PARKS AND TRAILS PLANNING STANDARDS - DRAFT

An integral part of the master planning process is creating a clear vision of what the communities desire for their parks, trails, and open spaces in order to establish a desired level of service. There are many aspects to consider when establishing the desired level of service, with the core criteria including 1) number of parks needed; 2) location of the parks; and 3) types of amenities to best fulfill the current and projected need of the community over the next decade.

In this chapter we provide parks and trails planning standards, and planning guidelines to assist County staff in delivering the level of service desired by the community. This chapter covers types of parks, service levels, service areas, park site characteristics, park design guidelines, and standards.

Park Classifications

While the National Recreation and Parks Association's (NRPA) Park, Recreation, Open Space and Greenway Guidelines provides definitions for park classifications, it also acknowledges that each community is unique in terms of geographical, cultural, and socioeconomic make-up. In the County of El Dorado General Plan, we define parks in three different categories, and they are described below:

Neighborhood Parks serve a variety of age groups within a limited area or neighborhood. They generally serve residents within a half mile radius and are typically within walking or biking distance to the residents they serve. Neighborhood parks provide access to basic recreation opportunities such as field games, court games, and playgrounds. They also provide passive recreation activities that include walking, viewing, and picnicking.

- Neighborhood parks are typically 2-10 acres in size.
- They should be somewhat centrally located in the neighborhood it is intended to serve.
- Biking or walking distance to park should not exceed half a mile and should avoid arterial roadways, the ideal access would be by way of non-motorized trail or by

local streets.

- At least 50% of the park site should be fairly level (2% slope max) and usable.
- These small parks typically do not have on-site parking and restroom facilities.

Community Parks are larger than neighborhood parks and intended to serve several neighborhoods as a gathering place and focal point for a larger community. They generally serve a larger user area of one to three miles in radius. Community parks may include areas for more intense recreation activities such as competitive sports, tennis, playgrounds, volleyball, etc. They may also support facilities like restrooms and designated parking areas.

- Community parks should be centrally located within the community they serve.
- Access should be provided by way of collector or arterial streets with bike lanes and sidewalk.
- Community parks should generally range from 10 – 44 acres in size with a great area (ideally 80%) that is relatively level (2% slope or less) and usable.
- Biking and walking distance to the park site should not exceed half a mile to a mile.

Regional Parks are large multi-use parks that serve several communities within a particular region, generally within a one-hour driving distance. The regional park incorporates natural resources and provides both active and passive recreation opportunities, with a wide selection of recreation facilities for all age groups. They may also include areas of nature preservation for activities such as sightseeing, nature study area, wildlife habitat, and conservation. National Recreation and Park Association (NRPA) standards for regional parks vary due to the specific site characteristics and natural resources but generally can range in size from 30 – 10,000 acres with the ideal size being several hundred acres. Regional parks may include, interpretive centers, community centers, aquatic facilities, sports complexes, camping opportunities, hiking trails, and amphitheaters.

- Regional parks should be centrally located within the service area.
- Access would be provided by highways, arterials roadways, and regional trail networks.
- They should range in size from 30 – 10,000 acres with the ideal size being several

hundred acres.

- Biking and walking distances to location are not top priority for regional parks but more so a focus on users within a one-hour drive of the park location.

In addition to these categories listed in the General Plan, the County also maintains Special Use Parks, which do not fit neatly into any of the three categories but are an important part of the overall parks system. Special Use Parks can be described as follows:

Special Use Parks are a park or recreation facility designed for a single, primary use, like a golf course, historical site, skate park, theme park, or water park, where the primary focus is on that specific activity rather than general recreational use. These parks offer specialized amenities that cater to a particular interest or group of users, often drawing visitors from beyond the immediate local area.

- These parks have a focused purpose dedicated to one specific activity or function, unlike a typical park with diverse amenities.
- Access would be provided by highways, arterials roadways, and regional trail networks.
- The size of the park is related to the use and may vary from less than one to hundreds of acres.
- Biking and walking distances to location are not top priority, as these parks may serve a smaller proportion of the population.

Park Service Levels

The County acknowledges that there is an appropriate place for all the above-described park types within the County but the County's role in acquisition, development, or management of each can vary. For example, direction provided in the Parks and Recreation Element of the General Plan states that the County will assume the primary responsibility for the acquisition and development of regional parks and assist in the development of neighborhood and community parks. The County's role in providing parks and recreation amenities is more at the regional or county-wide level whereas the need for smaller neighborhood and community parks is better fulfilled by local parks districts and cities within El Dorado County.

Guidelines for parks acreage, regardless of which entity owns, operates, and maintains them, are identified within the Parks and Recreation Element of El Dorado County's General Plan, as

displayed in Table 1.

However, the guidelines were developed over two decades ago, adopted in 2004, and is no longer the approach followed by parks and recreation agencies. There is no universal acceptable level of service standards available. The National Recreation and Park Association (NRPA) replaced their standards in 2009 with a nationwide benchmarking tool to help parks and recreation agencies customize standards to the unique characteristics and needs of their community. According to Parks and Recreation System Planning,[1] the new approach is a "decision-making framework" that provides greater flexibility through developing customized standards based on the agency's vision, community values, community context, residents' needs and priorities, and desired experiences.

County Parks staff recognizes that the park acreage guidelines established in the General Plan need to be updated, and until that time, will continue to use them among other metrics and tools. A future update to the General Plan's Parks and Recreation Element could provide an opportunity to consider revising levels of service guidelines for more flexibility to meet the need for parks and recreation facilities.

Table 1

Guidelines for Acquisition and Development of Park Facilities	
Park Types	**Developed**
Regional Parks	1.5 ac/1,000 population
Community Parks	1.5 ac/1,000 population
Neighborhood Parks	2.0 ac/1,000 population
Specific Standards (Neighborhood and Community Parks)	
Cameron Park Community Services District	5.0 ac/1,000 population
El Dorado Hills Community Services District	5.0 ac/1,000 population
Planned Communities	5.0 ac/1,000 population

Source: El Dorado County General Plan Parks and Recreation Element, 2004

[1] Barth, David L. (2020). Parks and Recreation System Planning: A new approach for creating sustainable, resilient communities. Island Press.

Park Service Areas

A Park Service Area map applies buffers over park sites based on how far people are willing to travel to visit them. This assists staff in identify underserved areas as well as areas that have adequate service. Although expressed in terms of service radius, features such as arterial roads, rivers, or other disruptions to normal travel may influence the extend of the service area. Services areas differ based on the type of park, for example the El Dorado County General Plan states that the service area for a neighborhood park is 0.5 miles while the service area for a community park is 5 miles. Due to the nature of regional parks, they do not have a defined service area as people are willing to drive much further to visit them.

(*Include exhibit provided by GIS*)

Park Site Characteristics

As described in park types, there is certain park site characteristic criteria that we look for when qualifying a site to become a future park. Neighborhood and community parks must be centrally located within the neighborhood or community and be generally flat where active recreation will take place. Conversely, regional parks site topography is not as critical due to the size of the site and types of recreation offered. The following guidelines should be used to evaluate the viability of proposed land to be acquired or dedicated for park uses.

- Park locations should be selected based on compatibility the adjacent land uses, site suitability, and opportunities to optimize existing infrastructure.
- Proposed parkland should have access to appropriate infrastructure such as roads, water, sewer, and power.
- The types of land uses surrounding the potential park site should be considered.

Land adjacent to an existing or proposed school site is desirable because it offers future joint use opportunities. Land that provides opportunities to connect to trails or bikeways is also desirable. If a proposed park site is adjacent to land uses that are incompatible with the proposed park use, the land may not be suitable.

- Land that is constrained by the presence of special status species, jurisdictional wetlands, cultural/historical resources, or other protected resources may not be suitable, depending on how much of the site is constrained and the extent of the constraint. In situations where the resources may offer meaningful interpretive opportunities, provide additional passive recreation.
- The service area standards determine how far park users can reasonably be expected to travel to access the park. Land that is to be dedicated for a neighborhood park should generally be within half mile walking or biking distance of the population it will serve. Community park land should be within 3 miles of the intended user population.
- The site should be no less than 4 acres for a neighborhood park due to the limited improvements that can be built on smaller parcels and the increased maintenance cost per acre.
- A community park should be no less than 10 acres.
- To the extent possible, all new neighborhood parks should be on an existing or proposed Class I bike path or Class II bike route. Neighborhoods that include parks on Class II bike routes should have sidewalks connecting homes to the park. Appropriate road crossings should be part of the route. This standard is intended to facilitate safe pedestrian and bicycle access to parks and to make it feasible for children to visit neighborhood parks without being driven there. Improved non-vehicular access will also reduce the need for parking lots, help prevent overflow parking into neighborhoods, and reduce traffic congestion and associated air pollution.

Park Design Guidelines

Park design guidelines are important tools that can guide planning, influence investment priorities, set goals for parkland acquisition, and establish the policy basis for financing sources, such as impact fees and credits. Additionally, guidelines embody the aspirations of the Parks and Trails Master Plan but are not strict requirements. If guidelines are to be meaningful, they

should be reasonably achievable over time, and sufficiently flexible to accommodate diverse and evolving community needs. The following guidelines are intended to provide that guidance in the planning, design, and construction of new parks as well as improvements at existing parks.

In addition to the below park design guidelines all park projects shall conform with the current version of the El Dorado County Design and Improvements Standards Manual, which is compiled, updated, and enforced through the County Department of Transportation.

- Facilities within parks should be sited to optimize recreation value by locating features with similar uses adjacent to each other.
- Multi-use recreation areas and facilities should be emphasized to efficiently utilize park resources.
- Where night lighting is included in parks for safety and anticipated recreational uses, glare impacts on nearby residential areas shall be mitigated through appropriate equipment choices and placement.
- Provide a unique character for each park consistent with the local identity. Express this identity through consistent use of selected colors, materials, and design motifs.
- Sites, facilities, structures or landscapes of historic or cultural significance within each park should be included where possible in the park design.
- Barriers and screens such as landscaping, earth berms, and fences should be included as buffers between parks and residential or other land uses where park use adversely impacts or is adversely impacted by the adjacent land use.
- Adequate parking shall be provided at parks in accordance with anticipated levels of use. On-street parking shall not cause traffic congestion or interfere with parking for and access to adjoining land uses, particularly residential neighborhoods.
- Park entrance improvements shall include a park name sign with rules and hours of operation.
- An ADA accessible circulation route shall be provided connecting all accessible features in the park.
- Sight lines shall be maintained along circulation routes so that users have adequate opportunity to see oncoming pedestrians and cyclists and to eliminate blind spots.
- Design park facilities to minimize maintenance requirements.

- Preserve natural site characteristics as feasible in park design.
- Preserve mature healthy trees as feasible by locating park improvements outside of the trees' drip line and preserving natural drainage.
- Sites, facilities, structures or landscapes of historic or cultural significance within each park should be included where possible in the park design.

Trail Standards

To describe the existing level of service for trails it is useful to first clarify what is meant by the term "trail". Many different types of features are included under the broad concept of trails, each with different and sometimes overlapping functional objectives and user expectations.

There are several different local, state, and federal agencies that have developed their own trail standards. Most have many aspects in common but there are some variations amongst the different jurisdictions. The intent of this section is to describe the different applicable agencies standards, and to articulate the time and place each standard is applied. These trail standards may be consulted over the life of the Master Plan as the County plans for new trails or trail improvements.

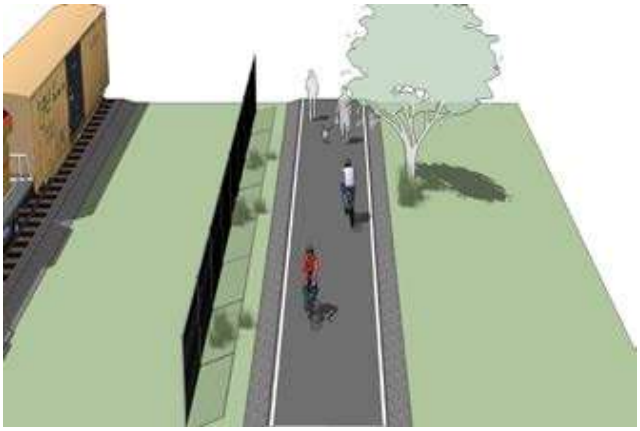
Paved Trail Classifications

The California Department of Transportation (Caltrans) Trail and Bike Facilities Standards is the most commonly used standard for paved trails within the state of California and is consistent with the paved trail sections within El Dorado County. As we continue to add mileage to our trail network, we will use the Caltrans Standards for paved off-street trails and on-street bike lanes.

Class I Shared Use Path

Class I shared use paths are paved trails completely separated from the street or highway. They allow two-way travel for people bicycling and walking and are often considered the most comfortable facilities for children and inexperienced bicyclists because there are few potential conflicts between people bicycling and people driving. The El Dorado County Active Transportation Plan (2020) identifies approximately 35.9 miles of new Class I bike paths for future development, for a total of 65.5 miles. These additional miles of trail would provide

recreation value in addition to transportation.



Example of Class I Trail

Class II Bicycle Lane

Class II bicycle lanes are striped preferential lanes on the roadway for one way bicycle travel that include pavement stencils and signs. Some bicycle lanes include a striped buffer on one or both sides to increase separation from the traffic lane or from parked cars, where people may open car doors into the bicycle lane. Variations of the Class II Bicycle Lane are the **Uphill Climbing Lane**, where due to narrow roadway width, a Class II facility is installed in the uphill traveling direction to give bicyclist additional protection and the **Buffered Bike Lane**, where painted buffers increase the distance between bicyclists and drivers. Some short segments of bicycle lanes exist in El Dorado County near Placerville and in El Dorado Hills.

Example of Class II Bicycle Lane

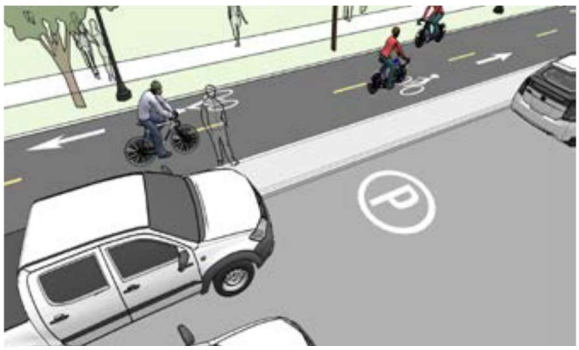
Class III Bicycle Route

Class III Bicycle Routes are signed routes where people bicycling share a travel lane with people driving. Because they are shared facilities, bicycle routes are best suited for low-speed streets with relatively low traffic volumes or on higher-speed roadways that include a wide outside lane or shoulder to accommodate safe passing. Class III bicycle routes include shared lane markings or "sharrows" that encourage proper bicyclist positioning in the travel lane and alert drivers that bicyclists may be present. **Advisory Shoulders** are signed roadways where bicyclists are to travel in the shoulder when they are not being used for parking. Class III bike routes have been designated in some areas of El Dorado County.

Example of Class III Bicycle Route

Class IV Separated Bikeways

Class IV Separated Bikeways are on street bicycle facilities that are physically separated from motor vehicle traffic by a vertical element or barrier such as a curb, bollards, or parking aisle. They can allow for one- or two-way bicycle travel on one or both sides of the roadway. No Class IV bikeways currently exist in El Dorado County.



Example of a Class IV Bicycle Facility

In addition to these formally designated bikeways, bicyclists often use wide shoulders on state highways or county roads to travel between communities in El Dorado County. An inventory of shoulder conditions was conducted for the 2010 Bicycle Plan. In some cases, sufficiently wide shoulders may create opportunities for low-cost implementation of Class II Bicycle Lanes. (*Refer to the El Dorado County Active Transportation Plan for more information and shoulder study inventory.*)

Natural Trail Classification

Below (Table X) is a summary of natural trail design standards based on the United States Forest Service standards and can be referenced by the County for natural trails categorization and development along corridors, within parks, or in open space areas. The US Forest Service has trail classification nomenclature that uses numbers (1-5) to differentiate trail classifications to denote the level of management and range from minimally developed trails (Class 1) to fully developed (Class 5).

Table X

Trail Attributes	Trail Class 1 Minimally Developed	Trail Class 2 Moderately Developed	Trail Class 3 Developed	Trail Class 4 Highly Developed	Trail Class 5 Fully Developed
Tread & Traffic Flow	• Tread intermittent and often indistinct • May require route finding • Single lane with no allowances constructed for passing • Predominantly native materials	• Tread continuous and discernible, but narrow and rough • Single lane with minor allowances constructed for passing • Typically native materials	• Tread continuous and obvious • Single lane, with allowances constructed for passing where required by traffic volumes in areas with no reasonable passing opportunities available • Native or imported materials	• Tread wide and relatively smooth with few irregularities • Single lane, with allowances constructed for passing where required by traffic volumes in areas with no reasonable passing opportunities available • Double lane where traffic volumes are high and passing is frequent • Native or imported materials • May be hardened	• Tread wide, firm, stable, and generally uniform • Single lane, with frequent turnouts where traffic volumes are low to moderate • Double lane where traffic volumes are moderate to high • Commonly hardened with asphalt or other imported material
Obstacles	• Obstacles common, naturally occurring, often substantial and intended to provide increased challenge • Narrow passages; brush, steep grades, rocks and logs present	• Obstacles may be common, substantial, and intended to provide increased challenge • Blockages cleared to define route and protect resources • Vegetation may encroach into trailway	• Obstacles may be common, but not substantial or intended to provide challenge • Vegetation cleared outside of trailway	• Obstacles infrequent and insubstantial • Vegetation cleared outside of trailway	• Obstacles not present • Grades typically < 8%

Trail Attributes	Trail Class 1 Minimally Developed	Trail Class 2 Moderately Developed	Trail Class 3 Developed	Trail Class 4 Highly Developed	Trail Class 5 Fully Developed
Constructed Features & Trail Elements	• Structures minimal to non-existent • Drainage typically accomplished without structures • Natural fords • Typically no bridges	• Structures of limited size, scale, and quantity; typically constructed of native materials • Structures adequate to protect trail infrastructure and resources • Natural fords • Bridges as needed for resource protection and appropriate access	• Structures may be common and substantial; constructed of imported or native materials • Natural or constructed fords • Bridges as needed for resource protection and appropriate access	• Structures frequent and substantial; typically constructed of imported materials • Constructed or natural fords • Bridges as needed for resource protection and user convenience • Trailside amenities may be present	• Structures frequent or continuous; typically constructed of imported materials • May include bridges, boardwalks, curbs, handrails, trailside amenities, and similar features
Signs[2]	• Route identification signing limited to junctions • Route markers present when trail location is not evident • Regulatory and resource protection signing infrequent • Destination signing, unless required, generally not present • Information and interpretive signing generally not present	• Route identification signing limited to junctions • Route markers present when trail location is not evident • Regulatory and resource protection signing infrequent • Destination signing typically infrequent outside of wilderness; generally not present in wilderness • Information and interpretive signing not common	• Route identification signing at junctions and as needed for user reassurance • Route markers as needed for user reassurance • Regulatory and resource protection signing may be common • Destination signing likely outside of wilderness; generally not present in wilderness • Information and interpretive signs may be present outside of wilderness	• Route identification signing at junctions and as needed for user reassurance • Route markers as needed for user reassurance • Regulatory and resource protection signing common • Destination signing common outside of wilderness; generally not present in wilderness • Information and interpretive signs may be common outside of wilderness • Accessibility information likely displayed at trailhead	• Route identification signing at junctions and for user reassurance • Route markers as needed for user reassurance • Regulatory and resource protection signing common • Destination signing common • Information and interpretive signs common • Accessibility information likely displayed at trailhead
Typical Recreation Environs & Experience[3]	• Natural, unmodified • ROS: Typically Primitive to Roaded Natural • WROS: Typically Primitive to Semi-Primitive	• Natural, essentially unmodified • ROS: Typically Primitive to Roaded Natural • WROS: Typically Primitive to Semi-Primitive	• Natural, primarily unmodified • ROS: Typically Primitive to Roaded Natural • WROS: Typically Semi-Primitive to Transition	• May be modified • ROS: Typically Semi-Primitive to Rural • WROS: Typically Portal or Transition	• May be highly modified • Commonly associated with visitor centers or high-use recreation sites • ROS: Typically Roaded Natural to Urban • Generally not present in wilderness

(U.S. Forest Service Trail Fundamentals and Trail Management Objectives: Trail Class Matrix)

Multi- vs. Single Use Trails

The design of natural surface trails should consider the type of use and how developed or undeveloped the trail should be. Multi-use trails may be a better solution for areas with fewer users or where multiple single-use trails are infeasible, while single-use trails may be identified in areas with high user volume use or terrain better suited to high technical skill levels.

Multi-Use Trails

By definition a multi-use trail must be designated to accommodate cyclists, equestrians, and pedestrians. Trails that only facilitate use by cyclists and pedestrians or trails that only allow for equestrian and pedestrian uses are not considered multi-use. Multi-use trails are designed with the intention of accommodating a range of uses and user groups on the same trail facility. A byproduct of having a facility that is meant for multiple uses is that not all of the expectations

or design features of each user group can be met. The construction of multi-use trails demonstrates compromise amongst these uses and user groups and often results in lower rates of user satisfaction. In addition to generally lower level of satisfaction multi-use trails commonly pose a greater level of difficulty when it comes to trail design and sustainability.

Single Use Trails

Single use trails are broken up into four categories: Pedestrian, equestrian, mountain biking, and motorized or off-highway vehicle trails. These trails have been developed for a specific use, user group(s), or specific mode of transportation. These facilities are intended to satisfy specific needs and are generally used for recreation and not transportation.

Paved vs. Natural Trails

Paved Trails

Paved trails are trails that use an improved trail surface most commonly asphalt or concrete depending on the application and trail location. Paved trails are most commonly used for active transportation and conform closely with the Caltrans Class I – IV standards.

Natural Trails

Natural trails are usually unpaved and intended to serve hikers, mountain bikers, and equestrians, depending on constraints of terrain and environmental sensitivity. Nature trails typically provide ways to explore public natural areas and may be served by designated and/or improved trail heads. They function primarily as recreation features rather than for transportation. There are many miles of natural trails in western El Dorado County, most of them owned and managed by other regional agencies whose mission includes public recreation. Most residents within the County can access a wide selection of natural trails within a one-half hour drive from their homes. There are over 100 miles of nature trails in the various BLM, state, and federal recreation areas in the County foothills and over 200 additional miles of nature trails in the Sierra.

Connectors

Connectors are characterized by the function they serve in providing ways for people to move between neighborhoods and communities. They have both a recreation and transportation

function, but for recreation purposes are typically separated from a vehicular route. They may be paved and/or unpaved, depending on their location and intended use. Connectors may function at the scale of a neighborhood, community, and/or region. The El Dorado Trail is an example of a connector that functions at all three scales depending on location, and also functions as a natural trail in some areas.

Connectors provide alternative transportation options for people to get from home to schools, parks, and businesses without relying on a vehicle particularly in the more urbanized communities. These are also important recreation features, especially for people who can't drive to a trailhead, such as children, people without cars, and the elderly who no longer drive. In the more rural areas, such as the Georgetown Divide, these local connectors are also heavily used by equestrians. When people talk about wanting more access to trails for everyday exercise, these are often the types of facilities they have in mind. Connectors are key to being able to develop Safe Routes to Schools and other features of Livable Communities.

There are very few connectors in unincorporated El Dorado County. In some neighborhoods, sidewalks provide for limited pedestrian access. Within the Georgetown Divide, an extensive network of informal trails through private property is used by residents to connect to neighborhoods, regional trails such as the Western States Trail, and U.S. Forest Service trails. These connectors can also function as natural trails.

(Include trail exhibit provided by GIS include overlay of rail alignment)

Trails Level of Service

While most counties, like El Dorado County, have developed a level of service standards for park facilities within the General Plan, most have not developed quantitative, per capita, targets for trails.

The National Recreation and Park Association (NRPA) does not have a level of service standard for trails, and trail types and level of service may differ between County areas dependent on their setting. Instead, NRPA has compiled data from agencies throughout the country to track the average number of trail miles typically provided. Agencies serving more than 250,000 residents have 70.5 miles of trail on average and agencies serving 50,000 residents have 10 miles of trail on average. This equates to approximately 0.25-0.5 trail miles per 1,000 residents. There are no quantitative guidelines established by the El Dorado County General Plan suggesting how many miles of trails are needed to serve the population. The General Plan does recognize regional trails for hiking and equestrian use along with bicycle facilities and pathways for pedestrians as components of the County's non-motorized transportation system that also have important recreational value.

Trail Design Standards

The following standards should guide planning, design, and construction of new trails and improvements to existing trails. All trail projects shall also comply with the El Dorado County Design and Improvements Standards Manual as applicable.

Parking and Trailheads

- Designated parking lots should be provided whenever possible at trailheads, particularly at heavily used trails and trailheads. Parking lots shall be of sufficient size to accommodate known or anticipated demand. Consideration should be given to joint-use parking with schools, churches, restaurants, and commercial uses.
- Where parking lots are not provided at trailheads, sufficient on-street parking should be available that will not cause traffic congestion and interfere with parking for and access to adjoining land uses, particularly residential neighborhoods.
- Frequent, convenient access/egress points with appropriate road crossings as needed

should be located along trails in neighborhoods and communities to facilitate use and trail security.

- At a minimum, trailheads heavily used by equestrians should include hitching rails. Where practicable, corrals and a water spigot should also be provided.
- Restrooms (permanent or portable) should be provided and maintained within all major trailhead parking lots.
- Trash receptacles shall be provided and maintained in sufficient number and size to accommodate trailhead use.
- Whenever practical, potable water shall be provided at trailhead parking lots.

Signs

- Signs shall be placed at all trailheads, in clear view of parking lots or adjacent streets (where parking lots are not used), directing trail users to trails. Signs at trailheads should include the following information, at a minimum:
    - Trail name and route number
    - Destination(s) and distance to destination(s).
    - Overall length and length of segments (where applicable).
    - Types of users (i.e., pedestrians, equestrians, bicyclists) permitted.
    - Trail etiquette and safety considerations, including respect for private property, litter control, fire control, and protection of sensitive plants and animals.
- Signs should be placed at various points along trails to identify junctions with other trails, water features, streets, and hazardous or sensitive areas.
- Interpretive signs may be placed at environmentally sensitive areas to educate trail users of the value of the natural resource. Culturally sensitive sites shall not be identified to discourage disruption, theft, and vandalism.
- Signs located at trail heads and at forks in the trails should include the name of the trail and the distance to known points or destinations. Degrees of difficulty, use limitations, and timing are additional desirable pieces of information.

Proximity to Developed Areas

- Trailheads and trails should be located away from noise- and privacy-sensitive uses, particularly residences, to the extent necessary to prevent intrusion. In addition to physical distance, earthen berms and plant materials may be utilized to further screen trailheads and trails from adjoining uses.
- Barriers and obstacles including boulders, logs, bollards, and stiles, may be erected outside of and adjacent to the path of travel where needed to discourage unauthorized motor vehicles access.

Grading and Erosion Control

- Grading for trails and trailheads should be minimized to the extent feasible. Where trails traverse cross slopes, large upslope cuts and downslope fills should be avoided through the use of retaining walls.
- Trail alignments should be selected that will result in the least impact on the existing topography and vegetation.

Proximity to Hazardous Areas

- To the extent practicable, trails should avoid proximity to potentially unsafe situations, such as railroad tracks, busy streets and highways, abandoned mines, and steep cliffs. Where trails must be near such areas, fencing or other appropriate barriers shall be installed.
- Trail crossings of busy streets or rails should be minimized. Where crossings are needed, a location with adequate sight distance shall be selected and appropriate signage and crossing treatments installed.
- Trail intersections with other trails should be located and designed so that sight distance, grades, and other features enhance crossing safety.
- Where trails are designed within an active or potentially active railroad corridor, trails should be located downslope of tracks whenever possible, should employ physical barriers when necessary, and always be separated by the maximum available distance.

- Trails should not be constructed where cross slopes exceed 20 percent, unless appropriate downslope barriers are provided. In certain instances, upslope barriers may be necessary to intercept falling rocks.
- Barriers constructed of local trees and logs should be provided between trails and steep and hazardous areas.
- Trails located next to steep or other hazardous areas shall be at least four feet in width.

Trail Design Details

- Class I bike paths will be designed in accordance with Caltrans Chapter 1000 Bikeway Design Standards.
- For all other trails, tread width minimum requirements:
    - Single-use trails: 4 feet
    - Dual- or multiple- use trails: 10 feet
- To accommodate the minimum tread widths specified in above, trail easements for single-use trails shall be a minimum width of 8 feet. Easements for dual or multiple trails should be a minimum of 14 feet in width.
- When equestrian uses are anticipated adjacent to a paved trail a separate unpaved track shall be provided at least 4 feet in width and at least 6 feet from the paved trail.
- Horizontal clearance for all trail types shall be two (2) feet beyond the trail tread.
- Minimum vertical clearance standards are as follows:
    - Hiking trail: 7 feet
    - Bicycling trail: 12 feet
    - Equestrian trail: 12 feet
- Trails should not be greater than 15% in slope except where necessary for short runs of up to 20%.
- Where retaining walls are employed, natural materials, such as logs and native stone, should be used to the extent possible.
- Landings at the end of switchbacks should be at least 8 feet in width.
- Hiking and equestrian trails located within a public right-of-way shall be at least 5 feet

from the traveled way unless a barrier is constructed between the trail and the edge of the traveled way.

- Regional connectors should ideally provide accessible facilities for pedestrian, bicycle, and equestrian users. However, ownership and terrain may preclude the ability to secure a sufficiently wide easement for all uses. In such cases, uses will be selected based on community priorities and feasibility.

Open Space

Open Spaces and natural areas are of great value when it comes to recreational opportunities in El Dorado County. Although the County does generally own or operate a great deal of open space, there is a significant amount of National Forest, Bureau of Land Management, and State Park lands that provide an array of recreation opportunities. These open spaces can range in size from a few hundred acre to several hundred thousand like the El Dorado National Forest that makes up roughly 43% of the counties overall land area.

Open Space Classifications

Preserves

El Dorado County is home to several rare plant and animal species some endemic to the area. Because of this some open spaces areas have been designated as preserves. These areas serve as irreplaceable habitat for both plant and animal communities. When considering recreation opportunities in these areas be aware there could be access restrictions based on the sensitivity of the resource. Preserves have the potential to make great outdoor education opportunities and could include facilities such as interpretive and nature centers.

Regional Open Space

Regional open space is the most abundant type of open space within the county and includes National Forest, BLM, and State Parks Lands. These areas contain passive amenities such as restrooms, picknick tables, and parking facilities. They also provide a greater range of recreation opportunities and tend to draw visitors from a large geographic range.

Campgrounds

Campgrounds provide visitors the ability to stay overnight in a natural environment and enjoy the signs and sounds of nature after dark. Campgrounds have ranging degrees of improvements from private campgrounds with full hookups to those with very minimal amenities.

Trail head

Trail heads act as access and wayfinding points for visitors when accessing open space and trails within the county. They may contain information kiosks, bulletin boards, maps, and restrooms. Some trail heads may also include equestrian facilities and bike repair stations.

Maintenance Standards

All scheduled park maintenance is conducted by Parks Maintenance staff and Grounds Maintenance staff within the Facilities Division of the Chief Administrative Office. The maintenance objective is to provide safe, sanitary, and aesthetically pleasing landscaping and maintenance for all County parks and trails.

Maintenance is provided on a regular basis at the County's parks: Bradford Park, Forebay Park, Henningsen Lotus Park, Historic Railroad Park, Joe's Skate Park, Old Depot Bike Park, and Pioneer Park, in addition to the SPTC/El Dorado Trail. Tasks include repairs to signs, concrete, fencing, and water fountain, and trash and graffiti removal as needed. Crews provide landscape and field maintenance, restroom cleaning, and any repairs needed to lights, equipment, picnic tables, play areas, barbecues, hardscape, and other park facilities. The SPTC/El Dorado Trail is maintained seasonally for vegetation management, and periodically for trash removal, cleanup at parking lots and trailheads, and any repairs as needed for bollards, kiosk, par course, benches, and other structures. The El Dorado Western Railroad maintains the tracks throughout the corridor under the direction of Parks and Museum staff.

In order to evaluate how well parks and trails are maintained, three levels of service have been articulated by the maintenance staff.

High Level of Service

This is the desirable standard, but resources are not always available to uniformly meet this goal. To meet this standard requires ongoing preventive maintenance and a regular schedule of equipment upgrade or replacement in keeping with life cycle expectations. This level of service

is characterized by the following criteria.

- Citizen complaints are very infrequent.
- Areas are free of trash, weeds, and dead or stressed plants.
- Obstructions and hazards are non-existent during work hours.
- No substantial loss of water due to breakage.
- Facilities are visually appealing and manicured.
- Frequent site inspections.
- Restrooms cleaned frequently, well stocked with sanitary products, free of debris, and equipment is functional.

Normal Level of Service

This is below the standard the Grounds unit is committed to providing, but is nevertheless safe, sanitary, and will sustain plant life. Characteristics of this level of service include:

- Citizen complaints infrequent but do occur.
- Hazards and complaints are generally responded to within 2-4 days.
- Minor debris and trash is removed during normal litter removal as scheduled.
- Increased water loss due to delays in breakage repair.
- Presentation of landscape is not always manicured and is less visually pleasing.
- Vegetation abatement to meet fire code.
- Restrooms cleaned intermittently, in sanitary condition, and equipment is functional.

Basic Level of Service

This is the least desirable level of service and is based on reacting to issues rather than issue prevention.

- Minor debris would be ignored and weed control would be handled as complaints were received.

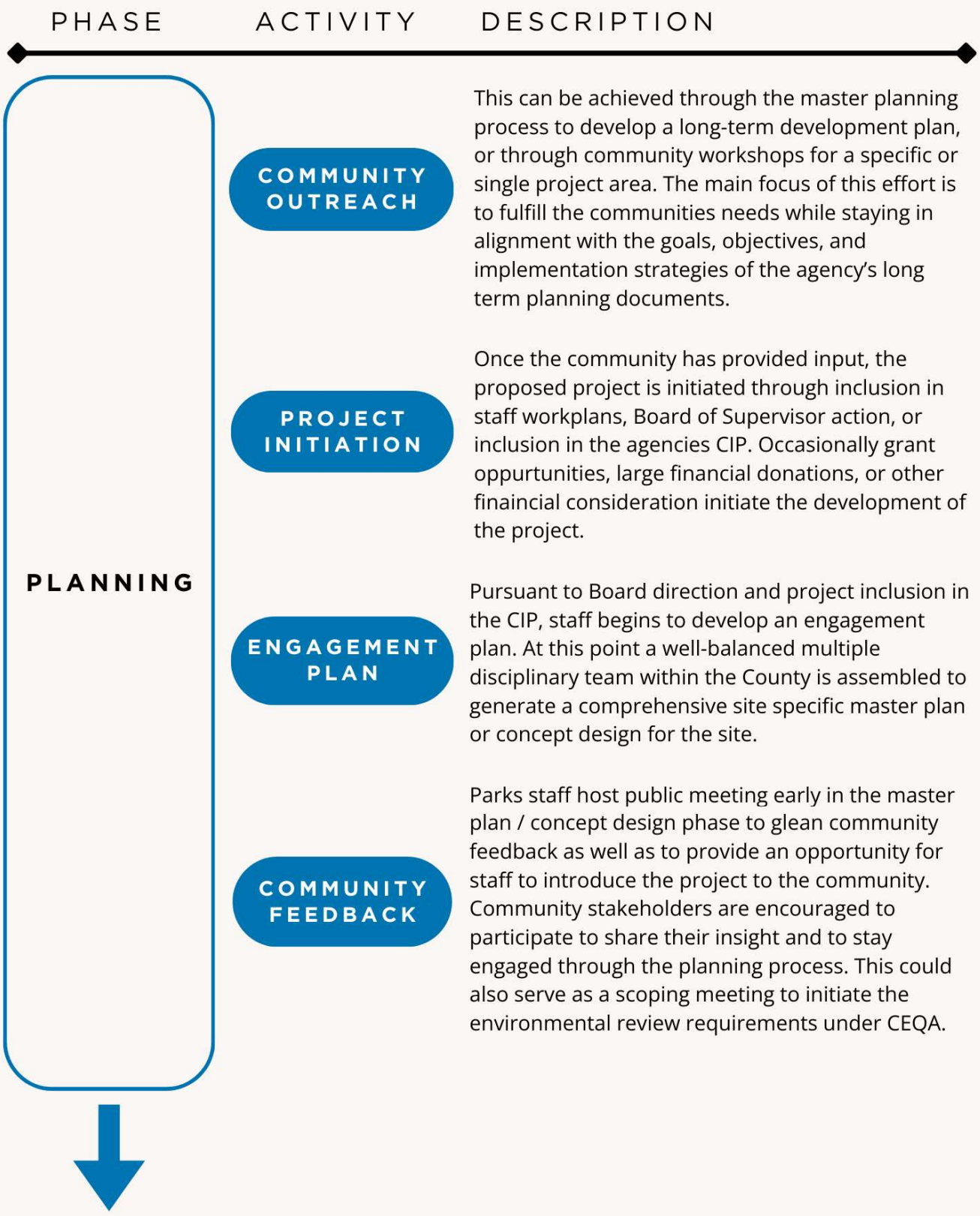
- General aesthetics would be poor and plant material health would decline.
- Citizen complaints and hazards would be frequent. Response and prioritization would be based on safety, liability, and severity of situation.
- Water system failures would be frequent.
- Minimal number of site inspections.
- Minimal vegetation abatement.
- Restrooms occasionally, in usable condition, and equipment is functional.

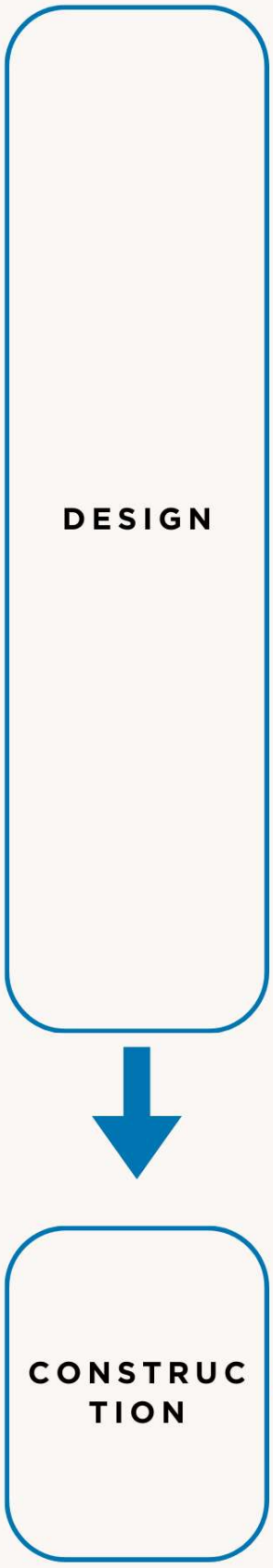
Staff are generally able to maintain County parks and trails between the “High” and “Normal” level of service depending on availability of staff, weather conditions, and extent of public use.

Park and Trail Development Process

The typical process for development of a new park or trail, or renovation projects, takes several years on average and is contingent upon available funding for completion and staff availability. Projects start as a simple idea and become more refined over time until plans and specifications for construction are approved**,** and the project is built. The following chart describes a typical, standard process from concept to public opening.

Parks and Trails Development Process



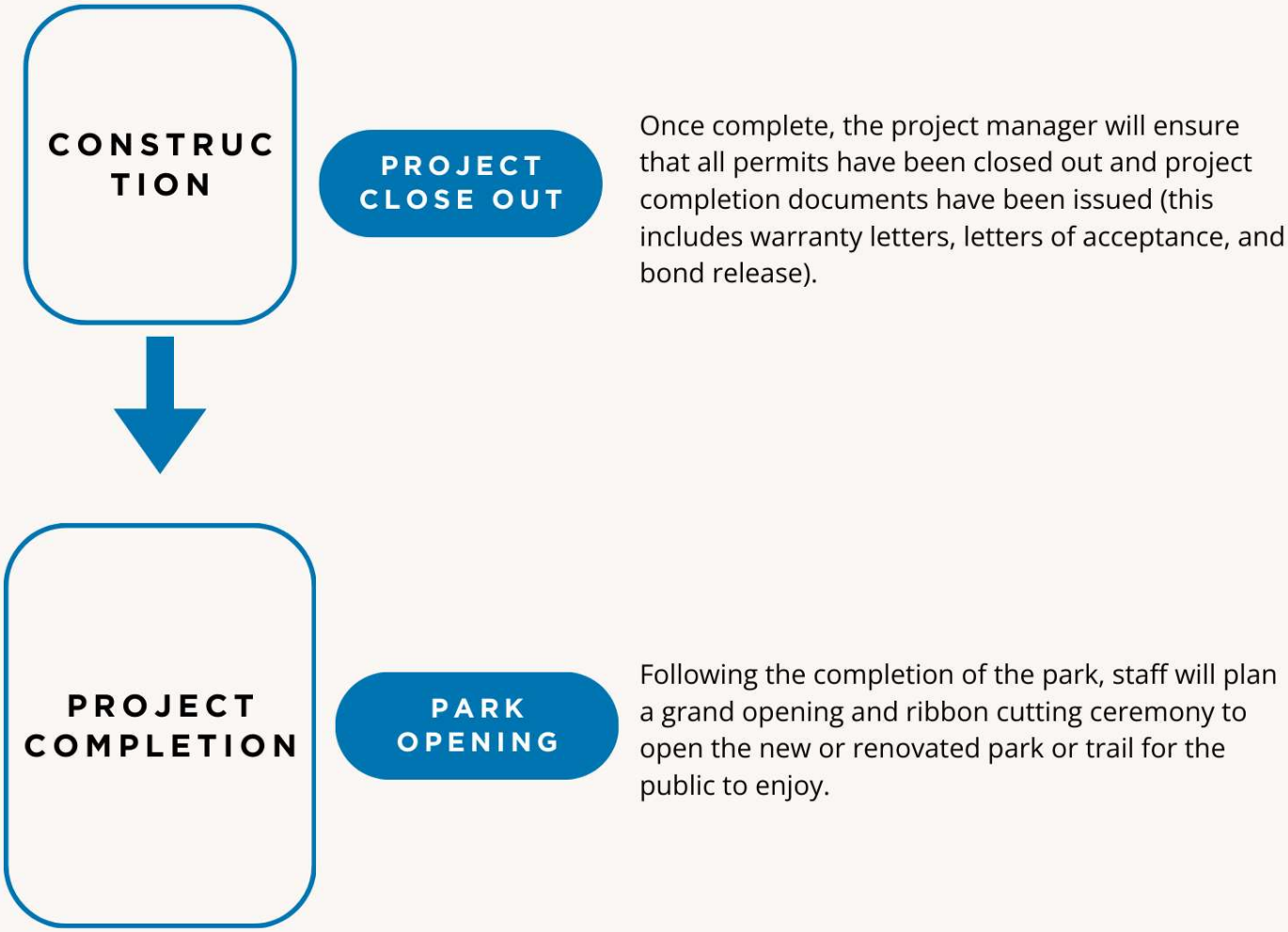


Feedback provided to staff will be reviewed and incorporated as appropriate and relevant to the intent of the project, and then circulated for public review and comment. The design can also provide information around phasing of improvements to coincide with available funding. With Board direction the draft concept design can proceed to the Parks and Recreation Commission for formal review, receive public comments, and provide commissioner recommendations.

After the Parks and Recreation Commission review, the project goes back to the Board of Supervisors for final direction and approval. This includes adoption of environmental documents, detailed designs, and engineering and construction documents.

Next is refinement of the design and development of project plans, specifications, and engineer estimates to get the project ready for bid and construction. The construction plans will take the concept design and refine it with site specific engineering. This phase will also incorporate any off-site improvements required to mitigate impacts such as traffic and noise, as well as prepare any permits required through the environmental review process.

This phase includes contract execution, project management, building permit issuance, and project construction. This phase begins with the approval of bid documents and public posting of the bid package. Once the contract is awarded through the competitive bid process the project goes to the Board for award to the contractor and work can begin.


CONSTRUCTION
PROJECT CLOSE OUT
Once complete, the project manager will ensure that all permits have been closed out and project completion documents have been issued (this includes warranty letters, letters of acceptance, and bond release).
PROJECT COMPLETION
PARK OPENING
Following the completion of the park, staff will plan a grand opening and ribbon cutting ceremony to open the new or renovated park or trail for the public to enjoy.