

UTAP

Universal Trail Assessment Process

Breaking News...

UTAP re-designed for the 21st Century

Check out the **new and improved** trail assessment process
- UTAP 2000! -

It's more streamlined, universal and suitable for diverse trail environments.

Also Inside:

- **Craters of the Moon Receives Award for Trail Signage**
- **TrailWare in 2003**
- **Update on Trail Accessibility Guidelines**
- **UTAP Train-the-Trainer Project Finishes**
- **UTAP Trainer Recertification**
- **Congrats to New UTAP Trainers**
- **Congrats to Newly Certified TACs**
- **Upcoming UTAP Coordinator Workshops**
- **Upcoming UTAP Trainer Course in June 2003**
- **...and more!!**

Providing access, mapping, usage, and maintenance information

UTAP for the 21st Century

Have you heard of **UTAP 2000**?

The Universal Trail Assessment Process (UTAP) is now new and improved. Originally developed in 1995, the UTAP has been dramatically revised for the 21st Century. Data collection has been **streamlined and expanded** to create a **universal assessment strategy for all paths of travel in outdoor environments** (e.g., recreation trails, access routes, shared use paths). The UTAP is now **faster and easier** to do and provides information on trail maintenance, conservation, construction, mapping, level of access, interpretation, and use. **UTAP 2000 information is now primarily designed to benefit land managers** by providing them with objective information about the conditions on their trails. Land managers can also use the information to better inform trail users of the conditions that they will encounter through the dissemination of Trail Access Information.

UTAP 2000 differs significantly from the original process because it is:

- **Streamlined**
Basic UTAP 2000 data collection (grade, cross slope, surface, width, and features) can now be **completed at a slow walking pace, by a team of two or three people**. The time required depends on the trail conditions and level of detail desired by the land manager. Trails with consistent

conditions are faster to assess than those in difficult, constantly changing terrain. Managers who want to collect very detailed information (e.g. construction methods and materials, detailed sign and facility inventories, documentation of specific species) can do so, but at a slower speed.

- **Universal**
UTAP 2000 has been redesigned to meet all of the data collection needs of land management agencies. Gone is the sole focus on accessibility. The **new focus is objective trail information** that can be used for any trail-related work, including conservation, environmental monitoring, accessibility, planning, design, mapping, interpretation, user access and safety, construction and maintenance.
- **Diverse**
The “standard” **UTAP 2000** procedures are designed for unpaved, front-country recreation trails. “Modified” **UTAP 2000** procedures have been designed for a range of applications, including shared use paths, back-country recreation trails, long-distance trails, trail maintenance and construction planning, and new trail layout.

How can **UTAP 2000** information be used?

The Universal Trail Assessment Process can be used to:

- Create a standardized record of existing trail conditions and maintenance needs.

- Monitor specific trail features to enhance planning/budgeting of trail needs.
- Balance access and barrier removal with conservation of the natural resource.
- Provide information that enhances the safety of all trail users (i.e., not just hikers).
- Enhance user enjoyment through the selection of trails appropriate to individual skills, interests and experience.

Why create **UTAP 2000**, a universal assessment strategy for outdoor paths of travel? Originally, the UTAP was developed with funding from the National Institutes of Health specifically to determine the level of access on recreation trails for people with disabilities. The focus was solely on accessibility, primarily for people using wheelchairs. As we worked on UTAP implementation with a wide variety of land management agencies we received a lot of feedback about the potential benefits of an objective assessment process. Our land management partners educated us about the need for reliable, objective information for a variety of issues such as conservation, construction, maintenance, mapping, interpretation, budget preparation, and trail planning and design. They also helped us to understand more clearly the resource limitations (both staff and materials) that influence trail work. We also received valuable input from a broad range of disability organizations that, along with our own research, more clearly identified the level of detail required to enable trail users to



Taking trail measurements

make informed decisions about trail access. Finally, through the people we had trained to do the UTAP measurements we learned that it could be applied to any path of travel in an outdoor environment. Based on the knowledge and experience gained over the first five years we realized that the benefits of the UTAP could be substantially increased with the adoption of a universal approach. Significant work over the past three years has resulted in **UTAP 2000**, a universal assessment strategy for outdoor paths of travel. **Many, many thanks to all those who helped expand the UTAP horizons!**

What are people saying about UTAP 2000?

UTAP 2000 has received tremendous support, particularly from people who learned the original UTAP between 1995-

1999 and realize the changes that have taken place. Hugh Osborne, with the National Park Service Rivers, Trails & Conservation Assistance Program in Denver, attended a UTAP Update Clinic at the National Trails Symposium, and had these comments:

"The UTAP is a remarkable tool to fully assess trails and provides all the information users and managers need. The UTAP information is more useful to the field manager than other assessment tools such as Maximo. The refinements to the UTAP have made the process more accurate and easier to use, as well as easier for people to learn and understand what is measured and how to do the measurements. The UTAP measures what is actually on the ground and provides objective information for users to decide if the trail is accessible for them."

The creation and improvement of the TrailWare software makes recording and displaying the assessment data a breeze. In the last year, more people are asking for and even demanding the information and data that are provided by the UTAP."

Karl Knapp, California Parks and Recreation – Sierra District, who uses and teaches the UTAP comments:

"Being involved with UTAP since the early 1990's we see UTAP as more than a valuable trail assessment tool that provides core data for our agency and our users. The UTAP process centralizes design criteria that are required for all outdoor recreation pathways and trail issues. Surfacing, obstructions, grades and clearances are core design values that need to be incorporated into all outdoor recreation situations the California Department of Parks and Recreation deal with. The UTAP process helps institutionalize these design values in everyday maintenance and rehabilitation of pathways and trails."

Art Needleman, with the U.S. Fish & Wildlife Service in New Mexico recently updated his knowledge of the UTAP when attending the UTAP Trainer Course and had these comments:

"The benefits of UTAP are two-fold. Land management agencies are able to measure and assess trails with the final result being information that is clear and accurate to all levels of users. Secondly, land

management agencies are able to use the same information as a means to determine short-term and long-term maintenance needs, usually before a problem becomes a major expenditure. The newer approach to UTAP broadens the scope of benefits to all users, and presents more usable information on trails.”

How do I know if I learned the new and improved UTAP?

The UTAP has been in a process of refinement since its creation in 1995. The newest version of the UTAP Training Guide (© 2002) provides the details of the **UTAP 2000** approach and measurement

techniques. If you attended a UTAP Coordinator Workshop in the last couple of years (e.g., 2000 or later) then you are ready to assess trails using **UTAP 2000**, a universal assessment strategy for outdoor paths of travel.

Want to learn more about UTAP 2000?

A variety of opportunities are available to help you learn and apply **UTAP 2000**.

- Details of the assessment procedures are available in the **Universal Trail Assessment Process Training Guide** (©2002).

- A 5-hour **UTAP Update Clinic** is available to individuals who attended the original UTAP Coordinator Workshops.
- **UTAP Coordinator Workshops** continue to be offered throughout North America.

Check the American Trails website (www.americantrails.org) for training dates and locations or contact Beneficial Designs for more information at (831) 429-8447 ext 113 or send an email to [<trails@beneficialdesigns.com>](mailto:trails@beneficialdesigns.com).

Don't live in the past, get all the benefits of **UTAP 2000** today!

Are Your Surfaces Firm and Stable?

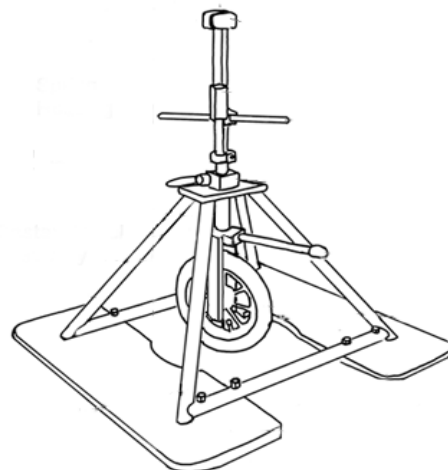
From soil, to grass, to wood chips, to asphalt, in order to be considered accessible, **surfaces must be “firm and stable”**. Firmness is the resistance to a force pushing down on the surface. Stable surfaces do not shift with twisting or sideways forces.

The **Rotational Penetrometer** is the **only portable tool** that objectively measures the firmness and stability of **any surface**. For only \$1,990 plus shipping you can be sure that all of the surfaces in your facility meet the requirements of the Americans with Disabilities Act. Designed to be lightweight for use on trails, the rotational penetrometer can also be used to assess indoor surfaces such as carpet or tile. The instruction manual provided makes learning to use the rotational penetrometer quick and easy, just:

- Stand on the base
- Place the penetrometer wheel on the surface
- Release the calibrated spring and read the measure of firmness
- Rotate the penetrometer wheel and read the measure of stability

Research, funded by the Access Board, has demonstrated that the Rotational Penetrometer is accurate and reliable. A copy of the research report is included with each Rotational Penetrometer purchased, and information about the performance readings for firm, moderately firm, stable and moderately stable surfaces are also available on the Access Board web site (www.access-board.gov).

Order your Rotational Penetrometer today from Beneficial Designs, tel: (775) 783-8822, fax: (775) 783-8823, email: surfaces@beneficialdesigns.com.



Rotational Penetrometer – a portable tool for measuring the firmness and stability of indoor and outdoor surfaces

Craters of the Moon National Monument Recognized for New TAI Signage

Craters of the Moon National Monument in Arco, Idaho, has been awarded the **National Park Service 2002 National Design Project Achievement Award (Exhibits and Waysides)** for their efforts to provide all visitors, including those with disabilities, with Trail Access Information (TAI) in a variety of formats.

Staff determined that the best place to provide the Trail Access Information was on signs located at each trailhead. The signage provides visitors with information on all eight trails within the developed area of the Monument. Visitors can use this information to determine if a particular trail meets their interests and abilities. Since visitors also need this information for pre-trip planning, published, and electronic versions were also developed.

To develop the signage and information the staff began by using the Universal Trail Assessment Process to conduct assessments of their trails and obtain accurate measurements of grade, cross slope, tread width, surface characteristics, and potential obstructions along the trails. The data were entered into TrailWare for analysis and to develop formats for providing visitor information.

Congratulations to Craters of the Moon for their multi-disciplinary effort to conduct assessments and to design and install signage



Craters of the Moon National Monument - Arco, Idaho

that provides Trail Access Information to all visitors. To see more on the work of Craters of the Moon visit their website at www.nps.gov/crmo/hikingaccess.htm. More information on the award they received is available at http://www.nps.gov/access/awards/exhibits_waysides/2002.htm.

UTAP Products and Services

Just a reminder that a variety of training materials, services and products are available from Beneficial Designs. We can:

- provide you with the personnel to perform a full trail assessment,

- train your staff or volunteers to conduct their own assessments,
- assist you with processing your trail data using TrailWare to create standard Trail Access Information (TAI) and signage, or
- create custom signage for trail head signs, pocket maps, audio trail descriptions or trail guide books.

We also distribute a full trail assessment tool kit along with the individual tools that you may need for performing your trail assessments. The newest addition to our selection of “tools” for conducting trail assessments is the availability of legal-size data collection forms on waterproof (i.e., “write-in-the-rain”) paper. Feel free to give us a call in either our Minden (775-783-8822) or our Santa Cruz (831-429-8447) offices. We will be happy to answer any questions you might have regarding ordering or purchasing products. For questions about TrailWare software please contact the Santa Cruz office (831-429-8447). Also feel free to send an email to <trails@beneficialdesigns.com>, and we will route it to the most appropriate team member to respond to your needs.

TrailWare in 2003

Agencies and organizations across the U.S. and Canada, from local volunteer trail groups to large land management agencies, are busy evaluating TrailWare 2.0 to assist Beneficial Designs in developing a user-friendly and efficient software program. Since September 2002 the testers have

been entering and analyzing their own trail data in order to thoroughly evaluate the use of TrailWare under “real world” conditions. TrailWare enables easy entry and analysis of data collected with the Universal Trail Assessment Process. TrailWare also provides reports for trail managers and Trail Access Information for trail users. The success of the beta-evaluations done to date are illustrated by:

- The entry and analysis of data for over 400 trails that are now available on the Trail Explorer (www.trailexplorer.org).
- Creation of Trail Access Information for the trail map of Humber Arboretum in Toronto, Canada.
- Development of Trail Access Information signage for trails at Craters of the Moon National Monument in Arco, Idaho.

Beneficial Designs also has been busy developing new TrailWare modules to provide additional analysis and reporting functions. TrailWare modules currently

under development include:

- Computerized development of a grade profile with surface shading.
- Advanced land manager reporting, including data summary calculations, search and find options, and more advanced reporting and exporting capabilities.
- Guidelines comparison for published accessibility criteria for all types of outdoor paths (e.g., trails, outdoor recreation access routes, accessible routes, beach access routes, shared use paths, public rights of way) and customized comparisons for user-determined criteria.
- Hand-held data entry on-trail with direct download into TrailWare.

TrailWare development and testing will continue at a rapid pace over the next few months as we work towards completion of the research project. **TrailWare will be available FREE** to people who would like to try the software before purchasing. The **120-day**

The Trail Detail screen allows for narrative trail information to be entered.

trial version will allow agencies, organizations, and individuals to “test drive” TrailWare before they buy. For more information on obtaining a 120-day evaluation version of TrailWare contact <trails@beneficialdesigns.com>.

UTAP Trainer Recertification?

Calling all UTAP Trainers! We want to know what you think!

Many UTAP Trainers have raised the issue of trainer recertification. Ultimately they ask, “What do we have to do to remain certified as a UTAP Trainer?” They have also made a wide variety of recommendations related to the issue of trainer. Ultimately, the key benefit of using UTAP to create and disseminate Trail Access Information is the availability of standardized, reliable information about on-trail conditions. Our ability to ensure the accuracy and reliability of Trail Access Information rests with the quality of the UTAP Coordinator Workshops and, therefore, with the people who lead these training opportunities. The fundamental question is:

How can we ensure that UTAP Trainers have the most up-to-date knowledge?

If you are a UTAP Trainer (Level 1, 2 or 3), we want to hear from you! **Let us know whether or not you think that UTAP Trainers should be required to re-certify on a regular basis.** If you think that they should re-certify regularly, let us know:

- How often?

- What actions or additional training or experience should be required?

Suggestions that we have already received include: Teaching a minimum of one UTAP Coordinator Workshop or

Assessing a minimum of one mile of trail or Attending a trail-related conference or symposium or Completing a written renewal examination.

- What fees are you willing to pay to cover the processing cost of recertification?.
- What status would trainers who don't re-certify have? Inactive status – to be re-activated upon completion of renewal or co-teaching a workshop Former status – not currently recognized.

Send your thoughts, comments and suggestions on the issue of UTAP Trainer to Beneficial Designs, **no later than May 15, 2003.**

Does your playground surface meet accessibility standards?

Beneficial Designs continues to test playground surfaces to determine whether they comply with the requirements of the ASTM Standard (F1951) for playground surface accessibility. If you are a surface manufacturer we can test your surface material to see if it meets the moderate firmness and stability requirements for this application. Contact our Minden office (775-

783-8822) for more information about ASTM standards testing.

UTAP Train-the-Trainer Project Finishes

The UTAP Train-the-Trainer project was completed August 31, 2002. Over 50 qualified UTAP Trainers are now available throughout the U.S. to Federal, State and local land management agencies, trail builders and organizations of people with disabilities. The UTAP Trainer program provides participants with the knowledge and experience to successfully conduct UTAP Coordinator Workshops. Training is ongoing, with **the next Trainer Course scheduled for June 10-13, 2003** (June 9-13 for those not previously trained in UTAP) in Minden, Nevada (Lake Tahoe area). Trainer course information and registration forms are available from the Beneficial Designs Trails Coordinator at: <trails@beneficialdesigns.com> or tel: (831) 429-8447x113.

The project developed a wide variety of training opportunities and resources, including:

- Master Trainer Manual
- Trainer Manual
- Trainer Resource Manual
- Trainer CD-ROM
- Universal Trail Assessment Process (UTAP) Training Guide
- UTAP Fast Facts
- Information and Promotion Package
- Information CD-ROM

Increased availability of the UTAP Coordinator Workshops will impact all people who build, maintain or use trails. The information obtained from the UTAP can benefit all trail users, including groups that have historically been under-represented among trail users, such as people with disabilities, parents with young children, and older adults, by providing the information they need to choose a trail that will meet their abilities and enable a safer hiking experience. Trail managers can use UTAP data to create maintenance and budget plans, monitor environmental impact, determine trail compliance with design standards and enhance the satisfaction, safety, and access of all trail users.

Update on Proposed Trail Accessibility Guidelines

Many people have been asking about the status of the ADA Accessibility Guidelines for trails. Recently, ADA accessibility guidelines have been finalized for recreation facilities (Section 16) and proposed guidelines have been published for public rights of way (Section 15). To find out the "latest" in terms of the guidelines for outdoor developed areas (recreation trails, beach access routes and picnic and camping facilities connected by outdoor recreation access routes), we spoke with Peggy Greenwell, US Access Board.

Currently, the Access Board is working to complete the regulatory assessment that is

necessary for the next step in the review process. Over the next few months, the Access Board will make available various draft sections of the report in order to gather feedback before the draft report is submitted to the Office of Management and Budget (OMB) for review. The review by OMB can take a maximum of 90 days. The proposed rule in the draft report will be the same as the final report submitted by the Regulatory Negotiation Committee on Outdoor Developed Areas (September 1999). The Regulatory Negotiation Committee report is available on the US Access Board website (www.access-board.gov) and is recommended as the current "best practices" related to trail accessibility. Once the draft report is approved by OMB, it will be published in the Federal register for public comment. Public hearings on the draft report are also likely. The US Access Board is hopeful that the Proposed Rule for Outdoor Developed Areas will be available for public comment before the end of 2003.

2002 National Trails Symposium - Universal Design of Trails

The 2002 National Trails Symposium, held November 10-13, 2002 in Orlando, was a tremendous success. Feedback from participants indicates that the program of presentations was the strongest yet. Many of the symposium sessions included topics related to the universal

design of trails, trail assessment, or trail data analysis. The following are just a few highlights of how trail accessibility and universal design were featured at the 2002 National Trails Symposium.

Transcending Boundaries to Enhance Trail Access for People of All Abilities

An overview of the Universal Trail Assessment Process (UTAP) for collecting objective, reliable information about the conditions on trails and paths in outdoor environments was presented. Land managers learned how to use the information for project planning and maintenance, as well as for disseminating information about trail conditions to users. All participants learned about enhancing access to trails through the use of the UTAP and Trail Explorer, and how management agencies across the nation are using the assessment process and information. Land managers also learned how to identify the highest assessment priorities among the trails that they manage.

Trail Management Software: Trail Soft and TrailWare

This session was designed to introduce two great software packages that can meet a variety of needs for managing trail data. Trail Soft is a trail and club management software that greatly enhances your ability to maintain descriptive information about trails. TrailWare is software that can be used by land managers to monitor environmental impact, identify access barriers, ensure compliance with design

guidelines, budget and plan maintenance activities, and create reports that can be used to convey accurate trail information to users.

Crossing the American Landscape: Universal Design for Trails and Shared Use Paths

Trails and shared use paths can be used by people of all abilities for a variety of purposes, including exercise, recreation, and transportation. This session focused on identifying the demands of the environment and the needs of users through the Universal Program Participation Model and then incorporating that information into design recommendations that eliminate barriers. The elimination of barriers and using a universal design approach increases the usability of a trail and enables everyone, of all ages and abilities, to enjoy the benefits of trails and shared use paths.

Trail Award Highlights

Universal design and trail accessibility efforts received numerous awards from American Trails. **Whole Access** and **California Department of Parks and Recreation** received the American Trails Award for **Outstanding Trail Sharing: The Trail Design Charette** in recognition of the accessible trail design charette project in the redwood forests of northern

California. **Beneficial Designs, Inc.** was recognized for their outstanding work in developing UTAP, TrailWare, and Trail Explorer as recipients of the **State of the Art Technology Award**. **Christopher Douwes**, the Recreational Trail Program and Transportation Enhancements Manager at the Federal Highway Administration received the **Trails Public Service Award**. For more detail on the awards given by American Trails you can visit www.Americantrails.org/awards/NTSO2.html.

Trail Access Coordinator Workshops

UTAP Coordinator Workshops were offered both before and after the conference. An excellent training facility was made available at the Little Big Econ State Forest. Participants had the opportunity to test their skills on a variety of trail conditions only minutes from the classroom. As a result of these workshops, 14 more people from 9 states have learned the benefits of UTAP.

UTAP Update Clinic

The UTAP Update Clinic was also offered at the Little Big Econ State Forest just prior to the start of the conference. The update clinic provided a detailed overview of the UTAP 2000 (changes in the UTAP for the 21st century), highlighting differences with the UTAP assessment methods that

participants had originally learned. The classroom session was followed by work on the trail so that the new assessment techniques could be put into practice.

TrailWare Training Course

The first-ever TrailWare Training Course was held on the last day of the National Trails Symposium. Despite a long and action-packed week of conference activities, the workshop was attended by an enthusiastic group of trail assessment supporters (some of whom had only learned the UTAP procedures at the pre-conference workshop). The focus of the training was “hands on” experience in entering, analyzing, and reporting trail data. Participants worked feverishly at their computers to complete a variety of basic and advanced TrailWare functions. The success of the training course indicates that the future of TrailWare training is bright.

A second TrailWare workshop was offered at the Western Trail Builders Conference, February 11, 2003, in Reno, Nevada, where 20 more individuals learned to use TrailWare. For more information about future TrailWare training opportunities, contact trails@beneficialdesigns.com.

UTAP Coordinator Workshops

In 2002, 74 individuals learned how to conduct trail assessments through Universal Trail Assessment Process Coordinator Workshops held in Nevada, Arizona, Ontario, Manitoba, and Florida. The two-day UTAP Coordinator Workshop provides the opportunity to learn UTAP skills through hands-on experience so that participants are able to return to their home area and lead their own assessments. There are many opportunities to learn the UTAP.

Confirmed 2003 Trainings

Date	Course	Event/Sponsor	Location
Apr. 23-24	UTAP Coordinator Workshop	Pennsylvania Park & Recreation Society	Altoona/Gallitzen, Pennsylvania
Apr. 28-29	UTAP Coordinator Workshop	Universal Design Institute	Winnipeg, Manitoba
May 12-13	UTAP Coordinator Workshop	Universal Design Institute	Winnipeg, Manitoba
June 9-10	UTAP Coordinator Workshop	Universal Design Institute	Winnipeg, Manitoba
June 10-13	UTAP Trainer Course	Beneficial Designs, Inc.	Minden, Nevada
June 9-13	UTAP Trainer Course (extended)	Beneficial Designs, Inc. (for individuals who have not previously attended a UTAP Coordinator Workshop)	Minden, Nevada
Jun. 25-26	UTAP Coordinator Workshop	TrailLink 2003 Conference	Providence, Rhode Island
Sept. 10-11	UTAP Coordinator Workshop	PEL Consulting	Toronto, Ontario
Sept. 24-25	UTAP Coordinator Workshop	Mid-America Trails & Greenways Conference (Indianapolis, Indiana)	Martinsville, Indiana (Bradford Woods)
Sept. 27-28	UTAP Coordinator Workshop	Northern Virginia Community College	Fairfax, Virginia

Listed above are trainings confirmed and scheduled to date. Additional trainings are added throughout the year. Contact <trails@beneficialdesigns.com> or check the American Trails website <www.americantrails.org> for more information about how you can join over 650 people who have been trained to use the UTAP.

Congratulations to New UTAP Trainers!

American Trails and Beneficial Designs would like to congratulate seven new Level 2 UTAP Trainers. These folks have completed the process to become a UTAP Trainer. A Level 2 UTAP Trainer has the knowledge and experience to be the lead instructor for UTAP Coordinator Workshops. These trainers have demonstrated an in-depth knowledge of all aspects of the UTAP Coordinator Workshop and have a thorough knowledge of the UTAP measurement procedures and the effective application of the UTAP in a variety of trail environments.

Nicole Armstrong Best	Phoenix, Arizona
Cris Costigan	Tempe, Arizona
Velma Finnern	Tempe, Arizona
David Rapson	Winnipeg, Manitoba
Laurie Ringaert	Raleigh, North Carolina
Paul Sandhofer	Anchorage, Alaska
Kathy Taylor-Hallick	Winnipeg, Manitoba

These new Level 2 UTAP Trainers join 18 other trainers who are available to lead UTAP Coordinator Workshops.

While some UTAP Trainers conduct workshops only within their own agency or region, many UTAP Trainers are able to travel to other workshop locations. Contact the Trails Coordinator at Beneficial Designs (trails@beneficialdesigns.com) to find out who might be available for workshops in your area.

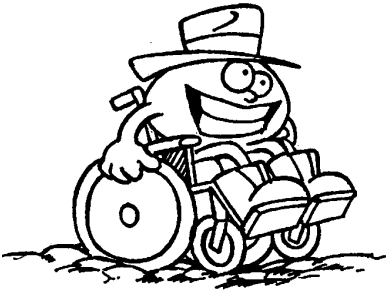
Congratulations to Newly Trained TACs!

Congratulations are in order for the following people who have achieved the UTAP Trail Assessment Coordinator (TAC) **certification!** These individuals have demonstrated that they collect high quality data and now join 70 other certified TACs across the United States and Canada.

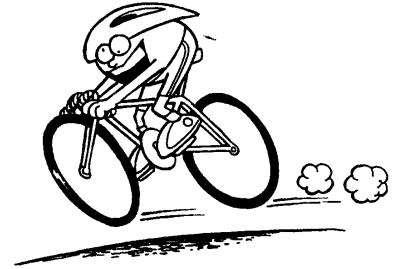
Nicole Armstrong Best	Arizona State Parks	Phoenix, Arizona
Dave Bos	National Park Service	Munising, Michigan
Georgette McNally	Arizona State Parks	Phoenix, Arizona

Help Enhance Trail Design

Ride for Science events are being held in College Park, Maryland and Santa Cruz, California to determine future design recommendations for trails used by "people with wheels". The Federal Highway Administration, the largest funder of new trail construction in the US, wants to know the travel speeds, acceleration, braking and turning capabilities of anyone who uses wheels to travel on a trail. Participating in the project will take about 30 minutes of your time. "Wheels" for a trail include bicycles, recumbent bicycles, tricycles, inline skates, manual wheelchairs, power wheelchairs, skateboards, strollers, push scooters, power scooters, pedi-cabs, or handcycles. Turn to the last page of the newsletter for details on where and when you can participate.



got wheels?



Help improve trails for everyone!

Help us find out:

- how fast trail users travel
- how much space they need for safety
- how quickly they can accelerate or brake
- how easily they can turn

Who can ride?

Anyone who uses "wheels" to travel on a trail, including people who use:

- | | |
|---------------|-------------------------|
| Inline Skates | Manual Wheelchairs |
| Skateboards | Power Wheelchairs |
| Bicycles | Road Racing Wheelchairs |
| Recumbents | Off-Road Wheelchairs |
| Handcycles | Push Scooters |
| Tricycles | Power Scooters |
| Strollers | |



Join the Ride for Science

Volunteers needed, with and without disabilities, to travel on a trail using their own "wheels".

Adults of all ages (including older adults) and parents with children are encouraged.

Groups of families and friends are welcome, whether their equipment is the same (e.g., all bicycles) or different. If you use several types of equipment (e.g., manual wheelchair, hand cycle, racing wheelchair), bring and participate with them all.

When and where?

June 14, 2003

San Lorenzo River Trail in Santa Cruz
Start at the Santa Cruz County Government Center Building, 701 Ocean Street, east side of the river between Water St. & Soquel Ave.
For more information contact Kathy or Seanna at Beneficial Designs (831) 429-8447

May 3, 2003 8:30 am to 5:00 pm,

University of Maryland, College Park on the Paint Branch Trail. Registration is at University of Maryland parking lot 11B. (enter main gate from U.S. 1, take first right on Paint Branch Drive, parking lot is on right after the Energy Research Building)

For more information contact Theo at Sprinkle Consulting (813) 949-7449 or (888) 462-3514