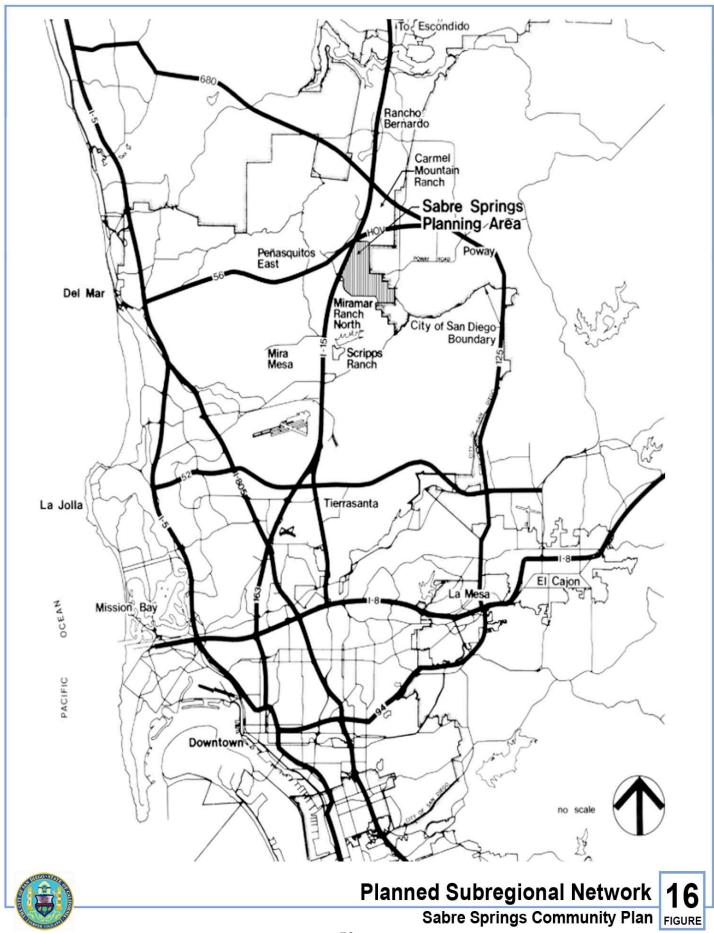
CHAPTER 11. TRANSPORTATION ELEMENT

11.1 Goal and Objectives

The overall goal for the Sabre Springs transportation system is to CONSTRUCT AND MAINTAIN AN ADEQUATE MULTI-MODAL CIRCULATION NETWORK WITHIN THE COMMUNITY WHICH IS INTEGRATED INTO THE REGIONAL TRANSPORTATION SYSTEM. The following objectives further specify this goal:

- Provide a community roadway network of arterial, major, collector and local streets which ties into regional primary arterials and I-15.
- Support the phased construction of the HOV Access Road as a primary arterial from the city of Poway to Rancho Peñasquitos and the building of the HOV/I-15 interchange.
- Require that streets within the community possess sufficient capacity and meet City
 engineering standards to safely handle traffic generated as the community is built
 out.
- Provide adequate off-street parking for vehicles in all community projects.
- Encourage design of roadways and parking facilities which is sensitive to environmental conditions, traffic noise concerns and view opportunities, as well as meets functional requirements.
- Promote transit alternatives to private vehicular travel within the community which can be integrated with the regional circulation network.
- Support the construction of HOV lanes in the median of I-15, provision for accompanying park-and-ride facilities and special accommodation of HOV lanes at the HOV/I-15 interchange.
- Provide a park-and-ride facility in the planning area which can be used by vehicles traveling Poway Road and I-15.
- Develop a system of bikeways and accompanying bicycle storage areas within the community tying into the regional bicycle network.
- Provide a continuous, safe and accessible pedestrian circulation system throughout the community minimizing conflicts with vehicular traffic patterns.
- Locate an equestrian trail along Peñasquitos Creek which may be linked to Los Peñasquitos Preserve.



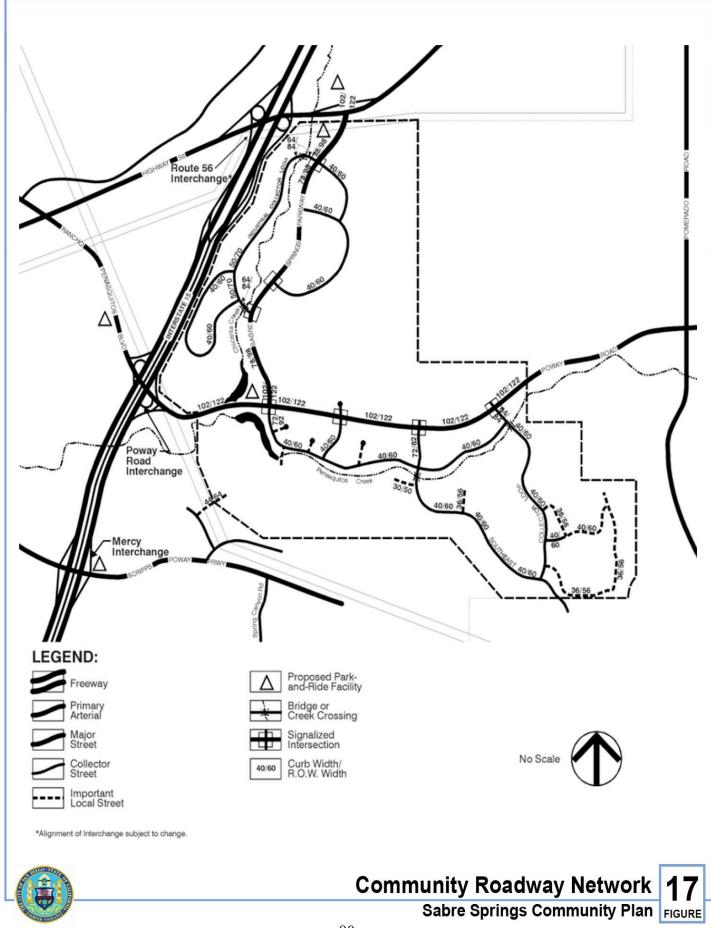
11.2 Roadway Network

Section 2.5A describes the subregional transportation system in the Sabre Springs area and traffic concerns and transportation planning options in designing the community. Development of Sabre Springs requires an internal transportation system tying where necessary into the existing and proposed streets of surrounding communities and into the North City subregion and San Diego metropolitan area as a whole.

A. Interstate 15

In order to provide adequate access to and from Sabre Springs via I-15 and to ensure adequate freeway capacity a multilevel approach is recommended:

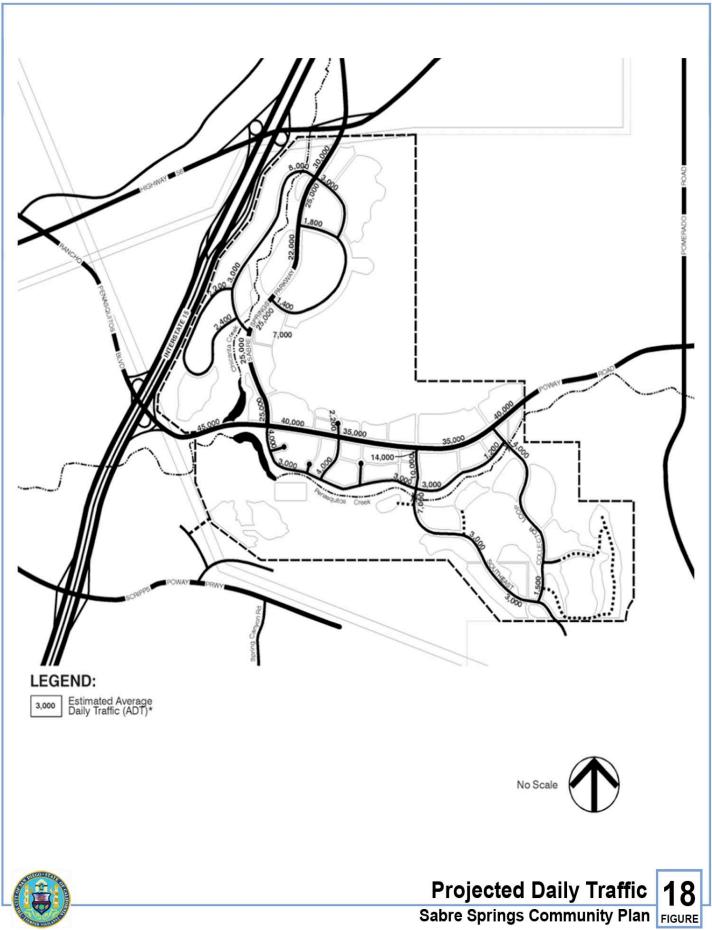
- Completion of scheduled CALTRANS improvements of the I-15 roadway and interchanges from the planning area south to I-8, including the Miramar bypass.
- Provision for park-and-ride facilities and I-15 transit service in order to reduce traffic on the freeway. Park-and-ride facilities are proposed at two adjacent freeway interchanges; two sites at Poway Road/Rancho Peñasquitos Boulevard and one or more sites at the HOV Access Road in Carmel Mountain Ranch.
- Widening of Poway Road from four to six lanes from the city of Poway to the I-15 interchange to accommodate intra-community, commuter and bicycle traffic. This would include signalization of four intersections within the planning area.
- Construction of the HOV Access Road from the city of Poway to Rancho Peñasquitos including the HOV/I-15 interchange to provide Poway traffic an alternate access to I-15 and channel some local north- south traffic to an upgraded Black Mountain Road. The exact configuration of the HOV/I-15 interchange is subject to change.
- Construction of HOV lanes for buses, carpools or light rail in the median of I-15, with an appropriately designed interchange at the HOV Access Road (see Section 11.3A).
- Planning of a balance of industrial and residential land uses in the planning area to induce a counter-flow of traffic on the freeway and at the interchanges during peak hours and to maximize intra-community trips. This approach is reflected in **Chapters 4** and **5**.
- Phasing of community development to the provision of adequate corridor capacity and access improvements. A phasing program for the development of the community and for provision of transportation improvements is outlined in **Section 14.2**.



B. Community Network

A hierarchy of primary arterial, major, collector and local streets should form the community street system, as shown in **Figure 17**. The estimated average daily traffic (ADT) volumes on Sabre Springs streets are depicted in **Figure 18**.

- Poway Road, to be widened from four to six lanes, carries most east-west traffic movement through and within the community. Poway Road will be designed as a six-lane primary arterial from the Poway Road interchange at I-15 to the intersection with Sabre Springs Parkway and as a six-lane major street from the Sabre Springs Parkway intersection to the City of San Diego boundary. Access should be limited to major and collector streets and project roads intersecting the arterial at signalized intersections. The exceptions are the existing church and proposed community commercial which may utilize right-turn in/right-turn-out access from Poway Road. If needed, consideration may be given to provide a signal interconnection system to coordinate the traffic flow through the signals along Poway Road. Emergency parking only should be permitted along the roadway to provide bicycle lanes.
- Sabre Springs Parkway, a major street, follows Chicarita Creek north-south through Sabre Springs North. This street should be four lanes wide with a median except for the six-lane section on the southern end extending from Poway Road. The northern section should smoothly join the major street in Carmel Mountain Ranch. Intersections should be limited to designated collector and local roads. Other access points should be confined to right-in/right-out movements at commercial centers (Parcel 4 and 14), and the Parcel 7 residential project; and to left-turn accesses at the neighborhood park (Parcel 13) and Parcel 7, and Parcel 14. Three signals are proposed to accommodate major turning movements, one at the northwest corner of the community commercial and two where the industrial collector loop intersects the parkway. The main access for the specialty commercial site will also use the traffic signal at the northwest corner of the community commercial site. No parking should be permitted along Sabre Springs Parkway.
- The Industrial Collector Loop, a collector street, provides access to the employment center and medium-density residential areas along the freeway in the northern portion of the planning area. This should be a two-lane facility. The exceptions are at the north and south ends where the street crosses Chicarita Creek and intersects with Sabre Springs Parkway; in these locations, four lanes are required. The creek crossings are proposed as culverts, as described in Section 8.4. No parking should be permitted along the collector loop.
- The network of streets north of Peñasquitos Creek and south of Poway Road consists of collector streets. This network generally consists of two-lane streets. Exceptions are the street next to the commercial areas, the easternmost collector (adjacent to a low-density residential area) and the westernmost collector (next



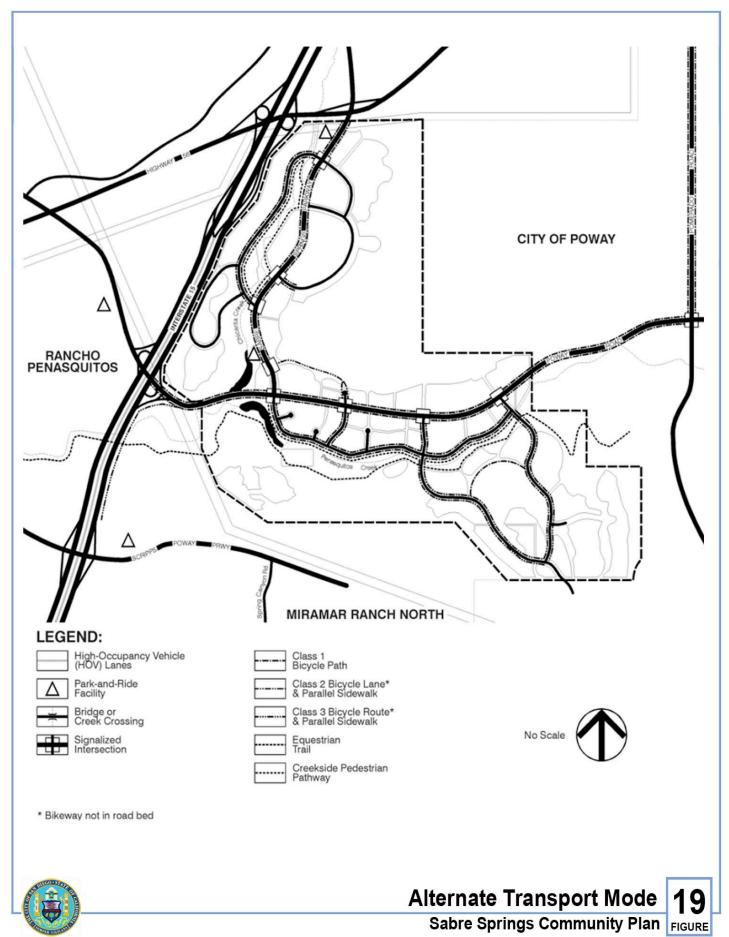
to the southern lake). These three streets are four-lane facilities with turn pockets as needed to accommodate higher traffic volumes and turning movements. No parking should be permitted on streets running along Peñasquitos Creek or the southern lake. Local streets and private roads (not shown) are anticipated within project areas.

- The Southeast Collector Loop, a collector street, serves the southeast residential projects (south of Peñasquitos Creek). This street should be a two-lane facility with no median. Local streets and private project roads should provide access to residential projects with no single-family driveways entering the collector. A local street should provide access to the neighborhood park and a driveway should serve the elementary school. Most of the collector loop functions as a single-loaded facility and no parking should be permitted along the street side abutting open space areas in order to preserve views and a semi-rural character. The western Peñasquitos Creek crossing should be a two-lane bridge, which widens to a four-lane road approximately 100 feet south of the collector paralleling the north side of Peñasquitos Creek. The eastern crossing should be a two-lane bridge designed to a 40-foot traveled way width. Both bridges should have adequate room for bicyclists (see Section 11.3B) and appropriate emergency parking.
- <u>Local streets</u> shown in **Figures 17** and **18** represent roads which will provide access to important facilities or isolated project areas. These local streets are subject to change in location, configuration and sizing as detailed design proceeds. In addition a number of other local streets are possible which are not shown. Access may be taken from the southeast collector loop via local streets extending south along the ridges into the county "island."

C. Street and Parking Design

The design of public streets should take into account both functional requirements and aesthetic considerations. Functional requirements include, for example, city standards as to widths, radii, grades and design speeds; provision for turning movements, sight distances and intersection controls; and accommodation of nonmotorized transportation facilities as needed. Aesthetic considerations include, among others, roadside views (especially of the creeks), the overall sense of "street scene" and the travel experience. Mitigation of traffic noise impacts is addressed in **Section 12.7**.

Streets should follow the contours of the topography and creeks where possible. The feeling of moving along creeks, around hillsides and through canyons should be enhanced. In residential areas through-traffic and high-speed travel should be discouraged through such measures as vertical and horizontal undulations of streets and street pattern layout. Private roads in attached residential projects are encouraged. Vistas should be retained or enhanced along roadways. Examples include broad views along the creeks, visual breaks in building groups and view



framing by landscaping. Landscaping should be integrated into street design utilizing designated medians, creek-enhancing landscaping, tree and shrub groupings and similar measures as described in **Chapter 13**. Both public and private street designs should be reviewed by the City to ensure the City can safely provide refuse collection service.

Adequate off-street parking should be provided in all development projects. Where possible parking should be distributed into multiple small lots which can be softened by landscaping rather than centralized into large lots. Parking areas should be well-landscaped and screened by landscaping, berms, or fences where needed. On-lot and on-street parking of boats, trailers and recreational vehicles in residential areas should be carefully controlled. On-street parking should not be permitted on arterial, major or collector streets with Class II bicycle lanes.

Traffic signals, signs and street lighting should be provided during the normal course of development. This is to ensure a high degree of traffic safety. Special consideration should be given to providing safe access to schools and parks by children.

11.3 Alternate Transport Modes

Practical alternatives to private automobile travel should be provided for circulation within the community and to outside surrounding areas. Commuting between work and residence is an especially important target for use of alternative transportation modes. Utilization of alternate modes can reduce traffic congestion, conserve energy and minimize air pollution. Included in alternate transport modes are transit, bicycle travel, pedestrian circulation and equestrian movement as shown in **Figure 19**.

A. Transit Service

Transit includes a number of travel alternatives such as bus, tram and paratransit using standard roadways, and light rail utilizing special roadways. On a subregional basis existing express bus service along the I-15 corridor may continue. In addition the median area of I-15 is reserved for construction of HOV lanes which would carry buses and carpool vehicles. These lanes could be ultimately developed with a light rail system. The planned HOV lanes extend along Sabre Springs to a proposed HOV terminal/park-and-ride facility or facilities at the HOV/I-15 interchange. The terminal should provide direct access to the HOV lanes for carpool vehicles and buses traveling to and from the communities of Sabre Springs, Carmel Mountain Ranch and Rancho Peñasquitos. The terminal should accommodate both car and bicycle parking and park-and-ride commuters.

As shown in **Figure 19** two park-and ride facilities are proposed within Sabre Springs; one is within Parcel 14 adjacent to Sabre Springs Parkway and the second is in Parcel 1 adjacent to the HOV access lane. Within the commercially-designated Parcel 14 a child-care center and parking for at least 115 automobiles will be provided. Within Parcel 1 parking for at least 115 automobiles will be provided.

Local transit service within Sabre Springs could be provided by local buses, trams, car and vanpools and/or dial-a-ride service. Planning of local transit services should consider the following:

- Development of connections to the HOV terminal and the Sabre Springs parkand-ride facility. Provision of linkages with transit routes in surrounding communities such as the proposed jitney service in Carmel Mountain Ranch.
- Use of Sabre Springs Parkway and collector streets such as the industrial collector loop for local transit routes within the community.
- Development of transit stops serving high-intensity uses such as commercial centers, industrial parks and schools.
- Provision of transportation services for elderly and handicapped persons.
- Utilization of strategies by major industrial park employers to encourage transit usage such as carpool preferential parking and ride-sharing programs.

B. Bicycle Circulation

A number of bikeways are proposed for internal circulation within Sabre Springs. This internal bicycle system connects into existing or proposed bikeways in surrounding communities contributing to the creation of a subregional network. The primary bikeway system for the community and ties into surrounding areas are shown in **Figure 19** and described further below:

- Class I <u>bicycle paths</u> are facilities separate from roadways and pedestrian ways used exclusively for bicycle travel. There is an existing regional bicycle path extending southeasterly along the Poway Road interchange.
- Class II bicycle lanes are striped or marked lanes in the roadway, or sometimes lanes next to a sidewalk, designated for preferential use of bicycles. The high use bikeways in the planning area are provided as bike lanes in what would be the parking of important streets, with no parking permitted. This includes bicycle lanes in Poway Road, Sabre Springs Parkway (providing bicycle access to Rancho Carmel), the industrial collector loop and the collector system between Poway Road and Peñasquitos Creek. In these cases sidewalks would abut the curb running parallel to the roadway and bicycle lane. One combined pedestrian-bicycle facility will serve the school and park south of Peñasquitos Creek where there is no road. Another combined facility separated from the roadbed will run along the south side of Poway Road from Sabre Springs Parkway westerly, to join with the existing Class I bikeway at the edge of Sabre Springs. This will be a ten-foot-wide combined bikeway and pedestrian path plus a one-foot clearance from adjacent horizontal obstructions in a manner acceptable to the City Engineer. Portions of the bikeway/pedestrian path may be reduced to an eight-foot-wide section where precluded by existing conditions. Due to severe topographic constraints portions of this bikeway will be

constructed as a one-way facility for westbound bicyclists where a further reduced section of between four and six feet will be built. East-bound bicyclists will be directed to ride in the striped bike lane within Poway Road. Turnouts will be constructed at either end of this one-way portion of the bikeway.

• Class III <u>bicycle routes</u> are signed ways within the roadway with no specially marked lane. Bicycle routes are proposed along the southeast collector loop and in several other roads in the planning area to serve relatively high-intensity uses such as schools and parks.

Additional bicycle access from project areas to the primary system should be accommodated on local streets and private roads with no special lanes or signing.

Bikeways should be developed in accordance with City standards. Bikeway crossings at important streets should be clearly defined. A number of key crossings are proposed to be signalized. Bicycle parking areas should be provided in the industrial park areas, in the community and neighborhood commercial centers, at the public schools and neighborhood parks and at the park-and-ride.

C. Pedestrian Travel

A system of sidewalks is proposed paralleling the Class II and Class III bikeways as shown in **Figure 19**. These sidewalks generally follow the curb of the street except for the combined pedestrian-bicycle facility serving the school and park south of Peñasquitos Creek where there is no street. Pedestrian access to Carmel Mountain Ranch is provided by sidewalks paralleling Sabre Springs Parkway. Sidewalks should also be provided along local streets and within projects.

In general, the sidewalks should be held back from the creeks to preserve the habitat areas as intact as possible. However, the development of pleasant vistas along the pathways is encouraged. Passive recreation areas are discussed in **Section 7.2C**.

Two pedestrian pathways are proposed in the creek areas to permit visual access to the public while limiting disturbance to the creek habitats. On the north side a pathway is proposed along Chicarita Creek by Parcels 4 and 7. The pathway on the south side runs along Sabre Springs Parkway, south of Poway Road. Here, near Parcels 23, 24, 25, 27, 28, 29, and 30, a meandering and landscaped pedestrian path will provide views into Peñasquitos Creek. These pathways should tie back into the street sidewalk network.

D. Equestrian Trail

In accordance with the CPO (now SANDAG) regional transportation plan and the City of San Diego's A Plan for Equestrian Trails and Facilities (1975), an equestrian trail is shown paralleling Peñasquitos Creek in Sabre Springs South. This trail would connect into the trail proposed in the Miramar Ranch North Community Plan, in turn tying into a trail running under I-15 westward into Peñasquitos Canyon.

The approximate location of the trail is shown in **Figure 19**. Within the Sabre Springs planning area the trail should be held back from Peñasquitos Creek where preservation of habitat areas is important. Encroachment into the riparian area may be necessary where the path goes under the bridges. The western portion of the trail generally follows the sewer line service road and provides views down and/or across the creek and southern lake. Extension of the trail easterly of the Plan area into the city of Poway could present practical difficulties because of topographic conditions. The westerly extension to Miramar Ranch North follows the existing sewer service road down to I-15.

It is anticipated the equestrian trail will be owned and maintained by the City of San Diego, as part of the natural open space areas. The city of Poway currently maintains the existing sewer road and owns a portion of the property through which the trail will pass. The cities should determine the ownership and maintenance of this Poway portion of the trail. Sections of the trail not already in existence as a service road should be constructed by the City of San Diego.