

**SCOTTSDALE TRAILS  
MASTER PLAN:  
ON THE RIGHT TRAIL**



**EXECUTIVE SUMMARY  
APRIL 2003**

## Purpose

*The purpose of this study is to develop a vision, set goals and objectives to guide development of a City-wide trails master plan that will be implemented through expenditures of 2000 bond funds and beyond.*

## Mission

*The project team, including City staff and consultants, has a straightforward mission. It is to create a great trail system for the citizens of Scottsdale.*

## BACKGROUND

The last time the City of Scottsdale addressed trail planning on a Citywide basis was in 1991. Adopted as an element to the City's General Plan, it included approximately 300 miles of unpaved, non-motorized multi-use trails. The 1991 plan also reflected historical trails throughout the City that had been documented in the early '70s and refined in the '80s. Since the implementation of that plan, significant growth and change has occurred.

## PROCESS OVERVIEW

The Master planning process was structured into five phases:

**ANALYZE:** inventory and evaluation of existing conditions, plans, procedures, facts and initial public comment.

**UNDERSTAND:** identification of additional issues, facts, needs, ideas opportunities and constraints leading to a clear understanding of how the Scottsdale Trails System currently functions and the preparation of a guiding vision, goals and objectives for how the Trail System will function in the future.

**IDEATE:** review existing and potential trail corridors leading to a recommended draft plan and process for identifying specific improvement projects.

**IMPLEMENT:** production of the final recommended trails plan with implementation strategies.

**APPROVE:** final approvals of the Recommended Draft Trails Master Plan thereby creating the Scottsdale Trails Master Plan.

## PUBLIC INVOLVEMENT SUMMARY

Public information was gathered throughout the planning process by a variety of interactive and participatory means. Focus groups, open houses, workshops, Parks and Recreation, Planning, Transportation and Preserve Commission and personal meetings provided opportunities for direct input and creative ideas at crucial points in the process.

Newsletters, the City's Web site and media provided information and announcements for upcoming meetings. Participatory opportunities were available for the interested public, users and non-user of trails. Residents in four specific neighborhood study areas: Mescal Park, Cactus Corridor, Shea Corridor and Desert Foothills were invited to participate in an in-depth analysis of localized trail issues and opportunities.

The Parks & Recreation Commission recommended approval of the Scottsdale Trails Master Plan Maps on February 19th, 2003, and the written Master Plan document on March 5, 2003. The City Council approved the Scottsdale Trails Master Plan in its entirety on April 14, 2003.

## OPERATIONS, FUNDING, POLICIES & PROCEDURES

In order to gain a better understanding of the current operations shaping trail planning in Scottsdale, the Consultant team evaluated existing staffing levels, volunteerism/citizen support, maintenance and operations programs. Existing capital improvement programs were reviewed illustrating the multi-departmental responsibilities for trail planning and development currently existing in the City. Various policies and procedures were identified and documented that further shape the City's trail program: the parks and trails planning management focus, trail maintenance standards, trail design and policies standards and the overall trail planning process.

## PHYSICAL INVENTORY & ANALYSIS

Physical components of Scottsdale's trail system were analyzed and documented from a broad, regional context down to neighborhood study areas. Four neighborhoods were studied in detail: Desert Foothills, East Cactus Corridor, East Shea Corridor and Mescal Park. A comprehensive Geographic Information System (GIS) database was developed for all existing and potential trail corridors in the City that includes such information as legal status, physical condition, maintenance responsibility, signs, location, length, classification and trail type. The database is now up-to-date. This analysis concluded there were 324 miles of trails shown in the 1991 Trails Plan, of which 100 are contained within the McDowell Sonoran Preserve study boundary. An additional 33 miles of easements exist that are not identified in the 1991 General Plan.



## ISSUES AND NEEDS ANALYSIS

Issues and needs of the community were identified and documented through a variety of means including focus groups, a statistically valid phone survey, open houses and workshops. Citizens defined characteristics that make up a great trail and a great trail system. Additionally, they responded to questions about use of, and satisfaction with, existing trails and proximity to their homes.

## OPPORTUNITIES ANALYSIS

Specific issues and needs formed the basis for an opportunities and constraints analysis and organized into several topics: linkages and destinations, trailheads, support/opposition, and crossings/traffic conflicts. These topics were further refined to form the basis for the project's themes:

- Function
- Discovery & Experience
- Implementation
- Awareness & Education
- Safety



## SUITABILITY ANALYSIS

A suitability analysis was performed for every potential trail corridor in the City of Scottsdale. The purpose of this analysis was to identify trail corridors that are most, and least, suitable for trails. This became a critical step in the planning process because it bridged issues, opportunities and constraints, as well as the development of the final master plan. This step, above others, greatly influenced the outcome of the overall master plan. The following criteria used to analyze a corridor's suitability came from citizen comments, specifically their definition of a great trail and a great trail system:

- Local Link
- Loop Link
- Negotiability/Usability
- Regional Link
- Multi-modal Linkage
- Safety

## THE VISION

This functional network of non-motorized, unpaved, multi-use trails will create journeys of discovery linking local and regional places while connecting to the greater transportation network. These trails serve both recreation and transportation needs, providing a safe and enjoyable experience for all users.

The trail network will be responsive to the public, promoting a healthful outdoor lifestyle resulting in more trail users and advocates. This trail network will link people to place, enhancing Scottsdale's economy, culture and quality of life.

## PLANNING GOALS

The goals were derived from refining five themes that embody City and Staff comments: Function, Discovery and Experience, Safety, Implementation and Awareness and Education. These goals and objectives guided the plan's development.

## BUILT VS. NATURAL ENVIRONMENTS

Trail classifications are divided into built and natural environments. Built environment trails are located in more *constructed environments* and are constructed with decomposed granite trail surfacing. Natural environment trails are located in more *natural or undisturbed open space* (such as Natural Area Open Space areas) and consist of native surface materials.

**PRIMARY TRAILS:** *The Sun Circle Trail (right), a regional 110-mile loop trail, passes through Scottsdale along the Arizona Canal. This is an example of a built environment trail.*

*Two hikers (below right) enjoy the natural environment trail along the Central Arizona Project Canal.*

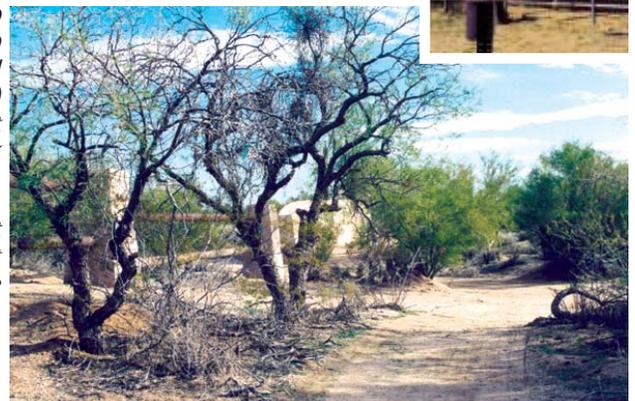


**SECONDARY TRAIL:** *A hiker (left) takes in the views along the Pinnacle Peak Trail. This is an example of a natural environment trail.*

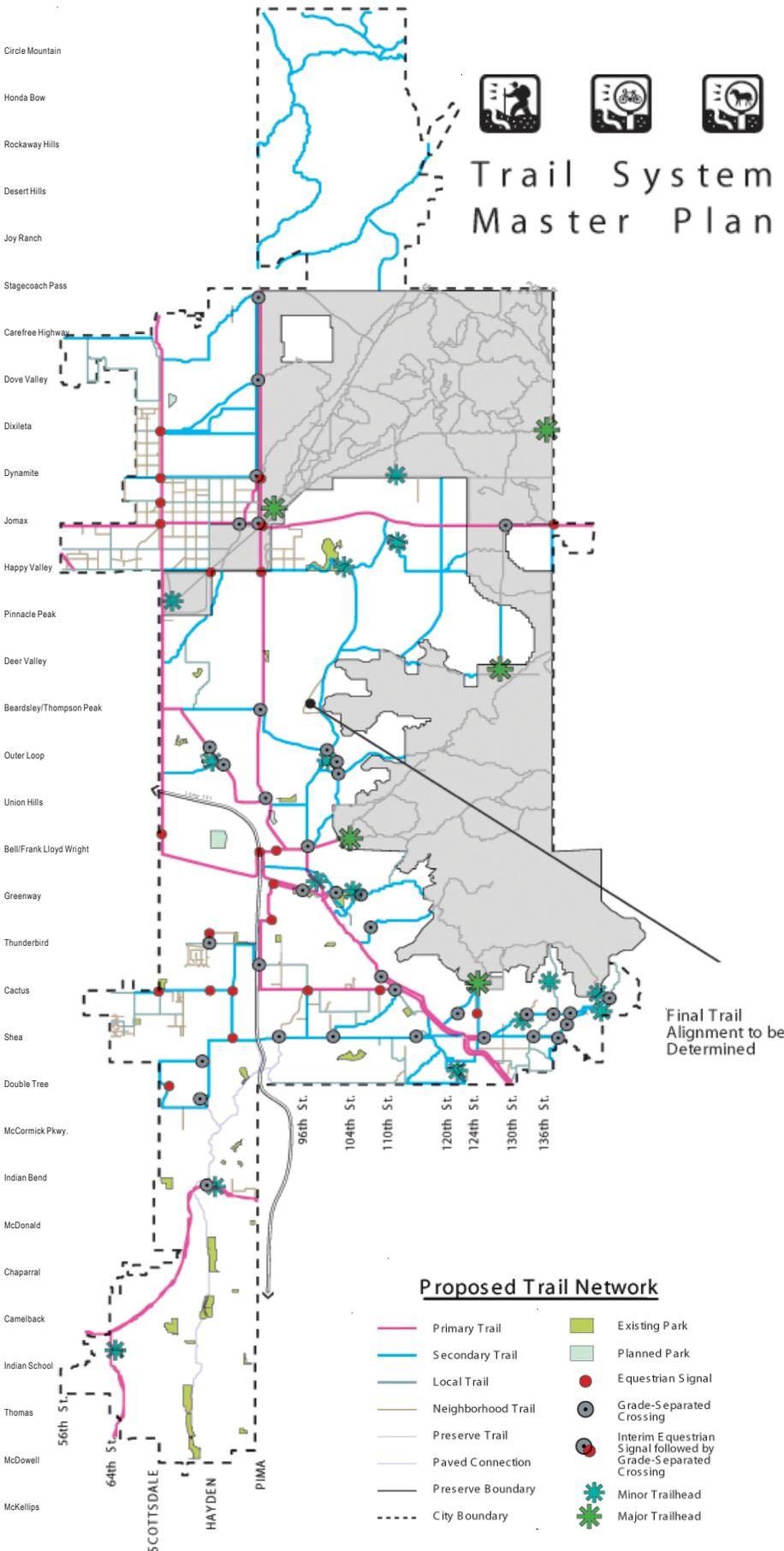


**LOCAL AND NEIGHBORHOOD TRAILS:** *A natural environment trail (right) passes through lush desert in the Whisper Rock neighborhood.*

*Signs (above right) direct users along the built environment trails in the Mescal Park area.*



# PLAN ELEMENTS



**Primary/Signature Trail: 73 miles.** Generally, these trails have a regional significance by providing linkages to major destinations. They have the widest trail width, greatest quantity and variety of signs, and the greatest opportunity for amenities like benches and drinking fountains.

**Secondary Trail: 115 miles.** These trails provide links between Primary/Signature trails and more localized neighborhood trails.

**Local Trail: 42 miles.** Usually feeder trails that are not continuous on both ends, or are lesser-used alternatives to already existing routes connecting to Secondary Trails.

**Neighborhood Trail: 56 miles.** These trails are very limited in range and serve a localized area. They have the narrowest trail width and lesser use of signs.

**Trailheads: 21 planned.** Major trailheads are located at major entry points into the McDowell Sonoran Preserve. Minor trailheads are planned in existing, or planned, community and neighborhood parks, such as Stonegate Park, Rio Montana Park and DC Ranch Park.

**Trail Crossings:** To minimize trail/traffic safety risks, several types of trail crossings are proposed:

- 1) Equestrian Crossings: 22 proposed.** Ideally, crossings will consist of asphalt-alternative surfacing and a specialized user-activated signal control in a "safe zone."
- 2) Grade-separated Crossings: 38 identified.** These exist in several forms, drainage structures, pedestrian bridges, pedestrian underpasses and vehicular bridges.
- 3) Interim Equestrian Crossings: 2 identified.** These exist in locations where grade-separated crossings are proposed. It may be several years before it is built.

**Paved Linkages:** Areas where constructing a new unpaved trail is not possible, yet the connection remains important and is made on a paved path.



## IMPLEMENTATION GOALS

Implementation goals were developed which aim to provide a means to implement the various components of the plan over time. They address topics of multi-modalism, signage, impact, user experience, safety, construction, maintenance, partnerships, publicity, enforcement and education.

## RECOMMENDATIONS

In order to provide a simplified blueprint for the expenditure of existing and future capital funds, the expenditure of operational funds, and the implementation of assisted policies, the plan recommendations fall into the following three broad categories:

### ACQUISITION AND DEVELOPMENT

The action plan recognizes that trails will continue to be built in Scottsdale through a variety of means. This section examines the City departments and other outside jurisdictions that have a history of implementing or impacting aspects of the trail system.

Project lists identify the “Top Twenty Five” trail projects and a Phase One Project List to be built with Bond 2000 \$2.5 million trail acquisition and development funds. Projects range from underpass improvements, to signage installation and easement acquisition. The plan recognizes these lists as being flexible in nature. Average trail construction costs are identified for each trail classification, based upon built or natural environments, ranging from \$2,648.45 to \$26,168.83 per mile. To assist with acquisition and development, recommendations are made to update Trail Design Standards and Policies Manual.

### MAINTENANCE

Recommendations include the development of trail maintenance standards, establishment of trail maintenance cycles based upon trail classifications, and working closely with Homeowner’s Associations (HOA’s) to properly maintain public trails on their properties. A methodology is suggested for determining maintenance standards. Typical trail maintenance costs are provided that range from \$1000 per mile/year for neighborhood trails to \$1750 per mile/year for Primary Trails. A further recommendation states that, over time, all public trails not within organized HOAs should be maintained by the City of Scottsdale to ensure a consistent and predictable trail condition.

### POLICIES AND PROCEDURES

Recommendations include procedures for Master Plan review, update and revisions; trail inventory maintenance, citizen representation, planning and project coordination, motorized vehicles, staffing, funding, awareness and education.

The Trails Master Plan should undergo a comprehensive update every five years. The trails database should be updated on a monthly basis and a trails supporter should continue to be a part of the Parks & Recreation Commission.



Further recommendations include improvements to the construction and inspection process for privately built trails, and the development of checklists and standard trail stipulations to help both project reviewers and developers build the right trails in the right place.

Joint meetings between the Parks & Recreation Commission and the Preserve and Transportation Commissions are recommended to ensure issues of shared interest are properly planned and addressed. The continuing issue of illegal motorized use on trails is addressed through the identification of several controlling tools from education to ordinance enforcement.

Staffing recommendations include more coordinated use of volunteers, creation of a trails advisory committee, and addition of staff to manage the increasing trail planning operations and maintenance responsibilities. Continued use of grants is identified as a means to make limited funds go further.

Awareness and education is addressed through publicizing the Arizona Recreational Use Statute, production of a Scottsdale trails map and brochure, revision of signage standards, and the implementation of a “Name-the-Trail” contest.



## TRENDS

Several trends help shape the Plan:

**Green Infrastructure:** Trails are seen as a critical part of a city’s infrastructure; fundamental to the community’s health and well being.

**Trail Research:** More studies report how trails typically have no impact or improve property values and the negligible impact trails have upon crime.

**Trails/Health Link:** The U.S. Surgeon General and the Center for Disease Control’s Task Force on Community Preventive Services strongly recommend creating, or enhancing, access to trails and other community locations for physical activity.

**TEA 3 Funding:** The U.S. Department of Transportation recommended reauthorization of the Transportation Equity Act for the 21<sup>st</sup> Century in an effort to continue support of trails programs across America.

**Trail Planning:** Citizen involvement helps shape plans that recognize a community’s varied users, ability levels, and specific cultural and geographic characteristics of the community leading to specific action items.

# Continuation

*Citizens support trails, and they recognize trails contribute to Scottsdale’s quality of life.*

*Our civic leaders have demonstrated their commitment to provide these benefits for all residents.*

*This comprehensive Trails Master Plan examines existing trail infrastructure from physical characteristics, to policies and procedures that put it in place.*

*Most importantly, this plan provides meaning, structure and guidance to those who will use and implement the trail system’s many features.*



COMMUNITY SERVICES DEPARTMENT:  
General Manager: Bill Exham

PARKS, RECREATION & FACILITIES:  
Director: Debra Baird, CPRP

Parks, Recreation & Facilities Manager:  
Judy Weiss, CPRP

Parks/Trails Planning Manager:  
Gary Meyer, AICP, RA

Trails Planner, Project Manager:  
Scott Hamilton

Parks/Trails Technician: Ryan Stee

CONSULTANTS:

Todd & Associates, Inc.:  
H. Duane Blossom, RLA, AICP  
Jim Coffman, RLA, ASLA, Project Manager

Stantec: Carol Johnson, AICP

Hancock Resources: Jan Hancock

The Rozelle Group: Dr. Martha Rozelle

Allyce Hargrove, ASLA

Dean Chambers, RLA, ASLA

YES! YES! YES!  
YES! YES! YES!  
YES! YES! YES!

*Do trails improve a person's life?*

*Do trails improve a community?*

*Does trail use improve  
a person's health and wellness?*

*Do trails provide an alternative  
to driving cars?*

*Do trails provide connections  
to nature and neighborhoods?*

*Do trails improve quality of life  
for people and communities?*

SCOTTSDALE CITY COUNCIL:

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Mary Manross

Wayne Ecton  
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PARKS & RECREATION COMMISSION:

Chair:  
Shelley Anderson

Vice Chair:  
Leigh Hersey

David Fortney  
Bill Heckman  
Nona Oliver  
Stephen Owens  
Lynn Timmons Edwards



4019 North 44th Street  
Phoenix, Arizona 85018  
Tel: 602 952 8280  
Fax: 602 952 8995

[www.toddassoc.com](http://www.toddassoc.com)