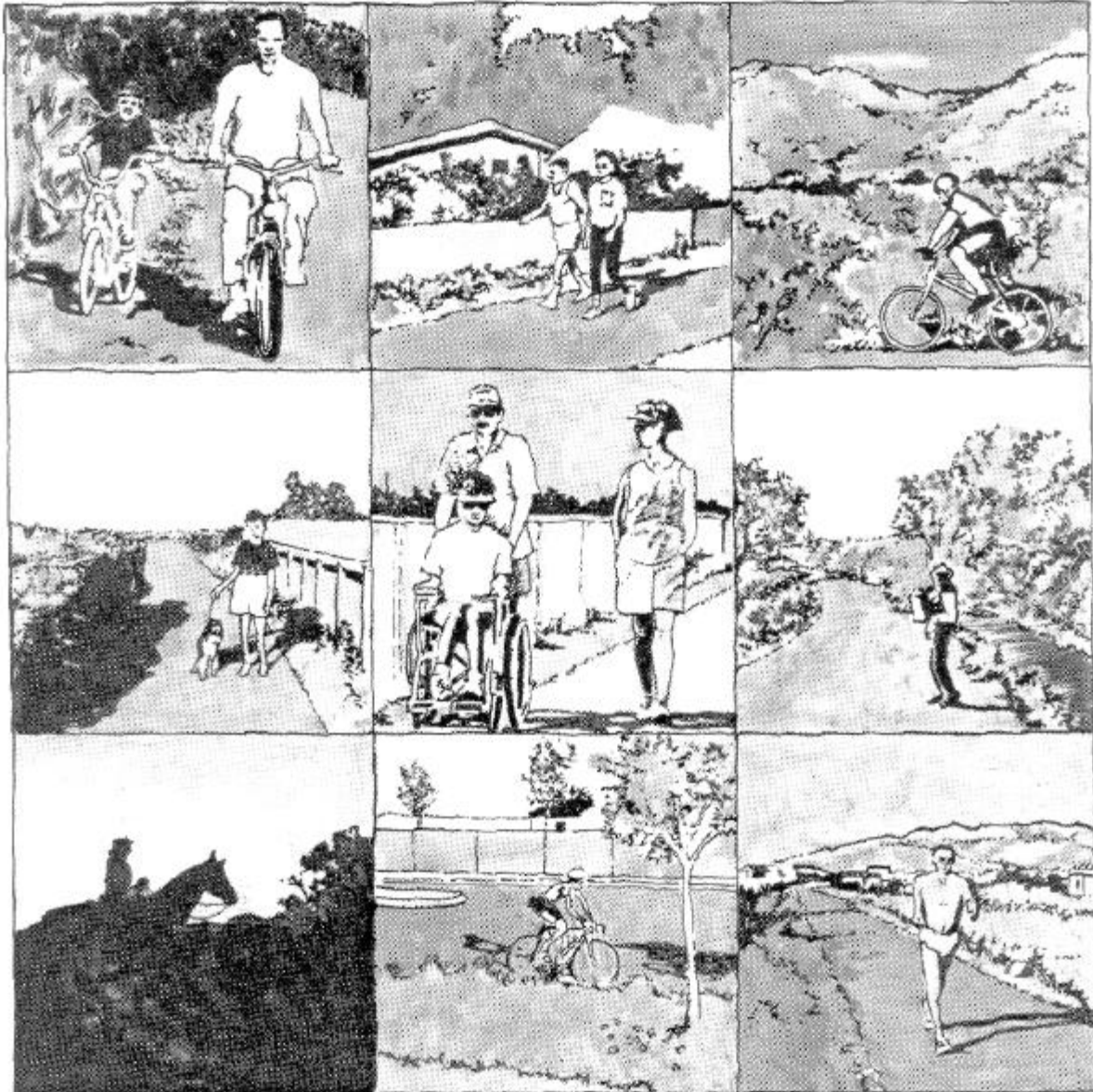


Trails & Bikeways Facility Plan



Adopted, July 1993 • Map Revised Nov. 1996

ACKNOWLEDGEMENTS

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* * *

Cynthia Bruce
Chief of Advance Planning
1984-1992

For her foresight and vision in working to
establish a non-motorized trail network.

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* indicates former committee member

CITY of ALBUQUERQUE
TENTH COUNCIL

COUNCIL BILL NO. R-308 ENACTMENT NO. 100-1993

SPONSORED BY: Councillor Michael Brasher

RESOLUTION

1 ADOPTING THE TRAILS & BIKEWAYS FACILITY PLAN AS A RANK TWO FACILITY PLAN

2 WHEREAS, the Albuquerque/Bernalillo County Comprehensive Plan
3 contains a number of policies supporting development of a metropolitan
4 area-wide bicycle and multi-use trail network; and

5 WHEREAS, the Greater Albuquerque Recreational Trails Committee and
6 the Greater Albuquerque Bicycling Advisory Committee have been closely
7 involved in the development of this plan; and

8 WHEREAS, the Trails & Bikeways Facility Plan reflects the desires
9 of area residents to develop a multi-use trail and bike network for
10 both commuting and recreational uses; and

11 WHEREAS, the Environmental Planning Commission has held public
12 hearings on the Trails & Bikeways Facility Plan and has recommended
13 adoption of the plan; and

14 WHEREAS, the Bernalillo County Planning Commission has held public
15 hearings on the Trails & Bikeways Facility Plan and has recommended
16 adoption of the plan; and

17 WHEREAS, the Trails & Bikeways Facility Plan is a Rank Two
18 Facility Plan implementing the Rank One Comprehensive Plan and
19 recommends development standards, site locations, and establishes a
20 multi-year program of capital improvements.

21 BE IT RESOLVED BY THE CITY COUNCIL, THE GOVERNING BODY OF THE CITY OF
22 ALBUQUERQUE THAT:

23 Section 1. In order to further detail and implement the concepts
24 of the Albuquerque/Bernalillo Comprehensive Plan, the Trails & Bikeways
25 Facility Plan attached hereto and made a part hereof, is adopted as a
26

Underscored Material - New
[Bracketed Material] - Deletion

Underscored Material - New
[Bracketed Material] - Deletion

1 Rank Two Facility Plan for the area within the planning jurisdiction of
2 the City of Albuquerque.

3 Section 2. The Trails & Bikeways Facility Plan is commended to
4 the County of Bernalillo for adoption.

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PASSED AND ADOPTED THIS 19th DAY OF JULY, 1993.
BY A VOTE OF: 9 FOR 0 AGAINST.


Vincent E. Griego, President
City Council

APPROVED THIS 29th DAY OF July, 1993.


Louis E. Saavedra, Mayor
City of Albuquerque

ATTEST:

City Clerk

RESOLUTION NO. AR 70-93

ADOPTING THE TRAILS & BIKEWAYS FACILITY PLAN

WHEREAS, the Albuquerque/Bernalillo County Comprehensive Plan contains a number of policies supporting development of a metropolitan area-wide bicycle and multi-use trail network; and

WHEREAS, the Greater Albuquerque Recreational Trails Committee and the Greater Albuquerque Bicycling Advisory Committee, which include representatives from Bernalillo County and are advisory to Bernalillo County, have been closely involved in the development of this plan; and

WHEREAS, the Trails & Bikeways Facility Plan reflects the desires of County residents to develop a multi-use trail and bike network for both commuting and recreational uses; and

WHEREAS, the Bernalillo County Planning Commission has held public hearings on the Trails & Bikeways Facility Plan and has recommended adoption of the plan; and

WHEREAS, the Trails & Bikeways Facility Plan implements the Albuquerque/Bernalillo County Comprehensive Plan and recommends development standards, site locations, and establishes a multi-year program of capital improvements.

BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSION, THE GOVERNING BODY OF THE COUNTY OF BERNALILLO:

Section 1. In order to further detail and implement the concepts of the Albuquerque/Bernalillo Comprehensive Plan, the Trails & Bikeways Facility Plan attached hereto and made a part hereof, is adopted for the area within the planning jurisdiction of the County of Bernalillo.

Section 2. The attached "amendments to the Trails & Bikeways Facility Plan" are approved and shall be incorporated into the final document.

ADOPTING THE TRAILS & BIKEWAYS FACILITY PLAN

was approved by the Bernalillo County Board of County Commissioners at the July 27, 1993, Commission Meeting.

BOARD OF COUNTY COMMISSIONERS

Patrick J. Baca, Chairman

Jacquelyn K. Schaefer, Vice-Chair

Eugene M. Gilbert, Member

Barbara J. Seward, Member

Albert "Al" Valdez, Member

APPROVED BY:

Tito D. Chavez

Tito Chavez, County Attorney

ATTEST:

Judy D. Woodward

Judy D. Woodward, County Clerk

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* Pocket Map

OVERVIEW

Albuquerque has a long history of trails planning - from bikeways planning in the early 1970's to arroyo corridor planning in the 1980's. Like most cities, Albuquerque has had some successes, but also has encountered many obstacles in implementing these plans. Within the government structure, trails have not fit readily into any department's mission. The Parks Department has constructed and maintains most of the existing trails, but at a certain point they view trails as a transportation facility, distinct from the park system. In the past, the Public Works Department to a large extent has considered trails a recreational amenity. This has changed in part, due to the passage of the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA), which mandates that transportation planning address other modes of travel besides the automobile.

The major goals for the Trails & Bikeways Facility Plan are to: secure a funding source; find an "administrative home" for trails and bikeways; create a map of the proposed network; and develop policies for future trail and bikeway development and usage. In two series of public meetings held throughout the city, the public made comments on this planning effort. Several major messages came through loud and clear.

First, citizens want continuity in the trail system; they want to connect up the existing segments of trails. Albuquerque has 39 miles of developed trails. A major focus of the plan is to develop proposed linkages. These projects tend to be expensive and difficult because they involve major freeway crossings, neighborhood acceptance, and other issues. In the "built" parts of the city, where little public right-of-way or vacant land is available, "trail study corridors" are proposed which will use the street system for trails, with traffic-slowing enhancements on certain residential streets added for the safety of trail users.

Second, people want to use the system to commute. This message resulted in an expansion of the trails plan to propose funding and improvements for the on-street bicycle network. Although the first phase of mapping has not dealt with the bike lane and route system, an evaluation of that system is proposed. In addition, many policies of the plan are directed toward the on-street bike system.

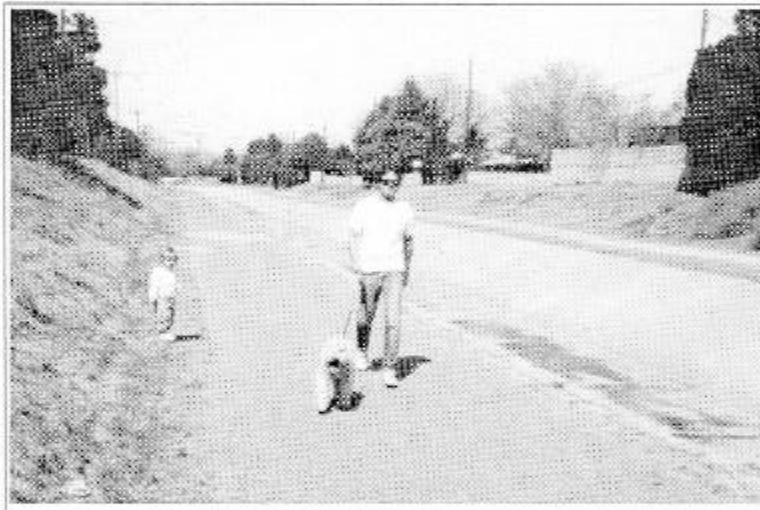
Finally, citizens want the trail system to address the needs of other trail users in addition to cyclists. There are pedestrians, runners, people with disabilities and equestrians who all need and desire trails which link them to parks, open spaces and other trails. The plan proposes a multi-use trail system. There are two levels of proposed trails, primary and secondary. The primary trails principally have a transportation function and it is mandatory that they be designed to encourage separation of different types of trail users. This can be

achieved by using a number of different design configurations which will encourage the recreational trail users to be separate from the commuting cyclists. On secondary trails, separation of use is not mandatory but still desirable.

The plan proposes that responsibility for implementation be assigned to two new staff positions: A bicycle/pedestrian coordinator in the Public Works Department to address issues related to the street system and the needs of commuters, and a trails coordinator in Parks and General Services to implement trails projects and address the needs of recreational trail users. Because of the regional nature of the proposed trail network, continuous coordination between representatives of many different agencies, departments, and jurisdictions will be required to make it a reality.

Funding is a major issue due to the competing needs of other public infrastructure. The plan relies upon a steady funding source (such as the currently proposed gasoline tax), supplemental City and County bond issue funding, and construction of trails as a component of transportation projects.

Paseo del Nordeste trail near Pennsylvania



ADMINISTRATIVE CONTEXT

This plan has been in progress since April of 1990. The initial intent of the plan was the implementation of an off-road recreational trail system. However, when public meetings were held in the fall of 1990, the public strongly indicated their desire that the trail system function not only as a recreational network, but also as an alternative method of transportation. Many suggestions were offered for modifications to the street system to facilitate bicycle commuting. The scope of the plan was therefore modified and its title in the current Multi-Year Planning Program for the City of Albuquerque is the "Trails & Bikeways Facility

Plan.” In addition to addressing the needs of off-road recreational trail users, the plan will provide strategies to assist cyclists in commuting by using combinations of trails, routes and lanes.

This is a Rank II Plan which recommends development standards, specifies general site locations and sets priorities for the use of public funds. The Planning Department is developing the Trails & Bikeways Facility Plan in coordination with the Parks and General Services Department, which is preparing both a Parks Facility Plan and an Open Space Facility Plan. An overall network of parks and open space areas connected by trails is envisioned. This is called the Parks, Open Space and Trails, or P.O.S.T., network. Public meetings were held jointly and much interaction has occurred as the plans have been developed. There are areas where the approaches to common issues should be coordinated and those will be described in this plan. Common goals have been established and joint objectives will be developed when all three plans are in final draft form.

The study area for the plan is Bernalillo County, including linkages to trails proposed in adjacent jurisdictions. The boundaries of the Proposed Trails Map, which will be proposed for inclusion in the Transportation Program prepared annually by the Middle Rio Grande Council of Governments (MRGCOG), will consist of the area within the Albuquerque city limits, the Village of Los Ranchos, and the unincorporated portions of Bernalillo County, exclusive of the East Mountain Area and the Rio Puerco Valley. Policies for trail development in the East Mountain area are contained in the East Mountain Area Plan. Policies for trail development in the Rio Puerco Valley and Mesa del Sol must be developed as planned communities are proposed.

This plan is proposed for adoption by Bernalillo County and the City of Albuquerque.

DEFINITIONS

- Accessible:** Describes a trail, or a portion thereof, which complies with American National Standards Institute (ANSI) Guidelines (ANSI, 1986, Appendix B, ADA Accessibility Guidelines) and is accessible to people with disabilities.
- AASHTO:** Refers to the American Association of State Highway and Transportation Officials, "Guide for the Development of Bicycle Facilities" manual, August, 1991.
- AMAFCA:** Albuquerque Metropolitan Arroyo Flood Control Authority: A political subdivision of the state established pursuant to Section 72-16-1 et. seq. N.M.S.A., 1978 in order to construct, maintain and operate flood control systems, primarily pertaining to

- arroyos.** AMAFCA policy is established by an elected board.
- Bike lane:** A portion of a roadway which has been designated by striping, signing and pavement markings for the preferential or exclusive use of bicyclists. (AASHTO)
- Bike route:** A segment of a system of bikeways designated by the jurisdiction having authority with appropriate directional and informational markers, with or without specific bicycle route number. (AASHTO)
- Bike path:** A bikeway physically separated from motorized vehicular traffic by an open space or barrier and either within the highway right-of-way or within an independent right -of-way. (AASHTO)
- Bikeways:** Any road, path, or way which in some manner is specifically designated as being open to bicycle travel, regardless of whether such facilities are designated for the exclusive use of bicycles or are to be shared with other transportation modes. (AASHTO)
- DRB:** Development Review Board: An administrative board, consisting of five members representing major City agencies which meets for the purpose of subdivision review and approval.
- DPM:** Development Process Manual: A compilation of City requirements related to design criteria and procedures for the processing of development proposals within the City's jurisdiction.
- Greater Albuquerque Cycling Advisory Committee (GABAC)** (see page 8)
- Greater Albuquerque Recreational Trails' Committee (GARTC)** (see page 21)
- Hard surface trail:** A trail surfaced with asphalt, concrete, soil cement, or other hard, stabilized surface.
- Irrigation ditch:** One of the conveyance channels owned or operated by the Middle Rio Grande Conservancy District for the irrigation and drainage of the Rio Grande Valley. These ditches may consist of drains, laterals, canals and acequias.
- ISTEA:** The Intermodal Surface Transportation Efficiency Act of 1991. The federal highway and transportation bill which provides funding for roads and other modes of transportation, including bikes and pedestrians.
- Major Public Open Space:** Major Public Open Space is an integrated system of lands and waters that have been designated either in the Major Open Space element of the Comprehensive Plan, the Major Public Open Space Register, or the City or County Comprehensive Zoning

Code. The lands and waters and interests therein have been or shall be acquired, developed, used, and/or managed to retain their natural character to benefit people throughout the Albuquerque Metropolitan Area by conserving resources related to the natural environment, providing opportunities for outdoor education and recreation, or defining the boundaries of the urban environment.

- MRGCOG:** Middle Rio Grande Council of Governments: An association of local governments in Bernalillo, Sandoval, Torrance and Valencia counties. The Urban Transportation Planning Policy Board (UTPPB) is a special body established by the MRGCOG Board of Directors to adopt policies for the long range transportation systems planning process in the Albuquerque Urban Area. The UTPPB in conjunction with several technical subcommittees develops the Transportation Program which is the basis for allocation of federal transportation funds.
- MRGCD:** Middle Rio Grande Conservancy District: The MRGCD was established by state law in the 1920's to alleviate problems in the Middle Rio Grande Valley related to drainage, flood control, and the consolidation of the irrigation systems in the Valley. MRGCD policy is established by an elected board.
- Park:** A park is a piece of land, varying in size and design and function, that enhances the urban or neighborhood environment. Some parks are designed for informal uses while others are designed for organized recreation.
- P.O.S.T.:** A City of Albuquerque interdepartmental planning effort for Parks, Open Space and Trails. Also, the physically connected system of Parks, Open Space and Trails. See discussion page 3.
- Primary trail:** A type of trail designated in the Trails and Bikeways Facility Plan which is of primary importance to the regional transportation network. Design must encourage separation of recreational trail users from commuter cyclists. Primary trails are coincident with "Bike Trails" designated on the Bikeways Master Plan.
- Secondary trail:** A type of trail designated in the Trails and Bikeways Facility Plan which supplements the primary trail system and may provide access to it. Separation of recreational users from commuter cyclists is encouraged if right-of-way is available.
- Soft surface trail:** An unsurfaced natural trail or trail surfaced with compacted earth, crusher fines, bark, or gravel.

- Trail:** A separate pathway designated by signs for use by non-motorized traffic only, including pedestrians, bicyclists, equestrians and people who use wheelchairs. Not all trails may accommodate all of these uses. Trails may be either hard surface or soft surface.
- Trail study corridor:** A type of proposed or future trail designated in the Trails and Bikeways Facility Plan where a trail right-of-way is not available or is not defined. In developed areas, traffic-slowing mechanisms may be applied to the street system to create linkages of trail segments. In undeveloped areas, when property is developed, trail access must be incorporated into the development.



A family of cyclists on the West side

tee presented its report, *The Bikeway Study*. That study proposed a network consisting of approximately 88 miles of bike trails, 60 miles of bike lanes, and 54 miles of bike routes, divided into a transportation system which utilized existing streets, and a recreational loop around the city.

The study further ranked these bikeways into three priority groups, outlined legal and financial considerations, and identified funding sources. The study proposed a "pilot system" of 32 miles of trails, 16 miles of lanes, and 9 miles of routes intended "to allow experimentation and study while establishing a skeletal network throughout the metropolitan area" The total network of 88 miles of trails and 60 miles of lanes was targeted for completion by 1978 and has yet to be realized. Development of some parts of the network proved impractical, while others simply never were implemented.

Those segments which were constructed, including the Paseo del Bosque and the Paseo del Nordeste trails, have served as the foundation of the Bikeways Master Plan for the Albuquerque Urban Area. The Bikeways Master Plan is in the form of a map produced by the Middle Rio Grande Council of Governments which shows existing and proposed bikeways.² The Bikeways Master Plan is updated annually as part of preparation of the Transportation Program.

The ad hoc bike committee has evolved into the Greater Albuquerque Bicycling Advisory Committee (GABAC), a citizen committee established by ordinance which represents all types of cyclists and advises governmental agencies on projects affecting cyclists. GABAC is also involved in the annual update of the Bikeways Master Plan.

² Copies of the Bikeways Master Plan are available from the Middle Rio Grande Council of Governments.

TABLE A

Existing Paved Trails and Bike Lanes

<u>Existing Trail</u>	<u>From</u>	<u>To</u>	<u>Length</u>
Arroyo del Oso Loop	Osuna Rd	Burlison Rd	0.4
Bear Canyon Arroyo	Eubank Blvd.	Juan Tabo Blvd.	1.0
Bear Canyon Arroyo	Wyoming Blvd.	Moon St.	0.5
Boca Negra Arroyo	San Ildefonso	Mariposa Arroyo	0.2
Embudo Arroyo	Morris	Tramway Blvd.	1.2
Four Hills Road	Stagecoach Rd.	Singing Arrow Rd.	0.5
Gibson Blvd.	Yale Blvd.	Amherst	0.7
Golf Course Rd.	La Orilla	Homestead Tr.	0.7
Heritage Hills	Barstow	Ventura	0.7
Interstate 40	Eubank Blvd.	Tramway Blvd.	2.3
Lomas Channel	Tramway Trail	Monte Verde Dr.	0.6
Mariposa Diversion	Dellyne Ave.	Kachina St.	0.9
Mariposa Basin	Mojave	Mariposa Basin	0.6
Nor Este/La Cueva Arroyo	Wyoming Blvd.	Barstow	0.5
Paseo del Bosque	Marquez Ln.	Rio Grande Nature Center	4.8
Paseo del Nordeste	UNM	Pennsylvania St.	6.0
Paseo del Norte Bridge	Alamo Rd.	Rio Grande Blvd.	1.0
Paseo de las Montanas	Pennsylvania	Tramway Blvd.	4.2
Phil Chacon	Phil Chacon Park	(within park)	0.2
Pino Arroyo/San Antonio	San Pedro Dr.	Wyoming Blvd.	1.0
South Domingo Baca	Louisiana Blvd.	Wyoming Blvd.	0.5
Tramway	Encantado	Paseo del Norte	6.7
Unser Blvd.	Bluewater Rd.	Los Volcanes Rd.	0.3
Unser Blvd.	Ladera Dr.	St. Joseph's	1.5
West Bear Canyon Arroyo	Osuna Rd.	Jefferson St.	0.7
Wyoming Blvd.	Academy Rd.	Barstow	1.4
		Total Mileage	39.1

<u>Existing Bike Lane</u>	<u>From</u>	<u>To</u>	<u>Length</u>
Bridge Blvd.	Coors Blvd.	Commercial Ave.	3.3
Burlison	Esther	Wyoming	0.7
Candelaria Rd.	12th St.	2nd St.	0.8
Chelwood Park Blvd.	Copper Ave.	Piedra Lisa Arroyo	2.5
Comanche Rd.	Alvarado	Moon St.	2.1
Coors Extension	Arenal	Central	1.4
Copper Ave.	Wyoming Blvd.	Eubank Blvd.	1.0
Louisiana	Burlison	So. Domingo Baca Arroyo	1.25
Moon St.	Comanche Rd.	Constitution Ave.	2.0
Osuna Rd.	San Pedro Dr.	Eubank Blvd.	2.5
Pennsylvania St.	Phoenix	Osuna	1.9
Rio Grande Blvd.	Mountain	Griegos	3.0
Unser Blvd.	I-40 Westbound Ramps	I-40 Eastbound Ramps	0.6
Washington	Constitution	Indian School	0.5
Wyoming Blvd.	Osuna	Academy	0.7
		Total Mileage	24.25

Additionally, the City publishes a pocket-sized, folded "Metropolitan Albuquerque Bicycle Map" which shows existing facilities and is intended for distribution to riders. Various agencies, including Parks and Recreation, Ridepool, and the City's Public Works Department, have participated in publishing this map.

As of December, 1992, Bernalillo County had approximately 39 miles of paved trails and 24 miles of designated bike lanes in existence. Table A includes a list of the existing trails and bike lanes. While these figures roughly approximate the skeletal pilot system proposed in the bikeway study eighteen years ago, they fall far short of the total network proposed.

Interest in cycling is again on the rise. Americans are spending billions of dollars annually on bicycles. Mountain bike sales in particular have skyrocketed from about 800,000 annually to more than 3 million. In a 1990 article for Outside magazine, David Noland observes that, "the cyclist of 1990 is serious. Three million people ride to work every day: nearly 200,000 raced last year You want hard core? A recent poll by one magazine for bikers revealed that 25 percent of its readers, if forced to choose, would give up sex before cycling." (Noland, David: "Cycling Gets Serious", Outside, March 1990)

Fanatical preferences aside, though, a recent survey by Bicycling magazine found that an average of 2.9% of adults in western states commute to work by bicycle on a regular basis. 20% (the equivalent of 32.9 million people) say they would sometimes commute to work by bike if there were safe lanes on roads and highways. (Louis Harris & Associates Poll, conducted for Bicycling magazine, October 1990)

Even though Albuquerque's existing bike system is incomplete, it is readily apparent to even a casual observer on a sunny weekend afternoon that the facilities are well used. This supports the notion that people ride merely for the sake of riding, when there are facilities available. In a 1991 survey conducted by the UNM Institute for Public Policy for the City of Albuquerque, 62% of the general public expressed that funding for bicycle paths should be increased.

Most trails proposed in the Bikeways Master Plan are included in the Proposed Trails Map. Alignments are clarified and some trails which are clearly infeasible are proposed to be deleted. The Bernalillo County portion of the current Bikeways Master Plan is on the following page.

Facility Plan for Arroyos

The Facility Plan for Arroyos was adopted by both the City and Bernalillo County in 1986 to establish guidelines “to create a multi-purpose network of recreational trails and open space along arroyos.” The Facility Plan for Arroyos was also endorsed by the Albuquerque Metropolitan Arroyo Flood Control Authority, an agency which is generally supportive of multiple use of its facilities where compatible with the drainage function. Trail usage of AMAFCA property is subservient to its drainage function and is controlled by revocable licenses approved by the Board of Directors to a public agency competent to assume liability and responsibility.

From a trails standpoint, Albuquerque’s arroyos offer unique opportunities in that they are linear corridors which cross large areas of the city and are generally located away from major roadways, with relatively few street crossings. The Facility Plan for Arroyos recognizes this opportunity and sets forth policies providing for joint use of the arroyo rights-of-way, combining recreational uses with their primary drainage function. The system envisioned in the Facility Plan for Arroyos is intended to address the needs of all types of trail users, including pedestrians, runners, equestrians, the disabled, and cyclists.

Three categories of arroyos were identified in the Facility Plan for Arroyos: Major Open Space Arroyos, Major Open Space Links, and Urban Recreational Arroyos. The latter two classifications specifically call for trail and recreational amenity development. The Major Open Space Arroyo designation, while not specifically requiring trail development, does provide for creation of trails where appropriate to access open space areas. Arroyos designated in the Facility Plan for Arroyos are listed in Table B. There is some overlap between the Facility Plan for Arroyos and the Bikeways Master Plan.

The Facility Plan for Arroyos calls for corridor plans to be adopted for individual arroyo trails. Table B also describes the status of the various arroyo corridor plans. All viable arroyo trails were included in the Proposed Trails Map.

The Water-Based Recreation Study

Early in 1984, the Open Space Division, then a division of the Albuquerque Parks and Recreation Department commissioned a study to investigate the potential for water-oriented recreation along the Rio Grande, as had been suggested in the 1969 Rio Grande Valley State Park Plan. This study included analysis of several specific projects suggested by a steering committee, as well as completion of conceptual designs for those projects. Among the selected studies was a network of trails along Middle Rio Grande Conservancy District (MRGCD) ditches in the valley.

TABLE B

**Facility Plan for Arroyos
Status of Corridor Plans**

Major Open Space Arroyos

1. Calabacillas Arroyo: In process.
2. Portions of the Tijeras Arroyo: In process.

Major Open Space Links

1. Piedras Marcadas Arroyo: To be completed after the Petroglyph National Monument General Plan is adopted.
2. Calabacillas Arroyo (portions): In process.
3. Amole Arroyo / Amole del Norte Diversion Channel: Corridor Plan adopted by City of Albuquerque and County of Bernalillo.
4. South Pino Arroyo: A trail has been developed along a portion.
5. Pajarito Arroyo: Corridor Plan adopted by City and County.
6. La Cueva Arroyos: Corridor Plan still needed.

Urban Recreation Arroyos

1. Bear Canyon Arroyo: Corridor Plan adopted, portions constructed.
2. San Antonio Arroyo: The western portion will be dealt with in conjunction with the Petroglyph National Monument General Plan.
3. Mariposa Arroyo / Mariposa Diversion Channel: Portions exist and funding is pending for other portions.
4. South Domingo Baca Arroyo: Portions exist. A corridor plan may be needed for the portion east of Holbrook.
5. Ladera Arroyo: No corridor plan called for. Trail can be designed outside the Petroglyph National Monument and coordinated with the NPS General Plan within the Monument.
6. Rinconada Arroyo: No corridor plan called for. Trail can be designed outside the Petroglyph National Monument and coordinated with the NPS General Plan within the Monument.
7. Mirehaven Arroyo: No corridor plan called for. Trail can be designed outside the Petroglyph National Monument and coordinated with the NPS General Plan within the Monument.
8. Embudo Arroyo System (including Embudito, Glenwood Hills and Piedra Lisa Arroyos): Developed trails exist along much of this arroyo. No corridor plan called for. Trails which are still viable are identified in the Proposed Trails Map and can be designed. Other segments are not feasible and therefore are not included.
9. Hahn Arroyo: Developed trails exist. No corridor plan called for. Some segments are not feasible and therefore are not included in the Proposed Trails Map.

With the exception of some of the older acequias, community ditches which existed prior to the creation of the MRGCD, most of the ditches in the valley have maintenance roads running alongside, which have historically been used not only for their intended purpose but also for recreation and local access. Just as the arroyos serve the higher areas of the city, ditches offer unique opportunities within the valley to provide connections between neighborhoods without traveling on busy streets. Horseback riders and pedestrians have long made use of the network.

Official use of these ditch roads is another matter, however, even though the MRGCD generally does not prohibit recreational trail use. Both the Comprehensive Plan and the 1975 City Edges Study discuss the idea of using the MRGCD ditch roads as part of a trail system. But at the same time, safety concerns and issues related to the privacy of adjacent property owners have hindered this effort.

The Water-Based Recreation Study acknowledges there are safety issues concerning the use of the ditches, but opts in favor of the trails system to take advantage of this extensive system of right-of-way. The Water-Based Recreation Study proposes that no improvements be made to attract young children and that an educational program be promoted. Ditches were analyzed as to right-of-way width, the potential to link to other planned or existing trails, and the type of title held by the MRGCD. The proposed trail network is included on the Proposed Trails Map with some modifications as suggested by the public. A separate planning effort is needed for the ditches and is discussed later in this plan.

Equestrians on the Gallegos Lateral



Area and Sector Development Plans

Area plans and many sector development plans also propose various trails, sometimes in a general way, and at other times very specifically. These proposals have all been included in the Proposed Trails Map as appropriate.

Unofficial Trails

It should be noted that unofficial unpaved trails abound within and around the urban area. In general, these are best suited to pedestrians, runners, equestrians and off-road bicycles. As mentioned in the previous section, equestrian and pedestrian use of ditch roads is widespread, although informal. There also exists an extensive network of trails within the Rio Grande bosque, used by both equestrians and hikers. The Open Space Division has installed log barriers that permit horses and pedestrians, but prohibit motorcycles and other unwanted traffic at a number of access points along the river. The Bosque Action Plan, recently adopted, addresses trails in the bosque.

The west side also has an extensive unofficial trail network, which often crosses into what is now the Petroglyph National Monument. This monument, containing over 7,160 acres was established in June of 1990. Lands acquired by the National Park Service, State of New Mexico, and City of Albuquerque will be jointly managed. A General Management Plan is being developed which will identify, among other things, trail needs, trail connections to other facilities, and how the monument will be used. The City and the NPS are making every effort to work together on all planning efforts.

Not all of the unofficial trails have been mapped. Equestrians have made some efforts at mapping in the North Valley, through an association called Horseways, Inc., devoted to preserving traditional equestrian routes. The Greater Albuquerque Recreational Trails Committee (GARTC) was formed in 1989 to help develop the trails plan and advise public agencies on trail issues. GARTC consists of representatives of different trail user groups as well as advisory members from different agencies and organizations. Two members represent Bernalillo County. In working on the Proposed Trails Map, GARTC made substantial progress on mapping unofficial trails.

National Forest Trails

The Sandia Mountains and Cibola National Forest offer wilderness opportunities literally at Albuquerque's back door. Located at the eastern edge of the city, the Sandia Mountain Wilderness is accessible from six trailheads on this side of the mountains, linking to miles of trails within the 37,000 acre wilderness area. Mountain bikes are not permitted

in the wilderness, but the Forest Service is taking steps to accommodate bikes on Forest Service land outside the wilderness boundary. Planning Department staff and the Open Space Division are working with the Forest Service to connect urban and open space trail facilities to the Sandias.

Current Trends

In addition to what has already been said about current interest in cycling, public interest in recreational trails is quite high. In a 1989 survey,³ when citizens were asked which park facilities were most in need of expansion or addition, recreational trails were the second highest priority from among 10 possible choices, including open space, golf courses, community centers, athletic fields, regional parks, tennis courts, swimming pools, etc. Trails ranked second only to neighborhood parks.

In a survey conducted as part of the regional P.O.S.T. network public meetings in 1990, trails were the top priority from among 30 choices for expanded facilities or programs, followed closely by neighborhood parks and open space. A national survey conducted in December of 1991, indicated that 73% of Americans walked for exercise in the preceding year.⁴

The trail system is getting a lot of use in Albuquerque. Improvements are being made to the popular Tramway Trail to alleviate congestion. The recent extension of this trail is already getting a lot of use. Sample trail counts were taken at various times and locations by an intern working for the Planning Department in order to provide information on the types of use trails and bikeways receive. A summary of this information is contained in Appendix E. At a glance, it is apparent that lots of people are using the trail system!

Studies indicate that public investment in parks, open space and trails pays for itself in attracting new corporations, in increased property values, and in jobs related to the recreation and leisure industry.⁵ Trails and bikeways are a relatively low capital cost facility, requiring little operation and maintenance. Trails with a firm surface and gentle slope can provide access to the outdoors for people with disabilities.

The health benefits of walking, biking and other trail activities are obvious. In addition to contributing to our quality of life as a recreational amenity, the potential contribution of trails to the transportation network is significant. Walking and biking require no other fuel than personal energy. Air polluting "short trips" are those most likely to be converted to

³ "Needs Assessment Survey for Albuquerque Parks and Recreation Department Comprehensive Plan," prepared by the UNM Institute for Public Policy (September 1989).

⁴ "Pathways for People", Louis Harris & Associates poll, Rodale Press (December 1991).

⁵ "Economic Impacts of Protecting Rivers, Trails and Greenway Corridors," National Park Service (1990 Edition).

Hikers in the Bosque

walking or biking. Trails can provide relief to traffic congestion, which is a major concern of area residents. Given today's limited public dollars, trails and bikeways are a logical choice for future public investment.

"Trails for All Americans", a summary report for the National Trails Agenda Project (Summer, 1992) concludes that a national system of trails should be built based on the following principles:

- Trail opportunities should exist within 15 minutes of most Americans' homes.
- The system should be made up of a combination of federal, state, local, and private trails, with all four linked together to create an interconnected system.
- In addition to their recreational function, trail corridors should be recognized as protection for valuable resources and as routes for alternative means of transportation.
- Trails should be planned as part of the nation's infrastructure, in the same category as highways and utilities.
- Planning for trail corridors and networks should be done at the local level.

The Trails & Bikeways Facility Plan is Albuquerque and Bernalillo County's effort to plan a regional trails network for this area. Connections to adjacent communities are planned. We now have an opportunity to become part of a vast, interconnected network of trails linking neighborhoods, communities, towns and cities, parks, and states throughout the entire country.

GOALS AND OBJECTIVES

The following plan goals evolved from the Greater Albuquerque Recreational Trails Committee, Greater Albuquerque Bicycling Advisory Committee, and public input obtained during public meetings held throughout the metropolitan area in the fall of 1990. Most of the goals and objectives have been addressed in the plan. Work remains to be done on some of them.

Develop a map of proposed trails throughout the Albuquerque metropolitan area. Objectives include:

- Link existing and proposed trails, to form a connected network;
- Connect neighborhoods to commute destinations;
- Connect neighborhoods to parks and open space;
- Attempt to distribute trail improvements area-wide;
- Determine appropriate locations for major improvements, such as overpass structures;
- Create recreational loops;
- Connect the heights and the westside to the valley;
- Update the map annually;
- Encourage the addition of neighborhood level trails;
- Digitize the map for ease of reproduction, revision and publication.

Accommodate the following users in the trail system recognizing that not all can be accommodated on every trail: cyclists (both mountain and touring), pedestrians, runners, equestrians, and the physically challenged. Objectives include:

- Develop trail design standards;
- Perform a corridor analysis or specialized study where necessary to address environmental agency or neighborhood concerns, or to determine a precise alignment;
- Develop maps for use by the public which show which portions of the trail system are appropriate for particular types of trail users and highlight major destinations;

Develop strategies to mitigate conflict between trail user types. Objectives include:

- Identify trails which may expect heavy bike commuter traffic;
- Require an extra design effort on those trails to separate user types;
- On all trails, develop strategies and use design techniques on available right-of-way to minimize conflict of use;
- Inform the public on trail rules of etiquette.

Develop a safe trail system. Objectives include:

- Locate and prioritize grade-separated crossings of arterials and other obstructions;
- Where crossings of arterials must occur at-grade, design safe at-grade crossings;
- Cooperate to inform the public on ditch and arroyo safety matters;
- Coordinate emergency access locations;
- Develop policies to utilize volunteers for safety patrols as appropriate;
- Consider safety issues in development of the trail design standards;
- Develop a public information campaign regarding trail user safety;
- Assign responsibility for maintenance of the trails system;
- In developed areas of the city, utilize innovative techniques to make the street system safe to provide critical connections in the trail system.

Facilitate commuter cycling. Objectives include:

- Undertake an on-street bike lane and route study and prioritize proposed improvements;
- Incorporate wide curb lanes into street designs for arterials and collectors;
- Implement on-street bike facilities in conjunction with roadway improvements;
- Develop a public information campaign regarding bicycle safety and encourage bicycle commuting;
- Develop procedures to more frequently sweep and maintain streets which have on-street bike facilities;
- Evaluate the mandatory sidepath law for needed revisions;
- Integrate bikes with the transit system;
- Develop guidelines and zoning requirements to encourage facilities to assist bike commuters, such as racks, lockers, showers and changing facilities.

Provide amenities for the trail system. Objectives include:

- Develop and install a system of signs to identify the trail network;
- Develop a landscaping policy for the trail system which can be easily maintained and, where possible, utilizes volunteer assistance;
- Develop interpretive and historic trails.

Develop a funding source and implementation strategy for the trails and bikeways network. Objectives include:

- Develop a steady annual source of funding for trail and bikeway development, maintenance and programmatic costs;
- Obtain supplemental capital funding as needed for major projects and to provide trail amenities;
- Leverage local funding to obtain state and federal transportation funds for major projects which serve a transportation purpose;
- Require trail dedication and platted access to the trail system as part of the development process;
- Include trail dedication apart of other public project planning;
- Create staff positions to implement the policies in the plan;
- Coordinate with all of the many agencies and jurisdictions needed to implement the plan;
- Utilize volunteers and the citizen advisory committees to the greatest extent possible to implement policies in the plan.

POLICIES & RECOMMENDATIONS

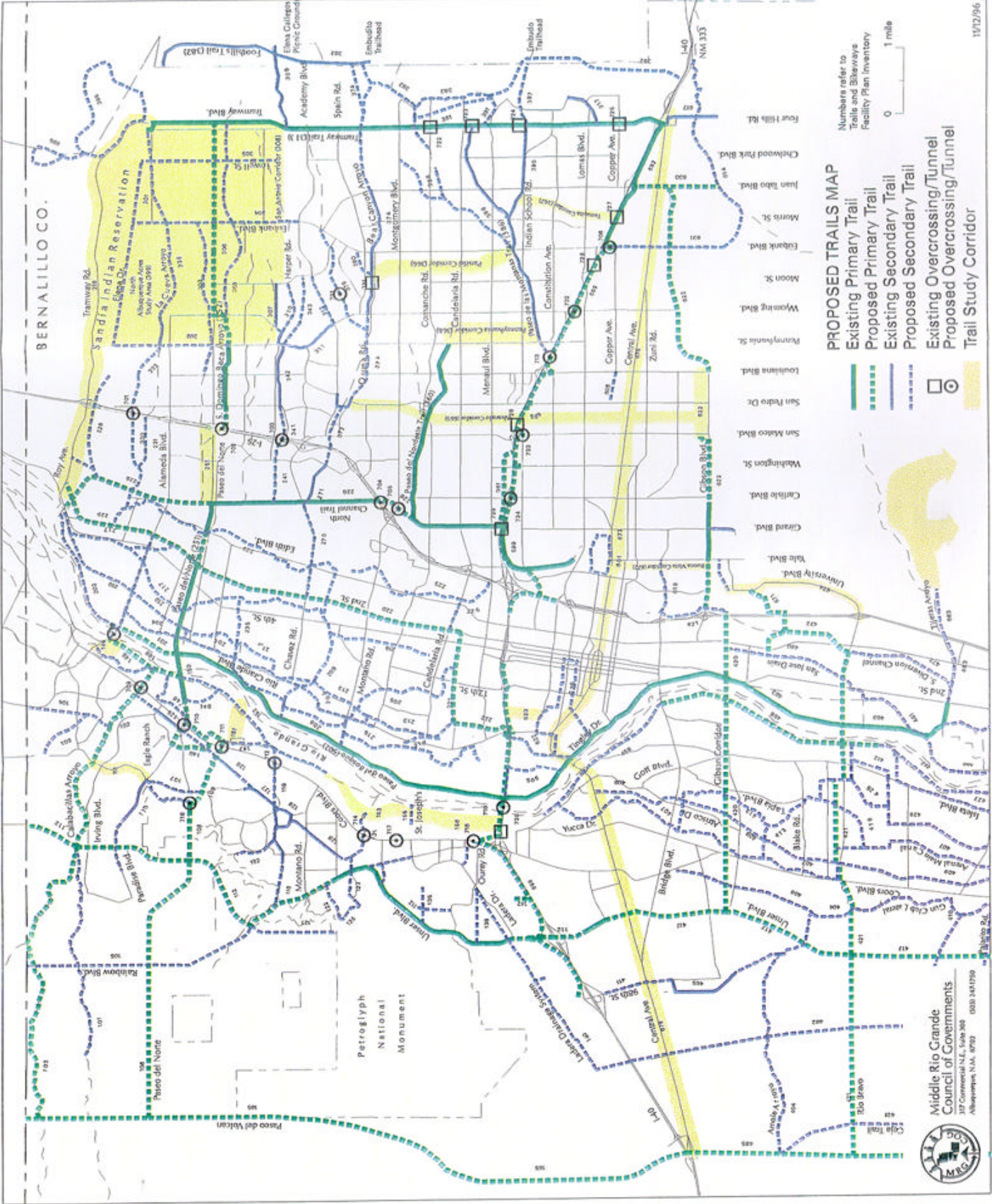
PROPOSED TRAILS MAP

The Proposed Trails Map, on the following page, illustrates the system of trails which this plan envisions. It was developed with much public comment and review over a period of several years. The Proposed Trails Map identifies known trail opportunities and critical linkages for the off-street trail system. Primary Trails are designated for trails which deserve a higher level of effort to separate commuter cyclists from other trail users. It is not intended that the primary trails stand alone as commuter bicycling routes. The Proposed Trails Map does not include on-street bike routes and lanes. In order to make connections to major work destinations, the street system is critical. The Bikeways Master Plan for the Bernalillo County portion of the Albuquerque Urban Area is provided on page 11 to show existing lane and route proposals.

Initially, a working map was developed which included all adopted trail and bike route proposals. The sources for the working map were the Bikeways Master Plan, the Facility Plan for Arroyos, the Water-Based Recreation Study and various area and sector development plan proposals. The working map was reviewed by the public at meetings held throughout the County in the fall of 1990 and many suggestions were made.

The Greater Albuquerque Recreational Trails Committee (GARTC) and Planning Department staff worked on each of six different regions of the City at GARTC's monthly meetings for over six months and a draft trails map was compiled. The draft trails map was reviewed by the public at meetings across the County in the summer of 1992 and further comments were received. At that time, the map was also reviewed by technical staff, GARTC and GABAC. Suggestions were incorporated as appropriate and the Proposed Trails Map was created. The guiding principles in creating the Proposed Trails Map were to:

- 1) link existing and proposed trails, to form a connected network;
- 2) connect neighborhoods to major commuter destinations;
- 3) connect neighborhoods to parks and open space;
- 4) attempt to distribute trail improvements city-wide;
- 5) determine appropriate locations for major improvements, such as overpasses;
- 6) create recreational loops;
- 7) connect the heights and the westside to the valley.



- PROPOSED TRAILS MAP**
- Existing Primary Trail
 - Proposed Primary Trail
 - Existing Secondary Trail
 - Proposed Secondary Trail
 - Existing Overcrossing/Tunnel
 - Proposed Overcrossing/Tunnel
 - Trail Study Corridor

Numbers refer to
Trails and Bikeways
Facility Plan Inventory

0 1 mile

Middle Rio Grande
Council of Governments
107 Commerce N.E. Suite 300
Albuquerque, N.M., 87102 (505) 243-1750



EXISTING AND PROPOSED TRAILS INVENTORY

A blackline version of the Proposed Trails Map is located in the pocket at the back of this plan. On that map, the trails are numbered and keyed to the Existing and Proposed Trails Inventory, which is Appendix A to this plan. The blackline map is divided into 6 geographic regions which correlate to the organization of the Inventory.

The Existing and Proposed Trails Inventory lists the source of each trail proposal. If a trail number has a "T" in front of it, it is a trail proposed for the first time in this plan. (After adoption of the plan, it will not be necessary to carry this distinction forward.) The inventory describes each trail's alignment and its ending point and terminus. The termini read from south to north and east to west. The length, estimated year of construction and estimated cost of each trail segment is also provided. The trails are identified as either Primary Trails, Secondary Trails, or Trail Study Corridors.

Primary Trails

The most important function of the primary trails is to serve as part of the regional transportation network. They also provide secondary recreational benefits. Design must encourage separation between recreational trail users and commuter cyclists, in order to promote commuter cycling by avoiding conflict between trail users. The primary trails will coincide with the "Bike Trail" designation on the Bikeways Master Plan.

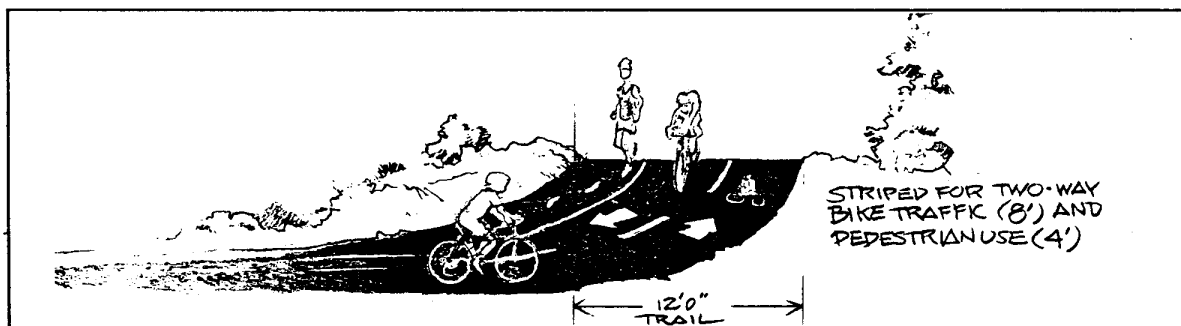
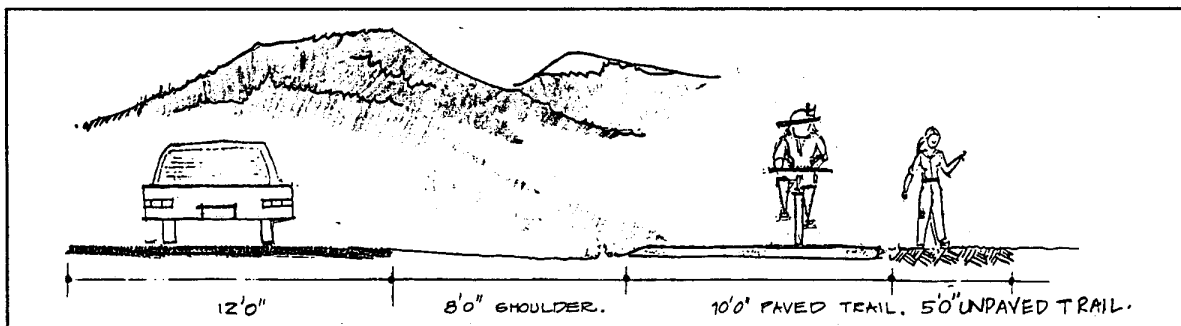
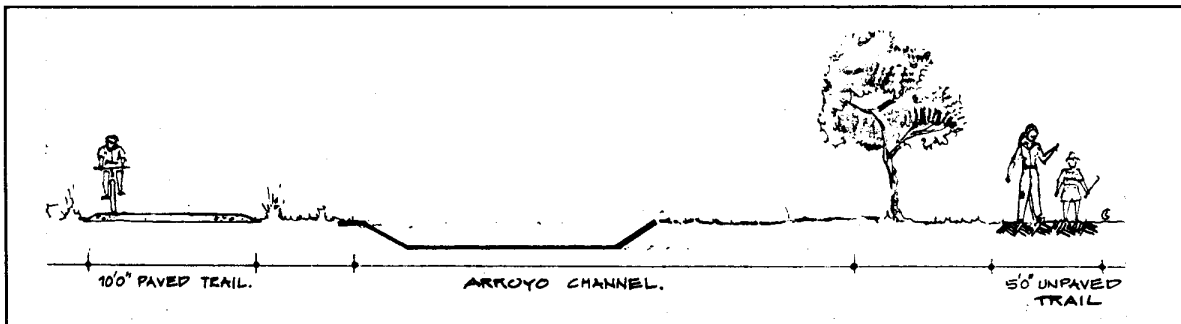
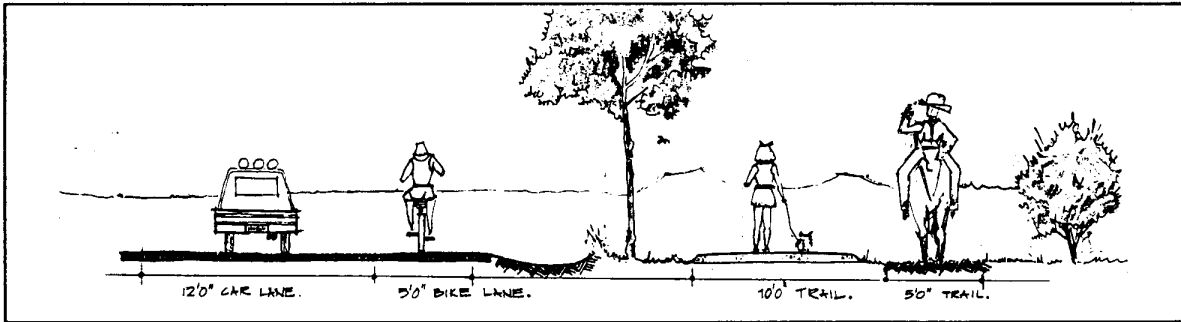
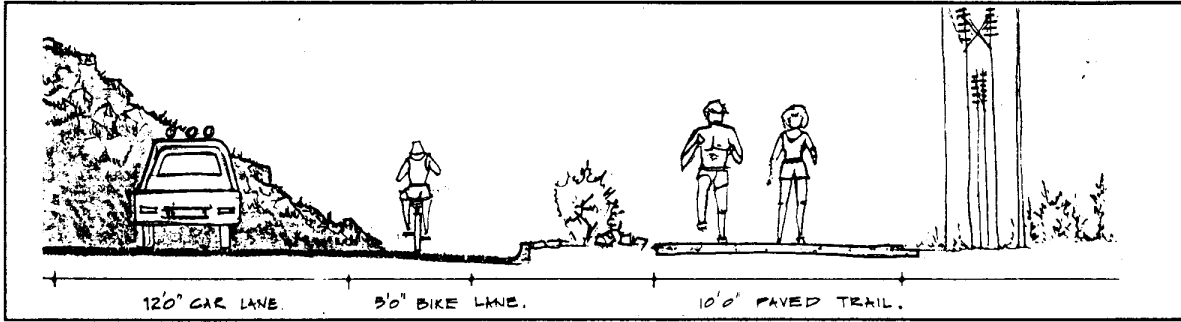
Examples of different types of trail design which will encourage separation of user types are illustrated in Figure A - Primary Trails Sample Trail Designs. In some stretches, separation of users may not be possible, for example, where right-of-way is constrained, at freeway overpasses or river crossings. Decisions on the design of individual corridors must be coordinated with GARTC and GABAC.

Existing trails which are designated as "primary" may not meet these design standards. As renovation occurs, compliance with Primary Trail design concepts will be sought. Where insufficient right-of-way exists, signage, striping and other conflict of use mitigation strategies should be incorporated.

Secondary Trails

The secondary trails supplement the primary system and may provide access to it. Separation of recreational users from commuter cyclists is encouraged if right-of-way is available.

PRIMARY TRAILS SAMPLE TRAIL DESIGNS FIGURE A



Secondary trails may be either hard or soft surfaced. Generally, soft surface trails are encouraged in natural areas, such as in the Sandia Foothills, within the Rio Grande Bosque, along the irrigation ditch network, and in the Petroglyph National Monument. However, stabilization or hard surfacing in natural areas may be appropriate in some instances in order to provide access for people with disabilities, or in some cases, a commuter trail connection.

Coordination with GARTC on the design of individual corridors will be required. Where a commuter use is demonstrated and the trail is proposed to be paved, it should be included in the Bikeways Master Plan.

Trail Study Corridors

This designation applies where a trail connection is desirable, but there is no definite alignment proposed. In developed areas, traffic-slowing mechanisms may be applied to residential streets to create linkages for existing or proposed trails. Using a traffic study and obtaining information from the neighborhood, traffic-calming strategies can be implemented to discourage automobile through traffic, thereby making the street safer for trail users. Some of these strategies could include traffic circles, median barriers, forced-turns, cul-de-sacs, speed humps, and narrowed streets with wide sidewalks.

In undeveloped areas, when property develops, trail access must be incorporated into the development along the alignment depicted in the Trail Study Corridor. A trail access easement may be platted within or adjacent to other rights-of-way, such as streets or drainage ways. Provision of easements and/or rights-of-way will be done in conformance with the Subdivision Ordinance.

Relationship to the Bikeways Master Plan (BMP)

The "Primary Trails" of the Proposed Trails Map and the "Bike Trails" of the BMP will be the same, but only the BMP will include proposed bike routes and lanes. The Proposed Trails Map will include the secondary trails and trail study corridors, which will not be on the BMP unless they are demonstrated to serve a bicycle commuting purpose. When the bike lane and route evaluation is complete, the BMP will be capable of being overlain on the Proposed Trails Map.

Currently, the Middle Rio Grande Council of Governments is considering changing the "Bike trail" designation on the Bikeways Master Plan to "bicycle path" in order to conform to the most recent AASHTO standards. When this change is instituted, the reference in the above paragraph to "bike trail" should be changed to "bike path." The Bernalillo County Portion of the Bikeways Master Plan is provided on page 11.

Corridor Analysis

Many trail proposals will require that the implementing agency perform a corridor analysis or engineering study prior to implementation, independent of the subdivision process. Extensive public involvement, particularly from neighborhoods, will be necessary prior to development of some trails. Other portions of the system, for example the irrigation ditch network in the valley, will require that major policy agreements be reached with other agencies prior to implementation. Finally, some trails will be subject to an environmental analysis, either because federal funding is anticipated, or because it is appropriate based on City policy or other circumstances.

Special Trail Planning Areas

There are several areas of the map where no trails are shown, although trails are needed. These include Mesa del Sol, which is designated to be a Planned Community, and the Petroglyph National Monument.

Mesa del Sol is a 13,000 acre parcel of land south of the Tijeras Arroyo. It is proposed as a planned community in the Comprehensive Plan and will be subject to meeting certain criteria. As planned communities criteria are developed, trails will be included. Connections from the proposed trail network to an extensive trail system in Mesa del Sol is highly desirable and should be addressed in Mesa del Sol's master planning efforts.

Petroglyph National Monument is a 7,000 acre monument which is part of the National Park system. Prior to creation of the monument, the City had adopted many plans and policies calling for a trail system within this area, e.g., the Comprehensive Plan, Facility Plan for Arroyos, and the Northwest Mesa Escarpment Plan. In deference to the National Park Service's planning process, none of the proposed alignments are shown on the Proposed Trails Map. The GARTC and many others, however, have a strong interest in continued trail use within the monument and are working with the National Park Service in this regard. The GARTC has a strong interest in establishing a multi-use trail network to provide for the protection, public use and enjoyment of this valuable resource.

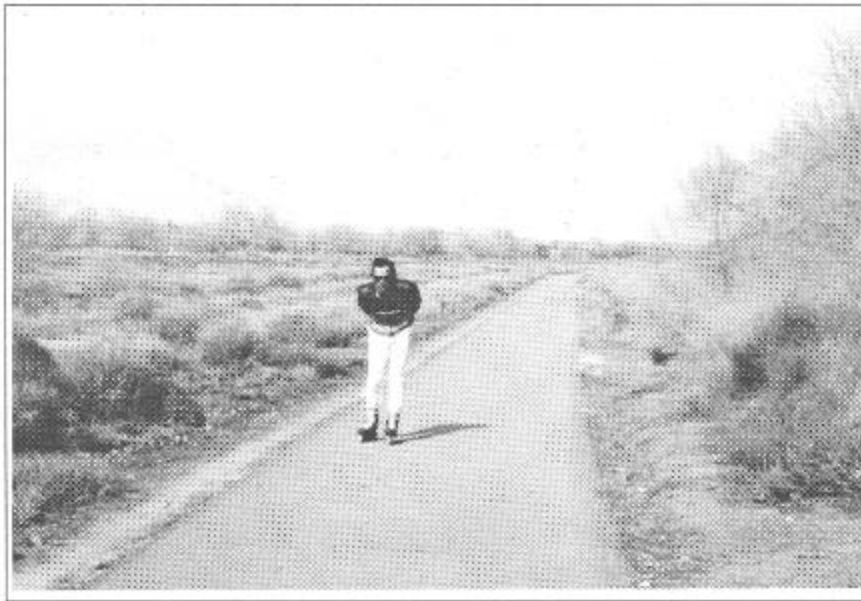
Many parties are objecting to the City's proposal to extend Paseo del Norte roadway through the monument and several alternative alignments have been proposed. The environmental impact statement on these issues is in the public hearing process as this is written. The trail as shown on the Proposed Trails Map is intended to be part of the road corridor and will be included in whatever alignment is chosen. If an alternative alignment is chosen, the need for a trail crossing of the monument at this location will be re-evaluated.

AGIS System

Upon adoption of the Trails & Bikeways Facility Plan, all alignments will be computerized on the Albuquerque Geographic Information System for easy access by agencies using this mapping service and for ease of updates to the Proposed Trails Map.

Map Updates

The Proposed Trails Map is a first attempt at putting all of the off-street trail proposals together and proposing new linkages. Work remains to be done at the neighborhood level to provide linkages from neighborhoods to the trail system. The Map should be updated annually as part of the Transportation Program update.



Paseo del Bosque trail

MULTIPLE USE TRAILS

Our trail system functions as a multiple use trail system, although some of the trails were originally intended only for bicycles. Concern is frequently expressed about conflict between types of users on the trails, but no one seriously advocates having single purpose trails for several reasons -- it would be difficult to enforce and in most cases insufficient right-of-way exists. Several factors help to alleviate trail congestion: commuters tend to use the trail system at different times of day than recreational users, and many commuter cyclists prefer to use the on-street bike lane and route system. There have been no reported cases of injuries resulting from collisions between trail users. This plan addresses the conflict of use issue through design strategies which accommodate multiple users.

Many other issues raised by the public are addressed in this section, including access to the trail system for people with disabilities. The existing trail system was evaluated for compliance with accessibility standards by the Parks and General Services Department in 1990. Many inaccessible trail segments are only inaccessible because the slope of a curb ramp at an entrance is too steep. Funding is being sought in the 1993 general obligation bond issue and subsequent bond issues for trail renovation to address safety and accessibility concerns on the existing trail system.

Although many agencies and people will be involved in the implementation of these policies, the Trails Coordinator, described in the Implementation section of this plan, is primarily responsible for coordinating the implementation of policies and development of the new programs described here.

General policy

The trail system will seek to accommodate the following types of users (recognizing that not all can be accommodated on every trail): cyclists (both mountain and touring), pedestrians, runners, equestrians, and people with disabilities. Multiple use by non-motorized trail users shall be allowed on all trails. The trail system will consist of both hard surface and soft surface trails. Generally, hard surface trails are not recommended for equestrians, but where necessary to connect unpaved trails, some short stretches may also be designated for their use.

Trail types

The trail system will include three levels of trail facilities: primary trails, where design of the trail corridor must encourage separation of user types; secondary trails, where separation is encouraged if feasible; and trail study corridors. (See discussion in Proposed Trails Map section for more explanation of each trail type.)

Trail development

Trails proposed in the Trails & Bikeways Facility Plan shall be included in adjacent public projects as the projects are planned and developed.

Conflict of use

Potential conflicts between different types of trail users due to large numbers of users will be lessened by the strategies outlined in the primary and secondary trail classifications. In addition, a campaign to inform the public about the Rules of Trail Etiquette, developed by the Greater Albuquerque Recreational Trails Committee, should be pursued.

Arterial crossings

Where trails must cross arterials at-grade, assistance to the trail user should be provided in the form of a signalized crossing or a median refuge. The Trail Standards to be developed will include criteria for whether such improvements should be included as part of site or subdivision improvements. Clarification of the Traffic Code regarding pedestrian rights and appropriate signage should be investigated. Locations for grade-separated crossings are identified on the Proposed Trails Map. Several of these are described as alternatives to each other, particularly along Coors Boulevard.

A study is needed to prioritize locations for grade-separated pedestrian crossings which are not necessarily related to the trail system. These structures are expensive and decisions on placement are being made on an ad hoc basis. Potential locations should be prioritized based upon accident statistics, proximity of schools, projected use, neighborhood input, and other factors. This project is appropriate for the Bicycle & Pedestrian Coordinator to pursue. Grade-separated crossing structures will be publically-funded improvements.

Public safety

Ditch Safety. Cooperation between trail development and the existing Ditch and Water Safety Task Force is encouraged. This task force has received a substantial increase in funding for FY '93 from the four contributing agencies (AMAFCA, the City, Bernalillo County and the MRGCD) and will be able to expand its scope to a broader education effort. Trails advocates should support the message that "Ditches are Deadly" which teaches children to stay out of arroyos and irrigation ditches. Trails next to, but outside of, ditches and arroyos are acceptable.

Emergency Access. Coordination with emergency rescue agencies regarding emergency access locations and safety signage as trails are designed is encouraged.

Volunteers. Policies should be developed for the use of volunteers to patrol trails and report problems. This could be coordinated with a volunteer maintenance program and, perhaps, with the use of volunteers for facilities in the entire P.O.S.T. system.

Trail design standards

Trail standards are recommended for inclusion in the Development Process Manual after review and revision by the Development Process Steering Committee. These standards will provide guidance for trail design and right-of-way needs. A current draft of the Trail Standards, which was reviewed by both GABAC and GARTC is included as Appendix D. This draft should be reviewed for needed modifications based upon the new AASHTO

bicycle standards, the Americans with Disabilities Act, the Parks Facility Plan existing trail inventory, and other cities' recently developed standards. Guidance on the use of bollards and their placement is needed as well as a standard design for horse walkovers. Design concepts for crime prevention should be incorporated.

Right-of-way dedication

Right-of-way for proposed trails must be dedicated in accordance with the Subdivision Ordinance and other adopted policies.

Where dedication of trail right-of-way meets a neighborhood park need as determined by the City, park dedication credit shall be available. Trail dedications may satisfy the parkland dedication requirement in the County if determined suitable by the County Parks and Recreation Department. Pursuant to the Facility Plan for Arroyos, any right-of-way dedicated for a trail in excess of what is required for drainage purposes along Open Space and Open Space Link arroyos shall be eligible for open space dedication credit.

Access standards

Pedestrian access to the trail system shall be considered at the time of platting or site development plan approval. Generally, at least one access point should be provided per quarter mile.

Trail users map

A Recreational Trails Map will be developed for use by the public that will show all trails and distinguish between hard and soft surfaced trails. The map should emphasize connections to schools and the parks, recreation and open space network. Maps should be printed and distributed liberally in order to give visibility to the trail system. They could be stocked in public libraries, sporting goods stores, etc. The maps should be distributed by all tourism and economic development agencies to people and businesses seeking information on New Mexico. In the future, specialized maps could be developed which would show certain networks, for example, accessible trails, equestrian trails, and others.

Access for people with disabilities

Standards regarding future trail development and access to the trail system for people with disabilities will be developed in conjunction with the P.O.S.T. network planning effort and as compliance criteria are developed pursuant to the Americans with Disabilities Act. Until these standards are developed, the following interim policies apply:

All trails identified as part of the primary trail system shall be fully accessible. Secondary trails which are new construction and proposed for hard surfacing should be made fully accessible unless extreme physical constraints make them financially and technically infeasible. In the event a portion of a secondary trail is not able to be made accessible, alternative accessible routes shall be sought.

Signage

Signs showing the trail network will be posted at various locations along the trails, so that trail users can find their location in relation to the system and locate connecting trails.

On asphalt trails, pavement signage should be used as much as possible in order to minimize freestanding signs along the trails. For example, "Stop", "Slow Your Speed" and reminders of the trail etiquette rules can be stenciled onto the pavement at strategic locations. Free-standing signs attract graffiti and vandalism.

Markings for all events using the trail system shall be removed after the event or made with materials that disappear quickly.

Landscaping

A policy on landscaping improvements along trail corridors will be developed in conjunction with the streetscape/urban design plan currently being developed by the Planning Department and in cooperation with the P.O.S.T. planning team. The first priority should be to plant the trail corridors with native grass for weed and erosion control. There may be opportunities to accomplish this jointly with the Public Works Department on the arroyo trails and on trails next to roadways. Certain trails should be selected for more intense landscaping. All opportunities to use citizen volunteers for beautification efforts should be explored. This is particularly true on the arroyos, where trails are adjacent to residences.

Interpretive Trails

Opportunities for interpretive trails, historic trails and trails which can provide environmental education should be explored and integrated into the trail network. Cooperation with the P.O.S.T. team, National Forest Service and National Park Service will be important.

BICYCLE FACILITIES

This section includes a number of policies intended to make our streets more "bicycle-friendly". Although many people and agencies will be involved in the implementation of these policies, the Bicycle and Pedestrian Coordinator, described in the Implementation section, is primarily responsible for coordinating the implementation of policies and development of the new programs described here.

Cyclists vary in whether they prefer to ride on a trail, in a bike lane or on the road. Many seem to want bike lanes if they are regularly swept of debris. A major focus of the plan is to provide a choice for cyclists depending on their level of skill and comfort on roadways. People should be able to ride to their destination using whatever combination of roads, trails, lanes and routes is most effective. Because cyclists' needs vary so greatly, as do their origins and destinations of travel, providing choice is essential to promoting commuter cycling.

Bikeways lane and route evaluation study

The improvements proposed in this plan are largely for the off-street trail system. Although many of the comments received at public meetings have reflected concerns with the on-street system for commuting cyclists, it has been beyond the scope, time constraints and funding available for this plan to address them. A traffic consultant is needed to evaluate the lane and route proposals on the Bikeways Master Plan (BMP) and propose appropriate modifications.

Consideration should be given to all suggestions made at the public meetings on the Trails and Bikeways Facility Plan in 1990 and 1992 and to the suggestions of GABAC members and other volunteers who have surveyed the system and noted needed improvements. In addition to proposed BMP revisions, improvements to the existing system, such as push buttons, median cuts, and others should also be identified. An extra effort should be made to increase routes and lanes in the developed older city areas with higher population densities and no space for trails. Special attention should also be given to employment centers such as the University of New Mexico, Downtown, Kirtland Air Force Base and the North I-25 industrial area.

Projects will be prioritized for implementation and transportation funding sources identified. The study should also result in an update of the Bikeway Locational Criteria.

Wide curb lanes

It is recommended that all curb lanes on new collectors and arterials, where bike lanes are not proposed, shall be at least 14' in width. When existing collectors and arterials are being

reconstructed or resurfaced, a wide outside curb lane shall be included if feasible. If additional right-of-way must be acquired to accommodate the wide curb lane on reconstruction projects, funding other than street improvement funds shall be sought. This policy will be implemented by revisions to the Development Process Manual after review by the Development Process Steering Committee.

Bike lanes and routes

All on-street bike facilities currently identified in the Bikeways Master Plan will continue to be implemented in conjunction with roadway improvements. Where a shoulder is identified as a bike route, although not signed as a bike lane, obstructions shall not be allowed to encroach into the shoulder.

Street maintenance

One of the most frequent complaints of cyclists is the accumulation of debris in the bike lanes. Streets which function as bike routes or have bike lanes will be swept more frequently. This can be accomplished in several different ways: by agreement of Street Maintenance; by purchase of a street sweeper for use on streets which have on-street bike facilities or are frequently used for bike travel; or by contracting with an outside service for more frequent street sweeping on bike routes. Better education of the public regarding litter control may also help prevent the accumulation of debris in bike lanes.

Street resurfacing

Streets which have on-street bike facilities should be given additional weight for resurfacing when resurfacing priorities are set. This can be incorporated into the street maintenance rating system.

Public safety

Public Information. A comprehensive public information campaign to alert car drivers to the rights of others on the roadways (cyclists, trail users and pedestrians) shall be pursued. The campaign should also inform pedestrians and cyclists as to their rights and responsibilities on roadways. The most effective method of reaching drivers should be sought, including television ads.

A portion of the campaign should also be devoted to encouraging more people to commute by bicycle and advising them of where to get information on how to find routes that best suit their needs.

Albuquerque Police Department. Instruction in bicycle traffic regulations will be included in APD officer training courses. Cooperation with the Albuquerque Police Department to develop a bicycle public safety campaign for the school system is encouraged.

Mandatory sidepath law

This law provides that where a path is provided for bikes parallel to the roadway, cyclists must use that path instead of the roadway. Since all of our trails are used by a variety of users, many cyclists prefer to use the street as a faster route. The mandatory sidepath law makes this illegal.

Because trails in Bernalillo County are for multiple use, they are not “usable” paths for the purpose of commuting by bike. The mandatory sidepath rule is not appropriately applied unless the trail is posted and enforced as a “bikes only” trail. The City of Albuquerque shall proceed with revision of its mandatory sidepath ordinance and support efforts to change the state mandatory sidepath statute. Experience from other states reveals that rather than repealing the law, the best approach is to revise it to allow cyclists to choose either the roadway or the trail. If it is repealed, local governments may still have the option to impose their own mandatory sidepath laws. The existence and enforcement of this law is counter-productive because it causes some cyclists to oppose trail development.

Integrate bikes with transit system

Bike racks shall be incorporated onto all city buses and bike racks and lockers will be included at park and ride facilities.

Bike lockers

Bike storage lockers shall be provided by the City in central locations such as Downtown. The University of New Mexico, Kirtland Air Force Base and other major employers are encouraged to provide lockers, showers, and changing facilities.

Zoning Code Revisions

The Zoning Code shall be revised to require that improvements to assist cyclists be incorporated into new developments. For example, depending upon the size and type of a proposed development or the number of anticipated employees, bike racks, lockers, showers and changing facilities could be required.

Maps

The Albuquerque Bicycle Map will be revised for readability. The GABAC will be consulted for suggestions and bicycle maps from other cities examined for ideas. Private sponsorship of the map should be considered, but excessive advertising on the map should be avoided.

Funding

Trails and bikeways have historically not had a dedicated funding source. Typically, they have been funded as part of the bond issue under the Parks question. The level of funding from this source has averaged \$132,000 per year for the past ten years. Some of this money was used to match federal Land & Water Conservation funds to construct several major trails. That fund is no longer in effect or is minimally funded. A few trails, most notably the Tramway Trail, have been constructed as part of a road project. In the '91/'92 bond cycle, for the first time, Urban Enhancement funding was awarded for trail projects.

NEEDS

Table C is a summary of pending funding requests for trail and bikeway **capital** projects and estimates for future years' needs. Projects are described in the Existing and Proposed Trail Inventory (Appendix A) which lists each trail alignment, gives its terminus, length, estimated cost and estimated year of implementation. The estimated year of implementation is based upon projected development trends, the timing of related projects, and other factors. The assumptions used as a basis for the cost estimates are located in Appendix A, page 49.

Twenty years was used as a time frame for implementation of the plan. Total trail miles proposed, including both paved and unpaved, is approximately three hundred. Total capital costs are projected at approximately thirty million dollars.

In addition to capital costs, there are **operating and maintenance** costs associated with the plan:

- implementation staff (\$100,000 per year);
- maintenance costs* (projected average annual increase of \$25,000 over next five years);
- public safety information campaign and maps (\$30,000 per year);
- enhanced maintenance of the on-street bike system (\$45,000 per year).

* *maintenance is estimated at \$2,400/annual/linear mile for paved trails and \$300/mile for dirt trails. The current cost of maintaining the existing paved trails is included in the Park Management budget.*

Another recurring expense will be trail renovation costs, which has been estimated at \$100,000 every two years. These estimates indicate that approximately two million dollars per year is needed to fund capital projects and operating and maintenance expenses as proposed in the plan. The Implementation section specifies that a capital project schedule and work program should be prepared and updated annually to reflect existing funding levels and short-term project priorities. Following is a discussion of potential sources to meet the projected needs.

TABLE C
Trails & Bikeways Facility Plan
Projected Capital Costs - Draft (April, 1993)

1993/1994 Projects	1995/1996 Projects	1997/1998 Projects
\$ 400,000* Paseo del Nordeste trail extension. Local match for '93/'94 ISTEAF funds, \$1.4M (226, 229, 251, 329, 704, T705)	\$ 80,000 San Antonio/Pino Arroyo (341) Designed.	\$ 113,000 Unser/Old Atrisco alignment (T113)
\$ 200,000* I-40 improvements. Local match for '94/'95 ISTEAF funds, \$800,000. (599, T719)	\$1,088,000 Paseo del Bosque Trail extension (503, 168, 201, 458)	\$ 77,000 Unser-San Antonio Arroyo to Montaña (114)
\$ 100,000* Acequia Plan - For trail system along irrigation network, to be undertaken in cooperation with MRGCD.	\$ 500,000 Downtown Urban Trail (525)	\$ 80,000 S. Branch San Antonio Arroyo (130)
\$ 100,000* On-street bike plan and improvements.	\$ 30,000 Buena Vista Trail Study Corridor (672)	\$ 18,000 PNM Easement - Ladera (T137)
\$ 75,000* Trail renovation - primary focus to improve handicap access.	\$ 45,000 Silver Trail Study Corridor (673)	\$ 53,000 Alamo Road (149)
\$ 80,000* Snow Vista Channel. Will match \$80,000 State grant for trails in Westgate Hts. (405)	\$ 45,000 University Blvd. Trail Study Corridor (674)	\$ 128,000 Corrales Main Canal (T144, 145, 147)
\$ 20,000* Riverview Trail Design. Trail to be constructed with private sector funding per Riverview Sector Plan. (126)	\$ 105,000 98th Street (411)	\$ 15,000 Piedras Marcadas Spur (151)
\$ 15,000* S. Domingo Baca trail nodal park. UETF.	\$ 105,000 Black Arroyo (103)	\$ 212,000 Rio Grande Blvd (T204)
\$ 55,000* Heritage Hills Trail. UETF (307)	\$ 88,000 Seven Bar Channel (104)	\$ 60,000 Griegos Drain (213,214)
\$ 45,000* Mariposa Arroyo Trail. UETF (132)	\$ 123,000 Boca Negra Arroyo (118)	\$ 68,000 Paseo del Norte-NDC to I-25 (T252)
\$ 91,000* Bear Arroyo - Juan Tabo to Foothills Trail. UETF (378)	\$ 30,000 Pennsylvania/Utah Trail Study Corridor (368)	\$ 113,000 I-40 - river to 12th (273)
\$ 111,000* Bear Arroyo - Moon to Eubank (376, 721) UETF.	\$ 20,000 Foothills Trail (384)	\$ 175,000 No. Domingo Baca Arroyo (T303)
\$ 158,000 Unser Blvd. South Phase II (115). Funded and currently being designed.	\$ 135,000 Piedras Marcadas Arroyo (108)	\$ 270,000 Paseo del Norte East (306)
\$ 110,000 Tramway Trail Extension - Central to Encantado (316). Funded and to be constructed in fall '93.	\$ 158,000 South Domingo Baca (352)	\$ 35,000 Simms Park Road (T309)
\$ 35,000 Mariposa Basin trail (128) - To be constructed as part of park complex	\$ 113,000 Embudo Channel (T361)	\$ 75,000 San Antonio Road (T308)
	\$ 135,000 Tramway (313)	\$ 35,000 Harper (T310)
	\$ 245,000 Tijeras Arroyo (T614)	\$ 60,000 Academy (T312)
	\$ 53,000 Stadium Blvd (T618)	\$ 20,000 Camino de la Sierra (T384)
	\$ 135,000 Alvarado Corridor (T665)	\$ 41,000 Embudito (T393)
	\$ 500,000 On-street bike route improvements and bike facilities**	\$ 280,000 Amole Arroyo (404)
	\$ 100,000 Trail renovation	\$ 210,000 Amole del Norte (406)
		\$ 53,000 West Bluff connection (T456)
		\$ 135,000 S. Diversion Channel (472)
		\$ 15,000 19th St./railroad spur (T523)
		\$ 123,000 UNM Loop Trail (T601)
		\$ 35,000 Copper extension (T605)
		\$ 35,000 Tramway connection (616)
		\$ 77,000 Phil Chacon/Gibson (627)
		\$ 113,000 Juan Tabo (630)
		\$ 700,000 On-street bike route improvements**
		\$ 100,000 Trail renovation
		\$ 3.5 M TOTAL
\$ 1.6 M Total (projects tentatively funded)	\$ 3.8 M Total	
\$ 2.2 M Total (unfunded needs)		

Notes:

- Numbers in () refer to trail segments which are described in the Existing & Proposed Trails Inventory, Appendix A.
- * This identifies projects which are currently proposed for funding either in the City's '93 General Obligation Bond Program or with Urban Enhancement Trust Funds.
- **Improvements to be identified in bike route and lane evaluation study.
- In years 1995 and beyond, these estimates do not include right of way acquisition (generally not anticipated) or landscaping. They do not take into account what might be paid for as part of transportation projects.
- Projects for years '99 to 2013 are prioritized as described in the Existing and Proposed Trails Inventory, Appendix A to the Plan.
- See Appendix A, page 47 for cost assumptions.

POTENTIAL SOURCES

Capital Improvement Program/Urban Enhancement Trust Fund

Trail and bike projects could continue to be funded through the capital program. They could either be funded as part of Parks general obligation bonds, as part transportation bonds, or with Urban Enhancement funding. One drawback to this approach is that trails and bikeways will be competing with other projects that have a higher priority with the departments which set the priorities. The capacity of the bond issue is limited and the City's needs are great. Trying to develop a new program such as is proposed in this plan using existing funding levels will be difficult. Also, the capital program will be unable to assist in operating costs.

Under any scenario, there will likely be some continued reliance on capital program funding. In addition to the City's program, projects should also be proposed for funding in the Bernalillo County capital program. The City of Albuquerque and the County of Bernalillo should work on jointly developing and maintaining projects which benefit both City residents and residents of the unincorporated portion of Bernalillo County.

Construction as part of transportation projects

The Bikeways Master Plan is intended to require that bike facilities be constructed as part of adjacent road projects. The problem with this approach is that if funding falls short on a road project or it is inconvenient to include the bike facility, the Bikeways Master Plan is often ignored or simply amended to delete the bike facility. Another problem is that many proposed trail projects are not related to a future road project. However, due to the economy of including trail and bike projects in adjacent road projects, cooperation should always be sought. Where bikeways are proposed for inclusion in a road project by environmental documents or the Bikeways Master Plan, they should proceed to be funded and constructed as part of the road project.

Transportation funding

A percentage of transportation funds could be identified for trails and bikeways. This could either be based on the City's capital program (approximately \$10 million dollars annually is typically allocated for streets) or could include the County of Bernalillo. The County issues bonds for approximately \$5 million dollars per year. If state and federal ISTEA funding for Bernalillo County are also included, another \$23 million annually could be considered.

A mandated percentage would have to be approved by the Urban Transportation Planning Policy Board of the MRGCOG. An advantage would be that money spent on all transportation projects in Bernalillo County would be considered, which is appropriate since the regional trails network is a county-wide transportation system. Using the above estimates, 5% of the transportation program would need to be allocated to meet projected trails and bikeways needs. The disadvantage would be that this approach would reduce available funding for road improvements, which have a high priority in the community.

Gasoline tax

Recently, several proposals have been put forth to have a public vote on whether a gasoline tax should be imposed, a portion of which would fund the trails and bikeways network. The Mayor first proposed a 2 cent per gallon tax, 1/2 cent to be devoted to trails and the balance for mass transit. A private group proposed 1 cent for trails and bikeways. The City Council has tentatively compromised on a bill which includes 1/2 cent for trails and the balance for transit and road repair. This will be voted on at the general election in October, 1993. If it passes, the tax will provide about \$1.1 million dollars per year for trails. Supplemental funding from the capital program or transportation program will still be needed. Maintenance and operations would be appropriate expenditures, but only transportation-related trails could be funded.

Quality of Life Tax

A special tax to build and operate the trails network could be proposed. This would be an ideal source, although the unpopularity of imposing new taxes is a big obstacle.

Gross Receipts Tax

A proposal has been put forth to dedicate 25% of the recently imposed 1/16 sales tax to construction of the trail network. Because of the projected needs of the trails network, if this proposal were to succeed, some portion of the trails system would have to continue to be funded by the CIP or other funding sources. Another concern is that sales tax revenues go into the general fund and it would be difficult to be sure that 25% continues to be dedicated to trails.

Regional Trails District

A separate district could be created which would be funded through property taxes. AMAFCA is an example of this type of organization. An advantage of this structure is that the district could be drawn to include all benefited areas, including those beyond the Albuquerque city limits. The network proposed in the plan is truly a regional network and a regional trails district would provide for implementation and operation of the trails network without regard to jurisdictional boundaries. This district would have to be created by State

law and any improvement bonds would be subject to a public vote. The major disadvantage is that another governmental organization would be created.

In some communities, the flood control districts play an expanded role, operating and maintaining a regional trails system. Another option would be to approach AMAFCA and the MRGCD with this type of proposal and see whether they would support the necessary legislative changes. This action would require Board approval, legislative changes and additional funding.

Private sector

There is some opportunity to work with the private sector to implement trails projects. For example, several businesses whose employees might benefit from an adjacent trail could be approached with a proposal to jointly fund a project. A trails coordinator position must exist in order to facilitate such projects.

In addition, there is an opportunity through the development process to require new developments to install trails as part of site improvements. This is particularly feasible where planned communities are proposed in the Comprehensive Plan, although allocation of responsibility for infrastructure in the Planned Communities is still subject to final policy definition. Since most trails are in public rights-of-way, however, and because it is easier to coordinate design if installed by one entity, opportunities for private construction of trails as part of development are often limited. It is more feasible to require the developer to dedicate needed trail right-of-way with publicly funded improvements to follow.

Impact Fees

The New Mexico legislature passed enabling legislation for local impact fees this past session. The legislation specifically allows impact fees for trails and non-motorized transportation purposes. It is yet to be determined whether such fees will be imposed and how much revenue could be generated.

Other Federal and State funding sources

There are other funds available for various types of trails: Symms Act (federal recreational trail money); Land and Water Conservation Funds; Fishing is Fun (federal funding for trails if they access fishing spots); and grants from the NM Department of Energy and Minerals (for transportation projects). Most of these funding sources are very small and very competitive, but it is worthwhile to submit applications in order to supplement a regular funding source. In addition, State and Federal agencies should be encouraged to build projects on their property which would benefit trails and bikeways, e.g. the University of New Mexico, Kirtland Air Force Base, and the State Fair.

CONCLUSIONS

Although many different avenues can be explored for funding trails, currently the most realistic option is a combination of a one-half cent per gallon gasoline tax, continued construction as part of transportation projects, and continued supplemental capital funding. The gas tax can provide funds for implementation staff, maintenance and operations, and public information. All three sources would contribute to capital project implementation without dramatically impacting any existing programs. If the City Council selects this funding method, a detailed financial plan will be developed to provide specific direction for project and program implementation.



Bear Canyon Arroyo trail at El Oso Grande Park

IMPLEMENTATION

Although project construction and funding are major components of plan implementation, there are other important aspects as well. Development of trails and bikeways has not been handled in a consistent manner by the City. The existing network has been planned, constructed, and maintained by a variety of agencies.⁸ Responsibility for different functions is unclear and there is no staff assigned responsibility for oversight of all of the different projects and activities related to implementation of the Bikeways Master Plan and Facility Plan for Arroyos. This plan proposes that two positions be created to coordinate implementation functions.

Additionally, since two citizen committees exist whose responsibilities overlap at times, their functions are further defined in this section. Planning issues which this plan has not been able to address are identified in this section and responsibility for completion is assigned.

Finally, this section addresses the important issue of maintenance. Trails require relatively little maintenance when compared to other city facilities, but with lean governmental operating budgets, maintenance costs are a big concern. As things currently stand, City Parks and General Services maintains the vast majority of the trails. Public Works maintains the on-street bike route and lane striping and signage. The New Mexico State Highway and Transportation Department maintains the I-40 Trail, the Paseo del Norte Bridge Trail and recently assumed responsibility for the Tramway Trail. There are some trail segments which no one claims responsibility for and which are not maintained.

Coordinator Positions

Two full-time positions are recommended to be responsible for implementation of the plan: a Bicycle and Pedestrian Coordinator and a Trails Coordinator. The major responsibilities of the Bicycle and Pedestrian Coordinator would pertain to on-street bike and pedestrian facilities and safety programs, and this position should be placed in the Public Works Department. The Trails Coordinator would focus on implementation of the off-street trail system, and this position should be placed in the Parks and General Services Department. Recommended duties for each position are outlined in detail in Tables D and E. Care has been taken to be sure that these suggested staff positions cover all critical tasks and that efforts are not duplicated.

⁸ City Parks and General Services, City Cultural and Recreational Services, City Public Works, City Planning Department, City Open Space Division, Bernalillo County Public Works Department, the New Mexico State Highway and Transportation Department, and the Middle Rio Grande Council of Governments.

Annual work program and prioritization process

Each coordinator will be responsible for developing a capital project implementation schedule and work program. This schedule and work program will be updated annually.

Each coordinator is assigned a significant number of new programs to develop and implement. The annual program will identify a strategy for implementing these programs based on available funding. The capital project schedule will also be annually updated based on available and projected funding. This will include allocation of resources between new construction and renovation needs.

The multi-use trail program and project schedule will be reviewed and approved by GARTC. The on-street bike program will be reviewed by the GABAC.

Participation by other agencies and jurisdictions

Even with the creation of two positions to implement the Trails & Bikeways Facility Plan, coordination and participation of many different people and agencies will still be required. Following are some specific tasks to be handled by others (all departments refer to City of Albuquerque departments unless otherwise indicated):

Bernalillo County. The County's responsibility for implementation is to include trails as part of County roads, certain arroyos, and other developments which occur outside of the municipal boundaries in accordance with the Proposed Trails Map and to maintain those trails. County participation in the Acequia Plan is essential and a separate policy for North Albuquerque Acres trails should be developed by the County. The County is responsible for trail implementation in the East Mountain area outside the National Forest boundary.

Bernalillo County is beginning a Park Master Plan which may re-evaluate some of the trail proposals depicted on the Proposed Trails Map. All revisions shall be incorporated in subsequent updates of the Proposed Trails Map.

Traffic Engineering, Public Works Department. The Traffic Engineer will continue to work with GABAC and coordinate efforts with the Bicycle & Pedestrian Coordinator to ensure that the bike lane and route system and trail crossings of streets are as safe as possible. The Traffic Engineer will be closely involved in the bike lane and route evaluation study and in all public safety education efforts.

Advance Planning Division, Planning Department. Advance Planning will be responsible for completion of the Trails & Bikeways Facility Plan, including production of the final map of the proposed trail network. Advance Planning will also continue to perform many of the functions described in the two coordinator roles until the new positions have been established.

TABLE D
Bicycle and Pedestrian Coordinator (B & PC)

Duties:

1. Responsible for coordinating all on-street bike and pedestrian issues, including review of all projects from corridor analysis through design in order to ensure bike and pedestrian facilities are included as appropriate. This includes reviewing Design Review Committee cases.
2. Staff to the Greater Albuquerque Bicycling Advisory Committee (GABAC);
3. Attend meetings of the Greater Albuquerque Recreational Trails Committee (GARTC) and coordinate regularly with the Trails Coordinator;
4. Development of the bike lane and route evaluation study;
5. Development of a bicycle/pedestrian/auto safety campaign to advise the public on the rights and responsibilities of bikes and pedestrians in relation to auto drivers;
6. Initiation of Trail Corridor Studies for the alignments identified in the plan;
7. Coordination of the update, printing and distribution of the bicycle map;
8. Implementation of the other recommendations in the "Bicycle Facilities" section of the plan, including in order of priority:
 - a. In conjunction with Street Maintenance, develop a method for a higher level of street maintenance on streets which have bike lanes or function as a bike route.
 - b. Develop zoning code revisions for bicycle facilities.
 - c. Propose and coordinate installation of bike racks and lockers at public facilities.
 - d. Initiate grade-separated crossing study (this is in Multiple-use Trails section under arterial crossings).
 - e. Initiate revisions to mandatory side-path law.

Placement:

It is recommended that whomever fills this position report directly to the Transportation Development Division Manager, Public Works Department.

Implementation

TABLE E
Trails Coordinator (TC)

Duties:

1. Responsible for implementing the capital projects proposed in the plan and coordinating development of the off-street trail network. Although this position will be placed in the City of Albuquerque, it is intended that the TC address trail issues on a County-wide basis.
2. Pursue all funding sources. Be added as a voting member on the Transportation Program Task Group, a committee which develops the Transportation Program for the Middle Rio Grande Council of Governments. (This will have to be approved by the Transportation Coordinating Committee.)
3. Staff to the Greater Albuquerque Recreational Trails Committee.
4. Review and comment on all Development Review Board, Environmental Planning Commission, and County Planning Commission cases which involve trails, notify the Bicycle & Pedestrian Coordinator of any issues that might affect bikes and pedestrians.
5. Serve on technical advisory teams for public projects, e.g. sector and facility plans, road corridor studies, park master plans, drainage management plans, etc., and on task forces and other study teams where a trails representative is required.
6. Attend all GABAC meetings and coordinate regularly with the B & PC, particularly on road projects.
7. Implementation of the other plan recommendations described under the "Multiple Use Trails" section, including in order of priority:
 - a. Revision of the Trail Standards and processing for inclusion in the Development Process Manual.
 - b. Completion of P.O.S.T. efforts related to the trails component of the P.O.S.T. system.
 - c. Creation of the Trail Users Map.
 - d. Development of a landscaping and maintenance plan for the trail system which would utilize the services of volunteers as much as possible.
 - e. Development of a volunteer patrol strategy.

Placement:

This position should be located in a division which is capable of planning, designing and implementing capital projects. It is recommended that this person report to the Design & Development Division of Parks and General Services, since this division has the most experience with trail development and issues related to the trail system.

Advance Planning will be responsible for development of the Acequia Plan, a project described later in this section of the plan which will include many issues beyond those covered here.

Cultural & Recreational Services. This department will be available to assist in promotional activities and events for the Trails & Bikeways network, including sponsorship of National Trails Day, bike-to-work activities, and children's education efforts, such as bike rodeos. They will continue to be the liaison between the City and major private events, such as runs and bike rides.

Open Space Division, Parks and General Services. The Open Space Division will be responsible for development and maintenance of trails in open space and along the major public open space arroyos. The Trails Coordinator will coordinate connection of these trails to the regional trails network. Open Space will work with GARTC in planning the development of these trails. Open Space will be a key participant in the development and implementation of the Acequia Plan.

Street Maintenance, Public Works Department. Street Maintenance will continue to maintain the streets which include bicycle facilities. As described in the Bikeways policies section, a higher level of maintenance for streets which have bike lanes and routes will be sought. In addition, Street Maintenance will also be responsible for maintenance of trails within the street right-of-way.

Park Management, Parks and General Services. Park Management will be responsible for maintenance of trails which are outside the street right-of-way. Consideration should be given to contracting jointly with Hydrology for mowing and clean up services for trails adjacent to arroyos. If a new funding source for trail maintenance is identified, it should be made available to Park Management for maintenance of new trails.

Design & Development Section, Parks & General Services. This Section will continue to coordinate with the trails program, particularly on P.O.S.T. planning issues. Trail projects which are currently under way should be completed and trail development in regional, community and neighborhood parks will continue to be designed and constructed by this Section. The Trails Coordinator will coordinate connection of these trails to the regional trails network.

Middle Rio Grande Council of Governments. Both the Bikeways Master Plan and the Proposed Trails Map will be proposed for inclusion in the Transportation Program. In addition, it is logical to have all mapping functions and the Existing and Proposed Trails Inventory database centrally located at the MRGCOG, since the Bikeways Master Plan function is already there. A formal request to the MRGCOG must be made and approved by

their Executive Board. The MRGCOG should be officially added to the GARTC as an advisory member.

Albuquerque Metropolitan Arroyo Flood Control Authority/COA Hydrology. AMAFCA and Hydrology will continue to cooperate on implementation of trails along their drainage channels. Cooperation in the area of ditch safety efforts will also be critical. The AMAFCA Board of Directors will be asked to endorse the plan.

Middle Rio Grande Conservancy District. The MRGCD will be asked to participate in the development and implementation of the Acequia Plan.

Village of Los Ranchos. Close coordination and possible participation in the Acequia Plan will be sought, as well as coordination on all projects proposed within the Village jurisdictional boundaries.

Cibola National Forest. The Sandia Ranger District of the National Forest will continue to provide major recreational trail opportunities in the Sandia Mountains. Coordination between the Open Space Division, the National Forest and the Trails Coordinator will be essential.

Committee responsibilities

The GARTC and GABAC will share advisory responsibility for the primary trail network. The GARTC will have advisory responsibility for the secondary trail network and trail study corridors. The GABAC will have advisory responsibility for the on-street bike network.

The GARTC and GABAC will also review and approve the annual work programs and project schedules. Other committee responsibilities will remain the same.

Further planning projects

As previously identified in the plan, several other projects should follow adoption of this plan. Those projects are described here.

Bike lane and route evaluation study. This study will use the services of a transportation engineer to evaluate the existing and proposed on-street bike network and propose needed modifications to that network. Consideration should be given to the comments made by citizens during the regional meetings on the Trails & Bikeways Facility Plan and to the suggestions of GABAC members and other volunteer cyclists who have surveyed the existing system and noted needed improvements.

Projects will be prioritized for implementation. Transportation funding sources should be pursued if needed to supplement funding identified for the Trails & Bikeways Facility Plan. Recommendations will be incorporated into the Bikeways Master Plan. See additional detail on this study in the Bicycle facilities section of the plan, page 34.

Acequia Plan. This plan will examine the Middle Rio Grande Conservancy District's system of ditches and drains and develop policies which will promote preservation of the network for trail use. The plan will follow up on work performed in the Water-Based Recreation Study (1985), which identified ditches most suitable for development of primarily unpaved pedestrian/equestrian trails. These trails are included in the Proposed Trails Map as modified based upon citizen and technical team input as well as from recommendations in the Draft North Valley Area Plan. All of the alignments must be field verified and evaluated for the appropriateness of inclusion in the trail system.

Proposed improvements are not anticipated to be structural in nature, but rather will preserve and enhance the existing system. Possible improvements include: gates to prevent motor vehicle access, simple trail signage, and inclusion of the network in a map for public use. Some segments of MRGCD ditches are being abandoned by the MRGCD because they are no longer needed for irrigation purposes. The Plan should identify which MRGCD rights-of-way which are part of the proposed trail system or provide access to the system and should be preserved. It should also suggest methods for neighborhoods to preserve ditches and develop procedures for the MRGCD to follow in abandonment proceedings. Although most of the network will likely consist of soft-surface trails, several ditches may be appropriate for consideration as part of the Primary Trail network, meaning commuter cyclists would be accommodated. The Alameda Drain is already designated as such and the Arenal Main Canal is another which should be considered.

The Plan will also examine other policy issues of concern to both trail access and the MRGCD, such as maintenance, liability, safety and policing. Historic preservation issues should also be addressed. Agreement must be reached with the MRGCD before any ditch roads can be officially designated as trails. Participation by the MRGCD, the County of Bernalillo and the Village of Los Ranchos will be sought for this project.

Given the natural character envisioned for this trail network, the Open Space Division, of the City of Albuquerque is the most appropriate agency to operate the future ditch trail network. Further, abandoned ditches are already included on the Major Open Space Protection/Priority Acquisition List, Open Space has its own maintenance and law enforcement crews, and the Open Space Advisory Board has indicated an interest in including the ditch trail system in the Major Public Open Space system.

North Albuquerque Acres. Citizens have expressed an interest in having the road network in the unincorporated area of North Albuquerque Acres used for a future trail system. There is a concern about relying on the arroyos in this area, because they bisect many individually owned parcels. One suggestion is to designate 15' on one side of each roadway as a trail.

Finding the right solution will require some analysis. It is recommended that the County of Bernalillo initiate a small study which will recommend trail alignments in North Albuquerque Acres. The findings of the study could be incorporated into a policy adopted by the Bernalillo County Commission. The trail alignments shown on the Proposed Trails Map along the arroyos in the unincorporated portion of North Albuquerque Acres are intended to preserve the option to require that a trail be developed along the arroyo only if major replatting and land consolidation occurs or if the drainage is ultimately carried in a public right-of-way. There is no intention to require dedication of trail easements from one acre lot owners at the building permit stage.

Maintenance

No new trails should be constructed with public funds unless responsibility and funding for maintenance is addressed. Responsibility for maintenance should be allocated as follows:

City Park Management is responsible for off-street trails and trails within neighborhood or regional park facilities. **Bernalillo County Parks and Recreation** is responsible for off-street trails and trails within County parks outside the City limits. **The Open Space Division** is responsible for trails within Major Public Open Space and trails along open space arroyos. **The City and County Public Works Departments and the New Mexico State Highway and Transportation Department** are responsible for off-street trails and on-street bike facilities within the street or highway rights-of-way.

Volunteers. There is a great potential for the use of volunteers in maintaining much of the trails system, since the bulk of trail maintenance involves trash pick up, weeding, sweeping up glass, and graffiti removal. The Trails Coordinator is assigned responsibility for developing a strategy for using volunteers on the trails. This should be coordinated with a strategy for use of volunteers for the entire P.O.S.T. system.

Citizen committees. The GABAC and GARTC could organize volunteers to do an annual survey of the trail and bikeway network and report on any maintenance or safety needs. They have contacts with the various clubs and it would be easy to get enough volunteers.

APPENDIX A

Existing and Proposed Trails Inventory (Map in Pocket)

Key:

#	Trail Segment Number
TSC	Transportation Study Corridor
FPA	Facility Plan for Arroyos
BMP	Bikeways Master Plan
WBR	Water-Based Recreation Plan
Ex	Existing
PT	Primary Trail
ST	Secondary Trail
Length	In Miles
Cost*	In Thousands

* **Cost Assumptions:**

- \$90,000/linear mile for Primary Trails
- \$70,000/linear mile for Secondary Trails
- \$30,000/linear mile for Trail Study Corridors
- \$20,000/linear mile for trails proposed along MRDCG irrigation ditches
- If actual cost estimates are available, those figures are used instead of assumptions
- In years 1995 and beyond, these estimates do not include right-of-way acquisition (generally not anticipated) or landscaping. They do not take into account what might be paid for as part of transportation projects.

TRAILS AND BIKEWAYS FACILITY PLAN DATA

NUMBER ALIGNMENT	REG FROM	TO	HIST	TYPE MILES ON_BMP
101.00 CALABACILLAS ARROYO	NW W OF RAINBOW AV	N. CALABACILLAS AR	FPA	ST 3.52 N
102.01 N BRANCH CALABACILLAS	NW PASEO DEL VOLCAN	UNSER BLVD	BMP	PT 5.09 Y
102.02 CALABACILLAS ARROYO	NW UNSER BLVD	CORR. R.SIDE DRAIN	BMP	PT 3.46 Y
103.00 BLACK ARROYO	NW GOLF COURSE RD	CALABACILLAS ARROYO	BMP	ST 1.43 Y
104.00 SEVEN BAR CHANNEL	NW WESTSIDE BLVD	BLACK ARROYO	BMP	ST 1.00 Y
105.00 RAINBOW AVE	NW UNSER BLVD	SANDOVAL CO. LINE	BMP	ST 3.82 Y
106.01 PASEO DEL NORTE (WEST)	NW PASEO DEL VOLCAN	CALLE NORTENA	BMP	PT 4.70 Y
106.02 PASEO DEL NORTE (WEST)	NW CALLE NORTENA	PIEDRAS MARCADAS ARR	TBFP	PT 0.67 N
107.00 GOLF COURSE RD	NW PIEDRAS MARCADAS ARR	PARADISE BLVD	BMP	ST 0.90 Y
108.01 PIEDRAS MARCADAS ARROYO	NW PASEO DEL NORTE	LA ORILLA OUTLET	BMP	PT 1.23 Y
108.02 PIEDRAS MARCADAS ARROYO	NW PASEO DEL NORTE	2000 FT N. OF PDN	BMP	ST 0.46 N
109.00 PIEDRAS MARCADAS FENCE	NW 2000 FT N. OF PDN	PARADISE BLVD	TBFP	ST 0.47 N
110.01 PARADISE BLVD	NW JUSTIN DR	GOLF COURSE RD	EX	ST 0.70 N
110.02 PARADISE BLVD	NW CHAPPARELL	JUSTIN DR	TBFP	ST 0.92 N
111.00 GOLF COURSE RD	NW PARADISE BLVD	CALABACILLAS ARR	TBFP	TSC 0.00 Y
112.01 UNSER BLVD	NW RAINBOW AVE	SANDOVAL CO. LINE	TBFP	PT 4.34 Y
112.02 UNSER/OLD ATRISCO ALIGN	NW MONTANO RD	81ST ST	TBFP	PT 1.05 Y
112.03 UNSER BLVD	NW SAN ANTONIO ARR	DELLYNE AVE	EX	PT 0.25 Y
112.04 UNSER BLVD	NW DELLYNE AVE	MONTANO RD	BMP	PT 0.54 Y
112.05 UNSER BLVD	NW SAINT JOSEPH'S	SAN ANTONIO ARROYO	EX	PT 1.47 Y
112.06 UNSER BLVD	NW LADERA DR	SAINT JOSEPH'S	EX	PT 1.69 Y
112.07 UNSER BLVD	NW I-40	LADERA DR	TBFP	PT 0.67 Y
118.01 BOCA NEGRA ARROYO	NW UNSER BLVD	SAN ILDEFONSO	BMP	ST 0.78 Y

TRAILS AND BIKEWAYS FACILITY PLAN DATA

NUMBER	ALIGNMENT	REG FROM	TO	HIST	TYPE	MILES ON BMP
118.02	BOCA NEGRA ARROYO	NW SAN ILDEFONSO	MARIPOSA BASIN	EX	ST	0.87 Y
118.03	BOCA NEGRA ARROYO	NW MARIPOSA BASIN	GOLF COURSE RD	BMP	ST	0.11 Y
119.01	LA ORILLA RD	NW GOLF COURSE RD	COORS BLVD	BMP	ST	0.70 Y
119.02	LA ORILLA CONNECTOR	NW COORS BLVD	CORR. R.SIDE DRAIN	TBFP	ST	0.24 N
121.00	81ST ST	NW VOLCANO PARK	RAINBOW AVE	BMP	ST	1.40 N
122.00	MID BR SAN ANTONIO ARR	NW ESCARPMENT	UNSER BLVD	FPA	ST	0.59 N
123.00	SO BR SAN ANTONIO ARR	NW ESCARPMENT	UNSER BLVD	FPA	ST	0.60 N
124.00	SANTA FE VILLAGE LP	NW S BR SAN ANTONIO AR	N BR SAN ANTONIO AR	TBFP	ST	0.47 N
125.01	PNM POWERLINE EASEMENT	NW PARADISE	IRVING	EX	ST	0.49 Y
125.02	PNM POWERLINE EASEMENT	NW IRVING BLVD	CALABACILLAS ARR	BMP	ST	0.44 Y
125.03	PNM POWERLINE EASEMENT	NW PIEDRAS MARCADAS ARR	PARADISE BLVD	BMP	ST	0.71 Y
126.01	RIVERVIEW TRAIL	NW GOLF COURSE RD	LA LUZ DEL CIELO	BMP	ST	0.34 Y
126.02	RIVERVIEW TRAIL	NW LA LUZ DEL CIELO	PIEDRAS MARCADAS ARR	EX	ST	0.43 Y
127.00	GOLF COURSE RD	NW LA ORILLA RD	HOMESTEAD TRAIL	EX	ST	0.57 Y
128.01	MARIPOSA BASIN	NW BOCA NEGRA ARR	BOCA NEGRA ARR	EX	ST	0.72 Y
128.02	MARIPOSA BASIN	NW MARIPOSA BASIN	GOLF COURSE/127	BMP	ST	0.11 Y
129.00	MARIPOSA DIVERSION	NW DELLYNE AVE	KACHINA ST	EX	ST	0.97 Y
130.00	SO BR SAN ANTONIO ARROYO	NW UNSER BLVD	MARIPOSA DIVERSION	BMP	ST	0.23 Y
131.00	SAN ANTONIO ARROYO	NW DELLYNE AVE	OXBOW/RIVERSIDE DR	BMP	ST	1.10 Y
132.01	MARIPOSA ARROYO	NW BOCA NEGRA ARROYO	MOJAVE ST	EX	ST	0.16 Y
132.02	MARIPOSA ARROYO	NW MOJAVE ST	ESCARPMENT	FPA	ST	0.53 N
133.00	ATRISCO DR	NW ST JOSEPH DR	UNSER BLVD	BMP	ST	0.76 Y
134.00	WESTERN TRAIL	NW UNSER BLVD	ATRISCO DRIVE	TBFP	ST	0.34 N

TRAILS AND BIKEWAYS FACILITY PLAN DATA

NUMBER ALIGNMENT	REG FROM	TO	HIST	TYPE	MILES ON_BMP
135.00 RINCONADA ARROYO	NW UNSER BLVD	LADERA GOLF COURSE	FPA	ST	0.60 N
137.00 PNM POWERLINE EASEMENT	NW LADERA DR	57TH ST	TBFP	ST	0.33 N
138.00 LADERA CHANNEL	NW UNSER BLVD	LADERA RD	FPA	ST	0.83 N
140.01 LADERA DRAINAGE SYSTEM	NW 118TH ST	98TH ST	TBFP	ST	1.25 N
140.02 LADERA DRAINAGE SYSTEM	NW 98TH ST	UNSER BLVD	BMP	ST	1.32 N
140.03 LADERA DRAINAGE SYSTEM	NW UNSER BLVD	OURAY RD	FPA	ST	1.00 N
142.00 SPUR TO S. R. MARMON ELEM.	NW I-40	ELEM. SCHOOL	TBFP	PT	0.26 N
144.00 CORRALES MAIN CANAL	NW CORRALES MAIN CAN	ALAMEDA BLVD	TBFP	TSC	0.00 N
145.00 CORRALES MAIN CANAL	NW CORR. R.SIDE DRAIN	CORR. CONN. TR. 144	WBRS	ST	1.15 N
146.00 CORRALES MAIN CANAL	NW PASEO DEL NORTE	CORR. R.SIDE DRAIN	WBRS	ST	1.08 N
147.01 CORR MAIN/LA ORILLA OUTLET	NW PIEDRAS MARCADAS ARR	PASEO DEL NORTE	BMP	PT	0.79 Y
147.02 CORR MAIN/LA ORILLA OUTLET	NW CORR. R.SIDE DRAIN	PIEDRAS MARCADAS ARR	BMP	ST	0.77 Y
148.00 EAGLE RANCH/PARADISE	NW COORS BLVD.	POWER LINE EASEMENT	TBFP	PT	0.95 Y
149.00 ALAMO RD	NW CORR. R.SIDE DRAIN	PASEO DEL NORTE	BMP	ST	0.63 N
150.00 PASEO DEL NORTE BRIDGE	NW ALAMO RD	RIO GRANDE BLVD	EX	PT	1.00 Y
151.00 PIEDRAS MARCADAS PBLO SPR	NW LA ORILLA OUTLET	CORR. R.SIDE DRAIN	TBFP	TSC	0.00 N
152.00 CORRALES RIVERSIDE DRAIN	NW MONTANO RD	PASEO DEL NORTE	BMP	ST	2.91 N
153.01 OXBOW BLUFF/CORRALES DRAIN	NW ST JOSEPH'S TR. 155	SAN ANTONIO ARROYO	TBFP	TSC	0.00 Y
153.02 OXBOW BLUFF/CORRALES DRAIN	NW SAN ANTONIO ARROYO	MONTANO RD	TBFP	TSC	0.00 Y
155.00 ST JOSEPH'S CONNECTOR	NW ST JOSEPH'S DR	CORR. R.SIDE DRAIN	BMP	ST	0.32 Y
156.00 WEST BLUFF CONNECTOR	NW I-40 OVERPASS	ST JOSEPH'S TR. 155	TBFP	TSC	0.00 N
157.00 90TH ST	NW 90TH ST ROUTE	MIREHAVEN DIV. CH.	BMP	ST	0.17 N
165.00 PASEO DEL VOLCAN	NW I-40	SANDOVAL CO. LINE	BMP	PT	10.99 N

TRAILS AND BIKEWAYS FACILITY PLAN DATA

NUMBER	ALIGNMENT	REG FROM	TO	HIST	TYPE	MILES ON BMP
166.00	118TH ST	NW I-40	MIREHAVEN DIVERSION	TBFP	ST	0.57 N
167.00	PNM EASEMENT	NW OURAY	ST. JOSEPH'S	TBFP	ST	0.52 N
168.00	CORRALES RIVERSIDE DRAIN	NW PASEO DEL NORTE	ALAMEDA	BMP	PT	1.32 Y
169.00	PASEO DEL NORTE CONNECTION	NW CORRALES MAIN CANAL	ALAMO RD	TBFP	PT	0.34 N
201.00	PASEO DEL BOSQUE	NV PASEO DEL NORTE	ALAMEDA BRIDGE	BMP	PT	1.04 Y
202.00	PASEO DEL BOSQUE	NV ALAMEDA BRIDGE	NO DIV CHAN OUTFALL	BMP	ST	2.18 N
203.00	ALAMEDA BLVD	NV CORR. R. SIDE DRAIN	2ND ST	BMP	ST	1.85 Y
204.00	RIO GRANDE BLVD	NV GRIEGOS RD	ALAMEDA BLVD	TBFP	ST	4.59 N
205.00	CHAMISAL WASTEWAY	NV ALBQ R. SIDE DRAIN	PUEBLO ACEQUIA	BMP	ST	0.41 N
206.01	GRIEGOS LATERAL	NV CANDELARIA RD	CHAMISAL WASTEWAY	WBR	ST	3.91 N
206.02	GRIEGOS LATERAL	NV ALAMEDA DRAIN	CANDELARIA RD	TBFP	ST	0.73 N
207.00	CHAVEZ CONNECTOR	NV ALBQ R. SIDE DRAIN	GRIEGOS LATERAL	BMP	ST	0.21 Y
208.00	GALLEGOS LATERAL	NV GRIEGOS LATERAL	ALAMEDA DRAIN/2ND ST	WBR	ST	2.03 N
209.00	STOTT'S LATERAL	NV ALAMEDA DRAIN/2ND ST	EDITH BLVD	TBFP	ST	0.53 N
210.01	ALBUQUERQUE MAIN CANAL	NV RIO GRANDE BLVD	PASEO DEL NORTE	WBR	ST	0.26 N
210.02	ALBUQUERQUE MAIN CANAL	NV PASEO DEL NORTE	ALAMEDA BLVD	BMP	ST	0.95 N
210.03	ALBUQUERQUE MAIN CANAL	NV ALAMEDA BLVD	NO DIV CH OUTFALL	BMP	ST	1.87 N
212.01	PUEBLO ACEQUIA	NV RIO GRANDE BLVD	RANCHITOS RD	WBR	ST	1.33 N
212.02	PUEBLO ACEQUIA	NV RANCHITOS RD	ALBQ MAIN CANAL	BMP	ST	0.54 N
213.01	GRIEGOS DRAIN	NV DIETZ PLACE	EL PORTAL RD	BMP	ST	1.69 N
213.02	GRIEGOS DRAIN	NV ALAMEDA DRAIN	DIETZ PLACE	WBR	ST	1.54 N
214.00	GRIEGOS LATERAL CONNECTION	NV GRIEGOS LATERAL	PASEO DEL BOSQUE	TBFP	ST	0.39 N
215.00	DURANES LATERAL	NV DURANES RD	MONTANO RD	TBFP	ST	2.81 N

TRAILS AND BIKEWAYS FACILITY PLAN DATA

NUMBER ALIGNMENT	REG FROM	TO	HIST	TYPE MILES ON_BMP
216.00 CAMPBELL DITCH	NV CAMPBELL RD	DURANES LATERAL	TBFP	ST 0.65 N
217.00 CHAMISAL LATERAL	NV GALLEGOS LATERAL	ALBQ MAIN CANAL	WBR	ST 4.95 N
218.00 HARWOOD LATERAL	NV AZTEC RD	GALLEGOS LATERAL	TBFP	ST 1.67 N
219.00 DERRAMADERA DITCH	NV CHAMISAL LATERAL	ALAMEDA DRAIN/2ND ST	WBR	ST 0.74 N
220.00 ALAMEDA DRAIN/2ND ST	NV MILDRED AVE.	4TH ST/ROY AVE	BMP	PT 7.08 Y
221.00 ALAMEDA DRAIN	NV GRIEGOS DRAIN	2ND ST	BMP	PT 1.50 Y
222.00 ALAMEDA DRAIN	NV I-40	MATTHEW BL/GRIEGOS	WBR	PT 1.01 Y
223.00 ALAMEDA LATERAL	NV CANDELARIA RD	ALAMEDA DRAIN/2ND ST	WBR	ST 6.57 N
224.00 CANDELARIA RD	NV 2ND ST/ALAMEDA DRAIN	ALAMEDA LATERAL	WBR	ST 0.53 N
225.00 MENAUL DETENTION BASIN	NV ALAMEDA LATERAL	I-25	TBFP	ST 0.62 N
226.01 NORTH DIVERSION CHANNEL	NV I-25	PASEO DEL NORTE	EX	PT 2.72 Y
226.02 NORTH DIVERSION CHANNEL	NV PASEO DEL NORTE	ALBQ R-SIDE DRAIN	BMP	PT 2.68 Y
226.04 NORTH DIVERSION CHANNEL	NE PASEO DEL NORDESTE	I-25	TBFP	PT 0.64 Y
227.00 AMAFCA RIGHT OF WAY	NV NORTH DIVERSION CH	ROY AVE	TBFP	ST 0.43 N
228.00 CAMINO ARROYO	NV NORTH DIVERSION CH	LOUISIANA BLVD	TBFP	ST 1.74 N
231.00 SOUTH LA CUEVA ARROYO	NV NO LA CUEVA (TR 330)	I-25	FPA	ST 0.85 N
235.00 CHAMISAL WASTEWAY	NV PUEBLO ACEQUIA	CHAMISAL LATERAL	WBR	ST 0.77 N
241.00 PINO ARROYO/SAN ANTONIO	NV NORTH DIVERSION CH	I-25	BMP	ST 1.00 Y
251.01 PASEO DEL NORTE	NV RIO GRANDE BLVD	SECOND ST	EX	PT 1.21 Y
251.02 PASEO DEL NORTE	NV SECOND ST	EDITH BLVD	TBFP	PT 0.55 Y
251.03 PASEO DEL NORTE	NV EDITH BLVD	NORTH DIVERSION CH	EX	PT 0.46 Y
251.04 PASEO DEL NORTE	NV NORTH DIVERSION CH	I-25	TBFP	TSC 1.35 Y
270.00 OSUNA RD	NV 2ND ST	NORTH DIVERSION CH	BMP	ST 1.57 Y

TRAILS AND BIKEWAYS FACILITY PLAN DATA

NUMBER ALIGNMENT	REG FROM	TO	HIST	TYPE	MILES ON_BMP
271.00 WEST BEAR CANYON ARROYO	NV OSUNA RD	JEFFERSON ST	EX	ST	0.78 Y
272.00 BEAR CANYON ARROYO	NV JEFFERSON ST	I-25	FPA	ST	0.28 N
301.00 ELENA DRIVE	NE WYOMING BLVD	LOWELL ST	TBFP	ST	3.03 N
302.00 WYOMING BLVD	NE SO DOMINGO BACA AR	ELENA DRIVE	TBFP	ST	1.86 N
303.00 NORTH DOMINGO BACA	NE LOUISIANA BLVD	EUBANK BLVD	TBFP	ST	2.59 N
304.00 EUBANK BLVD	NE ACADEMY RD	ELENA DRIVE	TBFP	ST	2.67 N
305.00 LOWELL ST	NE ELENA DRIVE	SAN ANTONIO DRIVE	TBFP	ST	2.16 N
306.00 PASEO DEL NORTE EAST	NE SO DOM BACA/BARSTOW	TRAMWAY BLVD	BMP	PT	3.30 Y
307.01 HERITAGE HILLS-NORTH PINO	NE BARSTOW	VENTURA	EX	ST	0.72 Y
307.02 HERITAGE HILLS-NORTH PINO	NE HARPER	BARSTOW ST	TBFP	ST	0.12 N
308.00 SAN ANTONIO RD/PNM EASEMT	NE VENTURA ST	TRAMWAY BLVD	TBFP	TSC	2.56 Y
309.00 SIMMS PARK RD	NE TRAMWAY BLVD	ELENA GALLEGOS PG	EX	ST	1.39 N
310.01 HARPER RD	NE WYOMING BLVD	BARSTOW ST	EX	ST	0.21 N
310.02 HARPER RD	NE BARSTOW	VENTURA ST	TBFP	ST	0.87 N
311.00 WYOMING BLVD	NE ACADEMY RD	SAN ANTONIO DRIVE	EX	ST	1.04 Y
312.00 ACADEMY ROAD	NE WYOMING BLVD	VENTURA ST	TBFP	ST	0.87 N
313.01 TRAMWAY BLVD	NE PASEO DEL NORTE	TRAMWAY ROAD	EX	PT	1.17 Y
313.02 TRAMWAY BLVD	NE MONTGOMERY BLVD	PASEO DEL NORTE	EX	PT	3.02 Y
313.03 TRAMWAY BLVD	NE ENCANTADO RD	MONTGOMERY BLVD	EX	PT	3.84 Y
313.04 TRAMWAY BLVD	NE CENTRAL AVENUE	ENCANTADO RD	EX	PT	0.51 Y
317.00 LOMAS CHANNEL	NE TRAMWAY TRAIL	MONTE VERDE DR	EX	ST	0.71 Y
318.00 TRAMWAY RD/ROY AVE	NE NM 313	TRAMWAY BLVD	BMP	TSC	6.56 Y
330.00 LA CUEVA/ALAMEDA WASTEWAY	NE 2ND ST	LOUISIANA BLVD	BMP	ST	2.28 N

TRAILS AND BIKEWAYS FACILITY PLAN DATA

NUMBER ALIGNMENT	REG FROM	TO	HIST	TYPE MILES ON_BMP		
333.00	NORTH LA CUEVA DIVERSION	NE LOUISIANA BLVD	WYOMING BLVD	TBFP	ST	0.64 N
334.00	NOR ESTE TRAIL-LA CUEVA	NE WYOMING BLVD	BARSTOW ST	EX	ST	0.49 Y
335.00	LA CUEVA ARROYO	NE BARSTOW ST	TRAMWAY BLVD	FPA	ST	3.14 N
341.00	PINO ARROYO/SAN ANTONIO	NE I-25	SAN PEDRO BLVD	BMP	ST	0.61 Y
342.00	PINO ARROYO/SAN ANTONIO	NE SAN PEDRO BLVD	WYOMING BLVD	EX	ST	1.03 Y
343.00	PINO ARROYO	NE WYOMING BLVD	VENTURA ST	BMP	ST	1.17 Y
352.01	SOUTH DOMINGO BACA	NE SAN PEDRO	WYOMING BLVD	EX	PT	1.04 Y
352.02	SOUTH DOMINGO BACA	NE I-25	SAN PEDRO BLVD	BMP	PT	0.34 Y
352.03	SOUTH DOMINGO BACA	NE WYOMING BLVD	BARSTOW ST	BMP	PT	0.51 Y
353.00	SOUTH DOMINGO BACA	NE BARSTOW ST	TRAMWAY BLVD	BMP	ST	3.30 N
360.00	PASEO DEL NORDESTE	NE UNIVERSITY OF NM	PENNSYLVANIA ST	EX	PT	6.28 Y
361.00	EMBUDO CHANNEL	NE NORTH DIVERSION CH	JEFFERSON ST	TBFP	PT	1.31 N
366.00	PARSIFAL CORRIDOR	NE EMBUDO ARROYO	BEAR ARROYO	TBFP	TSC	0.00 N
367.00	TOMASITA CORRIDOR	NE I-40 TRAIL	EMBUDO ARROYO	TBFP	TSC	0.00 N
368.00	PENNSYLVANIA/UTAH CORRIDOR	NE PASEO DE LAS MONT	PASEO DEL NORDESTE	TBFP	TSC	0.00 N
372.00	BEAR CANYON ARROYO	NE I-25	ARR DEL OSO GOLF C	FPA	ST	0.73 N
373.00	ARROYO DEL OSO LOOP	NE OSUNA RD	BURLISON RD	EX	ST	0.48 Y
374.01	BEAR CANYON ARROYO	NE SAN PEDRO DR	WYOMING BLVD	FPA	ST	1.55 N
374.02	BEAR CANYON ARROYO	NE WYOMING BLVD	MOON ST	EX	ST	0.51 Y
374.03	BEAR CANYON ARROYO	NE MOON ST	EUBANK BLVD	EX	ST	0.50 N
374.04	BEAR CANYON ARROYO	NE EUBANK BLVD	JUAN TABO BLVD	EX	ST	1.07 Y
374.05	BEAR CANYON ARROYO	NE JUAN TABO BLVD	FOOTHILLS TRAIL	BMP	ST	2.10 Y
379.00	BEAR TRIBUTARY ARROYO	NE SPAIN RD	EUBANK BLVD	FPA	ST	1.96 N

TRAILS AND BIKEWAYS FACILITY PLAN DATA

NUMBER ALIGNMENT	REG FROM	TO	HIST	TYPE MILES ON_BMP		
380.00	UPPER BEAR TRIB ARROYO	NE BEAR CANYON ARROYO	EUBANK BLVD	TBFP	ST	0.49 N
381.00	PNM EASEMENT/LINEAR PARK	NE PIEDRA LISA ARROYO	N GLENWOOD HILLS AR	TBFP	ST	1.29 N
382.01	FOOTHILLS TRAIL	NE ELENA GALLEGOS PG	CEDAR HILL RD	EX	ST	2.07 N
382.02	FOOTHILLS TRAIL	NE EMBUDITO TRAILHEAD	ELENA GALLEGOS PG	EX	ST	1.54 N
382.03	FOOTHILLS TRAIL	NE I-40	PIEDRA LISA ARROYO	TBFP	ST	3.50 N
383.00	CAMINO DE LA SIERRA	NE PIEDRA LISA ARROYO	EMBUDITO TRAILHEAD	TBFP	ST	2.44 N
385.00	EMBUDO ARROYO	NE I-40	PENNSYLVANIA ST	FPA	ST	0.29 N
386.00	PASEO DE LAS MONTANAS TR	NE PENNSYLVANIA ST	TRAMWAY BLVD	EX	ST	3.91 Y
387.00	EMBUDO ARROYO	NE TRAMWAY BLVD	CIBOLA NAT FOREST	FPA	ST	1.03 N
388.00	EMBUDITO ARROYO	NE EUBANK ARROYO	MONTGOMERY BLVD	FPA	ST	2.52 N
389.00	N GLENWOOD HILLS CHANNEL	NE EMBUDITO ARROYO 388	CAMINO DE LA SIERRA	FPA	ST	1.28 N
390.00	EMBUDO ARROYO	NE MORRIS ST	TRAMWAY BLVD	EX	ST	1.56 Y
391.00	PIEDRA LISA ARROYO	NE TRAMWAY BLVD	CAMINO DE LA SIERRA	FPA	ST	0.59 N
393.00	EMBUDITO TRAIL	NE BEAR ARROYO	EMBUDITO TRAILHEAD	TBFP	ST	0.52 N
395.00	FOOTHILLS LOOP	NE NM 556	SANDIA HEIGHTS	TBFP	ST	5.98 N
399.00	NORTH ALB ACRES	NE SAN ANTONIO-NO	WYOMING-EAST	TBFP	TSC	0.00 N
401.00	CEJA TRAIL	SW PAJARITO RD CORR	AMOLE ARROYO	SWAP	ST	3.15 N
402.00	POWERLINE CHANNEL/118TH ST	SW PAJARITO RD	I-40	TBFP	ST	5.57 N
403.01	RIVERSIDE DRAIN	SW ISLETA RESERVATION	SO. DIV. CHANNEL OUT	BMP	ST	4.62 N
403.02	RIVERSIDE DRAIN/SDC OUTFAL	SW SECOND ST	MARQUEZ LN	EX	PT	5.47 Y
404.00	AMOLE ARROYO	SW CEJA TRAIL	GUN CLUB LATERAL	FPA	ST	5.08 N
405.01	SNOW VISTA CHANNEL	SW BENAVIDES RD	98TH ST	EX	ST	1.26 N
405.02	SNOW VISTA CHANNEL	SW AMOLE ARROYO	BENAVIDES RD	TBFP	ST	0.81 N

TRAILS AND BIKEWAYS FACILITY PLAN DATA

NUMBER ALIGNMENT	REG FROM	TO	HIST	TYPE MILES	ON_BMP
406.00	AMOLE DEL NORTE	SW AMOLE ARROYO	TOWER RD	FPA	ST 2.35 N
407.00	ARENAL MAIN CANAL	SW ISLETA RESERVATION	ATRISCO DR/R.SIDE	SWAP	ST 11.77 N
409.00	ISLETA DRAIN	SW ISLETA RESERVATION	CENTRAL AVE	BMP	ST 10.21 Y
410.00	GUN CLUB LATERAL	SW ISLETA RESERVATION	RIO BRAVO BLVD	WBR	ST 6.24 N
411.00	98TH ST	SW EUCARIZ	I-40	TBFP	ST 1.31 N
412.00	PAJARITO LATERAL	SW ARENAL MAIN CANAL	LOS PADILLAS DRAIN	WBR	ST 3.49 N
413.00	ARENAL DITCH/ATRISCO	SW PAJARITO LATERAL 412	ARENAL/ATRISCO 414	WBR	ST 1.70 N
414.00	ARENAL ATRISCO FEEDER	SW ARENAL MAIN CANAL	ATRISCO ACEQUIA 413	WBR	ST 0.62 N
416.00	HUBBELL DITCH	SW ARENAL MAIN CANAL	PAJARITO LATERAL	BMP	ST 1.18 N
417.01	UNSER BLVD	SW LOS VOLCANES RD	I-40	TBFP	PT 0.58 Y
417.02	UNSER BLVD	SW BLUEWATER RD	LOS VOLCANES RD	EX	PT 0.32 Y
417.03	UNSER BLVD	SW ISLETA RESERVATION	BLUEWATER RD	TBFP	PT 9.40 Y
420.00	GIBSON BLVD WEST	SW UNSER CORRIDOR	I-25	TBFP	PT 4.86 N
421.00	RIO BRAVO/ARMIJO DRAIN	SW PASEO DEL VOLCAN	SOUTH DIVERSION CH	BMP	PT 8.27 Y
423.00	PAJARITO WASTEWAY	SW PAJARITO LATERAL	RIVERSIDE DRAIN	WBR	ST 0.26 N
424.00	LAKEVIEW RD	SW ISLETA BLVD	RIVERSIDE DRAIN	WBR	ST 0.53 N
425.00	BENNETT LATERAL	SW PADILLAS INTER DRAIN	PAJARITO LATERAL	WBR	ST 0.85 N
426.00	PADILLAS INTERIOR DRAIN	SW INDIAN LATERAL	PAJARITO LATERAL	WBR	ST 5.83 N
427.00	ISLETA BLVD	SW ISLETA RESERVATION	LAKEVIEW RD	TBFP	ST 4.72 N
428.00	PAJARITO RD	SW PASEO DEL VOLCAN	ISLETA BLVD	TBFP	ST 5.52 N
429.00	PAJARITO ARROYO	SW CEJA TRAIL	GUN CLUB LATERAL	FPA	ST 3.58 N
456.00	WEST BLUFF CONNECTOR	SW ARENAL MAIN CANAL	RIVERVIEW PLACE	TBFP	ST 0.29 N
457.00	ATRISCO RIVERSIDE DRAIN	SW ISLETA RESERVATION	HARRISON MIDDLE SCH	BMP	ST 5.32 N

TRAILS AND BIKEWAYS FACILITY PLAN DATA

NUMBER ALIGNMENT	REG FROM	TO	HIST	TYPE MILES ON_BMP
458.00	ATRISCO RIVERSIDE DRAIN	SW HARRISON MIDDLE SCH BRIDGE BLVD	BMP	PT 3.71 Y
459.00	ATRISCO RIVERSIDE DRAIN	SW BRIDGE BLVD	BMP	ST 1.69 N
460.00	SAN JOSE DRAIN	SW BARR CANAL	TBFP	ST 2.47 N
461.01	BARR CANAL	SW TIJERAS ARROYO	SWAP	ST 1.22 N
461.02	BARR CANAL	SW ISLETA RESERVATION	SWAP	ST 4.29 N
463.00	TIJERAS ARROYO	SW SECOND ST	FPA	ST 0.83 N
465.01	PASEO DEL VOLCAN	SW RIO BRAVO BLVD	BMP	PT 2.67 Y
465.02	PASEO DEL VOLCAN	SW ISLETA BLVD	BMP	PT 9.77 N
468.00	ATRISCO RIVERSIDE DRAIN	SW CENTRAL AVE	WBRS	ST 0.68 N
472.01	SOUTH DIVERSION CHANNEL	SW TIJERAS ARROYO/2ND	TBFP	ST 1.79 N
472.02	SOUTH DIVERSION CHANNEL	SW RIO BRAVO BLVD	BMP	PT 1.17 Y
502.00	PASEO DEL BOSQUE	DT MARQUEZ LANE	EX	PT 9.06 Y
503.00	PASEO DEL BOSQUE	DT BRIDGE BLVD	TBFP	PT 0.23 Y
505.00	DURANES ACEQUIA	DT I-40	WBRS	ST 1.44 N
522.00	ALAMEDA DRAIN	DT PASEO DEL BOSQUE	WBRS	ST 1.15 N
523.00	19TH ST/RAILROAD SPUR	DT MOUNTAIN RD	TBFP	TSC 0.00 N
525.00	DOWNTOWN URBAN TRAIL	DT CENTRAL-CIVIC PLAZA	TBFP	ST 3.66 N
599.01	I-40	DT 98TH ST	BMP	PT 6.88 Y
599.02	I-40	DT EDITH	BMP	PT 8.33 Y
601.00	UNM LOOP TRAIL	SE REDONDO DR	TBFP	ST 1.71 N
605.00	COPPER-STATE FAIRGROUNDS	SE SAN PEDRO DR	TBFP	ST 0.51 N
614.00	TIJERAS ARROYO	SE EUBANK	FPA	ST 3.56 N
617.00	FOUR HILLS RD	SE STAGECOACH RD	EX	ST 0.93 Y

TRAILS AND BIKEWAYS FACILITY PLAN DATA

NUMBER ALIGNMENT	REG FROM	TO	HIST	TYPE MILES ON_BMP
618.00 STADIUM BLVD	SE SOUTH DIVERSION CH	YALE BLVD	TBFP	ST 0.90 N
619.00 GIRARD BLVD	SE ABQ INTER AIRPORT	GIBSON	EX	ST 0.43 Y
621.00 SOUTH DIVERSION CHANNEL	SE GIBSON CORRIDOR	STADIUM BLVD	TBFP	ST 1.15 N
622.01 GIBSON BLVD	SE I-25	YALE BLVD	BMP	PT 0.80 Y
622.02 GIBSON BLVD	SE YALE BLVD	AMHERST	EX	PT 0.84 Y
622.03 GIBSON BLVD	SE AMHERST	SAN MATEO BLVD	BMP	PT 1.28 Y
622.04 GIBSON CONNECTOR (EASTERN)	SE TRUMAN AVE	LOUISIANA BLVD	TBFP	TSC 1.00 N
622.05 GIBSON BLVD	SE LOUISIANA BLVD	PENNSYLVANIA ST	BMP	PT 0.80 Y
622.06 GIBSON BLVD/SOUTHERN ALIGN	SE PENNSYLVANIA ST	JUAN TABO BLVD	BMP	PT 2.59 Y
630.00 JUAN TABO BLVD	SE TIJERAS ARROYO	I-40	BMP	PT 1.41 Y
631.00 EUBANK BLVD	SE KAFB	I-40	TBFP	ST 1.98 Y
632.00 I-40	SE EUBANK BLVD	TRAMWAY BLVD	EX	PT 2.25 Y
635.00 KIRTLAND CHANNEL	SE UNIVERSITY BLVD	YALE BLVD	BMP	ST 0.54 Y
663.00 TIJERAS ARROYO	SE I-25	MESA DEL SOL	FPA	ST/T 0.79 N
665.00 ALVARADO DR CORR	SE GIBSON BLVD	OSUNA RD	TBFP	TSC 0.00 N
671.00 SUNPORT INTERCHANGE CON	SE SAN JOSE DRAIN	UNIVERSITY BLVD	BMP	PT 1.61 Y
672.00 BUENA VISTA	SE GIBSON BLVD	SILVER AVE	TBFP	TSC 0.00 N
673.00 SILVER AVE	SE BUENA VISTA	ALVARADO DR	TBFP	TSC 0.00 N
674.00 UNIVERSITY BLVD	SE I-25	KIRTLAND CHANNEL	TBFP	TSC 0.00 Y
675.00 CENTRAL AVE	SE I-40	I-40	TBFP	TSC 0.00 N

TRAILS AND BIKEWAYS FACILITY PLAN--TRAIL CROSSING STRUCTURES

NUMBER ALIGNMENT	REGION CROSSING	SOURCE BUILT
701 LA CUEVA	NE I-25	BMP N
702 DOMINGO BACA	NE I-25	BMP N
703 SAN ANTONIO DR	NE I-25	BMP N
704 NORTH DIVERSION CHANNEL	NE I-25	BMP N
705 NORTH DIVERSION CHANNEL	NE MONTGOMERY BLVD	TBFP N
706 I-40 TRAIL	SE EUBANK	BMP N
708 ALAMEDA BRIDGE	NV RIO GRANDE	TBFP N
709 CALABACILLAS ARROYO	NW COORS BLVD	BMP N
710 PASEO DEL NORTE	NW COORS BLVD	BMP N
711 PIEDRAS MARCADAS	NW COORS BLVD	BMP N
712 LA ORILLA RD	NW COORS BLVD	BMP N
713 PASEO DE LAS MONTANAS TRAI	SE I-40	BMP N
714 SAN ANTONIO ARROYO	NW COORS BLVD	TBFP N
716 OURAY/QUAIL	NW COORS BLVD	TBFP N
717 NORTH OF ST JOSEPH'S	NW COORS BLVD	TBFP N
718 PIEDRAS MARCADAS	NW PASEO DEL NORTE	TBFP N
719 I-40	SW RIO GRANDE	TBFP N
721 MOON	NE BEAR TRIB ARROYO	TBFP N
722 COMANCHE RD	NE TRAMWAY BLVD	EX Y
723 PIEDRA LISA	NE TRAMWAY BLVD	EX Y
724 ROVER	NE TRAMWAY BLVD	EX Y
725 COPPER AVE	NE TRAMWAY BLVD	EX Y
726 LOS ALTOS	SE I-40	EX Y

TRAILS AND BIKEWAYS FACILITY PLAN--TRAIL CROSSING STRUCTURES

NUMBER ALIGNMENT	REGION	CROSSING	SOURCE	BUILT
727 TOMASITA	SE	I-40	EX	Y
728 PALOMAS	SE	I-40	EX	Y
729 PASEO DEL NORDESTE	SE	I-40	EX	Y
730 ATRISCO	SW	I-40	EX	Y
731 MOON	NE	BEAR ARROYO	EX	Y
732 I-40 TRAIL	SE	WYOMING BLVD	BMP	N
733 I-40 TRAIL	SE	SAN MATEO	BMP	N
734 I-40 TRAIL	SE	CARLISLE BLVD	BMP	N

APPENDIX B

TRAIL DESIGN STANDARDS AND OBJECTIVES

PURPOSE

The purpose of these standards is to identify ideal right-of-way conditions and establish design consistency for off-road recreational trails. The guidelines were developed by the Albuquerque Planning Department/Planning Division based on interviews with other cities and advice from local citizen groups and technical staff.

OBJECTIVES

The trail standards represent a range of acceptable design solutions. Objectives are included here to aid in determining the appropriate standard to apply.

I. Landscaping/Buffers

Landscaped buffers along trail corridors address the following objectives:

1. To prevent accidental falls into an arroyo or drainageway by establishing adequate spatial separation as a more aesthetic alternative to constructing a barrier adjacent to the channel.
2. To provide spatial separation from traffic lanes.
3. To limit potential user conflicts by providing adequate spatial separation between trails.
4. To limit trail maintenance by:
 - a. generally relying on revegetation with native or naturalized plant species that do not require irrigation to maintain.
 - b. concentrating intensive (irrigated and/or mowed) landscaping in a limited number of nodal parks .
5. To provide shaded rest areas, seasonal color and visual diversity.
6. To soften the visual impact of hard surfaces — such as paved trails, drainage channels, walls and buildings.
7. To soften the linear character of the corridor by providing clusters of trees and shrubs.
8. To provide screening for parking and service areas.
9. To provide privacy screening for adjacent residential development.
10. To prevent erosion.
11. To provide wildlife habitat.

II. Trails in Urban Areas

Trail segments through urban areas will meet the following general objectives:

1. To provide an off-road, recreational trail system incorporating native landscaping, small parks and trail-related amenities along drainage rights-of-way, linking urban areas with peripheral open space. Public rights of way can include drainage easements, alleys, old roads, utility easements, and property provided for trail use as part of the subdivision process.
2. To provide an alternative to use of the private automobile within the urban area by linking activity centers (such as retail, employment and institutional uses) with residential development utilizing streets only as necessary to create linkages.
3. To accommodate a variety of user groups — including the commuter cyclist — and a heavy volume of trail traffic.
4. To provide accessible outdoor recreation to a variety of user groups, including the very young, the elderly and the handicapped.

5. To complement adjacent urban development through the use of color, materials and landscaping.
6. To provide a sense of enclosure, safety, and human scale in the urban area through landscaping and architectural elements.
7. To develop loop networks for recreational users.

III. Trails in Open Space and Rural Areas

Trail segments in open space and rural areas will meet the following general objectives:

1. To provide controlled, limited access to open space and other fragile environments.
2. To accommodate primarily recreational users, including equestrians, where desirable.
3. To incorporate educational/interpretive elements and identify cultural and natural features found along the trail.
4. To prevent adverse environmental impacts and maximize the contrast with urban development by minimizing trail widths, paved surfaces, and initial disturbance to topsoil and vegetation and prohibiting access where appropriate.
5. To preserve a sense of openness through selection of landscaping and architectural elements that blend visually with surrounding open space.

Summary

Trails located in urban areas will choose from the higher end of the ranges proposed regarding trail width and surface durability due to the anticipated number and diversity of users. In contrast, trail design in open space areas will draw from the lower range of trail width, minimize paved surfaces, and accommodate equestrian users where deemed appropriate. Trails for commuter bicycle traffic will generally provide hard, durable surfaces, straighten alignments, wider trails and fewer rest stops. Trails designed to accommodate recreational users will provide for slower speeds, a greater number of educational/interpretive elements, shade, rest areas and landscaping to add visual interest and variety. Most trails will be combined until a greater number of trails exist and the possibility of separating user types substantially improves. One factor which makes this shared trail approach tenable is that, generally, the time of use for commuter and recreational users is different. Recreational users are generally on the trails earlier and later than most commuters. Landscape maintenance will be limited through the design of nodal parks and use of native and naturalized plants.

TRAIL DESIGN GUIDELINES

PEDESTRIAN ONLY

- | | |
|---|--|
| 1. Trail Width | 1. 3'-6' |
| 2. Ideal Grade | 2. $\leq 5\%$ |
| 3. Maximum Sustained Grade | 3. 8-10% |
| 4. Maximum Grade, Short Distance | 4. $\leq 15\%$ |
| 5. Vertical Clearance | 5. 8-9' |
| 6. Horizontal Clearance | 6. 0' (except when needed to clear sight triangle) |
| 7. Surface Requirements | 7. dirt, compacted surfaces, paved surfaces optional |
| 8. Separation from other trails | 8. optional |
| 9. Separation from bank edge* | 9. $\geq 10'$ preferred — varies with edge conditions, use of railings. |
| 10. Separation from walls and buildings | 10. 10'-15' recommended for privacy and landscaping |
| 11. Separation from streets** | 11. a. 6'-12' preferred
b. raised curb and sidewalk, or
c. other barrier |
| 12. Location in relation to floodplain | 12. Where the prudent line arroyo treatment is used, the trail may be located within the prudent line, but outside of the 100 year floodplain, except at road crossings. See The <u>Road Crossings</u> section of these Trail Standards. |

KEY

\leq "less than, or equal to"

\geq "greater than, or equal to"

* Source: A 10' safety buffer has been used in the design of Wildflower Park to prevent accidental falls into the drainage channel. 10' accommodates a typical landscaping equipment. Trails could meander within the standard right-of-way, if so desired.

** The Development Process Manual recommends a 12' buffer between curb and sidewalk on major arterials. 6' is adequate on less heavily traveled streets. A raised curb and sidewalk provides minimal separation where limited right-of-way is available.

JOGGING TRAILS*

1. a. Trail Width
 - b. Cross Grade
 2. Ideal Grade
 3. Maximum Sustained Grade
 4. Maximum Grade, Short Distance
 5. Vertical clearance
 6. Horizontal clearance
 7. Surface Requirements

 8. Separation from bank edge, walls, streets, buildings and floodplain
 9. Other
1. a. 8'-10' (9' allows 3 pedestrian lanes, i.e. - jogging in pairs with ability to pass)
 - b. 2-3% preferred, 4% maximum
 2. $\leq 5\%$
 3. 8-10%
 4. $\leq 15\%$
 5. 8-9'
 6. 0'
 7. hard packed dirt is preferred; crusher fines or ground bark over crushed rock base can also be used
 8. See Pedestrian Standards
 9. a. Must be well drained, side ditches recommended
 - b. Provide signed and measured distances. Recommend: 1500 meters, 440 yards, 1/2 mile, 1 mile
 - c. avoid cross traffic, especially bicycles and cars
 - d. provide stretching stations at beginning points, i.e. a wood rail (4" x 4" x 8" orig.) set horizontally at 30" above grade

* Source: City of Eugene, Oregon, Parks and Recreation Planning Development Division, 210 Cheshire Street, Eugene, Oregon 9740.

BIKE TRAILS

1. Trail Width (two-way traffic)
 - a. 8'-10' paved width
 - b. 1'-1.5' shoulders

(Note: where large volumes of trail users are anticipated, a 12' width should be considered and/or a center stripe; also, trails should be wider where steeper slopes are encountered.)
 2. Ideal Grade
 3. Maximum Sustained Grade
 4. Maximum Grade for Limited Distances
 5. Vertical Clearance
 6. Horizontal Clearance
 7. Surface Requirements
 8. Separation from Other Trails
 9. Recommended Turning Radius
 10. Separation from bank edge, walls, buildings, streets and floodplain.
1. $\leq 3\%$
 2. $\leq 5\%$
 3. $\leq 15\%$
 4. 8'-12'
 5. 1.5'-3' (expand for steeper trails)
 6. asphalt, porous pavement*, soil cement, compacted surfaces
 7. separation preferred on high-speed bike trails
 8. 50'
 9. See Pedestrian Standards

MOUNTAIN BIKES

1. Trail Width
 2. Ideal Grade
 3. Maximum Sustained Grade
 4. Maximum Grade for Limited Distances
 5. Vertical Clearance
 6. Horizontal Clearance
 7. Surface Requirements
 8. Separation from Other Trails
 9. Separation from bank edge, walls, streets, buildings and floodplain
1. 3'-4'
 2. $\leq 5\%$
 3. $\leq 10\%$
 4. $\leq 15\%$
 5. $\geq 8'$
 6. $\geq 3'$
 7. unpaved
 8. not required
 9. See Pedestrian Standards

* Porous pavement is specifically listed here in order to avoid drainage and erosion problems associated with paved surfaces. The issue is especially pertinent to drainage corridors. The New Mexico State Highway Department routinely installs porous pavement in new construction. See US Environmental Protection Agency report #600-2-80-135, "Porous Pavement Phase One, Design and Operational Criteria", by Elvidio Dineez. Contact the EPA, Municipal Environmental Research Laboratory, Cincinnati, Ohio, for copies of the report.

ACCESSIBLE TRAIL DESIGN FOR PEOPLE WITH PHYSICAL DISABILITIES*

These standards are based on providing wheelchair accessibility, but will serve a variety of users with physical disabilities. Some of the standards are divided by level of difficulty. The levels are intended to provide flexibility in types and phasing of improvements to permit the most economic and effective use of public funds.

- | | |
|--|---|
| <ol style="list-style-type: none"> 1. Trail Width | <ol style="list-style-type: none"> 1. a. One-way -- 3' minimum b. Two-way -- 5'4" - 6' minimum c. 1' - 1.5' shoulders |
| <ol style="list-style-type: none"> 2. Grade <ol style="list-style-type: none"> a. easiest b. more difficult c. most difficult d. landing/passing bay | <ol style="list-style-type: none"> 2. a. $\leq 3\%$ (anything greater is considered a ramp) b. $\leq 5\%$ c. 6 - 8% with short pitches up to 12% d. needed every 200' (5' X 5') |
| <ol style="list-style-type: none"> 3. Ramps (short distances, such as curbs) | <ol style="list-style-type: none"> 3. a. $\leq 8\%$ for maximum rise of 30" b. level landing needed at top of curb ramp |
| <ol style="list-style-type: none"> 4. Cross Grade | <ol style="list-style-type: none"> 4. $\leq 2\%$ |
| <ol style="list-style-type: none"> 5. Vertical Clearance | <ol style="list-style-type: none"> 5. $\geq 9'$ preferred, 6'8" minimum (See ANSI 4.4.2) |
| <ol style="list-style-type: none"> 6. Horizontal Clearance | <ol style="list-style-type: none"> 6. $\geq 3'$ (See ANSI 4.4.1) |
| <ol style="list-style-type: none"> 7. Surface Requirements <ol style="list-style-type: none"> a. easiest b. more difficult c. most difficult | <ol style="list-style-type: none"> 7. a. concrete or asphalt b. asphalt, soil cement or crusher fines (free of any openings larger than 1/2") c. hard packed sandy loam |
| <ol style="list-style-type: none"> 8. Separation from Other Trails <ol style="list-style-type: none"> a. pedestrians b. bikes/equestrians | <ol style="list-style-type: none"> 8. a. none b. preferred - see Bike and Equestrian Standards |
| <ol style="list-style-type: none"> 9. Separation from bank edge, walls, streets buildings and floodplain | <ol style="list-style-type: none"> 9. See Pedestrian Standards |
| <ol style="list-style-type: none"> 10. Shelter and Seating (easiest) | <ol style="list-style-type: none"> 10. every 1/8 mile |
| <ol style="list-style-type: none"> 11. Accessibility | <ol style="list-style-type: none"> 11. using standards on page 9, ensure access to and from adjacent parking lots, streets and sidewalks, and public facilities such as restrooms and drinking fountains |
| <ol style="list-style-type: none"> 12. Parking areas <ol style="list-style-type: none"> a. Lot Cross Slope b. Handicap Accessible Spaces | <ol style="list-style-type: none"> 12. refer to Albuquerque Comprehensive Zoning Code, section 40.A for more detail. <ol style="list-style-type: none"> a. 2% or 1:50 maximum b. one space for every 25 total spaces (preferably one van and one care space per every 25 spaces or less). 12'6" wide or 8'6" wide with a 5' aisle, 24' long. Place sign and ground graphics at each accessible space. |
| <ol style="list-style-type: none"> 13. Restrooms, drinking fountains and park furniture | <ol style="list-style-type: none"> 13. refer to ANSI handicap accessibility standards |
| <ol style="list-style-type: none"> 14. Vegetation | <ol style="list-style-type: none"> 14. avoid thorny plants next to trail; select plants with a variety of textures and fragrances |

EQUESTRIAN *

- | | |
|--|---|
| <ol style="list-style-type: none"> 1. Trail Width 2. Ideal Grade 3. Maximum Sustained Grade 4. Maximum Grade, Short Distance 5. Vertical Clearance 6. Horizontal Clearance 7. Surface Requirements 8. Separation from other trails <ol style="list-style-type: none"> a. Pedestrian and handicapped b. Bikes c. All 9. Separation from parallel street* <ol style="list-style-type: none"> a. Local street b. Collector c. Arterials d. 6-8 lane expressways e. All 10. Suggested Fencing/Barriers <ol style="list-style-type: none"> a. Other trails b. Streets c. All 11. Terrace Steps Up Slopes 12. Separation from bank edge, walls and buildings 13. Separation from floodplain | <ol style="list-style-type: none"> 1. 5'-8' (18"-30" tread width in the center of a 5' clear trail) 2. $\leq 5\%$ 3. 8-10% 4. $\leq 15\%$
(Note: horses are capable of traversing steeper slopes for short distances so long as surface conditions are adequate) 5. 10'-12' 6. see item 1 above 7. dirt, crushed aggregate, bark, gravel, oil coat 8. <ol style="list-style-type: none"> a. optional b. separation preferred c. Trails may converge for distances up to 1/4 mile where inadequate right of way exists for separation, or where it may be undesirable to have separate trails 9. <ol style="list-style-type: none"> a. 4' from driving lane b. Without barrier - min. 9' from curb c. Without barrier - min. 15' from curb d. Without barrier - 25' from curb e. Where multiple trails are parallel to the roadway, equestrians should be farthest from traffic 10. <ol style="list-style-type: none"> a. minimum 3'6" high post and rail fence b. minimum 3'6" high post and rail fence or concrete "jersey" barrier c. no barbed wire or sharp edges on guard rails 11. Railroad ties w/ 3'-4' minimum tread width, 3' minimum depth, 16" maximum height 12. $\geq 10'$ preferred 13. see Pedestrian Standards |
|--|---|

* Recommended by Horseways, Inc., a local equestrian organization, based on interviews with other cities. For more detailed design of trails and structures see A Trail Manual for the East Bay Regional Park District. Prepared by Jana Olson and Hanson Horn. October 5, 1976; and Bikeways and Horse Trails. Section 8. Design Procedures and Criteria. City of Scottsdale, Arizona, Revised July 1985, City of Scottsdale Community Development Department. Loan copies available from the Planning library.

ROAD CROSSINGS

Pedestrians, bikes, and equestrians may converge at road crossings. All trail crossings should offer an unobstructed view of oncoming vehicular and trail traffic.

Trail users will be of all ages and physical abilities. Therefore, a major objective is to provide safe, convenient road crossings that will minimize the trail user's exposure to vehicular traffic. Grade-separated or signalized crossings are preferred for arterial streets. Mid-block at-grade crossings are adequate for collector streets, although signalized crossings are preferred. Unsignalized crossings are more appropriate for local streets which are planned to carry considerably less traffic at slower speeds.

I. ARTERIALS

A. **AT GRADE CROSSINGS:** are most feasible when a signalized intersection is located within 300* of the trail, or when a signalized, mid-block crossing can be provided. Unsignalized mid-block crossings are the least desirable option for recreational trails.

- | | |
|--------------------------------|---|
| 1. Minimum Crossing Width | 1. 12'-15' (if shared with equestrians) with curb ramps, tactile warnings |
| 2. Surface Treatment | 2. textured pavement or other non-slip surfacing for equestrians |
| 3. Waiting Bay for equestrians | 3. 20' x 10' with 10' setback from road |
| 4. Hand Activated Signals | 4. 6' for equestrians, 4' for handicapped |
| 5. Separation of Uses | 5. all trail uses may be combined at crossing |
| 6. Median Holding Zone | 6. $\geq 10'$; 20' median width preferred, with curb ramps and tactile warnings. Note that "holding" equestrians in median is undesirable from a safety standpoint |

B. **BELOW GRADE CROSSINGS:** are the preferred crossing for convenience and safety reasons, where there is a sufficient clearance. Bridges are preferable to culverts, since they provide greater visibility and aesthetic quality.

- | | |
|---------------------------------|---|
| 1. Trail Width | 1. 9'-14' |
| 2. Surface | 2. Trail Standards. For equestrians, consider dirt, pea gravel, wood, roughened concrete — in order of priority |
| 3. Grade | 3. Trail Standards |
| 4. Trail Location (re-floodway) | 4. Paved trails should be located outside the 10 year floodway; locating all trails outside of the 100 year floodway is optimum; however, if necessary, paved trails may be located up to the 2 year floodway |

* 300' is based on walking distance and is the length of a typical City block in the downtown area. Up to 600' is considered reasonable by the State of Wisconsin/Highway Department.

- 5. Culverts or Tunnels
 - a. Optimum clearance/max. length
- 5. a. $\geq 12'$ X $12'$ preferred: 10'h and 12'w acceptable X 156' length with median opening for daylight (height provides clearance for equestrians, length is suitable for 4 lane road)*
- b. 8'w x 8'h/156' with median opening for daylight (height is suitable for bikes, pedestrians and handicapped uses)**
- c. 125' maximum length with no median opening for daylight
- 6. Bridges
 - 6. Use vertical clearance standards based on trail use. Length should be minimized, $\leq 250'$ preferred.

* and ** Culvert size recommended by Horseways, Inc. and the Open Space Task Force, respectively.

C. ABOVE-GRADE CROSSINGS

Past experience in Albuquerque indicates that above-grade structures tend to be used less than at-grade crossings, unless traffic volumes exceed 20,000 vehicles per day with speeds of 35 mph or greater.

CROSSING STRUCTURES

- 1. Trail Width
 - 2. Grade
 - 3. Surface
 - 4. Side Treatment
 - 5. Separation of Uses
 - 6. Structure Width
 - 7. Roadway Clearance
 - 8. Intersection Clearance
- 1. $\geq 10'$
 - 2. See applicable Trail Standards
 - 3. Textured concrete or wood, non-slip surfacing
 - 4. For equestrians: solid-sided barrier (or appearance of same) along bottom 3'; chain link or similar fencing up to 6'-8' total height; leave top uncovered or with at least 10' of clearance)
 - 5. See River Crossings, below. However, not recommended for handicapped or equestrian uses if other crossings can be provided
 - 6. 20' is typical
 - 7. 17'-22'
 - 8. Locate outside of "clearsight triangle" as defined by Zoning Code

RIVER CROSSINGS

Totally separate bridges for non-motorized traffic are preferred per the Development Process Manual.

- | | |
|-----------------------|--|
| 1. Trail Width | 1. 10'-12' (with equestrians) |
| 2. Grade | 2. trail standards |
| 3. Surface | 3. textured concrete or other non-slip surfacing |
| 4. Side Treatment | 4. For equestrians: solid-sided barrier along bottom 3', chain link or similar fencing up to 6'-8' total height |
| 5. Separation of Uses | 5. Post YIELD TO SLOWER TRAFFIC signs for trail users. Separate equestrians from bikes with railings or fences \geq 3'-6" high. Separate trails from vehicular traffic with similar railings |

II. LOCAL AND COLLECTOR STREETS

At-Grade crossings are feasible either at mid-block or at intersections. Signalized crossings are preferred for Collector Streets.

At Grade

- | | |
|---------------------------|---|
| 1. Minimum Crossing Width | 1. 12'-15' (with equestrians) |
| 2. Surface Treatment | 2. Textured pavement or other non-slip surfacing for equestrians |
| 3. Waiting Bay | 3. Flared trail width at street |
| 4. Hand Activated Signals | 4. 6' for equestrians, 4' for handicapped |
| 5. Separation of Uses | 5. Use YIELD TO SLOWER TRAFFIC signage |
| 6. Median Holding Zone | 6. \geq 10', with 20' median width preferred, and curb ramps with tactile warnings for handicap accessibility |

LANDSCAPING

1. Native Grasses Buffer Strip
2. Width of Area for Tree Planting:
 1. $\geq 10'$ width typical, 20' optimum for establishing plant community
 2. a. 15' for individual trees or a row of trees; provides for adequate crown space for native species.
b. 30'-40' for tree clusters.
c. maintain $\geq 4'$ distance from trails, walls — for root space
 3. 10'-20'
3. Width of Area for Screening Hedge
4. Nodal Parks
 - a. Prefer 3 acre minimum if turfed
 - b. In parks < 3 acres in size, use irrigated groundcovers (other than turf and native landscaping) that do not require mowing

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Greater Albuquerque Recreational Trails Committee
Greater Albuquerque Bicycling Advisory Committee
Open Space Advisory Board

The Planning Division gathered information from the following cities and states to establish a common range of trail widths, grades, clearances, road crossing and landscaping requirements.

Scottsdale, Arizona
Tucson, Arizona
Davis, California
Monterey, California
San Diego, California
Boulder, Colorado
Fort Collins, Colorado
Minneapolis, Minnesota
Santa Fe, New Mexico
Eugene, Oregon
State of California, Bay Area Rapid Transit System
State of California, East Bay Regional Park District
State of Oregon, Highway Department
State of Wisconsin, Governor's Office of Highway Safety

APPENDIX C

Trail Count Briefs

Bosque Trail at Tingley Beach

Thursday Morning, 6:00 - 7:30 a.m.

The total count of 62 trail users was fairly well divided between bicyclists (21), walkers (27) and runners (14). Most of the walkers were older, and several of them said the trail traffic was unusually slow this morning.

Thursday Lunch time, 11:30 - 1:30 p.m.

Maybe the heat kept this trail slow for this time period. Only 47 total trail users were counted at this time. Bicyclists (24) outnumbered runners (13) and walkers (9).

Bosque Trail at Rio Grande Nature Center

Tuesday Evening, 4:30 - 8:00 p.m.

This trail was consistently busy during the entire time period, but the busiest time for bicyclists was from 7:00 until 8:00. A total of 199 bicyclists were counted, along with 96 walkers and 23 runners. The runners seemed to prefer using the unpaved roadway to the West, across the ditch, where 57 runners were counted. Many of the bicyclists entered and exited at the Candelaria connection point. Almost all trail users continued onto the Bosque trail loop.

Griegos Drain Near Griegos Road

Tuesday Morning, 6:45 - 9:00 a.m.

Only 14 trail users were counted during this time period, but one elderly walker said the trail is most used on the weekends and even earlier in the morning (she said 5:00!). After the count I walked south on the trail and I was very impressed by the scenic beauty of this area. Of the 14 users, 8 were walkers and 6 were runners.

Rio Grande Blvd, Bike Lane Near Campbell Road

Wednesday Evening, 4:30 - 6:30 p.m.

The amount of automobile traffic through this area was extremely heavy during this time, but the bicycle lanes were barely being used. Only 15 bicyclists were counted.

Mariposa Arroyo at Montano Road**Wednesday Morning, 7:30 - 9:30**

This trail count produced 14 bicyclists, 21 walkers, 4 runners and 4 rollerskaters. The trail users seemed to be older, and several of them were using the trail with their children. One woman said the trail is very popular on weekends.

Kirtland Air Force Base at Wyoming Gate**Friday Afternoon, 3:30 - 5:30 p.m.**

A total of 96 bicyclists were counted coming out of this area during the afternoon commute. All of these riders were male with one or two exceptions. Judging by the type of equipment used and the speed of these cyclists, they all appeared to be serious commuter cyclists.

Thursday Morning, 6:45 - 8:45 a.m.

A total of 158 bicyclists were counted. Same type of rider as mentioned above.

Nordeste Trail at Montgomery Park**Wednesday Evening, 5:00 - 8:00 p.m.**

A great number of bicyclists (142), elderly walkers (56) and runners (14) going through a well used city park that was active with several youth groups. Three women walkers were seen carrying shortened broomstick handles and other makeshift "weapons". I'm not sure if this was to ward away would-be muggers or to guard against stray dogs (of which I saw none).

Wednesday Morning, 6:45 - 9:00 p.m.

Counted a fairly equal number of walkers (54) as cyclists (51) with only 7 runners. Again, most of the walkers were elderly, with several mentioning that they walk the trail before attending various activities at the Senior Citizen Center located near the Western edge of Montgomery Park.

Tramway Trail and Montanos Trail**Friday Morning, 6:45 - 9:00 a.m.**

This count location was at the pedestrian bridge crossing (Montanos Trail) at Tramway Blvd. and the actual Tramway Trail. Counts were done for both Tramway users and Montanos Trail users crossing the pedestrian bridge. A total of 243 users were counted,

mostly walkers (187). Not very many trail users were counted crossing the Montanos Trail pedestrian bridge: 48 total including 29 walkers, 12 bicyclists and 7 runners.

Tuesday Evening, 4:30 - 7:00 p.m.

This count would have been until 8:00, but a severe thunderstorm moved over the mountains. The earlier count may have been affected by this weather. Tramway Trail recorded 125 users, of which 54 were bicyclists, 30 were walkers and 41 were runners. A total of 39 trail users crossed the Montanos bridge, 25 being cyclists.

Isleta Drain and Navajo Elementary School

Wednesday Evening, 5:00 - 6:45 p.m.

The first of our ditch trail counts was quite exciting! The trail census taker was threatened with bodily harm by three juveniles. The trail count only totaled 8 users, so maybe this threesome scared off others, the reason for the poor count totals.

Nordeste Trail and University of New Mexico

Monday Morning, 6:45 - 9:30 a.m.

This count was done at the southern end of the Nordeste Trail. A total of 119 bicyclists were counted, with the heaviest traffic seen before 8:00. The walkers numbered 35, with 24 runners. Also counted were the number of people utilizing the unpaved road across the arroyo. This is a heavily used path for runners, of which 118 were counted along with 86 walkers and 6 bicyclists.

Monday Evening, 3:45 - 8:00

Counted were 199 bicyclists, 48 walkers and 41 runners on the Nordeste Trail. On the unpaved UNM road, 270 runners were counted along with 119 walkers and 19 bicyclists.

Other Interesting Bits of Information

Total number of dogs seen on the trails:	88
Total number of dogs see on leashes:	59

The trail counts, and this summary, were done by Ken Arrington, Planning student intern working for the Advance Planning Section, City of Albuquerque. Trail counts were taken between August 7 and 23, 1991.

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