TRANSPORTATION ELEMENT

Transportation

Transportation facilities provide for the movement of people and goods throughout an area. They also play a major role in shaping urban and regional form by influencing the location of housing, employment, commercial activities, and other land uses. Thus, transportation planning and implementation are of enormous importance in guiding the development of the City and the region.

The Transportation Element provides a framework for developing a comprehensive and coordinated transportation system to meet the varied needs of San Diego's residents, visitors, and businesses. It also serves to ensure that these transportation facilities and services are compatible with, and supportive of, other City and regional developmental goals.

FINDINGS

General

Many federal, state, regional, and local agencies are involved in planning and/or providing transportation within the San Diego area. The principal agencies include the U.S. Department of Transportation, California Department of Transportation (CALTRANS), San Diego Association of Governments (SANDAG), incorporated cities and the county, as well as the San Diego Unified Port District, Metropolitan Transit Development Board (MTDB), San Diego Transit Corporation, and other public transit and paratransit operators. Private railway, airline, trucking, and maritime companies also play a significant role in people and/or goods movement.

The provision of transportation facilities or services typically involves a number of independent agencies, each with their own particular purpose and perspective. A considerable amount of interagency coordination and cooperation is, therefore, essential to ensure a transportation system that will provide for the efficient movement of people and goods by road, rail, water, and air.

Streets and Highways

The planning and/or provision of streets and highways within the San Diego area is mainly the responsibility of CALTRANS, SANDAG, and the cities and county. Their efforts are coordinated through the state and regional transportation planning processes, as well as the general and community plans and capital improvements programs of each of the cities and the county.

The state highway system in San Diego is comprised of freeways, expressways, highways, and arterial streets adopted by the legislature and the California Transportation Commission. CALTRANS is responsible for planning, constructing, operating, and maintaining these facilities.

The Regional Transportation Plan (RTP), adopted and periodically updated by SANDAG, includes a 20-year freeway and expressway system plan for the San Diego region. Figure 1

shows the currently proposed phasing of these facilities based upon forecasted regional growth and projected travel demand.

The street and highway system designated by the City of San Diego and shown on the General Plan Map includes the freeways, expressways, and arterial streets needed to provide a reasonable level of mobility and accessibility within the City, as well as between San Diego and other cities in the metropolitan area. This system reflects the buildout of the urbanized and planned urbanizing areas of San Diego and the surrounding areas as provided for in local general and community plans. It is, therefore, more inclusive than the fund and/or time-constrained state and regional transportation plans.

Each of the City's community plans also contains a Transportation Element supplementing that presented in the General Plan. The streets and highways designated in these community plans include the applicable thoroughfares shown on the General Plan Map, plus a more refined system of streets within the local community. A composite of all presently designated City streets and highways, except local streets, is depicted on the Intercommunity Street System Map adopted by the Council pursuant to Council Policy 600-33. This map is based upon and consistent with the adopted general and community plans.

Travel demand is forecasted to increase substantially over the next 20 years in response to continuing high rates of population, housing, and economic growth as well as projected changes in travel behavior. In short, there will be more people making more and/or longer trips. Despite continuing efforts to provide and encourage the use of alternative forms of transportation, most of this additional travel is expected to occur by private auto. This, in turn, will necessitate the construction of new streets and highways, and improvements in the traffic handling capacity of many existing roads. Without these additional facilities and improvements, roadway congestion could reach unacceptable levels for sustained periods over much of the City's street and highway system. Even with all of the transportation improvements called for in the Regional Transportation Plan, freeway congestion is forecasted to increase substantially as shown by comparing Figures 2 and 3, which respectively indicate the current and projected traffic volumes on these facilities.

A number of designated streets and highways for which there is a projected need will not be required until well into the future; in several cases their specific locations have yet to be determined. These facilities remain vulnerable to actions which may inadvertently preclude the most desirable route location, and thereby increase the ultimate cost of constructing the facility or limit the capacity of the roadway that can be built. There is need, therefore, to adopt route locations and classifications for these facilities as soon as possible, and to implement a program for protecting required rights-of-way.

The auto continues to serve as the principal means of travel in San Diego due, in large part, to its many personal advantages over other forms of transportation. The auto offers unmatched comfort, privacy, and convenience as well as the flexibility to suit individual travel purposes. It is fully demand-responsive, available to go virtually anywhere at any time of day or night along a route of the driver's own choosing. There are few indications that auto use will become less common in the foreseeable future.

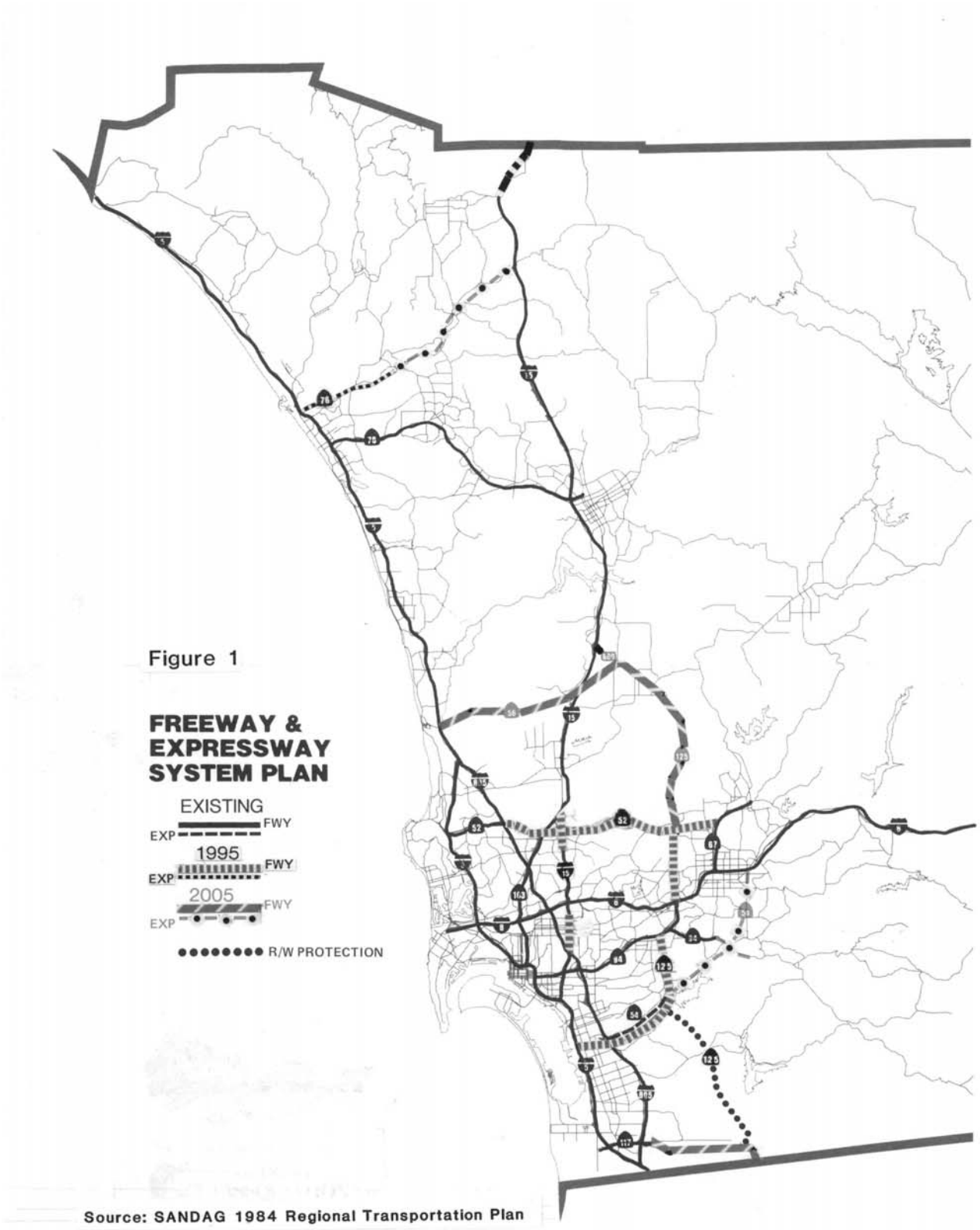


Figure 1
FREEWAY & EXPRESSWAY SYSTEM PLAN
EXISTING
FWY
EXP
1995
FWY
EXP
2005
FWY
EXP
R/W PROTECTION
Source: SANDAG 1984 Regional Transportation Plan

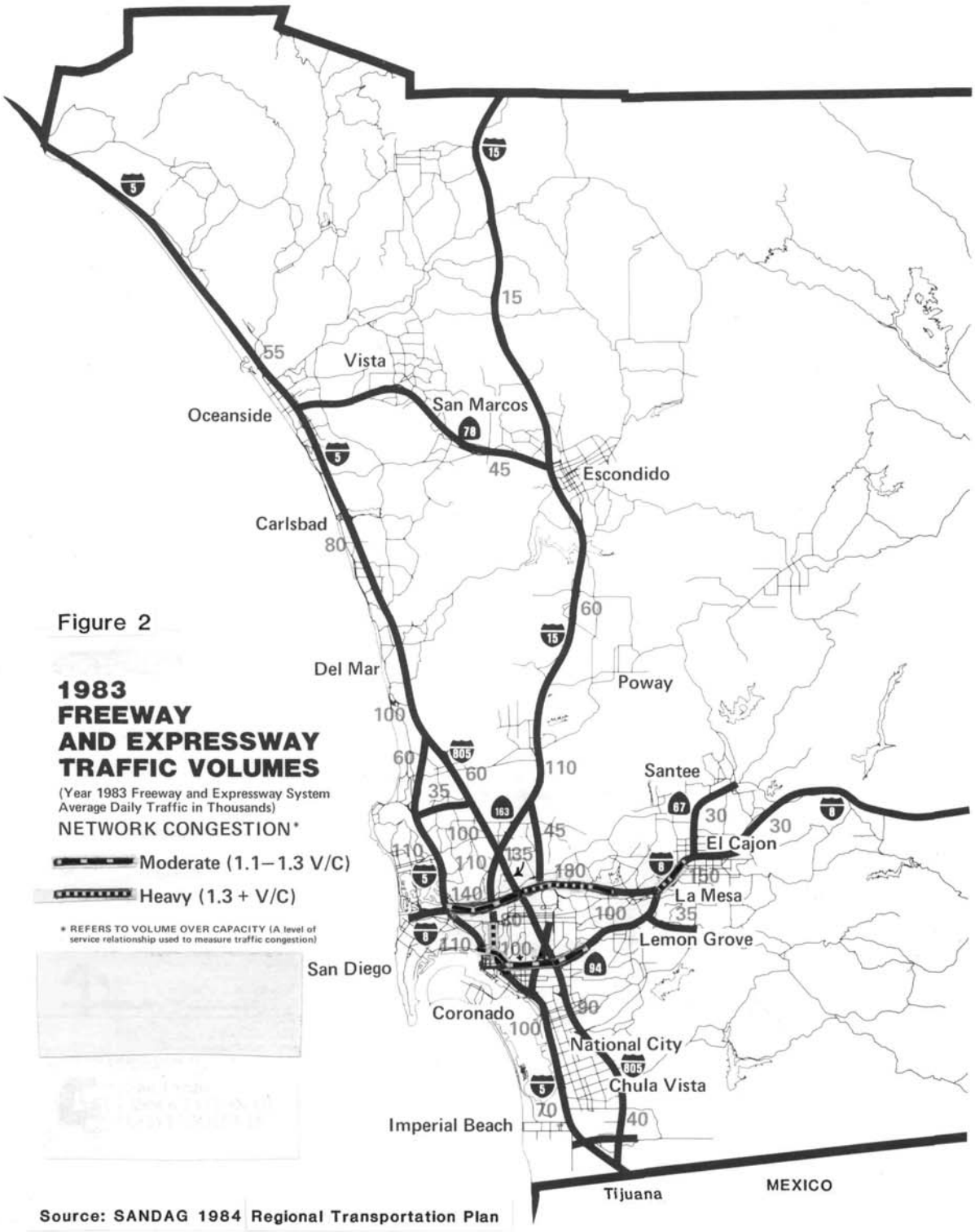


Figure 2
1983
FREEWAY
AND EXPRESSWAY
TRAFFIC VOLUMES
(Year 1983 Freeway and Expressway System
Average Daily Traffic in Thousands)
NETWORK CONGESTION*
Moderate (1.1–1.3 V/C)
Heavy (1.3 + V/C)
* REFERS TO VOLUME OVER CAPACITY (A level of service relationship used to measure traffic congestion)
Source: SANDAG 1984 Regional Transportation Plan
Oceanside
Vista
San Marcos
Escondido
Carlsbad
Del Mar
Poway
Santee
El Cajon
La Mesa
Lemon Grove
San Diego
Coronado
National City
Chula Vista
Imperial Beach
Tijuana
MEXICO

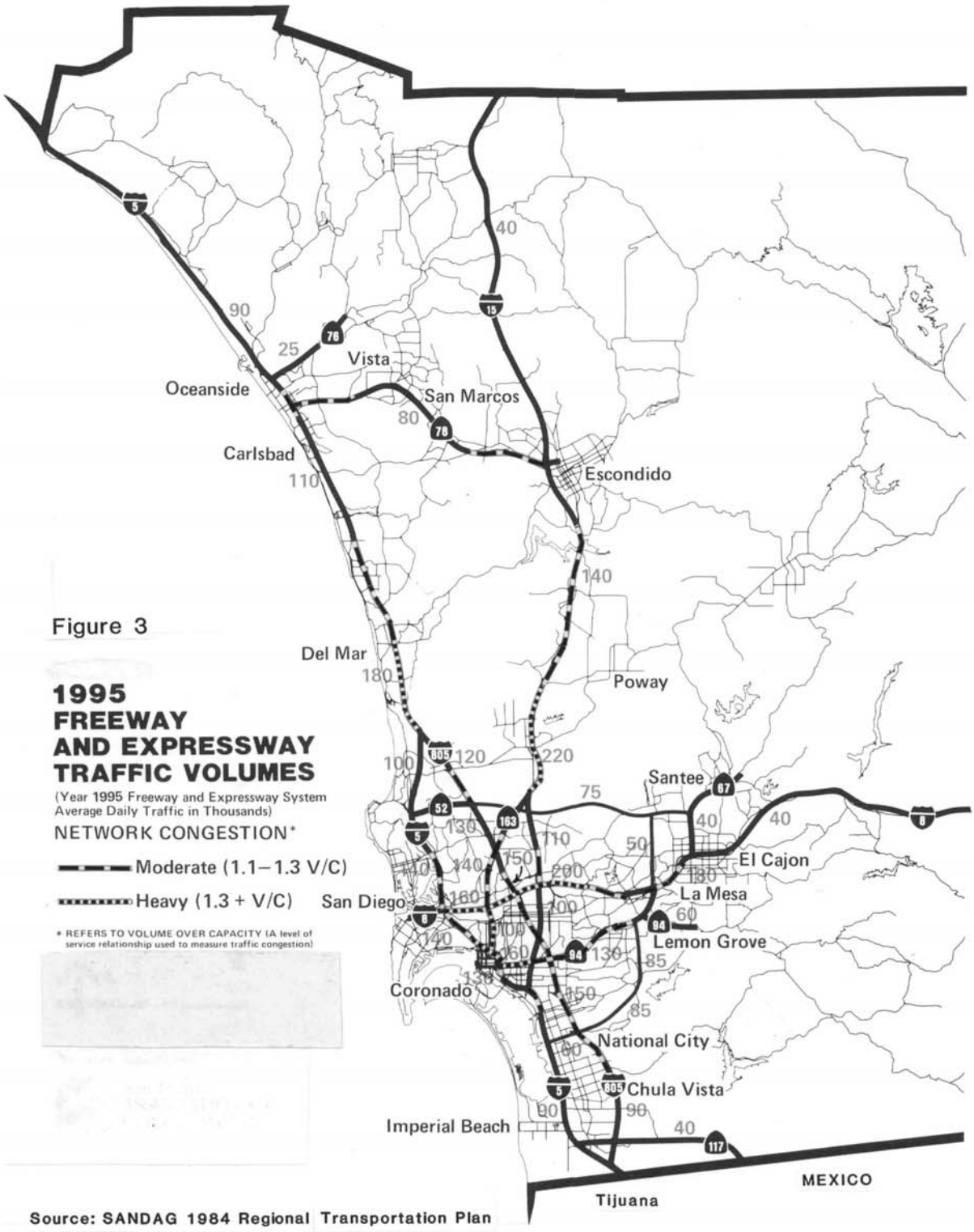


Figure 3
1995
FREEWAY
AND EXPRESSWAY
TRAFFIC VOLUMES
(Year 1995 Freeway and Expressway System
Average Daily Traffic in Thousands)
NETWORK CONGESTION*
Moderate (1.1–1.3 V/C)
Heavy (1.3 + V/C)
* REFERS TO VOLUME OVER CAPACITY (A level of service relationship used to measure traffic congestion)
Oceanside
Vista
San Marcos
Carlsbad
Escondido
Del Mar
Poway
Santee
El Cajon
La Mesa
San Diego
Lemon Grove
Coronado
National City
Chula Vista
Imperial Beach
Tijuana
MEXICO
Source: SANDAG 1984 Regional Transportation Plan

The predominancy of auto travel has not been without attendant costs which are, directly or indirectly, borne by the entire community. The vast extent, as well as the shape and character of the metropolitan area, are largely a consequence of the auto's past and present primacy in transportation. As outlying and peripheral areas continue to be developed, trip lengths and travel times increase correspondingly. Streets and highways are often built at the expense of San Diego's characteristic natural landforms. Much expensive urban land is committed to roadways and parking areas which contribute little to the enjoyment of the City but add to the cost of development. Vehicle traffic significantly increases community noise, creating annoying and sometimes unhealthful living conditions. Motor vehicles consume tremendous quantities of energy, about one-half of the total energy used in the region for all purposes. San Diego's occasionally unhealthful air pollution levels are in large part attributable to auto emissions.

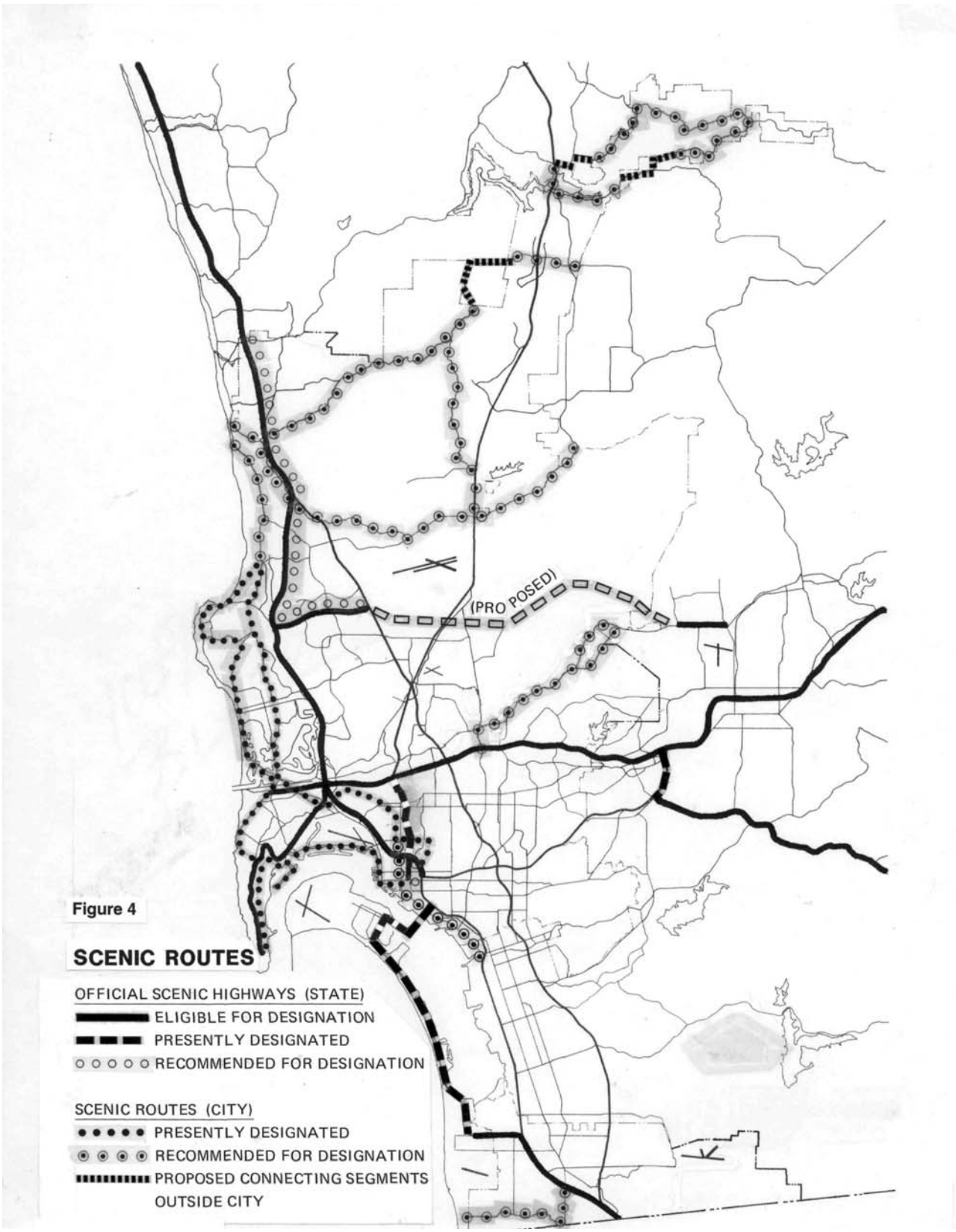
Though substantial, these problems are not insurmountable. Trip distances and travel times can be limited by checking urban sprawl and making communities more self-contained.

Streets and highways can be located and designed to be less intrusive and insensitive. Roadway space and parking demand can be reduced, freeing valuable urban land for more desirable purposes and decreasing development costs. Motor vehicles can be made to operate more quietly, and their fuel efficiency and emission performance improved. Similarly, roads can be improved and traffic controlled to further reduce noise, energy consumption, and air pollution. Use of the auto can become more efficient with greater emphasis on trip planning and ridesharing.

Many of San Diego's streets and highways traverse areas of great scenic beauty, affording pleasant experiences to passing motorists, cyclists, and pedestrians. But, in recent years, the declining aesthetic qualities of streets and highways and their adjacent visual corridors have become a matter of considerable concern. Too often, streets and highways have been located and built without adequate regard for the natural environment, the scenic character of the area traversed, or the aesthetic sensibilities of travelers. Roadside developments, in their competing efforts to call attention to themselves, are often a source of visual degradation, as are overhead utility lines. Further, outdoor advertising has created signs of excessive size and number along many heavily traveled routes and, in some areas, has virtually destroyed scenic views. It is, therefore, important to our image and experience of the City that streets and highways and their adjacent developments be designed in accordance with comprehensive guidelines intended to protect scenic and aesthetic values.

In recognition of the growing need to protect California's scenic beauty, the State Scenic Highway Program seeks to identify and protect scenic corridors adjacent to selected state highways. This program provides for state designation of eligible roads as "official scenic highways," where the local agency so requests and has prepared specific protection plans and implementation programs which must be approved by the state. Typically, such plans and programs feature the application of protective overlay zones that contain provisions relating to grading, landscaping, advertising signs, and undergrounding of utilities.

In addition, the City has, since 1964, maintained a 52-mile scenic route traversing many scenic areas of San Diego. This route was designated to afford scenic views of the community as well


(PRO POSED)
Figure 4
SCENIC ROUTES
OFFICIAL SCENIC HIGHWAYS (STATE)
ELIGIBLE FOR DESIGNATION
PRESENTLY DESIGNATED
RECOMMENDED FOR DESIGNATION
SCENIC ROUTES (CITY)
PRESENTLY DESIGNATED
RECOMMENDED FOR DESIGNATION
PROPOSED CONNECTING SEGMENTS
OUTSIDE CITY

as to link points of visitor interest. However, it should be noted that no special regulatory provisions are presently in force to protect the scenic values attaching to the route. Figure 4 shows a number of routes, or segments thereof, that have scenic qualities worthy of formal recognition and protection, and which are recommended for designation as official scenic highways (state) and scenic routes (city).

Parking

The widespread ownership and use of personal motor vehicles among San Diego residents requires a significant commitment of land and financial resources to the development of parking facilities. To a considerable extent, however, the parking demand associated with certain land uses such as employment, shopping, and recreational activities can be effectively reduced through the provision of alternative transportation services such as transit, ridesharing, and bicycling. This is not the case for residential uses where the need for parking is more closely related to vehicle ownership. A place to store one's vehicle is needed even though alternative transportation may be used for most personal travel.

Much of San Diego's prime urban land is devoted almost exclusively to parking preempting what are generally regarded as more desirable land uses and adding appreciably to the cost of development. Surface lots, parking structures, and on-street parking are dominant visual features in many neighborhoods and detract from the aesthetic qualities of the area. Frequently, shopping centers and employment sites devote more land to parking than to their total building area. Urban land may be conserved through the provision of underground or multi-story parking facilities, but high construction costs make this feasible only in areas where land values are very high.

Competition for parking space is intense in many neighborhoods, particularly in older mixed-use areas where the supply of parking cannot easily be expanded. In situations such as these, comprehensive parking policies, plans, and management programs would help ensure that the available spaces are equitably allocated among competing users.

Much of the City's parking is provided on public streets which adds appreciably to their cost of construction and maintenance. Moreover, on-street parking precludes full use of the right-of-way for travel lanes, thereby limiting the traffic-carrying capacity of the road. This competition for space between parked and moving vehicles within the public right-of-way is a major cause of traffic congestion in many high density areas and along several important City streets.

The type and location of parking provided within a community can noticeably affect its character, as well as the efficiency of its traffic flows. High density areas such as Centre City and La Jolla are often choked with traffic. Areas such as these could benefit greatly from peripheral parking facilities that would intercept the inward flow of vehicles. This would free a significant amount of close-in space for more desirable pedestrian-oriented uses, reduce traffic congestion within the area, and help control the cost of development. Alternatively, improved transit services, ridesharing programs, and bicycle facilities would help reduce auto travel and its associated parking demand.

Transit

Increasingly, mass transit is coming to be recognized as an essential public service which provides important benefits to the entire community. For San Diegans who are unable to drive or do not have use of an auto, transit offers mobility and access to jobs, schools, shopping, and other activities beyond the immediate neighborhood. Transit benefits nonusers as well by augmenting the capacity of the road system during peak traffic hours, reducing the amount of parking needed at major activity centers, and helping to minimize air pollution and energy consumption.

Transit usage in San Diego has fluctuated widely, but remains low compared with other major cities. Ridership increased significantly during the mid-1970s when additional funding permitted a marked improvement in service and a reduction of transit fares. However, patronage declined after 1978 when financial difficulties forced service reductions and fare increases. Ridership is forecasted to more than double over the next 20 years, but transit trips would still account for only a small proportion of total trips in the San Diego region. It appears unlikely that patronage will increase dramatically unless transit services are significantly improved so that they become more competitive with auto travel.

Efforts to increase the effectiveness and efficiency of transit services within the constraints of available funding are reflected in the short-range (five-year) plans prepared and updated annually by the MTDB and several individual transit operators including the San Diego Transit Corporation. MTDB's short-range plan, referred to as the Service Concept Element, coordinates the regional and local services provided by the several fixed-route and demand-responsive systems within its area of jurisdiction. Further, a short-range transit plan for the San Diego region is included in the Regional Transportation Plan adopted by SANDAG, which has the responsibility for overall coordination of short-range planning activities. Figure 5 locates the existing regional transit services and transit centers as well as those planned for implementation between fiscal years 1984 and 1988. Included are the proposed construction of the east urban trolley line from San Diego to El Cajon, additional regional bus routes, and several new transit centers.

The success of the MTDB's South Bay trolley line, which operates between Centre City and San Ysidro, generated renewed local interest in transit and led to the reassessment of long-range alternatives for the regional transit system. Studies undertaken by the MTDB and SANDAG have concluded that a coordinated bus/light rail network appears to be the most logical transit alternative to serve the region over the next 20 years. These studies have culminated in SANDAG's adoption of a revised long-range transit plan, an element of the Regional Transportation Plan, which calls for a greatly expanded light rail network supported by feeder bus service. The rail and busway network is planned to be implemented in phases as shown on Figure 6.

With the increased emphasis on fixed transit facilities, there are accompanying needs to protect rights-of-way for future rail extensions, to designate locations for trolley stations and transit centers, and to coordinate transit facilities with street and highway traffic and other transportation facilities. There may also be opportunities for public and private sector

cooperation in the joint development and use of station and center sites. Moreover, there may be opportunities for private sector participation in funding the construction and operation of transit facilities from which they would derive direct benefit.

The implementation of fixed transit facilities can also create significant opportunities for the development and/or redevelopment of surrounding properties which, in turn, benefit transit by providing an increased ridership market. A systematic evaluation of land use and development potential within fixed transit corridors should be initiated, and proposed changes brought forward for consideration as soon as possible to take maximum advantage of the opportunities presented. Such a study would evaluate the appropriateness of increasing densities, diversifying land uses, revising development regulations such as parking requirements, and other related proposals.

The City of San Diego and MTDB have initiated efforts to prepare transit plans at the same stage of the community planning process that road circulation plans are prepared. Both sets of plans would then be combined within the Transportation Element of each community plan.

Development proposals will also be reviewed to ensure compatibility with the City's general and community plans and SANDAG's Regional Transportation Plan. These efforts are designed to promote coordinated transit and roadway planning and to create a balanced transportation system for serving the needs of the community.

Ten years ago there were only two transit systems operating in the South county area; today there are 16 local jurisdictions, agencies, and transit boards involved in policy formation and implementation for 15 separate transit systems. While the increase in the number of systems has provided for enhanced local control of transit operations, problems have arisen regarding service coordination and the provision of essential inter-jurisdictional transit services. The affected local jurisdictions recently completed a transit organizational structure study which recommends several changes for improving overall effectiveness and efficiency. The principal recommendations call for the MTDB to provide identified regional transit services financed by a specially created pool of state transit funds that are currently allocated to the cities and the county, and for the MTDB to acquire the San Diego Transit Corporation, which is owned by the City of San Diego. Enabling legislation has been enacted to implement the study's principal recommendations.

There is continuing controversy regarding the accessibility of transit services for the elderly, disabled, and other transportation disadvantaged persons. Some assert that all transit services should be fully accessible, while others claim it is more cost-effective to meet the needs of these persons only through specialized paratransit services such as those offered by the San Diego Dial-A-Ride Program. Still others, recognizing that paratransit programs frequently have service restrictions not applicable to transit, advocate a balance between these two approaches. Further complicating the issue is that state law currently requires all new transit vehicles to be lift-equipped; while federal regulations allow greater flexibility, in choosing from among three alternative programs, as to how accessible service is provided.

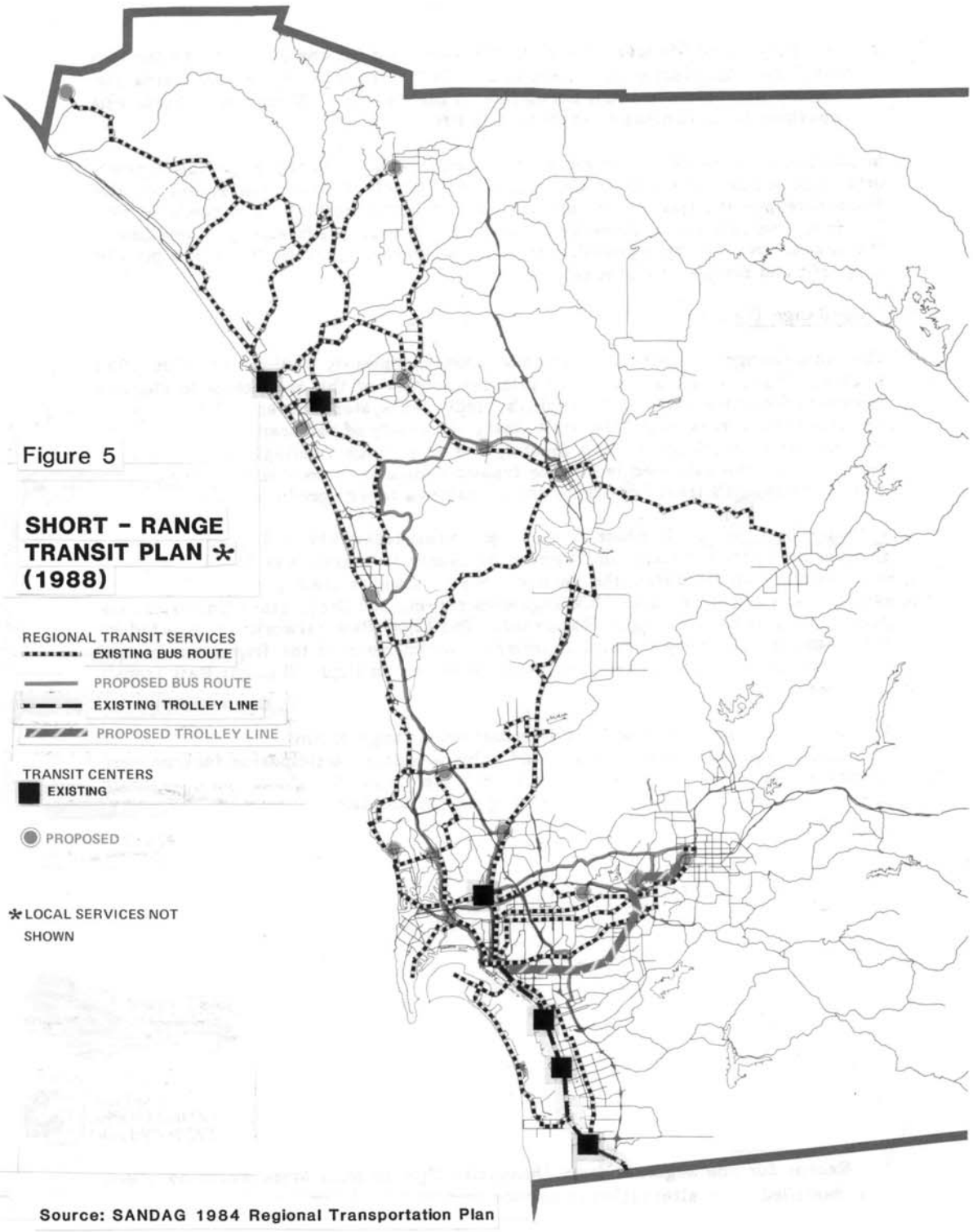


Figure 5
SHORT - RANGE TRANSIT PLAN * (1988)
REGIONAL TRANSIT SERVICES
EXISTING BUS ROUTE
PROPOSED BUS ROUTE
EXISTING TROLLEY LINE
PROPOSED TROLLEY LINE
TRANSIT CENTERS
EXISTING
PROPOSED
*LOCAL SERVICES NOT SHOWN
Source: SANDAG 1984 Regional Transportation Plan

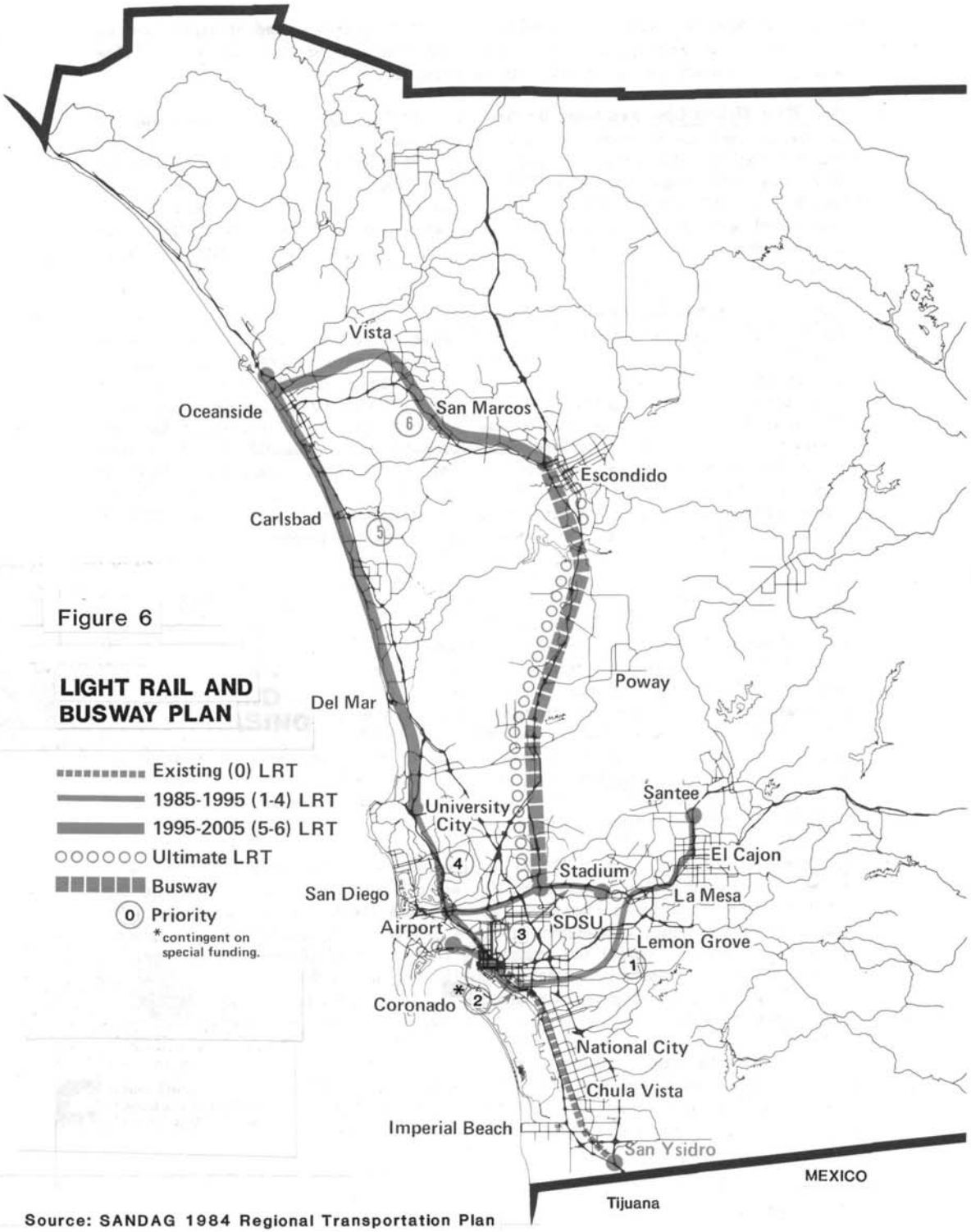


Figure 6

Source: SANDAG 1984 Regional Transportation Plan

Airports

Aviation facilities within the metropolitan area, shown on Figure 7, include San Diego International Airport (Lindbergh Field), four public general aviation airports, three military airports, and a number of recreational and private airfields. Tijuana International Airport, located immediately south of the international border, also provides commercial services used by many San Diego residents and visitors. In addition, there are a number of public and private heliports located throughout the metropolitan area, as shown on Figure 8.

Lindbergh Field, which functions as the air carrier airport for the entire region, is owned and operated by the San Diego Unified Port District. Lindbergh Field is probably the most conveniently sited airport in the country from the standpoint of proximity to the central business district, major activity centers, and the resident population served. However, a number of factors restrict its potential ability to accommodate commercial air travel demand for the long term. The site is limited size, constrained by hills at both ends of the runways, and not directly accessible from the freeway system. It is also bordered by incompatible residential land uses, and flight operations at the airport occur within extremely congested airspace over highly urbanized areas. Several previous efforts to relocate Lindbergh Field have been unsuccessful, however, due primarily to the unavailability of an acceptable replacement site. For the foreseeable future, it appears that Lindbergh Field will remain the region's principal commercial airport. It is therefore imperative that every effort be made to make the airport workable in its present location and compatible with development in the surrounding area.

Other airports of direct local concern because of their noise impacts and potential crash hazards are the Navy's facilities at Miramar, North Island, and Imperial Beach, and the general aviation facilities at Montgomery, Brown, and Gillespie Fields. Comprehensive land use plans have been or will be adopted by the Airport Land Use Commission (SANDAG) for each of these aviation facilities to help ensure the continued usability of the airports and the compatible development of lands within their influence areas.

In the past few years there has been a considerable increase in the number of private heliports within the metropolitan area. While the bulk of helicopter flight operations is still accounted for by the military, heliports are increasingly being developed at area hospitals for emergency patient transport and at industrial/commercial sites for private use. Unless properly located and regulated, helicopter facilities could, of course, create airspace management problems as well as localized noise and safety impacts to adjacent properties. Adequate heliport locational criteria and land use compatibility standards for urbanized areas do not presently exist; however, City staff are currently attempting to develop such criteria and standards.

San Diego's airspace is extremely congested, giving rise to concerns for the safety of aircraft passengers and that of the people and property in the communities below. As depicted on Figures 7 and 8, there are a large number of airports and helicopter landing sites in close proximity to each other, some having overlapping control areas. The accident risk is increased by the broad mix of high-performance military aircraft, large commercial air carriers, small private planes, and numerous helicopters. Moreover, the potential consequences of an accident,

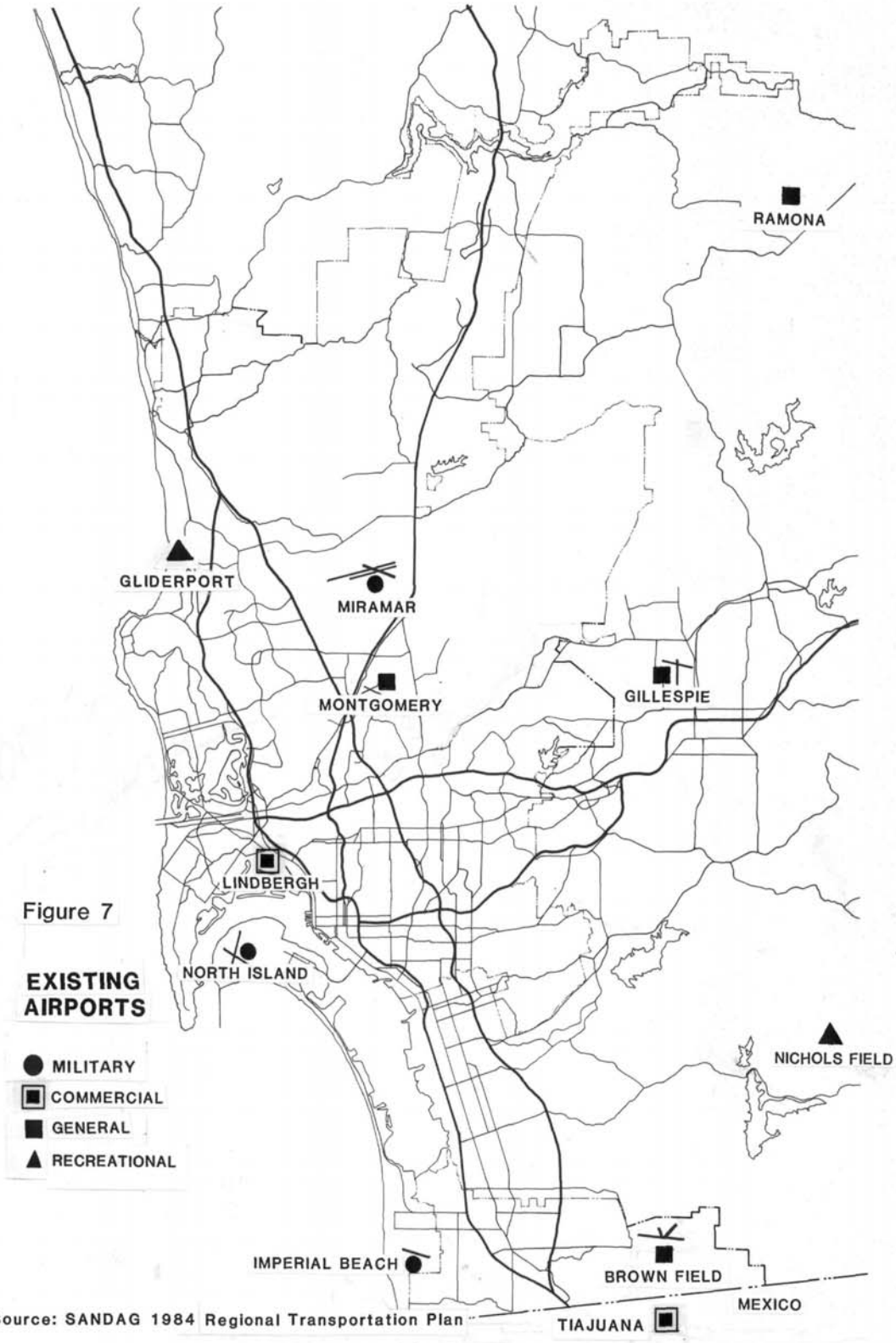


Figure 7

Source: SANDAG 1984 Regional Transportation Plan

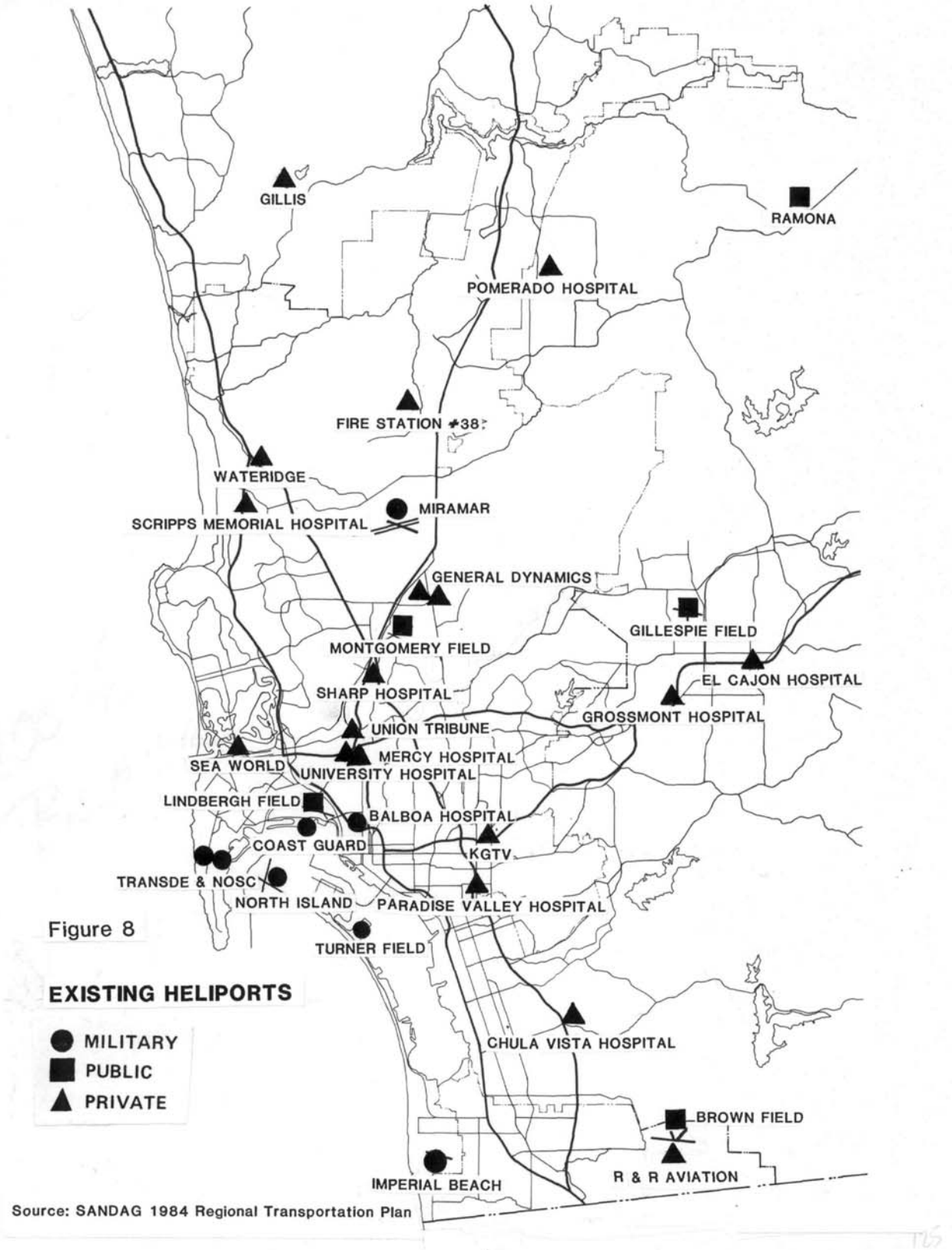


Figure 8

Source: SANDAG 1984 Regional Transportation Plan

the tragic loss of life and property, are significantly increased by the intensity of urban development around these airports and beneath the major airways. These factors demand carefully considered decisions regarding airspace use and management, future development of aviation facilities, and the planning and regulation of land uses.

Airports, because of their associated environmental impacts, are seldom regarded as desirable community assets by the people living and working nearby. Nonetheless, civilian air transportation and military aviation are important components of San Diego's economy. The visitor industry, many business activities, and the personal travel demands of San Diego residents are all tied to the availability of conveniently located commercial aviation facilities. Military aviation not only serves an essential national defense purpose, but provides a number of civilian jobs and secondary economic benefits to San Diego. Viewed in this perspective, the need to protect the continued usability of San Diego's airports takes on increased importance. Urban encroachment, including incompatible types of uses, overly intensive development, and excessive building heights, could constrain airport operations and ultimately force closure and relocation. Lindbergh Field and NAS (Naval Air Station) Miramar appear the most vulnerable in this regard due to the substantial developmental activity occurring nearby.

Contrary to general belief, the Federal Aviation Administration (FAA) has no authority to regulate or control the use of land around airports. That responsibility rests with the local land use agency empowered to adopt and enforce land use plans and zoning regulations. To ensure the safety of aircraft and the efficient utilization of navigable airspace, the FAA advises project sponsors and the local agency whether a proposed development would be an obstruction to air navigation; and, if so, whether the obstruction would create a hazard. However, it is the local agency which must consider the issues of public safety and airport usability, and decide whether and under what conditions to approve projects.

Studies of general aviation activities indicate a growing regional demand for facilities to accommodate the basing of private aircraft and the increasing number of flight operations. Sufficient capacity will be available for the next 20 years if existing airports are fully developed as planned, but additional facilities will be needed beyond that time period. Airport design requirements and inherent environmental impacts are such that few utilizable sites remain within or near the metropolitan area. Therefore, if a new general aviation airport is ever to be developed in San Diego, it would be advisable to find an appropriate location as soon as possible, and to designate and protect the site to ensure its future availability and the compatibility of surrounding land uses.

Bicycles and Pedestrians

Walking and bicycling are both important means of adult and youth transportation in San Diego. Regional travel studies show that pedestrian and bicycle trips each exceed the number of trips made by transit today. Moreover, travel forecasts indicate that nonmotorized transportation will increase significantly and will continue to outpace transit ridership.

The currently designated Regional Bikeway System proposed to accommodate increased bicycle travel is shown on Figure 9. Bicycle facilities within the City of San Diego are designated and

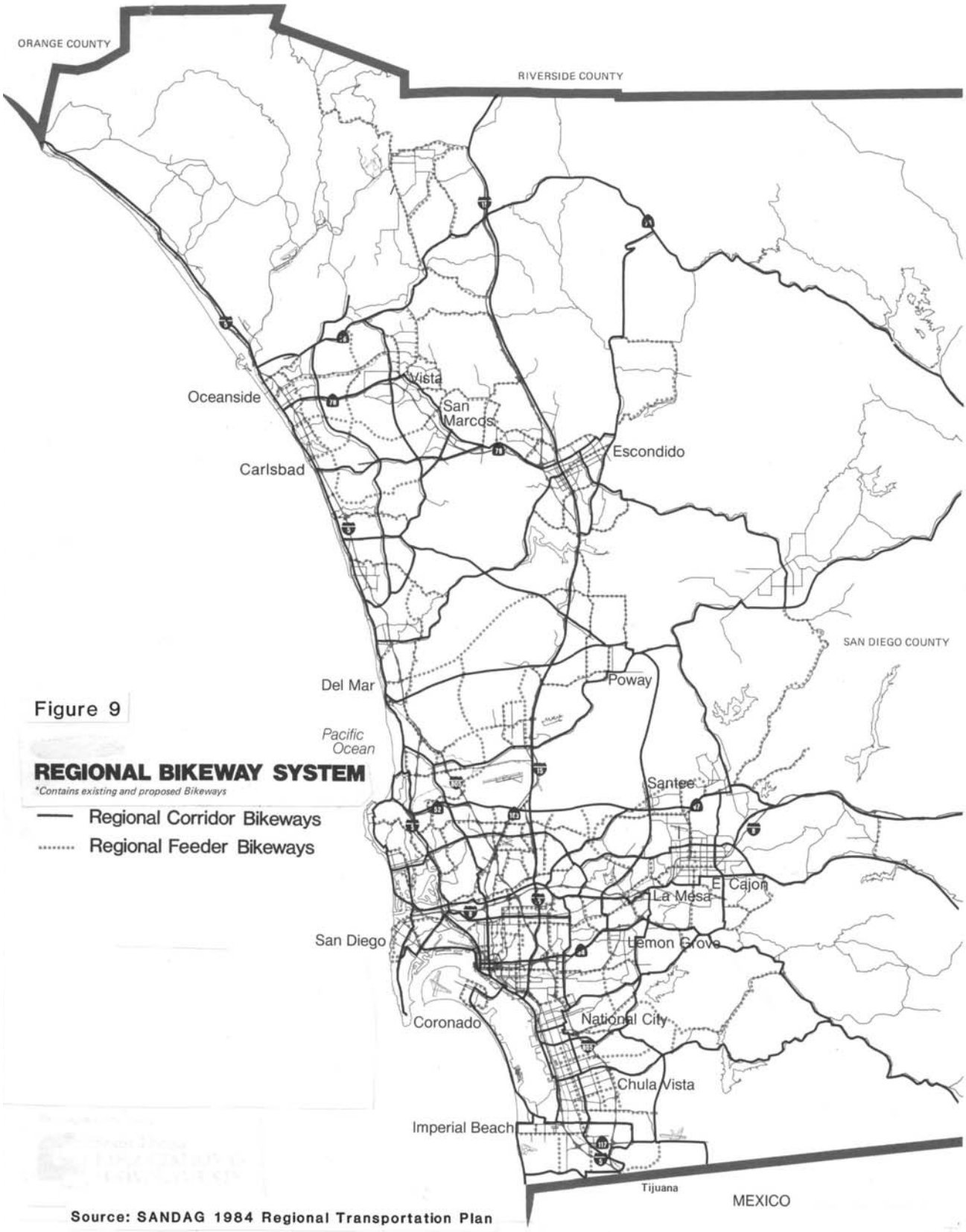


Figure 9

REGIONAL BIKEWAY SYSTEM

**Contains existing and proposed Bikeways*

— Regional Corridor Bikeways

····· Regional Feeder Bikeways

Source: SANDAG 1984 Regional Transportation Plan

shown in each community plan. Additionally, the Council has adopted a Master Bikeway Facility Map which depicts bikeways identified in adopted community plans, those recommended by community planning committees but not yet appearing in adopted plans, and facilities added to provide continuity of travel. This map is presently being updated and will be coordinated with the General Plan and community plans.

The bicycle is a very economical and efficient form of transportation that is highly suited for use in urban areas. It is inexpensive to own and operate, needs little space for use or storage, requires minimal support facilities, conserves energy resources, and generates virtually no noise or air pollution. Pedestrian travel is even more benign, and involves less personal expense and public cost. These transportation modes provide the most economical and compatible mean of accommodating travel demand within high density communities. Combined with the use of transit, they can provide access and mobility throughout most areas of the City and region.

The typically shared use of a right-of-way by motorists, cyclists, and pedestrians frequently gives rise to concerns for user safety. Where feasible, separate portions of the right-of-way are designated for the exclusive use of each mode of travel; even so, crossings and other potential conflicts are sometimes unavoidable. Cyclists are usually separated from motor vehicles by only a line painted on the street, with no physical barrier to prevent thoughtless or accidental intrusions. Conflict may also arise where cyclists and pedestrians travel the same path, as often occurs in recreational areas when parks and beaches are heavily used and on residential district sidewalks. In most cases, these kinds of problems can be resolved through design standards which provide for physically separated facilities and controlled intersections.

The normal range of bicycle and pedestrian travel is somewhat limited. It is important, therefore, that bikeways and pedestrian ways provide the most direct feasible access to neighborhood activity centers, major transportation routes, and other travel destinations. Facilities independent of the street system are sometimes needed because of San Diego's topography, and are particularly useful from the ends of long cul-de-sacs or to provide access through intervening developments, parks, and open space areas.

The lack of secure parking facilities has been identified as a significant barrier to the use of the bicycle for travel or for access to other modes of transportation. Bike lockers or other secure storage facilities cost very little, however, and help reduce the demand for expensive auto parking at many workplaces, shopping areas, and other activity centers. They can also reduce auto traffic congestion and parking demand at major transportation terminals, trolley stations, transit centers, and major bus stops.

Walking within an urban community should be a pleasant and enjoyable experience, an opportunity for healthful exercise and quiet relaxation on the way to work, shopping, or other destinations. Instead, the pedestrian must often contend with annoying vehicular noise and fumes from the adjacent street; narrow and irregular sidewalk surfaces; and a veritable obstacle course of poles, fire hydrants, and trash containers within the public walkway. Additionally, adequate street lighting for nighttime safety is often lacking, especially at bus stops. Moreover, amenities such as shade trees, landscaping, and comfortable seating areas are infrequently provided in commercial business districts where walking is the normal transportation mode.

Rail

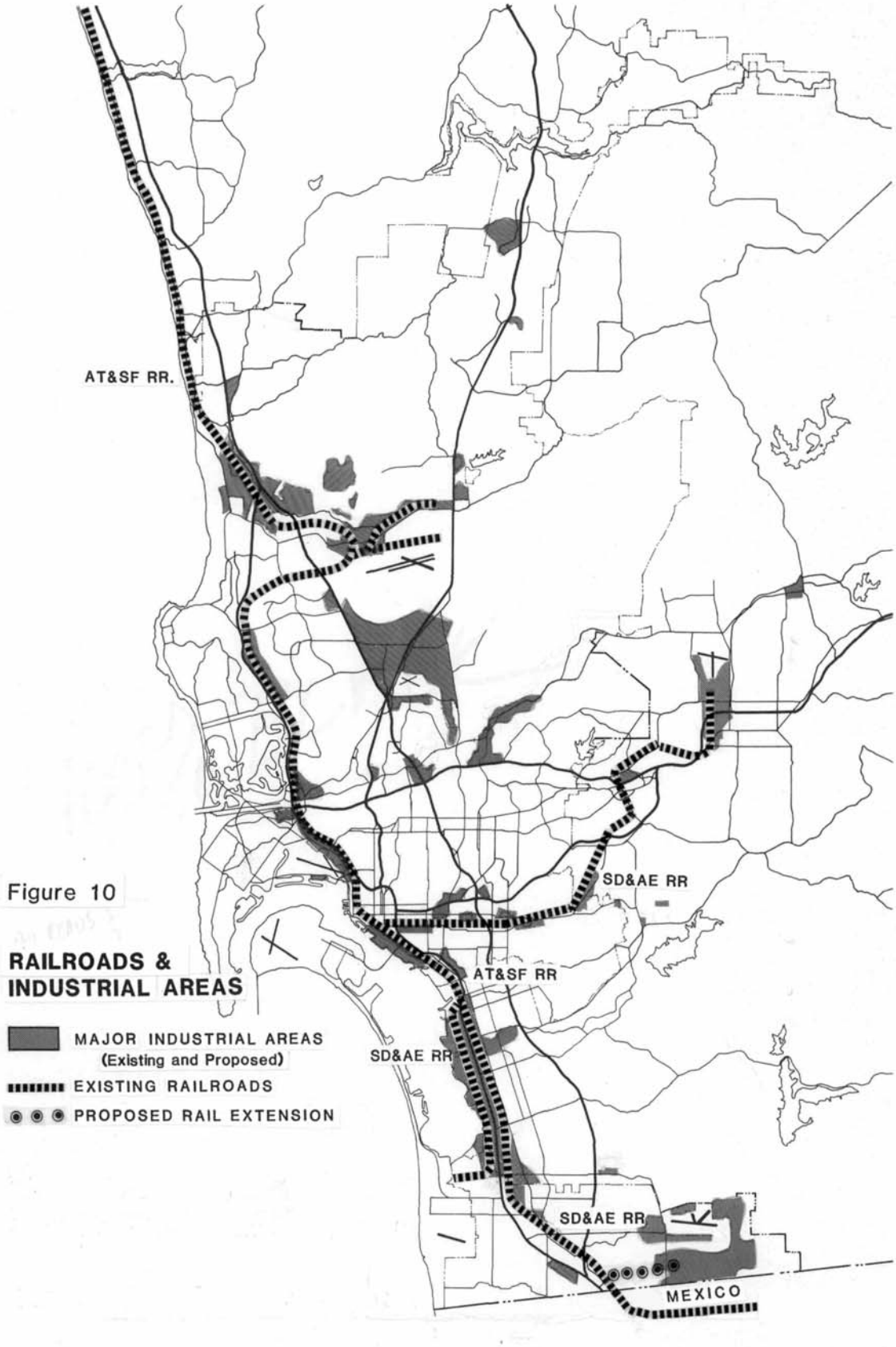
San Diego is served by two railroads, shown on Figure 10 in relationship to major industrial areas. The Atchison, Topeka and Santa Fe main line runs from National City to Los Angeles, where it connects with major continental railroads. The Santa Fe Railway Company provides freight service to the coastal communities along the main line and, from branch lines, serves the inland industrial and farming areas around NAS Miramar, Escondido, and Fallbrook. Amtrak, the national passenger rail company, uses the Santa Fe tracks to also provide passenger service between San Diego and Los Angeles.

The San Diego and Arizona Eastern (SD&AE) main line run from San Diego through Tijuana, Mexico to the Imperial Valley, there connecting with major U.S. and Mexican railways. SD&AE branch lines also run from San Diego to El Cajon and Imperial Beach. This railroad is now owned by the MDTB, which provides freight service through a contract operator. The MTDB uses portions of the SD&AE line to also provide trolley services within the metropolitan area.

Neither of San Diego's railroads provide a high level of service or transport a significant amount of freight. Most freight entering or leaving the region is transported by truck, with resulting impacts on the region's street and highway system. These impacts will likely become more severe as regional growth and development proceed, unless the increased movement of goods can be shifted to rail transport. Intermodal transfer facilities may also need to be developed or improved to accommodate such a shift.

There is, at present, no coordinated long-term plan for the continued development of freight rail transportation in the San Diego region. As a result, potentially desirable rail extensions and freight transfer facilities may be adversely affected, and industrial areas may not be located, designed, and developed so as to gain the benefits of direct rail service. Moreover, where rail and street crossings have not been coordinated in advance, major traffic conflicts can occur. It is important, therefore, that a rail service plan be prepared in advance of or concurrent with the development plans for newly urbanizing areas such as Otay Mesa, where the adopted community plan proposes a rail extension to serve the major industrial area projected near the international border.

Although Amtrak provides daily passenger service between San Diego and Los Angeles with intermediate stops in Del Mar and Oceanside, relatively few people use this intercity service for commuting between the coastal communities in San Diego County. However, roads within this travel corridor are becoming increasingly congested and additional travel capacity will be needed. Special commuter trains providing convenient service to the communities along the Santa Fe line between San Diego and Oceanside could help relieve this congestion without the need for extensive rail or station improvements.


AT&SF RR.
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AT&SF RR
SD&AE RR
SD&AE RR
MEXICO
RAILROADS &
INDUSTRIAL AREAS
MAJOR INDUSTRIAL AREAS
(Existing and Proposed)
EXISTING RAILROADS
PROPOSED RAIL EXTENSION

Figure 10

Maritime

San Diego Bay (which, together with the adjoining tidelands is administered by the San Diego Unified Port District) is one of the few natural harbors along the entire west coast of the United States. Although naval and recreational vessels regularly ply its waters, commercial shipping is negligible and port facilities, though limited, are greatly underutilized. Most goods and materials arrive and leave the region by truck, adding appreciably to highway congestion and maintenance costs. Several factors contribute to this situation, including: proximity to the major port facilities, transportation hubs, consumptive markets, and industrial centers in the Los Angeles area; minimal production locally and in San Diego's backcountry for foreign export; and limited importation of raw materials normally transported by ship.

Yet, San Diego has the potential to become a major shipping center and play an expanded role in international trade with Mexico and other rapidly developing Pacific Rim countries. This view is supported by San Diego's geographic location, the expandability of its port facilities, the vast supply of nearby land available for industrial development, the existence of a large labor force, and the substantial growth projected for the region.

San Diego's magnificent harbor also offers great potential as both a port-of-call and a base for cruise ship operations. Among the factors contributing to this potential are the bay's aesthetic qualities, as well as the proximity of air and rail passenger terminals, convention and visitor accommodations, and the many attractions nearby. Efforts are presently underway to overcome legal and regulatory impediments, and to develop supporting waterfront facilities in order to accommodate cruise line operators.

The waters of San Diego Bay are relatively shallow, thus requiring the dredging of navigable channels and berthing areas for deep draft vessels. Additional deep water facilities will likely be needed to accommodate increased shipping and larger commercial and naval vessels. Although existing commercial shipping facilities are not now fully used, an appreciable increase in trade and shipping will necessitate further capital investment in ship and cargo facilities and improved rail and highway transfer facilities.

A substantial number of military personnel and civilian workers commute from San Diego and other bayside communities to the major naval installations located on the Coronado peninsula. Much of this travel previously occurred by ferry, but service was discontinued when the San Diego Coronado Bridge was opened. Today, the bridge is frequently congested, causing long delays in crossing; and the heavy traffic seriously impacts the community of Coronado. The circuitous route around the southern end of the bay provides the only alternative land access. Consequently, the revival of passenger ferry service between Centre City and Coronado-North Island is now being considered.

Noise

Noise may be conveniently defined as unwanted sound. Loudness is the primary characteristic which influences how sound is perceived as well as its actual effects. Other important factors include frequency, pitch, duration, cycle consistency, the presence of masking sounds in the

environment, and the sound's familiarity. According to the medical profession, excessive noise may result in permanent physical injury and produce undesirable physiological and psychological effects. Noise can cause tension, nervous fatigue, irritability, depression, and hearing loss. Furthermore, a link has been tentatively established between excessive noise and cardiovascular and digestive disorders. Loud or unusual sounds disturb our sleep, impede our concentration, and interrupt our conversation. Thus noise interferes with many of our daily activities and diminishes our productivity and our opportunities for relaxation and leisure time pursuits.

The noise of autos, trucks, buses, and motorcycles emanates from the maze of roads traversing the City. Noise is measured in decibels and frequently expressed in terms of an average Community Noise Equivalent (CNEL). Noise levels of 65 decibels CNEL or greater, the accepted threshold of significance, are found along all freeways and many arterial streets in San Diego. Roadway noise often extends for a considerable distance onto adjacent properties, adversely affecting noise-sensitive land uses and constraining potential urban development.

In efforts to control vehicular noise, performance standards for new motor vehicles have been promulgated under federal law and noise limits for vehicles operated on California's streets and highways have been established by the state. Further, the City of San Diego prohibits the use of certain streets and highways by trucks and other types of vehicles because of noise considerations, and has adopted an ordinance regulating off-road vehicle activity.

Roadway design and vehicle operating characteristics can greatly influence traffic noise levels. Steep grades, high speeds, and impediments to smooth traffic flows are some of the factors that increase vehicular noise. Design features such as spatial buffers and berms, solid walls, or other types of barriers can serve to reduce noise impacts beyond the roadway. Moreover, traffic management techniques including coordinated signal lights, turn lanes, and access controls can minimize noise resulting from frequent vehicular acceleration and deceleration.

Aircraft and helicopter noise is almost as pervasive in San Diego as vehicular traffic noise. While the areas proximate to the City's many airports and helicopter facilities experience greater impacts because of the low altitude of approaching and departing planes, communities located along major airways are, to a lesser degree, also affected by the stream of traffic passing overhead. Large commercial jet aircraft operating out of Lindbergh Field and jet fighters based at NAS Miramar generate extremely high noise levels which constitute San Diego's most serious noise problems.

Lindbergh Field, located in the heart of the City adjacent to the downtown area and other long established communities, has virtually no open land buffer. Consequently, nearby areas are subjected to extreme noise levels ranging up to 80 decibels CNEL. (Individual aircraft, of course. produce substantially greater single event noise levels.) These densely settled, intensely used communities are devoted extensively to noise-sensitive uses. These noise-impacted areas contain: a number of residential neighborhoods; portions of Balboa Park, Mission Bay Park, San Diego Bay, and other outdoor recreation areas; several hospitals and medical offices; a number of schools; and highly populated military training bases. Most of these uses predate the advent of commercial jet aviation and, understandably, did not anticipate the extreme noise levels which

currently extend over a wide area. Numerous older structures lack adequate sound insulation to lessen interior sound levels, while virtually nothing can be done to mitigate aircraft noise impacts on the outdoor environment.

Although the introduction of quieter planes into commercial service and the curfew on night operations have helped reduce noise levels at Lindbergh Field, the airport still requires a variance from the California Airport Noise Standards which establish noise limits for civilian airport operations. These regulations require that civilian airport noise levels be reduced so that residential and other noise-sensitive land uses will not be effected by sound levels greater than 65 decibels CNEL by 1986 and thereafter. Lindbergh Field may be unable to fully comply with this requirement, and thus may need an extended variance to continue operation. As a condition thereof, the state may require the airport operator to implement feasible measures to minimize airport noise levels and their effects upon surrounding areas.

Because of the continuing severity and extent of Lindbergh Field's noise impacts, concerted efforts are needed to identify and implement feasible mitigating measures and to prevent the further development of incompatible land uses in the noise-impacted areas.

Noise from military jet aircraft based at NAS Miramar seriously impacts adjacent communities in the northern portion of the City. Miramar was established before the surrounding areas were developed and, with foresight, incorporated a substantial land buffer. Nonetheless, areas beyond the boundaries of the airport are subjected to aircraft-generated noise levels which range up to 80 decibels CNEL. (Single event noise levels are, of course, substantially greater.) The areas adjacent to the airport are occupied primarily by industrial and commercial land uses which are reasonably compatible with the noise environment. However, the more distant areas are devoted largely to single-family dwellings, many of which were constructed prior to the enactment of requirements for interior sound insulation. Despite the Navy's efforts to control aircraft noise levels and the City's efforts to ensure compatible development within the surrounding areas, Miramar remains a significant source of noise that adversely affects nearby residents.

Noise levels around San Diego's other airports are not nearly as severe or extensive as those at Lindbergh Field and Miramar. However, they do, in varying degrees, adversely affect the communities in which they are located. Therefore, efforts to control noise emanating from these facilities and to mitigate its impacts on surrounding areas need to be sustained.

Noise from watercraft affects only limited areas of the City, primarily Mission Bay Park and its environs. This area is devoted largely to noise-sensitive land and water uses including outdoor recreation, wildlife preservation, and residences. Mission Bay is the principal center for small boating activities, and on busy days the cumulative noise from speed boats, jet skis, and other motorized watercraft interferes with quiet enjoyment of the park and impacts adjoining residences. The problem is particularly severe during the annual hydroplane racing events and their associated practice sessions.

Railroads are not a major noise problem in San Diego because of the limited number of passenger and freight trains, and the restricted speeds at which these operate within the urbanized

areas of the City. Further, the rail lines generally traverse open and/or industrial areas within which there are few noise-sensitive land uses.

Public and private decisions affecting the uses of land in the vicinity of transportation facilities need to take the noise environment into account so that sensitive receptors are not subjected to the adverse effects that excessive noise can create. Ideally, proposed land uses ought to be compatible with current and forecasted levels of noise affecting the site. As indicated in the land use noise level compatibility chart, Table 2, all land uses are considered incompatible with noise in excess of 75 decibels CNEL more sensitive land uses such as residences, parks, and libraries are considered significantly impacted by noise in excess of 65 decibels CNEL.

Where overriding factors compel development within excessively noisy areas, adequate mitigation measures need to be incorporated into the design, construction, and operation of the project.

The California Administrative Code, Title 25, requires that all new multifamily dwellings constructed within a 60 decibels CNEL contour be sound insulated so that interior sound levels are not greater than 45 decibels CNEL. Additionally, the San Diego Municipal Code requires all newly constructed single-family dwellings within an aircraft generated 65 decibels CNEL contour to be sound insulated so that interior noise levels are not greater than 45 decibels CNEL. While these requirements adequately mitigate interior sound levels, they do not attenuate noise in the outdoor environment and, therefore, are not effective methods of achieving compatibility for residential or other land uses where activities are frequently conducted outdoors. Moreover, there is no requirement to ensure that newly constructed single-family dwellings will be adequately sound insulated against excessive roadway noise.

A record of Community Noise Equivalent Levels for the City of San Diego is maintained by the Noise Abatement Division of the Building Inspection Department in accordance with Municipal Code Section 59.5.0206. The Noise Abatement Office reviews all plans for new multifamily dwellings and requires that all City and state noise insulation standards be met. Plans for new single-family dwellings are subject to noise insulation standards if constructed within an aircraft generated CNEL contour of 65 decibels or greater.

The CNEL and similar noise impact measurements that average sound levels over specified time periods are adequate for many purposes. However, they understate the impacts from aircraft, helicopters, and other sources which generate extremely loud but relatively infrequent noise levels. In these circumstances, a measurement of noise impact and land use compatibility standards based upon single event noise levels would be more appropriate.

Generally, there are four basic methods for abating noise impacts: quiet the noise source; isolate the noise source; interrupt the noise path; and, protect the receiver.

Quieting certain noise sources may often be successfully achieved through design or the use of mufflers. Noise generated by aircraft and motor vehicles, for example, may be abated through improved design. This method most directly assigns the responsibility to the generator of the noise and therefore appears to be the most equitable.

Noise impact may also be abated by sufficiently separating or isolating the noise source from potential receivers. Wide buffers along freeways, for example, may reduce the noise impact upon the community. Although sufficient isolation of airport noise is difficult if not impossible in already urbanized areas, this method should be a prime consideration in planning new airports. Development may be restricted around airports, or development easements may be placed upon affected land so as to permit only compatible uses.

The noise path may be interrupted by interposing a dense, nonpermeable barrier. Good sound barriers have reasonable mass, and block the line of sight between the noise source and the potential receiver. This method has little practical value in reducing the noise impact outdoors from aircraft flying overhead.

The noise problem may also be abated by protecting the receiver with acoustical structures, enclosures, or construction techniques. The latter include noise-resistant wall insulation, heavy window glazing, and air conditioning to minimize window openings. However, insulating residences for the purpose of protection against extremely loud noises, such as those generated by aircraft close to an airport, would be expensive and would not achieve an acceptable outdoor auditory environment.

GOALS

- A FLEXIBLE, EVOLVING TRANSPORTATION SYSTEM. THE IMPLEMENTATION OF WHICH RETAINS FULL CONSISTENCY WITH CITY AND REGIONAL DEVELOPMENTAL GOALS.

- A TRANSPORTATION SYSTEM THAT IS IN BALANCE WITH THE TYPES AND INTENSITIES OF LAND USES THAT IT SERVES.

- A COORDINATED, MULTIMODAL TRANSPORTATION SYSTEM CAPABLE OF MEETING INCREASING NEEDS FOR PERSONAL MOBILITY AND GOODS MOVEMENT AT ACCEPTABLE LEVELS OF SERVICE.

- A TRANSPORTATION SYSTEM THAT IS SAFE, FUNCTIONAL, EFFICIENT, ENVIRONMENTALLY ACCEPTABLE, AND AESTHETICALLY PLEASING.

- ASSURED REVENUES TO COVER THE COSTS OF CONSTRUCTING, OPERATING, AND MAINTAINING PLANNED TRANSPORTATION FACILITIES AND PROVIDING NEEDED TRANSPORTATION SERVICES.

- A CONVENIENT, REGIONALLY COORDINATED TRANSIT SYSTEM THAT IS RECOGNIZED AS AN ESSENTIAL PUBLIC SERVICE BECAUSE OF ITS PERVASIVE SOCIAL ECONOMIC, AND ENVIRONMENTAL BENEFITS.

- A STREET AND HIGHWAY SYSTEM WHOSE COMPONENTS ARE CONSISTENT WITH THE CHARACTER OF THE AREA TRAVERSED AND SUITABLE FOR THE TYPE AND VOLUME OF TRAFFIC SERVED.

- AVAILABILITY OF PARKING FACILITIES SUFFICIENT TO MINIMIZE, IF NOT ELIMINATE, ANY MEASURABLE CONTRIBUTION TO TRAFFIC CONGESTION.

- REALIZATION OF THE PORT OF SAN DIEGO'S POTENTIAL AS A COMMERCIAL SHIPPING CENTER.

- REDUCTION OF TRANSPORTATION NOISE TO A LEVEL THAT IS TOLERABLE AND NO LONGER CONSTITUTES A THREAT TO THE PUBLIC HEALTH AND GENERAL WELFARE.

GUIDELINES AND STANDARDS

Streets and Highways

Design standards for each type of City street have been adopted by the City Council and incorporated into Council Policy 600-4. These standards, shown in Table 1, are mainly applicable to new construction, but are also used as guides whenever improvements are made to existing streets and highways.

- Design street and highway facilities to accommodate forecasted travel demand at acceptable levels of service (service level C or above).

- Evaluate proposed streets and highways on the basis of demonstrated need and consistency with growth management goals.

- Where appropriate, include rights-of-way for designated high-occupancy vehicle lanes and/or rail transit lines in new urban freeways and expressways.

- Incorporate transit, rideshare, bicycle, and pedestrian facilities in the design plans for new streets and highways and, where feasible, in the plans for improving existing roads.

- Give priority to bus and rail transit vehicles in the design, improvement, and operational management of streets and highways.

- Emphasize aesthetics and noise reduction in the design, improvement, and operational management of streets and highways.

- Observe the following guidelines, where consistent with safety standards, in the location and design of new streets and highways and, to the extent practicable, for improvements to existing facilities:

    - Establish general road alignments and grades that respect the natural environment and scenic character of the area traversed.

    - Utilize curvilinear alignments and landscaped median strips to reduce visual monotony.

- Provide adequate rights-of-way for scenic lookouts, and obtain scenic easements to ensure the preservation of scenic views.

- Preserve trees and other scenic features in the median and along the roadside.

- Avoid or minimize disturbances to desirable natural landforms.

- Contour manufactured slopes to blend with the natural topography.

- Promptly replant exposed slopes and graded areas to avoid erosion and unsightliness.

- Employ vegetational screens to mask objectionable views.

- Select landscape designs and materials on the basis of their aesthetic qualities, compatibility with the surrounding area, and low water demand and maintenance requirements.

- Utilize signs, lights, furniture, and other accessories suitable for their location.

- Place utility lines underground wherever possible, and sensitively site those that must be placed above ground.

• Increase the efficiency of existing streets and highways by adequate maintenance and appropriate design and operational improvements. A principal objective should be to minimize heavy traffic congestion (level of service E or below) and to increase overall average vehicle speeds.

• Improve traffic signal operations by optimizing signal timing; interconnecting signalized intersections along arterial streets; and installing computerized master traffic signal control systems in intensively utilized areas.

Parking

• Manage on-street parking in intensively utilized areas to ensure the equitable allocation of parking among competing users. In residential areas give priority to local residents. In Centre City and in other major employment areas, give priority to rideshare vehicles.

Transit

• Continue working with transit operators to determine the type and level of transit services to be provided within San Diego, and to coordinate such services with the transit system.

• Coordinate the location and design of major development projects with both current and planned transit facilities and services.

TABLE 1
Street Design Standards

Functional Street Classification	Number Of Lanes	Approx. Max. ADT	R.O.W. Widths	Curb-to-Curb (or Other) Width	Median Width	Shoulder Width	Minimum Radius or Curve	Maximum Grade	Minimum Design Speed
Primary Arterial	6	50,000	122'[2]	102'	14'	8'	1,000'	7%	55
	4	30,000	98'[2]	78"	14'	8'	1,000'	7%	55
Major Street	6[3]	40,000	122'[4]	102'	14'	8'	850'	7%	50
	4	25,000	98[4]	78'	14	8'	850'	7%	50
	4	20,000	92'	72'[5]	12'	8'	850'	7%	50
Collector Street	4	10,000	84-92'[6]	64'-72'[7]	0-12'	8'	500'	12%[8]	35
	2	5,000	60-70'[9]	40'-50'[9]	0'	8'-13'	500[10]	12%[8]	30
Local Street [14]									
Industrial	2	2,000	64'	44'	0'	10'	200'	8%	
Residential	2	2,200	60'	40'	0'	8'	100'	15%	
	2	1,200	56'	36'	0'	8'	100'	15%	
	2	700	52'[12]	32'[12]	0'	8'	100'	15%	
	2	200	50'[12]	30'[12]	0'	8'	100'	15%	
Bikeways									
Separated Facility	2		14' to 16'	8'-12[13]	0'	2'-3'	15'	7%	
In Roadway-Painted[14]	2		[15]	5'-8'	0'		15'	Grade of St.	
Alley	2		20'	20'	0'		100'	15%	
Sidewalk	2[16]			4'-5'[17]	0'			Grade of St.	

1. Includes, but not limited to, horizontal and vertical curves, intersection and driveway sight distance. Design practice shall be in accordance with current CALTRANS Design Manual.
2. Full control of access from abutting property.
3. Can be used where property owners elect and are authorized to construct additional lanes to convert a four-lane primary arterial to a major street in order to gain access.
4. Access and parking control at critical locations. Additional width required for double left-turn lanes.
5. Travel lanes are 11'.
6. Ninety-two feet (92') required where left turns are needed.
7. Travel lanes 12', except at locations with left-turn lanes where travel lanes are 11'.
8. Eight percent (8%) in commercial and industrial areas. No fronting residential property permitted in areas where the grade is more than 10%.
9. Seventy foot (70') R.O.W. and 50' curb width in industrial areas.
10. If the grade is 10% or less, a minimum curve radius of 375 feet may be used if there are no fronting residences in the area. If the grade is 6% or less, the minimum curve radius is 375 feet, or 300 feet if super elevation is provided.
11. Frontage roads or other single loaded streets: R.O.W. and curb widths may be reduced in residential areas to provide streets of 47/32' (5,000 ADT), 43/28' (1,00 ADT) and 41/26' (700 and 200 ADT). R.O.W. may be reduced 5' in commercial or industrial areas with no decrease in curb width.
12. Where no parking will be allowed, curb to curb width may be reduced to 24' with right-of-way width of 44' (R.O.W. 34' where sidewalks are provided separately from streets).
13. Twelve foot (12') facility were substantial amount of traffic volume is anticipated (e.g., near schools).
14. One-way traffic on each shoulder, no parking. Separation from traffic lane consists of 6" white line.
15. Requires either parking prohibition or additional 5' R.O.W. and 5' paving for each lane, with parking retained. Normally, parking prohibition option will be used only when abutting property is either nor developable or does not front street.
16. Sidewalk on each side except on single loaded streets.
17. Minimum clear unobstructed width – 4' residential areas, 5' in commercial and industrial areas and on all four or six lane streets (excludes curb top width, fire hydrants, light poles, transformers, etc.).

** Note – These are standards applicable primarily to newly developing areas without unusual terrain problems. In different terrain and in older developed areas where flexibility is required, deviations may be approved by the City Engineer.*

Airports

- Do not permit general aviation activity to adversely affect commercial aviation use and safety at Lindbergh Field.

- Give air safety the highest priority in the planning and management of the airport system.

- Evaluate proposed airports and heliports on the basis of demonstrated need; effect on air safety; and their noise, safety, and other impacts on surrounding land uses.

Bicycles And Pedestrians

The City of San Diego uses the guidelines and standards developed by CALTRANS for the planning and implementation of bikeways. These general planning criteria provide that when planning for street and highway improvement, consideration should be given to the bicycle as a potential part of the traffic mix, whether or not the road includes a designated bikeway. The City has three bikeway classifications, standards for which are summarized in Table 1.

Additional guidelines and standards for pedestrian paths and sidewalks are presented in the Urban Design Element.

- Include in community plans a system of bicycle and pedestrian facilities of a type appropriate to the area to be served.

- Coordinate community bicycle and pedestrian facilities in a citywide and/or region-wide network for continuity of travel.

- Concentrate bicycle and pedestrian facilities in areas containing the largest number of prospective users.

- Coordinate bicycle and pedestrian facilities with other modes of transportation. Emphasize safe convenient access, facilities for secure bicycle storage, and, where possible, bicycle carry-on service.

- Design and maintain bicycle and pedestrian facilities for user convenience and safety.

Maritime

- Coordinate the location and design of passenger ferry terminals with other components of the transportation system to ensure convenient multi-modal access and adequate parking.

Noise

Standards for land use compatibility with various noise levels have been adopted by the Council and are presented in Table 2. These standards are based upon accepted thresholds of significance

and apply to noise from any source. They are used by the City in land use planning and zoning, in the regulation of development, and in conducting environmental reviews.

- Consider both current and projected noise levels in determining land use compatibility.

- Design and manage transportation facilities to minimize their noise impact on surrounding uses.

RECOMMENDATIONS

The following recommendations for Council action relate to those aspects of transportation planning and implementation over which the City of San Diego has jurisdictional authority and responsibility.

Streets and Highways

- Protect rights-of-way for designated future streets and highways through all practicable means.

- Seek addition of the following prioritized list of designated future freeways and expressways to the Regional Transportation Plan and/or the state highway system, and urge the timely adoption of route locations to facilitate protection of needed rights-of-way:

    - Route 52 from Santo Road to State Route 67.

    - Route 680 from Interstate 15 to State 56.

    - Route 125 from State Route 54 to State Route 117.

TABLE 2
Land Use-Noise Level Compatibility Standard

	Land Use	Annual Community Noise Equivalent Level in Decibels 50	55	60	65	70	75
1	Outdoor Amphitheaters (may not be suitable for certain types of music).						
2	Schools, Libraries						
3	Nature Preserves, Wildlife Preserves						
4	Residential-Single Family, Multiple Family, Mobile Homes, Transient Housing						
5	Retirement Home, Intermediate Care Facilities, Convalescent Homes						
6	Hospitals						
7	Parks, Playgrounds						
8	Office Buildings, Business and Professional						
9	Auditoriums, Concert Halls, Indoor Arenas, Churches						
10	Riding Stables, Water Recreation Facilities						
11	Outdoor Spectator Sports, Golf Courses						
12	Livestock Farming, Animal Breeding						
13	Commercial-Retail, Shopping Centers, Restaurants, Movie Theaters						
14	Commercial-Wholesale, Industrial Manufacturing, Utilities						
15	Agriculture (except Livestock), Extractive Industry, Farming						
16	Cemeteries						

COMPATIBLE
The average noise level is such that indoor and outdoor activities associated with the land use may be carried out with essentially no interference from noise.

INCOMPATIBLE
The average noise level is so severe that construction costs to make the indoor environment acceptable for performance of activities would probably be prohibitive. The outdoor environment would be intolerable for outdoor activities associated with the land use.

- Support designation of the following state highways as nonchargeable interstate highway routes in order to expedite their funding and timely completion:

  - Route 15 from Interstate 5 to Interstate 8.

  - Routes 117 and 125 from Interstate 5 to the Otay Mesa Border Crossing.

- Direct staff to include within the North City/San Dieguito sphere of influence study a reevaluation of the appropriate road network for the study area, including alternative corridor alignments for Route 728 from Interstate 5 to Route 680.

- Direct staff to identify implementable alternatives to relieve existing and projected traffic congestion, especially in the east-west travel corridors between State Routes 54 and 94.

- In programming capital improvements, give priority to projects associated with heavily congested, high volume arterial streets in urbanized areas.

- Support metering of urban freeway ramps, including preferential bypass lanes for buses and rideshare vehicles, provided that adjacent City streets would not be adversely affected.

- Support federal and state programs to improve motor vehicle fuel efficiency and emission performance as strategies to conserve energy and improve air quality.

- Support ridesharing to relieve traffic congestion, reduce parking demand, conserve energy, and improve air quality. Give priority to facilities and services which encourage ridesharing for work and school trips in intensively utilized areas of the City.

- Authorize preparation and implementation of comprehensive guidelines and standards to encourage aesthetic considerations in urban street and sidewalk design and complementary improvements on adjacent private property.

- Authorize preparation of a program to obtain official scenic highway designation on recommended state highways, to designate scenic routes along proposed City thoroughfares, and to adopt measures to protect aesthetic qualities within scenic corridors.

Parking

- Authorize preparation and implementation of comprehensive parking policies, plans, and management programs for Centre City and other intensively utilized areas where appropriate.

- Establish public and encourage private off-street parking facilities to serve intensively utilized areas.

- Prohibit on-street parking in intensively utilized areas and along heavily traveled routes where traffic cannot otherwise be accommodated at an acceptable level of service.

- Provide and/or encourage a planned system of low-cost park-and-ride lots to be located at convenient community centers, along heavily traveled roads, and at bus and rail transit stations in order to facilitate and encourage transit use and ridesharing.

Transit

- Encourage and support intensified efforts to greatly increase transit patronage; thereby reducing traffic congestion, parking demand, energy consumption, and air pollution.

- Support the improvement of bus transit service at the fastest rate consistent with demonstrable travel demand and available capital and operating funds.

- Support efforts to increase the effectiveness and productivity of transit services.

- Support coordination of regional, local, paratransit, and rural transit services to facilitate efficient and convenient travel throughout the region.

- Support establishment of regionally significant transit routes based on travel demand, without regard to district or jurisdictional boundaries.

- Authorize studies, in cooperation with SANDAG, MTDB, and SDTC to identify, designate, and maintain preferred bus transit service corridors.

- Support the extension of transit services to newly developing areas as early as practicable.

- Support efforts to increase accessible transit services and facilities for the elderly, disabled, and other transportation disadvantaged persons. Demand-responsive services should be provided when accessible fixed-route transit cannot efficiently meet passenger needs.

- Protect rights-of-way for designated rail transit routes and stations through all practicable means.

- Support expansion of the rail transit system at the fastest rate consistent with demonstrable travel demand and available capital and operating funds.

- Authorize revision of the Transportation Element of the Centre City Community Plan to better accommodate rail transit service, as well as to improve overall access and mobility within the downtown area.

- Review and, if appropriate, modify land use designations, zoning patterns, and development policies in the vicinity of fixed transit facilities to obtain the maximum developmental benefits derivable from such facilities. Give priority to the review of areas around bus and rail transit stations.

Airports

- Support development of commercial aviation facilities to adequately accommodate forecasted air passenger and cargo demands.

- Support continued designation of Lindbergh Field as the region's commercial air carrier airport. If at some time in the future all or a major portion of NAS Miramar is no longer required for national defense, pursue aggressively the use of that facility as the region's air carrier airport.

- Support establishment of a Group 1 Terminal Control Area at Lindbergh Field to help ensure the safest and most effective management of San Diego's congested airspace.

- Improve highway and transit access to the terminal areas of Lindbergh Field, and support development of adequate airport parking facilities.

- Support adoption of airport master plans and comprehensive land use plans for Lindbergh Field and other airports in the San Diego area.

- Provide general aviation facilities to accommodate forecasted general aviation demand within the limitations of federal and state funding, user fees, and environmental constraints.

- Proceed with development of Montgomery and Brown Fields in accordance with their respective master plans.

- If deemed appropriate, designate and protect a future general aviation airport site to ensure its continued availability and compatibility with surrounding land uses.

- Protect public use and military airports from encroachment by incompatible land uses that limit the continued usability of the airport facilities or unduly constrain the orderly development of air transportation.

- Protect NAS Miramar from incompatible encroachment, both to support its national defense mission and to preserve the potential use of this facility as the region's air carrier airport.

- Limit building heights and land use intensities beneath airport approach and departure paths to protect public safety.

- Develop and encourage bicycle and pedestrian facilities as integral parts of the transportation system, thereby providing alternatives to automobile travel.

- Encourage bicycling and walking through educational, marketing, and promotional programs.

- Require convenient pedestrian and bicycle access and secure bicycle storage facilities in all major activity centers such as schools, parks, libraries, shopping centers, office buildings and employment centers.

Bicycles and Pedestrians

- Prohibit on-street parking where necessary and appropriate to provide safe bikeways.

- Give priority to the development of bicycle and pedestrian facilities which serve basic transportation (versus recreational) needs in order to maximize the positive impacts on air quality and energy conservation.

- Authorize preparation of plans to improve pedestrian circulation within existing communities, with such plans to be implemented in cooperation with adjoining property owners and public transit operators, where appropriate.

Rail

- Support cost-effective, environmentally sound passenger rail service between San Diego and Los Angeles, and encourage physical and operational improvements to reduce travel times.

- Support improvement of transfers between passenger rail and feeder transit services.

- Support improvement of commuter rail service in the coastal corridor between San Diego and Oceanside.

- Support continuation and improvement of freight service from San Diego to Los Angeles, Imperial County, and Mexico.

- Authorize preparation and implementation of plans, in cooperation with railroad operators, for providing freight service to major industrial areas in San Diego.

- Protect rights-of-way for planned rail extensions through all practicable means.

- Support development and improvement of facilities for the efficient transfer of goods among rail, water, air and truck transportation modes.

Maritime

- Urge the U.S. Army Corps of Engineers to maintain and improve the navigable waterways of San Diego Bay to ensure their continued usability by commercial and military shipping.

- Support an aggressive program to increase international trade to more productively utilize San Diego's port facilities.

- Urge the San Diego Unified Port District to improve and expand ship and cargo facilities so as to keep pace with growth in trade and shipping.

- Support development and marketing of facilities to accommodate a major cruise ship industry in San Diego.

- Support the reinstitution of passenger ferry service between San Diego and Coronado-North Island.

- Urge the San Diego Unified Port District to maintain and improve rail, highway, transit, and bicycle access to the marine terminals and surrounding employment areas.

Noise

- Ensure that land use designations, zoning, and specific project development plans are consistent with adopted land use noise level compatibility standards.

- Ensure that mitigation measures, needed to achieve compatibility with the noise environment, are made enforceable conditions of project approvals.

- Eliminate, as soon as practicable, incompatible land uses in areas adversely impacted by aviation noise by reducing noise levels, converting land uses, or by successfully mitigating the noise impact to noise-sensitive uses.

- Encourage the San Diego Unified Port District to undertake an Airport Noise Control and Land Use Compatibility (ANCLUC) study to determine all feasible noise mitigation measures for Lindbergh Field.

- Vigorously pursue the implementation of all feasible noise mitigation measures at Lindbergh Field to minimize its adverse impacts upon surrounding communities.

- Increase enforcement of restrictions on off-road vehicle use to eliminate this source of noise from local neighborhoods.

- Authorize a planning study to determine whether new residential uses should be sound-attenuated in noise environments above 60 decibels CNEL.

- Authorize formulation and implementation of land use compatibility standards, including single event noise levels.

Financing

- Aggressively pursue all potential sources of funding, including private sector participation to finance the construction, operation, and maintenance of needed transportation facilities and services. Give priority to maximizing federal and state transportation funds to the San Diego region, and to increasing local flexibility and discretion in the use of such funds.

- Support legislation to increase state highway revenues as needed to maintain and rehabilitate the existing state highway system, to match all available federal highway funding, and to fund all new construction and right-of-way programs identified in current state and regional transportation plans and improvement programs.

- Support measures to increase local street and highway revenues as needed to fund all road reconstruction, operational, and maintenance cost; the construction of new roads in existing developed communities; and along with developer contributions, road construction in newly developing areas.

- Support legislation to increase transportation user and benefit fees, and to index such fees to keep pace with inflation, in order to provide the additional revenues for needed transportation facilities and services.

- Support measures to develop and implement a continuing funding program, including private sector participation and an equitable fare structure, to fund the construction, operation, and maintenance of transit facilities and services.

- Support the evaluation and implementation of innovative transportation financing mechanisms such as local tax increment districts, benefit assessment districts, and joint development and use of transportation centers.

- Continue to require the dedication and/or improvement of transportation facilities in conjunction with the subdivision of land, negotiated development agreements, and developer financing plans in the planned urbanizing communities.

- Support establishment of community landscape improvement and maintenance districts.