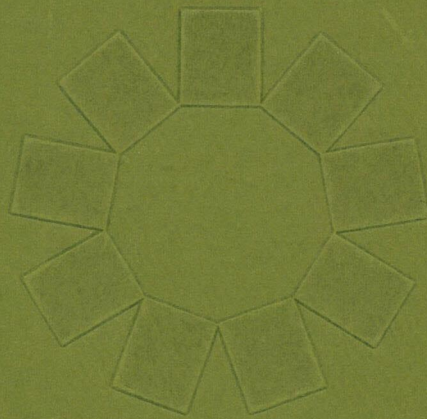


HT394
.C21,A77
1970

MTC-ABAG Library



R0004067



Regional
Plan
1970:1990

San Francisco Bay Region

ASSOCIATION OF BAY AREA GOVERNMENTS • BERKELEY, CALIFORNIA

15156

DATE DUE	
JUN 14 1991	AUG 28 2010
FEB 16 1993	
NOV 28 1997	
MAR 01 2000	
APR - 1 2000	
JUN 12 2000	
JUL 20 2001	
JUL 26 2003	
JAN 08 2003	
MAR 13 2004	

MTC-ABAG LIBRARY
101 8th STREET
OAKLAND, CA 94607
(510)464-7836

Regional Plan 1970:1990

San Francisco Bay Region

Approved by the Association's General Assembly, July 30, 1970

BERKELEY, CALIFORNIA
JULY 30, 1970

ASSOCIATION OF BAY AREA GOVERNMENTS

TO: Officials and Citizens of the San Francisco Bay Region

The Association is pleased to present its 1970:1990 Regional Plan. The Plan represents one of the major accomplishments of the regional planning process initiated by the Association in 1962.

The Plan as approved by the Executive Committee and the Regional Planning Committee is intended to achieve a number of objectives. First, it will identify for one point in time the Regional Planning goals, policies and development concepts of the Association. As such, the Plan will serve as a benchmark to both guide future decisions and serve as a point of reference for the consideration of additional policies and goals.

Secondly, the Plan will provide a broad regional framework for use by local cities and counties in evaluating and coordinating local plans, policies and goals. As such, the plan during the months to come will be subject to continuous examination and testing. The end result of such a process, as was clearly demonstrated in the 14 month review program related to the Association's 1966 Preliminary Regional Plan, will be to improve the quality of both the local and the regional planning process and plans.

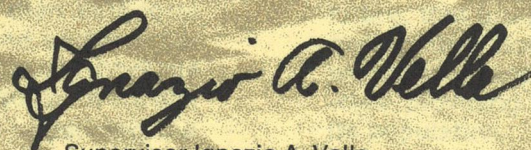
Thirdly, the Plan will also serve as the focal point for discussion among all interested persons as to the future of the region. It will provide for the first time an overall regional policy and plan framework for the San Francisco Bay Area. Previous plans and planning policy statements originating from other areawide planning agencies have been limited in terms of geographic or functional areas of concern. Every effort was made to incorporate the findings and recommendations contained in the 1969 plans prepared by the Bay Area Transportation Study Commission and the Bay Conservation and Development Commission.

Perhaps the most important aspect of this planning proposal is that it reflects the charge of the General Assembly in AB 1846, Legislative Session of 1969, which stated that:

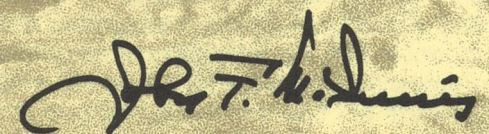
"Regional plan" means a comprehensive, general plan for the development of the region. The regional plan shall consist of a text and a map or maps and such recommendations concerning current or future problems as may affect the region as a whole. The regional plan shall include, but not be limited to, and specifically identify regional plan elements for a regional airport system, regional open space and parks, and regional refuse disposal, regional housing needs, conservation and development of the bay and its shoreline, regional air quality controls, regional water quality controls, and a balanced regional transportation system. The regional plan shall, except as expressly provided in this chapter, be advisory to governmental agencies located within the region.

However, the 1970:1990 Regional Plan should not be viewed as a final product but rather as the beginning of what must be a comprehensive, continuous and coordinated effort to develop practical guidelines to embrace both living and working conditions in the Bay Region.

We hope that after reviewing the Plan you will accept it and will lend your support to the Association in its future efforts to translate planning proposals into action programs. We invite you to contact us concerning your comments, your suggestions and your criticisms. The Association recognizes that future changes in the Plan will be necessary and one important source for identifying the changes needed is from interested citizens as well as public organizations.



Supervisor Ignazio A. Vella
President
Association of Bay Area Governments



Supervisor John F. McInnis
Chairman
Regional Planning Committee

Regional Plan 1970-1980

San Francisco Bay Region

Approved by the Association's General Assembly, July 1970

GOVERNMENT OF THE BAY AREA

The Board of Supervisors of the County of Alameda

and the Board of Supervisors of the County of Contra Costa

do hereby certify that the following is a true and correct copy of the

Regional Plan for the San Francisco Bay Area, as adopted by the

Association of Bay Area Governments on July 1, 1970.

Witness my hand and the seal of the County of Alameda this 1st day of

July, 1970.

County Clerk

County Clerk

County Clerk

County Clerk

County Clerk

County Clerk

County Clerk

County Clerk

County Clerk

County Clerk

County Clerk

County Clerk

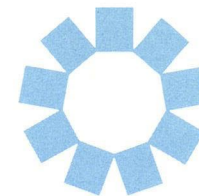
County Clerk

County Clerk

County Clerk

County Clerk

FOREWORD



Regional planning is much more than a simple matter of allocating land for development. It must concern itself with all the whats, wheres, hows, and whys of an infinitely complex problem: improving the quality of the living environment for a large and growing population. The 1970:1990 Regional Plan is an attempt on the part of the Association of Bay Area Governments to address this problem. It focuses on such areas as population, employment, location and transportation, and environmental quality for the entire region (open space, etc.). The result is an understanding of regional problems which leads to the formulation of a set of policies aimed at their solution. Translating these policies into action should be the decisive step in creating a better living environment for those living in the region. The rationale for bringing all of these factors together in a Regional Plan is as follows:

1. Planning at the local level is also concerned with problems of population, economic growth, transportation and environmental quality. The Regional Plan provides a needed communications bridge which permits local authorities to determine land use in a way that benefits the entire region and not just the immediate locale.
2. The Regional Plan presents its policies and objectives as comprehensively as possible, through both words and diagrams. Such a format aids the Association and other interested parties in understanding the links between intangible ideas and the tangible world. Differences in interpretation are therefore minimized, leading to a greater agreement among those concerned with planning the region's future. The development of such a consensus has been one of the Association's major goals in its continuing regional planning efforts.

The 1970:1990 Regional Plan proceeds from a general description of the physical character and the growth elements of the region to an elaboration of the regional planning framework. It then sets forth planning recommendations and policy guidelines, and implementation procedures. Although readers may agree with some portions and disagree with others, adequate assessment requires a careful consideration of the problems, concepts, and goals underlying the

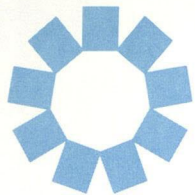
plan recommendations and policy guidelines. The Plan's ability to stimulate the consideration of these matters is in itself an important step in regional development.

The 1970:1990 Regional Plan is the result of almost a decade of research and development by the Association. Important milestones in the process were as follows:

- 1962-63 – Design and financing of the Preliminary Regional Planning Program.
- 1964-66 – Preparation of the Preliminary Regional Plan.
- 1966 – Presentation of the Preliminary Regional Plan to the Association's General Assembly.
- 1967-68 – Public hearings and review process of the Preliminary Plan conducted over a 14 month period.
- 1968 – Establishment of the policy framework for the preparation of the 1970:1990 Regional Plan based on the General Assembly's review process.
- 1969-70 – Preparation of the 1970:1990 Regional Plan.
- 1970 – Association's 1970:1990 Regional Plan for the Bay Region established as regional policy by action of the General Assembly.

The 1970:1990 Regional Plan will be refined further during the coming years. Special element plans involving water, sewage, drainage, open space, transportation, airports, etc. will be developed. Each of these special element plans will continue to reflect the general policies and goals as set down in the 1970:1990 Regional Plan.

Finally, in studying the Plan, remember that it focuses on the basic physical development concept for the City-Centered Region. Emphasis is on distinct urban centers, either in existence or planned for the future, that are scaled to absorb anticipated residential growth and employment needs. Urban development patterned on this concept would best respect and preserve the region's natural environment, while providing the highest level of urban economy and life style for its population.



ASSOCIATION OF BAY AREA GOVERNMENTS

Supervisor Ignazio A. Vella, President
Mayor Ronald R. James, Vice President

EXECUTIVE COMMITTEE COUNTY REPRESENTATIVES:

Supervisor John P. Bort, Alameda
Supervisor Robert E. Hannon, Alameda
Supervisor Alfred M. Dias, Contra Costa
Supervisor James P. Kenny, Contra Costa
Supervisor John F. McInnis, Marin
Supervisor Dewey K. Andersen, Napa
Supervisor Terry A. Francois, San Francisco
Supervisor Dianne Feinstein, San Francisco
Supervisor Jean Fassler, San Mateo
Supervisor Gerald F. Day, San Mateo
Supervisor Ralph H. Mehrkens, Santa Clara
Supervisor Victor Calvo, Santa Clara
Supervisor Ignazio A. Vella, Sonoma

CITY REPRESENTATIVES:

Mayor Jack D. Maltester, San Leandro
Councilman Donald F. Dillon, Fremont
Vice Mayor Louise Giersch, Antioch
Vice Mayor Adelaide Wilson, Fairfax
Mayor Ralph Trower, Napa
Mayor Joseph L. Alioto, San Francisco
Mr. Thomas J. Mellon, CAO, San Francisco
Supervisor Ronald Pelosi, San Francisco
Mayor Lewis Grasberger, Millbrae
Vice Mayor Frances Dias, Palo Alto
Councilman Edward Rogers, Campbell
Councilman Arne Digerud, Fairfield
Mayor Talbert Bean, Sonoma
Vice Mayor Joshua Rose, Oakland
Councilman Felix F. Chialvo, Oakland
Councilman Fred Maggiora, Oakland
Councilman Walter V. Hays, San Jose
Mayor Ronald R. James, San Jose

REGIONAL PLANNING COMMITTEE

Supervisor John F. McInnis, Chairman,
Marin County
Mayor Ralph Trower, Vice Chairman, Napa
Mayor Joseph L. Alioto, San Francisco
Supervisor Dewey K. Andersen, Napa County

Mayor T. Bean, Sonoma
Supervisor Ralph H. Mehrkens, Santa Clara County
Supervisor Alfred M. Dias, Contra Costa County
Vice Mayor Frances Dias, Palo Alto
Councilman Arne Digerud, Fairfield
Councilman Donald F. Dillon, Fremont
Supervisor John Ertola, San Francisco
Supervisor Jean Fassler, San Mateo County
Sanford Getreu, Planning Director, San Jose
Councilman Tom Kitayama, Union City
Mayor George Livingston, Richmond
Richard Oliver, Planning Director, Napa
Councilman Francis P. Pacelli, Daly City
Mayor John H. Reading, Oakland
Councilman Adelaide Wilson, Fairfax
Kenneth R. Blackman, Planning Director,
Santa Rosa

STAFF: ASSOCIATION OF BAY AREA GOVERNMENTS

J. Julien Baget, Executive Director

REGIONAL PLANNING STAFF:

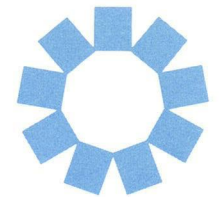
James H. Hickey, Planning Director
Rudolph R. Platzek, Principal Planner
Daniel McNichol, Principal Research Planner
Paul Spiegel, Senior Planner
J. Fred Silva, Associate Planner
Ned Honig, Associate Research Planner
Waide Egener, Assistant Planner
George R. Swanson, Assistant Planner
Ted J. Baptista, Chief of Graphics
Lizette Weiss, Community Relations
Adrienne Morgan, Planning Aide
Roger Butler, Planning Aide
Frank Broadhead, Planning Aide

ACKNOWLEDGEMENT:

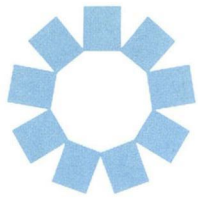
Special acknowledgement is made of the many contributions of local, city and county planning directors and staff members, the staff of the Bay Conservation and Development Commission and the Regional Transportation Planning Committee.

The preparation of this report was financed in part through an urban planning grant from the Department of Housing and Urban Development under the provisions of Section 701 of the Housing Act of 1954 as amended.

CONTENTS



FOREWORD	1
THE PHYSICAL SETTING	4
NATURAL ENVIRONMENT	4
MAN-MADE ENVIRONMENT	4
GROWTH AND CHANGE ELEMENTS	7
POPULATION	7
ECONOMY	9
FRAMEWORK FOR THE 1970:1990 REGIONAL PLAN	11
REGIONAL PROBLEMS AND ISSUES	11
REGIONAL PLANNING PROGRAM AND PROCESS	11
REGIONAL GOALS	12
CONCEPT FOR A CITY-CENTERED REGION	13
REGIONAL ASSUMPTIONS	14
REGIONAL PLAN 1970:1990	15
PLANNING FOR GROWTH & DEVELOPMENT	15
PLANNING FOR ENVIRONMENTAL QUALITY	19
SUMMARY STATEMENT—POLICY GUIDELINES	23
IMPLEMENTATION	26
METHODS TO ACHIEVE THE CITY-CENTERED REGION	26
IMPLEMENTATIONS THROUGH A VOLUNTARY ASSOCIATION OF GOVERNMENTS— GRANT REVIEW	27
IMPLEMENTATION THROUGH A VOLUNTARY ASSOCIATION OF GOVERNMENTS— INNOVATIVE PROGRAMS	28
IMPLEMENTATION THROUGH A LIMITED FUNCTION REGIONAL GOVERNMENT	31
REGIONAL PLAN MAP	(In Back Cover Pocket)



THE PHYSICAL SETTING

In preparing a Regional Plan, one of the major factors to be considered is the area's physical setting. The natural environment, including hills, valleys, and bodies of water, dictates to a large extent the course of development — past, present, and future. In addition, man-made changes in the natural setting have an effect on possible land uses.

NATURAL ENVIRONMENT

The region's interacting system of physical and climatic features has exerted a strong influence on patterns of urban development and corresponding life styles. The Bay and the Bay plain along with mountains, valleys and the area's moderate climate have been the prime determinants.

SAN FRANCISCO BAY

The San Francisco Bay affects the climate, the nature of development, and the quality of life in the surrounding area. Its common shoreline unites the region, as does its economic influence, but its physical presence splits the 7,000 square mile area into a number of sub-regions. While providing excellent recreational opportunities and a pleasing visual aspect, the Bay creates problems in traveling from one part of the region to another. Geologically, it is a "drowned valley" filled with water-borne silt, sand, and clay. Whether focusing on the advantages it brings to the area or the problems it causes, the Bay's enormous impact on the entire region cannot be denied.

HILLS AND VALLEYS

The long mountain ridges characteristic of the Bay Area are part of the Coast Range, a continuous north-south barrier between the Pacific Ocean and the Great Central Valley — broken only at the Golden Gate. The nearly

parallel ridges, rising in places to 4,000 feet, have constrained most of the region's urban growth to valley floors and the flat plain area bordering the Bay. It is on the Bay plain area that circles the Bay, and the larger valleys of Santa Clara, Napa, Sonoma, Petaluma, Livermore, and Ygnacio that the greatest amount of urban development has occurred. These valley lands, separated only by intervening ridges, are being steadily converted from agricultural to urban use to serve the needs of a growing urban population. Due to the difficulties of building on steeper slopes, those valley lands that remain unurbanized are prime targets for future urban development (see the Physical Setting Map). The region will have to choose either to retain the prime agricultural lands and unique natural settings that these lands provide, or to allow them to be transformed by urbanization.

Historically, the parallel alignment of the Coast Range Mountains with the Pacific Ocean coastline has restricted east-west surface transportation to the few locations where breaks occur in the mountain ranges. Of necessity, transportation routes have been established through such passes and they in turn, have influenced the location of the region's urban centers.

EARTHQUAKES

The geologic forces that formed the Bay are still present today in the form of earthquakes. Major fault zones that are still active exist on both sides of the Bay—the San Andreas Fault on the west and the Hayward Fault on the east. In recent years the consideration of the location of fault zones in relation to building construction has become a matter of prime importance. Work is currently underway by the U.S. Geologic Survey, the Federal Department of Housing and Urban Development and the Association to locate more precisely exist-

ing fault zone areas as well as other areas of geologic hazard.

CLIMATE

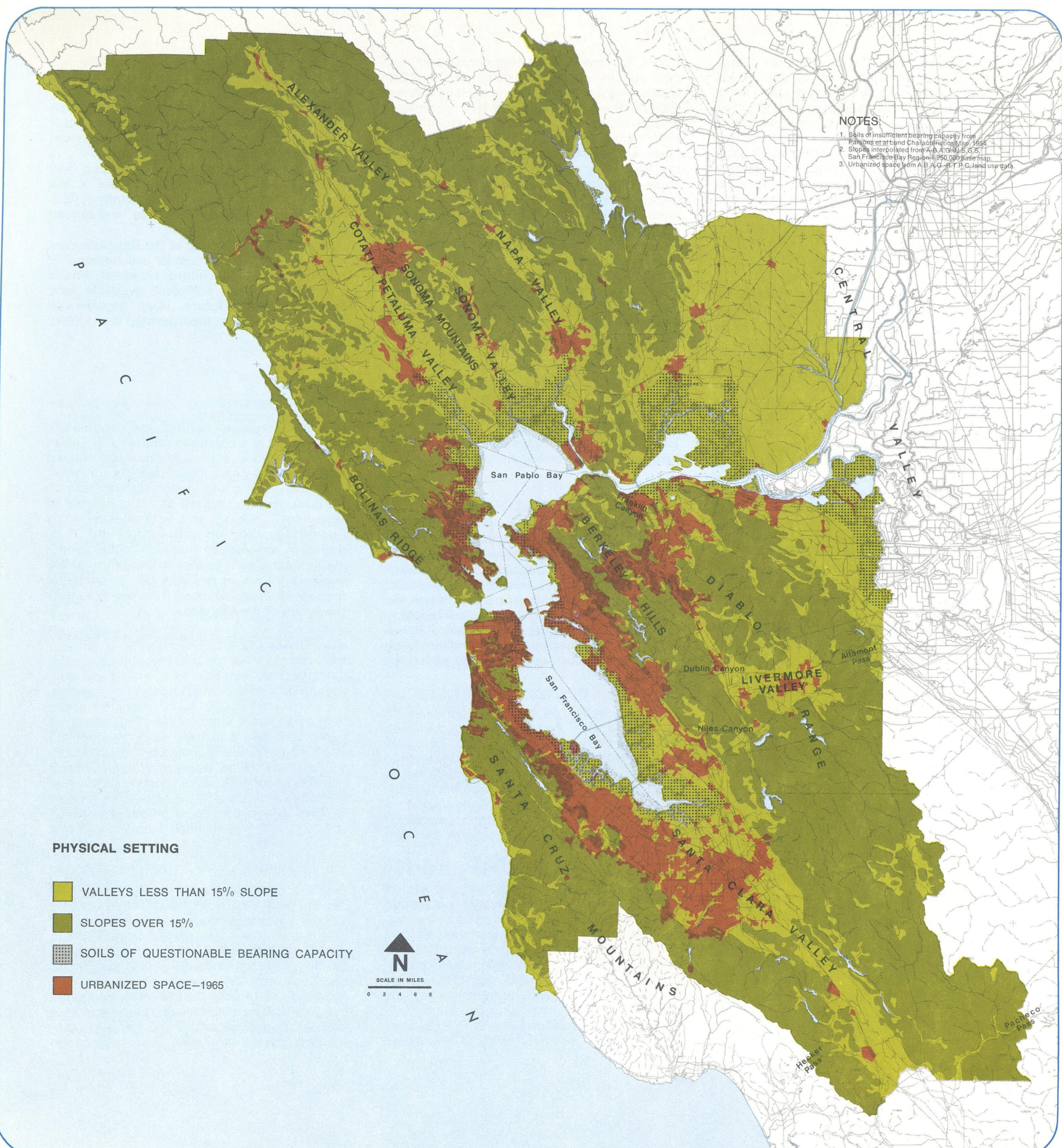
The Bay Region has what is essentially classified as a maritime climate, consisting of mild temperatures in summer and winter, with winter rains. The area's moderate climate is due chiefly to its proximity to the Pacific Ocean. The varied topography of the region produces a variety of local climatic conditions in terms of temperature, rainfall and exposure to wind and fog. For instance, annual rainfall varies from twelve inches per year in the eastern portion of Alameda County to 50 inches per year in the mountains of Santa Clara and Sonoma Counties.

A wide variety of natural features — Ocean, mountains, hills, bays, valleys, etc.,—and overall mild temperature contribute to a unique and highly desirable living environment in the Bay Region. These same natural features continue to play an important role in determining areawide land development patterns, regardless of recent innovations in engineering and construction technology.

One of the Association's primary goals in preparing the Regional Plan is to promote the most efficient and economical land development possible, while conserving the natural features and environment of the region for generations to come.

MAN-MADE ENVIRONMENT

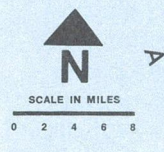
The man-made environment must also be understood in order to plan wisely for the region. In this case, it is particularly necessary to focus on the nature and extent of existing



- NOTES:**
1. Soils of insufficient bearing capacity from Parsons et al Land Characteristics Map, 1954.
 2. Slopes interpolated from A.B.G.-U.S.G.S. San Francisco Bay Region: 250,000 base map.
 3. Urbanized space from A.B.G.-R.T.P.C. land use data.

PHYSICAL SETTING

- VALLEYS LESS THAN 15% SLOPE
- SLOPES OVER 15%
- SOILS OF QUESTIONABLE BEARING CAPACITY
- URBANIZED SPACE—1965



P
A
C
I
F
I
C
O
C
E
A
N

C
E
N
T
R
A
L
V
A
L
L
E
Y

S
A
N
F
R
A
N
C
I
S
C
O
B
A
Y

ALEXANDER VALLEY
COTATI VALLEY
SONOMA MOUNTAINS
PETALUMA VALLEY
SONOMA VALLEY
NAPA VALLEY
BOLINAS RIDGE
SAN PABLO BAY
BERKELEY HILLS
DIABLO
LIVERMORE VALLEY
SANTA CRUZ MOUNTAINS
SANTA CLARA VALLEY
FRANKLIN CANYON
DUBLIN CANYON
NILES CANYON
ALFAMONT PASS
HOOPER PASS
PACHECO PASS

urban development. The Bay Region differs, in this regard, from other metropolitan areas such as Chicago, where urban growth extends outward from one dominant center. By comparison, the Bay Area has several centers of urban concentration, located around the Bay and in outlying valley areas. The map on page five shows the nearly continuous encirclement of the Bay by urban development but does not reflect the concentrations at particular urban centers.

EXTENT OF EXISTING DEVELOPMENT

There are approximately 4.5 million acres of land in the nine county Bay Region, of which four million remain undeveloped. Of these four million acres, however, three million can be considered unsuitable for urban use because of physical limitations or constraints imposed by various restrictions. (For instance, some lands are already committed to park and other open space uses.) In 1965, an estimated 344,000 acres had been developed for urban purposes. This constituted eight percent of the region's total land surface and 25 percent of the land with urbanizing potential, leaving 1.2 million acres available for future development¹. Seventy-six percent of the region's urban land in 1965 was devoted to residential use.

PATTERN OF DEVELOPMENT

The belt of urban land encircling the Bay contains 80 percent of the region's total population and 90 percent of the jobs. The pattern of development within this narrow plain can be characterized as having linear pockets of industrial activity along the Bay front located between somewhat parallel transportation cor-

ridors. Commercial developments have concentrated in regional sub-centers such as San Mateo, Redwood City, Fremont, Hayward, and Richmond, along major arterial highways, or in large shopping centers adjacent to arterials. High density residential areas occur next to large employment centers, especially along the Bay front, with declining density as distance from the Bay increases. In the last two decades, however, the rapid rate of employment growth in the San Francisco-Oakland and the San Jose metropolitan centers has caused residential spread into the Santa Clara Valley, southern Marin County, and central Contra Costa County.

Development of heavy industrial sites and large military installations has occurred in the Martinez, Pittsburg, Vallejo, Fairfield and Novato areas. The result has been the substantial urbanization of these areas despite the fact that they are located outside the main "commutershed". In 1965, traveling time for the average Bay Region commuter was 15.8 minutes each way.² For this reason, the majority of the region's smaller urban centers located away from the Bay plain are still relatively independent and self-contained.

LAND AVAILABLE FOR URBAN DEVELOPMENT

The areas in light green on the Physical Setting Map represent those undeveloped valley lands which, as of the mid-1960's, had the highest potential for future urban development. The positive correlation between lands having less than a fifteen percent slope and degree of urbanization is obvious. Exceptions are in locations such as the hill areas of Berkeley-Oakland, Lafayette-Orinda, southern Marin County, and San Mateo County, which are

close to the major urban centers. Although steeper slopes can be developed, it is expected that the region's physical character will continue to limit the bulk of future urban growth to the flatter valley areas. These natural growth corridors provide the physical framework for a City-Centered Region.

As of today there is little undeveloped land available along the inner Bay plain. A few exceptions can be found in the vicinity of Redwood Shores, north of San Jose, and around Milpitas and Fremont.

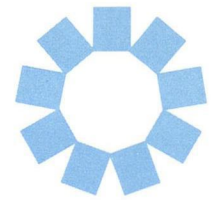
In addition, certain parts of the Bay plain cannot be developed for urban use because of restrictions on Bay filling. However, inland communities have sufficient available land to accommodate future urban growth well beyond the forecast incorporated in the 1970: 1990 Plan.

Although they often conflict, man and nature should exist in a balanced relationship. Urban expansion left to spread in an unconstrained fashion could prove disastrous by upsetting this balance. It could create serious hazards for both man and nature in areas subject to landslides, flooding, and earthquakes, or by furthering pollution and congestion. It is, therefore, essential to study the region's man-made setting as it relates to the physical environment. Only in this way can a functional framework be established from which to plan the future of the Bay Area.

¹Bay Area Transportation Study Commission, *Bay Area Transportation Report* (May 1969), p. 22.

²*ibid.*, p. 28.

GROWTH AND CHANGE ELEMENTS



Populations never remain constant; they grow or diminish, change and shift, locate and relocate. Population flux is closely related to a region's economic climate, both affected by and affecting prevailing economic conditions. These two factors, then—population and economic growth—are instrumental in shaping the form and functions of a given region. In this section the focus is on population growth, densities, distribution, and structure as well as economic growth, characteristics, and locations. The assumptions made are on the basis of the projected regional population in 1990.

The population and economic growth of the Bay Area are the result of various interacting internal and external forces. Expanding national and international markets, for instance, give rise to the growth of new (and existing) employment opportunities which attract people to the area.

An increasingly skilled labor force with higher income acts as an additional stimulus to new industry. To the extent that the region maintains a healthy physical environment and a well-educated and productive labor force, and as long as it remains a favorable location for capital investment, it can be expected to maintain its economic viability.

POPULATION

The Bay Region's development as a metropolitan center began in the Gold Rush of 1850. At that time, the present commercial district of San Francisco provided a natural stopping point for persons and goods bound for the gold fields. The combined needs for a harbor and for warehouse space to store food and equipment contributed greatly to the city's growth. It was also as an outgrowth of the Gold Rush that the rest of the region got its economic start. Additional settlements soon ap-

peared along the shoreline of the Bay's natural waterway. Expansion was so great that, at one point during the second half of the nineteenth century, San Francisco, Oakland, Berkeley, and Alameda accounted for over three-fourths of California's urban population.

The Bay Region's compact urban development was brought about through the nature of its early transportation system — a system composed of municipal or inter-urban street car lines, rail lines, and ferry boats. Most citizens lived within reasonable walking distance of such public transportation. This situation contributed to the formation of very dense urban development within the cities located in the Bay plain area. Prior to the 1930's the region's major cities attained a population density of 5,800 to 5,900 persons per square mile.

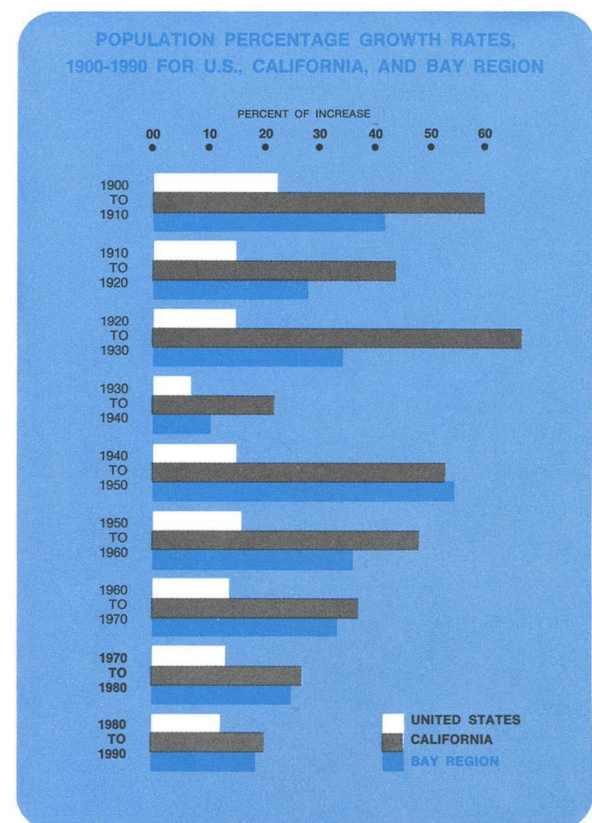
POPULATION DENSITIES

It was during the 1930's that urban population density began to decrease. This was due to the advent of the automobile, which gave people greater mobility and allowed them to settle in peripheral areas. At the time of the 1960 census, the general density figure for the major cities was 2,500 persons per square mile, or approximately the same average density that had existed one hundred years earlier.

FUTURE POPULATION

Before the year 2000 it is expected that the population of the United States will double again. By comparison, it is predicted that California's population will increase to three and one half times its 1950 size. During the same period, the population of the Bay Region could triple its 1950 population of 2.7 million. Assuming that present population growth trends remain constant, it is estimated that by 1990 between 6.9 and 8.4 million persons could be living in the Bay Region.

Even during the 1930's, a period when the nation's population increase was relatively slow, the rate of growth for the Bay Region was higher than the national rate. The same pattern could prevail during the remainder of this century, even though there will be a decrease in the growth rate difference. Historically, except for the Second World War years, the Bay Region's twentieth century growth rate has been less than that of the State of California. In the next thirty years, however, the growth rates of California and the Bay Region should level off and by the century's end the growth rate for both could be about equal.



REGIONAL DISTRIBUTION OF POPULATION

Prior to the 1940's, San Francisco, Alameda, Contra Costa, Marin, and San Mateo counties experienced the region's largest growth in terms of rate and actual numbers. Since 1946, however, San Francisco's population has become relatively constant. Meanwhile, southern counties such as Santa Clara and San Mateo have experienced a very rapid growth rate, followed closely by the northern counties of Marin, Napa, Solano, and Contra Costa, which have also shown a significantly large population gain.

POPULATION GROWTH RATES BY DECADE, 1900-1990, FOR BAY REGION AND COUNTIES

(IN PERCENTAGES)

	1900	1910	1920	1930	1940	1950	1960	1970	1980
	TO	TO	TO	TO	TO	TO	TO	TO	TO
BAY REGION	40.7	27.7	33.1	10.1	54.6	35.7	33.2	26.9	21.6
ALAMEDA	89.0	39.8	37.1	8.7	44.3	22.7	24.9	25.2	18.3
CONTRA COSTA	75.5	70.1	45.9	27.8	97.6	36.8	47.9	35.9	31.4
MARIN	59.9	8.9	52.3	27.0	61.8	71.5	53.6	36.4	32.9
NAPA	20.4	4.4	10.7	24.5	63.5	41.4	25.2	25.7	34.8
SAN FRANCISCO	21.6	21.5	25.2	0.0	22.2	-4.5	-0.8	9.8	2.5
SAN MATEO	119.8	38.3	110.4	44.4	110.8	88.6	33.4	24.4	18.3
SANTA CLARA	38.7	20.5	44.1	20.6	66.1	121.1	69.2	32.1	24.3
SOLANO	14.1	47.3	0.6	20.3	113.4	28.4	35.4	29.9	33.4
SONOMA	25.8	7.6	19.4	11.0	49.7	42.5	37.7	38.5	31.1

The 1970, 1980, and 1990 forecast figures for the Bay Region, individual counties and county sub-areas represent a revision of those used in the 1966 Preliminary Regional Plan. The updated forecasts are based on recent work by the Department of Finance and the Bay Area Transportation Study Commission, in which Association staff participated. In addition to more current information, the projected location of future employment has been used as a major determinant. Generally, the revised forecasts suggest greater population growth than was predicted in the Preliminary Regional Plan for 1990, as well as a reallocation of growth among the counties. Previous 1990 population growth levels for Marin, Napa and Sonoma have been reduced, and higher growth is assumed in Alameda, Santa Clara and Solano counties.

HISTORIC AND PROJECTED POPULATION

	1860	1870	1880	1890	1900	1910	1920	1930	1940	1950	1960 ¹	1970 ²	1980 ³	1990 ³
BAY REGION	114,074	265,808	422,128	547,618	648,111	925,708	1,182,911	1,578,009	1,734,308	2,681,322	3,638,939	4,846,300	6,150,800	7,477,100
ALAMEDA	8,927	24,237	62,976	93,864	130,197	246,131	344,177	474,883	513,011	704,315	908,209	1,134,100	1,420,300	1,680,600
CONTRA COSTA	5,328	8,461	12,525	13,515	18,046	31,674	53,889	78,608	100,450	298,984	409,030	604,800	821,700	1,080,000
MARIN	3,334	6,903	11,324	13,072	15,702	25,114	27,342	41,648	52,907	85,619	146,820	225,500	307,600	408,700
NAPA	5,521	7,163	13,235	16,411	16,451	19,800	20,678	22,897	28,503	46,603	65,890	85,500	103,700	139,800
SAN FRANCISCO	56,802	149,473	233,959	298,997	342,782	416,912	506,676	634,394	634,536	775,357	740,316	734,600	806,700	826,600
SAN MATEO	3,214	6,635	8,669	10,087	12,094	26,585	36,781	77,405	111,782	235,659	444,387	592,900	737,600	872,500
SANTA CLARA	11,912	26,246	35,039	48,005	60,216	83,539	100,676	145,118	174,949	290,547	642,315	1,086,800	1,435,500	1,784,700
SOLANO	7,169	16,871	18,475	20,946	24,143	27,559	40,602	40,834	49,118	104,833	134,597	182,200	236,700	315,800
SONOMA	11,867	19,819	25,926	32,721	38,480	48,394	52,090	62,222	69,052	103,405	147,375	202,900	281,000	368,400

SOURCES:

1. U.S. Bureau of Census Reports 1860-1960.

2. Calif. State Dept. of Finance, California Population 1965, Sacramento, January 1965.

3. BATSIC, "Controlled Trends" Zonal Forecasts 1965-1980, 1950, May 1, 1969, p. 10, 29.

If no major changes occur in population growth rates and individual attitudes, the forecast is for an increase to between 6.9 and 8.4 million people during the next twenty years. Using an estimate approximately midway between these two figures, the 1970:1990 Regional Plan assumes a growth increase that will bring the Bay Area's population to 7.5 million by the end of 1990. This is an increase of nearly three million over the present population figure. Nearly two-thirds of this growth increase (representing 1.7 million people) is expected to occur in Santa Clara, Alameda, and Contra Costa counties, leaving the counties of San Mateo, Marin, Solano, and Sonoma to absorb most of the remaining growth. It is anticipated that the populations of San Francisco and Napa counties will increase the least.

In the four northern counties — Marin, Napa, Solano, and Sonoma — the population growth rate is expected to be well above the average for the region. Contra Costa and Santa Clara counties are also expected to maintain high growth rates while those for Alameda and San Mateo counties decline below the regional average as a result of high costs and scarcity of land. According to the forecast, the slight increase in San Francisco's growth rate will be due to the denser concentrations of people that redevelopment and rehabilitation can produce.

In terms of specifics, present high growth centers in the northern counties are San Rafael-

Novato, Santa Rosa-Petaluma, Napa, Vallejo, and Fairfield. In the East Bay they are in the areas of Concord-Walnut Creek, Pittsburg-Antioch, Livermore-Pleasanton, and Hayward-Fremont. The San Mateo-Menlo Park environs could easily absorb over half of the growth of San Mateo County, and the San Jose-Sunnyvale area in Santa Clara County is expected to continue its rapid growth. By 1990, it could contain over one million people.

If present county growth trends continue and the population distribution of the region is not managed, about fifty per cent of the population increase can be expected to occur in and around these existing high growth centers. Such a tendency could be modified, however, if future urban growth were guided by the City-Centered concept for regional development as embodied in the policies of the 1970:1990 Regional Plan. At least seventy-five per cent of the Bay Area's 1990 population could then reside in and around existing and new communities.

MIGRATION AND NATURAL INCREASE

The early growth of the region was due almost entirely to people moving into the area. As population grew, however, increases resulting from new births gradually became more important as a growth factor. Natural increase now exceeds net in-migration, and by 1990 it is expected that annual births will be more

than double the number of net in-migrants. Although the birth rate is expected to continue decreasing to its pre-war level, it is anticipated that the actual number of births will increase as the population grows. According to the estimate for 1990 the number of births will be 60 percent greater than at present. As a result of these trends, the proportion of native-born residents will increase and inter-county shifts of population will become more important in determining overall population changes within the region.

AGE COMPOSITION

Projections of the future age composition of the region's population indicate three major areas of change. The proportion of the population under 25 years of age is expected to decline, due in part to the declining birth rate. This broad age group includes the school and college-age population. By 1990, most of the persons now in the 0 to 25 age group will have moved into the 25 to 44 age group which, along with the 45 to 64 age group, will constitute over 46 percent of the region's population. As a result of lower death rates, the proportion of the population 65 and over will also increase. It appears that the net effect of these changes will be favorable since the percentage of the population that is of labor force age will grow.

AGE COMPOSITION OF BAY AREA POPULATION

AGE GROUP	(IN PERCENTAGES)			
	1960	1970	1980	1990
0-14	29.5	27.5	25.3	25.2
15-24	12.7	17.4	15.4	15.1
25-44	28.3	25.5	29.9	31.5
45-64	16.6	16.8	14.9	14.2
65 AND OVER	12.8	12.8	14.6	14.1
MEDIAN AGE	30.9	28.6	30.5	32.0

SOURCE:
ASSOCIATION OF BAY AREA GOVERNMENTS,
Population and Labor Force Projections, 1967.

ECONOMY

Growth and change have been the most dominant characteristic in the region's economic history. In 1835, the economy centered around

a small hide-trading center known as Yerba Buena. Since that time, it has become one of the most diversified in the United States. Both traditional industries, which have maintained a healthy growth rate, and scientific and technological innovations have helped the Bay Area to achieve the highest per capita income in the western world. Projections of growth, especially in the highly productive sectors of the economy, suggest continuing increases. But a sound understanding of the Region's economy is essential if we are to encourage this growth and manage the results of economic change.

ECONOMIC PERIODS

The region's economic evolution can be seen in terms of three distinct development periods. First, there was the Gold Rush. Almost overnight, it transformed the Spanish mission village on the shores of San Francisco Bay into a center of commerce and light industry related to mining operations. Second, there was the introduction of rail transportation — passenger and freight trains, and local and interurban trolleys. During the latter part of the nineteenth century, the natural terminus for most of the rail lines from the East was the Bay Region, as it was the major center of business and trade in the West. Later, with the introduction of the automobile, access to many undeveloped portions of the region was provided, thereby creating a further stimulus to economic expansion. The third major catalyst was and continues to be certain events of national and international importance, particularly the two World Wars — Korea, Vietnam, and the exploration of space. As a result of these issues, the region has seen an increase in military and commercial shipping, shipbuilding, and the construction of military installations. The bulk of this growth has occurred during the past thirty years.

REGIONAL ECONOMIC CHARACTERISTICS

The character of the region's economy has both old and new elements. As in the beginning, when economic life centered around use

of the Bay and its tributaries, trade and shipping are of great importance. However, financial institutions and administrative offices locating in San Francisco have also helped make the Bay Area a dominant economic force. Today, as the leading West Coast center for finance, administration, and trade, the region's influence extends far beyond the immediate area, encompassing all of the western states. It also supplies an important link between the West and the major urban centers of the eastern United States, between the West and Hawaii and the South Pacific, and between the West and the Far East.

Among the nine major employment categories, the services sector currently constitutes the largest employer of Bay Area residents. This sector is highly diversified and is related to industry and trade as well as to the needs of the resident and tourist population. Wholesale and retail trade, government, and manufacturing rank as the next largest sources of employment. Although the number of employees in each of these four categories has increased, manufacturing and trade have declined slightly.

EMPLOYMENT IN MAJOR ECONOMIC SECTORS

	1960 ¹	1970 ²	1980 ³	1990 ³
AGRICULTURE	35,800 2.5%	27,400 1.4%	19,400 0.8%	15,100 0.5%
MINING	2,300 0.2%	2,500 0.1%	2,800 0.1%	3,200 0.1%
CONSTRUCTION	96,400 6.7%	121,300 6.1%	146,700 5.8%	171,000 5.5%
MANUFACTURING	294,700 20.4%	374,300 18.7%	447,500 17.6%	547,300 17.6%
TRANSPORTATION, COMMUNICATION AND UTILITIES	119,900 8.3%	142,000 7.1%	161,900 6.3%	185,400 6.0%
WHOLESALE AND RETAIL TRADE	305,500 21.7%	404,000 20.2%	472,400 18.5%	549,600 17.6%
FINANCE, INSURANCE AND REAL ESTATE	88,500 6.1%	133,800 6.7%	183,000 7.2%	230,700 7.4%
SERVICES	260,500 18.1%	413,000 20.7%	569,300 22.4%	730,600 23.4%
GOVERNMENT	238,700 16.6%	380,600 19.0%	542,600 21.3%	681,300 21.9%
TOTAL EMPLOYMENT	1,442,300 100.0%	1,999,100 100.0%	2,545,600 100.0%	3,114,300 100.0%
BASIC, OR SITE-ORIENTED EMPLOYMENT	684,800 47.5%	921,400 46.1%	1,144,300 45.0%	1,410,600 45.3%
POPULATION SERVING EMPLOYMENT	757,500 52.5%	1,076,800 53.9%	1,401,300 55.0%	1,703,700 54.7%

SOURCES:
1. BATSOC Employment Projections 1965-1990 (EMPRO) April 1968, p. 37.

2. BATSOC, PLUM, Projections for 1970, total distributed on basis of EMPRO.
3. BATSOC, PLUM, Projections from Controlled TRENDS, total distributed on basis of EMPRO.

In regard to manufacturing, it is important to understand that, in contrast with older metropolitan areas, the Bay Region's manufacturing base is dominated by research and development industries such as aerospace, electronics, chemicals and scientific instruments. The location of such industries in the area helps make it a major center for education and scientific research which can, in turn, provide ample resources for the continued growth of highly skilled, high-wage industries and services.

Other areas in which the region is also relatively self-reliant are transportation, communication, utilities, and construction. There is little need to import these goods and services from outside the region. Together, these sectors employ over thirteen percent of the region's labor force. Agriculture is another job source, employing over 25,000 persons but, as in most metropolitan areas, it has been declining in terms of total numbers and relative importance. Only wine grapes, horticultural specialties, artichokes and a few other high-yield crops appear able to resist the pressure to make way for urban growth.

EMPLOYMENT IN BAY REGION COUNTIES

	1960 ¹	1970 ²	1980 ³	1990 ³
BAY REGION	1,442,300	1,998,100	2,545,600	3,114,300
ALAMEDA	352,600	466,100	594,300	724,500
CONTRA COSTA	103,500	153,000	212,500	271,200
MARIN	32,800	62,200	76,700	100,000
NAPA	18,600	28,900	43,100	56,800
SAN FRANCISCO	476,200	541,500	592,900	714,100
SAN MATEO	131,200	234,300	303,900	362,800
SANTA CLARA	228,000	389,500	549,600	665,500
SOLANO	53,000	62,100	80,700	109,200
SONOMA	46,400	61,500	91,900	110,400

SOURCES:

1. Estimates by Calif. State Dept. of Employment 1960; Napa and Solano Counties based on 1960 Census figures.

2. BATSU Protective Land Use Model, September, 1988. 1970 projections after manual adjustment.

3. BATSU "Controlled Trends" Zonal Forecasts 1960-1980-1990, p. 15, 29.

ECONOMIC GROWTH PROJECTIONS

During the next two decades, employment in the Bay Region is expected to increase by more than one million jobs. This growth rate is higher than the overall population growth rate, in keeping with the relative increase in the size of the region's labor force. Among the fastest growing sources of employment are those sectors which serve and are dependent upon the location of night time population and the day time location of workers; by 1990, local government, services, and retail trade will provide over fifty-two percent of the region's employment, as opposed to forty-eight percent at the present time. These population-serving activities, which also include some elements of construction, transportation, communication, utilities, personal finance, insurance, and real estate tend to grow and locate in direct relation to the where-abouts of households. Basic or site-oriented industries, on the other hand, are characterized by activities with strong dependence on inter-regional transportation facilities, special site requirements or significant inter-industry linkages. They are apt to locate in the region in terms of a site's desirability for access to transportation and materials, and its ability to fulfill special industrial needs. These industries' choices of locations are important influences on the region's development patterns since they serve as a major attraction to population and to service employment. With the exception of agriculture, basic or site-oriented industries are expected to increase their employment from 0.9 million to 1.4 million by 1990. It is projected that employment growth in the manufacturing sector, which already provides jobs for the most people, will increase at a rate above the national average. Within this sector, the highest growth industries are aerospace, electronics, and scientific instruments — all relatively new technologies. Other major sources of new employment will be paper and printing, building materials, machinery, and chemicals. Wholesale trade and business services will, in turn, expand to meet the needs of these growing industries. The Bay Region is fortunate in having a well established lead in these rapidly expanding areas of employment.

labeled by the growing scarcity of land in the region's older industrial centers). In Santa Clara County, growth in the technologic industries is expected to be a continuing stimulus for development. These industries are also expanding in central Alameda and Contra Costa counties, and will contribute to the development of the Pittsburg-Antioch area as well as that of southern Solano County. Expansion of warehousing and transportation activities near the Oakland and San Francisco airports will stimulate growth to the south of these facilities. In San Francisco, the addition of large office buildings will preserve the city's position as the major center for finance and commerce, a development that will inhibit rather than encourage dispersion of economic activity. The ample supply of land in and around cities in Marin, Napa and Sonoma counties should permit new growth around these centers rather than force new locations to develop.

LOCATION OF ECONOMIC GROWTH

Given the present composition of the region, the vast majority of new employment opportunities is expected to occur as an expansion of already existing centers. Where possible, basic industry tends to locate close to well developed utility, trade, and transportation facilities and near the existing labor force. (Development in new areas has been stimu-

lated by the growing scarcity of land in the region's older industrial centers). In Santa Clara County, growth in the technologic industries is expected to be a continuing stimulus for development. These industries are also expanding in central Alameda and Contra Costa counties, and will contribute to the development of the Pittsburg-Antioch area as well as that of southern Solano County. Expansion of warehousing and transportation activities near the Oakland and San Francisco airports will stimulate growth to the south of these facilities. In San Francisco, the addition of large office buildings will preserve the city's position as the major center for finance and commerce, a development that will inhibit rather than encourage dispersion of economic activity. The ample supply of land in and around cities in Marin, Napa and Sonoma counties should permit new growth around these centers rather than force new locations to develop.

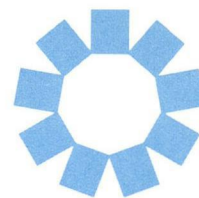
EMPLOYMENT GROWTH RATES BY DECADE 1960-1990, BAY REGION AND COUNTIES

(IN PERCENTAGES)

	1960 TO 1970	1970 TO 1980	1980 TO 1990
BAY REGION	28.5	27.4	22.3
ALAMEDA	32.2	27.5	21.9
CONTRA COSTA	47.9	38.8	27.6
MARIN	89.5	23.3	30.4
NAPA	55.3	49.2	31.2
SAN FRANCISCO	13.7	9.5	20.4
SAN MATEO	78.6	29.7	19.4
SANTA CLARA	70.9	41.1	21.1
SOLANO	17.2	29.9	35.3
SONOMA	32.5	49.5	20.3

As this report indicates, the Bay Region has gone through successive growth stages related to historical occurrences. Beginning with the Gold Rush and continuing into the wars of the Twentieth Century, growth patterns for population and economy have been correlated with migration, an increasing birth rate, and the reduction of time and distance through changes in communication and transportation. In the future, the Bay Region's growth will depend less on historical chance and more on planned expansion. Consequently, the need for careful planning is thus essential to the region's future.

FRAMEWORK FOR THE 1970:1990 REGIONAL PLAN



In designing the Regional Plan, it was necessary to establish a framework or foundation to serve as a planning guide. This framework, which provides the basis for the Plan's policy proposals, consists of the following items:

- REGIONAL PROBLEMS AND ISSUES
- REGIONAL PLANNING PROGRAM AND PROCESS
- REGIONAL GOALS
- CONCEPT FOR A CITY-CENTERED REGION
- ASSUMPTIONS

REGIONAL PROBLEMS AND ISSUES

The policies and goals which serve as the focus of the Regional Plan are addressed primarily to the following problems and issues:

1. POPULATION GROWTH, SHIFTS, AND SEPARATIONS.
2. UNLIMITED URBAN GROWTH.
3. INCREASING DEMANDS FOR OPEN SPACE AND NATURAL RESOURCES AND THE DECREASING SUPPLY OF THESE FACILITIES.
4. DECREASING QUALITY OF THE REGION'S ENVIRONMENT.
5. INADEQUATE EMPLOYMENT OPPORTUNITIES, HOUSING, EDUCATION, AND COMMUNITY FACILITIES AND INADEQUATE SERVICES FOR VARIOUS POPULATION GROUPS.
6. CONGESTED TRANSPORTATION FACILITIES AND GROWING COSTS FOR MOVING PEOPLE AND GOODS WITHIN THE REGION.
7. LACK OF AREAWIDE AWARENESS AND REGIONAL RESPONSIBILITY.

REGIONAL PLANNING PROGRAM AND PROCESS

In 1962, the Association responded to the

problems and issues cited above by accepting the responsibility for developing a regional planning process aimed at resolving them. Any evaluation of the 1970:1990 Regional Plan should take into consideration all aspects of that program and process—past, present, and future.

The following diagram presents in a summary form the various stages through which the

Association's Regional Planning Program has gone and will continue to go.

1. PRELIMINARY REGIONAL PLAN

In 1966, the Association completed a Preliminary Regional Plan for the San Francisco Bay Area. In it five different regional development concepts were presented: City-Centered, Urban Corridor, Suburban Dispersal, Composite Local Plans, and a recommended Preliminary Regional Plan. Each concept presented a different set of objectives for the region's future.

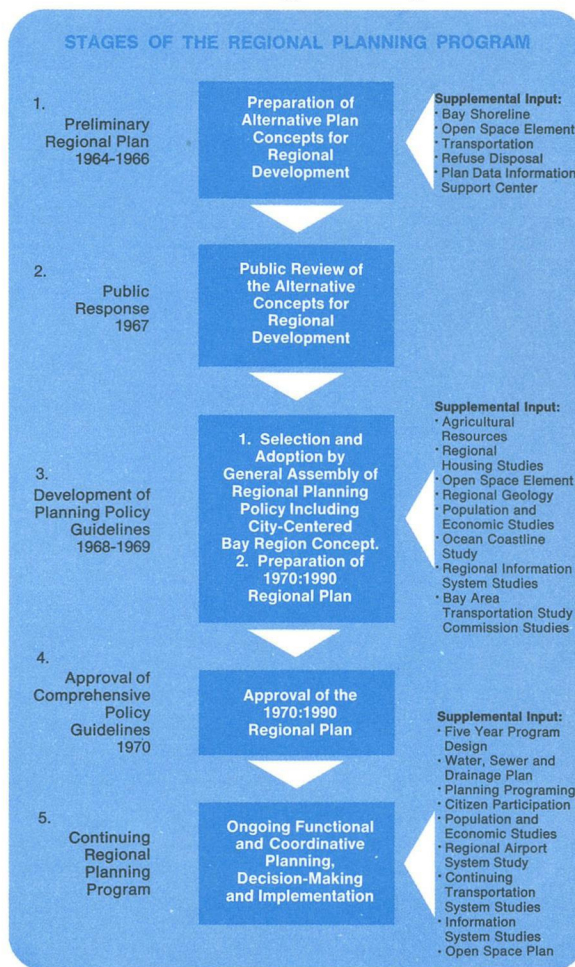
2. RESPONSE

Following the presentation of the Preliminary Regional Plan, the Association conducted hearings and meetings throughout the Region to inform the public and to invite comments. This period ended in February, 1968. Most people favored the City-Centered concept which advocated that new urban growth be allocated to existing or new cities.

3. DEVELOPMENT OF PLANNING POLICY GUIDELINES

The third phase of the program consisted of: (1) establishing the planning policy framework; and (2) preparing the 1970:1990 Regional Plan.

The Association's committees and General Assembly reviewed and considered the response to the Preliminary Regional Plan, and chose, as a result, the City-Centered concept as the basis for future regional development. They also approved six regional goals and accepted an increased growth of approximately 3.0 million people in the region by 1990 as basic planning policy guidelines. Based on this established regional planning framework, the 1970:1990 Regional Plan was prepared.



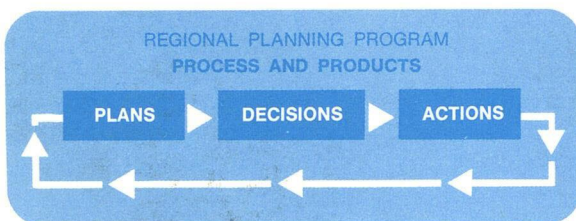
4. APPROVAL OF THE 1970:1990 REGIONAL PLAN

The approval of the 1970:1990 Regional Plan established a set of unified regional development policy guidelines as the next important step in the regional planning process. Until such approval was given by the Association's General Assembly it remained only a tentative set of proposals.

5. CONTINUING REGIONAL PLANNING PROCESS

The foregoing work and the multidimensional 1970:1990 Regional Plan provides the groundwork needed for the next step in the Association's continuing regional planning process. This continuing program will be concerned with short- and long-range physical, ecological, and socio-economic problems in the Bay Area. It will deal with both general issues and specific plan proposals. The main objective will be to develop action-oriented policies for implementation at the regional level. These policies will guide and promote development in ways that will permit and encourage the conservation of the region's environment. As the Association's work continues, further planning, decisionmaking, and action will take place, both in general and with regard to the regional planning program in particular. The following diagram shows the relationship of these three parts—planning, decisionmaking, and action—as they form the Association's ongoing planning process.

The process of plan formulation, decisionmaking, and implementation needs to be constant and recurring, if it is to be successful in solving problems in this era of changing conditions.



All of the plans made by the Association belong in either a functional or a coordinative planning framework.

FUNCTIONAL PLANNING FRAMEWORK

The functional planning framework is made up of interrelated multidimensional and special element regional plans for various time periods as follows:

Type of Plans	Time Period of Plans
• Long-Range Regional Plan Concept (e.g., City-Centered Bay Region)	20-50 Years
• Multidimensional Regional Plan (e.g., Regional Plan 1970:1990)	20 Years
• Regional and Sub-Regional Special Element Facility-Service System Plans	Varied Periods Primarily 20 Years
• Regional and Sub-Regional Development Plans and Programs	5-10 Years
• Specific Programs and Planning Services	1-5 years

COORDINATIVE PLANNING FRAMEWORK

Multidimensional coordination and integration of the plans and policies at all levels of government.

The main focus of the Association will continue to be on the preparation of regional plans (such as this) and of special elements plans directed towards individual facilities and services. Emphasis will then be on integrating these plans into other planning and development programs. Both types of planning mentioned—functional and coordinative—will have as their bases regional and sub-regional studies. Once plans are accepted as regional policy, they will be subjected to continued study, to assure their on-going validity and

relevance. Regional and special element plans will be updated every five years, while the long-range regional concept on which they are based will be revised and amended somewhat less frequently.

In summary, the 1970:1990 Regional Plan should be considered as only one step in a regional planning process consisting of a plan-making, decisionmaking, action continuum in which functional and coordinative planning plays a central part. Furthermore, it is only one part of the Regional Planning Framework comprised of the aforementioned kinds of plans.

REGIONAL GOALS

Goals are essential in establishing a planning framework as they determine the entire thrust of the effort. In September, 1968, planning goals were adopted by the Association's General Assembly. These goals lead to the concept of the City-Centered Region, on a belief in environmental conservation, and they provide the foundation for the 1970:1990 Regional Plan. The goals are:

1. TO PROTECT AND ENHANCE SAN FRANCISCO BAY AND THE MAJOR PHYSICAL FEATURES AND ENVIRONMENTAL QUALITIES OF THE REGION.
2. TO PROVIDE THE OPPORTUNITY FOR ALL PERSONS IN THE BAY AREA TO OBTAIN ADEQUATE SHELTER CONVENIENT TO OTHER ACTIVITIES AND FACILITIES, IN NEIGHBORHOODS THAT ARE SATISFYING TO THEM.
3. TO DESIGNATE AMPLE LAND AND FACILITIES FOR THE ECONOMIC GROWTH OF THE REGION IN ORDER TO PROVIDE OPPORTUNITIES FOR ALL CITIZENS AND COMMUNITIES TO IMPROVE THEIR ECONOMIC WELL-BEING.
4. TO PROVIDE A TRANSPORTATION SYSTEM THAT IS INTEGRATED WITH LAND USE AND CONSISTENT WITH THE CITY-CENTERED CONCEPT OF REGIONAL DEVELOPMENT.
5. TO PROVIDE A PERMANENT REGIONAL OPEN SPACE SYSTEM THAT MAKES

POSSIBLE THE RANGE OF ACTIVITIES ESSENTIAL TO THE CITY-CENTERED CONCEPT OF REGIONAL DEVELOPMENT.

6. TO CREATE A SENSE OF REGIONAL IDENTITY, RESPONSIBILITY, AND COOPERATION AMONG CITIZENS, ORGANIZATIONS, AND GOVERNMENTS IN THE BAY AREA.

These goals are supported in the Plan by the policy guidelines and by the implementation suggestions to be found in subsequent sections.

CONCEPT FOR A CITY-CENTERED BAY REGION

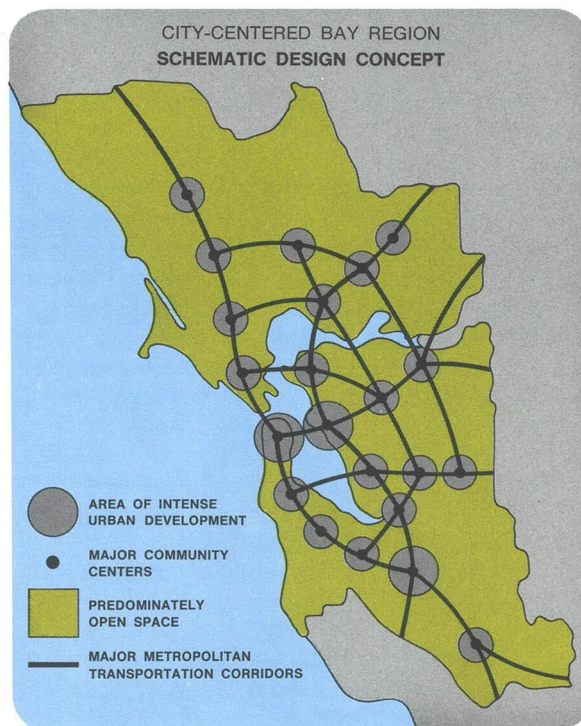
The central idea of the City-Centered Region is to accommodate future urban growth within the region in existing or new urban communities. This concept represents an ideal that extends far beyond the twenty-year time horizon of the 1970:1990 Regional Plan. As such, it provides an on-going basis for all types of plans, decisions, and actions. As currently defined, the concept of the City-Centered Region incorporates the following broad quantitative and qualitative objectives:

1. IDENTIFIABLE CONCENTRATIONS OF URBAN DEVELOPMENT AROUND COMMUNITY CENTERS.
2. EXTENSIVE OPEN SPACE AND CONSERVED AREAS.
3. IMPROVED ENVIRONMENTAL QUALITY.
4. A MULTIPLE-MODE TRANSPORTATION SYSTEM.
5. AN OPERATIONAL REGIONAL ORGANIZATION.
6. STRONG INTERGOVERNMENTAL COOPERATION, COORDINATION, AND CITIZEN PARTICIPATION.

These objectives derive from the previously stated regional goals. The next step is to translate them into a physical plan format.

The following diagram generalizes these broad objectives into a regional design form.

This diagram expresses the main physical components of the City-Centered regional structure, showing idealized spatial relationships in accord with the natural features of the



Bay Region. A more detailed description follows:

1. The region is organized into a system of closely inter-related urban communities in harmony with open space areas and nature. The communities are large enough to be able to specialize economically and provide a fairly high level of regional services and economic activity. Large communities located in the metropolitan core areas would develop as centers of international, national, and inter-regional economic and social activity. Surrounding communities would be less dependent on the metropolitan centers but would, in general, support them.

2. Population and economic growth are concentrated largely in these interrelated urban communities. Space is used as a limited resource. As a result, urban development is more vertical (both above and below ground) than at present, although physical concentration and scale of development vary according

to special attributes and requirements in different parts of the region.

3. Some new and expanded existing communities accommodating 100,000 people or more are located around the fringes of the metropolitan core area.

4. All communities are organized around one or two major community centers. In most communities, these centers include the central business district and functionally related contiguous areas. Designed on a relatively large scale, they have a center of stores, offices, institutional and cultural activities, with surrounding educational institutions, entertainment centers, and sports and convention facilities. In general, community centers are highly accessible from all parts of the community and the region. Those found in outlying communities are developed to improve local conditions and counter congestion in large metropolitan centers. Community centers influence patterns of regional population growth and urban development by providing a nucleus to attract uses and facilities which would otherwise be widely dispersed.

5. Within the planned communities employment opportunities are diversified and convenient to residents, resulting in shorter home to work trips. Housing of various types, designs, and prices is located close to major employment centers.

6. Densities are highest near major transportation interchange points and around community centers.

7. Established inner Bay plain communities have as their focal points the local community centers, which provide a sense of identity and enhanced community awareness. Outer ring communities, also containing community centers, are more individualized, although they, too, are served by certain regional facility-service systems, such as water supply, sewage disposal, recreation, and rapid transit.

8. Urban growth occurs by infilling or as an orderly extension of existing development. It is guided and contained by the presence of open space. Controlled development areas are located around most communities and provide land that can be released for develop-

ment when both local and regional needs are demonstrated. Controlled development areas can also be added to the permanent regional open space system.

9. Permanent open space areas separate the individual communities and are joined together to form a continuous permanent open space system for the region.

10. Environmental quality is maximized, prime agricultural resources are conserved, and recreational opportunities are available relatively close to all urban centers. Land use and transportation improvements are influenced by environmental policies regarding such ecological factors as soils, slopes, drainage, earthquake hazards, vegetation, and fish and wildlife patterns. Urban and regional environmental design is also a determinant.

11. A regional transportation system composed of limited-access highways, rapid and mass transit, and other modes of travel provide improved transportation to most parts of the region, between community centers and within cities. Travel capacities are based upon joint local-regional development and environmental policies which take account of the location, area and density of urban and open space activities. A high priority is given to rapid and mass transit as the means of providing quick, economical, and satisfying travel both within and between individual urban communities.

12. Municipal facilities and services can be used more effectively in the context of a City-Centered Region.

These descriptions should not be interpreted in uniform or standardized ways. Their aim is to describe the future structure of the Bay Region as it relates to the social, economic, ecological, and political realities, conditions, and needs of each component part.

REGIONAL ASSUMPTIONS

The 1970:1990 Regional Plan cannot possibly deal with all of the forces generating physical, economic, and social change in the Bay Area at this time. Certain assumptions must be made, however, about the role these forces will play, and the ways in which they will be directed so as to promote the good of the region. These assumptions can be divided into three general categories: (1) Growth and Development; (2) Environmental Quality; and (3) Organizational Mechanisms. The first two categories can, in turn, be considered in terms of two kinds of influences: (1) Forces acting on the region from outside; and (2) Forces being generated from within the region.

GROWTH AND DEVELOPMENT

These assumptions deal primarily with population, economic, and developmental forces that influence the region.

EXTERNAL INFLUENCES

1. A national and statewide urbanization and land use policy will evolve that responds to the needs of city people, and incorporates current environmental concerns. As demands for local and regional public goods and services increase, greater alliance will be placed on Federal and State funds to assist in meeting these and other needs that exist at the regional and local level. In return, local and regional plans will be more responsive to State and Federal development and environmental guidelines.

2. Accelerated rates of scientific discovery and technological change will lead to gains in productivity, personal income, and the consumption of goods and services. Increased demands for education, leisure activities, and mobility will follow.

3. Widening national and international economic influences resulting in larger market areas will have an accelerating effect on the Bay Region's economy. It will become an even more important center for research and development firms, educational institutions, government services, and the import and export of goods and services.

INTERNAL INFLUENCES

1. The regional population will increase from 4.6 million to approximately 7.5 million in the next twenty years. More than three-fourths of this increase will locate in and around existing and new urban centers.

2. About 1.5 million additional jobs will be generated in the region by 1990. The service-oriented sector of the economy will outgrow the basic industry sector.

3. Methods of regulating the scale and location of future urban expansion will be evolved. These methods will develop in relation to a comprehensive system of open space lands that will serve to shape and guide urban growth.

4. The number and use of automobiles will increase on our highways, particularly during commute hours, to a point where only limited use will be permitted within the metropolitan core area. The emphasis will shift from moving automobiles to moving people and goods, and, to this end, safe and efficient high speed mass transit facilities will operate in and between urban centers.

Technological breakthroughs in communication will lessen the necessity for face-to-face

business relations in the major urban centers, resulting in some relief from the traffic congestion which present business patterns produce.

ENVIRONMENTAL QUALITY

It is indisputable that the Bay Area's unprecedented rate of economical and urban expansion during the last hundred years has taken its toll on the region's natural environment. During the next two decades, measures, both public and private, will be instituted to attempt to redress this condition by: (1) halting the unnecessary use of limited natural resources; (2) restoring and replenishing them whenever and wherever possible; and (3) providing improved environmental conditions.

EXTERNAL INFLUENCES

1. There will be a major shift in priorities and policies at the national, state, and local levels, making the restoration and maintenance of environmental quality a prime concern.

2. In order to achieve this reordering of priorities, the public's control of environmental quality issues will be greatly broadened.

INTERNAL INFLUENCES

1. The citizens of the metropolitan region will become increasingly aware of environmental problems and will approve measures to regulate the shape and size of growth within that area.

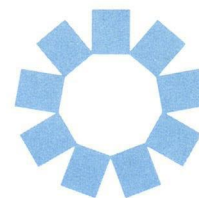
2. Vacant land available for urban expansion will become increasingly scarce. Traditional methods of land development regulation will be supplemented by other forms of control, e.g., the ability of local governments to assemble land to release for development.

3. The San Francisco Bay Region, still rich in natural and scenic resources, will choose to protect and conserve these environmental qualities and will take decisive actions toward protecting and enhancing the quality of its land, air, and water resources.

ORGANIZATIONAL MECHANISMS

Progress will be made in the development of effective regional organization. Better coordination and cooperation between different levels of government and between public agencies and the private sector will also evolve, insuring the realization of the policy objectives contained in the 1970:1990 Regional Plan. Finally, new means of cooperation and coordination will be developed so that governments and the private sector can work together to reach mutually desired goals.

REGIONAL PLAN, 1970:1990



The 1970:1990 Regional Plan is composed of two parts: (1) regional policy guidelines; and (2) planning recommendations reflecting those policies which can be expressed in two-dimensional plan map form. Both the policy guidelines of the 1970:1990 Regional Plan and the Plan recommendations reflecting these policies derive from the planning framework previously described. These policy and planning guidelines are divided into two broad areas:

1. GROWTH AND DEVELOPMENT
2. ENVIRONMENTAL QUALITY

The functions of the guidelines are to:

1. Encourage actions by appropriate agencies that will initiate, direct, and promote regional growth and development as well as conservation of the environment.
2. Clarify at all levels the decisionmaking process related to areawide problems and issues.
3. Continue the development of the Regional Planning Framework as a guide to regional planning in the future. Such development will include, where necessary, the formulation of more detailed plans and policies for special planning elements, e.g., sewer and water, open space, etc.

PLANNING FOR GROWTH AND DEVELOPMENT

It is estimated that, during the 1970:1990 planning period, there will be a population increase of approximately three million. If the results of such substantial growth are to be positive, policy and planning guidelines for urban development are required. For example, given the stated population growth, a proportional and concurrent increase of about 1.5 million

jobs will be necessary and planning for them must be prompt and careful.

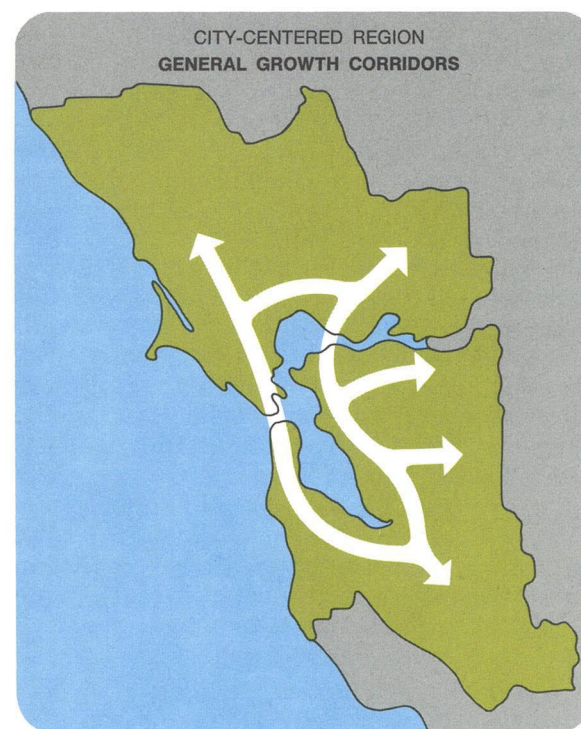
In order to discuss how new growth patterns can be accommodated, a description of the basic components required to support this growth is necessary. They are: urban development; open space; and transportation facilities.

1. For the purposes of the 1970:1990 Regional Plan, land is considered urbanized once it is committed to one or more of the following uses:
 - a. Residential development exceeding one family per acre combined with related population-serving employment areas and supportive facility-service systems.¹
 - b. Basic or site-oriented employment, with the exception of open uses such as agriculture, forestry, and mineral production.
 - c. Airports, military establishments, and other institutions.
 - d. Urban open spaces of less than 100 acres.
 - e. Transportation facilities within growth corridors which connect communities.
2. Regional open space is all land or water that is not covered in the preceding description.
3. The regional surface transportation system is composed primarily of limited-access highways, intra-city and inter-city rapid transit systems with their supporting terminal facilities.

GUIDING REGIONAL GROWTH

In order to provide for the expanding population and new employment opportunities, it is proposed that urban development take place within distinct communities located in a series of "general growth corridors". The general location of these corridors is indicated in the following diagram:

¹This does not imply an accepted density of one family per acre or less throughout the permanent open space or controlled development areas. Policies for development in open space areas will be identified in the Regional Open Space Plan Element.



Regional urban development should be directed to and fostered in communities located within these corridors. Such development should be guided by coordinated local, regional, State and Federal policies concerned with urban and industrial growth and open space. The location of future urban development in communities within general growth corridors will make it possible to concentrate the resources and facilities needed for the solution of the region's urban problems. Future urban expansion is proposed within these general growth corridors in three ways:

1. Rehabilitation, redevelopment, infilling of partially developed areas, and vertical expansion of existing communities.

2. Planned expansion along the edges of existing communities.
3. Planned new communities and greatly expanded existing smaller communities.

Within the twenty-year period covered by the Regional Plan, the largest proportion of future growth is treated as planned extensions of existing built-up communities. This decision is based on the recognition that it will be at least ten to fifteen years before inter-governmental urban growth policies will significantly redirect the forces accounting for the current outward expansion of urban growth. During the later part of the planning period, it is expected that the largest part of the region's new growth will occur within the centers of existing communities and in outlying new, or expanded existing communities.

Transportation, utility, and open space systems should be planned in support of this growth policy.

The proposed location of future urban growth, its relation to population and economic growth, and the shape such growth is given in the Regional Plan are effected in part by each of the following:

1. The predictive regional growth modeling system developed by the Bay Area Transportation Study Commission.
2. Existing local planning policies.
3. Existing and projected regional planning policies of the Association.
4. Adopted planning policies and programs of other areawide planning agencies such as the Bay Conservation and Development Commission, Regional Transportation Planning Committee, etc.
5. Existing and projected State and national urban growth objectives and strategies which influence the location of urban elements, particularly industrial development.
6. Private and public response to the content of the 1966 Preliminary Regional Plan. During public review of the contents of the Preliminary Regional Plan, some verbal and written responses showed concern for broad questions of population growth and distribution, economic growth, and urban development. These responses were con-

sidered and were included whenever possible, in the Regional Plan.

PROPOSED FEATURES OF REGIONAL STRUCTURE

For purposes of regional planning, the Plan diagram (see the map in the back cover pocket) groups the locationally specific planning components of regional interest into three major systems: urbanized space, open space, and transportation. Each component is further divided into functional parts of regional importance.

URBANIZED SPACE AND COMMUNITY DEVELOPMENT

Regional urbanization shown on the Plan diagram includes communities containing residential development, basic employment centers, and community centers. They are, on a regional scale, what might be called the "neighborhoods" of the region's urbanized space. Community centers are shown on the diagram for towns or combinations of towns above 50,000 in population, suggesting the location of future metropolitan communities. It should be noted here that the term "community," as used in this Plan, has two meanings—one is physical and the other is psychological. In the physical sense, community refers to those clusters of urban development that are able to provide and support a wide variety of facilities and services. The psychological meaning refers to an individual's awareness of or identification with a specific area of the region. In its references to communities the Plan includes both meanings. Thus, the concept of communities refers to groupings of smaller local communities or large-scale towns, which provide for their inhabitants a full range of facilities and services and the basis of a wider physical and social identification with the region.

It is proposed that communities be evolved in two ways: (1) by organizing and strengthening developed areas of the region which already exist; and (2) by adding new communities or by planned extensions of existing com-

munities. Communities should also be formed by clustering urban elements that otherwise would spread throughout the region. In most communities sufficient area is left for the exercise of locational choice. Accordingly, not every urbanized area shown on the Plan diagram will be developed by 1990.

EMPLOYMENT CENTERS

The growth, location, and operation of the basic employment centers are major priming agents in determining the location of urban development. Basic or site-oriented industries (refer to page ten) generate the flow of income into the region. The location of the basic group industries is instrumental in setting the regional patterns of jobs-to-people distribution. It is, in addition, a major factor in achieving balanced community development, minimizing excessive home-to-work travel, and guiding urban growth into the communities of a City-Centered Bay Region. The Regional Plan offers a choice of sites for industrial development which are within or adjacent to most communities. Growth of employment within the inner core of existing communities should be given high regional priority.

Employment centers are the chief destinations for work and they should be geared to the highest level of service and accessibility. Future success in achieving a City-Centered Bay Region will depend on the provision of intra-regional rapid transit linked with high standard mass transit within communities, and a differentiated regional highway system. Only by these means will good public transportation be provided from place of residence to the central locations of each employment center.

RESIDENTIAL DEVELOPMENT

Population growth, shifts and separations are matters of regional concern. To the extent that issues such as racial segregation affect population changes and shifts, they also become matters of regional concern and policy. The Regional Plan necessarily addresses these problems as it proposes residential-employment relationships, and space, location, and

form of residential growth to 1990. Regional residential growth policy must involve social, economic, and political questions such as zoning, taxes, price of land, development costs, density, relation to intra-urban recreation, transportation facilities, etc. Some of these matters are primarily local concerns and thus are not included in the Regional Plan. For instance, the Plan does not focus on residential density gradations or on the manner of distributing population within individual communities. A systematic approach is necessary, however, particularly through the coordination of local and regional plans and policies. Such coordination can relate all aspects of residential development to the solution of region-wide urban problems.

The residential land area shown on the Plan diagram is more than sufficient to accommodate the population growth in the region. Population distribution to sub-areas was used as the basis for allocating the amount of land provided in these sub-areas for residential development.

Population distribution in county sub-areas was conditioned by the combination of previously mentioned locational factors. Land designated predominately for residential purposes has been related to land provided for basic employment purposes within that sub-area of the region.

The open space policies incorporated in the Plan will also be a critical factor in guiding future residential development.

NEW OR EXTENDED COMMUNITIES

Substantial reasons can be presented in economic, physical, and social terms for the development of completely new communities which: attract economic activities to the region; broaden and diversify employment opportunities; create new growth centers; accommodate a portion of growth located in existing congested areas; provide choice of environment as well as a healthier environment; foster social integration and balance; and; provide opportunities for instituting new ideas for the development and redevelopment of existing cities. The details for developing planned, new, or partially independent¹ communities will be included as part of the Asso-

ciation's Housing Plan Element.

New towns, if developed, would only be one part of the solution to the future growth problem. For example, if five new towns, each accommodating 100,000 people were built in the next 20 years, they would accommodate only about seven percent of the region's 1990 population. Although new communities may be needed in the Bay Region, the greatest emphasis should be directed toward physical and economic growth and social conditions in existing communities.

COMMUNITY CENTERS

The vitality and growth of the centers of cities is essential to the entire region. Many of the problems of the inner-core areas are of regional importance and concern. In turn, strong vital community centers can play an important role in providing the central attraction to counter the spread of urbanization. Further, more detailed study is needed to define the location and role of community centers throughout the region. For the purposes of the Regional Plan, all towns or combinations of towns over 50,000 population are designated as community centers.

AIRPORTS, MILITARY BASES, AND INSTITUTIONS

The Regional Plan diagram shows existing major airports, military bases, and institutions. No new airport, military, or institutional locations are proposed as part of the 1970:1990 Plan. At the time of preparation of the Plan, a study for the location and development of airports in the metropolitan area was in progress.

TRANSPORTATION SYSTEM DEVELOPMENT

At the present time approximately one-fifth of the Bay Region's economy is expended on transportation. However, current investments in highways and automobiles have not solved the congestion problem. Population growth, economic activity, and increased mobility will increase congestion on the streets and highways of the region unless the following recommendations are put into effect.

¹New communities are considered independent when they contain employment opportunities in proportion to their working residents.

SYSTEMATIC APPROACH

Part of the transportation problem will require non-transportational solutions. For example, the growth, development, and environmental policies proposed in the Regional Plan will limit development scatteration and promote the creation of employment centers closer to places of residence. This will, of course, minimize the need for long commute trips. Regional objectives and policies for population distribution, the location of basic employment, and open space in a City-Centered Bay Region should thus be considered as necessary parts of any solution to the region's transportation problem.

MULTIPLE MODE APPROACH

The heavy reliance on automobiles as the primary mode of transportation in urban centers creates a serious transportation problem. More and more, the cities of the region are being rebuilt to accommodate the automobile, thereby becoming increasingly unliveable for people. For example, the undesirable side effects of the automobile include the continuation of present low-density, regional urban scatteration, growing traffic congestion, noise, odor, and auto-oriented use of land. The number of vehicles in the cities needs to be greatly reduced by the provision of other transportation alternatives. Moreover, multiple use of the space above and below existing and new transportation corridors needs to be expanded.

There is no simple solution to the region's urban transportation problems. Massive improvements are needed and given continuing transportation expenditures at about one-fifth of the region's economic effort will require:

1. Changes in individual attitudes towards current patterns of living and means of transportation, substantial change in existing travel habits and the nature of travel demands.
2. Restructuring of urban areas, resulting in less need for long commutes and frequent automobile trips.
3. Major advances in urban transport technology.

Progress made toward a City-Centered Region will depend on the progress made toward developing a balanced, multiple-mode transportation system.

Elements of the region's multiple-mode transportation system consist of:

SURFACE HIGHWAY SYSTEM
INTER-CITY RAPID TRANSIT SYSTEM
INTRA-CITY MASS TRANSIT SYSTEMS
AIR TRANSPORT SYSTEMS
WATER TRANSPORT SYSTEMS
TRANSPORTATION TERMINALS
SPECIAL ROADS AND TRAILS

The Transportation Element of the Regional Plan contains plan proposals and policy guidelines for the regional surface transportation system, which are compatible with the existing regional highway and rapid transit systems.

Concepts for other transportation modes will be considered as part of the continuing regional planning program. Special element plans will be prepared accordingly to achieve the objectives of a City-Centered Region.

The Bay Area Transportation Study Commission (BATSC) in its final report **Bay Area Transportation Report**, May, 1969, included a regional highway and transit system "development guide" to aid in the further planning of regional transportation facilities. The BATSC transportation guide provided the basic components for the Transportation Element of the Regional Plan. Policies are recommended in the transportation report to resolve short-range transportation needs. As such, it reflects current highway and transit plans which are already funded or otherwise committed for completion.

The Transportation Element of the 1970:1990 Regional Plan incorporates the work and recommendations of BATSC as a starting point in the development of a regional transportation system plan. Some modifications were made in the highway and rapid transit systems recommended by BATSC. Changes were made in order to facilitate more effectively the 1970:1990 Regional Plan objectives. The Regional Plan Transportation Element is recommended as a general guide and the

next step in the development of an integrated regional land use-transportation plan based on regional policies.

The characteristics of future travel demands will continue to be evaluated through comprehensive systems analysis in order to identify specific problems and problem areas. The analytical capability of both the Regional Transportation Planning Committee (successor to BATSC) and the Association will be utilized continually to reanalyze the modified highway and transit network contained in the Plan. Revisions in the Transportation Element will then be made where necessary.

CONCEPT FRAMEWORK

The 1970:1990 Regional Plan transportation system is designed to shape and serve a region of multiple communities situated within defined growth corridors. The regional highway and rapid transit systems shown on the Plan diagram follow these general growth corridors, linking together individual communities and their centers. In order to guide regional growth and maintain environmental quality, the region's surface transportation system should be developed in such a way as to connect community centers and provide capacity in and between growth corridors. Space occupied by urban transport facilities should be used both above and below the travel route for urban and open space purposes.

The region's transportation system should provide for more than the movement of people and goods for economic purposes. It should be balanced not only in terms of different types of facilities but in terms of multiple purposes and functions. The same system that serves workday commuters destined for urban centers should also be able to provide for weekend and recreational travel needs. Transport facilities should also be developed with reference to environmental quality objectives.

RECOMMENDED HIGHWAY SYSTEM

The transportation facilities shown on the Regional Plan diagram should be considered as corridors, not precise routes, capacities, or

designs. Most corridors already exist or are committed to transportation development. Two components of a regional highway system are proposed — regional highways, and major collector-distributor highways. Limited access corridors are recommended for both components in order to minimize access points, eliminate cross traffic at grades, and control the environment of the corridor.

Regional highways correspond to the existing freeway concept — divided highways primarily for intra-regional traffic, with full control of access. As shown on the Regional Plan diagram, these highways are generally continuous high-volume facilities.

Major collector-distributor highways maintain full or partial control of access and serve as connectors between or as extensions of regional highways. They also reach into the region's low density urban development and recreation areas. The routing, capacity, and design of major collector-distributor corridors vary with individual areas, depending on the particular road system, travel patterns, population density, land use, and environment. Planning and design of these special corridors will require detailed studies, involving all local and regional agencies. The aim of these studies must be to identify and account for the unique features and needs of individual areas. The recommended highway network consists of 897 miles of regional highway and 616 miles of major collector-distributors.

RECOMMENDED RAPID TRANSIT SYSTEM

The basic premise upon which the Bay Area Rapid Transit System (BART) has been built and the extension proposed in this Plan is the maintenance and growth of strong urban core areas.

The components of the regional transit system dealt with on the Regional Plan diagram consist of high-speed rail or bus rapid transit, proposed to operate on private rights-of-way between communities. Recommendations are made on the Plan diagram for completion of the first phase of the BART system, and future extensions of the system either by rail or bus

rapid transit. As with the highway recommendations the Regional Plan diagram indicates that transit extensions are corridors, not precise route locations. The system could be either mode, provided they are characterized by controlled-access and grade-separated roadways.

Future rapid transit service should connect all major community centers of the metropolitan Bay Region so that no transfer is required to move from one center to another. Although continuous, uninterrupted rapid transit service is recommended, interim solutions may include bus rapid transit on exclusive roadways and/or reserved freeway lanes, and priority of right-of-way in communities.

The development of high standard intra-city mass transit systems in all metropolitan communities, linked to the regional rapid transit system, also requires high priority at all governmental levels.

A total of 276 miles of ■■ rapid transit is included on the Plan diagram, of which 201 miles comprise the extended system.

DEVELOPMENT OF A SYSTEMATIZED MOVEMENT PLANNING PROCESS

The Regional Plan deals with only two kinds of transportation facilities—highways and rapid transit. These facilities must be closely linked and coordinated with other levels and modes to form the system required to serve the region. Some forms of that integration and cooperation are already indicated. Parking for automobiles will be provided at BART terminals and some intra-city bus systems will offer feeder bus service there. These individual actions are occurring without unified objectives for the transportation system and without regionwide development-environmental focus. In order to achieve the most effective systematic movements of people and goods, the Association should first define the dimensions of such movements. It should also play a role in coordinating the efforts of various transportation agencies to integrate all transportation functions into one overall system.

HUMAN RESOURCES DEVELOPMENT

Planning for the physical development of a City-Centered Bay Region should proceed in relationship to the improvement of social and economic resources such as regional labor force mobility, housing opportunities, recreational and health facilities, manpower and job training, safety, and citizen participation. For this reason, when making plans and decisions regarding the region's natural and man-made environment, the probable effects on socio-economic problems should be taken into consideration. The Association can provide the forum for communication between local and regional agencies dealing in such problems, and help to coordinate their efforts. In addition, broad citizen involvement can be sought to assist in establishing the goals for plans and programs that have a direct socio-economic and physical impact on the region.

GROWTH BEYOND 1990

Not unlike the other levels of government, the region has a responsibility to examine the question of the desirable population-holding capacity of the region. Although growth can be accommodated reasonably well for the next twenty years, the region's capacity is not unlimited. As part of its continuing regional planning process, the Association should inquire into the probable course and desirability of regional population growth beyond 1990, especially as it relates to the long-range City-Centered concept. Such an evaluation should include estimates of the demands and costs that population growth beyond 7.5 million could make on the public sector as represented by such public works as water, sewerage, highway, airport, park, and educational facilities.

Such an investigation should also include consideration of the ways in which population growth may effect the capacities of governments within the Bay Area to deal with these factors.

PLANNING FOR ENVIRONMENTAL QUALITY

The citizens of the Bay Area are increasingly aware of the deterioration of the region's environment. At the same time, their expectations about environmental quality are rising. Issues related to the environmental crises are: disappearing open lands; the manner of disposal of leftovers into the region's air, water, and soils from individual, municipal and corporate activities; blight; noise; congestion; etc. These kinds of problems are largely reflective of urban growth. Thus, the regional role in managing urban growth and development is closely linked to its role in conserving and improving its natural and urban environments. The foregoing guidelines for urban growth and development, transportation, and utilities must be considered in relation to the region's environmental system. For example, decisions to leave lands in agriculture, recreation, forests, and other open spaces should be coupled with decisions regarding the expansion of urban communities, which parts of the region can best accommodate urban growth, and which areas have highest priority for the development of new communities.

ELEMENTS OF REGIONAL ENVIRONMENTAL PLANNING

Open space, air and water quality, solid waste disposal, ecology, and design of the urban and natural environment are matters of key concern for the region. Each should be the subject of continuing study, policy development, and implementation in the continuing regional planning process. In addition to its own efforts in these areas, the Association should organize inter-agency multi-disciplinary studies to gather the information necessary to plan for environmental conservation, restoration, and development.

OPEN SPACE PROPOSALS

Early efforts by the Association emphasized the important relationship between the use of

land for urban growth and the conservation of the environment in terms of a permanent open space system. In the Preliminary Regional Plan and in supplemental open space studies, a multi-function area-wide open space system was recommended as being vital to the success of regional urbanization and conservation effort. It was due partially to this same recommendation that the concept of the City-Centered Region was chosen by the General Assembly. In a City-Centered Region, there is less scattering of development, resulting in more of the region's surface being left in a natural state. The open space recommendations included in the Regional Plan diagram are based on earlier Association work in open space planning, on the planning guidelines for the concept of a City-Centered Bay Region, and on the regional goals.

Open space is proposed in two elements: controlled development areas and permanent open space areas. Each element is meant to satisfy one or more of the following open space purposes:

1. Conservation of land and its resource features.
2. Ecological protection.
3. Park and recreation purposes.
4. Historic and/or scenic purposes.
5. Shaping and guiding urban form.
6. Enhancement of community values and safety.
7. Maintenance of options for the future.

Open space is unbuilt or predominately unbuilt land serving these multiple purposes. Open space areas of less than 100 acres that are located within communities should, in general, be planned for and provided by those communities.

CONTROLLED DEVELOPMENT AREAS

The urban land uses outlined on the Regional Plan diagram include both the existing 1970 land use pattern and the expanded 1990 urban development areas. Between the outer limits of the areas designated for development by 1990 and the permanent open space areas, controlled development zones have been established with proximity to most commun-

ities. These areas represent lands that could be used for urban purposes, added to the permanent open space system, or utilized in a number of ways to serve both concepts. In designating these controlled development areas, the potential need for additional lands to be used in urban expansion beyond 1990 is recognized. At the same time the actual determination of future use, urban or open, is left as a matter of choice. The open lands found in this category should be left as open space for as long as possible, if not permanently. Need for further expansion of the 1990 urban boundaries shown on the Plan map should be determined only after careful consideration at both the local and regional levels.

PERMANENT OPEN SPACE

Present demands upon the open land, water, and waterway resources of the region are increasing. At the same time, the supply of these valuable environmental commodities is getting smaller and smaller. Growing population, consumption, and leisure-time, create an ever-greater need for these resources. A permanent regional open space system is, therefore, a key factor in a unified urbanization and conservation policy. This policy advocates that both private and public lands, as well as water areas and large and small waterways, be seen, used, and permanently protected for their positive value in the region's urban and natural environments.

The idea of a permanent open space system is consistent with the concept of a City-Centered Bay Region as recommended in the 1970:1990 Regional Plan. The Plan anticipates that, as the population continues to grow, contact with the natural environment will become more and more crucial to maintaining a healthy life style. This consideration has been a major influence on the judgment of the need for permanent open space in the region. In general, the Plan's designation of space was based on the following factors which employ the philosophy stated above: the region's natural features; location policy for urban development; comprehensive open space planning goals; and criteria determining regional open space

significance, location, space, and developmental character.

All lands in the permanent open space system should be under public control, e.g., ownership or less-than-fee title. One public agency, however, need not be the sole owner. It is particularly important to allow public ownership to protect the following environmental features:

1. Major ridges
2. The Bay
3. Waterways and flood plains
4. Major recreation areas
5. The ocean coastline
6. Selected Bay and river shoreline
7. Areas of outstanding natural attraction
8. Strategic areas to guide urban expansion

Other lands should be retained in private ownership if their essential open and natural characteristics can be permanently maintained.

In terms of economy, retention of open space on a regional scale will contribute a net gain to the Bay Area rather than a loss. At the same time, provision of open space facilities for future generations will be assured. The region should anticipate its future needs, securing public open space **now**, while the land is still available. First priority should be given to acquisition of open space in and immediately around the existing urban areas.

Speaking specifically, the following lands should be included in the permanent open space system (refer to Regional Plan diagram): It is recommended that the soils used for specialty crops and prime agriculture should be retained. These include the Livermore, Napa, and Sonoma Valley vineyards, the Santa Clara County orchards and croplands, the prime agricultural lands of northeast Solano County, and the agricultural areas of eastern Contra Costa County. In addition, smaller areas of agricultural lands in southern Sonoma County should be retained.

In general, the ponds used for the solar extraction of salt also need to be retained. They should be maintained in multiple open water uses if, for economic purposes, their present use as a source of salt recovery becomes un-

feasible. Water supply lands around existing and proposed reservoir sites should be safeguarded. Open space use is proposed for the marshes of Suisun Bay, so that the areas for fish and wildlife, and the forest lands for wildlife refuges that are found in Sonoma, Napa, and other locations, may be preserved. Areas to be retained for recreation include all those presently in public ownership, with expansion anticipated. Open spaces to shape and guide development and for visual amenity are needed throughout the region. Efforts have been made in the highly urbanized areas to use open space to define and separate communities, so that the region becomes more understandable and attractive to residents and visitors. The major flood plains and drainage channels should be included in an effort to avoid the costs of further flood control protection and to provide a means of linking the region's open space areas.

PLANNING FOR OTHER ENVIRONMENTAL ELEMENTS

Some planning elements of the region's environmental system cannot be expressed in graphic form on the Regional Plan diagram, although plans and programs for them are extremely important. The following is a brief discussion of each of the elements in this category. All of them should be considered as positive planning components of the region's environmental system and integral parts of the Regional Planning Framework.

AIR

Air is perhaps the most precious resource in the region's entire environmental system. Excessive air pollution rapidly degrades the quality of existence, even if all other environmental resources are adequate. The pollutants of the region's air are primarily man-made and derive mainly from urban sources. The increased use of vehicles, as well as the manufacturing and burning in and around the region's communities, have steadily added to the air pollution problem. One source of the problem is the pattern of

urbanization that has resulted from continuing urban growth. Guiding such patterns of urbanization is a major concern of regional planning. The locations and functions of highways, airports, industrial areas, and other kinds of land, need to be considered in relation to their contribution to local and region-wide air pollution problems. The Association's role in helping to provide a region-wide and multi-dimensional approach to regaining clean air and managing airsheds should be continually explored and developed. Inter-governmental coordination of regional planning and action addressed to the air pollution problem is an immediate priority item.

WATER

Water is another critical resource of the Bay Area's environmental system. The quality of life in the region is directly related its water resources: the Ocean, the Bay and Delta and their related waterways, lakes, rainfall, etc. Water resources, like air resources, are being depleted by the ever-growing urban population. The process is by now familiar. Needs for water increase, urbanization of watersheds occurs and greater and greater volumes and concentrations of pollutants are discharged, directly or indirectly, into the region's circulatory systems. This kind of damage may be seen as one by-product of the area's ever-expanding production and consumption.

Laboring under such a burden, the natural processes of regeneration are becoming seriously overtaxed. For this reason, the Association (and other agencies) must not hesitate to address the issue in all of its dimensions. Water supply, conservation, pollution — these are interdependent problems, and the Association needs to respond to them through its multi-functional and comprehensive planning approach. Water supply, storage and distribution, sewage collection, treatment, and disposal, and storm water and flood management problems should be considered as related, and the goal should be to discover a means to balance all of these factors in a water use

and reuse cycle. These, in turn, are linked to plans for and management of air and land resources. Water should be reclaimed or returned to the land for agricultural or recreational purposes where possible. Costs and benefits should be weighed on an area-wide basis. Multiple use should also be encouraged on a regional basis in plans for the functions of water supply, storage, treatment, disposal, recreation, and flood control. In a City-Centered Bay Region, water can be distributed much more efficiently and sewage, in turn, can be collected much more effectively than in the case of low density, scattered urban developments. Thus, policies for water resource development and conservation should be closely related to policies for urban development. An approach should be adopted which discourages the provisions of public water and sewer services to scattered development. Such a policy would be a strong deterrent to growth in areas other than those in or adjacent to urban centers. Increasing controls on private water systems and individual sewage treatment facilities would also discourage scattered small-scale developments.

On the other hand, the concentration of growth in urban centers, although concentrating pollution-causing activities, would simplify pollution control mechanisms by channeling all liquid wastes through adequate facilities and reducing the number of random dischargers. In addition, the preservation of open space as recommended in the Regional Plan, together with appropriate watershed management, would minimize soil erosion, which is an important contributor to water pollution.

The Association should play a strong role in interagency cooperation in water distribution, sewage treatment, fire protection, soil conservation, flood control, and river beautification, and should assist in planning for district consolidation on a river basin or sub-regional basis.

Finally, every one of the natural waterways and creeks in the region should be treated as part of the permanent open space system.

SOLID WASTE DISPOSAL

Solid waste and refuse disposal has long been recognized as a regional problem by the Association. Early work indicated the severity and immediacy of the problem. Indications for the future are that the amount of refuse and the per capita production of solid waste will increase. Between 1963 and the year 2000, the Bay Area will produce enough solid waste to cover a 50 square mile area to a depth of 20 feet. The Association's 1965 **Refuse and Disposal Needs Study** stimulated an awareness on the part of citizens and elected officials of the need for long- and short-term solutions to the solid waste problem. The Association should continue to develop its planning and coordinative framework and its education and informative role in order to assist in the solution of solid waste disposal as an environ-

mental quality problem.

ECOLOGY

The region **must** preserve its ecology. As urbanization does occur it should preserve the balance of nature to the maximum extent, protecting the life cycles of the earth, the water, the plants, and the animals. The concept of a City-Centered Bay Region addresses the ecological problem by recommending that as little land as possible be wasted and that as much of the remainder as is possible be left in an open state.

The Association's continuing role in open space planning should be broadened to include an ecological element.

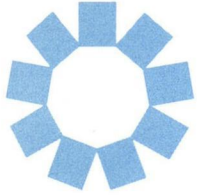
DESIGN OF THE VISUAL ENVIRONMENT

A growing awareness is developing in regard to the region's visual assets. Much could

be done to maintain and enhance its visual quality. For example, transportation facilities, power plants and transmission lines, areas where mineral extraction is taking place, parks, etc. should be designed to harmonize with regional landscape qualities. Regional design concepts should be developed and incorporated as a design element as part of the Regional Planning Framework. A special plan element to be prepared as part of the Association's continuing planning program will deal with the subject of the visual quality of the region.

URBAN ENVIRONMENTAL STANDARDS

In existing urban areas, minimum regional environmental standards for open space, visual amenities, and service facilities need to be developed.



SUMMARY STATEMENT— POLICY GUIDELINES

It is through a set of policy guidelines that the objectives of the Regional Plan, with its accent on the concept of the City-Centered Region, can be translated into a basis for public and private decision making and action programs. The following, therefore, is a summary of regional policy guidelines:

POLICY GUIDELINES FOR GROWTH AND DEVELOPMENT

The first major policy area deals with the growth and development of the man-made environment and of human resources.

ORGANIZATION OF A CITY-CENTERED REGION

1. The Bay Area and its communities should be organized into a City-Centered Region.
2. Accordingly, urban growth in the region should be guided into or around existing or new communities in accordance with the broad framework proposed in this Plan.
3. Living, working, and shopping within the same community should be planned and promoted by all levels of government and the private sector. To make this possible, a wide range of well-serviced residential units convenient to urban centers of employment will be required. The need for long commuting should be reduced.
4. Urban development should be organized to promote communities of sufficient scale to attract and support a wide range of convenient services and facilities and to provide focal points for wider regional identification.
5. Policies for open space, water, sewage, and transportation should be coordinated to guide the timing, location, growth, and wherever necessary, the limits of urban development.

6. Legislation should be encouraged by which to guide regional patterns of growth and development.

COMMUNITY DEVELOPMENT

1. Communities should evolve through the organizing and strengthening of existing developed parts of the region and through the addition of planned new communities.
2. Open space should be selectively acquired or reserved through development rights for the purposes of shaping and serving urban growth in accordance with the policy for a City-Centered Bay Region.
3. Controlled development areas should be located around the urban fringe of each community to provide, if needed, holding zones to permit the orderly extension of urbanization or the creation of new communities. Land scheduled for early use should be released in units of neighborhood size or larger, and unified planning and design concepts should be applied in order to prevent wasteful, unattractive, and ecologically damaging scattered development.

DEVELOPMENT OF EMPLOYMENT AND ECONOMIC OPPORTUNITIES

1. The location of employment and the timing of its development are critical to the success of the City-Centered Region. All compatible types of employment should be located within or adjacent to communities.
2. Maximum employment opportunities should be available to residents within their own communities. The nature and number of these jobs should, however, be consistent with the maintenance of a livable environment.
3. Specialization to capitalize on local advantages and diversification to improve stability

- should be encouraged in each community.
4. Growth of employment within the inner-city cores of existing communities should be given high priority.
5. The Association should develop concepts of regional economic efficiency and balance in order to throw light on regional economic issues and assess planning proposals as they are related to the development of a City-Centered Region. One example of an area needing further regional policy development can be seen in the relationship of physical planning proposals to labor and demand markets, labor mobility, efficient site development, etc.

RESIDENTIAL DEVELOPMENT

1. The location of residential development and the condition of the living environment will be key factors in meeting regional goals. All governmental levels as well as the private sector should assist in providing, in each community, the maximum number of housing choices in terms of location, style, neighborhood, and price. These choices should uphold local plans to meet the social and economic needs and desires of residents.
2. Private and public programs providing more low and moderate income housing of good design and healthy environment should be assisted. Programs accelerating rehabilitation efforts should be encouraged, and residential relocation should be planned on an area-wide basis.
3. Uniform housing codes, building codes, and subdivision ordinances, based upon performance standards, should be encouraged. The Association should prepare a model regional housing and building code.
4. Employers should be encouraged to provide housing for their workers in open, attractive neighborhoods near the place

of employment so that home-to-work distances are shortened.

COMMUNITY CENTERS

1. Each community should center around a core of intense activity where commercial, governmental, cultural, recreational, health, and educational services are provided.
2. Existing community centers which are becoming blighted should be rebuilt through coordinated policies and programs at all levels of government. This rebuilding should involve both private and public interest.
3. The Association should develop the regional fiscal and developmental plans and programs needed to assist in the evolution of strong community centers.

NEW COMMUNITIES

1. All levels of government should foster and assist in the development of entirely new planned communities or the planned expansion of some existing small settlements into new communities. The plans for these new communities should support the objectives for a City-Centered Region. When fully developed, they should contain at least 100,000 people and should provide employment opportunities in proportion to the number of resident workers. New communities should be served by regional rapid transit and freeway facilities. Sites for this kind of development should be reserved at an early date.

AIRPORTS, MILITARY BASES, AND INSTITUTIONS

1. The designation and use of land for these purposes should directly support the objectives for a City-Centered Region.

TRANSPORTATION SYSTEMS DEVELOPMENT

1. Regional transportation policies should be examined for their consistency with the long range objectives of the City-Centered Region concept and adjusted where found to be incompatible.

2. All plans and designs for the siting and construction of transportation-related facilities should be made so as to insure the protection and improvement of the quality of the region's environment.
3. Public transit service should be improved to the degree that it offers the public a more attractive means of urban-oriented travel than the automobile. Especially in areas of severe traffic congestion, where additional highway facilities would not provide adequate improvement or would have adverse community effects, all efforts should be made to encourage a shift from private automobile to public transportation. These efforts might include the enforcement of more parking restrictions, as well as bridge toll increases, free transit service, and public information programs.
4. More efforts should be directed toward achieving a balance and integration of various transportation modes and facilities. Increases in highway capacities leading to community centers should be allowed only in conjunction with the provision of adequate parking and street facilities for incoming and local traffic. In addition, strong emphasis should be placed upon the development of intra-city systems of mass public transit, which are also responsive to the need for adequate terminal facilities.
5. A more effective system of highway and transit facilities will require additional financial support. The region should therefore, request that the State make more monies available at the regional level for local governments. These monies should be spent at their discretion in improving the local portion of the regional transportation system in ways that support the objectives of the Regional Plan. The Association should also seek a long-range commitment from the Federal Government to financial support for rapid mass transit development.
6. The services offered at this time by the major modes of regional transportation should be improved. These improvements should be in the areas of speed, mobility, safety, comfort, and economy.

7. Where major improvements in the transportation system of central urban areas are warranted, highest priority should be given to completion of facilities that qualify as essential components of the overall regional transportation system, including both highway and public transit facilities. If additional facilities are needed to solve specific traffic problems, public transit solutions should be given first preference. If these solutions are found to be practical, their implementation should have a high priority in the scheduling of short-range capital improvements in the transportation system.
8. The region should adopt those products of new transportation technology which prove operational, capable of providing an effective level of service for a large number of people, and favorable to the development of a City-Centered Bay Region.

HUMAN RESOURCES DEVELOPMENT

1. The human side of a City-Centered Region should consist of a physical, social, economic, and cultural environment which maximizes the opportunities for all segments of the population to develop their potentials.
2. Accordingly, all levels of government and the private sector should seek to identify and meet existing problems and to create opportunities for all the citizens of the region.
3. The Association should explore and develop regional policies for human resources development pertaining to health (both personal and environmental), education, recreation, etc.
5. The Association should provide the forum to be used for communication among regional agencies dealing in physical and socio-economic programs and for the coordination of physical, social, and economic policies.
6. Residents of the region should be encouraged to help in setting goals and develop plans for programs that have a direct impact on their lives.

GROWTH BEYOND 1990

1. The region should begin to explore the subject of population increase beyond 1990 and how it can be accommodated. The possibility of continuing population growth should be re-examined as it relates to the City-Centered concept.

POLICY GUIDELINES FOR ENVIRONMENTAL QUALITY

The Plan's second major policy area deals with the region's open space, air, water, ecological, and design resources. Guidelines are proposed for each of the key elements and for the regional environmental system in general.

MANAGEMENT OF THE REGIONAL ENVIRONMENTAL SYSTEM

1. All levels of government, all groups, and all individuals should plan for, manage, and use the limited natural resources of the Bay Region in such a way as to conserve and restore the environment.
2. All development, public and private, small and large, should maximize the retention and maintenance of natural environmental qualities.
3. The development of a regional environmental quality management system is a prime responsibility of the Association.
4. The Association should provide the forum for reconciling possible regional conflicts regarding the environment, and for coordinating the regional plans and programs that have potential environmental impact.
5. The Association should participate in the consideration of new, large-scale regional investments which will have environmental effects. In weighing the value of such projects, rating scales for environmental relevance should be used.

OPEN SPACE

1. Planning and management of the regional open space system is a prime responsibility of the Association.
2. The region should, in anticipation of future needs, secure the public open space that is needed while it is available.
3. First priority should be given to securing open space within and immediately around the urbanized space as depicted in the Regional Plan diagram.
4. Open space should be planned and managed to serve more than one function at the same time. These functions include: managed resource production; natural and human resources preservation; human health, welfare and well-being; public

safety; intra-regional communication and service corridors; open space reserves (to maintain future options); and city-forming purposes.

5. Land reserved in open space for future controlled urban development should be released beyond 1990 as development pressure grows. The extent of the pressure should be determined at the local and regional levels. This land should be left in open uses for as long as possible or be included as part of the permanent open space system.
6. The Association should continue its development of open space policies through a continuing inventory, analysis, and evaluation of open space resources and needs.

AIR

1. Because the major sources of air pollution result from urban activities, the region and its urban areas should be planned and managed to minimize pollution-causing processes. For example, since automobiles are responsible for a large percentage of air pollution, high priority should be given to the extension of the regional rapid transit system and the development of intra-urban mass transit. Such extension and development would allow residents to cut down on the number of automobiles used in central areas. In addition, urban growth should, in keeping with the concept of a City-Centered Region, be guided in such a way as to reduce the need for long distance commuting. If sources of pollution exist that cannot be treated, they should be placed where their contact with urban areas can be minimized.
2. The Association should conduct studies, publish information, provide its regional forum, and coordinate plans and programs to assist in improving air quality in the region.

WATER RESOURCES

1. Water supply, storage, distribution, treatment and disposal, as well as sewage collection and storm and flood management should be considered as interdependent functions. With this in mind, a water use and reuse cycle that integrates the conservation of air and land resources with urban development should be evolved. The planning and management of urban development, open space, water supplies, etc., should be mutually reinforcing.
2. Water quality in all parts of the Bay and in regional waterways should be adequate enough to permit human water contact activities and provide a suitable habitat for

indigenous forms of wild and aquatic life.

3. Area-wide planning of water resources conservation and development should be an integral element of the comprehensive Regional Planning Framework.

SOLID WASTE MANAGEMENT

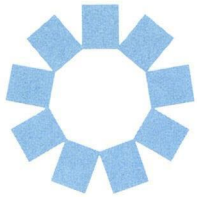
1. The region's solid waste disposal problems should be treated as an integral part of the region's environmental quality management system.
2. The development of recovery and recycling procedures for solid waste should be fostered and assisted by all governmental levels, especially through a taxation policy.
3. The Association should undertake studies to identify the functions of regional solid waste management as well as the operating, coordinating and planning responsibilities.

ECOLOGY

1. All governmental levels should give high priority to the preservation of the region's natural processes and life cycles as they exist both within communities and in open space areas.
2. All forms of urban development should be planned to minimize disturbance of the region's natural processes.
3. The form of urban development should be dictated as much as possible by natural determinants.
4. Land for urban development should be released in units large enough to plan for the inclusion of natural factors.
5. The Association should undertake the development of model land use regulations that recognize the importance of natural processes.
6. Multi-disciplinary ecological studies should be used in planning and management at all public and private levels.

DESIGN OF THE ENVIRONMENT

1. The physical environment of the region should be pleasing and meaningful to the senses and to the intellect.
2. Strong commitments should be made at all public and private levels to maintain and improve the visual quality of the region.
3. The Association should exercise design leadership by developing an inventory of regional design resources, as well as concepts and guidelines to be incorporated into all regional and local plans, decisions and actions which have environmental impact. Information programs should include environmental quality and amenity materials which include examples of good regional design and thereby an incentive for improvement.



IMPLEMENTATION

The Association's 1970:1990 Regional Plan is both a general policy concerned with the desirable goals for the future living environment of the Bay Area and a graphic expression of those goals. Unlike the general plans adopted by cities and counties, the Association's Regional Plan will not be used as the basis for any detailed application of the police power on a parcel-by-parcel basis, as in the making of zoning or subdivision regulations. Rather, the Regional Plan will be used as a guide to reflect the approved policies of the Association in regard to general planning at the regional level. The Plan will also provide a broad framework to help in facilitating the development of more detailed special element plans, including water, sewage, open space, etc.

METHODS TO ACHIEVE A CITY-CENTERED REGION

In general, each of the following implementation possibilities is designed to help in (1) determining the future location of urban growth; (2) scheduling urban development over time; (3) controlling the scale of such development when it occurs; and (4) affecting the existing urban centers in order to attract people and jobs back to the cities. The overall objective is to guide the bulk of new urban growth into existing or new urban centers by increasing their livability and efficiency. This urbanization should occur at an orderly rate, with emphasis on the conservation of the region's open space and natural features. The accomplishment of this objective will not be easy, but should be facilitated by the use of the following methods:

METHODS OF LIMITING SPRAWL

One of the principal means of limiting sprawl is the selective acquisition and conservation of open space. In this way open space can be

used to shape new urban growth, as well as to provide places for recreation and enjoyment that are easily accessible to urban populations. Such an open space program can do much to guide the timing and direction of new urban development as long as it operates according to an efficient method of releasing land on a scheduled basis over time. Open space lands in general fall into two categories: (1) those to be retained in open space permanently (e.g., recreation and agricultural areas); and (2) those susceptible for urban use, but whose development is not necessary during the next 20 years.

Full ownership of lands could be acquired by the regional organization (a Voluntary Association or Regional Government) through purchase, gift, or eminent domain. Outright purchase of the full-fee interest would be very costly. Initial outlays of money, however, could be reduced through "gradual acquisition" methods, such as installment purchase, options to purchase, and purchase followed by sale or lease-back. Installment purchase would have the advantages of permitting the occupant to retain economic use of the land, keeping the land on the tax rolls, and facilitating acquisition at a non-inflated price. Purchase and lease-back would have the advantages of permitting the occupant to retain economic use of the land, keeping the land on the tax rolls, and facilitating acquisition at a non-inflated price. Purchase and lease-back would provide the added opportunity of recovering any increases in value that result from public action or expense. Under these methods the price would be established but payment would be delayed, usually resulting in minimized overall costs, since land prices normally continue to rise. Gifts would be another excellent method of acquiring open space lands with the tax advantages accruing to the donor.

Eminent domain could be an important tool in an open-space acquisition program. With adequate planning, legislative authorization, and procedural safeguards, the condemnation of lands outside of urban areas would be legally permissible and a necessary device, especially in the absence of comprehensive land regulation powers. These lands could then be used for open space purposes. Eminent domain could be used for "land banking," as well as for the acquisition of permanent open space. Land acquired in this way would serve as a major deterrent to the haphazard development stimulated by increasing land values, which result, largely, from pressures to develop. The regional organization should also consider acquiring lands in the vicinity of permanent open space areas in order to reap the benefits arising from proximity to such open-space.

The acquisition of "development rights" or less-than-fee interests could also be used as an implementing tool by the regional organization. Experience indicates, however, that a large saving occurs only when rights or easements are obtained well before the land becomes ripe for development.

Private owners and groups could also play an important role in implementing the Regional Plan. A non-profit corporation or trust could provide technical assistance to public agencies, finance projects, furnish public information, purchase open space lands for resale to the regional body, and manage or own open space lands donated or bought with donated funds.

METHODS OF GUIDING GROWTH THROUGH PUBLIC ACTION

Regional development ultimately results from a combination of private and public decisions. While public officials can rarely initiate devel-

opment undertaken by the private sector, they are often able to influence relevant public investment decisions, especially those related to the location of capital facilities. Such decisions contribute to long-range changes in an entire area, and influence land use around a facility. Two examples of such public facility investments are highways and water and sewer lines. Highways, once in place, "create" urban land where none existed before. They do this by lengthening the possible commuting distance from city centers. Compact urban development has thus been undermined by highways and has given way both to strip commercial development and to low density sprawl around interchanges. In the same manner, the location and capacities of water and sewer lines have dictated urban development trends. As can be seen, the response to pressures for urbanization has been to follow development, rather than to guide it into desirable areas. The regional body must rectify this by bringing a comprehensive outlook to the highway and sanitary engineers who make decisions concerning the timing and location of public facilities. At the very least, the regional body should review and comment on all public facility investments and advise local governments as to location and timing on the basis of criteria in the Regional Plan.

METHODS OF BRINGING ABOUT A LARGER SCALE OF DEVELOPMENT

A regional organization must be able to guide the scale and size of new urban development located on the fringes of the metropolitan area, in order to give coherence to that development. In the past, traditional zoning techniques, particularly "large lot zoning," have resulted in scattered sections of low-density urban land which prematurely established the character of later development. The regional body should counter this tendency by designating "controlled development areas" beyond which urban development cannot go during a specified planning period, e.g. 5 years. Such designation, which would be made in accord with the Regional Plan, would curtail development for limited periods, there-

by stemming the "scatteration" of growth far beyond existing developed areas.

In addition, the regional body should prevent undesirable small-scale development in outlying areas. This should be done by adopting standards that require new development in specified undeveloped areas to take place on a large scale. A regional body's insistence upon the unified and comprehensive planning of whole neighborhoods will afford developers an excellent opportunity to undertake imaginative design projects.

METHODS OF GUIDING INTRA-URBAN GROWTH

If the foregoing measures are to be effective in guiding urban development in the metropolitan region's outlying or fringe areas, they must be combined with techniques that will attract growth back to the more urbanized portions of the region. Redirecting growth to urban areas places people closer to jobs, stores, and entertainment centers. In addition, compact living areas minimize the need for scattered government services, resulting in a substantial saving. In order to obtain such benefits, however, old urban centers must be made more amenable to new residential development, intra-urban recreational areas, schools, and jobs. The metropolitan cores must be revitalized through selective clearance and rehabilitation, and further decay must be prevented. To these ends, the regional body should support local renewal and rehabilitation efforts. It should also assist in evolving land assembly techniques that give rise to private interest in the redevelopment of the depressed areas of the city. Comprehensive inner-city renewal must effectively combine public and private remedies.

Generally speaking, a high degree of cooperation and coordination between local jurisdictions and the regional body is necessary. Only then will it be possible to achieve the urban development that is needed to realize the City-Centered regional pattern of growth.

Both the core areas of major cities and the undeveloped portions of the region must be regarded as regional problems, and a success-

ful effort to guide future growth must be undertaken. In making this effort, new development in existing urban communities must be emphasized.

The general term "regional body or organization" has been used in this section, in deference to the fact that the nature of the specific implementing agency has not yet been determined. Implementation of the Plan is therefore considered in three forms in the following section, only one of which applies to the Association at the present time. Since 1966, the Association has used the grant review process to implement its regional planning goals and policies. Additional possibilities for implementation are proposed here. (Even more specific and detailed implementation proposals and procedures will be included in each of the special element plans.) All implementation proposals included here relate, in general, to regional goals as they are stated in the 1970:1990 Regional Plan.

IMPLEMENTATION THROUGH A VOLUNTARY ASSOCIATION OF GOVERNMENTS — GRANT REVIEW

One method for the implementation of the Regional Plan is the Federal project review program. Since 1966, the Association has reviewed applications for various Federal grant-in-aid programs. These include open space, water development, and land conservation projects, as well as hospital, airport, library, water supply and distribution, sewerage facilities, and law enforcement grants. In addition, the Association also reviews the acquisition, use, and disposal of certain Federal property and some Federal public works projects.

With an approved Regional Plan, including detailed functional and special plan elements, the Association will be able to determine not only the extent to which a project contributes

to the effective development of the target area, but also how the project fits in with overall priorities. The general comprehensive land use guide contained in the Plan will provide a policy framework for the more detailed functional and precise plans. The latter, dealing with water and sewer facilities as well as open space, will provide the basic criteria for determining overall program coordination and for insuring the integration of all projects with general regional goals, objectives and policies. Careful review of project proposals against this framework can thus be an important step in implementing the Regional Plan.

REGIONAL PLANNING POLICY

The Regional Plan contains a statement of the objectives and policies which must be considered for the Association to fulfill its reviewing function under the Intergovernmental Cooperation Act of 1968. These include 1) appropriate land use for residential, commercial, industrial, governmental, institutional, and other purposes; 2) wise development and conservation of natural resources, including land, water, minerals, wild life, etc., 3) balanced transportation systems, including highway, air, water, pedestrian, mass transit, and other modes for the movement of people and goods; 4) adequate outdoor recreation and open space; 5) protection of areas of unique natural beauty, as well as those of historical and scientific interest; 6) properly planned community facilities, including utilities for the supply of power, water and communications, for the safe disposal of wastes, and for other purposes; and 7) concern for high standards of design.

The Regional Plan provides the qualitative and quantitative judgments needed to make the determination that a particular project will, for example, realize the goal of "wise development and conservation of natural resources." The review process also permits the tailoring of projects to the special element plans. Thus, the Association has the opportunity to explain how the location, capacities and timing of a

proposed project—such as, a water, sewage, or drainage project—are consistent with or in conflict with a particular element plan and the Regional Plan.

SETTING REGIONAL PRIORITIES

Federal law directs the area-wide review agency to assist Federal agencies in making reasoned choices between competing projects. In order to more effectively discharge its role as the review agency for the Bay Area, the Association must develop a quantitative rating system so that proposed projects can be evaluated more rationally. When developed, this mechanism will determine high priority needs in given project categories. The limited resources provided by Federal assistance programs will thus be channeled to those projects which satisfy the goals of the Regional Plan.

IMPLEMENTATION THROUGH A VOLUNTARY ASSOCIATION OF GOVERNMENTS — INNOVATIVE PROGRAMS

In addition to grant review, there are three other general means of implementation available to a voluntary association of governments. They fall under the overall heading of "innovative programs" and each provides a method of effectuating goals and policies of the Plan. These three innovative programs consist of: 1) development programming; 2) community relations; and 3) cooperative action programs. Within each category, specific methods of Plan implementation can be considered in terms of three levels of activity: 1) cooperative and coordinated activities; 2) activities conducted specifically through utilization of the Joint Exercise of Powers Act; and 3) activities designed to foster the passage of new legislation, or to modify or repeal existing legislation, both at the State as well as at the Federal level.

DEVELOPMENT PROGRAMMING

Development programming deals with actions

centered around controlling and regulating the nature and extent of future regional land development. It is particularly concerned with phasing development over time. In this way, the Bay Area would be developed in an orderly manner along the lines of the City-Centered Bay Region concept, rather than in a low-density urban sprawl.

Assuming that there is no regional government, and without reference to the implementation powers derived from the grant review process, there are still a number of ways in which the Association can implement Regional Plan goals through affecting the timing and nature of future regional land development.

1) Land Use Ordinance Review — When considered together, individual city and county zoning standards and other land use ordinances do not create a cohesive regional pattern, for they were developed in the absence of a regional frame of reference. Therefore, municipalities and counties within the region should be encouraged to submit their present land use ordinances to the Association for review and comment based upon criteria drawn from the Regional Plan. The objectives would be land use regulation that carefully considers unique local values without neglecting important regional considerations.

2) Model Municipal Ordinances—Rational regional development is often plagued by the multiplicity of methods through which development is controlled. Such multiplicity interferes with attempts to coordinate development, even when such coordination is possible. The Association should draft a set of Model Municipal Land Use Ordinances to help in promoting uniform regional standards based on Regional Plan criteria. These model statutes, developed in light of the most current legal thought, would be recommended to municipalities for adoption, either in whole or in part. Such model statutes would in no way confer upon the Association any powers to supercede local zoning authority defined in section 66785.1 of the annotated laws of the State of California.

3) General Plan Revision—When the region's

municipal and county general plans are aggregated on a regional composite basis, the result is an unsatisfactory program for future regional development. Therefore, the Association should develop a continuing program to review municipal, county, and other areawide general plans. Where inconsistencies occur, in areas of regional concern, in these plans, such inconsistencies will be resolved by modifying the local plan, changing the Regional Plan, or developing a mutually acceptable compromise to be incorporated in both the local and Regional Plan.

4) Special Element Plans—In keeping with the Regional Plan, the Association should develop special element and functional plans covering areas such as transportation, water and sewer, and housing. The last should be a full-fledged Regional Housing Plan. It should be kept up-to-date and used for the acquisition of low and moderate-income housing sites and the modification of exclusionary land development regulations.

a) Low- and moderate-income housing site acquisition: Solution of the regional housing dilemma requires an adequate availability of housing sites priced within the range of low- and moderate-income households. Sprawl and concomitant land speculation makes such an availability doubtful. The Association should, with its members' agreement, acquire land for present or future use as sites for low- or moderate-income housing. Such agreement would have to be accompanied by State legislation authorizing this kind of acquisition, and it would also be vital to seek funding at the State or Federal levels, or both. Alternatively, legislation should be sought authorizing either the Association or an agency created specially for that purpose (perhaps a Regional Housing Authority) to purchase such land.

b) Modification of land development regulations that have exclusionary effects: Local officials may have perfectly valid reasons for the individual employment of these regulations. When they are aggregated regionally, however, the effect upon low-income families seeking housing is pronounced.

The Association should review and comment upon local land use regulations, seeking local revision of those regulations found to be adverse in their effect upon an equitable dispersal of low- and moderate-income housing.

5) Development Timing Through Holding Zones — The Association should seek state legislation enabling local governments to establish holding zones in order to postpone urban development in areas that are inappropriate for development within the next 3 to 5 years. Such zones should be designated only when they are in accord with the Regional Plan. Local governments should be authorized to limit development within such zones to agriculture and open space uses, and they should be required to review holding zone designations at least every 5 years.

6) Fighting Urban Sprawl—Initially, the Association should undertake a study to identify all undeveloped areas in the region which are of particular importance in curbing sprawl. The localities within which these crucial lands lie should be asked to commit themselves to using all the tools at their disposal to inhibit such sprawl. The Association, for its part, should pledge itself to giving these localities technical assistance and at least a limited amount of funds, where necessary, to aid them in their effort.

7) Revolving Regional Land Bank—Through a joint powers agreement, such a bank could purchase, either in the name of the Association or in the name of the municipality, land deemed to be of particular value in fostering orderly regional development. When such land was sold for approved development activities (for undoubtedly appreciated prices) the funds received could be put back into the fund. Both Federal and State funding should be actively sought for this program.

8) Capital Improvement Review — In addition to its Federal grant review activities, the Association should foster and support cooperative arrangements between those municipalities that seek to phase and coordinate their capital improvements. To this end, the Association should seek to review and comment

upon municipal capital improvement programs, recommending that, wherever possible, the various public facilities be developed jointly.

9) Regional Capital Improvements Board — Such a board could be organized through a joint powers agreement. It would be composed of municipal, county, and regional officials and provided with Association staff support. Its function would be to plan and coordinate capital improvements throughout the region in accordance with the Regional Plan.

10) Tax Reform — The great dependence of local government upon the property tax as a source of revenue is one of the major influences upon land use patterns and upon the policies of local governments attempting to control them. In order to counter the effects of such dependence, the Association should support legislation at the State level for a restructuring of the State-local tax system. Such legislation could decrease the dependence of local governments upon the property tax. At the Federal level, the Association should support proposals for revenue sharing.

11) Promotion of a Limited Purpose, Multi-Function Regional Home Rule Agency — The Association should continue to seek support for the creation of an agency along the lines previously recommended. To this end, it should seek to structure any additional special districts which are proposed for the immediate future (such as for open space) so that they can readily come under the aegis of the regional organization when it is formed.

COMMUNITY RELATIONS

One of the most significant activities of a council of governments is inter-governmental communication. Given the voluntary nature of the Association, successful implementation of significant portions of the Regional Plan requires that the Association stimulate a constructive awareness of the benefits of regional cooperation. This awareness must be engendered among the various political leaders as well as among the constituencies which they represent.

1) Expanded Public Information Program —

The focus of the expanded program should be to promote increased public awareness of the Association and the Regional Plan, and to create an understanding of the need for regional planning as a means of solving area-wide problems.

2) Citizen Committee on Regional Problems—

The Association should establish citizen committees to study and discuss key regional problems (for example, an Environmental Quality Citizens Committee charged with the production of a comprehensive report on Bay Area environmental quality, including program recommendations). Such committees will not only aid the Association in understanding current citizen needs but in developing ways to meet them. In time, they will also give rise to a well-informed vanguard of citizens aware of the need for regional planning to solve area-wide problems.

3) Conference Series Sponsored by the Association—

a) Minority groups and housing: A regional conference on "Minority Groups and Housing" should include city officials from throughout the region and important regional minority group leaders. Focus would be on the regional dimensions of minority group housing problems. Though the ultimate goal of the conference would be program recommendations, the most significant result might be the opening up of channels of communication.

b) Regional tax reform: Leading regional legislators and professional tax experts should be invited to a conference organized around the topic of "The Property Tax: Regional Implications and Proposals for Reform." The resulting conference report could be utilized as a resource document to support the Association's efforts in Sacramento to restructure the State-local tax system.

c) Regional special districts: While the Association continues to press for a limited regional agency, it must continue to deal with special district fragmentation. The goal of this conference would be to minimize the current lack of coordination. The Associa-

tion would invite each of the numerous special districts within the Bay Area to send its chief executive officer for the purpose of increasing coordination of program and activities.

d) Involving the private sectors: Effective solutions to area-wide problems can be developed only if the private and public sectors combine their energies and resources in a common effort. As communication must precede action, a conference of regional and business leaders and public officials should be organized to discuss regional problems and plans.

4) Regional Publication Program—The Association should publish "Sierra Club"-type pamphlets and soft-cover books to stimulate the interest of larger segments of the Bay Area population than might ordinarily be reached. The first publication should be devoted to Bay Area environmental quality and, in order to achieve the widest possible circulation, it should be distributed at a minimal cost to the public (and free in schools).

5) District Reorganization Act-Regional LAFCO—This Act, passed in 1965, provides a complex set of procedures whereby the consolidation or merger of some special districts can be effected. The Association should initiate a detailed study of the precise manner in which the Act could be used to bring about a more rational alignment of special districts within the Bay Area. Upon completion of the study, the Association should sponsor a conference of all the Local Agency Formation Commissions within the region. The purpose of this conference would be to discuss the possibility for these Commissions to participate, through this Act, in special district reorganization. Should such reorganization prove impractical, the Association should press for legislation at the State level leading to the creation of a Regional LAFCO, composed of members of the existing LAFCOs within the region.

COOPERATIVE ACTION PROGRAMS

Governmental resources at all levels are scarce enough without needless duplication

and disregard of economies of scale. In many cases pooling the resources or service production of two or more governments can result in substantial savings in terms of resources expended, and better quality governmental services.

The coordination of activities which affect the region is also a form of the cooperative action program. The Association should take the lead in promoting such cooperation between all levels of government within the region, and, where appropriate, should not hesitate to become a party to formal agreements implementing such cooperation.

1) Intra-Regional Municipal Agreements—

Occasionally, municipalities within the region will face a common subregional problem related to the Regional Plan. Because of the essentially subregional nature of the problem, however, the Association might not feel it proper to address the problem directly. In such a case, the affected local governments should be encouraged to arrange a separate cooperative agreement tailored to a joint solution of the problem. The Association should stand ready in such cases to offer technical assistance.

2) Contracts for Services — In some cases, a member government might wish the Association to provide it with services, such as technical assistance, which are not within the purview of the initial ABAG agreement. A contractual agreement between the member government and the Association would legitimize the provision of these services. Cooperative purchase agreements with the Association serving as an intermediary in order to take advantage of economies of scale might also be made. Contractual relations such as these can highlight the benefits of a regional approach.

3) Association-Regional Agency Agreements

—It would only be logical to share information and develop joint action programs in those matters where the Association and various regional agencies and special districts are conducting similar studies. The sharing of regional data, and the cooperative development of a regional data bank with inputs from

many of the existing regional organizations, are two likely possibilities. It would also prove useful to Regional Plan implementation for the Association to coordinate its comprehensive planning with the other more limited forms of regional planning carried on by special districts and agencies like the Bay Conservation and Development Commission. This should be done through a cooperative arrangement which would automatically refer all major special district planning proposals to the Association for review and comment.

4) Association-State Cooperative Agreements—Cooperative agreements should be worked out to minimize duplication of labor concerning matters dealt with by both agencies. Such agreements might lead, for example, to the integration of State planning with regional planning, and the sharing and development of relevant data. The Association, in seeking to implement its Regional Plan, should press for an agreement providing for the automatic referral of State agency proposals affecting the region to the Association for review and comment (such as the plans of the Division of Highways).

5) Association-Federal Agency Cooperative Agreements—Numerous Federal agencies conduct activities which either directly or indirectly affect the Bay Area. The Association's relations with such agencies are usually delineated in contracts which must be signed pursuant to the release of Federal funding. Other beneficial contractual relations, however, are possible in certain contexts. For example, the General Services Administration might wish to dispose of unused Federal lands located within the region. The Association could contract to purchase such land and resell it to parties who agree to develop the property in accordance with the Regional Plan.

The implementation of a Regional Plan produced by a voluntary association is not an easy task, for what is "best" for the region is not always favorably received by a local government concerned with protecting the interests of those it is charged to represent. The eventual aim of the Association should be to

promote the concept that actions which have a detrimental effect upon the region as a whole, are not in the general welfare, even though they may promote the welfare of a given municipality.

IMPLEMENTATION THROUGH A LIMITED FUNCTION REGIONAL GOVERNMENT

The third principal method through which the goals, policies and proposals contained in the 1970:1990 Regional Plan can be effectuated is that of a general purpose, limited function Regional Government in the Bay Area. Such an organization, with broad regional planning and plan implementation powers, has been proposed twice to the State legislature by the Association as an alternative to the continued formation of special districts. The Association's General Assembly, in 1967, and again in 1969, approved of the creation of a regional home rule agency which contained comprehensive regional planning capabilities built in as mandatory features. It is within this context of regional organization that the following Regional Plan implementation proposals are presented.

When discussing implementation via Regional Government, no mention will be made of the powers derived from the grant review process, or of those proposals offered under a voluntary association of governments; however, these powers are considered cumulative and it is assumed they would be available for use by the Regional Government.

Plan implementation proposals utilizing the powers granted to the Regional Government are centered around guiding and programming new urban growth on the fringe and outlying areas of the metropolitan Bay Region. The main purpose of such guidance would be to focus growth around urban centers instead of allowing haphazard sprawl in response to speculative pressures.

THE REGIONAL HOME RULE GOVERNMENT

Legislative action by the State would authorize

the creation of a limited function, multiple-purpose Regional Government, having territorial jurisdiction over the nine counties bordering San Francisco Bay. Special purpose agencies, existing at the time of the Regional Government's inception would in time, be integrated with it. Such agencies might become standing committees of the Regional Government, and their existing jurisdictions might become regional service areas under its control and supervision.

RESPONSIBILITIES

The Regional Government's functions would begin with the preparation and adoption of a Regional Plan. The policies and proposals of the Regional Plan would become the guidelines for subsequent special plan elements. These plan elements would be developed to define and program activities which would meet regional needs in the areas of: open space and parks, regional airports, conservation and development of the Bay and its shoreline, transportation, air pollution, regional housing, solid waste disposal, waste water treatment and disposal, and criminal justice planning.

After adoption of the Regional Plan and preparation of the special plan elements, a proposal containing recommendations designed to implement special plan elements would be presented to the Executive Committee and the General Assembly for approval. The proposal would include the finding that the element or problem to be treated is of a regional nature and that it cannot be solved by existing city and county governments acting individually. In order that the costs of solving a regional problem be distributed equitably, the probable territorial extent of the benefits derived would also have to be assessed.

POWERS

The Regional Government, as conceived by the Association's policy makers, will be vested with many of the powers required to effectively implement the Plan. One of these is the ability to acquire real property through

methods such as purchase, gift, and eminent domain. This power can be of importance in effectively implementing special plan elements. To curtail possible abuse, acquisition will usually be made with the consent of the city or county having jurisdiction over the property; otherwise, 60 per cent of the member city and county representatives in the General Assembly voting independently, representing 60 percent of their respective populations, would have to approve the acquisition. Just compensation would be paid to the appropriate people or agencies for losses resulting from such acquisitions.

The Regional Government would be empowered to enter into joint exercise of powers agreements with member governments, as

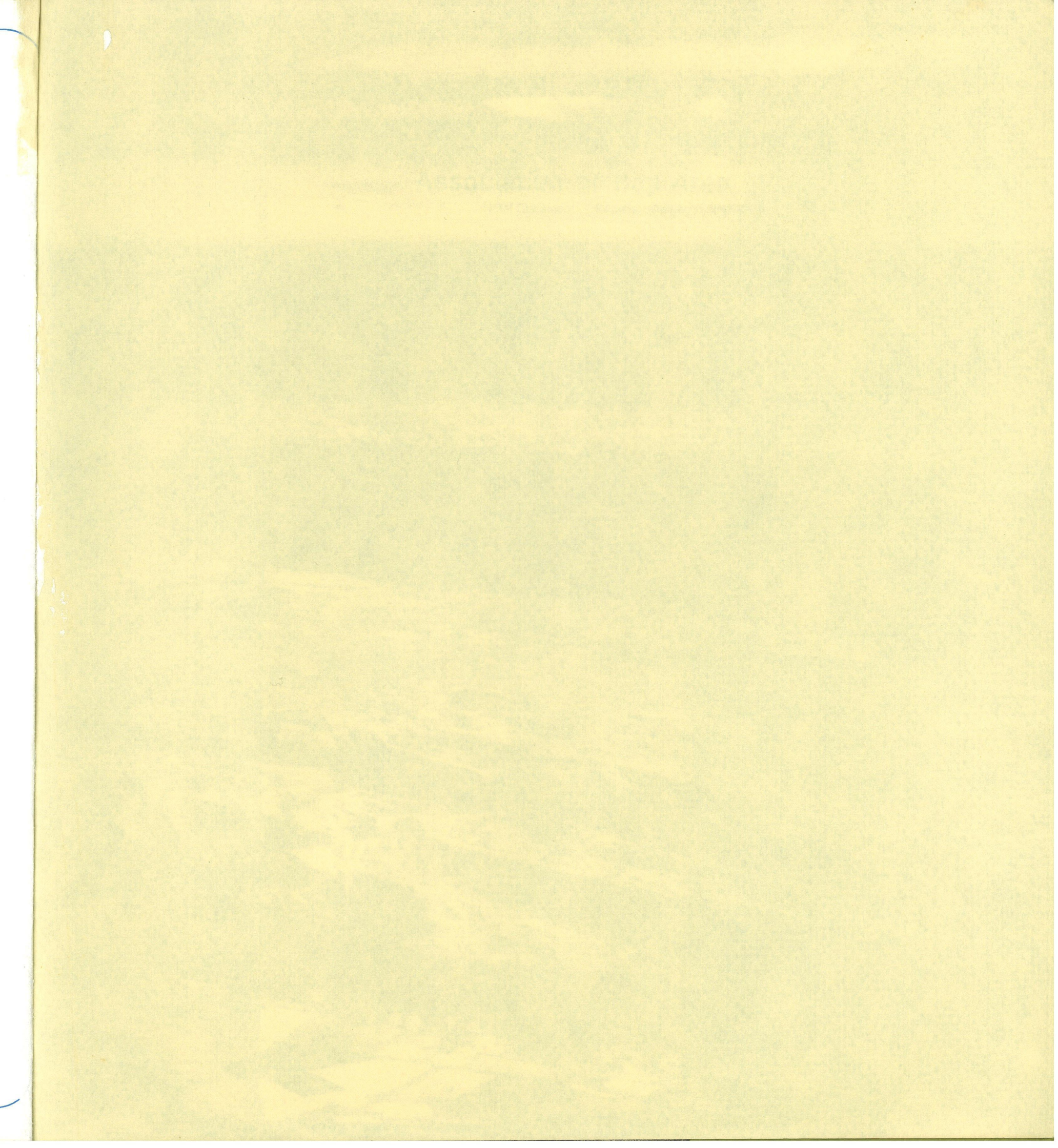
well as State and Federal governments. It would also have the authority to review and comment on all Federal, State, county and city activities which would affect its responsibilities and activities. Furthermore, should a proposed district formation, incorporation, or annexation include land in more than one county, the Regional Government would serve as a "Regional" Local Agency Formation Commission with respect to the proposed activity.

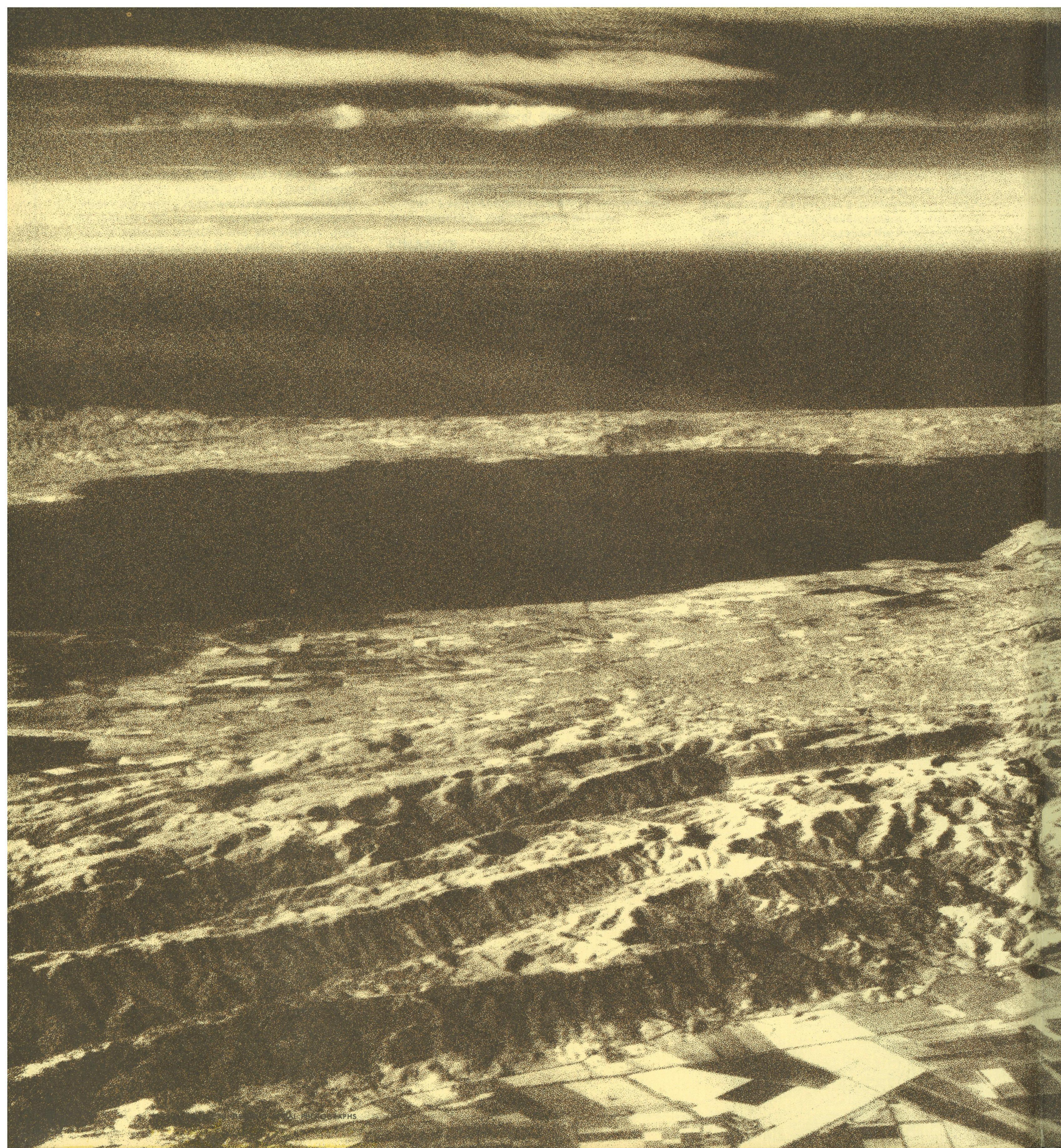
FINANCE

The activities of the Regional Government would be financed by means of a regional personal income tax not to exceed one-half of one percent. This tax would be collected by the State. In addition, various other equitable

taxes might be levied should the government need additional funds. These additional taxes would be imposed only after appropriate authorization had been secured.

In general it is agreed that a limited function, multi-purpose Regional Government would provide an effective institutional mechanism for solving the region's problems and planning for its future development. A Regional Government would possess the legal authority needed to implement its plans. In addition its permanent existence and broad responsibilities would insure a greater measure of cooperation and coordination between all agencies and organizations involved in planning in the Bay Area.







The Association of Bay Area Governments was created in January, 1961. It was founded in recognition of the fact that the physical, economic and social well-being of the entire region and of its individual communities depends upon continuing area-wide cooperation and the coordination of many policies, plans, and services.

The primary function of the Association is to provide the framework for dealing with regional problems on a cooperative, coordinated basis. Although the Association is not itself a government agency, it provides the means by which strong, vital units of city and county government work together in solving regional problems and in formulating and implementing regional development policies.

Formal organization for the Association is provided by contractual agreement between the member cities and counties acting under the authority of the Joint Exercise of Powers Act of the State of California. Present membership includes eight counties and 82 cities, representing collectively 99 percent of the total Bay Area population.

The primary objectives of the Association are:

1. The identification and study of the problems, functions and services of the San Francisco Bay metropolitan area, and the making of appropriate policy or action recommendations.
2. The review of proposals for metropolitan or regional governmental functions and the development of appropriate policy or action recommendations.
3. Such other metropolitan or regional functions as are determined by the Association to be appropriate for consideration.

The Association is currently active in the following fields: regional planning; transportation planning; airport planning; water, sewer and drainage planning; open space and recreational facilities; ocean coastline; regional information system; criminal justice and law enforcement; community shelter; and Federal grants-in-aid reviews. Financed in part by a Federal Urban Planning Assistance Grant, the Association's Regional Planning Program is designed: to produce a Regional Plan and related special element plans; to continue the planning process; to guide the future growth and development of the region; and to assist local planning agencies in the preparation and implementation of local plans. A full-time planning staff working in cooperation with city, county, State, Federal and other area-wide planning agencies has completed a Bay Area Regional Plan for the period of 1970 to 1990.

The Association's programs are financed by membership dues and special assessments and by grants in funds and services from other regional agencies and the State and Federal governments.



ASSOCIATION OF BAY AREA GOVERNMENTS • BERKELEY, CALIFORNIA

See Vision Book



Association of Bay Area Governments

Hotel Claremont • Berkeley, California 94705 • (415) 841-9730

Date: November 11, 1974
 To: All Staff
 Fm: Revan A. F. Tranter, Executive Director *RT*
 Re: The Regional Plan Diagram: A Clarification of Its
 Status and Relationship to ABAG's Goals and Policies

The Regional Plan 1970:1990 diagram is a graphic expression of approved regional goals representing, at the time of preparation, the most complete information available regarding the nature of the regional setting and the complex relationships which operate within it. As a multi-jurisdictional regional planning agency, ABAG does not set aside predetermined "zones" for various types of land use. The plan diagram indicates those geographic areas where, at the time the Regional Plan 1970:1990 was approved, it was felt particular broad categories of land use could be compatible with regional goals; it should be interpreted flexibly in the context of subsequent regional policy adoptions.

The diagram is intended to direct attention to the particular policies, standards and criteria which must be adhered to in order to enable achievement of the Plan's stated goals. It follows that a specific proposal within a general use area on the diagram could not be considered consistent with the Regional Plan* unless it could be demonstrated that the proposal would occur in accordance with the guidelines and policies stated in the Regional Plan 1970:1990* and those subsequently adopted by the Association including its Special Elements.

Some examples of how the diagram should be used to assist in interpretation of the Regional Plan's policies follow:

*In this context the term "Regional Plan" refers to the entire body of goals, objectives and policies adopted by ABAG. The Regional Plan 1970:1990, approved by the General Assembly on July 30, 1970, is the statement of ABAG policy probably most familiar to other agencies and to the region-at-large. Other policy documents which fall within the broad definition of "Regional Plan" include the Regional Airport Systems Study Final Plan (November, 1972), Regional Open Space Plan, Phase II (April, 1972) and Regional Ocean Coastline Plan (September, 1973). The term "Regional Plan" also includes other goals and policies which have, from time to time, been adopted by the General Assembly or Executive Committee, such as the growth criteria approved by the General Assembly in October, 1973.

Case 1: The development of a new industrial plant, involved in activities which would necessarily result in the emission of significant amounts of pollutants, in an area shown as predominantly basic employment adjoining a large residential development.

Such a project could be found inconsistent with the Regional Plan because of its policy that sources of air pollution should be placed where their contact with urban areas can be minimized if they cannot be treated.

Case 2: A proposal for four thousand \$100,000 homes in an area shown as predominantly residential development which is now without facilities and services and not contiguous to existing development.

While not consistent with adopted policies now, the same project might be found consistent after an interval of ten years, if, in the intervening period, a significant number of lower-priced units had been built in the vicinity and a range of employment opportunities, community facilities and services had been developed.

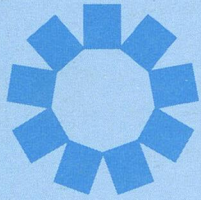
Case 3: A resort hotel in an area known for its water-oriented recreation activities and indicated on the diagram as permanent open space.

The hotel could be found consistent with regional policies if its presence did not conflict with any specific natural resource characteristics identified in the area.

Case 4: A hay-pelleting or tomato-packing plant in an area specified as open space because of its prime agricultural soils.

These could be considered appropriate activities. Having them in proximity to agricultural operations could reduce costs to the farmers and, ultimately, even help to preserve the area for crop production.

Admittedly, many of the agency's goals and objectives do not easily lend themselves to spatial expression, even in a format as flexible as the one described here. Furthermore, each planner--in fact, each Bay Area resident--has his or her own conception of the overriding goals of the Association. For this reason it is all the more vital that the formulation of policies, standards and criteria--the real substance of any plan--is continued. The position stated here is, therefore, based on the assumption that the Association must and will develop and adopt the type of guidelines, based on a thorough recognition of the intricacies of the regional setting, which will enable attainment of a desired future by providing guidance without needlessly limiting options.



**Regional
Plan
1970:1990**

**San Francisco
Bay Region**



BACKGROUND

THE PHYSICAL SETTING

A wide variety of natural features — Ocean, mountains, hills, bays, valleys, etc.—and overall mild temperature contribute to a unique and highly desirable living environment in the Bay Region. These same natural features continue to play an important role in determining areawide land development patterns, regardless of recent innovations in engineering and construction technology.

Although they often conflict, man and nature should exist in a balanced relationship. Urban expansion left to spread in an unconstrained fashion could prove disastrous by upsetting this balance. It could create serious hazards for both man and nature in areas subject to landslides, flooding, and earthquakes, or by furthering pollution and congestion. It is, therefore, essential to relate the region's man-made setting to the natural environment.

One of the Association's primary goals in preparing the Regional Plan is to promote the most efficient and economical land development possible, while conserving the natural features and environment of the region for generations to come.

GROWTH AND CHANGE ELEMENTS

Populations never remain constant; they grow or diminish, change and shift, locate and relocate. Population flux is closely related to a region's economic climate, both affected by and affecting prevailing economic conditions. These two factors, then—population and economic growth—are instrumental in shaping the form and functions of the region.

POPULATION GROWTH

Before the year 2000 it is expected that the population of the United States will double again. By comparison, it is predicted that California's population will increase to three and one half times its 1950 size. During the same period, the population of the Bay Region could triple its 1950 population of 2.7 million. Assuming that present population growth trends remain constant, it is estimated that by 1990 between 6.9 and 8.4 million persons could be living in the Bay Region.

Using the population estimates proposed as part of the Transportation Planning Program, the 1970:1990 Regional Plan assumes a growth increase that will bring the Bay Area's population to 7.5 million by the end of 1990.

ECONOMIC GROWTH

During the next two decades, employment in the Bay Region is expected to increase by about 1.5 million jobs. This growth rate is higher than the overall population growth rate, in keeping with the relative increase in the size of the Region's labor force.

Basic or site-oriented industries are characterized by activities with strong dependence on regional and inter-regional transportation facilities, special site requirements or significant inter-industry linkages. These industries' choices of locations are important influences on the region's development patterns since they serve as a major attraction to population and to service employment. With the exception of agriculture, basic or site-oriented industries are expected to increase their employment from 0.9 million to 1.4 million by 1990. The growth, location and function of the basic sector are of prime regional concern, requiring regional planning and policy guidelines.

Among the fastest growing sources of employ-

ment are those population-serving activities which serve and are dependent upon the location of night time population and the day time location of workers; by 1990, local government, services, and retail trade will provide over fifty-two percent of the region's employment, as opposed to forty-eight percent at the present time. These activities tend to grow and locate in direct relation to the where-abouts of households.

Accordingly, population-serving employment is a local concern and not dealt with on the Plan.

If present county growth trends continue and the population and employment distribution of the region is not managed, about fifty per cent of the population increase can be expected to occur in and around existing high growth centers. Such a tendency could be modified, however, if future urban growth were guided by the City-Centered concept for regional development as embodied in the policies of the 1970:1990 Regional Plan. At least seventy-five percent of the Bay Area's 1990 population could then reside in and around existing and new communities. If the results of such substantial growth are to be positive, planning must be prompt and careful.

HISTORIC AND PROJECTED POPULATION

	1950	1960	1970	1980	1990
BAY REGION	2,681,322	3,638,939	4,846,300	6,150,800	7,477,100
ALAMEDA	704,315	908,209	1,134,100	1,420,300	1,680,600
CONTRA COSTA	298,984	409,030	604,800	821,700	1,080,000
MARIN	85,619	146,820	225,500	307,600	408,700
NAPA	46,603	65,890	85,500	103,700	139,800
SAN FRANCISCO	775,357	740,316	734,600	806,700	826,600
SAN MATEO	235,659	444,387	592,900	737,600	872,500
SANTA CLARA	290,547	642,315	1,086,800	1,435,500	1,784,700
SOLANO	104,833	134,597	182,200	236,700	315,800
SONOMA	103,405	147,375	202,900	281,000	368,400



REGIONAL PLAN 1970:1990

The 1970:1990 Regional Plan concerns itself with the whats, wheres, hows, and whys of an infinitely complex problem: improving the quality of the living environment of the Bay Area. It is an attempt on the part of the Association of Bay Area Governments to address this problem by focusing on such areas as population and employment location, transportation, and environmental quality for the entire region.

FRAMEWORK

The following framework or foundation provides the basis for the Plan's proposals.

REGIONAL PROBLEMS AND ISSUES

Regional Plan 1970:1990 is addressed primarily to the following problems and issues:

1. POPULATION GROWTH, SHIFTS, AND SEPARATIONS.
2. UNLIMITED URBAN GROWTH.
3. INCREASING DEMANDS FOR OPEN SPACE AND NATURAL RESOURCES AND THE DECREASING SUPPLY OF THESE FACILITIES.
4. DECREASING QUALITY OF THE REGION'S ENVIRONMENT.
5. INADEQUATE EMPLOYMENT OPPORTUNITIES, HOUSING, EDUCATION, AND COMMUNITY FACILITIES AND INADEQUATE SERVICES FOR VARIOUS POPULATION GROUPS.
6. CONGESTED TRANSPORTATION FACILITIES AND GROWING COSTS FOR MOVING PEOPLE AND GOODS WITHIN THE REGION.

7. LACK OF AREAWIDE AWARENESS AND REGIONAL RESPONSIBILITY.

REGIONAL PLANNING PROGRAM

Evaluation of the 1970:1990 Regional Plan should take into consideration the continuing aspects of the Association's Regional Planning Program:

- 1962:63 — Design and financing of the Preliminary Regional Planning Program.
- 1964:66 — Preparation of the Preliminary Regional Plan.
- 1966 — Presentation of the Preliminary Regional Plan to the Association's General Assembly.
- 1967:68 — Public hearings and review process of the Preliminary Plan conducted over a 14 month period.
- 1968 — Establishment of the policy framework for the preparation of the 1970:1990 Regional Plan based on the General Assembly's review process.
- 1969:70 — Preparation of the 1970:1990 Regional Plan.
- 1970 — Association's 1970:1990 Regional Plan for the Bay Region established as regional policy by action of the General Assembly.

REGIONAL GOALS

In September 1968, planning goals were adopted by the Association's General Assembly. They provide one part of the foundation for the 1970:1990 Regional Plan. The goals are:

1. TO PROTECT AND ENHANCE SAN FRANCISCO BAY AND THE MAJOR PHYSICAL FEATURES AND ENVIRONMENTAL QUALITIES OF THE REGION.
2. TO PROVIDE THE OPPORTUNITY FOR ALL PERSONS IN THE BAY AREA TO OBTAIN ADEQUATE SHELTER

CONVENIENT TO OTHER ACTIVITIES AND FACILITIES, IN NEIGHBORHOODS THAT ARE SATISFYING TO THEM.

3. TO DESIGNATE AMPLE LAND AND FACILITIES FOR THE ECONOMIC GROWTH OF THE REGION IN ORDER TO PROVIDE OPPORTUNITIES FOR ALL CITIZENS AND COMMUNITIES TO IMPROVE THEIR ECONOMIC WELL-BEING.
4. TO PROVIDE A TRANSPORTATION SYSTEM THAT IS INTEGRATED WITH LAND USE AND CONSISTENT WITH THE CITY-CENTERED CONCEPT OF REGIONAL DEVELOPMENT.
5. TO PROVIDE A PERMANENT REGIONAL OPEN SPACE SYSTEM THAT MAKES POSSIBLE THE RANGE OF ACTIVITIES ESSENTIAL TO THE CITY-CENTERED CONCEPT OF REGIONAL DEVELOPMENT.
6. TO CREATE A SENSE OF REGIONAL IDENTITY, RESPONSIBILITY, AND COOPERATION AMONG CITIZENS, ORGANIZATIONS, AND GOVERNMENTS IN THE BAY AREA.

CONCEPT FOR A CITY-CENTERED REGION

The Association's committees and General Assembly reviewed and considered the response to the Preliminary Regional Plan, and chose, as a result, the City-Centered concept as the basis for future regional development. The central idea of the City-Centered Region is to accommodate future urban growth within the region in existing or new urban communities. This concept represents an ideal that extends far beyond the twenty-year time horizon of the 1970:1990 Regional Plan. As such, it provides an on-going basis for all types of plans, decision and actions. As



currently defined, the concept of the City-Centered Region incorporates the following broad quantitative and qualitative objectives:

1. IDENTIFIABLE CONCENTRATIONS OF URBAN DEVELOPMENT AROUND COMMUNITY CENTERS.
2. EXTENSIVE OPEN SPACE AND CONSERVED AREAS.
3. IMPROVED ENVIRONMENTAL QUALITY.
4. A MULTIPLE-MODE TRANSPORTATION SYSTEM.
5. AN OPERATIONAL REGIONAL ORGANIZATION.
6. STRONG INTERGOVERNMENTAL COOPERATION, COORDINATION, AND CITIZEN PARTICIPATION.

ASSUMPTIONS

Assumptions provide another part of the planning framework. The major assumptions on which this Plan has been developed are:

1. The regional population will increase from 4.6 million to approximately 7.5 million in the next twenty years. More than three-fourths of this increase will locate in and around existing and new urban centers.
2. About 1.5 million additional jobs will be generated in the region by 1990. The service-oriented sector of the economy will outgrow the basic industry sector.
3. Progress will be made in the development of effective regional organization. Better coordination and cooperation between different levels of government and between public agencies and the private sector will also evolve, insuring the realization of the policy objectives contained in the 1970:1990 Regional Plan.

GUIDELINES

The Plan is composed of two parts: (1) regional

policy guidelines; and (2) planning recommendations reflecting those policies which can be expressed in two-dimensional plan map form. The functions of the guidelines are to:

1. Encourage actions by appropriate agencies that will initiate, direct, and promote regional growth and development as well as conservation of the environment.
2. Clarify at all levels the decisionmaking process related to areawide problems and issues.
3. Continue the development of the Regional Planning Framework as a guide to regional planning in the future.

Unlike the general plans adopted by cities and counties, the Association's Regional Plan will not be used as the basis for any detailed application of the police power on a parcel-by-parcel basis, as in the making of zoning or subdivision regulations.

PLANNING FOR GROWTH AND DEVELOPMENT

In order to provide for the expanding population and new employment opportunities, it is proposed that urban development take place within distinct communities located in a series of "general growth corridors".

Regional urban development should be directed to and fostered in communities located within these corridors. Such development should be guided by coordinated local, regional, State and Federal policies concerned with urban and industrial growth and open space. The location of future urban development in communities within general growth corridors will make it possible to concentrate the resources and facilities needed for the solution of the region's urban problems. It is proposed that communities be evolved in two ways: (1) by organizing and strengthening

developed areas of the region which already exist; and, (2) by adding new communities or by planned extensions of existing communities. Communities should also be formed by clustering urban elements that otherwise would spread throughout the region. In most communities sufficient area is left for the exercise of locational choice. Accordingly, not every urbanized area shown on the Plan diagram will be developed by 1990.

Transportation, utility, and open space systems should be planned in support of this growth policy.

URBANIZED SPACE AND COMMUNITY DEVELOPMENT

Regional urbanization shown on the Plan diagram includes communities containing residential development, basic employment centers, and community centers. They are, on a regional scale, what might be called the "neighborhoods" of the region's urbanized space. Community centers are shown on the diagram for towns or combinations of towns above 50,000 in population, suggesting the location of future metropolitan communities.

EMPLOYMENT CENTERS

The growth, location, and operation of the basic employment centers are major priming agents in determining the location of urban development. The location of the basic group industries is instrumental in setting the regional patterns of jobs-to-people distribution. It is, in addition, a major factor in achieving balanced community development, minimizing excessive home-to-work travel, and guiding urban growth into the communities of a City-Centered Bay Region. The Regional Plan offers a choice of sites for industrial development which are within or adjacent to most communities. Growth of employment within the inner core of existing communities should



be given high regional priority.

RESIDENTIAL DEVELOPMENT

Population growth, shifts and separations are matters of regional concern. To the extent that issues such as racial segregation affect population changes and shifts, they also become matters of regional concern and policy. The Regional Plan necessarily addresses these problems as it proposes residential-employment relationships, and space, location, and form of residential growth to 1990. Land designated predominately for residential purposes has been related to land provided for basic employment purposes within that sub-area of the region.

Population distribution to sub-areas was used as the basis for allocating the amount of land provided in these sub-areas for residential development.

The Plan does not focus on residential density gradations or on the manner of distributing population within individual communities.

The residential land area shown on the Plan diagram is more than sufficient to accommodate the population growth in the region.

The open space policies incorporated in the Plan will be a critical factor in guiding future residential development.

NEW OR EXTENDED COMMUNITIES

Substantial reasons can be presented in economic, physical and social terms for the development of completely new communities. The details for planned, new, or partially independent communities will be developed as part of the Association's Housing Plan Element.

New towns would only be one part of the solution to the future growth problem. For example, if five new towns, each accommodating 100,000 people were built in the next 20 years, they would accommodate only about seven

percent of the region's 1990 population. Although new communities may be needed in the Bay Region, the greatest emphasis should be directed toward physical and economic growth and social conditions in existing communities.

COMMUNITY CENTERS

The vitality and growth of the centers of cities is essential to the entire region. Many of the problems of the inner-core areas are of regional importance and concern. In turn, strong vital community centers can play an important role in providing the central attraction to counter the spread of urbanization.

Each community should center around a core of intense activity where commercial, governmental, cultural, recreational, health and educational services are provided. Further, more detailed study is needed to define the location and role of community centers throughout the region. For the purposes of the Regional Plan, all towns or combinations of towns over 50,000 population are designated as community centers. Regional fiscal and developmental plans and programs are needed to assist in the evolution of strong community centers.

TRANSPORTATION SYSTEM DEVELOPMENT

The 1970:1990 Regional Plan transportation system is designed to shape and serve a region of multiple-communities situated within defined growth corridors. The regional highway and rapid transit systems shown on the Plan diagram follow these general growth corridors, linking together individual communities and their centers. In order to guide regional growth and maintain environmental quality, the region's surface transportation system should be developed in such a way as to connect community centers and provide capacity in and between growth corridors.

The transportation facilities shown on the Re-

gional Plan diagram should be considered as corridors, not precise routes, capacities, or designs. Most corridors already exist or are committed to transportation development.

Regional highways correspond to the existing freeway concept — divided highways primarily for intra-regional traffic, with full control of access. As shown on the Regional Plan diagram, these highways are generally continuous high-volume facilities.

Major collector-distributor highways maintain full or partial control of access and serve as connectors between or as extensions of regional highways. They also reach into the region's low density urban development and recreation areas. The routing, capacity, and design of major collector-distributor corridors vary with individual areas, depending on the particular road system, travel patterns, population density, land use, and environment. Planning and design of these special corridors will require detailed studies, involving all local and regional agencies. The aim of these studies must be to identify and account for the unique features and needs of individual areas. The components of the regional transit system dealt with on the Regional Plan diagram consist of high-speed rail or bus rapid transit, proposed to operate on private rights-of-way between communities.

Future rapid transit services should connect all major community centers of the metropolitan Bay Region so that no transfer is required to move from one center to another. Although continuous, uninterrupted rapid transit service is recommended, interim solutions may include bus rapid transit on exclusive roadways and/or reserved freeway lanes, and priority of right-of-way in communities.

The development of high standard intra-city mass transit systems in all metropolitan communities, linked to the regional rapid transit



system, also requires high priority at all governmental levels.

GROWTH BEYOND 1990

Not unlike the other levels of government, the region has a responsibility to examine the question of the desirable population-holding capacity of the region. Although growth can be accommodated reasonably well for the next twenty years, the region's capacity is not unlimited. As part of its continuing regional planning process, the Association should inquire into the probable course and desirability of regional population growth beyond 1990, especially as it relates to the long-range City-Centered concept.

PLANNING FOR ENVIRONMENTAL QUALITY

The regional role in managing urban growth and development is closely linked to its role in conserving and improving its natural and urban environments. The foregoing guidelines for urban growth and development, transportation, and utilities must be considered in relation to the region's environmental system. For example, decisions to leave lands in agriculture, recreation, forests, and other open spaces should be coupled with decisions regarding the expansion of urban communities, which parts of the region can best accommodate urban growth, and which areas have highest priority for the development of new communities.

OPEN SPACE PROPOSALS

The open space recommendations included in the Regional Planning diagram are based on extensive Association work in open space planning, on the planning guidelines for the concept of a City-Centered Bay Region, and on the regional goals.

Open space is proposed in two elements:

controlled development areas and permanent open space areas.

CONTROLLED DEVELOPMENT AREAS

Between the outer limits of the areas designated for development by 1990 and the permanent open space areas, controlled development zones have been established with proximity to most communities. These areas represent lands that could be used for urban purposes, added to the permanent open space system or utilized in a number of ways to serve both concepts. In designating these controlled development areas, the potential need for additional lands to be used in urban expansion beyond 1990 is recognized. At the same time the actual determination of future use, urban or open, is left as a matter of choice. The open lands found in this category should be left as open space for as long as possible, if not permanently. Need for further expansion of the 1990 urban boundaries shown on the Plan map should be determined only after careful consideration at both the local and regional levels.

PERMANENT OPEN SPACE

A permanent regional open space system is a key factor in a unified urbanization and conservation policy. This policy advocates that both private and public open lands, as well as water areas and large and small waterways, be seen, used, and permanently protected for their positive open value in the region's urban and natural environments.

All lands in the permanent open space system should be under public control, e.g. ownership or less-than-fee title. One public agency, however, need not be the sole owner. It is particularly important to allow public ownership to protect the following environmental features:

- Major ridges
- The Bay

Waterways and flood plains

Major recreation areas

The ocean coastline

Selected Bay and river shoreline

Areas of outstanding natural attraction

Strategic areas to guide urban expansion

Other lands should be retained in private ownership if their essential open and natural characteristics can be permanently maintained.

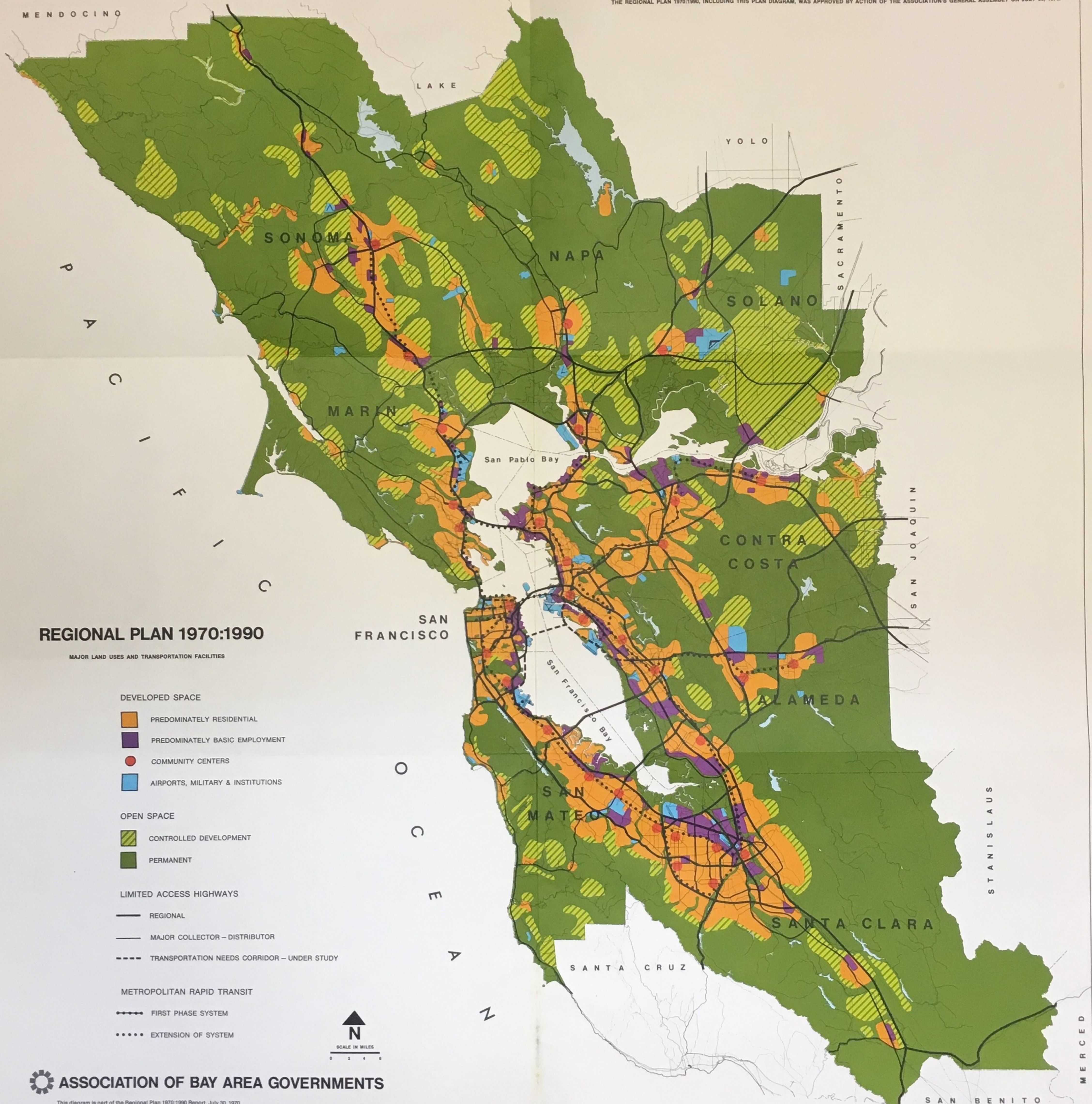
The region should anticipate its future needs, securing public open space **now**, while the land is still available. First priority should be given to securing open space in and immediately around the existing urban areas.

PLANNING FOR OTHER ENVIRONMENTAL ELEMENTS

Some planning elements of the region's environmental system cannot be expressed in graphic form on the Regional Plan diagram, although plans and programs for them are extremely important. Air and water quality, solid waste disposal, ecology, and design of the urban and natural environment are matters of key concern for the region. Each should be the subject of continuing study, policy development, and implementation in the continuing regional planning process.

The concept of a City-Centered Bay Region addresses the ecological problem by recommending that as little land as possible be wasted and that as much of the remainder as is possible be left in an open state.

The 1970:1990 Regional Plan should be considered as only one step in a regional planning process consisting of a planmaking, decision-making, action continuum in which functional and coordinative planning plays a central part. Furthermore, it is only one part of the Regional Planning Framework.



REGIONAL PLAN 1970:1990

MAJOR LAND USES AND TRANSPORTATION FACILITIES

DEVELOPED SPACE

- PREDOMINATELY RESIDENTIAL
- PREDOMINATELY BASIC EMPLOYMENT
- COMMUNITY CENTERS
- AIRPORTS, MILITARY & INSTITUTIONS

OPEN SPACE

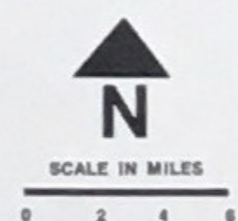
- CONTROLLED DEVELOPMENT
- PERMANENT

LIMITED ACCESS HIGHWAYS

- REGIONAL
- MAJOR COLLECTOR - DISTRIBUTOR
- TRANSPORTATION NEEDS CORRIDOR - UNDER STUDY

METROPOLITAN RAPID TRANSIT

- FIRST PHASE SYSTEM
- EXTENSION OF SYSTEM



ASSOCIATION OF BAY AREA GOVERNMENTS

This diagram is part of the Regional Plan 1970:1990 Report, July 30, 1970. The preparation of this plan was financed in part through an urban planning grant from the Department of Housing and Urban Development under the provisions of Section 701 of the Housing Act of 1954 as amended.