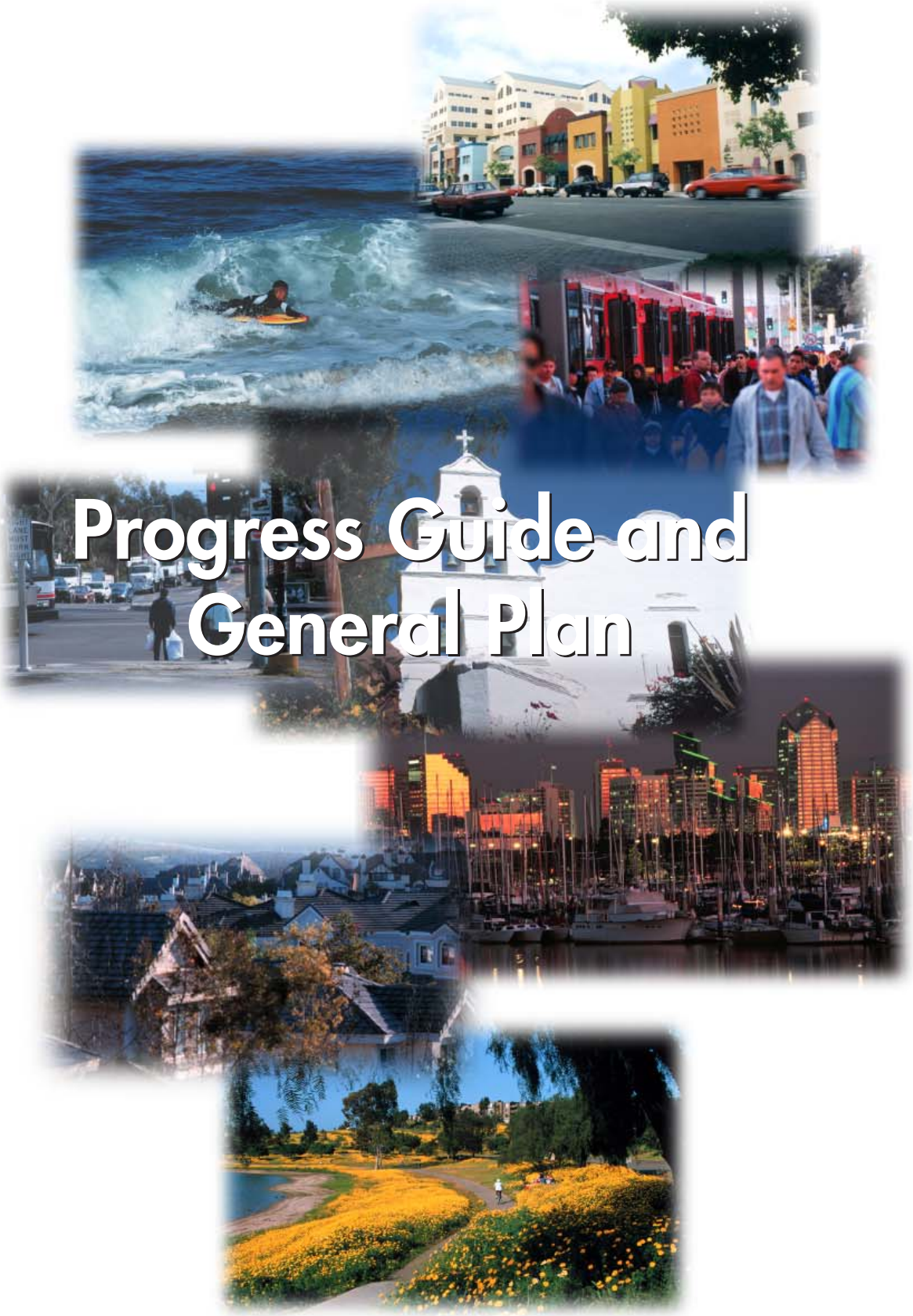
THE CITY OF SAN DIEGO



Progress Guide and General Plan

PROGRESS GUIDE AND GENERAL PLAN

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The following information has been incorporated into this June 2004 posting of this plan:

Amendment	Date Approved by Planning Commission	Resolution Number	Date Adopted by City Council	Resolution Number
Adoption Of General Plan	February 22, 1979	1725	April 1, 1979	R-222918
Industrial Element Amended			December 15, 1981	R-255517
Adoption Of General Plan Map			March 8, 1983	R-258076
Open Space Preservation And Development Of Sensitive Lands Added			December 11, 1984	R-262128
Adoption Of Transportation Element And General Plan Map			March 5, 1985	R-262664
Phased Development Areas Map Amended			May 20, 1986	R-265758
Phased Development Area Boundaries Ratified			January 27, 1987	R-267565
NAS Miramar West Sitings Approved			October 21, 1991	R-278874
Guidelines For Future Development Added			October 1, 1992	R-276650, R-280786, R-280787 & R-280788
North City Future Urbanizing Area Initiation Criteria Revised			January 18, 1994	R-283302
NTC Revisions			February 22, 1994	R-283431, R-283432 & R-283446
City Council Approved Redesignation Of Certain Parcels Of Land			January 8, 1996	R-286790 & R-286791
Future Urbanizing Area Amended And Approved			August 5, 1996	R-287748 & R-287749

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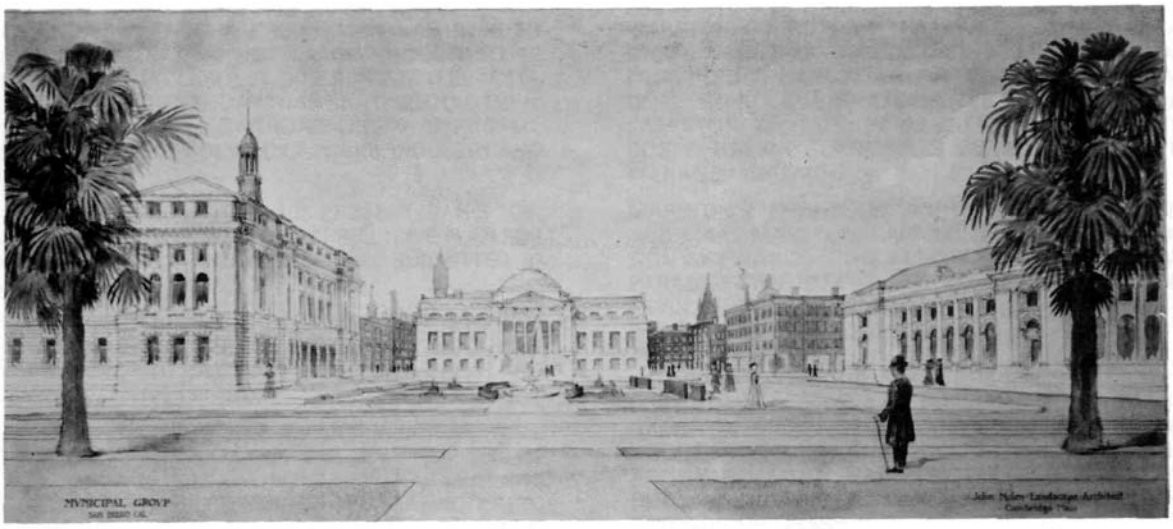
PREFACE

Preface

A modern General Plan for the City of San Diego was initially adopted by the Council and ratified by the voters in 1967. Following a comprehensive review over several years, the current *Progress Guide and General Plan* (General Plan) was adopted in 1979. But the first real master plan for San Diego pre-dates these modern efforts by nearly 60 years. John Nolen and his 1908 "San Diego: A Comprehensive Plan for Its Improvement" are clearly the progenitors of planners and plans, respectively, for San Diego.

The following article by Roger Showley, together with excerpts from the original Nolen plan, was originally published in the San Diego Union, January 9, 1983. With the kind permission of the Union, it is reprinted here to provide a historical context for the current General Plan.



THE NOLEN PLAN

By ROGER SHOWLEY
Staff Writer, The San Diego Union

No street bears his name, despite his work in plotting where streets should go. No monuments honor him in city parks, though he was the first to map a system of parks in the county.

Though largely forgotten, John Nolen devised the city's first comprehensive plan three-quarters of a century ago, aimed at attracting tourists, accommodating business, and providing a setting for thousands of immigrants in search of a sunbelt lifestyle.

The San Diego that this Cambridge, Mass., landscape architect encountered in 1908 was home to only 35,000 people — not large enough to be ranked in the 100 largest cities in the U.S.; Vista has more residents today than San Diego did then. It was a spur on a railroad line; a bypassed, shallow port; a city devoid of parks, industry and prominence.

Yet, Nolen looked beyond his present. In his 109-page study, "San Diego; A Comprehensive Plan for Its Improvement" — and its sequel submitted 18 years later — he saw the future. "The present city is but the nucleus of the future city," Nolen wrote, "and the citizens of today have an opportunity to rise to the call of a great and fine constructive period."

Pete Wilson invoked Nolen's vision in his farewell address to the city as mayor; "Nolen was right, of course. What he was saying in 1908 was that San Diego must exercise foresight and take action to accommodate its inevitable growth — before it occurred."

John L. Hancock said in his 1964 doctoral thesis, "Nolen came to San Diego on the eve of her metropolitan development and, by virtue of local acceptance of his two plans, the last officially. He is indisputably its modern planner, the man whose planning proceeded upon the assumption that "San Diego is more than an ordinary city; it is the center of a region and lends itself to the requirements of modern decentralized development."

Before Nolen's time, subdividers and speculators were the de facto city planners of the west; they bought the land, laid out the streets, sold off lots to individuals and developers and walked away with profits. However, there was no one to tie the entrepreneurs' dreams together. And the consequence was erratically placed connector streets, sparsely located parks and an unrelenting series of grid-shaped neighborhoods.

As an outgrowth of the 1890s "city beautiful" and 1900s progressive movements, civic leaders came to believe in comprehensive planning as a way to steer growth in a positive way. Planning departments were unknown and urban planning was a new profession.

Nolen paved the way for the integrated planning and zoning efforts taken for granted today. By the time of his death in 1937, Nolen's firm had prepared 467 big and small plans for cities all

over the country. "Mr. Nolen was the dean of the city planning profession in America," the American magazine of art eulogized. San Diego was one of his first challenges.

Comprehensive planning here was born of a desire in 1903 to relocate city hall from Fifth Avenue and G Street to Horton Plaza. George W. Marston, founder of the Marston's department store chain (now a part of the Broadway chain), prompted the Chamber of Commerce to form a civic improvement committee and hire Nolen (Marston covered a $3,500 deficit in printing costs) to lend some direction to San Diego's unmanaged growth.

Marston's grandson and daughter, Hamilton and Mary Marston, carried on the family tradition by financing the $12,000 report, "Temporary Paradise?" in 1974 — a study by urban planners Kevin Lynch and Donald Appleyard of future opportunities for San Diego development.
"In order to lift our eyes and imaginations to the long-term requires a really strong effort," Hamilton Marston said. "I think that is what Nolen in his first and second visits and the Lynch-Appleyard study have contributed. I think the results will be ongoing. Always, our reach is beyond our grasp."

Nolen's recommendations, submitted in March 1908, included grouping public buildings; developing the waterfront into a recreational and transportation center; providing for scattered playgrounds, wide boulevards and avenues; and setting aside public beaches and regional parks.
"These recommendations may appear to present a heavy task for a city the size of San Diego," Nolen said in the report's conclusion. "Yet, after careful consideration and a comparison with the programs and achievements of other cities, I believe the proposed undertakings are all of a reasonable nature."

"When they are looked at from the point of view of 25 years hence, so far as that can be brought before the imagination, they will in many respects be considered inadequate. No city regrets its acquisition of parks, but many cities regret their failure to act in time."

Looking back, Harry C. Haelsig, retired city planning director, commented, "It was a little visionary… we didn't have millions of dollars - we had nickels to spend."

The aftermath of the Nolen Plan involved more politics than projects. Short-term economic gain rather than long-term city planning.

- In 1909, instead of moving to build a new city hall, opera house and other public buildings around a square at Front Street and Broadway. As Nolen proposed (he said Horton Plaza was too small a site), the Chamber of Commerce proposed something else: a world's fair to coincide with the opening of the Panama Canal six years later.

- In 1911, instead of reserving the bayfront north of E Street to open-space recreation, linked to Balboa Park by a 12-block landscaped promenade, the City Council with $2 million in voter-approved bonds approved filling in the bay west of Pacific Highway and the construction of Broadway and B Street piers for shipping and commerce.

- Marston, espousing Nolen's Plans, was defeated for mayor in 1913 and, in his second try in 1917, his opponent, banker-developer Louis J. Wilde, tagged him as "Geranium George" - that is, standing for civic beauty - rather than favoring "smokestacks" - jobs and economic growth. Marston objected but lost. And Wilde presided over a four-year period when World War I brought the Navy, Marines and a solid base to the local economy (the Panama Canal opened, but shipping went to Los Angeles and San Francisco, not San Diego).

Five months after Wilde beat Marston, the year-old planning commission resigned under pressure, and Wilde, inspired by the metropolis to the north, declared, "Los Angeles is full of youth, vision, imagination, optimism, curiosity, boosters and brains. San Diego is full of old tightwads, pessimists, vacillating, visionary dreamers." He left the city in 1921 and died three years later.

Marston, on the other hand, lived 25 years longer to the age of 96, and, through his efforts, the Nolen approach to comprehensive planning remained alive.

By 1921, John L. Bacon, publisher of the old San Diego independent newspaper, had replaced Wilde and returned comprehensive planning to respectability. Nolen, in constant correspondence with Marston, visited the city in January, 1924, saying he was "more anxious than ever" to help shape San Diego's future a second time.

This time the city hired Nolen for $10,000 to prepare a city, harbor and parks plan. About 1,000 citizens attended a public presentation of the plans in February, 1926. At an American Legion speech, Will Rogers urged, "Now you have a real plan prepared by Nolen. Don't let any prominent citizen get up and talk you out of it."

Council approval came in less than a month on March 8 and Nolen's ideas became the cornerstone of all master planning of the city for 42 years, until voters adopted a new General Plan in 1967.

The second Nolen Plan modified some of the earlier recommendations and added a few new ones. It proposed a civic center on the waterfront, an airport on the mudflats of San Diego Bay. A regional government, a system of freeways and greenbelt parks, subdivision and zoning regulations, historic preservation and capital-improvement budgeting.

His 18 key recommendations were in one stage or another of implementation 10 years later. Nolen did not count on the depression, World War II, development of Tijuana, growth of suburbs and shopping centers, "clean industry" think tanks and the taxpayer revolt. But his principles are so basic that they still lie behind actions in many cases, according to City Planning Director Jack Van Cleave, a veteran of 35 years in the planning department.

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Groupings of public buildings - Nolen proposed a harborfront location for a civic center in 1926 and, 12 years later, what is now the County Administration Center opened on Pacific Highway - after four tries at the ballot box and a $1 million federal depression-era grant.

When the voters rejected a Washington, D.C.-type mall eastward along Cedar Street in the 1940s and 1950s, school, county and city offices were built on scattered sites. But today, major federal (1974), state (1963), county (1961) and city (1964) buildings lie within a three-block radius of Nolen's 1908 civic center site at Broadway and Front Street.

In retrospect, Van Cleave said, it may not have been such a good idea to concentrate public office buildings in one place. "It would have been for a Christmas tree lane, perhaps, but that's about the only activity at night. So, our concept now is to try to make downtown living day and night."

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Highways - Haelsig, who began as a city engineer in 1928 and retired in 1964 as planning director, said he based the city's 1931 major street system on Nolen's concepts. State 163 through Balboa Park is one example: widening of Pacific Highway and Mission Valley Road (the precursors district's master plan).

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Parks - Nolen foresaw that the city would overtax Balboa Park's recreational resources and proposed a series of regional and neighborhood parks and playgrounds. He designed Presidio Park for George Marston, who donated it to the city in 1937.

Glenn A. Rick, Haelsig's predecessor, planned Mission Bay Park - another Nolen idea - almost single-handedly, Haelsig said, and helped dedicate it in 1949. Old Town, the restored San Diego Mission de Alcala. Torrey Pines, Anza-Borrego, Cabrillo National Monument, La Jolla Shores, San Clemente Canyon, Coronado's Silver Strand and preserved lagoons in North County were part of Nolen's Plan. Mission Trails Regional Park around Cowles Mountain is but the latest addition, Van Cleave said.

■ ■ ■

Planning, zoning and regionalism - a year after the 1926 plan's adoption, the City Council passed a comprehensive zoning ordinance, initiated neighborhood planning studies and appropriated $15,000 for traffic maps. Voters in 1930 voted by a 6-1 margin for a state-county park system and, in 1931, ratified a new city charter that gave the planning commission constitutional authority over public and private projects.

But Van Cleave said planning and zoning of today goes far beyond the three zones and quarter-inch-thick set of regulations first adopted in the 1920s.

"It's one thing to have zoning regulations for a small city if you don't have many people there," he said. "On the other hand, as you get more and more dense and more intensity of land use, you have to have more definitive regulations to guide development so we can all live happily forever more."

Regionalism in Nolen's scheme envisioned close cooperation of south bay cities in a "metropolitan district." Today, the Metropolitan Transit Development Board, San Diego Unified Port District, County Water Authority, Serra Library System, Health Systems Agency, Local Agency Formation Commission and San Diego Association of Governments together can be traced back to Nolen's vision.

Nolen himself did not see his efforts as etched in stone: "The need for any city which would constantly provide for the future is to replan and replan, to readjust, to constantly use art and skill and foresight to remodel existing conditions and to mould and fit for use the new territory about to be invaded."

"A comprehensive and practicable plan," he concluded in the 1908 report, "will take months to work out even on paper and actually begin working out a far-reaching scheme, the result of which, I believe, will surpass our fondest dreams."

Van Cleave said the city's professional planners have enlarged on Nolen's work: “I don’t put Nolen up as a god or saint. I think he was a man who had some visionary thoughts about the

future and, hopefully, we have the same thoughts today. We're doing things in the area of planning today that Nolen would never have dreamed of."

But Nolen's dream lives on. The "Temporary Paradise?" study of 1974 boldly called for removal of Lindbergh Field and most military uses from the bay and their replacement with a Venice-type residential inner city; closer cooperation with Mexico in trans-border issues and projects; and preservation of canyons and scarce open spaces.

"It's not going to happen overnight," Van Cleave said, "Looking a century into the future. I think it'll happen."

Sam Hamill, 79, who moved here the year Nolen's first plan was published and went on to help design the County Administration Center on Pacific Highway, said Nolen's historic contribution was a way of thinking about the future.

"He injected an element of grandness. The city had been very small. He approached it on a grand scale. It opened up a greater spirit to thought and context."

ECHOES OF IMAGINATION

From John Nolen's "San Diego: A Comprehensive Plan for Its Improvement," published in 1908 by the San Diego Chamber of Commerce's Civic Improvement Committee:

San Diego is indeed unique. Even in Southern California, its situation, climate and scenery make it standout in permanent attractiveness beyond all other communities.

Notwithstanding its advantages..., San Diego is today neither interesting nor beautiful. Its city plan is not thoughtful, but, on the contrary, ignorant and wasteful. Fortunately, the public-spirited men and women of San Diego are preparing to act in time. They realize in general what the city lacks, what it needs and the opportunity and responsibility of the present generation.

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To beautify a city means to make it perfect — perfect as a city, complete in serving a city's purposes… The plans to improve and adorn the city must therefore take many things into account. They must be broad, and, considering the promise of the city, liberal and courageous. In this connection how difficult it is to bring before the people of a city a vision of what 50 years' growth, even 25, will make not only possible, but necessary.

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Action must be taken while it is still relatively easy, or it will certainly be costly and probably inadequate. The present, therefore, is a most propitious time to consider in a frank, clear-headed and comprehensive manner the future of San Diego. As never before, it seems now to have the opportunity to lay firm hold of its heritage.

Happily, it is still within the power of the people of San Diego to make their city convenient, attractive and beautiful. Each generation has spent too much time in lamenting the errors of the past and has given too little attention to the opportunities of the present.

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San Diego's opportunity is so open, so apparent and relatively so easy that it seems unnecessary to point further the application. Every phase of civic improvement is within its reach. This is its real formative era. The present city is but the nucleus of the future city, and the citizens of today have an opportunity to rise to the call of a great and fine constructive period.

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The people of San Diego will do well if they recognize today that the two great central recreation features of the city, now and always, are the City (Balboa) Park of 1,400 acres and the bay front, and that the value of both will be increased many fold if a suitable connecting link, parkway or boulevard can be developed, bringing them into direct and pleasant relation.

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Each school, each ward, each residence district in San Diego, by nature a play city, should have its playground; and the time to provide them is now before real estate values are prohibitive and before land of suitable character is monopolized for private purposes. The possession of play areas is a necessity of city life, and by obtaining them now San Diego can avoid the heavy penalty of procrastination which New York and other cities have had to pay.

In the improvement of established cities, no changes are so difficult, none so important, as those in streets. They are difficult because of the expense and great number of interests involved. But the gains are so decided that a city should face the difficulties with courage and generosity.

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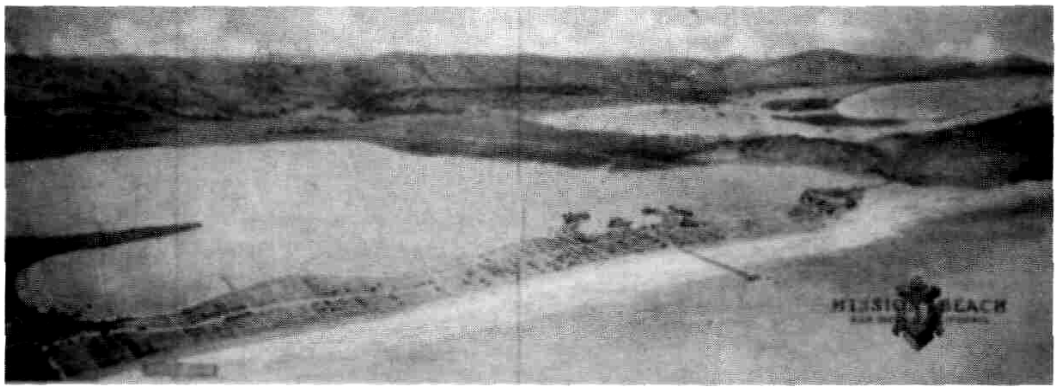
Few cities in the United States have a more romantic history and situation than San Diego, and it is to be regretted that they have not expressed themselves in the street names. Instead of D Street (now Broadway), Fifth Street (now Fifth Avenue) and similar colorless names, we might honor the discoverer of the bay, the sturdy fathers who established the missions, the pioneers in settling the modern city, the heroines of its romances which have become part of our literature.

A system of parks is unquestionably demanded. Such a system can be secured more easily than in any other city I know of...Connect this system of parks by the boulevards and parkways already planned, develop it naturally, simply, harmoniously and then confidently invite comparison with it of any park system in the world... It would give to the citizen health, joy and more abundant life, and to the city itself wealth and enduring fame.



INTRODUCTION

Introduction

This text, together with the attached map, constitutes the General Plan for the City of San Diego. A General Plan for the City of San Diego was initially adopted by the voters in 1967. One of the principal recommendations of the document called for plan review by the Planning Commission and City Council at five-year intervals. Work began on the revision of the General Plan in 1971 with the preparation of an issues report and series of public meetings held throughout the City. Simultaneously, background studies were initiated on each of the elements to be revised. During this same period, the state Legislature passed legislation requiring seven additional mandatory elements. Revision of the General Plan was delayed while the new elements were researched and reports published to meet the deadline for adoption. In 1974, work began again in an effort toward completing the revision and was again delayed because of the growth management study.

Even though San Diegans have had some ten years working experience with a General Plan, some questions will still remain: What is the General Plan? Why was it prepared? What will it do? What is its relationship to community plans? Can it be amended? If so, how?

The General Plan Defined

In broad terms, the General Plan represents a focusing of planning thought and effort - an attempt to identify and analyze the complex forces, relationships, and dynamics of city growth in order that they can be shaped and directed in accordance with recognized community goals and aspirations. From the standpoint of the citizen - who is, after all, the chief concern of planning - the General Plan may be considered a public document embodying a realistic appraisal of where we are as a city; a careful determination of where we want to go; and a forthright program for getting there.

In legal terms, the General Plan is defined in the state planning and zoning law as " ... a comprehensive, long-term . . . plan for the physical development of the . . . city, and of any land outside its boundaries which . . .bears relation to its planning."* This plan "shall consist of a statement of development policies and shall include a diagram or diagrams and text setting forth objectives, principles, standards, and plan proposals."** Additionally, it is provided that the General Plan shall include the following elements:

- **A Land Use Element** which designates the proposed general distribution and general location and extent of the uses of the land for housing, business, industry, open space; including agriculture, natural resources, recreation and enjoyment of scenic beauty, education, public buildings and grounds, solid and liquid waste disposal facilities, and other categories of public and private uses of land. The Land Use Element shall include a statement of the standards of population density and building intensity recommended for the various districts and other territory covered by the plan. The Land Use Element shall also identify areas covered by the plan which are subject to flooding, and shall be reviewed annually with respect to such areas.

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* Section 65300 of the Government Code of the state of California.

- **A Circulation Element** consisting of the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, and other local public utilities and facilities, all correlated with the Land Use Element of the plan.

- **A Housing Element**, to be developed pursuant to regulations established under Section 41134 of the Health and Safety Code and Title 25, Chapter 6, Subchapter 4 of the Administrative Code, consisting of standards and plans for the improvement of housing and for provision of adequate sites for housing. This element of the plan shall make adequate provision for the housing needs of all economic segments of the community through a Fair Share Allocation Plan.

- **A Conservation Element** for the conservation, development, and utilization of natural resources including water and its hydraulic force, forests, soils, rivers and other waters, harbors, fisheries, wildlife, minerals, and other natural resources. That portion of the Conservation Element including waters shall be developed in coordination with any county-wide water agency and with all district and city agencies which have developed, served, controlled or conserved water for any purpose for the county or city for which the plan is prepared.

- **An Open Space Element** that will make plans for the preservation of open space land for the conservation of natural resources, for the managed production of resources, for outdoor recreation, and for public health and safety.

- **A Seismic Safety Element** consisting of an identification and appraisal of seismic hazards such as susceptibility to surface ruptures from faulting, to ground shaking, to ground failures, or to effects of seismically induced waves such as tsunamis and seiches. The Seismic Safety Element shall also include an appraisal of mudslides, landslides, and slope stability as necessary geologic hazards that must be considered simultaneously with other hazards.

- **A Noise Element**, which shall recognize guidelines adopted by the Office of Noise Control pursuant to Section 39850.1 of the Health and Safety Code, and which quantifies the community noise environment in terms of noise exposure contours for both near and long-term levels of growth and traffic activity.

- **A Scenic Highway Element** for the development, establishment, and protection of scenic highways pursuant to the provisions of Article 2.5 (commencing with Section 260) of Chapter 2 of Division 1 of the Streets and Highways Code.

In San Diego, a Transportation Element was developed combining the Noise, Circulation and Scenic Highway Elements. The Safety Element has been incorporated into the discussion of Public Facilities and Services. The Land Use Element is graphically represented as the General Plan Map which is discussed at the end of this document. Eight optional elements are also included.

** Section 65302 of the Government Code of the state of California.

- **A Redevelopment Element**, concerned with the restoration on either a single piece of property or a collective unit of properties to a condition of physical, social, and economic vitality. Redevelopment means the replanning, redesign, and in some cases clearance, reconstruction and rehabilitation of areas that have been determined to be blighted. In recent years the emphasis of redevelopment has shifted from the "urban renewal" concept of total land clearance to a concept which emphasizes conservation and rehabilitation with only selective clearance.

- **A Cultural Resources Management Element**, to develop an inventory of cultural resources and create a comprehensive program for historic and archaeological preservation.

- **An Urban Design Element**, to deal with the preservation, rehabilitation, and reuse of existing man-made facilities as well as the integration of new development with the natural landscape or within the framework of an existing community, with minimum impact on that community's physical and social assets.

- **An Energy Conservation Element**, to recognize the City's potential impact and influence on energy consumption patterns through its policies and decisions concerning air quality, growth, transportation, and residential densities. The element documents local supply and demand, utilization patterns and conservation, as well as alternative energy sources such as solid waste conversion.

- **A Recreation Element**, for the development of standards for public recreational facilities, including population based parks, resource based parks, and facilities such as sports fields and concourses.

- **An Industrial Element**, to establish the goals and standards and recommendations for San Diego's industrial development, in recognition of the fact that the land allocations needed for industry are preceded in importance only by the allocations for conservation and open space.

- **A Commercial Element**, to guide the location, timing and quality of future commercial development in new and built-up areas of the City.

- **A Public Facilities, Services and Safety Element**, to prepare for the provision of services where and when needed. The services covered include those that are publicly managed; schools, libraries, police, fire, water, sanitation (liquid and solid wastes), and flood control. Safety is discussed in appropriate areas under the various services.

Specifically, the General Plan sets forth goals and objectives for the development of San Diego to the year 1995. It establishes the amount of land needed for various uses, and designates general locations for these uses while relating each to the other. It projects the transportation networks necessary to link all future facilities and to permit them to function efficiently. Finally, it enunciates recommendations and measures for achieving General Plan goals and objectives. A variety of other agencies and jurisdictions affect the preparation and implementation of the General Plan. Among the more important levels of influence aside from the state planning and zoning law are:

1) The California Coastal Act of 1976, which mandates that all designated coastal regions develop local coastal plans consistent with city and regional plans;

2) The state of California's urban strategy, which is a partial update of the mandated environmental goals and policy report that is intended to articulate the state's policies on growth, development, and environmental quality, and recommend state, local and private actions needed to carry out these policies;

3) The county of San Diego, which designs, controls and implements a variety of programs for the unincorporated regions of the county; and

4) The Comprehensive Planning Organization (the San Diego regional COG, or Council of Governments), which through its comprehensive plan for the San Diego region has developed a Regional Energy Plan, a Regional Air Quality Strategy, a Growth Management Strategy, a Regional Transportation Plan and an area-wide Water Quality Management Plan.

Additionally, the San Diego Unified Port District has the responsibility for the policies regarding operation and use of the City's harbor and major airport and the Metropolitan Transit Development Board has the responsibility for planning, constructing and operating a fixed rail guideway system for the San Diego region.

Individual elements detail the requirements and policies of these varied levels of influence that affect the particular strategies for the City of San Diego.

There is a compelling injunction that we prepare plans which will make the best use of our physical and human resources. The earth's continuing population explosion reminds us ever more forcefully that land is indeed a limited resource. As land shrinks in supply, and as urbanization and interdependent living proceed apace, a vital community must concern itself with the use of this resource. It becomes a legitimate public issue that the most efficient, balanced combination of land uses be achieved from among the innumerable alternative land use configuration.

Preparation of the General Plan is based on the logical premise that if a city knows where it wants to go, it possesses a far better prospect of getting there. The General Plan attempts to synthesize diverse efforts in order to determine rational and complementary development goals for the future.

The General Plan approach is essential to successful community problem-solving efforts. Experience has demonstrated that many problem areas in San Diego cannot be treated effectively by particularized or localized planning programs and solutions.

The General Plan provides a comprehensive framework which permits recognition of the relationships between seemingly diverse development goals and problems, and establishes a meaningful basis for the resolution of conflicts.

The General Plan, once adopted, is by no means a fixed, static document that is unyielding to change. State law provides that the General Plan can be amended, but no more than three times during any calendar year. This provision applies only to mandatory elements.

Amending the General Plan requires successive affirmative votes by both the Planning Commission and City Council, provided that each body has first conducted at least one public hearing on the proposed change or changes. However, the City Council is not precluded from amending the plan by a failure to act on the part of the Planning Commission.*

How the Plan is Used

The General Plan embodies authoritative City goals and policies relating to the growth and development of San Diego. As such, the plan will function as the master yardstick for evaluating all significant future development proposals of both government and private enterprise.

More specifically, the General Plan will render invaluable service to both the Planning Commission and City Council by providing essential background and perspective for decision making in respect to zoning, land subdivisions, and related matters. It will materially facilitate the work of the City Council in its deliberations on public investments, public land policies, capital improvement programs, and other vital fiscal considerations.

To businessmen, investors, and developers, the General Plan will provide guidance as to city development policies and the future direction, pace, and intensity of San Diego's growth. It will assist utilities and all governmental and semipublic agencies in establishing appropriate development policies and programs and in coordinating their own planning activities.

To the community at large, the General Plan, if properly implemented, will provide environmental stability and assurances; assurances that land use conflicts between business, industry, and residences will be resolved if not avoided; that misuses of land will not occur; that traffic congestion will be minimized or averted; that parks and other community facilities will be located where people can best use them; and that the City's growth will proceed in a rational, orderly manner.

The General Plan establishes a framework for the development of more specific community plans by identifying and locating those facilities which possess citywide or intercommunity importance. Moreover, the General Plan provides goals, standards, and criteria relating to the need for, and the location of, such essentially intracommunity facilities as neighborhood centers, neighborhood parks, and elementary schools. Within this framework of "fixes" and guides offered by the General Plan, community plans are appropriately evolved.

The General Plan reflects the major proposals contained within community or subarea plans adopted by the City Council. However, the General Plan should in no way be considered as a replacement for previously adopted and future community plans. Such plans must remain as official guidelines for the development of communities and subareas and act as supplements to

* Sections 65350-61 inclusive, of the Government Code of the state of California.

the General Plan with regard to the more specific proposals and programs normally associated with community plans.

In the future it must be anticipated that the intensive studies of local conditions typically undertaken as part of the community planning process may well suggest significant changes from, or additions to, the General Plan. Changes or additions which relate to intracommunity matters, or which do not conflict seriously with the General Plan's citywide proposals, should prevail upon official adoption of the community plan. On the other hand, where a proposed community plan would appear to conflict significantly in respect to matters which transcend the community's limits in their influence, revision of the General Plan should be considered simultaneously with adoption of the community plan by both Planning Commission and City Council, whenever possible. In this way, conflict may be resolved and consistency between the General Plan and community plans retained.

For all San Diegans, the General Plan should be instrumental in securing by 1995 an efficient, handsome, and exciting City possessed of an attractive environment for living.

General Plan Scope

An important aspect of the General Plan relates to its scope and application. In this regard, there was a determination that the objectives, standards, and recommendations of the plan would pertain only to the City of San Diego. For the purposes of the General Plan, however, studies were directed to the San Diego metropolitan area bordered on the north by census tract boundaries running easterly from Batiquitos Lagoon to the northerly limits of the City of San Diego; on the east by the foothills of the Peninsular Range and census tract boundaries related thereto; on the south by the republic of Mexico; and on the west by the Pacific Ocean. Within this area of approximately 750 square miles, the General Plan map indicates:

- Planning proposals for the City of San Diego.

- Those facilities existing or impending within neighboring cities and unincorporated county territory which have a clearly regional or quasi-regional character (and, therefore, a significant influence on the City of San Diego). Such facilities include industrial areas; regional commercial centers; regional or resource-based parks; freeways and major streets; educational institutions; and other major developments.

- Existing facilities in adjoining jurisdictions not of a regional or quasi-regional character where these are located on the very periphery of the City of San Diego and clearly bear relation to its planning.

It should be emphasized that the San Diego City General Plan was studied and prepared within the total metropolitan area context, and with an awareness of San Diego's preeminent role in such a context. Projections in this report are related to the City of San Diego and, where appropriate, to the metropolitan area. However, the General Plan is fundamentally a plan for the City of San Diego, and any efforts by neighboring jurisdictions to follow General Plan

objectives, standards, or proposals must be seen as purely discretionary acts on the part of those jurisdictions.

GOALS

Prior to any consideration of individual elements, it is important to focus upon the General Plan for San Diego - 1995 as a totality - for it is much more than the sum of its parts. What, then, does the General Plan say when taken as a whole, and what does it mean? What are its central thrusts?

The Basic Goal

The General Plan's basic goal is the **FOSTERING OF A PHYSICAL ENVIRONMENT IN SAN DIEGO THAT WILL BE MOST CONGENIAL TO HEALTHY HUMAN DEVELOPMENT.** Such a seemingly simple statement does not, of course, conceal the very difficult questions that quickly assert themselves; namely, what is "healthy human development?"; and what constitutes a "physical environment most congenial" to such development?

It cannot be assumed that the responses of San Diegans to these questions will be notable for their concurrence. Nor can it be assumed that the responses of any given individual would themselves remain unchanged over time. Consequently, it should be obvious that continuing research and inquiry into the evolving nature of the people's needs and desires are called for; and that the General Plan itself must be regularly reviewed and revised if it is to properly project for a dynamic, ever-changing San Diego.

Important Subgoals

A number of important subgoals flow from the General Plan's basic goal enunciated above. Some of the more broadly relevant of these may be expressed as follows:

- FOSTERING OF A PHYSICAL ENVIRONMENT THAT ENABLES SAN DIEGO TO FULLY AND EFFICIENTLY PERFORM ITS INDICATED LOCAL, REGIONAL, STATE, NATIONAL, AND INTERNATIONAL ROLES.

  This subgoal contemplates that the City's land use and transportation patterns will be such as to facilitate its functioning as a municipality; as a regional center of political, economic, social, educational, cultural, and recreational activities; and as a state, national, and international center of commerce, tourism, medical research, oceanography, and military training.

- FOSTERING OF A PHYSICAL ENVIRONMENT THAT OFFERS SAN DIEGANS A WIDE RANGE OF LIFE STYLES.

  Within each community if possible, but certainly within the City as a whole, there should exist the opportunity for individuals to pursue an appreciable variety of life styles.

Meaningful alternatives should be clearly available with respect to housing, employment, education, culture, and recreation.

- FOSTERING OF A PHYSICAL ENVIRONMENT THAT IS RESPONSIVE TO THE INDIVIDUAL'S PSYCHOLOGICAL, AESTHETIC, AND PHYSICAL NEEDS.

  San Diego's development should be coherent in form and comprehensible in total extent. Each constituent community should likewise possess spatial coherency, as well as a distinctive physical identity. Additionally, the City's overall physical aspect should be satisfying to the senses and elevating to the human spirit.

- ACHIEVEMENT OF THE PLANNED ENVIRONMENT THROUGH EFFICIENT USE OF THE CITY'S LAND AND OTHER NATURAL RESOURCES SO AS TO MAXIMIZE FUTURE DEVELOPMENTAL OPTIONS.

  This subgoal necessitates a phased, incremental absorption of the City's remaining land resources so as to retain substantial tracts in an undeveloped and, therefore, uncommitted status. To the extent that such a program is successfully adhered to, the City will be enabled to maximize its capability for accommodating future land use needs

- CONSERVATION OF AN URBAN ENVIRONMENT THAT IS IN HARMONY WITH NATURE AND RETAINS STRONG LINKAGES WITH IT.

  Concern for the wellbeing of present San Diegans and the obligation borne to future San Diegans dictate that this City be maintained as a habitable place possessed of the positive natural attributes and resources that compose its essence. Among other things, this requires that the generation of wastes and other pollutants be kept well within the absorptive capacities of the environment.

- EVOLVEMENT OF A LOCAL GOVERNMENTAL STRUCTURE AND PROCESS THAT PROMOTES CITIZEN PARTICIPATION IN THE DETERMINATION OF PUBLIC POLICY, AND ALSO FACILITATES THE EFFICIENT SOLUTION OF PUBLIC PROBLEMS.

  This subgoal comprehends the strength of the interdependencies linking the area's separate jurisdictions, and the correspondingly great need to effect a coordination of efforts in attacking and solving shared problems. There is an implicit awareness of the high potential that every jurisdiction has for frustrating the rational planning and development of its neighbors, if not the entire region.

Environmental Setting

The San Diego metropolitan area is bounded approximately by Escondido on the north, the foothills of the coastal mountains on the east, the Mexican border on the south, and the Pacific Ocean on the west. Geographically, the metropolitan area consists of a complex topographic succession ranging from a broad coastal plain dissected by local streams, and extending from the

Pacific Ocean to about 10-15 miles inland. The foothills provide a transition to the mountain and valley topography of the eastern county. Erosion-resistant formations give rise to the prominent mesa topography dominant between the San Diego River and the San Dieguito River. The geological formations are disturbed by faults. Two potentially active fault systems lie within the metropolitan area: the La Nacion Fault and the Rose Canyon Fault, which may be connected to recently active faults in the Baja California area.

The climate of the region is a Mediterranean-type, characterized by moderate temperatures, with annual and diurnal temperature variations of less than 15 degrees Fahrenheit from the average of 61 degrees. Climatic zones closely correspond to the topographic zones: coastal, coastal hills, foothills and mountains. The interaction of the topographic/geologic and climatic systems has resulted in a broad range of soil types occurring within the region which in turn supports many vegetation associations, including coastal scrub, grasslands, oak woodland, chaparral, and riparian types. Human activities have modified many of these plant communities and replaced the native vegetation with agricultural species and urban development in many areas. The surviving natural and naturalized plant communities support a wide range of wildlife throughout the region.

The San Diego metropolitan area contains portions of several drainage basins and several reservoirs. However, most of the water supplied to the region is currently imported from the Colorado River via aqueducts. The surface streams in the region are predominantly intermittent, flowing only during periods of high rainfall. Much of the area is steeply sloped, leading to potentially high rainfall run-off rates and flood hazards as well as landslide hazards.

The region's water quality is best described as poor, with urban and agricultural runoff, high salt content of imported waters, and other sources of pollution gradually degrading the quality of existing waters within the region. The coastal waters are of relatively high quality, with almost all sewerage receiving treatment prior to ocean disposal. Air quality is similarly degraded, with current levels of pollution exceeding state and federal ambient air quality standards. These pollutants are generated by process losses (e.g., dry cleaning), motor vehicles, aircraft, combustion (e.g., electrical generation), military operations (e.g., ships) and other miscellaneous activities. The San Diego Air Basin is strongly affected by the interaction of the high mountains to the east, weak on-shore winds during much of the year, and a meteorological condition known as a temperature inversion, which acts like a lid on the air basin, reducing the normal mixing and dispersion capabilities of the atmosphere. As a result, pollutants from the Los Angeles/Orange county area and occasionally from the Tijuana area, drift into the San Diego Air Basin.

Historic Development

Before the coming of the Spanish in the late 1700s, the landscape of what is now San Diego was little affected by human occupancy. Diegueno Indians were hunters and gatherers and had no significant agriculture and relatively few permanent structures. There are few remaining visible remnants of this period other than artifacts identified through archaeological investigation. River valleys and coastal areas have a higher incidence of such remnants than most other areas of the City. The Spanish period (1769-1822) yielded a few enduring structures, the restored mission

and Padre Dam being the notable landscape features from this era. During the Mexican period (1822-1848), Old Town began to grow. Some of these structures still exist in a restored state.

From 1850 to 1880 was a transitional period; Old Town blossomed and grew, only to be deserted for Alonso Morton's New Town (now downtown San Diego). Remnants of this era can be found in both areas, Old Town containing the densely packed distribution of examples from this period. By the 1870s, development had shifted south to the New Town. Large scale downtown urbanization began with the boom of the 1880s during which much of the waterfront was filled in and piers and waterhouses were constructed. By the 1890s, San Diego began to have the structure and organization of a typical American city complete with a downtown commercial section, residential hills, and a busy industrial waterfront. Much of this era still exists in the urban landscape of Centre City, Uptown, and the Golden Hills area. There are several examples of early commercial buildings in the lower Fifth Avenue area, many of which have been declared San Diego historical sites.

During the Victorian period (1880-1905) residential areas to the north and east also thrived; Uptown, the area north of downtown, roughly bounded by Ash Street to the south, Balboa Park to the east. Walnut Street to the north, and Interstate 5 (I-5) to the west, began to urbanize in 1888. Many elaborate mansions and other Victorian structures from this era still remain, including several historic sites. Golden Hills, the area just to the east of downtown bounded by Balboa Park on the north, I-5 on the west, Commercial Street on the south, and 30th Street on the east, is another area where significant Victorian structures remain. Villa Montezuma (the Jesse Shephard house), perhaps San Diego's finest monument to Victorian residential architecture, is located in the southern section of Golden Hills at 20th and K Street. Important structures were built in other areas within the current San Diego City boundaries during the Victorian era, and a few remain in areas such as Pacific Beach, East San Diego and La Jolla. Perhaps the finest Victorian structure on the west coast, the Hotel del Coronado, was one of several Victorian beach hotels, the rest of which are now gone. Balboa Park began to emerge from its "untouched" condition in 1892 when the City leased 30 acres in the northwest corner to Kate Sessions for a nursery.

The next 25 years (1905-1930) was notable for the Mediterranean and Hispanic influence in architecture. The Panama Pacific Exposition of 1915 had perhaps the greatest impact on this new era; a Spanish-Moroccan-Italian cityscape evolved. Balboa Park was transformed into a magnificent "Spanish" city, as the Prado, now an historic site, was constructed.

During this period the Santa Fe Station was rebuilt in the Mission Revival style. An important residential influence resulted from the work of architect Irving Gill, who developed a stucco style incorporating some Mediterranean influences along with a large degree of functionalism. Most of Gill's houses (built between 1905 and 1915) are in the Uptown area. During the 1920s the Spanish colonial residential style became popular and the new "suburbs" such as Mission Hills and Kensington were developed. Downtown at this time experienced a development of eastern style office buildings, some modeled after Florentine palaces and Spanish towers. Other downtown buildings, such as elaborate theaters, further carried out the Mediterranean theme. The period 1930-1950 saw the advent of "streamlined modern" as an influence. The Ford Building (1935) is the only historic site from this era, although this influence is visible in the

rounded corners and modernistic styling of other structures built at that time. During the 1940s, military housing was built in the Linda Vista and Rosecrans areas, as were an increasing number of apartments in many areas. Large factories and military buildings made a big impact on the cityscape during World War II. During the years since 1950, suburban San Diego has experienced large scale urbanization characterized by several trends. These include large tract housing developments, mobile homes, condominiums, and an increase in construction of all types of apartments, shopping centers, and office buildings.

San Diego Today: A Socio-Economic Profile

(This section was revised and adopted December 13, 1983, Resolution R-259840.)

Existing Land Use

As of July 1, 1983, the City of San Diego's corporate limits contained 206,989 acres of land area (323.4 square miles). Considering San Diego's vast area, it is not surprising that only 62 percent of its land is developed. The breakdown of the developed portion of the City, shown in Table 1, reflects the enormously disproportionate importance of "public and semipublic" uses, primarily military installations and large regional parks.

Population

A city is primarily an aggregation of people who are collectively termed its "population." The size, distribution and characteristics of the population are fundamental factors in planning any city's future. Population data are essential in the planning of residential, commercial and industrial areas, in the designing of the transportation system, and in the location of community facilities.

For analytical and projective purposes it is useful to study San Diego's population against the backdrop of the entire county and the metropolitan area. In April 1980, the metropolitan area contained a population of 1,476,400, reflecting an increase of 1,000,556 during the preceding 30 years. Yet, impressive as this growth was, its rate failed to match that of the county; for the metropolitan area's percentage of total county population actually declined from 85.5 percent in 1950 to 79.3 percent in 1980.

Looking to the future, it is anticipated that the average numerical increase of approximately 33,350 per year experienced by the metropolitan area for the 30 years between 1950 and 1980 will not continue through the year 2000, but that the metropolitan area's growth will drop to about 25,585 per year for the next 20 years. It is further anticipated that the metropolitan area's share of the total county population will continue to decline. Thus, for the year 2000 the projected metropolitan area population of 1,988,100 would be 73.7 percent of the county figure of 2,699,200.

The City of San Diego is the nation's seventh largest city based upon its population of 929,000 as of July 1, 1983. As seen from Table 2 it is projected that the City's population for the year 2000

will be 1,140,900. In relation to the San Diego metropolitan area, the City's population share will continue to decline, from 59 percent in 1980 to 57 percent in the year 2000.

Distribution of the projected year 2000 population is portrayed on Table 4. The "Study Areas" listed in the table do not coincide with planning area boundaries, but they represent convenient delineations for forecasting purposes based on census tract boundaries. In making forecasts, the existing development for each study area was analyzed, as well as its potential for development and population growth, to the year 2000 in terms of residential density standards recommended by the plan. In the City's central area, the forecast was influenced by the basic assumption that older, single-family residences would gradually be replaced by multiple-family dwellings. Such factors as existing subdivision characteristics, availability of utilities and access roads, and topographic limitations were considered in forecasting for the outlying areas.

Issues

Over the past few years, three major issues have surfaced in relation to public concern over the future of San Diego. These are the interrelated issues of growth, density and development patterns, and environmental protection.

As a result of such concerns, a comprehensive strategy has been developed which provides a framework for deciding some of the questions that result when considering these issues. The General Plan assumes that all land use decisions ultimately involve a trade-off of desirable goals, and therefore attempts to balance the major concerns by working toward an urban environment that meets the needs of the majority of the City's residents. The "Guidelines for Future Development" section represents a continuing and committed effort on the part of the City to further identify and resolve the issues that face us.

TABLE 1
Land Use in City of San Diego by Major Classes
July 1, 1983

Land Use Category	Areas in Acres	Percent of Total City Area	Percent of Total Developed Developed Area
Residential	41,048	19.8	31.8
Commercial	6,048	2.9	4.7
Industrial	6,912	3.3	5.4
Public and Semipublic	48,840	23.6	37.9
Streets and Highways	26,013	12.6	20.2
Subtotal Developed Area	128,861	62.2	100.0
Agricultural and Vacant	78,128	37.8	---
Total City Area	206,989	100.0	---

Source: City of San Diego Land Use Inventory, July 1983.

TABLE 2
Population of San Diego County and Subareas
1980 and 2000

	1980 CENSUS		2000 PROJECTION		CHANGE 1980 TO 2000		
Areas	Population	Percent of County	Population	Percent of County	Number	Percent Change	Percent of County
San Diego County	1,861,800	100.0	2,699,200	100.0	837,400	45.0	100.0
Metropolitan Area	1,476,400	79.3	1,988,100	73.7	511,700	34.7	61.1
City of San Diego	875,500	47.0	1,140,900	42.3	265,400	30.3	31.7
Other	600,900	32.3	847,200	31.4	246,300	41.0	29.4
Nonmetropolitan Area	385,400	20.7	711,100	26.3	325,700	84.5	38.9
North Coast	334,400	18.0	612,800	22.7	278,400	83.3	33.2
Inland	51,100	2.7	98,300	3.6	47,200	92.4	5.6

Sources: U.S. Census data. Projections derived in part from State of California Department of Finance Report 83, P-l "Projected Total Population of California Counties; July 1, 1980 to July 1,.2020," (report dated September 1983); in part from Series 6 Population Forecasts prepared by the San Diego Association of Governments.

TABLE 3
Population of City of San Diego and Related Areas
1900-2000

Year	City of San Diego	San Diego Metro Area	County of San Diego	Southern California	State of California
1900	17,700	n/a	35,090	304,211	1,485,053
1910	39,578	n/a	61,665	751,310	2,377,549
1920	74,361	n/a	112,248	1,346,963	3,426,861
1930	147,995	182,070	209,659	2,912,795	5,677,251
1940	203,341	253,645	289,348	3,672,363	6,907,387
1950	334,387	475,844	556,808	5,652,249	10,586,223
1960	573,224	885,447	1,033,011	9,025,694	15,717,204
1970	697,471	1,137,564	1,357,854	11,668,707	19,953,134
1980	875,538	1,476,400	1,861,846	13,748,822	23,668,562
			Projections		
1985	960,000	n/a	2,082,800	15,075,500	25,998,000
1990	1,029,600	1,773,400	2,335,000	16,192,500	27,990,000
1995	1,085,500	1,891,100	2,526,900	17,206,500	29,820,000
2000	1,140,900	1,988,100	2,699,200	18,080,800	31,414,000

n/a – Not Applicable
Include San Diego, Imperial, Riverside, San Bernardino, Orange, Los Angeles, Ventura, and Santa Barbara Counties.

Sources :U.S. Census data. Projections derived in part from State of California Department of Finance Report 83, P-1 "Projected Total Population of California Counties; July 1, 1980 to July 1,202O," (report dated September 1983); in part from Series 6 Population Forecasts prepared by the San Diego Association of Governments.

Table 4
City of San Diego Population by Study Areas
1980 - 2000

Area Name	1980 Census	Change 1980 to 1985	1985	Change 1985 to 1990	1990	Change 1990 to 1995	1995	Change 1995 to 2000	2000	Change 1980 to 2000 Number	Change 1980 to 2000 Percent
Central	117,427	12,873	130,300	2,000	132,300	---	132,300	-800	131,500	14,073	12.0%
Coastal	165,814	8,286	174,100	-2,500	171,600	-3,800	167,800	-4,100	163,700	-2,114	-1.3%
Eastern	287,234	25,666	312,900	7,300	320,200	-3,600	316,600	-8,300	308,300	21,066	7.3%
Kearny Mesa	157,042	13,358	170,400	5,500	175,900	3,600	179,500	2,100	181,600	24,558	15.6%
North San Diego	90,092	18,708	108,800	41,700	150,500	39,900	190,400	49,000	239,400	149,308	165.7%
South San Diego	57,929	5,571	63,500	15,600	79,100	19,800	98,900	17,500	116,400	58,471	100.9%
Entire City	875,538	84,462	960,000	69,600	1,029,600	55,900	1,085,500	55,400	1,140,900	265,362	30.3%

Source: Series 6 Population Forecasts prepared by the San Diego Association of Governments and the City of San Diego City Planning Department

GUIDELINES FOR FUTURE DEVELOPMENT

GUIDELINES FOR FUTURE DEVELOPMENT

I. INTRODUCTION

Development of the San Diego metropolitan area during the decade of the 1980s reflected the state's urban development patterns which were characterized by rapid population and housing growth, especially on the periphery of cities and towns. The pace of development, driven by growth in jobs, population and housing has been well above the national rate, exceeding even California's overall rapid rate of growth. The last decade saw acceleration of the trend toward economic diversification and high job growth in San Diego. This has led to a rapid increase in population, two-thirds of which came from in-migration during the 1980s. During this decade the region's population grew by 35 percent, the number of vehicle trips per capita increased, and there was only limited expansion of roads, transportation improvements and other facilities.

From 1987 to 1990, the City Council debated the problems and issues of growth and how growth affects the quality of life, fiscal resources, and the physical and social pattern of development. City Council direction over this four-year period has culminated in a growth management program designed to address neighborhood preservation, environmental protection, public facility availability, regional transportation mobility, and regional planning. This program is designed to supplement the 1979 management structure to guide growth citywide through a Tier System. Tiers are categories reflecting how development can occur based on the availability of public facilities and services. Merging the new growth policies with the 1979 growth management plan results in a program for managing future development in the City of San Diego.

II. TRENDS

A. Population Growth

In January 1990, the City's population was 1.2 million. Regional forecasts for population increase have been substantially exceeded in the latter half of the 1980s. The 1986 regional growth forecast projected that the region's population would reach 2.5 million in 1995, whereas in January 1990, that figure had already been reached for San Diego county. The forecast approximated a yearly increase of 45,000 in regional population where the actual increase during the second half of the 1980s was 82,000 per year. Despite an anticipated moderation of the rate of population growth for the 1990s, the impacts and needs associated with the next two decades will be pronounced due to the anticipated addition of another one million people in the region by 2010.

B. Urban Form

Development patterns have been established for most of the City and for the majority of the urban portions of the region (excludes mountains and desert). This reality does not preclude future shifts in land use and intensity, but these are generally expected to be long-term and less sweeping than the very rapid growth and development of vacant areas which has occurred over the last 40 years. This is particularly the case in where

approximately three-quarters of the adopted community plan residential capacity has now been built.

C. Fiscal Realities

As a result of the 1978 state passage of Proposition 13, substantial limitations have been placed on the ability of local governments to collect sufficient property taxes commensurate with the historical role this revenue source has played in funding both municipal operations and new public facilities. Also, there have been substantial reductions in the proportion of federal and state funding for transportation and other major capital needs as compared with the four previous decades (1940-1979).

D. Effect of Lifestyle Changes on Travel Patterns

There has been a major expansion of two-worker households leading to an increase in peak-hour trips. Even for those who make a concerted effort to live in the community in which they work, often another member of the household will travel to a job outside that community. Although a broad range of services and employment is a desirable community goal, and should lead to reductions in trip length, it does not ensure a substantially reduced need for inter-community travel. Unless there were to be widespread fundamental changes in the choices made by residents in their selection of home and work locations, the self-contained community alternative independent of specific transportation management incentives and provisions appears to have limited potential in reducing travel demand.

E. Increased Traffic Congestion

During the first seven years of the 1980s, freeway traffic in the region increased approximately 50 percent, as population increased 22 percent, despite the trend toward intensification of sub-regional and community retail and employment centers. This is due to the lower cost of housing on the periphery and the substantial expansion of two-worker households.

F. Economic Growth

The economy of the San Diego metropolitan area achieved major increases in the 1980s in terms of both its size and its diversity. New jobs were created at a very high rate starting in 1984, signaling the end of the 1982 recession. The high job creation, spurred by defense-related, high tech and biomedical increases, resulted in an average of over 45,000 new jobs per year from 1984 through 1989. For the first time, the service sector, stimulated by the growth in basic industry jobs, emerged as the largest category of employment. Service employment, which was San Diego's third largest sector in the 1970s, surpassed both government and retail/wholesale trade during the 1980s. This high level of job creation sustained the high level of population growth. Two-thirds of the increase in population was due to in-migration, a pattern dependent on the expansion of jobs.

III. OVERALL GOALS

1. Manage the growth of the region through assurance of adequate and timely public facilities to serve the additional population.

2. Develop an effective development management system to monitor the distribution and phasing of growth in relation to suitable environmental, physical, and public facility and service performance goals.

3. Reduce public capital and operational costs and effectively manage where future development will occur.

4. Accommodate social and community needs in all areas by providing for balanced housing within all communities for all income levels; proximity of place of employment and residence; recognition of community economic, social and physical values.

5. Preserve and enhance established neighborhoods by establishing performance standards to guide the conservation of valued existing neighborhood characteristics; encouraging private investment and financing for preservation of established neighborhoods; and encouraging infill within City neighborhoods where revitalization is desired and adequate public facilities exist.

IV. OBJECTIVES OF THE 1990 GROWTH MANAGEMENT PROGRAM

The City Council, during their deliberations of the problems and issues associated with growth, identified the following objectives:

1. Protect environmentally sensitive areas and provide for a linked and continuous open space system.

2. Protect single-family neighborhoods from incompatible development.

3. Provide adequate public facilities and services at the time of need to serve new development.

4. Identify existing public facility deficiencies and establish financing techniques to achieve level of service standards.

5. Coordinate growth management policies in San Diego with the growth policies of all jurisdictions within the region, including Mexico.

6. Promote a stable rate of economic growth, a strong and diverse economy and job opportunities which enhance the wellbeing of area residents.

7. Establish balanced communities by providing a range of housing for all economic levels and creating employment opportunities for the economic welfare of each community

8. Protect and conserve limited water supplies.

9. Encourage high-quality development in designated redevelopment areas.

V. DEVELOPMENT PROGRAM

The City will attain the objectives stated above by utilizing its police powers (i.e., its power to regulate the use of land) and its fiscal powers (i.e., the power to collect and to spend money). Through its police powers, the City may impose timing and sequencing controls on new development, thereby regulating the demand for public facilities, while using its fiscal powers to maintain or to expand the capacity of public facilities. The guidelines combine these powers to phase the level of new growth and development to the carrying capacity of programmed public facilities over time.

The provisions for adequate public facilities at the time of need will work to attain the identified level of service goals by 1) providing for capital facility improvements identified in a 20-year capital facilities plan, and 2) assuring that new development is consistent with adopted community facility plans.

A. New Residential and Non-Residential Growth

GOALS

1. Manage the growth of the region through the monitoring of development in the communities in terms of the adequacy and concurrency of public facilities to serve the additional residents.

2. Establish an effective development management system which requires that public facilities reasonably attributable to new development will be provided by new development and not by existing residents.

GUIDELINES AND STANDARDS

1. Plan for phasing of new development and establish revenue sources to pay for infrastructure.

2. Implement an ordinance that establishes procedures for the imposition, calculation, collection, expenditure and earmarking of impact fees tied to assured timely construction of facilities.

B. Economic Growth

GOALS

1. Promote a jobs/housing balance through land use policies which reduce demands on the transportation system.

2. Locate jobs in areas which will enhance and promote the utilization of public transportation and alternative transportation modes.

3. Encourage the continued diversification of the San Diego economy.

4. Promote economic growth which is consistent with environmental goals.

GUIDELINES AND STANDARDS

- Amend the General Plan to ensure consistency between housing goals and major new office and industrial development goals.

C. Preservation of Environmental Quality

GOALS

1. Preserve and protect environmentally sensitive lands which include but are not limited to shoreline, floodplains, hillsides, canyons, wetlands, riparian habitat, endangered species and habitats, and prehistoric and historic sites.

2. Obtain, preserve, and maintain interconnected and functional open space systems to meet the current City needs and the needs of future growth as outlined in the Open Space Element of the General Plan*.

GUIDELINES AND STANDARDS

1. Amend the current three tier program by creation of a fourth geographic area within the City - the environmental tier.

2. Map all areas within the City which are currently and formerly designated as open space, those areas defined as environmentally sensitive lands, and those areas as defined as open space in the Open Space Element of the General Plan. This mapped area will be analyzed for inclusion in the environmental tier and based upon such mapping, the City shall adopt the environmental tier.

3. Before development can proceed on any site within the environmental tier, the City Council shall be required to find that all possible methods of preservation to eliminate development of land within this tier, and/or to minimize development and the impacts of development to land within this tier through the use of mitigation measures have been exhausted.

4. On lands within portions of the environmental tier which are already developed or that have development imminent, all feasible measures shall be taken to protect and preserve environmentally sensitive lands and to provide interconnected and functional open space systems.

5. Provide for continued maintenance of sensitive lands and interconnected open space systems preserved within the environmental tier.

D. Water Conservation and Supply

GOALS

1. Conserve water by establishing standards for water conservation and water reclamation.

2. Protect and maintain sources of water supply, including both reservoirs and underground storage basins.

GUIDELINES AND STANDARDS

1. Require analysis of appropriate water conservation measures in the review of development projects.

2. Require analysis of high water usage projects (e.g., golf courses), and other large scale projects (e.g., industrial processing, major residential) to determine their impact on water supply.

3. Require analysis of projects for their impacts on potable water storage areas.

E. Housing Opportunities

GOALS

1. Maintain a steady level of housing starts to assure continuing availability of all types and prices of housing.

2. Encourage the production of housing opportunities for very-low and low-income persons, and first-time homebuyers.

3. Increase the efficiency of processing land development permits.

4. Create and maintain a stable inventory of developable building sites which provides certainty that development can occur.

GUIDELINES AND STANDARDS

1. Create new development opportunities in selective areas previously bypassed by market forces through governmental incentive as follows:

    a. Maintain a housing trust fund to assist in the production of housing affordable to low-income households and first-time homebuyers.

b. Encourage the production of housing opportunities for very-low and low-income persons, and first-time homebuyers through bonuses, waivers, and other regulatory incentives.

c. Establish an affordable housing replacement ordinance which shall condition the demolition or replacement of affordable housing on the replacement of such housing elsewhere.

d. Establish an inclusionary zoning policy in order to ensure the availability of very-low and low-income housing in new housing development.

F. Redevelopment and Reinvestment

GOALS

1. Stimulate private investment in order to remove and prevent physical, economic, and social bight.

2. Assure quality development in redevelopment areas.

3. Rehabilitate and creatively reuse older structures whenever feasible.

4. Provide mechanisms so that housing is not allowed to deteriorate into substandard conditions.

5. Preserve and increase affordable housing and minimize the additional effects of displacement due to redevelopment.

6. Encourage infill development in redevelopment areas and where revitalization is desired as a means to provide housing, employment and transit opportunities.

GUIDELINES AND STANDARDS

1. The City should subsidize impact fees, voluntary advance payments and other revenue sources for development proposals in designated redevelopment areas.

2. Rehabilitation and adaptive reuse of buildings should be encouraged where appropriate. Buildings should be protected for historical significance as well as social significance.

3. Redevelopment projects should be evaluated through the community planning process to determine the impact on the social and economic fabric of the community.

4. Provide incentives, through zoning and other mechanisms, for revitalization and rebuilding of older neighborhoods in ways that respect the existing character.

G. Transportation Congestion

GOALS

1. Maintain service level standards on the region's freeways and arterials.

2. Encourage transit and ridesharing, and maintain neighborhood character when planning community circulation systems.

GUIDELINES AND STANDARDS

1. Strive to achieve a level of service "C" (off-peak hour) and "D" (peak hour) on the City's freeways, to avoid increasing heavy traffic congestion.

2. The community plans should define standards for primary arterials and major streets, and the travel forecasts upon which they are based should be the criterion for non-freeway level of service standards.

3. Implement alternative modes of transportation to prepare for the future.

4. Implement an ordinance that provides for monitoring of the timing and sequencing of development in order to determine the capacity of transportation facilities to serve development.

5. Implement a transportation demand management program which includes urban form, urban design and land use recommendations to reduce automobile travel and encourage alternative modes of transportation.

6. Prepare a traffic congestion management program in compliance with state requirements which contains 1) traffic level of service standards, 2) standards for transit, 3) a trip reduction and travel demand element promoting alternative transportation methods, 4) a program for analyzing the impacts of local land use decisions, and 5) the seven-year regional transportation improvement program.

H. Facilities - Adequacy and Concurrency

Public facilities and services should include, but not be limited to freeways, significant regional arterials, public transit, police protection facilities, fire protection facilities, regional parks, central library, sewage treatment plants, solid waste disposal facilities, open space, civic center, city operation stations, water availability and water quality.

GOALS

1. Efficiently utilize existing community facilities and improvements.

2. Attain level of service goals for public facilities and services by the year 2010.

3. Provide public facilities and services to assure that adequate level of service standards are attained concurrently with development.

4. Limit the amount of new development to that which can be supported by existing and programmed public facilities.

GUIDELINES AND STANDARDS

1. Standards for facilities should be established by resolution of the City Council, other than the identified citywide level of service standards for freeways and expressways. The community plans should provide standards and criteria through their Public Facility Elements.

2. The City should adopt a Capital Facilities Plan (CFP) that establishes those capital improvements needed to attain the adopted level of service standards. This plan shall include the facilities needed to address deficiencies and to accommodate new growth over a period of twenty (20) years.

3. A schedule for constructing public improvements designed to attain preferred level of service by the year 2010 should be established.

I. Fiscal Impact Review

GOAL

Provide fiscal data for use by the City to guide future planning and land use decisions.

GUIDELINES AND STANDARDS

1. The City should conduct annual review of the fiscal impacts of private development on a sub-regional basis to serve as a policy guide regarding the amount, intensity, location and timing of new development.

2. Analyze development proposals to identify the demand for public facilities which would result from discretionary projects and to identify specific facility improvements which would be provided by the project.

VI. URBAN FORM ALTERNATIVES

In the preparation of the 1979 General Plan, four alternative strategies or frameworks to guide development patterns were addressed. These strategies are reassessed below in terms of the present urban environment. Alternative 4, Urban Node and Phased Development, was selected as the strategy to guide development into the future. This alternative serves as the basis for the 1990 revisions to this plan as well. The four alternative strategies included:

1. Existing Trends - Under this strategy, the City would permit development to build according to adopted community plans, which would result in 30 percent more housing units over the next 20 years in the City of San Diego. Under this alternative, there would be continued dependency upon the freeway-automobile system and housing continuing to grow in a low-density pattern on the peripheries of the metropolitan core.

This trend assumes no major departures from established City patterns of development (completion of existing and approved suburban communities; intensification of existing regional centers, e.g., Centre City, Mission Valley, University City).

2. Fixed Guideway Transit Alternative - This alternative strategy for accommodating growth would emphasize use of a public transportation system to meet a significant proportion of transportation needs. Rather than retaining present community plans, land use intensities would be oriented instead to ensure higher intensities of development near the public transportation corridors and stations. This strategy for growth could require a public and private commitment to funding an interconnected high-capacity rail system in the near to midterm; with an acceleration of the schedules for the I-5 and Interstate 15 (I-15) corridor trolley lines. Additional fixed rail lines to serve future urban nodes would be highly desirable.

3. Emphasis on "Self-Contained" Communities - This alternative requires self-contained, economically balanced communities linked with freeways and express buses. Each community would provide a full range of housing, shopping, employment and recreational opportunities, thus reducing the necessity for inter-community commuting. Intra-community transit systems would be used to reduce congestion within the individual centers.

4. Urban Node and Phased Development - This alternative as described in the 1979 plan calls for more balanced and self-sufficient communities than the continuation of existing trends, but not as compact and complete as the "self-contained" communities concept. More freeway improvements would be required, commuter and trolley rail systems would be required, employment centers would be located near suburban residential communities, leapfrog development would be discouraged, and infill and redevelopment would be encouraged. This alternative reinforces the importance of the Centre City urban core area as the administrative, financial, cultural and institutional center of the region.

   This alternative serves as the basis for the 1990 plan recommendation on guiding future development. Growth will be focused in the urbanized area in selected urban nodes and corridors while carefully phasing development based on the provision of needed public facilities throughout the City.

   The continued growth of urban core areas such as Centre City, the Northern University Community ("Golden Triangle"), and Mission Valley should provide the impetus for achieving the expanded rail system. Similarly, higher intensities in selected transportation corridors in the urbanized area will support public transportation throughout the City. However, the phasing of new development based on the availability of public facilities is key to ensuring that present service levels do not deteriorate and to preserve the "quality of life."

VII. MANAGING GROWTH THROUGH THE TIER SYSTEM

In 1979, the General Plan established an innovative growth management program to reverse the existing trend of rapid population growth on the periphery of San Diego, and the reduced and even declining growth in the central areas of the City. The 1960s and 1970s development pattern contributed to rising public costs to serve scattered development, a loss of natural resources such as open space and agriculture land, and a general deterioration in the City's "quality of life" from continued unplanned sprawl. To reverse this trend, the 1979 General Plan envisioned a process whereby the central business district would be revitalized while growth and development in outlying areas would be phased and sequenced in accordance with the availability of public facilities and services. The program divided the City geographically into three (3) "tiers": "urbanized," "planned urbanizing," and "future urbanizing."

The urbanized areas are comprised of older, built-up areas where the 1979 plan actively encouraged intensive and varied development. The planned urbanizing area consists of newly developing communities where development is staged and sequenced, and is required to "pay its own way" through the use of facilities benefit assessments or other financing mechanisms. The future urbanizing area consists primarily of land that is vacant and is zoned A-l (primarily for agricultural uses), and can be released for urban development only when the urbanized and planned urbanizing areas are sufficiently built out pursuant to General Plan guidelines and specific plans and policies.

At the time of the 1990 General Plan Amendment, the urbanized areas were 82 percent built out, while the planned urbanizing areas were 55 percent built out based on adopted community plans. On that basis, in 1990 the City as a whole was 76 percent developed. The policy of encouraging growth in the urbanized areas was successful. While only 10 percent of all new residential development in 1979 was occurring in the urbanized areas, by 1983 this figure had increased to a peak level of 60 percent. During the late 1980s, the momentum shifted again to the planned urbanizing area, while a strong percentage (typically 40 percent) of residential development continued to occur each year in the urbanized areas.

VIII. URBANIZED AREAS

Beginning with the 1979 General Plan, the program for guiding city growth recommended the division of the city into planning areas or "tiers," designated an urbanized, planned urbanizing, and future urbanizing.

The urbanized area is the central portion of San Diego as well as the remaining older sections of the City. This area includes most of the land south of Miramar Naval Air Station with the exception of Tierrasanta, East Elliott, and Otay Mesa which fall within the planned urbanizing designation.

The downtown core is conceptualized as the focus of metropolitan San Diego. Land use and transportation patterns are expected to emphasize its function as a regional

center. The objectives for the core include attracting the most intensive and varied land use including office-administrative, financial, residential, and entertainment, and strengthening the viability of the downtown core through renewal, redevelopment and new construction.

The remaining communities in the urbanized area could become more diverse in their land use, particularly employment opportunities and housing variety. Access and future public transportation systems are expected to emphasize nodes of activity in older communities. The objectives for the remaining older communities stress the conservation of the social-environmental characteristics and the rehabilitation of deteriorating neighborhoods.

IX. PLANNED URBANIZING

The planned urbanizing area consists of the newly developing communities (see Figure 2). The objectives for these areas include supporting additional public investment necessary to complete development and allow the growth of communities already served by capital facilities. Land will be opened for urbanization in a staged, contiguous manner through the orderly extension of public facilities and the provision of housing for a variety of income levels.

The following criteria should be used to evaluate all planned urbanizing development proposals:

- The development proposal must be included within an adopted community or master development plan.
- The ability and capacity of the water supply and distribution system to provide for the needs generated by the proposed development.
- The ability and capacity of the sanitary sewer system to dispose of and discharge the wastes generated by the proposed development.
- The ability and capacity of the on and off site drainage-ways and facilities to adequately discharge and dispose of the surface runoff generated or increased by the proposed development.
- The ability of the fire department to provide fire protection according to the established response standards of the City.
- The capacity of the appropriate neighborhood school to absorb the children expected to inhabit a proposed development.
- The ability and capacity of parks and open spaces to provide for the recreational needs of the residents of the proposed development.

- An analysis of the cost/revenue of the proposed development or redevelopment based on objective studies that cover total expenditures, both capital and operating, by all governmental agencies, and

- The extent to which the proposed development accomplishes the physical, social (housing), and economic goals of the City as expressed in adopted council policy, ordinances, and resolutions.

New Communities

Large new developments on primarily vacant land, such as North City West and Miramar Ranch North, require special consideration and guidelines.

In general, new communities should be designed and located to ensure that future residents will be afforded an optimum balance of dwelling styles and prices, convenience shopping, office and similar business centers, and educational, cultural, recreational and health services and facilities, either within the community or nearby. Each community should contain a readily identifiable focus achieved through careful siting in the natural terrain.

- Housing

  Heavy emphasis must be placed on techniques to implement the Housing Element of the general and community plans. This, in part, would include strong reliance upon a regulatory or review process that serves to avoid repetitive, standardized lot and street patterns and excessive cutting, scarring or other disruption of the natural environment.

  Plans for new communities must result in balance in not only the physical but in the social and economic sense as well. Each community should provide real housing opportunities for all economic, racial and ethnic groups. It is essential that housing for low and moderate as well as high income groups is considered in the planning stages of new communities and that it be provided in their actual development.

- Employment Centers

  Employment centers should be strategically located throughout the City so as to provide residents with a realistic alternative to the typical commuting burden fostered by urban sprawl. These employment centers could consist of a series of industrial park complexes with office and commercial activities.

- Transportation

  The siting of a series of new communities should carefully consider locations that can most readily accommodate and support alternative modes of transit other than the automobile.

  The transportation system should also be used as a tool for shaping the urban environment. This can be accomplished by integrating the major system into the natural

land forms and by complementing and providing public views and access to open space systems.

- Open Space

  San Diego's natural terrain with its hills, canyons and drainage systems provides an opportunity to create a system of large natural areas which preclude the merging of new development in a continuous pattern of urbanization and, therefore, forms communities which have identity and individuality. Open space not only provides opportunities for recreation and aesthetic enjoyment, but also preserves San Diego's unique natural features and resources.

- Cost Benefit

  Economic and fiscal studies must be undertaken to understand the cost/revenue impact of proposed development in both capital and operating costs of all governmental agencies.

  Ecological studies of the impact of urbanization throughout the area should be undertaken to quantify environmental values, which contribute to the "quality of life." At a minimum, these studies should serve to identify where environmental problems might occur.

- The development of new communities should be reasonable and realistically phased. Unless this is done, urban sprawl resulting from premature scattered speculation in land development is inevitable. Resisting these pressures requires a strong community will and determined commitment, but if successfully achieved, can result in sound, stable development and attractive living environments.

X. FUTURE URBANIZING AREAS

The future urbanizing area generally includes that land which is presently vacant and is zoned A-l primarily for agricultural uses, which is generally farthest removed from the City's central business district and from existing developed areas of the City, and which is farthest removed from the service areas of most existing City facilities and services. There typically are no community, specific, or precise plans either adopted, in preparation or programmed for this area. At this time, servicing the area would represent an expensive and inefficient use of City resources. This area is not expected nor is it needed to meet the demand for projected urban development since there is an ample supply of land available for development in the urbanized and planned urbanizing areas.

The City's objectives in this area, therefore, are to avoid premature urbanization, to conserve open space and natural environmental features, and to protect the fiscal resources of the City by precluding costly sprawl and/or leapfrog urban development. The future urbanizing area is to be maintained for the planning period as an "urban

reserve," a concept embodied in the state's "Urban Strategy for California" (State Office of Planning and Research, February 1978.)

The delineation of the future urbanizing area is not intended to be permanent; rather, it is an interim designation designed, as part of the overall growth management program, to prevent premature urban development and, therefore, to guide urbanization into more appropriate areas in accordance with a balanced and efficient growth pattern. Future General Plan updates may indicate either expansion or contraction of this area. Expansion may occur via annexation; contraction may occur via a shift of land to the planned urbanizing area. During the planning period, however, some land in this area may need to be shifted to the planned urbanizing area in order to meet presently unanticipated demands to enable the land market to operate more freely.

These lands may be released for urban development as the urbanized and planned urbanizing communities approach buildout, or as significant opportunities arise to implement the City's balanced housing, land use or other goals.

Proposition A, an initiative measure approved by the electorate of the City of San Diego on November 5, 1985 amended the General Plan. The initiative amended the plan by adding the provisions presented below in bold:

Section 1. "No property shall be changed from the "future urbanizing" land use designation in the General Plan to any other land use designation and the provisions restricting development in the future urbanizing area shall not be amended except by majority vote of the people voting on the change or amendment at a citywide election thereon."

Section 2. Definitions. "For purposes of this initiative measure, the following words and phrases shall have the following meanings:

(a) "*Progress Guide and General Plan* shall mean the *Progress Guide and General Plan* of the City of San Diego, including text and maps, as the same existed on August 1, 1984."

(b) "Change in Designation" or changed from 'Future Urbanizing' shall mean the removal of any area of land from the future urbanizing designation."

(c) "Amendment" or "amended" as used in Section 1 shall mean any proposal to amend the text or maps of the *Progress Guide and General Plan* affecting the future urbanizing designation as the same existed in the *Progress Guide and General Plan* on August 1, 1984 or the land subject to said designation on August 1, 1984, except amendments which are neutral or make the designation more restrictive in terms of permitting development."

Section 3. Implementation. "The City Council, City Planning Commission, and City staff are hereby directed to take any and all actions necessary under this initiative measure,

including but not limited to adoption and implementation on any amendments to the General Plan and zoning ordinance or citywide, reasonably necessary to carry out the intent and purpose of this initiative measure. Said actions shall be carried forthwith."

Section 4. Guidelines. "The City Council may adopt reasonable guidelines to implement this initiative measure following notice and public hearing, provided that any such guidelines shall be consistent with the intent and purpose of this measure."

Section 5. Exemptions for Certain Projects. "This measure shall not prevent completion of any project as to which a building permit has been issued pursuant to Section 91.04.03(a) of the San Diego Municipal Code prior to the effective date of this measure; provided, however, that the project shall cease to be exempt from the provisions of Section 91.02.0303)d) of the San Diego Municipal Code or if the said permit is suspended or revoked pursuant to Section 91.02.0303(e) of the San Diego Municipal Code."

Section 6. Amendment or Repeal. This measure may be amended or repealed only by a majority of the voters voting at an election thereon.

Section 7. Severability. "If any section, subsection/ sentence/ phrase/ clause/ or portion of this initiative is for any reason held to be invalid or unconstitutional by any court of competent jurisdiction/ such decision shall not affect the validity of the remaining portions of this initiative and each section, subsection/ sentence, clause/ phrase/ part of portion thereof would have been adopted or passed irrespective of the fact that any one or more sections, subsections, sentences, clauses/ phrases/ parts or **portions be declared invalid or unconstitutional."**

In the North City future urbanizing area bounded by the Carmel Valley and Rancho Peñasquitos communities, Peñasquitos Canyon to the south and the county of San Diego to the north, it became apparent that existing zoning was not effective in preventing premature development that could limit future land use options and opportunities to locate and finance future public facilities. A framework plan has been adopted which will guide development in this area when it is shifted to the planned urbanizing designation and for development in the interim before a phase shift has occurred. Land use designations in the framework plan which permit greater development intensities than the existing zoning require voter approval under Proposition A in order to become effective.

Development Policies

1. Land within the future urbanizing area which is designated and zoned for open space, agricultural, or low-density residential use for extended periods of time should be given tax relief through preferential tax assessments. This can be accomplished through the use of the Williamson Act which requires the designation of land as an "agricultural preserve" or as open space pursuant to the General Plan.

2. The existing non-urban land use pattern and character of the area should be retained until such time as the City Council and the electorate approve a phase shift reclassifying

the land to the planned urbanizing designation and a land use plan for the area is adopted.

3. Rural, resource-based and open space uses should be retained on a permanent basis, where appropriate and feasible.

4. Development should be permitted consistent with the A-l (Agricultural) Zone applied, and conditional uses should be allowed provided they are natural resources dependent, non-urban in character and scale, or are of an interim nature which would not result in an irrevocable commitment of the land precluding future uses.

5. Public facility improvements should be permitted only to meet regional needs or to serve primarily the urbanized and planned urbanizing communities, provided the impacts of those facilities upon identified resources can be avoided or fully mitigated.

6. Lands that should be categorized as environmentally sensitive or which are appropriate for permanent retention as rural, resource-based or open space uses should be identified and mapped.

7. Following the identification and mapping of these resources, transportation corridor and other needed public facility improvements should be identified and mapped, provided such facilities avoid or fully mitigate impacts to the area's resources.

8. Expenditures or plans for future urbanization of these areas should not be made until the need for urbanization of these lands has been evaluated based on the extent of utilization and redevelopment of existing urbanized and planned urbanizing areas, and findings have been made that:

    a. The capacity of lands identified as appropriate for development within the urbanized and planned urbanizing areas is approaching full utilization in accordance with adopted community plans;

    b. A need exists for additional developable lands; and

    c. A process has been developed to identify where the next phase of urban development should occur.

XI. REGIONAL PLANNING

Continue a cooperative relationship with other agencies such as the Local Agency Foundation Commission, the metropolitan sewer system, the San Diego Association of Governments, the Metropolitan Transit Development Board, etc. Continue active participation in and support of the Regional Planning and Growth Management Review Board function of the San Diego Association of Governments. Parameters include work to reach consensus of the region's cities and the county on:

1. Regional Quality of Life Standards.

2. The air quality plan for the San Diego region is mandated by the California Clean Air Act. Statutory requirements are placed on the Air Pollution Control District and the San Diego Association of Governments in formulating the region's air quality plan. Transportation Demand Management and indirect source measures (i.e., provisions to guide land use) are examples of mechanisms which local jurisdictions can utilize in achieving the standards.

3. Regional holding capacities based on factors such as water availability, air quality, and programmed capacity of the transportation system.

4. The need for additional growth-related policies including growth phasing (as related to the Regional Population Forecast), regional land use distribution (population and employment mix), growth monitoring, open space preservation, significant regional arterials, transportation system management and demand management, siting regional facilities, financing regional facilities, consistency of regional and local plans, and development of a regional growth management strategy.

XII. PROSPECTIVE ANNEXATION AREAS

One area of interagency cooperation requiring special attention is the determination of ultimate boundaries for the City. Both state and county have adopted policies favoring management of growth and concomitant urban services through expansion of cities rather than through creation or expansion of limited purpose agencies and special districts. The City has supported this approach to providing needed services to growing areas as the most cost-effective and responsive of available alternatives.

In order to finally determine the most logical and efficient boundaries between different cities, state law provides for the development of a "Sphere of Influence" study for the City by the Local Agency Formation Commission. Upon adoption the City "Sphere of Influence" is used by the Local Agency Formation Commission in making decisions about annexations, detachments, governmental reorganizations, special district formations and other matters affecting the jurisdiction and boundaries of the City. "Sphere of Influence" studies for the entire area have yet to be completed.

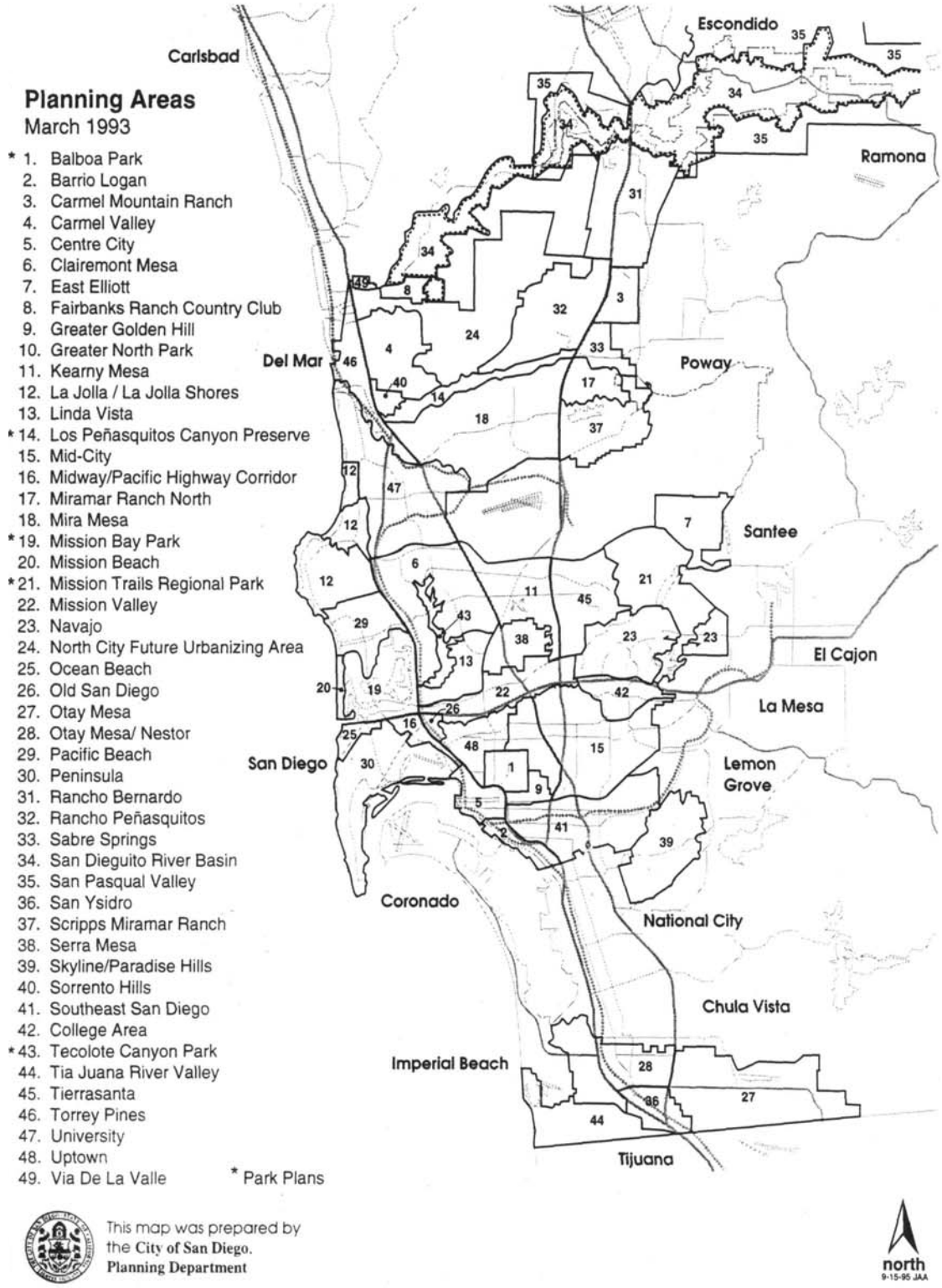
Pending the adoption by the Local Agency Formation Commission of a "Sphere of Influence" for San Diego, an interim guideline is necessary to specify the prospective ultimate boundaries of the City. The areas lying within these boundaries are shown on the Prospective Annexation Areas Map (Figure 3) and include both islands of unincorporated land and relatively undeveloped areas sharing common geographic features and bordered by the same natural boundaries as the contiguous City areas. Because development within these areas would require public facility and service extensions from contiguous City areas, and given the City's interest in promoting orderly growth on its periphery, the North City area, generally south of the San Dieguito

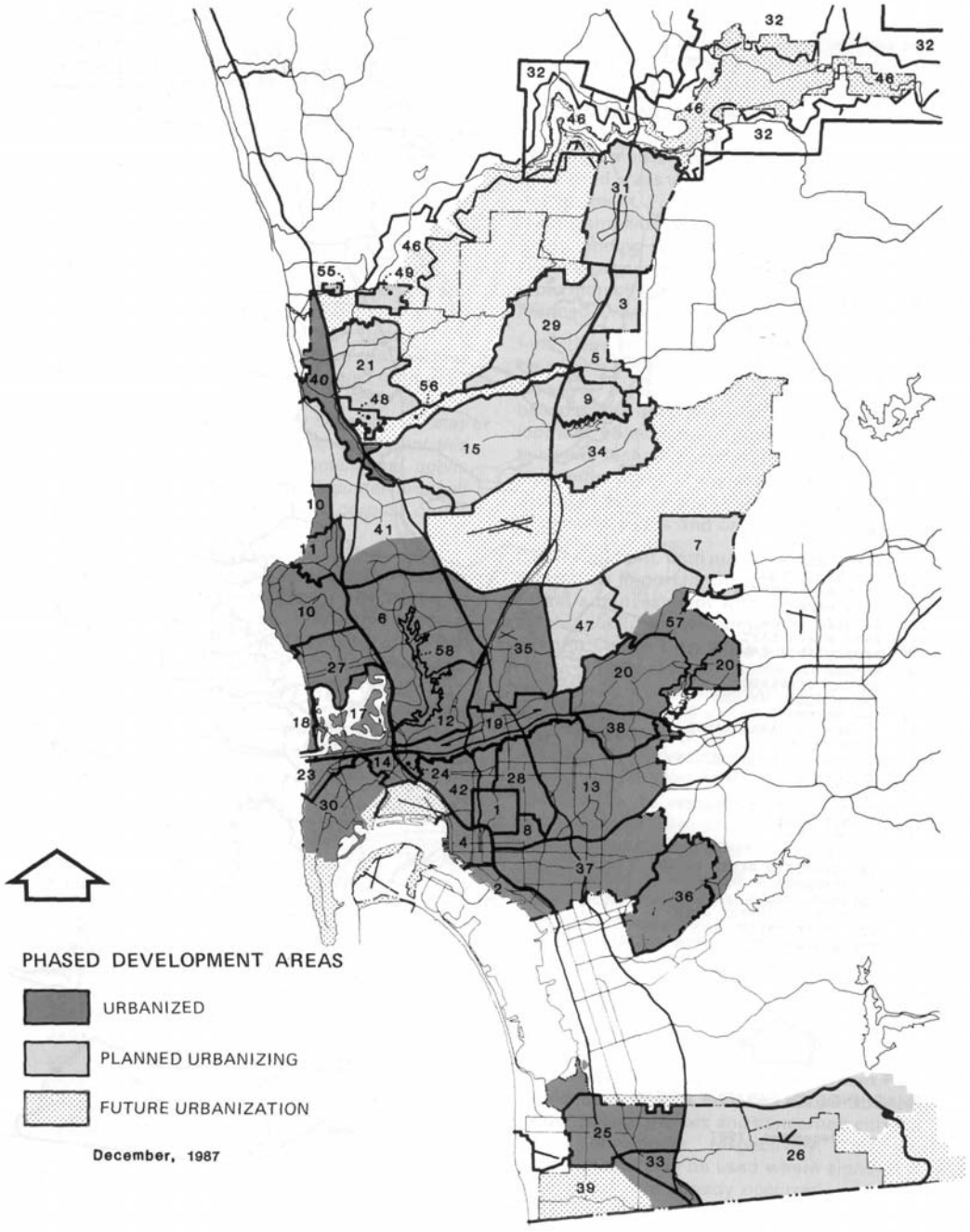
River, and Otay Mesa area, generally south of the Otay River, east to Otay Mountain are both considered as prospective annexation areas.

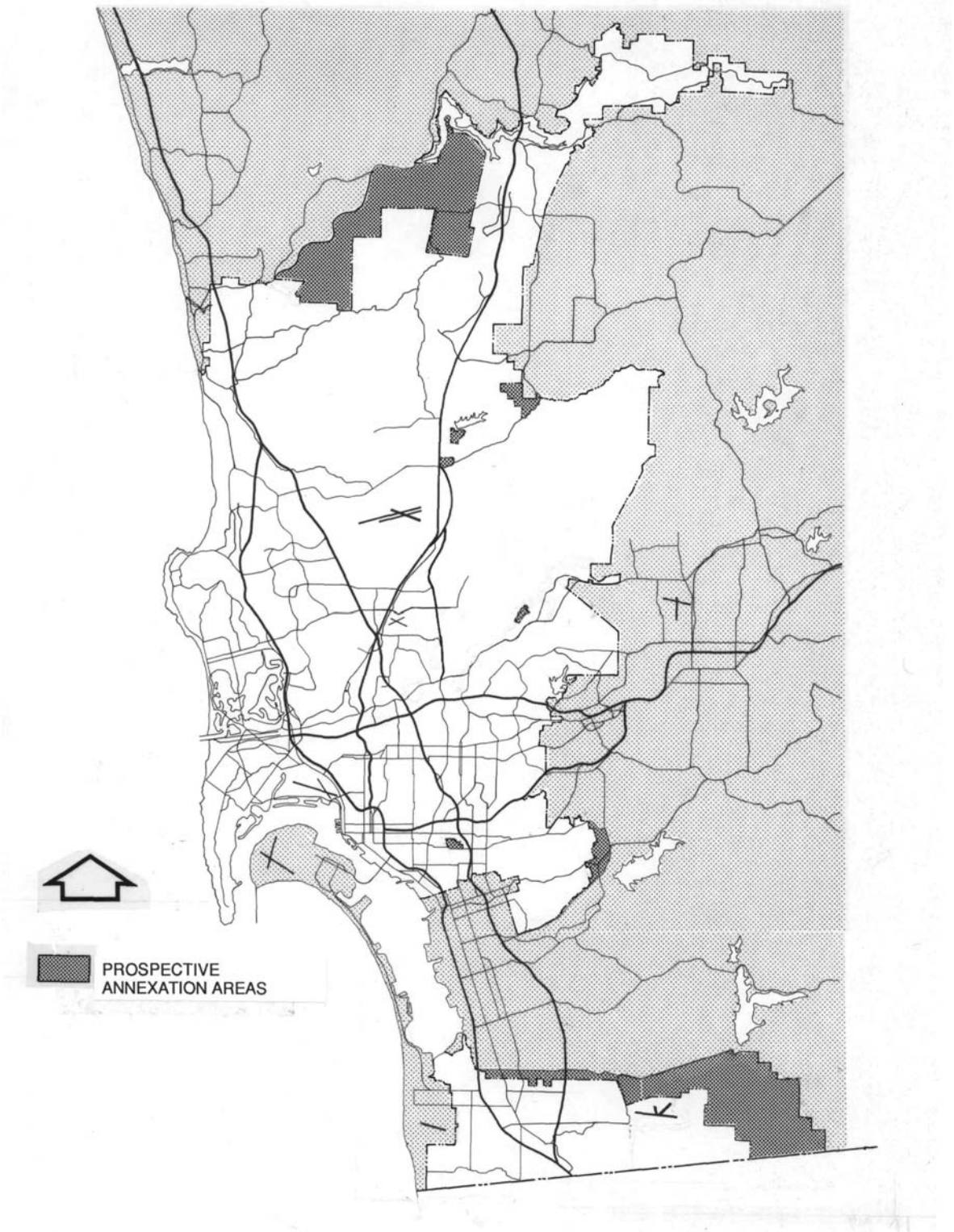
Land within the prospective annexation areas may be annexed upon the initiative of either the landowner or the City. In either case, the following factors will be reviewed:

- The fiscal impact of the proposed annexation.
- Whether the proposal represents an orderly extension of City boundaries.
- The ability of the City to provide urban services.
- The effect of the annexation upon the City's residential growth management program.
- The level of support on the part of affected property owners.

The prospective annexation areas will be systematically included in the appropriate community plans and phased development areas in the same manner as land lying within the City.


Planning Areas
March 1993
* 1. Balboa Park
2. Barrio Logan
3. Carmel Mountain Ranch
4. Carmel Valley
5. Centre City
6. Clairemont Mesa
7. East Elliott
8. Fairbanks Ranch Country Club
9. Greater Golden Hill
10. Greater North Park
11. Kearny Mesa
12. La Jolla / La Jolla Shores
13. Linda Vista
* 14. Los Peñasquitos Canyon Preserve
15. Mid-City
16. Midway/Pacific Highway Corridor
17. Miramar Ranch North
18. Mira Mesa
* 19. Mission Bay Park
20. Mission Beach
* 21. Mission Trails Regional Park
22. Mission Valley
23. Navajo
24. North City Future Urbanizing Area
25. Ocean Beach
26. Old San Diego
27. Otay Mesa
28. Otay Mesa/ Nestor
29. Pacific Beach
30. Peninsula
31. Rancho Bernardo
32. Rancho Peñasquitos
33. Sabre Springs
34. San Dieguito River Basin
35. San Pasqual Valley
36. San Ysidro
37. Scripps Miramar Ranch
38. Serra Mesa
39. Skyline/Paradise Hills
40. Sorrento Hills
41. Southeast San Diego
42. College Area
* 43. Tecolote Canyon Park
44. Tia Juana River Valley
45. Tierrasanta
46. Torrey Pines
47. University
48. Uptown
49. Via De La Valle
* Park Plans
This map was prepared by the City of San Diego. Planning Department
Carlsbad
Escondido
Ramona
Del Mar
Poway
Santee
El Cajon
La Mesa
San Diego
Lemon Grove
Coronado
National City
Chula Vista
Imperial Beach
Tijuana
north
9-15-95 JAA


PHASED DEVELOPMENT AREAS
URBANIZED
PLANNED URBANIZING
FUTURE URBANIZATION
December, 1987


PROSPECTIVE
ANNEXATION AREAS

ELEMENTS

(Housing Element not included in this edition)

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.

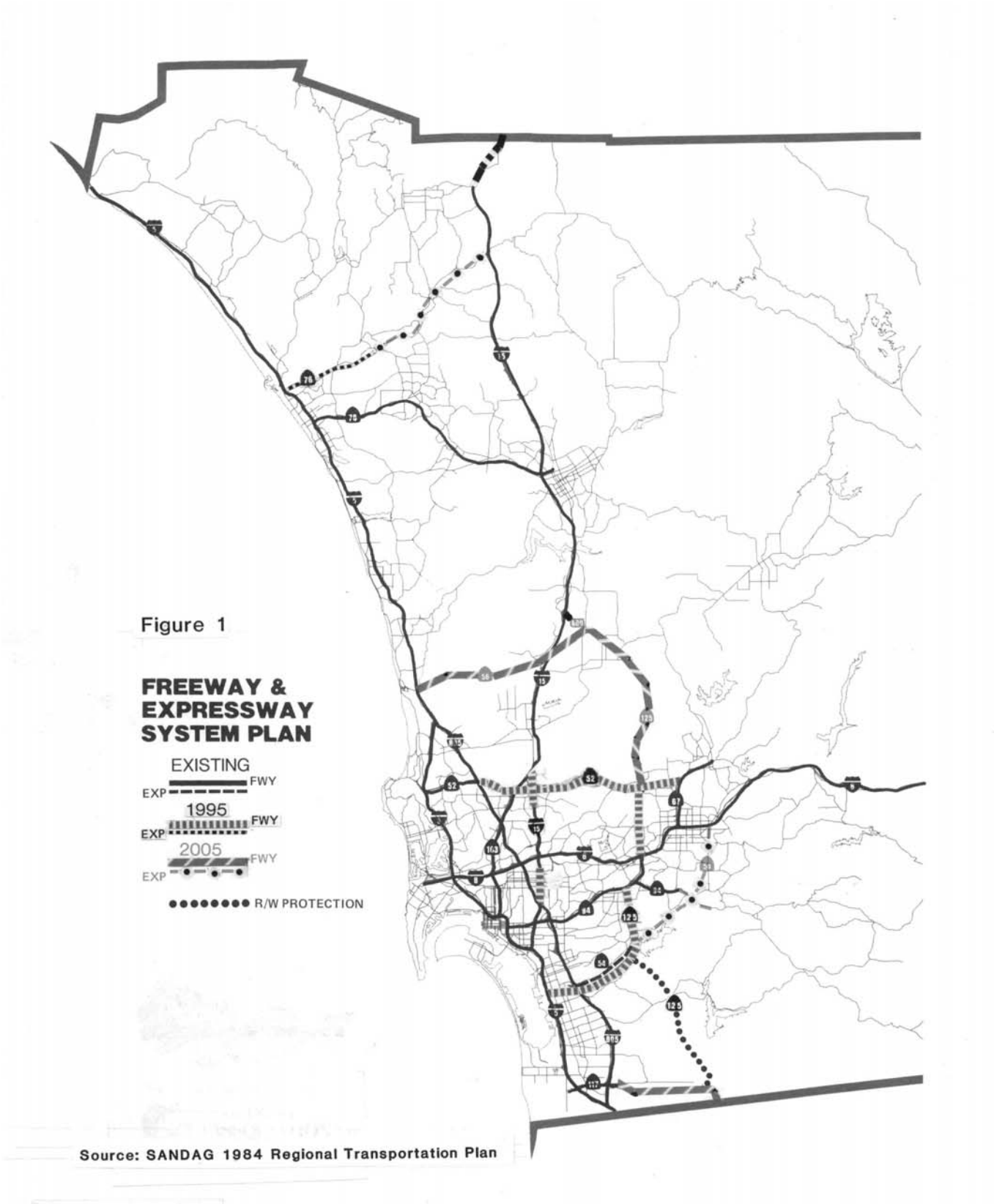


Figure 1
FREEWAY &
EXPRESSWAY
SYSTEM PLAN
EXISTING
FWY
EXP
1995
FWY
EXP
2005
FWY
EXP
R/W PROTECTION
Source: SANDAG 1984 Regional Transportation Plan

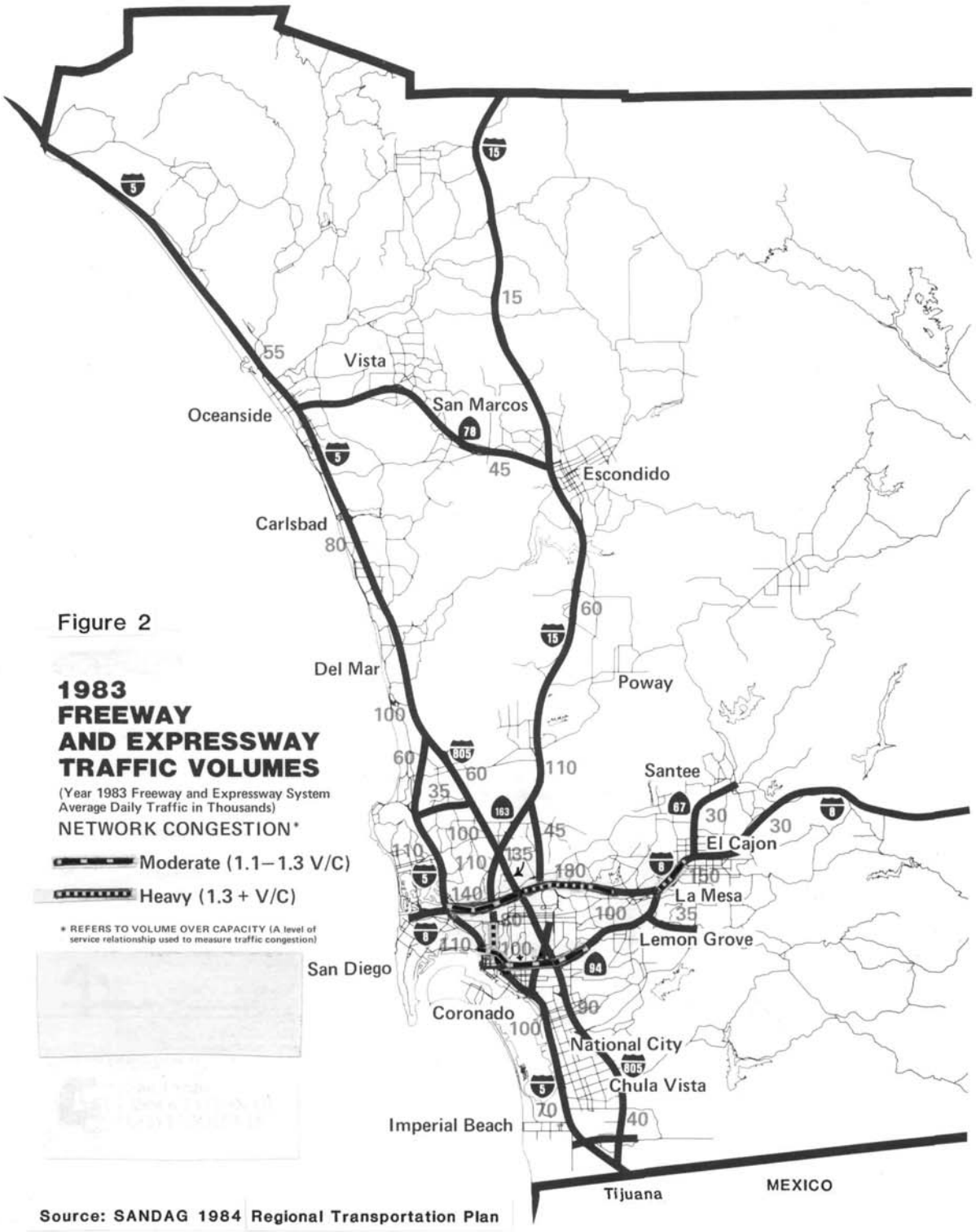


Figure 2
1983
FREEWAY
AND EXPRESSWAY
TRAFFIC VOLUMES
(Year 1983 Freeway and Expressway System
Average Daily Traffic in Thousands)
NETWORK CONGESTION*
Moderate (1.1–1.3 V/C)
Heavy (1.3 + V/C)
* REFERS TO VOLUME OVER CAPACITY (A level of service relationship used to measure traffic congestion)
Source: 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

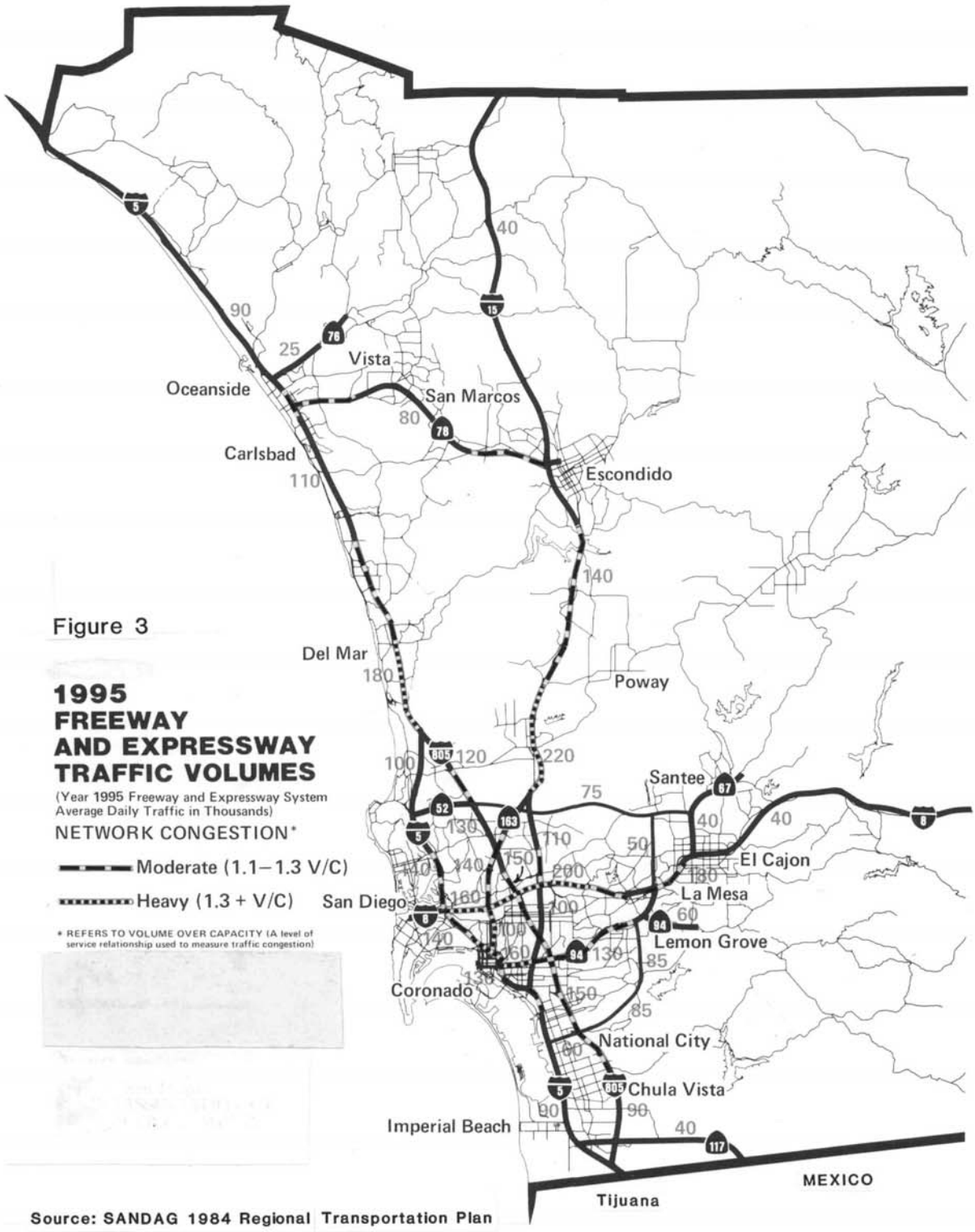


Figure 3
1995
FREEWAY
AND EXPRESSWAY
TRAFFIC VOLUMES
(Year 1995 Freeway and Expressway System
Average Daily Traffic in Thousands)
NETWORK CONGESTION*
Moderate (1.1–1.3 V/C)
Heavy (1.3 + V/C)
* REFERS TO VOLUME OVER CAPACITY (A level of service relationship used to measure traffic congestion)
Oceanside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

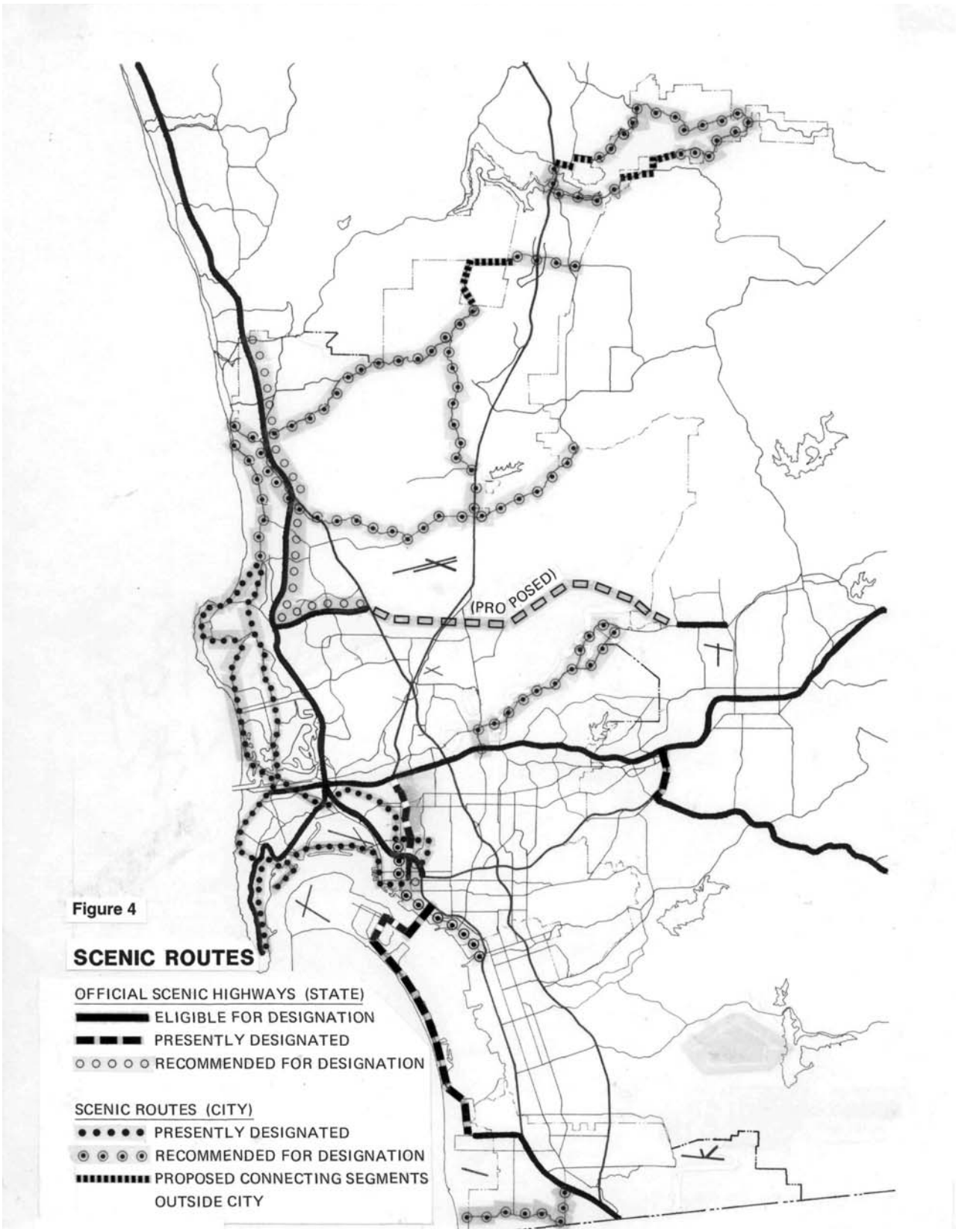
Though substantial, these problems are not insurmountable. Trip distances and travel times can be limited by checking urban sprawl and making communities more self-contained.

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.

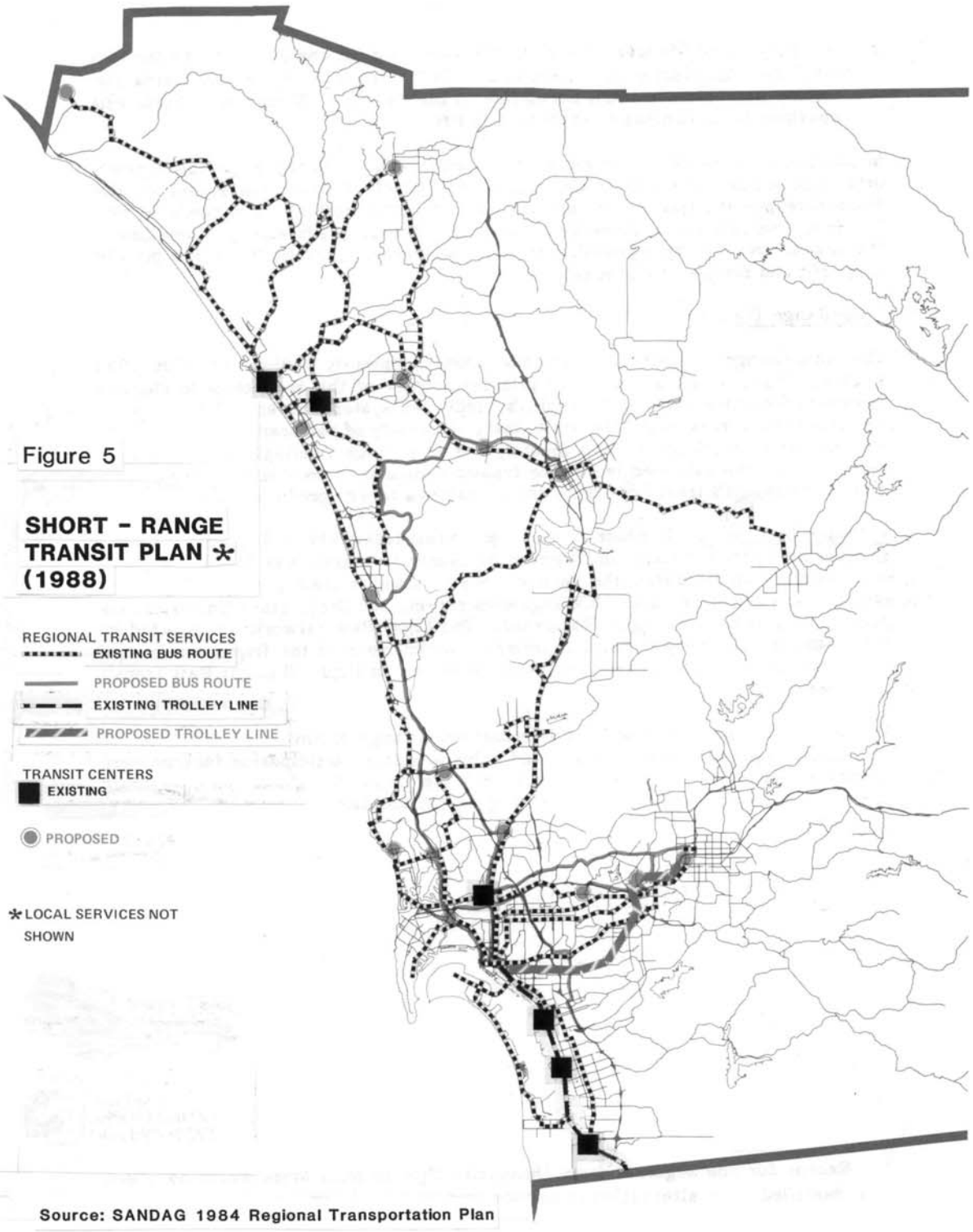


Figure 5
SHORT - RANGE TRANSIT PLAN *
(1988)
REGIONAL TRANSIT SERVICES
EXISTING BUS ROUTE
PROPOSED BUS ROUTE
EXISTING TROLLEY LINE
PROPOSED TROLLEY LINE
TRANSIT CENTERS
EXISTING
PROPOSED
*LOCAL SERVICES NOT SHOWN
Source: SANDAG 1984 Regional Transportation Plan

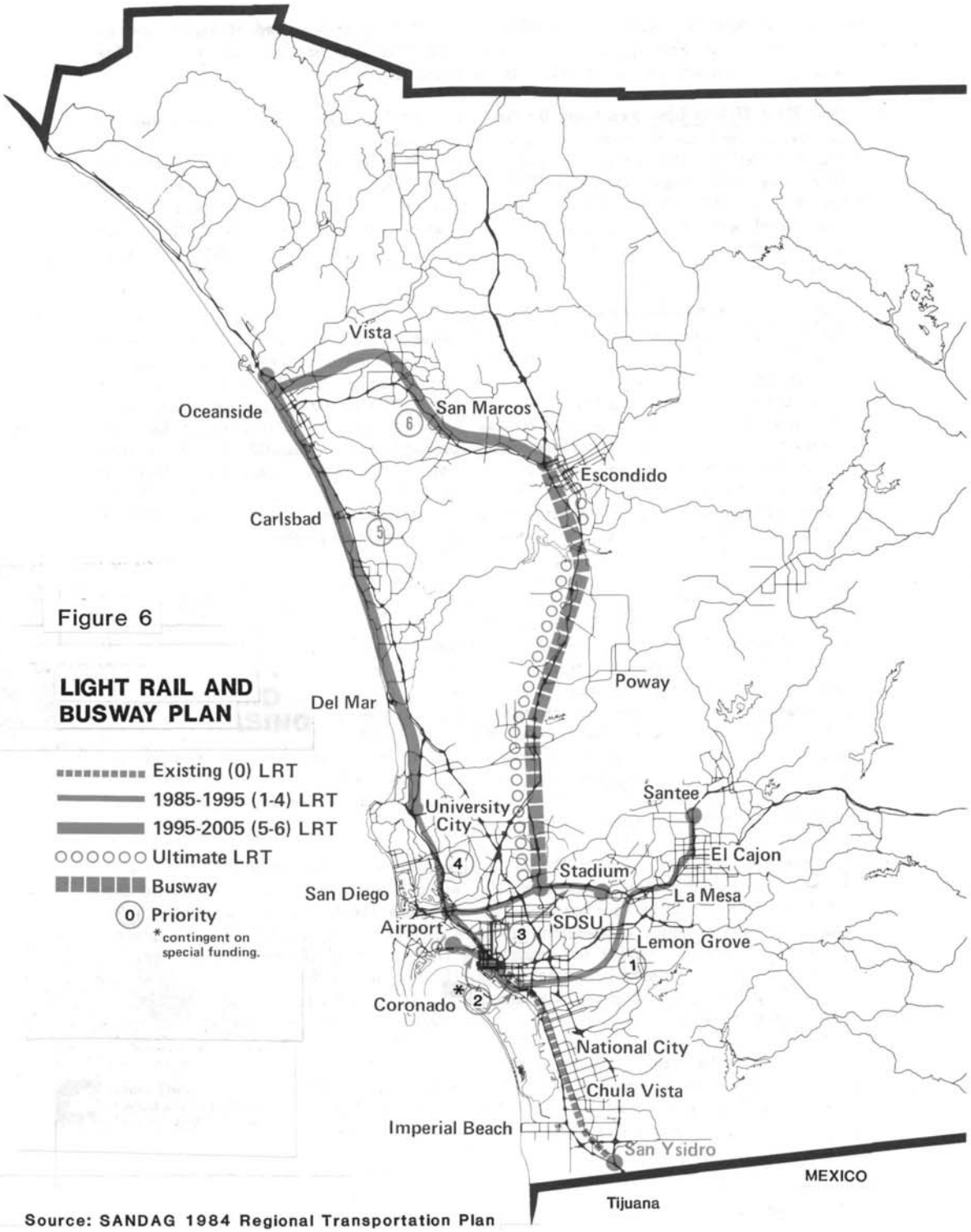


Figure 6

Source: SANDAG 1984 Regional Transportation Plan

Airports

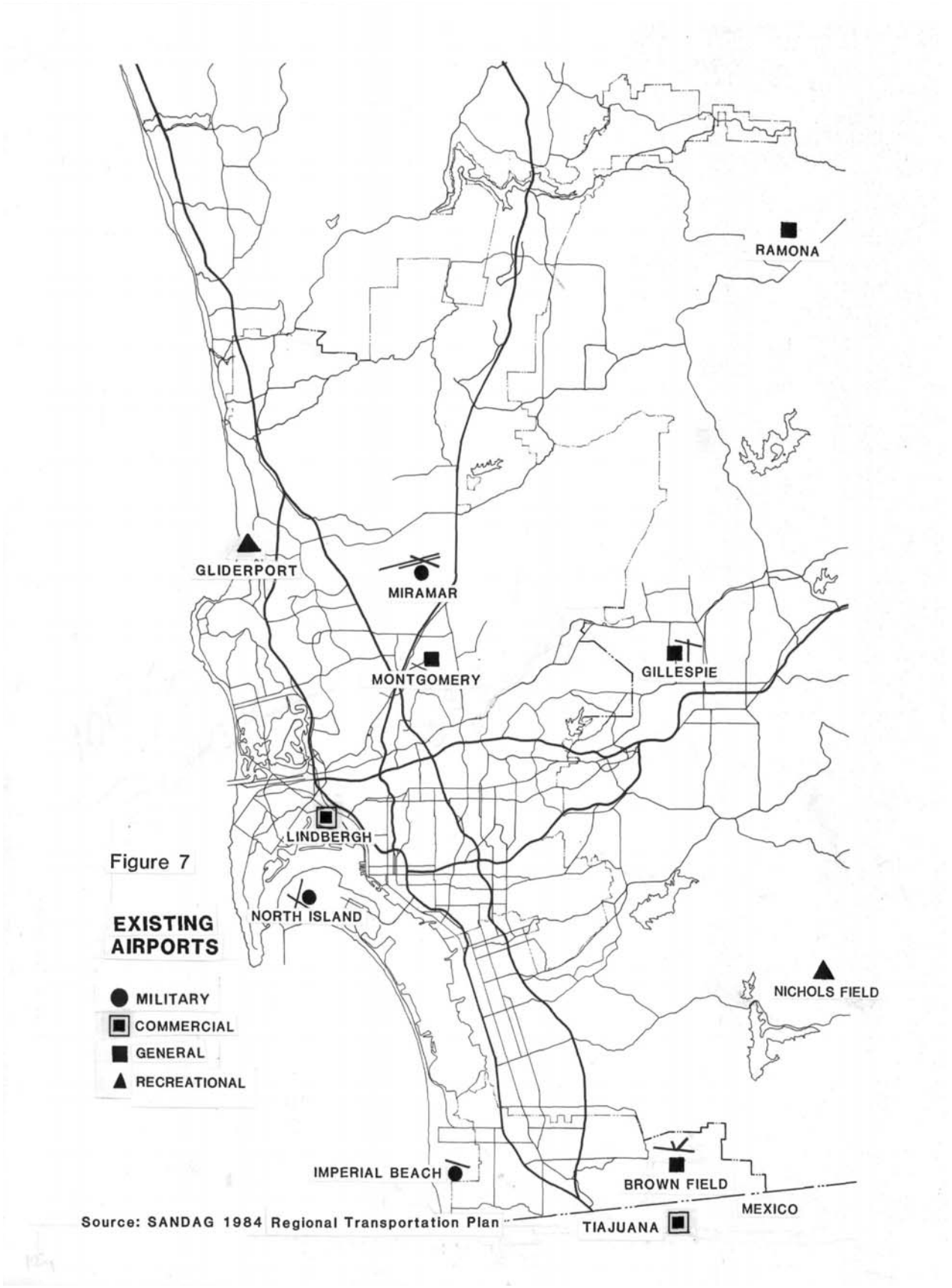
Aviation facilities within the metropolitan area, shown on Figure 7, include San Diego International Airport (Lindbergh Field), four public general aviation airports, three military airports, and a number of recreational and private airfields. Tijuana International Airport, located immediately south 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,


RAMONA
GLIDERPORT
MIRAMAR
MONTGOMERY
GILLESPIE
LINDBERGH
NORTH ISLAND
NICHOLS FIELD
IMPERIAL BEACH
BROWN FIELD
MEXICO
TIAJUANA
Figure 7
EXISTING AIRPORTS
MILITARY
COMMERCIAL
GENERAL
RECREATIONAL
Source: SANDAG 1984 Regional Transportation Plan

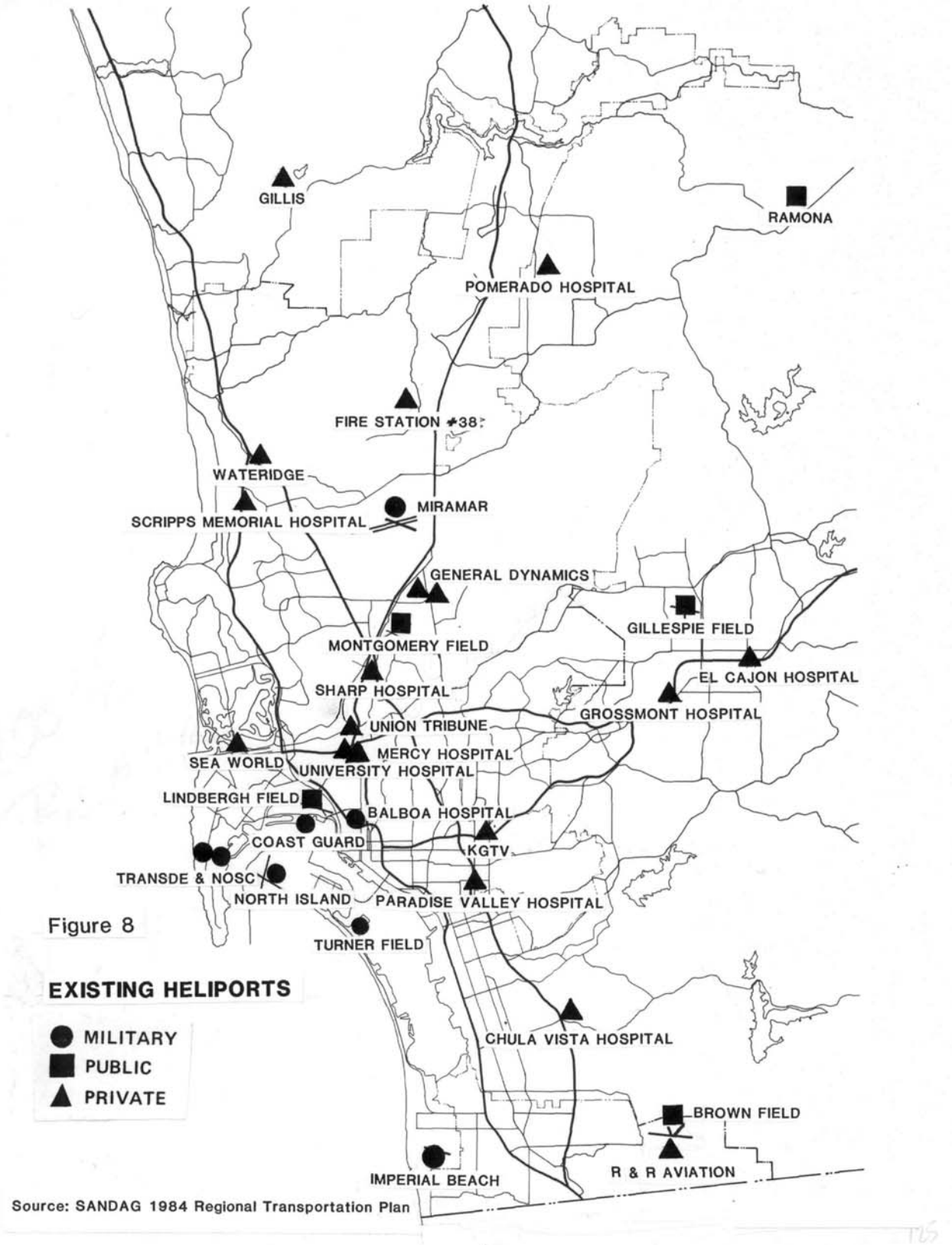


Figure 8

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

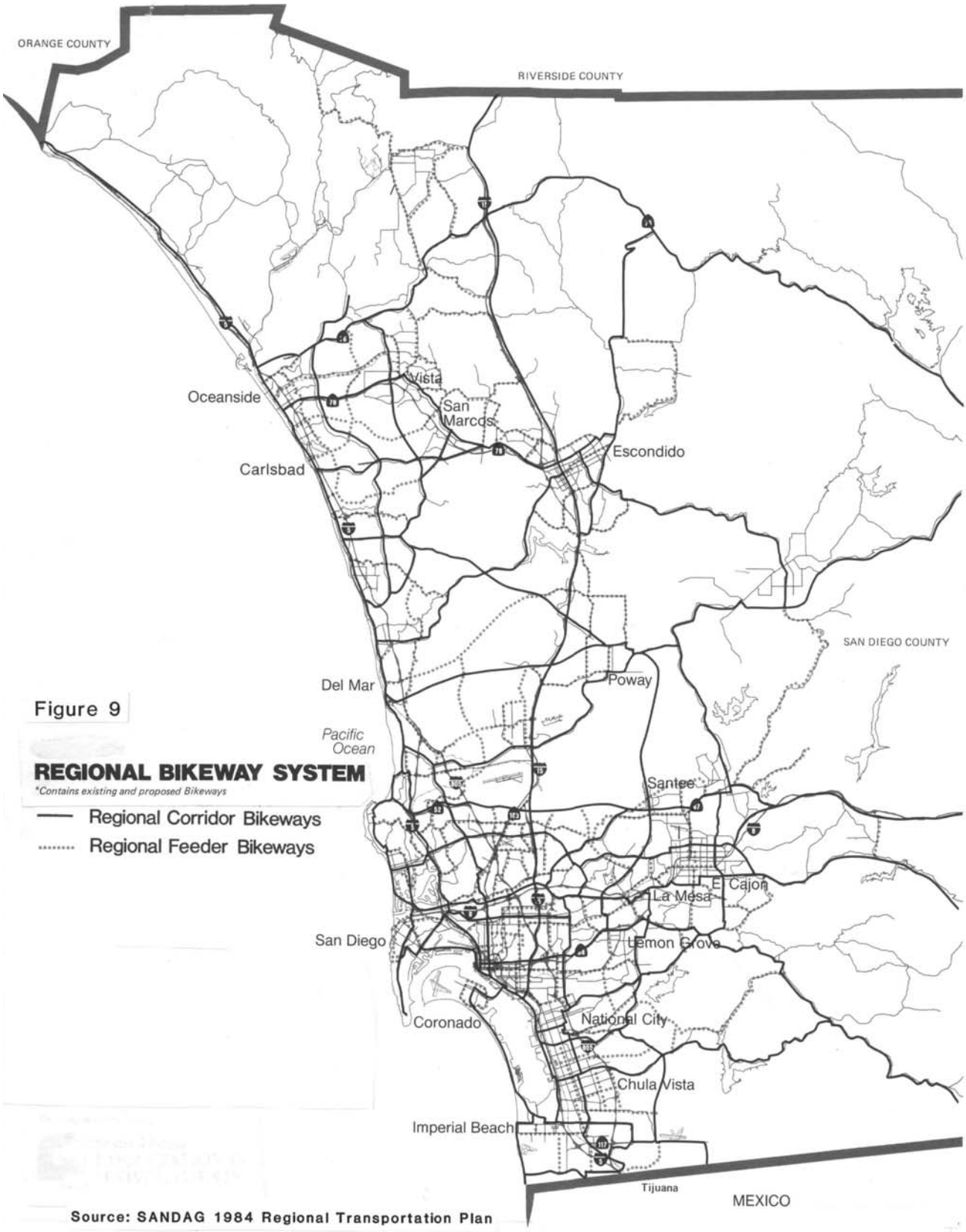


Figure 9

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

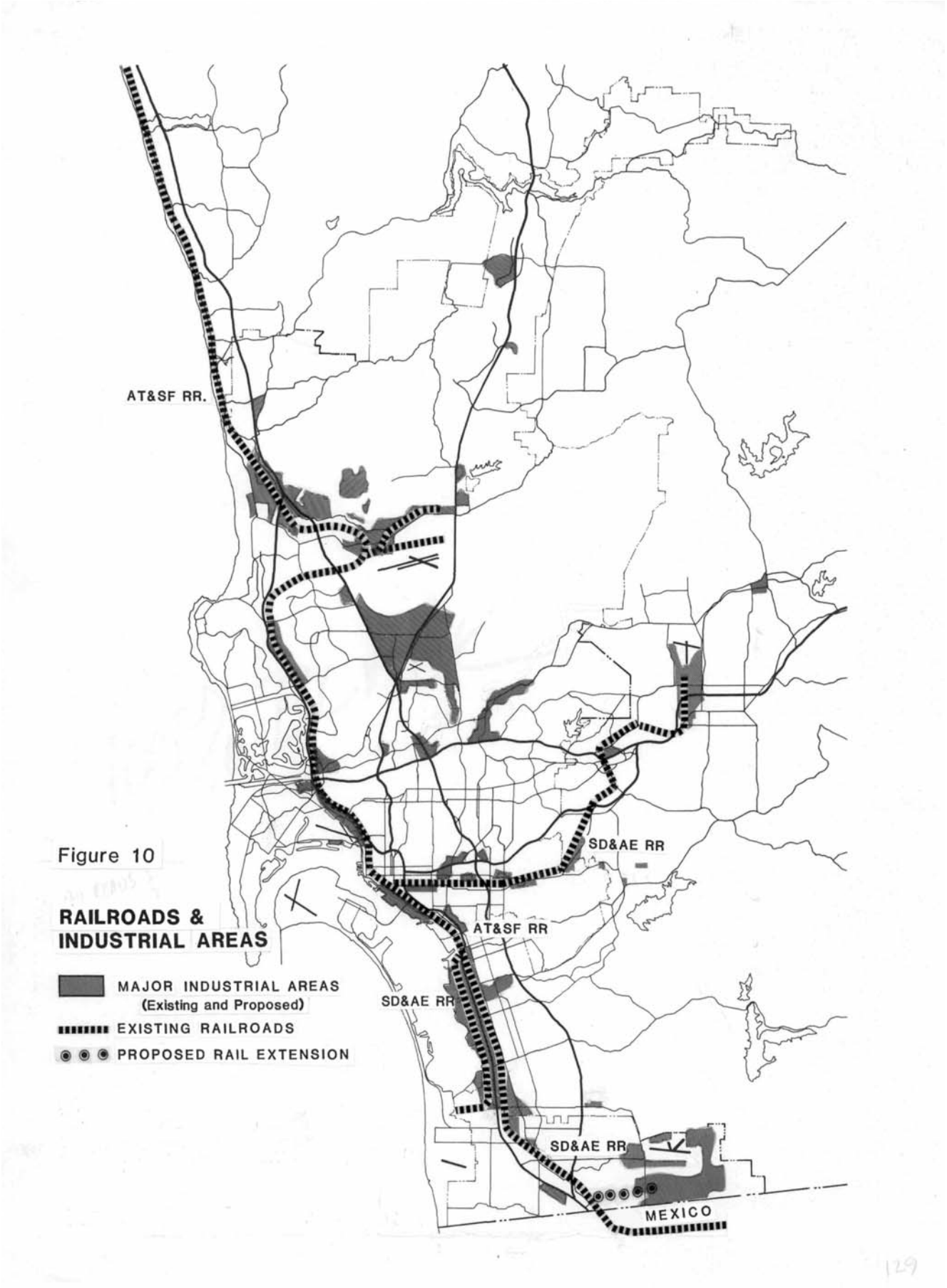
San Diego is served by two railroads, shown on Figure 10 in relationship to major industrial areas. The Atchison, Topeka and Santa Fe main line runs from National City to Los Angeles, where it connects with major continental railroads. The Santa Fe Railway Company provides freight service to the coastal 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.
SD&AE RR
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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.

COMMERCIAL ELEMENT

Commercial

The Commercial Element seeks to project a functional structure that can effectively accommodate the commercial needs of San Diego residents and visitors. In general terms this structure can be said to incorporate the following key components: continuation of the present decentralized pattern of commercial uses; continuing reliance on shopping centers as the favored form of retail commercial development; a changing, more specialized role for Centre City; and recognition of the increasing importance of commercial recreation to this area.

Commercial and residential areas are mutually supportive; and, to a somewhat lesser degree, so are commercial and industrial areas. The successful functioning of commercial areas is closely keyed to the City's transportation system and the latter, in turn, seeks to effectively serve the former.

FINDINGS

Commercial Activity

General

San Diego's commercial development prior to the 1940s consisted of the downtown, which was the regional retail and service center; assorted community business districts, such as North Park and La Jolla; and strip commercial developments along major streets. Streetcars and trolleys were the major factors in the development of this commercial pattern, but it was continued when autos and buses replaced trolleys.

After World War II, auto ownership increased enormously, there was a general movement to the suburbs, traffic and parking problems in the existing commercial areas increased, and retailers felt the need for new buildings that were not feasible in existing business districts. All these factors produced 30 years of shopping centers here and throughout the country.

Now, with rising property values, energy shortages, public and governmental concern about environmental issues, and efforts to build a more compact City, current trends all over the country are toward mixed-use complexes which make more efficient and intensive use of both land and the expensive parking facilities.

These newer shopping centers combine housing, shopping, offices, parking facilities, and cultural and recreational uses, usually centering on a pedestrian mall. Ideally they are integrated into a total urban design plan, in order to both contribute to and profit from the larger public environment. They are found both in suburbs and existing downtown areas, with emphasis on accessibility to public transit as well as autos. They typically use multi-story structures and stacked parking, rather than sprawling one-story buildings in a sea of asphalt, and thereby resolve some of the major problems and shortcomings of earlier shopping centers: excessive land use, dependence on auto travel, runoff pollution, visual impacts on their area, and enormous direct and indirect energy requirements.

Older Sections of the City

Strip development normally characterizes the older commercial areas of the City. Because of development prior to current zoning regulations, market trends and urban development patterns, the problems associated with the older commercial strips are a combination of inadequate parking and traffic congestion.

Strip or thoroughfare commercial is a result of the tendency to regard all property fronting on major streets as business property: such business frontage is usually considered the most valuable type of land investment and high-traffic streets are usually considered inappropriate for lower land uses.

Commercial strips made some sense when there was less traffic moving more slowly; the passing motorist could be induced to stop, getting on and off the thoroughfare was not difficult, and driving to a specific address did not entail miles of congested traffic. Now traffic is heavier and moves more quickly, it divides and destroys the strip areas, and at the same time the commercial uses strangle traffic flow. This type of commercial development now is inefficient for everyone concerned. It means inconvenience for the shopper, poor business for the merchant, and poor investment on the average for the landowners. Massed shopping areas are always preferable.

There are a number of business activities that need main street locations for auto access. There are others who are forced to locate there because they are unwelcome or unsuccessful in shopping centers or central business districts. However, these uses extending indefinitely in low-density, unplanned and unregulated strips have undesirable effects on adjacent property and on urban form in general. A particularly undesirable location is across from and around planned shopping centers. They interfere with traffic flow to and from the center, detract from the visual aspect of the center, make use of the shopping center parking, and undermine surrounding property values and the success of the shopping center itself.

Existing business districts in older, built-up areas of San Diego could be upgraded and infilled, to better serve their neighborhoods and to accommodate increased demand arising from the City's growth management policies. Attractive appearance is a factor which draws buyers to a commercial area. Adequate and easily accessible parking facilities are also lacking in most older business districts. Upgrading could also make use of rerouting major traffic flows, landscaping, elimination of non-commercial uses, sign coordination and control, creation of malls and other pedestrian areas, design and provision of street furniture, and coordination with public transportation facilities.

Newly Developing Areas

Most commercial establishments are reluctant to begin operations until there is an assured economic demand. The provision of commercial facilities then in new areas typically lags behind residential development. In some instances the failure to provide commercial facilities on a timely basis has resulted in piecemeal, unrelated development. In still other instances, only minimal facilities are ever provided since the land areas originally intended for

later commercial development have in the interim become diverted to other uses. An interesting contrast is where commercial development has been permitted on land zoned for industrial use. Industrial land is comparatively less expensive than commercial land and it becomes very attractive for commercial uses when, in addition, good freeway access is also available.

Centre City

Prior to the development of the major shopping centers in Mission Valley, San Diego's downtown district was the major commercial area of the region. The same factors that led to the building of outlying shopping centers also are responsible for the decline of the downtown: the decentralization of the housing and population, dependence on automobiles, obsolesce of existing physical facilities in the central business district.

For some time the downtown area has been undergoing a transition from primarily retail to a role as the administrative, financial and more recently the cultural and entertainment center for San Diego. Current studies and plans for redevelopment and rehabilitation, with intense multi-use development, hold considerable promise for revitalization of the downtown area as both a retail center and a residential community.

Specialty Retail and Services

For various reasons, a number of common commercial uses are apparently not favored as tenants by shopping center operators. These "non-shopping center uses" may include photography studios, furniture stores, bicycle shops, automobile parts stores, second hand merchandise stores, and plant nurseries. The locational problems of these establishments are increasingly evident in new areas where shopping centers are often the only kind of commercial facility provided.

Analysis of spending and employment projections indicate that of all the categories of commercial establishments, services will experience the most rapid increase in future popularity and growth. A problem stems from the reality that this trend is not now sufficiently taken account of in the existing commercial structure. That is, many shopping center operators seem almost exclusively intent upon securing retail tenants. Therefore, as services continue to proliferate, their locational problems will undoubtedly become more acute.

GOAL

- TO DEVELOP AN INTEGRATED SYSTEM OF COMMERCIAL FACILITIES THAT EFFECTIVELY MEETS THE NEEDS OF SAN DIEGO RESIDENTS AND VISITORS AS WELL AS ASSURING THAT EACH NEW DEVELOPMENT DOES NOT IMPEDE THE ECONOMIC VITALITY OF OTHER EXISTING COMMERCIAL AREAS.

COMMERCIAL STANDARDS

	Neighborhood Shopping Center	Community Shopping Center	Regional Shopping Center	Commercial Services	Specialized Commercial	Commercial Recreation	Heavy Commercial
Functions	Provides a wide range of necessity goods and personal and repair services; limited business, financial, and professional services.	Provides convenience goods, shoppers' goods, and specialized retail goods; personal, professional, repair, business, and financial services.	Provides variety and depth of shoppers' goods; limited business, financial, and professional services.	Provides business, personal, professional, financial, and repair services.	Offers retail activities as discount and freestanding stores not typically found in shopping centers.	Provides visitor and locally oriented leisure activities, ranging from recreation facilities to tourist shopping areas.	Accommodates activities having characteristics between commercial and industrial users.
Number of Establishments	4 -15	15-50	More than 50	Varies	1 – 10	Varies	Varies
	Supermarket, drugstore, liquor, variety, bank, barber and beauty services, cleaners, Laundromat, real estate, auto service, limited medical and dental services.	Neighborhood center-type establishments, apparel, shoes, banks, professional offices, medical and dental services, auto-related services.	One to five department stores, apparel, shoes, furniture, jewelry, limited professional and business services, auto-related services.	Medical and dental, engineering, architecture, interior design, business and management consulting, accountants, banks, stock and security brokerages, real estate, employment services, repair services.	Automobile dealerships, bicycle shops, appliances, building supplies, discount stores, used merchandise, boutiques.	Hotels-motels, specialized visitor shopping areas, eating and drinking places, theaters, bowling alleys, amuse-centers, golf courses, stadiums, sports arenas.	Truck and bus sales, marine craft, other recreational vehicles, mobile home sales, farm equipment, lumber yards, nurseries.
Distance Apart	1 – 2 miles	3 miles	10 miles	2 – 5 miles	2 - 5 miles	Varies	Less than 10 miles
Driving Time	6 Minutes	8 Minutes	15 Minutes	Less than 15 minutes	Less than 15 minutes	Varies	Less than 20 minutes
Population Served	2,000 – 10,000	10,000 – 25,000	More than 100,000	10,000 – 50,000	10,000 – 50,000	Varies	More than 15,000
Site Area[2]	1 – 10 acres	8 – 20 acres	More than 50 acres	1 – 15 acres	1 – 15 acres	Varies	2 – 10 acres
Parking Requirements	3:1	3:1	3:1	2-3:1	Varies	Varies	Varies
Acres/1,000 persons	1.0	0.8	0.7	0.4	0.5	1.0	0.3

1. In some instances discount stores in San Diego have evidenced a recent tendency to locate adjacent to, or within shopping centers and, therefore, do not always represent freestanding locations.

2. Site area may not always be the result of multiplying acres per 1,000 persons by population served. Factors capable of altering site areas include the accommodation of convenience centers within the neighborhood center standard, the rising cost of land in the case of regional centers, and the variety of types and the number of uses that may be included in the other categories.

GUIDELINES AND STANDARDS

The standards given in the following table are applicable to new developments. They should not be used as a rigid rule but should be applied only as a guideline. Each development should be geared to the needs of the population to be served. The governmental agency approving commercial development should be concerned with:

- Does the development fit into the environmental structure of the community.
- Parking, where and how is it located.
- The amount and quality of landscaping.
- Do the facilities proposed really serve the community.
- Does the development intrude upon the market area of other commercial activities.

RECOMMENDATIONS

- Zoning - Comprehensive review of all commercial zones with the intent of simplifying and reducing the number of zones and overlapping requirements. Zones should never be created to serve particular areas of the City, but only amended when a desired particular circumstance does not fit into an existing given zone.
- Strip Commercial - prohibit the expansion of existing strip developments. Encourage consolidated off-street parking.
- Industrial Areas - prohibit the location of commercial uses in designated industrial park areas, with the exception of commercial services needed to serve the industrial park.
- Rehabilitation - encourage the renewal of older commercial centers and areas, recognizing that flexibility may be needed in the enforcement of existing regulations.
- Commercial Development Timing - encourage when feasible the simultaneous development of residential and commercial uses.
- Market Area - review all commercial development projects on a regional level. Review to include the economic impact the new development will have on other commercial activities.
- Landscaping - suggest drought resistant landscaping in all new commercial developments. Encourage landscaping programs in older commercial areas.

INDUSTRIAL ELEMENT

Industrial

Manufacturing activities which employ a significant amount of the City's work force represent an important economic contribution both to the City and region. A larger percentage of the work force however, is engaged in non-manufacturing industries and a variety of activities that are supportive of manufacturing. These industries include wholesaling, warehousing, industrially related offices and parking, auto wrecking, junk, and other outdoor storage yards.

The location of industrial sites must be closely coordinated with the development of housing to obtain efficiency in land use patterns and with the transportation system to serve the specific needs of the industrial facility and for the employed worker.

FINDINGS

The Industrial Inventory

The inventory of industrial lands for the City was updated in November 1977 and again in May 1978. The results of the inventory are depicted in Table 16. The net area designated for industrial development in the City is 9,463 acres. Of that about 2,860 acres are occupied by industrial uses, 1,718 acres by non-industrial uses, and the remaining 4,885 vacant acres are either zoned or designated in community planning areas for industrial use.

Analysis of Vacant Areas by Size

An analysis of the inventory by size of vacant industrially designated areas provided the following data:

Ten Largest Vacant Areas	Vacant Industrial Zoned	Other Vacant	Total Vacant
Mira Mesa West	0	900	900
Otay Mesa East	0	900	900
Kearny Mesa-Murphy Canyon - City Research Park	584	134	718
Mira Mesa	240	334	574
Bernardo Industrial Park	169	192	361
Sorrento Valley	262	---	262
University East	5	194	199
Scripps Ranch	132	15	147
North City West	---	103	103
International Industrial Park	20	82	102
	1,412 ac.	2,854 ac.	4,266 ac.

The 4,266 acres contained in these ten areas represent 87 percent of the total vacant acreage available for industrial development in the City. Perhaps even more significant however, the top eight areas contain about 80 percent of the City's vacant land that is industrially zoned. It should be noted that the original inventory conducted in 1968 showed five of the areas as having readily available land in suitable quantities. With the exception of the International Industrial Park and Otay Mesa East, most of the areas containing vacant industrial land are located north of Mission Valley.

An analysis of vacant land based upon a sampling of industrial areas was conducted to determine the extent to which these areas are reasonably available for use. Reasonably available for use was defined as parcels larger than one acre that have existing utilities and access, that are developable within twelve months, and are available at marketable prices. The areas were analyzed to determine their availability for basic sector manufacturing, non-basic industry, or non-industrial uses. The results indicated that approximately two percent of the vacant land in the sample areas is reasonably available for manufacturing and about 15 percent is available for other industrial uses. This analysis indicates a serious shortage of reasonably available industrial parcels in general, and particularly so for manufacturing uses.

Analysis of Sites by Size

An analysis was made of vacant industrially designated parcels of ten acres or larger. This analysis excluded Mira Mesa West, Interstate 15 Corridor, and Otay East because they were not designated industrial areas at the time the study was conducted in November 1977. The following table summarizes that analysis.

VACANT PARCELS OF TEN ACRES OR LARGER IN DESIGNATED INDUSTRIAL AREAS

Status	Parcels	Total Acres
Reasonably available for use	28	774
Considered for future development	20	470
Committed for other use and/or development	9	168
	57	1,412

The above table indicates that a serious shortage of large parcels suitable for industrial development exists in the City.

Inappropriately Zoned and Designated Industrial Areas

Eight areas that were included in the past industrial inventories have been removed from the current inventory. For the most part these are areas that presently have industrial zoning but are being deleted because of present use or because of plan revisions that have taken place or are proposed.

The deletion of these areas results in a more meaningful industrial inventory and thereby provides a more accurate reflection of existing and potential industrial land within San Diego.

TABLE 16
Inventory Of Designated Industrial Areas

Oct.-Nov. 1977
(Figures in Acres)

Designated Industrial Areas	Gross Area*	Exclusions (a)	Net Area	Industrial Use (b)	Other Uses (c)	Vacant Industrial Zoned	Other Vacant	Total Vacant
1. Bernardo Ind. Park	625	70	555	185	9	169	192	361
2. North City West	124	10	114	0	11	0	103	103
3. Sorrento Valley	589	40	659	215	72	262	0	262
4. Torrey Pines North	193	97	96	17	2	31	46	77
5. Torrey Pines Science Park	88	19	69	21	0	48	0	48
6. Torrey Pines West	36	0	36	6	17	13	0	13
7. Torrey Pines East	355	181	174	174	0	0	0	0
8. Campus Point	183	127	56	0	0	2	54	56
9. University East	352	126	266	27	0	5	194	199
10. Mira Mesa	1,118	223	895	267	54	240	334	574
11. Scripps Ranch	196	7	189	24	18	132	15	147
12. I-805 and Governor	84	40	44	0	0	0	44	44
13. Rose Canyon	187	24	163	60	35	64	4	68
14. Kearny Mesa West (d)	1,387	25 (d)	1,362	357	(d) 759	122	124	246
15. Kearny Mesa East	1,167	40	1,127	632	162	324	9	333
16. Murphy Canyon	301	123	178	68	19	91	0	91
17. City Research Park	96	9	87	29	10	47	1	48
18. Murphy Canyon South	16	2	14	14	0	0	0	0
19. Grantville North	87	6	81	39	8	17	17	34
20. Morena Blvd	154	16	138	61	61	8	8	16
21. Hwy. 163 and Friars	11	2	9	7	0	2	0	2
22. Mission Valley East	59	17	42	0	33	0	9	9
23. Grantville	161	1	160	62	69	26	3	8
24. Hancock and Sherman	50	2	48	21	19	8	0	8
25. Pacific Highway	149	16	133	34	97	2	0	2
26. Wabash and Hwy 94	13	1	12	4	1	1	6	7
27. Home and Federal	16	1	15	5	6	3	1	4
28. 43rd and Federal	25	0	25	15	10	0	0	0
29. 60th and Federal	8	0	8	3	3	0	2	2
30. Commercial Avenue	41	1	40	14	21	5	0	5
31. The Dells Ind. Park	40	0	40	19	16	3	2	5
32. 41st and Market	17	0	17	0	0	17	0	17
33. Euclid and Market	79	4	75	42	18	12	3	15
34. Harbor-Hwy. 101	111	37	74	58	12	4	0	4
35. Wabash and Newton	6	0	6	3	1	2	0	2
36. Dalbergia St.	37	0	37	16	14	7	0	7
37. Hollister and Palm	29	15	14	3	11	0	0	0
38. Beyer and Iris	55	0	55	0	11	44	0	44
39. Brown Field (e)	200	102	98	0	98	0	0	0
40. Int'l Industrial Park	105	0	105	0	3	20	82	102
41. Western Mira Mesa	900	0	900	0	0	0	900	900
42. Otay Mesa East (t)	900	0	900	0	0	0	900	900
43. I-15 Corridor	100	0	100	0	0	0	100	100
Sub Totals	10,450	1,384	9,066	2,502	1,680	1,731	3,153	4,884
44. Tide Lands (City Only)	402	5	397	358	38	0	1	1
Totals	10,852	1,389	9,463	2,860	1,718	1,731	3,154	4,885

* *Does not include areas that are used or proposed for streets and highways.*

(a) Exclusions include: slopes in excess of 25%, existing or proposed flood channels, utility easements, open space, and railroad right-of-way.

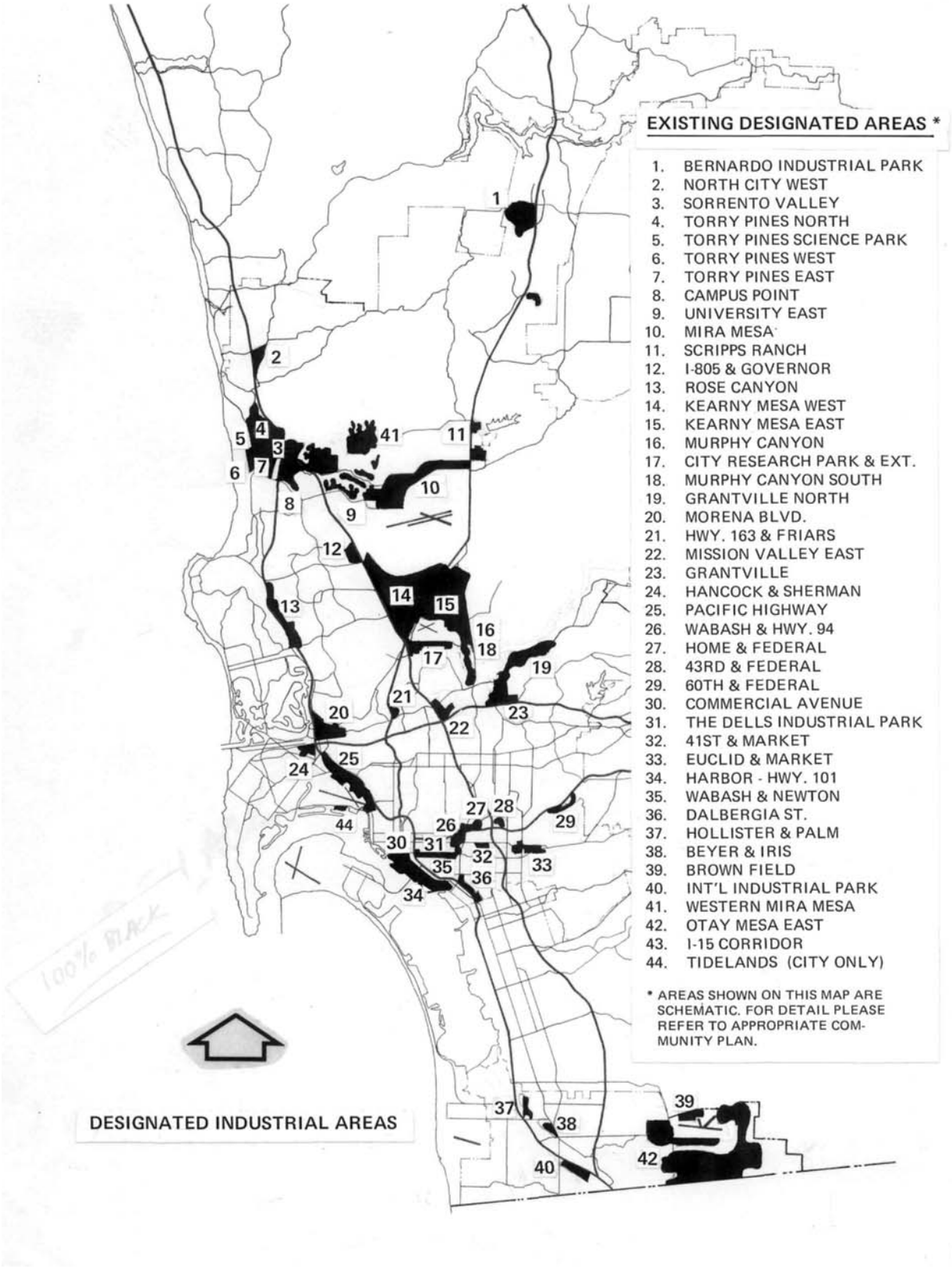
(b) Industrial uses include: manufacturing, wholesaling, warehousing, industrially related offices and parking, auto wrecking, junk, and other outdoor storage yards.

(c) Other uses include: residential, commercial extractive, public and semi-public, parking not industrially related, utilities, and military.

(d) Includes 374.42 acres of Miramar Naval Air Station located south of proposed Highway 72.

(e) This area is unzoned and currently a part of the airport northwest of the runway. Area was once considered for an industrial park.

(f) 2300 acres of designated industrial land in the proposed Otay Mesa annexation are not counted in this inventory.


EXISTING DESIGNATED AREAS *
1. BERNARDO INDUSTRIAL PARK
2. NORTH CITY WEST
3. SORRENTO VALLEY
4. TORRY PINES NORTH
5. TORRY PINES SCIENCE PARK
6. TORRY PINES WEST
7. TORRY PINES EAST
8. CAMPUS POINT
9. UNIVERSITY EAST
10. MIRA MESA
11. SCRIPPS RANCH
12. I-805 & GOVERNOR
13. ROSE CANYON
14. KEARNY MESA WEST
15. KEARNY MESA EAST
16. MURPHY CANYON
17. CITY RESEARCH PARK & EXT.
18. MURPHY CANYON SOUTH
19. GRANTVILLE NORTH
20. MORENA BLVD.
21. HWY. 163 & FRIARS
22. MISSION VALLEY EAST
23. GRANTVILLE
24. HANCOCK & SHERMAN
25. PACIFIC HIGHWAY
26. WABASH & HWY. 94
27. HOME & FEDERAL
28. 43RD & FEDERAL
29. 60TH & FEDERAL
30. COMMERCIAL AVENUE
31. THE DELLS INDUSTRIAL PARK
32. 41ST & MARKET
33. EUCLID & MARKET
34. HARBOR - HWY. 101
35. WABASH & NEWTON
36. DALBERGIA ST.
37. HOLLISTER & PALM
38. BEYER & IRIS
39. BROWN FIELD
40. INT'L INDUSTRIAL PARK
41. WESTERN MIRA MESA
42. OTAY MESA EAST
43. I-15 CORRIDOR
44. TIDELANDS (CITY ONLY)
* AREAS SHOWN ON THIS MAP ARE SCHEMATIC. FOR DETAIL PLEASE REFER TO APPROPRIATE COMMUNITY PLAN.
DESIGNATED INDUSTRIAL AREAS

Planning for the Future

The process of determining the amount of land that should be allocated for industrial use is difficult. Enough acreage should be designated to meet anticipated needs and to provide enough acreage for choice so that market forces can operate and maintain land prices within reasonable limits. On the other hand, too much industrial acreage can preclude the timely development of close-in properties and even result in the premature escalation of property taxes. An overabundance of industrial land may also contribute to a diffused, inefficient, and uneconomical industrial development pattern.

The Industrial/Residential Locational Pattern

A pattern is emerging locally, similar to one observable throughout the nation, which finds industry moving to the suburbs while the blue collar work force remains in the older residential sections closer to the central part of the metropolitan area. These blue collar workers are least financially able to afford private automobile transportation to a place of work, while the suburbanites living near the new outlying factories often commute daily to their jobs in downtown business districts.

This condition has prevailed in spite of attempts to effectuate Council Policies relating to the timing and location of residential, commercial, and industrial development and in the fostering of balanced community development in San Diego.

Incompatibility of Uses Within Industrial Zones

Major portions of the City's industrially zoned lands have been preempted by commercial and other non-industrial uses. This has often excluded manufacturers and other large employers from using these areas. Perhaps even more important however, the preemption of industrial by non-industrial users has commonly caused land prices and property taxes to escalate beyond levels feasible for manufacturing use. The following factors, whether singly or in combination, appear to be responsible:

- permissive industrial zones that allow a range of non-industrial uses;
- inability of industrial users, especially manufacturers, to compete in the land market with non-industrial users;
- tax pressures on landowners;

Obsolescence and Deterioration of Older areas

Several of the City's older industrial areas suffer from a variety of problems. Perhaps heading this list is the process which results in the obsolescence and deterioration of industrial facilities. Some of the more powerful forces contributing to the obsolescence and deterioration of industrial areas are age, mixed uses (especially non-industrial uses), traffic congestion, inadequate parking, small lots and inefficient subdivision patterns, and changing technologies

and methods of operation. A number of the same forces that result in obsolescence and deterioration can also cause property values to fall. This in turn tends to worsen deterioration and the process becomes self perpetuating. Perhaps the overall effects of this process on surrounding neighborhoods and communities in general are even more significant than they are in the industrial areas themselves.

It should be noted that some older industrial areas serve as locations for industries that are marginal or in incubator stages. Without these areas it is possible that many of these users would be denied the chance to survive, and in some instances, to expand into stable and productive establishments.

Matching Skills of the Labor Force with Industrial Activities

At the time General Plan studies were undertaken in 1977 San Diego had a serious unemployment problem (9.3 percent seasonally adjusted) compared with the statewide average (7.2 percent) and the national average (6.9 percent). Fortunately, however, the quality of the labor force is one of this area's assets. San Diego's unemployed appear to be adaptable to a wide range of job activities.

According to a sample survey of the unemployed derived from occupational statistics of workers receiving unemployment insurance, the job skills of San Diego's unemployed presently break down as follows:

Crafts, operatives, and transport	32%
Clerical and sales	20%
Professional technical & management administrative	15%
Services	13%
Other	20%
	100%

For that segment of the unemployed made up of very young first time job seekers, immigrants from around the country etc., who lack specific job skills, there are available educational opportunities through the public school system, vocational training both public and private, and the continuing public employment and employee training projects of the Regional Employment Training Consortium.

The Importance of Manufacturing to the Local Economy

In 1977 San Diego's economy was in a cycle that emphasized reliance on government, tourism, and the provision of services. At that time manufacturing activities employed about 15 percent of the work force compared with the statewide average of 22 percent and the national average of 24 percent. This is contrasted with the aerospace cycle of the 1960s when San Diego had about

26 percent of its labor force employed in manufacturing. This information indicates that the manufacturing sector of our economy needs strengthening.

Manufacturing industries are desirable because they result in the importation of money from outside the area which gives stability to our local economy. Manufacturing industries also result in the creation of more secondary or support industries than is the case with non-manufacturing activities.

Because San Diego's economy now relies heavily on tourism and government as sources of employment it is not likely in the future that manufacturing will employ a proportion of the labor force quite equal to that of the state or national average.

As stated earlier, there is a shortage of reasonably available land for manufacturing in the City. One of the reasons for this shortage is the heavy absorption of industrially zoned land by non-industrial and non-manufacturing activities which commonly utilize industrially zoned land. As a result of the current demand for industrially zoned land by these non-manufacturing activities, and by the development industry responding to the needs of these non-manufacturing uses, manufacturers contemplating expansion or relocation in the San Diego area find few attractive parcels that are located in proximity to transportation and population centers and are available at costs competitive with other metropolitan areas.

The Use of Publicly Owned Lands for Industry

Various public agencies including the City, county, state, and federal governments hold significant amounts of undeveloped land in the City. Periodically these agencies dispose of portions of their lands that have been declared surplus. City policy with respect to the acquisition of such areas has been inconsistent. There is a possibility that if a published inventory of such lands existed, some might be readily identified for industrial use.

GOALS

- ENSURE THAT INDUSTRIAL LAND NEEDS AS REQUIRED FOR A BALANCED ECONOMY AND BALANCED LAND USE ARE MET CONSISTENT WITH ENVIRONMENTAL CONSIDERATIONS.

- PROTECT A RESERVE OF MANUFACTURING LANDS FROM ENCROACHMENT BY NON-MANUFACTURING USES.

- REVITALIZE THROUGH PUBLIC AND PRIVATE EFFORTS, INDUSTRIAL AREAS WHICH ARE BASICALLY WELL LOCATED BUT SHOW ENVIRONMENTAL AND/OR FUNCTIONAL DEFICIENCIES.

- ENCOURAGE THE INDUSTRIAL DEVELOPMENT IN THE SOUTHERLY HALF OF THE CITY TO MAKE IT AS ATTRACTIVE TO INDUSTRIAL USERS AS THOSE AREAS NORTH OF MISSION VALLEY.

- DEVELOP AND MAINTAIN PROCEDURES TO ALLOW EMPLOYMENT GROWTH IN THE MANUFACTURING SECTOR AT OR NEAR THE STATE AVERAGE.

GUIDELINES AND STANDARDS

Site Characteristics

Land proposed for industrial use should have sufficient gradient to permit drainage but should not be too steep to preclude the development of sites of 10 acres or larger at the same elevation.

It is important to recognize that industrial land has two distinct classifications: (1) areas for manufacturing, scientific and corporate headquarters; and (2) areas for servicing, warehousing and wholesaling. Each of these classifications has differing requirements related to accessibility to potential employees. The first classification requires a relatively high number of employees per square foot and so should be located conveniently to the labor pool, if possible. The second classification does not require a high number of employees per square foot and is more dependent on access to transportation routes.

RECOMMENDATIONS

As mentioned earlier, in allocating additional land for industrial use it is imperative that sufficient acreage be designated to meet projected needs so that the existing market can operate effectively. At the same time, for reasons that have already been stated, it is important not to provide an overabundance of industrial land.

Based on an analysis of vacant industrially designated land, it was concluded that less than 20 percent of the vacant industrial land is reasonably available for use. This shortage is even more serious with land suitable for manufacturing activities.

In response to the problem of inadequate supply, two large industrial areas are being added to the industrial inventory. These areas include approximately 900 acres in the area impacted by Miramar Naval Air Station and about 3,200 acres in Otay Mesa East. Otay Mesa East lies mostly outside the City but is being planned jointly by the county (2300 acres) and the City (900 acres). The acreage in each of these areas may be expanded when the community plans are finalized and adopted. A minimum of 25 percent of the designated acreage should be reserved for the exclusive use of scientific, manufacturing, and corporate headquarters. In addition to the above two areas, about 100 acres of land are proposed for industrial designation in the Interstate 15 corridor area.

Finally, as part of the community planning process and studies of public and privately owned vacant lands, additional industrial lands will be considered for designation as these plans and studies are systematically undertaken. As a part of this process particular attention will be given to the designation of new industrial areas within the urbanized portions of the City.

- Where physical conditions and ownership situations permit, encourage the designation of additional industrial land with larger site sizes that can accommodate larger basic sector manufacturing activities.

- In designating additional industrial land special attention should be given to any suitable public and privately owned areas in the existing urbanized area, especially between Mission Valley and the National City boundary.

- Make available sufficient industrial land limited to manufacturing in order to attract industrial users who will utilize our unemployed work force.

- The City should act as a catalyst and become an active participant in making more industrial land available.

- Develop a City-sponsored program aimed at land banking future industrial lands for manufacturing purposes.

- Wherever practical restrict the use of city-owned industrially zoned lands to manufacturing or headquarters firms that indicate potential for developing base sector economic employment.

- Create an industrial zone specifically designed to accommodate manufacturing uses.

- Evaluate and consider for removal all inappropriately zoned and/or designated industrial lands from the industrial inventory.

- Support efforts of the Chamber of Commerce and the Economic Development Corporation to attract manufacturing firms to the City.

- Undertake specific redevelopment programs in older industrial areas in order to upgrade their utility and function as industrial districts.

- Develop incentives aimed at encouraging the development of industrial land that is zoned and has a full range of community services and facilities.

- Conditionally reduce parking requirements for industrial establishments who provide transportation for their employees.

PUBLIC FACILITIES, SERVICES AND SAFETY

Public Facilities, Services and Safety

The public facilities and services that have been identified are those that are publicly managed and which have a direct influence on the location and allocation of land use. These services are schools, libraries, police, fire, water, sanitation, and flood control.

The guiding goal in allocating services is to program these public facilities at a time and level to complement accompanying development. One should not precede the other, in fact the installation of public service can be used as a forceful tool in guiding and timing development in desired locations.

The Public Services, Facilities and Safety Element directly affects, and is directly affected by, those other General Plan elements that can be described as development-oriented. For without the entire range of services and facilities represented by this element, development is plainly infeasible. On the other hand, it is enormously important that the quality and quantity of the services and facilities provided be geared to the nature and intensity of the development that is prevailing and/or projected. But most important, that facilities and services be timely developed so as not to impact the capacity and ability of the City to provide the service.

FINDINGS

Schools

One of the most important of the public services is the provision of schools and the offering of quality education to the residents of the City. San Diego is fortunate in having many levels of education available; Universities and Colleges, an excellent Adult Education Program, numerous junior colleges, and the very necessary elementary and secondary school system. This section on schools will only address the lower educational level.

The San Diego Unified School District is the largest in the county serving the majority of the City. It is not, however, the only district serving City residents. In addition to the San Diego Unified School District there are 16 smaller districts, including elementary and secondary levels which service the suburban, peripheral areas of the City.

A serious persistent problem for most of the school districts has been the provision of schools in the rapidly developing areas of the City. The City of San Diego through Council Policy 600-10 requires that schools as well as other public facilities be available concurrent with need in the development. There is also City Council Policy 600-22 which requires certain basic information of the school districts pertaining to school availability and the impact on schools by proposed rezoning changes and new housing developments or redevelopments. The basis for this policy is to allow the City authorities a reasonable opportunity to make informed judgments and decisions on proposed developments. Under City Council Policy 600-22, developers must obtain a letter of school availability from the districts if developments are located outside of what is considered to be the older, urbanized areas of the City (see map). In areas where letters are not required, the school districts nonetheless, supply the City with school data pertinent to the proposed development.

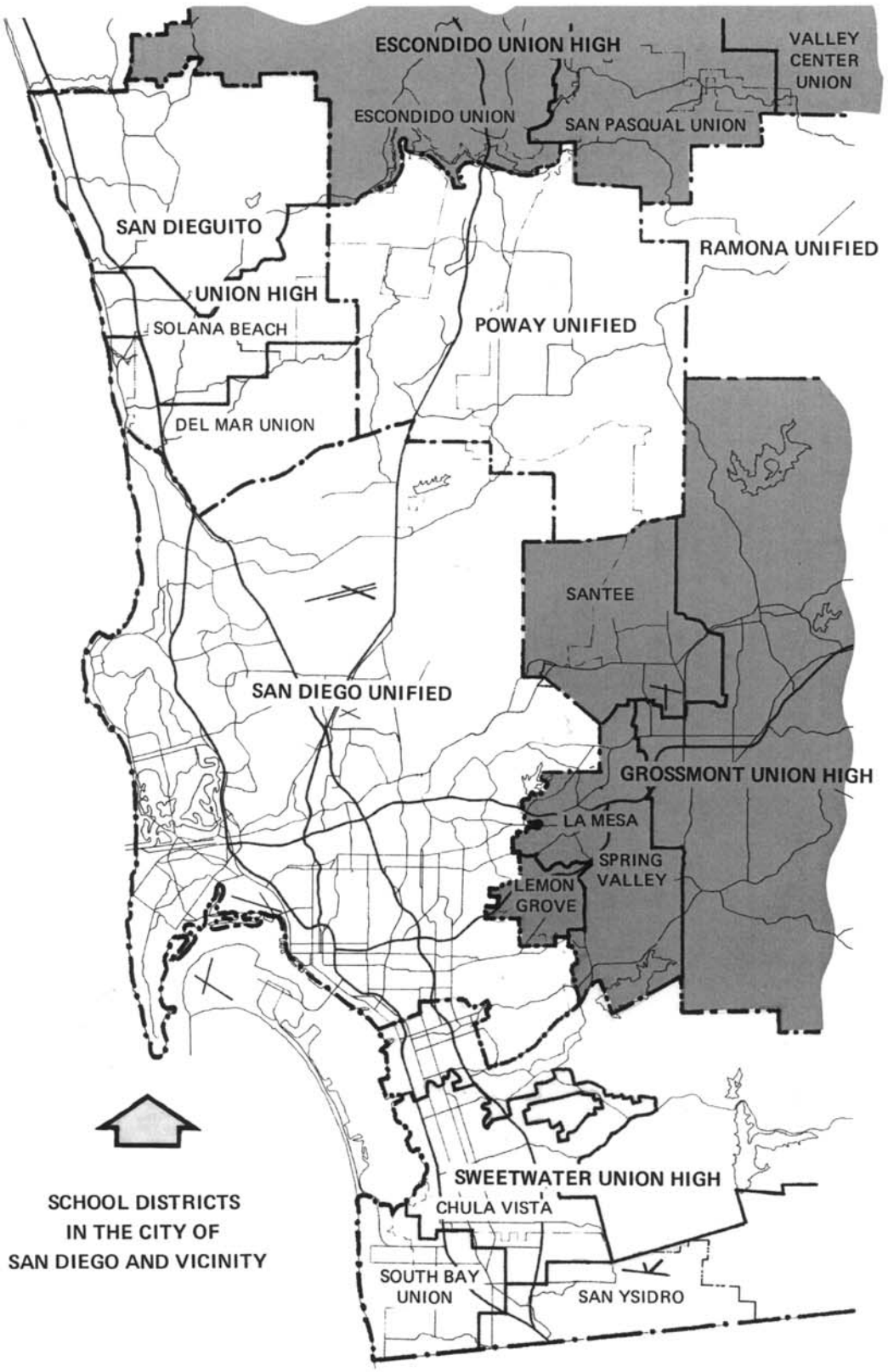
To implement the City of San Diego Council policies, the San Diego Unified School District in 1971, adopted a policy for determining the availability of schools. Currently, the policy, after being revised in 1977, contains procedures for determining capacities and school availability as well as guidelines for administering the policy as it relates to developer participation in providing school facilities. A fundamental factor in the applications of the district's policy is enrollment capacity for each school which is updated on an annual basis.

Under the policy, developers are responsible for the cost of incremental facilities required to house the students expected to reside in the proposed development. This means that if there is space available for a portion of the students generated, the developer contributes only on behalf of those that can not be accommodated in existing facilities. The amount and type of contributions are determined on a case by case basis and may consist of land, temporary or permanent classrooms, support facilities or cash.

Other school districts which serve the City of San Diego school children have varied requirements for developers. Some require fees for all development, whether adults only, condominium or mobile homes. Others base their fees on the type of home and the number of bedrooms which serves as the basis for projecting student population. With the exception of those school districts who do not have problems with school availability, fees are usually required and availability letters granted after the fee agreements are finalized.

Another major problem for the San Diego Unified School District is the assurance of racial and ethnic balance in their schools. The court early in 1977, directed the district to present to the court "a detailed plan to further alleviate racial segregation in those minority schools identified." They further stated that some portion of the plan had to be operative during the school year 1977-1978 and that dates were to be designated for those portions of the plan to be implemented at a later date. The plan developed by the school district with the assistance of a 70 member Citizen's Advisory Commission creates a series of magnet programs. These are located mainly at those schools defined as racially unbalanced schools; also, there are programs in schools where the enrollment is predominately majority race students. In the latter case, these are referred to as mirror magnet school programs. The programs in the first implementing portion of the plan include specific course emphasis at each school. Examples of the programs are music and art, fundamentals (reading, writing and math), all courses taught in a foreign language, and Olympics (physical education).

Evaluation of the plan also prepared by the school district measures the degree of minority student isolation or non-isolation. This measure is based on one or all of the components built into the basic plan. These components include the district's racial/ethnic pupil census, an integration index, and isolation index, and a classroom teacher integration index. The evaluation plan is intended to assist the Board of Education, the court, the district and the community in assessing the growth and involvement of students in a meaningful integration effort.



SCHOOL DISTRICTS IN THE CITY OF SAN DIEGO AND VICINITY

Other lesser problems, in light of school integration and the very basic issue of the availability of schools in newly developing areas of the City, is the continual drop in enrollment in older sections of the City. School districts will be faced with this issue more and more in coming years as the number of school age children declines. This decline is a combination of various factors including lower birth rates, out migration, communities changing to predominately senior citizens and/or singles and young marrieds with no children.

GOALS

- A PUBLIC SCHOOL SYSTEM THAT ENABLES ALL STUDENTS TO REALIZE THEIR HIGHEST POTENTIALS AS INDIVIDUALS AND AS MEMBERS OF SOCIETY.

- ACTIVELY PURSUE THE IMPLEMENTATION OF THE BALANCED COMMUNITY CONCEPT, THEREBY CAUSING INTEGRATED SCHOOLS THROUGH INTEGRATED RESIDENTIAL NEIGHBORHOODS.

GUIDELINES AND STANDARDS

Site Size

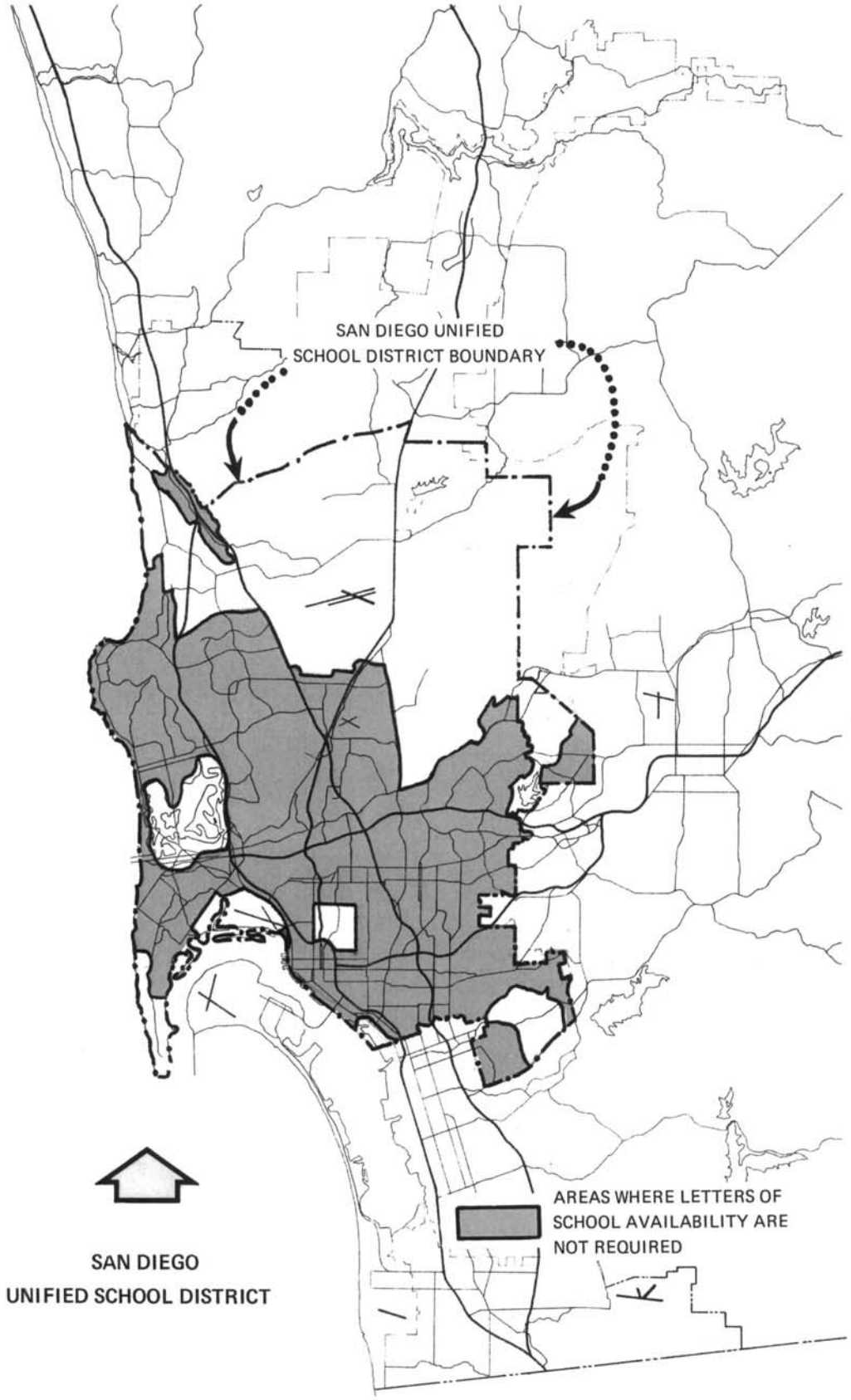
- Elementary Schools - 10 net usable acres

- Junior High School - 30 net usable acres

- Senior High School - 45 net usable acres

Capacity

The San Diego Unified School District's "Policy for Determining the Availability of Schools" provides that annually during the first week in December recommended enrollment capacities for each school in the district be presented for Board of Education adoption. Current capacity is defined as ". . . the number of students which may be served within the school's existing facilities, taking into account the educational program and staff assignment practices in effect at the school. For some schools, a maximum capacity is also established. These are schools in areas where there has been recently increasing enrollment and where the school's enrollment approaches or exceeds the school's current capacity. The policy defines maximum capacity as ". . . the greatest number of students who can be provided a quality educational program and school environment if the school's existing facilities are augmented or improved in a specific manner."


SAN DIEGO UNIFIED
SCHOOL DISTRICT BOUNDARY
AREAS WHERE LETTERS OF
SCHOOL AVAILABILITY ARE
NOT REQUIRED
SAN DIEGO
UNIFIED SCHOOL DISTRICT

Space is determined to be available at a school if one of the following circumstances exists:

- Current capacity accommodates the projected enrollment
- Developer contribution increases school capacity
- New development improves racial balance at the school

Geographic Location

- Schools should be located away from fault zones and outside areas susceptible to landsliding and flooding
- Schools should not be located in areas subject to excessive noise

RECOMMENDATIONS

- Cooperatively assist the school districts in resolving problems arising over the availability of schools in newly developing areas of the City
- Consider better utilization of land by the construction of multi-story school buildings
- Continued joint usage of schools with adult education and community programs
- Consider at all times the architectural design of the school facility and its place in the neighborhood and community
- Explore alternatives to the standard asphalt and cyclone-fenced playgrounds
- Consider attendance boundary adjustments for the purpose of achieving a more balanced enrollment distribution

FINDINGS

Libraries

The function of a library system is to provide to the public at large a major source of information, research and recreation as well as being a major cultural center for the City. Providing this service to a culturally and ethnically diverse public is difficult. Added to this is the problem of a rapidly expanding population both in numbers and geographic location.

In recognition of the essential unity of knowledge and of the desirability of promoting the public library's function in San Diego by ready access to library materials, the underlying theory is that of centralization respecting alike,

a. the organization of the physical plant, equipment and materials of the library, and

b. the responsibility for the unified, effective administration of the same.

At the same time, it is recognized as desirable to provide for the library requirements of the community by means of branch libraries. In such instances, it is not intended that the branch libraries be self-contained or shall comprise all the materials possessed by the central library. In order to meet the ever-changing needs of the residents of San Diego, the library system must be allowed to become flexible in terms of the location and size of the branch facility. The current situation in San Diego is that the system is locked into conformity by communities who perceive the branch library as a landmark. A factor that cannot be overlooked.

The fact that the City of San Diego Library System is the largest and most complete in the two adjoining counties accounts for the heavy use by nonresidents. The Serra Cooperative Library System, instituted in the 1960s permits nonresidents to use City libraries at no charge. It is estimated that about 10 percent of the usage at the central library is from people living outside of the City. The branches receive less non-resident patronage.

Central Library

The main library located in downtown San Diego is the third such facility for San Diego residents. Patronage at this facility and the books and staff needed to service residents have grown to a point where a larger and more efficient structure is now necessary. Inadequacies have been determined in at least four areas: shelving capacity, reader seat capacity, public comfort and convenience and staff work space. The decision has been made that the central library will remain in the downtown area, and expand at its present site, when feasible.

District Library Service

Not now a part of the library system, the concept of district centers may well be a future consideration. District libraries are basically regional in scope serving and providing a much broader service to the community and surrounding area. The regional or district library would be the first reference point when information or books could not be supplied at the community level. Book capacity in the library would be from 100,000 to 125,000 volumes, with at least 300 periodicals, and 200 records and cassettes.

If the regional library concept is ever to be applied in San Diego, it would not reduce the community libraries established except for the one that is replaced. The replaced library would be enlarged to accommodate the staff and books needed to serve a broader geographic area.

GOAL

- TO CONTRIBUTE TO THE MAINTENANCE AND IMPROVEMENT OF THE QUALITY OF LIFE IN THE CITY OF SAN DIEGO BY ASSURING ACCESS TO ORGANIZED RESEARCH, INFORMATIONAL, RECREATIONAL AND EDUCATIONAL RESOURCE COLLECTIONS OF ALL MEDIA.

GUIDELINES AND STANDARDS

The standards for libraries are currently being reviewed by Public Safety and Services Committee.

Population - The service area should be at least 18,000 to 20,000 residents before a permanent library facility is warranted with anticipated growth reaching about 30,000 within a period of 20 years after the branch is opened.

Branch Size - The maximum service area is a two mile radius. The site should be accessible by foot and auto. Since the automobile is the prime source of transportation, it is important to locate the facility in the vicinity of major streets; but public transportation should also be a significant locational consideration.

Book Capacity and Use - Based on experience in San Diego, the branch should house 2.7 volumes per sq. ft. on opening and an eventual capacity of 4.4 volumes or more.

Additional considerations which are not standards but none the less important when evaluating a contemporary, comprehensive library system are:

1. Library location should be in response to population distribution, not because a community desires one.

2. Library service and location should be flexible over time. Demands of residents can change as the social characteristics change. As for instance, a shift from a family dominated community to senior citizens.

3. Library location should be in an area of intense people activity and where the trip can be combined with other shopping chores.

4. The facility should have the flexibility of conversion to other uses when and if the need arises. In this respect, leasing or initially constructing a building that can be easily converted to commercial or office use warrants consideration.

RECOMMENDATIONS

- Evaluate yearly the existing libraries for continued use or necessary expansion or relocation.

- Library sites should be located when an area of the City is master planned for development. Construction of the library to begin when the population reaches at least 18,000 people.

- Continue to explore the concept of district/regional libraries which serve more than just the City of San Diego and are financed on a regional basis.

- Decisions on library effectiveness to be balanced with community influence and based on broader needs of the City.

- Implement the conversion of library inventory into machine readable form as rapidly as funds permit.

FINDINGS

Police

Both recent residential development patterns and expected future ones place demands on the location of physical facilities for police services. The geographic spread of residential and commercial development within the City limits and the limited expansion possibilities of existing police facilities initiated an evaluation of this public service by an independent consulting firm. The study concluded that decentralization of the major operations with an administration center in the downtown area and several substations would have a beneficial effect on police services and serve the needs of the City for the next 25 to 30 years.

Decentralization of substations provides a better working knowledge for patrolmen of particular communities while having general knowledge of the entire City. It also provides a greater degree of visibility and accessibility to community residents. For police personnel, there would be a savings in travel and an overall savings in equipment, fuel and manpower. Finally, accountability and responsibility for the delivery of police services to the communities surrounding the substations would be fixed with the police captain commanding that station.

Presently, there are two substations in the City, one in San Ysidro, and the other north of University City. The central facility in downtown San Diego also functions as a substation for the central part of San Diego. With decentralization, a new administration and technical center would be constructed or relocated in an existing structure in the downtown. New substations would be built over the next 30 years in different areas of the City and beat boundaries changed to provide better service to City residents.

Development Review

Police Departments in many American cities including San Diego's have become active in implementing programs concerning "defensible or visible space." This terminology is used to describe an environment, usually residential, whose building layout and site plan function to permit residents to become the key agents in ensuring their own security. A residential area, however, is defensible not only to the extent that residents choose to adopt this role, but is also a choice facilitated by the design of the development.

It is felt that resident's adoption of territorial attitudes and policing measures are perhaps the strongest deterrents to criminal activity. Application of the concept of visible space to apartments and other multiple family developments appears especially desirable, since the past expression of territoriality by the residents of such developments has not often been noted.

The idea of visible space is accomplished by designing housing developments in which the units are grouped together, where the placement of access ways, parking areas, public and private

areas and other shared facilities are so designed and defined so as to foster their observation by residents.

Implementation of the visible space concept is partially being achieved through the review by various City department of all proposed developments. The Police Department in particular, looks at the street design in relation to the housing development and at the building configuration when provided. Detailed floor plans and building elevations are not required for subdivision applications, therefore, thorough review of the architectural spaces cannot be accomplished.

Additional precautions suggested by the police department to improve security and safety for buildings focuses upon the hardware at existing openings including door hardware, sliding glass doors and windows. There is a demonstrated need for improved equipment and its use by property owners.

GOAL

- CONTINUE TO PROVIDE THE HIGHEST SERVICE LEVEL POSSIBLE OUT OF FACILITIES LOCATED IN AREAS OF THE CITY SITED TO SERVE THE DEMANDS.

GUIDELINES AND STANDARDS

- The Police Facilities Plan has been designed to fulfill Police Department standards through the year 2000.

RECOMMENDATIONS

- The administrative and technical center (central headquarters) should be located in Centre City on a site easily accessible to major street and freeways.

- New substations should be located as near as possible in the geographic center of the area to be covered and also accessible to major streets and freeways.

- Well located sites should be set aside for police substations at the time an area of the City is opened for development.

- Police personnel should be continually involved in the review process of all new developments to encourage utilization of the defensible space concept.

FINDINGS

Fire

The main objective of providing fire service to City residents is to prevent fires from occurring and to suppress them when they do. Provision of this service depends on adequate equipment numbers of qualified personnel, effective alarm systems and the proper siting of fire stations. With a few exceptions, the major part of the City has good fire protection, especially the older

areas. In newly developing sections of the City there are problems of proper site location and funding. The actual development pattern that emerges in these new areas sometimes precludes the timely reservation and acquisition of projected sites and necessitates the provision of temporary quarters. Usually, the temporary facility is housed for a time in one of the homes in the community until a permanent facility is constructed. Besides the problem of location, the City must determine means of funding the site acquisition, development of the facility and the day-to-day station operation.

The potential fire hazards that can occur in San Diego are classified as: canyon fires in developed areas; fire in high-rise structures; dense developments of combustible exterior construction with inadequate separation and/or access; aircraft crashes in developed areas; and earthquake caused fires. Of the five, canyon fires have the greatest potential for bringing about a general conflagration.

Fire control in canyons in developed areas is largely dependent upon a successful program of vegetational control having been previously carried out. Vegetational control typically involves the trimming and/or removal of flammable plants in close proximity to buildings, and their replacement by plants of lesser fire hazard potential.

The remaining classes of fire hazards noted possess distinctly lesser conflagration potentials. Currently, applicable building and fire codes and internal safety features should serve to minimize the threat. The occurrence of aircraft crashes in developed areas is statistically somewhat remote. Earthquake-caused fires would appear to present no particular problems where new construction is concerned, inasmuch as updated building and fire codes are designed to deal with the foreseeable hazards.

GOAL

- PUBLIC FIRE PROTECTION THAT PROVIDES THE OPTIMUM DEGREE OF SECURITY AGAINST FIRE LOSS.

GUIDELINES AND STANDARDS

- Fire stations should be located to provide rapid response time within the urbanized area and near major thoroughfares.

- Minimum site area should be ½ acre but with room for expansion.

- Station sites should be sufficiently buffered from adjacent land uses especially if located in residential areas.

- Sites should be acquired before or concurrent with surrounding urban development.

RECOMMENDATIONS

- Provide a continual review relationship with the fire department, for their examination of all land use developments.

- Provide adequate fire service for all areas of the community.

FINDINGS

Disaster Preparedness - San Diego Emergency Plan

Pursuant to the authority conveyed by the California Emergency Services Act, the City Council enacted the Emergency Services Ordinance in February 1974. The ordinance created the City of San Diego Disaster Council who was charged with developing and recommending for City Council adoption an emergency plan for the City. The plan provides for the effective mobilization of all the resources of the City, both public and private, to meet any condition constituting a local emergency; and provide for the organization, powers and duties, services and staff of the emergency organization.

The San Diego Emergency Plan was adopted by the City Council in June 1974. The purpose of the plan is to:

- Provide a basis for the conduct and coordination and the management of critical resources during emergencies.

- Establish a mutual understanding of the authority, responsibilities, functions and operations of civil government in the City of San Diego during an emergency.

- Provide a basis for incorporating into the City emergency organization those nongovernmental agencies and organizations having resources necessary to meet foreseeable emergency requirements.

Essentially, the emergency plan sets forth operational concepts and schedules for both peacetime and wartime emergencies; defines the organizational structure that becomes operative during emergencies; and assigns tasks and responsibilities to each of the units of the emergency organization. The plan becomes effective under any of the following conditions:

- When a state of war emergency exists.

- When the governor has proclaimed a state of emergency in an area including this City.

- On the order of the mayor or the director of emergency services, provided that the existence or threatened existence of a local emergency has been proclaimed in accordance with the provisions of the City's Emergency Services Ordinance.

The Unified San Diego County Emergency Services Organization functions as the organizational vehicle in the local operational area. It was created by joint powers agreement among the county of San Diego and the 13 cities. In order that the members of USD-CESO may act in concert during an emergency, their respective plans are standardized in such key subject areas as: concept of operations; responsibilities; organizational structure; and terminology.

GOALS

- REDUCTION OF DISRUPTIONS IN THE DELIVERY OF VITAL PUBLIC AND PRIVATE SERVICES DURING AND FOLLOWING DISASTERS.

- PROMPT AND EFFICIENT RESTORATION OF NORMAL CITY FUNCTIONS AND ACTIVITIES, FOLLOWING DISASTERS.

RECOMMENDATIONS

- In areas of very high hazard potential, preclude new development if possible; if not, limit improvements to those which pose the least threat to life and property.

- In conjunction with the Unified County Emergency Services Organization, undertake a public information program to create and sustain awareness of local disaster plans and to foster positive community response and cooperation in emergencies.

FINDINGS

Water Service

A major concern of residents of California is not just maintaining the quality of water but being assured of a continual supply. Water like many other natural resources has been added to the list of periodic diminishing supply. Even though the condition was considered temporary beginning in 1976, the fact that California experienced the worst drought in the state's history initiated a program of water conservation. The Metropolitan Water District of Southern California in 1977, relinquished their entitlement for water from the State Water Project for that year, because of their need for water in Northern California. Reliance on a water supply for Southern California then came solely from the Colorado River. As a result of a 1964 Supreme Court Decision, the supply of Colorado River water to the Metropolitan Water District by mid-1977, was to be reduced and the reduction to be made up by water from Northern California (State Water Project). Water from the state project will eventually provide two-thirds of the City's imported water with the remaining one-third coming from the Colorado River.

A long standing, but nevertheless increasingly critical, issue relates to whether water should be imported from Northern California in order to accommodate southland growth. Some argue that this will, in time, produce an unhealthy excess of population in many Southern California's urban areas, while simultaneously stunting the growth potential of northern communities.

Although the resolution of this issue obviously transcends San Diego's power alone to decide, the crisis surrounding the results of the drought initiated an evaluation of state water laws to ensure a more equitable distribution in the future.

Another side effect of the drought was renewed interest in wastewater reclamation and reuse. Continual evaluation of this method of water recovery is carried on as policies change on the state level favoring the wastewater reclamation process. Many of the water districts in the county including San Diego are in the planning stage for reclamation plants, and the area-wide Water Quality Management Plan prepared by the Comprehensive Planning Organization contains a section for a regional reclamation facilities plan. This plan set forth a schedule and identifies the institutional and financial arrangements for planning, construction and operation of the facilities.

Unlike other public services wholly managed by the City of San Diego, water and sewers transcends jurisdictional boundaries and decisions made can influence development patterns to a great extent not only in the City of San Diego but in adjoining areas. Because of water's life-sustaining qualities, the extension of service into undeveloped areas influences very powerfully the direction and timing of new urban growth.

GOAL

- CONTINUOUSLY MONITOR THE GROWTH PATTERN OF THE CITY OF SAN DIEGO IN ORDER TO ENSURE THAT WATER IS AND WILL BE AVAILABLE ON AN EQUITABLE BASIS.

RECOMMENDATIONS

- Support and initiate programs of water conservation and reclamation and which would include:
    - Requirements that all new construction and remodeling after a certain date must have water saving devices installed. This will require changes in the building code.
    - Reevaluation of landscaping requirements with emphasis on plants and trees that are drought resistant.
    - Emphasis, when possible, on cluster development (planned unit developments) that utilizes common open space, recreation and other services.
    - Maintain a forceful program of water reclamation planning, working toward plant construction and full operation.
    - Work toward an acceptable regional approach to water management.

FINDINGS

Sanitation-Liquid Wastes

In recent years, the issue of continued unmanaged growth, as it relates to the capacity of the metropolitan sewer system has provoked serious evaluation of the system as an instrument in phasing new development. Virtually all of the City of San Diego is sewered, but the capacity of the treatment plant at the present time is limited. Permission to expand the capacity must be granted by the Environmental Protection Agency who requires that the quality of treatment must be upgraded by the installation of a secondary treatment plant. Also, because San Diego is in a critical air basin, no capacity expansion will be permitted until it is demonstrated that additional population growth will not impair the air quality. It is contended that San Diego does not need a secondary treatment plant because the monitoring of the ocean outfall on Point Loma has shown no adverse environmental effect to the ocean water and sea life. The question of air quality is to prove and have accepted the degree to which air pollution is self generated versus that which is transported from other metropolitan areas.

The awareness generated by the concerns of growth and the eventual impact on needed services is far more important than the outcome of other issues (secondary treatment plants) which in time are resolved on the basis of compromise. Looking toward the long-range, the goal should be to pursue a means of total reclamation of usable water from sewerage, plus utilizing all the byproducts of the treatment process.

GOAL

- PURSUE A RECYCLEABLE APPROACH TO LIQUID WASTE MANAGEMENT.

Recommendations

- Permit the extension of sewerage lines only when in conformance with adopted regional, City and community plans, and the holding and treating capacity of the existing plants.

- Actively work toward the waiver of a secondary treatment plant.

- Continue the program of seeking a means of waste water reclamation.

FINDINGS

Sanitation - Solid Wastes

Refuse disposal has commanded increasing attention in past years, primarily because of the rapidly rising volumes of material to be collected and disposed, and the greater difficulties attached to disposal due to public attitudes toward the location of landfill sites. If this service is to be operated efficiently at a reasonable cost, then the disposal site should be located close to the generating source of waste products, which in this case are the people living in San Diego. There are at present nine sanitary fills in what is considered the coastal area of San Diego

County. Of these nine sites, five have a projected closing date by 1978. One located in Oceanside will be filled by 1982 and the remaining three have a life span until the year 2000. None of the three sanitary landfills which have a capacity to the year 2000 are located close to population concentrations, and only one is the City of San Diego.

The two basic problems associated with solid waste management is first, the assumed right of the public to consume and to accept without questioning, products that are marketed in packages that are not necessary or in containers that cannot be recycled. And, two, finding a method or means of disposing of the waste material. The first problem is a side effect of affluence and which is being recognized to some extent. However, the accumulated effect is very difficult to reverse and would require national policy and commitment to affect substantial change. The second problem, decisions made on locating additional landfill sites and or alternative methods of disposal are directly influenced by negative community attitudes.

GOAL

- PURSUE A REGIONAL SYSTEM OF SOLID WASTE MANAGEMENT THAT IS OPERATED BY ONE AGENCY WITH THE MAJOR TASK OF ENFORCEABLY MANAGING THE GENERATION, COLLECTION, STORAGE, REUSE AND DISPOSAL OF SOLID WASTE.

RECOMMENDATIONS

- Sanitary landfill sites to be located regionally providing efficient service and cost.

- Develop resource recovery plants, similar to the El Cajon Demonstration Project constructed under an Environmental Protection Grant.

- Continue to pursue new techniques and methods of solid waste disposal so as to phase out the use of sanitary landfills.

- Encourage the use of existing recycling centers for glass and paper through continual public awareness programs.

- Utilize land fill sites when closed for beneficial public use: parks, wildlife habitats.

FINDINGS

Drainage and Flood Control

It is paradoxical that areas such as San Diego which suffer from a chronic shortage of water are nonetheless periodically subject to flooding. Due to lack of vegetation and increased exposure to the sun, the ground surface of semi-arid areas is less able to accommodate extremely heavy rainfall than are lands in more humid climates. Thus, during peak rainy periods, the ground passages rapidly become sealed and the rate of runoff accelerated. Runoff is further increased,

of course, by urbanization - since wherever the ground surface is covered by pavement or some impermeable structure, direct absorption of precipitation by the underlying soil is precluded.

The City's numerous canyons and valleys comprise an efficient natural drainage system that results in a low ratio of floodplain area to total land area. Moreover, many of the floodplains are of such narrow width that floodwaters would be relatively confined and therefore limited in their potential destructiveness. However, the San Dieguito, San Diego, and Tijuana River floodplains do attain appreciable widths; and, in the case of the San Diego River Valley, substantial flood damage does occur because of the extensive development that has already taken place.

Two basic alternative approaches to flood control are the protective and the preventive. The protective approach stresses engineering works that encourage or depend upon urbanization for their justification. In contrast, the preventive approach advocates retention of all or a substantial part of the floodplain in an essentially natural condition through the application of strict developmental controls.

For many years, the protective approach was relatively questioned, and flood control programs typically proposed the construction of reservoirs, levees, and lined channels. However, adverse features associable with the protective approach have caused it to come increasingly under sharp criticism. These features include the great cost and the unaesthetic character of the improvement, the "sterilization" of wide swaths of land where flood control channels are built, and, in many instances, the permanent loss of significant plant and animal habitats.

The most commonly employed tool in the preventive approach is floodplain zoning, which designates districts subject to flooding and restricts the usage of those areas in order to minimize damage. While San Diego has long had zoning classifications designed to restrict the use of floodplains, studies of recognized deficiencies resulted in the 1973 adoption of two new zones: the FW (Floodway) and FPF (Floodplain Fringe). The FW Zone severely restricts building in the area designated as the natural floodway. The FPF Zone, which would be applicable to the remainder of the original floodplain, permits normal development provided that appropriate measures are taken to minimize flood damage.

GOAL

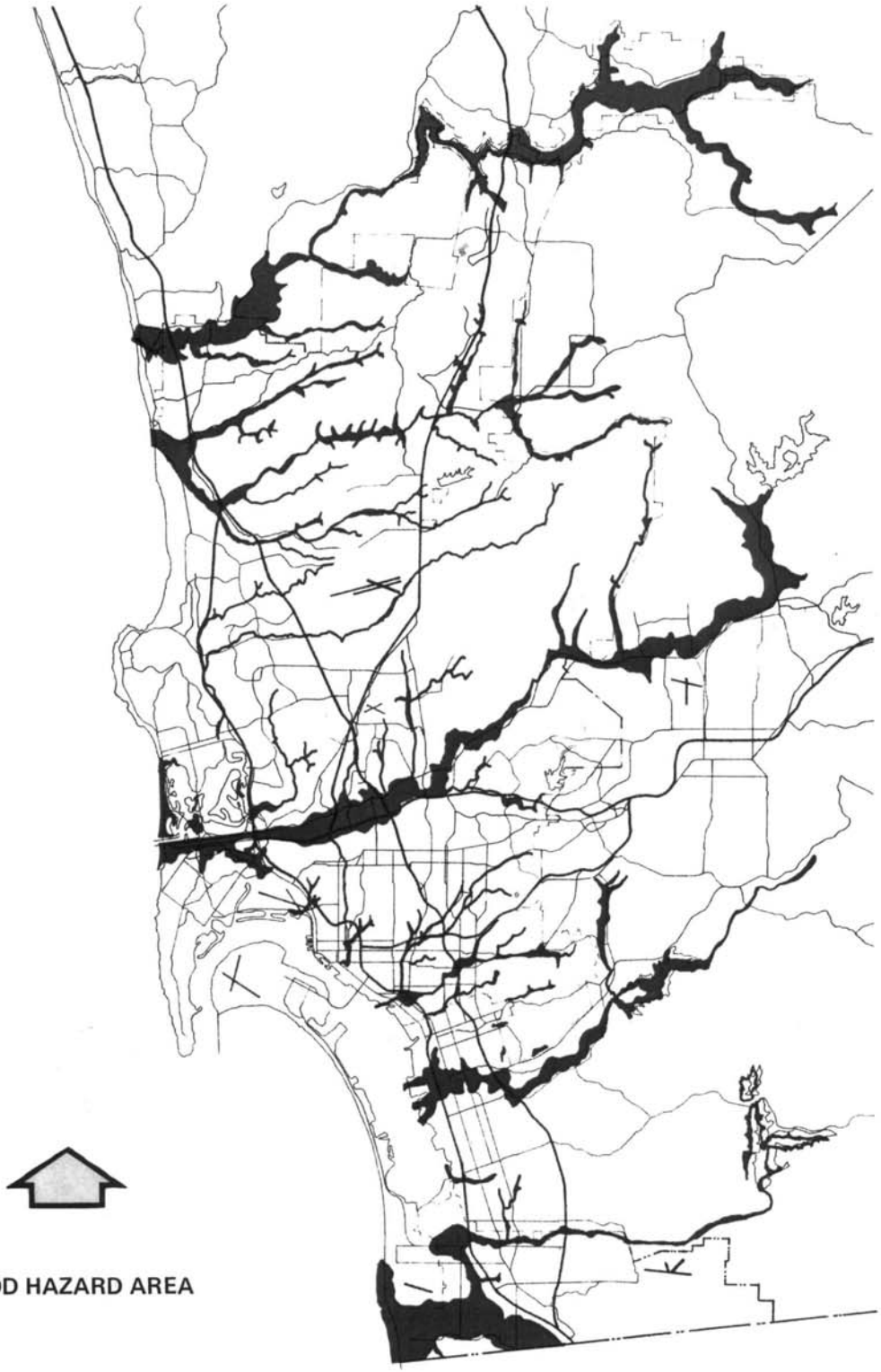
- TO PRESERVE AS MUCH AS POSSIBLE THE NATURAL ATTRIBUTES OF BOTH THE FLOODPLAIN AND FLOODWAY WITHOUT ENDANGERING LOSS OF LIFE AND PROPERTY.

GUIDELINES AND STANDARDS

The design and construction of drainage facilities should be predicated on protecting flood-prone areas against loss of life, significant property damage, and disruption of traffic or utility services. Underground facilities should be provided in areas where the natural topography has been disturbed, or where runoff exceeds the absorptive capacity of the existing natural surface or subsurface drainage systems.

RECOMMENDATIONS

- Emphasize the multi-purpose use of floodplains.
- Adopt policies favoring the preventive approach to flood control.
- Give highest priority to those floodplains where potential damage is greatest.



FLOOD HAZARD AREA

AREAS SUBJECT TO INUNDATION DURING A 100 YEAR FREQUENCY FLOOD. (A FLOOD WHICH HAS A 1% PROBABILITY OF OCCURRING IN ANY GIVEN YEAR.)
SOURCE: PRELIMINARY INFORMATION FROM FEDERAL INSURANCE ADMINISTRATION.

OPEN SPACE ELEMENT

Open Space

Open space may be defined as land or water areas generally free from development or developed with low intensity uses that respect natural environmental characteristics. Open space is generally non-urban in character and may have utility for park and recreation purposes; conservation of land, water, or other natural resources; and for historic or scenic purposes.

The California Government Code describes some of the more important uses of open space.

- "Open space **for the preservation of natural resources** including, but not limited to, areas required for the preservation of plant and animal life, including habitat fish and wildlife species; areas required for the ecologic and other scientific study purposes; rivers, streams, bays and estuaries; and coastal beaches, lakeshores, banks of rivers and streams, and watershed lands.

- Open space **used for the managed production of resources**, including but not limited to, forest lands, rangeland, agricultural lands and areas of economic importance for the production of food or fiber; areas required for recharge of ground water basins; bays, estuaries, marshes, rivers and streams which are important for the management of commercial fisheries; and areas containing major mineral deposits, including those in short supply.

- Open space **for outdoor recreation**, including but not limited to, areas of outstanding scenic, historic and cultural value; areas particularly suited for park and recreation purposes, including access to lakeshores, beaches, and rivers and streams; and areas which serve as links between major recreation and open-space reservations, including utility easements, banks of rivers and streams, trails, and scenic highway corridors.

- Open space **for public health and safety**, including but not limited to, areas which require special management or regulation because of hazardous or special conditions such as earthquake fault zones, unstable soil areas, floodplains, watersheds, areas presenting high fire risks, areas required for the protection of water quality and water reservoirs and areas required for the protection and enhancement of air quality."

- Open space **to control urban form**, which may include the utilization of the varied terrain and natural drainage systems in guiding and controlling the form of development.

- Open space **for scenic and visual enjoyment** for relief from continuous urban development and to help provide for the preservation of areas having outstanding scenic qualities.

  Inasmuch as the intent of preserving open space is to conserve the natural resources of the City, the overlap between the Conservation Element and open space is apparent. The Open Space Element is also very closely tied to recreation and the City's park system, and to cultural resources which discusses the historic and cultural aspects of San Diego.

A direct association is made to the Seismic Safety Element in the identification of floodplains and steep slopes, both geological hazards, and a component of the open space system. And lastly the open space system is an integral implementation tool of the Urban Design Element in the creation of cohesive neighborhoods and communities.

FINDINGS

The Open Space Element is perceived as one of the tools for protecting San Diego's quality of life. It supports the conservation and enhancement of San Diego's existing communities and seeks to aid in the recreation of new communities which strive to retain and enhance natural amenities.

The open space system is based upon the natural features of the San Diego coastal plain. It capitalizes on the drainage systems, particularly the river valleys and adjoining steep hillsides which interrupt the coastal plain and link the ocean with the coastal mountain range.

Because the drainage systems contain alluvial soils and ground water they often provide good agricultural potential. Since they also often support lush stands of vegetation they are an important asset in establishing the natural amenity or quality of life for San Diego. San Diego's many canyons and valleys are not only scenic but are often particularly suitable for use as natural parks.

The limited utility of drainage systems for intensive urban development often provides an opportunity to utilize them as natural relief from urbanization in already built up areas. Similarly, canyon and hillside open spaces give form to urbanization and can enhance established neighborhood environments thus conserving the "quality of life" in San Diego's communities.

In reviewing the land characteristics of the coastal plain it is apparent that open space may also function to protect the public health, safety, and general welfare. For this reason, steep areas of unstable soil and floodplains may be restricted to development intensities that are consistent with open space objectives.

An objective of the Open Space Element is that open spaces be multifunctional. Some systems may have attractive vegetation and/or wildlife, contain streams or estuaries, and also have potential for agricultural use. Some systems may also have scenic or cultural-recreational value for future park use. In other cases, the public health, safety, and general welfare may be protected through the prevention of intensive urbanization.

Open Space Categories

Open spaces shown on the Open Space Plan Map are divided into three components: 1) Public and Semi-Public Open Space, 2) Other Open Spaces, and 3) Open Space Subsystems Outside San Diego City.

Public and Semi-Public Open Space. This category consists primarily of the many resource based parks that are located throughout the City. These unique parks contain features that not only distinguish the open space system but add significantly to the overall image and quality of life typical of San Diego. Also included in this category is the large city-owned agricultural preserve in the Lake Hodges-San Pasqual Valley. Another significant publicly owned area is the federal installation on Point Loma that includes both the Naval facility and the Cabrillo National Monument. Finally, open spaces acquired through community and neighborhood assessment districts and open space dedications resulting from the subdivision process are categorized as public and semi-public open space.

Other Open Space Subsystems. Open Space that is designated in adopted community plans forms the mainstay of this category. Also included are proposed resource based parks and proposed additions to existing resource based parks. The undeveloped portions of riverine floodplains were also made a part of this component. These floodplains were delineated by HUD and the U.S. Army Corps of Engineers in connection with the National Flood Insurance Program.

Open Space Subsystems Outside San Diego City. These areas represent extensions of systems within the City that fit compatibly with jurisdictions outside the City.

GOAL

- ESTABLISH AN OPEN SPACE SYSTEM WHICH PROVIDES FOR THE PRESERVATION OF NATURAL RESOURCES, THE MANAGED PRODUCTION OF RESOURCES, THE PROVISION OF OUTDOOR RECREATION, THE PROTECTION OF PUBLIC HEALTH AND SAFETY, AND THE UTILIZATION OF THE VARIED TERRAIN AND NATURAL DRAINAGE SYSTEMS OF THE SAN DIEGO COMMUNITY TO GUIDE THE FORM OF URBAN DEVELOPMENT.

GUIDELINES AND STANDARDS

Although there is virtually total agreement as to the need for open space, there is by no means agreement as to specific need standards. However, it is apparent that standards for the designation of open space should primarily consider the extent to which the uses of open space alluded to earlier in this element can be identified and accommodated. In addition such standards should also consider the following variables: the extent, character, intensity, and pace of urbanization; the magnitude and distribution of the urban population; its rate of growth, mobility, and social and economic characteristics; the degree of stress and tension of urban living; and the availability of financial resources for open space acquisition.

Establishing Priorities

In establishing relative importance, the greater the number of uses or functions, the higher the system's priority should be. For example, a system which provides the opportunity to conserve natural vegetation and wildlife while also preserving agricultural lands or groundwater resources

should receive a higher priority than a system which provides the opportunity for only a single use.

The following open space uses are recommended to be considered in the establishment of priorities. These uses are described in greater detail in the introduction of this element.

- Open space for the preservation of natural resources.
- Open space for the managed production of resources.
- Open space for outdoor recreation.
- Open space for public health and safety.
- Open space to control urban form.
- Open space for scenic and visual enjoyment.

Given more than one candidate for open space which meet the criteria for multi-use, the following considerations will permit an evaluation.

Threat of Urbanization

Land designated for open space falling within urban areas on which subdivisions or improvements are proposed should receive a high priority in any considerations of acquisition. Land within urban areas but not subject to immediate development pressure should receive medium priority. Finally, an area which is not expected to urbanize in the next ten years, or land which is zoned agricultural, should receive a low priority.

Proximity to Existing Open Space

This evaluation should consider the need for open space based on the acreage devoted to existing open space within individual communities. Potential open space located in urbanized areas deficient in the provision of existing open space should receive the highest priority. Potential open space located in areas which have existing community-neighborhood open space but are deficient in regional open space should receive a medium priority. Potential open space located in areas where both community-neighborhood and regional open space exists should receive lower priority.

Size of System and Cost of Acquisition

When systems of comparable amenity and number of uses are candidates for acquisition, the opportunity to acquire large relatively inexpensive tracts of land should receive priority over smaller more costly sites. In some cases however, exceptions may be necessary, (e.g., a smaller site which is necessary to provide public access to an existing open space system or to protect a significant natural or man-made environment).

RECOMMENDATIONS

Lands that have value and utility for open space are expected to be preserved by acquisition and/or regulation. It is anticipated that open space acquisitions will be made through a combination of private and public actions. Open space that is not required may be preserved through reasonable regulatory devices and these areas will be permitted to develop in a manner that is consistent with appropriate zoning that is applied to them. Such zoning as may be applied on these properties will allow a reasonable use and promote the public health, safety and general welfare.

Acquisition

- A priority listing of open space acquisitions should be established utilizing the standards presented in this element.

- A citywide assessment district should be established for the acquisition of areas determined to have high priority.

- Specific City funds (Environmental Growth Fund) should be earmarked and priorities established for the purpose of acquiring open space as a part of the City's Capital Improvement Program.

- The establishment of community-neighborhood assessment districts should be encouraged for the acquisition of open space.

- Impact fees and/or open space dedications should be required where appropriate to provide open space in new developments.

- The City should establish an office whose function is to obtain supplemental open space acquisition funds from federal, state, and county programs, and to assist community groups in establishing and implementing community and neighborhood open space programs.

- The City should cooperate with adjacent jurisdictions and other governmental entities to preserve the open space systems shown on the Open Space Plan Map that are outside the City.

Floodplains & Hillsides

Because of the size of the City of San Diego and the diverse character of land areas which may have utility for open space, it may not be possible to acquire all of the systems proposed in this element. For this reason, lands included in floodplains, steep hillsides, and some agricultural areas should be permitted to develop consistent with the appropriate zoning that is applied to them.

The purpose and intent of regulating floodplains is to control land use and development in a manner that protects the public health, safety, and general welfare. Floodplain regulations also

seek to reduce the financial burden of the City by eliminating the need for the construction of expensive flood control facilities. In attaining these goals, floodplain regulations also tend to conserve the environmentally sensitive qualities of floodplains.

- Floodplain regulations should be applied to all areas subject to flooding as identified by the National Flood Insurance Program.

- Concurrent with the floodplain zoning program, plans should be prepared for all major drainage systems. Such plans should distinguish between urban (e.g., Mission Valley) and non-urban systems (e.g., San Dieguito Valley). These plans should emphasize preservation rather than protective approaches, retention of agriculture in floodplains, encouragement of water conservation techniques, and the development of park and recreational uses wherever possible.

The purpose and intent of regulating hillsides is to provide for the reasonable use of slopes exceeding 25 percent gradient while protecting the public health, safety, and general welfare. These regulations seek to ensure that development results in minimum disturbance of natural terrain and does not create soil erosion, silting of lower slopes, slide damage, flooding problems, and severe cutting or scarring. Careful administration of hillside regulations also serves to protect environmental resources that are associated with hillsides, to protect significant views of and from hillsides, to maintain a clear sense of natural hillside topography in steeply sloping areas, and to encourage sensitive forms of development of San Diego's hillsides.

- Where hillsides falling within the HR category exist and the community desires to acquire such systems, their acquisition should be given priority over development; however in the event that acquisition is not possible within a reasonable time period development should be permitted in conformance with the HR Zone.

Agriculture

The purpose of adopting agricultural regulations is to provide appropriate zoning of areas which are rural in character, and presently may be zoned for agricultural purposes, only on an interim basis. It is intended that the agricultural zones be applied to undeveloped areas not yet ready for urbanization and awaiting development, those areas where agricultural usage may be reasonably expected to persist, or areas designated as open space in the General Plan.

- That permanent agricultural zones be applied in areas where climate, ground water quality, and soil conditions are conducive to the production of agricultural products on an economically viable basis.

- That a Council policy be established which identifies the City's intent to establish agricultural preserves in agriculturally zoned areas, conserve agriculturally productive lands, and establish a process for administering Williamson Act and open space easement applications for tax abatement purposes.

General

- Apply floodplain and hillside regulations to all areas of the City that meet the criteria for these regulations.

- Where appropriate initiate rezoning to more restrictive classifications of those floodplains, hillsides, and potentially productive agricultural areas that are in R-1-20 or less restrictive zones.

- The installation of public and private improvements in designated open space areas should respect the natural environment to the maximum extent possible.

- Provide Open Space Elements for those adopted community plans that do not have Open Space Elements.

- Revise floodplain zones, hillside zone and agricultural zones to reflect the objectives of the Open Space Element.

OPEN SPACE PRESERVATION AND DEVELOPMENT OF SENSITIVE LANDS

Sensitive Land

In addition to the hillside review, floodplain and agricultural zoning tools which help ensure proper development of obviously sensitive areas, planned development permits are utilized.

The intent is not to apply any of these regulatory methods solely for the purpose of preserving open space lands. Instead, these controls will be exercised when site conditions exist which preclude standard zoning patterns and practices. For example, adverse geologic formations may preclude or make development on a portion of the site difficult; preservation of natural drainage may cause cluster of development on one portion of the site; the need for visual relief from contiguous development may be achieved by shifting development on a site. In summary, given the fact that development will occur on sensitive lands, alternative methods outside of standard zoning may ensure the best use of the site while protecting public health and safety.

- Require a planned development permit on sites when sensitive landforms or soils are known or found.

- Include in community plans the areas where planned development permits should be required.

Community Plans

The preservation of open space and the development of sensitive lands are major concerns of the City of San Diego as has been stated in this element. The City has adopted Council policies aimed towards acquisition and retention of lands for open space purposes as well as ordinances designed to restrict development in certain sensitive areas. Given the general nature of this

element, and the other elements of the General Plan, and given the unique neighborhood characteristics of each of San Diego's communities, an Open Space Element for each community would be appropriate to assure that the goals of this element and the purpose of Council policies will be applied to each community.

Recommendation

Establish an Open Space and Sensitive Land Element for each community plan with specific criteria on which to identify open space and sensitive land areas; to describe their function, their purpose, and develop a specific recommendation of either retention or development.

Definitions

Sensitive Lands - Identify in each community plan lands of significant environmental value because of the steepness of the topography (which enhances its contribution to the urban form and aesthetic character of the community, and which makes development difficult without extensive disturbance), certain biological habitats (which have significant value for wildlife or are the locations of high interest plant species), geological hazards (which may require substantial grading to correct), erosion concerns (where disturbed soils may be unusually difficult to stabilize or revegetate), and visual prominence of the area (its contribution to defining the predominant community character or its relationship to parks or open space areas).

Policy

It is a policy that every community plan and specific plan shall contain an Open Space and Sensitive Land Element to include the following:

1. Acknowledge the general character of the community as being either urbanized or planned urbanizing as established in the General Plan.

2. Identify and map all hillsides, canyons, water resources, bluffs, beaches, farm land, parks, open space areas, natural resources, and special urban spaces.

3. Areas identified on the open space retention list should be listed, their order of priority, and the recommended method of retention identified.

4. Describe the primary functions of the open space area, as well as the goals for the area.

   Possible uses and goals include:

   a. preservation and/or management of natural resources;

   b. outdoor recreation;

   c. historic and cultural preservation;

d. control of urban form and design; and

e. scenic and aesthetic enjoyment.

5. Identify and describe potential development conflicts and development opportunities associated with each open space system, with recommendations designed to reduce such conflicts.

6. Identify specific methods of implementation. These methods would include:

   a. Placing area on the open space retention list;

   b. Rezoning to a zone which will maintain open space characteristics of the land;

   c. Overlying the Hillside Review Zone on sensitive slopes having prominent features and panoramic vistas as well as reviewing and updating the existing Hillside Review Zone to assure accuracy;

   d. Creating special development regulations for the open space system;

   e. Zone floodway, floodplain fringe or sensitive coastal resource, as appropriate;

   f. Require that sensitive areas be placed in a permanent open space easement or given in fee to the City either through the subdivision or planned development permit process; and

   g. Develop specific development guidelines for those areas slated for development.

7. Provide phasing plan for implementation of the recommendations contained within the Open Space Element.

8. Define all terms and strengthen long range planning review of current planning projects.

9. Each area shall be evaluated using the following criteria. These criteria can be used to develop specific recommendations for each area.

URBAN FORM CONSIDERATIONS

A. General Plan Consistency

As stated in this element, "the extent, character, intensity and pace of urbanization" should be considered. Open space areas adjacent to fully developed communities, versus areas only partially developed or undeveloped, receive high consideration for retention of land character and open space corridors.

B. Community Identity

1. Retention of Open Space

   Land designed as open space on which subdivisions or improvements are proposed would receive high consideration for retention.

   Lesser consideration would be given to urban area land which is not subject to immediate development pressure, to areas not expected to urbanize within the near future, or to land which is zoned agricultural or floodway.

2. Lack of Parks in Neighborhoods - Areas deficient in General Plan population based park standards would receive a higher consideration for retention than areas meeting those standards.

C. Size and Area Considerations

1. Length and Area - provide an objective measurement that is easily calculated. Respond to the need to differentiate open space and sensitive lands that:

   a. importantly contributes to City identity or otherwise possesses citywide value or utility; or

   b. primarily serves to define or separate community areas and has both citywide and community value; or

   c. serves to define or separate neighborhoods within their respective communities and thus has mainly community value; or

   d. serves to provide focus and identity within neighborhoods.

2. Urban Form - San Diego's canyon and hillside open spaces give form to its urbanization, while also providing visual or psychological relief. These criteria measure how the open space gives form to what otherwise would be:

   a. continuous urban development;

   b. how the open space buffers or physically demarcates one community from another and how much the open space possesses in terms of scenic and aesthetic attractiveness;

   c. whether the open space would provide a useable linkage directly to other open space or park area; and

   d. whether the varied terrain and natural drainage systems may be used in guiding or controlling the form of development.

D. Scenic Criteria

Scenic criteria consider whether the area:

1. is primarily in its natural state, and its preservation would maintain or enhance the conservation of natural or scenic resources;

2. has outstanding scenic and visual qualities;

3. has quality long vistas either to or from the open space, and

4. provides for scenic and visual enjoyment or relief from continuous urban development.

E. Access and Recreation Potential

1. Access - is evaluated against both the number and quality of potential public access points into an open space area. Considerations include:

2. Recreational Potential - also recognizes areas particularly suited to recreational activities, such as those containing streams and trails. The most consideration is given to areas that offer multiple recreational uses such as pedestrian, bicycle and equestrian trails, open play areas, picnicking, etc.

F. Environmental Considerations

1. Fauna and Flora Features - Areas where endangered animals and vegetation are located, and highly vegetated areas, such as those with many or varied trees and flora.

2. Geological Features

   Geological open space capitalizes on our City's geological features - mountain ranges, drainage systems, river valleys, and coastal plains. It also includes safety considerations, such as earthquake fault zones and other geological hazards such as steep areas of unstable soil. Areas identified as "moderate" (C), "high" (D), or "variable" (BC or AC) risk zones as identified on the geotechnical land use capability maps referenced by the Seismic Safety Element of the General Plans shall be mapped.

RECREATION ELEMENT

Recreation

A large part of the richness and diversity of the urban scene derives from the variety and availability of its recreational opportunities. Of course, a large part of these opportunities are provided by commercial and non-profit enterprises. But since the first American public park was built in the middle of the last century, there has been a steadily increasing awareness of the need for public recreation facilities. These latter are one of the major criteria used to evaluate and compare cities, their relative "progressiveness," their quality of life, their attractiveness as places for establishing business or industry or residence.

The City of San Diego provides three types of recreational accommodations for residents and visitors. Population-based centers are intended to serve the local daily needs of residential areas. Where possible they adjoin schools in order to share facilities, and ideally are within walking distance of the residences within their service area. Resource-based parks serve users from the entire City and elsewhere, and are located at or centered around some natural or man-made feature. Beaches, historic sites, natural canyons, lakes. Mission Bay and Balboa Park are examples of this type of facility. The City also provides other recreational accommodations that are neither population-based nor resource-based; these include sports fields, open space parks, plazas, large and small landscaped areas, and mini-parks. The three groups of physical facilities, plus classes and programs and activities at these and other locations, constitute San Diego's municipal recreation system.

Preservation, development and operation of its public recreational resources is one of a city's primary responsibilities. The intent here is to consider the City's broader and more comprehensive recreation system. Land is essential to that system; of comparable importance are facilities and staff service. All three are vital elements of the City's coordinated effort to provide opportunities for the constructive and enjoyable use of leisure time.

The Recreation Element interrelates in varying degrees with many of the other elements of the General Plan. Recreation is one of the major uses for open space lands, and resource-based parks are a major part of the City's open space system. Both the Recreation Element and the Conservation Element are concerned with the preservation and use of beaches, water bodies and wildland areas. Providing recreation facilities within easy access of residential areas has important energy conservation consequences. Parks and recreation facilities contribute importantly to a sense of place, urban diversity, improved livability and accommodation of human needs with the City - all of which are concerns of urban design.

FINDINGS

At best, a city does not attempt to fulfill residents' entire need for recreation; it is not expected, and is unlikely to happen in the future. Public facilities in this country have traditionally played a relatively small part in the total picture of leisure-time use. However, planning emphasis is currently shifting toward increased guidance of and provision for recreation - in efforts to reduce auto use, energy consumption and air pollution, and to make inner cities and higher-density living more attractive and satisfying. To achieve this, an adequate and well-located system of facilities is essential. Also, despite the downward trend in the average work week and the

consequent increase in free time, the real increase in useable leisure is not as dramatic as might be expected. With the increasing pace and complexity of urban life, the use of available free time becomes critical. In effect, the need for recreation has increased faster than the supply of time available for accomplishing it. This places additional importance on providing a full and varied range of recreational opportunities, readily available to all.

Since their adoption, a lot of progress has been made toward achievement of the City's park and recreation goals. New park lands have been steadily acquired; development of facilities and recreation services have greatly expanded; considerable variety of service has been achieved. Recreation activities are offered throughout the City at parks, recreation centers, public schools, playgrounds gyms, athletic fields, auditoriums and classrooms. A variety of cultural, athletic, sport, social and craft programs designed to serve all age and ethnic groups are provided.

There is, however, considerable variation among the various communities and areas of the City with respect to the actual facilities provided, total acreage, and acres/1000 population. This is partly due to the uneven distribution of large resource-based parks: beaches and Mission Bay Park and Balboa Park fulfill needs of the entire City and tourists, as well as residents of the specific section of the City they are in. It is also partly due to the fact that the Park Service Districts and statistical areas used to compare recreation facilities are not really separable, independent units. However, even with allowances made for these considerations, appreciable deficiencies exist throughout the City and more in some sections than in others.

Of most concern is the relative lack of neighborhood and community facilities in some of the older parts of the City. This has occurred for several reasons: the General Plan standards did not exist when these communities were being developed, there was no park fee ordinance, and there is no space now to establish parks without displacing residents. However, the same needs exist as in newer communities where land dedication or park fees have provided recreation facilities. This problem is common to many older cities, and to the older parts of many cities, except where large-scale redevelopment has provided for recreation space. Given the current trend "back" to the inner City, increased citizen desire for public recreation, efforts to reduce auto use, increasing preference for active recreation and health activities, and the ubiquitous energy problem, it is apparent that facilities should be provided that make recreation an accessible part of daily lives and not a special, gasoline-consuming event that involves travel.

Both neighborhood and community facilities should take a variety of forms in response to the specific needs and desires of the residents involved. Neighborhood parks should be oriented toward achieving maximum neighborhood involvement in terms of interest, participation and support. They should be an important element in creating neighborhood identity. Community facilities should supplement the neighborhood ones and provide for more activities than the latter. Both should respond to the unique characteristics of their area; the type of facilities and services and the space arrangements should relate to the population and use characteristics of the area served. The space and equipment indicated as desirable for them should be considered guidelines and not fixed needs. Most are located adjacent to public schools in order to share facilities and land.

In older, already developed parts of the City, where recreation space is difficult to acquire, efforts should be directed toward providing staff and facilities which compensate for deficiencies in acreage. Land, equipment and supervision in varying proportions can still add up to recreational opportunity and service to the residents. If acreage is reduced, facility investment and leadership should be correspondingly increased.

Trade-offs and exchange among these various aspects of total service can allow the City to continue moving equitably toward goals while preferred levels of acreage are not immediately attainable.

Resource-based parks are intended to preserve and make available areas of outstanding scenic, natural, or cultural interest. They are meant to broaden the smaller, more daily type of opportunity offered by the system of population-based parks, and also are meant to serve the entire City and its visitors rather than any one community. However, parts of them can and do function to fulfill local neighborhood and community park needs of surrounding residents.

As a special resource-based facility, historical resources can serve both area-wide and local recreational needs when suitably located and identified and open to the public. San Diego's historical resources are treated in detail in the Cultural Resources Management Element. They embrace physical structures and geographic areas, both natural and man-made, which have some historical significance. Properly designated and available to the public, these can serve as a rich source of tangible historical material, leisure enjoyment and cultural enrichment as well as a practical asset for tourist-commercial and industrial promotion.

Parks are mostly financed by sales tax revenues and sales of city-owned land. Traditionally, park needs have exceeded the City's financial resources. To defray a portion of the cost of park and recreational facilities, the City Council, in June 1974, adopted a Park Fee Ordinance. This ordinance required land contributions or the payment of fees by the subdivider in conjunction with the subdivision process. It also requires that fees be paid by the developer at the time a building permit is issued. Collected fees must be used in the area of benefit.

The City also has policies regarding park development by private funds, and the allowance of credit when park and recreational facilities are furnished by the subdivides. However, park development involving private sources of funding must satisfy specific criteria.

Inasmuch as the amount of funds available for capital improvements for parks and recreation will continue to be severely limited, new sources of revenue should be explored. These may include increases in park fees in park deficient areas, user fees, bond issues for park purposes and mandatory land donations in large subdivisions.

GOALS

- PROVIDE A RANGE OF OPPORTUNITIES FOR ACTIVE AND PASSIVE RECREATION, EDUCATIONAL ACTIVITIES, AND NEIGHBORHOOD IDENTIFICATION, IN ALL PARTS OF THE CITY, ADAPTED TO THE NEEDS AND DESIRES OF EACH NEIGHBORHOOD AND COMMUNITY.

- ENHANCE THE URBAN SCENE BY DEVELOPMENT OF AN EXTENSIVE AND VARIED SYSTEM OF OPEN SPACE AND RECREATION FACILITIES.

- ACQUIRE AND PRESERVE ALL BEACHES FOR PUBLIC USES.

GUIDELINES AND STANDARDS

Population-based Parks and Facilities

An ideal balance of recreational opportunities cannot be achieved through just citywide application of numerical standards for physical facilities. These standards are important, however, they should be used with discretion rather than mechanically. They are only a basic tool for guiding and evaluating the adequacy of service to a given area and to the City as a whole. Their application should be related to economic feasibility and the nature of the specific neighborhood or community, and should allow for flexibility as specific areas change or the needs and desires of the residents change. Acreage, development and physical facilities, accessibility and distance, supervision and leadership should all be included in the total effort to achieve as much as possible the same degree of service or opportunity or need fulfillment in each administrative district.

Population based parks and facilities are intended to serve the immediately surrounding residential population. There are two categories of these:

Neighborhood Parks and Facilities

Neighborhood facilities should serve a resident population of 3,500 to 5,000 persons within approximately a ½ mile radius. Ideally, they should have a minimum useable area of five acres when located adjacent to an elementary school or 10 acres when not so located. The design and type of facilities should be determined by the population and use characteristics of the neighborhood. Play areas, multipurpose courts, picnic facilities, landscaping and lawn areas are usual accommodations when space permits and when appropriate for the specific neighborhood.

Community Parks and Recreation Centers

Community facilities should serve 18,000 to 25,000 residents within approximately a 1-½ mile radius. Ideally they should have at least 13 useable acres if adjacent to a junior high school or 20 acres if not so located. They should provide a wide range of facilities that supplement those of the neighborhood parks and which are determined by the needs, preferences and use characteristics of the community. Athletic fields, multipurpose courts, picnic facilities, play areas, recreation building, lawn acres and landscaping are standard facilities when possible and desirable.

TABLE 17
City Of San Diego Parks And Recreational Facilities
By Statistical Area And Type
June 1978

Statistical Area	Population	NEIGHBORHOOD/ COMMUNITY PARKS			SCHOOL TURF/MINI PARKS		OTHER PARK LANDS**		OPEN SPACE PARKS		REG./RESOURCE SHORELINE PKS.		CNTY/ST. NAT'L PKS***		TOTAL ALL PKS. IN THE CITY	
		No.	Acres	Ac/1000	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres	No.	Acres
Central	107,665	10	71.14	.66	6	2.47	1	.37	1	6.81	2	1207.25	2	10.68	22	1298.72
Coastal	152,590	10	128.11	.84	5	4.21	3	11.73	4	108.93	22	5152.47	2	957.60	46	6363.05
Kearny Mesa	154,420	23	319.32	2.07	2	13.00	-	-	2	863.28	1	364.75	-	-	28	1560.35
Eastern	264,400	39	681.38	2.58	9	16.82	4	17.62	2	582.65	4	2628.24	-	-	58	3926.71
N. San Diego	78,425	9	63.77	.81	4	15.10	-	-	9	61.89	2	253.73	1	1.00	25	395.54
S. San Diego	47,800	11	125.48	2.63	-	-	1	15.11	-	-	-	-	1	135.00	13	275.59
City Total	805,100	102	1389.20	1.73	26	51.60	9	44.83	18	1623.56	31	9606.44	6	1104.28	192	13819.96

* *Population as of July 1978*

* * *Includes such lands as Athletic Fields, Plazas, Cemeteries.*

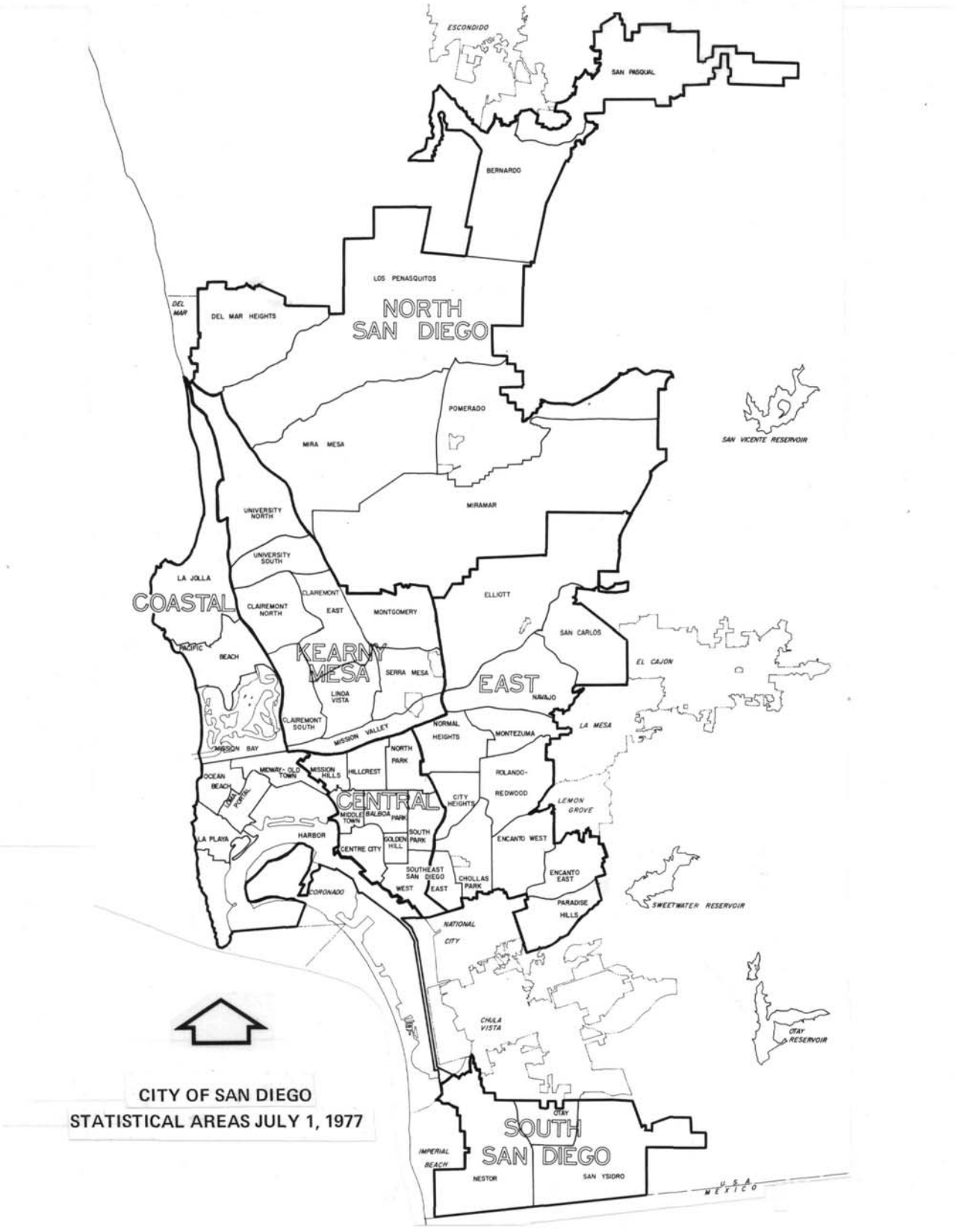
*** *Cabrillo National Park - 80.60 acres*
Border Field State Park - 135.00 acres
Old Town State Park - JO. 10 acres
Torrey Pines State Reserve - 877.00 acres
San Pasqual State Historic Park - 1.00 acres
Heritage County Park - .58 acres

CITYWIDE ACRES/1000

Neighborhood/Community Parks - 1.73
School Turf/Mini-Parks - .064
Other Park Lands - .056
Open Space Parks - 2.02
Regional/Resource/Shoreline Parks - 11.93
County/State/National Parks - 1.37

TOTAL ALL PARKS – 17.17

SOURCE: City of San Diego Park and Recreation Department, June 30, 1978



CITY OF SAN DIEGO
STATISTICAL AREAS JULY 1, 1977

Swimming pools, usually located at community parks, should be planned to serve a minimum population of 50,000 residents within a radius of 1-½ to 2 miles.

Resource-based Parks

Resource parks are located at the site of distinctive scenic or natural or cultural features. They are intended for citywide use. Their size and development should be determined by the specific resource involved, expected use, available land, and location. Where appropriate, they may be developed with landscaping and recreation facilities. Beaches should have adequate restrooms. In general, development and amenities should not impair the feature or resource that motivates the resource-based park.

Total Acres Per Thousand Residents

Citywide, there should be approximately 20 acres of urban recreation land for each 1,000 residents. Population-based facilities ideally constitute between 1.0 and 3.9 acres/1000, depending on proximity to schools and the residential densities of their service areas. Resource-based parks should provide between 15 and 17 acres/1000. Open space lands, sports fields, plazas, and landscaped areas should constitute approximately 1.1 to 2 acres/1000 residents. These figures are norms or abstract concepts, however, and should not be rigidly applied throughout the City.

RECOMMENDATIONS

- Make fullest possible use of multi-purpose planning to expand recreation opportunities:
    - recreation use of school facilities and school use of recreation facilities.
    - variety of compatible recreation activities within a given site.
    - passive recreation combined with cultural resource preservation.
    - appropriate recreational use of open space lands and wildlife conservation areas and water resources.
- Evaluate each park to be acquired and/or developed on an individual basis using the standards as guidelines.
- Address community needs in community plans.
- Retain all park land for recreation purposes only. As opportunities arise, repossess for recreation purposes desirable park areas that have been diverted to other uses.
- Design parks so as to preserve or enhance the topographic and other natural site characteristics.

- Utilize planting materials native to Southern California and landscaping compatible with our climate to reduce maintenance costs.

- Acquire non-public beach areas for public use, and preserve and identify access.

- Make suitable provision for parks or open space public areas in redevelopment plans for areas presently park-deficient.

- Needed park facilities in older urbanized areas of the City should receive higher priority in the allocation of available funds.

- Coordinate with private recreational facilities and commercial interest so that the private facilities complement and supplement the public recreational system.

- Review the existing fee schedule of the Park Fee Ordinance.

- Amend the Park Fee Ordinance to require park fees as a condition of building permits for construction where the underlying property has been previously subdivided.

REDEVELOPMENT ELEMENT

Redevelopment

Redevelopment is the restoration of either a single piece of property or a collective unit of properties to a condition of physical, social and economic vitality. Redevelopment means the replanning, redesign, and in some cases clearance, reconstruction and rehabilitation of areas that have been determined to be blighted. In recent years the emphasis of redevelopment has shifted from the "urban renewal" concept of total land clearance to a concept which emphasizes conservation and rehabilitation with only selective clearance.

The initiation of the redevelopment process can be through both private and public efforts. Private redevelopment occurs continually throughout the City, usually on a small scale and only when economic conditions are favorable for such action. Public redevelopment is typically large in scope encompassing many acres and in areas where blighted conditions enable the California Community Redevelopment Law to be used.

The Redevelopment Element is defined in the state planning and zoning law as "consisting of plans and programs for the elimination of slums and blighted areas and for community redevelopment, including housing sites, business and industrial sites and for other purposes authorized by law." The redevelopment process is guided by the California Community Redevelopment Law, Section 33000 of the Health and Safety Code. It is based on the need for communities to have the legal and financial ability to correct serious conditions of physical, social and/or economic deterioration that adversely affect the public health, safety and welfare of the community. The code states that a redevelopment area initiated by a public redevelopment agency must be precisely defined and must be characterized by a substantial degree of blight - either physical, social or economic - which impedes the normal development and investment process and leads eventually to deteriorating land use, and/or economic and social conditions, which can be corrected only by public action. The term blight is broadly defined to include unfit or unsafe buildings, the results of faulty planning or lack of planning, unproductive land use and/or decreasing population.

The lack of private investment within a reasonable time frame necessary to eliminate blighted conditions is the primary reason for a public sector intervention. The municipal government must, at a public hearing, document the blighted conditions and describe its plan for redeveloping the area and removing such blight. After the adoption of the Redevelopment Plan by the City Council, the Redevelopment Agency then has the responsibility to implement the plan including assembling land and making it available for private development. The new development serves as a catalyst to stimulate other private reinvestments in the area and ensure against further blight and decay.

The Redevelopment Element can be viewed primarily as an implementation tool and can be used as such to implement the recommendations of the Land Use Elements; Housing, Commercial, and Industrial. In addition redevelopment actions will be guided by the standards, criteria, and policies of the Urban Design, Cultural Resource Management, and Public Facilities Elements. Redevelopment and rehabilitation of deteriorated and underutilized areas of the City will return them to a condition of social, economic and physical vitality. Thus, the Redevelopment Element is one of the most important tools the City of San Diego has to guide growth into developed

portions of the community, conserve the community facilities and resources of the City, and prevent sprawl.

FINDINGS

The rush to suburbia has accelerated the deterioration of older central areas. Investment is directed to the new growth areas while sections of central cities grow older and more obsolescent. Loss of jobs, business, revenues, and prestige has resulted. Aging central areas have been left to those who lack means to change the situation.

In the past the redevelopment efforts of the City of San Diego have been directed primarily to areas of commercial and industrial usage, however future programs should include efforts at revitalization of older residential neighborhoods.

The future of older developments in the City revolve around the economics of rehabilitation and redevelopment. Too often in the past it was believed that potential market demand for higher intensity use would prevent deterioration and that older areas would be rebuilt. This belief in many cases led to improper zoning of land for higher intensity uses which in turn invited speculation and further decay because property owners deferred maintenance in the face of high taxes and the hope that the land would be purchased for higher intensity use. This cycle has led to the emerging conditions of blight in some areas which were previously in reasonably good condition.

The prime determinant prior to the declaration of a redevelopment project area is the finding of blight. Without a substantiation of blight the municipal Redevelopment Agency cannot legally or financially enter into a program of redevelopment.

Blight according to the California redevelopment law can be established on the basis of the condition of buildings both inside and out and also on the condition of the environment. It must be shown that these conditions are detrimental to the health, safety and welfare of the people in the community.

A building or structure is judged to be blighted, if for instance it is overcrowded or there is insufficient ventilation, light and sanitary facilities. A blighted environment covers physical, social and economic deterioration. This category includes such conditions as disuse as a result of improper planning, inadequate public improvements, a prevalence of depreciated value or impaired investment. In San Diego the condition of misuse or underutilization of land is more likely to occur rather than pure physical deterioration of structures.

Private redevelopment in San Diego is spotty and not usually concentrated in one particular area. However, it is occurring now in the older portions of the City; the beach communities, downtown and the peripheral areas surrounding Centre City. Much of the redevelopment is a combination of rehabilitation and recycling of older structures to new and more viable uses. In the downtown, buildings once used for industrial and warehousing are being rehabilitated for office and commercial use. Residential dwellings close to the core are being used for office and some retail.

In the beach communities the trend has been toward redevelopment but usually in commercial areas. Uses then remain virtually the same but at a greater intensity. Residential rehabilitation is also quite noticeable in the beach communities with either additional stories and/or units being added. Both the 30-foot height limit and the Coastal Act could possibly be a factor in inhibiting the act of total clearance in the redevelopment process.

When a commitment to the use of redevelopment is made, great care must be exercised to ensure that implementation of the project does not replace a situation of physical, social or economic blight with a solution that adversely impacts the project and adjacent areas because of an improper or unsympathetic physical solution.

The largest potential building sites present the greatest problems and challenges for moderation of physical development form. On these sites, normal controls over the form and intensity of construction that are intended primarily for smaller sites have less precision, and the external effects of large developments upon the surrounding area may be far greater. With large sites the chances for public controversy and frustration, and divisive effects in the community are multiplied. For these reasons, the larger sites require separate and more intensive consideration in policies relating to site design and building form. Of special importance is the continuing involvement of citizen participation in the planning and implementation of redevelopment areas.

PUBLIC PROCESS

The City Council established the Redevelopment Agency in 1958 in order to provide a method and structure for the revitalization of deteriorating areas. At that time the City Council also declared itself to be the Redevelopment Agency. The agency is, however, a separate legal entity which operates under the authorization granted to it by state law.

No redevelopment activities were undertaken until 1969 when the agency passed a series of resolutions setting forth operational procedures. In 1975 the Centre City Development Corporation was formed for the purpose of advising the Redevelopment Agency on implementation of redevelopment projects in the downtown area. The corporation is nonprofit and composed of seven directors, an executive director and limited staff. The corporation receives staff support from the Redevelopment Agency and other City departments.

The redevelopment process is accomplished by a series of steps or actions, each of which must be accompanied with an authorization by ordinance or by resolution. In San Diego the redevelopment process is usually initiated by the City Council with the designation of a survey area. This designation permits an area to be studied to determine whether a project or projects within an area are feasible. Following that, the selection of the project area and the formulation of a preliminary plan is accomplished by the Planning Commission. The Redevelopment Agency then prepares the Redevelopment Plan. The last step is the adoption of the final Redevelopment Plan by the City Council. A report which accompanies the plan includes a description of existing conditions, a relocation plan, proposed methods of financing, provisions for owner participation and an environmental impact statement.

While redevelopment projects may be undertaken by a variety of funding sources, the basic method of financing provided under the law is tax increment financing. Tax increment financing enables a community to undertake redevelopment projects without the assistance of further state, federal or other local funds. All of the projects that are currently being implemented by the Redevelopment Agency of the City of San Diego contain the provision of tax increment financing.

Basically, the role of the Redevelopment Agency is one of being the catalyst for changing the environment. The agency implements the plan by acquiring land, relocating residences and business, removing the blight, constructing necessary new public improvements, and making the land available for new development. Thereafter, the success of a specific project depends upon private investment in new construction in conformity with development agreements negotiated with the agency. It is significant that the ultimate success of most development projects depends upon the agency's ability to entice the private sector to make the necessary investment. To do so, the agency must not only be persuasive, but, also, able to give adequate assurance to the private investor that the proposed plan will, indeed, be implemented. Generally speaking, the bulk of the total investment in any project area is from the private sector.

GOAL

REDEVELOP AND REHABILITATE DETERIORATED AND UNDERUTILIZED AREAS OF THE CITY TO A CONDITION OF SOCIAL ECONOMIC AND PHYSICAL VITALITY ENSURING THAT REDEVELOPED AREAS COMPLEMENT THE URBAN FABRIC, THE RESOURCES TO BE CONSERVED AND THE COMMUNITY ENVIRONMENT.

- Revitalize older portions of existing urban development having the most critical needs for renovation or having the best potential for development of multi-purpose centers.

- Maintain and conserve sound existing development.

GUIDELINES AND STANDARDS

Although each project area has unique characteristics, there are general guidelines applicable to all redevelopment projects.

- Evaluate all potential redevelopment projects in terms of two distinct processes: **renovation and new construction**. The human dislocation and high costs associated with new construction often combine to make renovation restoration a highly desirable approach to redevelopment. Neighborhoods which vary in age but are in essentially sound condition should be maintained. Priority for redevelopment should be given to those areas where conditions of physical, economic, and social blight exist and that cannot be corrected by other means.

- Recognize the special urban design problems posed in large redevelopment projects. The larger a potential site for redevelopment, the greater are apt to be the size and variety of the urban design questions raised. Larger sites may mean greater visual prominence of

development and greater impact on the surrounding community. As more land is included in a single project, the possibilities are increased that the public resources, historic sites, and street space will be affected. Larger developments also have substantial requirements for public services including transportation and access.

- Redevelopment projects should be designed to minimize displacement of existing residents, businesses and uses. Where displacement is necessary care should be taken to ensure that the relocation process does not destroy the existing social/economic framework of the project area. This means not only the provision of adequate replacement housing, but the relocation and resettlement of those institutions and facilities that provide goods, services and job opportunities to the relocatees.

- Discourage acquisition and redevelopment of large areas, unless such development is carefully designed with respect to its impact upon adjacent areas. The guidelines of the Urban Design Element will help to some extent in reducing the negative effects of development on large sites. They will not, however, deal with all the special problems raised or guarantee good quality of design.

  There is no substitute for early and frequent communication as to the merits of a particular project between the developer on the one hand and public officials and interested citizens on the other. Such communication will give an early and more reasoned assessment of the positive and negative effects of the project upon the City and the surrounding area and will reduce the chances of later delays and controversies. Processes toward these ends should be employed for all major projects in the City.

- Protect the livability and character of neighborhoods from the intrusion of incompatible new development.

  Whatever redevelopment steps are undertaken may be counterproductive if human scale is not provided by the new development. Human scale can be retained if new buildings, even large ones, avoid the appearance of massiveness by maintaining established building lines and providing human scale at their lower levels through the use of texture and details. If the ground level of existing buildings in the area is devoted to shops, then new buildings should avoid breaking the continuity of retail space. The amenities that contribute to the livability and character of adjacent neighborhoods should be safeguarded and strengthened.

- In the implementation of redevelopment projects, care should be taken to avoid creating an image of abandonment and economic depression through the clearance of existing structures. Unless the structures are vacant or a blighting influence, it is usually desirable to have entered into a development agreement prior to removal of structures.

  Cleared land, especially in a downtown area creates a feeling of abandonment and a sense of economic depression. A standing building even though vacant is far better than a lot devoid of use.

- Buildings that have been designated as historic sites or of significant architectural or cultural value should be incorporated into the redevelopment plan. This type of structure because of its familiarity for residents creates a sense of stability and place within an area that may, for a period of time, be characterized by upheaval and change.

- Emphasis should be placed on the rehabilitation and recycling of buildings where appropriate and the development of adaptive reuse programs.

  Many buildings, although not falling within the historic category described above, possess architectural integrity and are compatible to their settings lending themselves gracefully to new uses.

- In order to provide community input there should be a committee of property owners, residents and other interested citizens for each redevelopment project area. This may be an existing group such as a community planning committee or a project area committee formed in accordance with the provisions of the California Redevelopment Law.

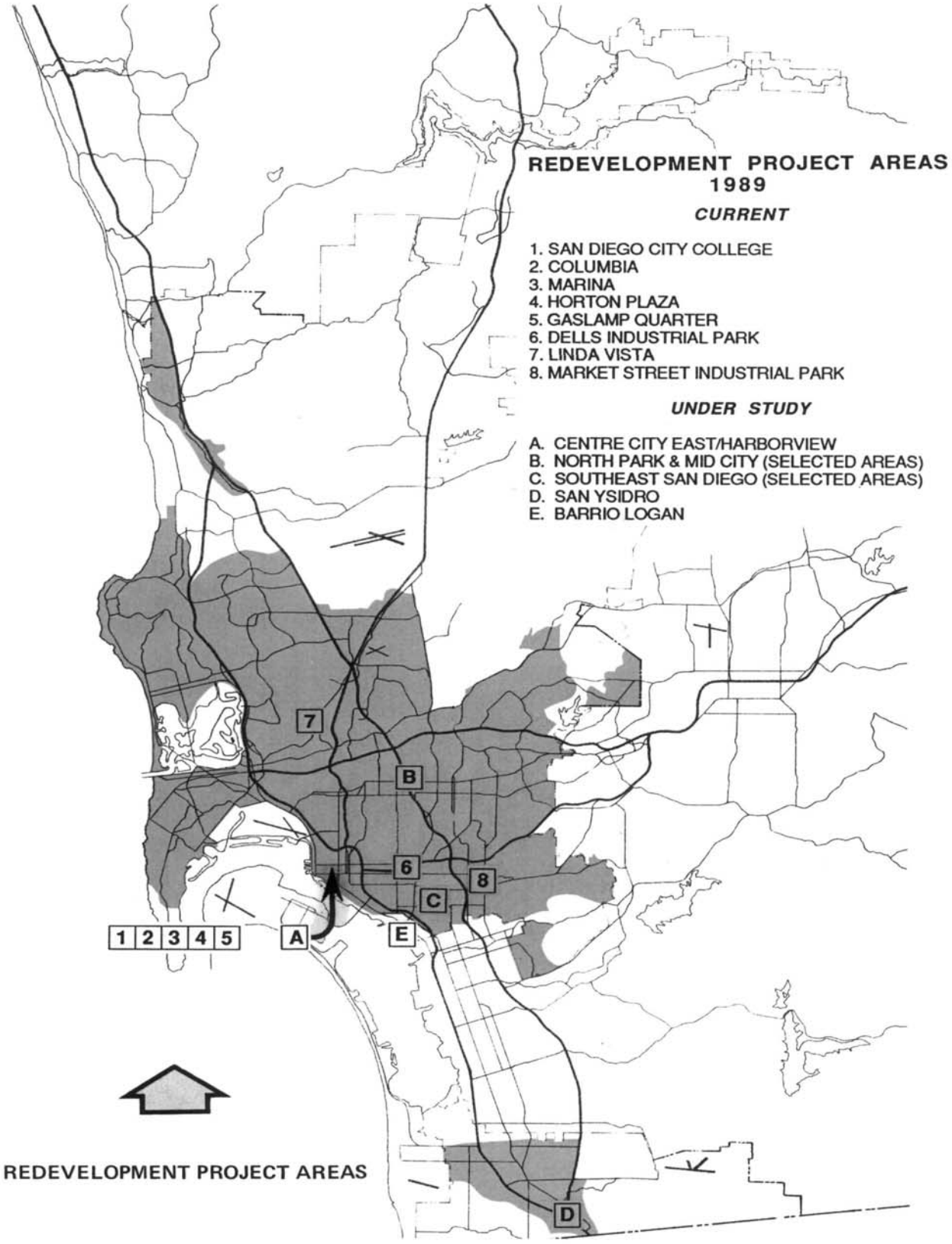
  Although property owners and residents may decline to participate in the planning for a redevelopment project area, they should be offered the opportunity. This would ensure maximum participation in the process.

RECOMMENDATIONS

Public agencies have implementation powers not available to the private sector. To effect the changes desired for redevelopment, a number of government tools can be utilized such as tailored zoning, code and ordinance modifications and variances, development rights transfers, utilization of air rights, eminent domain, and the purchase of easements. Public funds can be utilized to encourage private enterprise to invest dollars and manpower in redevelopment areas. Local funds can be utilized for land assembly, street improvements, placement or relocation of utilities, landscaping and parking to attract private investment.

The key element in implementation for the public agency is the use of tax increment financing and the speed and skill by which proposals can be carried through the negotiated procedures leading toward actual redevelopment. The City's commitment to projects hinges on various City departments and their cooperation in overseeing the various facets of physical improvements which then contribute to social and economic upgrading. The private sector will in turn follow the lead of City government with investments that produce the tax increment monies necessary for financing.

The circle of involvement from both the private and public sector must be equally divided for a successful redevelopment project. Both must be economically motivated not necessarily for the same reasons, but the end result should be the same, the redevelopment of an area that produces economic and social benefits to the City and profit for the private developer.


REDEVELOPMENT PROJECT AREAS
1989
CURRENT
1. SAN DIEGO CITY COLLEGE
2. COLUMBIA
3. MARINA
4. HORTON PLAZA
5. GASLAMP QUARTER
6. DELLS INDUSTRIAL PARK
7. LINDA VISTA
8. MARKET STREET INDUSTRIAL PARK
UNDER STUDY
A. CENTRE CITY EAST/HARBORVIEW
B. NORTH PARK & MID CITY (SELECTED AREAS)
C. SOUTHEAST SAN DIEGO (SELECTED AREAS)
D. SAN YSIDRO
E. BARRIO LOGAN
1 2 3 4 5
A
B
C
D
E
6
7
8
REDEVELOPMENT PROJECT AREAS

CONSERVATION ELEMENT

Conservation

Although many of the words and specialized meaning used in connection with conservation were unfamiliar to the average person ten years ago, environmental concerns are not new. For nearly 100 years, special interest groups and individuals have been actively involved in the conservation of major natural resources: redwood forests, buffalo herds, areas of unique scenic quality. But recently conservation has become a major concern in urban areas.

Conservation is the planned management, preservation, and wise utilization of natural resources. Its objective is to prevent the wasteful exploitation or destruction or neglect of resources. It involves both identification of a community's natural resources and adoption of policies for their preservation, development and wise use.

The Conservation Element interrelates closely with many other elements of the General Plan. The most important relationships are with the conservation of energy and the efforts to balance supply and demand for water, to manage the stock of available land, and to reduce moving-source air pollution. Conservation considerations also directly affect the open space pattern of the City, particularly in defining areas not suitable for urbanization. The Urban Design Element which stresses, among other things, the management and preservation of natural areas and unique land qualities; minimum disturbance of natural terrain; public use of bayfront and shoreline; and water conservation.

Land resources

Topographically, San Diego is a broad coastal plain drained to the ocean by many canyons and valleys. It ranges in width from ten to 20 miles. Within this coastal plain there is a wide variety of significant land features: shoreline, river beds, floodplains, upland mesas, valleys, rolling hills, steep cliffs and mountains. Elevations range from sea level to nearly 1,600 feet within City limits. Perhaps the most characteristic topography is mesa terraces intersected by numerous canyons that drain to the ocean.

Land resources are considered to be the natural characteristics that make up the earth's surface. These include soils, beaches, hills, cliffs, canyons and agricultural lands. Erosion and flooding of these resources are related considerations.

FINDINGS

Landforms and Land

"Land" is an area within which development and other activities take place or are planned, and "Landforms" are distinctive natural topographic features of the San Diego area. Both land and land forms, in this sense, are in limited supply and must be considered natural as well as esthetic resources. Land uses which do not use the available land to best advantage or which destroy the topography detract from the City's appearance, deplete its stock of resources, and contribute to erosion and sedimentation.

Three legislative tools are currently used by the City to control the use and alteration of land and landform: the Land Development Control Ordinance, the Hillside Review Overlay Zone, and Planned Development regulations. The Land Development Control Ordinance seeks to provide for "the orderly administration of private contract work in the public rights-of-way and to protect the public interest and safety in the development of private property by 1) regulating grading, 2) establishing minimum standards governing slope stability and drainage, and 3) effecting ... the restoration of natural ground cover through appropriate erosion control planting and irrigation." Essentially, no person can undertake any land development work as defined in this ordinance without first having obtained a permit to do so.

The Hillside Review Zone Ordinance regulates the use of slopes exceeding 25 percent. Its purpose is to provide supplemental regulations to ensure that San Diego's canyons, valleys and hillsides are developed in a manner that respects and maintains the character of the landscape. No grading or construction is permitted within a Hillside Review Zone until the project is approved by the Planning Director or the Planning Commission.

Under Planned Residential Development and Planned Commercial Development regulations, departures are allowed from the usual development controls to permit clustering of units and their better integration with the topography, which serves to preserve natural landforms.

Beaches and Shoreline

The nearly 20 miles of San Diego's shoreline must be given a top rank among the City's most valuable assets.

Although constituting but a small fraction of the approximately 20,000 miles of ocean shoreline within the continental United States, the local shoreline is outstanding because of the uniformly high quality of its sandy beaches. In addition, such beaches in combination with a Mediterranean-type climate are found in few other areas of the world, much less in the United States. Sandy beaches and cliffs are the two dominant elements of the City shoreline. Mission Beach is an example of fine sandy beach, devoid of rocks or obstructions. The La Jolla Caves area is the other extreme, cliffs ascending directly from the water. There are also cliffs with beach, such as Torrey Pines Reserve; and other areas have pebbly or sandy beaches in small indentations in the cliffs, such as Bird Rock and Sunset Cliffs. In all, nearly 60 percent of the City's shoreline is beach, with 87 percent of the shoreline in public or semi-public ownership. In view of the heavy use, both recreational and research, that both beach and non-beach shoreline receive, it is obviously desirable that additional shoreline be acquired as opportunities present themselves.

The State Public Outdoor Recreation Commission recommends that the major portion of California's coast should be permanently available for public use. The California Coastal Act of 1976 responds to the public concern for protecting and enhancing coastal resources and directs local governments to prepare local coastal programs in accordance with the act's policies. The policies of the act, which must be followed in local coastal program, are designed to guide development in the coastal areas, beach and lagoon resource management, and conservation of the unique qualities and nature of the coast.

Erosion

As with landforms everywhere, San Diego's are under constant attack from forces of erosion. While most such forces are natural in origin, they receive increasing assistance from man's activities. Natural forces include heat and cold, the chemical and scouring action of water, wind, and tides, and the combined action of wind and water at the shoreline. Human interference includes improper grading, destruction of ground covers, dams and concrete stream channels, ocean jetties and breakwaters along the coast.

Though hillsides and slopes are naturally in constant downward motion, and this movement of sand and rock material is desirable to maintain beaches, extreme and localized erosion of slopes is not desirable. Development often results in removal of the natural plant cover and root systems and cutting into easily eroded, sterile, underlying material which cannot support subsequent growth. Not only does this process allow excessive erosion of the exposed earth, but also resultant changes in groundwater levels can dissolve the natural soil cementing agents and produce even further destruction of both the eroding area and the downstream areas.

The eroding and depositing of shoreline beaches is also a continuing physiographic process. Whether growth or recession will occur in any given place depends on a number of interrelated factors, including the amount of available beach sand and the location of its source. Since streams and rivers are by far the most important source of sand, any change in their flow (as from damming or channeling) can permit erosion to prevail. Because of a significant diminution of the sand sources which rebuild them, many local beaches are now being eroded and are threatened with extinction. Groins and other projections from the shoreline also obstruct the natural movements of sand along the water's edge. In addition, where beaches have eroded, the cliffs are then left exposed to surf and wave action and there occurs a continuing recession of cliffs and bluffs. Sunset Cliffs, for example, has receded as much as one and a half foot per year in some locations.

Soils

Soils and land coincide, of course, but it is desirable to make a distinction between the two in order to discuss different aspects of the earth's surface. The relatively thin layer of weathered rock, organic matter and sediment which make up soils has the most direct implications for land use of any single natural characteristic of the environment. Certain types of soils are eminently suited to carrying the loads imposed by urban development. Other types are best suited to non-urban purposes. Soils also serve as the sole producer of the world's land-based food supply. As such, they are a vital natural resource and need to be dealt with as such, to be used and protected. Few other natural resources have such a direct bearing on man's affairs, whether it be to provide land for growing crops or for building cities.

All land has some degree of limitation in its capability to support urban development. Soil composition is a major consideration; topography, substructure, flood hazards and seismic problems are others. The latter are considered in detail in the Seismic Safety Element.

SLOPES IN EXCESS OF 25%

Soil tests are required by the City for all new subdivisions. In cases where a subdivision map is not required prior to construction of a building, the building inspector has the right to require a soil test prior to any construction. The Hillside Review Zone and Land Development Ordinance operate to protect the public health, safety and welfare by ensuring that development causes minimum disturbance of the soil and does not result in soil erosion, top soil loss, slide damage, flooding, or severe cutting and scarring of the terrain.

There is a wide variety of agricultural soil in San Diego. Soils in the area vary appreciably in origin, degree of weathering, depth and texture. The U.S. Soil Conservation Service has classified lands according to their productive capability, taking into account specific qualities of the soil slope of the land, degree of wetness, flooding hazards and other factors. Based on these classifications, San Diego's best agricultural soils are found in the broad river valleys of the area. Nearly three-fourths of the Sweetwater, upper San Diego and San Dieguito River Valleys is in the government's most productive classifications. Where fertile soils are found in combination with available water supply and suitable climate there is agricultural land.

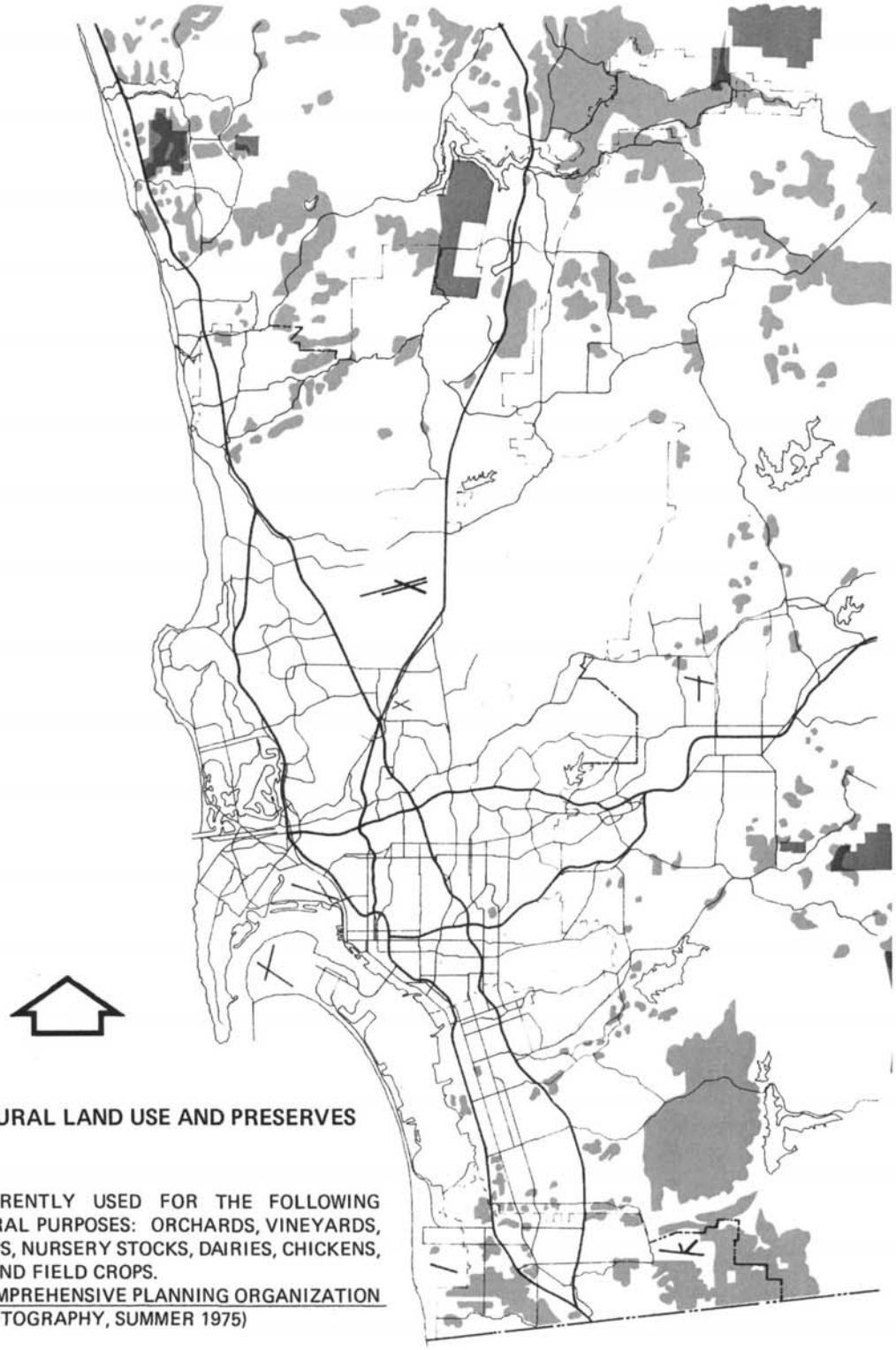
Agricultural Land

There are still many locations in San Diego which have the productive soil and the other requisites to be especially well suited for agricultural purposes, but this stock of prime agricultural land is diminishing rapidly. These lands represent a valuable natural resource. They could well be important for food production in the future even if not at the present time: the demand for certain vegetable and flower crops could increase, or there could conceivably be an increased future need for locally-produced food. Unfortunately, land used for agriculture is frequently a prime target for urbanization since it is generally level, easily excavated, well drained, and has good access. Also unfortunate is the fact that, for all practical purposes, once agrarian lands are built on they are thereafter lost to agriculture.

Agriculture can fill an important role in several of the objectives of the General Plan: a diversification of land uses, a tool of growth management, a means to prevent sprawl, an important open space use, preservation of floodplains, and to provide variety in the urban scene. It is also a significant contributor to the City's economic base.

Agriculture is an important factor in the local economy. Because of San Diego's particular combination of climate and soil types, an agricultural industry has developed here which produces significant amounts of off-season and specialty crops: avocados, citrus, tomatoes, flowers and nursery stock. As a "basic" industry, it is responsible for an important multiplier effect throughout the area's economy. It also enables residents to buy fresh products locally grown, and to be familiar with the agrarian scene.

Urban pressures on local agriculture are more the cause of its decline than lack of markets or appropriate growing conditions: increased land values, taxes, availability and cost of water, and seawater intrusion are the major problems. As urban growth extends into agricultural areas, the demand for land increases and prices escalate. Consequently the farmer finds it difficult to retain land he already owns or to purchase any additional that may be needed to increase operating efficiency. Along with higher land values comes increased taxes, which add to operating costs.



AGRICULTURAL LAND USE AND PRESERVES

AREAS CURRENTLY USED FOR THE FOLLOWING AGRICULTURAL PURPOSES: ORCHARDS, VINEYARDS, TRUCK CROPS, NURSERY STOCKS, DAIRIES, CHICKENS, RANCHING AND FIELD CROPS.
SOURCE: COMPREHENSIVE PLANNING ORGANIZATION (AERIAL PHOTOGRAPHY, SUMMER 1975)

AREAS PLACED IN PRESERVES PURSUANT TO THE CALIFORNIA LAND CONSERVATION ACT OF 1965 (WILLIAMSON ACT).
SOURCE: COUNTY OF SAN DIEGO.

Lowering of the groundwater table in many areas has both necessitated the use of more expensive imported water for irrigation and also has allowed seawater intrusion which is detrimental to many crops. As a result of these developments, agriculture in San Diego has dwindled from widespread prevalence to a relatively few concentrations in the South Bay, San Pasqual Valley, and the areas east of Cardiff, Encinitas and Leucadia. A continuing overall decline in acreage devoted to agriculture can reasonably be expected.

GOALS

- WISE MANAGEMENT AND UTILIZATION OF THE CITY'S REMAINING LAND RESOURCES, AND PRESERVATION OF ITS UNIQUE LANDFORMS, AND THE CHARACTER THEY IMPART TO SAN DIEGO.

- ACCESSIBILITY AND AVAILABILITY OF ALL BEACHES AND SHORELINE FOR PUBLIC USE.

- CONSERVATION OF BEACHES AND SHORELINE TO MAINTAIN AND ENHANCE THEIR BENEFITS FOR PRESENT AND FUTURE SAN DIEGO RESIDENTS AND VISITORS.

- RETENTION OF PREMIUM AGRICULTURALLY PRODUCTIVE LANDS IN AGRICULTURAL USAGE.

GUIDELINES AND STANDARDS

Land and Landforms

- Within the limits of other restraints, both other urbanized areas and those areas where urbanization has already begun should be filled in or built out before the City's remaining stock of large vacant and agricultural lands are developed.

- Floodplains, steep slopes, canyons, coastal and waterfront lands should be left undeveloped, or minimally developed consistent with their special qualities and limitations.

- Only sites best suited to development should be used. Steeply sloping or highly erodable land or natural stream channels should be left as open space or agricultural land. Construction should be clustered to minimize its effects.

- Grading should be kept to a minimum. Canyons should not be filled. Existing trees and ground covers should be retained as much as possible. Natural drainage systems should be preserved.

Beaches and Shoreline

- The use of beaches and shorelines should be limited to appropriate ocean-oriented recreational and educational uses.

- Scenic overlook areas should be protected from private and unrelated uses.

- Important tidepools and lagoons and marine canyons should be protected and preserved for recreational and research activities.

Erosion, Soils

- Watershed management and floodplain regulation should provide for the natural sand flow to beaches.

- The impact of all public and private alterations of cliffs and shoreline should be carefully studied, with the goal of minimizing erosion.

- Runoff, sedimentation, and erosion both during and after construction should be carefully studied and controlled.

Agricultural Lands

- Open space acquisition that facilitates conservation of important agricultural lands should receive priority.

- Prime productive agricultural lands should be retained in permanent agricultural zones.

RECOMMENDATIONS

Land and Landforms, Erosion, Soils

- Encourage use of planned residential development and planned commercial development procedures in canyons and on hillsides.

- Continue studies of proposed revisions to floodplain zoning and development of floodplain development guidelines.

- Develop a Mission Valley community plan which recognizes and enhances its floodplain and riverbed character.

- Continue study of proposed revisions to the Hillside Review Ordinance and development of hillside development guidelines.

Beaches and Shoreline

- Provide suitable access to all public beach and shoreline areas.

- Acquire remaining private beach and shoreline areas for public use.

Agricultural Lands

- Adopt enabling legislation to permit owners of prime agricultural lands to take advantage of the provisions of the Williamson Act.

- Continue water reclamation research programs with the aim of providing inexpensive means of leaching soils and preventing salt water intrusion in addition to cheaper irrigation.

Water Resources

The use, conservation, supply and distribution of water are critical issues in every city. Since almost every urban activity is dependent to some extent on water, it is in the best interests of the public to ensure that water supplies are properly planned and managed. A second major consideration is the impact of water on the landscape: in the form of runoff, flooding, groundwater levels and surface water features. A third aspect is the use and preservation of water for recreational or esthetic purposes, including the support of water-based wildlife and plant life.

Water management and conservation must directly provide for all these considerations.

FINDINGS

Rivers, Stream, Lakes, Reservoirs

There are five major rivers within or partially within the City: the San Dieguito, San Diego, Sweetwater, Otay and Tijuana Rivers. Due mainly to the dry climate and local impounding reservoirs, most of these are normally dry except during periods of abnormally heavy rainfall. In addition to the five rivers, there are also numerous canyons and creeks which drain the area.

The City's available water is stored in surface lakes and underground basins. There are three fresh-water lakes within the City, used to store potable water: Lake Murray, Miramar Reservoir, and Lake Hodges. The City also owns and operates seven more reservoirs within San Diego County (Upper Otay, Lower Otay, El Capitan, San Vicente, Sutherland, Barrett and Morena) and several small storage facilities, and major water filtration and treatment installations at Miramar, Murray and Otay Reservoirs. In addition to the surface lakes, there are numerous groundwater basins throughout the area which are important for agricultural production. These include the San Dieguito Valley, Lake Hodges basin, San Pasqual Valley, San Diego River basin, and the Tijuana River basin. Contamination and pollution of stored water are controlled by strict enforcement of sanitation rules at the reservoirs and watersheds. The City also maintains strict control over the quality of its filtered and treated "delivered" water.

The City has three sources of water for domestic, commercial and industrial uses. Ninety percent of the local water supply is imported, via two aqueducts, from the Metropolitan Water District of Southern California. This imported water is stored in the City's holding reservoirs. These reservoirs are also designed to collect surface runoff from their watershed areas which, during years of normal to heavy precipitation, can be a significant amount.

As a supplementary source, the City draws from wells in the Lakeside areas when the groundwater table and water quality permit. Existing aqueducts and storage facilities are capable of providing enough water to support the City's estimated population until about the year 2000, longer if stricter conservation measures were enforced.

Because San Diego must rely so heavily on imported water, efforts should be directed toward eliminating water waste and wise use of available supplies. Efforts in this direction should include landscaping requirements that increase use of drought-tolerant species, and irrigation devices which reduce wasteful runoff (drip irrigation). Other efforts would logically include watershed management to increase yield and minimize siltation; control of evaporation losses; acquisition of additional watersheds and collecting lakes; and programs aimed at sea water conversion and waste water reclamation.

San Diego's water management and planning efforts are coordinated with federal and state programs and with other regional and local programs through the Regional Water Quality Control Board, the State Department of Water Resources, the San Diego County Water Authority, and the Comprehensive Planning Organization. Through its participation in the latter organization, San Diego is working to develop an area wide water quality management program consistent with Section 208 of the Federal Water Pollution Control Act Amendments of 1972.

Ocean, Bays, Lagoons

The City of San Diego has jurisdiction over the Pacific Ocean offshore area, which extends from the tip of Point Loma northerly to the City's northern boundary near Sorrento Valley, and three nautical miles seaward from the mean low tide line. Within this area, kelp is harvested commercially; many varieties of fish and shellfish attract commercial fishermen; the varied sea floor topography and the clear water are ideal for oceanographic research activities; and many recreational activities take place.

San Diego Bay is one of the world's best natural harbors and is the second largest in California. It serves as the center of the Eleventh Naval District's activities; it also provides facilities for commercial and sports fishing, recreational activities, oceanic research, and major shipbuilding and repair facilities. It supports a wildlife sanctuary and salt evaporation beds in its southern extremity.

Mission Bay originally was a marshy lagoon draining the San Diego River and various canyon creeks. It has been dredged and developed to accommodate aquatic recreation water skiing, swimming, boating, and small boat harboring. There are extensive beaches, five resort hotels. Sea World, landscaped areas, and a wildlife preserve.

Coastal lagoons form one of the major features of the San Diego coastline and are important vegetation, wildlife and marine life habitats. Los Peñasquitos Lagoon and the Tijuana Slough are especially valuable, since very few such areas are left in Southern California.

Fisheries

Many commercial and sport-fishing boats operate out of San Diego Harbor and Mission Bay. These bring in fish and shellfish both from the coastal Offshore Area and from more distant areas. For various reasons, the local fishing industry has been declining for the past 25 years - as it has elsewhere in the state. Expectations are that it will continue to do so; however, fishing is still one of San Diego's large industries.

Pollution

Local water quality is strongly influenced by the region's topography and climate. Because of the rainfall patterns, geologic conditions and nature of the terrain, surface runoff is frequently affected by sand and gravel operations, local flooding, agricultural wastes, and the transport of saline waters. Since nearly all the wastewater in the region is either reclaimed or discharged through an ocean outfall, there are relatively few problems with inland surface waters due to point-source wasters. Non-point source pollution is much more difficult to evaluate; and San Diego, like many other regions of California, lacks adequate data in this general field. Discharge of treated municipal waste through the Point Loma outfall has generally not caused any serious problems, but may have long range, ill-defined adverse impacts on the ocean. However, required compliance with the State Water Quality Control Board's Ocean Plan is expected to provide an adequate margin of safety.

San Diego Bay has water quality problems due to thermal discharge from three San Diego Gas and Electric Company power generating plants, sewage discharge from boats and ships, and industrial waste from the North Island Naval Air Station. Corrective programs are under way for the latter two. The thermal discharges apparently do no significant environmental damage, but do not conform to state regulations. Water quality within the bay generally approximates that of the outside coastal waters, and authorized discharges into it are restricted to brine, storm water, flume and cooling water.

For various reasons, Mission Bay and the coastal lagoons have higher pollution levels than San Diego Bay. Waste runoff during storms, particularly from Mexico in the Tijuana Slough, and contributing factors. The poor flushing characteristics of Mission Bay and Los Peñasquitos Lagoon, plus waste discharges from small craft in Mission Bay, also help lower their water quality below that of the coastal waters.

GOALS

- INCREASED UTILIZATION OF LOCAL WATER RESOURCES.
- DECREASED RELIANCE ON IMPORTED WATER.
- ACHIEVEMENT AND MAINTENANCE OF A HIGH LEVEL OF WATER QUALITY IN ALL WATER BODIES UNDER CITY JURISDICTION.

- PROVISION OF WATER SUPPLIES ADEQUATE FOR PRESENT USES, TO ACCOMMODATE FUTURE GROWTH, TO ATTRACT AND SUPPORT COMMERCIAL AND INDUSTRIAL EXPANSION, AND TO SUPPLY LOCAL AGRICULTURE.

- PRESERVATION OF LOCAL COMMERCIAL AND SPORT FISHING INDUSTRIES.

GUIDELINES AND STANDARDS

- Water quality objectives and criteria of the Regional Water Quality Control Board and the State Water Resources Control Board should be achieved and maintained.

- Because intensive use is already made of available local ground and surface water, efforts should be directed toward development of innovative water supply techniques: reclamation, sea water conversion, watershed management.

- Because of the possibility that local supply could take on future importance, local basic food-producing industries such as fishing should be preserved and expanded as much as possible.

RECOMMENDATIONS

- Implement watershed management practices designed to increase quantity and quality of runoff and collection.

- Continue efforts to reduce evaporative losses in City reservoirs.

- Continue active participation in water reclamation and seawater conversion programs.

- Continue efforts to improve quality of ocean outfall discharges.

- Strictly enforce regulations concerning sewage discharge from vessels into Mission Bay and San Diego Bay.

- Publicize voluntary water conservation measures which focus on reducing waste, have little or no effect on the quality of life, and decrease the possibility of rationing and other undesirable restrictions.

- Work with local fishing industry representatives to enhance their possibilities of economic survival in San Diego.

- Encourage local water agencies to use state-mandated powers to enforce conservation measures that eliminate or penalize wasteful uses of water.

Mineral Resources

There are many valuable minerals found in the San Diego region, ranging from gold to crushed rock. Production of metals and gemstones and other more glamorous minerals has been limited for many years because of high extraction costs. In terms of both quantity and economic value, sand and gravel and crushed rock are by far the most valuable mineral resources extracted and processed in the area now. Evaporative production of salt in the lower parts of San Diego Bay is also of economic importance.

FINDINGS

Sand and Gravel

There are basically four sources of construction materials in San Diego: alluvium, Poway conglomerate, San Diego formation, and meta-volcanic rock. Alluvium is soil, sand, gravel or similar material deposited by flowing water. It is found in all of the major river valleys, and is the most desirable source of sand because it is relatively free of rocks and debris. Poway conglomerate is a mixture of cobbles, pebbles, boulders, clay, sand and silt bound together as a solid mass. It is the major local source of sand, gravel, road base material and aggregate for asphaltic concrete. The San Diego formation consists of alternating layers of silt, sand and gravel. Sand and gravel for construction materials is being taken from this formation near the International Border and is potentially a major source for the southern metropolitan area. Metavolcanic rock is a hard blue rock characterized by homogeneity, purity and high density. It is crushed to produce a high grade aggregate that competes economically with that processed from Poway conglomerate.

Based on current per capita consumption and anticipated future trends, the total estimated supply of sand and gravel resources currently owned or controlled by the local industry appreciably exceeds the projected demand through 1995. There is no guarantee, however, that the areas relied on for future supply will always be available for mining. Furthermore, in establishing policies for exhaustible resources, there is an obligation to consider the needs of future generations beyond any cut-off date. There is now no City zoning classification specifically designed to protect present or future construction material resources.

There are a number of objectionable characteristics that typically accompany the extraction, processing and transportation of sand and gravel products. These include noise, vibration, air pollution, dust, traffic slowdowns, and unattractive appearance of sites. There are also the health and safety hazards that accompany heavy earth-moving equipment, settling ponds, pits, and steep hillsides.

Rehabilitation of depleted sites is another major problem of the sand and gravel industry. There are three alternative approaches to this: 1) do little or nothing; 2) defer restoration until the site is worked-out; 3) progressive rehabilitation, concurrent with the mining operation. The latter is preferable for a number of reasons. It controls and minimizes neighborhood and operational conflicts which normally arise near an operating site. It is less costly than post-operational rehabilitation. It reduces surrounding air and water pollution caused by the mining operation.

And, since it involves early determination of the site's reuse, the end result is a more attractive and useable site.

Salt

Salt is produced in San Diego by solar evaporation of seawater near the mouth of the Otay River, at the south end of San Diego Bay. This method of salt production is possible in very few areas of the world because of the requisite climate (warm, dry, windy summers), area, and local market (salt has a high transport cost). Most of the salt produced in San Diego is used locally, with some going to the Los Angeles area. Bittern, a byproduct of the evaporation process, is also sold locally for production of magnesium chloride.

The total production of San Diego's salt ponds has remained fairly constant for the past twenty years. Markets which were formerly supplied in Arizona are new being largely supplied by salt mined there. Salt from evaporative ponds in Baja California is now competing with San Diego's salt production.

Salt ponds are of value in providing nesting and feeding areas for local and migratory birds, and breeding grounds for numerous mollusks and shellfish. They also provide an appropriate use for open space designations in the area.

GOALS

- PROTECTION OF MAJOR MINERAL DEPOSITS AGAINST ENCROACHMENT BY LAND USES WHICH WOULD MAKE THEIR EXTRACTION UNDESIRABLE OR IMPOSSIBLE.

- PRODUCTION OF SAND AND GRAVEL WITH MINIMAL HARM AND DISTURBANCE TO ADJACENT PERSONS AND PROPERTIES.

- PLANNED REHABILITATION OF DEPLETED MINERAL AREAS TO FACILITATE DESIRABLE REUSES COMPATIBLE WITH LOCAL DEVELOPMENT OBJECTIVES.

- CONSERVATION OF CONSTRUCTION MATERIAL RESOURCES TO PROVIDE FOR THE CITY'S GROWTH AND DEVELOPMENT NEEDS NOW AND IN THE NEAR AND DISTANT FUTURE.

- PRESERVATION OF THE LOCAL SALT INDUSTRY.


SAND AND GRAVEL RESOURCES
SAN DIEGO METROPOLITAN AREA
ALLUVIUM
METAVOLCANIC
POWAY CONGLOMERATE
SAN DIEGO FORMATION

GUIDELINES AND STANDARDS

- Local sand and gravel production is essential to the City's present and future construction, growth, and development.

- As an essential industry, extraction and processing of construction materials must be integrated with other existing and proposed land uses.

- As with other exhaustible resources, conservation measures should assure an adequate supply of accessible material for future as well as for present use.

- As a relatively unique local industry, with both present and historic interest, economic value, utility as an open space use, and importance as an ecological habitat, local evaporative production of salt should be protected.

RECOMMENDATIONS

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Sand and Gravel

- Develop and adopt a mineral resources zoning classification that:

    - protects resources for present and future needs.

    - substantially reduces operational and environmental conflicts with other land uses.

    - terminates non-conforming status for presently unregulated mining operations.

    - provides for full progressive rehabilitation of worked-out extraction and processing sites.

Salt

- Support the San Diego Unified Port District in its efforts to encourage continuation of the local salt production industry.

Ecological Resources

Ecology is defined as the science dealing with the relationship of living things to one another and to their environment. An ecological system is, therefore, a community of living things and their immediate environment.

A great variety of vegetation and wildlife exists in the ocean and coastal waters, valleys and canyons, and the foothill areas within the City of San Diego. Many plants and animal species have been present in these areas for thousands of years and have evolved through natural selection to a state of balance with and adaptation to the local environment. Several rare and/or endangered species of both wildlife and vegetation are to the found within the City.

Both wildlife and vegetation are of greater benefit to man than is often realized. Both serve as early warning agents of environmental damage which, unchecked, could be harmful to man. Vegetation produces oxygen, absorbs noise, and inhibits erosion. Both interact with the shared environment in countless beneficial ways: organic matter contributes to soil accumulation; vegetation cools and purifies the air, and improves watershed yield; animal life serves recreational, leisure and study purposes, and is an essential link in the chain of processes that maintain the quality of man's environment.

FINDINGS

Vegetation and Wildlife, Major Habitats

Los Peñasquitos Canyon is the last major river-oriented woodland in San Diego that has remained ecologically intact. It is the natural home for many species of birds, mammals, reptiles, amphibians and invertebrates as well as for trees and other plants. The lagoon and marsh complex consists of flatlands and tidal flats with occasional deep channels. Proximity to the University of California campus makes it attractive as a research site. It is the home of a large variety of plant and marine life and riparian mammals and birds.

The Torrey Pines Mesa includes portions of Torrey Pines Park, owned by the City of San Diego, and the Torrey Pines State Reserve owned by the state of California. The major attraction of this area is the Torrey Pine, which is found in only one other area of the world. There are also many other species of native plants.

The City has jurisdiction over two important tidal areas. The La Jolla Intertidal Area includes the shoreline and subtidal region between Bird Rock and Point La Jolla. The Point Loma Intertidal area includes the shoreline from the U.S. Coastguard Lighthouse to Sunset Cliffs. These areas support intertidal and subtidal fish, invertebrates and plants, as well as a number of migratory land and shore birds.

The Kendall-Frost Mission Bay Marsh Preserve is owned by the University of California and located in Mission Bay. It is the habitat of many birds and waterfowl, and numerous small sea organisms such as crabs and sea anemones.

The Pacific Ocean Offshore Area is rich in marine species because of the varied topography and the presence of the cold California current. It is dominated by the giant kelp, and kelp beds are the living environment for many fish and shellfish. A number of migratory sea animals are also found here, including seals, sea elephants, whales, sea lions and porpoises. Numerous shore and sea birds feed in the area.

Much of Mission Valley, Mission Gorge and the Otay River Valley contain riparian vegetation of significant value. The San Diego River Control Channel, and the South San Diego Bay Tidal Flats and adjacent marshes and salt evaporators, both support large populations of resident and migratory shore birds and waterfowl. In addition, they both accommodate many species of fishes, invertebrates, and plants. South San Diego Bay is also the only Elegant Tern nesting site in the United States.

NATURAL RESOURCE PRESERVATION AREAS

WETLANDS, RIVERS, RESERVOIRS, WILDLIFE HABITAT
SIGNIFICANT ECOLOGICAL SYSTEMS.

The Tijuana River Slough and adjacent area to the east includes one of the finest saltwater marshes along the California coastline. At least five endangered species of birds frequent the marsh. The slough may be the only location in this country where a rare plant species, Salt-marsh Bird's Beak, still exists. It is also the habitat and/or breeding ground of many other birds, fowl, invertebrates, mammals, reptiles and fish.

Vernal (spring) pools are an important natural resource in San Diego. These pools are usually found on mesa tops. They are depressions that fill with water during the rainy season and because of climatic and soil conditions remain up to several weeks. They occur in scattered locations in western North America, including Mexico. The two major parts of the San Diego area that still contain vernal pools in a natural state are Otay Mesa in the county and Kearny Mesa-Mira Mesa in the City. Because of their ephemeral nature, these pools are unsuitable for plants and animals typically found in permanent ponds. But, a variety of other organisms have adapted to them and have become so specialized that they are found only in these temporary pools. Several such plant species are found only in the vernal pools of the San Diego area and directly south in Baja California; Abrams Mesa Mint occurs only on Kearney and Mira mesas and no where else in the world. Abrams Mesa Mint, Adders-Tongue Fern, San Diego Coyote-Thistle and Orcutt's Brodiaea all are found in local vernal pools and are listed by the California Native Plant Society and the U.S. Fish and Wildlife Service as endangered or threatened species.

Additional native vegetation and wildlife habitats of significance are found in the large undeveloped mountain and canyon areas of Cowles, Fortuna and Black Mountains and Tecolote, Chollas, Alvarado and Lopez canyons.

Endangered Species

The California Department of Fish and Game has identified several San Diego birds as either endangered or rare. An endangered species is one whose prospects of reproduction and survival are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, over-exploitation, predation, competition, or disease. Local birds classified as endangered include five that frequent the marsh at Tijuana River Slough: the California Brown Pelican, American Peregrine Falcon, Beldings Savannah Sparrow, Light-footed Clapper Rail, and California Least Tern. A rare animal is a species or sub-species that, although not presently threatened with extinction, is found in such small numbers throughout its range that it may easily become endangered.

Human Threats

In addition to natural forces, acts of man may threaten many species of vegetation and wildlife. Such acts include: the alteration or destruction of a unique habitat necessary for survival of a species; population reduction by hunting, fishing or harassment; introduction of foreign species that competes or carries diseases; pollution of the environment.

In San Diego, the alteration or destruction of habitats through the process of urbanization is the most serious threat to both vegetation and wildlife. Dredging of lagoons for marinas, siltation of

water bodies by development and filling of canyons for building sites are three examples of development destroying the potential for plant and animal survival.

Offroad vehicle use has caused extensive plant destruction and interfered with wildlife activity in many areas. Vegetation removal is the single most-destructive action that affects wildlife. Although man's actions can enhance the environment for some species, the majority of man-modified habitats are ecologically poor compared with those that have evolved naturally. Riparian or water-related habitats are particularly sensitive to human interference: they support a more diverse population than most other habitat types, constitute a tiny percent of total City land area, and tend to be urbanized at a faster rate than any other type of wildlife area.

GOALS

- ACCEPTANCE OF A LAND ETHIC THAT INVOLVES THE BALANCED COEXISTENCE OF MAN, VEGETATION AND WILDLIFE.

- PROTECTION OF ALL WILDLIFE AND VEGETATION THAT DOES NOT CONSTITUTE A CLEAR AND DIRECT DANGER TO MAN.

GUIDELINES AND STANDARDS

- Vegetation, wildlife and wildland areas are important resources that have identifiable immediate and long-term values for man.

- The preservation, maintenance and enhancement of a vegetation, fish or wildlife species is directly dependent on the condition and extent of its habitat.

- To maintain a viable, self-perpetuating ecosystem, examples of each habitat and plant community must be preserved.

- Conservation of endangered species must include management of all resources necessary for their survival.

- Priority should be given open space acquisition that also serves to preserve important ecological resources.

RECOMMENDATIONS

- Adopt enabling legislation to permit use of the Williamson Act for protection of wildlife habitats.

- Control use of off-road vehicles.

- Include consideration of important ecological resources in the application of floodplain and hillside zoning and the proposed development guidelines.

- Establish policies and procedures for protection and preservation of all trees and significant plantings within the City.

- Continue educational efforts regarding the value of and needs of the environment, both formal (e.g., school systems) and informal (e.g., public recreational programs).

Other Resources: Air

Probably no single natural resource has such direct and intractable bearing on the public health, safety and welfare as air. It is one of the basic ingredients of the environment, essential to most forms of life. Unlike other resources it permits no substitutes, cannot be imported when local supplies are deteriorated, and allows no reduced-use conservation measures. However, like other resources, its quality has been extensively deteriorated by urbanization and development. Unfortunately, most of the facts about air pollution and proposed means of improving air quality are in direct conflict with well-established and emotionally volatile patterns of thought and behavior. Since smog first appeared in Los Angeles in 1945, there has been a general unwillingness on the part of both government and the public to cope with the problem or to accept the implications of major-source identification. It is only quite recently that concerned citizen pressures have precipitated the massive governmental intervention and involvement which dominate the air quality scene today.

FINDINGS

Almost without exception, human activities all create some type of pollution. When these activities are concentrated in space, and when climate and geographic and atmospheric conditions restrict air currents, waste products collect in the air. The result is air pollution. Pollutants can be smoke, dust, fumes, vapors, pollens, or any toxic substance that interferes with the use of air by men and other living things. Many economic as well as health effects or pollutants have been identified: they can erode and discolor building materials, break down rubber and paint and fabrics, slow growth of and/or kill plants, and increase the risk of cancer and respiratory ailments. It is reasonable to assume that there are other effects that have not yet been identified.

The management of air resources is dependent on both local and regional activities and controls. The resource itself is clearly regional, since air cannot be confined to the boundaries of any political jurisdiction. For this reason, air quality surveillance and pollution abatement authority must be vested in an area-wide agency. However, the generation of air pollution is local in nature and can be substantially affected by local land use and transportation decisions. Particularly in San Diego, where autos are the major source of air pollution, local decisions about the intensity of land use, residential densities, the location of major destinations in relation to residential development, the design of streets and highways, and the transportation choices available to the populace all determine to a great extent the amount of air pollution in the City.

Air quality in San Diego is directly affected by climate and geography as well as by the quantity or pollutants discharged. The geographic pattern of high mountains partially surrounding the urbanized area operates to hold and concentrate pollution within the local air basin. Three

particular aspects of climate aggravate the situation: amount of sunlight, temperature inversions, and wind patterns. San Diego has 73 percent of the maximum possible yearly sunshine, which is the energy that converts primary pollutants into the more complex and harmful ones called smog. Inversions create a lid effect to hold in locally produced contaminants. And local wind patterns also act to retain air pollution within the region. These factors, in combination with steadily increasing population and vehicle traffic, create severe air pollution problems for the City.

Although motor vehicles and aircraft are responsible for the greatest part of local air pollution, there are other significant sources. The most important of these are sand and gravel operations, manufacturing, various processing and product handling operations both on land and at sea, and pollutant transfer from the areas both north and south of the San Diego Air Basin. Control measures for a number of these sources are already being implemented.

The San Diego Air Basin has shown a steady decrease in air pollution levels since 1969. However, the rate of decrease has leveled out. Projections indicate that pollution levels will begin increasing again in the near future if population continues to increase at current rates and control measures remain static. These projections and the various state and federal air quality requirements have resulted in a Regional Air Quality Strategy, developed jointly by the Comprehensive Planning Organization, California Department of Transportation, San Diego County, the Air Pollution Control District, and the City of San Diego. Its goal is to provide a central set of policies which local planning agencies may implement in order to meet federal and state air quality standards.

GOALS

TO PROTECT AND ENHANCE THE QUALITY OF SAN DIEGO'S AIR RESOURCES SO AS TO PROMOTE THE PUBLIC HEALTH AND WELFARE AND THE PRODUCTIVE CAPACITY OF ITS POPULATION AND NATURAL ENVIRONMENT.

GUIDELINES AND STANDARDS

- The City should seek tactics for control of air quality which have the least possible disruptive effects on present ways of life.

- Priority should be given pollution-control measures which also serve to further other goals of the General Plan.

- Public participation, understanding, acceptance and support of air quality policies should be considered essential to their success and should be actively encouraged.

RECOMMENDATIONS

- Provide attractive less-polluting alternatives to the use of private autos.
    - improve public transit.
    - suburban park-and-ride facilities.
    - separated bike lanes.
    - car and van pooling.
- Promote more efficient operation of motor vehicles by such means as driver education, vehicle inspection and maintenance, and traffic flow improvements.
- Promote the development of relatively self-contained neighborhoods and communities which provide an appropriate balance of necessary land uses, facilities, and services thereby decreasing the number and length of passenger car trips.
- Encourage fill-in and vertical growth of the City, rather than a pattern of horizontal development.
- Improve control and regulation of sand and gravel operations and petroleum loading activities.

ENERGY CONSERVATION

Energy Conservation

Recently there has been wide-spread public and official concern about energy supplies, both present and future. The fundamental problems underlying the projected decreasing supply of traditional energy sources are of national or statewide scope, but there are significant contributions which can be made by local government. Land use patterns, air quality programs, growth policy, transportation, and residential densities all directly affect local energy consumption. Conservation of existing energy, both by City actions and by all City residents, is also within the scope of local government. Alternative energy sources, to provide for at least part of the City's needs, can be investigated and developed. Since unlimited supply and availability can no longer be taken for granted, energy considerations now need to be evaluated along with the other factors that enter into the formulation of City policies and decisions.

FINDINGS

Supply and Demand

Before the 1973 "energy crisis," the annual growth rate of San Diego's energy use was nearly three times that of the rest of California. This annual increase has since slowed considerably, due to both conservation measures and the economic recession. But with improved economic climate and increasing population growth, the energy use growth rate is again increasing. Measures both to conserve existing supplies and to develop alternative sources are necessary to avoid the very real possibility that power demand may exceed supply within the planned future.

San Diego's energy use patterns differ considerably from those of the rest of the nation. Because local industry in general is less energy-demanding, and because the local climate requires less heating and cooling, per capita energy consumption is less here than elsewhere in the United States. However, gasoline accounts for a larger proportion of that per capita consumption. With low-density development, low mass transit use, and heavy dependence on private transportation, vast quantities of energy are used to move both people and goods.

Nearly all of the energy consumed in San Diego is in the form of electricity, natural gas, and gasoline. These end-use energy forms derive from three basic energy sources: oil, hydropower, and natural gas. One alternative to imported oil is exploitation of local off-shore oil reserves; conversion to coal, nuclear fission, or geothermal energy to replace oil in the generation of electricity are other possibilities. Hydropower currently supplies more than a third of the power used for generating California's electricity, but its possibilities for expansion are limited because the most economic sites have already been developed. Long-range projects to supplement natural gas supplies include importation of gas, by either pipeline or in a liquefied state, from other countries; various innovative processes for synthetic production of natural gas locally; and substitution of solar energy for some of the natural gas uses, mainly heating and cooling.

Various techniques exist for recovering useful forms of energy from solid waste. These include burning trash to produce steam, for heating or electricity production; pyrolysis plants to produce fuel oil from waste; and recovery of methane gas from either sanitary landfills or wastewater solids. A related reclamation approach is the recycling of specific clean materials, such as

aluminum, copper, steel and paper. Metals can be reclaimed for a small fraction of the energy required to process raw material. Recycling paper requires a much higher relative amount of energy, but still can be done cost-effectively and energy-effectively.

Apart from the controversies that surround the development of specific alternative energy sources, there appears to be general agreement on many aspects of the supply picture. Petroleum supplies are both limited and unreliable, and must gradually be replaced by other basic energy sources. There is to date no single non-petroleum energy source which has the promise of replacing petroleum; therefore, many alternatives must be explored and evaluated. It is reasonable to anticipate several decades of research, development, demonstration, and commercialization before many of the non-petroleum energy sources can make a significant impact on the whole energy problem. The era of cheap and plentiful natural gas for California appears to be over. New sources for importation may be arranged. But, as other states and other countries become increasingly concerned about their own energy supplies, these sources can be considered at best as temporary transition measures.

There is also general agreement that existing ways of life, urban patterns, transportation facilities, buildings, and equipment all reflect a past when energy was abundant and cheap. Many other countries, with living standards equal to ours, use less than half the energy per capita that is consumed in the United States. Apart from savings in transportation, the next most fertile area for improving efficiency is building and development design and land use patterns. It is indisputable that sprawled low-density urban development increases travel distances, street and highway requirements, public utility extensions, and public service costs (fire, police, schools) - all of which translate directly into increased energy use. Grouped structures and higher density development have recognized energy savings. Subdivisions in areas that are hot in summer and cold in winter, or in areas where auto dependence is mandatory, or where cultural and commercial and recreational and employment facilities are lacking, can only result in increased energy use - not only in initial development but also in yearly operation and in the more nebulous energy costs that traffic congestion, wasted water, and public services demand.

In addition to the location of development, its design can be oriented toward better use of energy. Narrow streets reduce horizontal spread, construction energy and material, and reflected summer heat. Deciduous street trees allow summer shade and winter sun on buildings and streets, and make walking and bicycling more attractive. More extensive walks and bicycle paths reduce auto use. Smaller minimum lot sizes reduce travel and utility and service distances.

Important energy savings can also be realized through energy-conservant site planning and building design techniques and principles. The solar rights of individual property should be protected: Oregon and Colorado already have laws that prevent future shading of solar equipment by neighboring structures or plantings. Flexibility in required setbacks allows buildings to be oriented to maximize natural heating and cooling factors. Designs that consider microclimates building efficiency, summer shade and winter exposure of windows, and the energy implications of colors and materials can reduce total energy operating needs by as much as 50 percent.

Conservation

Conservation and efficient use and wise allocation are especially important to San Diego since nearly all of the energy used here is imported. The major exception is the electricity produced at San Onofre Nuclear Power Plant; all other energy, including vehicle fuels and natural gas and fuel oil and some electric power, is imported. There have been recent efforts to provide for a larger part of local needs locally; expansion of the San Onofre Plant, plans for additional nuclear power plants, experimental work with geothermal resources, and solid waste recovery work. However, conservation measures remain an essential part of the City's response to the long-term energy situation - both to allow more time to develop alternative sources before the world's oil supplies are exhausted, and also to achieve the major transition from cheap, abundant energy supplies to expensive, scarce ones.

The supply and disposal of water is one of the largest single users of energy in San Diego. Energy is required to pump water here, to treat it prior to use, to heat or cool it, collect and pump it to sewage treatment plants, and to treat and dispose of it in the form of waste water. Water conservation is therefore an important aspect of energy conservation, and a conservation attitude in general appears to be the appropriate direction for the near future.

The City of San Diego has already implemented major energy conservation programs. Its General Services Administration has initiated an ongoing conservation strategy which focuses on immediate and future reduction of energy use in its operations. The City Council has adopted an energy conservation policy, committing the City to a number of specific procedures for making the best use of existing resources as well as to development of innovative non-depleting energy sources. Solar heating is being installed at city-owned pools. A program is under way to convert existing street lights to a more energy-efficient type. The City has adopted the State Energy Commission's new standards for residential and non-residential buildings. And one of the central purposes of this element is to guide development patterns that make the best use of available energy.

GOAL

- ASSURE ADEQUATE ENERGY SUPPLY FOR THE CITY OF SAN DIEGO THROUGH A COMPREHENSIVE PROGRAM OF ENERGY CONSERVATION, ENERGY-EFFICIENT PRODUCTION AND USE OF ALL ENERGY FORMS, UTILIZATION OF ALTERNATIVE ENERGY SOURCES, AND ENERGY-EFFICIENT DESIGN OF THE COMMUNITY.

GUIDELINES AND STANDARDS

- Conservation measures, such as reduction of heat gain and loss and more efficient equipment in structures, should not be allowed to aggravate the low and middle-income housing problem: as with automobiles, a trade-off between a slightly increased initial cost and significantly lower operating costs can be a great advantage in terms of the buyer's ability to keep and use the product.

- A balance should be maintained between energy supply and environmental protection: use of alternative energy sources should not conflict with standards of air quality or other environmental pollution; where possible, both conservation measures and alternative sources that also reduce pollution should receive priority.

- The most desirable energy conservation and production tactics are those which have no significant adverse social, economic, or environmental impacts and which have minimum impact on the quality of life.

- City energy planning programs should be coordinated with federal, state and regional policies and goals.

- As much as possible, dependence on imported energy should be minimized in favor of local self-sufficiency.

- Sustained efforts should be directed toward elimination of wasteful and inefficient uses of energy: these conservation measures have the least effect on the quality of life.

- Priority should be given to energy conservation measures that also function to further the goals of other General Plan elements: Conservation Element concerns with water supply and use; efforts of the Growth Management Element to control urban sprawl and inefficient use of capital improvements; the Cultural Resources Element goal of continued reuse of quality structures.

- **On November 3, 1987, the electorate of the City of San Diego approved an initiative measure, Proposition H, amending the General Plan. The initiative amended the plan by adding the provisions presented below in italics:**

In order to protect the public health, safety and general welfare of the people and to foster a physical environment in San Diego that will be most congenial to healthy human development, the following standards are required for solid waste facilities that will burn 500 tons or more per day of residential, commercial or industrial solid waste.

1. *No such facility shall be built that will:*

    a. *increase existing levels of toxic air pollutants within the City as those levels are determined by federal, state or San Diego public agencies; or*

    b. *be located within a three mile radius of a hospital, elementary school, or child care center or nursing home for the elderly licensed by a governmental entity; or*

    c. *make additional demands on the treated water distribution system within the City.*

2. *Any such facility built shall include recycling and separation methods whereby major sources of toxic air pollutants, including but not limited to plastics, metals, industrial wastes, and coatings, are removed from the solid waste prior to incineration.*

RECOMMENDATIONS

Supply and Demand

- Guide development into land-use patterns that make the best use of available energy, both by minimizing transportation and by making use of existing capital improvements.

- In reviewing development proposals, evaluate probable travel requirements and mass transit use from the proposed project.

- Support development of local non-depleting energy sources: solar, geothermal, biomass, wind, hydroelectric, tidal and ocean current movements.

- Support regional transportation system proposals that require the lowest feasible levels of energy consumption per person-mile.

- Actively encourage adequate funding at both state and federal levels for research and development of alternative energy sources.

- Evaluate energy use and energy impacts in the environmental review process.

- Use housing distribution in relation to other land uses as a tool to minimize energy consumption.

- Develop emergency contingency plans, in cooperation with other local agencies and regional suppliers, to assure essential energy supplies and radically reduce non-essential consumption during periods of sudden energy shortage.

- Actively encourage innovative building and site design and orientation techniques which minimize energy use by taking advantage of sunshade patterns, prevailing winds, landscaping, sunscreens, and choice of materials.

- Devise and implement a program to encourage use of laundry lines and clothes-drying yards.

- Improve and expand the City's network of bicycle paths.

Conservation

- Maintain educational and publicity programs to sustain public awareness of the importance of energy conservation, the continued existence of energy problems, and specific conservation tactics that are recommended.

- Actively encourage utility rate revisions that provide incentives for domestic and commercial conservation and for shifting use to off-peak hours.

- Continue and expand publicity programs to discourage single-occupant auto trips and encourage more energy-efficient means of travel, such as carpools, public transit, bicycles, and walking.

- Devise and implement a system of encouraging development that conserves energy through its design, location, construction and operation.

- Enforce reduced levels of non-essential lighting, heating and cooling.

- Maintain and promote water conservation and water recycling programs as a means of conserving energy. Encourage local water jurisdictions to use state-mandated powers to enforce conservation measures that eliminate or penalize wasteful use by customers.

CULTURAL RESOURCES MANAGEMENT ELEMENT

Cultural Resources Management

No city can hope to understand its present or to forecast its future if it fails to recognize its past. For by tracing the past, a city can gain a clear sense of the process by which it achieved its present form and substance; and, even more importantly, how it is likely to continue to evolve. For these reasons, efforts directed to identifying and preserving San Diego's historic and archaeological resources - with their inherent ability to evoke the past - are most advisably pursued.

Cultural resources are physical features, both natural and man-made, associated with human activity. These may include such physical objects and features as archaeological sites and artifacts, buildings, groups of buildings, street furniture, signs, and planted materials; in short, almost anything that connotes man's past presence. For purposes of this element, a distinction is made between "archaeological" and "historic" sites. This distinction is based on the authoritative work of the State Archeological, Paleontological and Historical Task Force, appointed by former Governor Ronald Reagan in 1971, whose work culminated in the publication "The Status of California's Heritage: A report to the Governor and Legislature of California," by W.R. Green, et. al., September 1, 1973.

The California Task Force used the term "archeological site" to mean any mound, midden, burial ground, mine, trail, rock art, or other location containing evidence of human activities which took place before 1750 A.D. An "historic site" is any structure, place, or feature which is or may be significant in the state's past (1542 A.D.) history, architecture, or culture.

This element interrelates in varying measures with most of the other General Plan elements. It complements closely the Urban Design Element. Both are concerned with utilizing local physical features to strengthen the City's identity and its constituent communities. In addition the Cultural Resources Management Element's essential ingredients - cultural resources - often function as housing units, industrial or commercial establishments, recreational facilities, or other viable land uses. Further, the existence of cultural resources may be a compelling factor in the designation of open spaces.

It must be noted that the nature of the interrelationship with seismic safety may largely be one of conflict. This is because many older buildings are regarded as structurally hazardous, and are therefore prime candidates for abatement programs. Where such conflict situations arise, they should be resolved on a case by case basis - with full consideration given all competing values and objectives.

FINDINGS

General

For the citizens of San Diego to derive maximum educational and aesthetic benefit from our cultural resources, sites must be adequately protected and their surrounding environments preserved. This requires a broad application of the principles of cultural resources management as early as possible in the planning process of both public and private projects and the

establishment of mechanisms to ensure adherence to the program. Such measures must not, however, unduly retard or halt much-needed development and improvement of our urban landscape. A comprehensive cultural resource management program can permit preservation while at the same time allocating fairly the costs and burdens of preservation.

The alarming rate of historical and archeological site destruction by human agency, both public and private, has been discussed and documented by many authorities.

> "Although extremely destructive, urbanism is not the only factor adversely affecting archeological resources. Statewide, residential and industrial developments, highways, water projects, and vandalism are all major contributors to archaeological site removal. Other detrimental forces include agriculture, logging, recreation developments, military activities, off-road vehicles, and natural erosion. . . " [1]

The need for increased public efforts to slow the rate of destruction of cultural resources in evident.

> "In the past, responsibility for preserving historic artifacts, documents, and features, has been largely assumed by private organization and individuals. Certainly this laudable effort should be encouraged. But coordination is vital if the limited funds made available for this purpose are to be used wisely. Because of the lack of defined objectives, criteria, and priorities, funds have sometimes been expended on projects of less than prime importance while those that are critical to meaningful interpretation of history have been lost."

> "Historic structures are the most obvious and the most vulnerable of our historic resources. Historic documents and records can be preserved, filed, photographed, copied (although they can just as readily be lost); many art objects, artifacts and coins can be moved to safer quarters; sites, though they may be covered by later construction, can nevertheless be marked. Buildings, however, once gone are gone; approximate reconstruction in the original style and manner-if that can be determined--is rarely satisfactory." [2]

Deficiencies

Comprehensive Inventory of Cultural Resources

Historic: Previous surveys to identify historic resources have been limited in scope to particular areas of the City and/or to particular features. Consequently, a comprehensive citywide inventory of historic resources has yet to be accomplished.

In the absence of such an inventory, it may be presumed that many valuable historical resources have been irretrievably lost due to ignorance of their existence or value. Moreover, it can probably be ventured that losses will continue to occur until such time as adequate information becomes available.

Apart from deterring losses of value, a comprehensive inventory could be expected to yield other worthy benefits. For example, by indicating the magnitude of the City's cultural resources, an

inventory would permit a dimensioning of the total preservation task and thereby facilitate decision making as to how to proceed.

Archaeological: There has never been a systematic field survey of the City's archaeological resources. Known resource sites have been recorded at a number of institutions both inside and outside the San Diego area, making access to the data difficult. Many of the locally recorded sites have been destroyed by development while unrecorded sites also are lost due to our ignorance.

A comprehensive field survey and inventory program is needed to, 1) consolidate known San Diego sites recorded here and elsewhere, 2) verify the status of known sites by field check and 3) identify areas which contain prehistoric resources not previously known.

Such a program would permit a ranking of sites according to their significance, reducing the collection of redundant data and providing a knowledgeable basis for preservation and protection efforts.

Cultural Resources Management Plan and Program

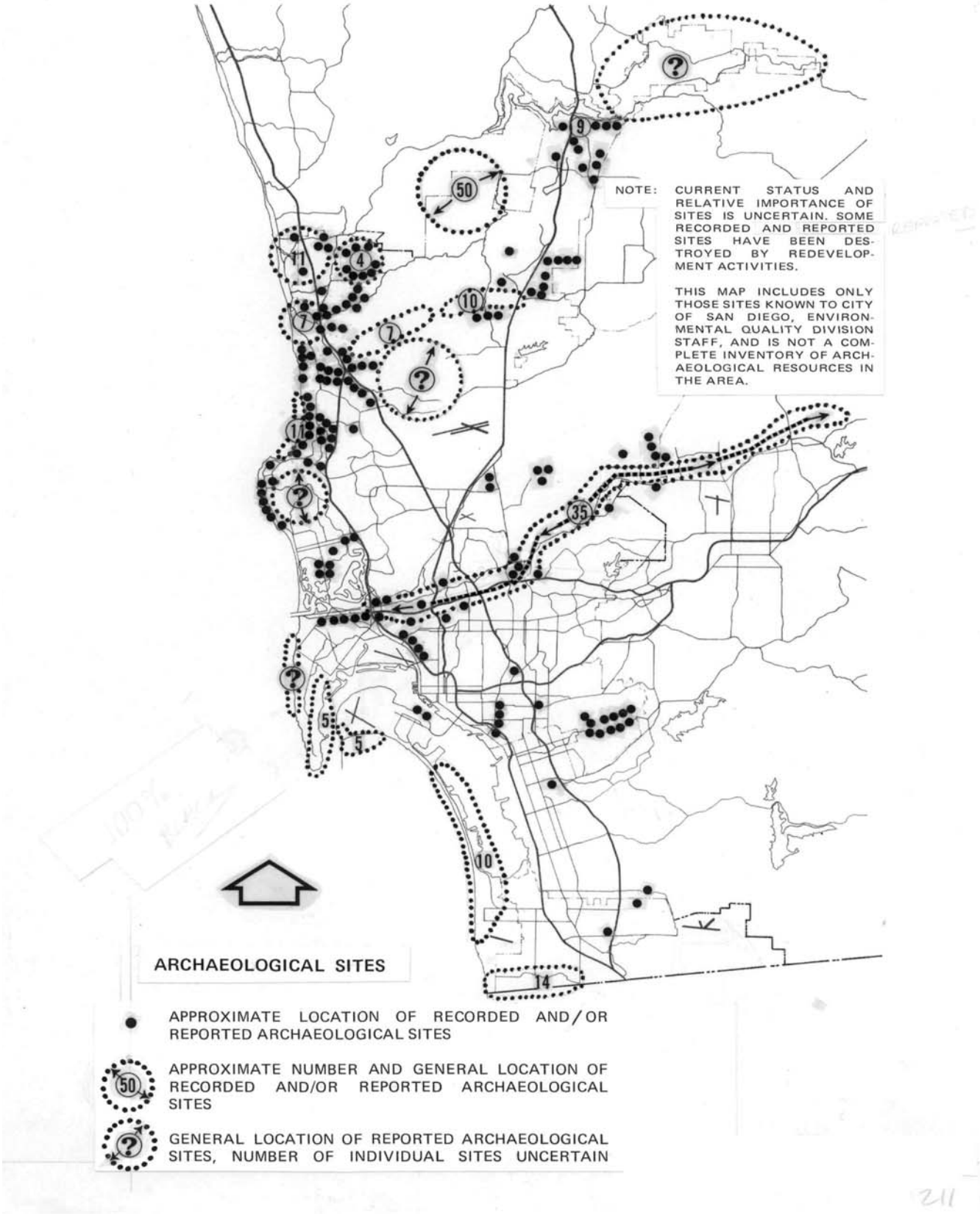
Historic: As part of the rising general concern expressed locally in recent years over deterioration of the environment, a heightened interest has attached to the preservation of historic resources. As a result, various private and semi-private organizations have become active in historic preservation work and have recorded a number of successes. However, that which remains to be done clearly exceeds the capabilities of these organizations. Therefore, requests for assistance directed to the City government have steadily mounted.

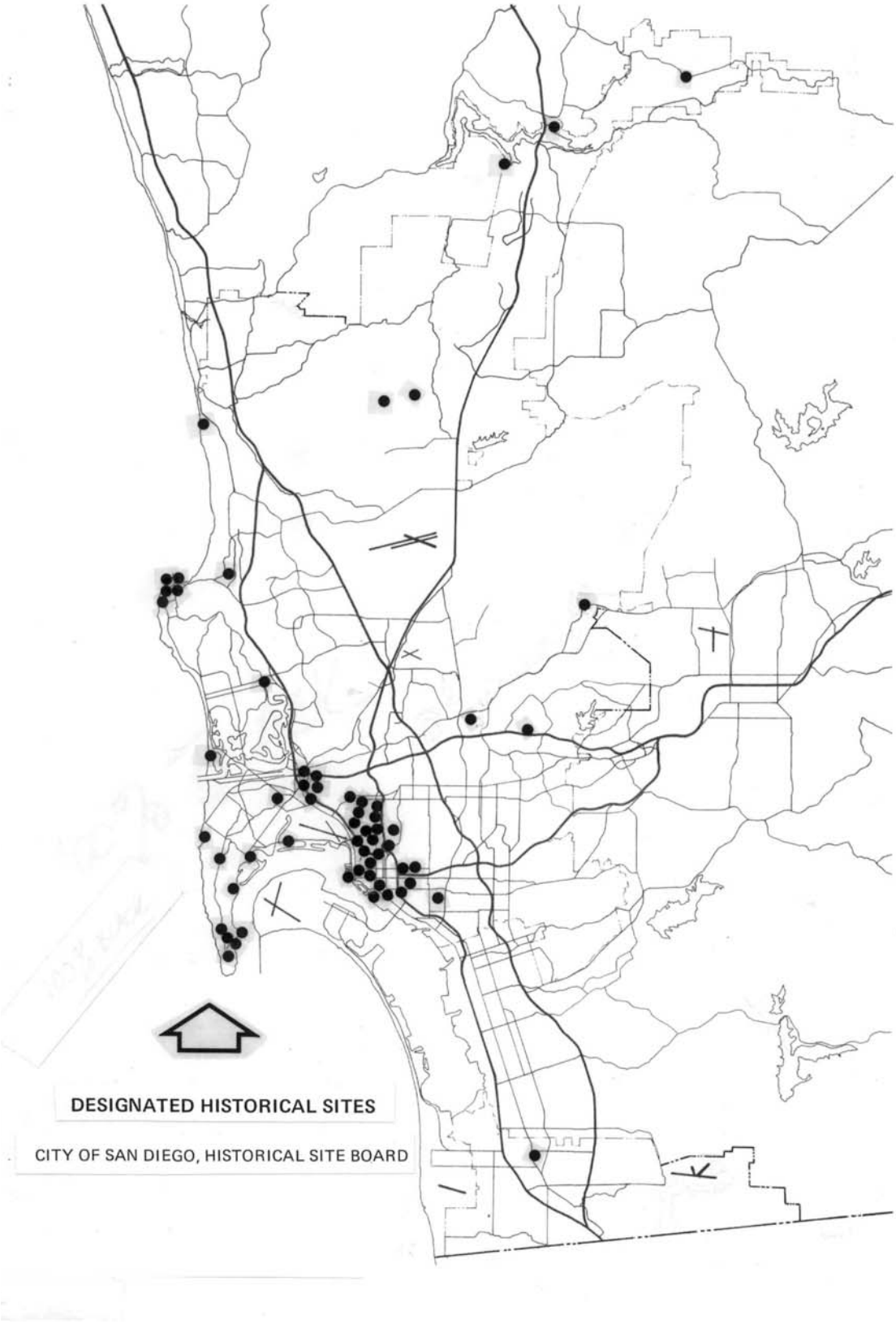
At present, the City has no historic preservation plan and program against which to systematically evaluate these increasing requests. Nor are official guidelines available to help decide what form of preservation is most appropriate in given situations.

It should be apparent that a well-conceived plan and program for the preservation of historic resources is very much needed.

Building upon the comprehensive inventory, such a plan and program could define with precision the categories of historic resources and the kinds of preservation techniques applicable to each; set forth specific goals and objectives; identify and explore possible funding sources; formulate criteria to assist the assignment of acquisition priorities; and project the pace at which implementation should desirably proceed.

Archaeological: Although recognition of the importance of our local prehistoric resources has been articulated through the environmental report process there has been no local policy or procedure by which to guide preservation efforts when they are needed. Local museums, universities and interested groups are limited by donations of funds, time, and materials in their ability to provide a continuing monitoring effort over our local resources.


NOTE: CURRENT STATUS AND RELATIVE IMPORTANCE OF SITES IS UNCERTAIN. SOME RECORDED AND REPORTED SITES HAVE BEEN DESTROYED BY REDEVELOPMENT ACTIVITIES.
THIS MAP INCLUDES ONLY THOSE SITES KNOWN TO CITY OF SAN DIEGO, ENVIRONMENTAL QUALITY DIVISION STAFF, AND IS NOT A COMPLETE INVENTORY OF ARCHAEOLOGICAL RESOURCES IN THE AREA.
ARCHAEOLOGICAL SITES
APPROXIMATE LOCATION OF RECORDED AND/OR REPORTED ARCHAEOLOGICAL SITES
APPROXIMATE NUMBER AND GENERAL LOCATION OF RECORDED AND/OR REPORTED ARCHAEOLOGICAL SITES
GENERAL LOCATION OF REPORTED ARCHAEOLOGICAL SITES, NUMBER OF INDIVIDUAL SITES UNCERTAIN


DESIGNATED HISTORICAL SITES
CITY OF SAN DIEGO, HISTORICAL SITE BOARD

An overall plan and program would provide a framework for standardization of procedures for surveys and excavations, qualifications of professionals, reporting, collection and storage of recovered materials and information, contact with Native Americans when necessary and site protection mechanisms. Beyond this, the plan and program should extend to public education in the value of prehistoric resources and the importance of protection from vandalism and random collection by amateurs.

All planning levels within the City should incorporate a component addressing both historic and prehistoric cultural resources which may be encountered in their activities.

Strengthened Organizational Structure

The only City agency formally charged with responsibilities for historic preservation is the Historical Site Board. The board is explicitly mandated by ordinance to designate "sites, buildings, structures, or marks" of historical significance; to advise City bodies and officials; to explore methods of preservation; and to recommend historic and aesthetic zones and standards. The board is proscribed from holding monies or properties as an appointive body, the board has no regular full-time staff and little funding. Therefore, it is difficult to adequately organize and promote historic preservation efforts in San Diego, and the board has generally limited its activities to designating sites and serving in an advisory capacity.

While the mandating ordinance establishes adequate authority for the board to perform its prescribed duties, it is not sufficient in scope to encompass the full task and associated responsibilities of cultural resources management. Thus, as an ordinance designed for an advisory rather than a decision making body, it does not encourage the initiation of action measures. Neither does it encourage examination of the economic and social impacts of historic preservation, nor does it designate responsibility for archaeological resources. A strengthened organizational framework with necessary staff personnel is called for if cultural resource management activities are to be conducted in an appropriately comprehensive manner.

Implementation

Available Measures

Historic-Archaeological

- **Historical Site Board**

  Designates buildings, sites, landmarks and districts deemed "historically significant."

  Can delay demolition up to one year with the consent of Council in order to find alternative means for permanent preservation.

  Drawbacks: The board has no authority to seek public funding. Demolition can eventually occur regardless of the site's significance. The board has no overall plan for determining the remaining inventory of significant sites. Designation is often conducted on a random basis.

No professional staff input is available regarding the planning or architectural merits of sites under consideration. The work of the board is often poorly coordinated with the goals and objectives of adopted community plans. Status of existing sites is poorly monitored. Liaison between the board and permit authorities is unclear, tending to cause delays in granting of permits. Public information is not generally available describing the function of board and its implementing authority. The board's authority does not explicitly include prehistoric sites or objects. The board does not include specialists in archaeology.

- **Building Code Amendment**

  Designated sites may receive special treatment under the building code when changes in use (most often from residential to commercial) are proposed.

  Drawbacks: Provisions of the Historic Building Code have limited applicability to masonry structures found most frequently in Centre City.

  Building permits are not reviewed by the California Environmental Quality Act (CEQA) process therefore some projects requiring only a building permit may destroy archaeological resources without opportunity for a survey and salvage.

  Building permits on undeveloped land not previously reviewed through discretionary approvals should undergo archaeological investigation. Early notice for this requirement could be made via the rezone, and parcel map approval process. Under these conditions delay of building permit approval would be very rare.

- **Planned Districts**

  Allows the development and administration of specific design and land use controls sensitive to the existing or desired character of an area.

  Drawbacks: Extensive staff and processing time required to implement. Would not be useful in protection of archaeological resources.

- **Tax Abatement**

  Mills Act presently allows "present use" assessment. Federal Tax Reform Act of ‘76 contains provisions relating to historic structures.

  Drawbacks: Mills Act requirements limit, for practical purposes, application to non-profit organizations.

  Federal guidelines still in initial stage of development site must be on national register. Existing laws should be amended to include property containing prehistoric resources.

- **Redevelopment Law (Tax Increment)**

  Allows use of tax increment to intervene by means of subsidy in redevelopment efforts. Drawbacks: Present priorities do not place preservation highly. Not applicable to preservation of prehistoric sites.

- **Community Planning**

  May call out areas of historic or other interest worthy of preservation and recommend implementation measures.

  Drawbacks: Previous plans have not included adequate survey evidence to justify recommendations. Implementation measures insufficient. Lack of surveys and inventory reduce opportunities for management guidelines.

- **Conditional Use Permit**

  Allows property owner to establish commercial uses within designated historic sites. Can be conditioned by the Planning Commission, Zoning Administrator and Council to require adequate mitigation of impacts to prehistoric resources.

- **Community Development Block Grant**

  Presently a revolving fund has been established to provide low interest "code-enforcement" type loans in designated areas. Property owners may borrow funds to upgrade homes. Drawbacks: As presently structured, repairs must be "minimum necessary" and thus have a tendency to downgrade living conditions, working against urban conservation. Not applicable to preservation of prehistoric resources.

- **Tentative Subdivision Maps, Grading Permits and Variances**

  Can be conditioned by the City Engineer, Zoning Administrator, Subdivision Review Board and Planning Commission to require adequate mitigation of impacts to prehistoric resources. These mitigations could be in the form of surveys, collection of resources, excavation and salvage of a small portion of site, and other means of protecting the resource from development.

- **Easement**

  An easement for purposes of preserving prehistoric and historic resources can be dedicated to the City by a property owner who finds such resources on his land through the environmental review process.

  An easement could limit the use of such land in order to prevent disturbance of the resources; restrictions could prevent building construction, fencing, landscaping, irrigation,

signing, lighting and other disturbances and could limit public access to the site for scholarly purposes only.

- **Deed Restrictions**

  Often used by condominium and cluster development projects, deed restrictions permit non-governmental regulations of architectural style, use of antennas, signs and other activities. Deed restrictions can therefore be used to protect prehistoric and historic resources in the ground or surface features such as grinding stations or pictographs and petroglyphs.

  Drawbacks: Because these restrictions are enforced through a private group their effectiveness is dependent on the commitment of the group and private legal efforts when necessary.

- **Demolition Permit**

  Permits for destruction of a building or structure are granted to contractors licensed by the state who file a surety bond with the City. Regulations include the requirements that remaining excavations or depressions be restored to the level of the adjacent ground. The Historical Site Board can delay demolition of structures having historic significance.

  Drawback: Demolition of structures over 50 years old may adversely affect archaeological resources underneath the structures which were not damaged due to building construction. Archaeological review of demolition permits for structures 50 years or older in 1970 should take place before, during, and/or after the demolition, that is, the review would not delay demolition.

- **Acquisition**

  Public acquisition of historic or prehistoric resources, either by private or public funds, for operation by a qualified organization under contractual agreement with the City. Precedent for such action has already been established in the City's acquisition of the Villa Montezuma and the Marston House.

Additional Measures

Historic

Rather obviously, public agencies cannot afford to preserve all endangered historic resources by outright purchase. Therefore, wherever conditions permit, the public sector should primarily concentrate on: (1) prohibiting destruction of those resources deemed to warrant preservation; and (2) establishing mechanisms whereby such resources can be retained under private ownership.

The investigation of additional implementing mechanisms is highly desirable. In this regard, the potential advantages and disadvantages linked to the use of such instrumentalities as

development rights transfer, scenic and facade easements, City tax rebates, density bonuses, and leaseback arrangements need to be thoroughly studied.

The establishment of revolving funding mechanisms to provide vital start-up capital for adaptive re-use projects is also a priority. Working with the financial community, the City can help to restore investor confidence in older neighborhoods and commercial districts. Capital improvement programs should be balanced to reflect commitment to central residential and business community areas.

Archaeological

There are currently no City mechanisms available for protection of archaeological sites through the Historical Site Board Ordinance. The California Environmental Quality Act provides that a public or private project would have a significant effect if it would "disrupt or alter an archaeological site over 200 years old. . . except a part of a scientific study of the site." [3-4]

In order to make this determination the City of San Diego, Planning Department's Environmental Quality Division would require an archaeological survey and report and would encourage the applicant to mitigate any impact which the project might have on the prehistoric resource. These mitigations would be voluntarily carried out by the developer or could be made a condition of approval by the approval authority.

The local police authority is bound to uphold the State Penal Code which includes a provision that any person, not the owner thereof, may not deface, destroy or otherwise degrade an object of archaeological or historical value whether on public or private land. [5] For sites listed on the National Register[6] or California State Historical Landmarks Register [7] matching funding may be available for preservation efforts.

GOALS

- PRESERVATION OF SAN DIEGO'S RICH HISTORICAL AND PREHISTORIC TRADITION SO THAT IT MAY BECOME PART OF THE CONSCIOUSNESS OF THE PRESENT AND FUTURE GENERATIONS.

- FFECTUATION OF A CULTURAL RESOURCES MANAGEMENT PROGRAM THAT MAXIMIZES, INSOFAR AS PRACTICABLE, THE LIVING UTILITY OF HISTORIC RESOURCES.

- CONSERVE NOT ONLY STRUCTURES OF OUTSTANDING HISTORIC AND ARCHITECTURAL MERIT, BUT ALSO THOSE STRUCTURES WHICH CONTRIBUTE TO THE ECONOMIC AND SOCIAL WELLBEING OF THE CITY.

- ENACT LOCAL ORDINANCES WHICH WOULD ENSURE EFFECTIVE PRESERVATION, PROTECTION AND MANAGEMENT OF SIGNIFICANT CULTURAL RESOURCES AND WOULD PLACE SUCH RESOURCES IN THE PUBLIC DOMAIN.

- CONSERVE IN THEIR ENTIRETY THE LARGEST AND MOST UNIQUE PREHISTORIC SITES FOUND WITHIN THE CITY TO BE HELD FOR INVESTIGATION WITH MORE SOPHISTICATED TECHNIQUES DEVELOPED AT SOME FUTURE TIME.

- PRESERVATION OF HISTORIC RESOURCES IN NUMBER AND TYPE SO AS TO SUCCESSFULLY EVOKE THE DISTINCTIVE CHARACTER OF ALL SIGNIFICANT STAGES OF SAN DIEGO'S HISTORY.

GUIDELINES AND STANDARDS

Identification Criteria

Historic

First order criteria: it is useful to distinguish between two levels of criteria employed in the identification of historic resources. "First order criteria" are those which, if met, are sufficient in themselves to establish historical significance.

These criteria are embodied in the questions that follow and reflect a broad definition of historical, architectural, and cultural importance; a perspective of local, rather than state or national significance; and the belief that all aspects of our history are potentially of equal importance.

Does the resource:

- offer tangible association with significant personages, groups, ideas, events, or evolutionary historical changes?

- illustrate particularly well an important aspect of a given period in time, or is it one of a few remaining examples of its type illustrative of that period?

- represent an archetype of a distinctive construction method, structural technique, or design treatment?

- exhibit distinguishing qualities of construction, workmanship, or use of materials?

- assist in illuminating the evolution of San Diego’s physical or economic development?

- play an important role as an element of a larger significant group or resources?

- provide particularly pleasing characteristics, qualities, or symbolic significance impossible or unlikely to be replaced? Or, in the case of platings, impossible to renew within a reasonable period of time?

Is the resource:

- a site which has contributed or may reasonably be expected to contribute to scholarly research by providing dates which may affect theories, concepts, or ideas relating to past cultures or activities?

- of a distinctive cultural or aesthetic character which makes an important contribution to the quality and diversity of urban life in San Diego, and whose loss would be detrimental to the fabric of the urban environment?

- one whose preservation would assist in a more balanced emphasis in the portrayal of past human activities?

- one which will significantly increase public interest in one or more aspects of San Diego's history?

Second order criteria: Second order criteria are those which while insufficient in themselves to denote historical significance, add measurably more status to a resource already so denoted through the application of first order criteria. Such a resource should be regarded as possessing far greater consequence if, in addition, it:

- serves as a significant social symbol or landmark; houses or facilitates significant social functions impossible or unlikely to be replaced; or plays an important role in a larger pattern of significant social interaction impossible or unlikely to be replaced;

- is a visually prominent, unique or familiar feature due to its physical location or form;

- contains a predominance of material or other physical remains which are original or which have replaced the original in the normal course of use and which have since acquired their own integrity; constitutes remains on their original site or on a site which has acquired meaning an association in its own right or conveys a significant sense of the original environmental context.

Archaeological

First order criteria for archaeological sites - site importance in terms of the local area and local research problems

- size of occupational area is large in terms of surface area or possesses large quantities of resources;

- presence of single or multiple occupations at single location representing different cultural occupations either during the same time or during successive time periods;

- relative depth of the occupational area in terms of the deposition of human cultural evidence below the ground surface, deeper sites usually contain more information than shallow or surface sites;

- representative of an age or occupational period formerly unknown or in need of greater definition;

- sites demonstrating wholeness in the degree of preservation of the resources and their ecological setting which would provide the greatest opportunity for scientific research and site preservation;

- unique, rare or unusual sites of any size, depth, age or setting;

- sites with high potential for scientific research and resource analysis;

- sites which can provide diagnostic information which would provide characteristics for a whole class of artifacts, occupational periods, activities or locations;

- sites which contain examples of a variety of human activities within one occupational area;

- sites meeting the criteria of eligibility for state or national register status;

Second order criteria

- sites possessing cultural heritage value to local inhabitants or special interest groups;

- sites contributing to long-range research questions such as the population of North America, the relationship between cultural groups in the American southwest and Mexico, and others;

- sites contributing to non-archaeological fields such as ecology, plant domestication, zoology, geology, hydrology, American history and others;

- sites contributing to public education and tourism which are vehicles for the dissemination of information about the past.

Implementation Guidelines

The following sets of principles should guide the carrying out of cultural resource management activities.

- The process of change is a continuous and positive reality. As a rule, efforts to preserve cultural resources should not attempt either to arrest the flow of time completely or to restore them to their original form and appearance. Rather, the evolutionary nature of past development should be recognized as valid and the possibility of future change be provided for within the implementative framework.

- Adaptive uses other than museums should be encouraged. The implicit biases which have operated in the past to exclude particular land uses and, therefore, particular ethnic and economic groups from occupying historic resources have been counterproductive. All land

- use activities are potentially compatible with preservation. In many cases, a resource is effectively preserved by a continuation of its present use.

- In general, it is better to preserve than to repair; better to repair than to restore; and better to restore than to reconstruct. Removal of historic resources from their original or long time locations seriously detracts from their significance. Features should be retained "on site" wherever possible.

- Depending on individual circumstances and the method of preservation employed, historic preservation can have negative as well as positive effects. Such negative effects may include the elimination of social and economic options, particularly lower priced housing and services, that are often facilitated by older buildings. There may also be involved the preemption of land and, to some extent, the limitation of new creative effort and development. All these factors should be taken into consideration and a fair balance determined before the method of preservation is settled upon.

- Awareness of the condition that archaeological resource preservation may not always be compatible with all uses primarily because the natural setting of the site is an integral part of the resource and also because intensive human activity near such resources can be counterproductive to preservation efforts.

- For archaeological resources it is better to preserve than to mitigate impacts. Mitigation is improved if a 15 percent or larger sample is excavated; however, holding a site out of development without excavation would be preferable as a long-term strategy. In unusual cases prehistoric sites could coexist with other uses which would have a minimum disturbance impact. When excavation is undertaken it should be done by qualified professionals, data should be stored with an appropriate institution, all materials and data should be fully analyzed and compiled in a report of publishable quality.

RECOMMENDATIONS

- Expand the role of the Historical Site Board or establish a new Cultural Resources Management Commission with adequate authority, staffing (an office of Urban Conservation) and funding to undertake functions beyond those now satisfactorily performed by the Historical Site Board.

- Utilize an existing organization or sponsor the establishment of a private, nonprofit, organization for the purpose of acquiring and preserving prehistoric sites.

- Prepare a comprehensive citywide inventory of cultural resources including both prehistoric sites and man-made resources.

- Prepare a comprehensive plan and program by both public and private sectors to accommodate urban growth while preserving structures and complexes of importance to urban identity.

- Support the development of legislation on all governmental levels in the cultural resource management field.

- Develop a program of national register designation for prehistoric sites and historic districts.

- Encourage the participation of both public and private sectors to share the responsibility of developing regulations, incentives, and increased awareness of the benefits of urban conservation.

- Create an archive for the City and county of San Diego wherein all excavated collections, records and reports could be centrally located.

- Continue and strengthen efforts to properly coordinate cultural resource management activities with other agencies and private organizations.

- Explore potential sources of funds, federal, state and local, for the acquisition, preservation and management of cultural resources.

- Develop a method whereby both the public and private sectors equally share the costs of conserving cultural resources.

- Develop public policy to protect prehistoric sites from the encroachment of expanding land uses.

FOOTNOTES

1. The Status of California's Heritage: A Report to the Governor and Legislature of California, by W.R. Green, et al., September 1973.
2. 'The Status of California's Heritage," op. cit.
3. CEQA, State Guidelines, appendix G, Section j
4. CEQA, 2100 1(c)
5. Cal Penal Code Title 14, Part 1, Section 622- ½
6. Historic Sites Act 1935
7. Historic Preservation Act 1966

SEISMIC SAFETY ELEMENT

Seismic Safety

State planning and zoning law requires a Seismic Safety Element of all City and County General Plans, as follows:

> A Seismic Safety Element consisting of an identification and appraisal of seismic hazards such as susceptibility to surface ruptures from faulting, to ground shaking, to ground failures, or to the effects of seismically-induced waves such as tsunamis and seiches.
>
> The Seismic Safety Element shall also include an appraisal of mudslides, landslides, and slopes stability as necessary geologic hazards that must be considered simultaneously with other hazards such as possible surface ruptures from faulting, ground shaking, ground failure and seismic induced waves.

The basic objective of the Seismic Safety Element is to reduce the risk of hazard resulting from future seismic and related events. The seriousness of seismic risk to public safety is a function not only of local seismic conditions, but also a public awareness of the seismic hazards present, and the effectiveness of mitigation policies and practices utilized to reduce the risk resulting from the hazards. This element attempts to identify existing and potential land use planning efforts which would be instrumental in planning for seismic safety.

The Seismic Safety Element importantly affects virtually all other General Plan elements through its identification of seismic and other geologic hazards, and its proffering of guidelines of relating land use classes to seismic risk zones.

FINDINGS

Geologic Hazards

Faults: An active fault is herein defined as one in which there has occurred significant subsurface earthquake activity, or any surface ground breakage, within the last 20,000 years.

Based on available information, the Elsinore fault zone is considered to contain those active faults nearest the City of San Diego. More specifically, the nearest fault in the Elsinore fault zone lies but twelve miles from San Pasqual Valley, 40 miles from Mission Valley, and 45 miles from San Ysidro. Although faults within the paralleling San Jacinto fault zone have greater historic and instrumental activity, their longer distances from the City would indicate lesser potential for damaging impacts.

Two offshore faults, the San Clemente Island and the Rampart, are significant to this area because of their suspected lengths. Of these two, the San Clemente Island fault appears most capable of earthquake activity that would affect San Diego because of its greater verified length and shorter distance away. This fault, which lies to the west-southwest, is approximately 40 miles from Mission Valley.

Known faults within the City of San Diego that appear capable of generating the most damaging earthquakes are located within the Rose Canyon fault zone and the La Nacion fault system, both of which have been described as potentially active in a study prepared for the City of San Diego

in 1974. More recent independent studies have supported this theory and have gone further to state that the Rose Canyon Fault is active and is capable of producing a major seismic event.

The Rose Canyon fault zone extends south from the La Jolla Shores areas along the general alignment of Ardath Road, through Rose Canyon, and then along the east side of Mission Bay. Some evidence indicates that it may extend to the south along the alignment of the San Diego Bay-Tijuana fault through San Diego Bay.

It has been variously suggested that the Rose Canyon fault is a part of a large fault zone which includes the Newport-Inglewood fault in the Los Angeles area, and the Vallecito and San Miguel faults in Baja California.

Controversy exists as to the status of the Rose Canyon system. One argument states that the lack of recorded seismicity on the Rose Canyon fault is due to the fact that motion on the fault ceased years ago. However, the opposing view holds that the fault is locked up and that strain is building in preparation for an estimated 6.5 magnitude earthquake.

The La Nacion fault system, which essentially parallels the Rose Canyon fault zone, consists of two major faults: the La Nacion and the Sweetwater. The La Nacion, discovered in 1971, extends south from the Collwood Boulevard-Montezuma Road area along 54th Street, crosses State Highway 94 in the vicinity of Federal Boulevard, and then angles to the southeast through Paradise Hills. It reenters the City of San Diego at Otay Valley just easterly of Interstate 805 (I-805), and roughly parallels the latter into the San Ysidro area. It then takes a southeast turn into Mexico.

Within the City of San Diego, the Sweetwater fault is only known to extend southerly of Division Street along 58th Street, and adjacent to the westerly edge of the Paradise Hills community. However, several discontinuous traces of what is suspected to be southerly extension of the Sweetwater fault are found in the vicinity of Palm Avenue and Beyer Boulevard.

Ground Displacement. Directly related to faulting and earthquake activity is the phenomenon of ground displacement or fault rupture that may occur along the break of a fault. Ground displacement is characterized by slippage along the fault, or by surface soil rupture resulting from displacement in the underlying bedrock. Such displacement may be in any direction and can range from a fraction of an inch to tens of feet.

In San Diego, exposures are generally poor and most faults are either potentially active or inactive, which makes it difficult to define the traces of potential displacement. However, if ground displacement were to occur locally, it would most likely be on an existing fault.

Ground Shaking. When a break or rapid relative displacement occurs along the two sides of a fault, the tearing and snapping of the earth's crust creates seismic waves which are felt as a shaking motion at the ground surfaces. The most useful measure of severity of ground shaking for planning purposes is Modified Mercalli Intensity. This scale, ranging from Intensities I to XII, judges shaking severity by the amount of damage it produces. Intensity VII marks the point at which damage becomes significant. Intensity VIII and above correspond to severe damage and problems that are of great community concern.

The severity of seismic shaking at a given locale depends largely on the following factors:

- Earthquake magnitude and duration
- Distance from the zone of fault rupture
- Local soil conditions

Earthquake magnitude (M), as measured by the Richter Scale is an indication of the amount of energy released in the earthquake. It is estimated that the maximum probable earthquake (that is, the event of greatest magnitude that might occur with a fairly high order of probability) for both the San Jacinto and the Elsinore fault zones is between M 6.9 and 7.3, with a repeat interval of approximately 100 years. The maximum credible earthquake for both fault zones is estimated at M 7.6.

For maximum credible events, considerable damage (Modified Mercalli Intensities VII and VIII) would be likely in Northeast San Diego*, while only moderate damage (Intensities VI and VII) would probably be experienced in the remainder of the City. A magnitude 7.0 event on the Elsinore fault would still cause considerable damage in Northeast San Diego, but would cause only limited damage in Urban San Diego. As noted previously, the closeness of the Elsinore fault to San Diego makes it potentially more significant than the San Jacinto fault. Northeast San Diego is particularly close to the Elsinore fault; and the region encompassing San Pasqual Valley and the San Diego Wild Animal Park is especially subject to severe shaking from the earthquake source.

The largest fault within the California Borderland is the San Clemente Island fault, with an estimated length of 110 miles. This fault is about the same distance from downtown San Diego as the Elsinore fault, and their maximum credible events appear to be of the same order. However, since its historic recorded activity has been less, the San Clemente Island fault does not appear to pose as significant a hazard to the San Diego area.

There are two potentially active fault systems within the San Diego region having sufficiently verified length to produce large magnitude earthquakes. These fault systems, the Rose Canyon and La Nacion, could produce credible events of approximately M 7.1 and 6.7, respectively. While it seems unlikely that an event of such magnitude will occur, the damage resulting from it (under anticipatable Intensities of VIII and IX) would be especially severe in Urban San Diego.

Northeast San Diego would be less seriously affected, although ground shaking would probably achieve Modified Mercalli Intensities VII and VIII.

Local soil conditions and topography tend to modify the nature and severity of seismic waves. The specific way and extent to which local soil deposits modify earthquake ground motion depends largely upon their depth and their "softness." In general, deep soft deposits have long

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*That portion of the City of San Diego lying northeasterly of an imaginary line connecting the southeast corner of the NE 1/4 Sec. 10, T14S, R3W, SBBM and the Old Mission Dam. The remainder of the City so demarcated is hereafter referred to as "Urban San Diego."

characteristic site periods and shallow stiff deposits have short periods. Most amplification of earthquake ground motion is likely to occur at or near the characteristic period of the soil deposit. Consequently, structures which have their characteristic period similar to that of the soil deposit will generally be subjected to increased seismic forces due to quasi-resonance with the amplified motion. In other words, tall flexible structures will be most affected when located on deep soft soil deposits. Conversely, low rigid structures will be most affected when located on stiff or hard soil deposits or rock.

As indicated, the most predictable source of significant seismic shaking in San Diego is the Elsinore fault. The combination of long duration, low frequency, and low severity bedrock motions from a large event on the Elsinore fault makes the effect of the soil amplification especially important in determining damage severity from this earthquake source. The differences among, and extent of Modified Mercalli Intensities VI, VII, and VIII will likely be controlled by local soil conditions.

Seismically Induced Settlement. Settlement of the ground may come from fault movement, slope instability, and liquefaction and compaction of the soil at the site. Settlement per se is not necessarily destructive; rather, it is usually differential settlement that damages structures. Differential or uneven settlement occurs when the subsoil at a site is of non-uniform depth, density, or character, and when the severity of shaking varies from one place to another.

Liquefaction refers to the process in which a soil below the water table becomes converted to a fluid state and loses its strength. Typically, loose fine-grained sands and silts below the water table are most susceptible to this process, which often occurs during major earthquakes. Medium dense sands and silts below the water table may also liquefy if the shaking is of sufficient severity and duration. In that regard, Modified Mercalli Intensity VII may be sufficient to cause localized liquefaction of especially susceptible deposits.

The consequences of liquefaction depend mainly on local site and subsurface conditions. The most favorable condition is one in which the zone of liquefaction is limited to a small area at some depth below the ground surface and in which no lateral sliding takes place. Structures with specially designed foundations may be expected to maintain their foundation integrity and not suffer serious consequences due to liquefaction under these circumstances. Where sliding and lateral movement is likely because of sloping ground or bay bottom conditions, the effects of liquefaction should be more severe. In such cases acres of land may slide and break up as they move, thereby imperiling if not destroying any supported structures.

Soil lurching is the movement of land at right angles to a cliff, stream bank, or embankment due to the rolling motion produced by the passage of surface waves. It can cause severe damage to buildings because of the formation of cracks in the ground surface. The effects of lurching are likely to be most significant near the edge of alluvial valleys or shores where the thickness of soft sediments varies appreciably under a structure. Underground utilities placed in soft soils are especially subject to rupture.

Tsunamis and Seiches. A tsunami is a sea wave generated by a submarine earthquake, landslide, or volcanic action. A major tsunami from either of the latter two events is considered to be remote for the San Diego area. However, submarine earthquakes are common along the edge of the Pacific Ocean, and all of the Pacific coastal areas are therefore exposed to the potential hazard of tsunamis to a greater or lesser degree.

Tsunamis travel across the oceans as powerful, long but low waves typically more than 100 miles long, and only one to two feet high. Traveling at velocities of 300 to 400 miles per hour in the Pacific, such waves in the open cause no problems. However, as the tsunami waves approach the coastline, they are affected by shallow bottom topography and the configuration of the coastline, which transforms them into high and potentially devastating waves. Even if large waves do not occur, strong currents (as fast as 40 feet per second) can cause extensive coastal damage.

Because of the width of the continental shelf extending offshore from San Diego, it is believed that tsunamis of distant origin are necessarily too weakened upon their arrival in these waters to wreak more than minimal damage. Moreover, based on current information, any movements along San Diego's offshore fault system are expected to be primarily horizontal. Since the most damaging tsunamis are usually associated with vertical tectonic displacements, it is questionable whether a significant tsunami could be experienced locally.

A seiche is an earthquake-induced wave in a confined body of water, such as a lake, reservoir, or bay. Resulting oscillations could cause waves up to tens of feet high, which in turn could cause extensive damage along the shoreline. The most serious consequence of a seiche would be the overtopping and failure of a dam. Present data precludes the determination of the probability of damaging seiches within the City of San Diego.

Landslide and Slope Instability. Old landslides and landslide-prone formations are the principal non-seismic geologic hazards with the City. Conditions which should be considered in regard to slope instability include inclination, characteristics of the soil and rock orientation of the bedding, and the presence of groundwater.

The causes of landslides start with the preexisting condition inherent within the rock body itself that can lead to failure. The actuators of landslides can be both natural events such as earthquakes, rainfall and erosion and human activities.

Those induced by man are most commonly related to large grading activities which can cause new slides or reactivate old ones when compacted fill is placed on potentially unstable slopes. Cutting operations, another human activity, contribute to landslides when the lateral support near the base of unstable hillside areas is removed.

Some of the areas where landslides have occurred are: Otay Mesa; the east side of Point Loma; the vicinities of Mount Soledad, Rose Canyon, Sorrento Valley, and Torrey Pines; portions of Rancho Bernardo and Peñasquitos; and along Mission Gorge in the vicinity of the second San Diego Aqueduct.

San Diego's **coastal bluffs** are land features that have resulted from the actions of sea wave forces on geologic formations and soil deposits. Geologic factors that affect the stability of bluffs include jointing and fracturing, faulting and shear zones, and base erosion. Measures for their preservation must take into account whether the particular bluff area concerned is in a transitory state (that is, changing relatively quickly due to the action of the forces of nature), or whether it is relatively stable by virtue of the fact it is very resistant to natural forces. Where bluffs are changing relatively quickly by action of nature, measures to retain bluff degradation may be necessary in order to preserve the bluff line.

The coastal bluff areas generally extend from Los Peñasquitos Lagoon to Scripps Pier; from La Jolla Cove to the northern end of Mission Beach; and from Ocean Beach Pier to the southern tip of Point Loma. In the Torrey Pines area the coastal bluffs have experienced sizeable landslides where oversteepening of the seacliff has resulted in unstable conditions. In addition, rock falls have occurred in the Sunset Cliffs area due to undermining of the sandstone.

Existing Structural Hazards

General. Along with all other California cities, San Diego has been required to enforce the State Earthquake Protection Law (Riley Act) since its enactment in 1933. However, the seismic resistance requirements of the law were minimal for many years and San Diego did not embrace more restrictive seismic design standards until its first adoption of the Uniform Building Code in 1951. As a consequence, the seismic-resistant qualities of all buildings constructed prior to 1933, as well as those of higher buildings constructed prior to 1951, must be regarded as somewhat suspect.

It is roughly estimated that about 1,000 (mainly nonresidential) masonry buildings within the City may constitute structural hazards. The majority of these are located in the downtown area; however, appreciable numbers are also found in the older sections of the Hillcrest, North Park, and La Jolla business districts, among others. For the most part these buildings are of unreinforced masonry construction utilizing terra cotta hollow blocks joined by sand-lime mortar for bearing walls.

Recent experience, particularly that derived from the San Fernando earthquake in 1971, supports the following broad generalizations about the earthquake performance of various classes of buildings:

- **Ductile steel and ductile reinforced concrete frame buildings** (as defined in Uniform Building Code) - highly resistant to structural damage; may suffer nonstructural damage.

- **Vertical load-bearing steel and reinforced concrete frame buildings braced against lateral forces** - perform well but may suffer some structural as well as nonstructural damage.

- **Unreinforced masonry buildings of all types** - highly vulnerable to damage.*****

- **Reinforced brick and concrete block masonry buildings** - perform well but may suffer some structural as well as nonstructural damage.

- **Pre-engineered and other light steel and sheet metal buildings** - usually perform extremely well.

- **Residential buildings** - Traditional wood frames with wood or stucco siding usually behave well but may suffer damage. Modern design open-type houses with large glass openings, split-level houses, and two-story houses or apartments with large garage openings in the first story are vulnerable to earthquake damage.

Schools. State legislation provides that all pre-Field Act (1933) school buildings found to be unsafe shall not be used for classroom purposes after June 30, 1975, if a construction contract to replace such unsafe structures had not been entered into by that date. Structural engineering surveys conducted locally in 1969 determined that there were unsafe school buildings at seventeen elementary and eight secondary school sites. All the schools in question have been replaced by structures built to meet current code standards.

Hospitals. Since 1972, the State Department of Public Health, through contract with the Department of General Services, has reviewed the plans for the construction or alteration of any hospital building. In performing this function it requires that geological data be reviewed by an engineering geologist and that structural design data be reviewed by a structural engineer. Under the same contract, the Department of Public Health observes the construction of, or addition to, any hospital building or, if the work alters structural elements, the reconstruction or alteration of any hospital buildings it deems necessary for the protection of life and property.

Dams, since 1929, the state of California has held full responsibility for the regulation and supervision of all dams and reservoirs within its territory that are not federally owned. This responsibility is exercised through the Department of Water Resources' Division of Safety of Dams, which conducts periodic inspections and reevaluations of all dams and reservoirs under state jurisdiction - including the fourteen owned by the City of San Diego.

Past inspections of City dams have resulted in major repairs and alterations being made on Lake Hodges Dam (in 1935) and on Murray Dam (in 1969) in order to bring these up to structural standards. More recently, Division of Safety of Dams engineers found that "under certain storm conditions, and also under certain earthquake loadings. Upper Otay Dam would be overstressed." Therefore, the City was asked to make a study to determine an operating water level that would not permit high stresses to develop. In another action, division engineers restricted the maximum water surface of El Capitan Dam to an elevation 30 feet lower than spillway, although permitting the temporary storage of storm inflows above the specified level for short periods.

Utility Systems. The extent to which a modern city is dependent upon maintaining its utility services is obvious. Even brief interruptions in the flow of water, sewage, energy, and communications can have near-catastrophic results. Nonetheless, utility systems are peculiarly subject to failure in earthquakes because of their largely underground location, and the inevitability that some lines will cross faults. Further, the California Joint Committee on Seismic Safety contends that the state-of-the-art of "lifeline" earthquake engineering is comparatively low in relation to building earthquake engineering.

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* While this is generally true, it should be noted that individual un-reinforced masonry buildings because of their particular characteristics, i.e., high level of maintenance, location, roof system, interior partioning, etc., may be able to withstand greater lateral forces than this statement would imply.

Preventive measures can and must be undertaken. Major transmission lines crossing fault zones should be carefully designed and constructed so that ground movement can be accommodated. In general, this suggests the use of flexible pipe and rubber ring joints rather than rigid lengths of pipe that are welded or glued. Frequent valving to permit the isolation of broken mains is also indicated, along with provision for utilizing alternate ("redundant") routes or systems.

Question of Risk

A consideration of seismic safety inevitably evokes the question of risk. Within the San Diego area there is no absolute freedom from the associated threats of seismic activity, loss of life, and property damage. In response to this, various measures can be taken to diminish the scale of such threats. However most of these measures translate themselves into higher developmental and construction cost. Therefore, the dilemma arises - how much "protection" from risk should be purchased?

A major factor complicating the protection from risk calculation is the inability to accurately predict the time, place, and severity of a seismic occurrence. Another complicating factor of significance is the public's tendency to change its mind over time as to what constitutes an acceptable risk. Thus, immediately following a damaging earthquake there is typically a great clamor demanding that extreme protective measures be undertaken. Then, as the event recedes in human memory, a steadily lessened concern is likely to be manifested.

In the case of hazardous structures, the problems associated with risk and abatement are complex economic, social, psychological, political, legal, planning, and jurisdiction issues. The engineering problems are relatively easy to identify by comparison.

Because risk is a function of chance there is an inherent degree of uncertainty in using risk as a basis for land use planning. However, land use planning decisions can be made if the risks arising from environmental hazards coexisting with any proposed or existing development program or structure are identified, and the risks compared with risks of alternatives. If risk reduction measures are enacted, the amount of damage to property and injury to life will be reduced over a given period of time. In this respect, risk can be a framework for land use decision-making.

Every seismic hazard has an associated element or risk. This risk has two aspects: one is the chance that the hazard will in fact occur, the other aspect is the chance that if the hazard does occur, the measures taken to mitigate the hazard will be sufficient to reduce the damage to life and property to some pre-determined acceptable level. Acceptable risk could be defined as the level of risk below which no specific action of responsibility of local government is necessary, other than creating public awareness of the risk. While there is technological capability to control or reduce the occurrence of seismic hazards, adverse effects could be minimized by land use planning which is cognizant of seismic risk.

The City currently has a set of guidelines which correlates acceptable risk of various land uses with seismic (and geologic) conditions identified for the site. (see Tables 18, 19, 20). Large and complex structures, and places attracting large numbers of people, are most restricted as to geographic location based on site conditions. These facilities include dams, bridges, emergency facilities, hospitals, schools, churches, and high density residential structures (see Table 19, group I, II, and III). Low and medium residential development is considered land use of a lesser

sensitivity and is therefore "suitable" or "provisionally suitable" (requiring mitigation) under most geologic conditions. Uses with only minor or accessory structures can be located on sites with relatively greater risk due to lower user-intensity associated with activities such as parks and open space, agriculture, and most industrial land uses. Further guidance for site development is provided in Table 20 as various types of geotechnical investigations which should be performed prior to site development. The scope of investigations can range from feasibility surveys to extensive field exploration and engineering/geologic/seismic analyses depending upon the complexity of site conditions and the intensity of the proposed land use. Continued consideration of this land use hazard matrix in land use decisions could provide a degree of risk evaluation.

GOALS

- GUIDANCE OF FUTURE DEVELOPMENT WHICH MAY BE INAPPROPRIATE LAND USE BASED ON IDENTIFIED SEISMIC RISK.

- ABATEMENT OF EXISTING STRUCTURAL HAZARDS WHICH COULD THREATEN LIFE AND PROPERTY IN CASE OF SEISMIC EVENT.

GUIDELINES AND STANDARDS

The generalized relationships that should prevail among seismic and geological hazards, risk zones, and land use types are portrayed in the following tables.

RECOMMENDATIONS

- Ensure that current and future community planning and other specific land use planning studies continue to include consideration of seismic and other geologic hazards. This information should be processed in the Environmental Impact reports which are a part of every plan.

- Keep updated those citywide maps showing faults, geologic hazards, and land use capabilities, and related studies used to determine suitable land uses.

- Utilize the findings of the beach and cliff erosion survey being undertaken to determine the rate and amount of coastline modification in the City.

- Continue to require submission to geologic and seismic reports, as well as soils engineering reports, in relation to applications for land development permits whenever geologic problems are suspected.

- Undertake a citywide program of identifying those structures that constitute seismic hazards. Judgments on hazardous-building abatement should take particular account of;

    - the desirability of preserving historical and unique structures and their architectural appendages;

    - special geologic and soils hazards;

    - the socio-economic consequences of the attendant relocation and housing programs.

- Continue to employ a qualified geologist/ seismologist on a consulting basis to review geologic/seismic studies required to be submitted to the City.

- Participate with other jurisdictions in setting up a geologic "data bank" for the San Diego area.

- Urge the State Legislature

    - to amend the Community Redevelopment Law so as to expressly provide that seismically hazardous structures may constitute a condition of blight;

    - to enact legislation that would empower local governing bodies to require owner of pre-Riley Act buildings to have detailed structural inspection made of these buildings and to have the remedial work done within a reasonable time.

- Create a committee to review local lifelines utility systems whether publicly or privately operated for the purpose of;

    - ascertaining their vulnerability to seismic and other geologic hazards and

    - to recommend specific measures for lessening of such vulnerability.

TABLE 18
Hazard-Risk Zone Correlation

Geotechnical	Feature or Phenomenon		Hazard Category No. (See Geologic Hazards Map)	Land-Use Capability Map Risk Zone A		B		C		D	
				-- Increasing Relative Risk →							
GROUND RUPTURE	FAULTS	Active *(*As defined by State)	None Recognized								•
		Potentially Active*	See Fault Map							•	
		Inactive, Presumed Inactive or Activity Unknown	See Fault Map					•			
POTENTIAL SLOPE INSTABILITY	SLIDES	Confirmed, Known, or Highly Suspected	21							•	
		Possible or Conjectured	22					•			
	SLIDE-PRONE FORMATION	Friars Formation: Neutral or Favorable Geologic Structure	23					•			
		Friars Formation: Thick Section and/or Unfavorable Geologic Structure	24						•		
		Ardath Shale: Neutral or Favorable Geologic Structure	25				•				
		Ardath Shale: Thick Section and/or Unfavorable Geologic Structure	26						•		
		Otay Formation	27						•		
POTENTIAL GROUND FAILURE	LIQUEFACTION	Potential Relatively High: (Major Alluvial Valleys, Groundwater 25' +)	31						•		
		Potential Relatively Low: (Upper Drainage Area of Major Valleys, Groundwater 25' + (Fluctuates Seasonally)	32				•				
COASTAL BLUFF STABILITY	GENERALLY UNSTABLE	Numerous Landslides, High Steep Bluffs, Rapid Erosion	41							•	
		Unfavorable Bedding Places, Locally Rapid to Generally Rapid Erosion	42						•		
		Unfavorable Jointing, Locally Rapid Erosion	43						•		
	MODERATELY STABLE	Mostly Stable Formation With Some Locally Rapid Erosion	44					•			
		Some Landslides, Slow Erosion	45				•				
		Locally Unfavorable Geologic Structure, Slow or No Erosion	46				•				
	GEN. STABLE	Very Slow Erosion: No Slides	47			•					
		Broader Beach Areas: Developed Harbor	48			•					
ALL OTHER TERRAIN CONDITIONS	GENERALLY STABLE	Relatively Level Mesas – Underlain by Terrace Deposits and Bedrock	51	•							
		All Remaining Level and Sloping Areas, Minor Alluvial Valleys, Low Terraces, Rolling Hillside to Steep Mountainous Terrain	52		•	•	•	•			

** Table numbers correspond to numbers used in study report.

RISK ZONE RATING KEY
A - Nominal B – Low C – Moderate D – High
AB, BD, AC – Variable Risk (Hazard Category No. 52 only)
GENERAL NOTES:

All risk zone ratings and hazard area boundaries subject to change, based on new data. Although flood hazard was not specifically evaluated for this study, it is taken into account in a general manner in the risk rating of potential liquefaction.

Guidelines used for assigning risk rating within hazard category No. 52: *Rating*

1. *Mostly developed area, essentially on mesas or within tracts developed by minimal grading ..... AB*
2. *Generally low slopes adjoining canyon or bay areas; may include low, nearly flat terraces; graded tracts having low to moderate slope heights ..... AB or B*
3. *Moderate to high natural or graded slopes with no special hazards identified nearby ..... B*
4. *Mostly moderate to high, locally steep natural or graded slopes; some hazards in adjoining areas or within area ..... BC*
5. *Areas including all the above ..... AC*

Multiple risk designations were permitted within a single category No. 52 area, without a line boundary separating then. Where a lesser hazard (e.g., an inactive fault) extended into a confirmed slide, the higher risk predominates; however, the approximately fault location is shown by a dashed boundary.

TABLE 19
Risk-Related Lane Uses

Building Type/Land Uses			Risk Zone --- Increasing Relative Risk → A	B	C	D
↓ Generally Increasing "Acceptable Risk"	Group I	Nuclear Facilities, Large Dams, Electrical Power Systems	•	O	X	X
	II	Hospitals; Fire, Police, Emergency Communication Facilities; Critical Transportation Elements, such as Bridges, Overpasses; Smaller Dams; Important Utility Centers	•	O	X	X
	III	Schools, Churches, Large or Highrise Buildings, or Other Places Normally Attracting Large Concentrations of People, such as Civic Buildings, Large Commercial Structures, Most Roads, Other Utilities.	•	•	O	X
	IV	Residential (Single-Family Residence, Apartments, etc.) Most Commercial and Minor Public Structures.	•	•	O	see foot – O Note No. 1
	V	Most Industrial, Other Minor Commercial (Warehouses, Wharves, Docks)	•	•	O	see foot – O Note No. 1
	VI	Agriculture, Marinas, Managed Mineral Resource Development, Parks, Other Open Space, Refuse Disposal Sites.	•	•	•	•

FOOTNOTES:

1. Development may be feasible in slide areas if adequate provisions are made for stabilization; not generally feasible in potentially active fault zones.

GENERAL NOTES: This chart is for general land-use planning only. Suitability for specific uses for a specific site must be confirmed by further investigation. An area evaluated as unsuitable for a particular does not necessarily preclude the use. If no other more suitable alternative sites are available, and provided that all potential hazards can be mitigated.

SYMBOLS: • Suitable
O Provisionally Suitable
X Generally Unsuitable

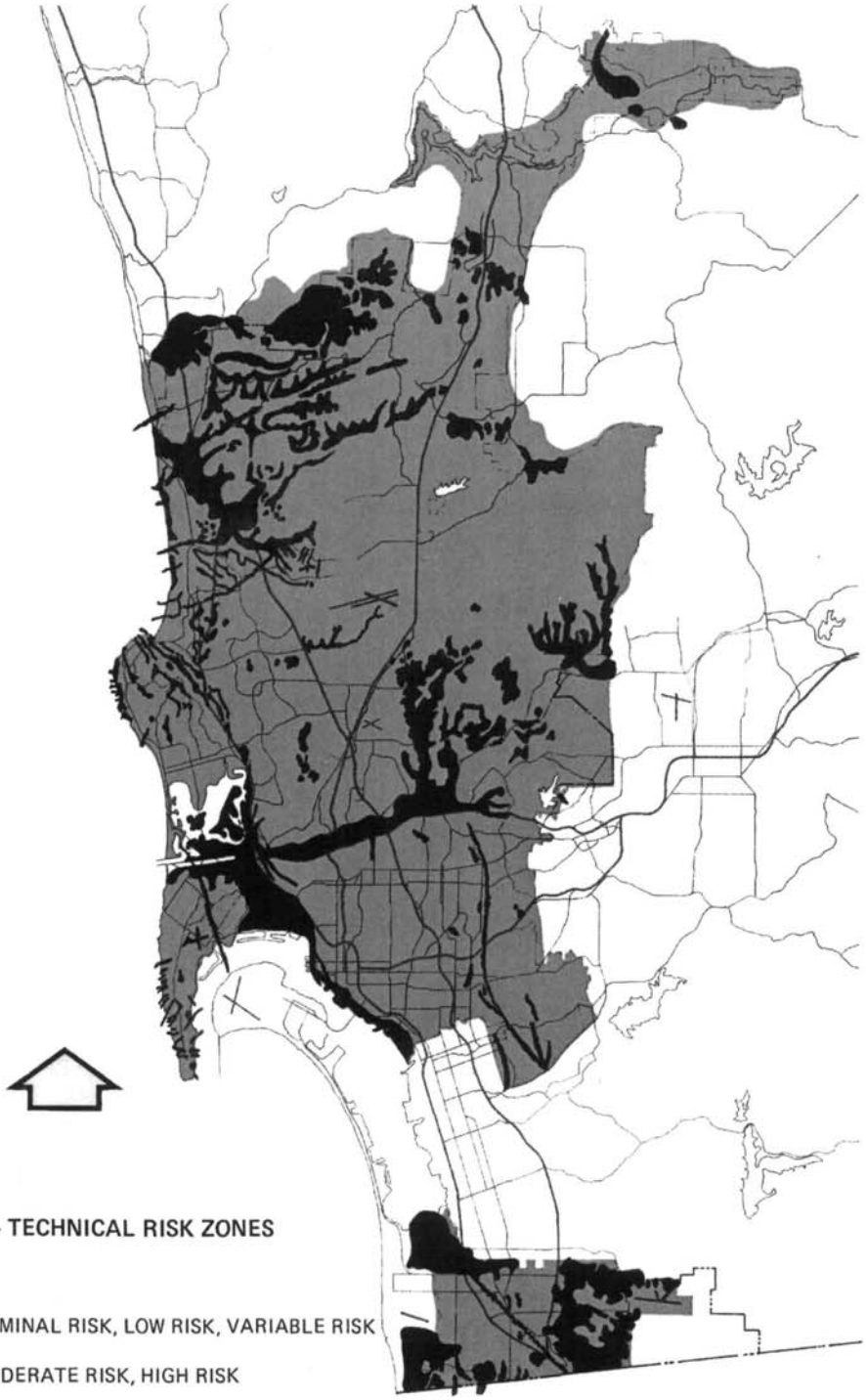
TABLE 20
Recommended Geotechnical Investigations

Risk Zone (Geotechnical Land-Use Map*)	Geotechnical Hazard Category No. (Geologic Hazards Map*)	Type Investigation [1] By Bldg. Type/Land use Group			Comments, Special Considerations
		Geologic	Soil	Seismic	
A	51 52	I-II I-III	I-V I-V	I-III [2] I-III	Footnotes: (1) Scope of investigations can range from very preliminary, feasibility type studies utilizing available research data (at the planning stages of a project) to in-depth investigations requiring extensive field exploration and engineering/geologic/seismic analysis (at the design/construction stage) depending upon the complexity of site conditions and the importance of the proposed structure. (2) Refer to the special state regulations regarding investigation standards and construction codes for schools and hospitals; also federal regulations for nuclear facilities. Commonly only "high-rise" structures in Groups II and III would require a seismic investigation in Risk Zones A and B. (3) Land uses, such as disposal sites or mineral resource development (open-pit mines, oil fields) may require a geologic investigation to evaluate their environmental impact, as regards slope stability or subsidence effects. Environmental impact reports may be required to meet state as well as federal guidelines, depending on jurisdiction. (4) Refer to state legislation regarding identification of active and potentially active faults (Alquist-Priola Hazard Zones Act); investigations to evaluate ground rupture hazard and seismic shaking. H.U.D. requires seismic analysis of F.H.A. financed developments in vicinity of active or potentially active faults.
B	25, 45, 46 47, 52	I-V	I-V	I-III	
	32 48	VI [3] ---	I-V I-V	I-III I-III	
C	Inactive Fault 22-24 26, 27 42-44 52	I-V	I-V	I-III	
	31	VI	I-V	I-V	
D	Potentially Active Fault [4]	I-V	I-V	I-V	
	27, 41	I-V	I-V	I-III	

** Available at a scale of 1" – 800' from the City of San Diego Mapping Section.*

SOURCES

Seismic Safety Study for the City of San Diego, Woodward-Gizienski and Associates and F. Beach Leighton and Associates, May 1974.
Geologic Hazards in San Diego, Earthquakes, Landslides, Floods, edited by Patrick L. Abbott and Janice K. Victoria. The San Diego Society of Natural History, 1977.
Model Seismic Safety Element, Final Report, Comprehensive Planning Organization, February 1974.



GEO - TECHNICAL RISK ZONES

NOMINAL RISK, LOW RISK, VARIABLE RISK

MODERATE RISK, HIGH RISK

AREAS WHERE KNOWN OR SUSPECTED SEISMIC AND/OR GEOLOGIC HAZARDS EXIST (E.G. LANDSLIDES, FAULTS, SOILS, SUBJECT TO LIQUEFACTION). DEPENDING ON THE NATURE OF THE HAZARD, THE GEO-TECHNICAL RISK ZONE WAS ESTABLISHED. SOURCE: SEISMIC SAFETY STUDY FOR THE CITY OF SAN DIEGO, WOODWARD-GIZIENSKI & ASSOCIATES AND F. BEACH LEIGHTON & ASSOCIATES, MAP 1974.

URBAN DESIGN ELEMENT

Urban Design

Urban Design is a process to foster environmental quality as the City changes. It is the complex interaction of physical and psychological factors relating to our urban environment. In a real sense, urban design provides the sense of place, of diversity and of distinctiveness so often lacking in land use plans.

"How does a city face what is really a massive socio-esthetic catastrophe? How does it keep its individual quality and style against the onslaught of scaleless, qualityless, value-destroying, speculative construction that produces pedestrian look-alikes and disaffected citizens without pride of place or community?. . .

How do you help cities to think about the problem and to devise answers; ways to exercise the 'city option' of style, quality and continuity that make a satisfying and identifiable place to live"?

Ada Louise Huxtable "Lessons in How to Heal the City's Scars"

"The concept of the public welfare is broad and inclusive. The values it represents are spiritual as well as physical, aesthetic as well as monetary. It is within the power of the legislature to determine that the community should be beautiful as well as healthy, spacious as well as clean, well-balanced as well as carefully patrolled."

U.S. Supreme Court, 1954 Berman vs. Parker, 348 US 26, 75 Supreme Court 98, Ed. 27 (1954)

The pattern of a city is the visual framework composed of the natural base upon which the city rests, together with the built or man-made environment. The pattern is not rigid but rather one of balance and compatibility with diverse and random features fitting together to form the whole. The pattern of San Diego's appearance is perhaps the basis of the city's quality.

San Diego will grow and change, but the City is already here and what is here will continue to be a major determinant of form and quality.

A careful look at what should be saved and repaired in the existing City is the first task. Conservation of the natural setting is an urgent priority as is preserving the older parts of the City. Much of the City needs repair and restoration in varying degrees. As in any city that has grown fast, mistakes have been made. Public use and public access have been preempted. The public environment is all too often simply the leftover space between.

The Urban Design Element deals with the preservation, rehabilitation, and reuse of existing man-made facilities. The element also addresses the integration of new development with the natural landscape or within the framework of an existing community, with minimum impact on that community's physical and social assets. The Urban Design Element will also serve as a springboard for innovative legislation to deal with development more effectively than present controls do.

This element is vital in implementing logical and planned growth as well as cohesiveness between all other elements in the General Plan. The various elements address the quality, location, timing and sequence of development and facilities, but they do not necessarily address the issue of form and human feeling that new development should take, nor do they describe an ideal to which new development should aspire. These issues are urban design issues. Implementation of the other elements of the General Plan alone will not improve the quality of the environment, but the combination of these elements carried out under the guidance of the criteria of the Urban Design Element will more fully address that quality.

An Image of San Diego

FINDINGS

The image of the City can be more fully defined as **environmental cognition**. It refers to the awareness, images, information, impressions, and beliefs that individuals and groups have about the elemental, structural, functional, and symbolic aspects of real and imagined physical, social, cultural, economic, and political environments.

The image most people have of San Diego is generally positive and full of affection. The physical setting appears as the most important feature. The City's site, its openness, its sun and mild climate, the sea and the contrasts of the landscape are unique assets. However, this setting is being destroyed. Development here is a copy of development everywhere in this country, rather than a pattern suited to the needs of San Diego. Freeways, arterial streets, airports, industrial areas and shopping centers, all look familiar. The newer residential areas are quite the same. It is only in the older communities where a character has evolved which is comfortable and humane.

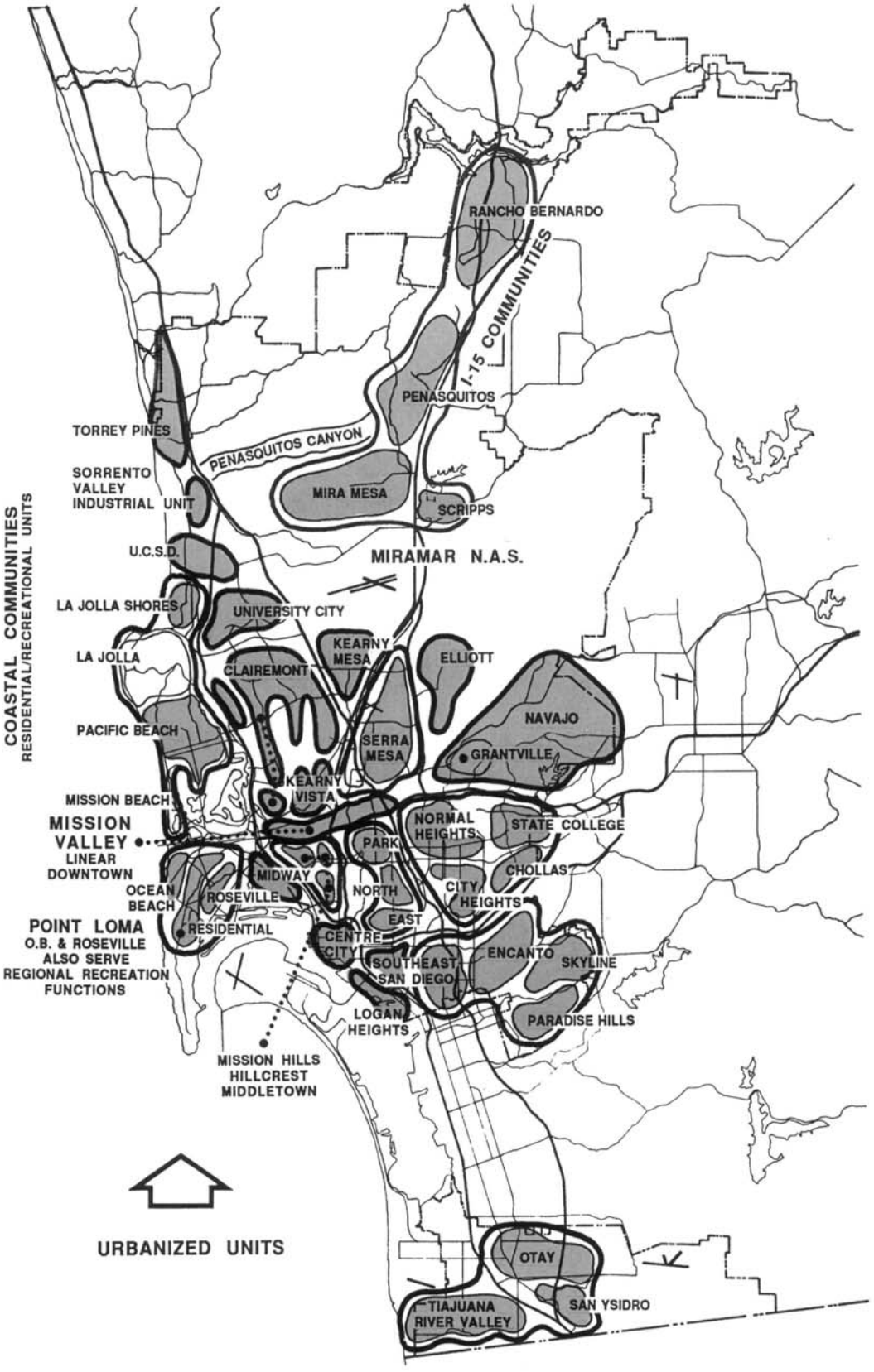
The image of the City is composed of the balance of many features fitting together to form the whole. These features consist of:

Water, the Ocean and San Diego and Mission Bays which are an edge of the City and a part of this climate and lifestyle. The water is open space, a focus of major view and a place of human activity.

Mesas, Canyons and Hillsides which allow the City to be seen, define communities and neighborhoods and which give communities an opportunity to be unique.

Streets and Highways which determine in many cases the character of development, accommodate man's movements and joins the communities of the City.

Residences, which occupy more of the land in San Diego than any other single use. Most neighborhoods are of good quality, varied and well maintained. However many large single-family housing areas tend to be monotonous and lack distinctiveness. Monotony is most acute in the newer areas containing many houses of similar age.

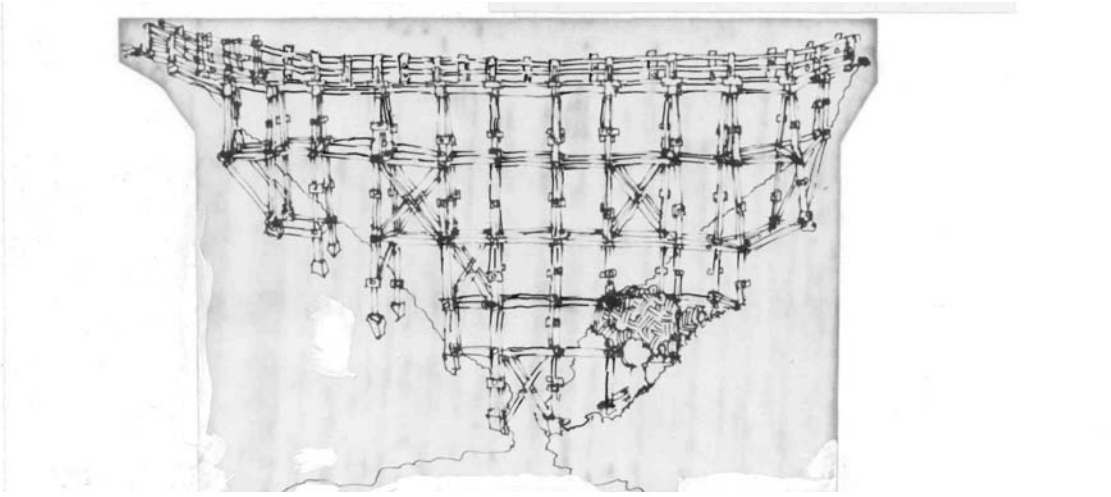

COASTAL COMMUNITIES
RESIDENTIAL/RECREATIONAL UNITS
RANCHO BERNARDO
I-15 COMMUNITIES
PENASQUITOS
TORREY PINES
PENASQUITOS CANYON
SORRENTO VALLEY INDUSTRIAL UNIT
MIRA MESA
SCRIPPS
U.C.S.D.
MIRAMAR N.A.S.
LA JOLLA SHORES
UNIVERSITY CITY
LA JOLLA
KEARNY MESA
CLAIREMONT
ELLIOTT
NAVAJO
PACIFIC BEACH
SERRA MESA
GRANTVILLE
KEARNY VISTA
MISSION BEACH
MISSION VALLEY
LINEAR DOWNTOWN
NORMAL HEIGHTS
STATE COLLEGE
PARK
CHOLLAS
MIDWAY
OCEAN BEACH
ROSEVILLE
NORTH
CITY HEIGHTS
EAST
POINT LOMA
O.B. & ROSEVILLE ALSO SERVE REGIONAL RECREATION FUNCTIONS
RESIDENTIAL
CENTRE CITY
SOUTHEAST SAN DIEGO
ENCANTO
SKYLINE
LOGAN HEIGHTS
PARADISE HILLS
MISSION HILLS
HILLCREST
MIDDLETOWN
URBANIZED UNITS
OTAY
TIAJUANA RIVER VALLEY
SAN YSIDRO

Zoning and subdivision practices promoting uniform development have encouraged endless repetition of house styles. In addition many current codes were written long after much of our existing housing was built, and their excessive standards now frustrate our avowed conservation objectives.

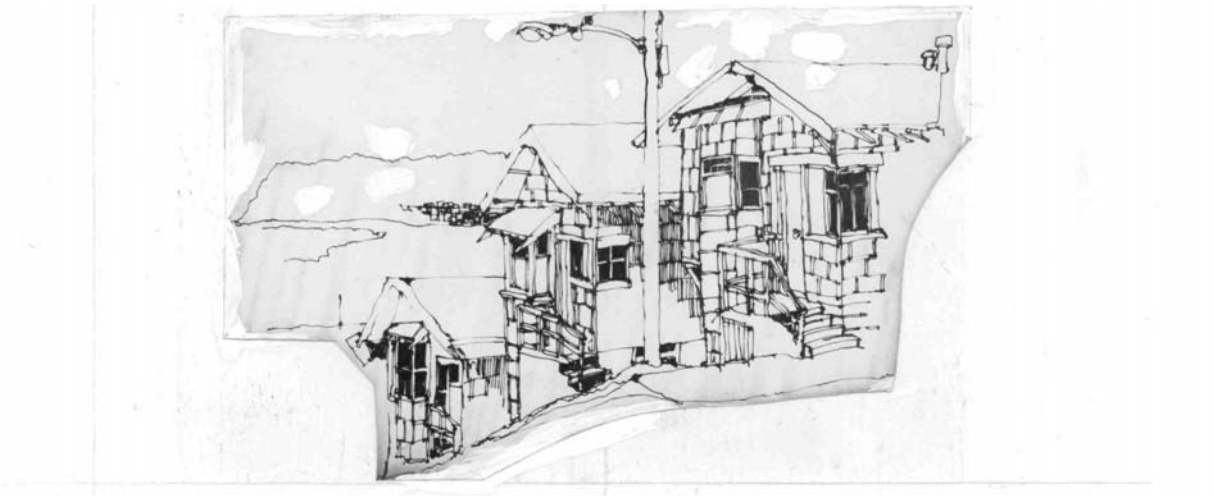
Other Buildings and Structures and clusters of them, which reflect the character of communities and centers of activity, provide reference points for human orientation and may add to (but can detract from) topography and views.

The image of the City has important psychological effects upon its residents. It provides organization and measured relationships that give a sense of time and place and reduce the amount of stress in urban life. Views on a pleasant and varied pattern give a comforting sense of living with the environment.

The image also helps people to identify communities and neighborhoods, particularly those in which they themselves live. Recognition of such areas by their prominent features,



their edges and their centers for activity breaks up a large and intense City into units that are visually and psychologically manageable. Furthermore, awareness of communities and neighborhoods increase the pride in one's area and in one's own life.

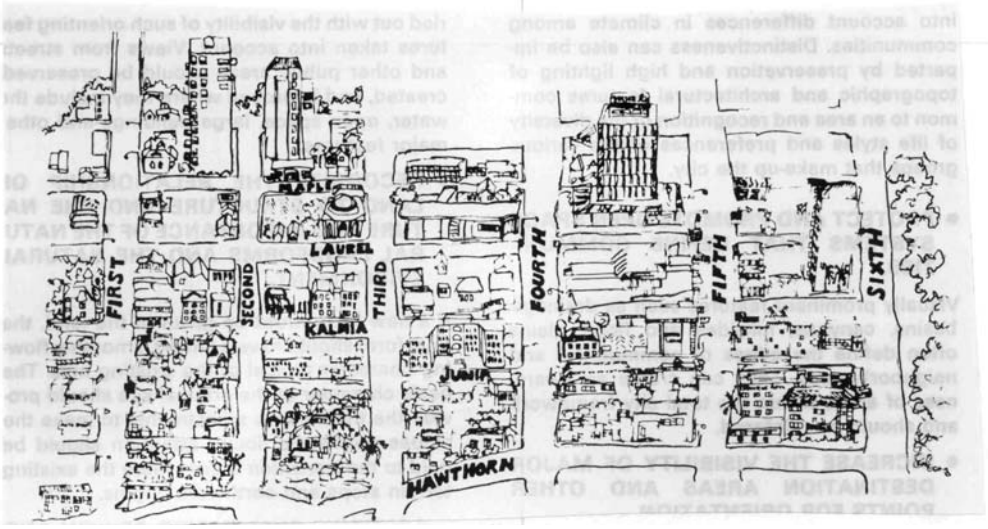


GOAL

- DEVELOPMENT OF A COMPREHENSIVE CONCERN FOR THE VISUAL AND OTHER SENSORY RELATIONSHIPS BETWEEN PEOPLE AND THEIR ENVIRONMENT.

GUIDELINES AND STANDARDS

- RECOGNIZE AND PROTECT MAJOR VIEWS IN THE CITY WITH PARTICULAR ATTENTION TO THOSE OF OPEN SPACE AND WATER.



Views contribute immeasurably to the quality of the City and to the lives of its residents. Protection should be given to major views whenever it is feasible, with special attention to the characteristic views of open space and water that reflect the natural setting of the City and give a colorful and refreshing contrast to man's development.

- RECOGNIZE THAT BUILDINGS, WHEN SEEN TOGETHER PRODUCE A TOTAL EFFECT THAT CHARACTERIZES THE CITY AND ITS COMMUNITIES.

The relationships of building forms to one another, to other elements of the City image and to the City's residents should be moderated so that effects will be complementary and harmonious. The general pattern of development should emphasize the topographic form of the City and the importance of centers of activity. Structures should stand out prominently in the City scape only when they signify the presence of important community facilities and occupy visual focal points that benefit from buildings and structures of such design.

- EMPHASIZE THE UNIQUE CHARACTER OF EACH COMMUNITY.

The design of public improvements and to some extent those for private properties as well, should capitalize on opportunities to emphasize the distinctive nature of communities and neighborhoods. Landscaping can take into account differences in climate among communities. Distinctiveness can also be imparted by preservation and high lighting of topographic and architectural features common to an area and recognition of the diversity of life styles and preferences of the various groups that make up the City.

- PROTECT AND PROMOTE OPEN SPACE SYSTEMS THAT DEFINE COMMUNITIES.

Visually prominent features such as drainage basins, canyons, hillsides and floodplains often define the edges of communities and neighborhoods. They can create an awareness of areas within the total City framework and should be reinforced.

- INCREASE THE VISIBILITY OF MAJOR DESTINATION AREAS AND OTHER POINTS FOR ORIENTATION.

The design of streets, the determination of street use and the control of land uses and building types along streets should all be carried out with the visibility of such orienting features taken into account. Views from streets and other public areas should be preserved, created, and improved where they include the water, open space, large buildings and other major features.

- RECOGNIZE THE RELATIONSHIP OF LAND TO STRUCTURE AND THE NATURE AND IMPORTANCE OF THE NATURAL LANDFORMS AND THE NATURAL EVIRONMENT.

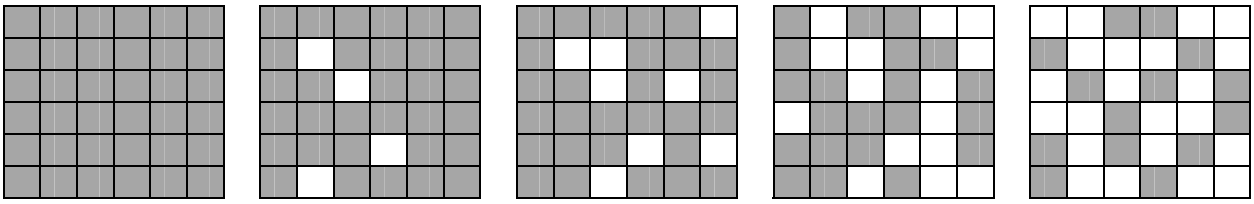
If a new form must be given to the land, the final form should have a strong, smoothly flowing character typical of the existing hills. The basic character of the original site should provide the theme with adjustments to make the slopes gentle. Particular attention should be paid to the transition areas where the existing terrain stops and earthwork begins.

- CONTINUE SYSTEMATIC REVIEW AND EVALUATION OF THE CITY'S ZONING, SUBDIVISION, AND BUILDING REGULATIONS TO ENSURE A CONSCIOUS CHOICE OF THE BEST OF AVAILABLE OPTIONS, INSTEAD OF MERE SATISFACTION OF MINIMUM STANDARDS.

The development process should, insofar as possible, be shaped by planning and regulatory bodies, lenders, accountants, appraisers, and other participants so that developers, homebuyers, and other consumers come to perceive the maintenance and enhancement of the quality of the environment as the key to profitability.

The two colors on a checkerboard appear to advance or recede one from the other from time to time. This is an instance of the optical phenomenon known as figure ground. The dominant color is referred to as the figure, the other as the ground. The relationship between hillside structures and hillside vegetation is such a figure ground relationship.

When the hillside can be read as the ground within which the figure rests, the hillside will retain its natural visual appearance. When development is so dominant that it becomes the ground, the hillside character has irreversibly changed.



Natural site vegetations is the ground

Development starts, structures is the figure.

Development continues.

Equilibrium attained.

Figure/Ground reverses. Hillsides lose character.

- EVALUATE DISCRETIONARY ACTIONS THAT RELATE TO PLANNING, URBAN DESIGN AND IMPACT CRITERIA RATHER THAN EQUITY-TYPE VARIANCE FINDINGS:

    - That the location, size, design, and operating characteristics of the site and the proposed development will be compatible with and will not adversely affect the livability or appropriate development of abutting properties and the surrounding neighborhood. With consideration to be given to harmony in scale, bulk, coverage, and density, to the availability of civic facilities and utilities, to the harmful effect, if any, upon desirable neighborhood character, to the generation of traffic and the capacity and physical character of surrounding street, and to any other relevant impact of the development;

    - That the location, design, and planning of the site and the proposed development will provide a convenient and functional living, working, shopping, or civic environment, and will be as attractive as the nature of the use and its location and setting warrant;

    - That the proposed development will enhance the successful operation of the surrounding area in its basic community functions, or will provide an essential service to the community or region.

RECOMMENDATIONS

- Prepare guidelines for the systematic consideration of visual and sensory quality in making environmental impact statements.

- Develop water conserving techniques and guidelines for planting, grading and landscaping management.

- Study major City views and important approaches with guideline for their protection and enhancement.

- Coordinate the design of street improvements and building features through cooperative efforts by property owners and public agencies and through community planning.

- Prepare an evaluation of perceived access to, and use of, the amenities of the City by different social groups, and recommendations for more equitable distribution.

The Natural Base

In the urban environment of San Diego, there are parts of the natural landscape that have not changed. These features, the valleys and canyons and the shoreline, provide a feeling and relief from the crowding and stress of City life. As the City grows the keeping of these features becomes more difficult. Preservation and enhancement programs must be undertaken if the City is to keep a sense of unspoiled nature for future generations.

FINDINGS

The Valleys and Canyons

The valleys, canyons, and hillsides are San Diego's priceless assets. The flat-floored valleys hold the water and the vegetation, and have been left open until recently, since new housing has avoided the floodplain and occupied high mesas. But now the valleys are facing development pressures despite the flood dangers.

Fingering out from the long valleys, the narrow, brushy canyons, too steep for building, penetrate the City. They are a naturally connected system of open space that is close to almost every community. Many canyons show signs of use by local children, and a few have walking trails. Most lie unused - inaccessible to their neighborhoods, in many cases severed from these neighborhoods by urban development at their base where they connect to the valleys. Heavy machinery can fill them over or terrace them to make flat building sites. But cost, flood danger, erosion, and respect for the land all argue against tampering with this natural drainage system.

Development trends in recent years have brought about many problems. Technological progress has dealt more with quantity rather than quality. Man has resculptured the terrain, remaking the environment, resulting in a sterile landscape. Constantly expanding development has eradicated

the unique character and identity of natural land forms. For miles in each direction neighborhoods and their houses become virtually indistinguishable.

The Shoreline

Many people value the ocean shore as the most important asset of the City. Although much of San Diego's shore is in public ownership, some of that is military ownership, and in other cases access is difficult because of the steep slopes, indirect routes, or the possessiveness of local shore communities.

San Diego has a fairly wide range of income and housing in its coastal neighborhoods, but economic realities pressure for higher densities and higher rents. Some large buildings have been constructed, strongly objected to by beach communities who feared a solid line of structures walling off the shorelines. Concern over this possibility precipitated the passage of Propositions "D" (30 foot coastal height limit) and 20 (The California Coastal Initiative), in 1972. Unfortunately, the 30 foot height limit has done little toward resolving the problem of "walling off," since if height is not permitted, the bulk of the building will expand to achieve the same desired and permitted density. An alternative could be the development of performance standards which would deal with variations of particular circumstances.

The Silver Strand, the logical beach to serve the South Bay communities, is mostly under Navy control and the approach is circuitous and expensive. San Diego Bay, a unique and intimate expanse, has limited accessibility. Ocean Beach, Mission Beach, and the La Jolla shore are heavily used but parking is difficult. The bluffs at Torrey Pines shelter a magnificent strand, ideal for vigorous people willing to climb down to it, but inaccessible to others.

The basic question to be answered is how much of the shore should be accessible to whom, and by what means. Shore communities should not have exclusive rights, nor should tourist accommodations be able to appropriate special frontages. The diversity of beach character and diversity of access should be maintained. There should be less reliance on the car, and more on the feet, or by bicycles and public transportation.

GOAL

- PRESERVE THE NATURAL BASE OF THE CITY; THE VALLEYS, CANYONS, HILL-SIDES AND SHORELINE BY ENCOURAGING DEVELOPMENT TO RESPECT A VANISHING RESOURCE.

GUIDELINES AND STANDARDS

The Valleys, Canyons and Hillsides

- MAINTAIN THE CHARACTER OF THE UNDEVELOPED VALLEYS, CANYONS AND HILLSIDES.

Confine development to the mesas and less sensitive areas of the canyons and protect the hillsides and rims, as well as the floor, so that the rural character of the valley or canyon is preserved, and erosion and flood damage is prevented. Floodplain and hillside zoning must be much more tightly drawn and specifically applied. Structures should be kept back from the rims, with few exceptions. Valley sides should be left to their natural vegetation, and the valley floors should be devoted to open space uses which are unharmed by flood. No further channeling of the streams should be permitted.

- VALLEYS AND CANYONS SHOULD NOT BE CONSIDERED AS RIGHT-OF-WAY FOR HIGHWAYS AND FUTURE TRANSIT LINES UNTIL ALL OTHER ALTERNATIVES HAVE BEEN EXPLORED.

Grading Principles

The steeper the natural slope, the more severe the cut and fill required to produce level areas and the higher the resulting banks.

Therefore, in steep terrain:

- Lower the requirements for level areas; e.g., narrower streets, smaller yards, etc,
- Make level areas in smaller increments to minimize bank height; e.g., split streets, multi-level houses and yards, etc.
- Create level areas by structure rather than by grading on extreme slopes; e.g., platform houses, decks, etc.

In level terrain:

- Create interest by building up earth forms.

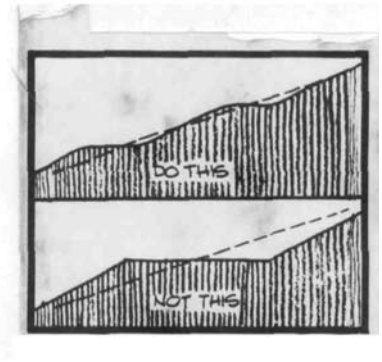
In all terrain:

- Preserve smooth flowing planes in the ground form. Steep slopes are difficult to plant and maintain and nature breaks down sharp edges, so avoid them in the first place.

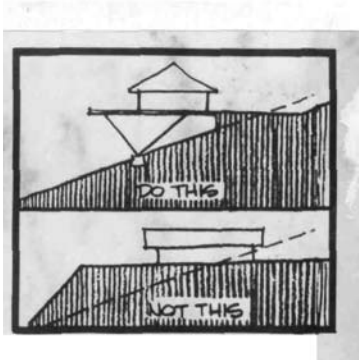
Not only do highways destroy the natural character, they inevitably bring further development. The uses which most need their access are above, on the mesas, and this means even more ramps to get up there. Except for short local routes serving valley uses, roads should cross canyons and valleys at right angles, SAN DIEGO HAS A UNIQUE OPPORTUNITY TO DEVELOP AS A TWO-LEVEL CITY - ONE LEVEL A GREENWAY UNDISTURBED BY CITY TRAFFIC.

- PARTS OF THE VALLEY AND CANYONS SHOULD BE ECOLOGICAL PRESERVES. OTHERS, CAMPGROUNDS AND PARK LANDS FOR CHILDREN TO EXPLORE.

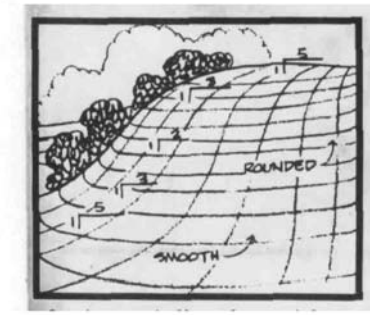
Agricultural, recreational and educational uses could be located there, wherever the natural character can be maintained. But uses which mean large gatherings and extensive parking lots - even public - do not belong.



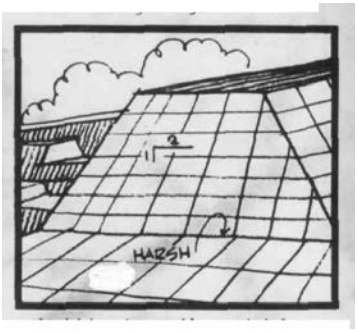
Make level areas in smaller increments.



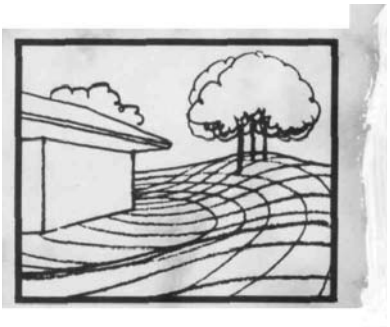
Create level areas by structure rather than grading.



Retain smooth flow of ground form: minimize steep slopes.

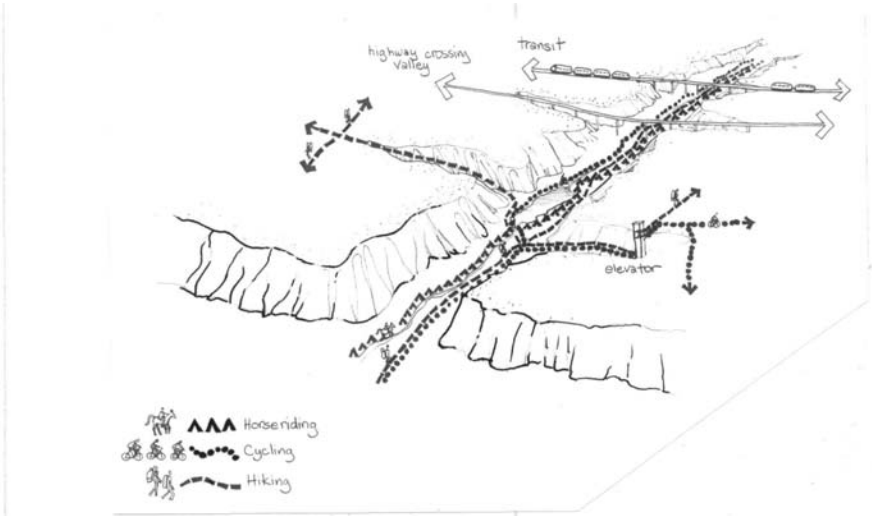


Avoid harsh, easily eroded forms and high, steep banks.



In level terrain, create interest by building earth forms.

A COMPLETE TRAIL SYSTEM - FOR WALKING, CYCLING, AND HORSEBACK RIDING - SHOULD BE DEVELOPED ALONG THESE NATURAL VALLEYS.



Since they penetrate the region at regular intervals and run from mountains to sea on easy grades, they are ideal for recreational travel, and might even be a component in the movement of bicycle commuters. Selected canyons could be developed as connectors between the communities and the valleys, while others could serve for strolling, exploration and local connections.

- ALLOW FOR A REASONABLE USE OF HILLSIDE AREA.

Sensitive development, built in a way which complements the natural character of hillsides and relates well to the regional open space system, should be encouraged. Environmental resources, significant public views and a clear sense of hillside topography must be protected. Re-contour rather than cut and fill if earth moving is necessary.

The Shoreline

- NEW DEVELOPMENT SHOULD BE BACK FROM THE WATER'S EDGE.

Whenever possible, development of vacant land and redevelopment should be at least 100 yards back of the beach or shore and set well behind the brow of the bluff. In many places it should be set farther back. Forward of that line, the land should be given to water-related public recreation, or occasionally leased to low and moderately-priced commercial recreation open to the general public. Where possible parking should be kept on the inland side of shoreline roads.

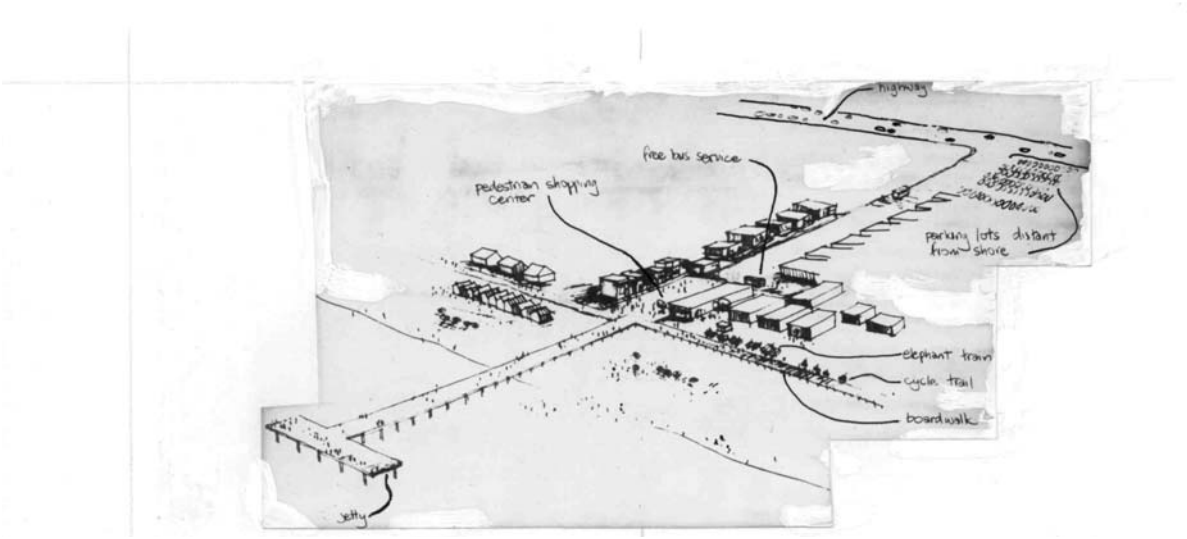
- MAKE THE BEACHES ACCESSIBLE WITHOUT DESTROYING THE LOCAL COMMUNITIES BEHIND THEM.

Major transportation and parking should be kept well back of the beach, with frequent foot access. Elephant trains, bicycles, mini-buses, and boardwalks should predominate along the coast, reaching back to the major routes, while discreet public access routes run down the bluff faces. Continuous shore roads are not needed, but connected cycle and foot trails run along the

ocean, both behind the strand and along the rim of the bluffs.

- ENCOURAGE HOUSING OF MIXED PRICE AND TYPE TO LOCATE ALONG THE SHORE.

Densities should be allowed to increase moderately in this zone in accordance with adopted community plans, but bulk and character must be controlled. The existing mix of income should be protected, and a mix ensured in any new development. Quotas of low and moderately priced housing may have to be imposed, for the privilege of developing shore-front property. Residential use, and its attendant services, and small scale employment should be the natural disposition of coastal land, except where there are fragile estuaries to be maintained in their natural condition.



- CONTROL THE HEIGHT AND BULK OF SHOREFRONT DEVELOPMENT.

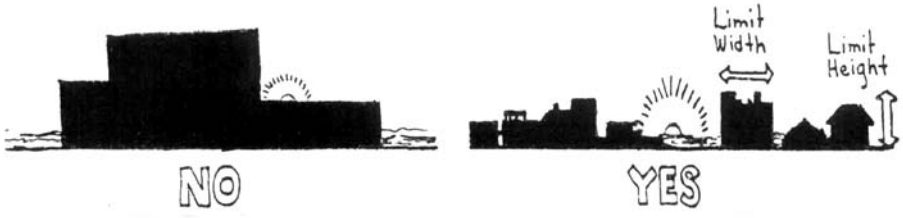
Tall buildings and bulky low scale structures block views and impair access. In general, buildings should be low at the beach, and higher up on the bluffs and mesas in order to give everyone a look. Buildings close to the water should be limited in their dimensions parallel to the shore. Stairs, plantings, and other works on the highly visible face and rim of the bluff should be controlled to maintain the natural aspect. At the same time and while maintaining their intimate character, residential densities could be increased in many beach communities. Prototype designs for shoreline residence and for combinations of recreational and residential use should be examined.

- PRESERVE THE HISTORICAL ASPECT OF THE SAN DIEGO BAY WATERFRONT.

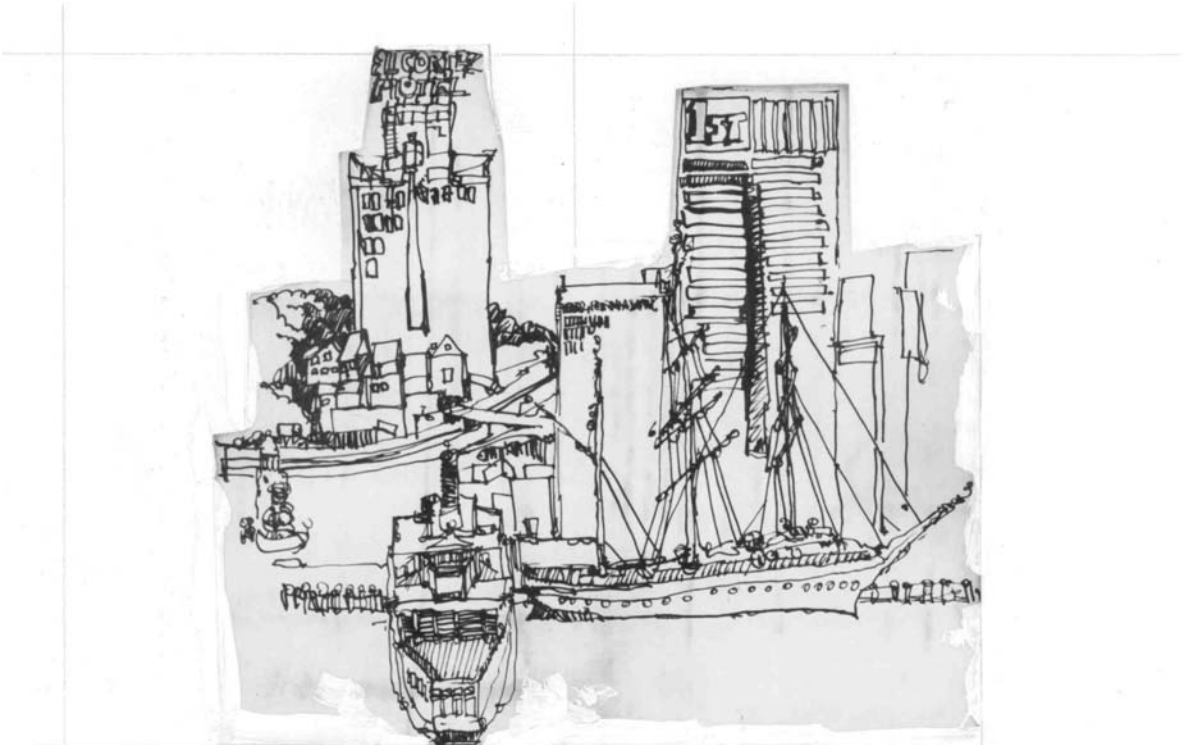
As the historical aspect of the San Diego waterfront is an important element in the City's history, all developments should preserve and enhance to the greatest extent possible, buildings of architectural qualities or historical interest.

- IN THE LONG TERM, REMOVE ALL USES FROM THE SHORE WHICH ARE NOT WATER-RELATED, AND ARE NOT HOUSING OR RECREATION.

Much of the shorefront industry, military, and transport facilities no longer use the water. Some like the airfields, are noisy and dangerous. In the long run, large scale industry can be dispersed to inland locations and the military uses consolidated or moved to other locations.



Access to the water should be opened up at many points, and the large blockading factories and military bases should be shifted to inland sites as this becomes possible. As other uses take over the bayside, it will be entirely appropriate that small centers of employment be located within them.



RECOMMENDATIONS

- Accord high priority to programs for management and preservation of irreplaceable natural areas.

- Review existing codes and ordinances to ensure that development results in minimum disturbance of the natural terrain.

- Prepare a long-term plan for the recapture of San Diego Bay for public use, including the gradual replacement of inappropriate activities, the treatment of the shore and its access, and the reuse of the bayside sites for housing and recreation. The work must be done together with the Port District, the Coastal Commission, and the military.

- Establish a strong sense of continuity along the shoreline and of connections between the waterfront, the City and the water.

The Neighborhood Environment

FINDINGS

Existing Communities

The San Diego region contains communities of all sizes, levels of cohesion, income, race, age and environmental quality. The quality of the community is of overriding importance to the individual, since the most basic human needs must be satisfied close to home. Today people are more aware of environment problems than they were even a few years ago and less willing to accept poor conditions.

There is no great difference of opinion as to what makes a community a good place to live from an urban design standpoint; people wish to have a tolerable and comfortable living environment, safe and free from stress, and the elements that make up such an environment are easily described.[1] People also wish to know that their communities and neighborhoods will be guarded against physical deterioration, and that any elements they consider deficient are likely to be improved. Community quality must be defined in the residents' own terms.

Some communities have greater needs because their residents live in conditions of greater congestion, less amenity or because the residents include more children and older people who tend to live within a smaller world in which the resources close at hand are the most important. People of low income, too, especially renters who have little direct role in maintaining their own physical environment, have special needs that characterize certain communities where the danger of physical decline is already very apparent.

These differences in communities point up the need to establish priorities in the programs that will stabilize and improve the local environment. Where serious physical deficiencies already exist, and where the density, age and economic status of residents indicate special needs, the communities require immediate and continuing assistance. Of equal importance, however, are many other areas that may be on the verge of physical decline. These other areas require priority

because the resident's fear of change may contribute as much as any other factor to real deterioration, and such fear can overcome by visible efforts to stabilize the community. Once lost, the existing resources in any neighborhood can be restored only through great expense and dislocation.

Even though these neighborhoods may offer a sense of individuality within a community and that conservation and rehabilitation of similar neighborhoods have proven economically attractive, unless lending institutions, regulatory agencies and others are committed to a conservation policy, market pressures may force demolition of even sound neighborhoods. The programs relating to community environment should, therefore, be designed both to hold neighborhood quality at its present levels and to improve deficient areas that do not enjoy the fine attributes of other parts of San Diego.

New Communities

The continuing rapid growth of San Diego is a serious issue, as it is in much of the United States. Environmental quality is only one element to consider in thinking about growth, but it is a key one. The growth of the region probably cannot be stopped, but the region can certainly redirect the location of growth, and modify its nature. At this point, the considerations of environmental quality become crucial.

An analysis of San Diego's newer communities indicates:

> **First**, that rapid growth has outrun public services. There are not enough schools, even though there may be empty classrooms in the inner City. The main roads of these communities are congested. Community institutions are lacking. The rate of growth is too fast.
>
> **Second**, the landscape is being carelessly destroyed. The tough natural cover and thin soil are being stripped off, leaving dusty, barren surfaces. Hills and banks are cut off, canyons buried. All the potentialities of the land are lost.

Third, the form of settlement itself, which is borrowed from the humid east, is inappropriate. Streets are too wide; yards are empty; houses and people are unprotected from the sun. The plants struggle with drought and poor soil. The public spaces are barren; the resulting landscape is hot, arid, empty, and monotonous. At the same time, it is wasteful of space and wasteful of water.

Fourth, development is at such a large scale, and of such a single type, that not even skilled design could prevent a sense of endlessness, of remoteness from the natural setting. Many times this takes place in areas that are still largely open. Small design decisions, such as a choice of roof form or wall color, become overwhelming when repeated so often. More serious, perhaps, the scale and homogeneity of development isolates people from work, from services, and from people who are not like themselves.

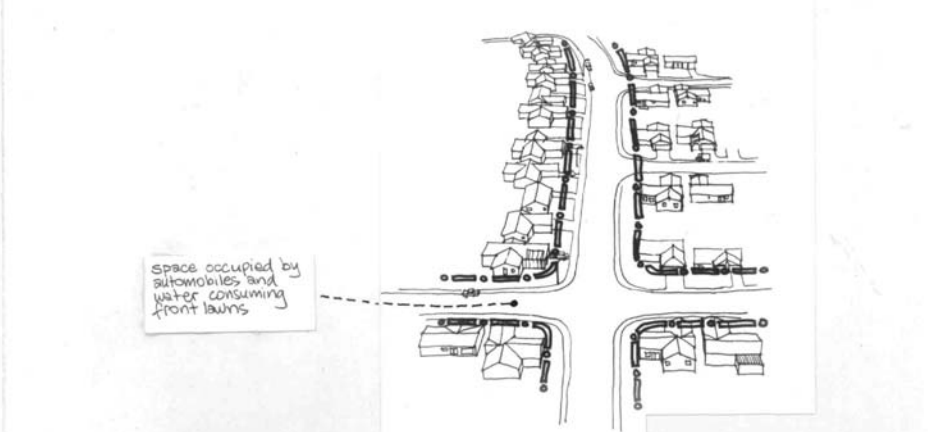
Finally, the location of this new development, almost all of which is in the inland area, puts more people in a climate which is hotter in summer and colder in winter, where they must expend more water and more energy to remain comfortable. It is farther from the sea, and increases their dependence on the car, with its attendant road congestion, oil consumption, smog, and its reduction of the independence of children and the elderly. These areas are more expensive to serve, while facilities in the inner City lie underused.

It should be noted that these communities are not substandard in any legal sense. Their form abides strictly by the public rules for construction, street widths, setbacks, street walls, bulk, and type of use. Their road patterns have been carefully reviewed. In official terms, they are properly done.

In sum, it seems that the present suburban growth is too rapid, too poorly coordinated with public services, too extensive and homogenous, too destructive of the land, inappropriate in form, and in the wrong place.

Redirection of Suburban Growth

Policies for regulating and redirecting suburban growth could be extremely dangerous if no alternate location for growth were provided. San Diego cannot stop migrants at her borders, nor forcibly reduce its birth rate. A check in suburban growth alone will simply raise the price of housing and confine moderate income families to shrinking, inadequate, inner City stock of houses. If there were acceptable ways of controlling the mix of housing types, prices and rents, to prevent discrimination against the less affluent, or of directly supplying low cost housing, then growth could be more severely controlled without loss of equity. As it is, a suburban slow-down must be accompanied by the encouragement of new growth in presently urbanized areas. This reflects the principal objective of the General Plan, "development of a more compact city" and the "redirection of growth to older developed communities" objective of the Growth Management Study. The fulfillment of these objectives can add a social diversity to communities that are becoming more homogenous.



"Densification" is the gradual addition or "infill" of dwellings to an existing community. When done well it may also be defined as "creative infill." The most visible kind of "densifying" happens where new apartments built on old single-family lots invade a block en masse. They transform the population, and thus overturn the community. They steal each other's light and air, display their tawdry fronts, and appropriate the curbs with their parked cars. They make a new, rather unpleasant, single use area, which will in time be ripe for its own decline.

Except for their wide streets, many of the older communities are already quite dense for their type of housing, due to the gradual accumulation of rear houses and converted cottages, all still in good repair. The original densities, in many cases have already come near to doubling, indeed, this is an illustration of how a slow and scattered process of increase can come without disruption.

Many of the older communities can take more housing, but only if it is gradual and dispersed, so that the change does not upset the present mix of people and buildings, if most new buildings are in scale with the existing community and if the community is compensated for the new population load by corresponding new public investments: schools, parks, transit, street improvements, new services.

Unless there is a concerted policy for infill in the present urban area, suburban growth cannot and very possibly should not be checked. Public agencies must key their land assessments and investments to those decisions based on surveys of the relative ability of City and rural land to absorb growth (due to water, soils, energy use, climate, visual quality, hazards, transport, amenities, potentials, etc.), compared with the need for housing expansion.

GOAL

- IMPROVEMENT OF THE NEIGHBORHOOD ENVIRONMENT TO INCREASE PERSONAL SAFETY, COMFORT, PRIDE AND OPPORTUNITY.

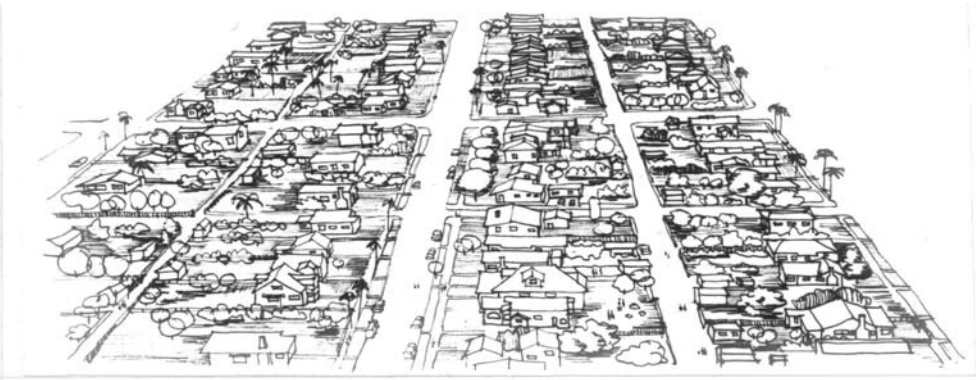
GUIDELINES AND STANDARDS

Existing Communities

- AVOID RADICAL AND INTRUSIVE CHANGES TO EXISTING RESIDENTIAL CHARACTER.

San Diego draws much of its strength and vitality from the quality of its communities. Measures must be taken to stabilize and improve the health and safety of the local environment, the psychological feeling of community, the opportunities for recreation and other fulfilling activities, and the small-scale visual qualities that make the City a comfortable and often exciting place in which to live.

Identify and then conserve the streets, landmarks, and areas that have a sense of place or history. Develop guidelines to ensure that new development adds to the existing character of the community, including such things as height bulk and setback, land use, open space, parking, landscaping, and architectural quality. It takes a detailed study to write guidelines that express the special quality of a place, and that still allow change. This is the next logical extension of the community planning process.



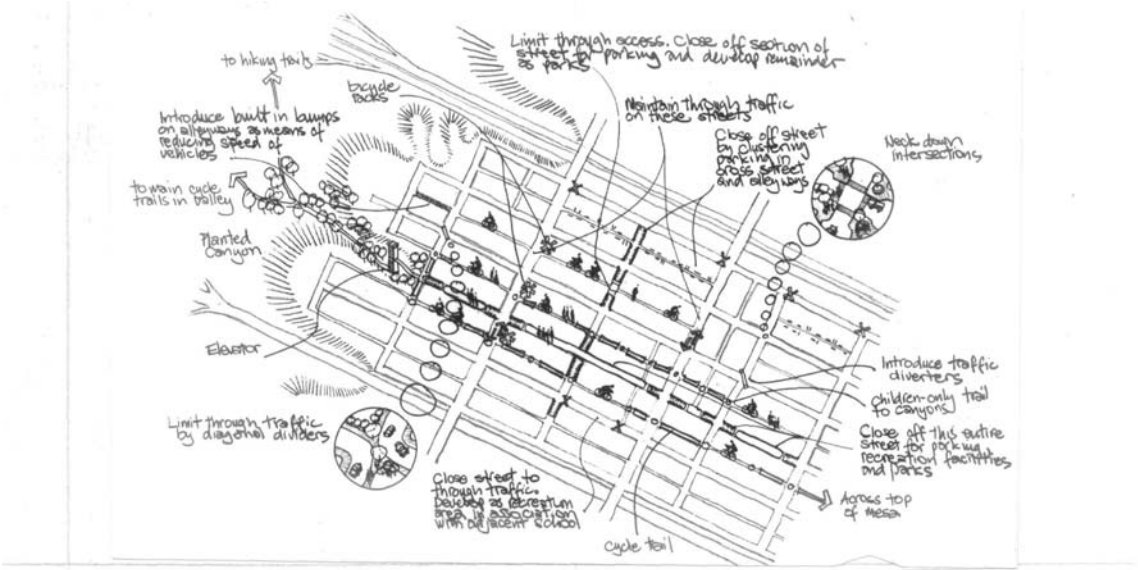
- PROTECT THE RESIDENTIAL AREAS FROM THROUGH TRAFFIC.

Studies show that an increase of traffic on residential streets cause families to move, to withdraw from the street, to reduce their feeling of responsibility for it. Cars are noisy, polluting, and dangerous. There are simple ways of controlling traffic volume and speed. Diagonal diverters can be built at four-way intersections; street entrances can be necked down, traffic islands erected. By making some gridiron streets into cul-de-sacs, while using the alleys for auto access, clustered parking can be provided, as well as open space for neighborhood use.

- BRING MORE OPEN SPACE INTO USE.

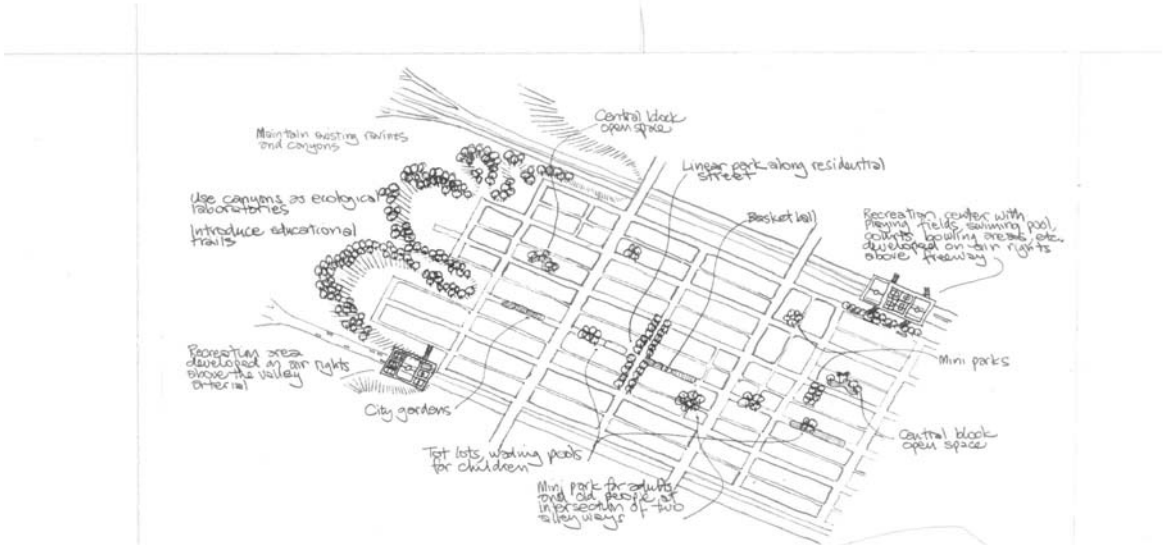
Street parks can be created by traffic management, vacant lots or canyons brought into use. Neighborhood groups should be encouraged to make and maintain their own mini-parks for children or to cultivate block gardens for vegetables or flowers. Individual yards are often too small for these amenities.

The closing of streets or portions of streets can provide more pleasant, safer walkways for children going to school and adults on their way to shop. Cycle trails can be built down these closed streets or along the alleys. A network of cycle trails on separate rights-of-way should connect shopping, bus stops, public facilities, and public open space.



- IMPROVE THE SURROUNDINGS OF SCHOOLS, LIBRARIES, CHURCHES, AND COMMUNITY FACILITIES.

In San Diego's climate many of the activities of these local institutions could have outdoor learning environments far more rich and interesting than the current asphalt and cyclone fenced playgrounds making them a positive feature in the community. Libraries and churches could have quiet sitting out spaces for contemplation and reading, outdoor exhibits and local art could be placed in public open spaces. Pedestrians precincts (automobile free zones) around these institutions could also protect them from traffic and noise. In addition the institutions themselves should be designed to better fit with the character of the community. They should become focal points and assets to the community rather than negative elements.



- IMPROVE THE PEDESTRIAN ENVIRONMENT IN THE COMMERCIAL STRIP.

Older shopping areas are often designed as a string of sales outlets where automobile riders may stop off to buy. There are few trees, benches, or human amenities of any kind. Yet these streets are the local service centers. Facilities for those who walk, bike, or come by transit are urgently needed. Shopping can be a pleasant social activity. Wider sidewalks, shade, arcades, pedestrian crossings, and pedestrian signs can begin to create a human atmosphere. Convenience clusters at bus stops can be furnished with benches, restrooms, shade trees, fountains, news stands, bulletin boards, and local works of art.

Avoid placing parking lots along street frontages where they detract from street life and impair definition of street space. Placement of buildings adjacent to the street, with the parking behind, can improve this situation, however, the different types of street uses and street life must be recognized.

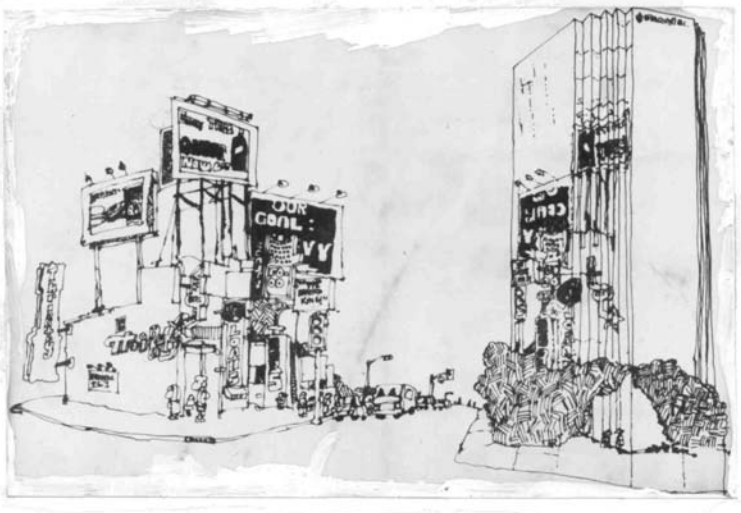
- REMOVE AND OBSCURE DISTRACTING AND CLUTTERING ELEMENTS.

Signs can be more lively, more informative, and yet less cluttered billboards are out of scale with the strip and more signs simply confuse and detract. The chaos can be controlled by reducing sign size and movement, and by limiting signs to those building facades to which they refer. Signs of local establishments can be encouraged to develop an individual style. Mass-produced signs and those for products not related to the place can be clustered in areas where they do not submerge the local scene. Particular attention should be paid to traffic, directional and informational signs, which are often poor in graphic quality, and many in number. Signing is a necessary art and can create character and sparkle, instead of simply assaulting the eye.

Lights and graphics can enliven the scene - high, cold, uniform lighting benefits the passing traffic and no one else. Warmer, smaller lights grouped in clusters are more useful for those who walk along the sidewalks and gather at the bus stops. Special night lighting can create a new mood, or enliven a community event. Street murals can be painted on the walls of buildings, or on screens around parking lots.

- INCREASE THE TRAFFIC CAPACITY OF THE MAJOR ARTERIAL STREETS.

An increase in arterial capacity will become urgent as present freeways fill up, and as residential areas reject through traffic. Handled in the usual manner, i.e., by increasing the width of the traffic pavement, this can negate any other improvement of the strip, and finally destroy its social and commercial function. If through traffic is diverted around the shopping street, the street is then cut off from its neighborhood. In this case, it is better to maintain and enhance the pedestrian turf on either side. Fortunately, San Diego's arterial rights-of-way are wide. Median strips and side strips, the prohibition of curb parking and curb entrances, better traffic control, shifting traffic pavements off-center to give a wide walkway on one side and the use of pedestrian overpasses, all can help to increase capacity without reducing pedestrian amenity. Capacity in terms of persons transported can be still further increased if special lanes are devoted to buses or bicycles.



- USE APPROPRIATE PLANT MATERIALS AND GIVE CAREFUL CONSIDERATION TO ENVIRONMENTAL FACTORS IN THE DESIGN OF LANDSCAPING AND OPEN SPACE TO CONTRIBUTE TO THE ENVIRONMENTAL QUALITY OF THE COMMUNITY.

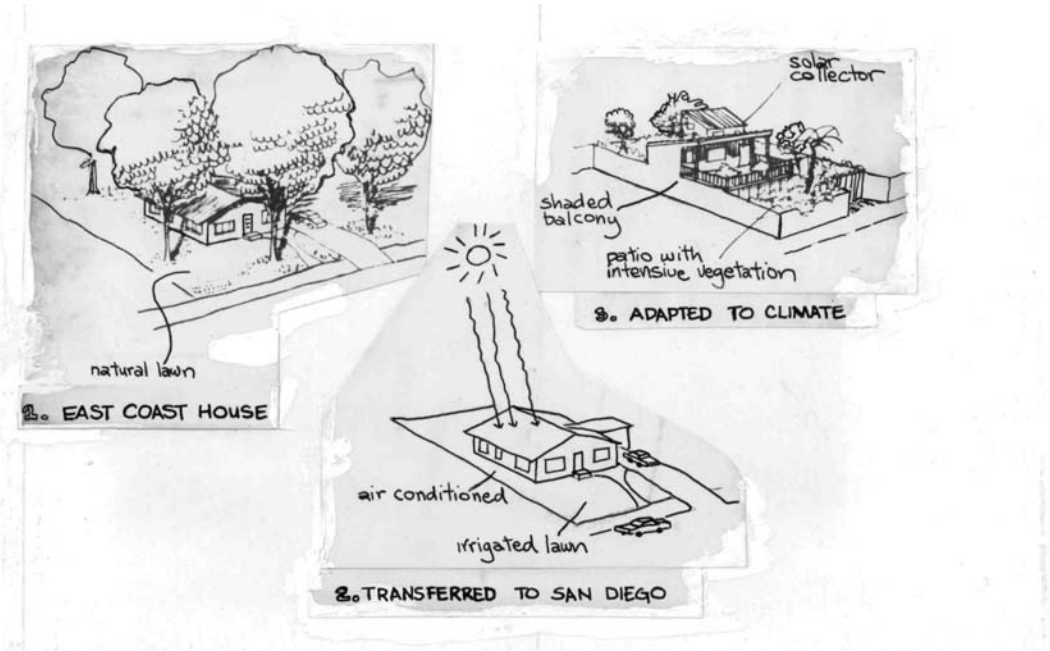
Planting alone could raise the quality of San Diego's arterials far above their present mediocre level. Streets need not be lined with trees on the standard model. Problems of maintenance and

the use of water set limits to this. But there could be frequent oasis of lush planting, not located for visual reasons alone, but where they also serve to shade pedestrians.

New Communities

- SLOW DOWN THE INLAND SUBURBAN GROWTH, BUT DO NOT TRY TO STOP IT.

Extend public services gradually, on a phased basis. Tie the pace of development strictly to that extension of service so that all public services (schools, utilities, roads, fire protection) are budgeted and provided before houses are complete. Find ways of levying the real public costs of extension directly onto the suburban developments that cause them — not only the initial construction costs, but the operating costs, and those more intangible costs of traffic, smog, wasted water, etc. Zoning and subdivision controls can not be relied on alone to stem the tide, as these are often ineffective where development pressures are strong, and there is no established community to offer resistance. These new areas should be developed in accordance with the planning principles outlined in the "New Communities" report. The use of timed and transferable development rights to impose a control on the regional rate of development, while maintaining equity for those land owners who would prefer that their land be the next to develop should be considered. [2]



- ENCOURAGING SMALLER, LESS HOMOGENEOUS DEVELOPMENT.

When development happens in smaller pieces and there is a greater mixture of house type, employment and services with the housing, a more interesting landscape is produced. In addition the community will be more varied in age and social composition. The journey to work and to shopping can be correspondingly reduced. This means much more flexible and fine-grained

zoning and other public rules. It indicates a greater reliance on planned unit development techniques and on performance standards rather than on use zone boundaries.

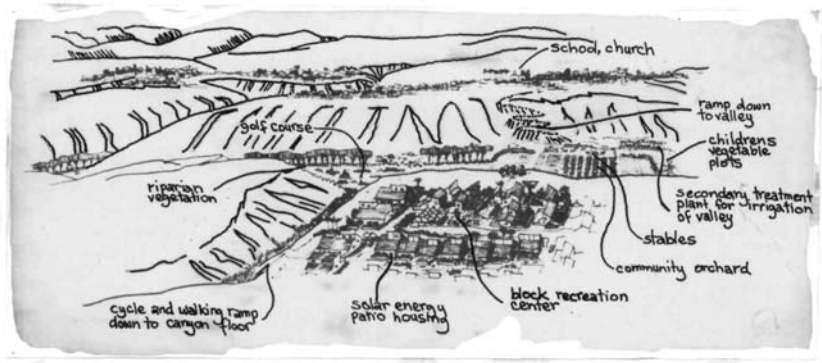
- USE A MORE APPROPRIATE FORM OF SETTLEMENT.

This could be based on a prototype more suited to San Diego's landscape and climate. Some of the City's older neighborhoods provide an excellent example for the prototype. This may be more compact site planning, narrow (even shaded) streets, the use of roofs, interior courts and small intensive gardens in place of lawns and yards. In San Diego's dry air, reliance should be placed on breeze and shade for cooling in place of air-conditioning. Native plants should be used and the application of water concentrated. All this can be done without sacrificing family privacy, home ownership, or reasonable costs. It may be necessary to impose minimum densities, to encourage compactness and save the land. Minimum density standards would have to be accompanied by other rules to prevent the equally inappropriate form: the high tower set in an arid parking lot.

The higher costs of energy and the need for national independence for sources of energy have caused a greater need for proper energy planning from a new perspective.

Single structures can be easily oriented on a site to maximize energy conservation and solar energy utilization. While more difficult, groups or clusters of houses or structures on a site and in an area, can be oriented to provide maximum energy conservation and at the same time provide necessary utilities, services, transportation and complementary land uses in the most efficient and economical manner.

Similarly, orientation and siting of structures should also take into account water conservation, by management of water run-off and the use of plant material appropriate to the climate.



HOT - HUMID ZONE

In this zone air movement constitutes the main comfort-restoring element. Sites offset from the prevailing wind direction, but exposed to high airstream areas near the crest of a hill or high elevations on the windward side near a ridge, are preferable. East and west sides of a hill receive more radiation than other orientations where the sun rays come in a more oblique angle. This would suggest that northern and southern slopes are more desirable. However, wind-flow effects should remain the dominant siting consideration since shading might be provided by other means.

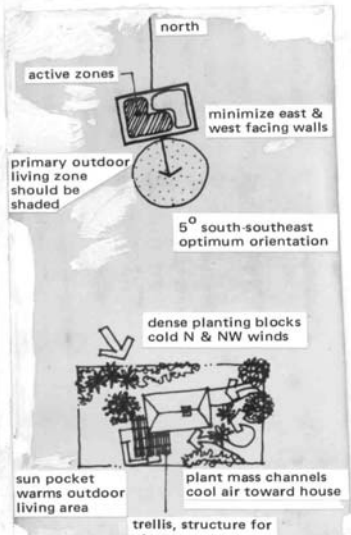
Objectives:

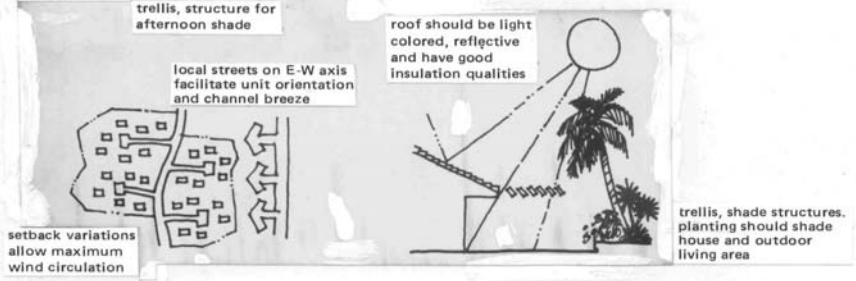
Maximize shade throughout the day

- Orient active living zones to the south with properly designed overhangs, trellis, or other sun control
- East or west window should be avoided to minimize radiation with low sun angles
- Minimize energy intensive paving and building materials

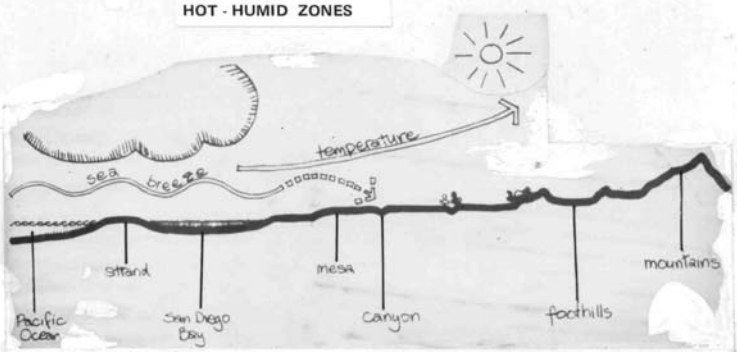
Reduce the effects of high humidity by maximum exposure to air movements

- Orient streets and structures to maximize cool breezes, prevailing winds vary with regions and micro climates
- Utilize the psychological effects of falling water or large water bodies but minimize the humidity of small water ponds and low areas





HOT - HUMID ZONES



San Diego's varied climate ranges from a "hot humid zone" along the coast to a "hot arid zone" inland. The development guidelines on this and the following page present the extremes of those ranges. There are varying climate zones in between as one goes from west to east in San Diego.

HOT – ARID ZONE

In this zone desirability of heat loss over rules the demands of cool periods. Lower hillside locations, benefiting from cool air flow, are preferable if arrangements are made to interrupt the air flow during under heated times. Wind effects have resistively small importance. In a large portion of the year afternoon shade is required, making sites with east-southeast exposure preferable in the hot-arid zone.

Objectives:

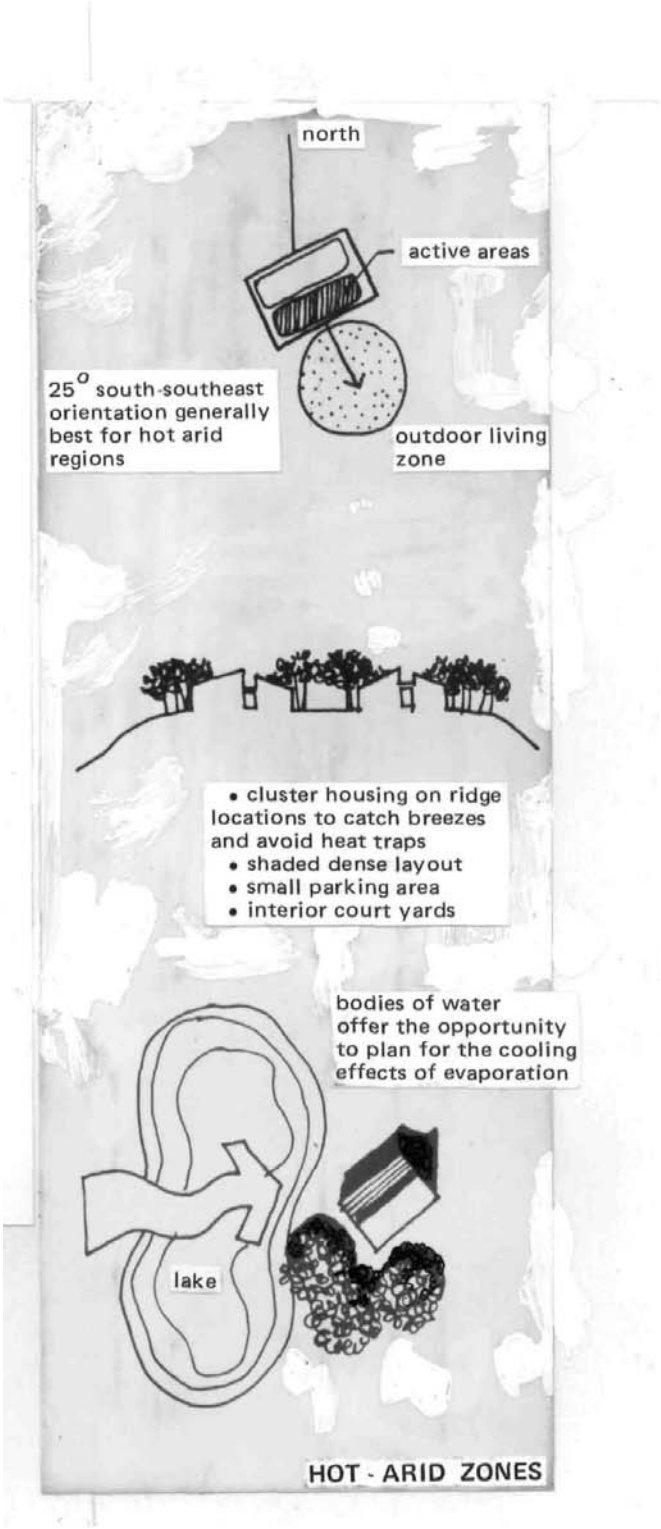
Maximize shade for late morning and afternoon solar radiation

- Orient active living areas to the south-east to collect early morning sun
- Glass areas should face south with properly designed overhangs
- East and west windows should be avoided to minimize radiation with low sun angles
- Cluster buildings and utilize solar panels for shade.

MAXIMIZE DESIRABLE AIR MOVEMENTS

Maximize the humidity and cooling effects of evaporation across water bodies

- Utilize the lower hillsides to benefit from cool natural air movements in early evenings and warm air movements in early morning.



Redirection of Growth

- "DENSIFICATION" SHOULD BE BALANCED WITH CITY AND REGIONAL NEEDS.

Densification (infill) is to be gained in return for public investment and services. It must also be in accordance with adopted community plans. In all cases the needs of the individual neighborhoods must be balanced with the regional needs, as in building a connected transit system, for example, or in trying to diminish social segregation.

- THE RATE AND CHARACTER OF DENSIFICATION SHOULD NOT DESTROY EXISTING COMMUNITY CHARACTER.

Particular guidelines will be needed for each community. Guidelines can deal with the control of parking and paved areas, the provision of landscaping, the design of buildings so as not to destroy the privacy or overshadow smaller neighbors, the use of materials/ and the activities which front the street. It will depend on the neighborhood character to be preserved. Where possible residential streets should be short loops or cul-de-sacs. These streets tend to have a higher safety factor and a higher level of commitment from the residents. In general, additional units should be low, scattered, and added gradually. Relaxed spacing and density rules must be accompanied by new performance standards. Consideration should be given to reinstatement of those development regulations used in initial development of the community.

- PUBLIC IMPROVEMENTS SHOULD FOCUS ON PRESENT URBAN AREAS**.**

The old arterial commercial streets should be renewed, along with local streets and alleys, small parks added, schools, libraries and public utilities rebuilt. Suburban restraint and the revitalization of the existing City must go hand in hand.

- PROMOTE MIXED USAGE AS A KEY TO AN ACTIVE, LIVELY URBAN ENVIRONMENT.

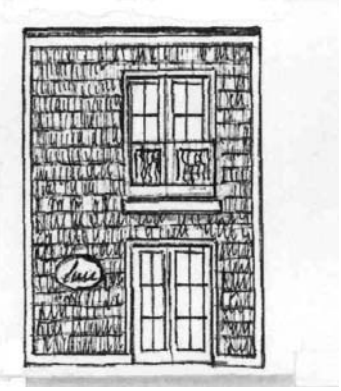
The concept of mixing uses is a plea for an environment in which inhabitants can enjoy the amenities of living while finding freedom from total dependence on the automobile. In our present society, it is generally accepted that differing land uses have to be separated. The automobile and zoning, within a relatively short history, have fostered this attitude. The idea behind zoning is to separate incompatible uses; what has in fact happened is that we have separated all uses. Even variations of one basic use such as housing, have been separated and segregated into an unbelievable number of differing zones. The incompatibility of certain industrial, and semi-industrial uses that create high levels of noise, offensive smells, or that in some way constitute a possible danger to the community, seem obvious. The incompatibility of a small shop adjacent to an apartment seems, more often than not, imaginary.

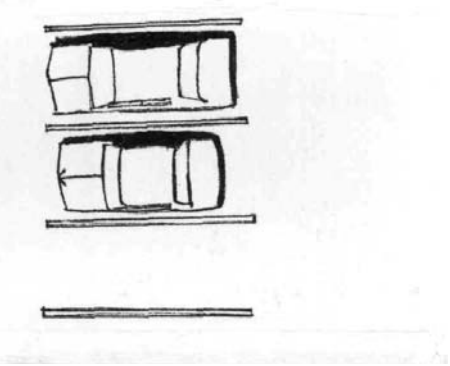
RECOMMENDATIONS

- In conjunction with the growth management program and adopted community plans, prepare a survey of the City's communities in order to judge their ability to absorb further growth. Where should densities increase to take expected growth? What form should that increase take, and how can the decision be carried out? Selected urban neighborhoods should be analyzed to see how they could take growth without damage to neighborhood character, and what public investment would be required? Illustrative designs, performance standards, private incentives, and public regulations would be drawn up.

Mixed Usage

The key to an active, lively urban environment is mixed usage. This mixing of residential, commercial and professional uses within a compact area assures activity throughout the day and evening.





Apartments over shops offer an excellent opportunity to introduce-lower rent apartments. The introduction of people living above stores reduces possible-vandalism during off hours since there are no off hours. Commercial use is more than a shopping center, it is a town...

The unfortunate thing about parking lots is that they are empty most of the time. Not so with mixed usage - the very times that some lots are lull are when others are empty. There aren't really more cars at certain times of the day, rather, the cars travel from one parking lot to another. The mixing of uses means we only need one lot in place of two, three or more.

The mixing of residential gives, to many, an important option that does not now exist, to live without an automobile. This is particularly important to students, singles and older people to whom the automobile represents an exorbitant and unnecessary expense.

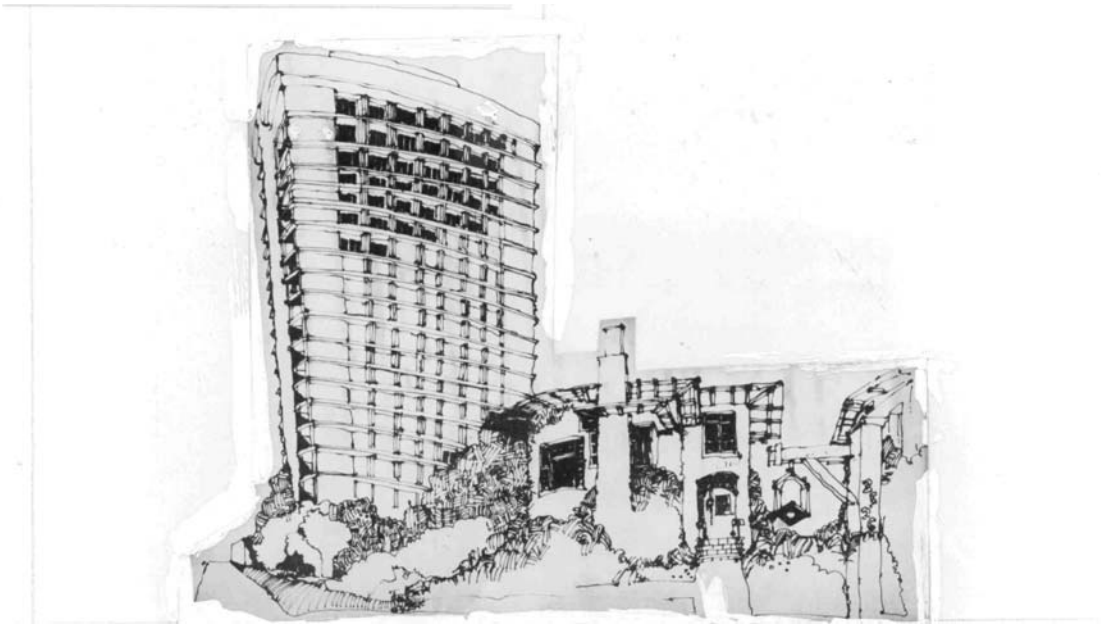
- Prepare an analysis of typical commercial arterials in the City, and develop proposals for the public action needed to convert these "strips" into humane landscapes.

- Investigate funding and legislative assistance programs to bring about the restoration and preservation of older buildings and districts.

- Use encouragement and advice, wherever practical, to avoid demolition of significant older buildings or remodelings that would detract from their original character, and securing of competent architectural assistance in such remodelings.

- To preserve neighborhood character, use design review procedures in a positive and creative manner, primarily through extension of existing procedures rather than imposition of new controls.

- Study the use of underutilized street areas for recreation and community purposes.



Height, Bulk and Density

FINDINGS

During the past decade, citizens throughout the City of San Diego have petitioned the City Council for the imposition of temporary or permanent height limitation zones over different communities and residential areas. These requests have perhaps been culminated with the passage of Proposition "D," the 30 foot coastal height limit and Proposition 20 the Coastal Zone Conservation Act, in 1972. Concern about height has usually been prompted by the construction of buildings that are out of scale and character with the existing community. However, height

limitation zones do not adequately deal with this problem. In addition to height the problems stem from issues of building bulk, location and orientation, density, traffic congestion, and perhaps most importantly the existing scale and character of the community.

> "The fitting in of new development is, in a broad sense, a matter of scale. It requires a careful assessment of each building site in terms of the size and texture of its surroundings, and a very conscious effort to achieve balance and compatibility in the design of the new building. Good scale depends upon a height that is consistent with the total pattern of the land and of the skyline, a bulk that is not overwhelming, and an overall appearance that is complementary to the building forms and other elements of the city. Scale is relative, therefore, since the height, bulk and appearance of past development differ among the districts of the city." (San Francisco Urban Design Plan, San Francisco Planning Department, 1971).

In questions of scale the height of buildings has received the most public attention. However, exceptional height can have either positive or negative effects upon the character of a community. A well designed structure can strengthen the community's form if it is well placed, however, the same buildings at the wrong location can have very disruptive results.

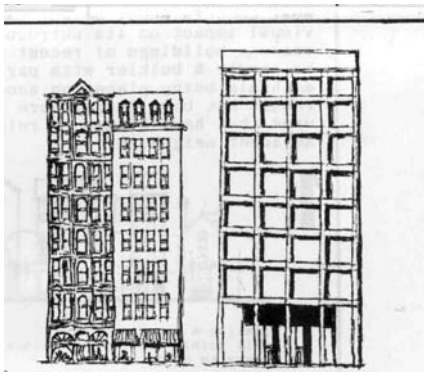
An additional aspect of the building scale to be considered is that of bulk, or the apparent massiveness of a building in relation to its surroundings. A building may appear to have great bulk whether or not it is of extraordinary height, and the result can be a blocking of near and distant views and a disconcerting dominance of the skyline and the neighborhood. The users of modern building space may find these bulky forms more efficient, and the forms may seem logical for combining several uses in a single development, but such considerations do not measure the external effects upon the City. Neither height limits nor limits upon the amounts of floor space permitted will directly control excessive bulk, and therefore, specific attention to this problem is called for.

The apparent bulk of a building is a function of height, width, breadth, and design, and because of these factors it is also one of perception. Accordingly, controls seeking to avoid excessive bulkiness must consider the existing scale of development in each area of the City and the effects of the topography in exposing building sites to wide spread view.

It has been suggested that height and bulk controls are really density controls. Density is the numerical relationship between the number of dwelling units on a given quantity of land. It is **quantitative** rather than qualitative. It is not uncommon to hear that low-density is good and high density is bad, however the problem of density is not one of numbers, but a complex set of physical and psychological factors, that cannot be reduced to a set of numerical constraints.

It is interesting to note that while most of us think of older European cities as being composed primarily of low, quaint buildings a closer look reveals that most buildings are six, eight or ten stories in height. A look at a recent American eight story buildings shows some striking differences.

1. The older buildings are usually narrower, often in groups. The groupings tend to deemphasize each one individually. Newer buildings tend to be larger often standing alone. This serves to bring attention to the building as a whole including its total height.
2. A closer look reveals that the older buildings are composed of smaller architectural elements: windows, cornices and other details are really not much bigger than they would be on a single-family house. The newer building is probably more correctly scaled to its total size, that however only brings attention to its total size.
3. Traditional buildings have tended to reserve the ground floor for shops and stores. This has diverted our attention from the total building. Recent concern for corporate image has resulted in pristine, monumental lobbies or a prestigious bank. Most newer buildings have been designed to impress us.



Traditional European 8-story building

Recent American 8-story building

Existing height, bulk, and density controls indicate no sensitivity for individual communities beyond generalized mapping for the various districts within the City. No account is taken of the various geographic, social or economic conditions within differing areas. As far as existing zoning is concerned, they represent identical situations.

As the City changes new development can and must be fitted in with established community character in complementary fashion. Harmony with existing development requires careful consideration of the character of the surroundings of each site. The scale of each new building must be related to the prevailing height, bulk, and intensity of use in the area, and to the wider effects upon the neighborhood, views and topographic form.

GOAL

- REVIEW AND REVISE REGULATIONS DEALING WITH HEIGHT, BULK, AND DENSITY TO REFLECT QUALITY DEVELOPMENT RATHER THAN QUANTITY.

GUIDELINES AND STANDARDS

- PROMOTE DEVELOPMENT WHICH IS SENSITIVE TO THE PARTICULAR NEEDS OF INDIVIDUAL AREAS.

Height

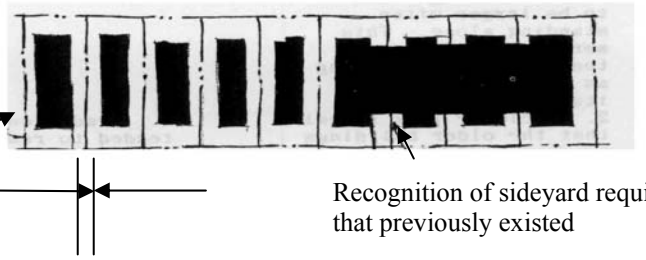
Most concern about height has to do with its apparent visual impact on its surroundings. Due to a variety of reasons buildings of recent years have tended to be larger and bulkier with particular architectural emphasis being placed on accentuating height. The result has been larger more impressive structures that have tended to relate poorly to their adjacent neighbors.

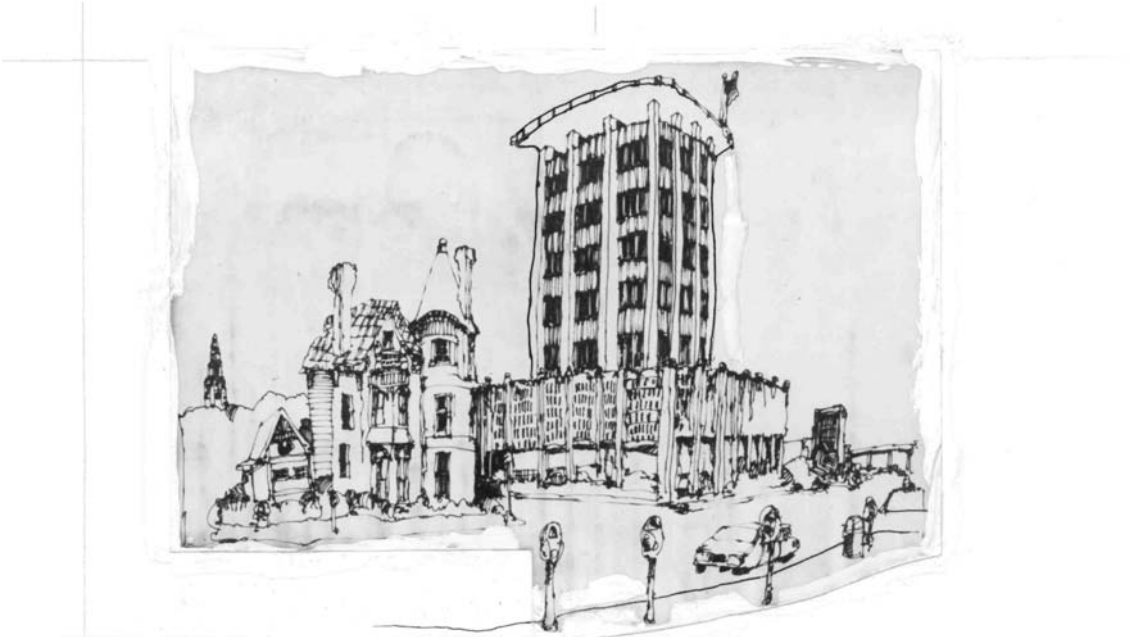
1.

Existing and new structures built within existing lot lines appear to be harmonious.

When many smaller lots are joined to make one large lot the result is often a structure that in no way resembles the other buildings in the neighborhood.

2.





The feeling of distinctiveness which characterizes most of the communities of San Diego must be encouraged. Regulations should be developed which describe intensity of use and generalized performance criteria rather than arbitrary quantitative requirements. Not only should buildings be designed to be sensitive to the scale, rhythm, texture, penetration, color, and character of their neighbors but the spaces between the buildings must be designed. Many neighborhoods are destroyed (visually) by chaotic parking and random open space around buildings. This indicates the need for flexible regulatory techniques. What is appropriate for Mira Mesa should be mandatory in Park West (setbacks, parking requirements, building codes, etc.).

- PROMOTE HARMONY IN THE VISUAL RELATIONSHIPS AND TRANSITIONS BETWEEN NEW AND OLDER BUILDNGS.

New buildings should be made sympathetic to the scale, form and proportion of older development. This can often be done by repeating existing building lines and surface treatment. Where new buildings reach exceptional height and bulk, large surfaces should be articulated and textured to reduce their apparent size and to reflect the pattern of older buildings.

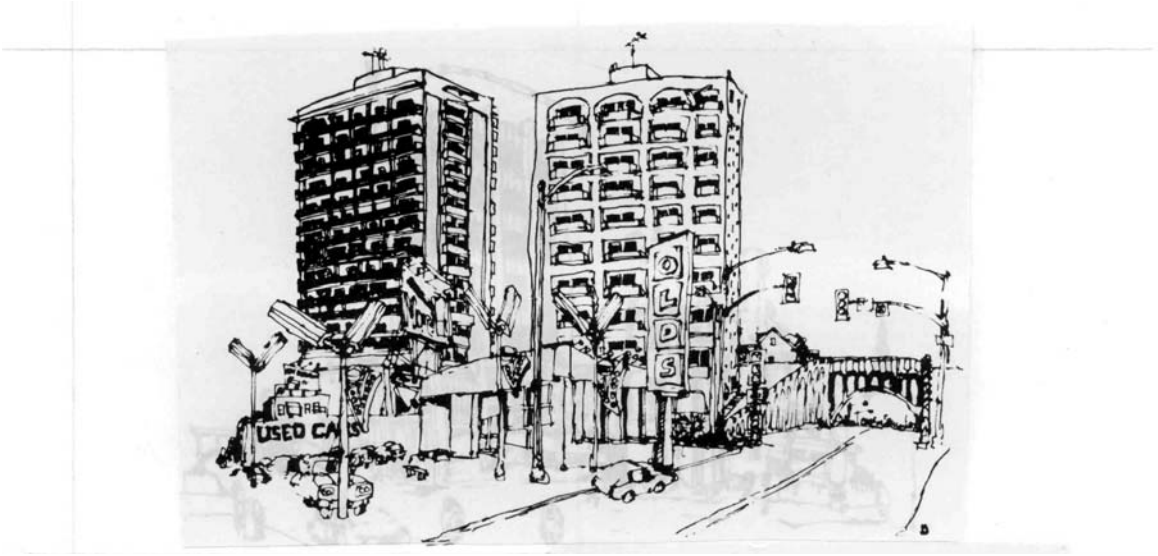
- PROMOTE EFFORTS TO ACHIEVE HIGH QUALITY OF DESIGN FOR BUILDINGS TO BE CONSTRUCTED AT PROMINENT LOCATIONS.

Certain buildings will achieve visual prominence, whatever their design, because of their exposed locations. Among such locations are those at canyon rims, the tops of hills, those fronting on permanent open space such as the ocean, San Diego Bay, Mission Bay, Balboa Park and areas with height limits, those facing wide streets or closing the vista at the end of a street, and those affording a silhouette against the sky.

- PROMOTE BUILDING FORMS THAT WILL RESPECT AND IMPROVE THE INTEGRITY OF OPEN SPACES AND OTHER PUBLIC AREAS.

New buildings should not block significant views of public open space and the water. Buildings near the open spaces should permit visual access, and in some cases physical access to them.

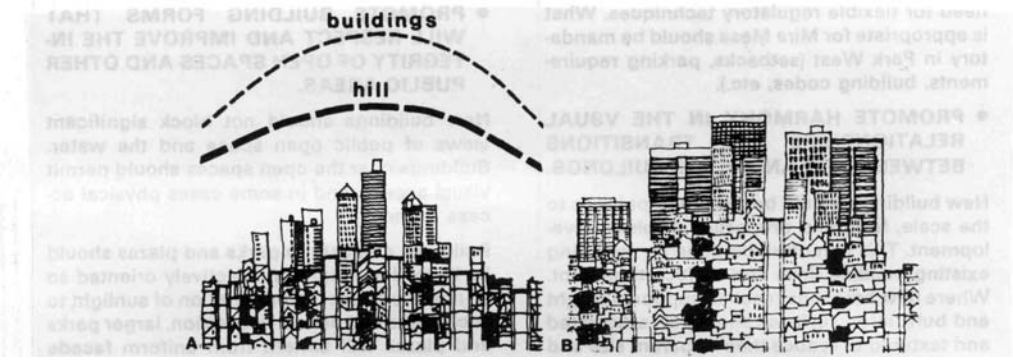
Buildings adjacent to parks and plazas should be limited in height or effectively oriented so as not to prevent the penetration of sunlight to such parks and plazas. In addition, larger parks and plazas will benefit from uniform facade lines and cornice heights around them, which will visually contain the open space.



Large buildings and developments should, where feasible, provide ground level open space on their sites, well situated for public access and for sunlight penetration. The location and dimensions of such open space should be carefully considered with respect to the placement of other buildings and open spaces in the area, and with respect to the siting and functioning of the building with which it is provided.

- RELATE THE HEIGHT OF BUILDNGS TO IMPORTANT ATTRIBUTES OF THE CITY PATTERN AND TO THE HEIGHT AND CHARACTER OF EXISTING DEVELOPMENT.

Tall, slender buildings should occur on many of the City's hilltops to emphasize the hill form and safeguard views, while buildings of smaller scale should occur at the base of hills. Views along streets and from major roadways should be protected. The height of buildings should taper down to the shoreline of the bays and ocean, preserving topography and views.



A. Tall, slender buildings near the crown of a hill emphasize the form of the hill and preserve views.

B. Extremely massive buildings on or near hills can overwhelm the natural land forms, block views, and generally disrupt the character of the City.

Tall buildings should occur closest to major centers of employment and community services which themselves produce significant building height, and at locations where height will achieve visual interest consistent with other neighborhood considerations. IN ALL CASES, THE HEIGHT AND CHARACTER OF EXISTING DEVELOPMENT SHOULD BE CONSIDERED.

- RELATE THE BULK OF BUILDINGS TO THE PREVAILING SCALE OF DEVELOPMENT TO AVOID AN OVERWHELMING OR DOMINATING APPEARANCE IN NEW CONSTRUCTION.

When buildings reach extreme bulk, by exceeding the prevailing height and prevailing horizontal dimensions of existing buildings in the area, especially at prominent and exposed locations, they can overwhelm other buildings, open spaces and the natural land forms, block views and disrupt the community's character.

- RECOGNIZE THE SPECIAL URBAN DESIGN PROBLEMS POSED IN DEVELOPMENT OF LARGE PROPERTIES.

The larger a potential site for development, the greater are apt to be the size and variety of the urban design questions raised. Larger sites may mean greater visual prominence of development and greater impact upon the City pattern. As more land area is included in a single project, the possibilities are increased that the public resources in natural areas, historic sites and street space will be affected. Larger developments also have substantial requirements of public services, including transportation.

RECOMMENDATIONS

- Prepare a plan for the location and control of high-rise buildings. Use the guidelines contained in this element as the basis for this plan. If the plan is not prepared on a citywide basis priority should be given to hillside and shoreline area, areas with the greatest development pressures.

- Study methods for making the height, bulk and density guidelines as flexible as possible in their application, in accordance with their essential purposes, through bonuses, review processes, performance standards, etc.

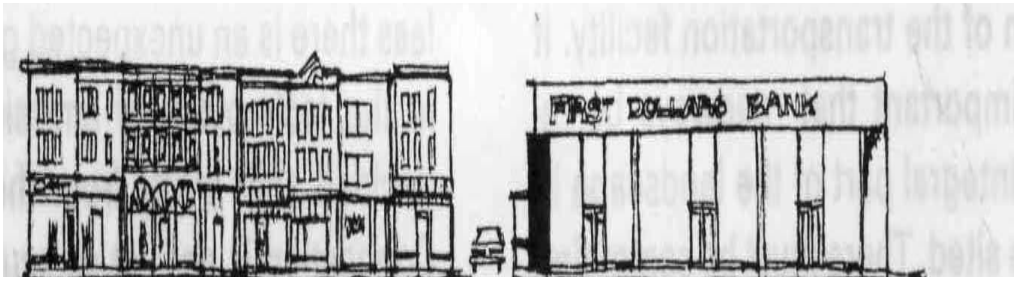
- In the absence of further legislated controls use the principles and standards in this element in project reviews already required by law where the external effects of the project must be considered.

- Enact legal controls where necessary to reduce the cumulative advantages of large site assembly in terms of the floor area, height and bulk permitted, and to take into account the external effects produced by exceptionally large developments.

- The Planning Department and the Police Department should undertake a study of the concept of "defensible space" or "Architectural Design for Crime Prevention" leading to the development of implementing standards.

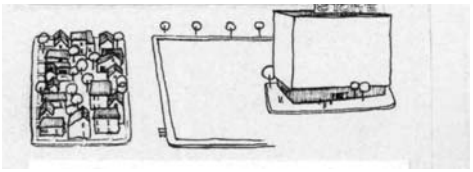
Continuity & COMPACTION…

Continuity and compaction is really a continuation of our concern for pedestrian scale. Compaction is necessary in order to place the essential elements close enough to one another to induce pedestrian movement. Continuity has to do with the quality of compaction – that there be a fairly continuous stream of items of pedestrian interest.

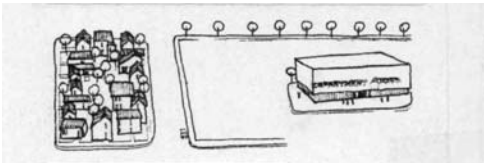


The vitality of shopping districts is dependent upon continuity. Large scale tenants such as banks, theatres and supermarkets can often sever this continuity beyond hope. The continuity of stores windows gives the pedestrian new things to look at every few feet - insert a bank and there is one or two hundred feet of no merchandise and few people. It is not the "bankness" of the bank that makes it incompatible, but rather its long expanse of inactive street frontage.

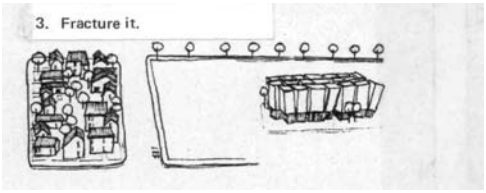
1. Take one typical shopping center



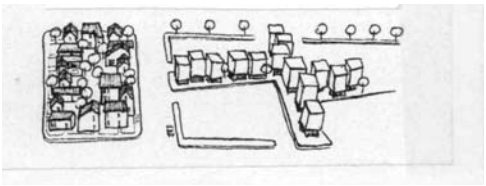
2. Squash it! Eliminate unnecessarily high ceilings, eliminate thick floors required by long runs of heating and air conditioning duct work. Eliminate false parapets used to make building look bigger.



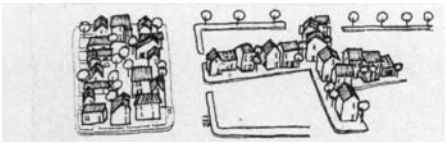
3. Fracture it.



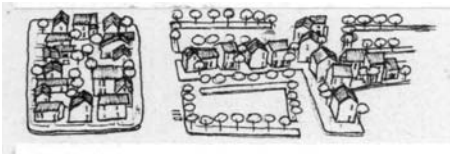
4. Redistribute it. Eliminate island effect.



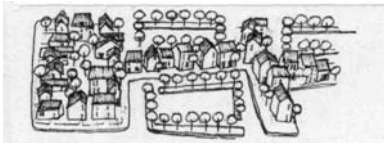
5. Now that we have lots of small buildings in place of one big one, there is really no need to build them like big buildings. Indeed, if they're house size they can be built like houses.



6. Now if we can just put the parking lots somewhere, like across the street!



7. If houses look like shops and shops look like houses why do we have a street separating them? Indeed, wouldn't it be better if we could reclaim some land previously lost to the automobile and put it back to use?



Now how are we to decide where to separate commercial from residential? Why anyone could open a shop right out of his own living room! And look at the unfair advantage of being right next door to where people have come to shop! Why you'll have people selling everything from homemade wooden spoons to ship models, and why not!

Circulation

People experience their environment by traveling through it. Circulation systems set the character of cities. One aspect of transportation planning which has often been overlooked is that portion of its site planning which involves the art or form of the transportation facility. It is especially important that roadways be regarded as an integral part of the landscape in which they are sited. There must be something more than the standard provision of a surface for moving cars or guiding public transit vehicles. However, the design of the facility must not override, but be considered equally with the safety and capacity of the facility.

San Diego is an auto city that is becoming aware of the costs of a narrow transportation base. Air pollution is an immediate problem. San Diego already discharges far more than the allowable oxidant load into its atmosphere. At current rates of growth, it will continue to fall below federal standards indefinitely, unless there is an unexpected great leap forward in the technology of emissions control, or a decided shift away from the use of the car. Congestion is not yet as acute as in other cities, but the energy situation indicates the uncertainties of depending on cars. The rapid spread of the City and region is associated with the automobile, and so is the disruption of residential neighborhoods by freeways. Less dramatic is the slow deterioration of older areas and shopping centers, and the effects on personal health of the lack of exercise - not to speak of the disadvantages suffered by those who cannot drive: the old, the poor, the handicapped, the young. But it will take a massive effort to get people out of their automobiles, a two-pronged strategy of slowing the growth of auto facilities, while speeding that of other modes.

Automobile

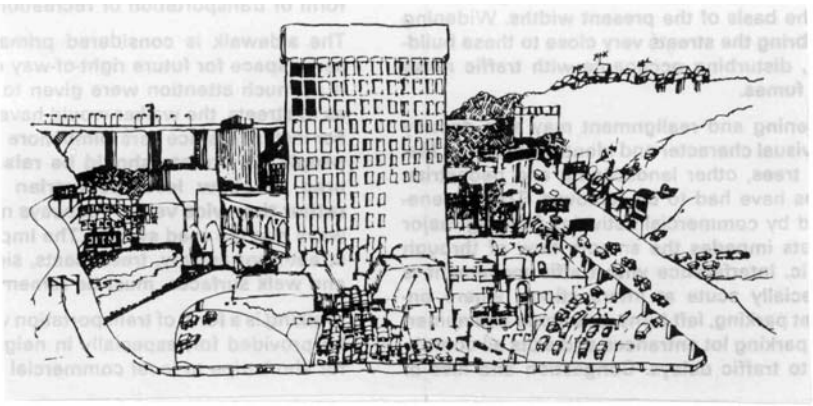
The automobile is one of the users of space in the urban environment. It has already severed, broken and diluted many of our urban spaces. It has yielded alternative transportation methods useless. The automobile must be accepted as a means of transportation but not the only means, as it has been. We must not allow it to guide our thinking as has been so true in the past. At times it should be difficult to find parking, this prompts us to walk a few blocks when we would otherwise drive.

FINDINGS

Freeways

In many parts, San Diego's freeway system is magnificent. It was put in place largely prior to development, and is still not badly congested, except in certain locations and at certain times. They are masterpieces of 20th Century engineering.

However, at times, it is difficult to know which freeway one is on. Gravel pits, bare hills, graded cuts not yet recovered, scar the natural landscape. Except thru Balboa Park, with its lavish use of water and its old trees, the effort to create a green setting has been unsuccessful. The adjacent urbanized land, which has its back to the freeway and yet is undergoing a rapid change due to that freeway access, is the effective visual setting, and it is nondescript. In some stretches, the freeway is flanked by telephone poles and signs. When the glare from the concrete is coupled with this open, dry landscape, the experience can be arid and eye-scorching. The freeways clearly cannot be replaced or relocated, but they need visual enhancement.



Streets

We are now finding out that most of our thinking about the purpose of streets, has been one-dimensional. Officially translated into traffic policy and concrete, it has over adapted our cities to a single transportation mode, bringing on strangulation, hampering adaptability to new modes, taking flexibility and "stretch" out of our street systems. Consequently, many of the City's other purposes and systems are suffering.

Obviously, streets serve a variety of purposes. One is the circulation of people, vehicles, goods and services (utilities). Streets also serve as shopping corridors, restaurant rows, linear parks, residential front yards, extensions of office lobbies, playground, ceremonial gathering places, battlefields, parade grounds, racing courses, display areas, entertainment strips, etc.

For the street is really the City, organized along a corridor. It is a continuous forum for gathering where all those activities, making city life what it is, have their overture. It has economic, social, aesthetic, political, ecological, even philosophical implications - this in addition to providing a right-of-way for the circulation of people and things.

Many streets in San Diego have no distinctive quality to identify due to their similar appearance. Some streets appear so "busy" with signs, billboards, utility poles and lines, and gaudy structures that they are confusing and discomforting to the observer. This condition is particularly characteristic of commercial strip development.

Many major streets are inadequate in width by current standards, and have buildings set back on the basis of the present widths. Widening will bring the streets very close to these buildings, disturbing occupants with traffic noise and fumes.

Widening and realignment may also destroy the visual character and identity of streets. Mature trees, other landscaping and pedestrian strips have had to be removed. Traffic generated by commercial activities fronting major streets impedes the smooth flow of through traffic. Interference with traffic movement is especially acute at intersections, where on-street parking, left turns, bus stops and numerous parking lot entrances and exits all contribute to traffic delays.

Congestion and loss of capacity are the major problems here; however, the resulting traffic chaos also looks bad.

Transit

The bus is the fundamental unit of a public transportation system, but people will be attracted to them, and away from cars, only if the convenience, frequency, character, and location of service is much improved. The economics of transportation costs and energy will also play an important part in the utilization of public transportation.

The choice of a transit system will involve many environmental and design considerations. The size and design of the vehicles will affect the degree of privacy, awkwardness and comfort. The frequency of the stops will affect the speed of travel and ease of access, but also the number of local areas disrupted. System design can also influence the noise produced, heaviness of the structure, the ease of inserting alignments into the urban fabric.

The general location of routes and stations may affect the form of regional growth. A transit system together with appropriate zoning and land use policies can induce growth just as a highway system does, therefore, the location of its routes and stations is critical for the future form of the City.

Pedestrians

Pedestrians in San Diego are a rarity today. It takes courage and stamina to walk. Rules, regulations, and practices governing development discourage walking as a meaningful form of transportation or recreation.

The sidewalk is considered primarily as reserve space for future right-of-way expansion. If as much attention were given to sidewalks as to streets, the walker would have a chance. For instance, since cars climb more easily than people do, **streets should be raised or lowered to allow level pedestrian crossings, rather than vice versa**. Footways need not always hug the road system. The importance of street-front activity, trees, seats, signs, lights, and walk surfaces, must be remembered.

Walking is a form of transportation which must be provided for, especially in neighborhoods for short trips to local commercial and public facilities and in business areas where many shoppers congregate. Sidewalks, malls and similar spaces provide not only for pedestrian movement but also for children's play, socializing among residents, window shopping, and sitting and watching. Congestion occurs on sidewalks in high activity areas, just as it does on streets. The inadequacy of pedestrian space creates inconveniences for those trying to pass through and those shopping or stopping to talk or look or rest.

GOAL

- IMPROVE THE VISUAL QUALITY AS WELL AS THE PHYSICAL EFFICIENCY OF THE EXISTING AND FUTURE CIRCULATION SYSTEM.

GUIDELINES AND STANDARDS

Freeways

- FREEWAYS MUST BE SENSITIVELY DESIGNED.

Beauty in freeway design is a result of the sum total of carefully planned and sensitively handled elements. Full consideration must be given to location, alignment, cross-section, scale, environmental impact, architectural detailing, and landscape development.

So far as visual quality in highway design is concerned, the best solutions are "natural" solutions. These include the rolling of the highway with and around (rather than across or through) attractive topographical features. Scars resulting from road cuts should be minimized. Attractive natural elements such as hills and groves should be preserved and featured rather than destroyed.

- INCORPORATE THE FREEWAY INTO THE COMMUNITY LANDSCAPE, WHERE FEASIBLE.

The existing freeway system divides the City into units of development. The improvement of the physical appearance of the freeways should be viewed as an opportunity for reinforcing these development units.

Noise, fumes, and visual intrusions can be reduced by buffers and walls, but consistent sound proofing would lead to monstrous, continuous walls. Buffers must be applied with care and locally fitted.

- CLUSTER PLANTS, VEGETATION, USE NATIVE PLANTS

It is too expensive and water-consuming to plant the freeways continuously. Intense clumps of vegetation are more effective than slim lines of trees, or narrow bands of ice plant. Native plants or drought-resistant trees may take time to grow, but it may be possible to use irrigated planting until the native species take over.

- URBAN FREEWAYS SHOULD BE PLEASANT TO DRIVE.

By location and design, urban thoroughfares should be pleasant to drive. Contributing factors include an ease in finding direction, apparent directness of routing toward desired destinations, and a sense of smooth uninterrupted flow, in harmony with the landscape forms and well related to architectural features.

Coloring the pavement and the guardrails in dark green, blues and browns, could do much to relieve the sense of glare and heat. Varied lighting systems, or signs which had local character and conveyed local names and information would support a sense of place in the City. U.S. highway details are presently neutral, standardized over vast areas of the state and the nation.

Streets

- DESIGN STREETS FOR A LEVEL OF TRAFFIC THAT WILL NOT CAUSE A DETRIMENTAL IMPACT ON ADJACENT LAND USES.

The need for traffic carriers must be balanced against the adverse effects of heavy traffic on the use of adjacent land and the quality of the environment. The needs of residents for peace and quiet, safety from harm, and useful open space must be given consideration. Each area and each street of the City have different characteristics which determine the level of traffic to be absorbed without serious adverse impacts. The following factors should be the basis for a judgment on the acceptable levels of traffic on a specific street:

- the distance between the curb and building line established by sidewalk width or setback;
- the presence or absence of buffering between street and buildings in the form of landscaping, change in elevation, or similar condition;
- the level of pedestrian traffic;
- the proportion of the street which is residential in land use;
- whether residences face the street;
- the presence of hospitals, schools, parks or similar facilities on or near the street.

The widening of streets at the expense of sidewalks or of setbacks should not occur where space is necessary for pedestrian movement, buffering from noise, useful open space and landscaping. This is especially true in densely populated neighborhoods and commercial areas with little public or private open space. No additional sidewalk narrowings, tow-away zones and one-way streets should be instituted in residential neighborhoods.

- STREET LAYOUTS WHICH DO NOT EMPHASIZE TOPOGRAPHY REDUCE THE CLARITY OF THE CITY'S FORM AND IMAGE.

Contour streets on hills which align buildings to create a pattern of strong horizontal bands that conflict with the hill form should be avoided.

- THE FOLLOWING DESIGN GUIDELINES SHOULD BE USED IN THE DESIGN OF THE STREET SYSTEM.

Major Streets

- Where residential uses abut on major and secondary thoroughfares, they should be screened visually and physically wherever possible.

- A consistent pattern of trees at regular intervals should be used to identify major streets.

- Extensive buffers should be used to separate busy thoroughfares from active pedestrian areas.

- The brightness (apparent illumination) of street lighting should be greater than on residential streets and the color or hue different from that on residential streets. The location of street lighting and transit stops must be coordinated.

- Destination information should be concentrated on major streets with signs used to route traffic on the major streets system.

Local Residential Streets

- Excessive traffic speeds and volumes should be restricted and discouraged by every means possible.

- Where possible, vehicular access directly to and from local streets should be from other than major thoroughfares, e.g., via a secondary thoroughfare or collector street.

- When alternate access is possible, residences should not access to major thoroughfares.

- Local streets, other than collectors, should be primarily for access to residences and to serve for emergency vehicles; pedestrian-dominant streets with the maximum feasible amount of street space devoted to environmental amenities desired and needed by the residents.

- Residential streets should be well-lighted without being excessively bright.

Intersections

- Street width, traffic controls, destination and route information and illumination should be maximized at the intersection of two major thoroughfares.

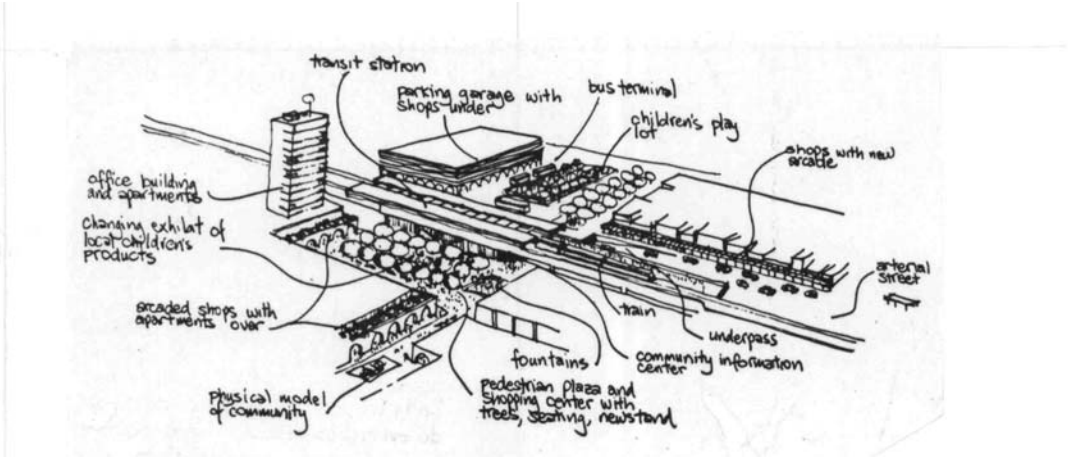
- Two intersecting residential streets should have minimal roadway width, wide sidewalks and no change in illumination from that on the streets themselves.

- Intersections of residential streets and major thoroughfares should be minimized; where they must intersect, cross and left-turn movements should be limited by curb alignments or medians.

• INCREASE THE CLARITY OF ROUTES FOR TRAVELERS.

Many types of improvements can be made in street area and in their surroundings to provide greater clarity and increase the ease of travel. Once such improvements have been made, adequate maintenance of them is of equal importance.

Among the least difficult actions would be development of a better system of identifying and directional signs, through improvement of verbal messages, symbols, graphic design and sign placement.



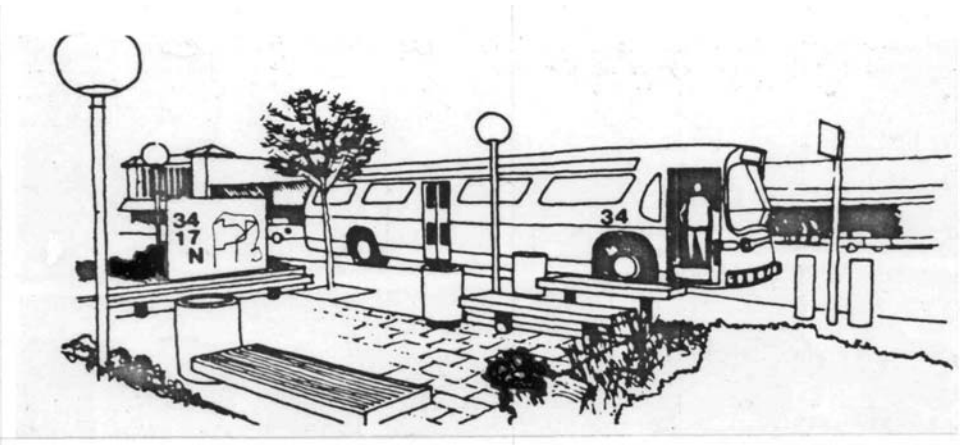
Transit

- THE DETAILED LOCATION AND FORM OF THE LINES AND STATIONS MUST RESPECT THE LOCAL FABRIC.

  Carelessly done, transit can be as destructive as highways. A system that fits poorly into the landscape, is unlikely to satisfy a broad range of travelers, if engineering criteria are dominant during the design. Environmental surveys of the corridors should locate sensitive areas, areas of change, neighborhood and community territories, valued places, and good crossing points.

- TRANSIT STOPS AND STATIONS CAN BE IMPORTANT COMMUNITY FOCI.

  Stations should be located where they can reinforce existing centers and where higher densities are possible. Rather than surrounding stations with vast parking lots, bus, pedestrian and bicycle access to the stations should have equal consideration. Parking garages could compact the areas devoted to the automobiles.



- TRANSIT ROUTES, STOPS, AND TRANSFER POINTS CAN BE MORE EASILY UNDERSTOOD AND REMEMBERED IF THEY ARE DISTINCTIVELY IDENTIFIED BY SIGNS, LANDSCAPING AND ILLUMINATION.

Attractive, easily seen symbols at bus stops that indicate the type of service and the route can facilitate use of the transit system.

The importance of transfer points can be expressed by the amount and type of landscaping, provision of shelters for waiting passengers, and nighttime lighting.

- THE FOLLOWING DESIGN GUIDELINES SHOULD BE FOLLOWED IN THE DESIGN OF THE TRANSIT SYSTEM.
    - Major transit transfer locations should be highly visible and identifiable; wherever possible, there should be adjacent space for shelter, information, amenities and off-street loading.
    - Special lighting should be used to identify transit stops.
    - Lines named for streets, such as the El Cajon bus, should stay on those streets as much as possible.
    - As many routes as possible should pass through major transfer "transit locations."
    - Routes should, to the extent possible, run in straight lines between well-known termini.
    - Waiting areas should be extended into the parking lane and vehicle stops made in the right-hand traffic lane on major transit routes.
    - Graphic symbols and color coding should be used to identify specific transit routes or districts and places served.
    - Vehicles should be distinctively marked to identify the type of service they offer: local, express, shuttle, limited-stop.

Pedestrians

- WIDEN SIDEWALKS WHERE INTENSIVE COMMERCIAL, RECREATIONAL, OR INSTITUTIONAL ACTIVITY IS PRESENT AND WHERE RESIDENTIAL DENSITIES ARE HIGH.

In many high-activity areas of the City sidewalks are narrower than required for pedestrians. Where pedestrian traffic is high and through vehicular traffic is light or can be moved to alternate routes or reduced by transit improvements, some street space can be made into wider sidewalks, landscaped strips, and sitting areas. Through traffic should be discouraged or eliminated to avoid conflicts which inconvenience drivers and pedestrians and may increase accidents. In a high density residential area with little open space, wider sidewalks and small plazas should be created to provide more usable space as well as to discourage through traffic.

- ENSURE CONVENIENT AND SAFE PEDESTRIAN CROSSINGS.

Where streets are designed for high volumes or relatively fast movements of vehicles, adequate provision must be made for safe and convenient pedestrian crossings. This is especially important near schools, parks and hospitals, and in high-density residential areas. Wide streets should have adequately timed lights and median strips or islands at intersections to allow safe crossings. If grade separation of pedestrian and vehicular movement is necessary, the roadway should be depressed to maintain continuity of pedestrian paths wherever possible. If a change in pedestrian levels is required, ramps are preferable to stairs.

- PARTIALLY OR WHOLLY CLOSE CERTAIN STREETS NOT REQUIRED AS TRAFFIC CARRIERS FOR PEDESTRIAN USE OR OPEN SPACE.

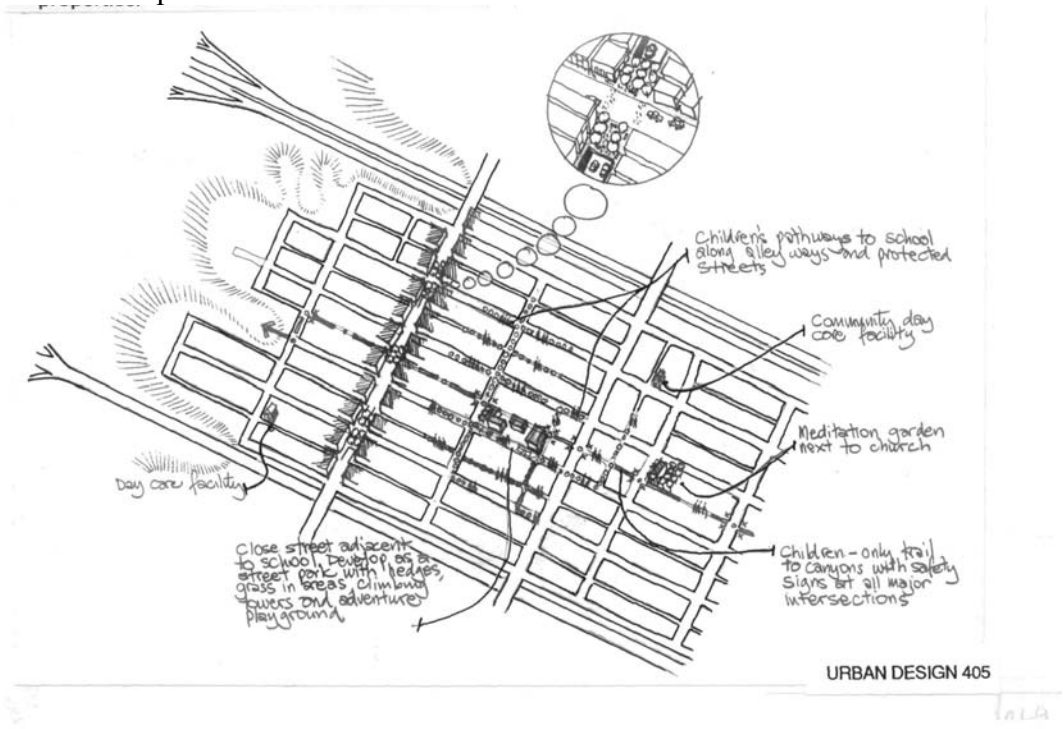
Some streets in active shopping areas and in residential areas can be closed wholly or partially to vehicular traffic, because the streets are not required for vehicular use, except possibly at infrequent intervals or during emergencies. Partial closings can be achieved by substantially narrowing the roadway or by installing temporary barriers during certain periods of the day. Doing so would open up the street for nontraffic uses, without its loss for emergency use or access to homes and businesses.

- PROVIDE ADEQUATE LIGHT IN PUBLIC AREAS.

In order to reduce the hazards of traffic at night, and provide security from crime and other dangers, public areas should have adequate lighting. Although the need for lighting is general, special attention should be given to crosswalks, bus stops and to pathways in parks and around public buildings. Care should be taken to shield the glare of any such lighting from residential properties.

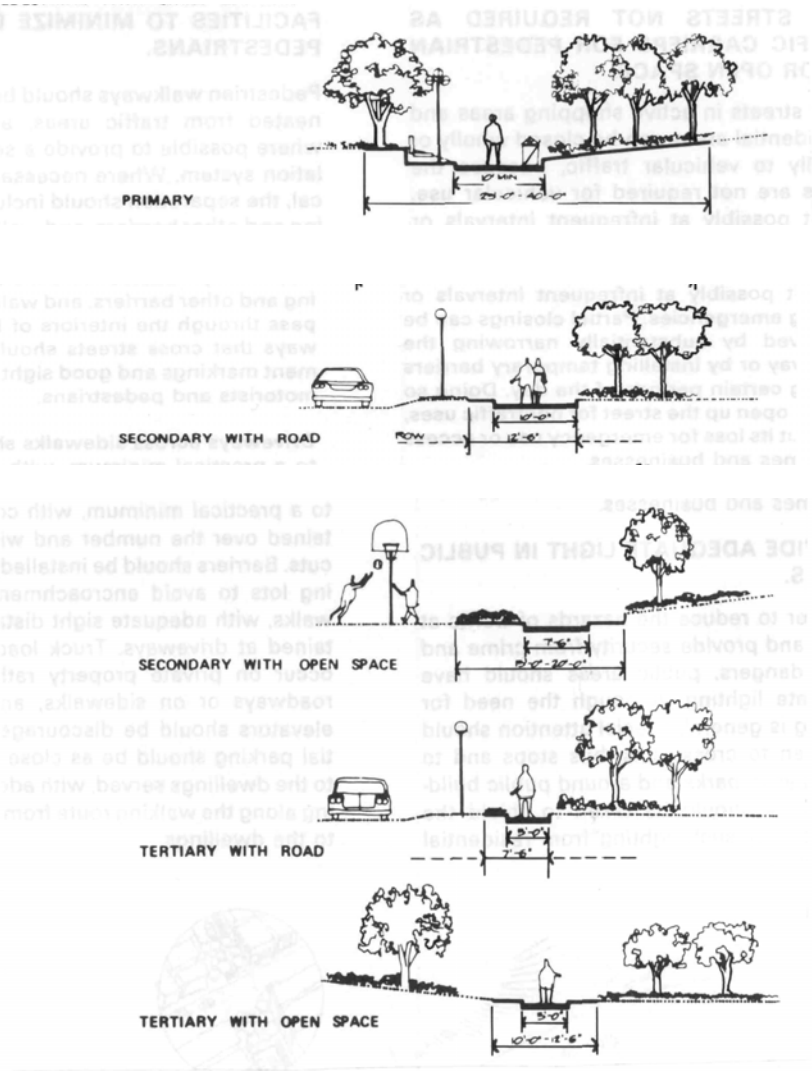
- DESIGN WALKWAYS AND PARKING FACILITIES TO MINIMIZE DANGER TO PEDESTRIANS.

Pedestrian walkways should be sharply delineated from traffic areas, and set apart where possible to provide a separate circulation system. Where necessary and practical, the separation should include landscaping and other barriers, and walkways should pass through the interiors of blocks. Walkways that cross streets should have pavement markings and good sight distances for motorists and pedestrians.



Driveways across sidewalks should be kept to a practical minimum, with control maintained over the number and width of curb cuts. Barriers should be installed along parking lots to avoid encroachments on sidewalks, with adequate sight distances maintained at driveways. Truck loading should occur on private property rather than in roadways or on sidewalks, and sidewalk elevators should be discouraged. Residential parking should be as close as possible to the dwellings served, with adequate lighting along the walking route from the parking to the dwellings.

PEDESTRIAN PATH CROSS SECTIONS



RECOMMENDATIONS

- Jointly with CALTRANS and the Comprehensive Planning Organization study the rehabilitation of existing highways and freeways.

- Conduct a citywide analysis of conditions to which pedestrians are subjected.

- Prepare guidelines for the rehabilitation of existing streets and the design of new streets that emphasize the needs of people first and automobiles second. This to include: careful attention to the safety aspects of sidewalk lighting and walking design, improvements of traffic channels, directional signs and other aspects of street design to increase clarity of routes, methods of reduction of clutter in and adjacent to sidewalks, and coordination of all street improvement methods to bring about unified design and a maximum of amenity of these improvements.

- Analyze along with the CPO and the MTDB proposed transit systems in order to gauge potential problems of quality, encourage good joint development, and to improve the experience of the ride and transfer. Guidelines should be laid out for the location and design of the routes, stations, and vehicles. Similar studies should be made of bus stops and routes.

GENERAL URBAN DESIGN RECOMMENDATIONS

The Urban Design Element establishes a framework within which the City can preserve that which is good in the present environment, enhance that which could be better, guide or control that which is new so that it will be compatible with its surroundings both natural and built, and improve the environment where it is deficient in the qualities that are desired by the community.

The Urban Design Component is a system of common reference points to enlist community agreement on courses of action with respect to urban design. It seeks to resolve the conflicts that arise from the pressures of growth and change.

Just as there has been no overall plan in the past to define quality in the San Diego environment, there has been no overall implementation system, no authorized hierarchy of standards and procedures to be used in questions affecting urban design. Such a system is both difficult to establish and difficult to adapt to new pressures and changing needs.

To be effective, an urban design program must employ a variety of implementing methods including regulatory provisions, capital improvement guidelines, inter-and intra-governmental procedures and public information and participation efforts.

In general, an implementation program should be based on the following premises:

- Effective, long-term solutions to urban design problems do not come from repeated confrontations over development proposals. The emphasis should be upon evolving solutions by use of the best design talents, and upon the making of decisions through a rational choice among the available alternatives with all significant urban design values taken into account.

- To establish a climate for such solutions and decisions, there must be widespread agreement on points or terms of reference before a given development project is either designed or announced. These terms of reference must be defined by public planning to which the community is committed.

- In order that such planning may have real meaning, there must be early and continuous involvement of urban design professionals who express the public's point of view, in all significant projects affecting the physical development of the City. It is critical that this involvement be timely if it is to be effective and persuasive.

- These urban design professionals, and others who seek solutions or make decisions affecting urban design, will be able to respond to the public's interest in a better city only if there is citizen discussion of the major issues, citywide and in each community.

The general approach just described is dependent upon processes in planning, in project review and in decision making. Taken in a very broad sense, the approach means that there must be a "planning-development process" that includes all the elements of the City affected by planning and development, both public and private. This process proceeds from the setting of overall

objectives and policies to the final execution of projects without any break in the chain of planning and decision making. The concept of such a process is extremely challenging, but it is essential to the working out of a comprehensive plan with real community significance.

An effective process requires organization, which means primarily the organization of the city government to carry out its responsibilities effectively and in a responsive manner. Although organization is the business of the whole government, in matters of planning and especially urban design the City Planning Department and the City Planning Commission are cast in a central role for the making of policy and the outlining of programs to carry it out.

Thorough processes and strong organization will not be fully used without community education in matters of urban design. Planning is itself an educational experience, for it helps to highlight the urban design issues and to outline the available alternatives for both the general public and their representatives in government. Among all the means of education, open meetings in the community are the most effective in encouraging a free exchange of ideas.

In project review especially, but in other public and private design processes as well, it is important that key points be identified for review and consultation involving the public urban design professionals. Those professionals would in most cases be members of the staff of the City Planning Department.

The input of urban design planning in these processes involves certain financial costs. It requires a commitment to a permanent urban design staff, adequate in numbers and talent to carry out its responsibilities. For effective work, and for adequate explanation of the urban design issues to other participants, especially to the public at large, the design input requires a variety of graphic illustrations, including three-dimensional models. Such illustrations are necessary to show what design alternatives are available, and to show the effects of the alternatives upon the rest of the City. On the part of private developers, who may have to provide some of this illustrative material, the urban design input may also result in additional costs in architectural services in order to improve the design of their projects. The same may be true where the projects are built with public funds.

On the other hand, it is possible that the total net effect of methodical review of the urban design considerations will be a lower cost. Certainly this will be so if such review is substituted for a period of extended confrontation and redesign resulting from chaotic review and decision making. In some cases, too, the improved design solutions for either public or private projects may simply involve less expensive construction. In any event, if all public costs are considered, and the long-term effects of each project upon the City are included, any higher immediate costs that may be imposed may be regarded overall as a wise bargain.

- INSTITUTE AN URBAN/ENVIRONMENTAL DESIGN PROCESS FOR THE CITY.

The process will concentrate on regulatory methods, the most widely applied planning implementation technique, but also the method which has most often failed to improve environmental quality.

The Urban Design Element is intended to supplement the planning background that assists in specific application of the provisions of the planning and zoning regulations. The element is not deemed however to supersede or negate any explicitly existing provision of the planning and zoning regulations and no change can occur unless and until it is accomplished by specific legislation adopted in the manner required for ordinances.

The Urban Design Element should be used as:

- the basis for preparation of similar elements in community plans;
- the basis for preparation of specific studies and legislation dealing with issues confronting the built environment;
- the basis for revisions to the development regulations section of the planning and zoning regulations.

The Urban Design Element and subsequent studies should be used as criteria and standards for evaluating projects requiring discretionary action; CUPs, Planned Developments, Zoning Variances and exceptions, etc.

The Urban Design Element should become the basis for preparation of a council policy on design of the built environment.

As part of the urban design process a method should be developed so that the planning and zoning regulations and adopted community plans can be used together to determine the appropriateness of proposed public and private development projects.

- CREATE AN URBAN DESIGN SECTION WITHIN THE PLANNING DEPARTMENT.

In order to begin a continuous urban design/environmental planning process the following actions should be undertaken:

- Make a detailed assessment of the quality of the San Diego environment and how it is perceived and used by its people;
- Analyze how the City's environmental quality is created today, and propose strategic changes in that process.
- Propose images and policies for the future City that will stimulate public discussion and provide a framework for the present scattered efforts to improve the quality of San Diego.
- Review and revise the zoning ordinance and other land development regulations to comply with the Urban Design Program. Prepare performance standards, development regulations, and maintenance rules to govern the private and public use of land.

Ongoing functions of the Urban Design Section would include:

- Design review including evaluation of planned developments, Conditional Use Permits, and other discretionary actions.

- With other City departments and public agencies:

Promote design considerations and coordinate key public projects, with private projects in redevelopment or special planning areas.

- Participate in, organize, and lead special task forces formed to design and coordinate complex public projects, or to guide the development of special districts of the City.

FOOTNOTES

1. Lynch and Appleyard in their report “Temporary Paradise?" described "six basic values which might be thought of as the environmental rights of any citizen":

   Livability: An environment in which one can act with confidence, free from such dangers and discomforts as noise, pollution, accident, heat, glare, and fatigue.

   Access: A region in which all groups--including, the young, the old, the poor, the handicapped, and the Spanish-speaking--have equal access to work places, education and medical facilities, recreation and open space, and to public environments of equal quality.

   Sense of Place and Time: A landscape which has the definite sense of place and history of which citizens can be proud, and where the different communities take pride in their own territories.

   Responsiveness: An environment in the human scale, which allows for personal control and the expression of personal values.

   Pleasure and Sensibility: A landscape that is a pleasure to live in, where the senses are heightened by its richness, esthetic quality, and sense of life.

   Conservation: A place in which all valuable resources, both natural and urban, are cared for and conserved.

Allen B. Jacobs, former Planning Director of San Francisco, in a speech to the 1968 ASPO Convention gave the following description:

> "I'm afraid that I would define social goals in fairly simplistic terms. When you put them together, they mean, to me, the Good Life! The good life is whatever each person or family or group thinks it is, or should be."

"Having said that, it does become necessary at least to try to define it. Perhaps it boils down to such simple terms and concepts as the following:"

Health: the ability to grow up and live free of environmental disorders.

Privacy: the opportunity to be alone when a person wants to be alone, with no one "bugging" him.

Comfort: physical comfort in housing and in getting around.

Fun: laughter, facilities; a place to go when a person wants to go somewhere; people around or available when one wants company, and sex. That's fun!

A chance: a chance for achievement, a chance to achieve what a person wants in terms of jobs, education, housing.

Freedom: freedom of movement, of choice, of play.

Security: physical safety; a setting in which a person may relax.

2. Time and transferable development rights are a new idea, whereby growth might be more strictly controlled in location and timing, without giving windfall profits to some landowners and causing severe losses to others. In brief, a total maximum growth rate would be set for some region, and specific, limited zones be designated in which that growth would be allowed to happen. At the same time, all landowners in the region would be given marketable development rights on some equitable basis. Developers in the favored areas would have to buy up rights from other owners in order to proceed with anything more than low-density building on their land. See Lynch, "Controlling the Location and Timing of Development by the Distribution of Marketable Development Rights," unpublished, 1973.

Illustration in the Urban Design Element courtesy of:
Matt Potter, "You See San Diego"S.D.A.I.A.
Kevin Lynch, Donald Appleyard, "Temporary Paradise?"
"Urban Design San Diego" S.D.A.I.A.
National Association of Home Builders

GENERAL PLAN MAP

General Plan Map

The General Plan Map is the Land Use Element of the General Plan. It illustrates the location of residential areas, commercial activity, industrial development, public facilities, the alignment of the transportation network and the open space/park system. It is intended to indicate only those land uses of regional or citywide significance and its locational designations should be considered advisory only. The fine detail so often seen on planning maps is included not on the General Plan, but on the many community plans which have been developed throughout the San Diego area. Reference must be made to these plans and the maps and descriptions contained within them in order to determine the land-use designation of any particular property.

Residential neighborhoods are shown on the General Plan Map as an undifferentiated single designation. These areas are understood to include a wide range of housing types and densities as well as various supportive uses, such as neighborhood shopping, recreation, institutional, parks, libraries and public safety services and facilities. The General Plan Map also shows general land uses for areas outside the City limits but within the metropolitan area.

Appearing on the reverse side of the General Plan Map is a map showing the Community Planning Areas and those areas of the City which are **URBANIZED, PLANNED URBANIZING** and available for **FUTURE URBANIZATION**. This terminology is defined in the section of the General Plan text identified as Guidelines for Future Development. The Urbanized definition covers a majority of the land area in the City and includes, with minor exceptions, all of the communities south of Miramar Naval Air Station. Planned Urbanizing refers to still developing communities like Rancho Bernardo, Tierrasanta and South Bay Terraces. Future Urbanizing is, at present, vacant and is to be held as an urban reserve until needed. All other undeveloped lands remaining within the City are the floodplains, steep slopes and areas of environmental concern (lagoons, agriculture, unique wildlife). These lands make up the open space system for the City.

APPENDIX

Environmental Impact Reports

Consistent with the requirements of the California Environmental Quality Act a Supplemental Environmental Impact Report (EIR) was prepared for each of the General Plan elements. In addition a detailed evaluation was made of the Guidelines for Future Development which is the Residential Growth Management Program for San Diego. This EIR looks at the City's program of managing growth and its relationship to both regional and state goals and policies. It also documents sources and reference for each aspect of the environmental setting.

General Environmental Impact Report

Progress Guide and General Plan Amendment - No. 77-09-20

Supplemental Environmental Impact Reports

Housing
Transportation - No. 78-03-56
Commercial - No. 78-03-55
Industrial - No. 78-10-16
Public Facilities, Services and Safety - No. 78-03-60
Open Space - No. 78-02-27
Recreation - No. 78-03-52
Redevelopment - No. 78-01-15
Conservation - No. 78-03-48
Energy Conservation - No. 78-03-49
Cultural Resources Management - No. 77-08-31
Seismic Safety - No. 78-03-54
Urban Design - No. 77-09-37

Background Studies

A Growth Management Program for San Diego, Report to the San Diego City Council and Planning Commission, - July 8, 1976 - The first of two reports describing the Five-Tiered Program for San Diego, prepared by Robert H. Freilich, Hulen Professor of Law, University of Missouri, Kansas City.

Development Incentives – October 1976 - An examination of various development incentives that would encourage growth inward toward already urbanized areas.

Report on Vacant and Underutilized Lands -
October 1976 - This report is an inventory of privately owned vacant residential land and underdeveloped land which is defined as being those parcels zoned for multifamily use but developed with a single-family unit or a multifamily structure below the density permitted.

Low and Moderate Income Housing Allocation – October 1976 - Explains the development of a housing allocation model which could be used as a guideline in preparing the housing element of the General Plan and the Housing Assistance Plan for the City.

Tier III Alternatives - November 1976 - Examination of alternatives for growth in the Tier III communities.

Tier IV Assessed Value - November 1976 -An inventory of the assessed value of land and improvements in the Tier IV geographic areas of each Tier III alternative.

Analysis of Community Characteristics -
December 1976 - Each community in the City was evaluated in order to determine their potential for growth and under what condition this growth might occur.

An Analysis of Public Facilities - December 1976 - An overview of the possible impact of growth on community facilities were the City to undertake a Growth Management Program which emphasizes growth in Tiers I and II.

An Analysis of Socio-Economic Considerations - Balanced and Self-Contained Communities - December 1976 - This report is a preliminary effort to develop a criteria and methodology by which the communities in San Diego can be evaluated in terms of their balance and self-containment.

Summary and Conceptual Strategy for a Growth Management Program - December 1976. A condensation of the conceptual framework of managing growth in San Diego. The report includes the alternatives for growth, a description of the tier approach and methods for implementing development in the different Tiers.

A Residential Growth Management Program for San Diego - April 1977 - Approved by the San Diego City Planning Commission, April 14, 1977, and the San Diego City Council on July 20,

1977. This report presents in more detail than the summary listed above, the program for managing growth within the City of San Diego.

A Five Tiered Growth Management Program for San Diego, The Implementation Program - July 20, 1978 - The second report to the Planning Commission and City Council prepared by Robert H. Freilich, Hulen Professor of Law, University of Missouri, Kansas City, describes the implementation process for managing growth in San Diego.

Fiscal Impact Study - February 1977 -Volume I, Analysis of the fiscal impact of Growth Management on the City of San Diego and the Unified School District. Prepared by Financial Management Department, City of San Diego and Marcou, O'Leary and Associates.

Fiscal Impact Study - February 1977 -Volume II, Description of the methodology used in developing the fiscal impact of Growth Management. Prepared by Financial Management Department, City of San Diego and Marcou, O'Leary and Associates.

The Impacts of Alternative Growth Management Policy Sets on the Housing Market of San Diego - June 1978 - The study projects the demand, supply and cost of housing in the City of San Diego under alternative sets of growth management policies, one representing current policy and the other considering additional incentives to development in the older, developed portion of the City. Prepared by Hammer, Siler, George Associates.

San Diego City Growth Management Studies Income and Employment Component - July 1978 - Report examines employment and income implication of the City's Growth Management Program. Prepared by Econmetric Research Associates, Inc.

Natural Resources Study - July 1978 - Examined the effects Growth Management would have on demands for electricity, natural gas, energy sources, water, capital costs for sewers, telephone service, the value of open space and the costs and savings in transportation. Prepared by Copley International Corporation in association with JHK and Associates.

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Special appreciation is given to Dr. Robert H. Freilich, Hulen Professor of Law, University of Missouri, Kansas City, Missouri, who participated in this program as a consultant on the legal aspects of the Residential Growth Management Study.

And lastly, acknowledgment is given to those members of the Planning Department who greatly contributed to the preparation of this document.