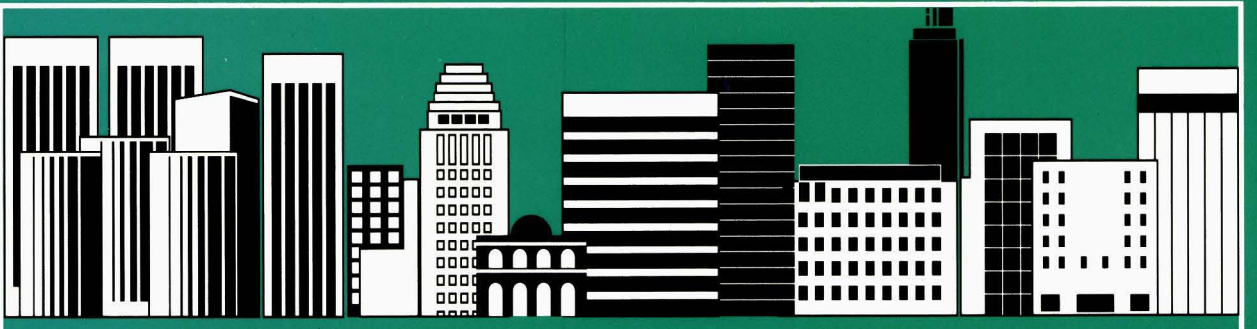


Los Angeles Transportation/ Land Use Policy

BACKGROUND REPORT

December, 1991

Prepared By:
Los Angeles County Transportation Commission
City of Los Angeles Department of City Planning
City of Los Angeles Department of Transportation

Table of Contents

INTRODUCTION

Los Angeles Transportation/Land Use Policy

CHAPTER I.

Setting the Context for Los Angeles in the 90's and through 2030

- Social-Economic State of Los Angeles 1990-2010

CHAPTER II.

History of Rail Transit in Los Angeles

- Los Angeles Railway Lines
- Impact on the Urban Form
- Decline of the Original Railway System

CHAPTER III.

Local Public Agencies which Influence Land Use and Transportation Planning

- Southern California Rapid Transit District
- City of Los Angeles Department of City Planning
- City of Los Angeles Department of Transportation
- Los Angeles County Transportation Commission
- California Department of Transportation
- Southern California Association of Governments
- South Coast Air Quality Management District
- Community Redevelopment Agency of the City Of Los Angeles

- Congestion Management Program

LACTC 30 Year Integrated Transportation Plan

CHAPTER IV.

The City of Los Angeles General Plan

General Plan Implementation Tools

APPENDIX

Summary of LACTC Joint Development Policy

Summary of 1991 Air Quality Management Plan (AQMP) Amendment

Summary od Citywide Existing Parking Policy

Summary of Regional Mobility Plan

Summary of Regional Growth Management Plan

Summary of Draft Quality Management Plan - Appendix IV-C District Mobile and Indirect Source Control Measures

Summary of Air Quality Management Plan Appendix IV-E Transportation, Land Use and Energy Conservation Measures

Case Studies: Selected System in North America

- Atlanta
- Boston (Orange line only)
- Edmonton
- Portland
- Sacramento
- San Diego
- San Francisco
- San Jose
- Toronto
- Vancouver
- Washington DC

INTRODUCTION

The purpose of the Los Angeles Transportation /Land Use Policy Workshop is to gather the best information, grounded in real experience, on how to plan for and around rail stations and rail corridors in the City of Los Angeles. Due to recent voter approved transportation funding, over 300 miles of rail will be built in Los Angeles County during the next 30 years. Much of that rail system will be operational in the City of Los Angeles.

We are looking for assistance from other cities and counties that have begun or expanded their rail systems since the 1950's. Our goal is to combine lessons learned in other cities with the current context of the City of Los Angeles to produce a policy document or set of guidelines that the City can use to direct development around its rail facilities.

The City of Los Angeles and the Los Angeles County Transportation Commission (LACTC) have formed an alliance in order to accomplish this goal. Our intention is to identify an integrated land use and transportation policy that can be adopted by the City of Los Angeles and LACTC, and then serve as a prototype for other cities in Los Angeles County.

Central to the development of such a policy document is the concept of value capture. There is substantial benefit to the surrounding city and community of a rail system, and a well-planned land use policy can help to maximize or capture this benefit. In addition to providing improved regional access, a rail system can stimulate economic development, provide opportunities for affordable housing, enhance urban design and open space, promote successful joint development,and recover transit capital costs. The City of Los Angelesand LACTC seek to define a policy that will promote value capture in all these dimensions.

This background book has been prepared to give our invited guests, the rail experts from other cities, some basic information about the City of Los Angeles. Included is: the most recent demographic and building trend information; some history on rail transit in Los Angeles; a brief description of the agencies and institutions that influence rail and transportation planning in the region; and a description of the City of Los Angeles planning principles and procedures including a section on planning implementation tools.

The Appendix to this book includes summaries of the major planning documents affecting the region, as well as brief case studies of twelve North American rail systems. It is intended that this information will help to ground the discussion both in the history and the future of rail development in Los Angeles.

CHAPTER I

SOCIO-ECONOMIC STATE OF LOS ANGELES 1990-2010

A. Population Growth

The City of Los Angeles, the second largest and fastest growing metropolitan area in the country, has experienced and continues to experience population growth. It has the demographic distinction of being the most populous city in California and second in the nation. Based on the 1990 census between 1980 and 1990, the City's population increased by 518,548 persons from 2,966,850 to 3,485,398--an increase of 17.5%, or an annual growth of 1.75%. According to the Southern California Association of Governments (SCAG), natural increase will account for sixty-three percent of population growth in the Los Angeles region between 1990 and 2010. Predictions on net migration, the other component of population change, indicate a very mobile population between 1990 and 2010. Because natural increase is the major cause of population growth, it is inevitable that population will increase well into the next century. SCAG has estimated that by the year 2010, Los Angeles City population will increase from 3.48 million in 1990 to 3.84 million, a projected increase of 363,700 persons from 1990. The majority of the new growth will be due to non-white Anglo populations. If population in Los Angeles grows as expected over the next 20 years, the City would comprise 39% of the County population.

B. Population Distribution and Densities

Population Distribution

Since the beginning of the 1970's the population of the City was concentrated in the Central and Western geographic regions of Los Angeles. This trend had persisted for several decades even though the rate of population growth was higher in the San Fernando Valley. However, the 1990 census revealed that this trend is no longer the case. As of 1990, the greatest number of the population lived in the following community plan areas: Wilshire (272,000); South Central Los Angeles (257,000); Southeast Los Angeles (239,000); Northeast Los Angeles (237,000).

During this period, three planning areas declined in population: Central City (-18.6%);Bel Air-Beverly Crest (-2.3%); and Encino-Tarzana (no growth). The planning areas that had the fewest population in 1990 were: Central City North (19,000); Bel Air-Beverly Crest(20,000); Central City (22,000); and Harbor Gateway (36,000).

Population Density

Los Angeles currently has 14.4 persons per net acre. This translates to almost 12 persons per gross acre. According to 1990 population census, Los Angeles' population is concentrated in five planning areas, each with a density of over 30 persons per acre. These include: Wilshire, South Central Los Angeles, Southeast Los Angeles, Boyle Heights, and Westlake. These areas coincide with the areas inhabited by the non-white population (see Figure 2). The next areas of high densities (20-30 persons/acre) occur to the west and east of the high density areas. These include: Westwood, West Los Angeles, West Adams-Baldwin Hills; Palms Mar-Vista-Del Rey and Venice to the west; Silverlake-Echo Park to the east and Van Nuys-North Sherman Oaks, North-Hollywood to the north. In between these two major populations, are pockets of medium (10-20 persons/acre) to low (5-10 persons/acre) densities. The former include Canoga Park, Reseda-West Van Nuys, Mission Hills, Arleta Pacoima, Hollywood, Northeast Los Angeles and Wilmington-Harbor City-San Pedro planning areas. The planning areas falling into the latter group include: Chatsworth-Porter Ranch, Encino-Tarzana, Sun Valley, Sylmar, Granada Hills-Knollwood and Westchester-Playa Del Rey. The mountainous areas of Bel Air-Beverly Crest, Brentwood Pacific Palisades are areas of low population densities.

C. Ethnicity

The ethnic makeup of Los Angeles has been changing. In addition to the changing patterns, there is a great deal of shifting within ethnic categories. Ethnic groups seem to be converging in terms of location and absolute numbers. Neighborhoods are changing and entire sub-populations are relocating. For the City the most dramatic change has been in the Hispanic population. From 1970 through 1990, Hispanic non-white population increased in proportion from 18.5% in 1970 to 40.2% in 1990. It is expected that by the year 2010 this percentage would have increased to about 48.5%, thus becoming the major sub-group population within the City.

While the Hispanic population has increased rapidly, the white, non-Hispanic majority, has been moving in opposite direction. The white population declined from 48.3% in 1970 to about 37.3% in 1990. Interestingly, the proportion of the City residents within the Black ethnic community has remained relatively static since 1970, compounding at a rate of about 0.4% per annum. In 1970 the Asian population represented only about 4.5% of the population, since then it has grown by about 86.3% representing 9% of the sub-population.

As ethnicity changes, so do the neighborhoods. The Black population appears to be shifting northwards and westward. This may be one result of an increasing population density in some areas of South Central Los Angeles. The people moving

into southern areas of the Black community seem to be largely from the increasing Hispanic population. Hispanics are also moving into areas around Westchester and Venice on the west side, Central and Northeast Los Angeles, Arleta-Pacoima and Wilmington-Harbor City. The whites, non-Hispanic population are heavily concentrated in the West San Fernando Valley and the west side, (see Figures 3 through 6). Asian population shifts are occurring rapidly. Some notable examples include a rapidly expanding Korean population in the Olympic Corridor region of the Wilshire area. Another concentration of Asian population is occurring in the North Central City region commonly known as Chinatown.

D. Income and Employment

Table 1 below shows average household income by Master Environmental Impact Report (MEIR) Areas for 1980, in current dollars. As of 1980, West Los Angeles residents had the highest average household income ($40,268) while the Central Los Angeles area residents had the lowest ($10,737). The average household incomes of residents of Southwest Valley, Northwest Valley, Southeast Valley and the Northeast Valley were above the average Citywide household incomes ($21,714). The average household incomes for Northeast Los Angeles, South Los Angeles, Metro Center, Southwest Los Angeles, Central Los Angeles and Harbor area were below the citywide average.

It is interesting to note that the areas where the average incomes are below citywide average coincide with areas of high population densities and concentration of non-white population. Employment in the City between 1980 and 1987 increased by 24%. Employment in goods-producing industries, such as agriculture and manufacturing, declined by 57% and 8% respectively. Two other goods-producing industries-construction and mining, increased in employment by 33% and 20% respectively. Following a trend since 1970, employment in service-producing activities, such as retail services and government has increased, while that in banking and finance decreased.

The City is forecast to have an employment level of 2,211,241 by the year 2010. This forecast is based on job and wage level projections from 1984 to 2010. Using 1987 as basis of comparison, the City is projected to have an increase in employment of 85% by the year 2010. From 1990 to 2010, increases in employment at all wage levels are projected to be between 87% and 89%. Employment at the lowest wage level (under $250/week) and middle wage level ($400-499/week) will have the greatest concentration of employment relative to other wage levels. This will represent 28% of all employment by 2010, which signals a particular need for housing affordability for low and middle wage earners.

E. Housing

As of October 1, 1989, the City of Los Angeles had an estimated population of 3.310 million and a total housing stock of 1.310 million units. According

to Southern California Association of Governments (SCAG), the median rent in the City of Los Angeles has doubled over the past 10 years and more than 62 percent of the City's households pays in excess of 30 percent of their monthly income for housing. Only one in every five families can afford the $210,850 median priced home in the City. Because of the gap between income and cost of providing shelter to house their families, low income households are often forced to make untenable choices between paying their rent and meeting their family necessities. In its Regional Housing Needs Assessment (RHNA), SCAG has estimated that the City will need to construct about 130,000 new housing units between 1989 and 1994 in order to accommodate projected population growth. Although the housing vacancy rate is 6.35 percent, the Census indicates that 270,950 households live in overcrowded conditions. It has been estimated that the housing units in the City are projected to grow by 252,300 in the 20-year period between 1990 and 2010.

TABLE 1

AVERAGE INCOME BY MEIR (DOLLAR)

	1980	1990
Northeast Los Angeles	16,804	
South Los Angeles	11,872	
Metro Center	18,916	
Southwest Los Angeles	19,964	
Central Los Angeles	10,737	
Southeast Valley	23,623	Not Available
Northeast Valley	22,649	Until 1992
Northwest Valley	28,583	
Southwest Valley	30,140	
West Los Angeles	40,268	
Harbor	20,235	
Citywide	21,714	

(Source: 1980 U. S. Census, Department of City Planning)

10-1-91

Change in Population and Housing Units by Meir between 1980 & 1990

Map of Master Environmental Impact Report Areas (MEIR)

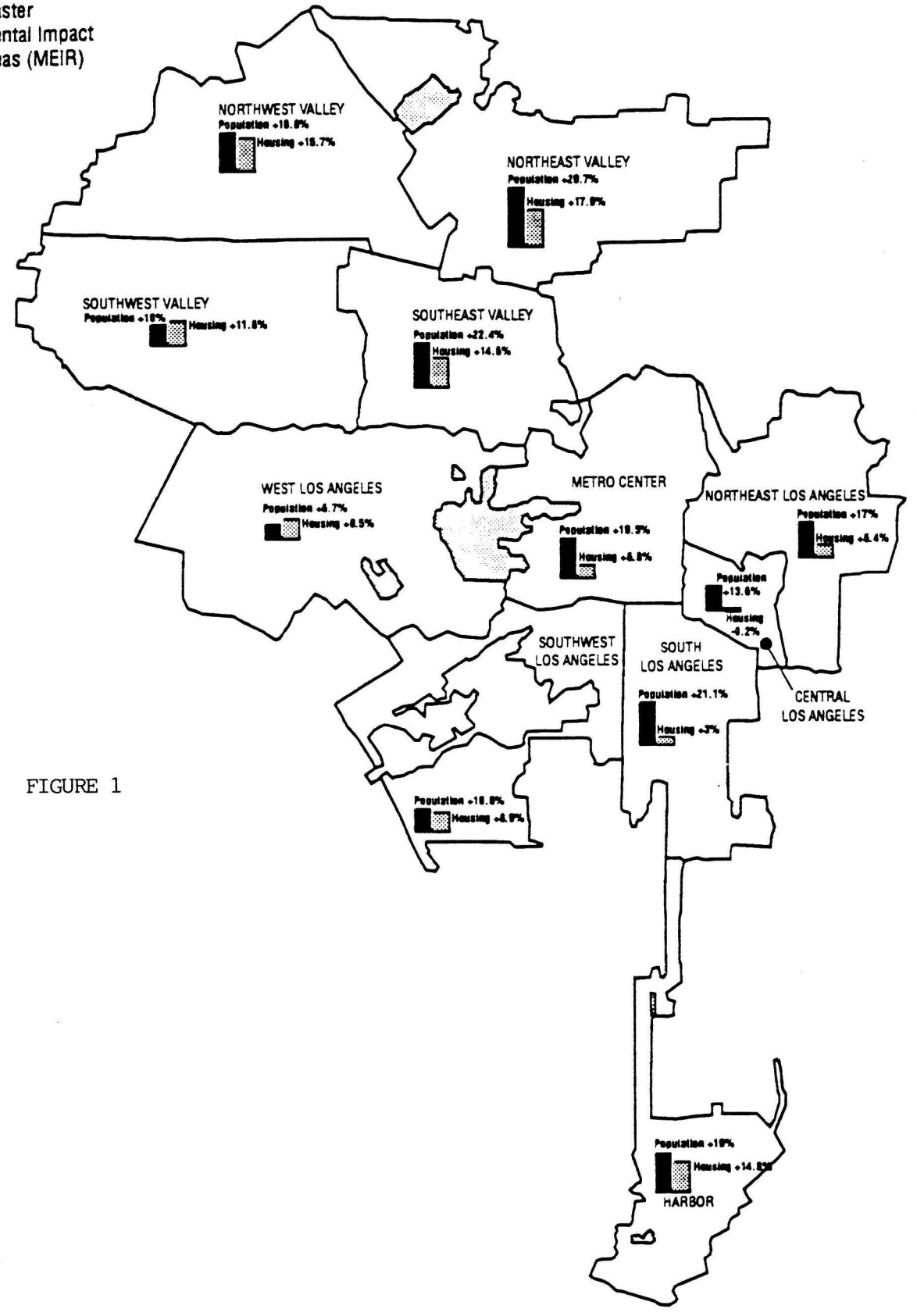
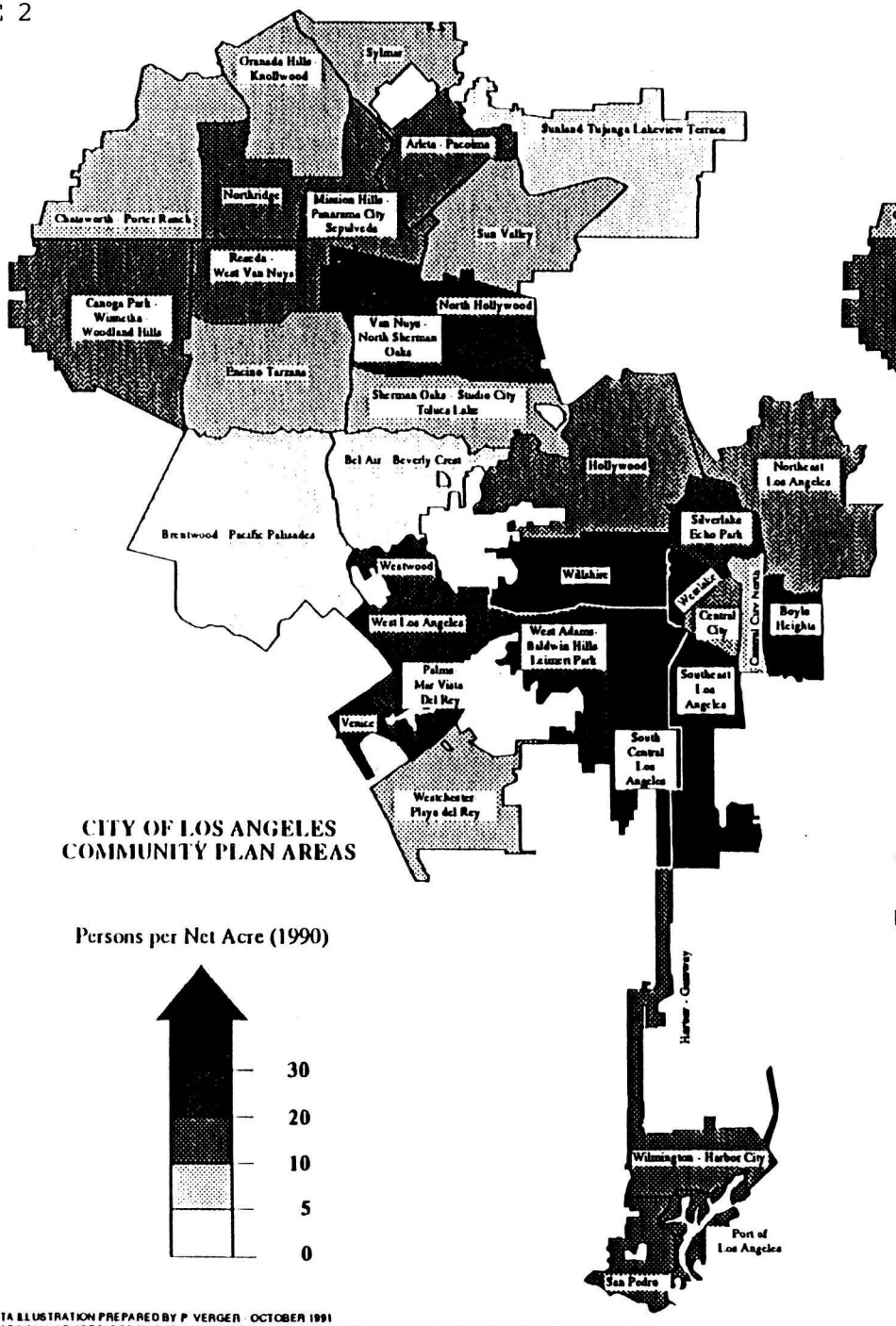
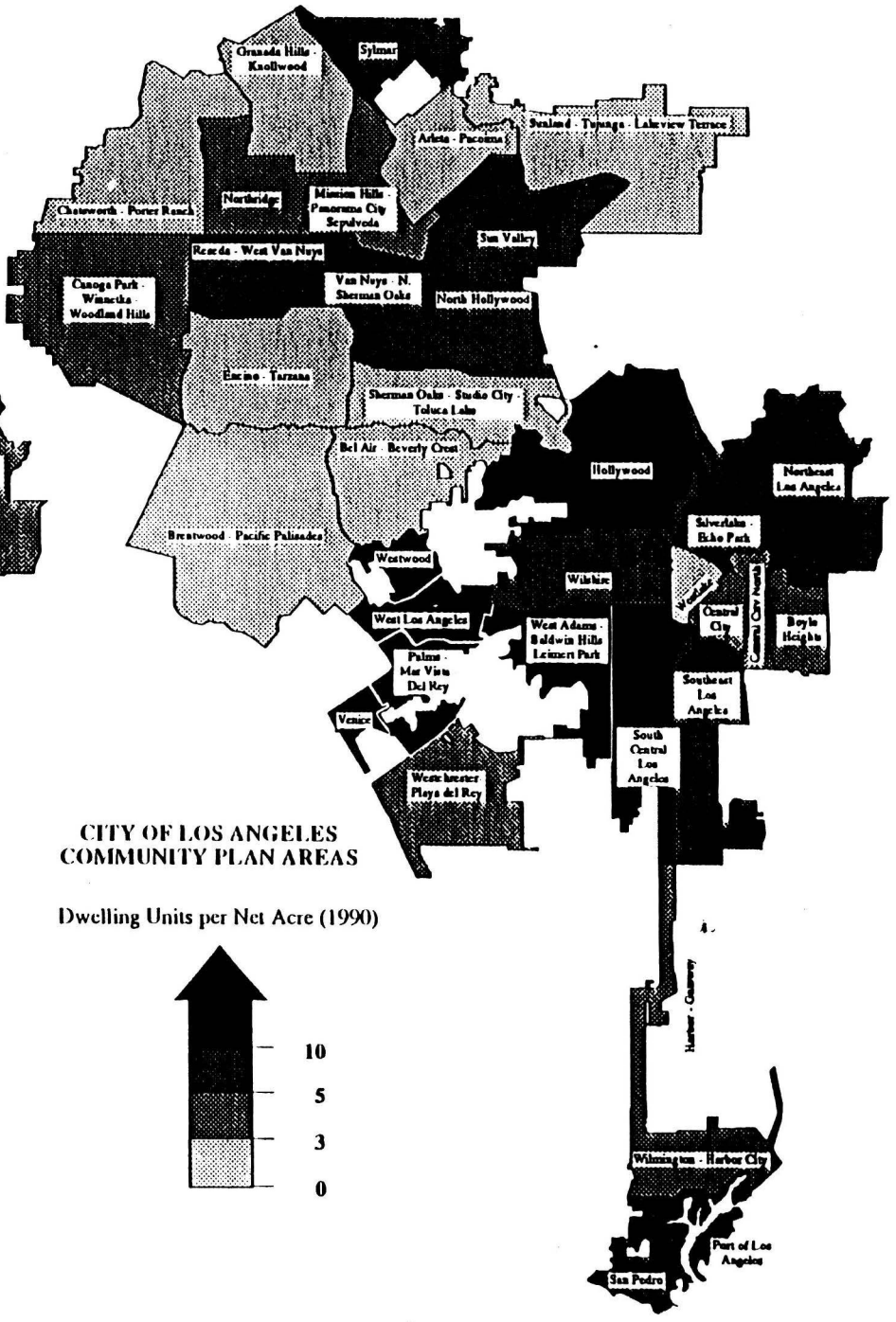


FIGURE 1

FIGURE 2





DATA ILLUSTRATION PREPARED BY P. VERGER - OCTOBER 1991
BASED ON MAP PREPARED BY THE GRAPHICS SECTION - LOS ANGELES CITY PLANNING DEPARTMENT - NOVEMBER 1987
ANALYSIS OF 1990 CENSUS DATA PREPARED BY THE RESEARCH SECTION - LOS ANGELES CITY PLANNING DEPARTMENT - APRIL 1991
USING APPLE MACINTOSH MACDRAW II FILES CREATED BY C. NICOLL

FIGURE 3

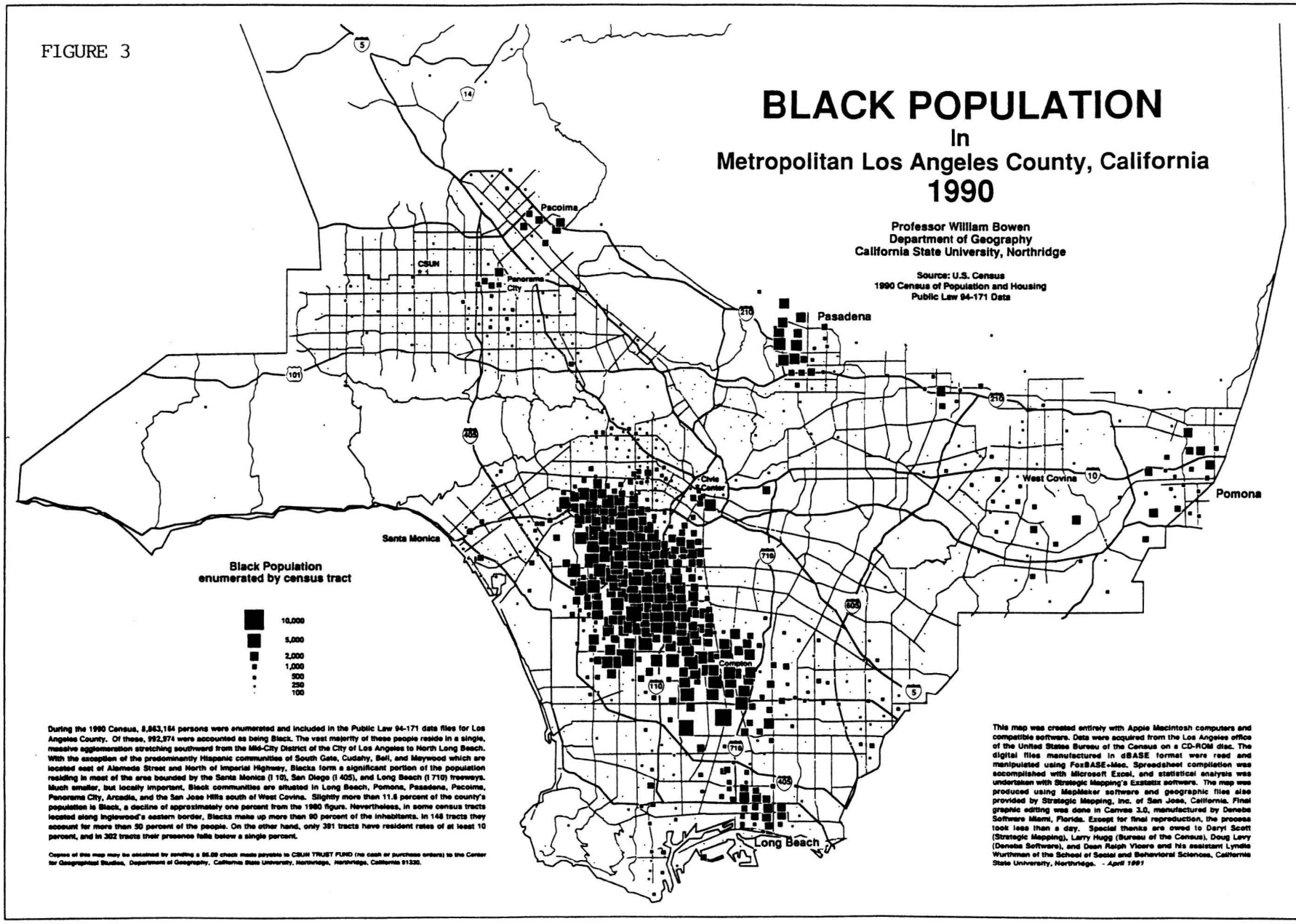

BLACK POPULATION
In
Metropolitan Los Angeles County, California
1990
Professor William Bowen
Department of Geography
California State University, Northridge
Source: U.S. Census
1990 Census of Population and Housing
Public Law 94-171 Data
Pacoima
CSUN
Panorama City
Pasadena
West Covina
Pomona
Civic Center
Santa Monica
Compton
Long Beach
Black Population
enumerated by census tract
10,000
5,000
2,000
1,000
500
250
100
During the 1990 Census, 8,863,164 persons were enumerated and included in the Public Law 94-171 data files for Los Angeles County. Of these, 992,974 were accounted as being Black. The vast majority of these people reside in a single, massive agglomeration stretching southward from the Mid-City District of the City of Los Angeles to North Long Beach. With the exception of the predominantly Hispanic communities of South Gate, Cudahy, Bell, and Maywood which are located east of Alameda Street and North of Imperial Highway, Blacks form a significant portion of the population residing in most of the area bounded by the Santa Monica (I 10), San Diego (I 405), and Long Beach (I 710) freeways. Much smaller, but locally important, Black communities are situated in Long Beach, Pomona, Pasadena, Pacoima, Panorama City, Arcadia, and the San Jose Hills south of West Covina. Slightly more than 11.6 percent of the county's population is Black, a decline of approximately one percent from the 1980 figure. Nevertheless, in some census tracts located along Inglewood's eastern border, Blacks make up more than 90 percent of the inhabitants. In 148 tracts they account for more than 50 percent of the people. On the other hand, only 381 tracts have resident rates of at least 10 percent, and in 382 tracts their presence falls below a single percent.
Copies of this map may be obtained by sending a $5.00 check made payable to CSUN TRUST FUND (no cash or purchase orders) to the Center for Geographical Studies, Department of Geography, California State University, Northridge, Northridge, California 91330.
This map was created entirely with Apple Macintosh computers and compatible software. Data were acquired from the Los Angeles office of the United States Bureau of the Census on a CD-ROM disc. The digital files manufactured in dBASE format were read and manipulated using FoxBASE+Mac. Spreadsheet compilation was accomplished with Microsoft Excel, and statistical analysis was undertaken with Strategic Mapping's Exstatix software. The map was produced using MapMaker software and geographic files also provided by Strategic Mapping, Inc. of San Jose, California. Final graphic editing was done in Canvas 3.0, manufactured by Deneba Software Miami, Florida. Except for final reproduction, the process took less than a day. Special thanks are owed to Daryl Scott (Strategic Mapping), Larry Hugg (Bureau of the Census), Doug Levy (Deneba Software), and Dean Ralph Vicere and his assistant Lyndie Wurthman of the School of Social and Behavioral Sciences, California State University, Northridge. - April 1991

FIGURE 4

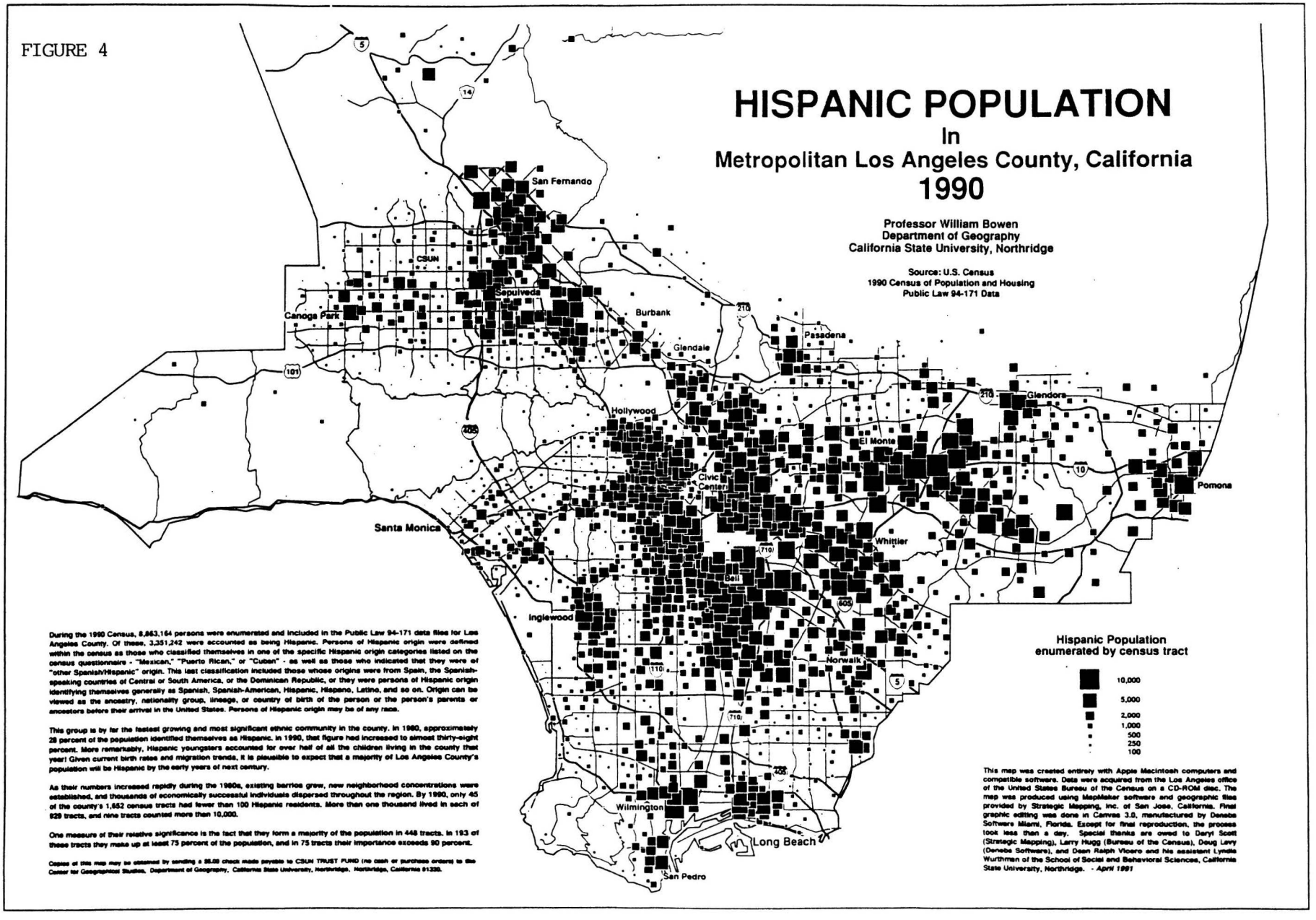

HISPANIC POPULATION
In
Metropolitan Los Angeles County, California
1990
Professor William Bowen
Department of Geography
California State University, Northridge
Source: U.S. Census
1990 Census of Population and Housing
Public Law 94-171 Data
San Fernando
CSUN
Sepulveda
Canoga Park
Burbank
Glendale
Pasadena
Glendora
Hollywood
El Monte
Civic Center
Pomona
Santa Monica
Whittier
Bell
Inglewood
Norwalk
Wilmington
Long Beach
San Pedro
Hispanic Population
enumerated by census tract
10,000
5,000
2,000
1,000
500
250
100
During the 1990 Census, 8,863,164 persons were enumerated and included in the Public Law 94-171 data files for Los Angeles County. Of these, 3,351,242 were accounted as being Hispanic. Persons of Hispanic origin were defined within the census as those who classified themselves in one of the specific Hispanic origin categories listed on the census questionnaire - "Mexican," "Puerto Rican," or "Cuban" - as well as those who indicated that they were of "other Spanish/Hispanic" origin. This last classification included those whose origins were from Spain, the Spanish-speaking countries of Central or South America, or the Dominican Republic, or they were persons of Hispanic origin identifying themselves generally as Spanish, Spanish-American, Hispanic, Hispano, Latino, and so on. Origin can be viewed as the ancestry, nationality group, lineage, or country of birth of the person or the person's parents or ancestors before their arrival in the United States. Persons of Hispanic origin may be of any race.
This group is by far the fastest growing and most significant ethnic community in the county. In 1980, approximately 28 percent of the population identified themselves as Hispanic. In 1990, that figure had increased to almost thirty-eight percent. More remarkably, Hispanic youngsters accounted for over half of all the children living in the county that year! Given current birth rates and migration trends, it is plausible to expect that a majority of Los Angeles County's population will be Hispanic by the early years of next century.
As their numbers increased rapidly during the 1980s, existing barrios grew, new neighborhood concentrations were established, and thousands of economically successful individuals dispersed throughout the region. By 1990, only 45 of the county's 1,652 census tracts had fewer than 100 Hispanic residents. More than one thousand lived in each of 929 tracts, and nine tracts counted more than 10,000.
One measure of their relative significance is the fact that they form a majority of the population in 448 tracts. In 193 of these tracts they make up at least 75 percent of the population, and in 75 tracts their importance exceeds 90 percent.
Copies of this map may be obtained by sending a $5.00 check made payable to CSUN TRUST FUND (no cash or purchase orders) to the Center for Geographical Studies, Department of Geography, California State University, Northridge, Northridge, California 91330.
This map was created entirely with Apple Macintosh computers and compatible software. Data were acquired from the Los Angeles office of the United States Bureau of the Census on a CD-ROM disc. The map was produced using MapMaker software and geographic files provided by Strategic Mapping, Inc. of San Jose, California. Final graphic editing was done in Canvas 3.0, manufactured by Deneba Software Miami, Florida. Except for final reproduction, the process took less than a day. Special thanks are owed to Daryl Scott (Strategic Mapping), Larry Hugg (Bureau of the Census), Doug Levy (Deneba Software), and Dean Ralph Vicero and his assistant Lynda Wurthman of the School of Social and Behavioral Sciences, California State University, Northridge. - April 1991

FIGURE 5

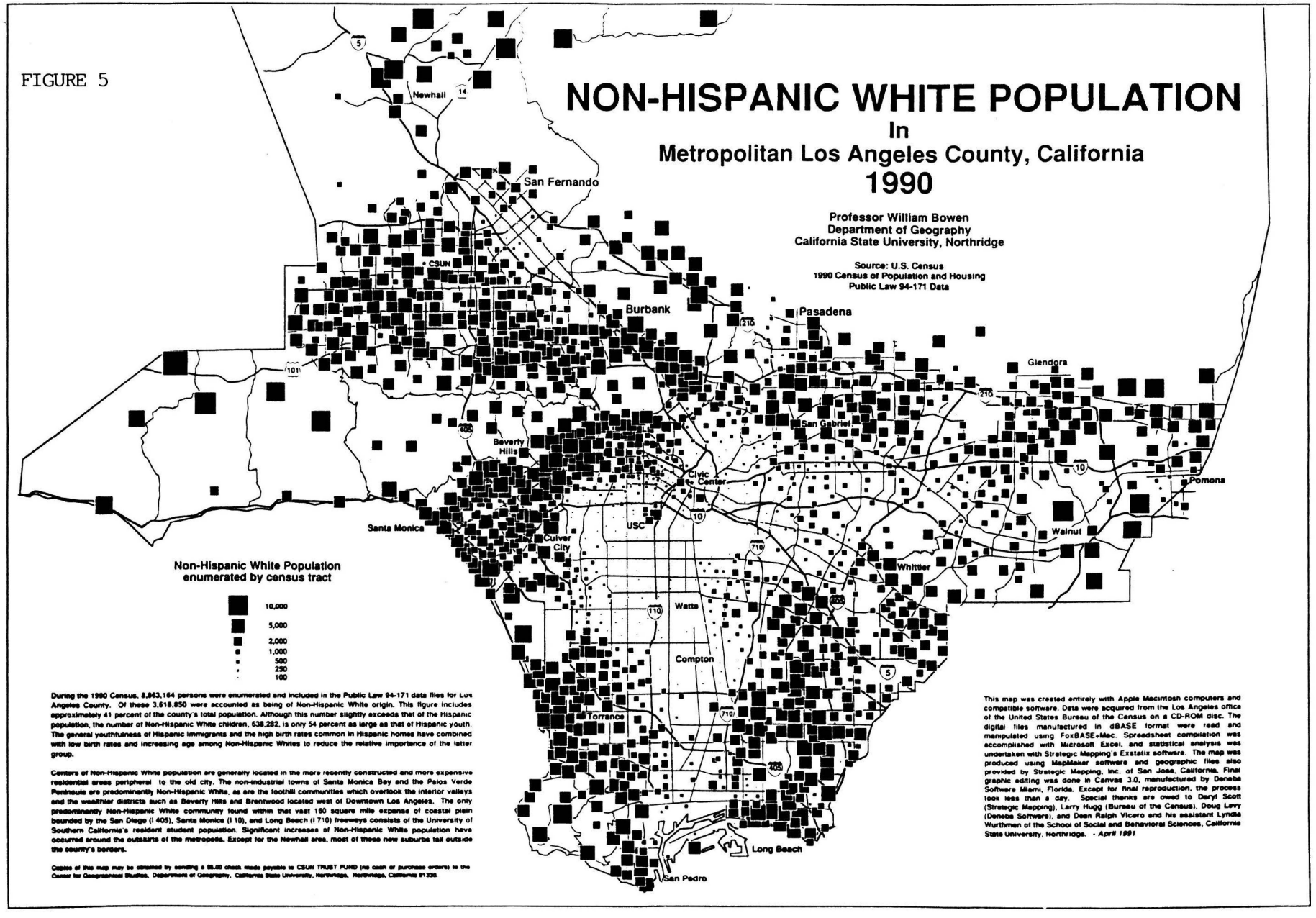
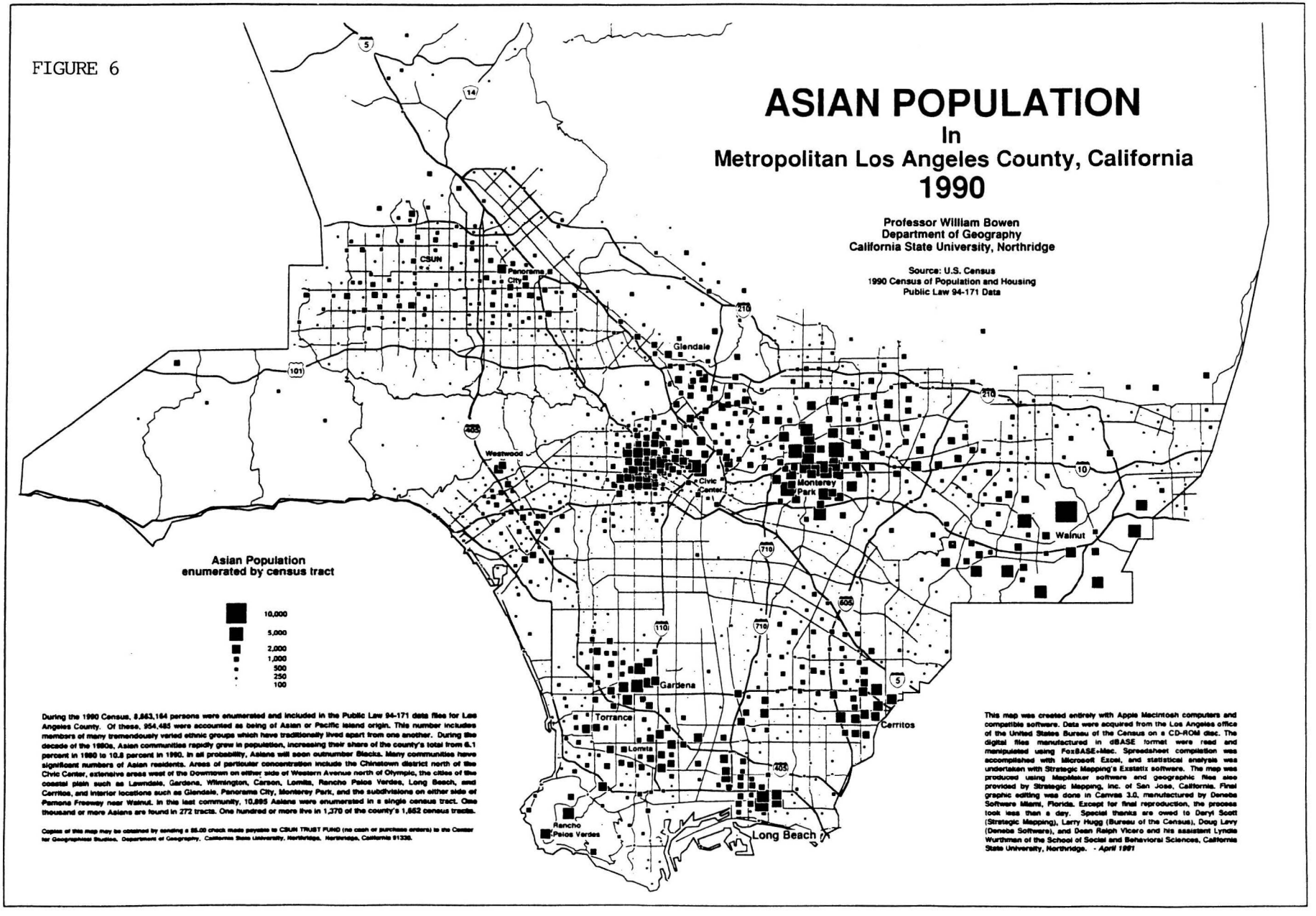
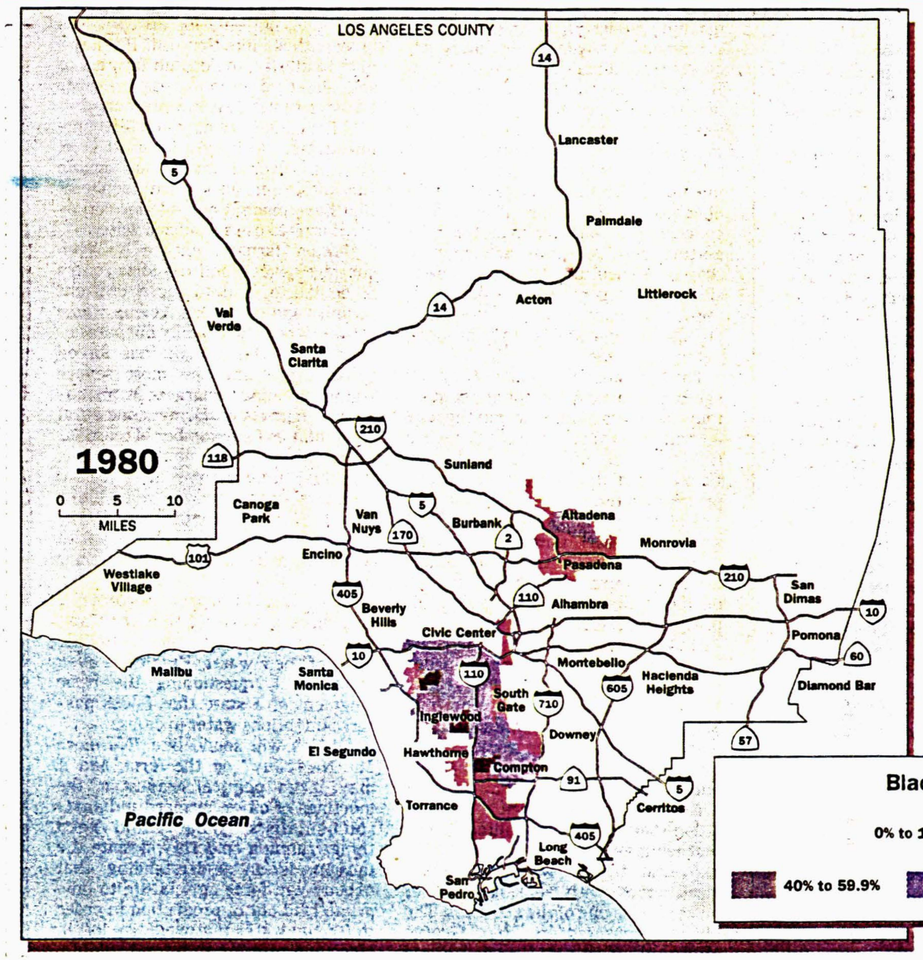

NON-HISPANIC WHITE POPULATION
In
Metropolitan Los Angeles County, California
1990
Professor William Bowen
Department of Geography
California State University, Northridge
Source: U.S. Census
1990 Census of Population and Housing
Public Law 94-171 Data
Non-Hispanic White Population
enumerated by census tract
10,000
5,000
2,000
1,000
500
250
100
Newhall
San Fernando
CSUN
Burbank
Pasadena
Glendora
San Gabriel
Pomona
Walnut
Whittier
Beverly Hills
Civic Center
USC
Santa Monica
Culver City
Watts
Compton
Torrance
Long Beach
San Pedro
During the 1990 Census, 8,863,164 persons were enumerated and included in the Public Law 94-171 data files for Los Angeles County. Of these 3,518,850 were accounted as being of Non-Hispanic White origin. This figure includes approximately 41 percent of the county's total population. Although this number slightly exceeds that of the Hispanic population, the number of Non-Hispanic White children, 638,282, is only 54 percent as large as that of Hispanic youth. The general youthfulness of Hispanic immigrants and the high birth rates common in Hispanic homes have combined with low birth rates and increasing age among Non-Hispanic Whites to reduce the relative importance of the latter group.
Centers of Non-Hispanic White population are generally located in the more recently constructed and more expensive residential areas peripheral to the old city. The non-industrial towns of Santa Monica Bay and the Palos Verde Peninsula are predominantly Non-Hispanic White, as are the foothill communities which overlook the interior valleys and the wealthier districts such as Beverly Hills and Brentwood located west of Downtown Los Angeles. The only predominantly Non-Hispanic White community found within that vast 160 square mile expanse of coastal plain bounded by the San Diego (I 405), Santa Monica (I 10), and Long Beach (I 710) freeways consists of the University of Southern California's resident student population. Significant increases of Non-Hispanic White population have occurred around the outskirts of the metropolis. Except for the Newhall area, most of these new suburbs fall outside the county's borders.
Copies of this map may be obtained by sending a $5.00 check made payable to CSUN TRUST FUND (no cash or purchase orders) to the Center for Geographical Studies, Department of Geography, California State University, Northridge, Northridge, California 91330.
This map was created entirely with Apple Macintosh computers and compatible software. Data were acquired from the Los Angeles office of the United States Bureau of the Census on a CD-ROM disc. The digital files manufactured in dBASE format were read and manipulated using FoxBASE+Mac. Spreadsheet compilation was accomplished with Microsoft Excel, and statistical analysis was undertaken with Strategic Mapping's Exstatix software. The map was produced using MapMaker software and geographic files also provided by Strategic Mapping, Inc. of San Jose, California. Final graphic editing was done in Canvas 3.0, manufactured by Deneba Software Miami, Florida. Except for final reproduction, the process took less than a day. Special thanks are owed to Daryl Scott (Strategic Mapping), Larry Hugg (Bureau of the Census), Doug Levy (Deneba Software), and Dean Ralph Vicero and his assistant Lyndie Wurthmen of the School of Social and Behavioral Sciences, California State University, Northridge. - April 1991

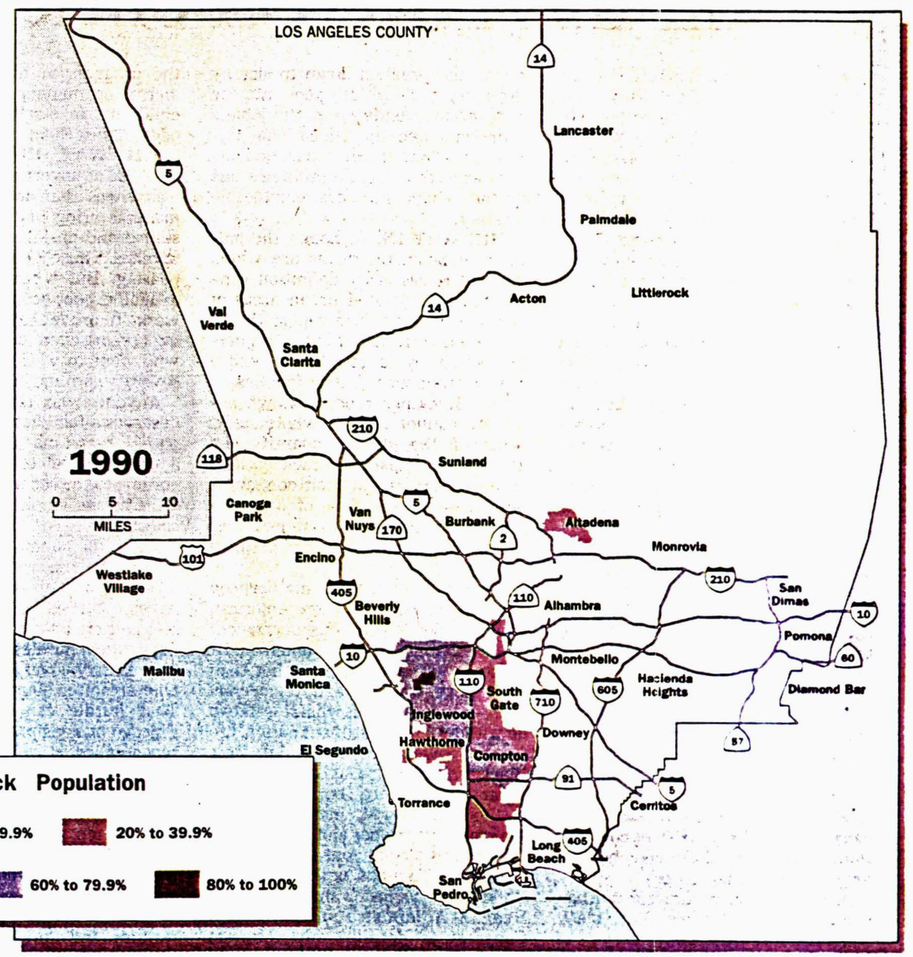
FIGURE 6


ASIAN POPULATION
In
Metropolitan Los Angeles County, California
1990
Professor William Bowen
Department of Geography
California State University, Northridge
Source: U.S. Census
1990 Census of Population and Housing
Public Law 94-171 Data
Asian Population
enumerated by census tract
10,000
5,000
2,000
1,000
500
250
100
CSUN
Panorama City
Glendale
Westwood
Civic Center
Monterey Park
Walnut
Gardena
Torrance
Lomita
Cerritos
Rancho Palos Verdes
Long Beach
During the 1990 Census, 8,863,164 persons were enumerated and included in the Public Law 94-171 data files for Los Angeles County. Of these, 954,485 were accounted as being of Asian or Pacific island origin. This number includes members of many tremendously varied ethnic groups which have traditionally lived apart from one another. During the decade of the 1980s, Asian communities rapidly grew in population, increasing their share of the county's total from 6.1 percent in 1980 to 10.8 percent in 1990. In all probability, Asians will soon outnumber Blacks. Many communities have significant numbers of Asian residents. Areas of particular concentration include the Chinatown district north of the Civic Center, extensive areas west of the Downtown on either side of Western Avenue north of Olympic, the cities of the coastal plain such as Lawndale, Gardena, Wilmington, Carson, Lomita, Rancho Palos Verdes, Long Beach, and Cerritos, and interior locations such as Glendale, Panorama City, Monterey Park, and the subdivisions on either side of Pomona Freeway near Walnut. In this last community, 10,895 Asians were enumerated in a single census tract. One thousand or more Asians are found in 272 tracts. One hundred or more live in 1,370 of the county's 1,852 census tracts.
Copies of this map may be obtained by sending a $5.00 check made payable to CSUN TRUST FUND (no cash or purchase orders) to the Center for Geographical Studies, Department of Geography, California State University, Northridge, Northridge, California 91330.
This map was created entirely with Apple Macintosh computers and compatible software. Data were acquired from the Los Angeles office of the United States Bureau of the Census on a CD-ROM disc. The digital files manufactured in dBASE format were read and manipulated using FoxBASE+Mac. Spreadsheet compilation was accomplished with Microsoft Excel, and statistical analysis was undertaken with Strategic Mapping's Exstatix software. The map was produced using MapMaker software and geographic files also provided by Strategic Mapping, Inc. of San Jose, California. Final graphic editing was done in Canvas 3.0, manufactured by Deneba Software Miami, Florida. Except for final reproduction, the process took less than a day. Special thanks are owed to Daryl Scott (Strategic Mapping), Larry Hugg (Bureau of the Census), Doug Levy (Deneba Software), and Dean Ralph Vicero and his assistant Lyndie Wurthman of the School of Social and Behavioral Sciences, California State University, Northridge. - April 1991

LOS ANGELES COUNTY: THE CENSUS STORY

The county's multiethnic population was on the move throughout the past decade. Communities such as Glendale experienced successive waves of immigrants from different parts of the world. Elsewhere, the complexion of South-Central Los Angeles and the San Gabriel Valley changed dramatically as Latino and Asian newcomers settled in neighborhoods long dominated by African-Americans and Anglos.





Blacks

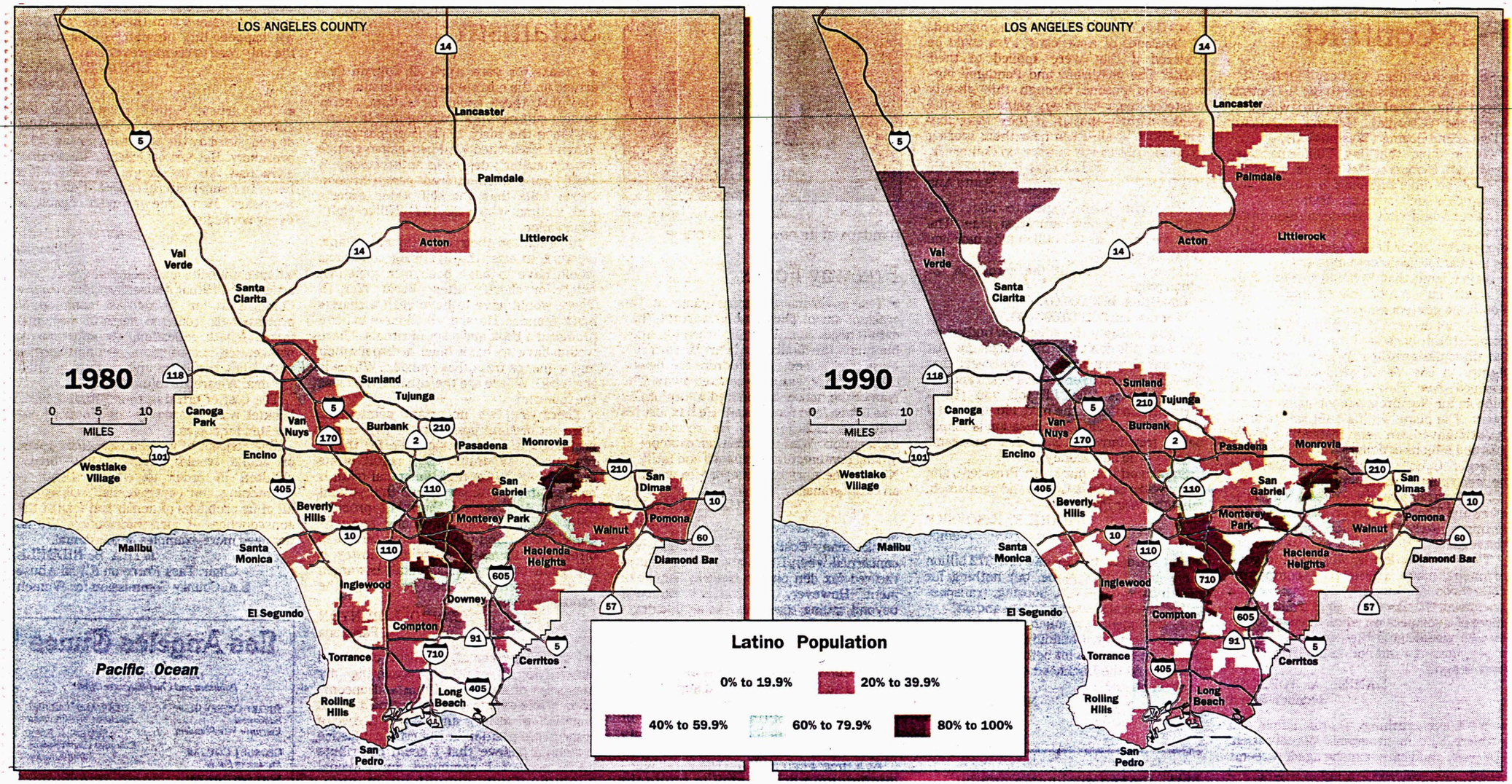
While the county's African-American population grew by only 1% during the 1980s, much of the black population redistributed itself, abandoning the central area and fanning out into suburban communities where blacks traditionally have not lived in great numbers. The black population grew by more than 50% in more than 60 of the county's 163 communities. In many of these places, however, the African-American populations remain tiny minorities -- from a few hundred to a few thousand people -- despite rapid growth. For example, in Palmdale the black population grew by nearly 1,000% but still makes up only 6% of the total population.

Los Angeles Times maps by Don Clement

Notable Population Changes:

There were a handful of places where large black communities got bigger. They include:

- Long Beach, by 42% to 56,800.
- Inglewood, by 3% to 54,900.
- Hawthorne, by 165% to 19,380.
- Places with large African-American populations that experienced losses include South-Central Los Angeles, down 17% to 122,500; Southeast Los Angeles, down 28% to 93,100; Compton, down 21% to 47,600; Willowbrook, down 20% to 17,400; Wilshire district, down 6% to 30,000; and Pasadena, down 2% to 23,400.



Latinos

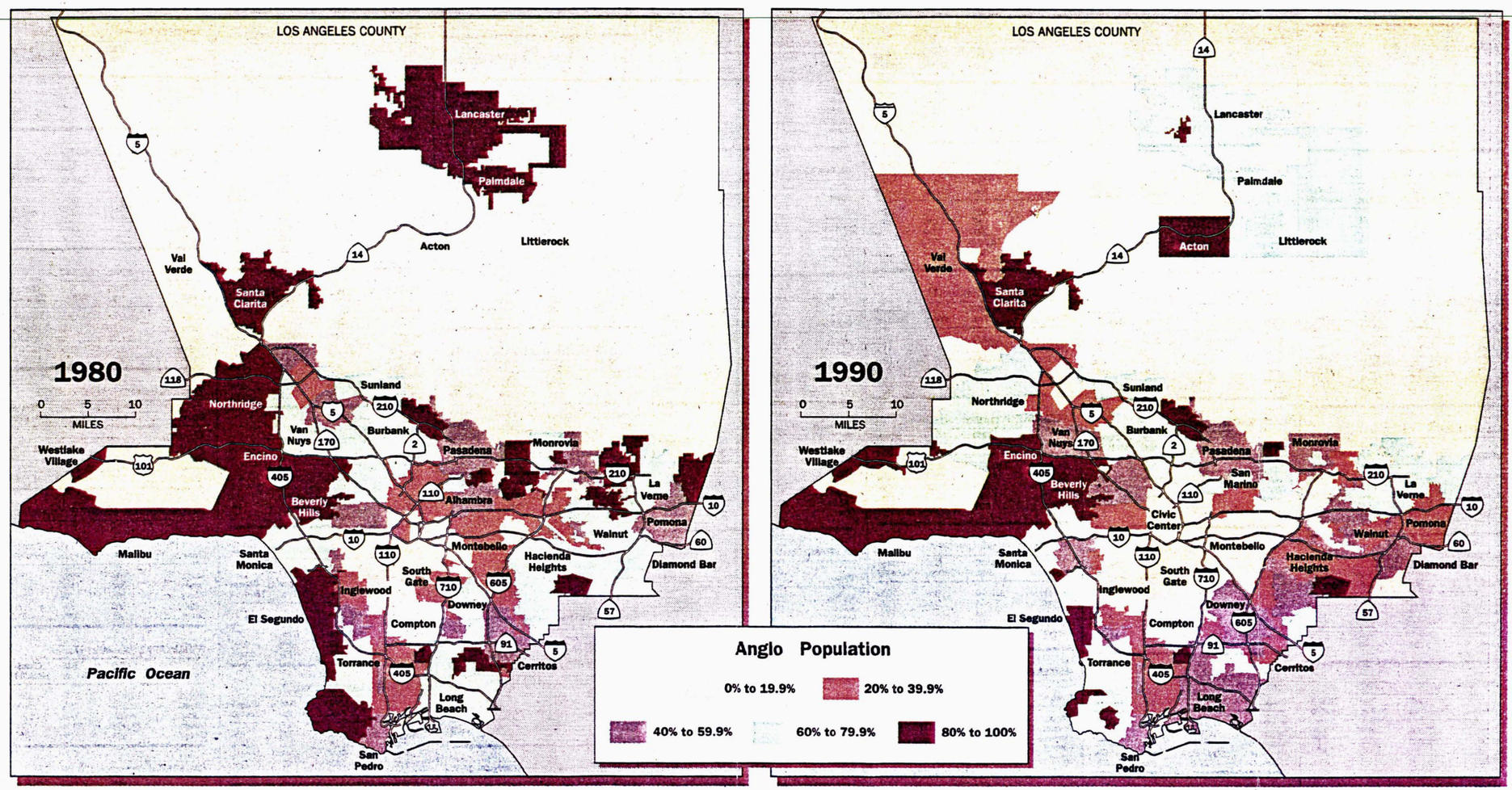
The Latino population grew throughout the county, gaining population in 148 of 163 communities. The Latino population growth rate was well over 100% in Palmdale and Lancaster in the northern part of the county, in Southeast and South-Central Los Angeles and in several communities in both the San Gabriel and San Fernando valleys. But there were a handful of places in the county where the Latino population declined. They include Monterey Park, Cerritos, Rolling Hills, and Sunland-Tujunga. Latinos have gained a majority in 45 communities, compared to 31 in 1980.

Notable Population Changes:

Several communities now have Latino populations of more than 100,000. They include:

- Northeast Los Angeles, 151,400, having grown by 26%.
- Southeast Los Angeles, 141,500, 138% growth.
- East Los Angeles, 119,600, 16% growth.
- South-Central Los Angeles, 115,200, 119% growth.
- Wilshire district, 103,700, 86% growth.
- Long Beach, 101,400, 100% growth.

During the past 10 years, Los Angeles County's population has rearranged itself in ways that have substantially altered the ethnic character of numerous communities. These maps show where each of the four major ethnic groups were concentrated in 1980 and where they are today. The maps are color-coded to indicate population intensity.



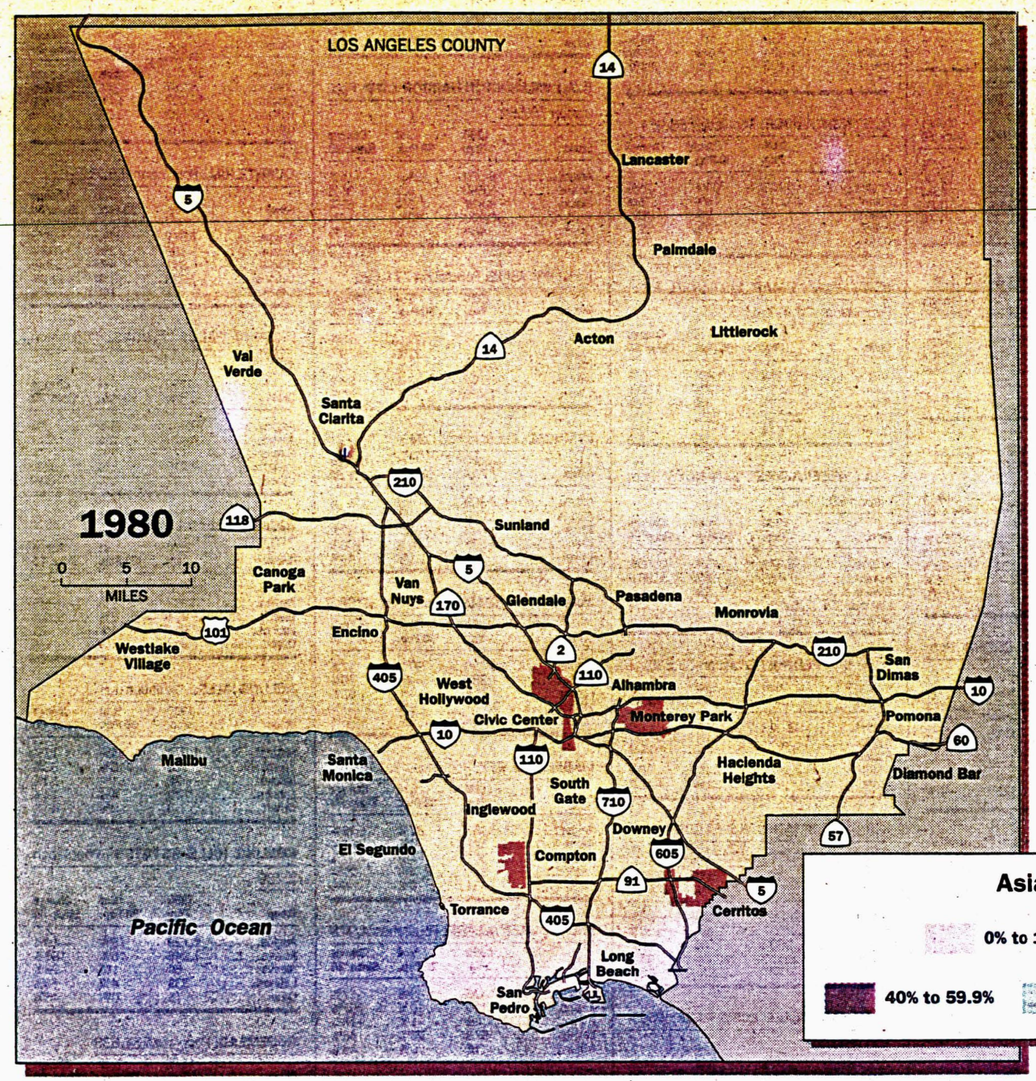
Anglos

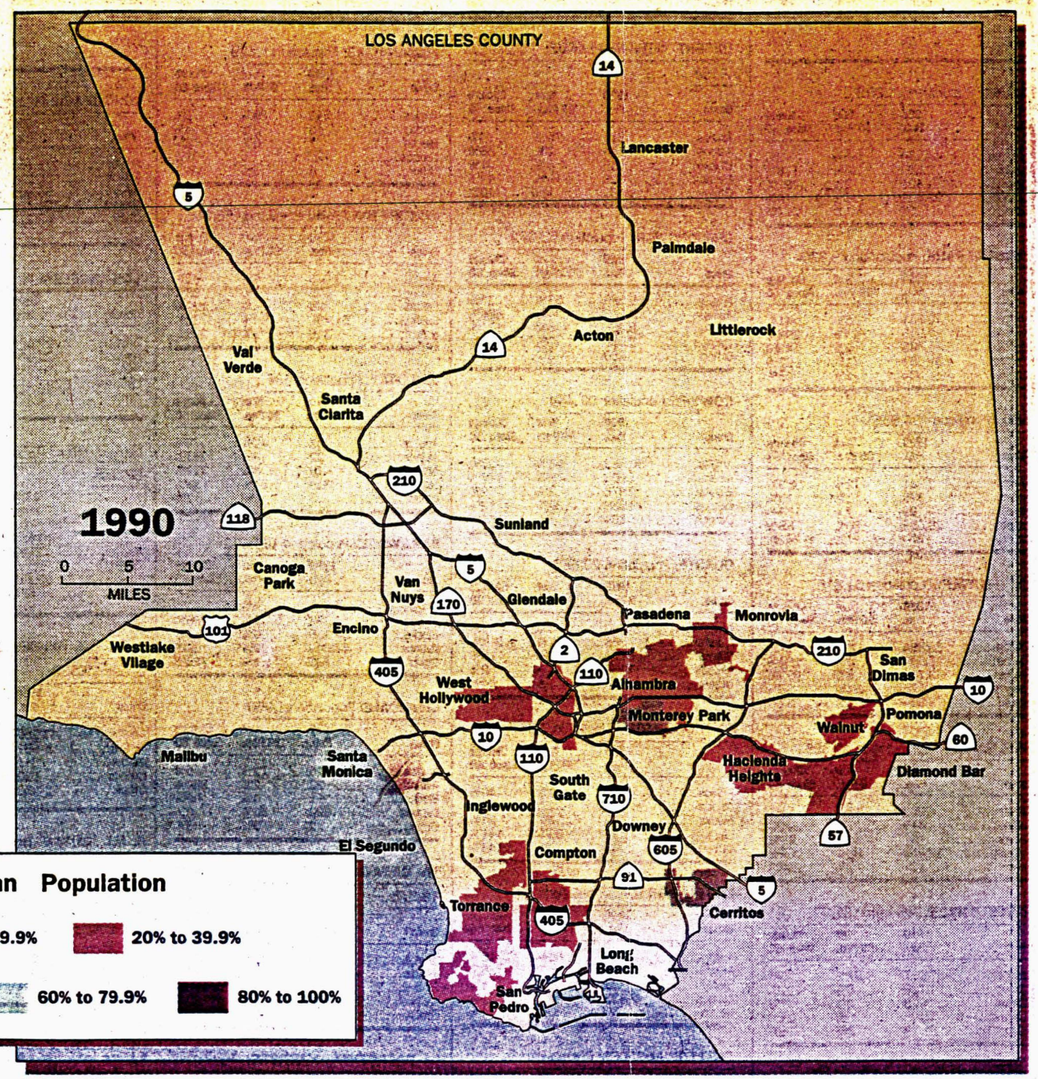
Shrinking by just over 8%, the Anglo population staged a broad retreat across Los Angeles County, declining in all but 19 of 163 communities measured by the census. Population losses were greatest in southeastern and south-central neighborhoods of the city of Los Angeles and in the western San Gabriel Valley. There were also steep declines in wealthy enclaves such as San Marino and in parts of the San Fernando Valley, such as Northridge, Panorama City and Sun Valley. The Anglo population also receded on the city's Westside, in Beverly Hills, Brentwood, Santa Monica and Westwood. Communities with Anglo majorities dropped from 94 in 1980 to 78 in 1990.

Notable Population Changes:

Anglo population growth surged in:

- Northern Los Angeles County; in Palmdale the growth was 344%.
- Lancaster by 72%.
- Santa Clarita by 48%.
- Elsewhere, noteworthy Anglo growth occurred in Diamond Bar (37%), Walnut (23%) and La Verne in the eastern San Gabriel Valley and in Westlake Village (20%) in the western San Fernando Valley.





Asians

From the Palos Verdes Peninsula to the Wilshire district to broad stretches of the San Gabriel Valley, the population of Asians and Pacific Islanders, once thinly distributed across the county, is increasing its visible presence. In 1980, Monterey Park was the only place in the county where Asians made up more than 30% of the population. Today, Monterey Park has an Asian majority of 56% and there are nine other communities where the Asian population is 30% or greater. The Asian population grew in more than 140 communities. As with blacks, the greatest percent growth often occurred in places with tiny populations. An example is Palmdale, where the growth rate was nearly 2,000%; but Asians still number only 2,890 out of a total population of nearly 69,000.

Notable Population Changes:

Along with Monterey Park, with an Asian population of more then 34,000, the most populous Asian communities include:

- The Wilshire district, with 57,200 and 21% of the population.
- Long Beach, with 55,200 and 13% of the population.
- Northeast Los Angeles, with 38,000 and 16%.
- Alhambra, with 30,700 and 37%.
- Torrance, with 28,800 and 28%.
- Glendale, with 24,600 and 14%.

F. Los Angeles Historic Growth

COMMERCIAL GROWTH:

From 1979 to 1990, the City of Los Angeles issued building permits for office, retail and manufacturing exceeding 120 million square feet (See TABLE 2/Chart 1). Office space accounted for 72 million or 65% of the commercial space growth of the City. Retail space accounted for almost 25% or 27.7 Million square feet while manufacturing only accounted for 11% or 12 Million square feet for the same period. For each square foot of manufacturing permit issued 6 square feet of office or almost 2.5 square feet of retail were permitted.

Of all the permits issued by the City from 1979-90, 31.% were less than 40,000 square feet, 38% were 40,000 to less than 250,000, and the remaining 31% were over 250,000 square feet in bulk (See Table 3). Over 59 million square feet or 81% of office space permitted were 40,000 square feet and above while 66% or the majority of the manufacturing permits issued were less than 40,000 square feet. While manufacturing activities indicate a dispersal trend, office permits indicate concentrations more susceptible to transit services.

SCAG estimated employment in 1980 for office and manufacturing were 651,374 and 534,016 respectively. Retail employment accounted for 225,184 or 12% of the three. The building permit analysis indicate that in the eighties the traditional manufacturing jobs declined in significance. The building permits issued by the City indicate a significantly reduced share of manufacturing compared to its previous share in the 1980 total employment among the three categories.

HOUSING:

As of the 1980 Census, the total housing stock was estimated at 1,188,923 units, of which 55.69% or 662,131 were multi-family units. In the 1990 Census, of the citywide total dwelling unit count of 1,300,963, 59.97% or 780,271 were multiple family units. The total single family dwelling units was 526,792 and 519,692 for 1980 and 1990 respectively. The census figures from 1980 to 1990 indicate a loss of 1.35% or 7,100 from the 1980 total single family housing stock. However, overall the City registered a 9.5% growth in housing stock or a total of 112,040 units since the 1980 census year.

In Table 4, from 1980 to 1989, the city issued net residential permits totalling 3,191 and 118,324 for single family and multi-family units respectively. Contrary to the Census findings, the building permit analysis indicate a net growth of over 3,000 in single family units. While the building permit figures seem inconsistent with the census, both suggest however that the trend in the City is towards greater density, as

demonstrated by the dominance of multi-family unit construction.

G. Distribution of Growth:

HOUSING:

Table 4 and Chart 2 indicate the location and net quantity of new housing units. For new single family units, two planning districts that had the highest share were Canoga Park/Winnetka/Woodland Hills and Chatsworth/Porter Ranch in the San Fernando Valley. The planning districts of Wilshire and Hollywood registered the largest volume of new multi-family units. In Chart 2, over 10 planning Communities/Districts gained 5,000 and above new housing units from 1980 to 1989.

COMMERCIAL:

Table 5 and Chart 3 indicate that six communities gained over 5 Million square feet of development from 1980-1988. For the said period, Central City and West Los Angeles Community/District Plan areas gained over 14.5 Million and 11.5 Million square feet of development respectively. Over 11 and 8 Million square feet of the growth, experienced by both Center City and West Los Angeles respectively, were accounted for by new office space construction.

H. Growth Forecast:

HOUSING:

From 1988 to 1995, it is projected that housing stock will increase by 180,747 units. Only 7.34% or 13,263 units will be accounted by the increase in single family units. Of the new additions to the single family housing stock, 3 district/community plan areas, namely-Sylmar, Canoga Park/Winnetka/Woodland Hills and Chatsworth-Porter Ranch, from the San Fernando Valley will account for over 9,000 of the new units.

In the projections, 9 community/district plan areas will absorb over 5,000 multi-family units. The plan areas of Hollywood, North Hollywood, and Van Nuys/Sherman Oaks will account for the 3 highest increases.

COMMERCIAL/INDUSTRIAL SPACE

From 1988 to 1995, only 7 communities will have growth below 1 Million square feet (See Table 7). Wilshire, West Los Angeles and Central City will add over 13.5, 12.5 and 11.5 Million square feet to their existing commercial/industrial spaces, respectively, by 1995. West Los Angeles is expected to account for almost 19% or 7.8 Million square feet of the total office growth, surpassing the 5.6 Million square feet of projected growth of Center City. For the period, West Los Angeles District is projected to be the most favored office location replacing Center City.

I. Citywide Growth 1990 th 2011

From 1990 to 2011, Commercial and Industrial growth will total 293.4 Million Square feet or an increase of 42% from the 1990 total building stock (See Table 8). In the period, industrial floor space will grow by only 13.2 Million or 10.4% of the total growth. Office space, however, is projected to account for 136.5 Million square feet or almost 47% of the total growth. From 1990 to 2011, the proportional share of industrial floor space to the total commercial industrial space in the City declined to just 14% from almost 18% in 1990 while office share increased continually from 26% to 32% by the year 2011.

In Table 9, commercial floor space is calculated to increase by 280.2 Million square feet or by 48% from the 1990 estimates. High rise-office space is projected to increase by 125.8 Million square feet accounting for 45% of the total commercial space growth. It is evident from the forecast that office space will continue to significantly increase and concentrate in the future, making the City more appealing to alternative transit modes.

HOUSING

As of October 1, 1989, the City of Los Angeles had an estimated population of 3.310 million and a total housing stock of 1.310 million units. According to Southern California Association of Governments (SCAG), the median rent in the City of Los Angeles has doubled over the past 10 years and more than 62 percent of the City's households pays in excess of 30 percent of their monthly income for housing. Only one in every five families can afford the $210,850 median priced home in the City. Because of the gap between income and cost of providing shelter to house their families, low income households are often forced to make untenable choices between paying their rent and meeting their family necessities. In its Regional Housing Needs Assessment (RHNA), SCAG has estimated that the City will need to construct about 130,000 new housing units between 1989 and 1994 in order to accommodate projected population growth. Although the housing vacancy rate is 6.35 percent, the Census indicates that 270,950 households live in overcrowded conditions. It has been estimated that the housing units in the City are projected to grow by 252,300 in the 20-year period between 1990 and 2010.

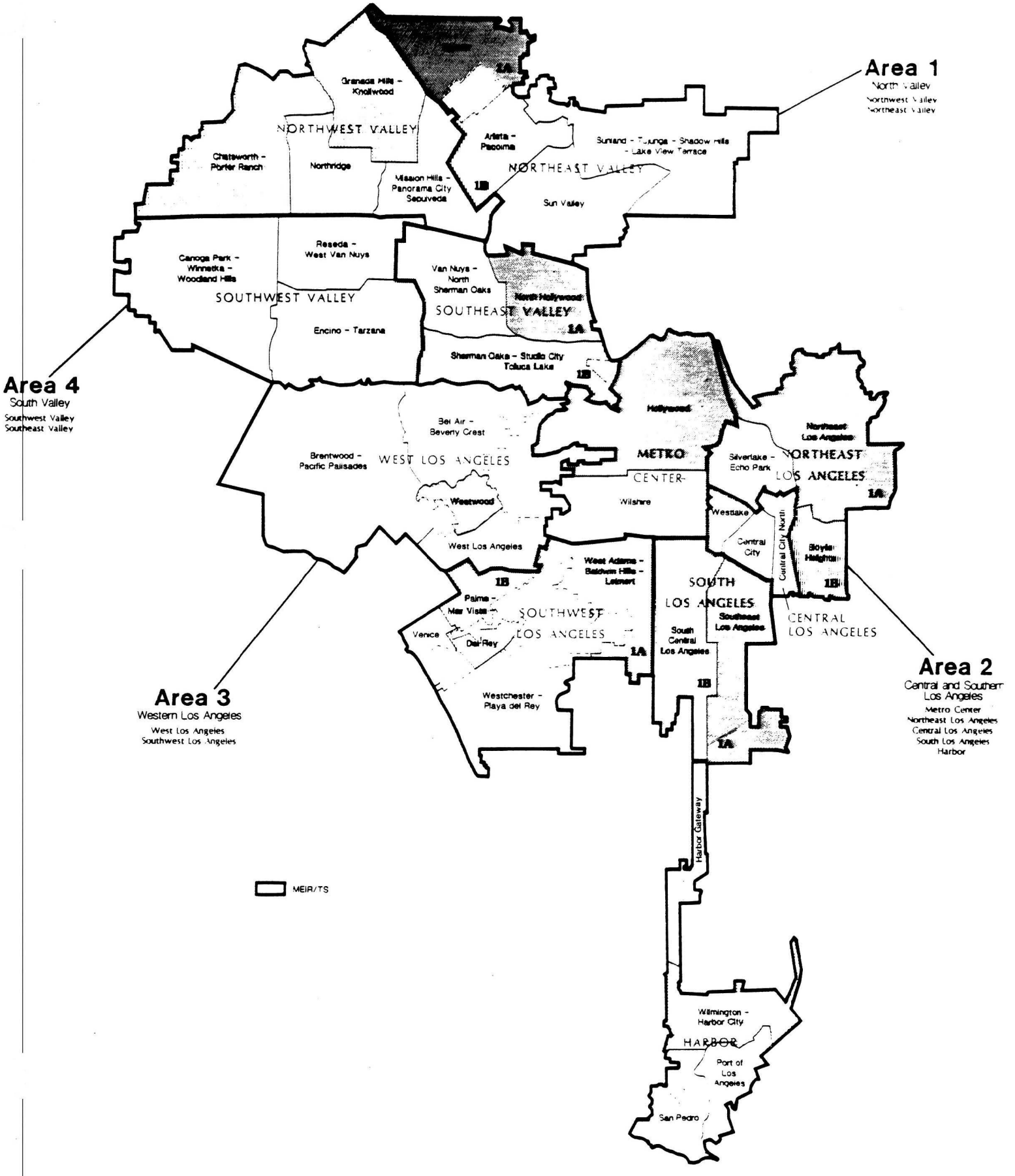

Area 1
North Valley
Northwest Valley
Northeast Valley
Area 2
Central and Southern
Los Angeles
Metro Center
Northeast Los Angeles
Central Los Angeles
South Los Angeles
Harbor
Area 3
Western Los Angeles
West Los Angeles
Southwest Los Angeles
Area 4
South Valley
Southwest Valley
Southeast Valley
NORTHWEST VALLEY
NORTHEAST VALLEY
SOUTHWEST VALLEY
SOUTHEAST VALLEY
WEST LOS ANGELES
METRO CENTER
NORTHEAST LOS ANGELES
SOUTHWEST LOS ANGELES
SOUTH LOS ANGELES
CENTRAL LOS ANGELES
HARBOR
Granada Hills - Knollwood
Chatsworth - Porter Ranch
Northridge
Mission Hills - Panorama City Sepulveda
Arleta - Pacoima
Sunland - Tujunga - Shadow Hills - Lake View Terrace
Sun Valley
Canoga Park - Winnetka - Woodland Hills
Reseda - West Van Nuys
Van Nuys - North Sherman Oaks
North Hollywood
Encino - Tarzana
Sherman Oaks - Studio City Toluca Lake
Bel Air - Beverly Crest
Brentwood - Pacific Palisades
Westwood
West Los Angeles
Hollywood
Wilshire
Silverlake - Echo Park
Northeast Los Angeles
Westlake
Central City
Central City North
Boyle Heights
West Adams - Baldwin Hills - Leimert
Palms - Mar Vista
Venice
Del Rey
Westchester - Playa del Rey
South Central Los Angeles
Southeast Los Angeles
Harbor Gateway
Wilmington - Harbor City
Port of Los Angeles
San Pedro
1A
1B
MEIR/TS

TABLE 2
CITY OF LOS ANGELES
ANNUAL PERMITS ISSUED, 1979-1990
BY USE, (IN SQUARE FEET)

YEAR	MFG	PERCENT	RETAIL	PERCENT	OFFICE	PERCEN	TOTAL	% TOTAL	% CUMU
1979	1,503,053	12.40%	1,509,611	5.45%	2,868,464	3.96%	5,881,127	5.24%	5.24%
1980	1,359,628	11.21%	1,981,727	7.15%	5,818,962	8.04%	9,160,317	8.16%	13.40%
1981	817,990	6.75%	919,649	3.32%	8,263,270	11.41%	10,000,909	8.91%	22.31%
1982	656,269	5.41%	700,397	2.53%	5,870,530	8.11%	7,227,195	6.44%	28.75%
1983	825,465	6.81%	1,518,828	5.48%	5,379,168	7.43%	7,723,461	6.88%	35.63%
1984	1,069,102	8.82%	3,019,915	10.90%	10,326,976	14.26%	14,415,993	12.84%	48.47%
1985	1,594,583	13.15%	2,399,503	8.66%	8,379,755	11.57%	12,373,842	11.02%	59.50%
1986	853,170	7.04%	3,563,421	12.86%	5,830,074	8.05%	10,246,665	9.13%	68.63%
1987	900,759	7.43%	3,740,777	13.50%	2,344,655	3.24%	6,986,190	6.22%	74.85%
1988	1,270,693	10.48%	2,431,590	8.77%	7,826,097	10.81%	11,528,380	10.27%	85.12%
1989	818,492	6.75%	4,796,419	17.31%	7,643,676	10.56%	13,258,587	11.81%	96.93%
1990	454,844	3.75%	1,133,217	4.09%	1,855,722	2.56%	3,443,783	3.07%	100.00%
TOTAL	12,124,048	100.00%	27,715,052	100.00%	72,407,349	100.00%	112,246,449	100.00%	
PERCENT	10.80%		24.69%		64.51%		100.00%		

SOURCE: DEPARTMENT OF CITY PLANNING, CITY OF LOS ANGELES, CITYWIDE DIVISION
BUILDING PERMIT FILES, TRANSPORTATION UNIT (11/91)

TABLE 3
CITY OF LOS ANGELES
TOTAL COMMERCIAL USE PERMITTED 1979-1990
BY BUILDING SIZE AND TYPE OF USE

PERMIT SIZE	MFG	% TOTAL	OFFICE	% TOTAL	RETAIL	% TOTAL	TOTAL	PERCENT	%CUM
0 < 15000	3,822,620	31.53%	5,437,137	7.51%	8,187,675	29.54%	17,447,432	15.54%	15.54%
15000 < 40000	3,951,977	32.60%	7,921,674	10.94%	5,718,852	20.63%	17,592,503	15.67%	31.22%
40000 < 250000	4,086,950	33.71%	29,350,019	40.53%	8,869,896	32.00%	42,306,866	37.69%	68.91%
250000 AND ABOVE	262,500	2.17%	29,698,519	41.02%	4,938,629	17.82%	34,899,648	31.09%	100.00%
TOTAL	12,124,048	100.00%	72,407,349	100.00%	27,715,052	100.00%	112,246,449	100.00%	
PERCENT	10.80%		64.51%		24.69%		100.00%		

SOURCE:

YABES, R. I., BUILDING BOOM OR EMPLOYMENT BUST? THE REAL PICTURE IN THE CITY OF ANGELS

FORTHCOMING PUBLICATION

TABLE 4
NET DWELLING UNITS PERMITTED BY TYPE OF USE, 1980-1989

COMMUNITY/DISTRICT PLAN AREA	SINGLE FAMILY UNITS	MULTIPLE FAMILY UNITS	TOTAL DWELLING UNITS	PERCENT TO TOTAL
N.E. LOS ANGELES	262	6,190	6,452	5.31%
BOYLE HEIGHTS	-55	806	751	0.62%
S.E. LOS ANGELES	198	1,289	1,487	1.22%
W ADAMS/BLDWN HLS/LEMRT	-26	862	836	0.69%
SOUTH CENTRAL L. A.	-173	1,539	1,366	1.12%
WILSHIRE	-688	10,557	9,869	8.12%
HOLLYWOOD	-411	9,488	9,077	7.47%
SILVERLAKE/ECHO PARK	30	2,383	2,413	1.99%
WESTLAKE	-533	1,159	626	0.52%
CENTRAL CITY	-21	2,240	2,219	1.83%
CENTRAL CITY NORTH	-30	581	551	0.45%
STDIO CTY/SHRMN OAKS/T.LAKE	-41	5,384	5,343	4.40%
N. HOLLYWOOD	-657	7,634	6,977	5.74%
ARLETA/PACOIMA	244	2,579	2,823	2.32%
VAN NUYS/N. SHERMAN OAKS	-627	7,986	7,359	6.06%
MISSION HILLS/PAN.CTY/SEP.	-130	5,402	5,272	4.34%
SUN VALLEY	-157	2,019	1,862	1.53%
SYLMAR	734	3,005	3,739	3.08%
GRANADA HILLS/KNOLLWOOD	463	407	870	0.72%
CANOGA PK/WNTKA/WDLND HLS	1949	6,144	8,093	6.66%
CHATSWORTH/PORTER RANCH	1760	2,808	4,568	3.76%
NORTHRIDGE	350	2,208	2,558	2.11%
RESEDA/WEST VAN NUYS	166	2,504	2,670	2.20%
ENCINO/TARZANA	207	1,469	1,676	1.38%
SUNLND/TUJUNGA/LAKEVW TERR	656	2,180	2,836	2.33%
WESTWOOD	-68	3,746	3,678	3.03%
WEST LOS ANGELES	-430	3,877	3,447	2.84%
PALMS/MAR VISTA/DEL REY	-516	5,516	5,000	4.11%
VENICE	187	1,126	1,313	1.08%
WESTCHESTER/PLAYA DEL REY	178	2,785	2,963	2.44%
BRENTWOOD/PACIFIC PALISADES	352	1,057	1,409	1.16%
BEL AIR/BEVERLY CREST	369	138	507	0.42%
WILMINGTON	-137	3,524	3,387	2.79%
SAN PEDRO	-168	6,011	5,843	4.81%
HARBOR GATEWAY	-46	1,721	1,675	1.38%
TOTAL	3,191	118,324	121,515	100.00%

SOURCE: DEPARTMENT OF CITY PLANNING, CITY OF LOS ANGELES, TRANSPORTATION UNIT (11/91)

TABLE 5
TOTAL NON-RESIDENTIAL PERMIT ISSUED BY TYPE OF USE, 1980-1988 (IN SQ. FT.)

COMMUNITY/DISTRICT PLAN AREA	INDUSTRIAL SPACE	% TO TOTA INDUSTRIA	OFFICE SPACE	% TO TOTA OFFICE	OTHER COMMERCIAL	% TO TOTA OTH. COM.	TOTAL GROWTH	PERCENT TO TOTAL
N.E. LOS ANGELES	2,056,774	8.35%	775,775	1.52%	878,442	3.03%	3,710,991	3.54%
BOYLE HEIGHTS	440,401	1.79%	7,909	0.02%	255,853	0.88%	704,163	0.67%
S.E. LOS ANGELES	1,642,955	6.67%	116,946	0.23%	578,772	2.00%	2,338,673	2.23%
W ADAMS/BLDWN HLS/LEMRT	272,533	1.11%	204,845	0.40%	537,705	1.85%	1,015,083	0.97%
SOUTH CENTRAL L. A.	310,799	1.26%	238,579	0.47%	1,141,067	3.94%	1,690,445	1.61%
WILSHIRE	174,043	0.71%	5,027,680	9.84%	4,618,489	15.93%	9,820,212	9.38%
HOLLYWOOD	454,341	1.84%	1,372,815	2.69%	1,648,607	5.69%	3,475,763	3.32%
SILVERLAKE/ECHO PARK	106,678	0.43%	81,931	0.16%	485,564	1.68%	674,173	0.64%
WESTLAKE	80,854	0.33%	4,782,536	9.36%	551,936	1.90%	5,415,326	5.17%
CENTRAL CITY	801,712	3.25%	11,195,746	21.92%	2,645,472	9.13%	14,642,930	13.99%
CENTRAL CITY NORTH	4,796,639	19.47%	479,901	0.94%	458,297	1.58%	5,734,837	5.48%
STDIO CTY/SHRMN OAKS/T.LAKE	6,674	0.03%	2,301,928	4.51%	1,383,269	4.77%	3,691,871	3.53%
N. HOLLYWOOD	249,806	1.01%	769,597	1.51%	443,759	1.53%	1,463,162	1.40%
ARLETA/PACOIMA	1,112,329	4.52%	156,313	0.31%	215,001	0.74%	1,483,643	1.42%
VAN NUYS/N. SHERMAN OAKS	929,409	3.77%	1,225,032	2.40%	499,100	1.72%	2,653,541	2.53%
MISSION HILLS/PAN.CTY/SEP.	144,517	0.59%	473,940	0.93%	431,329	1.49%	1,049,786	1.00%
SUN VALLEY	2,270,847	9.22%	233,942	0.46%	271,448	0.94%	2,776,237	2.65%
SYLMAR	1,162,012	4.72%	43,936	0.09%	169,417	0.58%	1,375,365	1.31%
GRANADA HILLS/KNOLLWOOD	50,535	0.21%	312,104	0.61%	250,933	0.87%	613,572	0.59%
CANOGA PK/WNTKA/WDLND HLS	82,028	0.33%	1,461,045	2.86%	565,369	1.95%	2,108,442	2.01%
CHATSWORTH/PORTER RANCH	2,440,660	9.91%	508,428	1.00%	820,661	2.83%	3,769,749	3.60%
NORTHRIDGE	141,747	0.58%	222,726	0.44%	163,719	0.56%	528,192	0.50%
RESEDA/WEST VAN NUYS	1,213,746	4.93%	658,457	1.29%	974,900	3.36%	2,847,103	2.72%
ENCINO/TARZANA	69,701	0.28%	1,862,091	3.65%	580,099	2.00%	2,511,891	2.40%
SUNLND/TUJUNGA/LAKEVW TERR	87,453	0.36%	48,413	0.09%	214,034	0.74%	349,900	0.33%
WESTWOOD	404	0.00%	2,103,071	4.12%	74,546	0.26%	2,178,021	2.08%
WEST LOS ANGELES	500,600	2.03%	8,130,227	15.92%	2,903,885	10.02%	11,534,712	11.02%
PALMS/MAR VISTA/DEL REY	357,809	1.45%	441,231	0.86%	742,745	2.56%	1,541,785	1.47%
VENICE	23,224	0.09%	204,889	0.40%	299,370	1.03%	527,483	0.50%
WESTCHESTER/PLAYA DEL REY	443,337	1.80%	1,997,954	3.91%	2,498,335	8.62%	4,939,626	4.72%
BRENTWOOD/PACIFIC PALISADES	12,000	0.05%	1,024,467	2.01%	392,661	1.35%	1,429,128	1.37%
BEL AIR/BEVERLY CREST	160	0.00%	61,410	0.12%	118,786	0.41%	180,356	0.17%
WILMINGTON	1,391,059	5.65%	303,475	0.59%	376,561	1.30%	2,071,095	1.98%
SAN PEDRO	69,326	0.28%	291,805	0.57%	528,438	1.82%	889,569	0.85%
HARBOR	736,272	2.99%	1,949,913	3.82%	269,824	0.93%	2,956,009	2.82%
TOTAL GROWTH 1980-88	24,633,383	100.00%	51,071,057	100.00%	28,988,393	100.00%	104,692,835	100.00%

SOURCE: DEPARTMENT OF CITY PLANNING, CITY OF LOS ANGELES, TRANSPORTATION UNIT (11/91)

TABLE 6

PROJECTED DWELLING UNITS BY COMMUNITY BY TYPE OF USE, 1988-95

COMMUNITY/DISTRICT PLAN AREA	SINGLE FAMILY UNITS	MULTIPLE FAMILY UNITS	TOTAL DWELLING UNITS	PERCENT TO TOTAL
N.E. LOS ANGELES	252	6,349	6,601	3.65%
BOYLE HEIGHTS	0	1,113	1,113	0.62%
S.E. LOS ANGELES	142	1,363	1,505	0.83%
W ADAMS/BLDWN HLS/LEMRT	8	950	958	0.53%
SOUTH CENTRAL L. A.	0	1,538	1,538	0.85%
WILSHIRE	0	631	631	0.35%
HOLLYWOOD	0	16,952	16,952	9.38%
SILVERLAKE/ECHO PARK	30	3,344	3,374	1.87%
WESTLAKE	0	3,136	3,136	1.74%
CENTRAL CITY	0	3,055	3,055	1.69%
CENTRAL CITY NORTH	0	1,519	1,519	0.84%
STDIO CTY/SHRMN OAKS/T.LAKE	0	7,057	7,057	3.90%
N. HOLLYWOOD	0	11,773	11,773	6.51%
ARLETA/PACOIMA	518	4,864	5,382	2.98%
VAN NUYS/N. SHERMAN OAKS	0	12,347	12,347	6.83%
MISSION HILLS/PAN.CTY/SEP.	0	5,388	5,388	2.98%
SUN VALLEY	0	2,818	2,818	1.56%
SYLMAR	1,772	3,971	5,743	3.18%
GRANADA HILLS/KNOLLWOOD	897	1,077	1,974	1.09%
CANOGA PK/WNTKA/WDLND HLS	2,166	5,011	9,151	5.06%
CHATSWORTH/PORTER RANCH	5,267	1,466	13,910	7.70%
NORTHRIDGE	93	1,236	8,062	4.46%
RESEDA/WEST VAN NUYS	268	3,355	4,952	2.74%
ENCINO/TARZANA	65	2,845	6,533	3.61%
SUNLND/TUJUNGA/LAKEVW TERR	389	5,402	8,701	4.81%
WESTWOOD	0	1,520	7,311	4.04%
WEST LOS ANGELES	0	5,692	5,692	3.15%
PALMS/MAR VISTA/DEL REY	0	7,643	7,643	4.23%
VENICE	389	2,303	2,692	1.49%
WESTCHESTER/PLAYA DEL REY	447	3,402	3,849	2.13%
BRENTWOOD/PACIFIC PALISADES	107	232	339	0.19%
BEL AIR/BEVERLY CREST	453	0	453	0.25%
WILMINGTON-HARBOR CITY	0	3,376	3,376	1.87%
SAN PEDRO	0	3,400	3,400	1.88%
HARBOR GATEWAY	0	1,819	1,819	1.01%
TOTAL	13,263	137,947	180,747	100.00%

SOURCE: DEPARTMENT OF CITY PLANNING, CITY OF LOS ANGELES, TRANSPORTATION UNIT (11/91)

TABLE 7

PLAN AREA NON-RESIDENTIAL GROWTH FORECAST BY TYPE OF USE, 1988-1995 (IN SQ. FT.)

COMMUNITY/DISTRICT PLAN AREA	INDUSTRIAL SPACE	% TO TOTA INDUSTRIA	OFFICE SPACE	% TO TOTA OFFICE	RETAIL SPACE	% TO TOTA RETAIL	TOTAL IND+OFF+RET	PERCENT TO TOTAL
N.E. LOS ANGELES	4,173,882	11.54%	1,801,377	4.35%	1,469,970	3.49%	7,445,229	6.22%
BOYLE HEIGHTS	907,658	2.51%	5,743	0.01%	207,727	0.49%	1,121,128	0.94%
S.E. LOS ANGELES	2,501,645	6.91%	122,986	0.30%	823,197	1.96%	3,447,828	2.88%
W ADAMS/BLDWN HLS/LEMRT	560,994	1.55%	123,906	0.30%	1,044,018	2.48%	1,728,918	1.44%
SOUTH CENTRAL L. A.	428,228	1.18%	92,279	0.22%	1,984,444	4.71%	2,504,951	2.09%
WILSHIRE	99,988	0.28%	5,636,418	13.62%	7,785,135	18.49%	13,521,541	11.30%
HOLLYWOOD	472,991	1.31%	1,280,235	3.09%	3,134,506	7.44%	4,887,732	4.08%
SILVERLAKE/ECHO PARK	52,375	0.14%	38,434	0.09%	293,151	0.70%	383,960	0.32%
WESTLAKE	56,900	0.16%	1,990,949	4.81%	846,376	2.01%	2,894,225	2.42%
CENTRAL CITY	0	0.00%	5,600,134	13.53%	1,288,683	3.06%	6,888,817	5.76%
CENTRAL CITY NORTH	9,029,485	24.96%	778,673	1.88%	1,788,925	4.25%	11,597,083	9.69%
STDIO CTY/SHRMN OAKS/T.LAKE	557,459	1.54%	1,999,275	4.83%	2,209,788	5.25%	4,766,522	3.98%
N. HOLLYWOOD	218,359	0.60%	214,908	0.52%	543,058	1.29%	976,325	0.82%
ARLETA/PACOIMA	1,895,593	5.24%	501,979	1.21%	427,599	1.02%	2,825,171	2.36%
VAN NUYS/N. SHERMAN OAKS	1,966,018	5.43%	810,264	1.96%	500,837	1.19%	3,277,119	2.74%
MISSION HILLS/PAN.CTY/SEP.	271,462	0.75%	725,766	1.75%	852,316	2.02%	1,849,544	1.55%
SUN VALLEY	3,249,017	8.98%	591,601	1.43%	317,595	0.75%	4,158,213	3.47%
SYLMAR	2,389,267	6.60%	47,493	0.11%	411,694	0.98%	2,848,454	2.38%
GRANADA HILLS/KNOLLWOOD	0	0.00%	295,909	0.71%	291,926	0.69%	587,835	0.49%
CANOGA PK/WNTKA/WDLND HLS	38,442	0.11%	910,954	2.20%	703,302	1.67%	1,652,698	1.38%
CHATSWORTH/PORTER RANCH	2,672,371	7.39%	296,289	0.72%	518,221	1.23%	3,486,881	2.91%
NORTHRIDGE	23,548	0.07%	193,692	0.47%	318,642	0.76%	535,882	0.45%
RESEDA/WEST VAN NUYS	1,116,587	3.09%	1,269,553	3.07%	2,299,421	5.46%	4,685,561	3.91%
ENCINO/TARZANA	0	0.00%	1,747,542	4.22%	746,148	1.77%	2,493,690	2.08%
SUNLND/TUJUNGA/LAKEVW TERR	86,809	0.24%	10,967	0.03%	231,815	0.55%	329,591	0.28%
WESTWOOD	0	0.00%	0	0.00%	0	0.00%	0	0.00%
WEST LOS ANGELES	889,089	2.46%	7,850,314	18.96%	3,799,294	9.02%	12,538,697	10.48%
PALMS/MAR VISTA/DEL REY	624,612	1.73%	57,576	0.14%	1,538,014	3.65%	2,220,202	1.86%
VENICE	29,743	0.08%	323,985	0.78%	392,144	0.93%	745,872	0.62%
WESTCHESTER/PLAYA DEL REY	203,228	0.56%	1,493,716	3.61%	2,251,755	5.35%	3,948,699	3.30%
BRENTWOOD/PACIFIC PALISADES	0	0.00%	2,099,096	5.07%	1,150,422	2.73%	3,249,518	2.72%
BEL AIR/BEVERLY CREST	0	0.00%	0	0.00%	0	0.00%	0	0.00%
WILMINGTON/HARBOR CITY	1,282,453	3.54%	284,972	0.69%	529,868	1.26%	2,097,293	1.75%
SAN PEDRO	54,989	0.15%	96,629	0.23%	830,512	1.97%	982,130	0.82%
HARBOR GATEWAY	327,399	0.90%	2,101,442	5.08%	576,560	1.37%	3,005,401	2.51%
TOTAL GROWTH 1988-95	36,180,591	100.00%	41,395,056	100.00%	42,107,063	100.00%	119,682,712	100.00%

SOURCE: DEPARTMENT OF CITY PLANNING, CITY OF LOS ANGELES, TRANSPORTATION UNIT (11/91)

TABLE 8
PROJECTED FLOOR SPACE BY BUILDING CATEGORY

1990-2011 (In Millions of Square Feet)

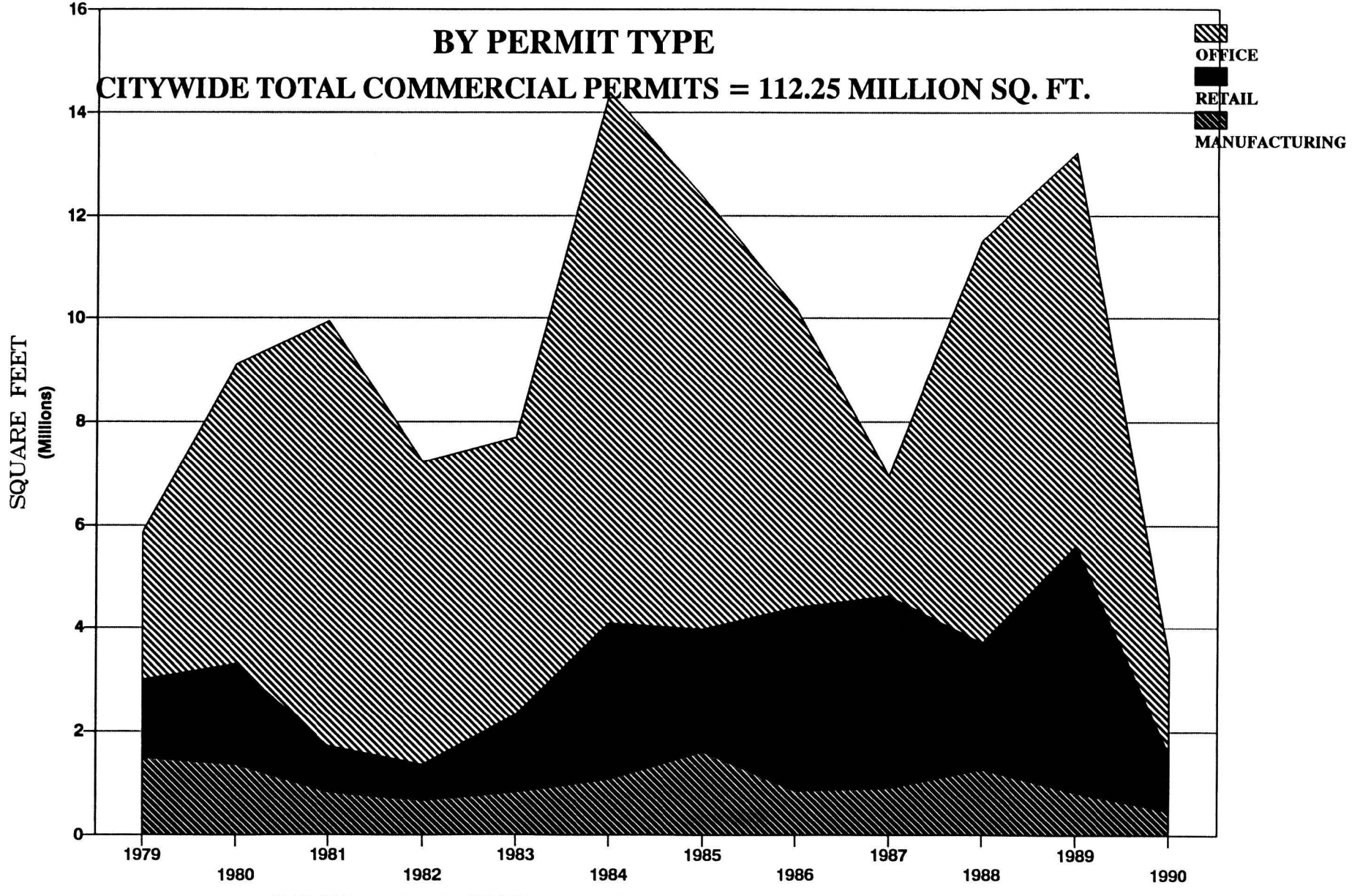
BUILDING CATEGORY	YEAR 1990	% to Total	1995	% to Total	2000	% to Total	2011	% to Total
Office	182.6	25.87%	217.5	27.66%	252.6	29.31%	319.1	31.93%
Retail	70.4	9.97%	81.8	10.40%	90.6	10.51%	102.3	10.24%
Warehouse	68.3	9.68%	71.6	9.10%	80.1	9.30%	100.3	10.04%
Other Commercial	257.8	36.52%	285.3	36.28%	304.8	35.37%	337.6	33.78%
Industrial(Assembly)	126.8	17.96%	130.2	16.56%	133.6	15.50%	140.0	14.01%
TOTAL COM/IND	705.9	100.00%	786.4	100.00%	861.7	100.00%	999.3	100.00%
Percent Commercial		82.04%		83.44%		84.50%		85.99%

SOURCE:
City of Los Angeles, Department of Water and Power (12/89)

dwpproj.wq1 (n3..s24)

CHART 1

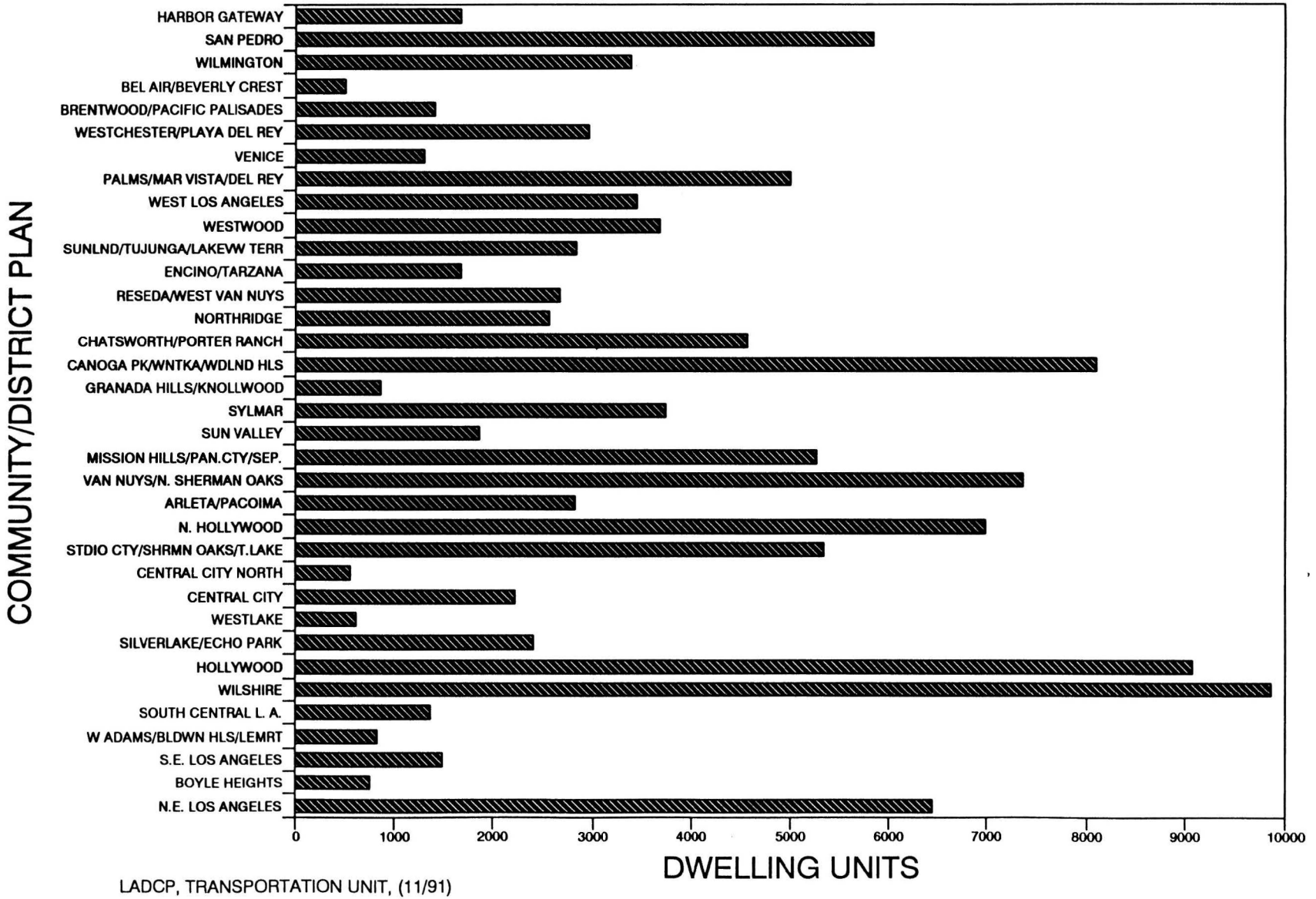
CITY OF LOS ANGELES
TOTAL COMMERCIAL USE PERMITTED 1979-90



SOURCE: BUILDING PERMIT FILES, TRANSPORTATION UNIT, LADCP (11-91)

CHART 2

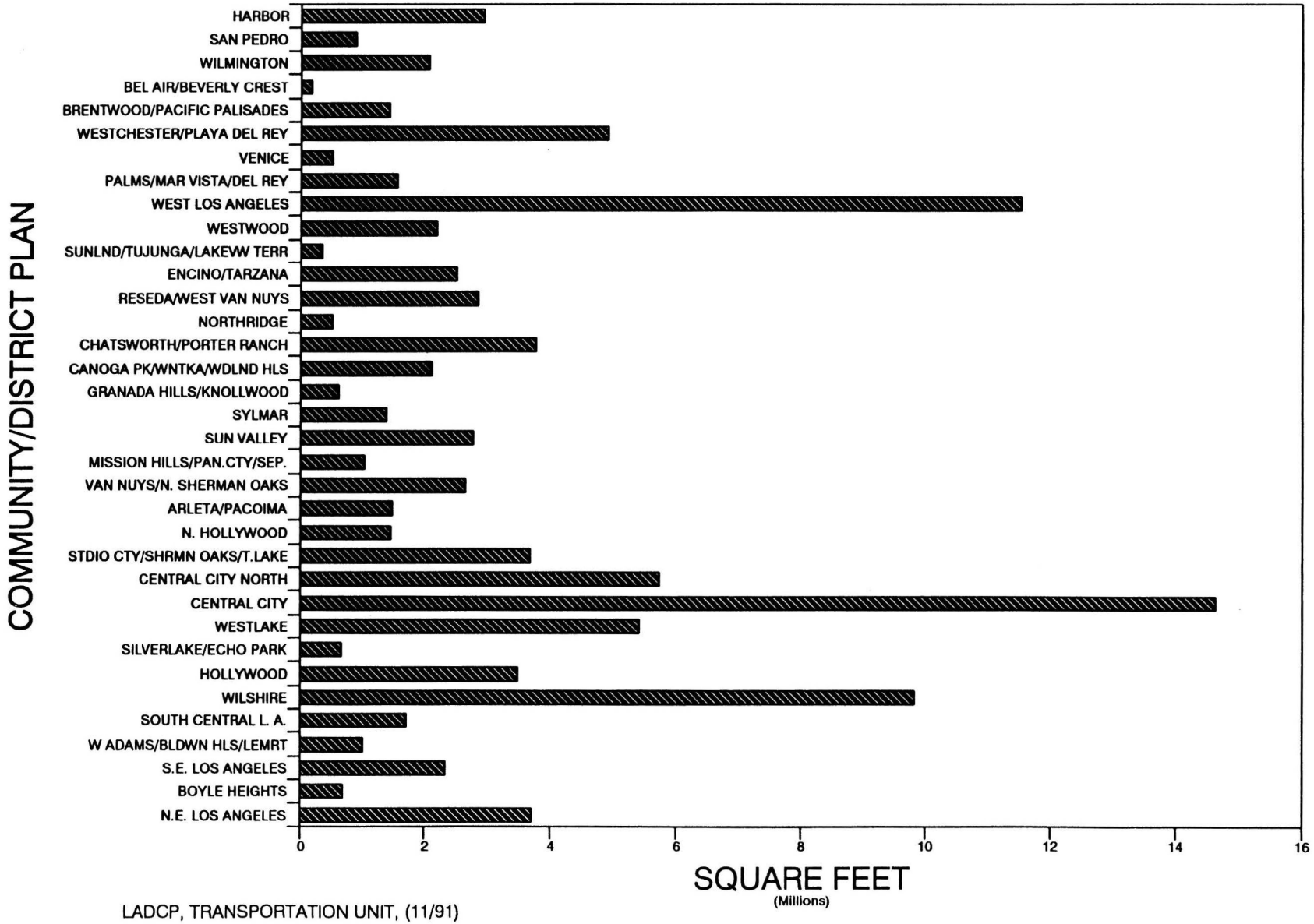
CITYWIDE NET RESIDENTIAL CONSTRUCTION
1980-89 (IN UNITS)



LADCP, TRANSPORTATION UNIT, (11/91)

CHART 3

CITYWIDE NON- RESIDENTIAL CONSTRUCTION
1980-89 (IN MILLIONS OF SQ.FT.)



LADCP, TRANSPORTATION UNIT, (11/91)

TABLE 9
PROJECTED COMMERCIAL FLOOR SPACE

In Millions of Square Feet

BUILDING CATEGORY	YEAR 1990	1995	2000	2011
Office-Low Rise	63.6	67.0	70.1	74.3
Office-High Rise	119.0	150.5	182.5	244.8
Restaurants	13.9	14.2	15.1	17.1
Retail	70.4	81.8	90.6	102.3
Food Store	14.7	17.1	18.9	21.3
Warehouse	68.3	71.6	80.1	100.3
Schools	54.5	60.5	62.4	66.5
Univ./College	36.0	37.3	38.4	40.9
Hospital	32.3	33.6	35.4	39.5
Hotel/Motel	22.7	25.7	27.4	29.4
Others	83.7	96.9	107.2	122.9
TOTAL-Commercial	579.1	656.2	728.1	859.3

SOURCE:
City of Los Angeles, Department of Water and Power (12/89)

dwpproj.wkq (c4..h28)

CHAPTER II

HISTORY OF RAIL TRANSIT IN LOS ANGELES

A. Introduction

In April of 1961 the last run of the Pacific Electric Red Car was made between Los Angeles and Long Beach. This marked the demise of the once extensive public transportation system which at its height in 1947 carried 651 million passengers annually. After 1924, except for the World War II years, the automobile increasingly became the dominant means of transportation in the region. During the period from 1924 to 1950, the highway network was greatly expanded including the development of the first freeways - the Pasadena and Hollywood Freeways.

As the trolley and the automobile each in their turn had profound impacts on Southern California land use development patterns, so it is possible that the new 300-mile rail system for Los Angeles County can have positive land use impacts if properly focused, guided and supported by appropriate land use policies. In developing a policy for the City of Los Angeles which attempts to integrate both transportation and land use planning objectives, it is critical that we not only look at what successes other cities have achieved, but also at how past transportation and land use decisions helped established the urban form of Los Angeles. If rail planning is allied with supporting land use policies a more integrated system could be created. Just as central city land values declined in Los Angeles during the decade trolleys were removed, modern rail transit could be one amongst several forces supporting the redevelopment of historic city centers, preserving existing neighborhoods and focusing growth.

As rail transit once was part of a regional package supporting economic growth which included the construction of aqueducts and a deep water port; today it could be part of a package of unified community enhancing actions including land use policies supportive of transit use and pedestrianism, redevelopment efforts and a positive public-private co-venture spirit.

B. Los Angeles Railway Lines

The earliest transit in the Los Angeles area began with horse cars in the 1870's, followed by some cable car routes in the 1880's. By the mid 1890's, trolley lines, many built from horse street car routes, criss-crossed Los Angeles. The Sherman and Clark railway, the first "inter-urban" rail line was built connecting downtown Los Angeles to the city of Pasadena. By the turn of the century there were several dozen street car companies. In 1925 the Pacific Electric system reached its peak with 700 route miles and 1100 track miles. The following is an abbreviated history and listing of the major public transit companies which serviced the city in the first half of this century:

1. Pacific Electric

The Pacific Electric Railway (PE) was formed in 1901 by Henry E. Huntington. It was later reorganized in 1911 as a subsidiary of the Southern Pacific, to merge four electric inter-urban railroads in the Los Angeles area and to formally separate these from the purely local street car lines within Los Angeles, which were operated by the Los Angeles Railway (LARy). PE's rail lines were grouped into four operating districts:

- Western - Hollywood, the San Fernando Valley and the beaches;
- Southern - Long Beach, San Pedro, New Port Beach and Santa Ana;
- Northern, to Pasadena, the San Gabriel Valley and San Bernardino, Redlands and Riverside.

In addition, both PE and LARy were also involved in providing bus service throughout Los Angeles. In April of 1961 PE discontinued service of its only surviving line of the electric interurban system once covering Southern California.

2. Los Angeles Railway (LARy)

The LARy was formed in March of 1895 from previously existing Los Angeles Consolidated Electric Railway (LACE). LACE converted all old cable and horse-car lines to electric trolley lines. In October of 1898 Henry E. Huntington, Collis Powell and Issaias W. Hellman purchased LARy and its 103 streetcars. It was then renamed the Los Angeles Railway Corporation. The system stretched from Central Los Angeles to East Los Angeles, Boyle Heights, Pico Heights, Inglewood, Eagle Rock and Vernon. In 1910 Henry Huntington became the exclusive owner of the Los Angeles Railway Corporation (which had been partially owned by Southern

Pacific). In 1913 the Los Angeles Railway Corporation was reorganized and again renamed LARy. In January of 1945 LARy was sold to Los Angeles Transit Lines (LATL), whose holding company was the National City Lines. In 1958 LATL was taken over by the Los Angeles Metropolitan Transit Authority (LAMTA), a public agency created by the State legislature to overcome the rivalries among communities for transit control. On March of 1963 LAMTA abandoned the last remaining five Los Angeles local streetcar lines.

3. Los Angeles Motor Coach

The Los Angeles Motor Coach Company was the first motor coach in Los Angeles and operated on Western Avenue. It was created jointly by the Pacific Electric and LARy in August of 1923 by consolidating bus resources. By December of the same year, service was expanded to include Sunset Boulevard and Vermont Avenue. To accommodate the motor coach fleet, a garage was constructed at Santa Monica Boulevard and Virgil Avenue serving 120 buses.

4. Metropolitan Coach Lines

In May of 1953 the Metropolitan Coach Lines were created by Jesse Haugh who purchased Pacific Electric's assets (excluding its rights-of-way). Haugh implemented an aggressive bus oriented system using only a few of the remaining rail lines. Haugh was a former Pacific City Lines executive, who formed the Western Transit Systems as a holding company in 1947 and subsequently acquired the San Diego Transit System.

5. Asbury Rapid Transit

Originally part of the Asbury Trucking Company, which was started in the early part of the 20th century, by brothers J. T. and F. H. Asbury. Asbury Rapid Transit (ART), was the largest of the independent bus companies to exist in Los Angeles. ART, was a consolidation of suburban and interurban lines operating primarily in the San Fernando Valley. The backbone of the system was the Original Stage Line, which ran from downtown Los Angeles to the San Fernando Valley. Suffering from a decline in patronage and experiencing financial difficulties, ART was sold to Metropolitan Coach Lines in August of 1954.

6. Los Angeles Metropolitan Transit Authority

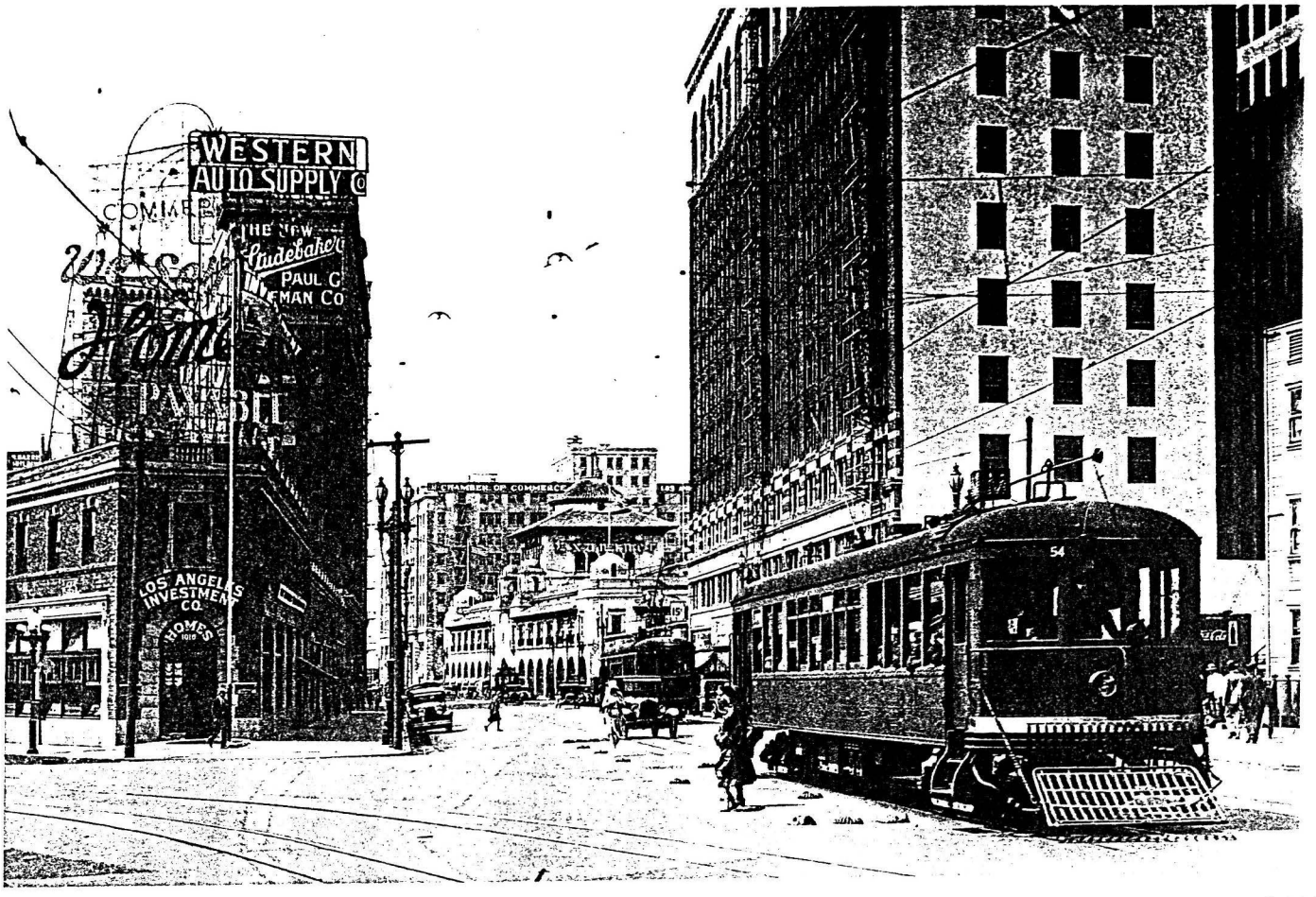
The Los Angeles Metropolitan Transit Authority (LAMTA) was created by the State legislature in 1951 to study the feasibility of a monorail system in the Los Angeles area. After years of study with no tangible results, a bill was passed and signed in 1957 to enable the Authority to own and operate any form of transit system. In March of 1958 the Authority bought out Metropolitan Coach Lines, its subsidiary Asbury Rapid Transit and the Los Angeles Transit Lines. In 1964 the LAMTA was replaced by the Southern California Rapid Transit District (SCRTD).



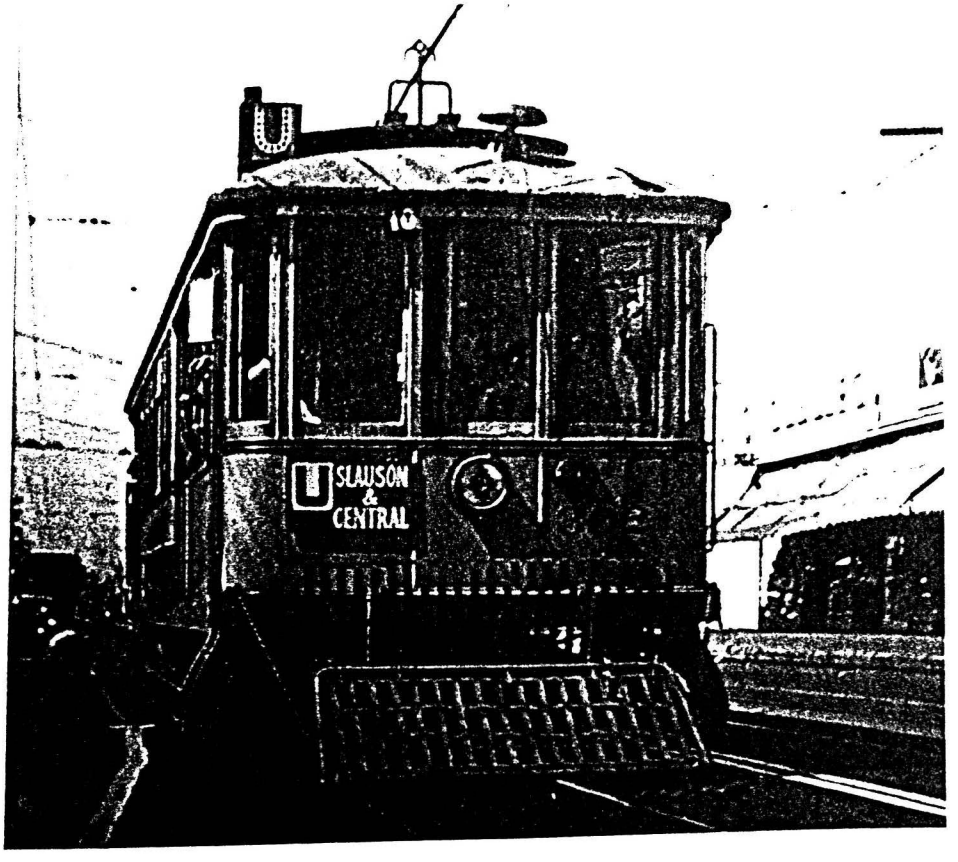
Looking west of Fifth Street from Hill in 1910. The block to the right is where Robert Widney began a residential subdivision in 1873, and his Spring & Sixth horsecars had once turned this same corner, run a block along Fifth, then turned southerly again at Olive Street. — HUNTINGTON LIBARY



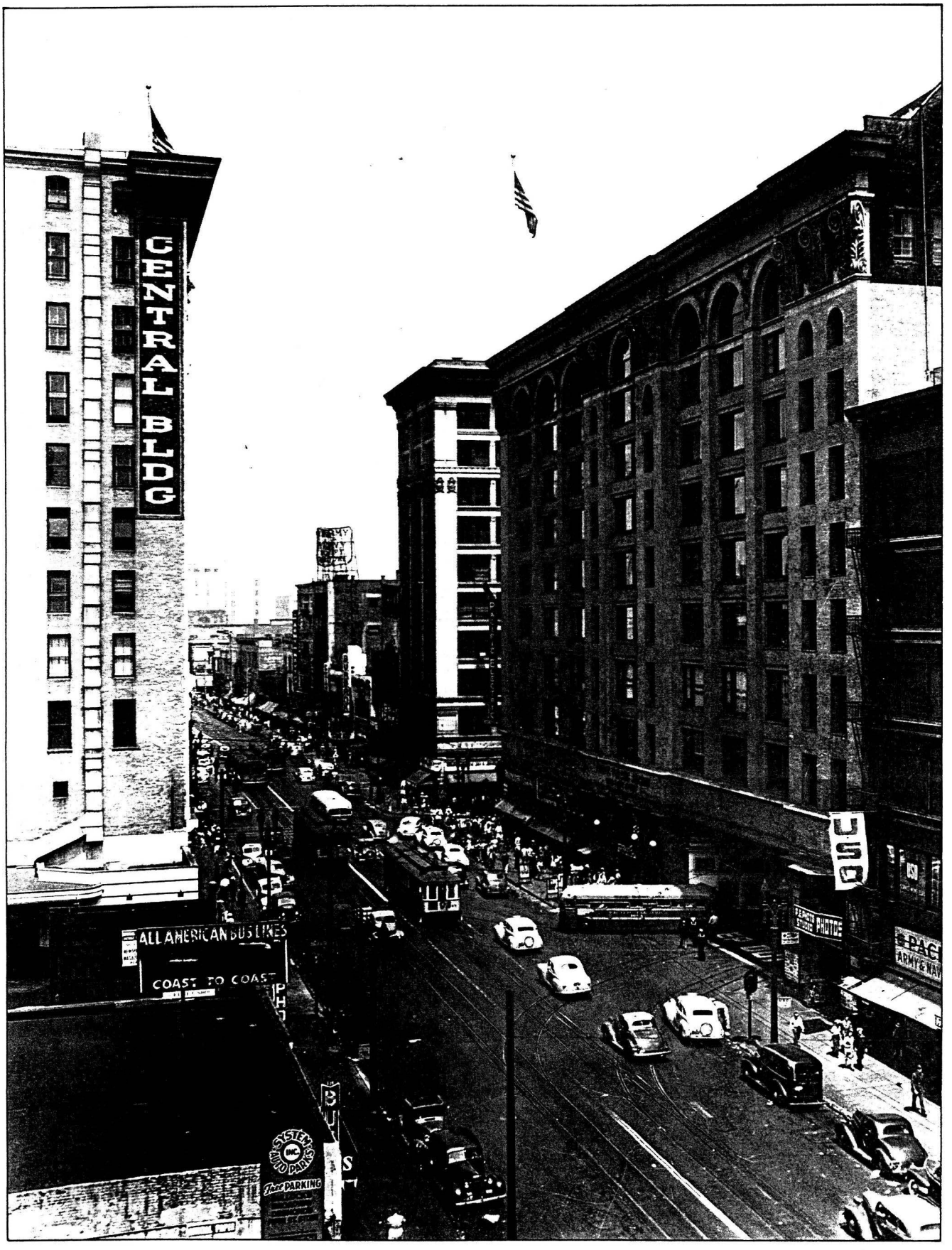
LARY's "Type B" cars were its most numerous. They were also among the most famous of all streetcars due to their frequent appearance in Hollywood movies. Designed by Henry Huntington's engineers specially for the Southern California climate, they became known as "Huntington Standards." Here, early in the morning on May 9, 1909, at the Division 1 carhouse, a LARY crew is about to head into service with No. 321, which had arrived in the first of nine batches from St. Louis Car in 1902. — HUNTINGTON LIBRARY



LARy's "Type H" car entered service in late 1922 seen here along South Broadway. - Street Railways and the Growth of Los Angeles

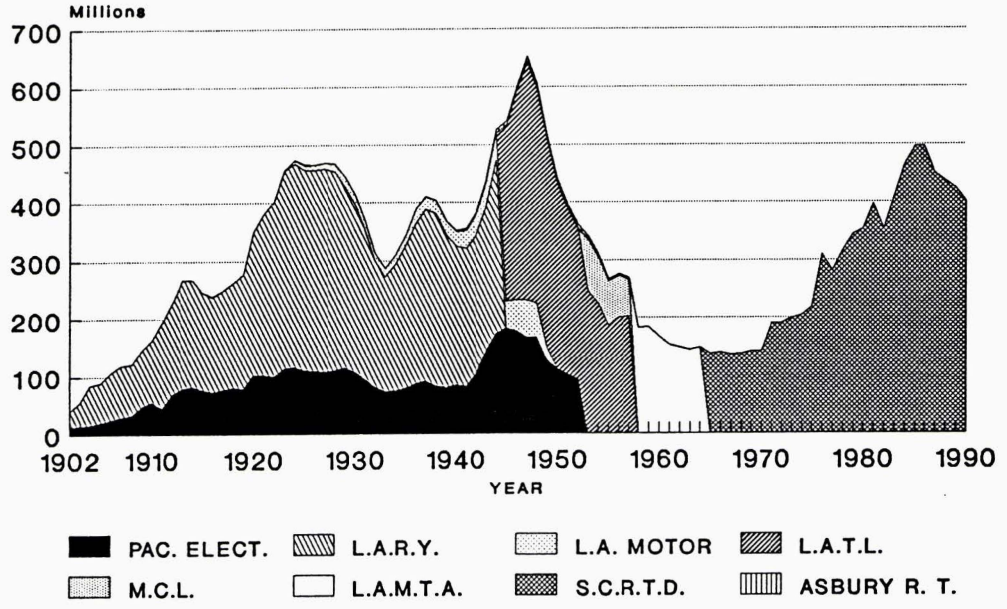


LARy's Huntington standard streetcar along Central Avenue near 43rd Street.- The Yellow Cars of Los Angeles



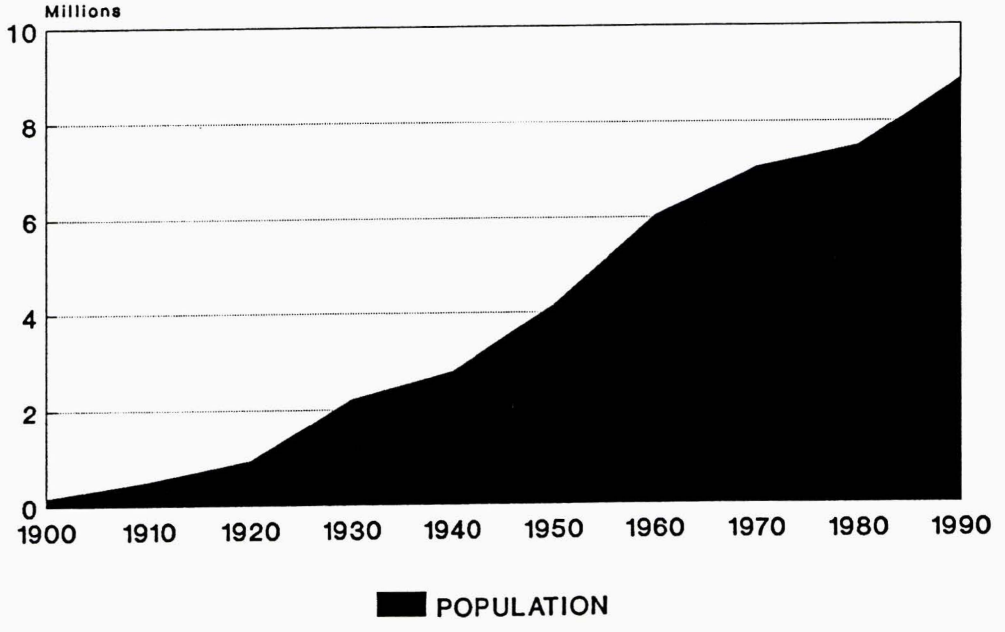
Twin Coach 1664 is pulling out of Main Street Station, hub of much of the Pacific Electric system, in this 1943 view. *SCRTD Collection*

PASSENGERS CARRIED BY MAJOR TRANSIT OPERATIONS

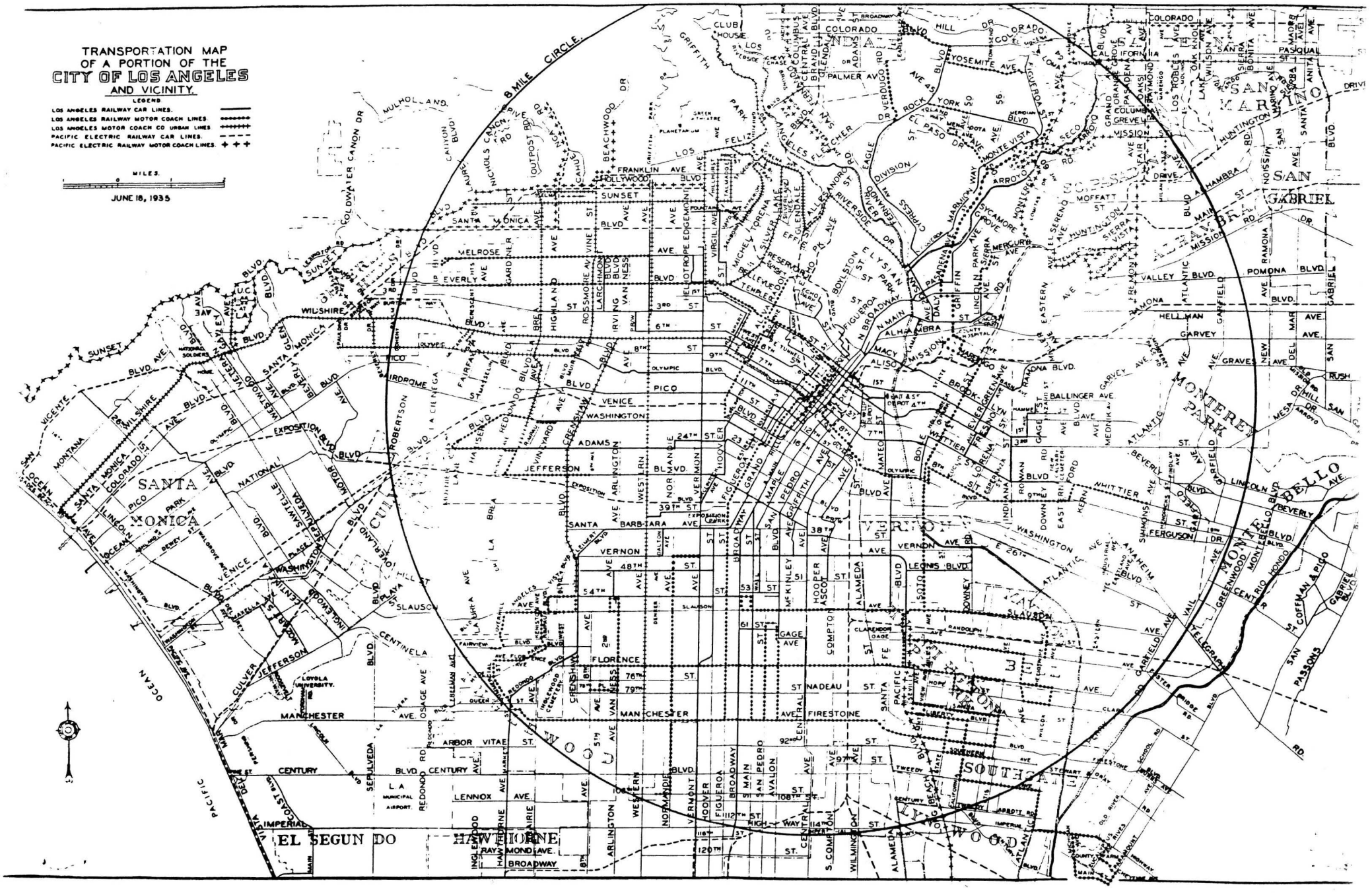


SOURCE: Ron Johnson, SCRTD Planning

L.A. COUNTY POPULATION
1902-1990



Bureau of the Census, Wasshington, D.C.


TRANSPORTATION MAP
OF A PORTION OF THE
CITY OF LOS ANGELES
AND VICINITY.
LEGEND
LOS ANGELES RAILWAY CAR LINES.
LOS ANGELES RAILWAY MOTOR COACH LINES.
LOS ANGELES MOTOR COACH CO URBAN LINES.
PACIFIC ELECTRIC RAILWAY CAR LINES.
PACIFIC ELECTRIC RAILWAY MOTOR COACH LINES.
MILES.
JUNE 18, 1935
8 MILE CIRCLE.
SANTA MONICA
EL SEGUNDO
HAWTHORNE
MONTEREY PARK
MONTE BELLO
SAN GABRIEL
SAN MARINO
SOUTHGATE
LYNWOOD
VERNON
PACIFIC OCEAN
LOYOLA UNIVERSITY.
L.A. MUNICIPAL AIRPORT.

C. Impact of the Urban Form of Los Angeles

The pattern of early twentieth century development in Los Angeles County was influenced by several factors in addition to the electric interurban and streetcar lines. Noted Pacific Electric historian Professor Spencer Crump has listed the mild Mediterranean climate, the transcontinental railroad connections to the region, the development of a deep water port, the completion of the Panama Canal and the construction of aqueducts to import water to the arid southland as other major factors supporting rapid growth.

Much of Los Angeles urban development was directly related to the major regional transportation network. During the period from 1900 to 1924 the region experienced rapid growth (from 170,238 to 1.5 million in 1924), primarily along or adjacent to the Red Car lines as developers paid for extensions of the trolley system to serve their speculative efforts. In 1924 the Pacific Electric reached its peak in terms of passengers carrying 109 million passengers that year over one thousand miles of track.

During the period from 1924 to 1950 the population grew from 1.5 to 2.9 million. The central Los Angeles area experience outward expansion and infilling of areas which remained undeveloped during the period od rapid growth between 1906 to 1924. Construction of an extensive highway network made previously inaccessible areas develop.

During the 1950's population in the region grew by more than 50% to 4.4 million and in the 1960's population growth again exceeded 50% at 6.8 million. The 1970's was a period of reduced growth of the region. The region's population increased by 25% to 8.5 million. Continued construction of the region's 500-mile freeway system supported the continued regional sprawl.

While electric rail lines were not the only factor leading to extraordinary growth, the lines certainly were crucial in determining the special pattern of that growth, particularly in facilitating a pattern of disbursed cities and towns surrounding the urban core. Towns like Huntington Park and Huntington Beach came into being explicitly as real estate developments related to rail. Even Santa Monica, which existed prior to the coming of electric trolleys, tripled its population in the decade after electric trolleys arrived. Region-wide all of the prosperous suburbs were connected by interurban lines during the last decade of the nineteenth century and the first decade of the twentieth.

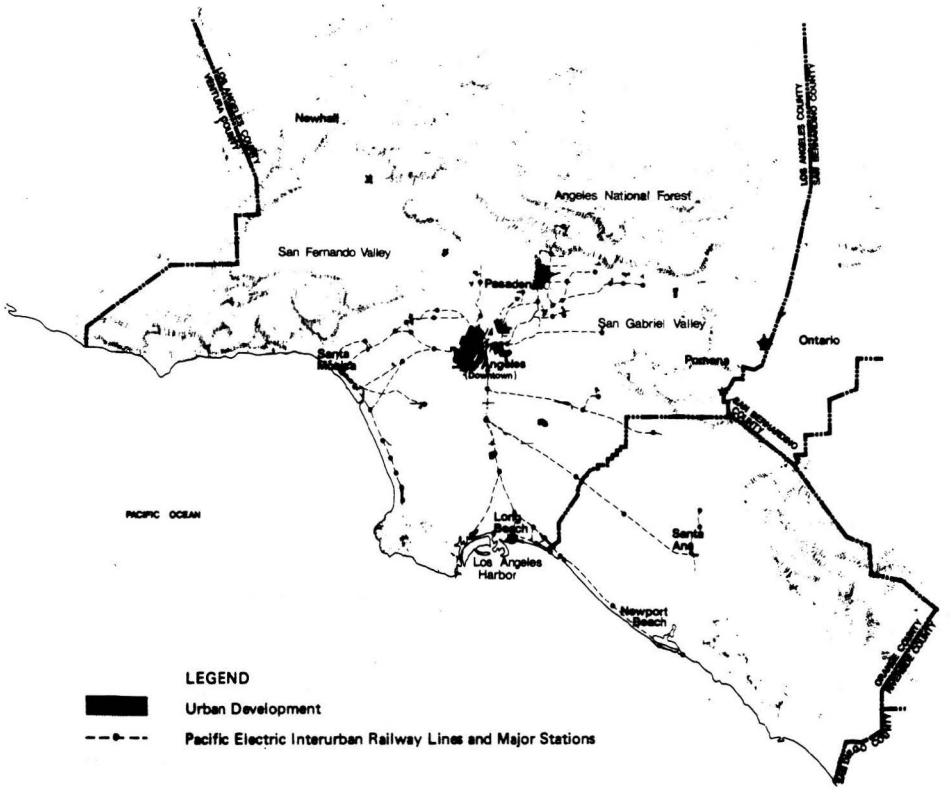
While the standard gauge interurban lines of the Pacific Electric connected the far flung suburbs, the narrow gauge Los Angeles Railway allowed a solid ten mile band of residential neighborhoods to develop throughout the financial core of the City of Los Angeles in the decades prior to widespread auto ownership.

The increase in automobile usage and creation of new roads enabled growth to disperse away from the established urban centers which where along the transportation corridor. Rail lines were increasingly forced to share their right-of-way with an larger number of cars which forced the rail cars to continually reduce speed.

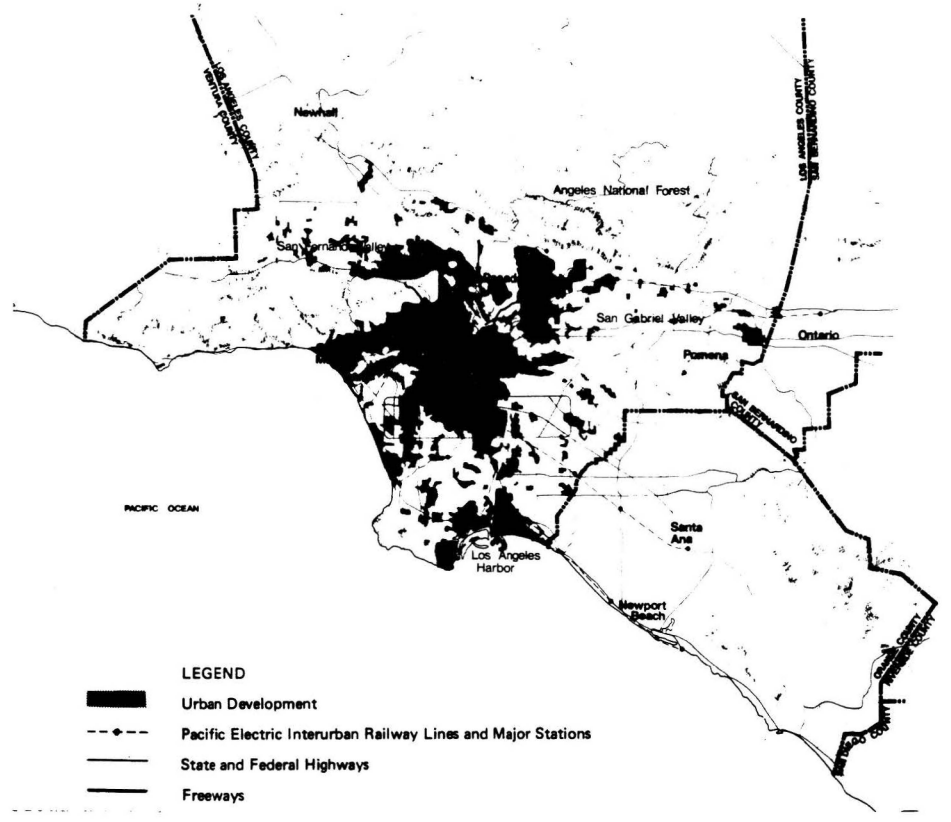
D. Decline of the Original Railway System

Numerous factors influenced the decline of the trolley system both locally and worldwide. Certainly the advent of the automobile ended the virtual monopoly trolleys had briefly held on local urban transportation. Factors such as a Supreme Court decision forbidding the ownership of trolley systems by electric utility companies, the difficulty faced by privately owned trolley companies in competing with publicly financed road improvements, the post World War II decision not to include right of way for transit in Southern California Freeways, the ability of the automobile to make possible much more decentralized suburbs, all contributed to the decline of the trolley. Certainly the often cited purchase and conversion of trolley systems to buses using auto industry financing was not the only cause of the trolleys decline, but one of several which contributed to decreasing its efficiency and its eventual dismantling.

1906



1940



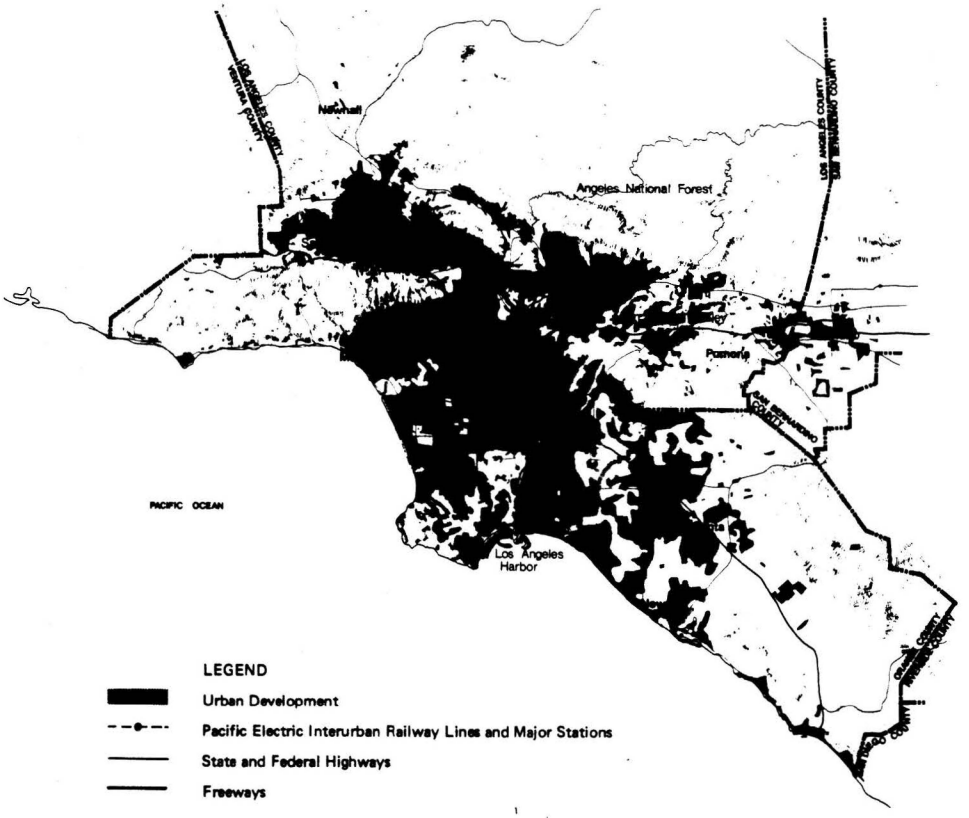
Urban Development and Inter Urban Rail Lines

The Growth-Inducing Impacts of
The I-105 Project and its Alternatives, Gruen Associates, Inc. 1979

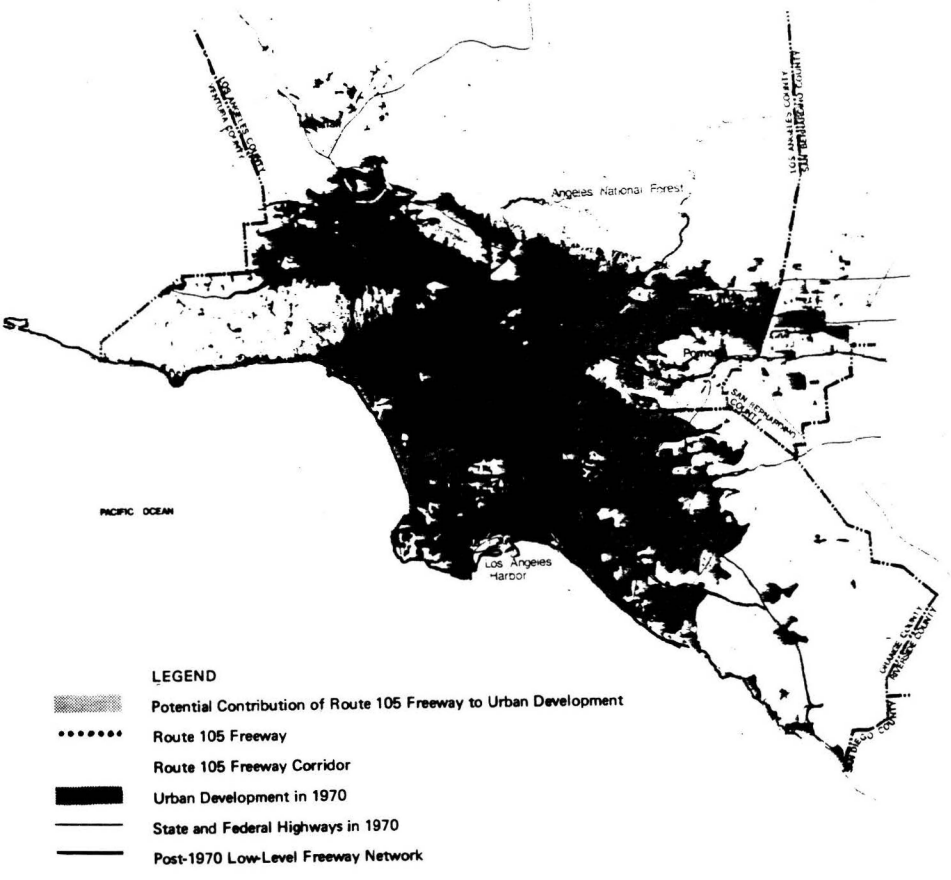
0 5 10 20
SCALE IN MILES

NORTH

1960

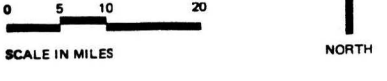


1980



Urban Development and Inter Urban Rail Lines

The Growth-Inducing Impacts of
The I-105 Project and its Alternatives, Gruen Associates, Inc. 1979





Richard Smith

P.C.C. #3039 is being backed into the yard during the last week of service.

CHAPTER III

LOCAL PUBLIC AGENCIES WHICH INFLUENCE LAND USE AND TRANSPORTATION PLANNING

A. Southern California Rapid Transit District

The Southern California Rapid Transit District was established in 1964 by the state legislature to build and operate a cohesive regional transportation system.

Superseding LAMTA, the Southern California Rapid Transit District (SCRTD) was created in 1964. The SCRTD became responsible for all rights and property of the LAMTA. In addition the SCRTD became the regional public bus operator and is also the operator of the Blue Line. At present, the SCRTD operates over 2000 peak hour buses on 190 bus lines, serving over 1.4 million riders a day.

B. City of Los Angeles Department of City Planning

By Charter, the Department of City Planning is responsible for the preparation and implementation of a Comprehensive General Plan which sets forth goals, objectives, policies and implementation programs to guide long-range growth and development in the City. The umbrella document for the General Plan is its Citywide framework (Concept Los Angeles and Citywide Plan, adopted in 1974, is now being revised under the newly funded FRAMEWORK WORK PROGRAM which will balance citywide growth and infrastructure). The integration of land use with transportation is a key component of the framework.

In addition, through its authority for review and recommendation of discretionary actions such as zone changes, conditional use permits, subdivisions and parcel maps, the Department is also responsible for implementation of the City's General Plan, which includes 35 community planning areas. A five-member Planning Commission, appointed by the Mayor, directs policy for the Department.

Other functions of the Department include: the Office of Zoning Administration, including its five-member Board of Zoning Appeals.

C. Los Angeles City Department of Transportation

The Los Angeles City Department of Transportation (LADOT) is responsible for the development of plans to meet the ground transportation needs of the traveling public and commerce; it has centralized authority over the conceptual planning and operation of the City's streets and highways. The Department provides for the installation and maintenance

of traffic signals, the striping of streets, signage, parking enforcement, bike paths among other things. The Rail Transit Program Division of LADOT is responsible for project analysis and interagency coordination for the City of Los Angeles.

In addition, LADOT also operates the Commuter Express and DASH lines. Currently, the DASH fleet consists of 28 buses that serve 5 routes throughout the downtown Los Angeles area. Yearly ridership estimates for the lines are estimated at 2,117,000. The Commuter Express fleet consists of 35 buses that serve 8 routes, bringing commuters into downtown from the surrounding areas. Yearly ridership estimates for the lines are estimated at 447,000.

D. Los Angeles County Transportation Commission

The Los Angeles County Transportation Commission (LACTC) was created in 1976 by the California Legislature to function as the primary transportation authority in Los Angeles County. The Commission's eleven member board sets public transit policies and funds transit projects, such as the County's streets and highways, rail transit, buses, shuttles, dial-a-rides, social service transportation, bikeways and other public transit systems. Internally the Commission is divided into five different divisions: the Rail Construction Corporation (RCC), the Commuter Rail Development Team, the six Area Teams, the Financial and Administrative Services Team, and the Strategic Support Team. In addition, LACTC also works closely with all transportation-related agencies, such as the Air Quality Management District (AQMD), the State Department of Transportation (CalTrans), the Southern California Rapid Transit District and twelve other public bus operators, the Federal Department of Transportation, the Urban Mass Transportation Administration (UMTA), and the Federal Highway Administration (FHWA). LACTC receives its funding from a variety of sources which include: local, state, federal, and private funds.

E. California Department of Transportation (CalTrans)

The State Department of transportation, known as Caltrans, has broad responsibility for the planning, design, operation and maintenance of the state highway system. Caltrans is also responsible for various activities in overall transportation planning, mass transportation and aeronautics. Under the transportation planning program, Caltrans is responsible for analyzing transportation policy issues, developing a systems plan for the effective integration of the various modes of transportation, coordinating development evaluation of regional plans and transportation improvement programs. Under the highway program, Caltrans is responsible for developing, operating, rehabilitating and maintaining the state highway system; making operational improvements to the system to increase safety and improve traffic flow; and expanding the capacity of the system. Under the mass transportation program, Caltrans is responsible for administering

various state-funded programs for transit operators; providing technical assistance to transit operators. Under the aeronautics program, Caltrans is responsible for administering state-funded programs for aiding local governments in general airport acquisition and development; conducting safety and permit inspections of general aviation airport facilities; developing the California Aviation System Plan; conducting general aviation safety education programs; and ensuring compliance with California's airport noise standards. Funding for the Department comes from a variety of sources of which include: fuel taxes, truck weight fees, miscellaneous (interest income, other income, reserve/surplus, and reimbursements), federal aid, state aid, county funds, local sales tax, and local general funds.

F. Southern California Association of Governments

The Southern California Association of Governments (SCAG) was established to act as a vehicle by which city and county governments could examine common problems and identify solutions to them. Currently, SCAG serves over 13 million people covering 38,000 square miles. It is staffed by professional planners who examine the region's problems and work to solve them. SCAG's members include six counties (Los Angeles, Orange, Riverside, San Bernardino, Ventura, and Imperial) and over 180 cities. SCAG also works with a number of other agencies, ranging from the federal and state governments to the local city-planning bodies and housing boards. Funding is provided through grants from federal and state agencies, and by dues paid by its members.

G. South Coast Air Quality Management District

The South Coast Air Quality Management District (SCAQMD) is responsible for monitoring and controlling both stationary and mobile sources of pollution. It also prepares and regularly updates the Air Quality Management Plan, a regional blueprint for attaining air quality standards; maintains a network of 34 air monitoring stations to track pollutant levels; researches new technologies that will help clean the air; and coordinates public outreach to the communities they serve. The SCAQMD employs over 800 people which includes scientists, engineers, chemists, planners, inspectors, attorneys, technicians and support staff. The majority of funding is acquired from fees and fines from polluters with the remainder coming from federal and state subsidies, grants and other sources. The agency also works with a number of federal, state and local agencies some of which include the Southern California Association of Governments (SCAG), the California Air Resource Board (ARB), etc.

H. Community Redevelopment Agency

The Community Redevelopment Agency for the City of Los Angeles currently implements 20 redevelopment projects throughout the city of Los

Angeles. The CRA may implement the adopted Redevelopment Plan using a variety of implementing tools including use of tax-increment funds, developer incentives, permit approval process, as well as project specific land use and transportation plans as long as these plans are consistent with the adopted Redevelopment Plan and City's General Plan.

I. Congestion Management Program

The Congestion Management Program (CMP) is a new countywide program enacted by the state to improve traffic congestion in California's urbanized areas. The CMP originated in the State Legislature with the passage of Assembly Bill 471 (1989) and Assembly Bill 1791 (1990). The Program requirements became effective when Proposition 111 was enacted by the Voters in June 1990. Proposition 111 increased the state gas tax by nine cents over a five year period.

In passing the Congestion Management Program, the State Legislature emphasized the importance of California's transportation system to maintaining the economic vitality of the State. To address the magnitude of these problems, a Congestion Management Program was created with the following objective:

- To link land use, transportation and air quality decisions;
- To develop a partnership among transportation decision makers on developing appropriate transportation solutions that include all modes of travel; and
- That the CMP be the basis for proposing transportation projects which are eligible to complete for State gas tax funds.

A Congestion Management Agency is designated by local jurisdiction to develop, implement, and annually update a Congestion Management Program. The Congestion management program is to be develop in partnership with various government agencies including cities, counties, Caltrans, transit operators, South Coast Air Quality Management District (SCAQMD), and the Southern california Association of Governments (SCAG).

LACTC will annually review the performance of each of the cities and the County of Los Angeles to verify that they are conforming to the CMP requirements.

LACTC 30 Year Integrated Transportation Plan

The proposed 30 Year Transportation Plan is envisioned as a strategic document that will serve as a framework for the future Los Angeles County Transportation Commission (LACTC) actions regarding the allocation of resources to meet the mobility needs of Los Angeles County residents. The Proposed Plan funds a multi-modal system network including rail, improved bus service and High Occupancy Vehicle (HOV) network which are designed to meet the mobility and help meet the air quality goals of the region.

1. Highway Component

The highway component of the Proposed Plan will increase mobility by the providing for the creation of additional HOV lanes, gap closures, signal synchronization systems and other capacity improvements. Additionally, the Proposed Plan recommends Tow Service Patrol and Transportation Systems Management.

2. Bus Component

The bus component of this proposed plan increases the peak by approximately 1,700 buses by the year 2010 and will include 503 electric trolley buses. Approximately 65 percent of the estimate increase of 1,700 peak buses will be phased-in over the next ten years.

3. Transportation Demand Management Component

A very substantial Transportation Demand Management Component will be required to meet the mode split required be regional air quality goals. The LACTC 30-Year Integrated Transportation Plan projects a transit mode split of 10.3 percent with the balance of the multi occupant vehicle mode split goal of 19.4 percent,contained in the Air Quality Management Plan (9.1 percent) attained through car-pools and van pools.

If this ride-sharing goal is met, land use planning will need to incorporate provisions for preferential treatment of rideshare vehicles. In addition, after physical provision i made for ride-sharing at the planing stage (high occupance vehicle lanes, preferential parking for car and van pools etc.) planning will need to incorporate economic policies which will encourage ride-sharing once new development is completed. Policies might include parking costs, building/occupant subsidies of car and van-pools, corporate transit pass purchasing, definitions od amounts of parking etc.

4. Rail Component

The draft 30-Year Plan includes approximately 210 miles of urban rail and 190 miles of Commuter Rail. While some of this system is currently in operation, there is a significant part under construction and/or in design, and the rest of the proposed system is under active study.

a. Rail Service In Operation

Metro Blue Line

In July 1990, the Metro Blue Line became the first public rail line to open in Los Angeles County in 26 years. This 22-mile light rail line between Long Beach and downtown Los Angeles, has 22 stations and serves both commute trips and local non-work related trips.

b. Rail Projects Under Design and Construction

Metro Red Line

Segment 1 of this Heavy Rail Line is 4.4 miles in length, has 5 stations and connects Union Station to Wilshire/Alvarado. This segment is under construction and expected to open in September 1993.

Segment 2 of this line will be 6.7 miles in length, will have 8 stations, and will connect the Wilshire Section from Alvarado to Western, and the Hollywood Section to Hollywood and Vine. The first construction contracts for this segment were awarded in the early part of 1991. The Wilshire/Western section of the segment is expected to open in 1996, and the extension to Hollywood/Vine in 1998.

Segment 3 of the Red Line will be 6.3 miles in length, will have 3 stations, and will connect Hollywood/Vine to Lankershim Boulevard/Chandler Boulevard in North Hollywood. The construction on this segment is likely to begin in 1994 and the line is expected to open in the Year 2001.

Metro Green Line

This Automated Rail Transit Line is 23 miles in length, has 16 stations, and connects Norwalk (at I-605) to El Segundo. This line is currently under construction, and is expected to open in October 1994, depending on the opening of the Glenn Anderson (I-105) Freeway.

5. Metro and Commuter Rail Lines Under Study/Planning

a. Metro Orange Line

Eastern Extension: The LACTC has recieved authorization from UMTA to an alternatives analysis for the possible eastern extension of the Metro Red Line into the eastern part of Los Angeles. This study has just begun, with the consideration being given to a full range of alternatives potentially serving the Boyle Heights district of Los Angeles and a portionof Los Angeles County.

Western Extension: LACTC is proposing a two station, 2.3 mile extension of the Metro Red Line from the Wilshire/Western Station to the Mid-City area. Stations are proposed at Olympic and Crenshaw Boulevards, and Pico and San Vicente Boulevards. The LACTC is currently in the process of re-evaluating a 1987 environmental document. An alternatives analysis process will be initiated in 1992 to study extensions from the interim Pico and San Vicente terminus.

b. San Fernando Valley Rail Project

This 5.6-mile long rail line is proposed to connect Lankershim Boulevard in North Hollywood to Sepulveda Boulevard in Van Nuys. Three stations are proposed on this rail line, while is planned for opening in 2001. The EIR for this project has been approved, with the Southern Pacific Burbank Branch right-of-way selected as the preferred alignment. Construction on this project is likely to start in 1995-96.

c. Pasadena-Los Angeles Light Rail Project

This 13.6-mile long rail line is proposed to have 14 stations and connect Sierra Madre Villa in Pasadena to Union Station in downtown Los Angeles. Service on the line could begin in 1996, subject to funding, design and construction determination. The EIR for the project is approved with the Highland Park route and no-subway downtown alternative selected as the preferred alternative. Construction on the project could start in Fiscal Year 1993-94.

d. Commuter Rail Lines

Metrolink is a regional rail network which will ultimately have more than 400 route miles and approximately 60 stations that will link downtown Los Angeles. Metrolink will be operated by the Southern California Regional Rail Authority, composed of appointed members representing Los Angeles, Orange, Riverside, San Bernardino and Ventura counties.

Metrolink will operate streamlined, bi-level passenger cars on existing rail

lines pulled by the most modern and quiet diesel locomotives. Initially, three corridors will be operational - San Bernardino, Santa Clarita and Ventura County (Moorpark), with Orange and Riverside county corridors to be added a year later.

Commuter Rail Service in Los Angeles County is expected to begin in October 1992 on the following lines:

- San Bernardino to Los Angeles: 60 miles (from downtown San Bernardino to Union Station in Los Angeles); 11 Stations.
- Moorpark to Los Angeles: 50 miles (from eastern Ventura County to Union Station in Los Angeles); 6 Stations.
- Santa Clarita to Los Angeles (Union Station): 35 miles; 5 or 6 stations.

The following Commuter Rail Services are also proposed, but their opening dates are currently undetermined:

- Southern Orange County to Los Angeles Union Station: 60 miles.
- San Bernardino to Riverside to Fullerton to Los Angeles or Irvine: 60 miles.

RAIL AND MOTOR COACH LINES OF THE PACIFIC ELECTRIC RAILWAY IN SOUTHERN CALIFORNIA

SCALE IN MILES

LEGEND

- RAIL LINES—PASSENGER AND FREIGHT
- RAIL LINES—PASSENGER ONLY
- RAIL LINES—FREIGHT ONLY
- MOTOR COACH LINES

DOWNTOWN LOS ANGELES

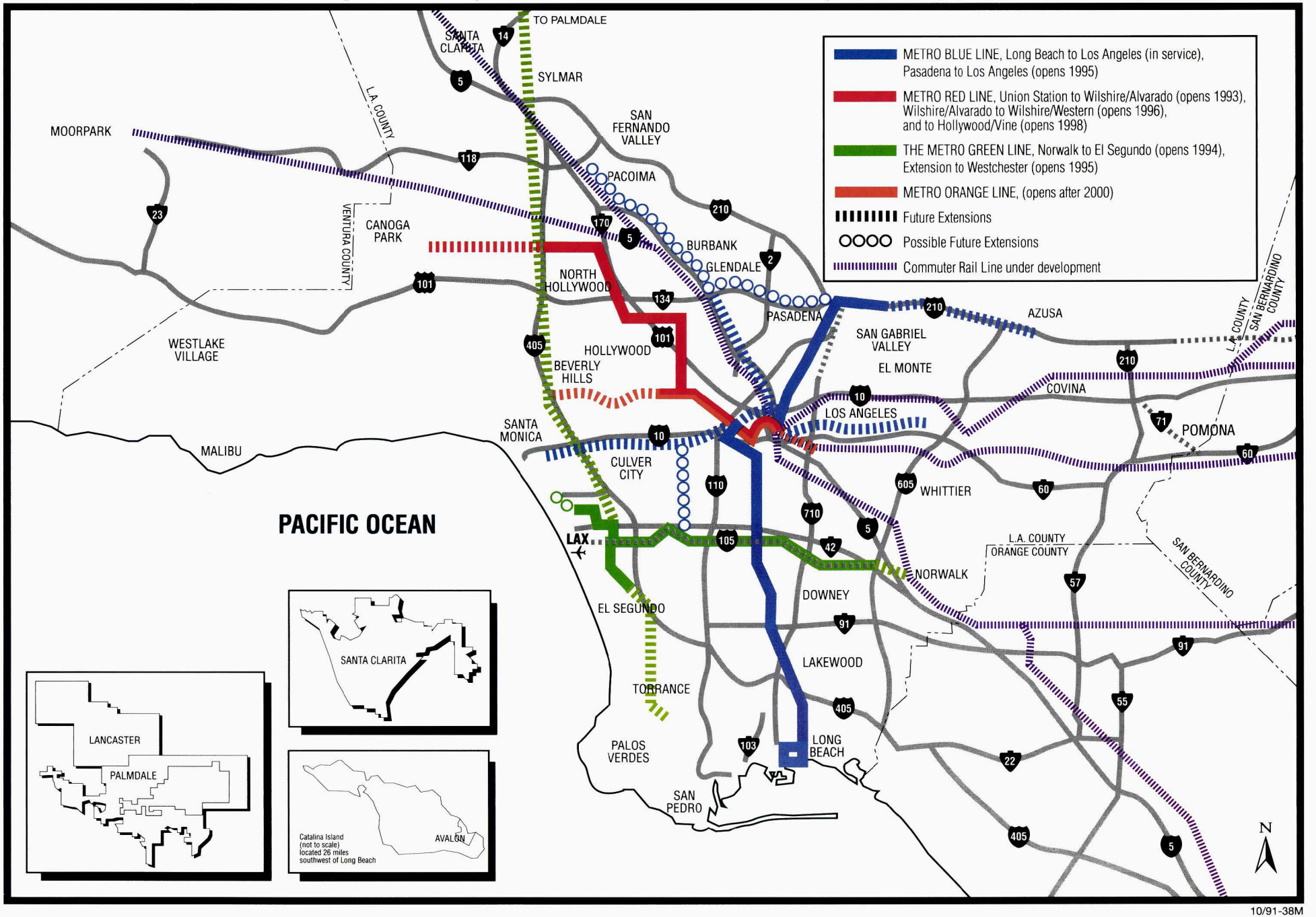
SANTA CATALINA ISLAND

August, 1949

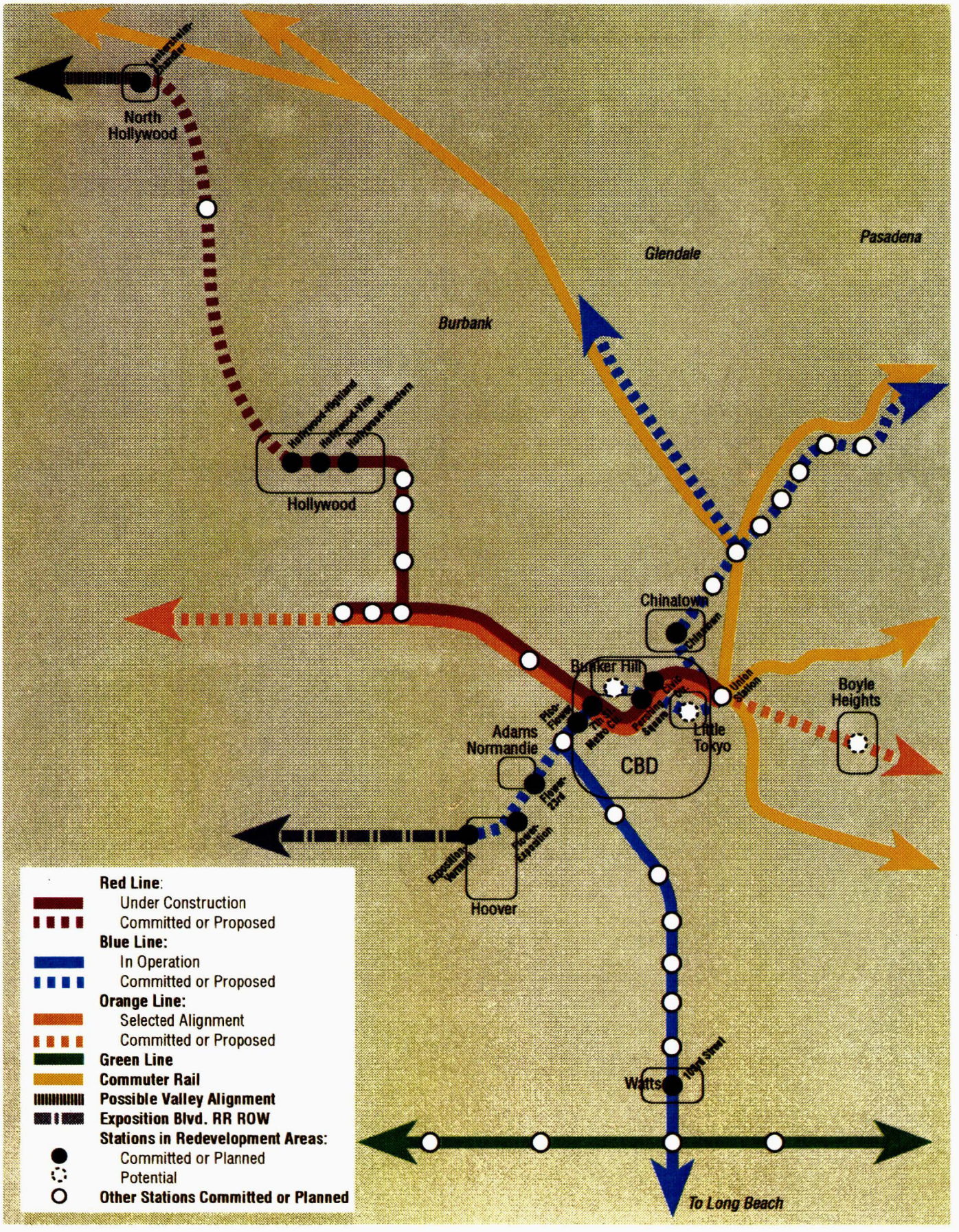
INTERURBANS P.O. Box 6444 Glendale, California 91205

Reprint

Los Angeles
Metro Rail System (Draft 30-Year Plan)



10/91-38M



Regional Rail Alignments & Stations Serving Redevelopment Areas

CRA/LA . November 1991

METRO RAIL STATIONS IN REDEVELOPMENT AREAS

MAP REF	REDEVELOPMENT AREAS	STATIONS	ALIGNMENTS
1	CHINATOWN	Chinatown	Blue Line
3	NORTH HOLLYWOOD	Lankershim-Chandler	Red Line Valley Extension
6	HOLLYWOOD	Hollywood-Western Hollywood-Vine Hollywood-Highland	Red Line Red Line Red Line
7	LITTLE TOKYO	Little Tokyo (?)	Downtown Connector (?)
8	CENTRAL BUSINESS DISTRICT	Civic Center Pershing Square 7th ST. Metro Center Pico-Flower	Red Line Red Line Red Line Blue Line Blue Line
9	BUNKER HILL	Civic Center 4th-5th & Hill St.	Red Line Downtown Connector (?) Red Line
11	ADAMS NORMANDIE	Flower St.-23rd ST. (?)	Blue Line
12	HOOVER-HOOVER EXPANSION	Flower St.-Exposition Blvd. (?) Exposition Blvd.-Vermont Ave. (?)	Blue Line Blue Line
15	WATTS	103rd St.	Blue Line
18/19	BOYLE HEIGHTS I & II	One station	Orange Line

NOTES:
(?) indicates that station locations and/or alignments have not yet been selected.

A:SINA1\mrstations 11/19/91

RAIL ALIGNMENTS & STATIONS SERVING REDEVLOPMENT AREAS

MAP REF	CRA PROJECT AREA	RAIL LINE THROUGH CRA PROJECT		RAIL LINE ADJACENT TO CRA PROJECT	
		ALLIGNMENT	STATIONS	ALLIGNMENT	STATIONS
1	CHINATOWN	Pasadena Blue Line	1	Commuter Rail	1
2	MONTEREY HILLS	None		Pasadena Blue Line	1
3	NORTH HOLLYWOOD	Metro Red Line Valley Extension	1	None	
4	CRENSHAW	None		None	
5	RODEO/LACIENEGA	None		None	
6	HOLLYWOOD	Metro Red Line	3	None	
7	LITTLE TOKYO	Downtown Connector (?)	1 (?)	None	
8	CENTRAL BUSINESS DISTRICT	Long Beach Blue Line Downtown Connector Metro Red Line	2 1 (?) 3	Commuter Rail Orange Line East	1 1 (?)
9	BUNKER HILL	Metro Red Line Downtown Connector	2 1 (?)	None	
10	NORMANDIE 5	None		None	
11	ADAMS NORMANDIE	Exposition Line	1 (?)	None	
12	HOOVER/HOOVER EXPANSION	Exposition Line	2 (?)	None	
13	LOS ANGELES HARBOR	None		None	
14	BEACON STREET	None		None	
15	WATTS	Long Beach Blue Line	1	Green Line	1
16/17	PICO UNION I & II	None		None	
18/19	BOYLE HEIGHTS I & II	Orange Line East	1 (?)	None	
20	LINCOLN HEIGHTS I	None		Pasadena Blue Line	1

NOTES:

1) The Metro Red Line stations in Civic Center and 4th/5th & Hill have portals in both Bunker Hill and CBD.
2) The station location for the Commuter Rail in Chinatown and CBD is Union Station.
3) (?) indicates that alignment and/or station locations have not yet been selected.

A:SINA5\30YRSHAD 11/13/91

LOS ANGELES COUNTY
city boundaries

LOS ANGELES COUNTY TRANSPORTATION COMMISSION
LACTC

1 2 3 4 5
Scale in miles

▲ Santa Clarita located off map (see inset at left)

▲ Lancaster/Palmdale located off map (see inset below)

SANTA CLARITA
Ventura Co.
AGOURA HILLS
WESTLAKE VILLAGE
HIDDEN HILLS
SAN FERNANDO
CITY OF LOS ANGELES (San Fernando Valley)
BURBANK
GLENDALE
LA CANADA FLINTRIDGE
PASADENA
SIERRA MADRE
MONROVIA
ARCADIA
BRADBURY
DUARTE
AZUSA
GLENDORA
SAN MARINO
SOUTH PASADENA
IRWINDALE
LA VERNE
CLAREMONT
CITY OF LOS ANGELES (West Los Angeles)
BEVERLY HILLS
WEST HOLLYWOOD
SAN GABRIEL
TEMPLE CITY
ALHAMBRA
BALDWIN PARK
COVINA
SAN DIMAS
EL MONTE
ROSEMEAD
WEST COVINA
POMONA
CITY OF LOS ANGELES (Central Los Angeles)
MONTEREY PARK
SOUTH WHITTIER
LA PUENTE
WALNUT
SANTA MONICA
MONTEBELLO
INDUSTRY
DIAMOND BAR
CULVER CITY
VERNON
COMMERCE
MAYWOOD
PICO RIVERA
PORTINGTON PARK
BELL
BELL GARDENS
CUDAHY
WHITTIER
LA HABRA HEIGHTS
CITY OF LOS ANGELES (West Los Angeles)
INGLEWOOD
SOUTH GATE
SANTA FE SPRINGS
Orange Co.
HAWTHORNE
LYNWOOD
NORWALK
LA MIRADA
EL SEGUNDO
GARDENA
PARAMOUNT
COMPTON
MANHATTAN BEACH
LAWNDALE
BELLFLOWER
CERRITOS
ARTESIA
HERMOSA BEACH
REDONDO BEACH
LAKEWOOD
TORRANCE
CARSON
LONG BEACH
HAWAIIAN GARDENS
PALOS VERDES ESTATES
LOMITA
SIGNAL HILL
LONG BEACH
CITY OF LOS ANGELES (Harbor)
ROLLING HILLS ESTATES
ROLLING HILLS
RANCHO PALOS VERDES
LANCASTER
PALMDALE
PACIFIC OCEAN

Avalon
(not to scale)
located 26 miles
southwest of Long Beach
AVALON

mobile pubs / rickbell media

CHAPTER IV
THE CITY OF LOS ANGELES GENERAL PLAN

A. CENTERS CONCEPT OR TARGETED GROWTH AREAS

CONCEPT LOS ANGELES, adopted by the City Council in 1974, is still the current policy regarding the preferred urban form for the City of Los Angeles. It is part of the General Plan and a 20-year Citywide Plan effort to guide the future and long-range development of the City. CONCEPT LOS ANGELES outlines a series of centers located throughout the City. The Centers Concept was endorsed by the public through an intensive citizen participation effort (Goals Program) conducted by the Planning Department in the 1960's. The Centers Concept also addresses the issues of community character and jobs/housing balance, and is designed to achieve the objectives contained in the Statement of Goals.

The Concept features five basic components: suburbs; centers; open space of various sizes serving recreational functions; industrial areas at locations convenient to residences, transportation and freight facilities; and comprehensive transportation system consisting of: improved highway and freeway system, rapid transit network with feeder lines, peripheral parking and local buses, bikeways, region-wide air and freight terminal movement systems. Major centers of residence and business served by public transportation are a significant component of the plan.

Thirty-seven centers are located within the City of Los Angeles varying in size, shape and intensity. They will be the dominant physical elements in the City. Each center will offer a combination of appropriate residential, commercial cultural, recreation, and compatible industrial uses. The intensity and mixed land use characteristics in centers will define them within the metropolitan region. The plan provides that population growth can be accommodated through proper land use control and other policy implementation techniques.

A typical center will function as a focal point for adjacent suburbs and nodes and will have about one-quarter mile radius "core" containing a rapid transit station, high-rise office structures, department stores, hotels, theaters, restaurants and government offices. The core will function on a three-dimensional basis. The Center's circulation system should be related closely to adjacent suburbs and nodes so as to decrease the need for long distance commuter travel.

The suburbs are a key feature of the Concept and will contain the bulk of the City's open space, including neighborhood, community and regional parks and recreational sites, scenic preserves and specialized recreational facilities such as bikeways and equestrian trails.

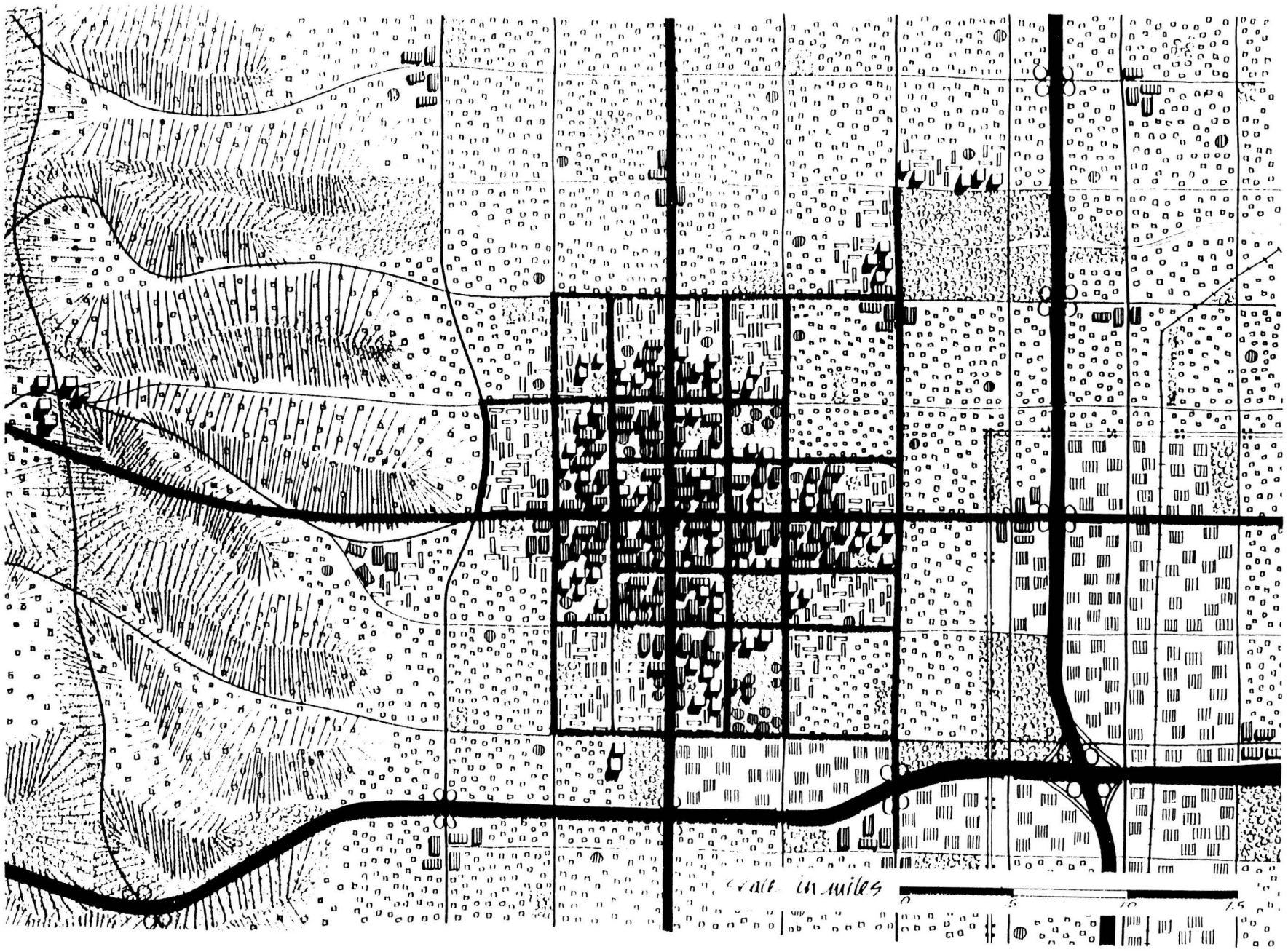


DIAGRAM ILLUSTRATING THE CENTERS CONCEPTS
From Centers Definition Report, Los Angeles City Planning Department

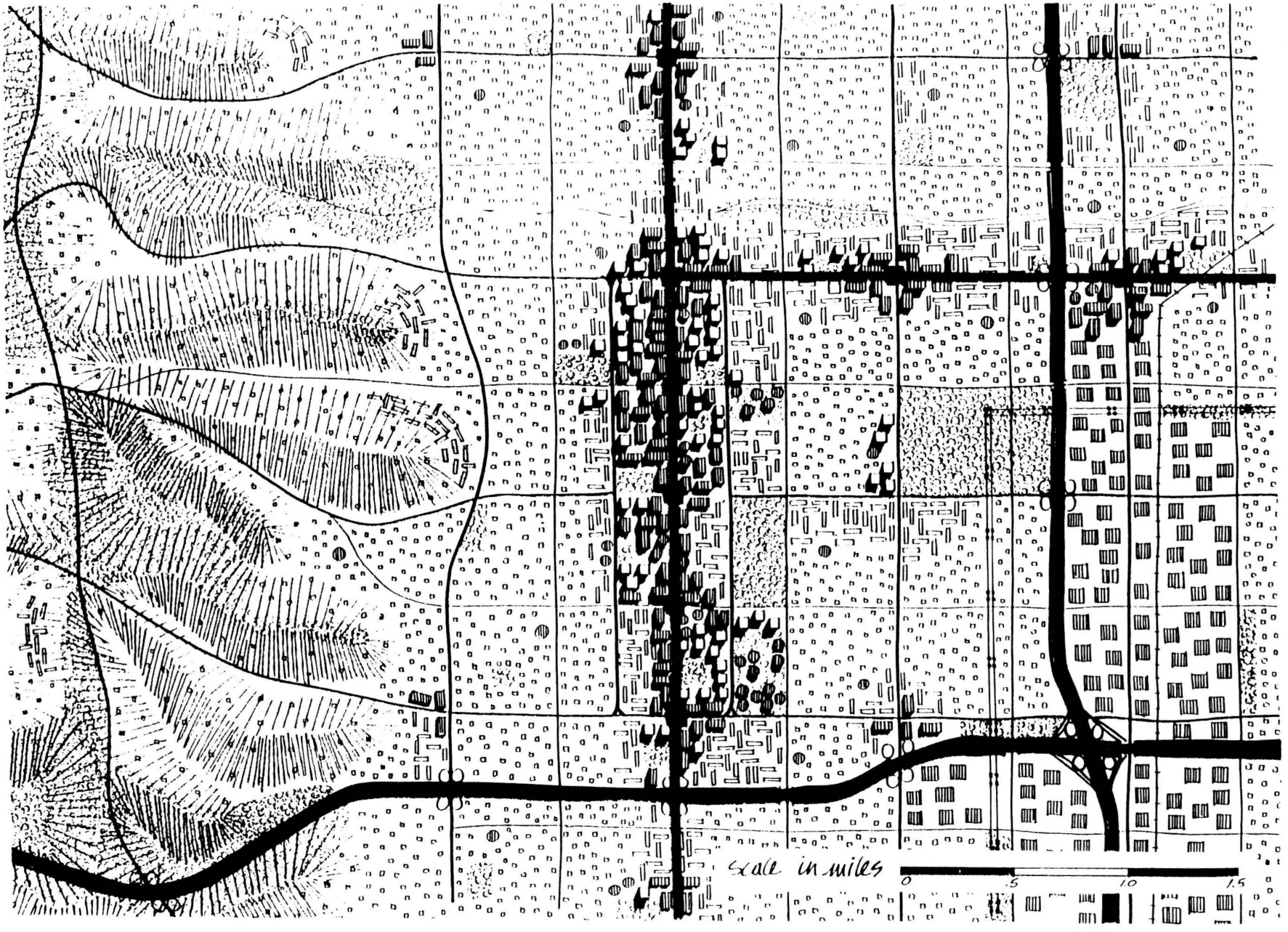


DIAGRAM ILLUSTRATING THE CORRIDORS CONCEPT
From Centers Definition Report, Los Angeles City Planning Department

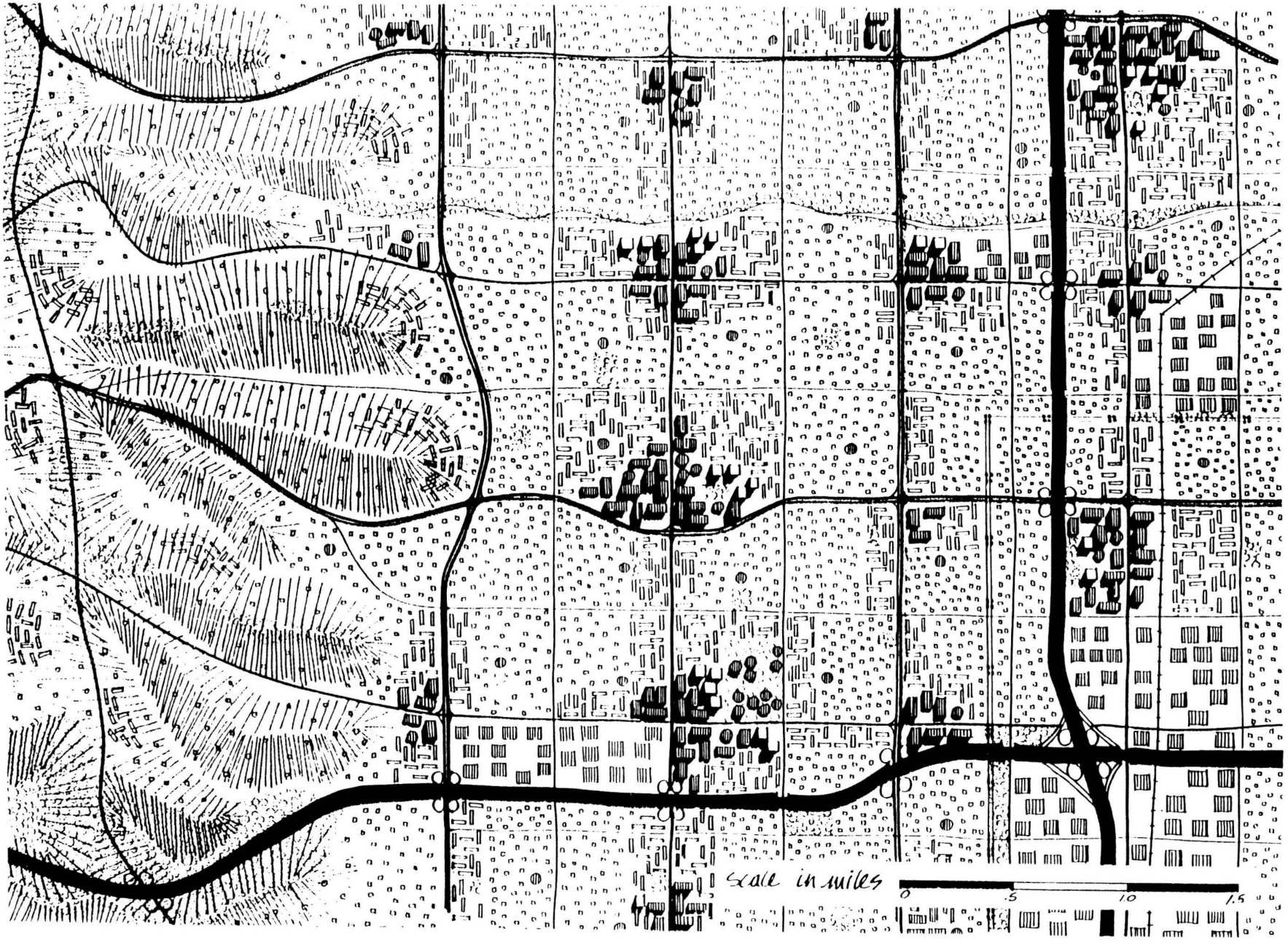


DIAGRAM ILLUSTRATING THE DISPERSION CONCEPT
From Centers Definition Report, Los Angeles City Planning Department

The following is a list and brief description of implementation tools available to Los Angeles city planners which may be used for station area planning. Each rail station presents a different context or situation so the constellation of appropriate land use planning tools will vary station by station. Before any of these techniques can be put in place, it is necessary to ascertain what individual property owners envision as the development capacity for their sites, and what the surrounding community expects or envisions as the station area potential.

B. GENERAL PLAN

California state law requires each city and county to adopt a long- term comprehensive general plan which must be an integrated, internally consistent and compatible statement of goals, objectives, policies, and implementation programs which provides a basis for rational decision making regarding the City's long-term physical development.

The general plan expresses the community development goals and policies relative to the distribution of future land use. The plan integrates the citywide elements, community plans and neighborhood plans, and gives policy direction to the planning regulatory and proactive implementation programs.

The City of Los Angeles' comprehensive general plan is currently being revised. The format for the revised General Plan consists of a hierarchy of five components which guide the subsequent levels that make the policy direction more specific. The components are: Citywide General Plan Framework; Primary Citywide Elements; Secondary Citywide Elements; Community Plans, and Neighborhood plans.

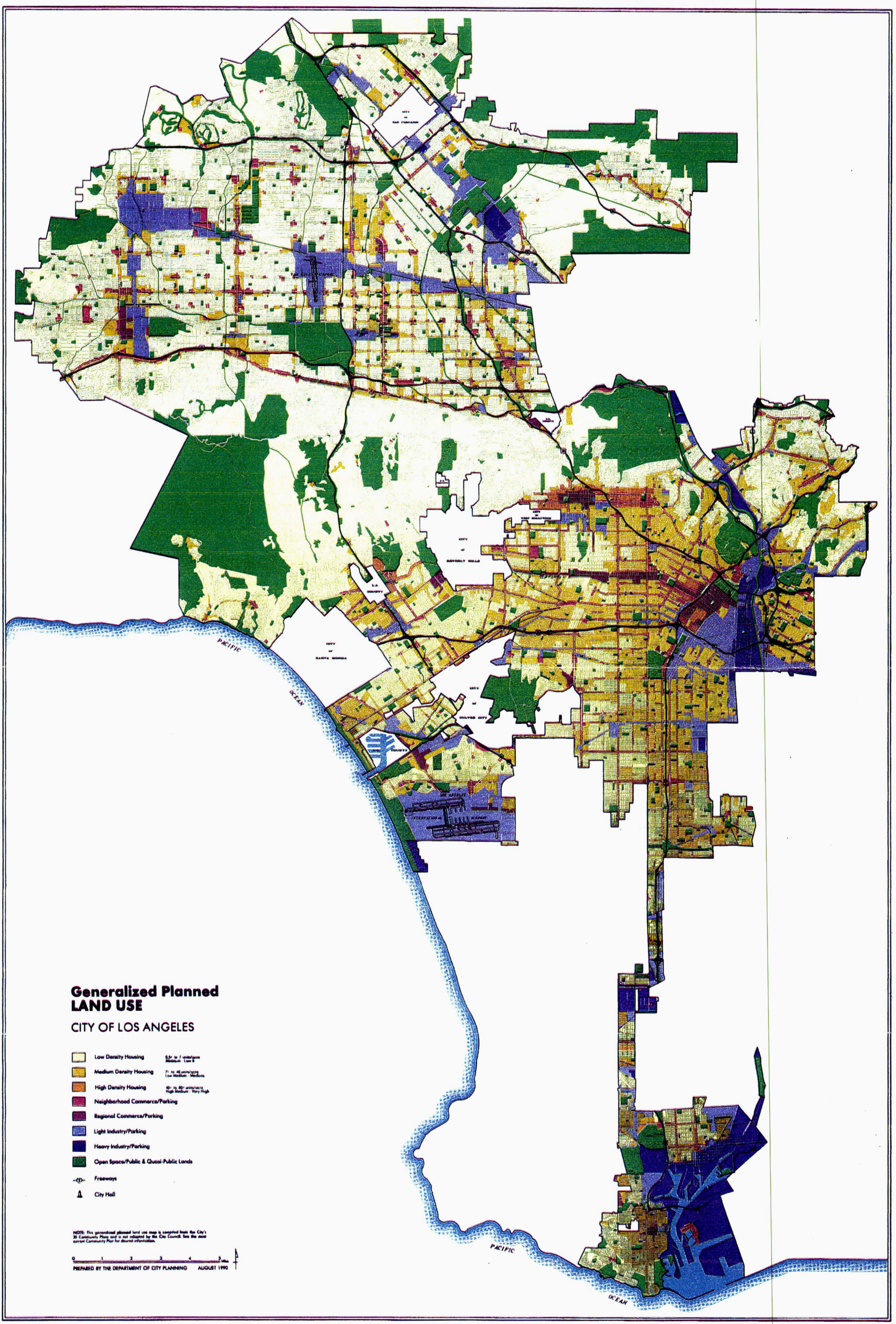
Citywide General Plan Framework brings the demands on urban systems into equilibrium with the systems' capacities and maintains that balance in the future. The following inter-related factors and their interaction will be addressed: centers/urban form, jobs/housing relationship, growth/infrastructure balance, economic, revitalization and capital improvements programming strategies. This component is the umbrella concept which ties all of the other components together.

Primary Citywide Elements provide long-range citywide policy direction, which include citywide goals and needs, and also interacts to affect the type, location, and intensity of land uses--timing and phasing of development. This component includes the following elements: Air Quality, Transportation, Housing, Infrastructure Systems, Conservation, Open Space and unique plans (LAX, Port of Los Angeles).

The third component, Secondary Citywide Elements, are those which respond to, but do not dictate, the type, location, and intensity of land uses. This component includes the following elements: Noise, Public Facilities, Cultural and Urban Design, and Safety.

Community Plan is a composite Land Use Plans to provide an arrangement of land uses, streets, and services which will encourage and contribute to the economic, social and physical health, safety, welfare ad convenience of the people who live and work in the community.

Neighborhood Plan involves the preparation of specific plans which blend both policy and implementation functions for unique neighborhoods within a Community Plan area. It includes not only regulatory restrictions, but development incentives as well.


CITY OF SAN FERNANDO
VAN NUYS
CITY OF BEVERLY HILLS
L.A. COUNTY
CITY OF SANTA MONICA
CITY OF CULVER CITY
PACIFIC OCEAN
PACIFIC OCEAN
Generalized Planned
LAND USE
CITY OF LOS ANGELES
Low Density Housing
Medium Density Housing
High Density Housing
Neighborhood Commerce/Parking
Regional Commerce/Parking
Light Industry/Parking
Heavy Industry/Parking
Open Space/Public & Quasi-Public Lands
Freeways
City Hall
NOTE: This generalized planned land use map is compiled from the City's 35 Community Plans and is not adopted by the City Council. See the most current Community Plan for desired information.
0 1 2 3 4 5 miles
PREPARED BY THE DEPARTMENT OF CITY PLANNING AUGUST 1990

B. GENERAL PLAN IMPLEMENTATION TOOLS

1. ZONING CODE AND LAND USE DESIGNATIONS IN THE GENERAL PLAN

The City of Los Angeles Planning and Zoning Code, Chapter One of the Municipal Code, is the most frequently used mechanism with which to implement the Comprehensive General Plan. The Zoning Code establishes minimum development standards for the use, placement, height, and intensity of development on properties throughout the City. State legislation requires the City's Zoning Code to be consistent with the City's General Plan, including the land use designations in the community or district plans. Zone changes requested around rail stations which are not consistent with the land use designations in the latest adopted community or district plan will need a plan amendment first in order to be approved. Many of the City's thirty five community/district plans over fifteen years old and do not anticipate either rail alignments or station locations in the community.

2. SPECIFIC PLANS

A specific plan is an ordinance which affects a geographically defined area or subset of the City, and adds more detail to the conditions required of the underlying zoning. It is analogous to a mini zone code and is a way to tailor zoning to include standards and regulations which more finely outline controls and incentives in an area. The definition, application, and procedures for creating specific plans are established by State law. Specific Plans are allowed by state law to collect fees among the affected properties for creation and implementation of the specific plans themselves, and linkage fees for infrastructure funding.

3. OVERLAY OR SPECIAL USE DISTRICT

The City may adopt an ordinance which is Citywide or has broad geographic scope, but which addresses specific issues such as design and aesthetic qualities of new development, the pedestrian environment, historic preservation, etc. In theory the City could create a rail station overlay zone which would give more detail to the requirements of the underlying zoning, and even build in some incentive programs like density, height or setback bonuses for child care facilities or other desired inclusions. The complication with this approach is that it may be as time consuming as preparing specific plans, and may not give a developer as many "by right" assurances as a specific plan. In addition, a specific plan is prepared with an environmental review document which then assists subsequent developments in their environmental review process. This would not be the case with an overlay zone and each project would have to undergo a separate environmental assessment.

4. ENTERPRISE ZONE

The enterprise zone is a comprehensive planning tool used to encourage economic revitalization of an area. Developers who participate can take advantage of the following benefits: state tax benefits, priority servicing by City departments, site location assistance, management and technical assistance for creation of a job retention program and new business.

5. REDEVELOPMENT AREAS

The California Constitution and Community Redevelopment Law, permits cities and counties to establish redevelopment agencies to finance local redevelopment projects. The law permits redevelopment agencies to capture a portion of the growth in property tax revenue (tax increment) within the boundaries of the redevelopment project area, to be used to pay back bonded indebtedness incurred to finance the project.

Redevelopment which combines police and corporate powers, contains some of the most powerful tools available to local governments for implementing the General Plan. These tools include the assemblage of land and investment of necessary capital to revitalize a blighted area. Redevelopment is a means of focusing resources to transform a deterioration area into a more productive part of the community.

6. INFRASTRUCTURE FINANCING DISTRICTS: SB 308

This relatively new legislation, signed by the Governor in September 1990, permits cities and counties to create infrastructure financing districts for the purpose of financing public capital facilities with tax increment revenues. Facilities which may be financed include, but are not limited to, highways, sewage treatment plants, child care facilities, libraries, parks and open space. These districts may use tax increment revenues with the approval of two thirds of the voters in the district.

The revenues may finance the purchase, construction, expansion, improvement or rehabilitation of any real or other tangible property with an estimated life of 15 years or more. Revenues may be used to finance planning and design work which is directly related to the project, but not for routine maintenance, repair work, the costs of ongoing operation, or for providing services of any kind.

7. TRANSFER OF DEVELOPMENT RIGHTS (TDR)

TDR is a device by which the development potential of a site is severed from its title and made available for transfer to another location. The owner of a site which transfers/sells development credits, loses total development potential of his site by the amount that he transferred. The owner of a receiving site may transfer/buy development credits, allowing the receptor site to be developed at a greater density. The density of the entire area is preserved because it is transferred within a prescribed boundary. This tool has been used successfully to

preserve architecturally significant structures, and to vary the sky line profile.

8. LAND DEVELOPMENT COUNSELING COMMITTEE (LDCC)

An LDCC is technically not an implementation device but rather part of the early planning process. The LDCC is an advisory group of City departments and other agencies which are typically called together to give a developer preliminary review as to what the various decision-making bodies will require of the proposed project. This type of process could be very useful around station areas for assessing how to best implement any preliminary proposal or master concept. However, in order for any of the LDCC's recommendations to be legally enforceable, the recommendations must be made part of the conditions of any subsequent discretionary or administrative actions.

9. SPECIAL REVIEW PROCEDURES

The City uses special review procedures for projects that may proceed "by right" or administratively, but are of such a significant size or impact that they require some additional scrutiny. The guidelines of the City's Site Plan Review procedures may be adjusted to add incentives or additional standards for projects that occur within a specified radius of a rail station or corridor.

10. CEQA REVIEW AND MITIGATION MEASURES

The City has internal guidelines for how staff will implement the State California Environmental Quality Act (CEQA). These guidelines may be amended to address any special needs or standards for mitigation around rail station areas. For example, the parking requirements for projects close to rail stations may be adjusted and proximity to rail may be credited as a form of trip mitigation.

11. DEVELOPMENT AGREEMENTS

A development agreement is contract between a developer and the City assuring the developer that the City will not change certain rules, regulations and policies applicable to a project. In return for this promise the developer must be willing to agree to certain concessions and may provide the city with certain amenities, benefits and dedications that the City could not otherwise require. Examples include chid care facilities, affordable housing, open space and public facilities such as portals, pedestrian enhancements around stations, and street or other public dedications.

LOS ANGELES COUNTY TRANSPORTATION COMMISSION
JOINT DEVELOPMENT POLICIES AND PROCEDURES PROGRAM

PURPOSE:

LACTC shall actively pursue a joint development program ion order to extract the optimum benefit from the utilization of property owned and acquired by the LACTC consistent with community development objectives and LACTC transportation goals.

JOINT DEVELOPMENT POLICIES

The Los Angeles County Transportation Commission will aggressively pursue joint development opportunities with developers and/or municipalities to achieve the following policies:

1. Maximize limited capital resources by leveraging the public investment with private/public sector interests. (The Commission has a mandate to build a 150 mile rail system which will cost several billion dollars. Hence, the Commission seeks to leverage its limited capital funds by integrating outside funding sources whenever possible.

2. Encourage development on, over, and adjacent to the rail stations for both passengers' convenience and to create an economic draw that fosters activity around rail transit stations.

3. Generate project revenues whenever possible to finance rail development and operating costs.

4. Integrate the rail stations into the economic and social fabric of neighborhoods they serve while preserving communities' individual character.

5. Reduce dependency upon the private automobile for personal transportation by promoting community development, commercial and retail activities around rail stations.

6. Improve accessibility to and enhance the attractiveness of the stations by maximizing the design quality of the transit related development.

7. Create joint development investment opportunities for the private sector and/or municipalities.

8. Focus economic growth by coordinating comprehensive planning, zoning and development around station sites with local municipalities and communities.

9. Encourage economic development consistent with regional and local land use objectives.

10. Assure that project enhance present and future public transportation facilities.

EXAMPLES OF BENEFITS OF JOINT DEVELOPMENT

WMATA BALLSTON METRO CENTER (Washington) - This is a 712,000 square-foot project with mixed use development (hotel, residential, retail, health club, parking, bus terminal, and metro access). WMATA will receive revenues in the form of rent as well as a percentage of rent for land leased to the developer.

MARTA LENOX STATION PASSENGERS' PLAZA (Atlanta) - this is 400,000 square-feet of office space. MARTA receives $105,000 annually (adjusted CPI) plus a fixed rent of $7,370 for access rights. In addition, the developer built a Kiss-and-Ride area for MARTA patrons to access the station at no cost.

MTA CHARLES CENTER STATION (New York) - This is a 350,000 square-foot office and retail project. MTA receives a base rent plus 20% of net profits (projected to be 1 million per year after 5 years). The developer holds a 99 year lease on the property from MTA.

WMATA METRO CENTER STATION (Washington) - This is a 156,241 square-foot project with multi-purpose uses including retail, hotel, recreational, office and parking. The site also includes a Metro bus transfer and Kiss-and-Ride facilities. The developer has a 50 year lease with an option to renew for 49 more years. WMATA is receiving $1.6 million per year plus a percentage of gross profits.

LACTC METRO RAIL STATION (Los Angeles) - The Home Savings Tower incorporates the portal, surface and subsurface facilities to support a major Light Rail/Metro Rail transfer station. The development saved the project $15 million in site acquisition casts and $6 million of improvements.

Smaller scale project ranging from Automated Teller Machines and kiosks to advertisement space and vendors are common and help to offset construction and ongoing operating costs. WMATA, for example, expects to receive $6,431,450 in FY 1991 from continuing joint development agreements.

SUMMARY OF 1991
AIR QUALITY MANAGEMENT PLAN (AQMP) AMENDMENT

On June 6, 1991, the SCAG Executive Committee unanimously adopted the land use and transportation measures of the 1991 AQMP update and endorsed the Energy Appendix. These sections of the Plan were designed to meet two objectives: (1) build off the Plan adopted in 1989 to provide continuity for local governments and county transportation commissions who have been working diligently to implement the Plan, and (2) meet the standards of the California Clean Air Act.

The first of two major areas of refinement from the 1989 AQMP is modification to the Growth Management Measures. The modifications include a VMT implementation equivalency to job/housing balance, a requirement that local governments adopt action plans to implement growth management through a mix of strategies, and a commitment to rework the measure for the 1992 AQMP Amendment to meet federal standards.

The second major area of refinement is in the facilities measures with pricing alternatives for High Occupancy Vehicle lanes on toll roads and with a modest enhancement of highway and freeway mixed flow lanes. As a result, vehicle miles traveled (VMT) increase by 1.8% and vehicle hours traveled (VHT) decrease by 28%, thereby decreasing ROG, NOX, and CO emissions in 2010.

Background

In 1988, the California state legislature enacted the California Clean Air Act (CCAA). This current amendment incorporates the recommendations for the 1991 AQMP to satisfy the requirements of the CCAA.

This amendment continues the work started with the adoption of the 1989 plan. The 1989 plan raised the consciousness among the people of Southern California concerning a number of lifestyle and infrastructure issues, and has brought about the passage of numerous transportation funding propositions. The awareness of linkages between growth, housing, jobs, traffic and air quality have also been raised significantly.

The following four regional plans that are directly linked to the AQMP all complement each other:

- The Regional Mobility Plan;
- The Growth Management Plan;
- The Regional Housing Needs Assessment (RHNA); and
- The Area Wide Waste Treatment Management Plan (208).

All four of these plans will be updated as elements in the Regional Comprehensive Plan in 1992 after the 1990 Census and the Origin and Destination Survey and will meet the

new Federal Clean Air Act Plan requirements.

Overall Summary of the Text Revisions from 1989 AQMP to 1991 AQMP

The following is a summary of the main text revisions the 1989 AQMP to the 1991 AQMP.

I. TRIP REDUCTION

A) Alternative Work Week and Flextime and Telecommunication

- Adds option for local government to enact a single trip reduction ordinance instead of separate ordinances for telecommunications and Employer Based Rideshare.

- Adds requirement that the local government ordinance meet these additional targets for reducing their employee person work trips: 12% by December 3, 1994, 20% by 2000, and 30% by 2006. Same for Telecommunication and private sector employees.

- Adds County Transportation Commissions (CTCs) to agencies working together to implement this measure and to do outreach.

- Adds language to be consistent with Growth Management and Transportation Task Force (GMTTF) recommendations regarding dates, market incentives, and telecommunication center requirements in ordinances for regionally significant employment developments in housing-poor areas and regionally significant housing developments in housing-rich areas.

- Adds County Transportation Commissions to implement agencies and that all implementing agencies use all appropriate transportation funds to establish tele-commuting centers and tele-commuting programs from home.

- Adds language to acknowledge telecommunications centers as an option for reducing trips under local government ordinances and in SCAQMD indirect source regulations, including Regulation XV.

- Deletes legislation for non-work trip reduction because language is too broad.

- Deletes state legislation to require financial institutions and their regulators to develop feasible services by telecommunications.

B. Non-motorized Transportation (potential new measure)

- The Growth Management & Transportation Task Force recommended that a non-motorized transportation control measure should be considered within the framework of the 1991 RMP/AQMP.

- Facilities and requirements that facilitate short trips (work and non-work) to be made by bicycle or on foot (through the use of ordinances) (applied in designated business, trade and government activity centers throughout the region) can decrease dependence on automobile use and enhance use of pedestrian and bicycle facilities. The Regional Mobility Plan contains a Non-motorized Transportation Program specifying actions, schedule, and agencies to implement this program.

II. TRANSPORTATION DEMAND MANAGEMENT MOTORIZED MODE SHIFT STRATEGIES.

A. Employment Rideshare and Transit Incentives

- Adds option for local government to enact a single trip reduction ordinance for Alternative Work Week, Telecommunications, and Employer Rideshare and Transit Incentives.

- Requires SCAQMD, SCAG or CTS to evaluate the effectiveness of trip reduction measures being implemented by local jurisdictions by December 31, 1993.

- Expands Regulation XV, if necessary (after analyzing of the result of above mentioned measures), to cover employers, developers and building owners for facilities with 25 or more employees by December 31, 1993.

B. Merchant Transportation Incentives

- Extends schedules for adoption of SCAQMD Indirect Source Rule to implement control measure, i.e., to get developers, large retail establishments and merchants to provide programs and incentives for customers to reduce non-work trips.

C. Parking Management

- Changes date of implementation to December 31, 1990 and introduces employer "cash out" of free employee parking as a market incentive demonstration approach to plan implementation.

D. Auto Use Restrictions

- Extends the adoption of Air Quality Element (dealing with special event centers and trip reduction programs) into General Plan (1/1/91 to

12/31/92).

III. TRANSPORTATION FACILITIES THAT PROMOTE MOTORIZED MODE SHIFT

A. High Occupancy Vehicle Lane System

- Adds a new policy pertaining to the pricing of a toll road facility that allows for free or reduced tolls for HOVs that achieve average vehicle occupancy rates attained by HOV lanes. An annual monitoring program is required to assess the effectiveness of the toll road pricing policy. The construction or dedication of HOV lanes is required if the monitoring shows these policies to be ineffective.

- Further study of arterial based HOV lanes to improve transit productivity and for applications to super streets has been included in the revision.

B. Transit Improvements

- Passage of Proposition 108, 111,116 has advanced the schedule for implementation of Metro Rail, Proposition A LRT line in Los Angeles County. A specific timetable has been set by LACTC, the implementing agency. Propositions 108 and 116 have also provided funding for implementation of the commuter rail system proposed in the RMP and AQMP. County commissions are currently establishing the necessary institutional arrangements to develop and operate commuter rail services.

IV. LEGISLATIVE/TAX INCENTIVES TO PROMOTE MOTORIZED MODE SHIFT

A. Vanpool Formation Incentives

- Requires local jurisdictions to continue to support legislative efforts to provide the following: tax credits for employers who purchase or lease vans for employee vanpool programs, favorable tax treatment for employees who vanpool, tax credits for owner-operated battery powered vanpools, and tax credits for clean-fuel vans used for vanpools.

IV. CONGESTION MANAGEMENT

A. Truck Travel Restrictions to Reduce Congestion

- Changes made were Implementation Issues and Cost Effectiveness. Under new additions, Implementation Milestones and schedules are given for Incident Response Program, Accident Prevention Program, Strategies to Improve Truck Movement, and Public Sector Rules and Regulations.

B. Diverting Port-Related Truck Traffic to Rail

No significant changes.

C. Rail Consolidation to Reduce Grade Crossings

- Amend control methods to reflect establishment of Alameda Corridor JPA in August 1989.

- Amend second summary bullet to direct JPA during 1990-91 "to complete financial plan" instead of "to obtain financing" since funding has been obtained. Add call for completion of a capacity/conceptual design study by 10/93.

- Revise expected construction commencement date from 7/1/91 to 10/93 to reflect current expectations.

- Scale back method calling for new JPA to develop consolidated corridor from Los Angeles to San Bernardino to a call for an economic and environmental study by 1/93 of such a possibility. This reflects the need to determine if it is desirable.

D. Traffic Flow Improvements

- Implementation schedule accelerated by 500 signals (from 2000 to 2500 signals) by the end of 1993. Total signals remain at 8000 by the year 2010. Requirements of AB 471 Congestion Management Programs can be expected to accelerate implementation of these measures.

E. Nonrecurrent Congestion Management

- Adds Service Authorities for Freeway Emergencies (SAFES) to agencies working together to implement this measure.

- Adds a section asking for legislative action to fund CHP and Caltrans programs through an increase in Department of Motor Vehicles registration fee.

F. Freeway and Highway Capacity Enhancements

- Adds a new policy on mixed-flow improvements, stating that their implementation should include appropriate components of higher priority regional plans and required documentation and consideration of these higher priority elements.

- Adds a new policy on market incentives and disincentives to prevent hardships for lower income people. States that the market incentives be utilized to promote transit, clean-burning fuel vehicles, HOV, implement demand management and other air pollution strategies. Directs that market incentives be integrated into future updates of the AQMP and RMP. Directs SCAG to work with local governments in corridors, identified for HOV facilities to implement transportation control measures.

G. Congestion Pricing (new) (GMTTF Recommendation)

- It is proposed that peak-period travel in single-occupant vehicles be charged a fee to help relieve congestion. The congestion charges collected would be used to compensate those willing to use the highway system during the off-peak hours as well as to fund transportation improvements and services in the corridors in which the fees were collected. The experiment should be targeted at corridors with convenient transit systems or HOV lanes.

VI. AVIATION/INTER-REGIONAL TRANSPORTATION MEASURES

A. Replacement of High-Emitting Aircraft

- Extends completion date for Memorandum of Understanding between the Los Angeles Department of Airports and the SCAQMD for the phase-out of Stage 3 aircraft. Reduces program initiation date and full implementation date.

B. General Aviation Vapor Recovery

- Extends adoption of SCAQMD regulation.

C. Indirect Source Measure for Airports

- Extends adoption of SCAQMD indirect source rule.

D. High Speed Rail

- Study initiation dates delayed.

- Sacramento was added to the list of cities that will benefit from implementation of the high speed rail measure.

- San Francisco, Los Angeles and Sacramento are expected to have high speed rail lines by the year 2010.

VII. LAND USE POLICIES TO IMPROVE AIR QUALITY

Growth Management (refer to Summary of Growth Management Plan)

VIII. ENERGY, FUEL AND TECHNOLOGY ADVANCEMENT

A separate appendix was created for Energy Measures. SCAG's part of this Appendix was transmitted to the District under separate cover. It will replace:

- Local Government Energy Conservation
- Residential, Commercial and Industrial Sector Energy Conservation
- Waste Recycling
- Clean Fuels For Passenger Vehicles, Electrical Vehicles, and other Clean Burning Fuels (Deleted)
- Railroad Electrification

The dates for this measure have been extended.

A. Highway Electrification and Automation (additional measure)

- The impacts of highway electrification and automation are being investigated to determine to what extent these technologies can alleviate freeway congestion, air pollution and dependence on fossil fuels. The feasibility of implementing one or more demonstrations in the six-county region will be subsequently determined.

B. Automobile Buyback Program (additional measure, new)

- Buying back automobiles manufactured without catalytic converters and removing them from circulation.

IX. FUGITIVE ROAD DUST MEASURES

A. Paving of Unpaved Lots and Parking Lots

No substantive changes have been made.

B. Dust Suppression from Paved Roads

- Add examples of storm water control measures that may be implemented by local governments.

- Add Flood Control Districts to the list of implementing agencies.

- Add language that local governments may adopt Development Impact Fee Ordinances, or create Street Maintenance Districts to fund the measures.

SUMMARY OF CITYWIDE EXISTING PARKING POLICY

[1] **Off-Street Automobile Parking Requirements by City of Los Angeles.** A garage or an off-street automobile parking area shall be provided in connection with and at the time of the erection of each buildings or structures hereinafter specified, or at the time such buildings or structures are altered, enlarged, converted or increased in capacity by the addition of dwelling units, guest rooms, beds for institutions, floor area or seating capacity. The parking space capacity required in said garage or parking area shall be determined by the amount of dwelling units, guest rooms, beds for institutions, floor area or seats so provided, and said garage or parking area shall be maintained thereafter in connection with such buildings or structures. **(Amended by Ord. No. 145,088, Eff. 10/18/72.)**

I. For Dwelling Units. **(Amended by Ord. No. 164,904, Eff. 7/6/89.)**

In all zones, there shall be at least two automobile parking spaces on the same lot with each one-family dwelling thereon. The ratio of parking spaces required for all other dwelling units shall be

- at least one parking space for each dwelling unit of less than three habitable rooms,
- at least one and one-half parking space for each dwelling unit of three habitable rooms,
- at least two parking spaces for each dwelling unit of more than three habitable rooms.

II. For Commercial and Industrial Buildings. **(Amended by Ord. No. 161,265, Eff. 6/27/86)**

There shall be at least two automobile parking spaces for each 1,000 square feet of combined floor area contained within all the office, business, commercial, or research and development buildings on a lot, and one automobile parking space for each 500 feet of combined floor area contained within all manufacturing or industrial buildings on any lot.

A. WAREHOUSE: In addition to the one automobile parking space for each 500 square feet of floor area for the first 10,000 square feet, only one parking space need be provided for each 5,000 square feet of floor area in excess of the first 10,000 square feet.

---

[1] City of Los Angeles Municipal Code Chapter I Article 2 Section 12.21.4 Off-Street Automobile Parking Requirements.

B. HEALTH CLUBS: One automobile parking space for each 100 square feet of floor area in any building. This provision does not include such a facility located within an office building of at least 50,000 square feet or more of gross floor area.

C. RESTAURANTS AND BARS, GENERAL: There shall be at least one automobile parking space for each 100 square feet of gross floor area included within the total square footage of any restaurant, cafe,...or any similar establishment, which dispenses food or refreshments or provide live entertainment with gross floor area greater than 1,000 square feet.

D. RESTAURANT, SMALL: (1,000 square feet or less) Need to provide only one automobile parking space for each 200 square feet of gross floor area.

E. RETAIL STORES, GENERAL: Retail establishments, other than those located in a mini-shopping center, and discount wholesalers selling to general public, shall provide at least four automobile parking space for each 1,000 square feet of gross floor area.

F. RETAIL, FURNITURE STORES: Shall provide at least one automobile parking space for each 500 square feet of gross floor area.

G. TRADE SCHOOLS: Shall provide at least one automobile parking space for each 50 square feet of floor area contained within classrooms and assembly areas, or one parking space for each five fixed seats contained within classrooms and assembly areas, whichever provides the greater number of parking spaces.

III. For Institutions:

There shall be at least one automobile parking space for each 500 square feet of floor area contained within any philanthropic institution, governmental office building, or similar use. **(Amended by Ord. No. 145,088, Eff. 10/18/73.)**

A. HOSPITAL: Shall provide 2.0 automobile parking spaces for each patient bed for which the hospital is licensed.

B. SANITARIUMS AND CONVALESCENT HOMES: Shall provide one automobile parking space for each 500 square feet of floor area, or 0.2 automobile parking spaces per patient bed, whichever provide the greater number of automobile parking space.

C. CLINICS: Shall provide one automobile parking space per 200 square feet of total floor area.

IV. For Auditoriums:

There shall be at least one automobile parking space for each five seats contained within

any theater, church, high school, college or university auditorium or other similar place of assembly. Where there are no fixed seats in the auditorium or place of assembly, there shall be one parking space for each 35 square feet of floor area (exclusive of stage) contained therein.

V. For Elementary School:

There shall be one automobile parking space on the same lot with each classroom contained in any elementary school.

VI. For Combinatin of uses:

A. Where is a combination of uses on a lot, the number of automobile parking spaces required shall be the sum of the requirements of the various uses, except as provided below.

B. If there is office space auxiliary to a manufacturing, warehouse,or other industrial use on the same lot, the office use shall have its required parking spaces computed at the same ratio as the industrial use. However, if the office space exceeds 10 percent of the total gross floor area of a building, then the balance of the office space in excess of 10 percent shall have its required spaces computed at the ratio specified for office use.

C. If the office building has a total gross floor area of at least 50,000 square feet,and if the retail space in the building does not exceed five percent of the total gross floor area, or 15,000 square feet, whichever is the smaller amount, then any retail space in the building shall have its required parking spaces computed at the same ratio as the office use.

EXCEPTIONS/SPECIFIC PLANS:

In the following described areas there need only be two parking spaces for every one thousand square feet of combined gross floor area of commercial office, business, retail, restaurant, bar and related uses, trade schools, or research and development building on any lot:

1) Chinatown Redevelopment Project Area;

2) Hollywood Redevelopment Project Area;

3) Central City West Interim Control Ordinance Area;

4) Central Business District Redevelopment Project Area;

5) North Hollywood Redevelopment Project Area;

6) Eastside Employment and Economic Incentive Program Area;

7) Greater Watts Employment and Economic Incentive Program Area;

8) Central City Enterprise Zone;

9) Pacoima Enterprise Zone;

10) Wilmington Employment and Economic Incentive Program Area.

A. Exception - Senior Citizen/Handicapped Housing Development. **(Amended by Ord. No. 161,593, Eff. 9/20/86.)**

The number of parking spaces required for a senior citizen housing development or a housing development occupied by handicapped person, located on a lot, may be reduced to not less than 40 percent of the number otherwise required by this subdivision.

B. Exception - For any structure designated on the city, state, or National Register list of historical or cultural monuments. **(Amended by Ord. No. 165,773, Eff. 4/10/90.)**

There need be provided only one parking space for each five hundred square feet of combined within all the business, commercial, manufacturing, retail, restaurants, or trade school buildings on any lot.

C. Exception - Shelter for the Homeless. **(Added by Ord. No. 161,427, Eff. 8/2/86.)**

The number of automobile parking spaces required for a "shelter for homeless", located within 1,000 feet of a public transit stop may be reduced to 25 percent of the number otherwise required, but in no event less than two spaces for any such shelter. For a "shelter for homeless", located 1,000 feet or more from a public transit stop, may be reduced to 25 percent of the number otherwise required, plus two spaces.

D. Exception - Downtown Business District. **(Amended by Ord. No. 165,773, Eff. 4/10/90.)**

The off-street automobile parking spaces required in connection with the following buildings, structures or uses shall be located on the same lot or not more than 1,500 feet therefrom and said spaces shall be provided in the following ratio:

1) For auditoriums and other similar places of assembly, one space for each 10 fixed seats or one space for each 100 square feet of floor area (exclusive of stage) where there are no fixed seats;

2) For hospitals, philanthropic institutions, governmental office buildings and

similar uses, at least one parking space for each 1,000 square feet of floor area;

3) For business, commercial or industrial buildings, having gross floor area of 7,500 square feet or more, at least one parking space for each 1,000 square feet of floor area in said building, exclusive of floor areas used for automobile parking space; provided that, for a warehouse having a gross floor area of 10,000 square feet or more, in addition to one automobile parking space for each 1,000 square feet of floor area the first 10,000 square feet, the automobile parking required for that portion of the warehouse in excess of the first 10,000 square feet of floor area shall be one space for each 5,000 square feet.

E. Exception - Central City Area. **(Added by Ord. No. 129,334, Eff. 2/28/65.)**

Notwithstanding any other provisions of this section to the contrary, within that area hereinafter described, the off-street automobile parking spaces required in connection with the following residential uses shall be located on the same lot and said spaces shall be provided in the following ratio:

1) One space for each dwelling unit, except where there are more than six dwelling units of more than three habitable rooms per unit on any lot, the ratio of parking spaces required for all of such units shall be at least one and one-quarter parking spaces for each dwelling unit of more than three habitable rooms.

2) One space for each two individual guest rooms or suites of rooms for the first 20,

- One additional parking space for each four guest rooms or suites of rooms in excess of 20 but not exceeding 40,

- One additional parking for each six guest rooms or suites of rooms in excess of 40.

F. Exception - Greater Downtown Los Angeles.

The amount of parking spaces a developer must provide and how they provide them, varies depending on where a development is located in greater downtown:

1) Central City West (current phase)
   - maximum of 1.7 spaces per 1000 square feet on site (10% HOV)

   - minimum of 0.2 space per 1000 square feet off site

2) Downtown East of Harbor Freeway

- maximum of 1 space per 1000 square feet within the 1500 ft of future transit stations

- maximum of 1.25 space per 1000 square feet at sites greater than 1500 feet away from stations.

- Of these spaces 40 percent must be provided on peripheral locations.

G. Exception - Westwood

The following parking requirements are applicable to the uses listed below. Parking requirements for other uses are set forth in applicable provisions of the Los Angeles Municipal Code.

1) Hotel, Motel and other projects containing guest rooms.

   - One space for each guest room, plus one space for each 100 square feet of dining area of a restaurant, plus one space for each 35 square feet of meeting rooms, plus the number of spaces required by this section and the Los Angeles Municipal Code for other uses.

2) Motion picture theater.

   - One space for each 3 fixed seats, or, where there are no fixed seats, one space for each 25 square feet of floor area.

3) Nightclub or other establishment offering live entertainment or dancing as its primary use.

   - One space for each 5 fixed seats, or, where there are no fixed seats, one space for each 75 square feet of floor area.

4) Office, excluding medical office.

   - 3.25 spaces for each 1,000 square feet of floor area.

5) Retail and other commercial uses.

   - 3.25 spaces for each 1,000 square feet of floor area.

H. Exception - Park Mile

The parking Space capacity required in the garage or parking area shall be

determined by the use of the structure.

1) For the dwelling units, there shall be at least two and one-half parking space for each dwelling unit regardless of the number of habitable rooms contained therein.

2) For office and other commercial uses, there shall be at least three parking spaces provided for each 1,000 square feet of gross floor area available at no charge to all patrons and employees of those uses.

3) For auditoriums and churches, there shall be at least one parking space for every three seats contained therein. Where there are no fixed seats, there shall be at least one parking space for each 25 square feet of floor area (exclusive of stage) contained therein.

I. Exception - San Vicente

The following minimum parking requirements shall apply to new structures, conversions and to the net additional floor area added to an existing structure:

1) For restaurants not located in a shopping center or in an office building with six or more stories, 15 spaces shall be required for each 1,000 square feet of gross floor area including the area used for outdoor cafes.

2) For hotels and motels, one space shall be required for each guest room in addition to other parking requirements for offices, restaurants, and service areas.

3) For medical and dental offices, one space shall be required for each 125 square feet of gross floor area.

4) For buildings or premises occupied by any other commercial use, one space shall be required for each 300 square feet of gross floor area.

5) For gyms, health clubs, aerobic dancing or similar uses, one space shall be required for each 100 square feet of gross floor area.

J. Exception - Palisades Commercial Village

The parking Space capacity required in the garage or parking area shall be determined by the use of the structure.

1) For dwelling units containing fewer than four habitable rooms or not more than 700 square feet, there shall be one parking space per unit.

2) For dwelling units containing four or more habitable rooms or more than

700 square feet, there shall be one parking space for each unit.

3) For retail and service commercial uses, one parking space shall be required for each 300 square feet of gross floor area.

4) For restaurants, one parking space shall be required for each 100 square feet of gross floor area. For fast-foot restaurants there shall be one parking space for each 75 square feet of gross floor area.

5) For general offices, one parking space shall be required for each 300 square feet of gross floor area.

6) For medical and dental buildings, one parking space shall be required for each 125 square feet of gross floor area.

7) For financially-oriented services, one parking space shall be required for each 300 square feet of gross floor area.

8) For movie theaters, one parking space shall be required for every four seats.

9) For elementary or junior high schools, four parking spaces shall be required for each classroom or teaching station.

10) For elementary or junior high schools, four parking spaces shall be required for each classroom or teaching station.

11) For child care and preschool, there shall be one parking space for each staff member and one parking space for each eight children.

12) For gyms, aerobic dancing, health club or similar uses, there shall be one parking space for each 100 square feet of gross floor area.

K. Exception - Coastal Transportation Corridor

Reduced Parking.

1) An applicant for a development within a one-quarter mile radius of a transit station may, upon operation of such Transit Facility, submit an application to the Department of City Planning for the conversion of up to 25 percent of required parking for the development to leasable commercial or industrial space, not counting the parking required for additional converted land use.

2) Any applicant for a development which involves the arrival at its site of at least 100 employee and/or tenants may request reduction of its required

on-site parking pursuant to subsection J of Section 12.27 of LAMC.

L. Exception - San Pedro

1) All parking spaces required by other provisions of the Planning and Zoning Code shall be provided. Storage of materials or other use of required parking spaces which reduces the number or area of any required parking spaces is prohibited.

2) Section 12.21-A, 4(q) of the Los Angeles Municipal Code, which requires only one parking space on a nonconforming lot of 40 feet or less in width and not abutting an alley, shall not apply.

SUMMARY OF REGIONAL MOBILITY PLAN

INTRODUCTION

The Regional Mobility Plan (RMP) is part of an overall regional planning process and is directly linked to and dependent upon SCAG's Growth Management Plan, the Housing Allocation process, and the SCAQMD Air Quality Management. The goal of the Regional Mobility Plan is to recapture and retain the transportation mobility levels of 1984, and the Plan provides specific means to address the goal.

The goals of the plan are:

- To attain and maintain mobility in an environment of rapid population and economic growth.
- To provide sufficient capacity for the transportation demands of people and goods given the adopted growth-management forecast.
- To make the region accessible to everyone, including the elderly, the handicapped, and the transit-dependent.
- To induce changes in travel behavior that will lower the number of home-to-work trips and increase vehicle occupancy.
- To achieve an efficient balance among all modes, including new technologies.
- To maximize use of existing facilities of through system and demand-management techniques.
- To protect the environment and support the region's plans for managing air quality.
- To support a pattern of development that shortens trip lengths through improved job/housing balance.

To promote these goals the following objectives for the ground transportation system have been established.

- Maintain the freeway system at 1987 level of congestion through year 2010.
- Achieve a 19 percent transit share of home-to-work trips by 2010.
- Limit the increase in daily vehicle miles traveled to 60 million miles over the next 20 years.
- Limit the daily vehicle hours of travel at approximately 7,850,000 hours through the year 2010.
- Increase the number of people ridesharing to 1,610,000 by 2010.

- Eliminate 3 million daily home-to-work trips by 2010.
- Reduce transportation emissions back to 1987 level by 2010.
- Fund the $23.2 billion shortfall in highway, transit and demand management capital costs.
- Fund the $2.9 billion annual shortfall in highway, transit and demand management operating costs.

Within the Plan are four separate elements: growth management, transportation demand management, transportation systems management, and facility development. Accomplishing the elements of the plan will require commitment from the region's elected officials and a substantially more generous level of funding for transportation improvements than is currently available.

ACTIONS AND STRATEGIES

The RMP proposes a program of actions that foster the interaction of the components of the four elements as mentioned above. The Plan provides policy guidance to regional, county, and local entities, and suggests how private sector groups can help meet the goals. Finally, there are contingency suggestions for approaching the mobility issue if strategic elements in the Plan can not be achieved to the degree assumed. Specific actions recommended under this Plan are:

TRANSPORTATION DEMAND MANAGEMENT PROGRAM

- Eliminate 3 million daily work trips through work-at-home and tele-commuting.
- Increase ridesharing to 1,610,000 daily work-trips.
- Increase transit usage to 1,400,000 daily work-trips.
- Study the implementation of user charges for congestion, peak period use, tolls parking, fuel taxes, and emissions fees.

TRANSPORTATION SYSTEM

- Increase ramp metering and High Occupancy Vehicle (HOV) bypass-lane program.
- Promote advanced signalization and coordination of key intersections throughout the region.
- Improve programs to monitor, control, and respond to traffic incidents.

Taken together, all of these system management efforts must eliminate the equivalent of about 800,000 vehicle hours of delay daily.

HIGHWAY IMPROVEMENT

- Build 1,251 lane-miles of HOV and transitway lanes.
- Build 1,846 lane-miles of additions to existing highways.
- Protect right-of-way for future use.

TRANSIT DEVELOPMENT PROGRAM

- Work with County transportation commissions and operators to implement all projects within the financially constrained program. (The RTD Locally Preferred Alternative, Long Beach, Century, Pasadena, Valley and Coast Light Rail links, and Metro Rail extensions; and Orange County Transitway Program.)
- Identify and create new sources of funds needed to complete the unconstrained program of transit development.
- Work to improve regional and long range planning for transit through better coordination, funding, and delineation of responsibilities.

COMMUTER RAIL PROGRAM

- Study and implement appropriate new commuter services between Los Angeles and South Orange County, Saugus, Ventura/Oxnard, and San Bernardino, and between San Bernardino/Riverside and Orange County.

AVIATION

- Increase capacity and safety of operations at existing air-carrier airports when environmental impacts and ground access can be mitigated.
- Plan for the creation of one or more new air-carrier airports to reduce pressure on the existing system. Each subregion should provide environmentally acceptable capacity within its own market area to serve local short-haul demand.
- Provide appropriate access to the region's commercial airports to meet demand and mitigate local impacts.

GOODS MOVEMENT

- Encourage increased use of inter-modal services.

- Examine trucking and its impact on the economy of the region.
- Explore alternative peak-hour routes and schedules for trucking operations.
- Coordinate local regulations to improve trucking access and movement through the region.

PORTS AND MARITIME

Improve physical access by truck and rail to the Ports of Los Angeles and Long Beach, and to Port Hueneme.

SYSTEM PERFORMANCE

The combined impact of these measures is expected to improve traffic over what would otherwise be expected without the Plan.

LONG-RANGE CORRIDORS

- Plan for the future through the designation of long-range corridors and by establishing a system of Regional Significance.

REVENUE SHORTFALL

Revenues from existing sources will not cover the cost required to fund the various programs called for in the Plan. Approximately 60 percent of the transit capital needs cannot be met with existing revenues, leaving a $18.1 billion shortfall in the transit capital program. Annual operation and maintenance requirements for the transit and demand management programs also show large deficits.

THE FINANCIAL STRATEGY

Major reliance for increasing revenues to meet the funding shortfalls in the Plan would be on user-based approaches. In addition to the user charges, the Plan financial strategy categorizes gas taxes as user fees, and includes possible congestion charges or tolls. It also would require the removal of the Gann limit on transportation expenditures. Finally, this financial strategy emphasizes flexibility in use of traditional and nontraditional revenue sources to fund necessary transportation improvements.

As financing is such a critical aspect to the implementation of the plan, and because present funding is so inadequate, it must be restated that the entire Plan is built on a series of actions which will require strong leadership in order to bring out the necessary support. Any lessening of the level of achievement in any of the areas will put an added burden on the others to help meet the overall goals, and

possibly force a revision if the deficiency is too great.

SUMMARY OF REGIONAL GROWTH MANAGEMENT PLAN

The Growth Management Plan (GMP) presents the region's forecasts and policies for dealing with anticipated growth between today and the year 2010. The GMP forecasts the amount of population, housing and employment growth expected in Southern California. The Plan's Environmental Impact Report (EIR) identifies the potential impacts of growth, and the GMP establishes a set of regional policies which will enable Southern California to respond to that growth. Finally, a structure for local government implementation of the policies is set forth.

The study region covers the counties of Los Angeles, San Bernardino, Riverside, Ventura and Imperial. Over the past decades, the region has undergone tremendous growth. The GMP offers growth and land use policies, directions and actions that the region can pursue to enhance our advantages and offset the unwanted consequences of growth.

BACKGROUND

This Growth Management Plan is the sixth in a series of growth forecasts that SCAG has prepared over the past 20 years. The demographic and economic modeling and analysis provide understanding of the factors driving growth in our region. In addition, the specific policies dealing with the management and distribution of growth are important components of RMP and AQMP strategies to improve mobility and air quality.

Creating the GMP began in 1986 with SCAG developing the Baseline Projection using refined demographic and economic modeling and analysis capabilities. This projection was used to provide an initial indication of the region's growth through 2010 without new growth management policies. The Baseline projects that in the year 2010 the population of the region will be 18.3 million people (a growth of more than 4.5 million persons over the 1988 figure).

The Growth Management Plan has the following objectives:

- To present a vision of the region's future in terms of its people, its housing, its economy, and its government structure;
- To provide a framework within which SCAG can develop plans that provide mobility, protect the environment, ensure safe disposal of hazardous waste, and assure adequate housing for the region;
- To set goals for preserving the environment, preserving our quality of life, and assuring individual life style choices;

- To define possible events that could disrupt that vision; and

- To develop measures for preventing or responding to such events.

POLICIES

The Baseline Projection of the region's future growth assumed that current demographic and economic trends would continue unchanged and that no new government policies would be implemented. Such a course would give us gridlock and unacceptable environmental and social damage. Thus, the Growth Management Plan examines the trends and proposes policies and strategies for guiding the distribution of growth in the region to mitigate the impacts of that growth.

The SCAG Committee established the policies that would be used in developing the Growth Management Plan. The major decision was that the Plan should be based upon the amount of growth which was likely to occur. No policies were established to control the regional totals because there were no viable ways to limit the growth. However, the Committee decided that the region needed to influence the distribution of growth to minimize adverse impacts. As a result, The SCAG Executive Committee adopted the following general policies to guide the distribution of growth within the region and mitigate its impacts.

- Support the policies of the Regional Mobility Plan, the Air Quality Management Plan, the Hazardous Waste Management Plan, and the Regional Housing Needs Assessment Plan.

- Achieve better job/housing balance at the sub-regional level.

- Outline measures to reduce the adverse effects of population and employment growth.

Furthermore, the Committee recognized that a job/housing balance which took into account the most recent growth trends in the sub-regional distribution of population, housing, and employment would be the most desirable alternative to mitigate the impacts of projected growth. As secondary benefits, the policy of job/housing balance would result in an increased in mobility and improved air quality.

To improve balance, the GMP incorporating the Job/Housing Balance Alternative, redirects 9% of the new employment to housing-rich areas, and 5% of the housing units added between 1984 and 2010 to job-rich areas. This will achieve a more balanced distribution of jobs and housing among subregions.

The GMP forecast, compared to the baseline projection, reduces vehicle miles traveled by 33.4 million (8.5%), reduces vehicle travel hours by 7.2 million (37%)

and reduces reactive organic gases (ROG) by 45.5 tons, or 33% of the emission reductions to be achieved through transportation, land-use, and energy conservation measures.

THE GMP IMPLEMENTATION PROCESS

The GMP establishes regional guidelines for local governments to manage growth. The Plan provides the types of actions local governments can take to implement the job/housing balance performance goals and other policies of the Plan.

The GMP centers on implementation by local governments. A variety of actions are outlined to assist local implementation including:

- Participation of local jurisdictions, existing state and regional agencies, and various private-sector interest groups;
- Formation of sub-regional entities (similar in concept to the existing transportation policy area study steering committees);
- Design of an outreach program;
- Development of sub-regional and local jurisdiction job/housing balance performance goals, in five-year increments;
- Development of model local implementation measures;
- Development of a monitoring process to gauge progress in meeting sub-regional job/housing performance goals; and
- Development of guidelines for assessing consistency with performance goals.

The GMP establishes a process for evaluating performance goals and adjusting the implementation actions, if needed. The two major steps in the implementation process are:

A. Implementation of the job/housing balance policy to attain sub-regional performance goals by:

   - Local Jurisdiction: through development of general plans that incorporate regional job/housing balance policy and through adoption of measures and ordinances, and through issuance of development permits according to suggested guidelines.
   - SCAG: through the Intergovernmental Review Program (A-95) and the Regional Transportation Improvement Program (RTIP).

- County Transportation Commissions: through programming of transportation funds.

- The South Coast Air Quality Management District: through revisions to the new Source Review Rule.

- The State Housing and Community Development Department:
  - through reviews of local jurisdiction housing elements that incorporate the Regional Housing Needs Assessment.

  - Reassessment of performance goals and re-evaluation of the implementation measures and actions in five years.

SUMMARY OF DRAFT AIR QUALITY MANAGEMENT PLAN - APPENDIX IV-C DISTRICT'S MOBILE AND INDIRECT SOURCE CONTROL MEASURES

This appendix contains the South Coast Air Quality Management District (District) mobile source control measures included for the 1991 AQMP Revision. Mobile sources consist of on-road and off-road motor vehicles. These measures are based upon technological applications currently available and which can be adopted withinthe next few years. Control measures presented in this report are presented in this report are presented in three subgroups: on road vehicles, off-road vehicles, and indirect sources.

TIER I CONTROL MEASURES (ON-ROAD MOTOR VEHICLES)

Zero-Emission Urban Implementation (CM #90M-G-1)

Source Category:	Urban bus
Control Methods:	Electrification of transit Buses Using Conventional Technology
Implementing Agency:	District
Impacts:	Reduced ROG, NO_X, CO AND PM10 emissions; Reduced Noise Pollution; Increase Demand for Electricity.

Low-Emission Retrofit of Transit Buses (CM #90M-G-2)

Source Category:	Urban buses
Control Methods:	Retrofit of existing transit buses with low emission technology.
Implementing Agency:	District, pending Legislative authorization
Impacts:	Reduced ROG, NO_X, CO AND PM10 emissions; Operational and budgetary impacts on transit service levels

Use of Radial Tires on Light-Duty Motor Vehicles [PM10] (CM #90M-G-3)

Source Category:	Light-Duty passenger vehicles
Control Methods:	Ban bias-ply tires on light-duty passenger vehicles
Implementing Agency:	District
Impacts:	Fewer tires may need to be disposed of longer lifetime

Low-Emission New Fleet Vehicles (CM #90M-G-4)

Source Category:	Passenger cars, light-duty trucks, medical-duty vehicles, and heavy-duty vehicles operated in fleets of 15 or more
Control Methods:	Require fleet vehicle operators to acquire low-emission vehicles
Implementing Agency:	Not determined
Impacts:	Unknown

Motor Vehicle Buy-Back Program (CM #90M-G-5)

Source Category:	Passenger cars, light-duty trucks
Control Methods:	Remove noncatalyst-equipped cars from the South Coast Air Basin
Implementing Agency:	District
Impacts:	Reduced ROG, NO_X, CO AND PM10 emissions

Eliminate Excessive Car Dealership Cold Starts (CM #90M-G-6)

Source Category:	Passenger cars, light-duty trucks
Control Methods:	Restrict car dealers to one fleet engine start-up every two weeks
Implementing Agency:	District
Impacts:	Fuel savings

Eliminate Excessive Curb Idling (CM #90M-G-7)

Source Category:	All on-road vehicles
Control Methods:	Limit idling time to 3 minutes
Implementing Agency:	District and local government
Impacts:	Alleviate surface street congestion and reduce noise pollution

Aerodynamic Devices for Trucks (CM #90M-G-8)

Source Category:	Heavy-Duty trucks (GVW 8,500 and above)
Control Methods:	Provide incentives for installation of aerodynamic add-on devices onto heavy-duty trucks
Implementing Agency:	California Air Resources Board (ARB), District
Impacts:	Reduced ROG, NO_X, CO AND PM10 emissions; Increased fuel economy; Improved engine, transmission, and Suspension life system.

Eliminate Emissions from Advertising Vehicles (CM #90M-G-9)

Source Category:	All on-road vehicles
Control Methods:	Eliminate emissions from advertising vehicles
Implementing Agency:	District, Pending legislative authorization, and local governments
Impacts:	Alleviate congestion and reduce noise pollution

Eliminate CFC-Based Transport Refrigeration Systems (CM #90M-G-10)

Source Category:	Medium- and Heavy-Duty trucks
Control Methods:	Prohibit sale of freon-based refrigeration units beginning in 1994
Implementing Agency:	District
Impacts:	Reduced ROG, NO_X, CO AND PM10 emissions; Reduce pollutants Associated with Diesel Powered Refrigeration Systems, Noise abatement

Inspection and Maintenance Program Enhancements (CM #90M-G-11)

Source Category:	Gasoline and alternative-fuel vehicles
Control Methods:	Implementation of a loaded mode I/M test procedure and other potential I/M program enhancements
Implementing Agency:	District, ARB, Bureau of Automotive Repair (BAR)
Impacts:	Possible reduction in the number of smog check stations; Potentially longer smog check test time

Oxygenated Fuel Program (CM #90-G-12)

Source Category:	On-Road motor vehicles
Control Methods:	Require the use of Oxygenated fuels beginning in 1992
Implementing Agency:	EPA, ARB
Impacts:	Reduces CO

TIER I CONTROL MEASURES (INDIRECT SOURCE)

Environmental Review Program (CM #90M-H-1)

Source Category:	Passenger vehicles
Control Methods:	The District will adopt a rule that will establish standards for the air quality analysis in environmental documents and institute a review program in which the District would validate the adequacy of the air quality analysis for local governments. The District would also offer an pre-project consultation review.
Implementing Agency:	SCAQMD and local governments
Impacts:	Increase in air quality mitigation required for regionally significant projects; congestion relief; and for those developers that utilize the early consultation process, a reduction in time and cost during the environmental review process.

Trip reduction for schools (CM # 90M-H-2)

Source Category:	Passenger vehicles
Control Methods:	Regulation XV will be expanded to reduce student trips to high schools, colleges, and universities
Implementing Agency:	District
Impacts:	Increase the number and quality of commute options available to students; Reduces traffic congestion around schools; Reduces the demand for parking spaces and increases the availability of land to be used at its highest and best use

Supplemental Development Standards (CM #90M-H-3)

Source Category:	Passenger vehicles, Residential energy conservation
Control Methods:	Local government will be asked to adopt ordinances that specify minimum supplemental development standards for new projects including: urban tree planting, vehicle idling, support for non-motorized transportation modes, freight loading/unloading zones.
Implementing Agency:	Local government
Impacts:	Increased marketability of office space, more efficient use of city-wide street cleaning programs, reduced energy costs, reduced atmospheric CO_2 concentrations, mitigation of photochemical smog formation, increased ROG emissions, and decreased water consumption.

Special Activity Centers (CM #90M-H-4)

Source Category:	Passenger vehicles

Control Methods:	The District will adopt a series of rules that reduce non-work trips, such as trips to special event centers, regional shopping centers and to airports. Local governments could be certified to administer this program.
Implementing Agency:	SCAQMD and/or Local Governments
Impacts:	Reduced congestion in and around the activity centers; reduced capital expenditures for parking facilities; and increase the number and quantity of transportation options for patrons.

Enhanced regulation XV (CM #90M-H-5)

Source Category:	Passenger vehicles
Control Methods:	The District would amend Regulation XV to comply with the California Clean Air Act requirement to achieve a region-wide average vehicle ridership of 1.5 during commute hours.
Implementing Agency:	SCAQMD and/or local governments
Impacts:	Reduce congestion and minimize parking needs for employers

Truck Programs (CM #90M-H-6)

Source Category:	Medium-duty and heavy-duty trucks
Control Methods:	The District will adopt a series of rules that would: 1) establish requirements for new and existing facilities that generate large numbers of truck trips, such as truck terminal, truck stops, and warehouses; 2) establish operating practices for facilities that receive trucks; and 3) require facilities that attract trucks for the purpose of refueling to reduce truck related emissions. For the facilities that generate truck trips, credit would be given towards compliance if the trucks are low-emission vehicles (as defined by ARB). Local governments could be certified to administer this program.
Implementing Agency:	SCAQMD and/or local governments
Impacts:	Reduced ROG, NO_X, and CO emissions

Registration Program (CM #90M-H-7)

Source Category:	Passenger vehicles, Medium-Duty trucks and Heavy-Duty trucks
Control Methods:	Commercial and light industrial facilities will be required to register data on trips to the District in order to improve the emission inventory, assist in rulemaking, and provide monitoring data for annual progress reports.
Implementing Agency:	SCAQMD and local governments
Impacts:	Assess the effectiveness of mitigations and control measures.

Sensitive receptor review for Risks from Toxic Air Contaminants (CM #90M-H-9)[2]

---

[2] Control Measure M-H-8, "Wastewater Conformity" was deleted from the AQMP by Board motion.

Source Category:	Variable
Control Methods:	This control method focuses on protection of receptors (those exposed to pollutants) rather than the reduction of emissions from a source, however, emissions reduction may be a possible outcome of the process. The District will adopt a rule that requires (at the request of a city or county government) a review of potential health impacts on sensitive receptors (schools hospitals, residential areas) from surrounding sources of toxic air contaminants.
Implementing Agency:	Local governments
Impacts:	Unknown

TIER I CONTROL MEASURES (OFF-ROAD VEHICLES)

Control of Emissions from Ship Berthing Facilities (CM #90M-I-1)

Source Category:	Ship-Berthing facilities
Control Methods:	Use of shore-side electrical power in place of ship engine while at berth (cold ironing)
Implementing Agency:	District, Ports of Los Angeles (LA) and Long Beach (LB)
Impacts:	Reduces NO_x

Control of Emission from Jet Aircraft (CM #90M-I-2)

Source Category:	General Aviation and Commercial Aircraft
Control Methods:	Engine modification and redesign; Methanol demonstration
Implementing Agency:	U.S.Environmental Protection Agency
Impacts:	Reduce ROG, NO_x, AND CO emission

Control of Emissions from Marine Vessel Tanks (CM #90M-I-3)

Source Category:	Marine vessel operations
Control Methods:	Add-on control devices; operational requirements
Implementing Agency:	District, U.S. Coastal Guard, LA and LB Port Authorities
Impacts:	Reduce ROG emission

Control of Emissions from Marine Diesel Operation (CM #90M-I-4)

Source Category:	Marine Diesel Engines
Control Methods:	Reduce cruising speeds; prohibit by-passing ships from entering District coastal water.
Implementing Agency:	District
Impacts:	Reduce NO_x emission; Energy conservation

Limit on Sulfur Content of Marine Fuel Oils (CM #90M-I-5)

Source Category:	Marine vessels
Control Methods:	Reduce Sulfur content of fuel; Scrubbers
Implementing Agency:	District
Impacts:	Reduce NO_x emission; Potential increase in hazardous wastes

Lower Emissions from Military Aircraft (CM #90M-I-6)

Source Category:	Military aircraft
Control Methods:	Lower-emitting military aircraft and reduced idle/taxi operations at military airports
Implementing Agency:	Department of Defense
Impacts:	Reduce ROG, CO AND NO_x emission

Eliminate Leaf Blowers (CM #90M-I-7)

Source Category:	Leaf blowers
Control Methods:	Prohibit the use and sale of Leaf blowers beginning in 1994
Implementing Agency:	District, local government
Impacts:	Noise abatement; Reduction in fugitive dust emissions

Emission Standards for Construction and Farm Equipment (175 HP & Less) (CM #90M-I-8)

Source Category:	Heavy-Duty construction and farm equipment
Control Methods:	Emission standards for new and rebuilt equipment
Implementing Agency:	Enviromental Protection Agency (EPA)
Impacts:	Increased manufacturer certification cost

TIER II CONTROL TARGETS -MOBILE SOURCES-

Tier II control targets have been developed to provide further emission reductions, and are directed at demonstrated technologies which require further advancement or improvements, but which can reasonably be expected to occur within the planning time frame.

There are several possible measures that can be taken to control emissions. These measures include engine modification, leaner air-to-fuel mixtures and/or improved fuel injection system. If these strategies do not provide the requested emission reductions, the consideration of catalytic converters, alternative fuels, or combinations of these technologies may be necessary.

TIER III TECHNOLOGICAL BREAKTHROUGHS -MOBILE SOURCES-

In general Tier III control targets call for efforts to develop new technology in reducing remaining emissions. Two primary control strategies likely to be investigated to achieve the Tier III targets for smaller gasoline Off-Road vehicle engine are catalytic converters and alternative fuels.

SUMMARY OF AIR QUALITY MANAGEMENT PLAN APPENDIX IV-E TRANSPORTATION, LAND USE AND ENERGY CONSERVATION CONTROL MEASURES

SETTING

The South Coast Air Basin (Basin) is a 6600-square-mile area bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto mountains to the north and east. The Basin includes all of Orange County and the nondesert portions of Los Angeles, Riverside, and San Bernardino Counties.

Background

The 1989 AQMP raised the consciousness among the people of Southern California concerning a number of lifestyle and infrastructure issues, and has brought about the passage of numerous transportation funding propositions. The awareness of linkages between growth, housing, jobs, traffic and air quality have also been raised significantly.

In 1988, the California State Legislature enacted the California Clean Air Act (CCAA). This current amendment incorporates the recommendations for the 1991 AQMP to satisfy the requirements of the CCAA.

The following four regional plans that are directly linked to the AQMP all complement each other:

* The Regional Mobility Plan;
* The Growth Management Plan;
* The Regional Housing Needs Assessment (RHNA); and
* The Area Wide Waste Treatment Management Plan (208).

All four of these plans will be updated as elements in the Regional Comprehensive Plan in 1992 after the results of the 1990 Census and the Origin and Destination Survey are available.

The 1991 AQMP continues the work started with the adoption of the 1989 plan. The following is a summary of the transportation land use and energy conservation control measures within revisions of the 1989 AQMP to the 1991 AQMP.

1.TRIP REDUCTION

a) Alternative Work Week, Flextime and Telecommunication

* Local government to enact a single trip reduction ordinance for telecommunication, employer based rideshare and transit.
* Require the local government ordinance to meet these targets by reducing their employee person work trips: 12% by July 1, 1994, 20% by 2000, and 30% by 2006.

* Agencies working together to implement this measure and to do outreach are: LACTC, CTC
* Adoption of trip reduction ordinance by July 1, 1994 for market incentives.
* Adoption of SCAQMD regulation by July 1, 1994.
* Conduct study of educational institutions to determine the extent telecommunication technology and programs in reducing school-related trips, by July 1, 1994.
* Consistent with Growth Management and Transportation Task Force (GMTTF) recommendations regarding dates, market incentives, and telecommunication center requirements in ordinances for regionally significant employment developments in housing-poor areas and regionally significant housing developments in housing-rich areas.
* Acknowledge telecommunication centers as an option for reducing trips under local government ordinances and in SCAQMD indirect source regulations, including Regulation XV.

b) Non-motorized Transportation

* The Growth Management & Transportation Task Force recommended that a non-motorized transportation control measure should be considered within the framework of the 1991 RMP/AQMP.
* Facilitate short trips (work and non-work) to be made by transit, bicycle or on foot through the use of ordinances and applied the ordinances in designated business, trade and government activity centers throughout the region by preparing required facilities. This measure increases mode shift.

2. <u>TRANSPORTATION DEMAND MANAGEMENT MOTORIZED MODE SHIFT STRATEGIES</u>.

a) Employment Rideshare and Transit Incentives

* Local governments have the option to enact a single trip reduction ordinance for alternative work week, telecommunications, and employer rideshare and transit incentives.
* Requires SCAQMD, SCAG or CTS to evaluate the effectiveness of trip reduction measures being implemented by local jurisdictions by December 31, 1993.
* Expands Regulation XV, if necessary (after analyzing the result of above mentioned measures), to cover employers, developers and building owners for facilities with 25 or more employees by December 31, 1993.

b) Merchant Transportation Incentives

* Adoption of non-work trip reduction ordinance by July 1, 1992.
* Adoption of SCAQMD Indirect Source Rule to implement control measure, i.e., to get developers, large retail establishments and merchants to provide programs and incentives for customers to reduce non-work trips.

c) Parking Management

* Date of implementation is July 1, 1992. It introduces employer "cash out" or free employee parking as a market incentive demonstration approach to plan implementation.

d) Auto Use Restrictions

* Adoption of Air Quality Element (dealing with special event centers and trip reduction programs) into General Plan by January 1, 1992.
* If necessary, to adopt a special event center trip reduction ordinance by January 1,1993 for large capacity centers (over 10,000 seating capacity).

3. TRANSPORTATION FACILITIES THAT PROMOTE MOTORIZED MODE SHIFT

a) High Occupancy Vehicle Lane System

* Policy pertaining to the pricing of a toll road facility that allows for free or reduced tolls for HOVs that achieve average vehicle occupancy rates attained by HOV lanes. An annual monitoring program is required to assess the effectiveness of the toll road pricing policy. The construction or dedication of HOV lanes is required if the monitoring shows these policies to be ineffective.
* Further study of arterial based HOV lanes to improve transit productivity and for applications to super streets has been included in the revision.

b) Transit Improvements

* Passage of Proposition 108, 111,116 has advanced the schedule for implementation of Metro Rail, Proposition A LRT line in Los Angeles County. A specific timetable has been set by LACTC, the implementing agency. Propositions 108 and 116 have also provided funding for implementation of the commuter rail system proposed in the RMP and AQMP. County commissions are currently establishing the necessary institutional arrangements to develop and operate commuter rail services.

4. LEGISLATIVE/TAX INCENTIVES TO PROMOTE MOTORIZED MODE SHIFT

a) Vanpool Formation Incentives

* Requires local jurisdictions to continue to support legislative efforts to provide the following:
  Favorable tax credits for employers who purchase or lease vans for employee vanpool programs, favorable tax treatment for employees who vanpool, tax credits for owner-operated battery powered vanpools, and tax credits for clean-fuel vans used for vanpools.

5. CONGESTION MANAGEMENT

a) Truck Travel Restrictions to Reduce Congestion

* Implementation Milestones and schedules are given for Incident Response Program, Accident Prevention Program, Strategies to Improve Truck Movement, and Public Sector Rules and Regulations.

b) Diverting Port-Related Truck Traffic to Rail

c) Rail Consolidation to Reduce Grade Crossings

* Control methods reflect establishment of Alameda Corridor JPA in August, 1989.
* Economic and environmental study for a consolidated corridor from Los Angeles to San Bernardino.

d) Traffic Flow Improvements

* Implementation schedule for 2,500 signals by the end of 1993. Total signals remain at 8000 by the year 2010. Requirements of AB 471 Congestion Management Programs can be expected to accelerate implementation of these measures.

e) Nonrecurrent Congestion Management

* Service Authorities for Freeway Emergencies (SAFES) to agencies working together to implement this measure.
* Requires Riverside and San Bernardino Counties to bring on-line 1800 call boxes by the year 1991. That additional funds be sought for Incident Management Programs through the SAFEs.
* Proposes legislative action to fund CHP and Caltrans programs through an increase in Department of Motor Vehicles registration fee.

f) Freeway and Highway Capacity Enhancements

* Policy on mixed-flow improvements, stating that their implementation should include appropriate components of higher priority regional plans and require documentation and consideration of these higher priority elements.
* Policy on market incentives and disincentives to prevent hardships for lower income people. The market incentives should be utilized to promote transit, clean-burning fuel vehicles, HOV, implement demand management and other air pollution strategies be integrated into future updates of the AQMP and RMP. SCAG is directed to work with local governments in corridors, identified for HOV facilities to implement transportation control measures.

g) Congestion Pricing

* It is proposed that peak-period travel in single-occupant vehicles be charged a fee to help relieve congestion. The congestion charges collected would be used to

compensate those willing to use the highway system during the off-peak hours as well as to fund transportation improvements and services in the corridors in which the fees were collected. The experiment should be targeted at corridors with convenient transit systems or HOV lanes.

6. AVIATION/INTER-REGIONAL TRANSPORTATION MEASURES

a) Replacement of High-Emitting Aircraft

* Completion date for Memorandum of Understanding between the Los Angeles Department of Airports and the SCAQMD for the complete phase-out of Stage 3 Aircraft; by July 1, 1991. Program initiation date of January 1, 1991. Full implementation by the year 2000.

b) General Aviation Vapor Recovery

* Adoption of SCAQMD regulation by August 1, 1991.

c) Indirect Source Measure for Airports

* Aircraft and Ground Service Vehicles
  Adopt SCAQMD indirect source rule by July 1, 1992.
* Centralize Ground Power Systems
  Milestones and schedule for development of SCAQMD indirect source rule.
* Airport Ground Access
  Adoption of SCAQMD indirect source rule by July 1, 1992. Requires airport fleet vehicles and parking lot shuttles be converted to alternative fuels.

d) High Speed Rail

* San Francisco, Los Angeles and Sacramento are expected to have high speed rail lines by the year 2010.
* Sacramento was added to the list of cities that will benefit from implementation of the high speed rail measure.

7. LAND USE POLICIES TO IMPROVE AIR QUALITY

Growth Management (refer to Summary of Growth Management Plan)
* Development of Subregional Vehicle Miles Travel Target.

8. ENERGY, FUEL AND TECHNOLOGY ADVANCEMENT

a) Local Government Energy Conservation

b) Residential, Commercial and Industrial Sector Energy Conservation

c) Waste Recycling

d) Clean Fuels for Passenger Vehicles and Electrical Vehicles

e) Railroad Electrification

f) Highway Electrification and Automation

* The impacts of highway electrification and automation are being investigated to determine to what extent these technologies can alleviate freeway congestion, air pollution and dependence on fossil fuels. The feasibility of implementing one or more demonstrations in the six-county region will be subsequently determined.

g) Automobile Buyback Program

* Buying back automobiles manufactured without catalytic converters and removing them from circulation.

9. FUGITIVE ROAD DUST MEASURES

a) Paving of Unpaved Lots and Parking Lots

b) Dust Suppression from Paved Roads

* Storm water control measures that may be implemented by local governments.
* Flood Control Districts to be added to the list of implementing agencies.
* Local governments may adopt Development Impact Fee Ordinances, or create Street Maintenance Districts to fund the measures.

c) Cost Effectiveness

CASE STUDIES: Selected Systems in North America

The purpose of preparing these case studies was to gather basic information about how other North American cities had pursued rail transit in the Post World War II era. We looked at twelve cities using light and heavy rail technologies. A summary of some of the operating characteristics can be found on the accompanying chart.

We concluded that station area planning, in the form of value chapter or joint development, is essential to a successful transportation system. In looking at twelve North American cities, those with integrated planning policies tend to be most successful. This can be attributed to the accessibility of the system, zoning that allows for intensive mixed-use of land, and the desirability of a system that meets the needs of its patrons. The results can be seen favorably in farebox revenue, community development, and financial opportunities.

CASE STUDIES: RAIL SYSTEMS SUMMARY

CITY SYSTEM	TECHNOLOGY FLEET SIZE	START-UP DATE	NUMBER OF MILES	NUMBER OF STATIONS	AVE. DAILY PASSENGERS
Atlanta (MARTA)	Heavy 198 Vehicles	1979	32	29	190,000
Boston (Orange Line Only)	Heavy 120 Vehicles	1957	11.1	19	127,000
Edmonton	Light 37 Vehicles	1973	7	9	24,000
Miami Metro-Dade	Heavy 136 Vehicles	1980	21	20	50,000
	People Mover 12 Vehicles	1986	1.9	10	12,000
Portland	Light 26 Vehicles	1986	14.9	31	24,500
Sacramento	Light 36 Vehicles	1987	18	27	22,500
San Diego	Light 71 Vehicles	1981	33.5	33	45,793
San Francisco (BART)	Heavy	1972	71.4	34	250,000 (102,000 Pre-Earthquake)
San Jose	Light	1987	18.4	30	20,000
Toronto	Heavy 622 Vehicles	1948	38	65	600,000
Vancouver (Sky Train)	Light 130 Vehicles	1986	15	17	110,000
Washington DC (WMATA)	Heavy 594 Vehicles	1976	103	83	500,000

City of Los Angeles, Department of City of Planning (11/91)
Data Compiled By: Sheri Brett

(1) ATLANTA

The Metropolitan Atlanta Rapid Transit Authority (MARTA) was created in 1965 by the Georgia State legislature. In 1972, it was empowered to plan and operate an integrated public transportation system, taking over the Atlanta Transit System's extensive bus network. This new system was to include surface and rail operations for the Metropolitan Atlanta area. Construction began on the MARTA heavy rail system in February, 1975.

The current system is 32 miles long, with 29 stations. MARTA heavy rail carries about 190,000 passengers daily. MARTA heavy rail uses Siemens, Siemens-MAN and LEW traction, with a fleet of 198 actively used vehicles, and 42 reserve vehicles.

The capital costs to build the MARTA system to date is 234.1 million dollars YTD. It was funded for each segment separately. Operation funding is in part from a 1% sales tax in Fulton and De Kalb counties, which pays for about half of the operating costs. MARTA has a 36% farebox return, with the remaining operating costs split between Federal Operating Assistance, and local sources of revenue.

Atlanta studied station area planning extensively in the 1970's, and created documents that set the standards for station area planning. Called Transit Area Development Studies (TSADS), they set guidelines for the future growth and development of Fulton and De Kalb Counties, as they interact with the transportation network.

The vision of the planners was to create an environment conducive to the use of public transportation by planning the connections and activities which were to take place around and near the transit stations. The emphasis was to reduce traffic interference in already existing areas, and to promote development around specified stations. The emphasis for these areas was for high density development of office and retail space, as well as higher density residential areas. Joint development and zoning strategies were used to bring in private sector investors, and also tax incentives.

The plans created high-density mixed-use stations, primarily in the downtown area. The TSADS were used as guidelines, but many of the recommendations were never implemented. There were no specific controls on development in terms of density or parking. This created areas of high density and parking - 1 space for every 1,000 square feet, with much of the parking free.

Atlanta is beginning to consider additional station area plans to balance its system. There are extensions under construction and planned. At this point, local communities are encouraged to participate with the planning and development of station areas for the most effective use of transportation. They are emphasizing the

need to integrate land use planning and transportation planning on the local government level. They are looking to improve accessibility, decrease the use of single occupancy vehicles, and reduce vehicle trips. Some of their concepts for how to accomplish this are to designate high density transit corridors as growth corridors, promote employment areas close to transit facilities, encourage more private development including daycare facilities and other public amenities at station areas, and develop various densities of housing close to employment and transit centers.

(2) BOSTON

Boston has a long rich history of rail based rapid transit systems. Both its heavy and light rail systems are nearly a century old, America's first subway opened under Tremont Street. For the purposes of this study only the Orange Line will be reviewed.

The Orange Line in Boston has the most development associated with station area planning. It is 11.1 miles long, with the most recent extension, the Southwest Corridor, being 4.7 miles. It has a total of 19 stations, and a daily ridership of 127,000 passengers.

The current fleet of the Orange Line is 120 cars, with 102 in service during peak hours. These heavy rail vehicles were built by Hawker-Siddeley of Canada, using conventional technology.

The Metropolitan Boston Transit Authority (MBTA) is the planning and operating agency of the Boston Metro. The Orange line branch is mostly federally funded in terms of capital costs, about 80-90%. This is one of the largest federal grants ever awarded, because transportation funds are allocated in exchange for highway funds. The Southwest Corridor extension costs $743 million, with the expense being due to the urban alignment.

The Orange Line has a farebox return of 19.4 million dollars, or 29% of total costs. The remainders comes from the state, and about 10% from the local cities and towns that support it. The annual operations costs are about $65.5 million dollars.

The Orange Line goes through an old commercial area and a port, and runs next to a development area. One of the difficulties in transit policy in Boston is that there are 78 cities and towns in Boston, with no unincorporated areas. Planning policy is divided accordingly. The larger, more organized communities zone to take advantage of a transit-development link, with joint development projects or zoning for higher density. There are several mixed-use developments under consideration currently.

(3) EDMONTON

Edmonton Transit used abandoned Canadian National railway right of way combined with a new subway to create their light rail alignment. Groundbreaking took place in 1973. In 1989 an extension southward opened to Grandin bringing the total system milage to 7 miles with 9 stations. Twenty-four thousand (24,000) ride the system daily.

The Edmonton light rail line was the first in North America to use the ubiquitous U2 double ended light rail vehicle built by Duewag AG of Germany. These are "off the shelf" models with conventional traction technology preferred by Edmonton, Calgary, San Diego and Sacramento. Edmonton has a fleet of 37 cars.

The Edmonton light rail is planned and operated by the same agency, Edmonton Transportation Department. The Transit Division has a Transportation Planning Branch, which plans the system, and another branch for Operations. The capital costs to date, including car acquisition and a new station to be opened next year, are $350 million Canadian dollars. The capital funding for Edmonton comes 75% from the Province of Alberta, and 25% from the city.

The operating costs for Edmonton are about $9.9 million Canadian dollars annually. The system has a farebox return of 43%. The remainder comes from a Province grant, a Municipal tax levy.

The Edmonton light rail is small, but it does have station area planning as part of the planning process. One quadrant of the city has a station connection with the Northlands Coliseum and Commonwealth Stadium, while another community decided to stay with low density zoning. Others have established town centers of higher density, and there is redevelopment at the planned University station. The general plan does not have a specific mechanism by which station area planning is considered, but the local communities can decide, with the help of the planning agency, to incorporate various joint development projects and re-zoning in their station areas.

In one study, "Clareview Town Centre Neighborhood Area Structure Plan," by the Walker Consulting Group Ltd. and William Dolman and Associates, plans are outlined for a mixed use, higher density neighborhood center, close to several residential neighborhoods. It outlines the goals for the center, zoning considerations, transportation circulation, and "human" elements of design.

(4) MIAMI

Ground breaking for the Metro Dade heavy rail line occurred in 1980. The line opened in May of 1984, from Dadeland South to Overtown. A further extension to Earlington Heights opened in December of the same year. There are twenty elevated stations on the system, because of Miami's high water table preclusion of subway construction. Transit America, (BUDD) of Pennsylvania delivered 136 cars from a joint order with Baltimore to Miami in 1984.

One of the initial problems with the route was the challenge to serve the central business district due to political and physical limitations, (no underground alignment was practical). The Miami Metromover peoplemover system was created to resolve this problem, allowing connecting service from the Heavy Rail line into the central business district. In fact, ridership on the Heavy rail line increased quickly once the Metromover opened in April 1986. Westinghouse Metromover of Pennsylvania built twelve cars in 1986, to serve ten stations in downtown Miami, carrying a maximum of 120 people at a time.

Extensions to both the Metro line and the Miami Metromover are contemplated but no funding is currently available. Miami has a ridership of 50,000 passengers daily on the heavy rail line, and 12,000 on the Peoplemover. There are 21 miles of heavy rail, and 1.9 miles of Peoplemover so far. Upon the completion of the Peoplemover, there will be 4.5 miles.

The capital costs to build the Miami systems were approximately $1.5 billion dollars, with 75% of the funding provided through Federal sources. Seven and a half million dollars came from the State of Florida, and the remainder from city and local bonds.

The operating costs are approximately $32 million annually for the Metrorail, and $16 million for the Metromover. They have a farebox return of 30-35%, with the remainder of operating subsidy coming from the general County budget, and various State and local sources.

Miami uses station area planning, value capture and joint development adjacent to its rail facilities. Joint development is actively sought and encouraged, with incentives for companies to build in high density areas. A development has to be built 30% smaller if it is not in the planning zones of the station areas. Basically, if it is not a transit-oriented development, it is more expensive and harder to approve. Miami is planning to use their rail system to guide growth and development in the region. These plans are in the city's general plan, and supported by local agencies.

(5) PORTLAND

The Tri-Met Light Rail system in Portland, Oregon, represents the most advanced station area planning in use in the United States. It serves the expanding East Multnomah County, into the city center of Portland. The alignment is 14.9 miles long, and features 31 stations (4 are in one direction). It carries 24,500 passengers daily.

Planning for the MAX system began in 1976, when the U.S. Department of Transportation approved the substitution of a transit line for the proposed Mt. Hood Freeway. In 1977, it was decided that light rail would be the best alternative. Construction began in 1982, and was completed in September of 1986.

The Portland light rail system chose double-ended vehicles built by Bombardier of Canada under contract from BN Constructions Ferroviaires et Mettalliques SA of Belgium. They are loosely based on similar cars built by BN for Rio de Janeiro in Brazil. This conventional technology is less expensive to purchase and repair than newer high-tech vehicles. They now own 26 vehicles, with 24 in service at rush hour.

The MAX is operated by Tri-County Metropolitan District of Oregon. In 1990, its yearly operating costs were $6.87 million dollars. As it compares with the bus operations 30% farebox return, the MAX receives a 52.7% farebox return, and subsidizes the remaining balance with tax increment financing. This tax is paid by employers at the rate of $6.00 per $1,000.00 of payroll salaries in the Metropolitan area. While MAX is currently planned by Tri-Met, planning responsibilities for future construction will be given to the Metropolitan Service District, a regional planning authority.

The capital costs for building the MAX are $214 million dollars YTD, in 1985 dollars. Eighty three percent of construction funding came from UMTA, with the remaining 17% divided between local agencies. The Transit authority paid $7 million, the suburban sector $5 million, $2 million came from civic coffers, and the remaining $7 million came from the City of Portland. Some of the funds were drawn from existing revenue, portions came from parking fees implemented at the zoo, some from Bonds, and some from general funds. The existing assessment districts were to fund amenities downtown.

Portland has been very creative in terms of planning. When the funding was secured, extensive station area studies and planning commenced. Instead of planning being strictly controlled by the regional authority, the local governments were given the voice and power to shape how the MAX would affect their community. The developers were given voice by local governments, and the combination of shared experience and mutual interest gave the planning agencies strength and focus. It was decided that having the light rail was not a goal unto itself; the goals of the city were defined, and light rail became part of Portland's vision for the future.

"Light rail is a vehicle to move people, to shape regions, defer highway investments, and to enhance quality of life."

Station area planning goals were created to stimulate development before the system was built, by determining market potentials and rezoning the station areas. This was done to specifically work with the light rail system. There was strong community support at every level of planning, because all interested parties were given a voice.

(6) SACRAMENTO

Sacramento's "RT Metro" was born out of a change in heart towards freeway construction. By 1983 construction was started on a new light rail line using both the interstate transfer funds and the alignment of an aborted freeway. The Sacramento Regional Transit District opened the first 9 mile section of the new line from Watt-I80 to the newly developed downtown transit mall on March 12, 1987. Nearly 6 months later the southern 9.3 mile section was inaugurated on September 5, 1987.

Twenty thousand and five hundred daily riders currently patronize the 18.3 mile 27 station line, which is now being double tracked for greater crowd capacity. The RT Metro is planned and operated by the Sacramento Regional Transit District. The annual operating costs for the RT Metro are approximately $11 million, with an over 30% farebox return. The remaining costs are absorbed by TDA funding, and local sources.

The light rail vehicles selected for the alignment were "off the shelf" Duewag U2 cars slightly modified for the Sacramento system. Sacramento has a fleet of 36 cars.

Funding for the RT Metro was made possible by the transferring of funds from highway construction to rail construction. This allowed the capital costs of the system to be manageable for the city. The capital costs to build the system were 176 million, with 90 million coming from federal funds, but the UMTA funding was fixed, and the local funding has to be approved before the federal sources will be available, in 1992. The rest of the capital came from local sources.

RT Metro had many other advantages besides highway funding going for them. The northern section used abandoned highway right of way both for the line and its dedicated parking facilities. The Storage and Maintenance facilities were used to build the cars used on the line. The southern section was built on two abandoned railway rights of way, the Sacramento Northern and the Southern Pacific railways. The entire line was single tracked with passing sidings to minimize construction costs.

A document called "Transit-Oriented Development Design" prepared for Sacramento by Calthorpe and Associates, is an outline for future station area planning in Sacramento. This very ambitious study gives the criteria for Transit-Oriented Development (TOD) sites as about 80% under-utilized developable land, within a 1/4 mile walking radius, and a Secondary Area with a 1 mile radius, of a transit stop. This area would include the area on the side of the street with the stop, not necessarily on both sides of the alignment. The study calls for a diverse, mixed-use station area, with no competing retail uses (gas stations, car wash, etc.). The study outlines all aspects of planning from zoning to street measurements.

This study is to direct the future of station area planning in Sacramento. The city

is currently drafting a new 20-year plan, including many guidelines from the study. There are several TOD's already in business, with larger projects in the planning stages. Where these guidelines are for future construction of alignments, they are also considering the existing system for new TOD's.

(7) SAN DIEGO

The San Diego Trolley is considered to be one of the most successful transit systems in the country. Ground-breaking took place on October 25, 1978. The alignments are a combined 33.5 miles long, with a total of 33 stations. The San Diego Trolley carried an average of 45,793 daily in 1991.

The San Diego Trolley uses "off-the-shelf" Siemens Duwag cars, which as conventional technology, keep acquisition and maintenance costs down for this system. They are similar to cars used in Sacramento. They have a fleet of 71 vehicles.

Capital funding for the Trolley came from various sources, including the California State gas tax, the Transit Development Act, State Transit Assistance, private sector sales and leasebacks. The capital cost for the Trolley was $306.2 million dollars, with extensions planned.

The operating costs for the Trolley are very low at $18.2 million dollars annually. The farebox revenue is the magic of this system, at an over 90% return. This is attributed to low operating costs, and a philosophy of running the system as a business - they run an open shop, and make every effort to keep costs low. The remaining operating costs are paid by State Transit Assistance Funds. The system is operated by San Diego Trolley, Incorporated, a subsidiary of Metropolitan Transit Development Board, or MTDB.

The planning of the San Diego Trolley is carried out by MTDB. While MTDB does not have a specific mechanism for station area planning, there is emphasis on favorable land use decisions concerning transit. Local communities are encouraged to be a part of the planning process with regard to their stations, and they do have a policy to promote Joint Development, and have several projects to their credit. Joint Development makes significant contributions to the light rail system.

The MTDB does not produce strict documents that determine all station area planning decisions. Community goals are considered, as are accessibility and the needs of the many transit patrons.

(8) SAN FRANCISCO BAY AREA

The San Francisco Bay area has a truly rich history of public transportation. Its cities have seen many innovations in public transportation and have tried just about everything imagined in public transportation. Today the San Francisco Bay area is a true transit showcase, with more types of public transportation than any other conurbation in the world. A complete history of public transportation in the Bay area would fill volumes, so for the purposes of this document, study is limited to the Bay Area Rapid Transit District and its heavy rail system.

By the early 1960's, all rail-based urban transportation in the Bay area had been reduced to five surface street light rail lines running exclusively in San Francisco. Many transit districts had sprung up around the bay all using buses, yet there was no coordinated transit system to get around the whole Bay Area. Voters approved a bond issue in November of 1962 to resolve this problem, giving birth to the Bay Area Rapid Transit District. Six counties were originally to participate, of these only four approved and financed the system and, until recently, only San Francisco, Oakland and Alameda counties were to benefit from the BART system.

Ground breaking took place on June 19, 1964 in Concord and the first section from MacArthur station in Oakland to Fremont station in its namesake city opened on September 11, 1972. The final link under the San Francisco Bay opened in 1974, completing the 71.5 mile system with 34 stations. Ridership on BART is holding steady at 250,000 passengers per day. This is a significant increase from before the earthquake of October 17, 1989, when patronage was about 102,000 passengers daily.

The capital costs to build BART so far are a $.5 Billion dollars. The funding comes from Measure C dollars, UMTA and State of California funds, and County funds from Alameda, San Francisco and Oakland Counties.

BART operates at $40.3 million dollars annually. The farebox return is 45.86% with the remaining revenue coming from a transaction and use sales tax (42.17%), property taxes (4.51%) and other local sources (7.46%).

BART has done studies and planning concerning the lands adjacent with its stations, but since local governments are responsible for planning, BART has worked with the community in station area planning. A connection between transportation and land use have been recognized. BART plans the property it owns accordingly, and actively works to integrate with local communities. Market considerations notwithstanding, they try to plan the best possible use for the area. Once this has been established, it is identified as a good location for development. The local governments decide where the further planning is initiated, and they have made a serious effort to use redevelopment opportunities. Value capture occurs through tax increment financing and tax bonding.

(9) SAN JOSE

Santa Clara County Transit District began in 1972 as a result of federal funding, (U.M.T.A.) and the Mills-Alquist-Deddeh Act state gasoline tax funds. They combined Palo Alto Transit, San Jose City lines and portions of Peerless Stages routes into one large regional transit district. When plans were made to build a new highway along the Guadalupe corridor, a light rail line was to be included in the project.

Political setbacks held groundbreaking back until March 23, 1984. The line was opened in sections starting from the northern end. Final extension along the Guadalupe corridor to the Santa Teresa and Almaden Terminals occurred on April 25, 1991. Twenty thousand riders a day use the 30 station, 18.4 mile line.

The double-ended light rail vehicles were built by Urban Transportation Development Corporation Incorporated (U.T.D.C.) of Canada, loosely based on the Toronto Articulated Canadian Light Rail Vehicles, (C.L.R.V.). San Jose has a fleet of 50 vehicles. These are conventional technology vehicles.

The capital costs of the light rail in San Jose are about $500 million dollars YTD, paid by the State Rail Bond. Extensions are being planned.

The Santa Clara County Transportation Agency plans and operates the Light Rail system. The farebox return is 11%, with a total annual operating cost of $19 million dollars. The remainder of the funding is provided by a 1/4 cent sales tax (TDA) and a Santa Clara County dedicated 1/2 cent sales tax.

To date, SCCTA has not done extensive work on station area planning specifically, though there has been development as a result of the light rail system. Presently, work is progressing toward the creation of a child care facility two miles south of the downtown area, in a location that is scheduled for the terminus of the light rail and CalTrain systems. The question remaining is whether it should be available to patrons only, or for the general public. There is also in progress a study for a Housing Initiative Project, to benefit from higher density zoning. San Jose is beginning to create station area planning policy around the needs of the community.

(10) TORONTO

Toronto was the first North American city to build a new heavy rail, (subway), system since the second World War. Although Toronto kept its extensive streetcar network intact, it could no longer handle the sheer volume of traffic developing in the city during the 1950s.

Groundbreaking for the subway occurred on September 8, 1949. The completed system counts 65 stations covering 38 miles of combined heavy rail and light rail alignment. Over 600,000 patrons use the system daily.

The heavy rail lines use 74.5 foot subway cars built by the Montreal Locomotive Works, Hawker Siddeley, United Transportation Development Corporation and Can-Car Rail companies of Cananda. All of these use conventional traction technology. They have a fleet of 622 subway cars, and 28 light rail vehicles.

Seventy-five percent (75%) of the capital funding for the Toronto Subway and the light rail comes from the Province of Ontario, with the remaining twenty-five percent (25%) being absorbed by Toronto Metro Government. The capital costs to build the system to date are $4.9 billion dollars Canadian. The subway and light rail are planned by the Metro Toronto Council.

The Toronto Transit Commission operates transportation in Toronto, and plans to a limited degree. The operating costs of the heavy rail division were combined with total system costs, and not separately available. In 1978, a policy was created stipulating that the subway was to return 70% of its costs through farebox return. Later, that figure was reduced to 68%, which the system now maintains. The remaining percentage was paid half by the Provincial Government of Ontario (16%), and half by Metro Toronto (16%).

Toronto is the standard by which North American cities measure their transit success. It is regionally planned and locally operated, which demonstrates that planning and operations are distinct, and effectively run by separate agencies. Presently, some planning responsibilities are handled by the Toronto Transit Commission, but there is a movement to put these decisions back into the hands of the Metro Toronto Council.

There are no specific station area planning mechanisms in Toronto, but the political culture of the region strongly favors transportation expenditure, having a long

tradition of transit use. The planning and construction of the subway is responsive to the needs of the ridership. Accessibility is a major planning factor, and service to the community is a priority. Current extensions are being considered to relieve segments of the system that are running at or near capacity, or in high growth areas to accommodate the growing Metro areas. This also keeps development focused and discourage unwanted growth in specific communities.

Station areas in the downtown area are specifically zoned to encourage high density development, and about fifteen years ago, they were zoned for FAR 12 development, but since have been downzoned for FAR 8. Local communities participate in station area planning throughout the Metro area, sometimes favoring higher density development, but most suburban stations strongly favoring a low density environment. Joint development is encouraged, but there are more applicants for participation in joint development than there are projects to invest in. Public funding is not provided for the purposes of joint development, but in turn, the transit agencies do not ask for a percentage return of the value capture from the subway connection. The philosophy is that if developers have to part with the percentage, they may leave the area, taking the transit riders with them.

Specific station area planning is not presently needed, because within the region, it is understood that successful development is most closely associated with transit, and especially with heavy rail transportation. This is in part true because of the parking restrictions in the downtown Toronto area. Parking is minimal. For example, the Stadium holds 50,000 people, but there are fewer than 500 parking spaces within the one and a half mile walking radius around the stadium. If you want to go to the ball game, you almost have to take the subway. Parking is discouraged as a matter of policy. Most mobility problems are answered by mass transit.

Perhaps the most valuable contribution the subway has made is the focusing of development. Development is structured by the system, keeping high density development in limited and controlled areas, instead of spreading without direction. This growth is monitored and restricted to maintain the integrity of the surrounding low density residential, industrial and institutional locations.

(11) VANCOUVER

Public transportation began in Vancouver in 1891, with an interurban rail system. By 1938, they had 330 miles of track, and a fleet of almost 600 passenger, freight and express cars. Like many North American cities, the system was dismantled by the mid 1950's by politics.

In 1971, light rail was recommended to pick up the transit deficit in the growing Vancouver area. After several revisions, Sky Train was approved in 1981 using the controversial Intermediate Capacity Transport System, (ICTS), developed by UTDC of Canada. The system was opened in January 1986, coincident with the opening of the World Exposition at Vancouver.

The use of proven technology in most of Sky Train's support operation gave the experimental ICTS portion a chance for success. Stations were built using conventional designs keeping the cost for all 15 stations in Vancouver low. Automated train control problems were eliminated by using the proven "SELTRAC" control system already in use on line 4 of the "U Bahn" operated by BVG in Berlin, Germany.

Sky Train now has 15 miles of in-service alignment, with 17 stations. One extension is currently under construction, with three new stations considering private sector development. It has a daily ridership of 110,000 passengers, with 130 cars to service them. 55% of the passengers transfer from the bus system, and 35% walk to train stations.

BC Transit plans the Sky Train, which is a Province of Alberta organization. It has a subsidiary called BC Rapid Transit, which takes care of the operating responsibilities. BC Transit works with local authorities both in terms of planning and operation.

The capital costs to build the Sky Train are $750 million Canadian dollars. Two hundred fifty million dollars of that came as a grant from the province of Alberta instead of highway funds. The remainder comes from the province at 73.5%, and 26.5% from the local agencies. A funding change occurred that has the Province paying 100% of the costs for future extensions.

Operating costs are 26 million dollars Canadian annually, but that is for the entire transit system, buses and all. The farebox return is 53% systemwide. The Province pays for 31.2% of the operating costs, and local governments pay 68.8%. With the 53% farebox return, local authorities need to recover an additional 15.8% of their costs. This is achieved through a gasoline tax of 3 cents per liter, a levy on hydroelectric power of $1.90 per month per residence, and a non-residential property tax.

The connection between transportation and land use is part of Canadian thinking in terms of planning. BC Transit determines where an alignment is positioned, and local municipalities work on station area planning, to suit the needs of their riders. Long range planning also comes out of the regional authority. Vancouver works to bring high-density mixed-land uses around station areas, unless a community is better served with existing local plans. There are three residential stations currently on the alignment, but the rest have one form or another of joint development, community use, or plans to build accordingly. The transit system was built to direct land use, not just for rapid transit, and station areas are zoned accordingly. The Province is considering value capture techniques at the present, and has only plans to do more of the same.

(12) WASHINGTON, D.C.

Washington Metropolitan Area Transit Authority (WMATA) was created in 1967 to build a rail rapid transit system by President Johnson and other national dignitaries. Originally, it was not intended for WMATA to operate the system, but in 1973, using a $70.3 million dollar grant, WMATA took over all the Washington D.C. transit operations.

The Washington Metro began construction on December 9, 1969. The total extent of the Washington Metro to date is 103 miles, with 83 stations. The Metro has a daily ridership of over 500,000 passengers.

The Washington Metro Fleet is 594 cars, 298 being engineered by Rohr Industries of Chula Vista, California. The 75 foot-long cars were conventional technology. Later, 76 cars were built by Breda of Italy, also of conventional technology. In 1981, Breda was contracted to build high technology chopper-controlled vehicles for WMATA, with 220 now in service, and 70 now on order.

The capital costs of building the Washington Metro has been $10 billion dollars YTD. The operating costs of the Metro are $290 million dollars annually, with a 76% farebox return. The remainder is funded by local cities and counties, with some funds coming from the states of Maryland, Virginia, and the District of Columbia.

WMATA plans and operates the Washington Metro. Station area planning is not specific in their philosophy, but value capture and joint development are employed throughout the system. The system enjoys about $6 million dollars annually from value capture, but the figures vary depending on local economic conditions.

Most specifically, WMATA has the most advanced joint development policies in North America. WMATA leases excess development rights to private businesses for high density development, for creating additional ridership for the system. They contract joint development strictly on a ground lease basis. To date, they have 12 major joint development projects, and 12 system interfaces (where developers have agreed to a direct connection to the transit station).

The success in terms of station area planning is that joint development redefines zoning and land use patterns around station areas, even if it is not strictly mixed use. Joint development is sought and encouraged for mutual benefit of WMATA, developers, and patrons. WMATA offers structure to joint development strategies, while maintaining the integrity of the transit network.

List of Staff Credits

Los Angeles County Transportation Commission

Judy Wilson
Deputy Executive Director

Central Area Team

A.R. de la Cruz
Director

Nancy Michali
Rail Development Manager

James de la Loza
Project Manager

Steve Brye
Project Manager

Yvette Pierre
Intern

Gilberto Ruiz
Intern

City of Los Angeles Department of City Planning

Emily Gabel
Principal Planner

Lynn Harper
City Planner

Karla McLucas
Associate City Planner

Robert Yabes
Associate City Planner

Joe Conduah
Assistant Planner

Jack Tsao
Assistant Planner

Mewland Watanabe
Planning Aide

Sheri Brett
Planning Intern

City of Los Angeles Department of Transportation

Benjamin Chen
Transportation Engineer

Roy Kim
Associate Transportation Engineer

Fatemeh Shahryarinejad
Assistant Transportation Engineer

* Thanks to Rick Rosen for providing some of the historic material for this report

COMMENTS SHEET

NAME: _____

AGENCY/ORGANIZATION: _____

COMMENTS SHEET

NAME: _____

AGENCY/ORGANIZATION: _____

COMMENTS SHEET

NAME: _____

AGENCY/ORGANIZATION: _____