



Parks & Recreation System Master Plan



GEOGRAPHIC ANALYSIS

The geographic analysis presents a series of seven maps illustrating park access and distribution of recreation opportunities. This memo provides a brief description of each map and findings. These findings will be further interpreted in the Needs Assessment and Opportunities Analysis.

PARK LAND ACCESS

Two maps illustrate access to park land:

- Map 1: Nearby City Park Access: shows areas that have access within $\frac{1}{4}$ and $\frac{1}{2}$ mile to parks satisfying Cupertino's General Plan Policy RPC-2.4.
- Map 2: Access to Parks with Specialized Facilities show areas served by parks that have unique feature that attract people from a mile away.

Note: Park access is defined as the ability to enter a park via a road, sidewalk or trail at a park entry point. On both maps, undeveloped areas are shown as unserved because they do not currently have roads, sidewalks or trails that provide access to parks and recreation facilities.

The maps consider barriers to access, including Hwy 85, Lawrence Expressway, Interstate 280 and the railroad tracks. As per Commission request, the maps also identify intersections anticipated to have traffic congestions issues, based on the General Plan traffic study that evaluates additional trips generated by future development through 2040 (denoted by symbols "E" or "F" representing Level of Service E or F¹).

Map 1: Nearby City Park Access

As noted in the Cupertino General Plan Policy RPC-2.4, the City of Cupertino strives to ensure that all residents have "access within a $\frac{1}{2}$ mile walk of a neighborhood park or a community park with neighborhood facilities." Map 1 uses Network Analyst Extension² provided by ArcGIS to illustrate areas

¹ Traffic conditions are evaluated using "Level of Service" (LOS). LOS is a qualitative description of operating conditions ranging from LOS A, or free-flow conditions with little or no delay, to LOS F, or jammed conditions with excessive delays. LOS E is the limit of acceptable delay. These high delay values generally indicate poor signal progression, long cycle lengths, and high volume-to-capacity (V/C) ratios. Some vehicles must wait more than two cycles.

LOS F is considered unacceptable by most drivers. This condition often occurs with oversaturation, that is, when arrival flow rates exceed the capacity of the intersection. Many vehicles must wait more than two cycles. Poor progression and long cycle lengths may also be major contributing causes of such delay levels (Transportation Research Board, 2000 Highway Capacity Manual).

² ArcGIS Network Analyst provides network-based spatial analysis tools. It uses a configurable transportation network data model, allowing organizations to accurately represent their unique network requirements (e.g.: determining areas around the

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served by parks with picnicking and play opportunities for nearby neighbors. Play equipment and picnic tables/areas were defined as the minimum types of facilities needed to satisfy the General Plan policy. Map 1 shows areas served at these distances:

- ¼ mile easy walking distance
- ½ mile walking or biking distance (and the distance service is desired as per General Plan policies)

City parks in the following classifications have neighborhood facilities that satisfy this General Plan policy: small neighborhood parks, large neighborhood parks and community parks. City-owned special use sites (such as Mary Avenue Dog Park and the Sports Center), County and regional parks and school sites do not satisfy the General Plan policy and are not counted in the analysis.

In addition to these City parks, there are four other parks that provide neighborhood facilities:

- Rancho Rinconada and Main Street Park both offer play and picnic feature, but neither is a City-owned park. However, these sites currently meet needs for neighborhood facilities.
- Little Rancho Park and Canyon Oak Park are smaller City parks that currently do not provide both play and picnicking. They do provide play areas for neighborhood children.

Because of these conditions, services areas for these four sites are shown in a different color (brown/tan). Areas zoned for residential development are highlighted in yellow to note unserved areas.

Two maps show unserved areas: Map 1A and Map. 1B. Both Map 1A and 1B display all unserved residential areas in yellow consisting of the following Cupertino residential zoning designations: Single Family Residential (R1), Single Family Residential Cluster (R1C), Residential Duplex (R2), Multiple Family Residential (R3), Residential Hillside (RHS), and Mixed Use Planned Development (P) inclusive of residential uses.³ Map 1B displays all properties with residential zoning that lie outside the desired ½ mile walking or biking distance. Map 1A displays the unserved residential zoned parcels, but only shows properties that are inhabited.

Map 1 Key Findings

- Most residents in Cupertino have access to City parks within ½ mile, as per General Plan policies.
- Rancho Rinconada, Little Rancho Park and Canyon Oak Park are each significant in meeting close-to-home needs for neighborhood park land.
- Several residential areas lack park access. Service needs are not exclusive to north or east Cupertino, even though those two geographic areas are discussed more frequently for their park land needs.
- Some of the areas with service gaps are near projected high congestion intersections, which would make it more difficult for residents to walk or bike to parks outside the ½ mile radius in the future.

parks that fall within a specified distance from the parks along the road network rather than using a simple one-mile buffer around the parks without taking the mode of travel into consideration).

³ Some Mixed Use Planned Development zoning designations exclude residential uses.

Map 2: Access to Parks with Specialized Facilities

Using a similar methodology and analysis tool as Map 1, Map 2 illustrates areas with residents living within ¼ mile, ½ mile and 1 mile of park land that feature specialized recreation options. These parks have unique or specialized recreation features that draw people from greater distances.

Specialized or special-purpose facilities include:

- Indoor recreation buildings (i.e., most park buildings except restrooms, maintenance sheds and storage);
- Unique outdoor recreation facilities, such as dog parks, community garden, water play/sprayground features;
- Programmable sports fields of any type for team play or practice;
- Sports and leisure attractions that are significant, such as swimming pools, golf courses, batting cages, archery ranges, championship sports courts; and
- Large group gathering space, including event/festival venues and amphitheaters.

The following were not counted as specialized facilities:

- Trails and trail corridors;
- Regular sport courts; and
- Playgrounds and picnic areas, which were defined as neighborhood facilities in Map 1.

Based on this definition of specialized facilities, the following park classifications and public park sites were factored into the service areas in Map 2:

- City community parks;
- City large neighborhood parks;
- City special use sites;
- School athletic fields (joint use sites with the City);
- Selected local parks and recreation resources, such as Deep Cliff Golf Course, Rancho Rinconada, and Cupertino City Center Park; and
- County parks and regional preserves.

Map 2 Key Findings

- Nearly all of Cupertino has access to parks with specialized recreation options within a mile walking, biking or driving distance.
- Parks and facilities owned by other providers (e.g., school fields, park district facilities and county and regional parks) play a significant role in meeting needs.
- Many of these sites may draw people from distances greater than 1 mile, adding to traffic congestion issues. Broad facility distribution is important to alleviate some of this traffic.

FACILITY DISTRIBUTION

Maps 3 to 7 highlight the distribution of the several types of recreation facilities and features. The purpose of these maps is to show the distribution of specific types of recreation opportunities.

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- Map 3: Active Recreation Facility Distribution notes locations of sports fields, sports courts, and other active recreation features such as golf, batting cages, fitness center, bocce, or running track.
- Map 4: Sports Fields Facility Distribution identifies locations of baseball/softball fields as well as soccer and cricket fields that are City-owned or are school district-owned and maintained by the City under a joint use agreement.
- Map 5: Aquatics and Water Play Facility Distribution shows locations of pools and spray grounds that are City- or school district-owned, or that can be accessed for a fee or membership. This map includes some pools outside of the city limits that are nearby enough to serve our residents.
- Map 6: Outdoor Event Space Distribution notes the location of existing small and large events venues, along with potential event space in existing parks or at schools that are included in the joint use agreement with the City.
- Map 7: Access to Nature shows the distribution of features such as community gardens and orchards, nature and creek trails, environmental education/interpretive facilities, and visual access to natural areas.

Map 3: Active Recreation

Many cities require neighborhood parks to have some type of active recreation opportunity to support health and fitness within walking or biking distance of most residents. As noted in Map 1, Cupertino's smaller parks emphasize play equipment and picnicking. For this reason, Map 3 highlights the distribution of active recreation facilities including sports fields (soccer, baseball/softball, and cricket), sports courts (tennis, basketball, volleyball) and other facilities that support active recreation such as golf courses, batting cages, fitness centers, and tracks.

Key findings regarding the distribution of active recreation facilities across the city include:

- Many areas in Cupertino have access to parks with active recreation facilities.
- Some areas without easy access to active recreation opportunities are in north Cupertino (near Franco Park), eastern Cupertino between the Lawrence Expressway and Cupertino High School/Sedgwick Elementary and the area near Lawson Middle School and De Anza Boulevard.
- Some of these areas with service gaps are near projected high congestion intersections which may make it more difficult for residents to walk, bike or drive to active recreation opportunities in the future.

Map 4: Sports Fields

Map 4 highlights the distribution of baseball/softball fields, soccer fields and cricket fields, including facilities in City parks and joint use facilities (school fields maintained by the City and managed by the City during non-school times).

Key findings regarding the distribution of sports fields across the city include:

- Sports fields in general are well distributed in Cupertino. Nearby access varies based on the sport played.
- Some areas with service gaps are areas in north Cupertino (stretching from Franco Park to Cali Mill Plaza), eastern Cupertino between Sedgwick Elementary and Lawrence Expressway, and western Cupertino near Canyon Oak Park and Little Rancho Park.

- The service gaps in northern and eastern Cupertino are near projected high congestion intersections, which may make it more difficult for residents to walk, bike or drive to nearby sports fields in the future.

Map 5: Aquatics and Waterplay

Map 5 highlights the distribution of aquatic and waterplay facilities. These include swimming facilities such as leisure pools and competitive or lap pools, as well as spraygrounds that offer waterplay opportunities across Cupertino. Aquatics and waterplay facilities considered for analysis include the ones that are owned and operated by the City of Cupertino as well as other public and private providers such as Rancho Rinconada, Northwest YMCA, De Anza College, Cupertino and Homestead High Schools and Cupertino Hills Swim and Racquet Club. A number of the aquatics and waterplay facilities provided by entities other than the City or schools are exclusive to members only or require registration and other fees, with a notable exception of Rancho Rinconada, which is a park district facility that provides public swim at select times with a drop-in fee. However, each of these facilities help address swimming and water play needs.

Key findings regarding the distribution of aquatics and waterplay across the city include:

- There are several pools in Cupertino, even though few are provided or operated by the City.
- Traffic will be a factor in reaching pools in the future, unless new facilities are dispersed for easier access by underserved areas.

Map 6: Outdoor Event Space

Map 6 notes the location of existing and potential event space. Only two sites support existing large events: Civic Center Plaza (accommodates approximately 500 people for festival-style events) and Memorial Park (up to several thousand). Only Memorial Park offers enough space, nearby parking and infrastructure to support the City's larger festivals. Creekside Park is currently hosting the Farmers Market. Within the Stevens Creek Corridor, special conditions and considerations exist. Blackberry Farm Park hosts a family-oriented Harvest Festival in the fall that is in keeping with restrictions which apply to the site. McClellan Ranch Preserve supports small events and outdoor programs that are consistent with its mission as a nature and rural preserve.

Several large neighborhood parks across the city have a potential to host small to medium gatherings (20-150 people). Jollyman Park, Wilson Park, Hoover Park, Linda Vista Park and Library Field are potentially suitable for programs and could be augmented by adding additional support amenities (electricity, water, additional parking, restrooms, etc.). In addition, there are nine sites covered by the joint use agreement that the City could explore using for events—if such events are compatible with school needs, sport field use, and other considerations.

The City can program additional sites for special events, including Cali Mill Plaza, Main Street Park, and Town Square.

Key findings regarding the distribution of event spaces across the city include:

- There are many opportunities to host smaller outdoor events in parks and at schools across the city.
- Few sites are suitable for large-scale community events. It will be important to continue to support events at Memorial Park and Civic Center Park when these two sites are renovated in the future.

[Map 7: Nature Access](#)

Map 7 illustrates access to nature, including access to community gardens or orchards, environmental education/interpretation amenities and facilities, visual access, and nature and creek trails. Key findings include:

- Most nature access opportunities are located to the west of Highway 85.
- Nature and creek trails currently offer the only nature access opportunities in central and eastern Cupertino.
- While few parks currently provide natural areas or habitat, there are a variety of opportunities to restore habitat and improve nature access in parks. Nature restoration opportunities will be important to consider in the Needs Assessment and Opportunities Analysis.