

III. TRAIL SYSTEM PLAN



A. VISION

Based on many meetings and discussions on what will make the ideal trail system, the consultant team established the following 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 will 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.

B. GOALS & OBJECTIVES

The goals and objectives were derived from the refinement of the five themes discussed in Chapter II. The issues contained within those themes directly relate to the majority of the plan goals. In addition, there is a distinct difference between goals relating to the creation of the Master Plan, and goals relating to implementation of the Master Plan.

Therefore, the following goals and objectives were considered vital to the planning process, and are outlined below. The implementation goals and objectives are outlined in Chapter IV. The goals and objectives outlined below are organized into the five themes; function, discovery & experience, safety, implementation, and awareness & education.

FUNCTION

- Goal #1: Develop a continuous trail system**
- Objectives:
- 1.1 Provide continuous routes, with minimal gaps
 - 1.2 Provide loops of various lengths
 - 1.3 Provide a trail system which provides numerous neighborhood connections as well as connections to trails of regional significance and regional destinations
 - 1.4 Connect to open space/ mountain trails in the Tonto National Forest, McDowell Sonoran Preserve, and the County
 - 1.5 Connect to adjacent city trails
- Goal #2: Make trails functional as a transportation mode**
- Objective:
- 2.1 Link trails to significant destinations such as parks, open space, commercial centers, and schools

- Goal #3: Integrate trails into an overall multi-modal system**
Objective: 3.1 Provide improved pedestrian and bicycle routes to neighborhood schools and parks
3.2 Provide linkages between trails and paved pathways, bike lanes, transit terminals, bus stops, and park & ride lots

- Goal #4: Create regionally significant trails**
Objectives: 4.1 Create “Signature” Trails that provide the backbone of the system
4.2 Make full use of regional corridors, such as the Arizona Canal, powerlines, roadways, scenic corridors, and open space preserves

DISCOVERY & EXPERIENCE

- Goal #5: Create an organized and easily understood trail system**
Objectives: 5.1 Create a hierarchy of trail classifications similar to a street hierarchy
5.2 Make trail alignments simple and logical

- Goal #6: Minimize the visual and environmental impact of trails and trail users**
Objective: 6.1 Distinguish between citywide trails, trails of regional significance, and neighborhood trails
6.1 Make use of already available or already disturbed land where possible for trail alignments

- Goal #7: Provide a quality trail experience for all users**
Objectives: 7.1 Develop a variety of trail types
7.2 Plan and develop safe trails

- Goal #8: Integrate trails into every day life**
Objective: 8.1 Locate trails in such a way that they are readily accessible to potential users

SAFETY

- Goal #9: Make trail use safe**
Objective: 9.1 Maximize visibility and physical access to trails from streets and other public lands

- Goal #10: Minimize vehicular conflicts**
Objective: 10.1 Make all street crossings safer

IMPLEMENTATION

- Goal #11: Build new trails per the approved Trails Master Plan**
Objective: 11.1 Develop prioritization plan and schedule for new trail projects

- Goal #12: Improve existing trails**
Objective: 12.1 Develop a prioritization plan and schedule for improving existing trails

Goal #13: Encourage partnerships between the City and other entities

- Objectives:
- 13.1 Work closely with neighborhood homeowner associations
 - 13.2 Work closely with the business community

Goal #14: Provide appropriate maintenance

- Objective:
- 14.1 Identify maintenance responsibility for all existing trails
 - 14.2 Continue to budget for the maintenance of all trails

Goal #15: Enforce legal protections to trails

- Objective:
- 15.1 Secure trail easements through the development process based upon locations shown on the Trails Master Plan
 - 15.2 Work with Code Enforcement to address blocked trail easements

EDUCATION & AWARENESS

Goal #16: Promote awareness of trails and the trail system

- Objective:
- 16.1 Promote the benefits of trail usage such as economic, transportation, safety, connectivity, community image and health

C. PLAN ELEMENTS

This section outlines the four main components of the Trail System Plan; 1) Trail Classifications, 2) Trailheads, 3) Trail Crossings, and 4) Paved Linkages. The [Trail Network Map](#) details the locations of these elements.

TRAIL CLASSIFICATIONS

With nearly 300 miles of trails in the citywide trail system, it is necessary to organize them in a way that reflects the variety of functions that the trails serve, based on their use and location within the larger trail system. Just like the street system, with freeways, arterial and collector streets, the trail system, too, has been organized into a hierarchy ranging from major (those with a regional significance) to minor and localized. We have classified these trails into four categories; Primary/Signature, Secondary, Local, and Neighborhood trails. The following table outlines the number of miles of trail per trail classification.

Trail Type	Miles
Primary/Signature	73
Secondary	115
Local	42
Neighborhood	56
Total	286



The Arizona Canal is a Primary/Signature Trail



Trails leading into the McDowell Mountains are Secondary Trails



Local and Neighborhood Trails are throughout the Mescal Park area



Stonegate Equestrian Park is an example of a Minor Trailhead

Ultimately, the purpose for classifying the trails into different categories is twofold: First, to help organize the many miles of trails into a plan that is easy to interpret. Second, the trail classification is the basis for the revisions to the Trail Design Standards and Policies manual. For example, a regional trail in a scenic corridor will have a different design standard than one within a small neighborhood area. By organizing the Master Plan trails in this way, we are able to take a very complex system of trails and trail connections and define it in a way which will ultimately result in a logical, useful and understandable trail system.

PRIMARY/SIGNATURE TRAIL

Generally, the trails with a regional significance, such as a trail connecting to an adjacent jurisdiction, or into the Preserve or the Tonto National Forest, have been classified as Primary, or Signature, trails. These trails are planned along the scenic corridors of Scottsdale and Pima Roads and Dynamite Blvd. Others include those along the CAP canal, power line corridors and major wash corridors. This designation will give significance to one of the City's oldest regional trails, the Sun Circle Trail along the Arizona Canal. Primary/Signature designation illustrates the significance of the Arizona Crosscut Canal within the regionally promoted Papago Salado area in Scottsdale's southwestern corner. In general, primary/signature trails are anticipated to receive the greatest level of use of all the City's trails.

SECONDARY TRAIL

The Secondary trail classification has the most trail miles. At just over 100 miles, these trails feed into the larger Primary trail network and provide the connections between the most significant corridors and the more localized trails. Examples of Secondary trails include the Bent Tree Wash trail, Shea Blvd, the Lost Dog Wash and Taliesin Trails, the Hidden Hills Trail, the Pinnacle Peak Trail, and the trails through DC Ranch and the Reata and Beardsley washes. These secondary trails are to be built and maintained to a different standard than the Primary trails, with a narrower tread width than most Primary Trails, reflecting an anticipated lesser degree of use.

LOCAL TRAIL

The next step down in the hierarchy includes the Local trails. Their purpose is to connect to the Secondary trails, which in turn, feed into the Primary trails. Local trails are usually feeder trails that are not continuous on both ends, or are lesser-used alternatives to an already existing route.

NEIGHBORHOOD TRAIL

The neighborhood trail is very limited in range and serves a very localized area. In most cases, the neighborhood trails connect to local trails and the larger trail system. Many of these trails and/or trail easements already exist, but have never been part of an approved plan, and were historically never considered part of the city trail system. These trails are proposed for inclusion in the overall city trails plan, as all public input indicates that trail opportunities close to home are in high demand.

TRAILHEADS

There are 21 trailheads planned in the City of Scottsdale, nine of which are in the Preserve. They vary in size and amenities based on their place in the overall trail system. Five of these trailheads are designated as Major, and the remaining 16 are classified as Minor trailheads. All five Major trailheads are located at major entry points into the McDowell Sonoran Preserve. The [Trailheads Map](#) details trailhead

classifications and locations. Preserve trailheads are taken directly from the Preserve Access Areas Report.

MAJOR TRAILHEAD

A major trailhead (or community access area) contains more amenities than minor trailheads and its primary purpose is to provide opportunities for public use of and access to the Preserve for the entire community. The typical size of a major trailhead is 30-60 acres, with 200-300 parking spaces including horse trailers. Amenities can include parking (including horse trailer and bus parking), a transit stop where feasible, maps and signage, restrooms, picnic areas, ramadas, drinking fountains, telephones, interpretive and educational displays, and visitor information.

MINOR TRAILHEAD

A minor trailhead is similar in function to major trailheads but smaller in size. Minor trailheads will accommodate a variety of users but will be in locations where public demand is not anticipated to be as high as in areas where major trailheads are planned. The size and amenities in these areas will be dependent upon the character of the surrounding area and level of use. The size of a minor trailhead will be less than 30 acres, up to 100 parking spaces and limited horse trailer parking. Amenities can include maps and signage, and possibly restrooms, picnic areas, ramadas, drinking fountains, and telephones. Wherever possible, minor trailheads are planned in existing or planned community or neighborhood parks, such as Stonegate Park, Rio Montana Park, and DC Ranch Park. The following table describes each trailhead by name and/or location:



The northwest corner of Thompson Peak Parkway and Bell Road is the site of a major trailhead at the Preserve's "Gateway"

Trailheads

Map ID	Trailhead Name	Class	Existing or Planned	Horse parking	In City Park	In Preserve
1	Happy Valley / Scottsdale Road	Minor	Planned	X		X
2	Pima/Dynamite	Major	Planned	X		X
3	Alma School Rd. north of Dixileta	Minor	Planned	X		X
4	136 th St./Lone Mtn.	Major	Planned	X		X
5	128 th St./Dynamite	Minor	Planned	X		X
6	Troon North Park	Minor	Planned	X	X	
7	Pinnacle Peak Park	Minor	Existing	X	X	
8	128 th St. north of McDowell Mountains	Major	Planned	X		X
9	Grayhawk Community Park	Minor	Planned	X	X	
10	DC Ranch Park	Minor	Planned	X	X	
11	Gateway: Thompson Peak Pkwy./Bell Road	Major	Planned	X		X
12	WestWorld	Minor	Planned	X		
13	McDowell Mtn. Ranch	Minor	Existing		X	
14	124 th St./Cactus	Major	Planned	X		X
15	136 th St. Wash	Minor	Existing	X		
16	Rio Montana Park	Minor	Existing		X	
17	Via Linda/Hidden Hills	Minor	Planned	X		
18	145 th Street / Hidden Hills	Minor	Planned			X
19	Stonegate	Minor	Existing	X	X	
20	Nature Area	Minor	Existing		X	
21	Paiute Park	Minor	Existing		X	



Several drainage structures provide trail crossings under Shea Boulevard

TRAIL CROSSINGS

Any time a trail crosses a street there exists a potential safety hazard, especially with regard to equestrians. A major goal of the Trails Master Plan is to minimize conflicts between autos and trail users. To minimize these risks, several types of trail crossings are proposed: 1) equestrian crossings, 2) grade-separated crossings, and 3) interim equestrian crossings (see [Grade-Separated Crossings Map](#)). Currently, the majority of trail crossings already exist. Most of these crossings are grade-separated crossings that take place in drainage corridors. The following table outlines the existing vs. planned crossing by type:

Trail Crossings

Crossing Type	Existing	Planned	Total
Equestrian	0	22	22
Grade-Separated	25	13	38
Interim Equestrian	0	2	2

EQUESTRIAN CROSSINGS

The plan proposes several locations where there is a high incidence of equestrian traffic crossing major arterials. To increase safety of these intersections, specialized equestrian crossings are proposed at 22 intersections throughout the City. The crossings should consist of an alternative surfacing other than asphalt and a specialized user-activated signal control. The push-button control mechanism should be located a safe distance from the intersection, and be placed at a height so that it can be activated by a person without getting off a horse. Additional coordination is necessary with the Transportation and Traffic Engineering Departments to refine this conceptual design.

GRADE-SEPARATED CROSSINGS

In an effort to further decrease any potential conflict between street traffic and trail users, 38 grade-separated crossings are included in the plan. There are 25 locations where these crossings already exist which greatly increase safety. There are four main types of grade-separated crossings that will accommodate trails. They are 1) drainage structures, 2) pedestrian/equestrian/bicycle bridges, 3) pedestrian/equestrian/bicycle underpasses, and 4) vehicular bridges.

Drainage structures comprise the majority of crossing opportunities. There are currently 21 existing trail crossings along drainage corridors. The Master Plan proposes an additional eight, primarily in the far north reaches of the City. There are three existing pedestrian bridges, with no additional bridges planned. However, there are five pedestrian underpasses planned. Whenever possible, these grade-separated crossings are to be coordinated with Transportation Department capital improvements, similar to the 124th Street/Shea underpass.

Grade-Separated Crossings

Crossing Type	Existing	Planned	Total
Drainage Corridor	21	8	29
Pedestrian Bridge	3	0	3
Pedestrian Underpass	0	5	5
Vehicular Bridge	1	0	1

INTERIM EQUESTRIAN CROSSINGS

In instances where a grade-separated crossing is proposed but will be several years before it is to be built, it is proposed that an equestrian signal be installed in that location as an interim safety measure until the time at which an underpass or bridge is put in place. See the Master Plan map for locations of all specialized crossings.

PAVED LINKAGES

In addition, some areas were identified where constructing a new trail is not possible, yet the connection remains important. We have identified these connections (primarily the paved paths along the Indian Bend Wash and the Camelback Walk) on the Master Plan as “Paved Connections.” It is important to recognize these paths as links between the more isolated southern portions of the city with the areas in the central parts of the city that have much greater opportunities for trail activity.

D. TRAIL STANDARDS

The following standards are proposed for each trail classification. Trail standards serve as a guide to the development of the trail system and are discussed in more detail in Section 7.3 of the City’s Design Standards and Policies Manual. For example, a primary trail will be developed differently than a local or neighborhood trail. In addition, the classifications are further divided between trails within built space or natural space, which also influences the standard under which it is to be developed. The following table outlines the specific differences in trail standards for each trail classification.

PRIMARY/SIGNATURE TRAILS

Primary trails are to be developed to a greater extent than any other trail in the system. The standard width for primary trails is a minimum of 8’ (in the built environment) and a minimum of 4’ (in a natural environment), wide enough for two users to pass side-by-side. Signage along primary corridors is to be the most extensive, which may include named routes and/or distance markers. Signature trails are primary trails that are high profile enough to be named. Primary trails will have the priority for including amenities, such as shade structures, hitching posts, and/or water fountains. In addition, development of trails along primary corridors will be placed at a higher priority than other trails in the system.

SECONDARY TRAILS

Secondary trails comprise the majority of trail mileage in the system, with approximately 115 miles. They are the primary connecting corridors between the local and neighborhood trails and the more regional primary trails. The minimum tread width for secondary trails is 4’. Signage along secondary trail corridors will consist of trailhead signs, directional signs, trail courtesy signs, and regulatory signs where necessary.

LOCAL AND NEIGHBORHOOD TRAILS

Local and neighborhood trails share the same standard. They are the narrowest and the least developed trails in the system and are geared more towards smaller-scale local use. The minimum tread width in the built area trails is to be 4’, while in the natural areas, the tread width may be as narrow as 2’. Signage is to consist of directional signs, trail courtesy signs, and regulatory signs where necessary.

BUILT VS. NATURAL ENVIRONMENT TRAILS

Each of the trail classifications is divided into built and natural environments. The standards for each will vary based on their surroundings. Built environment trails



The Camelback Walk is the most significant “Paved Linkage”



A “Built Environment” Trail



A “Natural Environment” Trail

are located along roadsides, power line corridors, canal banks, and drainage corridors, and are to be constructed with decomposed granite trail surfacing. Natural environment trails are located in washes and natural undisturbed open space (such as NAOS areas), and consist of the native surface material. Trail width in natural environment trails will be either the same as built environment trails or narrower, depending on the site conditions. Typically, variations in tread width will be determined by the amount and density of surrounding vegetation and the width of the overall easement

Trail Classification Standards

TRAIL CLASS	MINIMUM TREAD WIDTH	SURFACE TYPE	SIGNAGE	AMENITIES
PRIMARY TRAILS				
Built Environment Canal banks Power line corridors Scenic Corridors Standard Corridors Drainage corridors Built open space	8'	Decomposed Granite	Trailhead Directional Regulatory Courtesy Distance Signature Routes	X
Natural Environment Washes Natural open space/NAOS	4' - 8'	Native Surface	Trailhead Directional Regulatory Courtesy Distance Signature Routes	X
<i>SECONDARY TRAILS</i>				
Built Environment Roadside Non-street easements Drainage corridors Built open space	4'	Decomposed Granite	Trailhead Directional Regulatory Courtesy	
Natural Environment Washes Natural open space/NAOS	4'	Native Surface	Trailhead Directional Regulatory Courtesy	
<i>LOCAL AND NEIGHBORHOOD TRAILS</i>				
Built Environment Roadside Alleyways/non-street easements Drainage corridors Built open space	4'	Decomposed Granite	Directional Regulatory Courtesy	
Natural Environment Washes Natural open space/NAOS Roadside with adjacent natural environment	2' - 4'	Native Surface	Directional Regulatory Courtesy	