5 Issue
<b>Cities and Counties</b> n=20	Soil erosion	Habitat fragmentation	Damage to vegetation	Decreases in wildlife sightings	Increase in invasive species
<b>State Agencies</b> n=19	Soil erosion	Increase in invasive species	Damage to vegetation	Habitat fragmentation	Decreases in wildlife sightings Impacts to water quality
<b>Federal Agencies</b> n=26	Soil erosion	Increase in invasive species	Damage to vegetation Impacts to water quality	Habitat fragmentation	Decreases in wildlife sightings

Ranking is based on the mean of a four-point scale where 1=not a problem, 2=minor problem, 3=moderate problem and 4=a serious problem; *highest* score is most important.

**Non-Motorized Trail Social Conditions for Arizona Land Managers**

Managers were asked to rate eleven social conditions that might be impacted by trail use.

The three most problematic social conditions on non-motorized trails for Arizona city and county land managers are: *vandalism, inappropriate user behavior* and *users not staying on designated trails*. The three most problematic social conditions, on non-motorized trails, for Arizona state land managers are: *users not staying on designated trails, unsafe or unprepared trail users* and *inappropriate user behavior*. The federal land agencies within Arizona are concerned with *unsafe or unprepared trail users* and *vandalism* as tie for first place, *destruction and/or removal of signs* as a second issue with another tie between *inappropriate user behavior* and *users not staying on designated trails*. A social condition that rated as one of the lowest was *fence cutting* in both the federal and state agencies. Again, an inconsistency between federal agencies and Arizona cities/counties are apparent.

**Non-motorized Trail Social Conditions for Arizona Land Managers**

Regarding trails, how much of a problem is each of the following social conditions to you?

**Table 43: Perceived Social Conditions for Non-Motorized Trail Users**

	#1 Issue	#2 Issue	#3 Issue	#4 Issue	#5 Issue
<b>Cities and Counties</b> (n=20)	Vandalism	Inappropriate user behavior	Users not staying on designated trails	Unsafe or unprepared trail users	Destruction and/or removal of signs
<b>State Agencies</b> (n=20)	Users not staying on designated trails	Unsafe or unprepared trail users	Inappropriate user behavior	Fence cutting	Destruction and/or removal of signs Vandalism
<b>Federal Agencies</b> (n=27)	Unsafe or unprepared trail users Vandalism	Destruction and/or removal of signs	Inappropriate user behavior Users not staying on designated trails	Trail braiding	Fence cutting

Ranking is based on the mean of a four-point scale where 1=not a problem, 2=minor problem, 3=moderate problem and 4=a serious problem; highest score is most important.

**Non-Motorized Trail Funding Priorities for Arizona Land Managers**

Managers were asked to rate eleven issues that relate to the management of non-motorized trails. Their priorities are quite diverse and noticeably different from the past survey.

The top three priority funding issues for non-motorized trails for city and county agencies are: *construction of new trails, development of new trail support facilities* and *acquisition of land for new trails and trail access*.

The top three priority funding issues for non-motorized trails for state agencies are: *routine maintenance of trails, renovation of existing trails and facilities, prevention, restoration, and mitigation of damage to areas surrounding trails*.

The top three priority funding issues for non-motorized trails for federal agencies are: *routine maintenance of trails, completion of environmental/cultural clearances and regulations and renovation of existing trails and facilities.*

**How important are each of the trail management areas to your agency and trail needs?**

**Table 44: Topic(s) of Importance to Agency and Trail Needs**

	#1 Issue	#2 Issue	#3 Issue	#4 Issue	#5 Issue
<b>Cities and Counties (n=20)</b>	Construction of new trails	Development of new trail support facilities	Acquisition of land for new trails and trail access	Routine maintenance of trails	Developing and printing trail maps and information
<b>State Agencies (n=20)</b>	Routine Maintenance of Trails	Renovation of existing trails and facilities	Prevention, restoration and mitigation of damage to areas surrounding trails	Developing and printing trail maps and information	Construction of new trails Development of new trail support facilities Enforcement of laws and regulations
<b>Federal Agencies (n=28)</b>	Routine maintenance of trails	Completion of environmental and cultural clearance and regulations	Renovation of existing trails and facilities	Purchase of installation and trail signs	Implementation of education programs promoting responsible and safe trail use

Ranking is based on the mean of a five-point scale where 1=not at all important, 2=slightly important, 3=neither important nor unimportant, 4=somewhat important and 5=extremely important; *highest* score is most important.

**NON-MOTORIZED TRAIL PRIORITY RECOMMENDATIONS — ISSUES AND ACTIONS**

The findings from the telephonic, targeted, online and land manager survey are used to compile a comparative analysis of the priority issues for non-motorized trail recreation, which is the *Arizona Trails 2015 Plan*.

This section takes these priority issues and presents them as recommendations for managers and trail users. The first and second level priority recommendations are from those issues that consistently ranked the highest. These recommendations reflect statewide priorities; local and regional priorities may differ. Recommendations within each level are in no particular order. Arizona State Parks acknowledges that all recommendations are important for effective management of trail resources and many are inter-related.

**A summary listing of the recommendations is followed by a more detailed explanation of each issue with recommended actions.**

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”. The recommendations from this plan are used to influence the overall direction for Arizona State Parks, land managers and trail users in

their efforts to improve the State of Arizona’s non-motorized trail opportunities. The priority recommendations for non-motorized trail use are considered when distributing the available funds administered by Arizona State Parks for trails construction and maintenance and trail facility development.

On July 6, 2012, the President signed into law P.L. 112-141, the Moving Ahead for Progress in the 21st Century Act (MAP-21). It leaves the Recreational Trails Program (RTP), a Federal-aid program codified in Federal statutes under section 206 of title 23, United States Code (23 U.S.C. 206) unchanged. The RTP is a Federal-aid assistance program to help states provide and maintain recreational trails for both motorized and non-motorized recreational trail use. The Act authorizes funds to be apportioned to each state. The Governor of Arizona designated the Arizona State Parks Board as the administrator of Arizona’s portion of the RTP monies. The RTP Act defines a recreational trail as a “thoroughfare or track across land or snow, used for recreational purposes such as: pedestrian activities, including wheelchair use; skating or skateboarding; equestrian activities, including carriage driving; non-motorized snow trail activities, including skiing; bicycling or use of other human-powered vehicles; aquatic or water activities; and motorized vehicular activities, including all-terrain vehicle riding, motorcycling, snowmobiling, use of off-road light trucks or use of other off-road motorized vehicles.”

This is the only source of non-motorized trail funds currently available through State Parks grants.

**Priority Non-Motorized Trail Recommendations**

**Table 45: Non-Motorized Recreation Recommendations**

<b>First Level Priority Non-Motorized Trail Recommendations</b>
Routine Maintenance of Trails
Renovation of Existing Trails and Support Facilities
Acquire Property or Easements for Trail Access
Mitigate and Restore Damage to Areas Surrounding Trails
<b>Second Level Priority Non-Motorized Trail Recommendations</b>
Construct New Trails
Develop Support Facilities
Provide and Install Trail Signs
Provide Educational Programs
Enforce Existing Rules and Regulations
Provide Maps and Trail Information

Managers of non-motorized recreational trails are encouraged to concentrate on the following actions. Trail users and partners are encouraged assist with many of these recommended actions.

## **First Level Priority Recommendations for Non-motorized Trails**

### **Routine Maintenance and Renovation of Existing Trails**

Issue: Non-motorized trails in the State are often eroded and deteriorated. This is 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. Trash and litter continue to be one of the public's biggest concerns. On the other side, land managers are facing a severe lack of financial resources and drastic cut backs on agency-funded crews.

#### Actions:

- Identify maintenance needs and actively seek out grants, partnerships and volunteers to supplement trail budgets.
- Prioritize reconstruction needs and incorporate sustainable trail design when reconstructing/maintaining trails.
- Provide education about the litter problem (emphasize Pack It In—Pack It Out).
- Partner with volunteer groups such as trail clubs and Keep Arizona Beautiful to coordinate clean-up efforts.
- Provide trash bags or other litter control means (receptacles should only be used in areas where it is feasible to empty trash cans regularly).

### **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 the city or county general development plans. Land managers need to coordinate between jurisdictions to preserve the continuity of trails.

#### Actions:

- Implement more comprehensive planning with projections into the future to identify access needs, unprotected access points for trails, and acquire land for existing and proposed trails and trail access, easements and right-of-ways, as well as connector trails linking different jurisdictions.
- Coordinate trail access needs with users/stakeholders, involving them throughout the planning process.
- Support/host workshops coordinated through ASCOT and/or other trails and community groups that educate the trails managers and planners on the importance of protecting trail access.
- 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.
- Ensure that trails are accessible for individuals with physical disabilities.

## **Mitigation and Restoration of Damage to Areas Surrounding Trails**

Issue: Protection of Arizona's natural and cultural resources is important to both the public and land managers. Areas surrounding trails become damaged for a host of reasons; improper trail design causing erosion, users moving off the trail, overuse, and creation of unauthorized trails. Managers need to prevent and also work to restore and mitigate damage to areas surrounding trails. The public perceives decreased wildlife sightings and damage to vegetation and cultural sites near trails as moderate problems. Land managers perceive damage to vegetation and increased invasive species along trails as moderate to serious problems, and habitat fragmentation and decreased wildlife sightings along trails as slight to moderate problems.

### Actions:

- Rectify or reduce existing damage caused by trail use to natural or cultural resources along trails. This may include rerouting, revegetation, invasive species treatment, trail realignments, or temporary closures.
- Incorporate sustainable trail design when reconstructing/maintaining trails.
- Seek innovative ways to provide educational signage on vegetation and wildlife habitat in the area and the human impacts. Emphasize the need for users to stay on trails.
- Install unobtrusive barriers around sensitive areas along trails, such as wetlands or archaeological sites, or consider rerouting trails, if appropriate. The use of wildlife blinds and viewing platforms help reduce impacts to wildlife and habitats.
- Maintain viable wildlife habitats and linkages through identification and protection of sensitive areas and important wildlife corridors.

## **Second Level Priority Recommendations for Non-Motorized Trail Use**

### **Develop/Construct New Trails**

Issue: There is demand for new trail opportunities in communities 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. Development of new trails should include accessibility issues for the physically challenged wherever possible. The other "new" trail that is in demand in many areas is the "connecting" trail or link between two existing trails that provides a loop.

### Actions:

- Develop trail opportunities for specific activities (i.e., single-track trails for mountain bikes, competitive events, geo-caching) where appropriate.
- Encourage cities, counties and towns to adopt planning and zoning ordinances to protect access to trails.
- Develop more close-to-home trail opportunities.
- Develop new trails, emphasizing sustainable design, in areas experiencing high population growth to meet demand.
- Plan for "connector" trails to expand the trail opportunities in established trail areas.

### **Develop Support Facilities**

Issue: In addition to the actual trail corridor, users often require support facilities to aid in the area's use and activities. Well-designed support facilities, accessible to all users, increase the user's experience and satisfaction along with protecting the natural resources, and keeping areas clean and free of litter and waste. Support facilities include structures such as restrooms, water faucets, trash bins, parking areas, kiosks, picnic sites, campsites, wildlife blinds, viewing platforms and shelters.

Actions:

- Develop trailheads with adequate parking, restrooms, drinking water and litter control (such as providing individual litter bags or trash cans where appropriate).
- Develop picnic sites or campsites in conjunction with the trailhead, where appropriate.
- Develop individual overnight campsites or shelters along long trails frequented by backpackers.
- Support facilities should be accessible to all users; comply with ADA guidelines.

### **Provide and Install Trails Signage**

Issue: Users need a number of different kinds of signage to safely and enjoyably pursue their trail experience. Locator signs that lead people to trailheads and parking areas, directional signs along the trail, destination signs to let people know they have reached end points, interpretive signs that describe the natural or cultural history of the area, and regulatory signs that explain the do's and don'ts of the area are important trail components. Increased trail use in remote areas is causing the need for more emergency rescues. Providing periodic trail markers that can be referenced with global positioning system (GPS) information leads to quicker rescues which save money.

Actions:

- Develop signage that includes route marking and access signage; include both trailhead kiosks and individual trail signs.
- Develop consistent inter-agency universal standards for signage.
- Provide bilingual signage.
- Provide interpretive signage that helps users understand and appreciate the need for protection of natural areas and cultural sites, and why regulations should be followed.
- Consider providing signs and information that allow users to determine if the trail is accessible for their individual capabilities (e.g., length, width, tread and slope).
- Provide location indicators at frequent intervals on the trail to assist first responders in locating lost hikers. Land managers must provide accurate trail information to local rescue coordinators.

### **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 increasing environmental impacts.

Actions:

- Promote “share the trail” and emphasize cooperation, tolerance and respect for other trail users.
- Increase bilingual education resources for trail etiquette and environmental education.
- Work with educators to incorporate trail etiquette and environmental ethics material into existing school and youth programs.
- Emphasize educational messages that promote self-responsible behaviors, such as Pack It In—Pack it Out, Tread Lightly! and Leave No Trace.
- Have rules and regulations posted at trailheads for users.
- Make allowable trail uses known to users through trail signage, maps and brochures.
- Bilingual educational messages should be emphasized year after year to reach visitors and new resident trail users.

**Enforcement of Existing Rules and Regulations/Monitoring**

Issue: Trail rules and regulations are often unknown or ignored by users. People not following existing rules and laws create conflicts with other users and adjacent landowners. Different jurisdictions may have different rules regarding trail use which change as the trails cross land management boundaries that are not always clearly marked. 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 patrol all trails. Enforcing existing laws and regulations gives them weight and importance.

Actions:

- Promote volunteer programs with clubs and individuals to patrol and monitor trail use and educate users about the regulations.
- Request assistance from enforcement entities within the area.
- Install complaint registers or provide enforcement contacts (phone numbers) for trail users to report inappropriate use.
- Impose heavier fines for repeat offenders.
- Install regulatory signs and rules of conduct where appropriate.

**Provide Trails Information and Maps**

Issue: Trail users need accurate maps that lead them to existing trails and provide key information about safe and responsible use of the trails. Keeping up-to-date maps available at trails sites is difficult.

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.

### **Trail Managers are Encouraged to Promote Coordinated Volunteerism**

The investment in a volunteer coordinator will be returned many times over. Volunteers are a valuable supplement to an agency's labor force. Trail users are willing to help build and maintain trails along with monitoring and educating users. A volunteer coordinator can:

- Provide volunteer trainings for trail maintenance techniques.
- Enlist selected volunteers to take a leadership and coordinate volunteers trail projects.
- Work with volunteers who can seek grants and partnerships to support agency goals.

### **Trail Managers are Encouraged to Promote Regional Planning/Interagency Coordination**

Better communication between agencies is important to ensure a clear understanding of agency plans and policies. There is a need to standardize trail rules, regulations and enforcement such as signage. Agencies should:

- Collaborate with neighboring agencies to interconnect trail systems and share resources.
- Develop regional trail system plans and involve relevant agencies, organizations, and users in all planning efforts.
- Consult regularly with surrounding jurisdictions to coordinate trail connections and consistent signage between systems.
- Support programs such as the Wildlife Linkages Assessment, Invasive Species task force, and Watchable Wildlife programs.
- Involve the recreational users in planning efforts and keep them informed of new policies and changes in management. Their skills and knowledge will become your asset.

### **Trail Users are Encouraged to Become Part of the Solution**

If you are passionate about trails and/or the environment, find ways to exercise your passion. Seek out opportunities to participate in activities that are rewarding to you. Take on some responsibility and multiply your efforts. Participate in planning efforts.

## **STATE TRAILS PROGRAM ACCOMPLISHMENTS**

### **Arizona State Committee on Trails (ASCOT)**

The Arizona State Committee on Trails (ASCOT) is a fifteen-member committee. ASCOT is appointed by and serves in an advisory capacity to the Arizona State Parks Board. The overall mission of the State Trails Program is to promote, develop, and preserve non-motorized trail opportunities throughout the state for mountain bikers, hikers, equestrians, trail runners, cross-country skiers, and water trail users.

ASCOT assists the State Trails Program through:

- Review and recommend the State Trails System (Arizona Premier Trails – see below) nominations to the Arizona State Parks Board for final approval.

- Serve as a liaison to the State Parks staff in the grant rating process.
- Assist with the Statewide Trails Plan.
- Use priorities identified in the Statewide Trails Plan to make recommendations for the grant criteria used to evaluate proposed trail projects and distribute the Arizona State Parks administered trail funds. *Every 5 years or as Staff and/or Committee see a need for change.*

ASCOT has persevered over the past few years to continue its presence on the state trail scene despite the departure of the State Trails Coordinator. In December 2011 they reaffirmed their intent to continue to:

- Promote the State Trail System (Arizona Premier Trails) by suggesting improvements to the State Parks website.
- Continue periodic meetings including the State Recreational Trails Advisory Committee meeting in conjunction with the state motorized users group as required under the federal Recreational Trails Program to maintain eligibility for funds.
- Solicit and review nominations and recommend new trails for the State Trails System (Arizona Premier Trails).
- Conduct a workshop annually.

### **The State Trails Program Hosts Trail Trainings**

One of the focuses of the State Trails Program is to host trainings for both land managers and volunteers who work on trails. The Program aims to keep trainings low cost while imparting the knowledge and skills offered in national trainings. Federal Recreational Trails Program (RTP) Education Funds have been very useful in hosting trainings in Arizona.

#### **Trainings Provided:**

**Trails and Volunteering Workshop** was held on Saturday, May 22<sup>nd</sup>, 2010. An impressive list of local presenters tutored about 60 people.

**Strategic Planning: From Concept to Reality** was held on December 4<sup>th</sup>, 2010 at the Rio Salado Audubon Center. Noted trails management trainer, Kim Frederick addressed the group and facilitated a panel discussion on trail development.

**Linking Communities through Trails** was coordinated in conjunction with the annual Arizona Trail Association meeting at Mormon Lake Lodge on September 23, 2011. Presenters emphasized the importance of bringing long distance trail users into the communities near those trails.

**Arizona Hosts both the American Trails “International Trails Symposium” and the Partnership for the National Trails System “14<sup>th</sup> Biennial National Scenic and Historic Trails Conference” in 2013.**

In the spring of 2012 ASCOT and State Parks began the process to secure the **American Trails** biennial trails conference for Arizona. A consortium of communities and businesses was developed to prepare

an offer American Trails could not refuse. The symposium was hosted April 14-17, 2013 at the Radisson Hotel and Conference Center on the Ft. McDowell Yavapai Nation northeast of Phoenix. For this event American Trails expanded the involvement of motorized trail enthusiasts and reached out to international trails partners. ASCOT and State Parks played a key role in coordinating volunteer assistance. One of Arizona's premier volunteer non-motorized trail organizations, TRACKS ([www.tracks-pinteop-lakeside.org](http://www.tracks-pinteop-lakeside.org)) was honored with the National Award for Community Service. More information about the conference can be found at: <http://www.americantrails.org/2013/index.html>

The **Partnership for the National Trails System** selected the Westward Look Wyndham in Tucson for their 14<sup>th</sup> conference November 3-6, 2013. Once again ASCOT provided volunteers and many current and former ASCOT members were involved in the presentations. More information about the conference can be found at: <http://www.pnts.org/conference>.

ASCOT and State Parks acknowledge the federal Recreational Trails Program for their funding support for both conferences through State Parks grant agreements.

### State Trail System

Vision Statement: *Arizona's State Trails System is an invaluable resource, offering a diversity of quality non-motorized 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."*

The State Trails System was established to recognize and promote non-motorized trails *of special interest or significance* to Arizona's residents and visitors. This system consists of non-motorized trails that are managed mostly by partners of Arizona State Parks. The assessment of the condition of this system is the basis for this State Trails Plan.

When the Heritage Fund was established in 1990, it included language requiring trails to be in the State Trails System to be eligible for Trails Heritage Grant Funds. A.R.S. §41-501. Definitions; Heritage Fund: In this Article: . . . 2. "Trails" are those trails for non-motorized use nominated for inclusion in the state trails system, including urban, cross-state, recreation, interpretive or historic trails. This caused the system to balloon to over 800 trails and diminished the aspects of special interest and significance. This caused many problems with assuring the integrity of the trails. The State Parks Heritage Fund statute was repealed in 2010 and new trails have been accepted on a limited basis since then using the existing criteria developed by ASCOT and State Parks staff.

ASCOT has always wrestled with the management of the database and promotion of such an extensive system of trails. In 2012 ASCOT's State Trails System Subcommittee began a process to identify how best to manage the system. Trail users expect detailed information on the condition, difficulty, and location of the trails they are interested in. The main drawback to publication of trail information on a statewide website or through a phone application is that all information must be current and verified, especially global positioning system (GPS) data. Collecting that data for 800+ trails from a variety of trail managers is prohibitive. Also, most trail managers provide this information on their own websites.

Recently, in May of 2014, the Arizona State Parks Board authorized ASCOT to freeze the nomination process for the current State Trails System and investigate the development of a new system that focuses only on *trails of special interest or significance* to Arizona's residents and land managers. They have named the new system "Arizona Premier Trails" and identified the categories for trails that will be included in the new system: National Trail System, Historic, Interpretive, Recreation, Scenic, Water, and Trail Systems. Nomination criteria and a selection process that will include public participation are being finalized. They are also working on plans to promote the trails. Once approved by the Arizona State Parks Board, the new trail system will become the basis for the next state trails plan. The current State Trails System data will be archived with minimal updating.

## CHAPTER 5

### GRANTS AND FUNDING

#### GRANTS AND PARTNERSHIPS

Since the Arizona Trails 2010 trails plan was written Arizona and the rest of the country has suffered through and rebounded from serious economic hardships, but not without damage. The State Parks Board portion (\$10 million) of the Arizona Heritage Fund (A.R.S. § 41-503) was repealed. This eliminated \$500,000 annually in non-motorized trails development funds. Federal agencies have lost many talented people to retirement and budget reductions. Passionate trail advocates have learned that offering to assist with new projects and routine work produces much better results than relying on the agencies. The agencies also look for sources of additional funding through cost share agreements and grant programs. Arizona State Parks participates in these partnerships by supporting trail and OHV planning efforts with the statewide data found in this plan, and by awarding grants and other funded services to eligible applicants.

The Arizona State Parks Board currently administers two motorized and two non-motorized trail funding sources. One source for both motorized and non-motorized trail funding is the federal Recreational Trails Program (RTP). This is the one program that has been continuous and unaffected by the state's economic conditions.

#### **The Federal Highway Administration – *Recreational Trails Program (RTP)***

On July 6, 2012, the President signed into law P.L. 112-141, the Moving Ahead for Progress in the 21st Century Act (MAP-21). It leaves the Recreational Trails Program, a Federal-aid program codified in Federal statutes under section 206 of title 23, United States Code (23 U.S.C. 206) unchanged. The program provides funds for all kinds of recreational trail uses, such as pedestrian uses (hiking, running, wheelchair use), bicycling, in-line skating, equestrian use, cross-country skiing, snowmobiling, off-road motorcycling, all-terrain vehicle riding, four-wheel driving, or using other off-road motorized vehicles. Each state develops its own procedures to solicit projects from project sponsors, and to select projects for funding, in response to motorized and non-motorized recreational trail needs within the state. The MAP-21 Act provides funding through 2014. Arizona is currently obligating funds apportioned in federal years 2012 under the 109<sup>th</sup> Congress enacted the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). The future of the RTP is uncertain. Once the SAFETEA-LU legislation expired in 2009 the bill was continued periodically by resolution of Congress until the new transportation bill (MAP-21) was signed in 2012. MAP-21 expires at the end of September 2014 and continuing resolutions are expected to extend funding until the next transportation bill is signed. The RTP portion of the transportation bill is always up for discussion and considerable lobbying by trails advocacy groups is required to sustain it.

Arizona State Parks is the agency responsible for administering RTP funds in Arizona. The projects portion of Arizona's RTP funds must be divided between motorized (30%), non-motorized (30%), and

diverse (40%) trail projects. Funding from the RTP requires a National Environmental Policy Act (NEPA) assessment and matching funds.

RTP requires each State to establish a State Recreational Trail Advisory Committee (SRTAC) that represents both motorized and non-motorized recreational trail users. Yearly, Arizona convenes two of the Parks Board's standing advisory committees: the Off-Highway Vehicle Advisory Group (OHVAG), and the Arizona State Committee On Trails (ASCOT) to discuss the RTP. State Parks, through discussions with the SRTAC, divides the fund equally between motorized and non-motorized trail projects throughout the state. This larger joint committee and other key stakeholders assist State Parks in:

- Developing project sponsor criteria (which kinds of project sponsors may receive grants).
- Developing project eligibility criteria (which kinds of projects the State would consider for funding).
- Developing project evaluation and selection criteria.
- Providing guidance to determine compliance with the diverse trail use requirement.
- Determining appropriate State policy to determine matching share criteria.

The SRTAC has determined that the 30/30/40 sub-distribution requirement for the program can be met by dividing the apportioned funds equally between motorized and non-motorized uses.

Information on the Recreational Trails Program can be found at the Federal Highways website: [www.fhwa.dot.gov/environment/recreational\\_trails](http://www.fhwa.dot.gov/environment/recreational_trails) The program guidance can be found at: [http://www.fhwa.dot.gov/environment/recreational\\_trails/guidance/](http://www.fhwa.dot.gov/environment/recreational_trails/guidance/)

RTP guidance requires each State develop its own procedures to solicit projects from project sponsors, and to select projects for funding, in response to recreational trail needs within the State. The RTP encourages all kinds of trail enthusiasts to work together to provide a wide variety of recreational trail opportunities.

### **State Parks RTP Trails Maintenance Program—Non-motorized Trails**

The non-motorized portion of the Recreational Trails Program monies has primarily been used to fund maintenance of existing trails since 2001. The need for maintenance on existing trails in Arizona has been one of the top priority recommendations of the all trails plans since 2000. Land managing agency budgets have been shrinking and staff for trail maintenance has been difficult to keep. The State Parks RTP Trail Maintenance Program has continued to meet the needs of trail managers and has been refined to be easily accessible. State Parks contracts directly with trail maintenance crews, such as youth conservation corps and other trail maintenance providers, to remove the need for individual contracts or agreements with trail managers. In 2008 the trail maintenance contract was expanded to include a crew that provides mechanized trail building and one of the existing contractors has added mechanical equipment to their program.

Funds are offered every other year and generally capped at \$30,000 to \$50,000 per applicant. Trail managing agencies complete a simple application form that identifies the trails they intend to maintain and the amount they need, up to the cap. Projects are selected through a process that insures statewide distribution of the funds. The project sponsors must provide documentation to support compliance with federal National Environmental Policy Act (NEPA) and state and federal historic preservation requirements (Section 106). The non-federal match portion of the project cost is usually satisfied with volunteer labor.

The program was initially limited to routine maintenance on existing trails to simplify the NEPA/Section 106 compliance process. In 2010 project sponsors were allowed to include the construction of short new trail segments designed to connect existing trails to provide loop opportunities and realignment outside the original trail corridor if the project sponsor could provide the more detailed documentation required for the NEPA/Section 106 process.

State Parks Trail Maintenance Projects were solicited in early 2011. Twenty-two projects were selected requesting \$760,313. The projects were required to be completed by November 30, 2012. Two other selections were made in conjunction with the grant cycles offered in July 2012 and January 2014.

Table 46: State Parks RTP Trail Maintenance Projects 2009-2014

STATE PARKS RTP TRAIL MAINTENANCE PROJECTS 2009-2014					
DATE FUNDED	PROJECT NUMBER	PROJECT SPONSOR	TRAILS INCLUDED	TOTAL FUNDING	TOTAL W/MATCH
2011	RTPNM11001	Alpine RD	Aker Lake Bicycle Trail (4.8 mi), Aker Lake/KP Connection Trail (.2 mi), Fish Creek Trail (11.7 mi), Fish Creek Bench (.8 mi), Clell Lee Groomed Ski Loop (4.4 mi), Horse Ridge Trail (4 mi)	\$51,040	\$54,472
2011	RTPNM11002	Avondale	Monument Hill Trail (2800 ft)	WD	
2011	RTPNM11003	Black Canyon City	Black Canyon Heritage Park Trail (.5 mi)	\$38,385	\$40,966
2011	RTPNM11004	Cave Creek RD	Palo Verde Trail #512 (4.7 mi) Jojoba Trail #511 (1.3 mi)	\$38,990	\$41,612
2011	RTPNM11005	Flagstaff RD	Mt. Elden Lookout (2.5 mi), Fatman's Loop (1.3 mi), Sunset (4.5 mi), Little Gnarly (2 mi)	\$40,000	\$42,689
2011	RTPNM11006	Glendale	H-2 (1.5 mi), H-2A (.12 mi), H-3 (2.86 mi), H-3A (.15 mi), H-4 (1.26 mi)	\$40,000	\$42,689
2011	RTPNM11007	Globe RD	West Pinto Creek Trail #212 (8.9 mi)	\$37,727	\$40,264
2011	RTPNM11008	Hassayampa FO	Hassayampa River Wilderness Trail (1.5 mi), Black Canyon National Recreation Trail (80 mi)	\$36,465	\$38,917
2011	RTPNM11009	Kingman FO	Cherum Peak Trail (3 mi), Foothills Rim Trail (10 mi), Twenty-six Wash Trail (7 mi), Wabayuma Peak Trail (3 mi)	\$37,983	\$40,537
2011	RTPNM11010	Lost Dutchman SP	Treasure Loop Trail (2.25 mi), Prospectors Trail (.75 mi), Crosscut Trail (1.25 mi)	\$35,730	\$38,132
2011	RTPNM11011	Lower Sonoran FO	Quartz Peak Trail (3 mi), Painted Rock Heritage Trail (.5)	\$16,395	\$17,497
2011	RTPNM11012	Maricopa County	Rainbow Valley Trail (3 mi), Pedersen Trail (3 mi)	\$33,525	\$35,779
2011	RTPNM11013	Mogollon RD	Arizona Trail (FR 123 n to FR 751, 6 mi), Arizona Trail (FR 211 n to FR 82, 3.2 mi)	\$33,000	\$35,219
2011	RTPNM11014	Mesa RD	Trail 235 (2 mi), Trail 236 (2 mi), Trail 106 (3 mi)	\$38,330	\$40,907
2011	RTPNM11015	Pleasant Valley RD	Trail 144 (4.5 mi), Trail 139 (7 mi), Trail 254 (5 mi), Trail 140 (3 mi)	\$37,200	\$39,701
2011	RTPNM11016	Scottsdale	Pinnacle Peak Trail (800 ft)	\$37,200	\$39,701
2011	RTPNM11017	Safford FO	Safford Morenci Trail (18 mi), Cottonwood Trail (3 mi)	\$40,000	\$42,689
2011	RTPNM11018	Tonto Basin RD	Park Trail #66 (4.9 mi), Gold Ridge Trail #47 (5 mi), South Fork Trail #46 (7.5 mi), Deer Creek Trail #45 (85 mi)	\$40,000	\$42,689
2011	RTPNM11019	Tusayan RD	Arizona Trail (s boundary Kaibab NF to Moqui Station, 4.85 mi)	\$11,000	\$11,740
2011	RTPNM11020	Williams RD	Laws Spring (1 mi), Oveland (2 mi), Key Sink (1 mi), City of Williams Link (1 mi), Clover Spring (1 mi), Scholz Lake (.5 mi), Kendrick Mtn (4 mi), Deadman (.8 mi), Benham (4.5 mi), Pumpkin (5.5 mi), Bull Basin (4.5 mi), Ponderosa (.5 mi), Dogtown Lake (1.8 mi), Sycamore Rim (11 mi), Parks Rest Area Nature (.5 mi), Beale Wagon Rd (11 mi), Davenport (2.5 mi), Route 66 Hiking (.88 mi), Summit Mtn (1.1 mi), Sycamore View (1.2), Bixler Saddle (2 mi), Spring Valley Cross Country Ski (8 mi), Connector Trails (1.5 mi), Arizona Trail (11 mi), Vishnu Ovrlook (1.5 mi), Red Butte (1 mi), Tusayan Mtn Bike (25.1 mi), Ten-X Nature Trails (.7 mi)	\$38,500	\$41,089

STATE PARKS RTP TRAIL MAINTENANCE PROJECTS 2009-2014					
DATE FUNDED	PROJECT NUMBER	PROJECT SPONSOR	TRAILS INCLUDED	TOTAL FUNDING	TOTAL W/MATCH
2011	RTPNM11021	Tonto Basin RD	AZ Trail	\$39,844	\$42,523
2011	RTPNM11022	Fool Hollow Lake RA	Lake Trail	\$38,998	\$41,620
12/4/12	471273	Bradshaw RD	Prescott Circle Trail	\$31,915	\$34,061
12/4/12	471274	Payson RD	Donahue Trail 27, West Webber Trail 228, Turkey Springs Trail 217, East Webber Trail 289, See Spring Trail 185, Myrtle Trail 30, Babe Haught Trail 143, Horton Springs Trail 292, See Canyon Trail 184, Drew Trail 291	\$40,000	\$42,689
12/4/12	471275	San Pedro RNCA	San Pedro Trail System	\$38,250	\$40,822
12/4/12	471276	Verde RD	Oxbow Trail 163, Tule Rim Trail 162, Coldwater Springs Trail 27	\$40,000	\$42,689
12/4/12	471277	Santa Catalina RD	SCRD trails	\$40,000	\$42,689
12/4/12	471371	Kingman FO	Cherum Peak Trail, Mohave Milltown Trail, Wabayuma Peak Trail, Monolith Gardens, Badger Trail, Castle Rock Trail, Missouri Springs Trail	\$40,000	\$42,689
12/4/12	471372	Lost Dutchman SP	Prospector Trail, Crosscut Trail	\$40,000	\$42,689
12/4/12	471373	Globe RD	Telephone Trail 192, Pioneer Trail 196, Six Shooter Trail 197, Ice House Trail 198, Kellner Trail 242	\$40,000	\$42,689
12/4/12	471374	Tusayan RD	Tusayan RD: AZ Trail, Vishnu Overlook, Red Butte, Tusayan Mtn. Bike, Tes-X Nature Trails. Williams RD: Laws Spring, Overland, Keyhole Sink, City of Williams Link, Clover Spring, Scholz Lake, Kendrick Mtn., Deadman, Benham, Pumpkin, Bull Basin, Ponderosa, Dogtown Lake, Sycamore Rim, Parks Rest Area Nature, Beal Wagon, Davenport, Route 66 Hiking, Summit Mtn., Sycamore View, Bixler Saddle, Spring Valley Cross Country Ski, Connector Trails	WD	
12/4/12	471375	Mogollon Rim RD	U-Bar Trail 328, Barbershop Trail 91	\$40,000	\$42,689
5/20/14	471470	Catalina SP	Bridle Trail	\$30,000	\$32,017
5/20/14	471471	Chino Valley	Yew Thicket Trail #52	\$30,000	\$32,017
5/20/14	471472	Douglas RD	Snowshed Trail #246, Crest Trail #270, Southfork Trail #243	\$30,000	\$32,017
5/20/14	471473	Pinal County	Arizona Trail Passages 14 & 15	\$30,000	\$32,017
5/20/14	471474	Wickenburg Conservation Fdtn	Sophie's Flat Trail, Redtop Trail, feeder trails	\$21,130	\$22,551
<b>RTP TRAIL MAINTENANCE TOTAL</b>				<b>\$1,251,608</b>	<b>\$1,335,761</b>

NF=National Forest    RD=Ranger District    FO=Field Office    SP=State Park    RA=Recreation Area

## New Trail and Support Facilities Grant Projects Are Solicited

In July 2012 after a four-year absence of the state lottery supported Trails Heritage Fund, State Parks offered a portion of the RTP non-motorized funds as grants to allow new trail and support facility development. The grants process is different from the trail maintenance project selection in that state grant statutes must be adhered to and a competitive evaluation process must be outlined and followed. NEPA/Section 106 and matching funds requirements must be met. The grants also allow a wider range of eligible scope items.

Grant projects were capped at \$100,000. Twenty-six grant projects were submitted requesting \$1.9 million. Available funding could only support thirteen of the projects at about \$1 million.

Trail maintenance projects were also solicited and capped at \$40,000. Sixteen projects were submitted requesting \$608,665 with ten being funded at \$388,665.

Grants and trail maintenance projects were solicited again in January 2014. The caps for both types of projects were lowered to encourage a wider distribution of the fund. Grant projects could request up to \$80,000 and the trail maintenance projects were limited to not more than \$30,000. Thirteen grant projects requesting \$560,229 were received. Only ten could be funded at \$434,360. Five of the ten trail maintenance projects requesting \$291,130 were funded at \$141,300.

Since the 2010 State Trails Plan was completed sixty-six new non-motorized trail projects have been selected to receive more than \$3 million dollars.

State Parks will continue to solicit non-motorized grant and trail maintenance projects in January of each year through announcement via the State Parks website, E-Civis, Grants.Gov, and direct email.

**Table 47: State Parks RTP Grant Projects 2010-2014**

STATE PARKS RTP GRANT PROJECT 2010-2014					
DATE FUNDED	PROJECT NUMBER	PROJECT SPONSOR	PROJECT TITLE	TOTAL FUNDING	TOTAL W/MATCH
9/15/10	471042	Flagstaff	FUTS Signing Improvements	\$227,777	\$368,510
9/15/10	471043	Coconino NF - Red Rock RD	Red Rock Trail System Signage Development	\$14,499	\$17,650
12/4/12	471232	Apache-Sitgreaves NF, Springerville RD	Mt. Baldy/Little Colorado River Loop Restoration	\$45,712	\$50,791
12/4/12	471233	A Apache-Sitgreaves NF, Alpine RD	Foote/Steeple Loop Restoration	\$71,986	\$79,984
12/4/12	471234	Volunteers for Outdoor Arizona (VOAZ)	Highline Trail Renovation	\$100,000	\$138,569
12/4/12	471235	Black Canyon City Community Assn	Black Canyon Heritage Park Trail Improvements	\$75,105	\$83,697
12/4/12	471236	Lake Havasu City	SARA Park Trail Improvements	\$52,012	\$91,613
12/4/12	471237	City of Bullhead City	Colorado River Nature Center Trail Improvements	\$93,552	\$123,508
12/4/12	471331	Pine Strawberry Fuel Reduction, Inc.	Barefoot Trail Construction	\$44,623	\$56,485
12/4/12	471332	Coconino County	Rogers Lake Trail System Development	\$96,860	\$129,200

STATE PARKS RTP GRANT PROJECT 2010-2014					
DATE FUNDED	PROJECT NUMBER	PROJECT SPONSOR	PROJECT TITLE	TOTAL FUNDING	TOTAL W/MATCH
12/4/12	471333	Saguaro National Park	Carrillo Trail Re-route	\$71,147	\$79,052
12/4/12	471334	Apache-Sitgreaves NF, Clifton RD	Clifton Rim Trails Restoration	\$52,472	\$58,302
12/4/12	471335	Tonto NF, Mesa RD	Butcher Jones Trail Renovation	\$59,300	\$63,500
12/4/12	471336	Graham County	Graham County Park Trail Improvements	\$100,000	\$112,000
12/4/12	471337	International Mountain Biking Assn (IMBA)	Prescott Circle Trail Improvements	\$99,400	\$114,300
12/4/12	471338	City of Holbrook	Hidden Cove Park Trail Improvements	\$99,815	\$122,516
10/16/13	471339	Old Spanish Trail Assn.	Scholarships to the 14th National Scenic and Historic Trails Conference	\$15,000	\$15,957
12/4/12	471340	Pine Strawberry Fuel Reduction, Inc.	Pine Canyon Trail Construction	\$40,127	\$51,445
12/4/12	471245	American Trails, Inc.	2013 International Trails Symposium	\$35,000	\$40,000
5/20/14	471430	Coconino NF Red Rocks RD	Red Rocks Trail Enhancements	\$80,000	\$242,747
5/20/14	471431	Mohave County	Dolan Springs Trail Improvements	\$28,574	\$33,422
5/20/14	471432	Apache-Sitgreaves NF Lakeside RD	White Mountain Trail System	\$15,346	\$56,486
5/20/14	471433	Tonto NF Mesa RD / AZ Trail Association	Arizona National Scenic Trail (McFarland Canyon-Mt Peeley)	\$47,054	\$52,798
5/20/14	471434	Arizona State Parks	Arizona State Parks Signage Project	\$13,545	\$28,884
5/20/14	471435	Apache-Sitgreaves NF Alpine RD	Blue Mountain Trail Restoration Project	\$32,808	\$42,152
5/20/14	471436	Apache-Sitgreaves NF Black Mesa RD	Black Mesa Trail Main. & Improvement	\$52,400	\$68,556
5/20/14	471437	Coronado NF Nogalas RD	Florida/Crest Trail Project	\$24,600	\$30,099
5/20/14	471438	Prescott NF Bradshaw RD	Almosta Trail System Development	\$74,556	\$83,594
5/20/14	471439	Coronado NF Safford RD	Mt. Graham Trail Maintenance and Kiosk Installation	\$65,477	\$88,419
<b>TOTAL RTP GRANT PROJECTS</b>				<b>\$1,828,747</b>	<b>\$2,524,236</b>

NF=National Forest      RD=Ranger District

**Arizona Trail Fund**

The other non-motorized fund that State Parks administers is the **Arizona Trail Fund** (A.R.S. § 41.511.15), established consisting of legislative appropriations and donations to the fund. The monies in the fund are continuously appropriated for the sole purpose of maintaining and preserving the Arizona Trail that extends approximately 800 miles between the southern and northern borders of the state. The Arizona National Scenic Trail was designated as such on March 30, 2009 by the Omnibus Public Land Management Act of 2009. State Parks works with the Arizona Trail Association and other partners to approve funding for projects that best meet the needs of the Arizona National Scenic Trail and comply with the statutory intent of the legislation. In 2007, the first year the fund was established, the legislature appropriated \$250,000. In the next two years \$125,000 was appropriated for each year. However, in mid-2009 the State Legislature rescinded all unused funds. There has been no appropriation since. Donations to the Arizona National Scenic Trail are generally made directly to the Arizona Trail Association. For more information visit the website at: AZTRAIL.ORG

NOTE: The Arizona Trails 2010: A Statewide Motorized & Non-Motorized Trails Plan contains a complete review of the funds expended. That plan can be accessed at the State Parks website: <http://azstateparks.com/publications/index.html>

**State of Arizona – Off-Highway Vehicle Recreation Fund (OHV FUND)**

In addition to the motorized portion of the Recreational Trails Program, State Parks administers the state Off-Highway Vehicle Recreation Fund (Fund) (A.R.S. §28-1176) created in 1991. The Arizona Legislature appropriates .55% of state's annual vehicle gas tax revenue to support the Fund. In 2009 new OHV legislation was enacted to provide more regulation of OHV usage and additional funds to support law enforcement and facility development. All vehicles weighing less than 1800 pounds and designed primarily for travel over unimproved terrain are required to display an indicia (sticker) distributed through the Department of Motor Vehicles. The \$25 cost of the sticker is added to the OHV Recreation Fund. State Parks receives 60% of the money in the Fund and the State Parks Board is required to examine applications for eligible projects and determine the amount of funding, if any, for each project based on criteria derived from the priority recommendations in this plan.

The State Parks Board allocates the Fund annually based upon the Statewide OHV Program plan and the recommendations of the Off-Highway Vehicle Advisory Group (OHVAG) and Arizona Outdoor Recreation Coordinating Commission (AORCC). The Fund monies are available to develop an OHV program and fund grants based on the priorities of the state trail plan, including: acquisition, construction, and maintenance of OHV routes and trails; enforcement of OHV laws; information and educational programs; signage and maps; mitigation of damages to land, and prevention and restoration of damages to natural and cultural resources; and environmental and cultural clearances and compliance activities.

The last “normal” motorized grant cycle was conducted in 2009 funded solely with the motorized portion of the federal Recreational Trails Program. Three projects were selected to receive \$521,580.

In 2010 the revenue from the OHV Recreation Fund was allowed by the state legislature to return to its intended use and at that time the additional revenue from the new “sticker” legislation boosted the State Parks share from the Fund to over \$2 million dollars annually. Getting that money to the ground in the form of desirable projects was a challenge.

An expedited process to select desirable projects known as the “Sticker Project Selection Process” was devised. Competitive evaluation was not involved and projects were selected by the OHVAG from applicants who had existing master agreements with State Parks, primarily the Forest Service and Bureau of Land Management, based on the priority needs of the statewide OHV program. In the next year five project selection cycles were conducted awarding \$2.4 million in state OHV Recreation Fund and \$730,000 in federal RTP funds to 50 projects.

After June 2011 the grants staff created a competitive process and comprehensive evaluation form with input from the OHVAG and AORCC. This process allowed all applicants that manage motorized trails, including non-profit organizations with established agreements with a land managing agency that allows them to make improvements on federal property, to be considered for funding. From June of 2012 through June of 2014 five funding cycles have been completed awarding \$2 million in state OHV Recreation Fund and \$1.5 million in RTP funds to 28 projects.

Motorized grant funds are currently offered twice a year in January and July through announcement via the State Parks website, E-Civis, Grants.Gov, and direct email.

See Chapter 3 for more information on the Statewide OHV Program and other uses of the state Off-Highway Vehicle Recreation Fund.

**Table 48: Off-Highway Vehicle Project Funding Programs 2009-2014**

OFF-HIGHWAY VEHICLE PROJECT FUNDING PROGRAMS							
DATE FUNDED	OHV PROJECT NUMBER	RTP PROJECT NUMBER	PROJECT SPONSOR	PROJECT TITLE	OHV FUNDING	RTP FUNDING	TOTAL PROJECT COST
10/11/09		470901	BLM-Hassayampa FO	Table Mesa/Heiroglyphics OHV Area Development		\$203,835	\$230,920
10/11/09		470902	BLM-Grand Canyon Parashant NM	GCPNM Travel Info/Signage Development		\$41,445	\$46,050
10/11/09		470903	Economic Development for Apache County	Saffel Canyon Trail Reno's		\$276,300	\$307,000
6/16/10	571001		Tonto NF-Mesa RD	Rolls OHV Area Renovations	\$60,250		\$79,425
6/16/10	571002		BLM-Kingman FO	OHV Signage and Kiosk Improvements	\$10,790		\$10,790
6/16/10	571003		Apache-Sitgreaves NF-Lakeside RD	Maverick Trail Improvements	\$20,000		\$20,000
6/16/10	571004		Mohave County	Hualapai Mountain Park OHV	\$100,000		\$100,000

OFF-HIGHWAY VEHICLE PROJECT FUNDING PROGRAMS							
DATE FUNDED	OHV PROJECT NUMBER	RTP PROJECT NUMBER	PROJECT SPONSOR	PROJECT TITLE	OHV FUNDING	RTP FUNDING	TOTAL PROJECT COST
				Improvements			
6/16/10	571005		Prescott NF	Prescott NF OHV Trail Improvements	\$60,000		\$60,000
6/16/10	571006		Tonto NF-Globe RD	Pipeline OHV Area Improvements	\$34,384		WD
6/16/10	571007		BLM-Hassayampa FO	Castle Hot Springs OHV Area Improvements	\$17,197		\$17,197
6/16/10	571008		BLM-Hassayampa FO	Boulders OHV Staging Area Dust Treatment	\$40,236		\$40,236
6/16/10	571009		BLM-Hassayampa FO	Hassayampa FO Law Enforcement Equipment	\$20,177		\$20,177
6/16/10	571010		BLM-Hassayampa FO	Little Pan OHV Staging Area Improvements	\$42,861		\$42,861
10/20/10		471001	Mohave County	Hualapai Mountain Park OHV Area Improvements		\$150,000	\$165,000
10/20/10	571011		BLM-Hassayampa FO	Table Mesa OHV Area Improvements	\$32,380		\$32,380
6/16/10	571012		BLM-Hassayampa FO	Table Mesa OHV Area Kiosks	\$10,858		\$10,858
6/16/10	571013		Tonto NF-Cave Creek RD	Bartlett Lake Rd North OHV Improvements	\$98,800		WD
10/20/10	571014		Tonto NF-Cave Creek RD	Bartlett Lake Rd South OHV Improvements	\$24,380		WD
6/16/10	571015		BLM-AZ State Office	2011 Ambassador Program Operation	\$110,000		\$140,000
10/20/10	571016		Coconino NF-Red Rock RD	Red Rock OHV Area Improvements	\$150,000		\$150,000
10/20/10	571017		Apache-Sitgreaves NF	Kids in the Woods Program	\$87,696		WD
2/25/11	571018		Community Forest Trust	Prescott NF OHV Ambassador Program	\$18,500		\$18,500
6/23/11	571019		Coconino Rural Environment Corps	OHV Ambassador Program	\$75,000		\$75,000
2/25/11	571020		Arizona State Parks	OHV Ambassador Program Equipment	\$25,000		\$40,000
2/25/11	571021		Prescott NF	Williamson Valley/Hayfield OHV Improvements	\$35,600		\$35,600
5/20/11	571101	471101	Coconino NF	Coconino NF Kiosks	\$6,500	\$116,800	\$128,440
5/20/11	571102	471102	Coconino NF	Coconino NF TMR Signing	\$6,000	\$103,573	\$114,748
5/20/11	571103	471103	Coconino NF-Flagstaff RD	Cinder Hills OHV Area Access Road / Improvements	\$18,000	\$275,000	\$345,500
5/20/11	571104	471104	Kaibab NF	Kaibab NF TMR Signing	\$6,000	\$84,000	\$95,745
5/20/11	571105		Game & Fish Dept	OHV Safety Video	\$136,680		\$150,980
5/20/11	571106		Coconino County Sheriff's Office	OHV Law Enforcement Equip.	\$52,000		\$52,000
6/23/11	571107		Town of Wickenburg	Downtown Trailhead	\$100,000		\$100,000
6/23/11	571108		BLM-Arizona State Office	OHV Ambassador Program	\$163,800		\$193,800
6/23/11	571109		BLM Hassayampa FO	Boulders / Table Mesa OHV Areas Site Steward	\$66,000		\$94,000
6/23/11	571110		BLM Hassayampa FO	Boulders, Table Mesa OHV Trail Maintenance	\$13,000		\$105,000
6/23/11	571111		Tonto NF - Cave Creek RD	OHV Road Renovations North of Bartlett Lake Rd	\$104,800		\$110,800

OFF-HIGHWAY VEHICLE PROJECT FUNDING PROGRAMS							
DATE FUNDED	OHV PROJECT NUMBER	RTP PROJECT NUMBER	PROJECT SPONSOR	PROJECT TITLE	OHV FUNDING	RTP FUNDING	TOTAL PROJECT COST
6/23/11	571112		Tonto NF - Cave Creek RD	OHV Road Renovations South of Bartlett Lake Rd	\$26,380		\$30,780
6/23/11	571113		Tonto NF - Cave Creek RD	OHV Equipment Purchase (UTV)	\$14,255		\$15,855
6/23/11	571114		Game & Fish Dept	OHV Law Enforcement Equipment Purchase	\$99,845		\$105,100
6/23/11	571115		BLM Hassayampa FO	Table Mesa Trail System Access Guides	\$5,500		\$5,500
6/23/11	571116		BLM Hassayampa FO	Little Pan Rd #9998 Reno / Dust Mitigation Project	\$70,600		\$85,600
6/23/11	571117		PRfect Media, Inc.	OHV Program Media Support	\$50,000		\$50,000
6/23/11	571118		Arizona State Parks	OHV Ambassador Program	\$62,800		\$62,800
6/23/11	571119		RideNow Mgmt, LLLP	OHV Ambassador Program	\$15,000		\$15,000
6/23/11	571208		STATE PARKS	OHV Media Support Program	\$50,000		\$50,000
6/23/11	571209		BLM-Arizona State Office	2013 OHV Ambassador Prog	\$155,200		\$155,200
6/23/11	571210		STATE PARKS	In-House OHV Projects	\$50,000		\$50,000
<b>STICKER FUND PROJECT SELECTION TOTALS – JUNE 2009 THROUGH JUNE 2011</b>					<b>\$2,346,469</b>	<b>\$729,373</b>	<b>\$3,758,842</b>
6/20/12	551201	471201	Coconino NF-Red Rock RD	Stoneman Lake/Apache Maid OHV Area Improvements	\$61,666	\$88,334	\$165,000
6/20/12	551202	471202	Tonto NF-Cave Creek RD	Desert Vista Trail System - Phase I	\$75,000	\$60,127	\$147,391
6/20/12	551203	471203	BLM-AZ Strip FO	Travel Management Plan Implementation	\$116,233	\$110,586	\$653,542
6/20/12		471204	Coconino NF-Flagstaff RD	Munds Park OHV Area Improvements		\$64,508	\$74,849
6/20/12		471205	American Conservation Experience	Mazatzal Wilderness Boundary Signing		\$79,970	\$89,728
6/20/12	551204		Tonto NF-Cave Creek RD	Desert Vista/St Claire Management Presence	\$40,259		\$49,835
6/20/12	551205		Maricopa County Parks	Vulture Mtn Regional OHV Park Environmental Assess.	\$69,950		\$80,050
6/20/12	551206		BLM-Kingman FO	Route Evaluations	\$30,000		\$33,350
3/20/13	551301	471301	Coconino NF, Flagstaff RD	Kelly Motorized Trails, Phase I	\$131,516	\$158,309	\$344,134
3/20/13	551302	471302	Apache-Sitgreaves NF, Lakeside RD	Maverick Trail Maintenance & Renovation	\$87,176	\$41,666	\$145,117
3/20/13	551303		BLM-Kingman FO	KFO Travel Management	\$61,410		\$84,810
3/20/13	551304		Coconino Trail Riders	CTR Equipment Purchase	\$15,207		\$50,105
3/20/13	551305		BLM-Tucson FO	Middle Gila Canyons OHV Management	\$97,000		\$119,000
3/20/13	551306		BLM-Yuma FO	YFO Travel Management	\$113,800		\$154,600
3/20/13	551307		BLM-Lake Havasu FO	LHFO Travel Management	\$72,100		\$104,600
3/20/13	551308		AZ Game & Fish Dept	Alamo Wildlife Area Trail Signing	\$3,000		\$4,792
9/18/13	551309		Tonto Recreation Alliance, Inc. (TRAL)	Adopt-A-Trail Program	\$53,000		\$63,080
9/18/13	551310		Tonto NF	Tonto Motorized System Cultural Survey	\$88,956		\$119,537
9/18/13	551311	471311	Prescott NF	Alto Pit OHV Area System Renovations	\$5,000	\$54,816	\$66,593

OFF-HIGHWAY VEHICLE PROJECT FUNDING PROGRAMS							
DATE FUNDED	OHV PROJECT NUMBER	RTP PROJECT NUMBER	PROJECT SPONSOR	PROJECT TITLE	OHV FUNDING	RTP FUNDING	TOTAL PROJECT COST
9/18/13	551312	471312	Coconino NF, Red Rock RD	Red Rock OHV Improvements, Phase II	\$161,165	\$83,612	\$244,777
9/18/13	551313	471313	Coconino NF, Flagstaff RD	Cinder Hills Dust Abatement	\$12,000	\$198,000	\$211,581
9/18/13	551314		Tonto NF, Payson RD	OHV Recreation NEPA Planning	\$131,000		\$147,399
9/18/13	551315		BLM - AZ Strip FO	TMP Implementation Coordinator	\$91,000		\$121,467
1/15/14	551401		Mohave County	Hualapai OHV Phase III	\$300,000		\$300,000
1/15/14	551402		AZ Game & Fish Dept	OHV Safety Education Program Development	\$22,500		\$32,081
6/20/14	551403	471403	Mesa RD	Mesa RD OHV Rehabilitation / Improvements Project	\$86,885	\$282,855	\$503,958
6/20/14	551404	471404	Apache-Sitgreaves NF	Forest Wide OHV Maint / Renovations Project	\$77,944	\$262,000	\$359,919
6/20/14	551405		Safford FO	Hot Well Dunes OHV Improvements	\$15,218		\$22,016
<b>STATEWIDE OHV PROGRAM GRANT TOTALS – JUNE 2012 THROUGH JUNE 2014</b>					<b>\$2,018,985</b>	<b>\$1,484,783</b>	<b>\$4,493,311</b>
<b>TOTAL OFF-HIGHWAY VEHICLE PROJECT FUNDING PROGRAMS</b>					<b>\$4,365,454</b>	<b>\$2,214,156</b>	<b>\$8,252,153</b>

RD=Ranger District    NF=National Forest    FO=Field Office

## **GRANT APPLICATION AND ADMINISTRATION PROCESSES**

Responses from the survey regarding grant processes and administration of grants indicate that approximately 40% of the respondents felt grants were somewhat to very difficult to apply for and administer. First of all, State Parks as the fiduciary of public funds must be accountable to the public for the use of those funds. Every process from identifying the projects and evaluating them to awarding funds and monitoring the use of those funds is based in statutory requirements, either state or federal. Since State Parks is entering into a “contract” with the project sponsors and money is changing hands, nothing can be assumed, thus extensive descriptions and disclosures.

Grants staff understands that most of the people who apply for State Parks’ grant funds are not “grant writers” and has attempted to provide as much instruction as possible to assure that the application is complete and accurate. On the first page of the grant manual potential applicants are encouraged to contact grants staff to help with the process. In the last two years staff has required all applicants to contact the grants staff and program coordinator to discuss the scope of their project and submit cost estimate sheets prior to submission of the application. Both of these measures help to insure that the grants staff and the project sponsors understand how the grant funds will be spent.

Many comments suggested uses for grant funds that are currently available or processes that are currently in place. Some suggest that funds be provided without a defined work plan or completion date. These comments clearly indicate that communication between grants staff and project sponsors needs to improve. Grants staff is available and interested in discussing potential projects all year long. Non-motorized trail project grants and State Parks RTP Trail Maintenance Program non-motorized routine trail maintenance projects are solicited once a year in January. The federal Recreational Trails Program (RTP) is the only source of funds for non-motorized projects. Motorized projects are solicited twice a year in January and July. Federal (RTP) and state funds are used to fund these projects. Project sponsors are “strongly encouraged” to contact the State Parks grants staff at least six months prior to these solicitations to discuss potential projects.