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TRANSIT STUDY • 1944

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Organized 1924
For Mutual Benefit of
Business and Property Interests
In Central Business District

Consulting Engineers
STUART M. BATE
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Dear Sirs:

This is a report concerning transportation in the Los Angeles Metropolitan Area. It summarizes the principal results of the Association's work not only during the first half of the current year but also a substantial amount of the work of the staff each year since 1940.

It has been apparent ever since the publication of the transportation reports which resulted from the exhaustive surveys and analyses of 1938 and 1939 that the findings and recommendations of these reports entailed further work and study as to the details of parkway use and coordination of such use with existing transit facilities.

These matters were again brought prominently before the people of the Metropolitan Area in November of 1943 by publicity given the filing of applications with the State Railroad Commission for operation of coach lines on the parkways. The need for issuance of the Association's studies and findings became quite apparent. In addition, both the City Planning Commission and the Regional Planning Commission published reports dealing with either parkways or their use.

Definite plans are in process of drafting for the construction features of the first priority parkways. A summary report only could be undertaken at this time. Basic data and analyses will follow in due course. It is hoped that this brief statement and general plans will be of assistance to the governmental agencies and authorities drafting the constructive plans.

Respectfully submitted,


Michael F. Shannon, President

STATEMENT

THIS Association and the Los Angeles Traffic Association were cooperating agencies in the preparation of "A Transit Program for the Los Angeles Metropolitan Area" published the latter part of 1939. Again, in 1940, a joint report was issued covering traffic conditions on Hill Street through the Central Business District. In 1941, we reported on the use of the Arroyo Seco Parkway by motor coaches. In 1942, we cooperated with the City Planning Commission on "Mass Transit and the Master Plan of Parkways." Part of our 1943 Annual Report was devoted to transportation and parkways.

These activities were primarily the result of specific requests from governmental agencies for use of data and personnel in connection with their planning assignments.

In order to bring out the status of the various units of the overall parkway system planned for the Los Angeles Metropolitan Area, the program for construction as agreed upon by the City, County, and State, first priority units to be constructed as soon as materials become available, and more particularly how the parkways are to be utilized to make them available to all the people in the area — those who use public transit as well as those who drive their own automobiles — this Transit Report is presented, without exhaustive analyses or discussions.

We had before the war an existing public transit system serving over a million riders each day and adopted plans for a system of parkways designed to serve the metropolitan area. The question now arises — to what extent do existing facilities meet present and prospective needs and to what extent are we justified in utilizing the parkway system for mass transit purposes?

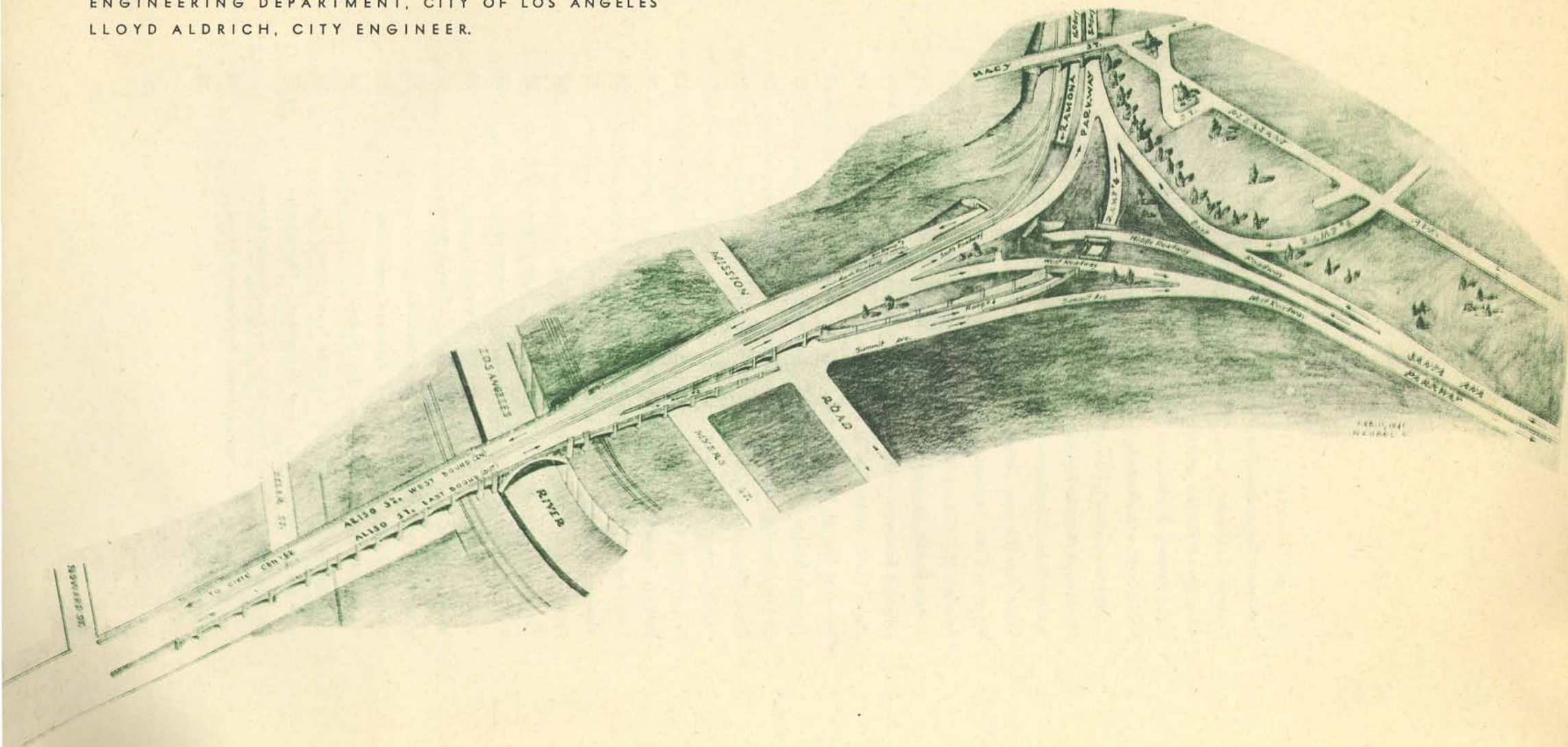
These considerations have led to studies and recommendations by regulatory bodies, planning agencies, and individuals, as well as service organizations such as the Central Business District Association. It is in the light of such studies and recommendations that the proposals contained in this report are submitted.

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ALISO STREET VIADUCT AND CONNECTIONS WITH RAMONA PARKWAY AND SANTA ANA PARKWAY IN THE CITY OF LOS ANGELES

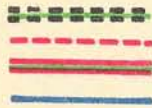
ENGINEERING DEPARTMENT, CITY OF LOS ANGELES
LLOYD ALDRICH, CITY ENGINEER.



INITIAL PARKWAY ROUTES EAST-WEST (HOLLYWOOD-SANTA ANA) NORTH-SOUTH (ARROYO SECO-HARBOR)

LEGEND

INITIAL PARKWAYS
PARKWAY AND SURFACE LINES
INTERSECTING PARKWAY LINES
INTERSECTING SURFACE LINES



NOTE . . . The Parkway Plan as shown is "Master Plan of Parkways" as approved by the Los Angeles City Planning Commission June 23, 1941.

This illustration emphasizes

1. Initial east-west and north-south parkway through routes.
2. Combined surface and parkway transit lines that will use them.
3. Points of intersection with future parkways.
4. And with existing surface transit lines.

FIRST PRIORITIES OF PARKWAY CONSTRUCTION



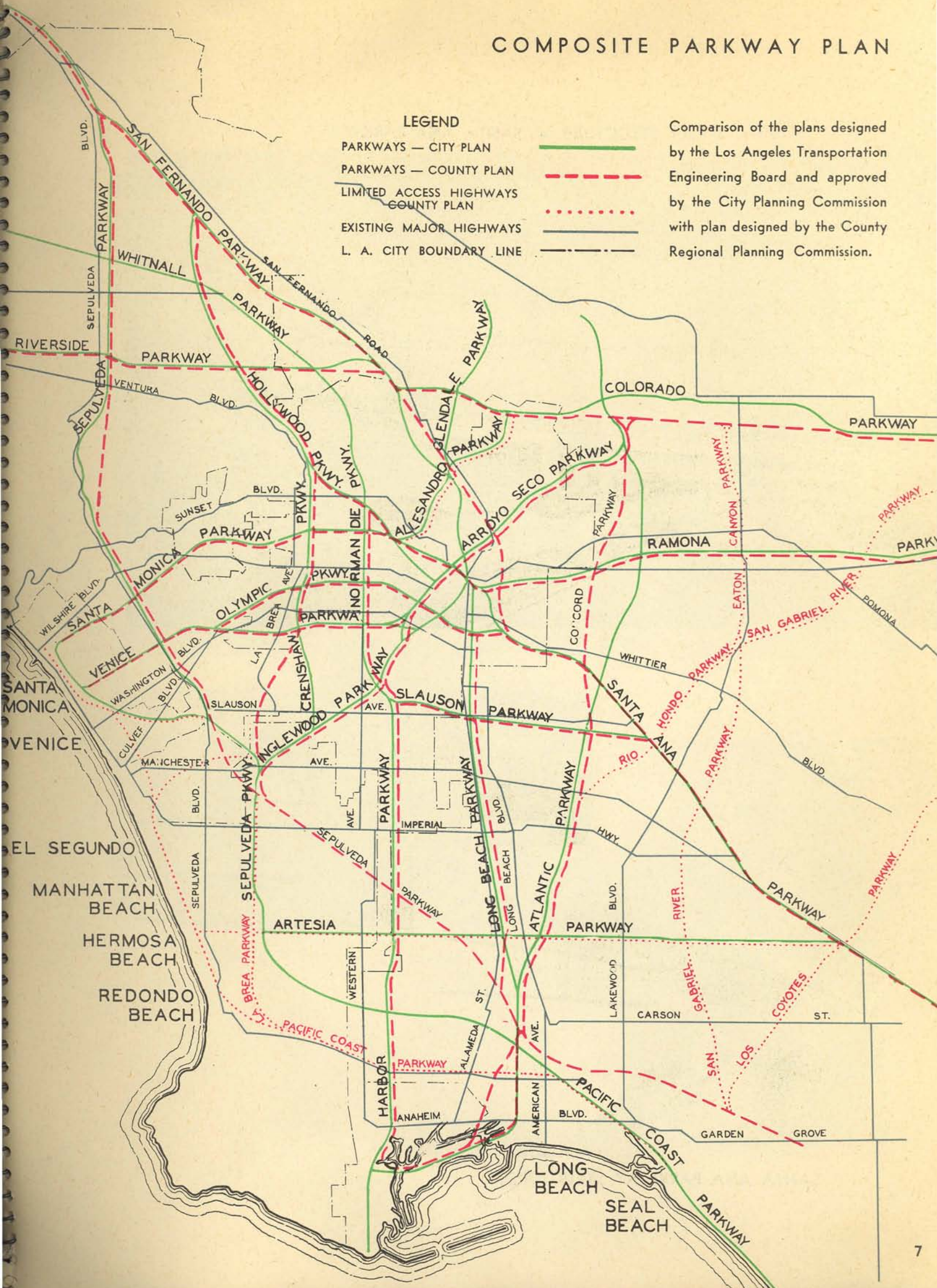
While substantial parts of the initial east-west (Hollywood-Santa Ana) and north-south (Arroyo Seco-Harbor) through routes are covered in the First Priorities for Parkway Construction, also included is the Santa Monica Parkway, westward from its intersection with the Hollywood Parkway to the City of Santa Monica.

COMPOSITE PARKWAY PLAN

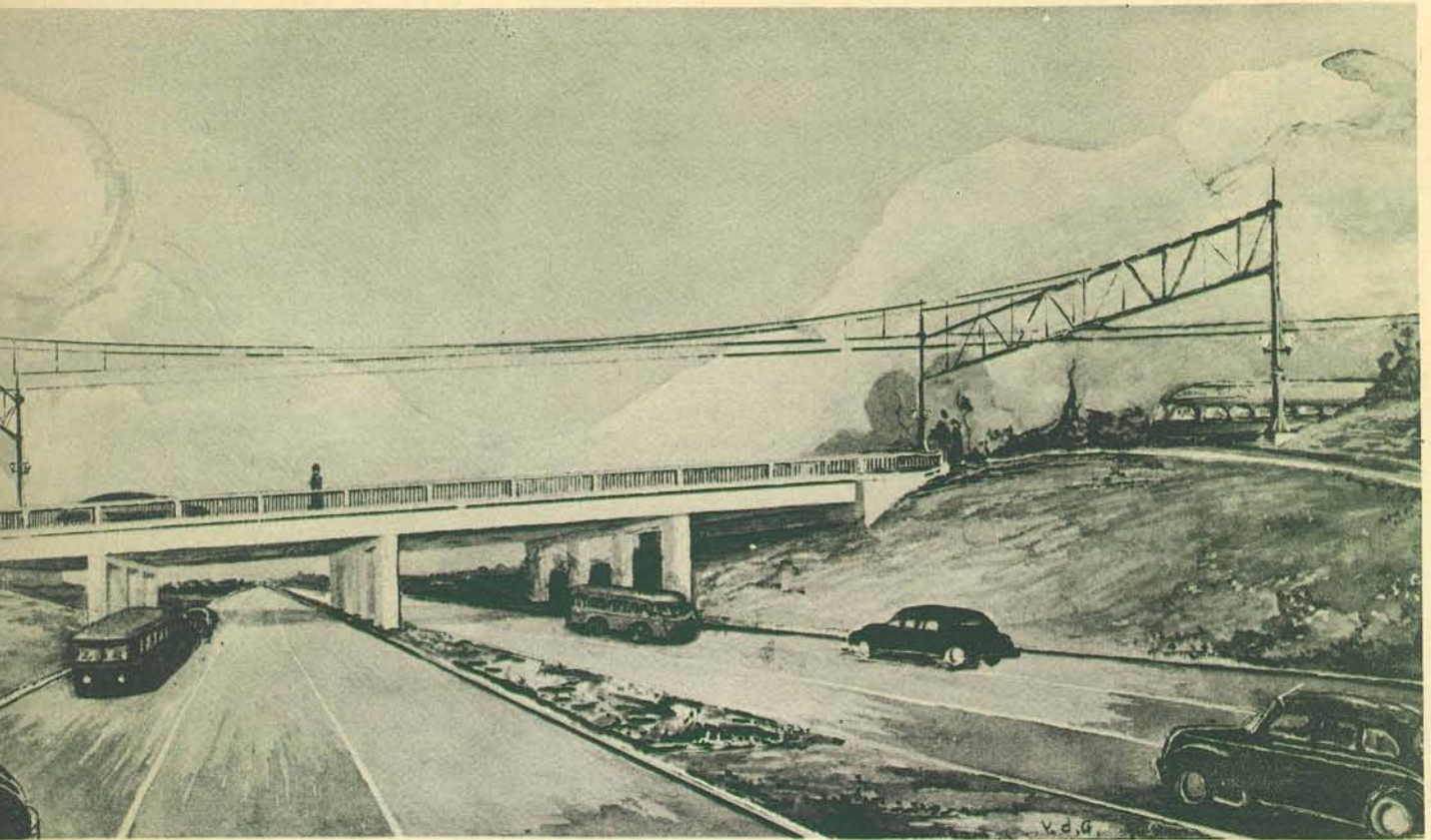
LEGEND

- PARKWAYS — CITY PLAN —
- PARKWAYS — COUNTY PLAN - - -
- LIMITED ACCESS HIGHWAYS COUNTY PLAN · · ·
- EXISTING MAJOR HIGHWAYS —
- L. A. CITY BOUNDARY LINE - · - · -

Comparison of the plans designed by the Los Angeles Transportation Engineering Board and approved by the City Planning Commission with plan designed by the County Regional Planning Commission.



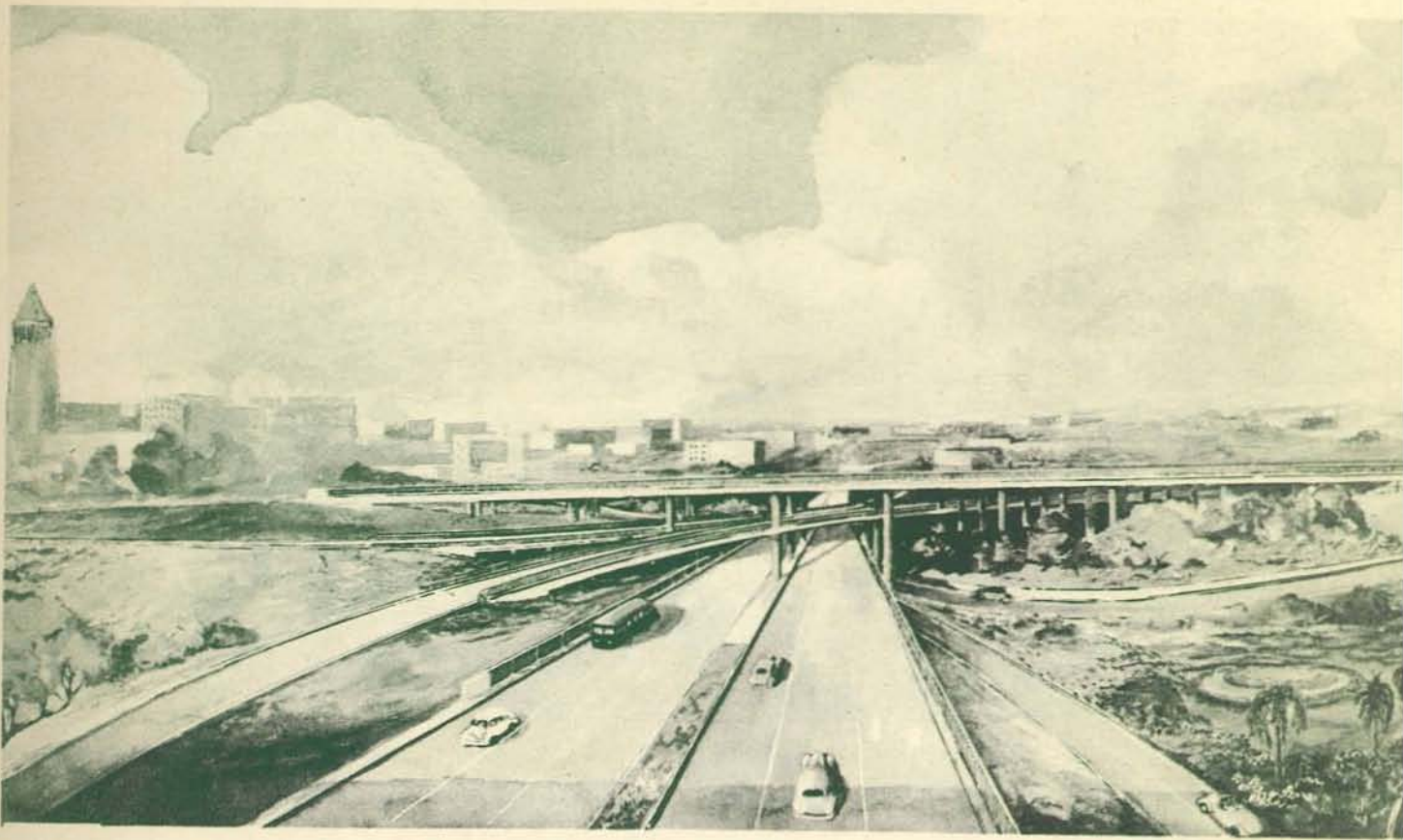
FOURTH STREET STRUCTURE • SANTA ANA PARKWAY



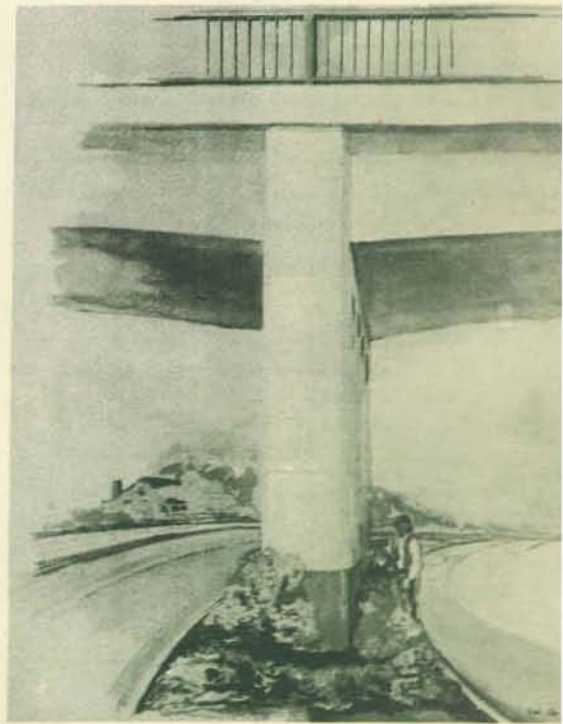
SANTA ANA PARKWAY STRUCTURES

FOUR LEVEL STRUCTURE

INTERSECTION OF HOLLYWOOD, SAN TATA ANA AND ARROYO SECO - HARBOR PARKWAY



RAMONA PARKWAY DETAILS





SOUTHBOUND TRAFFIC is approaching Los Angeles on new Arroyo Seco extension and through open cut in Elysian Park — old road at left — City Hall in background.

Adaptability of the facility for other traffic than automobiles is illustrated by the army trucks shown in the picture.

Service trucks having priority of right-of-way could utilize, if necessary and desirable, any or all of the roadways.

It is apparent that use by buses could be easily confined to the outside traffic lane.

The northbound roadway leading to the Figueroa Tunnels is seen at the left of the picture.

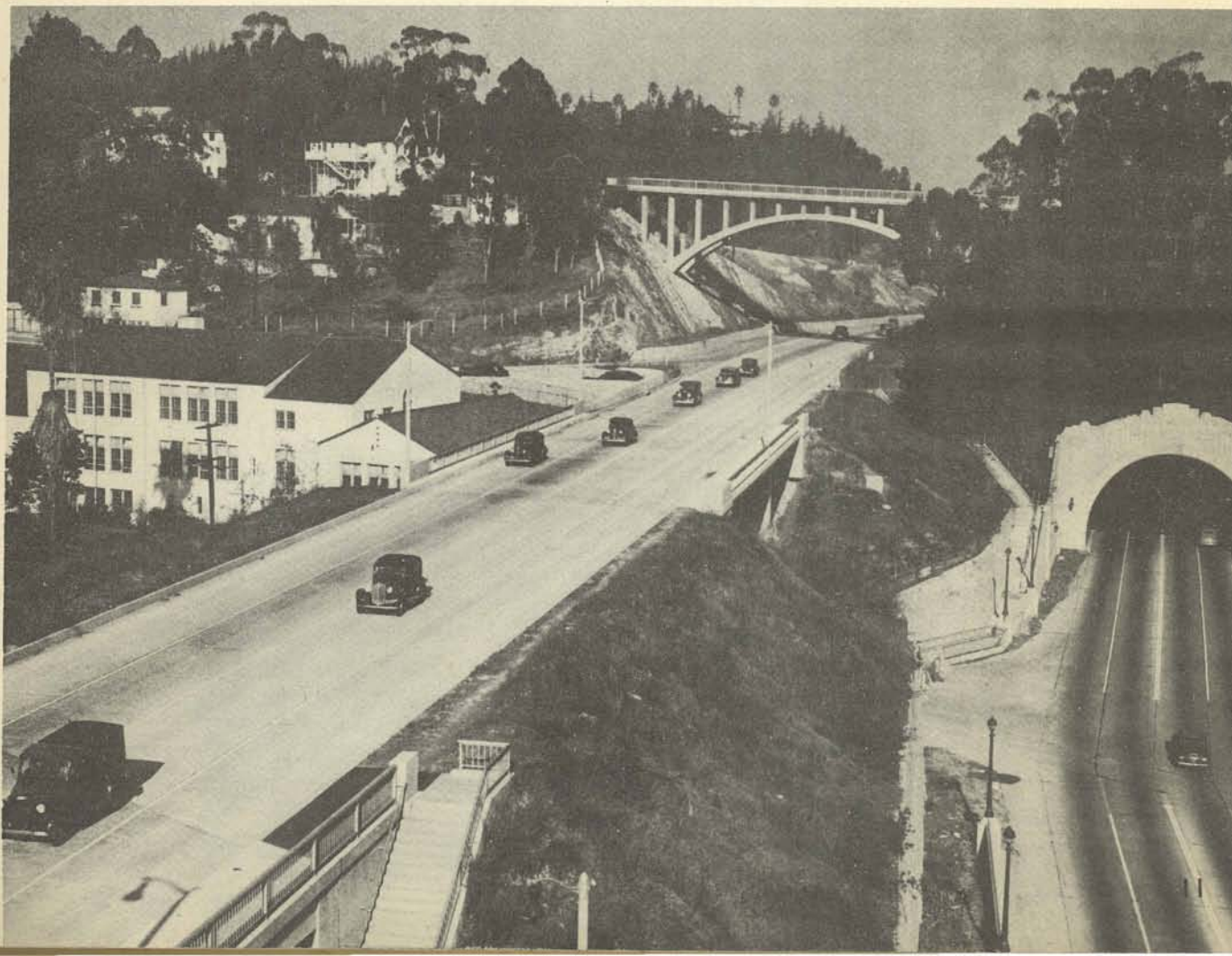
Four-lane traffic arteries in each direction have been designed, where necessary, to carry heavy traffic loads.

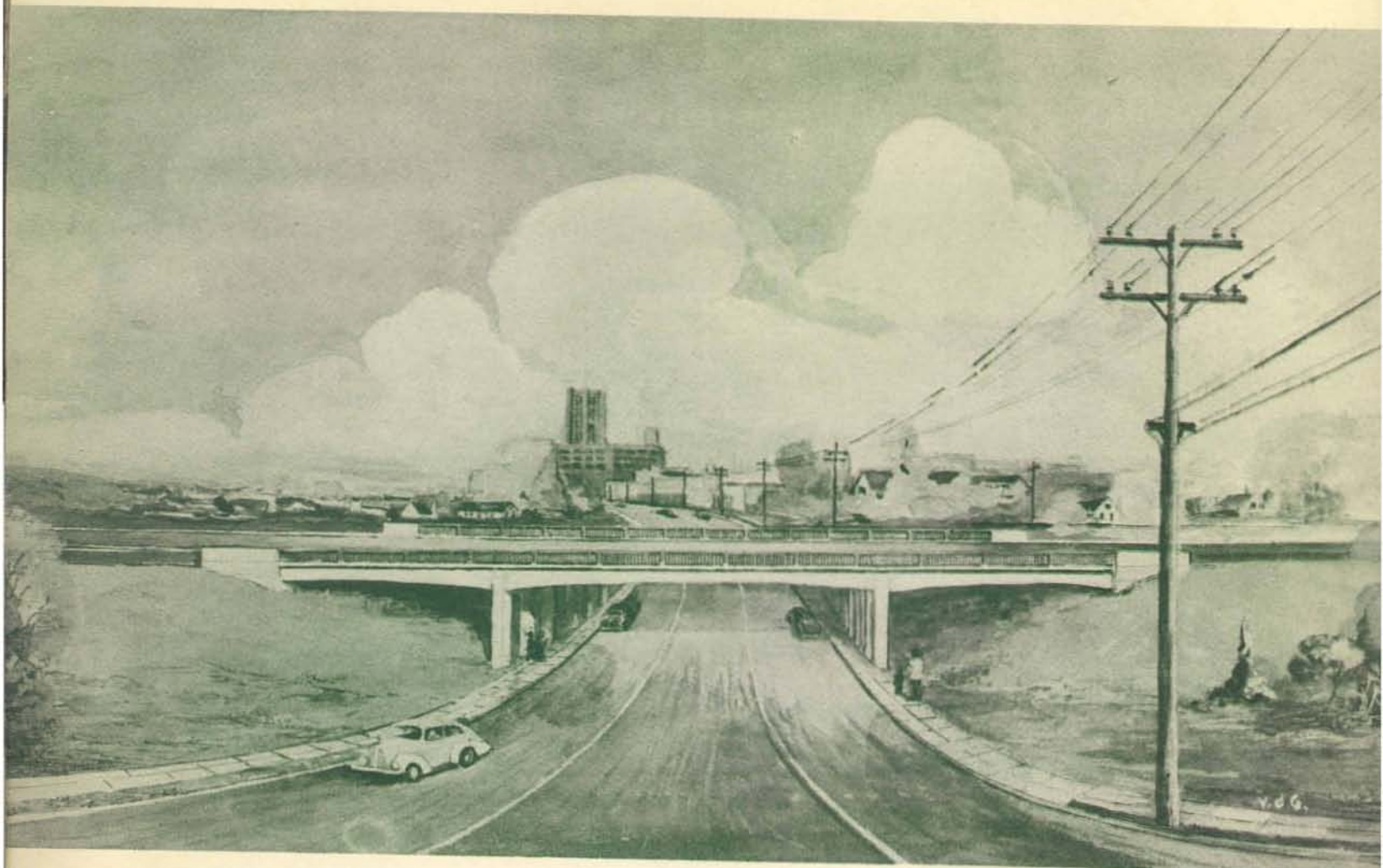
Arroyo Seco Extension will carry the heavy north-east traffic.

Hollywood Parkway, between Figueroa Street and Vermont, will accommodate the combined load discharged into it from the Santa Monica Parkway and San Fernando Valley.

Traffic loads most likely to develop on the majority of the overall parkway system will require but three traffic lanes in each direction.

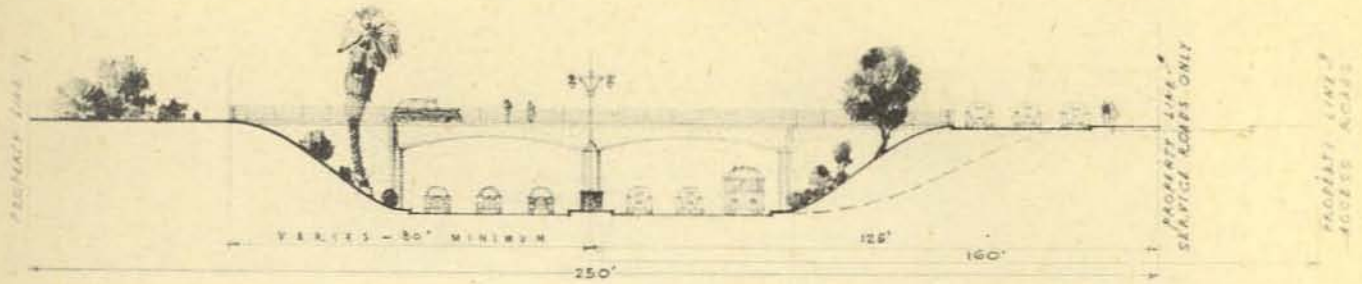
SOUTHBOUND TRAFFIC passing under Park Row Bridge on Arroyo Seco Extension - NORTHBOUND TRAFFIC on old road through park tunnel.



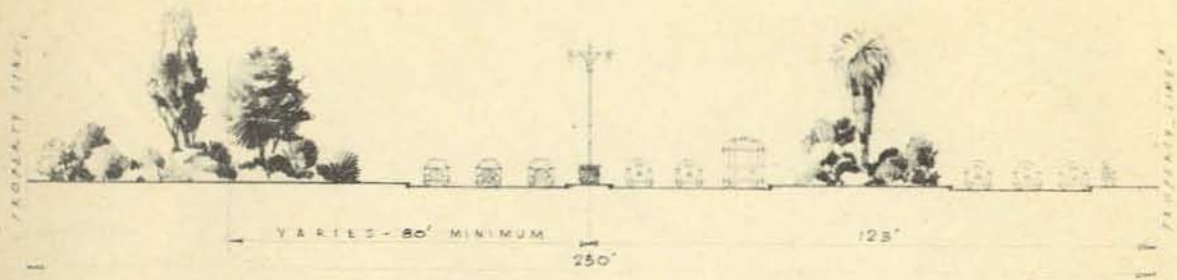


SOTO STREET OVERPASS - RAMONA PARKWAY

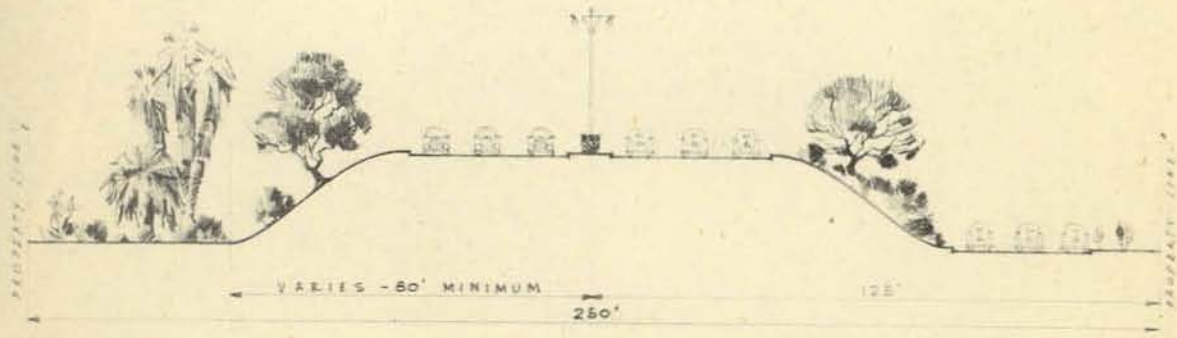




HALF SECTION WITHOUT SERVICE ROADS — HALF SECTION WITH SERVICE ROADS - ACCESSES
 N O R M A L D E P R E S S E D P A R K W A Y



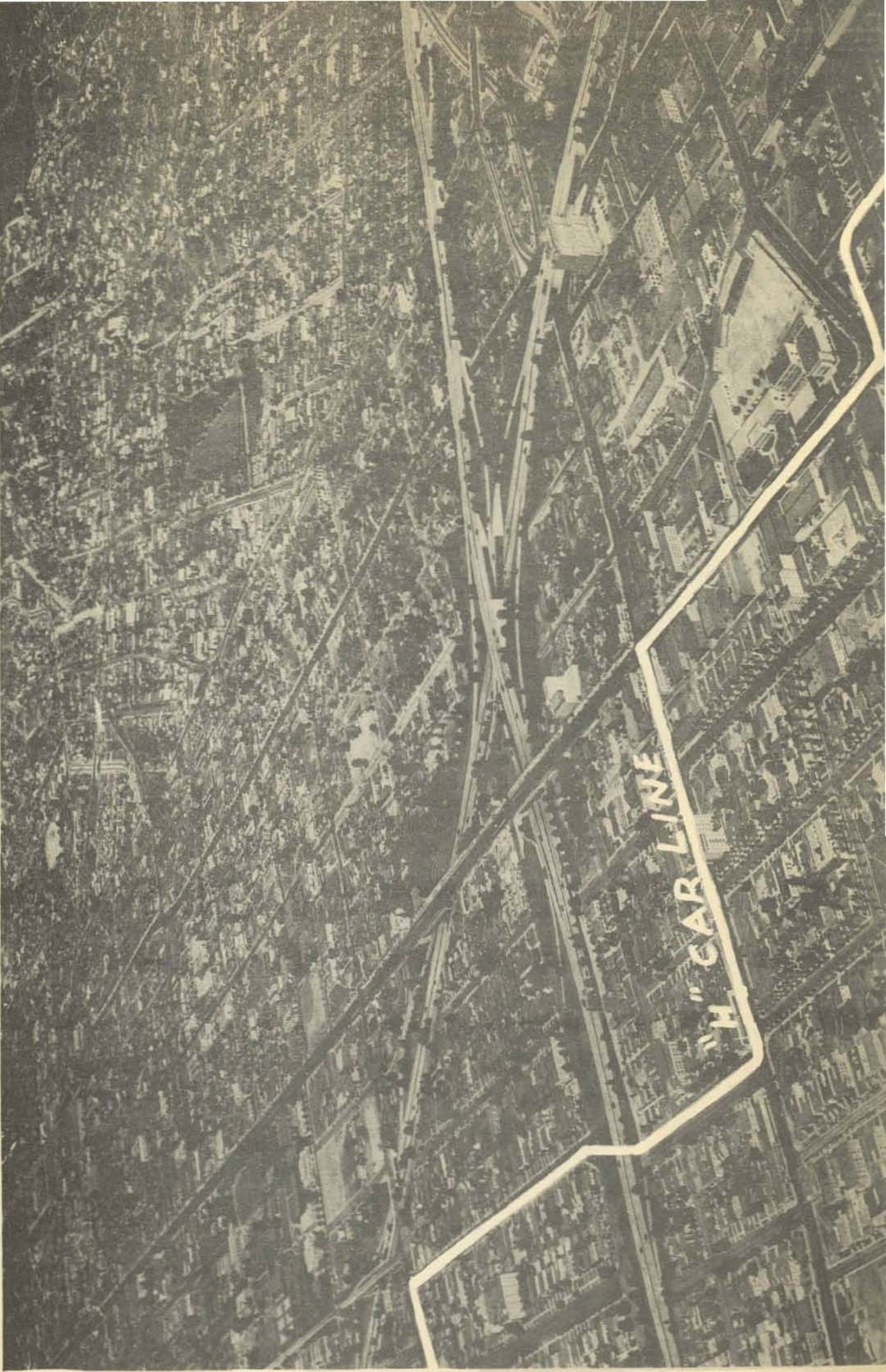
HALF SECTION WITHOUT SERVICE ROADS — HALF SECTION WITH SERVICE ROADS
 N O R M A L P A R K W A Y L E V E L



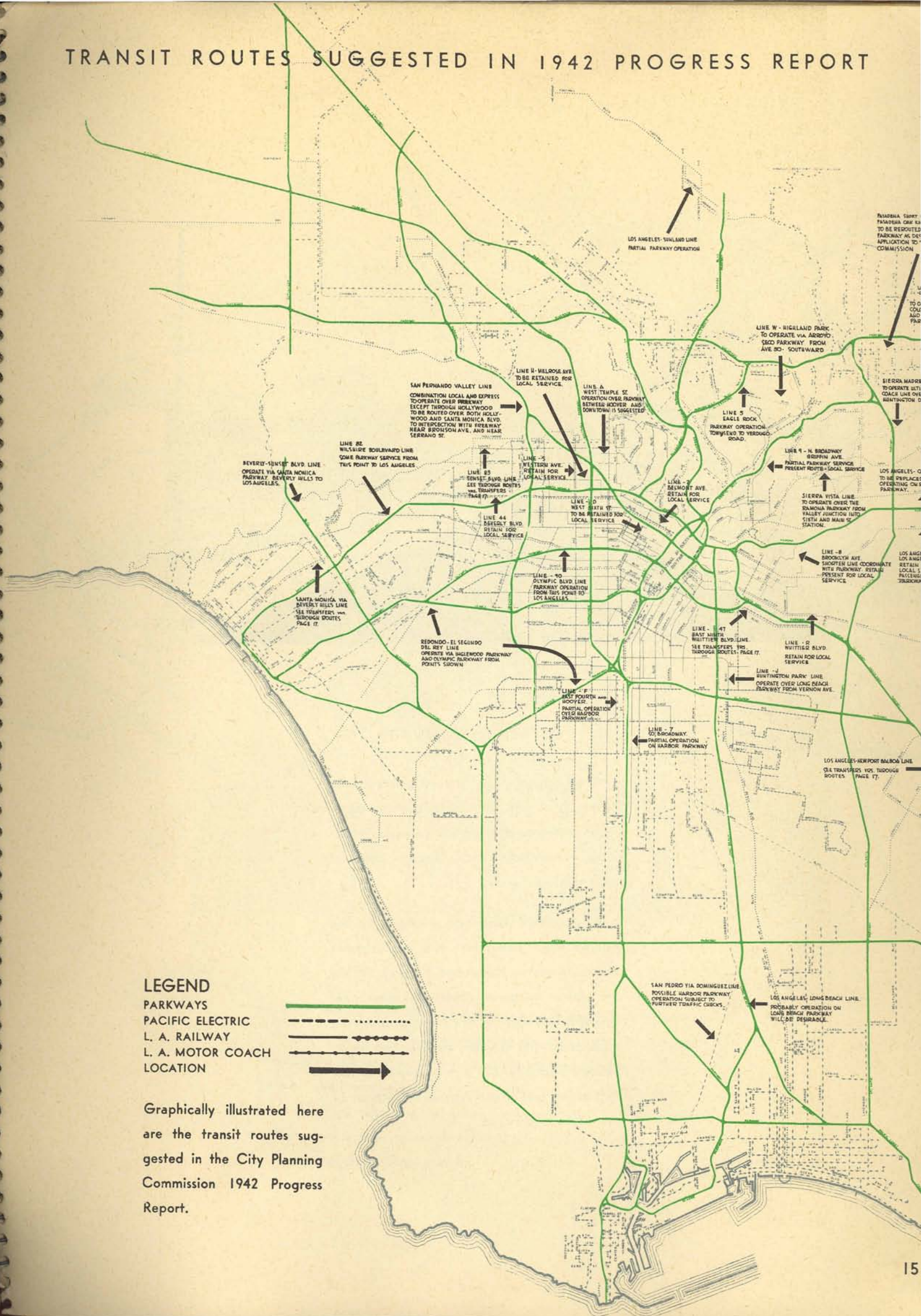
HALF SECTION WITHOUT SERVICE ROADS — HALF SECTION WITH SERVICE ROADS
 N O R M A L P A R K W A Y O N F I L L

VARIOUS TYPES OF CROSS SECTION USED IN PARKWAY CONSTRUCTION

RELATION OF "H" LINE TO HOLLYWOOD PARKWAY AT VERMONT AVENUE



TRANSIT ROUTES SUGGESTED IN 1942 PROGRESS REPORT



Graphically illustrated here are the transit routes suggested in the City Planning Commission 1942 Progress Report.

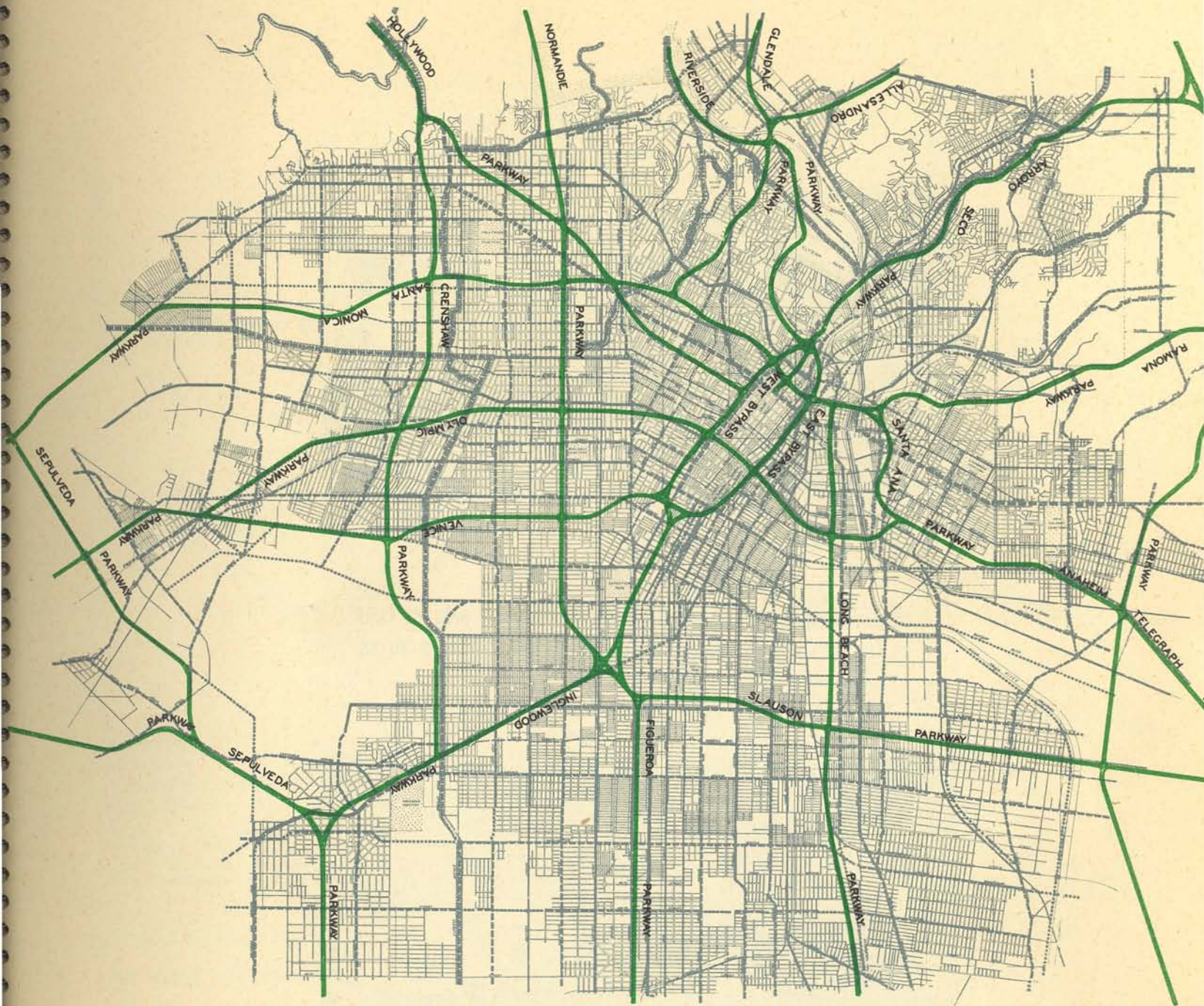


OLYMPIC BOULEVARD

A typical example of a street planned some twenty years ago later being built, as population increased and attending heavier traffic loads demanded, into a through route, or major highway.

A prominent diagonal proposed in the original major street plan now approximates the route of the Hollywood Parkway. While the surface diagonal street was never constructed, the artery is now being provided, in accordance with the early appreciation for its ultimate necessity, but with parkway and limited access and grade separation features of the most modern type.

MAJOR TRAFFIC STREET PLAN



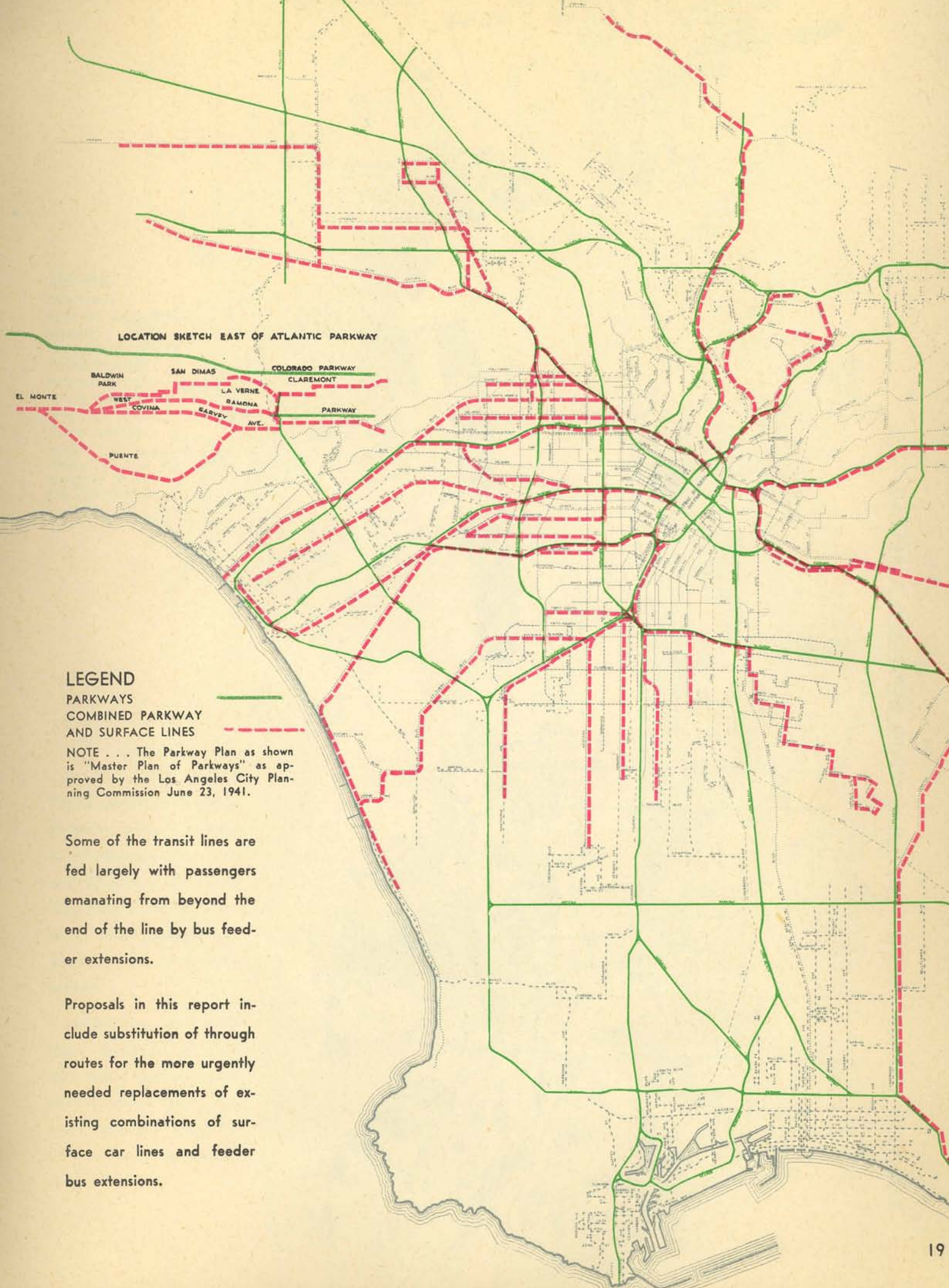
To those familiar with the Los Angeles Major Street System as it exists today, it is readily apparent that the majority of the major streets were planned 20 years ago. They are indicated in this illustration. The parkway system routes closely approximate the major street locations. The diagonal arteries in the old plan, and, as noted on the opposite page, in one prominent instance, are now to be built as portions of the parkway system.



ILLUSTRATING DELAY AND INCONVENIENCE OF END OF LINE TRANSFERS NECESSITATED BY LACK OF THROUGH ROUTES.



THROUGH ROUTES • VERSUS TRANSFERS



LOCATION SKETCH EAST OF ATLANTIC PARKWAY

LEGEND

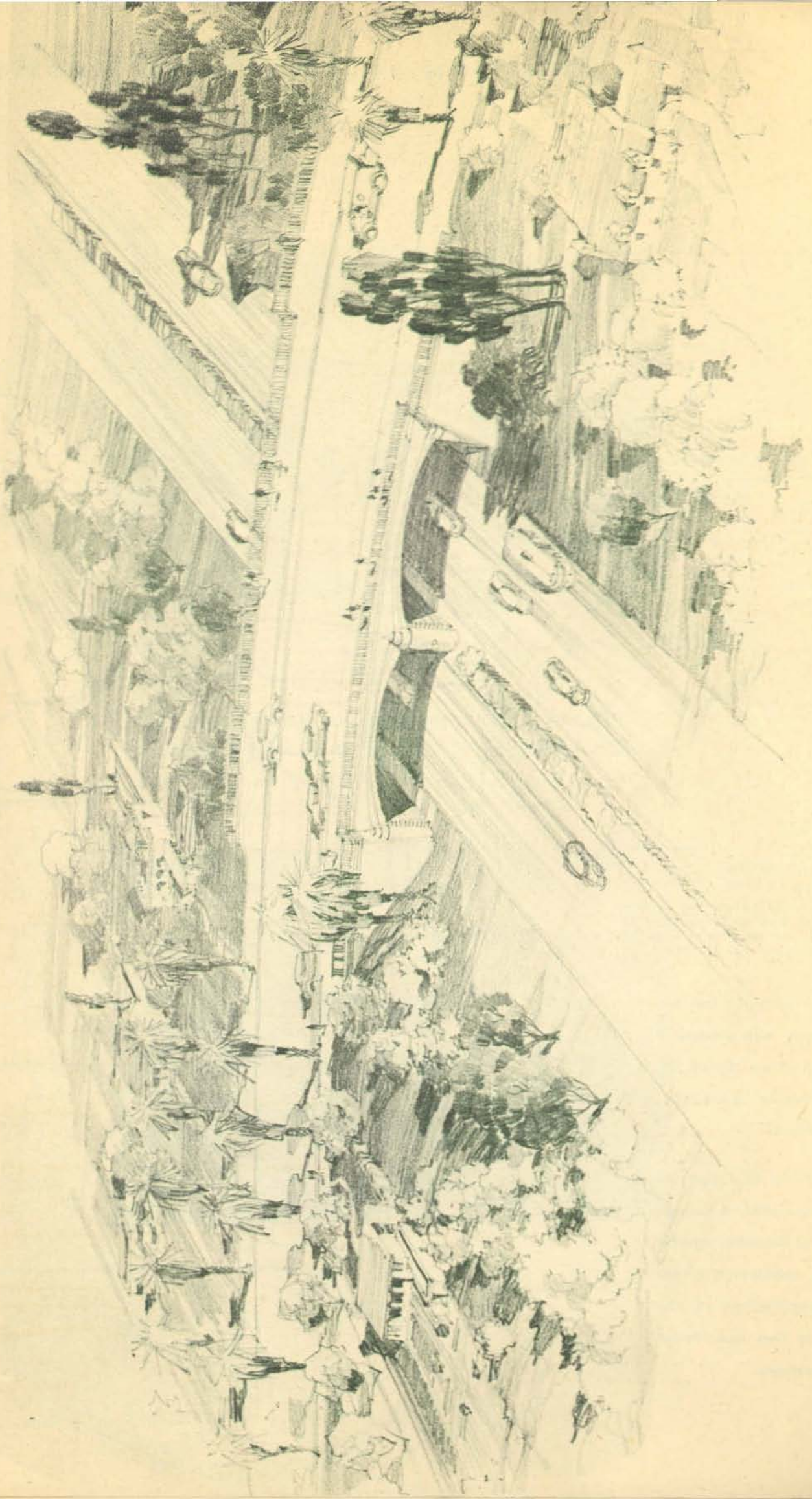
- PARKWAYS ———
- COMBINED PARKWAY AND SURFACE LINES - - - - -

NOTE . . . The Parkway Plan as shown is "Master Plan of Parkways" as approved by the Los Angeles City Planning Commission June 23, 1941.

Some of the transit lines are fed largely with passengers emanating from beyond the end of the line by bus feeder extensions.

Proposals in this report include substitution of through routes for the more urgently needed replacements of existing combinations of surface car lines and feeder bus extensions.

PARKWAY DETAILS — STREET CROSSING OVER DEPRESSED PARKWAY



CROSS TOWN AND FEEDER SERVICE

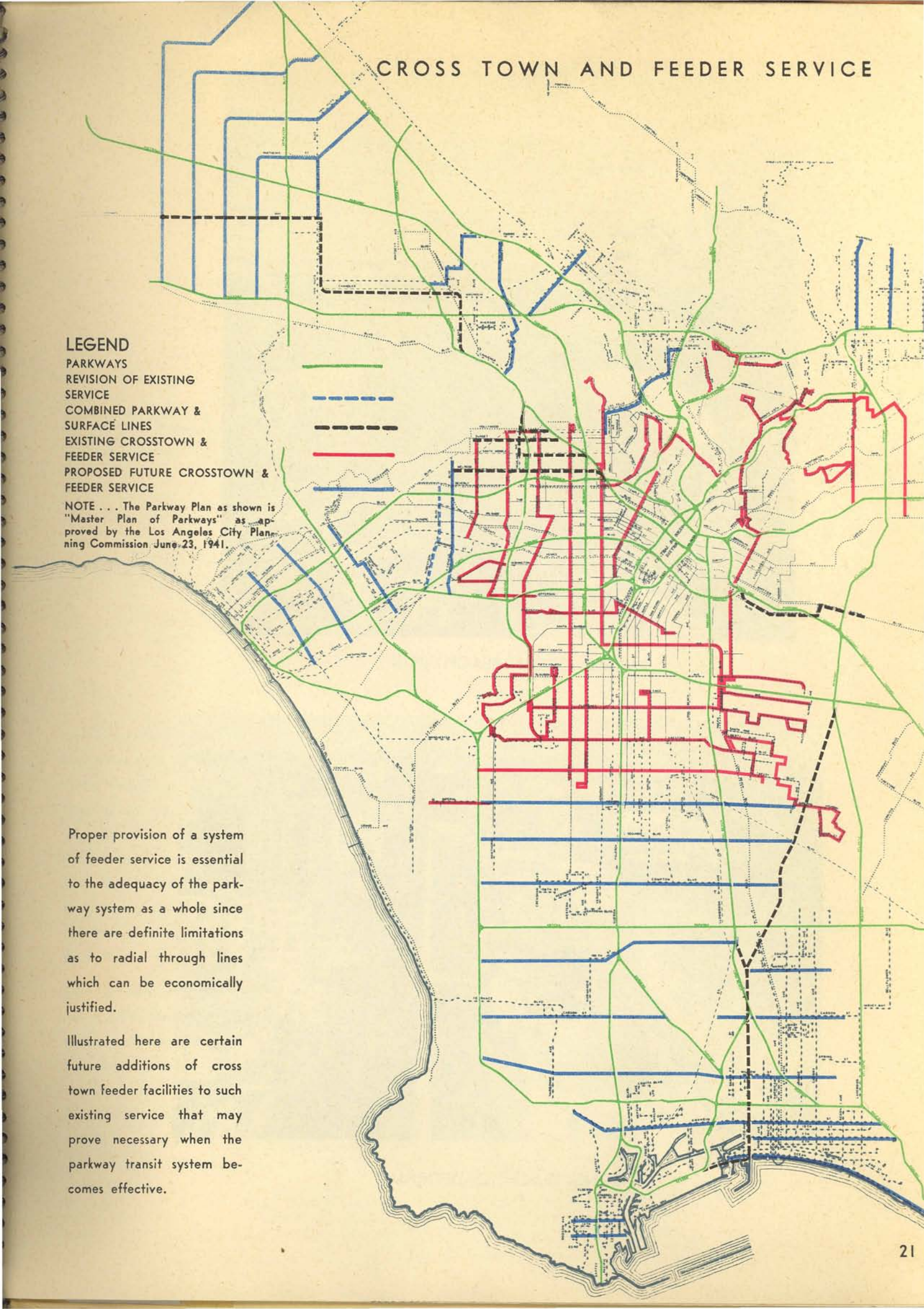
LEGEND

- PARKWAYS
- REVISION OF EXISTING SERVICE
- COMBINED PARKWAY & SURFACE LINES
- EXISTING CROSSTOWN & FEEDER SERVICE
- PROPOSED FUTURE CROSSTOWN & FEEDER SERVICE

NOTE . . . The Parkway Plan as shown is "Master Plan of Parkways" as approved by the Los Angeles City Planning Commission June 23, 1941.

Proper provision of a system of feeder service is essential to the adequacy of the parkway system as a whole since there are definite limitations as to radial through lines which can be economically justified.

Illustrated here are certain future additions of cross town feeder facilities to such existing service that may prove necessary when the parkway transit system becomes effective.





PACIFIC OCEAN BEACH VIEW



LONG BEACH, CALIFORNIA

TRANSIT LINES TO PACIFIC COAST BEACHES

LEGEND

PARKWAYS
THROUGH TRANSIT
ROUTES

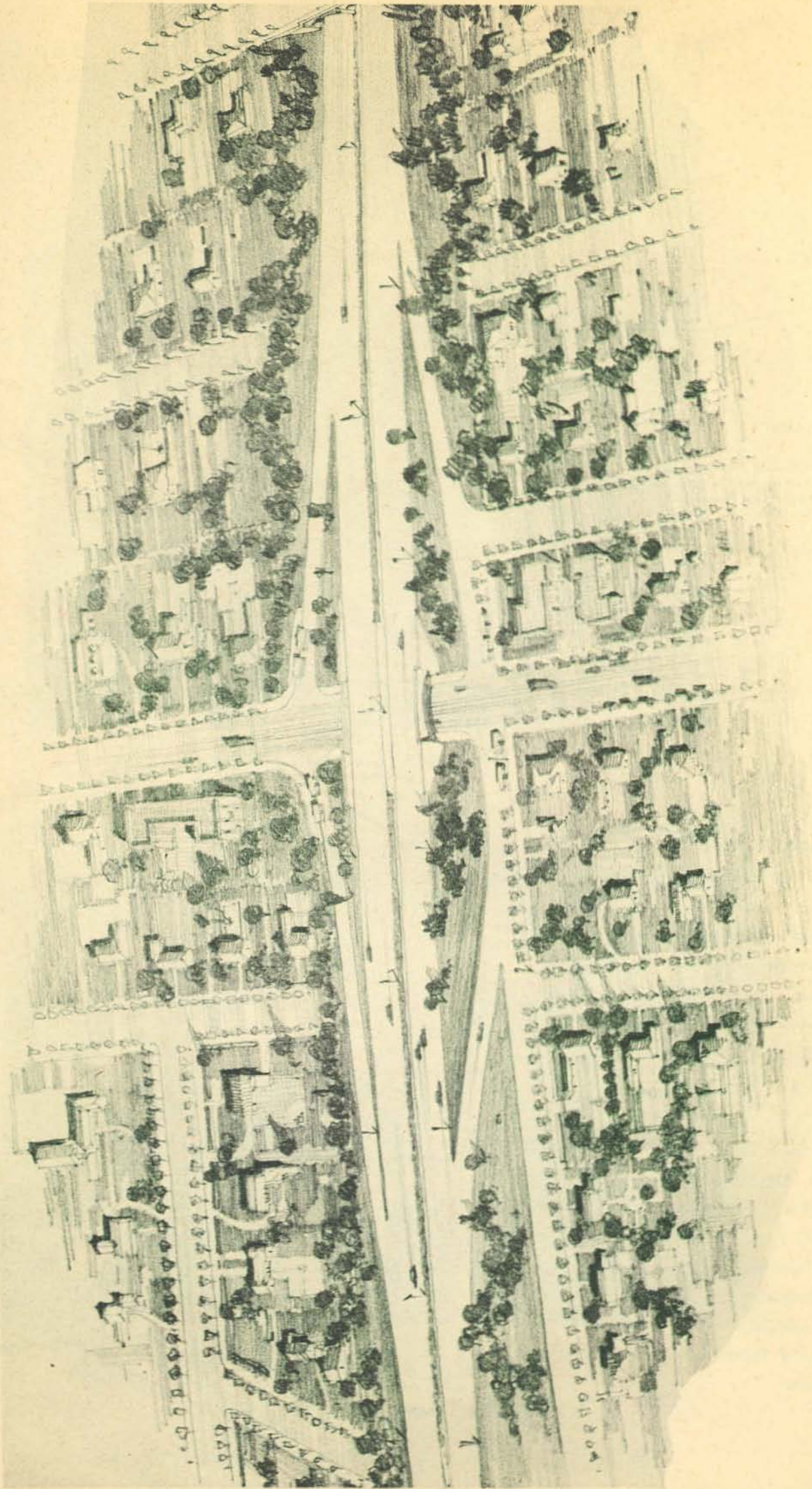
NOTE . . . The Parkway Plan as shown is "Master Plan of Parkways" as approved by the Los Angeles City Planning Commission June 23, 1941.

In the planning of extensive improvements for the Pacific Coast Beach communities, Playa del Rey to Palos Verdes, auxiliary parkways, or access roads, connecting these beaches with the general overall parkway system, were made a part of the Beach Plan.

Illustrated here is the manner in which these auxiliary parkways will be utilized by the parkway transit lines. Planning for fast, convenient service at reasonable cost is, indeed, in order in view of the anticipated future use of the beaches.



PARKWAY TRANSFER AND STOP ARRANGEMENTS



TIME AND DISTANCE FACTORS

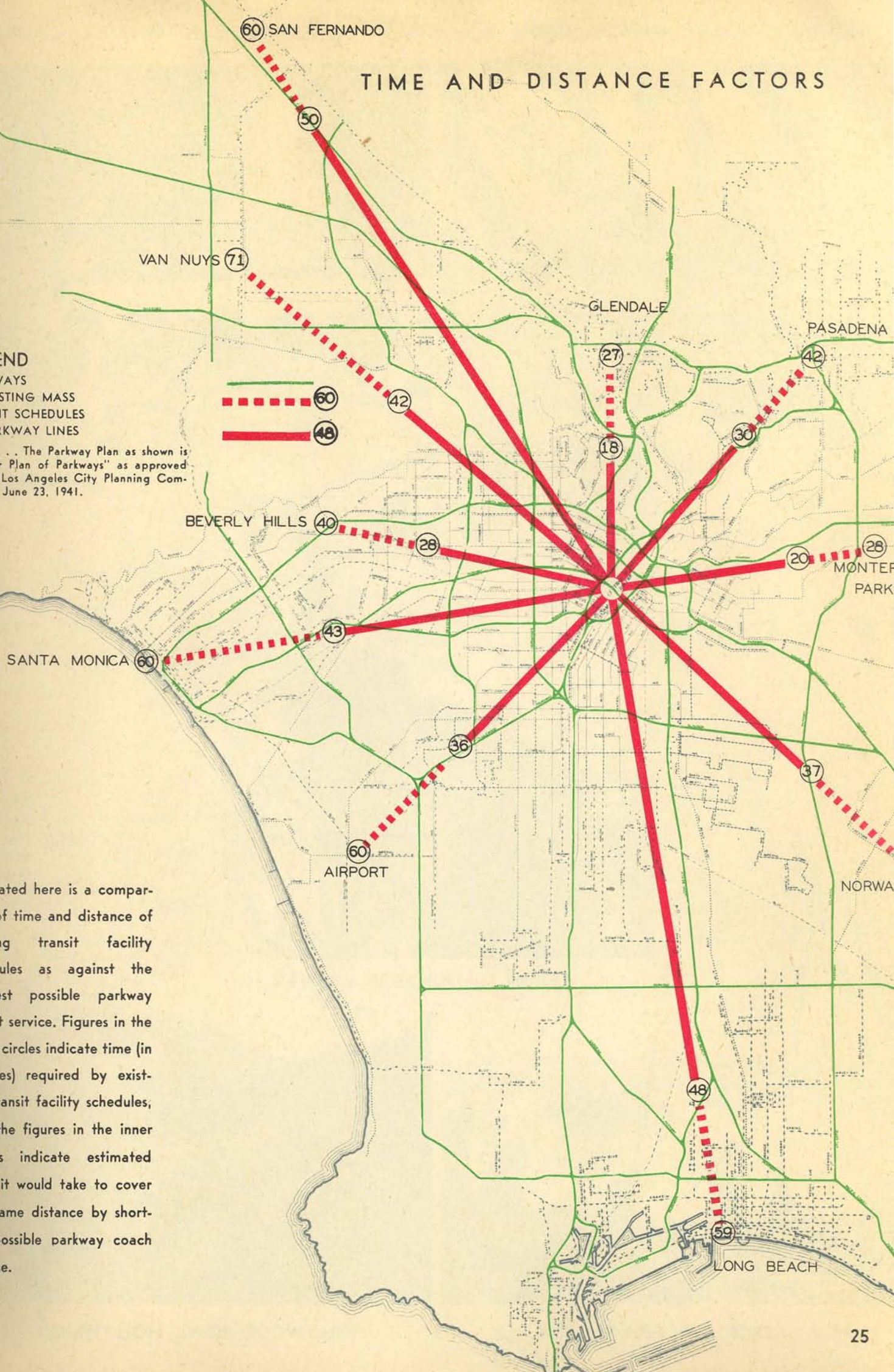
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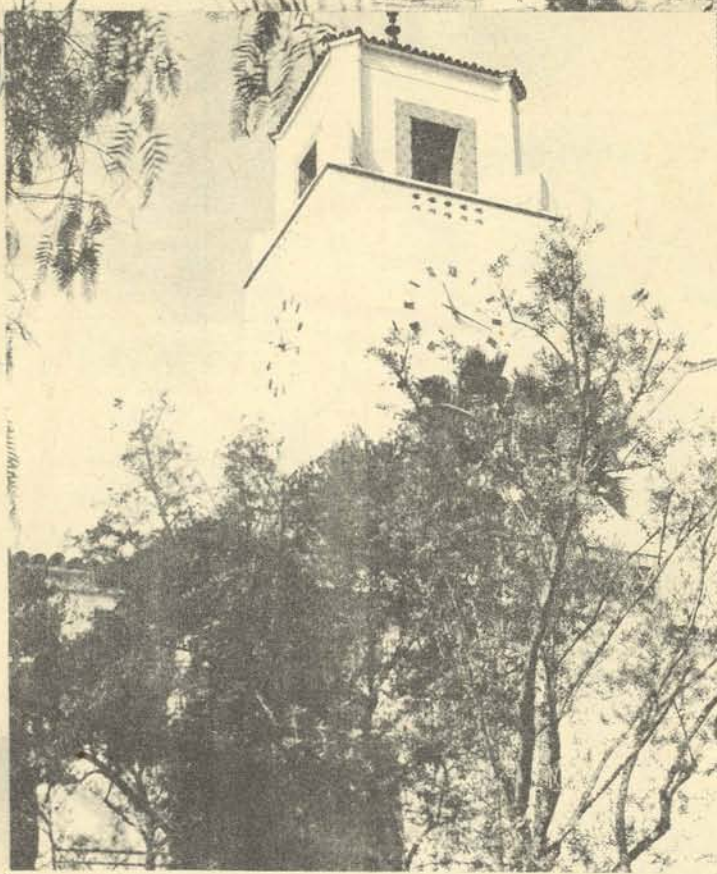
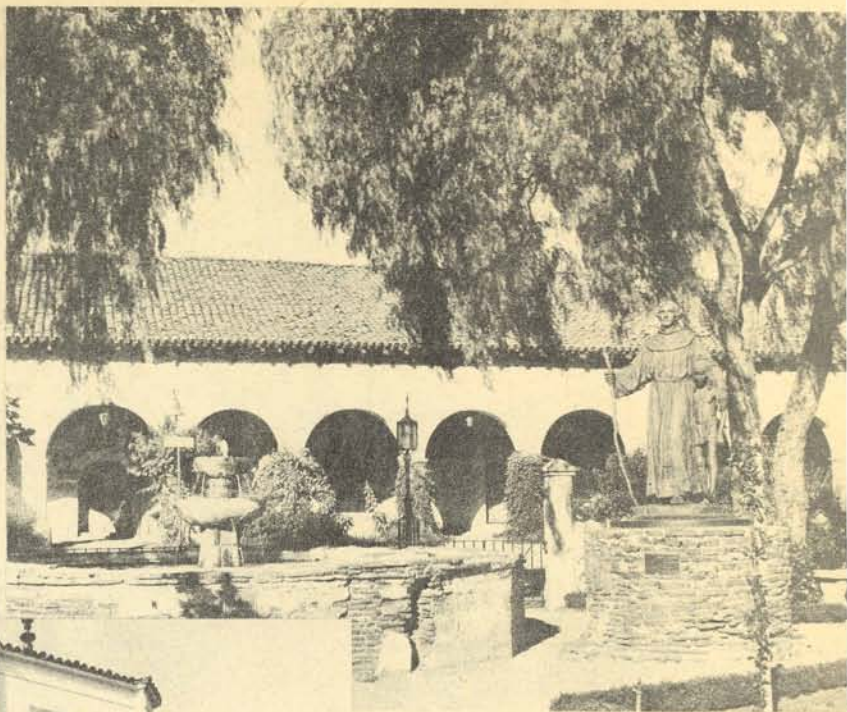
PARKWAYS
BY EXISTING MASS
TRANSIT SCHEDULES
BY PARKWAY LINES

NOTE . . . The Parkway Plan as shown is "Master Plan of Parkways" as approved by the Los Angeles City Planning Commission June 23, 1941.

60
48

Illustrated here is a comparison of time and distance of existing transit facility schedules as against the shortest possible parkway transit service. Figures in the outer circles indicate time (in minutes) required by existing transit facility schedules, and the figures in the inner circles indicate estimated time it would take to cover the same distance by shortest possible parkway coach service.





UNION STATION, LOS ANGELES

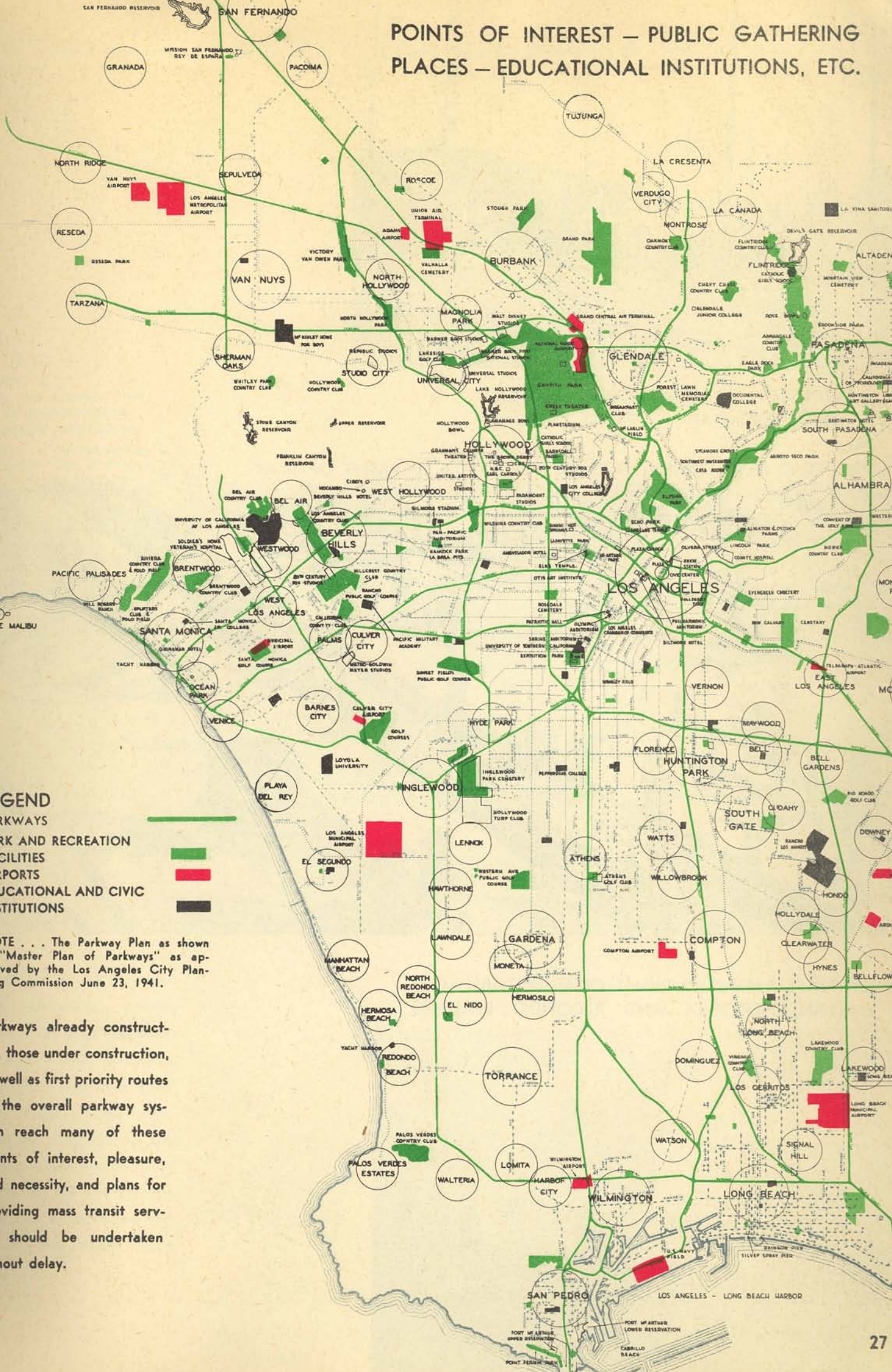


FISH HARBOR, SAN PEDRO, CALIF.



HOLLYWOOD BOWL, HOLLYWOOD, CALIF.

POINTS OF INTEREST – PUBLIC GATHERING PLACES – EDUCATIONAL INSTITUTIONS, ETC.



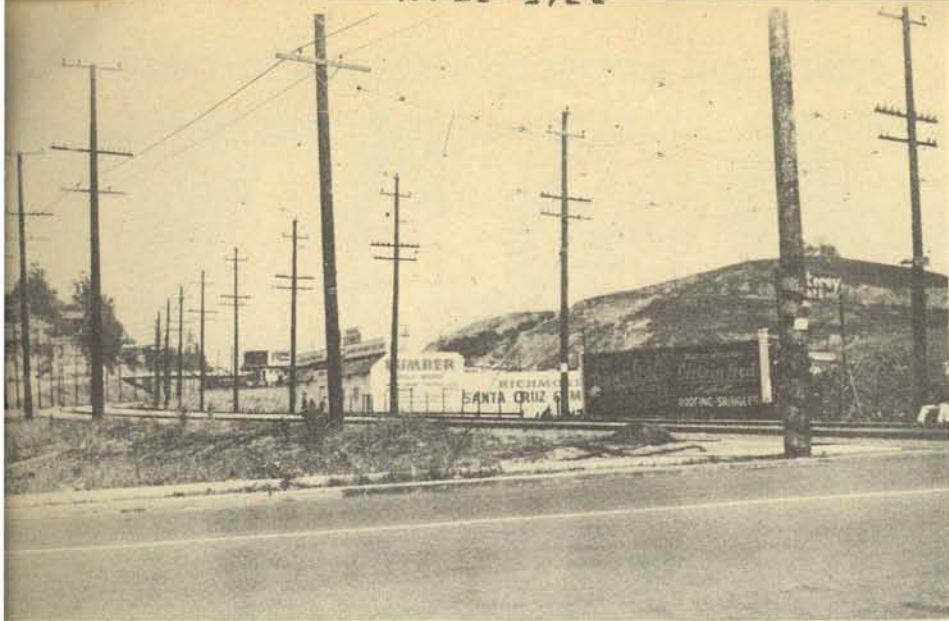
LEGEND

- PARKWAYS
- PARK AND RECREATION FACILITIES
- AIRPORTS
- EDUCATIONAL AND CIVIC INSTITUTIONS



NOTE . . . The Parkway Plan as shown is "Master Plan of Parkways" as approved by the Los Angeles City Planning Commission June 23, 1941.

Parkways already constructed, those under construction, as well as first priority routes of the overall parkway system reach many of these points of interest, pleasure, and necessity, and plans for providing mass transit service should be undertaken without delay.

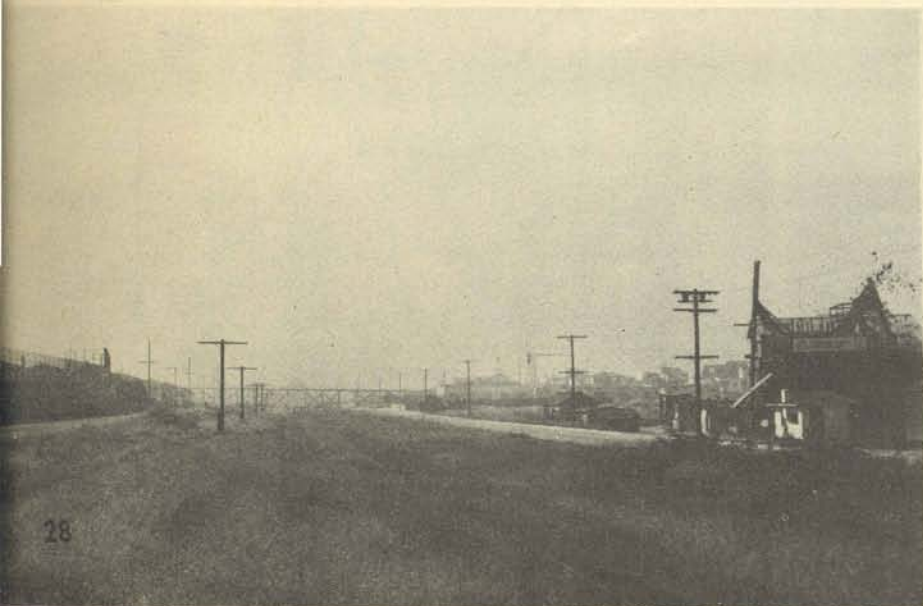


HUNTINGTON DRIVE — PACIFIC ELECTRIC RAILROAD COMPANY — RIGHT OF WAY

PROPOSED DEVELOPMENT SCHEME FOR SANTA FE RIGHT OF WAY



SANTA FE RAILROAD RIGHT OF WAY THRU MANHATTAN, HERMOSA AND REDONDO BEACHES



RAIL LINE RIGHTS-OF-WAY CONVERSIONS TO HIGHWAY USE

LEGEND

PARKWAYS
RAIL LINE RIGHTS-OF-WAY
TO BE CONVERTED FOR
AUXILIARY PARKWAY USE

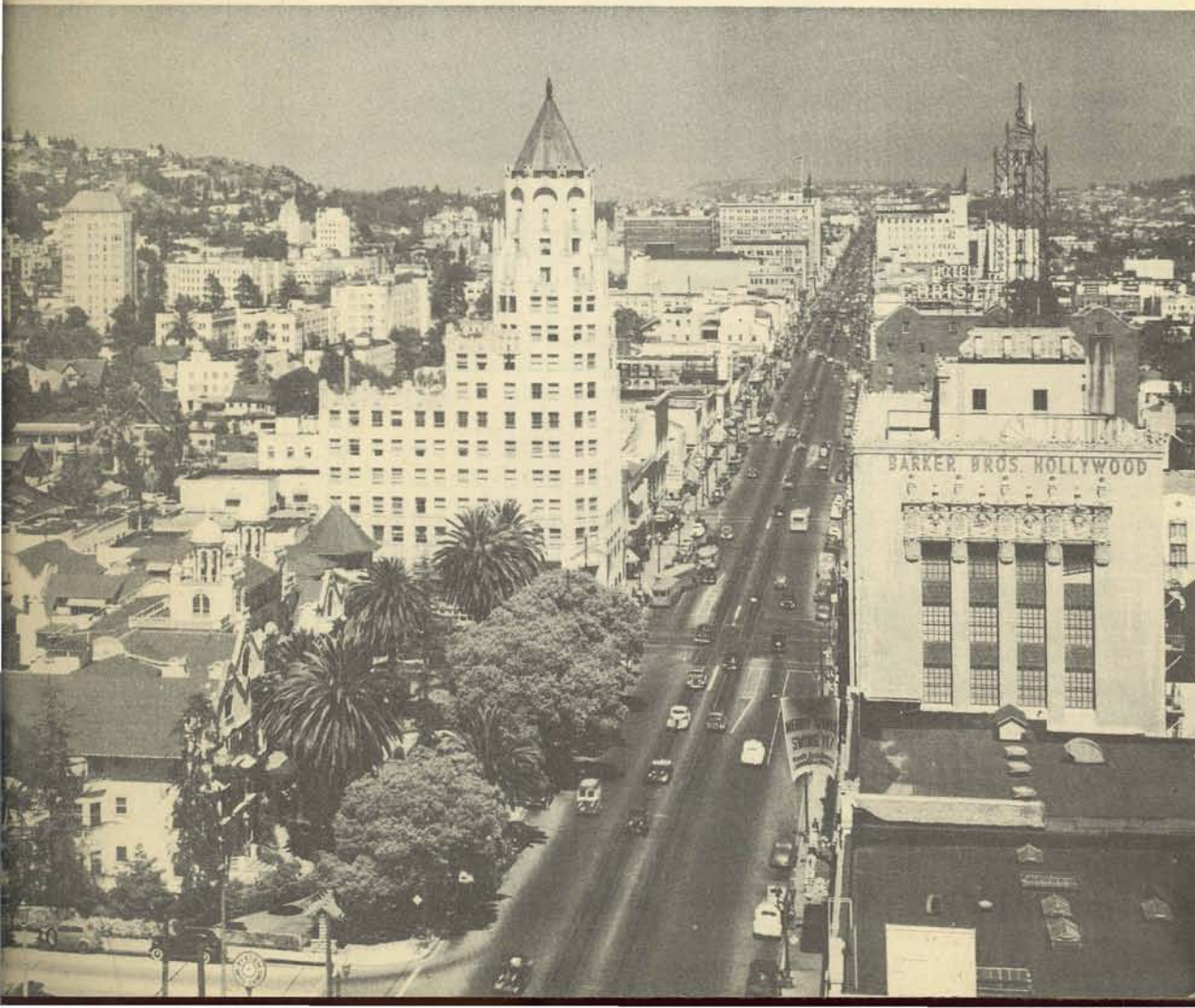
NOTE . . . The Parkway Plan as shown is "Master Plan of Parkways" as approved by the Los Angeles City Planning Commission June 23, 1941.

Abandonment of any rail line rights-of-way permits these areas to be developed for other than transportation purposes. They most desirably should continue to be used for transportation purposes. Where transportation needs do not warrant their use, they should be reserved for the very definite future need.



ROSE BOWL — PASADENA, CALIFORNIA

HOLLYWOOD BOULEVARD — HOLLYWOOD, CALIFORNIA



NEEDS

AND

POSSIBILITIES

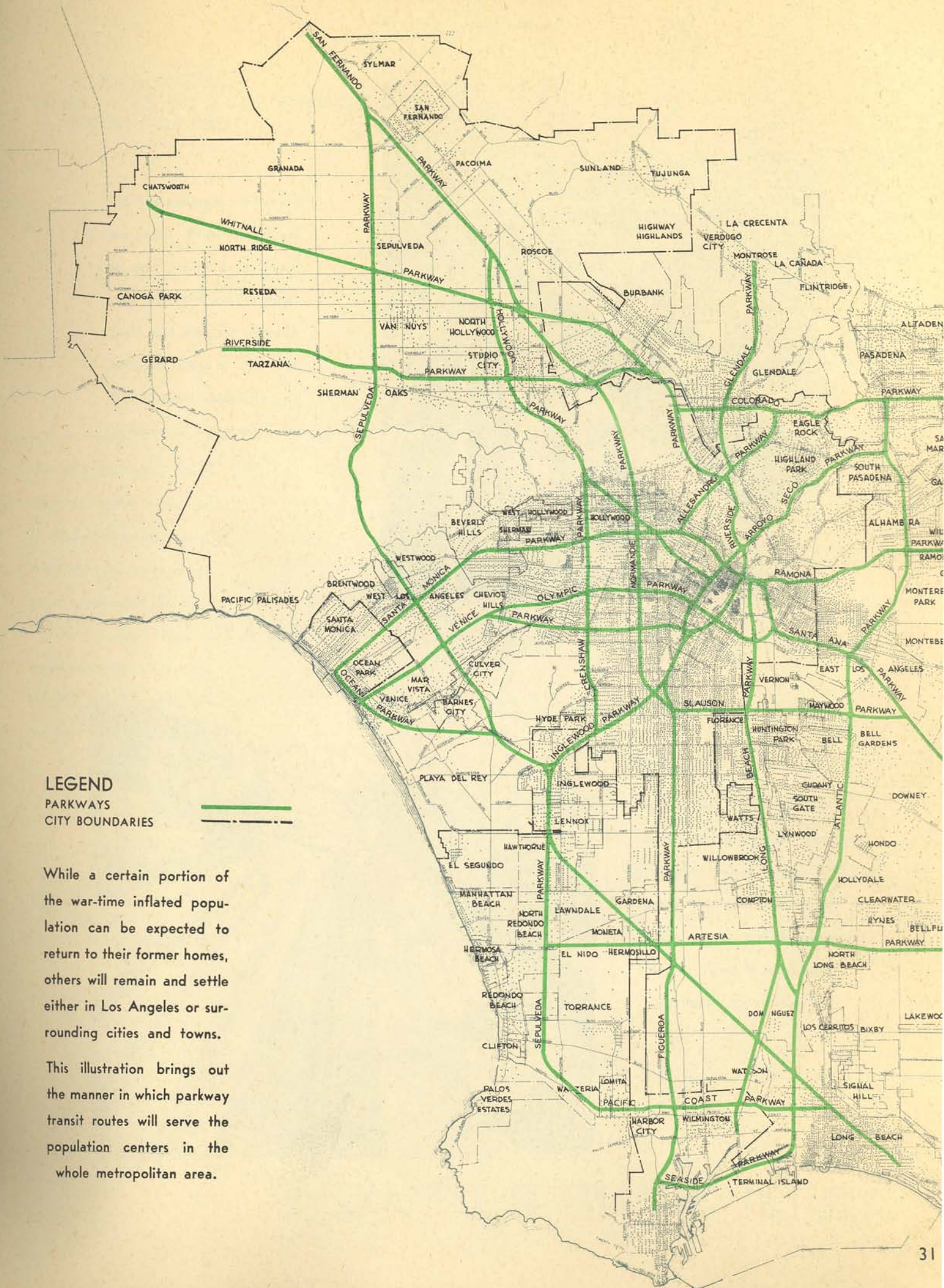
OF

PARKWAY

TRANSIT

SERVICE

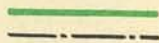
METROPOLITAN CITIES AND TOWNS



LEGEND

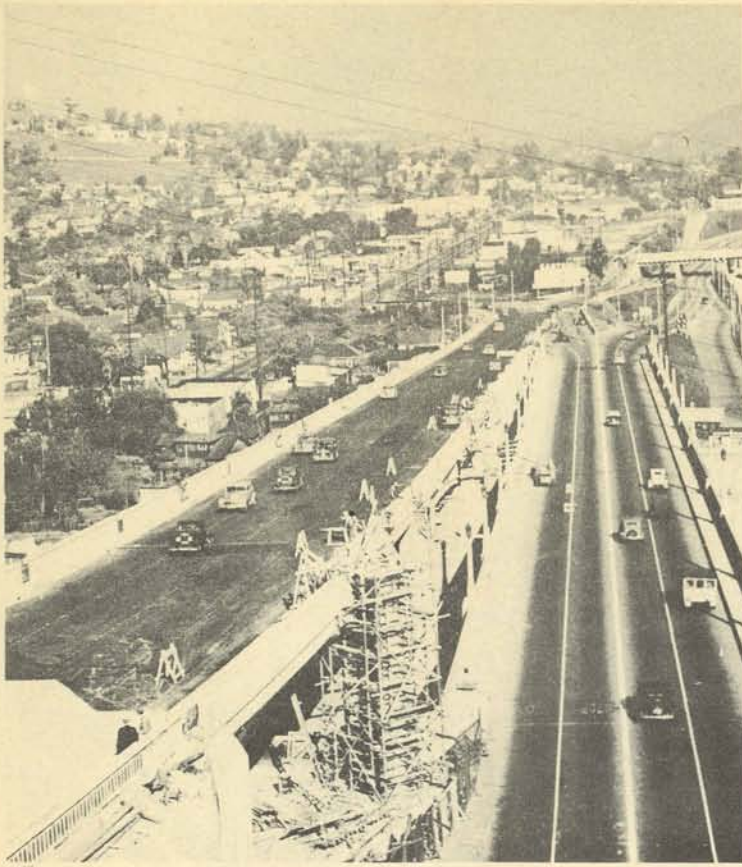
PARKWAYS

CITY BOUNDARIES



While a certain portion of the war-time inflated population can be expected to return to their former homes, others will remain and settle either in Los Angeles or surrounding cities and towns.

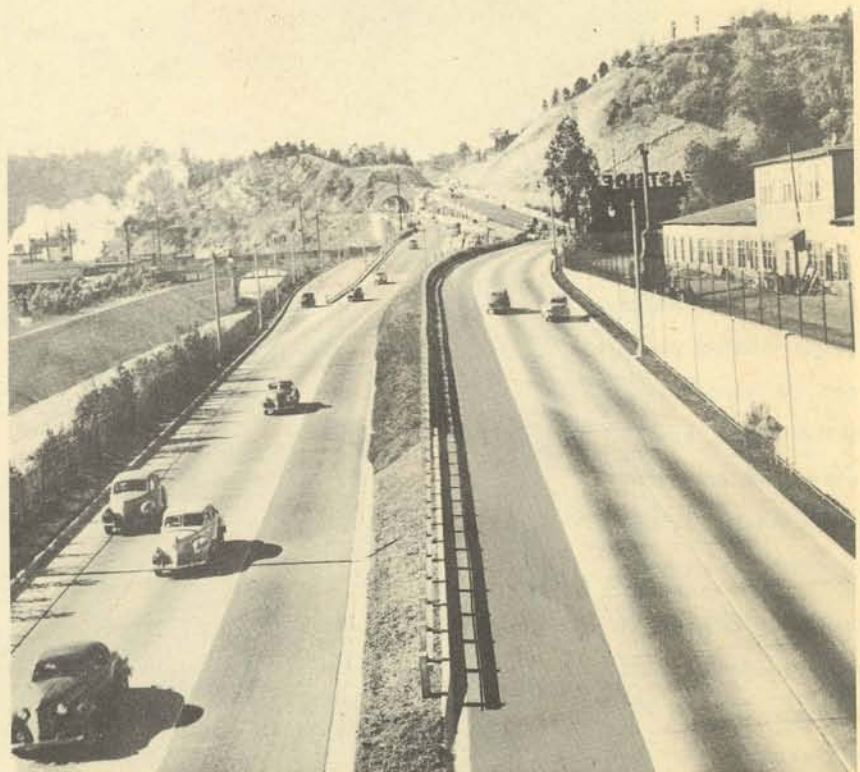
This illustration brings out the manner in which parkway transit routes will serve the population centers in the whole metropolitan area.

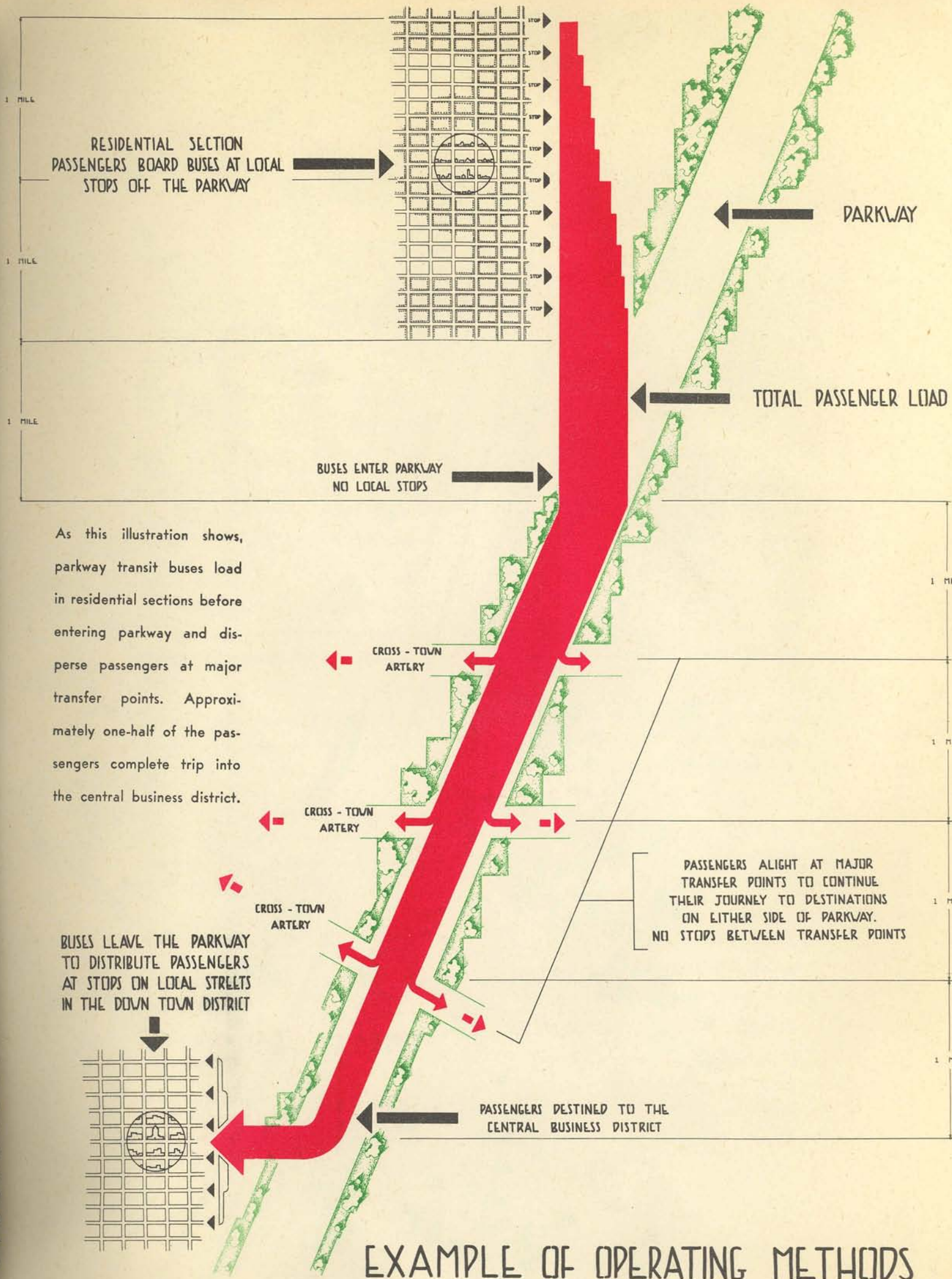


To avoid congestion and delay where Traffic loads are heaviest, as in the case of Arroyo Seco Extension pictured to the left, four lanes of traffic in each direction are afforded. Mass transit use is illustrated by coach in right hand lane.

ARROYO SECO PARKWAY

In this view of the Arroyo Seco Parkway opposing traffic proceeds on different levels separated by railing and planted slope. Only three lanes of traffic in each direction are required.





RESIDENTIAL SECTION
PASSENGERS BOARD BUSES AT LOCAL
STOPS OFF THE PARKWAY

PARKWAY

TOTAL PASSENGER LOAD

BUSES ENTER PARKWAY
NO LOCAL STOPS

As this illustration shows,
parkway transit buses load
in residential sections before
entering parkway and dis-
perse passengers at major
transfer points. Approxi-
mately one-half of the pas-
sengers complete trip into
the central business district.

CROSS-TOWN
ARTERY

CROSS-TOWN
ARTERY

CROSS-TOWN
ARTERY

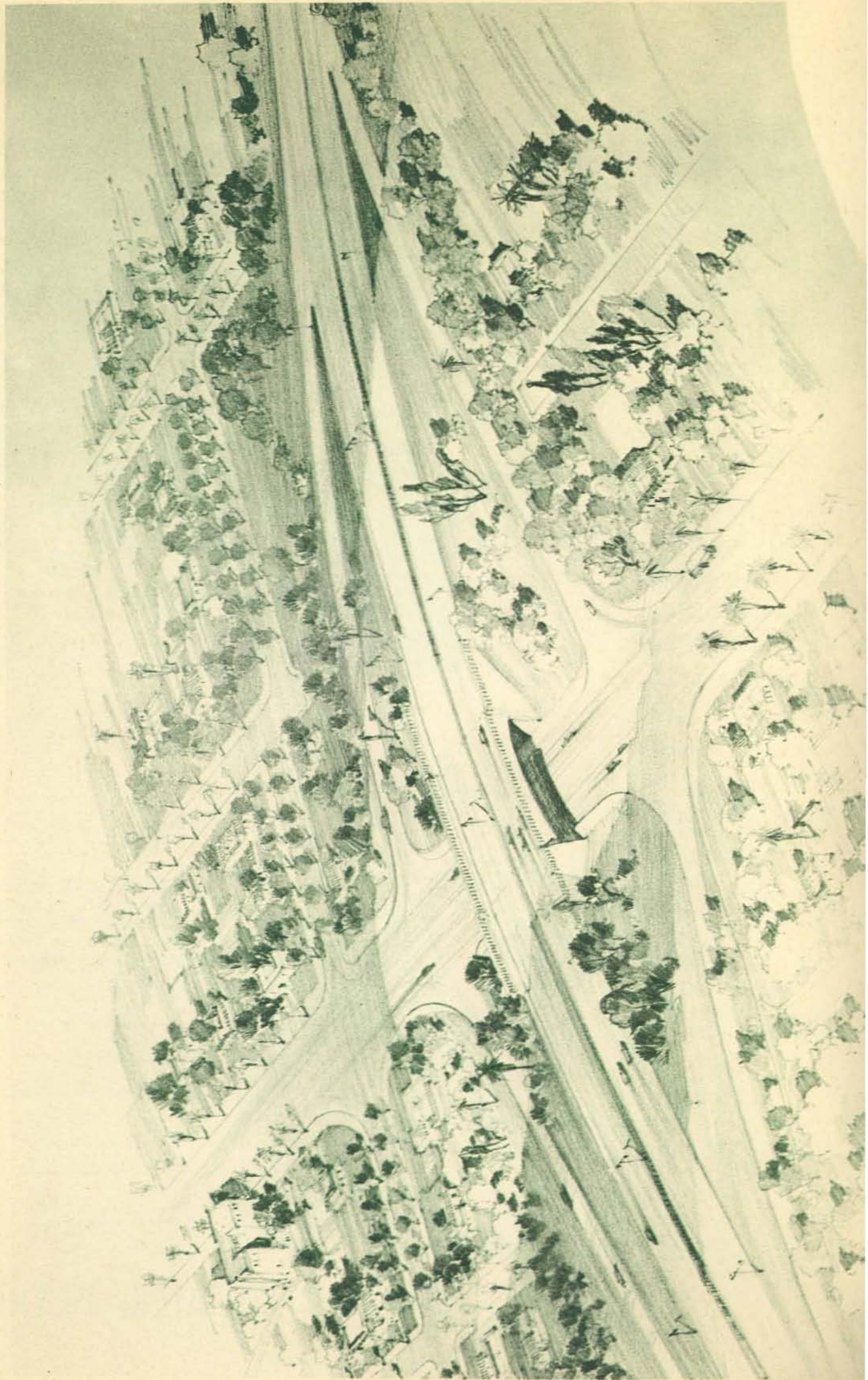
PASSENGERS ALIGHT AT MAJOR
TRANSFER POINTS TO CONTINUE
THEIR JOURNEY TO DESTINATIONS
ON EITHER SIDE OF PARKWAY.
NO STOPS BETWEEN TRANSFER POINTS

BUSES LEAVE THE PARKWAY
TO DISTRIBUTE PASSENGERS
AT STOPS ON LOCAL STREETS
IN THE DOWN TOWN DISTRICT

PASSENGERS DESTINED TO THE
CENTRAL BUSINESS DISTRICT

EXAMPLE OF OPERATING METHODS

PARKWAY DETAILS—ENTRANCE AND EXIT RAMP



SELECTED FINDINGS

1. Plans for construction of the initial parkway routes must consider intersecting parkways and surface lines as well as the parkway transit lines.
2. An area of agreement has been established regarding first priority of parkways to be built and, tentatively, for a ten-year program.
3. By reason of the permanent nature of parkway facilities, once established, to alter or enlarge capacities is most difficult.
4. Some sections of the parkways may be elevated, or depressed and confined between retaining walls, but normal design is preferred.
5. The large amount of basic data analyzed in preparation for this summary report should eventually be published.
6. The parkway plan herein presented is consistent with and carries on the original intention of Los Angeles Major Traffic Street Plan.
7. Calculations and basic data show that certain through parkway routes are a necessary element of an efficient overall transit system.
8. Sufficient cross town and feeder transit service must be provided to avoid uneconomical additional radial transit routes.
9. Pacific Ocean Beach communities without doubt will be utilized to much greater extent for dwelling and recreational purposes than at present and adequate transit service must be provided.
10. Substantial time savings in many cases are possible by parkway coach service as against surface line schedules now in effect.
11. In planning parkway service attention should be given to principal points of interest, educational institutions, public gathering places, and the like.
12. Various rail lines have been abandoned—more probably will be. Some rights-of-way should continue to be used for transportation purposes.
13. Due to war-time inflation, existing population distribution can be used only sparingly in planning transit facilities.
14. In general, combined surface and parkway lines will gather and distribute in outlying areas and transfer at intermediate points.
15. Present transit service provides in part the latest available types of facilities for existing surface operation. Present coaches operate satisfactorily with other traffic on completed sections of parkway.

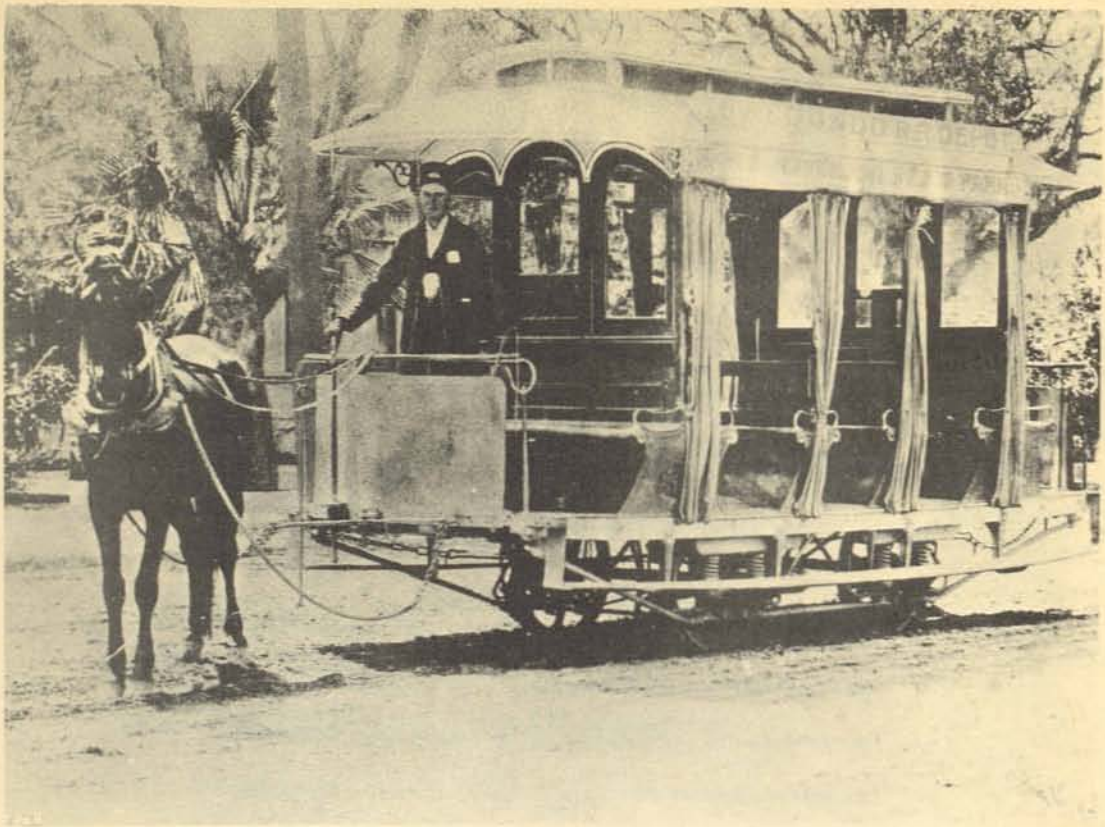
However, coaches specially designed for appropriate speed, braking, and similar characteristics, and controlled as to number, ultimately will be required for parkway service.



SECOND AND BROADWAY — LOOKING SOUTH — 1889



BROADWAY NEAR SEVENTH STREET — LOOKING NORTH — MODERN SUBURBAN TRANSPORTATION



LAST HORSE CAR TO RUN ON MAIN STREET — LOS ANGELES — 1897



MODERN TYPE BUS USED IN 1944

Excerpt from

" A TRANSIT PROGRAM FOR THE
LOS ANGELES METROPOLITAN AREA"

TRANSPORTATION ENGINEERING BOARD, CITY OF LOS ANGELES
CONCERNING CENTER STRIP RESERVATION

"At the time of acquiring right-of-way and final designing of structures and arrangements, consideration should be given to the advisability of providing extra width in the center reservation or planted area between the main parkway roads. Several possible uses are in prospect for an extra width of about 35 feet or approximately 15% of the total right-of-way, and initial provision of such width offers possibilities of attractive future economies at the expense of moderately increased initial cost.

"The extra width would provide room for expansion to three main roadways instead of the conventional two which with largely unbalanced traffic would be equivalent to doubling the capacity of the route.

"Other uses for the center roadway are in prospect such as an exclusive roadway for buses, or in certain localities, for truck and commercial vehicles.

"Bus rapid transit has definite limitations as to ultimate capacity and, if growths are rapid, it might not be long until the extra center width would be pressed into service."

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