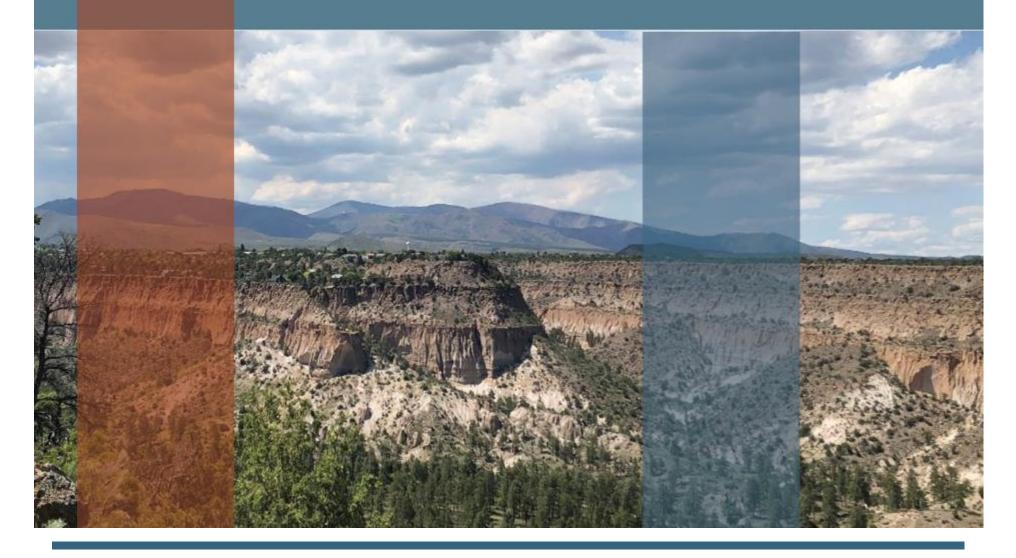
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INTRODUCTION



How To Use This Document

This plan was an effort to consolidate strategies from six existing planning documents that involved Open Space & Trails in Los Alamos County:

- Open Space Restoration Feasibility Assessment, 2023
- Trail Management Plan, 2012 (revised 2022)
- Trailhead Assessment, 2022
- Trail Signage Plan, 2015
- Open Space Management Plan, 2015
- Community Trail Plan, 2013

Additionally, this document incorporated, where necessary, important alignments with the 2022 ADA Transition Plan and the 2023 Community Services Department Integrated Master Plan.

2024 Open Space & Trail Management Plan

Part I – Current Planning Context & Community Profile

Part II - Existing Conditions

Part III – Public Engagement

Part IV - Needs Assessment

Part V – Strategy Alignment

Part VI - Reference Appendices

Because previous plans contained clear guidance on a variety of topics that is still applicable to the Los Alamos community, sections of previous plans were included as appendices for reference.

Reference Materials

- 1. Land Use Maps
- 2. Complete County Trail List
- 3. Trail Difficulty Maps
- 4. List of Trails by Mentions

Appendices

- Definitions & Descriptions
- Policies and Standards for Development and Maintenance of the Trail Network
- What We Heard Public Public Engagement Summary
- Trail Assessments & Maintenance Needs
- Trailhead Kiosk & Signage
- Open Space Restoration Feasibility Assessment
- Additions to Trail Network
- Trailhead Assessments

Plan Purpose & Goals

Plan Purpose

Los Alamos County selected Sites Southwest to develop an Open Space and Trails Management Plan for the County. This effort identifies existing County services and opportunities as well as reviews, updates, and consolidates existing relevant County documents. This plan provides recommendations, best practices and actions in alignment with previous planning efforts to more clearly and effectively guide staff towards County Open Space and Trails Goals.

LAC Open Space & Trails Division Values

In developing a robust and vital community, open space and green space are necessary and should be balanced with all needs of the community. Los Alamos County provides for inclusivity for its diversity of residents, and this applies to all recreational amenities. County recreational spaces are open to everyone and the County strives to locate facilities in the most equitable way possible for the benefit of the community.

Description of Physical Space

Los Alamos County (approx. 109 sq.mi.) includes 4,000+ acres of open space, 58+ miles of County-owned trails, 150 cultural sites, unique topography, canyon vistas, and a rich, cultural history dating back to 1350 A.D. The major towns in the county are Los Alamos and White Rock, which are approximately 10 miles apart. Surrounding the county are three national parks –Bandelier National Monument, Valles

Caldera National Preserve, and the Manhattan Project National Historical Park. The County shares boundaries with several key entities including the Department of Energy's Los Alamos National Lab (LANL), San Ildefonso Pueblo, the Santa Fe National Forest, and the Pajarito Mountain Ski Area.

Trail Network Vision

The Los Alamos Trail Network will be a well-recognized resource that provides the community a **strong connection to its natural and cultural landscape**... a **diversity of safe and pleasurable opportunities for recreation**, solitude, and **non-motorized transportation.** The Trail Network will take advantage of the natural beauty of Los Alamos to enhance the downtown area.

(Trail Management Plan, 2012 (rev. 2022)

Open Space Vision

The Los Alamos County Open Space Management Plan provides a guiding framework for **effective stewardship of the county's outstanding open space resources...to restore or maintain ecosystem health** and to provide outdoor recreations experiences...that **adapt to changing conditions** so that residents and visitors of Los Alamos can revel in their surroundings through the 21st century and beyond.

(Open Space Management Plan, 2015)

What is Open Space?

Los Alamos County is extremely unique in the amount of open space inside the County's jurisdiction and immediately adjacent. "Open space should protect and preserve certain parcels of undeveloped land that contain significant wildlife habitats or corridors, cultural resources, trails, or serve as areas for flood or wildfire protection. The system should align with the land uses defined on the Land Use Map" (Open Space Management Plan, 2015). As recommended... the 2019 Comprehensive Plan established three levels of open space within the County's Future Land Use Map: Parks, Active Open Space, and Passive Open Space.

History of Planning in Los Alamos

Much of the history of open space and trails in Los Alamos is wrapped up with the history of the Manhattan Project. Prior to the commission, all land was owned by public

entities: the Atomic Energy Commission (AEC), the U.S. Forest Service, and the National Park Service. Over time, the AEC deeded certain lands to the County with use restrictions, including using the land for recreation in perpetuity.

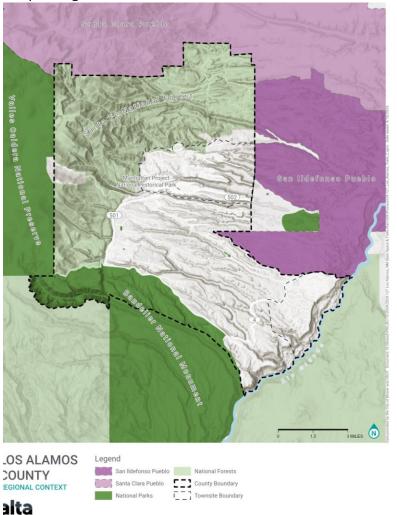
Key Planning Milestones:

- 1957 First long-range plan completed by the AEC. Established major uses within the County including community centers and public facilities.
- 1963 First comprehensive plan. Facilitated the transfer of federal land to the community of Los Alamos.
- 1970s County Council adopted three zoning classification for County-owned parcels which included two overlay districts related to open space.



Planning Context





Los Alamos County represents a unique planning context: surrounded by other federal entities, 86% of land in the county is owned by entities such as Department of Energy (Los Alamos National Labs), U.S. Forest Service, San Ildefonso Pueblo, or the Bureau of Land Management. This includes easy access to 365,000 acres of the Santa Fe National Forest, 88,900 acres of the Valles Caldera National Preserve, 34,000 acres of the Bandelier National Monument, and Diablo Canyon Recreation Area. Lastly, the Pajarito Mountain Ski Area is 7 miles away from Los Alamos townsite, providing yearround recreation options.

County Open Space and Parks

By Ownership

	Ownership			
Los Alamos			Other -	
Land Use	County	Private	Public	
Open Space				
+ Parks	8.2	0.8	61.7	
Other	2.5*	4.9	32	
Total (sq. mi.)	10.7	5.8	93.4	
% Open Space				
+ Parks	77 %	14 %	66%	

^{*}Other includes all land uses that are not parks and open space, which includes developed and undeveloped land.

Map 2. County-Owned Land & Open Space Amenities

Of the undeveloped land in the county, the Los Alamos County government is only responsible for 10%. This map shows in green the land the County owns and maintains. Of County-owned land, 77% is open space or parkland.



Community Services Department Integrated Services Master Plan

In 2023, a comprehensive effort to seek input on and evaluate County services and amenities was undertaken by the Community Services Department (CSD). The CSD includes the Parks and Open Space Division, the Recreation Division, libraries, the Social Services Division and Centralized Services. This planning effort included integration of existing plans, wide community engagement, inventory and evaluation of existing amenities, and recommendations for the department.

Many of the community desires and recommendations of this plan are in alignment with the consolidation of the Trails & Open Space Management Plan. Furthermore, the detailed inventory of facilities is helpful when determining how to prioritize repairs, improvements, or additions.

According to the assessment, Los Alamos County amenities such as parks and playgrounds are fairly well distributed throughout the County and many are within a 10 min walk to the majority of the residential population. 91% of residents are within a 10-minute walk to an outdoor recreation amenity and 99% are within a 1-mile walk. Similarly, in terms of open space amenities like disc golf courses, picnic areas, and natural areas, the County is providing these at a high level of

access in comparison to the population and expected population growth.

The Integrated Services Master Plan also noted some areas for improvement. In terms of walkability, White Rock residents do not have access to as many amenities within walking distance in the southern residential area. When evaluating various outdoor recreation components such as playgrounds or park facilities, it found that the County assets are more likely to be minimal in design or in need of repair in comparison to national datasets. Lastly, the report found a need for more accessible and ADA-compliant spaces.



Current Land Use Planning

For the Open Space & Trails Division, the primary land use category that is taken into consideration is Open Space Zoning which has two subtypes – active and passive. For a more detailed history of open space and land use in Los Alamos County, please see Appendix 2 in the 2015 Open Space Management Plan.

From the Los Alamos County Development Code, Section 16:

Definition for Scenic Open Lands District W-1 (passive): The W-1 scenic open lands district is intended to maintain, protect and preserve the scenic and environmental quality, open character and the natural recreational value of undeveloped land.

Definition for Recreation Wilderness District W-2 (active):
The W-2 recreation wilderness district is intended maintain, protect and preserve the scenic and environmental quality, open character, and natural recreational value of undeveloped lands; and to accommodate public and private recreational uses of an open nature.

Typical activities and structures that are permitted on open space are: Hiking, Running, Mountain biking, Dog walking, Equestrian, Rock climbing, Off-trail exploring on foot, Orienteering, Geocaching, Flood control, Nature study, Wildlife habitat improvements, Existing infrastructure, and Future infrastructure improvements with a restoration component.

W-2 lands are developed to accommodate outdoor recreation activities and public infrastructure such as team sports, dog training, walking and jogging, children's playgrounds, picnicking, stabling domestic animals, and other forms of active and passive recreation. Included in this classification are parks, golf courses, playgrounds, tot lots, shooting ranges, and hard-surfaced pathways: Playlots, Stables, Public parks, Golf courses, Multi-use trails, Athletic fields, Dog parks, Campgrounds, Nature centers, Ski areas, and Parking associated with recreational use.

For land use reference maps, please see Map 13 on pg. 46.

Community Profile

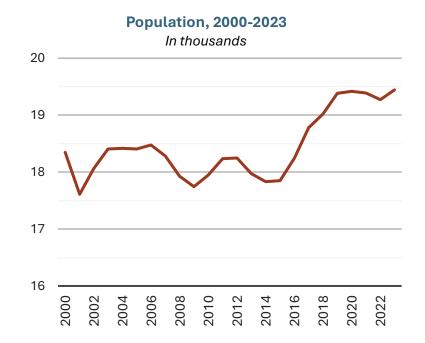
Los Alamos County is an emerging, regional tourism and employment destination and a unique place to live. The demographics of the County show that it is extraordinary in the state of New Mexico and across the country.

Demographics & Housing

In 2023, the population of Los Alamos County was 19,444. Between 2013-2023, the population of Los Alamos County grew from 17,970 to 19,444, an 8.2% population increase. This surpassed the growth of the United States and New Mexico for the same time period. This recent population growth has put a strain on both housing and county amenities. The primary driver is the staffing increase at Los Alamos National Labs (LANL).

Population Comparison, 2013-2023

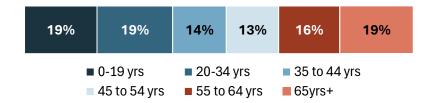
Geography	Percent Change
Los Alamos County	8.2%
United States	6.0%
New Mexico	1.0%



Source: Population Estimates Program

The Los Alamos community is divided fairly evenly between age groups, with no single age group dominating. Los Alamos has a distinctly lower percentage of people living in poverty compared to the state and the country. This difference is because of the high cost of housing, leading to a high barrier of entry to living in the County. While these costs is not insurmountable for highly paid LANL staff, it does lead to lower-income households being priced out of the County.

Age Distribution, 2022



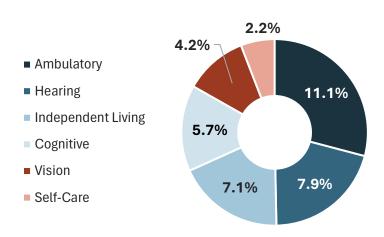
In 2022, **10.7%** of Los Alamos residents had a disability – with ambulatory and hearing disabilities being the most prevalent. Understanding these characteristics is very important when considering trail users and how they interact with their environment, wayfinding, and other trail users.

Educational Comparison, 2022

	Bachelor's Degree or Higher
Los Alamos County	69.7%
US	34.3%
NM	29.1%

Los Alamos is unique in the high percentage of residents who have a bachelor's degree or higher, which can be attributed to LANL.

Type of Disability, 2022



Source: U.S. Census Bureau, ACS 5yr Estimates, 2022

Household Comparison, 2012-2022

	2012	2022	Percent Change	
Median Age				
Los Alamos County	44.0	41.2	-6.4%	
New Mexico	36.6	38.6	5.5%	
Ave	Average Household Size			
Los Alamos County 2.39 2.35 -1.7%				
New Mexico	2.63	2.55	-3.0%	
Median Household Income				
Los Alamos County	\$106,426	\$135,801	27.6%	
New Mexico	\$44,886	\$58,722	30.8%	

The Los Alamos median age decreased between 2012-2022, which shows how this community is younger than the rest of the state. Similarly, the average household size decreased slightly over this same time. The median household income of Los Alamos grew approximately 28% over the 10-year period, ending at \$135,801 in 2022.

Source: U.S. Census Bureau, ACS 5yr Estimates, 2012 & 2022

Population Living Below Poverty Rate, 2022

	Total Population	Under 18yrs & Over 65yrs
New Mexico	18.3%	37.2%
United States	12.5%	26.7%
Los Alamos County	3.7%	5.4%

Los Alamos has a distinctly lower percentage of people living in poverty compared to the state and the country. This difference is because of the high cost of housing, leading to a high barrier of entry to living in the County.

Household Demographics, 2012-2022

	2012	2022	Percent Change
Family HHs	5,151	5,229	1.5%
Non-Family HHs	2,347	2,920	24.4%
HHs with 65 yrs+	1,793	2,301	28.3%
HHs with 18yrs & younger	2,312	2,275	-1.6%
Total HHs	7,498	8,149	8.7%

While related families make up the majority of households in Los Alamos, non-family households and households with members 65 years and older are the fastest growing demographic segment over the last 10 years, hinting at shifting demographics.

Important housing characteristics include family type, tenure (homeowner v. renter), and composition of physical housing. In Los Alamos, the majority of housing is 1-unit buildings and most of these are attributed to Family households.

Household Characteristics, 2022

	1 unit	2+ units	Mobile homes & other	Total Households
Family HH	4,271	750	208	5,229
Nonfamily HH	1,503	1,161	256	2,920
Total HHs	5,774	1,911	464	8,149
	70.9%	23.5%	5.7%	

Multifamily housing makes up 23.5% of all housing in Los Alamos. Residents living in these types of buildings may need more access to public recreation facilities if their building does not provide outdoor space.

Housing Units by Tenure, 2022

Almost a third of housing in Los Alamos is occupied by renters. Similar to multi-family housing, these are residents who may not have as much outdoor space directly associted with their resident and therefore, more frequently utilize County amenities.

72.8%

Owner-occupied

Renter-occupied

Source: U.S. Census Bureau, ACS 5yr Estimates, 2022

Commuting & Employment

Commuting Characteristics, 2021 Primary Jobs

Commute to Los Alamos for work

7,479
Live & Work in

Los Alamos

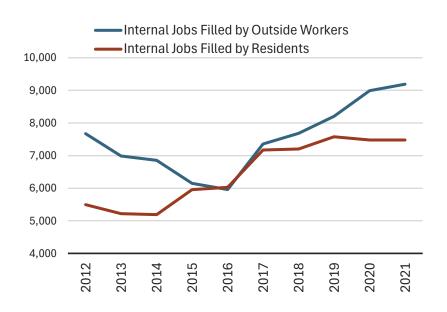
Live in Los Alamos and work outside

Los Alamos is a well-known commuter destination for workers due to Los Alamos National Labs. Looking into the details is important to determine how Los Alamos residents and commuters alike are interfacing with the county. Of those employed in Los Alamos, 9,189, or 55.1% of workers, live outside the county and 7,479, or 44.9% of workers, live and work in the county. Of those living in the county, 2,080, or 21.8% of residents, commute elsewhere for work.

The number of jobs in the county filled by residents has remained steady since 2017, hovering around 7,500. That same year, marked a change in the number of jobs in the county filled by external works, increasing by 25%, or 1,838 workers over four years.

Source: U.S. Census Bureau, On The Map & LEHD, 2012-2021

Los Alamos Worker Characteristics, 2021



5.7% of Los Alamos residents use alternate transportation methods to get to work. Most likely these residents use a combination of trails and sidewalks to get to work even if they also take public transportation.

Los Alamos Worker Analysis, 2021

Origin City	Percent
Los Alamos CDP	30.8%
White Rock CDP	13.1%
City of Santa Fe	11.3%
City of Albuquerque	7.2%
City Rio Rancho	3.8%
City of Española	3.7%
Other	30.2%
	100%

The majority of people who work in Los Alamos live in the either Los Alamos townsite or White Rock townsite.

Commuters from the cities of Santa Fe, Albuquerque, Rio Rancho, and Española make up another 25.9% of commuters.

Resident Commute Type, 2022

Mode of Transportation	Percent
Biked	2.0%
Walked	2.0%
Public Transportation	1.7%
Total alternate transportation	5.7%

Source: U.S. Census Bureau, ACS 5yr Estimates, 2022 & On The Map & LEHD, 2012-2021

PLAN BACKGROUND & EXISTING CONDITIONS



Recent Projects

The Los Alamos County Open Space & Trails Division is continuously monitoring and improving the existing trails and open spaces. Below are some recent updates on projects with key partners:

Youth Conservation Corps

- Water Bar Trails improvement project
- South Pueblo Bench Trail rock steps project
- 5-acre invasive Scottish thistle removal

Volunteer Projects

- School Canyon Rim Trail erosion control and trail side vegetation removal
- Woodland Trail erosion control
- Perimeter Trail erosion control project
- White Rock Canyon graffiti removal
- Pueblo Canyon Rim Trail erosion control project and trail side vegetation removal

CM Arbor Care Projects (On-Call Contractor)

- Kwage Mesa Trail maintenance project- 2022
- Bayo Canyon Trail Erosion Project 2023
- Perimeter Trail erosion control project 2023

- Gonzales Trail Reroute 2024
- Tent Rock Trail culvert installation 2024
- Deer Trap Mesa Trailhead rock wall and erosion control project - 2024

Staff Maintenance & Planning

- Dot Grant trail erosion control
- Woodland trail erosion control
- Pueblo canyon rim trail vegetation removal
- Upper Walnut trail vegetation removal
- Upper Pueblo trail erosion control and vegetation removal
- NM 4 trail and Canyon Rim Trail Fog & Crack Seal
- Mitigation Studies
- Canyon Restoration Assessment

Grant Funded Projects

- Bayo Canyon Access Trail 2023
- Kinnikinnik Park ADA Trail 2024

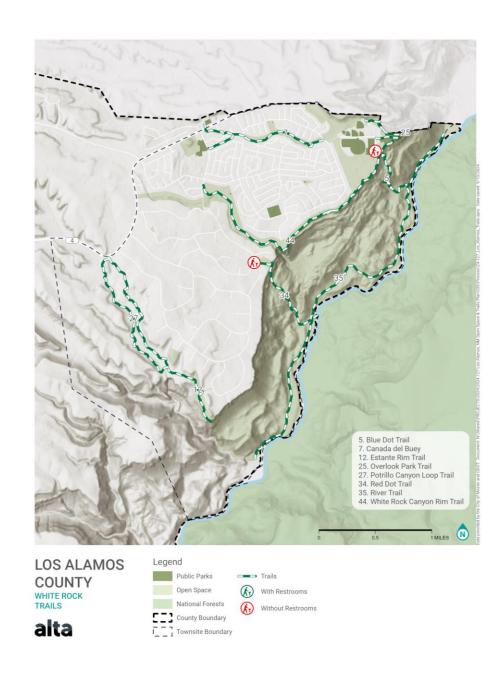
Upcoming Projects

- Deer Trap Mesa Trail Erosion project
- Gonzales Trail erosion project

Map 3. Los Alamos Townsite Trails

LOS ALAMOS Acid Canyon Trail Barranca Crossing Trail Bayo Canyon Access Trail 17. Kinnikinnik Park Trail 32. Quemazon Trail COUNTY 18. Kwage Mesa Trail 19. Los Alamos Mesa Trail 33. Ranch School Trail 36. Satch Cowan Trail LOS ALAMOS Bayo Canyon Trail Camp Hamilton Trail 37. School Canyon Trail 38. South Pueblo Bench Trail 20. Mitchell Trail 21. North Bayo Bend Trail **TRAILS** S. Canyon Rim Trail Deer Trap Mesa Loop Trail Dot Grant Trail East Fork Trail 22. North Pueblo Bench Trail 39. Tent Rocks Trail 40. Upper Walnut Trail 41. Walnut Canyon Rim Trail 42. Walnut Canyon Trail 23. North Pueblo Trail Legend 24. Otowi Mesa Trail 26. Perimeter Trail Public Parks 13. Fireline Trail 28. Pueblo Canyon Rim Access Trail 43. Water Bar Trail 29. Pueblo Canyon Rim Trail 45. Woodland Trail 14. Gonzales Road Open Space 15. Graduation Canyon Trail 30. Pueblo Canyon Trail 46. Zip Line Trail 16. Homestead Crossing Trail 31. Quemazon Nature Trail National Forests County Boundary Townsite Boundary Trails With Restrooms Without Restrooms alta

1 MILES



Map 4. White Rock Townsite Trails

Los Alamos County Trail Network

By Difficulty Rating – See pg. 47 for full list of County trails, including user types and difficulty rankings

Total County trails: 45

Total miles of County trail: 71.6

Trails with clear signage¹: 33

Number of County Trails

	Bike	Hike
Easy	13	24
Intermediate	11	18
Hard	15	4

33 41

Percent of Network by Mileage

	Bike	Hike
Easy	19%	39%
Intermediate	41%	50%
Hard	40%	11%

Trail Miles per Category

	Bike	Hike
Easy	11.2	28.2
Intermediate	23.9	35.9
Hard	23.2	7.5

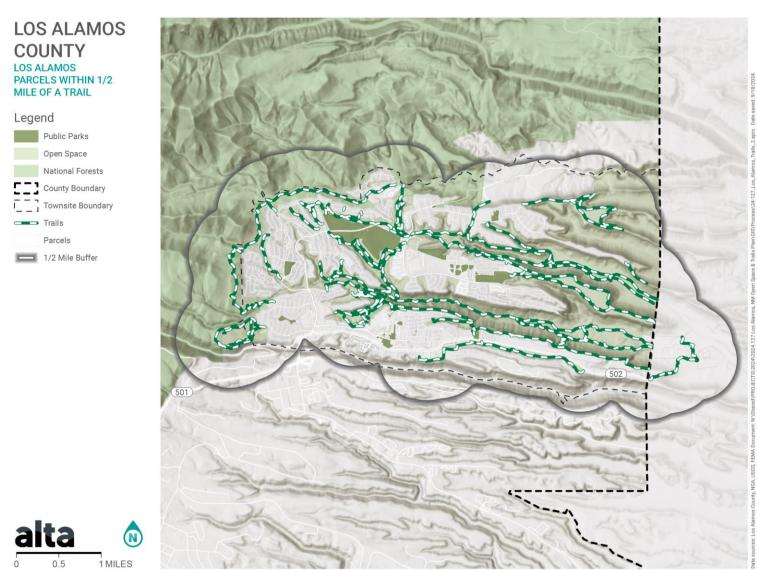
54 71.6

When analyzing the Los Alamos County Trail network by user type and trail type, it becomes clear that the system has more trails for hikers than bikers and skews towards more difficult trails with only 19% of bike trails and 39% of hiking trails ranked as easy. Trails ranked as hard might not be challenging for the entire length of the trail, but the presence of challenging sections means the entire trail is essentially inaccessible for individuals who are not able to complete the toughest portions.

Trailheads	Paved Parking	Water	Dog Pick-up Station	Restroom
East Park - Los Alamos Mesa Trail	Х		X	х
East Rd/Entrada Dr - Canyon Rim Trail Underpass	Х			х
Kinnikinnik Park/Aquatics Center - Acid Canyon	Х			х
Piedra Loop - Red Dot Trail				
48th St - Quemazon Trail				
Overlook Park - Blue Dot Trail	Х			
San Ildefonso Roundabout - Bayo Canyon Trail				
Arizona/45th - Mitchell Trail	Х			
Barranca Rd - Deer Trap Mesa	Х			
N. Mesa Park Rd - Kwage Mesa Trail				х

¹ Trail is mentioned by name in one of the newer trailhead guides https://www.losalamosnm.us/Parks-and-Recreation/Open-Space-Trails/Trailheads-Canyons

Map 5. Los Alamos Townsite - Parcels Within 0.5mi of a Trail



Parcels are units of land with distinct boundaries and ownership and a common unit of analysis in maps.

Because trailheads provide wayfinding, amenities, resources, and warnings, it is important to assess how readily available trailheads are throughout the network.

Map 6. Los Alamos Townsite - Parcels Within 0.5mi of a Trailhead



Map 7. White Rock Townsite - Parcels Within 0.5mi of a Trail Map 8. White Rock Townsite - Parcels Within 0.5mi of a Trailhead LOS ALAMOS LOS ALAMOS Legend Legend Townsite Boundary T____ Townsite Boundary Public Parks With Restrooms COUNTY COUNTY WHITE ROCK PARCELS WITHIN 1/2 MILE OF A TRAIL WHITE ROCK PARCELS WITHIN 1/2 MILE OF A TRAILHEAD Without Restrooms National Forests 1/2 Mile Buffer 1/2 Mile Buffer County Boundary County Boundary alta alta

OPEN SPACE AND TRAILS MANAGEMENT PLAN

Los Alamos County Open Space Network

<u>Open Space:</u> consists of areas of an undeveloped character where development is restricted or that are set aside for natural or cultural resource protection and dispersed recreation. Included are undeveloped natural lands with trails, cultural and historic sites,

significant habitat supporting ecosystem health, wildlife habitat, areas managed for community wildfire protection, riparian areas, and significant viewsheds (Los Alamos Open Space Management Plan, 2015).

Total acres: 4,000 Sensitive Plant and Animal Species: 20	National Register of Historic Places sites: 12	New Mexico Registered Cultural Properties: 15
---	--	--

Open Space Management Concerns

Management Unit	Ponderosa Pine	Canyons	Mesa Top	Western Perimeter	White Rock	Lower Rendija/Guaje
Cultural Sites	~	✓	✓	✓	✓	~
Wildlife Corridor	~	~				
Endangered Species		✓			~	
Sensitive Plant Species	~	✓			~	
Erosion/Stormwater Issues	~	✓	✓			~
Fire Management Risk	✓	✓	✓	✓		~
Insect/Disease/Invasive Species	~	~	✓	✓	✓	✓
Hazardous Materials		~				
Adjacent Urbanization	~	~	✓	✓	~	~

Adjacent Ownership

Management Unit	Entity
Ponderosa Pine	Golf course
Canyons	San Idelfonso Pueblo, SFNF
Mesa Top	San Idelfonso Pueblo, SFNF, LANL
Western Perimeter	SFNF
White Rock	San Idelfonso Pueblo, DOE, SFNF
Lower Rendija/Guaje	DOE to transfer to County in future

Open Space Access in Los Alamos

Los Alamos County residents have access to immense amounts of open space regionally and in their backyards. **1 out of 7 residences** (or 14%) are located adjacent to open space lands managed by either the County or US Forest Service. The Trust for Public Land states that 95% of residents live within a 10-minute walk of a park, this is higher than the median for the 100 most populous US Cities (74%) and higher than all urban cities and towns in the US (55%).

When looking at all adjacent lands, Los Alamos residents have easy access to over 45,000 acres of Open Space or Parks. In Los Alamos County alone, 77% of land owned by the County is dedicated to this land use.

County Open Space and Parks

By Ownership

	Open Space + Parks	Open Space + Parks	Other Land Use Other		Total	Total Square	% of Land Open Space
Ownership	(acreage)	(sq. mi)	(acreage)	(sq. mi.)	Acreage	Miles	+ Parks
Los Alamos County	5,250	8.2	1,572	2.5	6,830	10.7	77%
Los Alamos Public School	92	0.1	113	0.2	206	0.3	45%
Private	535	0.8	3,157	4.9	3,692	5.8	14%
US Forest Service	28,598	44.7		0.0	28,642	44.8	100%
National Park Service	6,664	10.4		0.0	6,674	10.4	100%
Bureau of Indian Affairs	15	0.0		0.0	15	0.0	100%
Los Alamos National Lab	4,122	6.4	20,181	31.5	24,309	38.0	17%
Grand Total	45,276	70.7	25,023	39.1	70,370	110.0	64%

Source: Los Alamos County, GIS Department, 2024

An open space restoration assessment was conducted in 2022, for details on the ranked restoration projects of each open space area, please see Open Space Restoration Potential - Appendix E.

Open Space Features

- Birding & Wildlife Viewing
- Vistas & Viewpoints Anderson Overlook, Sierra de los Valles, Lower Canyons
- Geologic Features
- Cultural and Historic resources
 - Historic Roads
 - Cultural sites
 - Historically Designated Landmarks



Equestrian Facilities

Los Alamos County is unique in that it manages equestrian facilities that are holdovers from the Atomic Commission era. Facilities include stables, a large indoor arena, an outdoor dressage arena, jump arena, round pens and rodeo grounds.



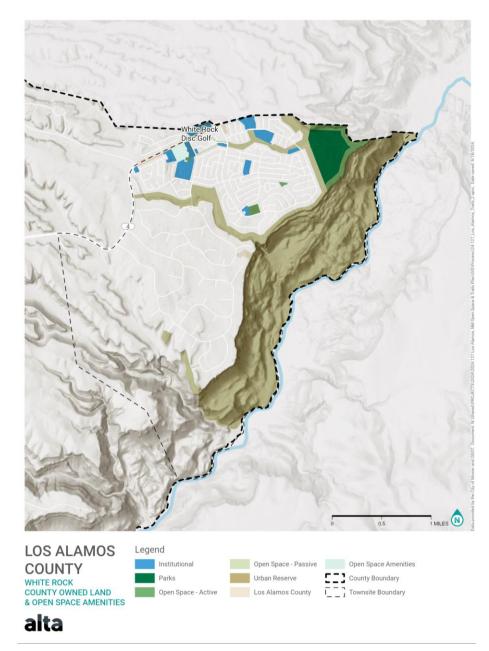
- Of the 46 County trails, 32 are accessible by horseback
- These trails represent 51.4 miles and a range of difficulty levels
- Kwage Mesa includes horse trailer parking and transient pends for overnight horse camping.
- Horse trailers are permitted at all trailheads but some trailhead parking areas are too small for safe trailer ingress, egress, parking and unloading.
 - Additionally, horses with metal shoes may have difficulty unloading onto pavement due to slipping.

For information on trail building standards related to equestrian trails, please see:

https://www.fs.usda.gov/t-d/pubs/htmlpubs/htm07232816/toc.htm

Map 9. Los Alamos Townsite - County-Owned Land & Open Space Amenities





Map 10. White Rock Townsite - County-Owned Land & Open Space Amenities

Plan Comparisons

High Priorities by Number of Times Mentioned

The most mentioned strategies across all plans are concerned with existing facilities and how to improve them. This is important to note because management of existing facilities is the most sustainable because it limits the environmental impact of new trails and diffusing County resources. Improving safety was the only other strategy mentioned across all plans.

Strategy	Community Services Integrated Master Plan	Trail Management Plan	Bike Transportation Plan	Trailhead Assessment	Community Trail Plan	ADA Transition Plan	Open Space Management Plan	Restoration Feasibility	тотаг
Maintain/Improve ourrent facilities	2023	2022	2017	2022	2013	2022	2015	2023	0
Maintain/Improve current facilities	-								8
Improve safety		•		•	•	•	•	•	8
Better signage and wayfinding	•	•	•	-	•	-			6
Partner with surrounding agencies	•	-	-		•	•	•		6
Conserve resources, stewardship of the environment	•	-	-		•		•	•	6
ADA accessibility (all ages, all abilities)	-	-	-	-		-			5
Trail connectivity	-	-	-		-		•		5
Community education	•	-	-		-		•		5
Trails as transportation	•	•	•		-				4
More trails for beginner/intermediate users	•	-	•		•				4
New facilities (event space, bike skills park)	•	•	•		•				4
New/improved trailhead amenities	•	•		•	•				4

Plan Comparisons

Lower Priority Strategies

Enhance tourism/Economic development	-		•		•		3
Increase cultural programming/Protect cultural assets	-	-				•	3
Promote health	-	•	-				3
Increase community cohesion/Inclusivity	-		-		•		3
GPS inventory needed		•		•		•	3
Land use reforms needed		•	•			•	3
Pursue special designation (LAC, Ride Center)			•		•		2
Protect open space	-					•	2
Equestrian facilities	-				•		2
Facilities for motorized vehicles			•				1
Wildlife/endangered species protection						•	1

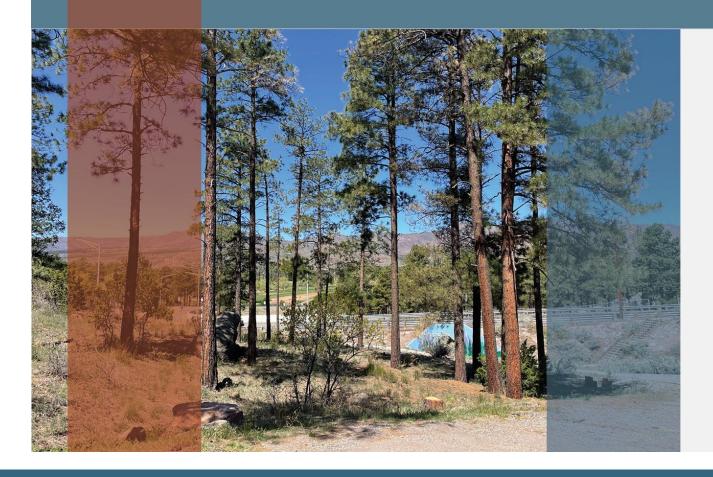
Previously Proposed New Trails and Open Space

Throughout previous plans, new trails are often mentioned as ways to better connect the existing trail system and make far reaching areas more accessible. Other examples, like the Urban Multi-Use trail, are suggested as providing ways for people to get around town without having to get in a car.

For Policies for Additions, Realignments, and Deletions to Trail Network, please see Appendix A.

Trail/ Open Space Area		Community Services Integrated Master Plan	Trail Management Plan	Bike Transportation Plan	Trailhead Assessment	Community Trail Plan	ADA	Open Space Management Plan	Restoration Feasibility	Public Outreach	Туре	Total
Piedra Loop to Sherwood Blvd	WR	•		•						•	New/Improve	Ω
Quemazon Trail Stacked Loops	LA		•			•				•	Extend/Improve	3
Urban Multi-use Trail (20th/Trinity to Canyon Rd)	LA	•		•							New	2
Connect northern residential areas to the CBD	LA			•		-					New	2
Otowi-Deer Trap-Kwage Mesa Connector	LA		•							-	New	2
Perimeter Connectors	LA		•								Extend	1
White Rock Loop	WR					•					New	1
Rendija Canyon Addition	LA		•								New	1
Connect White Rock River Trail to Rio Grande Trail	WR									•	Extend/Improve	1
Pueblo Canyon Extension	LA		•								Extend	1
Walnut Canyon to Walnut Rim	LA		•								Extend	1

COMMUNITY ENGAGEMENT



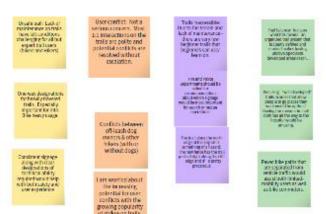
Los Alamos County engaged residents and staff to learn what the most current issues were around trails and open space for the Los Alamos community and to disentangle opportunities and challenges between user groups, goals, and County capacity.

Comprehensive outreach and planning processes were previously conducted for all the plans being consolidated as part of this effort. These plans were thoroughly reviewed for key themes and the input received is still relevant today.

Engagement Activities

Residents were able to participate via multiple in-person or online listening sessions and leave comments on the landing page for this planning process on the County's website.

- 2 site visits
- 2 Listening Sessions (virtual & in-person)
 - o May 2024
- 1 Workshop (in-person)
 - August 2024 & Follow-up survey
- Open Space Survey (OSWG)
- Project landing page on County website with comment box
- Disability trail advocacy round table with PEEC
- 1 Presentation of plan revisions (virtual)





Groups represented – Los Alamos Professional Disc Golf Association, Transportation Board, Parks & Recreation Board, LAC Open Space Working Group, Pajarito Environmental Education Center (PEEC), San Ildefonso Pueblo, disability advocates, Los Alamos Stable Owners Association, Equine and Livestock Working Group, and members across a variety of activities including, equestrian, mountaineering, hiking, and mountain biking.

For a complete summary of engagement input, please see Appendix B.

What We Heard – Key Themes





Trail Maintenance





Safety Concerns

Reduce different user type conflicts;

off-leash dogs; wildlife; proximity to

roads

Continued maintenance needed for trails that experience periodic

Build new trails; bike-specific skill areas; recreational amenities, such disc golf and equestrian facilities; parking

New Amenities

Prioritize improvement of existing facilities over creation of new facilities

Sustainability





erosion, heavy use, vegetation

overgrowth





Connectivity

Improve trail network connectivity,

especially north to south

Trail Variety

Add new trails that are considered easy or beginning level for hiking and the

Create uniform signage throughout the system, with a specific attention to trail difficulty level

Better Wayfinding/Signage

Wide Community Involvement

Allow for more contact with specific user groups and community organizations





mountain biking





Coordination

Open Space

Disability/Accessibility

Conservation & Preservation

Collaborate with adjacent entities (DOE, SFNF, etc.) to solve issues across boundary lines

Emphasize continual improvement and remediation of open space, due to fires/flooding cycle

Ensure all Los Alamos residents have access to information about and use of trails and open space

Protect environmental and cultural resources

Community Concerns

New facilities and trailheads	Overuse of trails and open space	Preservation of cultural resources	Economic development	Modern trail standards	Runoff/erosion due to impermeable surfaces	Multi-use trails
Natural trails	More parking	County jurisdiction	Community trail stewardship	Historical trails	Maintenance of existing facilities	No new trails
Sensitive plant & animal species	Education or access around protected resources	Maintenance or budget constraints	Social trails or non-sanctioned trails	Open space	Accessible Trails	Inclusion
Better wayfinding	Exclusion	Too much signage	Erosion, overgrown vegetation	Seasonal trail closures or trail re-routing	User-specific trails	Surrounding entities

Improvements Prioritization

With the following survey questions, participants were asked to either vote and/or rank their top choice. Prioritization is helpful for County staff because it demonstrates priorities within real-world restrictions. Of the strategies that exist in adopted plans, how does the public want the County to focus its resources?

*Scoring was weighted and does not reflect individual votes

What neighborhood do you live in?



Which trailhead needs to be improved most? Please rank

Bayo Canyon/San Ildefonso Roudabout	236
Quemazon/ 48th St	160
Mitchell Trail/Arizona Ave	158
Kwage Mesa/ N. Mesa Park Rd	143
Deer Trap Mesa/Barranca Rd	93
Acid Canyon/Aquatics Center	91
Red Dot/Piedra Loop	72
Los Alamos Mesa Trail/ East Park	50
Blue Dot/Overlook Park	34
Canyon Rim Trail @ East Rd/Entrada Dr. Underpass	17

Which amenity is most important to you? Please rank

Restroom	203
Dog Waste Station/Trash Can	159
Water Fountain	138
Horse Trailer Parking	112
Paved Parking	59
Bike Tools	52

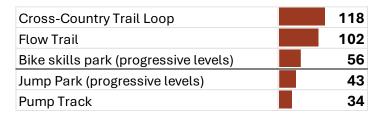
Vote on these priorities (participants are only given 100 points to vote with)

Existing Open Space Maintenance (Habitat restoration, wildfire prevention, erosion control)	942
Existing Trail Maintenance (Removal of social trails, erosion control, vegetation trimming, wayfinding)	931
Equestrian Access & Improvements (regrading of trails, trailer parking)	646
Preservation of Historic Trails & Cultural Sites	484
Bike-Specific Amenities (designed for a variety of skill levels with more attention to beginners)	477
New Trails & Trail Connections	302
Improving Amenities at Existing Trailheads	261
New Trailheads	149
New Open Space Amenities	45

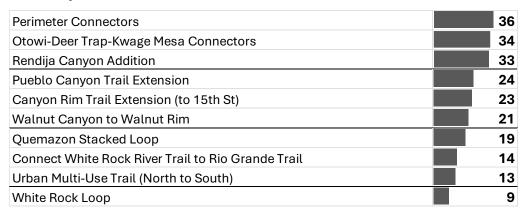
Which trails would make good accessible trails?

Kwage Mesa Utilities Rd	19
White Rock Canyon Rim	18
Trail alongside Overlook Rd	18
Kinnikinnik Park Trail	17
Kwage Mesa Trail	15
North Bayo Bench	13
Graduation Canyon Trail	7
Other	6

Which bike amenity is most important to you? Please rank



Which trail connections would you use most?



NEEDS ASSESSMENT



Trail Network & Amenities Gaps

All trails were assessed and top maintenance needs identified in the 2012 Trail Management Plan (revised 2022) effort. The concerns below were a result of public engagement efforts in 2024 to help identify priorities from the previous assessment efforts.

Please see Appendix C for the full trail assessment.



Trail Gaps

- Canyon No new development
- Quemazon Trail better connections from Quemazon to surrounding trails
- Homestead Crossing Trail maintenance needed
- Tunnel Safety issues for equestrians
- Blue Dot Erosion and social trails issues
- Camp Hamilton Trail Trail maintenance needed
- Graduation Canyon Trail maintenance & wayfinding
- Bayo Canyon Trail maintenance needed & user conflicts due to congestion
- Kwage Mesa No new development and user conflicts
 Tent Rock Trail Make more bike friendly

Trailhead Gaps

- Bayo Canyon poor signage; dangerous tunnel; stairs need repairing; needs more/better parking; restroom and other amenities needed
- Red Dot Trail maintenance needed for wooden stairs; paved parking; restroom
- Quemazon No amenities



Trail Vulnerability Defined

- Use Type & Trail Use Intensity Designations from 2022 Trails Management Plan
- Implementation Timeline As listed in plans & staff insights
- Safety Concerns Includes issues such as: steep slopes, erosion issues, exposure for users

Trail Vulnerability Index Weighting

- Use Intensity Score was weighted the highest at double the total points: 2pts = light; 4 pts = moderate; 6pts = heavy
- Use type: 1pt per type served
- All other categories: 1pt maximum

How to use this tool

• The highest scores represent trails that will require more of staff's time and resources to deal with the cumulative impacts of a variety of factors. For example, if a trail borders or transects multiple jurisdictions, it will take more time to coordinate re-routing or maintenance between multiple entities.

Trail Vulnerability Index – Existing Trails

Trait vullerability fildex – Existing	Use Type A = Pedestrians	Type Score	Implementation Timeline ST: 1-3yrs	Ownership	Erosion/Safety Concerns	Trail Use	Use Intensity Score	Distance (mi.)	Q
Trail/Multi-Use Trail	B = Cyclists C = Equestrians	Nse	MT: 3-5yrs LT: 5yrs+	(Non-County adjacent entities)	Ero: Con	Intensity	use	Dist	Score
Max Points:		3	1	1	1		6		15
Bayo Canyon Trail	ABC	3	Short-term		Х	Heavy	6	3.2	14
Pueblo Canyon Trail	ABC	3		Airport	Х	Heavy	6	4.5	14
North Bayo Bench Trail	ABC	3			Х	Heavy	6	2.2	13
Barranca Crossing Trail	ABC	3		SFNF	Х	Mod	4	0.3	12
Mitchell Trail	ABC	3	Short-term	SFNF		Heavy	6	0.3	12
Perimeter Trail	ABC	3		SFNF, DOE		Heavy	6	5.0	12
Pueblo Canyon Rim Access Trail	ABC	4			Х	Mod	5	0.3	12
Quemazon Trail	ABC	3	Short-term	SFNF		Heavy	6	1.1	12
Red Dot Trail	Α	1	Mid-term		х	Heavy	6	1	12
South Pueblo Bench Trail	ABC	3			х	Heavy	6	2	12
White Rock Canyon Rim Trail	ABC	3			Х	Heavy	6	2.8	12
Canada del Buey	ABC	3				Heavy	6	1.5	11
Canyon Rim Trail & West Extension	AB	2	Long-term			Heavy	6	2.5	11
Acid Canyon Trail	AB	2		DOE		Heavy	6	1	11
Homestead Crossing	ABC	3			х	Mod	4	0.6	11
Los Alamos Mesa Trail	ABC	3				Heavy	6	0.5	11
Pueblo Canyon Rim Trail	ABC	3	On-going		Х	Mod	4	4.5	11
Walnut Canyon Rim Trail	ABC	3			_	Heavy	6	0.9	11
Water Bar Trail	ABC	2			Х	Heavy	6	0.3	10
Bayo Canyon Access Trail	ABC	3				Heavy	6	0.6	10
Deer Trap Mesa Trail	А	1	On-going	San Ildefonso		Mod	4	4.7	10

Trail/Multi-Use Trail	Use Type A = Pedestrians B = Cyclists C = Equestrians	Use Type Score	Implementation Timeline ST: 1-3yrs MT: 3-5yrs LT: 5yrs+	Ownership (Non-County adjacent entities)	Erosion/Safety Concerns	Trail Use Intensity	Use Intensity Score	Distance (mi.)	Score
Fireline Trail	ABC	3		DOE		Mod	4	2.3	10
North Pueblo Bench Trail	ABC	3				Heavy	6	1.3	10
Kinnikinnik Park Trail	ABC	3			Х	Mod	4	0.2	10
Kwage Mesa Trail	ABC	3				Mod	4	4.5	10
Ranch School Trail	ABC	3			Х	Mod	4	0.6	10
Walnut Canyon Trail	ABC	3			Х	Mod	4	0.6	10
Woodland Trail	ABC	3			Х	Heavy	6	1.5	10
Overlook Park Multi-Use Trail	AB	2				Heavy	6	0.8	9
Blue Dot Trail	Α	1			Х	Mod	4	1	9
Dot Grant Trail	ABC	3				Mod	4	1.2	9
East Fork Trail	ABC	3				Mod	4	1.6	9
Graduation Canyon Trail	ABC	3				Mod	4	0.6	9
North Pueblo Trail	ABC	3				Mod	4	2.2	9
Zipline Trail	ABC	3			Х	Low	2	0.8	9
Otowi Mesa Trail	А	1		San Ildefonso	Х	Mod	4	1.1	8
Gonzales Rd	AB	2			Х	Light	2	0.7	8
Quemazon Nature Trail	Α	1				Heavy	6	0.8	8
River Trail	Α	1	Short-term	San Ildefonso	Х	Low	2	2	8
Tent Rocks Trail	ABC	3				Light	2	4.1	8
Estante Rim Trail	ABC	3		DOE		Light	2	0.9	7
Upper Walnut Trails	AB	2			Х	Mod	4	0.8	7
Camp Hamilton Trail	Α	1		DOE		Light	2	1.5	7

Trail/Multi-Use Trail	Use Type A = Pedestrians B = Cyclists C = Equestrians	Use Type Score	Implementation Timeline ST: 1-3yrs MT: 3-5yrs LT: 5yrs+	Ownership (Non-County adjacent entities)	Erosion/Safety Concerns	Trail Use Intensity	Use Intensity Score	Distance (mi.)	Score
School Canyon Trail	Α	1				Mod	4	2	6
Potrillo Access Trail	ABC	3				Light	2	0.3	5
Satch Cowan Trail	AB	2				Low	2	1.2	5

Reviewing which trails were mentioned as high priorities in previous plans demonstrates how the public felt in the past during other planning processes. Many of the trails with the highest number of mentions also scored highly on the vulnerability index (indicated with an asterisk). These trails in particular should be prioritized by the County because these are public favorites and embody a variety of factors that demand more attention by County operations.

Highest Total by Previous Plan Mentions

Trail/Multi-Use Trail	Total
Canyon Rim Trail & West Extension*	7
White Rock Canyon Rim Trail*	5
Canada del Buey	4
Red Dot Trail*	4
Bayo Canyon Trail*	4
Pueblo Canyon Trail*	4
Perimeter Trail*	4
Blue Dot Trail	3
Quemazon Trail*	3
Woodland Trail	3
Deer Trap Mesa	3

See pg. 48 for full list

Highest Scoring by Vulnerability Index

Trail/Multi-Use Trail	Score
Bayo Canyon Trail*	15
Pueblo Canyon Trail*	14
North Bayo Bench Trail	13
Acid Canyon	12
Barranca Crossing Trail	12
Canyon Rim Trail & West Extension*	12
Mitchell Trail	12
Perimeter Trail*	12
Pueblo Canyon Rim Access Trail	12
Quemazon Trail*	12
Red Dot Trail*	12
South Pueblo Bench Trail	12
Walnut Canyon Rim Trail	12
White Rock Canyon Rim Trail*	12

Accessibility

Accessibility is currently lacking in the trails and open space network, but it is a priority for the County and community. By definition, accessibility increases participation for all – young and old; experienced or beginner; limited mobility or endurance enthusiasts. Better trails enable users of all ages and abilities to participate. While the Los Alamos geography is challenging and many trails cannot be realistically improved to meet universal design standards, the County is working to improve trails that have the potential to serve more users.

Specific needs related to accessibility:

- <u>Language</u> Access to information in other formats (braille, other languages) and screen reading technologies for online information
- <u>Trail difficulty</u> Need more options for beginner/differently-abled hikers and bikers (parabikes, rollator walkers)
- Close parking some trails do not have nearby parking, so no way to access them easily
- <u>Linear and Cross Slope Grade</u> Steep trails are not accessible for users with limited mobility or endurance or users who require assistive devices
- Surface material paved v. natural materials
- <u>Trail width & tread obstacles</u> curbs or tree roots that require a step up or can the trail accommodate assistive devices
- Strength of cell service for emergency calls

Technical Specifications for Accessible Trails

- 5% or less for any distance
- Up to 8.33% for 200 feet
- Up to 10% for 30 feet
- Up to 12 % for 10 feet
- No more than 30% of the total length of the trail may have a running slop above 8.33 and must never exceed 12%.
- Above 5%, resting intervals must be provided at both ends of the grade and resting spaces considered

For more details on the disability trail accessibility roundtable, please see Appendix B.

Source: United States Access Board, Outdoor Developed Areas, 2014

Accessible Trails

Trail	Distance (mi.)	Construction
Kinnikinnik Park	0.25	
Canyon Rim Trail	3.0	Paved
Los Alamos Mesa	0.5	Paved, but needs to be
Trail		repaved and realigned
Canada del Buey	1.5	Partial crushed gravel/Partial
		paved

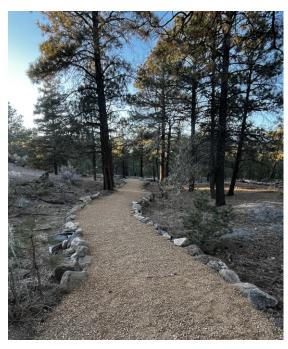
Kinnikinnik Park Loop Trail

The Kinnikinnik Park accessible trail was funded by New Mexico Outdoor Recreation Trails+ Grant program that improved a quarter mile of existing trail making the area ADA-accessible by resurfacing with crusher fines and clearing barriers that might prevent individuals with disabilities from enjoying the trail.

ADA-approved trail improvements include:

- Clear tread width is at least 36 inches
- Passing spaces of 60 inches and resting intervals provided
- Surface is firm and stable
- No slope steeper than 1:8 (12%)







Potential Accessible Trails

Accessibility goes beyond paved trails: as long as trails can meet the previously mentioned criteria, a wider range of trails can meet the needs of differently abled residents. With few modifications, these trails have the potential to increase access to nature for a variety of users. (Gradients from AllTrails.com)

- Kwage Mesa Trail
 - No shade
 - o 226ft elevation gain
 - 2% average grade; 3% max grade
 - ADA portion could be shortened to an out and back
 - o Parking at North Mesa Park Playground
 - Narrow trail portions leaving the parking area
- Kwage Mesa Utilities Road²
 - Wide and flat

- No benches or shade
- o No signage
- Accessible bathroom at horse arena
- White Rock Canyon Rim Trail (partial to Kimberly Lane)
 - o Steep beginning Could be avoided with new trail
 - Gets steep again towards Kimberly Lane. Could make ADA portion end at this point
 - o If these points are avoided, max grade around 7%
 - Parking at Blue Dot Trailhead
 - alignment
- Trail alongside Overlook Rd (portions of Canada del Buey & Blue Dot)³
 - o Max grade: greater than 10%
 - Minimal shade, but several benches

² https://peecnature.org/kwage-mesa-utilities-road/

³ https://peecnature.org/overlook-park-and-white-rock-canyon-overlook/

Trail Signage/Wayfinding

To date, trailheads have received a new kiosk with new trailhead guides that call out specific trails that can be reached from that point. Key information such as maps, difficulty level (hiking and biking), recommended trail use type (hike, bike, equestrian), notable features, trail surface, distance, and elevation gain are also included.

This information is exactly what the Los Alamos community has asked for and these trailhead information kiosks are a great start to providing better wayfinding.

Opportunities for improvement:

- Include a network-wide map on the backside of the kiosk to provide more geographic context
- Provide information in other languages at the kiosk or via QR code, including braille for applicable trails
- Provide more education regarding treatment of cultural and historical sites and objects that may be encountered
- Continue the branding throughout the trail and clearly mark trail divergences

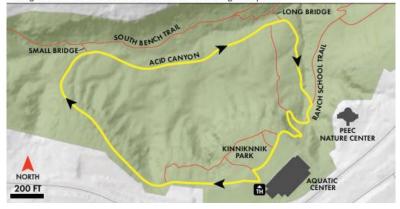
(See Appendix D for signage location and typology recommendations)

ACID CANYON LOOP 🌘 🔣 🛎				
LENGTH: 0.9 MILES	ELEVATION GAIN: 200 FEET			
FITNESS LEVEL: EASY	FEATURES: MATURE PONDEROSA PINE STANDS, ISOLATION WITHIN THE DOWNTOWN AREA			
TRAIL SURFACE: PACKED DIRT	MOUNTAIN BIKE SKILL LEVEL: CHALLENGING			

ere's one of the few short and easy hiking trips in Los Alamos. The loop is less than a mile and most of the loop follows a bedrock fireroad through beautiful open pine stands. The return leg uses a steep trail built around 1920 by the Los Alamos Ranch School. All of this on the edge of downtown!

From the kiosk, take the trail heading north. In a few yards, bear left, head downhill, and bear left again. In a minute come to a fire road near a hefty gate. Skirt around on the trail that goes right of the gate and rejoin the fire road. The road heads gradually downhill, then curls around to head east parallel to the drainage of Acid Canyon.

After passing a long bridge to the left, swing right and cross a small wooden bridge. Climb on a bedrock ramp; bear right, and in a few yards cross the drainage on a low bridge. Follow switchbacks up to the mesa top. At the entrance to Kinnikinnik Park, head straight to the trailhead or take a short detour through the park.



Definitions

- <u>Backcountry Trail</u>: A trail on County-owned land that is more remote than central-area trails and that passes through open space of a more wild nature.
- <u>Management Unit</u>: Ecologically based management units that summarizes current conditions and past management activities in each unit.
- Neighborhood Trail: A trail that is generally used only by neighborhood residents who know about it and are not marked on trail maps nor signed by the County. These trails are accessed through private yards or through pedestrian easements.
- <u>Pathway</u>: A trail corridor within an urbanized area or a park that primarily provides access to and from housing, structures, and other developed areas. A pathway is usually, but need not be, paved.
- Trail: A constructed, cleared corridor that travels through open space or parks. A trail may be, but usually is not, paved.
- <u>Trailhead</u>: A formal, important access point to the trail network from which several trails and trail segments can be reached. A trailhead has an information kiosk with trail and natural resource information.
- Trail Marker: A directional sign placed on the trail system at major trail junctions or at open space access points.
- <u>Trail System Entrance</u>: The point of connection between the trail network and a road, sidewalk, or pathway. These locations are usually marked with a wooden trail entrance sign.

Intersection Types

- Network trail with network trail: Junctions between two network trails should have standard trail markers with information on both trails.
- Network trail with street: In places where network trails are accessed from the street and there is no primary or secondary trailhead, trail entrance markers with maximum information should be used.
- Network trail with neighborhood trail: To guide users to stay on the network trail, junctions will neighborhood trails should be marked with a confidence marker or possibly a rock cairn of uniform style.
- Network trail with Santa Fe National Forest trail: Standard trail markers should be used in locations where network trails intersect Forest Service system trails.
- Neighborhood trail with neighborhood or street trail: No signage

Types of Signage

- Trailhead
- Trail entrances (access from roads or sidewalks)
- <u>Trail directional markers</u>: Directional signs are rectangular and are placed trail junctions and some road crossings. They can be multi-directional
- Trail use markers: indicate what types of trail users should continue beyond the point
- Confidence markers: The simplest markers, directional arrows, on short posts. Used at confusing spots on a trail.

Signage Levels

- <u>Standard</u>: Trails immediately adjacent to neighborhoods that receive moderate to heavy use should have sufficient signage for easy navigation and might use larger sign styles, signs with more detailed information, and be signed at all intersections.
- <u>Minimal</u>: Backcountry trails should be signed more sparingly with smaller signs, minimal information, and signed only at major intersections.

A note on Electric Bikes (E-bikes):

- Los Alamos County allows **Class 1 e-bikes** on our <u>trail system</u>. These pedal assisted bikes operate similarly to traditional bicycles and are permitted for use.
- However, please note that **Class 2 and Class 3 e-bikes are not permitted** on our trails. We ask trail users to respect this rule to ensure the safety, preservation, and enjoyment of the trail systems for all.
- In 2023, New Mexico passed legislation regulating the use of electric-assisted bicycles (e-bikes). Senate Bill 69, which became law on July 1, 2023, defines and governs the use of e-bikes under the New Mexico Statutes, Chapter 66, Motor Vehicles, Articles 1 and 3.
- **Definition of E-Bikes:** E-bikes are defined as "electric assisted bicycles" and are categorized into three classes:
 - o **Class 1:** Pedal-assist only, with no throttle, and a maximum assisted speed of 20 mph.
 - o Class 2: Throttle-assisted, with a maximum assisted speed of 20 mph.
 - o Class 3: Pedal-assist only, with a maximum assisted speed of 28 mph and equipped with a speedometer.

Cultural Preservation

Los Alamos County is located on ancestral lands of indigenous pueblo people. County trails often lead to or traverse significant and sacred sites of the people who lived on the land before Los Alamos was founded. Because of the history of migration and settlement in the area, many of these sites are at risk of being damaged by trail users. Over 1,750 cultural sites are spread throughout the county, but many have been damaged or developed over as Los Alamos has grown.

Vandalism and illegal entry are behaviors that are increasing around the nation⁴, and Los Alamos is no different. Several culturally significant trails, including those on the National Historic Register, have seen increased graffiti and defacement. National parks around the country are using surveillance equipment, strict penalties, and trail closures to deter such actions. Preservation and respect for existing sites and artifacts should be included at every trailhead to ensure no further degradation of indigenous sites or other historic sites.



⁴ https://www.foxews.com/lifestyle/american-national-parks-vandalized-ruined-visitors-take-centuries-remedy-report

STRATEGY ALIGNMENT



Over 160 separate strategies and goals were identified from the plans consolidated as part of this planning effort. Since the Community Trail Plan in 2013, many of the strategies in other plans repeated similar strategies or proposed conflicting strategies.

This planning effort identified those redundancies and conflicts, created new language where needed to resolve the conflicts, and consolidated similar suggestions. Next, all remaining strategies and goals were grouped along the key themes that cut across all plans:

Open Space Maintenance & Improvements; Trail System Maintenance & Improvements; Public Education & Engagement; Signage & Wayfinding; Improved Accessibility for All Ages and All Abilities; and Data & Reporting.

APPROACH			
Trails & Open Space	Conflicts	Redundancies	New
Division Currently staff are managing 160+ existing strategies, actions and goals across 6 different plans created across the last 10+ years	Remove conflicting language across plans and resolve conflicts with new language	Identify redundant language across plans and replace with one strategy that represents the others	Based on public input provide new strategies as needed

Conflicts Removed Signage (3) No longer reflects current operating procedures (2) • Social Trails (6) • Not under the purview of the Conservation (2) **SUMMARY** Parks and Open Space Division (2) • Not feasible due to topography constraints (1) Conflicts Redundancies Redundancies • Resource Protection (8) • 15 strategies resolved with 4 revised Social Trails (7) strategies • Connectivity (5) • Public Education & Engagement Redundancies • Trail Difficulty (5) (5)• 37 strategies resolved with 11 revised New • New Development (2) strategies Open Space (2) • Volunteers (2) Removed Trail Maintenance (3) • Open Space (1) • 5 strategies removed Public Education & • Trail Maintenance (4) New Engagement (5) Vistas (4) • 15 new strategies added based on Signage (3) • Alternate Transportation (2) community engagement Accessibility (5) • User Groups (5

|--|

Previous language

The 2012 Trail Management Plan (revised 2022) included 25 strategies that began with:

"The Parks Division, with advice from the Parks & Recreation Board, and its subcommittees..."

Replacement language:

"The Parks & Open Space Division, with advice from the community..."

Why is this change needed?

To ensure that the Parks & Open Space division is reaching a wide variety of stakeholders in the community.

^{*}Signage standards were moved out of strategies and can be found in Appendix D. Trail Construction & Signage Standards

Open Space Maintenance & Improvements

Throughout the planning process residents made it clear that the community values preservation of undeveloped open space equally as much as maintaining and improving the trail system. In many cases, these considerations go hand in hand. As noted in the Open Space Management Plan, trails are the primary way that most residents experience the County's Open Space system. To maintain its open space, the County must continue to employ a mixture of regular maintenance efforts, new improvements, targeted restoration and conservation efforts, wildfire mitigation, and sensitive habitat (plant and animal) protections.

GUIDING PRINCIPLES

- Every effort will be made to balance use and accessibility with conservation and protection of cultural, historical, and natural resources in the creation and maintenance of trails and open space.
- Provide effective environmental stewardship for the protection of natural resources through careful monitoring of existing
 conditions, documentation of changes that occur, restoration projects, and adaptive management techniques that
 address detrimental changes.
- Retain Los Alamos' special character of open and scenic vistas across a natural and memorable landscape; and retain opportunities for solitude, inspiration and renewal within the landscape.

STRATEGIES

Open Space Management & Improvements

- Eliminate feral cattle in the canyon not only on County land, but on all jurisdictions.
- Remove trash from all open spaces and develop methods to discourage additional illegal dumping.

Open Space Administration

- Develop a Los Alamos County Open Space System that formally recognizes existing open space to protect and preserve the community's recreational, cultural and natural resources and to promote recreational use by residents and visitors.
- While engaging citizens, the Parks and Open Space Division will update the county development code and develop
 necessary county laws and zoning regulations that support and protect trails, trail access, and natural and cultural
 resources within trail corridors.

Cultural & Historical Resources Protection

- Ensure adequate stewardship of the White Rock Canyon Archeological District through effective monitoring of cultural resources.
- Respect the traditions of local Pueblos and protect cultural resources, including historic trails and areas listed on National and State registers.
- In Pueblo and Rendija canyons, protect tent rocks from damage from erosion and human use.

Conservation & Restoration

- Reduce arroyo downcutting and re-establish riparian zones.
- Reduce erosion damage and sediment transport caused by stormwater runoff from urbanized areas.
- Reduce soil loss along the rim and on the flats within the canyon by reestablishing 60% ground cover and reducing erosion potential by 40 percent (White Rock Canyon).
- Control vehicle access to reduce erosion potential.
- Work closely with Los Alamos National Laboratory (LANL) to minimize sediment and contaminant transport in Pueblo and Bayo canyons.

Restoration – Location Specific

- Barranca Crossing
 - Trail crossing drainage; Channel incision; Trail and drainage erosion; Repair should focus on trail surface and drainage
- Upper Acid Canyon
 - Incised with loss of floodplain function; Eroding banks; Active headcut; Some nonnative species; Utilize machinery to build rock; grade control; Access and potentially contaminated soils are issue
- Orange Canyon
 - o Channel Incision; Excess sediment at culvert; Utilize Rock Grade Control; Hand crews and volunteers
- Middle Pueblo Canyon
 - Incised Channel; Grade control at Utilities creates scour; Treat with rebuilt grade control using large boulders and geomorphic concepts
- Rendija Canyon
 - o Erosion through old alluvial deposit; Requires channel restoration to appropriate dimensions
- Perched Wetlands

- Small shallow pockets of wetland plants supported by alluvial soils and runoff on hill slopes; Erosion through fine soils; Repair with hand build rock structures
- Lower Pueblo Canyon
 - High sediment supply from urban runoff; Existing grade control; Invasive Reed Canary Grass; Create meandering wetland channel; Revegetate
- Walnut Canyon
 - Reed Canary Grass & Russian Olive Infestation; Incision into wetland; Weed Treatment; Replanting; Handbuilt Grade control
- White Rock Canyon
 - o Invasive Russian Olive and Tamarisk; Remove and revegetate
- Kwage Mesa
 - Control run-off and erosion from utility road

Wildfire Mitigation

- Because wildland fighting ability is reduced by the inaccessibility of many of the canyons, develop better access to the management unit by establishing new and connecting existing trails.
- Maintain wildlife habitat and corridors in fuel mitigation project areas.
- Ponderosa Pine Management Unit
 - $\circ \quad \text{Maintain healthy forest conditions in ponderosa pine stands through continued active management of pine forests.}$
 - Monitor changing conditions in ponderosa pine forests that are the result of drought, increasing temperatures, and insect activity.
- Canyons Management Unit
 - Manage all forest stands for improved forest health and to protect adjacent housing areas from wildfire with a fire management plan that combines mechanical and hand thinning, piling and burning, and broadcast burning.
 - Monitor and if necessary continue forest restoration efforts in the upper watersheds of School, Walnut, Pueblo, and Rendija canyons.
- Mesa Top Management Unit
 - Use adaptive fuel reduction techniques to manage woodlands in a manner that permits containment of wildfires to individual mesa tops.
 - o Control erosion and sediment transport from areas of exposed soils across the mesa tops.
- Western Perimeter Management Unit

- Maintain low fuel density for protection of adjacent housing.
- o In areas altered by stand-replacement fire, re-establish ponderosa pine forest at healthy
- o stem densities.
- Continue monitoring the effects of mastication debris on re-establishment of ground cover.
- White Rock Canyon Management Unit
 - Reduce threat of fire to homes adjacent to open space along Meadow Lane, Kayenta, Joya Loop, Rover Boulevard,
 Glenview drive and court, and Kimberly Lane.
- Lower Rendija/Guaje Management Unit
 - Implement fuel reduction along the foot of Barranca Mesa.

Sensitive Species/Habitat Management

- Update and implement the Invasive Species Plan
- Monitor and protect habitat for helleborine orchids, grama grass cactus, Cardinal flower, and Springer blazing star
- Manage and protect environmentally sensitive places and species through a variety of methods:
 - Public awareness campaigns to alert trail/open space users to consequences of uncontrolled access and encourage good stewardship. These could include:
 - Trailhead signage;
 - Localized, specific, interpretive signage;
 - Public service announcements on local radio or TV stations;
 - Social media posts on Nextdoor or other local online groups;
 - Brochures for distribution at bike shops, schools, public events, etc.;
 - School activities, field trips, or classroom sessions; and
 - See additional information in Public Education and Engagement section, below.
- Identify and emphasize a variety of points of interest, natural features, and habitats available to open space and trail users to spread impacts across the system, rather than concentrating them in popular areas.
- Employ seasonal closures as needed to protect especially vulnerable habitats and/or species during certain times of year, such as breeding or nesting season, or during icy or muddy conditions.
 - o Make sure that extent of closure is made clear via signage and other means;
 - o Identify potential alternate routes to circumvent closure area; and
 - o Employ similar techniques for fire closures, if/when necessary.

Trail System Maintenance & Improvements

The trail system in and around Los Alamos has evolved extensively over time, dating back to historic and even prehistoric times as people and animals sought to gain access to the natural resources of the area. It is clear from community feedback that the trail system is an extremely valuable community asset. However, as closely as the trails and open space programs are aligned, they can sometimes be at odds: as ease of access increases so do the hazards of overexposure. The recommendations provide improvements to the trail system in a sustainable way that takes into consideration multijurisdictional collaboration, regular maintenance, new improvements, connectivity, and protection of environmentally and culturally sensitive areas.

Trail Construction Guidelines in use:

USFS Accessibility Guidebook for Outdoor Recreation and Trails by U.S. Forest Service

Standard Trail Plans and Specifications by U.S. Forest Service

GUIDING PRINCIPLES

- Creation/modification of the existing trails to provide for skills progression and a wider spectrum of abilities.
- PRB will foster the concept of non-motorized transportation as an alternative to automobile use.
- Increase comfort and confidence in navigating the trail network.
- Trail system is improved and enhanced based on a reasonable timeline and budget.

STRATEGIES

Trail System Administration

- The Parks and Open Space Division, with input from the community, will coordinate, design, and implement trail projects on an ongoing basis.
- The Parks and Recreation Board will seek advice from the community on all issues concerning trails.

• The Parks and Open Space Division will seek approval to apply for and secure Federal and State funding for trail building, maintenance, and remediation projects as established by the Trail Policy Plan.

Trail Maintenance & Improvements

- The Parks and Open Space Division will ensure that trails are:
 - built to safe standards for specific uses and users;
 - o designed to enhance the non-motorized commuter potential from all parts of Los Alamos;
 - o designed to make surfaces as natural as possible, except for trail marking and erosion control measures; and
 - o designed and maintained in as natural state as possible for intended users, except for trail marking and erosion control measures.

Trail Connectivity

- Create and enhance recreational loops.
- The county trail network will better interface with nearby destinations, pathways, and sidewalk to promote connectivity to key community notes and promote commuting by non-motorized means.

Social Trails & Conservation

- Identify and assess social trails and determine a closure plan:
 - White Rock Canyon Rim Trails
 - Perimeter Trails
 - o Pueblo and Bayo Canyon cattle trails
- Utilize volunteer groups to lead re-routing and re-planting efforts of areas with a high number of social trails.

Alternate Transportation & Motorized Vehicles

- The Community Services Department and the Transportation Board will support land-use patterns and transportation policies that promote increased use by non-motorized users as commuting alternatives.
- On an ongoing basis, in collaboration with the Transportation Board, the Parks and Open Space Division will develop cooperative promotions with Los Alamos National Laboratory and the business community.

Interfacing with Development

- The Los Alamos County Utilities and Public Works departments should consult with Parks and Open Space to avoid or mitigate disturbances during utility installation or repair, especially where trails and utility lines or other infrastructure share the same corridors; they will require and monitor work done by private utility and cable companies to meet the same standards.
- The Community Services Department will suggest new developments to include access to the Trail Network. Dedicating trail corridors, green space and/or playlots should be required of developers, depending on what is appropriate in specific situations.
- Work with Planning & Public Works/Transportation Divisions to improve street crossings at key locations that interface with the trail network as identified through public input: 35thSt/Orange St/Olive St; Diamond Dr at Ridgeway; and Trinity Drive crossings (multiple).

Trailhead Improvements

- Improve trailhead parking and amenities at trailheads.
 - Bayo Canyon Trailhead
 - Quemazon Trailhead
 - Red Dot Trailhead
 - Mitchell Trailhead

Location Specific

- In the long term, work with LANL management as facility plans change with an eye toward creating a trail link between Los Alamos and White Rock.
- The Community Services Department will continue to work with the Public Works Department by extending Canyon Rim Trail westward.
- Support and advocate for a White Rock Loop (WZ-1).
- Improve connectivity of existing Perimeter trail.
- Improve trail equestrian opportunities around Kwage Mesa/Bayo Canyon.
- Continue to maintain and improve trail conditions on Deer Trap Mesa.
- Repair River Trail without detracting from a quality backcountry experience
- Use volunteer labor to improve eroding parts of Blue Dot and Red Dot trails.
- Improve connectivity to Quemazon trail across upper Puelo Canyon.
- Improve access to upper Pueblo Canyon across Diamond Drive.

Trail Difficulty & Variation

- Create a Family Bike Skills Area.
- With the advice of the Parks and Recreation Board and the community, the Parks and Open Space Division will recommend connections and new trails for a greater variety of trail destinations, lengths, and linkages.
- The Parks and Open Space Division and the Parks and Recreation Board will encourage variations in trail design and development to accommodate different uses and users by investigating new trail designs.

For Policies and Standards related to Development and Maintenance of the Trail Network Please see Appendix F.

Public Education and Engagement

During public engagement, trail etiquette was often mentioned as something all community members highly value. The County should take the lead on setting the standards for trail and open space etiquette and proactively educate members of the community to avoid future conflicts or misunderstandings. The tone the County creates around these issues will set an example for the rest of the community. Without clear guidance, members will continue to have different expectations and frustrations. Public engagement should also include collaboration with community and volunteer organizations, high quality educational materials, and open dialogue between the community and staff.

GUIDING PRINCIPLES

- Build relationships and understanding between user groups.
- Respect the traditions of local Pueblos and protect cultural resources.
- Promote the personal health benefits derived from outdoor recreation and trail use.
- Integrate advice and guidance from local groups and organizations.

STRATEGIES

Community Communication

- The Parks and Open Space Division will continue to collaborate with schools to use the Trail Network in their teaching of natural history, environmental science, local history, and art.
- Highlight Open Space & Trails Accomplishments.
 - o Better communicate what projects have been done and what is in the pipeline.
 - Add signage when work is being completed on the ground
- Integrate clear messaging on boundaries of County maintenance & operations.
 - o If including areas outside of County jurisdiction in marketing/ trail resources, evaluate if online materials should be housed on a different webpage (PEEC or Tourism) to signal that the County Open Space and Trails division does not maintain all of the mentioned trails.

Communication Resources

- Create an online hub for videos, instructions on etiquette in Los Alamos County.
 - How to interact between user groups (hikers, birders, cyclists, equestrians, etc.)
 - How to treat historical and cultural sites
- The Parks and Open Space Division will produce maps and brochures that describe the Trail Network and make them readily available to both citizens and tourists.
- Ensure trails are named the same across all materials printed, maps, interactive maps, etc.

Trail Stewardship

- Create a trail maintenance certification for interested volunteer groups & individuals.
 - o For all volunteer projects, techniques, tools, site visits, and trail standards must be submitted to the County in the form of a site plan for approval.
- The Parks and Open Space Division will involve the community in trail planning, development, and maintenance by holding public meetings on trail issues when appropriate.
- The Parks and Open Space Division will organize and support, volunteer trail building, maintenance, and remediation activities through the County volunteer project coordinator, local trail user groups, and other agencies.
- The Parks and Open Space Division will support the County Council in linking the Trail Network to trails on surrounding jurisdictions, such as those of the DOE, USFS, Bandelier National Monument, adjacent pueblos, and neighboring communities.
- The Parks and Open Space Division will involve trail users in promoting appropriate trail use and etiquette through public education.
- Support and advocate for inter-user group to foster better community partnerships (Example: <u>Trail Partners Foundation Best</u> Practices)
 - o Invite speaker from Trail Partners Foundation or similar org to host community panel.
 - Host 'Tails & Tires' Workshops to discuss safety concerns especially related to equestrians Horses can get used to
 cyclists and cyclists can spend time to better understand the horses (Galisteo Basin Preserve in Santa Fe hosted a similar
 event).

Cultural Stewardship

• Continue to include San Ildefonso Pueblo and Santa Clara Pueblo in any interagency coordination and collaboration to ensure that indigenous interests are represented.

- Educational signage should be placed at all trailheads that lead to areas with cultural sites that requests respect of the land, structures, and objects without disclosing exact locations.
 - o Utilize trail re-routing to manage and protect historic/culturally sensitive sites.
 - o Illustrate clear boundaries where County lands meet Pueblo lands on all public maps, guides, signage, etc.
 - o Provide clear signage regarding trespassing onto Pueblo lands at commonly used (but illegal) entry points.

Signage & Wayfinding

Trail signage is an essential communication tool for trail users. Given the many trail options available in Los Alamos County, it is important to provide key information about the routes, appropriate use, and safety to ensure users are well-informed and have a positive experience. The County has worked to improve the network signage and standards in recent years. New trailhead kiosks and trailhead guides attest to this with consistent design and content.



Trailhead Kiosk at East Park Trailhead, Sites Southwest



Trail junction signage in White Rock, Sites Southwest



Trailhead Kiosk and amenities at the Aquatic Center, Sites Southwest



Trail signage at Mitchell Trailhead, Sites Southwest

GUIDING PRINCIPLES

- Different types of signage may be offered on trails that are designed specifically for accessibility.
- Interpretive signage tells the story and history of Los Alamos' unique places.
- Trail users will have access to information that enhances their outdoor experience digitally, in print, and at trailheads.

STRATEGIES

Signage Guidelines

- The Parks and Open Space Division will mark trails, access points, and trail junctions clearly to protect trail users, trail corridors, and surrounding open space.
- Wayfinding improvements to better guide visitors (eg. Red Dot needs specific signage and wayfinding guides at its uppermost stream crossing).
- Place confidence markers where appropriate.
- Discourage the use of painted dots and arrows as navigational aids on the Red Dot and Blue Dot trails.
- Add signage when boundaries change (public entity or private entity).
- The Parks and Open Space Division will incorporate interpretive signage where trails pass through areas of natural and historical significance.

Interactive, Digital Maps

• Continue maintaining interactive GIS trail map and place it clearly on the County's website.

Location specific

- Construct secondary trailheads at key locations: Deer Trap Mesa, Kwage Mesa, Rendija Trailhead, Los Alamos Nature Center, 48th Street access to Perimeter Trail, Woodland Trail, and Bayo Canyon Trail.
- Install additional primary trailheads at Smith's Marketplace along the Canyon Rim Trail, and the Pajarito Trailhead in Rendija Canyon.

For individual trailhead assessments, please see Appendix C.

Improved Accessibility for All Ages and All Abilities

For community members who have limited mobility or disabilities, enjoying nature is highly desired, but requires more planning and preparation to access. Right now, Los Alamos County does not have sufficient resources to ensure that differently-abled members of the community can access the open space and trails network. However, the County has a great foundation to begin implementing stronger, more targeted support for these members of the Los Alamos community. Often, outdoor access looks different depending on ability. Below are examples of meaningful outdoor spaces that are accessible in a variety of ways.

Bachechi Open Space (Bernalillo County, NM)



Safe, ADA compliant paths



Parking



Areas of interest for rest and shade



Wildlife viewing with shade

GUIDING PRINCIPLES

- Whenever possible, they will develop trails to provide universal access, following best practice guidelines as provided by the U.S. Access Board's Public Right-of-Way Accessibility Guidelines (PROWAG).
- Increasing access to nature does not necessarily mean a new trail: having accessible places to rest in a quiet, natural environment is also desired if reachable, safe, and comfortable.

STRATEGIES

Accessibility Information Availability

- Produce detailed information relevant for trail users with different abilities: Partner with PEEC and pay volunteers to evaluate each trail using an uniform rating system (Example: <u>Disabled Hikers Spoon Trail Rating System</u>).
- Publish an online information hub for accessible trails with detailed trail descriptions that are designed to be used with screen readers and keyboard-only navigation.

Improve Outdoor Access

- Los Alamos County Parks and Open Space will continue to coordinate with County Council's Accessibility Task Force on projects that include accessible projects and upgrades.
- The Parks & Open Space Division will look for additional locations where trails might be made ADA-compliant and where a trail would provide a meaningful outdoor experience, such as a vista or unique natural feature.
- The Parks & Open Space Division, with advice from the community, will seek opportunities for addressing the accessibility needs of the community that are in balance with practical consideration of cost, terrain, retaining the special character of open and scenic vistas, and retaining opportunities for solitude, inspiration, and renewal within the landscape.
- Work with Public Works/Transportation Division to increase public transportation on weekends without this resource, residents with limited sight are not able to access the outdoors without seeking assistance (Example: Santa Fe Ride).
- Support and advocate for groups that increase access to trails for marginalized groups. (examples below).
 - Canes & Canines Los Alamos
 - o <u>Disabled Hikers</u> Washington
 - o Happy Ramblers PEEC & Seniors Division, Los Alamos

Data & Reporting

A reoccurring theme during engagement was a disconnect in the public perception of what the Opens Space & Trails Division is doing and what has actually been accomplished by staff. The division thoroughly understands the needs of the community and is managing a large trail system with minimal staffing. Even with these constraints, Los Alamos County has a high-quality trail system that draws people to the County from the region and beyond. With more information sharing by the division, the Los Alamos community could better understand the magnitude of the Los Alamos system and appreciate the work being completed. Furthermore, staff could benefit from enhanced data gathering and tracking to identify trends, goals, and accomplishments.

GUIDING PRINCIPLES

• The Parks and Open Space Division utilizes best practices and new technologies to accurately track and report on division spending, trail maintenance needs, and project statuses.

STRATEGIES

Information Maintenance

- The Community Services Department will maintain the Trail Network on the County Geographic Information System (GIS).
- Clean up current GIS data.
 - o Ownership, trail names, etc.
 - o Consolidate trail segments by trail name.
- Document and track key metrics to verify progress, using relevant software such as Cartograph.
 - o Miles of accessible trails, trails for beginners, equestrian trails, etc.
- Maintain a map of known locations of sensitive plant and animal species and monitor populations yearly.
- Rank maintenance needs listed in 2012 Trail Management Plan (revised 2022) and create maintenance schedule per trail or other organizational unit.
 - o Begin to track deferred maintenance or unfunded maintenance.

Assessments & Reports

- The Parks and Recreation Board and the Parks and Open Space Division will review and recommend updates of the Open Space and Trails Management Plan to the County Council.
- The Parks and Open Space Division, with advice from the community, will report the status of the implementation of this plan to the County Council.
- Provide for the protection of historic and cultural resources by maintaining an accurate inventory, monitoring sites annually, developing a protection plan for threatened resources, and implementing projects as necessary.
- Establish baseline conditions for cultural sites and monitor the sites for potential erosion damage.
- The Parks and Open Space Division will assess yearly the safety of trail structures such as bridges.

REFERENCE MATERIALS

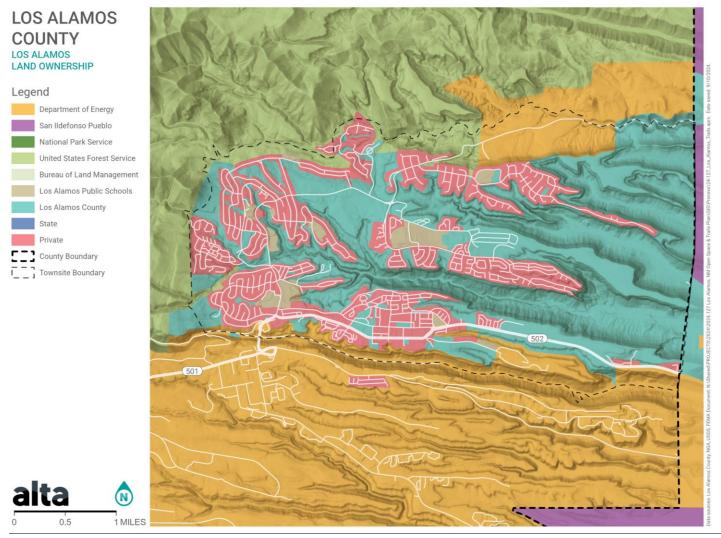


Funding Sources

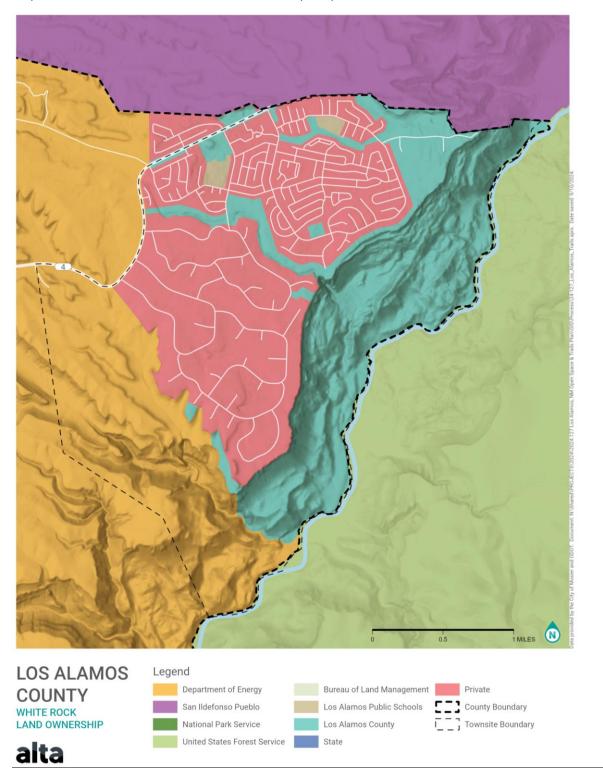
- <u>Trails Capacity Program</u> funds trail research, stewardship, and maintenance projects that are inclusive, engaging, educational, and foster improved trail user behavior.
 - o \$5,000-\$10,000
 - o No match required, but preferred
 - o Opens: Dec. 4 | Closes: Jan. 15
- NMEDD Trails+ This grant program supports shovel-ready projects that enhance communities' outdoor recreation opportunities
- NMEDD Outdoor Equity Fund This program breaks down barriers to accessing the outdoors and ensure equitable access for all youth in New Mexico. This grant supports transformative outdoor experiences that cultivate stewardship and respect for New Mexico's lands, waters, and cultural heritage, and connect youth to outdoor recreation career pathways.

Reference Maps

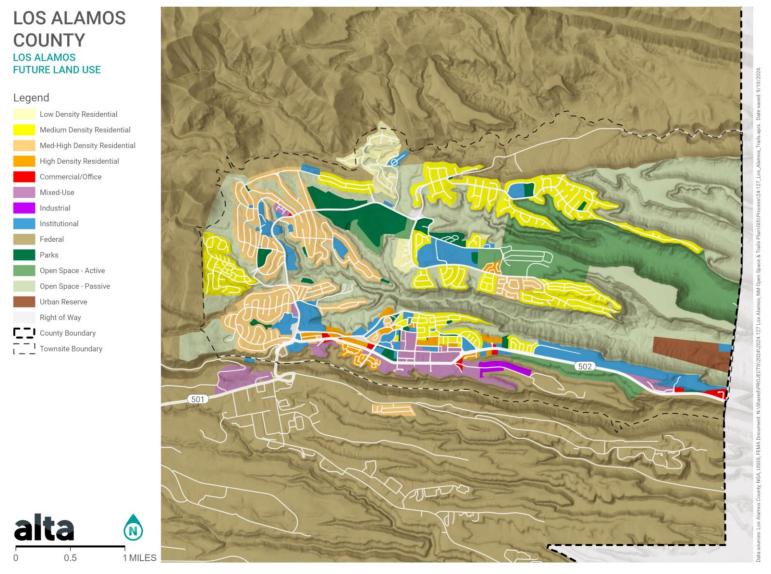
Map 11. Los Alamos Townsite - Land Ownership Map



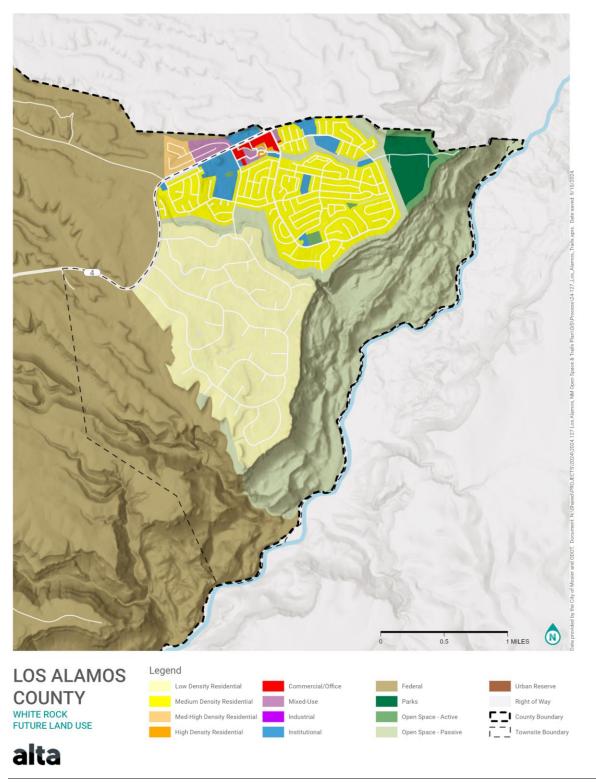
Map 12. White Rock Townsite - Land Ownership Map



Map 13. Los Alamos Townsite - Future Land Use Map



Map 14. White Rock Townsite - Future Land Use Map



Trail Index

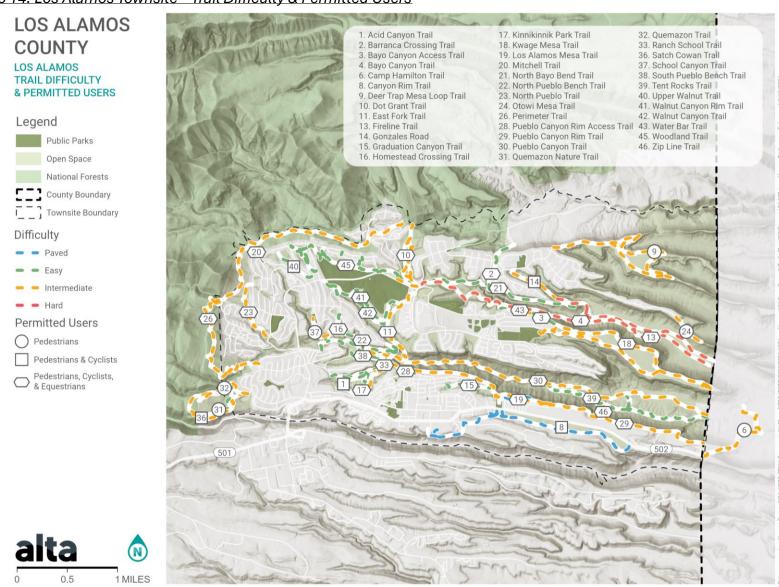
Trails Maintained by County

lacktriangle = Easy | \Box = Intermediate | \Diamond = Difficult

			Length (mi.)	
Trail/Multi-Use Trail	Bike	Hike	Lengt	Score
Max Points:				15
Bayo Canyon Trail	◊	◊	3.2	14
Pueblo Canyon Trail	◊		4.5	14
North Bayo Bench Trail	•	•	2.2	13
Barranca Crossing Trail		•	0.3	12
Mitchell Trail	◊		0.3	12
Perimeter Trail			5.0	12
Pueblo Canyon Rim Access Trail	•	•	0.3	12
Quemazon Trail			1.1	12
Red Dot Trail		◊	1	12
South Pueblo Bench Trail		•	2	12
White Rock Canyon Rim Trail		•	2.8	12
Canada del Buey	•	•	1.5	11
Canyon Rim Trail & West Extension	•	•	2.5	11
Acid Canyon Trail	◊	•	1	11
Homestead Crossing	•	•	0.6	11
Los Alamos Mesa Trail	•	•	0.5	11
Pueblo Canyon Rim Trail	◊		4.5	11
Walnut Canyon Rim Trail	•	•	0.9	11
Water Bar Trail	◊		0.3	10
Bayo Canyon Access Trail	•	•	0.6	10

Deer Trap Mesa Trail	◊		4.7	10
Fireline Trail	◊	◊	2.3	10
North Pueblo Bench Trail	◊	•	1.3	10
Kinnikinnik Park Trail	•	•	0.2	10
Kwage Mesa Trail			4.5	10
Ranch School Trail	◊		0.6	10
Walnut Canyon Trail		•	0.6	10
Woodland Trail		•	1.5	10
Overlook Park Multi-Use Trail	•	•	0.8	9
Blue Dot Trail		◊	1	9
Dot Grant Trail			1.2	9
East Fork Trail	◊		1.6	9
Graduation Canyon Trail	\	•	0.6	9
North Pueblo Trail	◊		2.2	9
Zipline Trail	◊		0.8	9
Otowi Mesa Trail			1.1	8
Gonzales Rd	\		0.7	8
Quemazon Nature Trail		•	0.8	8
River Trail		•	2	8
Tent Rocks Trail		•	4.1	8
Estante Rim Trail	•	•	0.9	7
Upper Walnut Trails		•	0.8	7
Camp Hamilton Trail	◊		1.5	7
School Canyon Trail	◊		2	6
Potrillo Access Trail	•	•	0.3	5
Satch Cowan Trail	◊		1.2	5

Map 14. Los Alamos Townsite – Trail Difficulty & Permitted Users



Map 16. Los Alamos Townsite – Trail Difficulty & Permitted Users



Existing Trails

High Number of Times Mentioned

Trail/Multi-Use Trail		Community Services Integrated Master Plan	Trail Management Plan	Bike Transportation Plan	Trailhead Assessment	Community Trail Plan	ADA	Open Space Management Plan	Restoration Feasibility	Public Outreach	Туре	TOTAL
		2023	2022	2017	2022	2013	2022	2015	2023	2024		
Canyon Rim Trail & West Extension	LA	•	•	•	•	•	•			•	Extend	7
White Rock Canyon Rim Trail	WR	•		•	•	•		•			Improve	5
Canada del Buey	WR	-	-	•	•						Extend/Improve	4
Red Dot Trail	WR				Improve/Monitor	4						
Bayo Canyon Trail	LA				Extend/Improve	4						
Pueblo Canyon Trail/ Rim Connector	LA		-		-	•				-	Extend/Improve	4
Perimeter Trail/Connectors	LA		•		•	•				•	Extend/Improve	4
Blue Dot Trail	WR		-		-	•					Improve	3
Quemazon Trail	LA		•			•				•	Extend/Improve	3
Woodland Trail	LA		-		-					•	Improve	3
Deer Trap Mesa	LA		•		-	•					Extend/Improve	3
Overlook Park Multi-Use Trail	WR	•		-							Improve	2
Tent Rocks Trail	LA		•					•			Monitor	2
Zipline Trail	LA		•							•	Monitor	2

Trail/Multi-Use Trail		Community Services Integrated Master Plan	Trail Management Plan	Bike Transportation Plan	Trailhead Assessment	Community Trail Plan	АБА	Open Space Management Plan	Restoration Feasibility	Public Outreach	Туре	TOTAL
Barranca Crossing Trail	LA		•		•						Extend/Improve	2
Mitchell Trail	LA		•		•						Monitor	2
South Pueblo Bench Trail	LA		•		Improve	2						
Homestead Crossing	LA	•		Improve	2							
North Pueblo Bench Trail	LA	• •		Monitor	2							
Kinnikinnik Park Trail	LA	• •		Improve	2							
Kwage Mesa Trail	LA		•		-						Improve	2
Pueblo Canyon Rim Trail	LA		•		-						Monitor	2
Gonzales Rd	LA		•		-						Improve	2
Graduation Canyon Trail	LA	• •		Improve	2							
Quemazon Nature Trail	LA		•		•						Improve	2
Upper Walnut Trails	LA		•		•						Improve	2
School Canyon Trail	LA		•		•						Improve	2

Existing Trails

Lower Number of Times Mentioned

Trail/Multi-Use Trail		Community Services Integrated Master Plan Trail Management Plan	Bike Transportation Plan		Community Trail Plan	АБА	Open Space Management Plan	Restoration Feasibility	Public Outreach	Туре	TOTAL
		2023 2022	2017	2022	2013	2022	2015	2023	2024		
North Bayo Bench Trail	LA	•								Monitor	1
Walnut Canyon Rim Trail	LA	•								Monitor	1
Acid Canyon	LA	•								Monitor	1
Walnut Canyon Trail	LA	•				Improve	1				
Los Alamos Mesa Trail	LA	•	•		Monitor	1					
East Fork Trail	LA	•	•		Extend/Improve	1					
Fireline Trail	LA	-								Monitor	1
Ranch School Trail	LA	-								Improve	1
Dot Grant Trail	LA	•								Monitor	1
North Pueblo Trail	LA	•								Improve	1
Otowi Mesa Trail	LA	•								Improve	1
Camp Hamilton Trail	LA	•								Extend/Improve	1
River Trail	WR	•								Improve	1
Potrillo Access Trail	WR			•						Improve	1
Bayo Canyon Access Trail	LA			•						Improve	1
Estante Trail	WR										0
Satch Cowan Trail	LA										0
Water Bar Trail	LA										0

APPENDICES



Appendix A. Policies for Additions, Realignments, and Deletions to Trail Network

Criteria for Additions of New Trails

- A proposed trail must have a function that may be but is not limited to connecting two trails on the network, leading to a point of interest, leading to an existing or proposed residential or commercial area, or enhancing public access to the network.
- A proposed trail must minimize impact on residences within 50 feet of the trail. Minimal impact is defined as having little potential to encourage inadvertent trespass; having little potential to interfere with activities normally considered routine activities on private property; and having little potential to interfere with the privacy of residents.
- A proposed trail must minimize impact on critical wildlife habitat, nesting areas, natural features, and cultural resources.
- A proposed trail must not duplicate the function of an existing trail on the network. If a duplicate trail does provide an advantage over an existing trail, the Parks and Open Space Division may recommend to the Parks and Recreation Board that the existing trail be closed in favor the new trail.
- Rerouting an existing trail to correct blockage of a trail section, reduce erosion, or enhance accessibility to the trail is considered
 maintenance and need not go through this process, provided that the change does not move the trail in excess of 25 feet from its
 original location.

Criteria for Realignments of Existing Trails

• Trails must be considered in any action that may affect the integrity of the Trail Network. All new construction of housing, utility lines or structures, and other infrastructure should include an evaluation of its impact on trails.

Network trails may be realigned to accommodate development; however, the realigned trail must be equal or better than the existing trail at satisfying the following criteria: security, convenience, efficiency, comfort, welcome, and scenic value. Historic trails should not be realigned, except as a last resort.

Procedures for Additions, Deletions, and Realignments to the Trail Network

Any citizen, citizen's group, private entity, county or other governmental entity may propose a network trail be added, deleted, or realigned. The proposing entity will submit the proposal to the Parks and Recreation Board. The Board may request that OSWG confirm that the proposal meets criteria and that the documentation is complete.

Documentation must include:

- A written rationale detailing why the trail should be added to, changed, or deleted from the network. The rationale shall not exceed one page.
- Maps of the proposed trail change on a recognized mapping base, such as a USGS topographic quadrangle map or a county map. Hand drawn maps or computer sketches are not adequate.
- For a new trail, a narrative description of the trail including length, minimum width, minimum vertical clearance, minimum clearance at breast height, maximum slope, and tread condition.
- A list of possible impacts including, but not limited to, natural and cultural resources, budget, existing developments, and the network itself.

With assistance from the Parks and Recreation Board and the community, the Parks and Open Space Division will hold a public meeting on the proposal. (This meeting may be in conjunction with other Parks and Recreation public meetings.) The Parks and Recreation Board may request that OSWG modify the proposal in response to public comments or after consultation with the Open Space Specialist.

OSWG shall present a recommendation to the Parks and Recreation Board to accept or reject the proposed change to the Trail Network. The Parks and Recreation Board will then make its own recommendations on the proposed change and send it to the Open Space Specialist. The Parks and Open Space Division Manager will review the proposal and the recommendation and may approve the proposal or conclude that further review and public comment is appropriate.

If the proposal impacts private land, it will be taken for review by the Planning and Zoning Commission, and if approved, taken to the County Council for approval.

Upon approval, the Parks and Open Space Division Manager will direct that the trail be added to, deleted from, or realigned on the existing maps of the Los Alamos Trail Network. If necessary, the trail may be added to the annual trail work plan. Upon successful completion of the procedures described herein, the trail map of Appendix A of the Plan shall be updated to reflect the changes to the Trail Network. The updated map shall be part of the County GIS records.

Appendix B. What We Heard: Public Engagement Report

Appendix C. Trail Assessments & Maintenance Needs

Appendix D. Trail Signage Typologies & Locations

Appendix E. Restoration Potential Assessment

Appendix F. Los Alamos County Trail Building Standards

Appendix G. Trailhead Assessments

Appendix H. Descriptions of Proposed Additions to Network