

# Metropolitan Setting<sup>1</sup>

## GENERAL CHARACTERISTICS

Los Angeles lies at the heart of one of the most complex metropolitan regions in the United States. As a major center of commerce, finance, and industry in the West, and the Southern California region for many years has captured the imagination of those who see in the patterns of its development the shape of the American city of the future.

The Southern California region extends well beyond the Los Angeles-Long Beach metropolitan area (SMSA). As defined by the boundaries of the regional planning agency, the region covers 38,000 square miles containing a population of more than 10 million residents. Aside from Los Angeles County, the region includes the counties of Orange, San Bernardino, Riverside, Ventura, and Imperial.

The Los Angeles-Long Beach SMSA encompasses the most heavily populated area of the region. With a population of slightly over 7 million in 1970, the SMSA is the second largest in the United States. It covers 4,069 square miles and includes 76 municipalities other than the cities of Los Angeles and Long Beach. The City of Los Angeles covers 464 square miles within the County of Los Angeles, and the boundaries of the county coincide with those of the SMSA.

Built on a vast plain surrounded by mountains on the north and east and the Pacific Ocean on the south and west, Los Angeles spreads out in a pattern of development that gives the region a distinctive style. Although the city's CBD is strong, major centers of employment and residential development are scattered throughout the area in a decentralized, low-density pattern of growth (see Figure 2).

During the past 25 years, shifts in population have reinforced this decentralized pattern. The largest change in population for the SMSA took place during the decade between 1950 and 1960, when the SMSA grew by 45.5 percent. During the

1950-60 period, the most pronounced growth took place in the suburbs. While the population of the City of Los Angeles increased by 25.8 percent and Long Beach grew by 37.2 percent—substantial increases in both cases—the population of the remainder of Los Angeles County increased by 66.6 percent.

Population growth during the next decade reflected the same pattern but indicated that the overall rate of growth had slowed. Starting with a total population of 6,038,771 in 1960, the entire SMSA increased by 16.5 percent to a total of 7,036,887. As it had the decade before, the distribution of this growth also favored the suburban areas of the county. In 1960, the City of Los Angeles held 41.1 percent of the population, Long Beach 5.7 percent, and the remainder of Los Angeles County had 53.2 percent. By 1970, the share of the two central cities had dropped to 39.9 percent and 5.1 percent respectively, and the percentage of the population living in the suburban areas of the county had increased to 55 percent.

One characteristic of this pattern of development is that the distribution of population has become relatively even throughout the county. Based on studies undertaken by the Southern California Rapid Transit District, Wilshire Boulevard in the CBD had the highest density (20 persons per acre) and percentage of population (18 percent) in 1970. The areas surrounding it were less dense but not so radically different in terms of population. In the northwest, the San Fernando Valley had 14.4 percent of the population and a density of seven persons per square acre. The areas to the southwest and south of the CBD averaged densities from 12 persons per acre to 8 persons per acre. East of the CBD, in the Santa Ana area, the figures are higher. In 1970, 17.2 percent of the population lived in the area at a density of nine persons per square acre. With 6 percent and 5.5 percent of the population respectively, Pasadena and the San Gabriel Valley were considerably lower than the other areas; but their densities were comparable at seven and nine persons per acre.

This pattern of population distribution and density stimulated a considerable amount of debate

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<sup>1</sup> See Figure 1, pages 20 and 21

LAND AREA (1970)  
(square miles)

Suburban Ring	3,556.6
Los Angeles City	463.7
Long Beach City	48.7
Entire SMSA	4,069

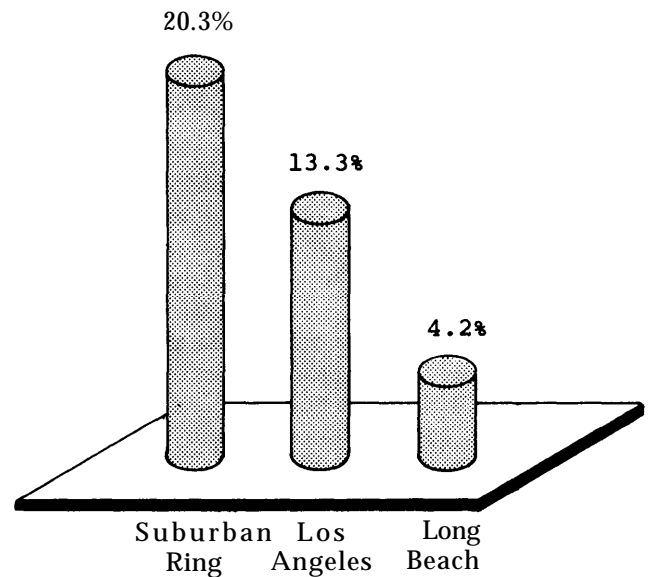
POPULATION

	<u>Suburban Ring</u>	<u>Los Angeles City</u>	<u>Long Beach City</u>
1960	3,215,588	2,479,015	344,168
1970	3,868,658	2,809,596	358,633

DENSITY  
(population/square mile)

	<u>Suburban Ring</u>	<u>Los Angeles City</u>	<u>Long Beach City</u>
1960	879	5,346	7,067
1970	1,088	6,059	7,364

POPULATION  
Percent Change 1960-1970



**FIGURE 2:LOS ANGELES METROPOLITAN CHARACTERISTICS**

Source: Urban Transportation Fact Book, American Institute of Planners and the Motor Vehicle Manufacturers Association of the U.S., Inc., 1974.

A Standard Metropolitan Statistical Area (SMSA) includes a center city (or cities) , usually with a population of at least 50,000, plus adjacent counties or other political divisions that are economically and socially integrated with the central area.

about the type of mass transit system best suited to serve the area, Whether a high-capacity mass rapid transit system could be justified in any of these areas was a central question throughout the planning process.

## EXISTING PASSENGER TRANSPORTATION SYSTEM

Los Angeles has come to be known as the freeway capital of the world. Although the region had a highly developed interurban railway network until shortly after World War II, it was replaced by an extensive system of freeways, and Los Angeles has become one of the most auto-dependent metropolises in the United States.

The total number of vehicles registered in the seven-county region was 7,095,138 in 1973. Automobiles amounted to 76 percent of this total, and Los Angeles County had 3.7 million automobiles or 69 percent of all automobiles in the region. It is estimated that 41 percent of the population owned an automobile in 1973 and that nearly 65 percent of the land area of downtown Los Angeles was devoted to the service, storage, or movement of motor vehicles.

Downtown Los Angeles lies at the center of an elaborate grid of freeways that links together the entire region. Roughly speaking, the grid is formed by four north-south freeways and several freeways running east and west. The first four are the San Diego Freeway (I-405) to the west of the CBD; the Long Beach and Harbor freeways connecting the city to Long Beach and Pasadena; and I-605, which runs east of the city. The second group is formed by the leg of the San Diego Freeway that crosses to the east just north of Long Beach; the Santa Monica and Hollywood and Golden State freeways linking the city to the coast and San Fernando Valley on the west; and the Santa Ana, Ramona, and San Bernardino freeways that link the city to areas in the east and south. Interstate 210 and the Ventura Freeway mark the northern line of the grid.

Historically the system of interurban railways that provided public transportation to the region closely resembled this elaborate network of freeways. The Pacific Electric System, as it was called, had over 1,100 track miles connecting more than 50 communities in the region before it began to go into decline in the 1930's and was gradually replaced by buses.

The Southern California Rapid Transit District (SCRTD) is now responsible for the provision of public transit service in Los Angeles County. Although there are 13 other transit companies in the region, SCRTD is by far the largest. The number of buses it operated grew from 1,771 in 1973-74 to 2,111 in 1974-75. Although SCRTD ran a \$44.6 million deficit in fiscal year 1974, the number of revenue passengers it carried had risen from 139.3 million riders in 1966 to 152.5 million in 1974 (see Figure 3). Table 1 shows the amounts of Federal assistance provided to SCRTD (and its predecessor, the Metropolitan Transit Authority) since the beginning of the UMTA program.

TABLE I.—Federal Assistance to  
Los Angeles Transit Programs  
From F.Y. 1962 to May 31, 1975

Type of Assistance	Federal Share	Total Costs
Capital Grants . . . . .	\$78,530,000	\$110,717,000
Technical Studies . . . . .	6,440,000	9,560,000
<b>TOTAL . . . . .</b>	<b>\$84,970,000</b>	<b>\$120,277,000</b>

Source: Urban Mass Transportation Administration

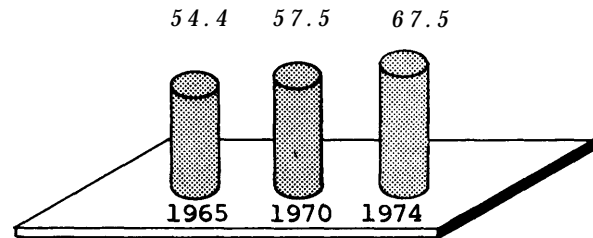
The statistical data on the mode and distribution of the journeys to work underscore the decentralized land use pattern described earlier and the predominant role the automobile plays in the county (see Figure 4). In 1960, 75 percent of the employed residents of the center cities and 86 percent of the employed residents of the suburban ring used automobiles to get to work. The figures for public transit use were 13 percent and 5 percent, respectively. In 1970, the pattern was even stronger: 82 percent of the employed residents of the center city and 89 percent of the employed residents of the suburban ring used autos to get to work, while the percentage of employed residents in each who used public transit was 9 percent and 3 percent, respectively.

The distribution of trips to work illuminates the comparative importance of trips to and within the suburbs over CBD-oriented trips. Between 1960 and 1970, the number of work trips into the center city increased by 7 percent; but the work trips from the central city into the suburban ring increased 41 percent, and work trips both beginning and ending in the suburban ring increased by 26 percent.

One other aspect of the region's travel patterns is worth noting, although it is not directly tied to the

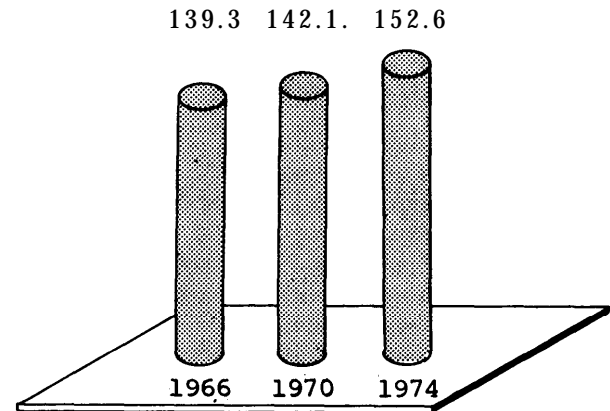
VEHICLE MILES OPERATED  
(millions of miles)

Peak Year = 1973 (63.8 million miles)  
Low Year = 1966 (53.7 million miles)



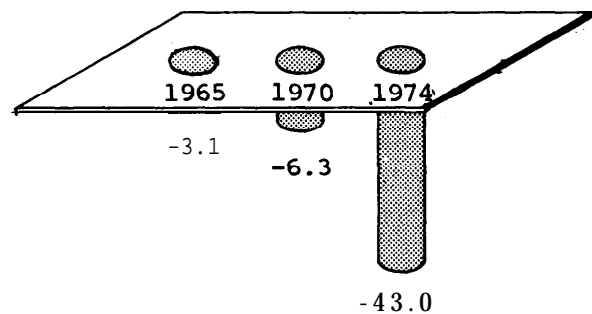
REVENUE PASSENGERS  
(millions of passengers)

Peak Year = 1974 (152.6 million riders)  
Low Year = 1966 (139.3 million riders)



NET OPERATING REVENUE  
(millions of dollars)

Peak Year = 1968 (\$4,217,534)  
Low Year = F.Y. 1974 ~-\$43,003,000

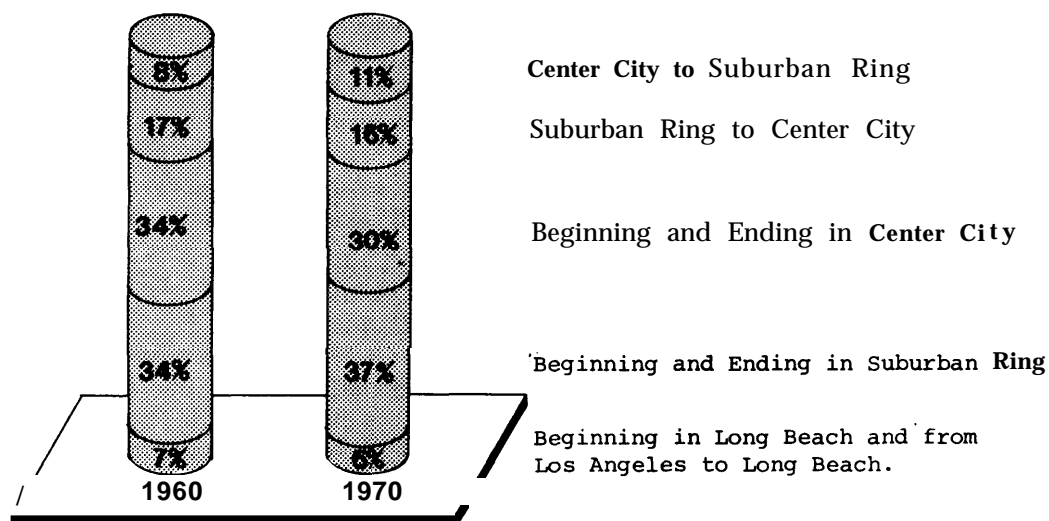


**FIGURE 3 : LOS ANGELES TRANSIT OPERATIONS 1960-1974**

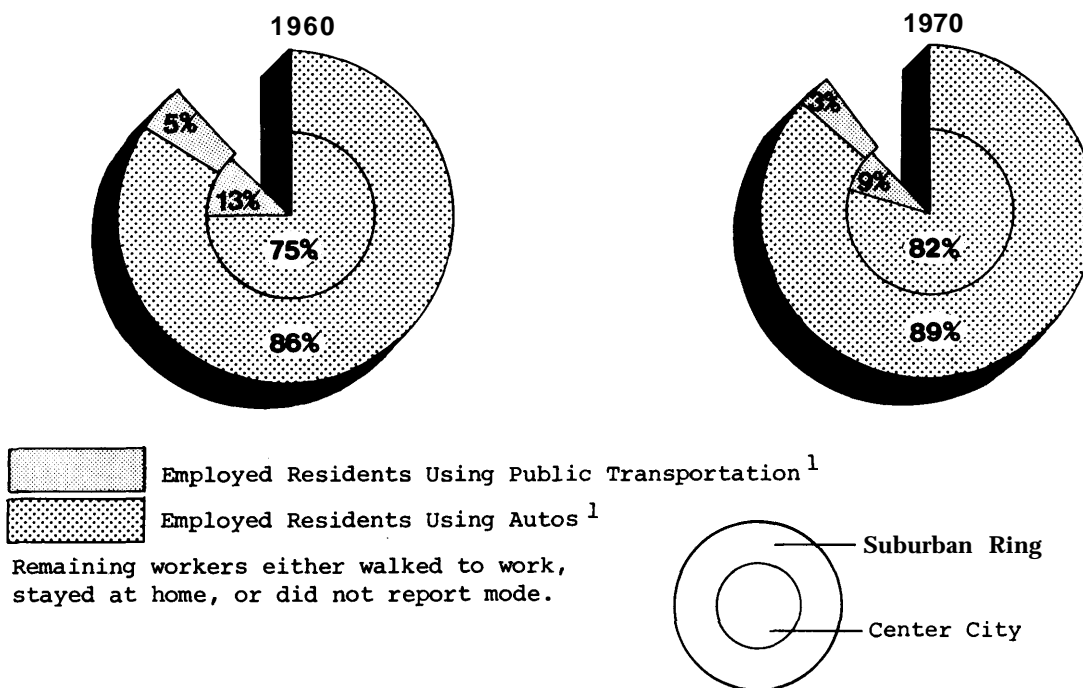
Source: American Public Transit Association records for the Metropolitan  
" Transit Authority and the Southern California Rapid Transit District.

<sup>1</sup>Data not reported for 1965-1968.

## WORK TRIP DISTRIBUTION



## WORK TRIP MODE



**FIGURE 4: LOS ANGELES SMSA TRAVEL CHARACTERISTICS 1960-1970**

<sup>1</sup> In both 1960 and 1970, 13% of auto work trips and 7% of public transit work trips were taken by Long Beach residents.

Source: Urban Transportation Fact Book, American Institute of Planners and the Motor Vehicle Manufacturers Association of the U.S., Inc., 1974. A Standard Metropolitan Statistical Area (SMSA) includes a center city (or cities), usually with a population of at least 50,000, plus adjacent counties or other political divisions that are economically and socially integrated with the central area.

relationship between center city and suburban trips to work. The trips in the region tend to be short ones: approximately 50 percent of all personal trips in the seven-county region are less than 3.3 miles in length, and so percent of home-to-work trips are less than 6.4 miles in length. The fact that most of the travel is comparatively localized affected the debate about the planning of a rapid transit system for the Los Angeles area.

## TRANSPORTATION PLANNING INSTITUTIONS

The organizations involved in the recent history of planning for rapid transit in Los Angeles represent regional and local interests. The State of California and the Urban Mass Transportation Administration also have played an important role in the process.

TABLE 2.—Federally Recognized Regional Agencies

Designation	Agency
A-95	Southern California Association of Governments
MPO	Southern California Association of Governments

### Southern California Association of Governments (SCAG)

The Southern California Association of Governments was created in 1965 to carry out comprehensive regional planning and coordination activities in the six-county region. SCAG'S membership is composed of 111 municipalities and the counties of Los Angeles, Orange, Ventura, Imperial, San Bernardino, and Riverside. SCAG'S activities are financed by an assessment on local governments and by Federal and State grants.

Since 1971, SCAG has been responsible for regional transportation planning. It functions as the A-95 review agency for the region<sup>2</sup> and the

<sup>2</sup> Office of Management and Budget Circular A-95 requires one agency in each region to be empowered to review all proposals for Federal funds from agencies in that region. Circular A-95 replaced Circular A-82, which was created to implement Section 204 of the Demonstration Cities and Metropolitan Development Act of 1966 (42 U.S. C. 3301).

officially designated Metropolitan Planning Organizations

In addition to these Federally related responsibilities, SCAG also exercises a number of State functions. Under the provisions of Assembly Bill 69, SCAG must prepare the southern California regional element of the statewide transportation plan. The association also approves and allocates State transit assistance funds available under SB325.

The rapid transit planning carried out by the Southern California Rapid Transit District (SCRTD) is a subregional transit element of SCAG'S Regional Transportation Plan. Coordination between SCAG and SCRTD planning occurs through a series of SCAG'S existing committees, including the Comprehensive Transportation Planning Committee, which is a policy committee; the Transit Advisory Committee, which is concerned primarily with coordination of technical matters; and the Council of Planning.

### Southern California Rapid Transit' District (SCRTD)

The Southern California Rapid Transit District was created by the California State Legislature in 1964 to operate bus transit service in Los Angeles County and to plan, design, and implement a mass rapid transit system. SCRTD'S jurisdiction covers over 4,080 square miles and includes bus lines extending beyond Los Angeles County into Orange, Riverside, and San Bernardino counties.

SCRTD is governed by an 11-man board of directors. The Los Angeles County Board of Supervisors appoints five of the members; a special city selection committee representing 76 cities in

<sup>3</sup> The Urban Mass Transportation Administration and the Federal Highway Administration require Governors to designate a Metropolitan Planning Organization (MPO) in each area to carry out the "continuing, comprehensive transportation planning process . . . carried out cooperatively . . ." (the "3-C" process) mandated by the Federal-Aid Highway Act of 1962 and the Urban Mass Transportation Assistance Act of 1974. According to joint UMTA-FHWA regulations published in September 1975, MPO'S must prepare or endorse (1) a long-range general transportation plan, including a separate plan for improvements in management of the existing transportation system; (2) an annually updated list of specific projects, called the Transportation Improvement Program (TIP), to implement portions of the long-range plan; and (3) a multiyear planning prospectus supplemented by annual unified planning work programs.

the county appoints four; and the mayor of the City of Los Angeles appoints two.

Aside from participating on SCAG policy and technical committees, SCRTD reviewed and coordinated work on the Study of Alternative Transit Corridors and Systems through an ad hoc technical advisory committee composed of representatives from the SCRTD, SCAG, Los Angeles County, the City of Los Angeles, the Orange County Transit District, the CALTRANS regional office, and the League of California Cities.

#### **Rapid Transit Advisory Committee (RTAC)**

In March 1975 SCRTD established this committee to develop a consensus on an acceptable transit "starter" line. The committee has representatives from the State transportation department, SCAG, Los Angeles County, Orange County Transit District, the League of California Cities, and the City of Los Angeles. All these bodies would be responsible for providing financial support to the project in one way or another.

#### **Los Angeles County**

The Board of Supervisors of Los Angeles County is responsible for land use planning in the county's unincorporated areas, transportation planning (which has meant highway planning), and health and welfare. The county's Department of Planning prepares a general plan.

#### **City of Los Angeles**

The City of Los Angeles is a major institutional force on the regional scene. Its involvement in

transit planning occurs in several ways. The Mayor of Los Angeles participates in SCAG and appoints members of SCRTD'S board of directors. In addition, the city's Department of Planning develops a general development plan that contains a transit element. All city departments concerned with transportation have representatives on a transportation technical advisory committee. SCRTD also has a representative on this committee. The City Council of Los Angeles also has an ad hoc committee on rapid transit.

#### **League of California Cities**

The League of California Cities provides a mechanism for coordination among the 78 municipalities in Los Angeles County. The League has a transportation task force made up of elected officials from several major transportation corridors in the Los Angeles County area. The League also provides a lobbying force for municipal-interests.

#### **California State Department of Transportation (CALTRANS)**

CALTRANS was established by Assembly Bill 69 in 1972. Part of the Department of Business and Transportation, CALTRANS is a multimodal agency incorporating the former Division of Highways. The bill creating CALTRANS also mandated the adoption by 1976 of a State transportation plan assembled from separate regional transportation plans.