

RAILROAD COMMISSION
of the
STATE OF CALIFORNIA

Case No. 4002

Report

on the

**Local Public Transportation
Requirements**

of

Los Angeles

**Los Angeles, California
December 16, 1935**

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Los Angeles, Cal.,
December 16, 1935.

Warren K. Brown
Director of Transportation

We are pleased to transmit herewith a report covering the local passenger transportation situation in and about Los Angeles, as rendered by the Los Angeles Railway, Pacific Electric Railway, and Los Angeles Motor Coach Company. This study has been prepared in connection with Case No. 4002 now pending before the Railroad Commission. It is planned to introduce this study as the Commission's exhibit at the hearing before Commissioner Carr at Los Angeles January 9, 1936.

The summary and conclusions of the report are fully stated in the final chapter, and we may here point out that

I

The outstanding problem is the need for not less than two hundred new, modern, up-to-date street cars for use on the Los Angeles Railway to replace obsolete and inadequate equipment, together with the modernization of three hundred of the steel-body cars now in service. This requirement is a minimum to preserve adequate local rail service, and is paramount to all other needs of the local lines.

II

The service as a whole on the system is operated on a satisfactory and economical basis, but certain changes in routes and certain extensions of service are suggested.

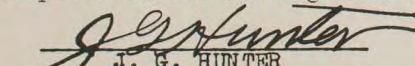
III

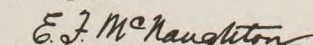
The fare arrangements are complicated and unwieldy, but no basic rearrangement has been devised. However, certain changes are recommended.

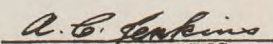
IV

The difference in rail gauge and methods of operation of the two rail systems is a fundamental barrier to complete unification of these systems, but a more complete coordination of the operations by the present operators should be undertaken, particularly in respect to fares.

In presenting this study we desire to acknowledge the cooperation of the officers and employees of the Los Angeles Railway and Pacific Electric Railway in making all desired information available; the officers of the City of Los Angeles including the City Attorney and the Board of Public Utilities and Transportation; the Downtown Business Men's Association; Central Business District Association; Los Angeles Traffic Association; Hollywood Chamber of Commerce; and other interested groups. Informal discussion throughout the preparation of the report has been had with these groups, which has been helpful to us in endeavoring to view the transportation problem in Los Angeles in all of its many aspects. A. F. Ager of the Commission's Los Angeles office has participated in the meetings and discussions relative to the report.


J. G. HUNTER
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VIEW LOOKING NORTH OVER CENTRAL BUSINESS DISTRICT OF LOS ANGELES

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TABLE OF CONTENTS

<u>Chapter</u>	<u>Title</u>	<u>Page No.</u>
I	Introductory	1
II	General Transportation Situation in Los Angeles . .	3
III	Basic Considerations of Study	13
IV	Corporate History	15
V	Present Properties	17
VI	Operating Organization	34
VII	Balance Sheet Statements	47
VIII	Income Statements	64
IX	Operating Revenues	79
X	Operating Expenses	107
XI	Taxes	160
XII	Depreciation	163
XIII	Rate Base	176
XIV	Rate of Return	184
XV	Earnings by Lines	188
XVI	Present Service	200
XVII	Traffic, Routing and Service	222
XVIII	Extensions and Abandonments	258
XIX	Plant and Equipment	266
XX	Fares	275
XXI	Franchise Situation	283
XXII	Financial Requirements	286
XXIII	Coordination of Fares and Service	290
XXIV	Unification of Properties and Operations	293
XXV	Summary and Conclusions	299

CHAPTER I

INTRODUCTORY

The local public transportation service in and about Los Angeles is used by over a quarter of a million patrons daily. It is apparent, therefore, that the problems involved in rendering this service are of vital importance to a large body of people, as well as the utilities, the business and shopping district, and to the city in general.

AUTHORITY FOR REPORT

By Case No. 4002 filed on April 12, 1935, the City of Los Angeles brought a formal complaint before the Railroad Commission, naming as defendants the Los Angeles Railway Corporation and Pacific Electric Railway Company, and asked that the Railroad Commission conduct a study of all phases of the operations of these companies. The transcript of the hearing on June 6, 1935, shows the final arrangement for the conduct of this survey, by which the Commission's engineers were instructed to proceed with the present study.

PURPOSE OF REPORT

The purpose of the report is to review the service, operating and financial matters connected with the Los Angeles local transportation service as rendered by the Pacific Electric Railway and Los Angeles Railway, and their joint agency, the Los Angeles Motor Coach Company, for the purpose of making such recommendations as may seem appropriate looking toward both the immediate and ultimate Los Angeles local transportation requirements.

While the defendant railways have formally denied many of the allegations in the City's complaint, all parties, nevertheless, have agreed to cooperate in conducting the present study for the purpose of assisting in determining the issues of the case.

GENERAL TRANSPORTATION COMMITTEE

The "Joint Transportation Committee" was appointed to study the public street transportation problems in the Los Angeles metropolitan area and proceed in an amicable and informal manner to effect changes looking toward an improvement in the rates and service of local transportation. The appointment of the committee followed a conference held in the Commission's San Francisco office on October 6, 1933, which was called by the Commission for the purpose of discussing the local transportation situation in the City of Los Angeles. The participants at this conference with the Commission included representatives of the Board of Public Utilities and Transportation and the City Attorney's Office of the City of Los Angeles, Pacific Electric Railway Company, and Los Angeles

Railway Corporation.

Initially, the personnel of this committee consisted of representatives of the two railroads, the Board of Public Utilities and Transportation, Public Utility Department of the City Attorney's Office, together with representatives of the Commission. Subsequently, however, the committee was enlarged to include representatives of the Los Angeles Traffic Association, Central Business District Association, Down Town Business Men's Association, and the Hollywood Chamber of Commerce. Problems arising which affected some particular area necessitated the inclusion from time to time of certain other representatives who participated in these informal conferences, including the Cities of Inglewood, Hawthorne, Huntington Park, etc.

The committee functioned through sub-committees, eighteen of which were formed, with specific duties prescribed for each. Thereafter the General Committee met at frequent intervals, but as the work progressed, meetings were held less often. The committee suspended meetings during the present study and functions only if and when special problems arise which appear to require action by the committee.

Some of the principal accomplishments of the General Committee since its inception were:

1. Installation of inter-company transfer, good between Los Angeles Railway primary zone and in two of Zones 1, 2, and 3 of the Pacific Electric Railway.
2. Standardization of the zone points of the various lines of the Los Angeles Railway Corporation in Zone No. 1, based in general upon a six-mile zone with Seventh and Broadway as its center.
3. Walk-over transfer privilege between Pacific Electric and Los Angeles Railway in the area between Temple and Sixteenth Streets and Main and Hill Streets.
4. Institution of weekly passes on the lines of the Los Angeles Railway, consisting of a \$1.00 zone pass and a \$1.50 system pass. These passes also include provision for the transportation of two children under twelve years of age, on Sundays and holidays, when accompanied by an adult holding a weekly pass.
5. Conversion and rehabilitation of 23 cars for use on the "N" line of the Los Angeles Railway.

THE EQUIPMENT CASE

On October 16, 1934, the City of Los Angeles brought a case No.3915 before the Commission involving equipment of the Los Angeles Railway Corporation. This complaint was settled by agreement, early in 1935, of the Los Angeles Railway to spend the first \$500,000 remaining in each of the years 1935, 1936, and 1937 for modernization of existing equipment, purchase of new equipment or such other capital improvements as might be mutually agreed upon, after paying operating expense, taxes, bond and loan interest, and fixed charges, but before depreciation charges. This agreement was predicated upon the gradual introduction of one-man operation.

CHAPTER II
GENERAL TRANSPORTATION SITUATION
IN AND ABOUT
LOS ANGELES

In viewing the general local transportation operations in and adjacent to Los Angeles the material has been assembled in the following sections:

- A. Study Area
- B. Population
- C. Present Transportation Services
- D. Other Transportation Facilities
- E. National Transit Trend
- F. Business Conditions in Los Angeles

SECTION A

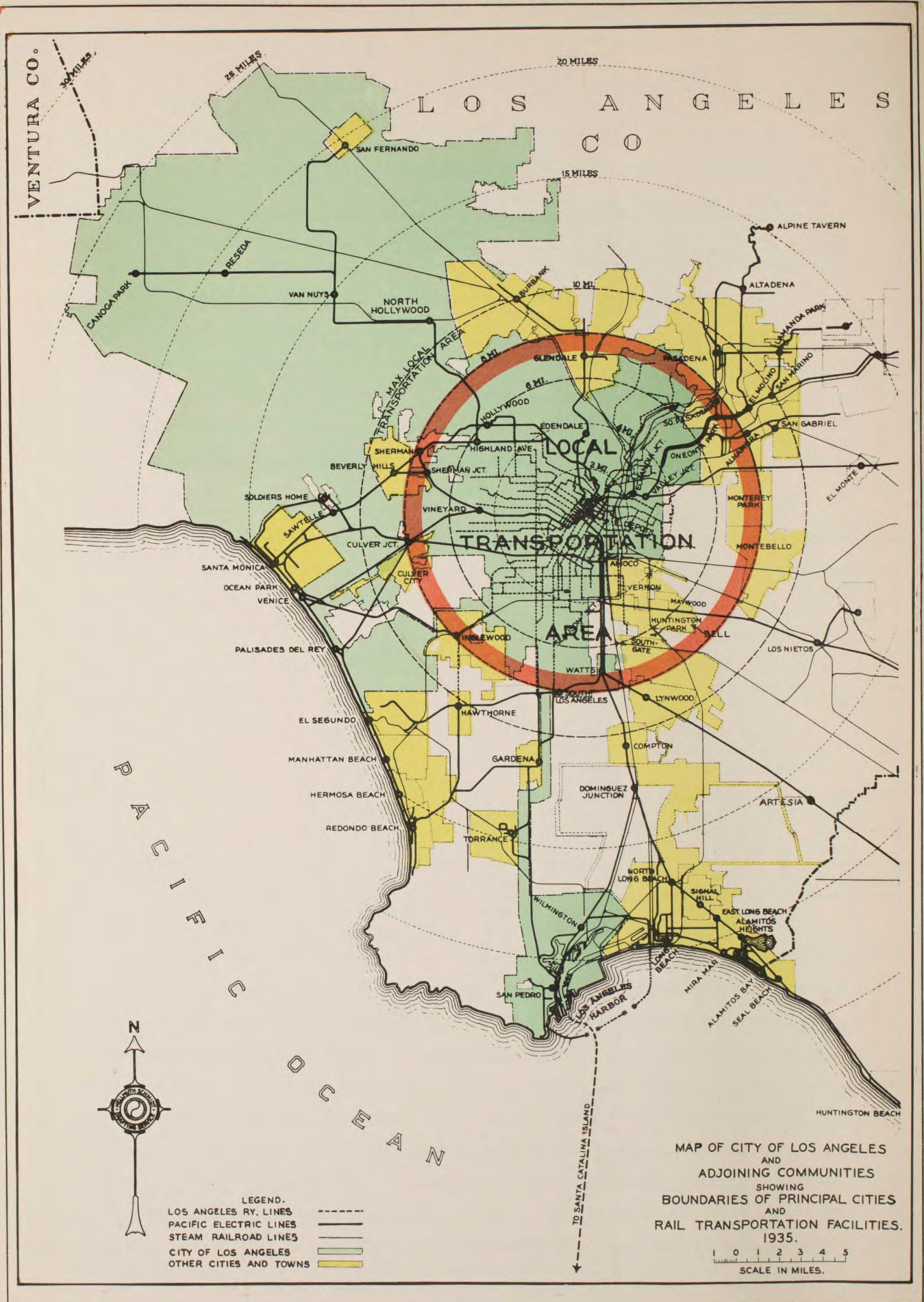
STUDY AREA

This report embraces the local transportation area extending in a general manner about eight miles from the central business district of Los Angeles. Beyond this distance the field is largely that of interurban transportation service and as a rule it may be said the maximum local service area will not exceed ten miles from Los Angeles. Growth of Los Angeles and the communities tributary to it in recent years, particularly in the territory between Los Angeles and Beverly Hills, may require some form of coordinated suburban and local service to be given to the territory beyond the ten-mile circle.

The accompanying map shows in general the rail transportation services rendered in and about Los Angeles and includes adjoining areas, particularly Beverly Hills, Santa Monica, Culver City, Glendale, Hawthorne, Montebello, Alhambra, and a portion of Pasadena. It should be understood, however, that while consideration has been given to these areas adjoining Los Angeles, the study relates primarily to the local services embraced within the ten-mile circle measured from the central business district of Los Angeles.

There is also attached, opposite the next page, a more detailed map showing the rail and motor coach services, and a route map appears as the last page of the report. From the aerial photograph frontispiece a general idea of the geography of the area is given, practically the entire local service area being flat except for the Santa Monica mountains back of the Hollywood area and the gradual rise from Los Angeles to the north-east, to the Verdugo Hills back of Glendale and Pasadena.

The limits of the City of Los Angeles are superimposed upon the map showing the rail transportation facilities. It is apparent that the city limits as such cannot be related to the local transportation requirements. For example, Vernon, although a separate city, is involved in the local transportation problems, while San Fernando Valley and San Pedro, although within the Los Angeles city limits, are definitely outside of the

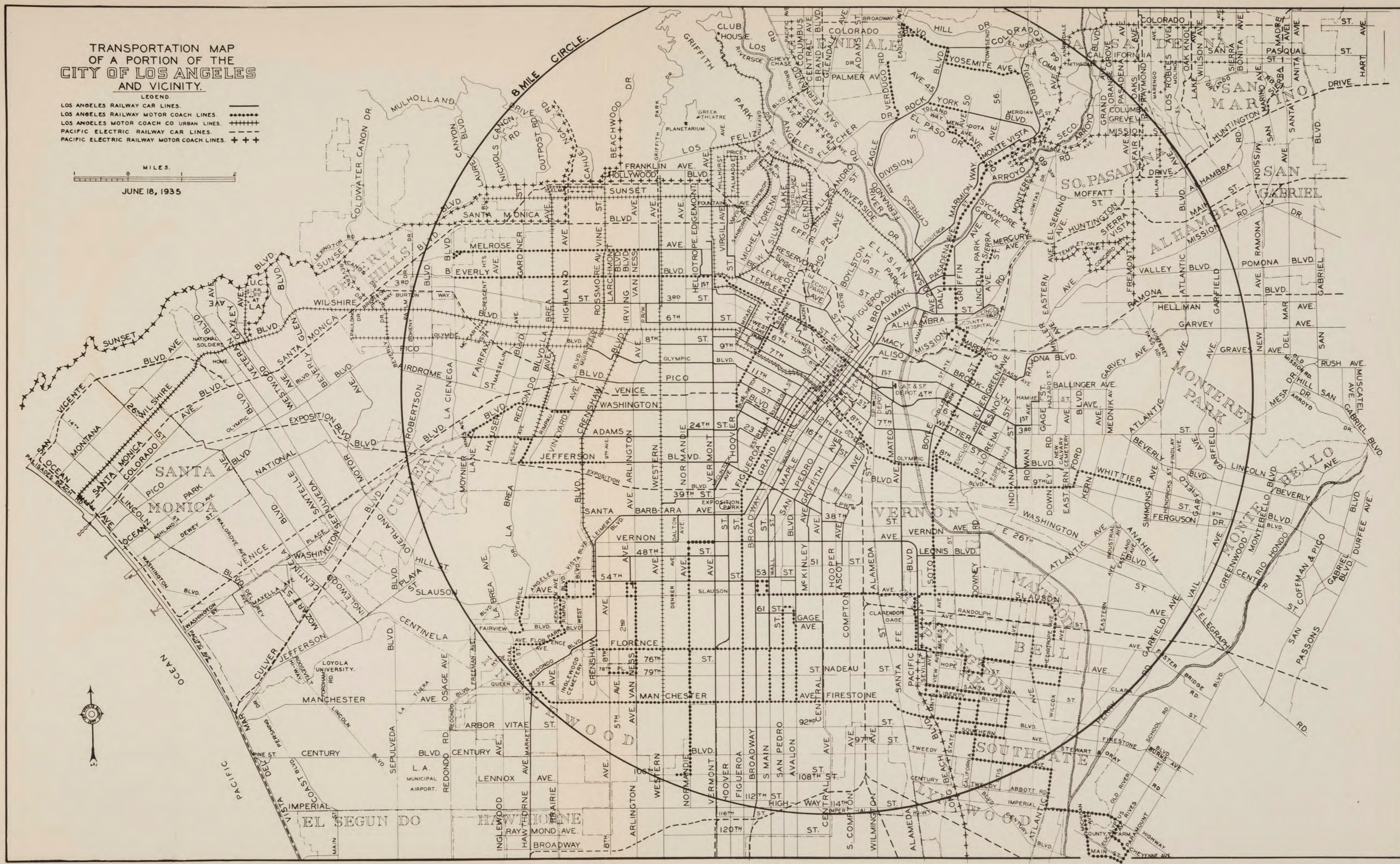
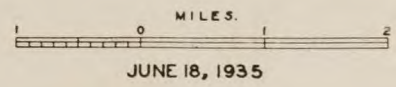


LEGEND.
 LOS ANGELES RY. LINES -----
 PACIFIC ELECTRIC LINES - - - - -
 STEAM RAILROAD LINES _____
 CITY OF LOS ANGELES [Green shaded area]
 OTHER CITIES AND TOWNS [Yellow shaded area]

MAP OF CITY OF LOS ANGELES
 AND
 ADJOINING COMMUNITIES
 SHOWING
 BOUNDARIES OF PRINCIPAL CITIES
 AND
 RAIL TRANSPORTATION FACILITIES.
 1935.
 1 0 1 2 3 4 5
 SCALE IN MILES.

TRANSPORTATION MAP
OF A PORTION OF THE
CITY OF LOS ANGELES
AND VICINITY.

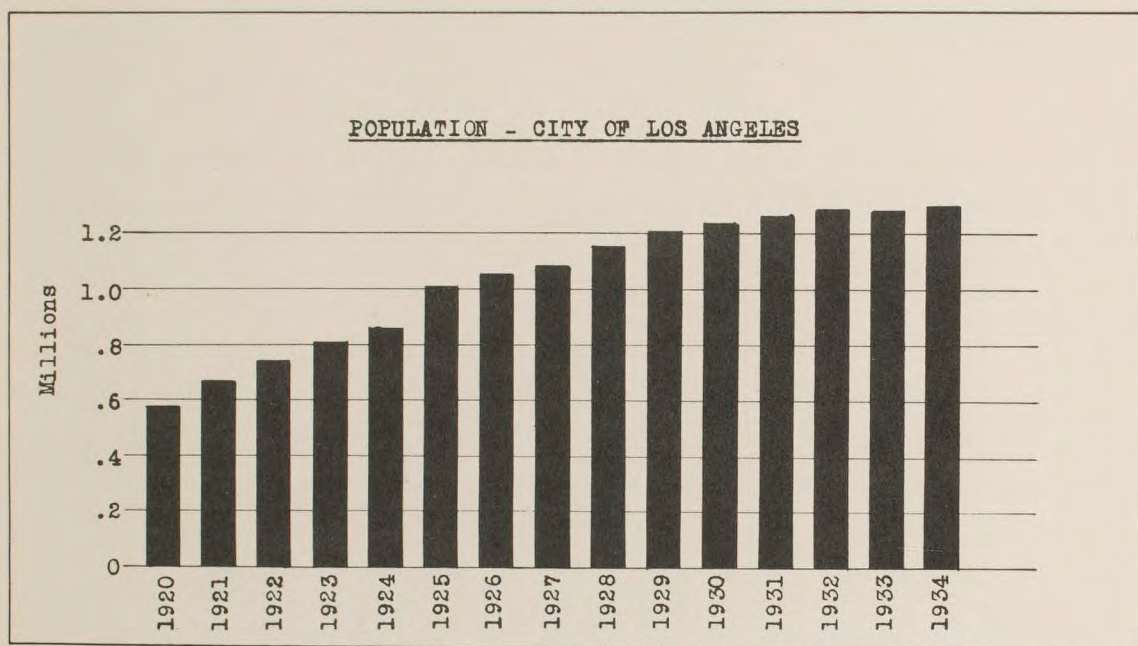
- LEGEND
- LOS ANGELES RAILWAY CAR LINES. ————
 - LOS ANGELES RAILWAY MOTOR COACH LINES. —●—●—
 - LOS ANGELES MOTOR COACH CO URBAN LINES. —+—+—
 - PACIFIC ELECTRIC RAILWAY CAR LINES. —+—+—
 - PACIFIC ELECTRIC RAILWAY MOTOR COACH LINES. —+—+—



maximum local transportation service area and are involved in this study only in a general manner.

SECTION B
POPULATION

It is estimated that the population of the City of Los Angeles at this time is approximately 1,300,000, which is somewhat in excess of the population of 1,231,000 as found by the 1930 census. The following chart indicates the substantial growth of the city during the years 1920 to 1934. These figures are based on the 1920 and 1930 census, together with estimates of the population for each of the intervening years and up to the present time. Certain enlargements of the boundaries of the City of Los Angeles in 1925, particularly the Venice area, account in part for the increase shown in the year 1925.



Growth of Population

The growth of population as related to distance from the downtown district is of interest and two studies are available which, when compared, are indicative of the trend.

Year	Distance from 7th & Broadway (Miles)		
	0-5	5-10	Total
1923	551,000	342,000	892,000
1930	748,000	599,000	1,347,000
Increase	197,000	257,000	455,000
Percent Increase	36%	75%	51%

It is apparent that the population increase has been relatively very much greater in the area 5 to 10 miles from the Los Angeles business center than in the area within 5 miles.

Another view may be had by inspection of the growth of some of the communities adjoining Los Angeles compared with the City of Los Angeles:

<u>Year</u>	<u>County of Los Angeles</u>	<u>City of Los Angeles</u>	<u>Five Adjoining Cities</u>
1920	936,455	576,673	76,657
1930	<u>2,208,492</u>	<u>1,238,048</u>	<u>200,545</u>
Increase	1,272,037	661,375	123,888
Percent Increase	136%	115%	162%

The adjoining cities included in the above statement are:

<u>City</u>	<u>1920</u>	<u>1930</u>	<u>Percent Increase</u>
Beverly Hills	674	17,429	2,486%
Glendale	13,536	62,736	363
Pasadena	45,354	76,086	68
Alhambra	9,096	29,472	224
Whittier	<u>7,997</u>	<u>14,822</u>	<u>85</u>
Total	76,657	200,545	162%

These figures confirm, of course, common impressions of the tendency of residential development in the way of single family homes in the formerly undeveloped territory surrounding Los Angeles.

Direction of Growth

While all areas show a growth during the decade 1920 to 1930, the increases were most marked in the area to the west of Los Angeles. Particularly is this true of the territory along Wilshire Boulevard and the City of Beverly Hills.

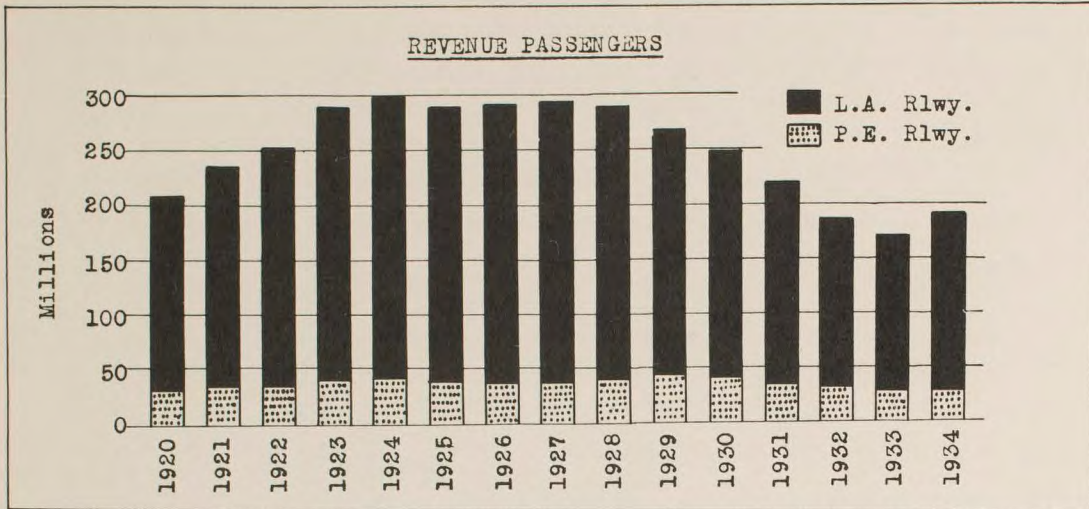
SECTION C

PRESENT TRANSPORTATION SERVICES

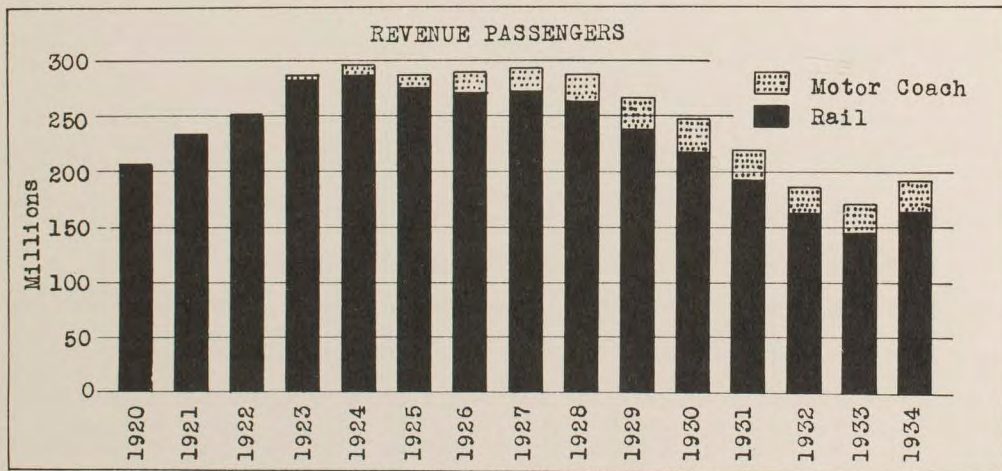
The largest local transportation company is, of course, the Los Angeles Railway and the next largest is the Pacific Electric Railway. These companies, together with their agency, Los Angeles Motor Coach Company, provide practically all of the local public passenger transportation service. There are no jitneys or other local services directly competitive with these lines; taxicab operation is of the usual type and with a fare structure not directly competitive. Los Angeles City has no municipal transportation service and such operations by adjoining communities have been confined, to date at least, to connections with local rail lines.

As will later be pointed out in detail, the local service is highly competitive with the private automobile, and this situation has a most important relationship to many of the studies made and conclusions reached concerning the local transit lines.

The trend of travel during the period 1920 to 1934 has been as follows, based on revenue passengers of the Los Angeles Railway and Pacific Electric Railway:



Beginning in 1923, motor coach operations were started by the Los Angeles Railway and Pacific Electric Railway. These operations have gradually increased until they now account for approximately 14% of the total revenue passengers of the companies, as shown by the following chart.



The gross local passenger revenue of these companies (each of which includes its share of Los Angeles Motor Coach Company) in 1934 was over \$12,000,000. The revenue passengers carried in the same period totaled over 190,000,000, or about 575,000 per average week day, indicating a patronage of over a quarter million. Approximately 630 route miles are operated in these services, and nearly 1,200 passenger equipment units are assigned to the Los Angeles local services. The following tabulation presents the basic figures for each of the operators, divided also as between rail and motor coach operation.

	<u>L.A. Ry.</u>	<u>P.E. Ry.</u>	<u>L.A.M.C.Co.</u>	<u>Total</u>	<u>Percent</u>
<u>Passenger Revenue</u>					
Rail Operations	\$8,300,989	\$1,588,397	\$ -	\$ 9,889,386	81.9%
Motor Coach Operations	<u>847,959</u>	<u>7,690</u>	<u>1,327,111</u>	<u>2,182,760</u>	<u>18.1</u>
Total	\$9,148,948	\$1,596,087	\$1,327,111	\$12,072,146(a)	100.0%
Percent	75.8%	13.2%	11.0%	100.0%	
	(a) Before intercompany eliminations.				
<u>Revenue Passengers</u>					
Rail Operations	141,992,521	23,222,267	-	165,214,788	86.2%
Motor Coach Operations	<u>11,296,849</u>	<u>100,374</u>	<u>15,149,096</u>	<u>26,546,319</u>	<u>13.8</u>
Total	153,289,370	23,322,641	15,149,096	191,761,107	100.0%
Percent	79.9%	12.2%	7.9%	100.0%	
<u>Route Miles</u>					
Rail Operations	264	84	-	348	55.2%
Motor Coach Operations	<u>136</u>	<u>9</u>	<u>138</u>	<u>283</u>	<u>44.8</u>
Total	400	93	138	631	100.0%
Percent	63.4%	14.7%	21.9%	100.0%	
<u>Equipment Units in Service</u>					
Rail Operations	775	156	-	931	79.0%
Motor Coach Operations	<u>111</u>	<u>5</u>	<u>131</u>	<u>247</u>	<u>21.0</u>
Total	886	161	131	1,178	100.0%
Percent	75.2%	13.7%	11.1%	100.0%	

SECTION D

OTHER TRANSPORTATION FACILITIESOther Privately-Owned Operators

There are certain other operators of public transportation service in the local service area. The Motor Transit Company operates a number of interurban lines radiating from Los Angeles. Practically all of these operations are restricted as to right in the local service area.

The Pasadena-Ocean Park Stage Line operates a service between Pasadena and Hollywood and between Pasadena and Ocean Park via Glendale and Hollywood. It is restricted as to the handling of local business between Hollywood and Santa Monica and Ocean Park. The Original Stage Line operates a motor coach service from Los Angeles to Glendale and Burbank. The Studio Stage Lines operates a service between Culver City and Universal City via Hollywood. These three companies are under a single ownership.

The Bay Cities Transit Service operates a number of local service lines in Santa Monica, West Los Angeles and along Pico Boulevard to a connection with the Los Angeles Railway Pico Street line.

Several other independent operators serve territory adjoining the local service area and in general serve as feeders to the Los Angeles Railway. These are the H. & A. Bus Line, Belvedere Gardens Line, El Segundo Motor Transport, Holbrook Transit, Sunset Stages, and Prairie Avenue Transit Company. While these lines are of importance in their

particular serving areas, their operations do not have a major bearing on the Los Angeles local transportation problem.

Municipal Operations

The City of Montebello for many years has operated a motor coach service on Whittier Boulevard from Montebello to a connection with the terminal of the Los Angeles Railway Whittier Boulevard rail line.

In 1927 the City of Culver City established a municipal motor coach service operating along Washington Boulevard from Venice through Culver City to the terminal of the Los Angeles Railway's Washington Street line.

In 1928 the City of Santa Monica established a somewhat similar service operating from Ocean Park in Santa Monica via Pico Street to the terminal of the Los Angeles Railway's Pico Street line. The City of Santa Monica has an application on file with the City of Los Angeles at this time for permission to operate a motor coach service from Santa Monica via Third Street to downtown Los Angeles. The two lines now operating are competitive with the Pacific Electric Railway interurban lines, but connect as feeders to the Los Angeles Railway local system. The present application of the City of Santa Monica would parallel not only the Pacific Electric Railway and Los Angeles Motor Coach Company's lines, but would be directly competitive with the lines of the Los Angeles Railway.

Motor Coach Operations in Downtown Los Angeles

Motor Bus service is restricted by charter provisions in the downtown Los Angeles district, and such service may not be operated in the area bounded by Broadway, First, Main, and Eighth Streets, except on Second and Third Streets.

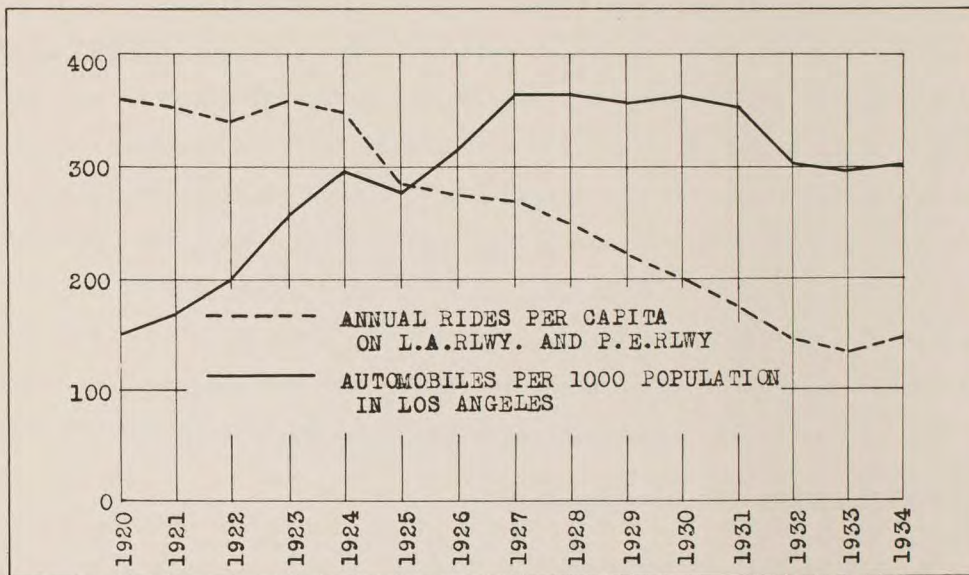
Taxicabs

There are approximately 345 taxicabs operating under permit in Los Angeles, virtually all being owned by the Yellow Cab Company. The rates are on a basis which do not seriously affect street railway travel.

The Private Automobile

The outstanding competitor of the local public transportation lines, of course, is the private automobile. The following chart shows the growth in use of the automobile compared with the trend of use of the public transportation facilities. This chart shows that automobiles per thousand of population in the City of Los Angeles increased rapidly during the period 1920 to about 1927. From 1927 to 1931 the number remained rather constant at about 360 automobiles to one thousand population. With the depression, particularly the interval from 1931 to 1932, there was a reduction in the number of automobiles per thousand population to 300, or about a 20% decrease. During this period the travel

on the local transportation lines related to population has continued to decline year by year since 1923 until the last year, when an upward trend is again noticed. It is without question that a substantial portion of the decline in street car travel, particularly in the years when the automobile development was most rapid, was mostly effected by increased use of the automobile. During recent years, however, the facts would indicate that the depression has brought about a decline in the use of both facilities, and the experience of 1934 and 1935 indicates definitely that some of the local transportation travel is being recovered. The figures for the first ten months of 1935 indicate a 10% increase in travel on the transit lines.



Of all the large cities in the country Los Angeles has by far the highest ratio of automobiles in relation to population. Los Angeles has also by far the largest number of automobiles entering the downtown business district, compared with any other city.

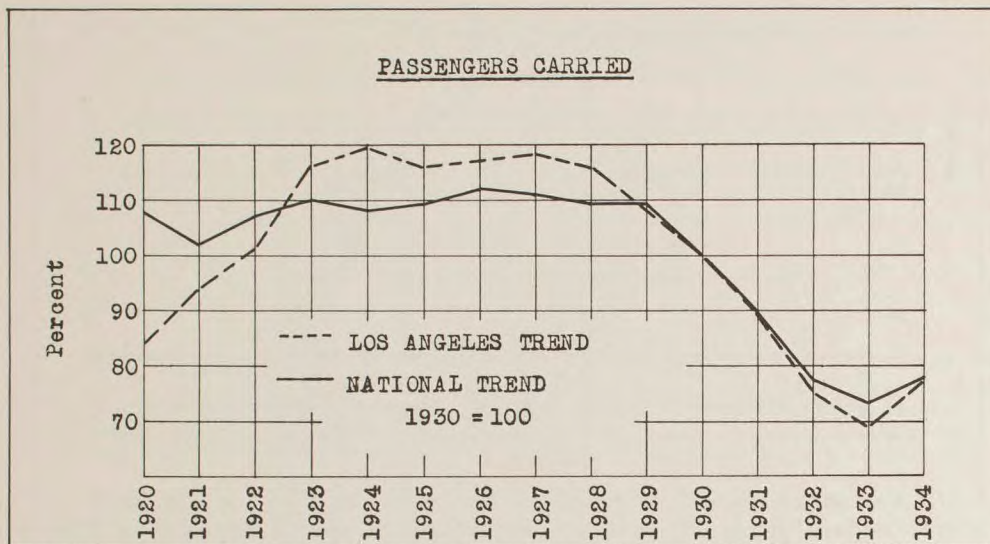
Naturally the growth and development of Los Angeles in the past ten or fifteen years has been influenced to a marked extent by the high development of automobile usage and many millions of dollars have been invested in new streets and highways, widening of existing thoroughfares and construction of storage facilities for this means of transportation.

It is of interest to note, however, that the automobile development was adversely affected by the depression along with the decrease of travel on the local rail and motor coach lines, and with the upturn in business experienced in the last eighteen months, which was reflected in increased rail and motor coach travel, it may be that the competitive effect of the automobile is nearing its zenith and that in the future the local transportation utilities may obtain their share of the increased travel, depending on the aggressiveness with which the equipment, service, and fare problems are met.

SECTION E

NATIONAL TRANSIT TREND

The trend of travel and use of local transportation facilities in Los Angeles has not differed greatly from national trends since 1930. This is shown by the following chart.



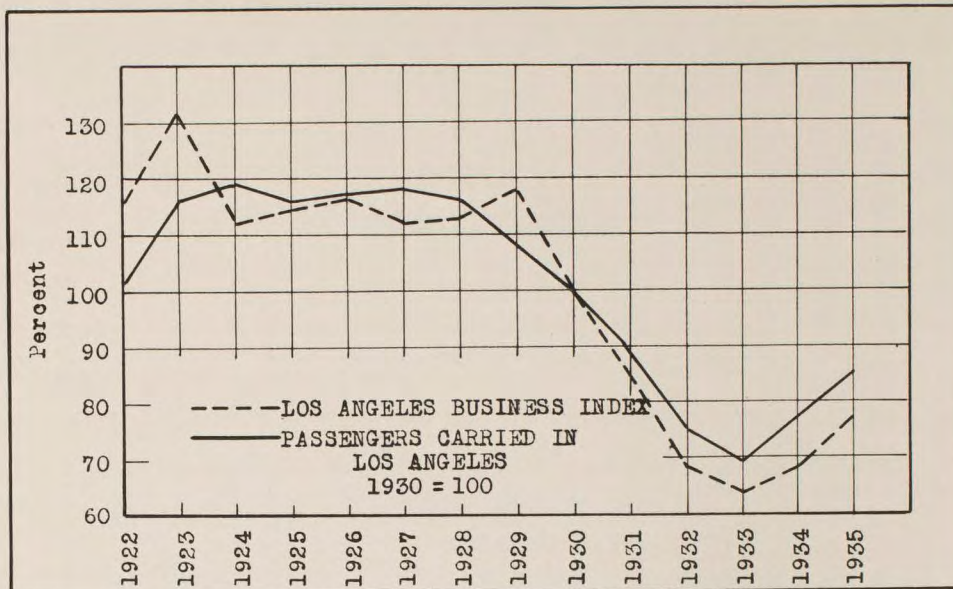
It is apparent that the depression insofar as travel is concerned has had about the same effect on Los Angeles transit lines as the national travel figures. The tremendous growth of Los Angeles following 1920 is largely responsible for the departure of the Los Angeles trend from the national trend in the period 1920 to 1924. From 1924 to 1928 the trend was parallel. In 1929 the fare increase in Los Angeles resulted in a decrease, bringing the Los Angeles trend downward, while the effect of the depression is apparent on both trends beginning in 1930. It will be noted that Los Angeles travel decreased to a somewhat greater extent than the national trend, both trends reaching the low point in 1933 and both showing a recovery in 1934.

SECTION F

GENERAL BUSINESS CONDITIONS

The trend of general business conditions in the Los Angeles area is of interest in considering many of the travel and revenue trends. The "Index of Business Activity in Southern California" as prepared by the Security-First National Bank has been used for this purpose. From this chart it will be seen that in the period 1925 to 1928 travel followed to some extent the business trend. In 1929 the travel decreased while business conditions improved. The decrease in travel in this case was largely due to the increased fares effective late in 1928. From 1929 on to 1933 the decreased travel has been largely due to the decline in business conditions, and the trend of 1934 and 1935 indicates a

recovery in travel along with a recovery in general business condition in the Los Angeles area.



A substantial recovery from the low point of the depression in 1933 has been recorded to date:

<u>Year</u>	<u>Business Index</u>	<u>Passenger Traffic</u>
1929	118	108
1930	100	100
1931	85	89
1932	68	75
1933	64	69
1934	68	77
1935	78	85

It will be noted from these indices that while business conditions in general reached a low point of 64 in 1933 compared with 100% for 1930, passenger travel on the local lines was 69%. The recovery from this low point to 1935 as indicated by business activity shows an increase to 78%, or within 22 points of the 1930 level. Passenger traffic has increased to 85, or to within 15 points of the 1930 level. Here again it is obvious that there is some relation between the general business activity and the passenger travel on the local transportation services, although it is apparent that passenger travel was relatively less affected by the depression than was general business.

CHAPTER III

BASIC CONSIDERATIONS OF STUDY

In the preceding chapter the existing public transportation utilities serving Los Angeles have been discussed in a general manner. It is appropriate at this point in the report to consider the broad questions with which the report will deal. The study deals primarily with the operations of the Los Angeles Railway, the local lines of the Pacific Electric Railway, and the Los Angeles Motor Coach Company's operations in and about Los Angeles. The complaint before the Commission, as has been pointed out, is inclusive of practically all phases of the operations, fares, services and financial matters connected with these utilities. There has also been raised the question of a more complete unification of the services of the three companies, both as to fares and service. Such unification might come about through some form of coordination or pool operation by the existing companies, or might go further and embrace some form of purchase or lease of existing properties by other companies or by political sub-divisions. No less than ten such possible combinations which would provide for ultimate unification of the transportation operations in the Los Angeles area are available for consideration.

With this general statement it may be now said that the object of the remainder of this report will be as follows:

First To present the basic facts as to the present properties of the companies under consideration, their operating organizations, balance sheet and income statement, operating revenues, operating expenses, taxes, depreciation, rate base, rate of return, earnings by lines, and the detail of the present service rendered. It is necessary that these matters be fully presented and understood before endeavoring to discuss and present any plans for changes, and such basic facts are shown largely in Chapters IV to XVI, inclusive.

Second. A study of service and routing including analysis of traffic studies, service requirements and operating methods; studies of extensions, improvements and abandonments of service; substitution of motor coach service for rail lines; a consideration of the existing rail equipment and future needs, together with other new money requirements for replacement of property and additions to plant; consideration of present fares and possible modifications; the franchise situation; and the financial situation of the companies as presently operated.

Third. All of the studies and recommendations as presented in Chapters XVI to XXII, inclusive, as above described, will be made basically to apply to the present operations by the present companies so that immediate consideration may be given any

conclusions reached from these studies. This is important because plans for complete unification of these services will undoubtedly require extended consideration, and it is believed that the report will be presented so that its results may be applied to the immediate situation.

Fourth. On the other hand, in all of the studies in Chapters XVII to XXII, inclusive, there will be always considered the possibility of future ultimate unification of these properties, and as a general statement each recommendation or conclusion will be tested so as not to act as a barrier to such ultimate unification.

Fifth. In Chapter XXIII the basic principles which would be involved in any coordination of fares and service through some form of cooperative or pooling arrangement by the present operators will be set forth, while in Chapter XXIV the various methods by which a unification of the properties might be accomplished are discussed, together with tentative conclusions as to these subjects based on the information at hand at this time.

The last chapter shows the summary and conclusions of the entire study.

The above statement has been made at this time so that the interested parties may have clearly before them the basic considerations involved in this report.

It is essential, looking to the future, that an adequate public transportation service be available to Los Angeles and surrounding communities. It is also essential that provision be made so that necessary new capital will be available as needed to meet the transit requirements.

For the purpose of this report, these possibilities of the future must be kept in mind at all times. The present study must of necessity deal primarily with the present corporate structure and separate operating organization of the two operating companies. In the event of modification of the corporate structure or operating organization, further changes will result, and while it is the intent of this study to consider these modifications, the major emphasis has been placed on those changes which can be considered for the properties as now owned and operated.

CHAPTER IV

CORPORATE HISTORY

This chapter dealing with the corporate history of the present operating companies is presented in three sections as follows:

- A. Los Angeles Railway Corporation
- B. Pacific Electric Railway Company
- C. Los Angeles Motor Coach Company

SECTION A

CORPORATE HISTORY

LOS ANGELES RAILWAY CORPORATION

The Los Angeles Railway Corporation is the result of the consolidation and development of numerous transportation properties. The physical history of the street railways of Los Angeles dates back as far as 1872. The early records show that the Los Angeles Cable Railway Company was organized in 1887, acquiring the properties of the City Railway, the Central Street Railroad, and the East & West Los Angeles Railroad, comprising in all about 25 miles of track. This company was succeeded by the Pacific Railway Company, and the properties of the latter in 1893 were purchased under foreclosure sale by the Los Angeles Consolidated Electric Railway Company. This company also acquired the Los Angeles & Vernon Street Railway organized in 1887. In 1895 the Los Angeles Consolidated Electric Railway Company defaulted in interest and the bondholders reorganized the property under the name of Los Angeles Railway Company. In 1899 the latter was reorganized by the Huntington interests and two other smaller street railway properties consolidated with the reorganized property, which was also known as the Los Angeles Railway Company.

On November 21, 1910, the Los Angeles Railway Corporation was formed and took over the properties of the Los Angeles Railway Company, portions of the Los Angeles & Redondo Railway Company, portions of the Pacific Electric Railway Company, the Los Angeles Interurban, and the Los Angeles Traction Company. The Los Angeles Railway Corporation is the present operating company and owns all property in existence at the date of its incorporation, plus all additions and betterments made and all property acquired by the Corporation subsequent to its incorporation, and is the lessor of all property owned by its subsidiary, City Railway Company, of Los Angeles (the common stock of which company is wholly owned by Los Angeles Railway Corporation).

The City Railway Company of Los Angeles was organized December 1, 1910, for the purpose of financing such new construction, extensions, equipment, etc., as were not financed from earnings; but all of such properties were to be operated and are operated at the present time by the Los Angeles Railway Corporation under terms of a lease dated

August 25, 1911, for a term of years beginning December 8, 1910, and ending February 1, 1941. Since 1910 there has been no change in the corporate organization of the present Los Angeles Railway properties.

In connection with the development of motor coach service in certain territory contiguous to both Los Angeles and Pacific Electric Railway serving areas, a joint agency of the two companies was organized on August 18, 1923, known as the Los Angeles Motor Coach Company. This company, however, is not a corporation, and the properties so operated are included in the Road and Equipment accounts of the respective parent companies.

SECTION B

CORPORATE HISTORY

PACIFIC ELECTRIC RAILWAY COMPANY

The Pacific Electric Railway Company was incorporated under the laws of California and began operation on September 1, 1911, being a consolidation of the following companies:

<u>Constituent Companies</u>	<u>Date of Incorporation</u>
Pacific Electric Railway Company	Nov. 14, 1901
Los Angeles Pacific Company	Apr. 4, 1907
Los Angeles Interurban Railway Company	June 9, 1903
Los Angeles & Redondo Railway Company	Apr. 1, 1889
San Bernardino Interurban Railway Company	Nov. 30, 1906
The Riverside & Arlington Railway Company	Aug. 13, 1887
The San Bernardino Valley Traction Company	June 2, 1903
Redlands Central Railway Company	Apr. 26, 1907

The operations of the Pacific Electric Railway Company represent the development of urban and interurban transportation from the period of 1885 to the present time. The eight constituent companies of the present Pacific Electric Company, which are listed above, were likewise mainly the result of consolidation of two or more companies, and in all the present company represents the combination and consolidation of 72 separate predecessor companies.

The Pacific Electric Land Company, a wholly owned subsidiary, has been in existence for a number of years, in connection with certain property holdings. The Pacific Electric Railway Company has a half interest in the Los Angeles Motor Coach Company.

SECTION C

HISTORY

LOS ANGELES MOTOR COACH COMPANY

As a result of growth of the community, demands for transportation service in areas contiguous to the serving areas of both companies led to the formation of a joint agency to provide such service. The Los Angeles Motor Bus Company was organized as a joint agency for this purpose on August 18, 1923, each company having a one-half interest. The name was subsequently changed to Los Angeles Motor Coach Company.

CHAPTER V

PRESENT PROPERTIES

The purpose of this chapter is to briefly describe the properties of the companies rendering local transportation service in Los Angeles. The description is presented in the following sections:

- A. Way and Structures and Power - Los Angeles Railway
- B. Rail Equipment - Los Angeles Railway
- C. Shops and Car Houses - Los Angeles Railway
- D. Motor Coach Equipment - Los Angeles Railway
- E. Los Angeles Local Properties of Pacific Electric Railway
- F. Equipment Assigned to Los Angeles Motor Coach Company

SECTION A

WAY AND STRUCTURES AND POWER

LOS ANGELES RAILWAY

The Los Angeles Railway operates approximately 187 miles of double track electric railway and 25 miles of single track in car houses and yards. Of the regular operated track, some 144 miles is by franchise rights while the remaining 43 miles is over private rights of way or perpetual easements. Of the total mileage, 80% is in paved streets, 10% in open track, the remainder in gravel streets, car houses, and yards. Approximately 50% of the mileage in paved streets is of 116# girder rail, 20% of 72# 6" tee rail, the remainder mostly of low section tee rail.

Track mileage as of September 10, 1935, was as follows:

Operated Track	373.344	S.T.M.
Car Houses and Yards	<u>25.398</u>	"
Total	398.742	S.T.M.

The mileage, divided as to sections of rail, is as follows, using for round figures a total of 400 miles of single track:

	<u>S.T.M.</u>	<u>Percent</u>
60# 4½"	45	11%
70# 4-5/8"	25	7
72# 6"	84	21
116# 7"	196	49
127# 7" (Joint P.E.)	9	2
132# 7" (Curves)	6	1
Miscellaneous	10	2
Car Houses and Yards (Various)	<u>25</u>	<u>7</u>
Total	400	100%

Dividing the single track mileage as to type of surface shows the following result:

	<u>S.T.M.</u>	<u>Percent</u>
Paved Streets	322	80%
Dirt "	11	3
Open Track	42	10
Car Houses and Yards	<u>25</u>	<u>7</u>
Total	400	100%

The open track mileage comprises 33 miles of 60# 4 $\frac{1}{2}$ " section rail and 9 miles 70# 4-5/8" section rail.

Power and Distribution System

The Los Angeles Railway purchases its power for street car operation from the Southern California Edison Company at 16,500 volts, 3 phase, 50 cycles, delivered at its sixteen sub stations located in various parts of the city. The sub stations have a total installed capacity of 35,800 kilowatts direct current, using for conversion purposes motor generator sets, rotary convertors and mercury arc rectifiers, the capacities being 4,000, 16,800 and 15,000, respectively, with efficiencies at full load of 85, 93, and 95, respectively. The substations are inter-connected by 16,500 volt tie lines. The sub station buildings are in general constructed of brick, some with iron roofs, some with wooden roofs, and some with concrete slab roofs. The buildings range in age from 32 years to 4 years.

The distribution system consists of approximately 220 miles of overhead positive feeders, 33-1/3 miles of overhead negative returns, and approximately 11-1/2 miles of underground negative return. These feeders are in general stranded copper cable with triple braid weatherproof insulation for overhead and copper cables laid in creosote boxes covered with asphaltum for negative underground. There are approximately 378 miles of trolley wire exclusive of shops, yards, buildings, and car houses, span wire suspension being quite generally used on city streets and bracket arms on some private right-of-way.

SECTION B

RAIL EQUIPMENT

LOS ANGELES RAILWAY

The company has 1081 rail cars, of which 845 were available for active service as of July 22, 1935; with 175 cars in temporary storage and 61 in permanent storage. The following statement shows the totals in these respective classifications at the end of each year from 1920 to date (excluding work equipment):

<u>As of Dec.31</u>	<u>Total Cars</u>	<u>No.Cars in Active Service</u>	<u>No.Cars in Temporary Storage</u>	<u>No.Cars in Permanent Storage</u>
1920	912	912	-	-
1921	964	962	2	-
1922	1014	1012	2	-
1923	1078	1077	1	-
1924	1224	1220	4	-
1925	1250	1243	5	2
1926	1250	1137	12	101
1927	1250	986	38	226
1928	1250	1000	30	220
1929	1249	1000	32	217
1930	1227	950	72	205
1931	1132	895	138	99
1932	1128	725	305	98
1933	1082	725	306	51
1934	1082	775	257	50
7/22/35	1081	845	175	61

Since 1928, a total of 170 cars have been abandoned; comprising 149 of Type B cars, 16 of Type C cars, and 5 of Type G. These cars were scrapped; and in addition at the present time there are 61 cars in permanent storage.

The principal types of cars, together with classifications as of July 22, 1935, are as follows:

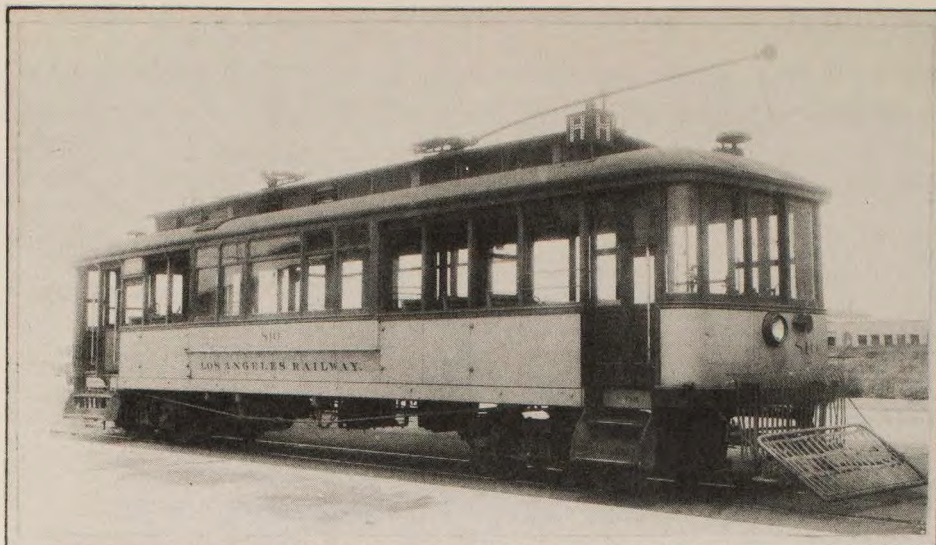
Type of Body	Number of Cars			Total	Percent
	Active	Temporary Storage	Permanent Storage		
B Older Type - End Entrance	365	129	17	511	47.3%
C Older Type - Center Entrance	118	28	21	167	15.4
F End Entrance	16	-	-	16	1.5
G Birney Safety Cars	28	16	20	64	5.9
H End Entrance - Steel Body	250	-	-	250	23.1
K End Entrance - Steel Body	60	-	-	60	5.6
All Others	8	2	3	13	1.2
Total	845	175	61	1,081	100.0%

Type B Body - End Entrance

The Type B cars, of which there are 511 in capital accounts at this time, represent cars purchased in general from 1896 to 1913 and which were subsequently remodeled in the period 1911 to 1922. Motor changes and adaptation to one-man two-man operation have since been made in some cars. The detail for Type B cars follows:

Body Type	Motors		Cont.	Seating Capacity	Two-Man	One or Two Man	Total	Active	Temp. Stor.	Perm. Stor.
	No.	Type								
B	2	306-L	K-11	48	"	-	58	54	4	-
B1	2	38-B	K-11	48	"	-	26	-	26	-
B1	2	269-B	K-68	48	"	-	11	11	-	-
B1	2	306-L	K-11	48	"	-	31	31	-	-
B2	2	38-B	K-11	44	"	-	99	-	97	2
B2	2	101-X	K-11	44	"	-	4	-	-	4
B2	2	249-B	K-11	44	"	-	1	-	1	-
B2	2	269-B	K-68	44	"	-	96	96	-	-
B2	2	306-L	K-11	44	"	-	54	53	1	-
B3	2	101-X	K-11	44	"	-	8	-	-	8
B6	2	101-X	K-11	48	"	-	2	-	-	2
B8	2	101-L	K-11	44	"	-	1	-	-	1
B10	4	101-L	K-35	40	-	"	14	14	-	-
B10	4	265-C	K-35	40	-	"	17	17	-	-
B10	4	306-L	K-28	40	-	"	14	14	-	-
B10	4	306-L	K-35	40	-	"	33	33	-	-
B11	2	269-B	K-68	40	-	"	42	42	-	-
Total							511	365	129	17

These cars are all of three section wooden body construction and the general nature of the car is illustrated by the accompanying photograph. Many cars of this series have longitudinal seats in the center section, although in a number of cars, cross seats have been substituted.



Type B Equipment

Approximate
Cost

\$6,400

Weight

2 Motor Cars-37,000 lbs.
4 Motor Cars-43,000 lbs.

Type C Body - Center Entrance

This group of wooden body center entrance cars, totaling 167, were purchased prior to 1915, the last purchase of about 65 cars being in 1914. The detail for Type C cars follows:

Body Type	Motors		Cont.	Seating Capacity	Two- Man	One or Two Man	Total	Active	Temp. Stor.	Perm. Stor.
	No.	Type								
C	2	38-B	K-11	48	"	-	21	-	-	21
C	4	101-L	K-35	48	"	-	10	10	-	-
C	4	249-B	K-28	48	"	-	5	5	-	-
C	2	306-L	K-11	48	"	-	70	42	28	-
C	4	306-L	K-28	48	"	-	10	10	-	-
C	4	306-L	K-35	48	"	-	1	1	-	-
C	4	526-L	K-35	48	"	-	50	50	-	-
Total							167	118	28	21

These cars are all arranged for two-man operation. The general nature of the type is shown by photograph of Car 936, purchased in 1914. These cars all have longitudinal seats in the center section.

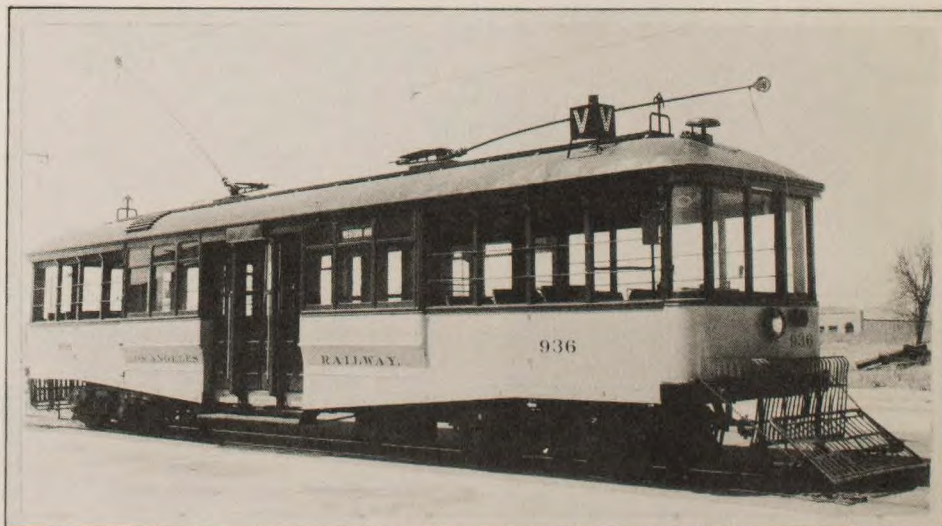
Type C Equipment

Approximate
Cost

\$6,600

Weight

2 Motor Cars-37,000 lbs.
4 Motor Cars-43,000 lbs.



Type F - End Entrance

This group of 16 cars is of an early type originally purchased in 1896, rebuilt in 1911 and again in 1922 to 1923. In the last rebuilding they were lengthened to 48 feet and arranged to seat 56 passengers. They are equipped for two-man operation with 4 motors (265-C) and Type HL control. Weight of car is 43,000 pounds.

Type G - Birney One-Man Safety Cars

These cars were purchased in 1920 and 1921. No major changes have since been made in this type of equipment. Weight of car is approximately 17,000 pounds. There are 64 of these cars in capital accounts at this time as follows:

Body Type	Motors		Cont.	Seating Capacity	Two-Man	One or Two Man	Total	Active	Temp. Stor.	Perm. Stor.
	No.	Type								
G	2	264-C	K-63	30	"	-	34	24	5	5
G	2	508-A	K-63	30	"	-	30	4	11	15
Total							64	28	16	20

Type H - End Entrance - Steel Body

This group of cars, of which there are 250 in service, comprises the principal group of equipment for main line use. They were purchased from St. Louis Car Company during the years 1921 to 1925, inclusive. Some of these cars (Type H-4) have been converted for one-man two-man operation as discussed later. The details are as follows:

Body Type	Motors		Cont.	Seating Capacity	Two-Man	One or Two Man	Total	Active	Temp. Stor.	Perm. Stor.
	No.	Type								
H	4	514-L	HL	52	"	-	5	5	-	-
H-1	4	514-L	HL	52	"	-	50	50	-	-
H-2	4	265-C	HL	52	"	-	8	8	-	-
H-2	4	514-L	HL	52	"	-	132	132	-	-
H-3	4	514-L	HL	52	"	-	35	35	-	-
H-4	4	514-L	HL	48	"	-	20	20	-	-
Total							250	250		

The H-3 Type has had end sections enclosed, and upholstered seats and new lighting installed. All except Type H-4 are equipped for train operation.

Type H Equipment

Approximate
Cost

\$14,200

Weight

Approximately

44,000 lbs.

Type K Body - End Entrance

This group of 60 cars quite similar in characteristics to the Type H cars was built in the Los Angeles Railway shops in 1923 and 1924. These are four motor cars (514-L) with HL control, seating 52 passengers, and arranged for two-man operation. All cars are available for active service. The weight of these cars is about 43,000 pounds.

All Other Types

The remaining cars, totaling 13 in number, are detailed as follows:

Body Type	Motors		Cont.	Seating Capacity	Two-Man	One or Two Man	Total	Active	Temp. Stor.	Perm. Stor.
	No.	Type								
A	4	38-b	K-28	36	"	-	3	-	1	2
A	4	306-L	K-28	36	"	-	5	5	-	-
D	2	249-B	K-11	40	"	-	1	-	-	1
E	2	269-B	K-68	52	"	-	1	-	1	-
L	4	514-L	HL	56	-	"	1	1	-	-
M	4	516-L	PCM	55	-	"	1	1	-	-
M	4	701-A	VA	55	-	"	1	1	-	-
Total							13	8	2	3

Type A cars were remodeled in 1911. They differ from Class B in the smaller seating capacity. Type D is a Funeral Car which is in storage. Type E was remodeled in 1921 to conform approximately to Type H, although it has a wooden body and drum type control. Type L is an end entrance sample car purchased in 1925, remodeled in 1934 for one-man two-man operation.

Two Type M (Peter Witt) cars were purchased in 1930 as sample cars and were remodeled in 1934 for one-man two-man operation. Type M car is of front end entrance design as shown in the accompanying photograph.

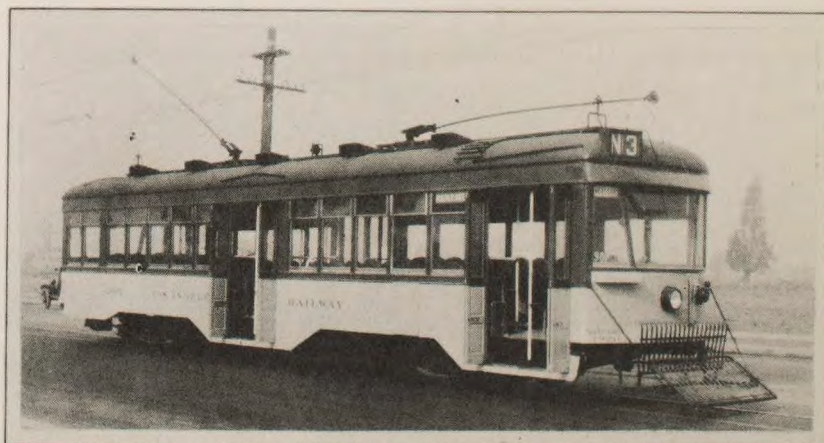
Type M Equipment

Approximate
Cost

\$23,000

Weight

44,000 pounds



SECTION C

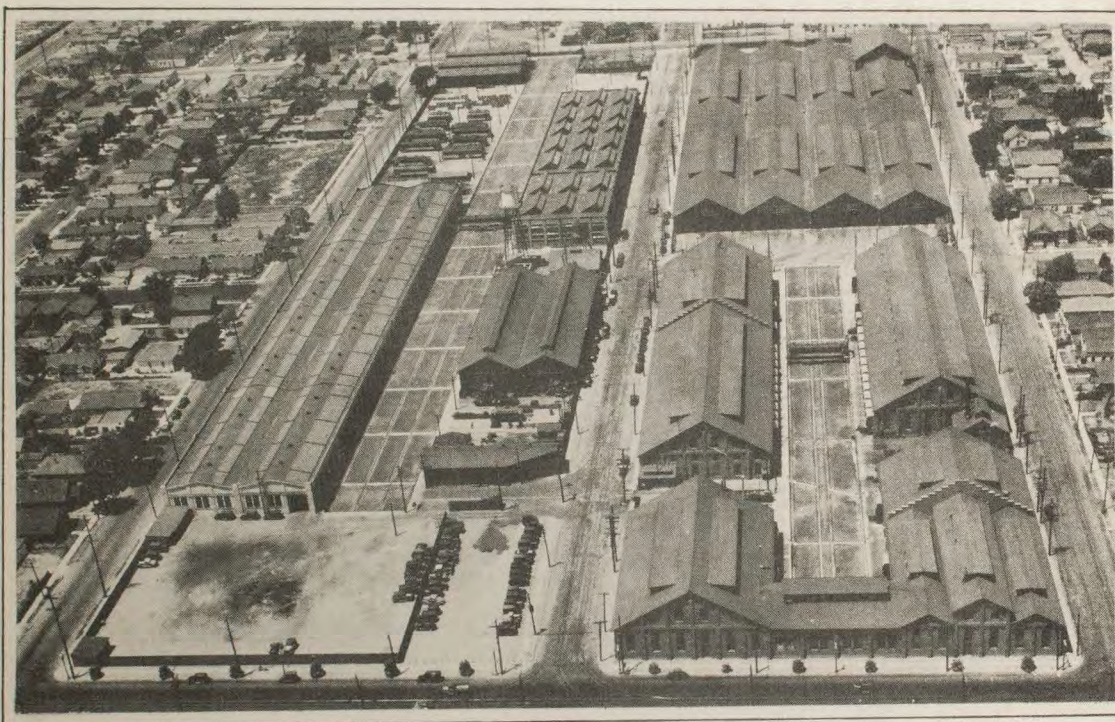
SHOPS, CAR HOUSES AND GENERAL OFFICE BUILDING

LOS ANGELES RAILWAY

South Park Shops

The main shops known as the South Park Shops are located in the area bounded by 53rd Street, Avalon Boulevard, 55th Street and San Pedro Street.

The main shops, representing an investment of approximately \$900,000, are used for overhauling the street car and motor coach bodies and making major repairs to them when necessary for wrecks or other damages; reconstruction of cars, coaches or other equipment; and salvaging and manufacturing materials and supplies used for the services of the company. The shops are also equipped for the construction of street cars.



South Park Shops of Los Angeles Railway

The aerial photograph shows the shops and yards of the Los Angeles Railway comprising approximately 17 acres. Of this area approximately 4 acres are occupied by car house No. 2, which is used at the present time for storage of equipment. This is the large covered building shown at the upper right hand corner of the picture. The buildings in the lower right hand section comprise the repair shop, boiler room, wheel room, machine shop, and blacksmith and fender shop, air brake room and office. The facilities located between 54th Street and 55th Street (the left hand side of the picture) comprise the paint shop, carpenter and erection shop, stores department, and lumber yard.

There are also the motor coach facilities located on East 16th Street between San Pedro Street and Griffith Avenue, and the Virgil Garage of the Los Angeles Motor Coach Company. These are described in the following sections.

Car Houses

There are five divisions or car houses at various points on the Los Angeles Railway as follows:

<u>Division</u>	<u>Location</u>	<u>Approximate Acreage</u>	<u>Total Capacity (Cars)</u>
No. 1	Sixth and Central	4.59	204
2	54th and Avalon	4.83	234
3	Ave. 28 and Idell	8.70	342
4	12th and Georgia	4.17	203
5	54th and 2nd Ave.	15.00	420

Each car house is furnished with tools and the necessary equipment to service and repair the cars, including cleaning, light inspections, and repairs and replacements. Regular inspection pits cover a large portion of the area of the complete storage space at each division. At each division also are small machine shops, including a lathe, drill-press, grinders, etc., for making emergency or light repairs to equipment and materials, pit wheel grinders for removing flat spots from the car wheels, air hoists, jacks, and other necessary tools and equipment for handling repairs.

Each point is also arranged with an office for the mechanical foreman; separate locker-rooms for the mechanics, men car cleaners, and women car cleaners, as well as lavatory facilities.

There is also maintained at each division a small storeroom which contains approximately 1400 various items to facilitate the light repairs and replacements necessary to the safe operation of the cars.

All divisions are operating divisions except No. 2, which is used for storage purposes at this time. There are total car storage facilities available to the extent of space for 1403 cars, of which 613 can be stored in the car houses, 708 in adjoining yards, and 82 in division shops. Approximately \$700,000 is invested in car houses.

General Office

The Los Angeles Railway owns its general office building located at 11th and Broadway in Los Angeles, where the executive, accounting and operating offices of the company are located. The building is mainly occupied by offices of the Los Angeles Railway Corporation. The tenth floor is devoted to the executive departments; ninth, auditing and accounting; 8th, engineering; seventh, transportation department; sixth, claims and publicity departments; fifth, personnel department and rentals to outside parties; fourth, secretary-treasurer, cashier and purchasing department; third, valuation department and outside rentals; second, statistical department and budget engineer and outside; and first, information and ticket bureau and rentals to various stores. The building is of Class A. construction with red brick facing and is served by three elevators.



General Office Building

Built in 1921

Investment approximately
\$800,000

SECTION D

MOTOR COACH GARAGE AND EQUIPMENT

LOS ANGELES RAILWAY

Garage Facilities

Garage facilities are located on East 16th Street between San Pedro Street and Griffith Avenue. The superintendent of Motor Coach Division and his staff and coach operators are housed in a leased building on the south side of East 16th Street.

Storage and repair shop, except for heavy body work and painting, is located on the north side of 16th Street. Heavy body work and painting are done at South Park Shops.

All Los Angeles Railway coach storage and repair work, except that above mentioned, is on the north side of the street and, including both covered and uncovered portions, will accommodate approximately 250 coaches (186 are now stored there). The covered storage is a fire-proof building, built in 1923, and is practically all used for the storage of the double deck equipment used on the Wilshire Boulevard line of Los Angeles Motor Coach Company, this being desirable to protect the upper deck seats from the dew and rain and also to keep them clean.

Repair facilities are contained in the large fire-proof repair shop built in 1927. Nearly all of the first floor area is occupied by a series of pits for repair work,

served by overhead cranes, and is a most modern layout in every respect. The remainder of the first floor is occupied partly by the machine shop for unit overhaul (motors, transmissions, differential carriers, etc.) and partly by a storeroom. On the mezzanine floor, the sub-store of the store department handling coach parts is located together with general foreman's office. The second floor provides space for the superintendent of automotive equipment and his staff. Part of the storeroom also occupies this floor.

Another building is the wash rack, built in 1928, where all coaches, trucks and automobiles are washed. This wash rack is provided with appliances for softening water, water under high pressure and various other facilities for cleaning equipment and also for cleaning their parts.

The service station building, built in 1927, houses the electric pumps for filling coaches with water and oil and the canopy and its repair pits provide the facilities for coach inspection and refueling. Approximately 25,000 gallons of gasoline are stored underground.

A very unusual feature is the dynamometer for testing coaches. This dynamometer is so constructed that a coach may be placed upon it with its rear wheels on rollers and by electrical devices tests may be made of the horse power developed at various speeds, friction losses, etc. Other apparatus makes it possible to test fuel consumption.

Classification of Passenger Coach Equipment
Assignable to Los Angeles Railway - Coach Division
at 16th Street Garage
As of September 1, 1935

Type No.	Make	Body Type	Rear Exit	No. of Coaches	Coach Serial Number	Year Model	Aver. Wgt.	Cylinders	Seat. Capa.
1	Yellow	Conventional	No	3	151 to 153, incl.	1926	8900	6	21
1	Yellow	"	"	4	154 to 157	1927	9102	6	21
3	Pageol	"	"	21	301 to 321	1923	10637	4	29
3	Pageol	"	"	15	322 to 336	1925	11438	4	29
4	Twin	"	"	4	401 to 404	1934	7612	6	23
9	Pageol	Conventional	Yes	3	901 to 903	1928	14650	6	29
12	Pageol	"	No	1	1201	1926	10150	4	21
15	Yellow	"	"	1	1501	1925	12993	6	29
15	Yellow	"	"	8	1502 to 1509	1927	13972	6	29
15	Yellow	"	"	1	1510	1926	14204	6	29
16	Pageol	"	"	9	1601 to 1609	1926	13560	6	29
16	Pageol	"	"	11	1610 to 1620	1927	13701	6	29
18	Yellow	Metropolitan	Yes	6	1801 to 1806	1934	14002	6	30
19	White	Conventional	"	8 (b)	1901 to 1908	1928	16024	6	29
19	White	"	"	5 (e)	1909 to 1913	1929	16010	6	29
19	White	"	"	8 (b&e)	1914 to 1921	1930	16637	6	29
20	Twin	Metropolitan	"	3	2001 to 2003	1928	16537	12	40
20	Twin	"	"	3	2004 to 2006	1928	16251	12	40
20	Twin	"	"	8	2007 to 2014	1929	16133	12	40
21	White	Conventional	"	2	2101 to 2102	1929	17027	6	38
22	Yellow	Metropolitan	"	6	2201 to 2206	1934	17064	6	41
23	Pageol	Conventional	Yes	5	2301 to 2305	1930	15351	6	29
24	White	"	No	1	2401	1932	11910	6	21

(b) Butane operation - Coaches 1901, 2, 3, 4, 5, 6, 20 and 21.

(e) Ethyl operation - Coaches 1909, 11, 13 and 15.

Los Angeles Railway operating coaches total 136. In addition 50 coaches assignable to

Los Angeles Motor Coach Company are stored at the 16th Street Garage. These are detailed in the section dealing with the Los Angeles Motor Coach Company.

Photographs showing three typical coaches in service follow:



Pageol Coach

29 Passenger

Purchased in 1926

Cost \$8,800

Yellow Coach

41 Passenger

Purchased in 1934

Cost \$11,900



Twin Coach

23 Passenger

Purchased in 1934

Cost \$4,800



SECTION E

PROPERTIES OF PACIFIC ELECTRIC RAILWAY IN LOS ANGELES

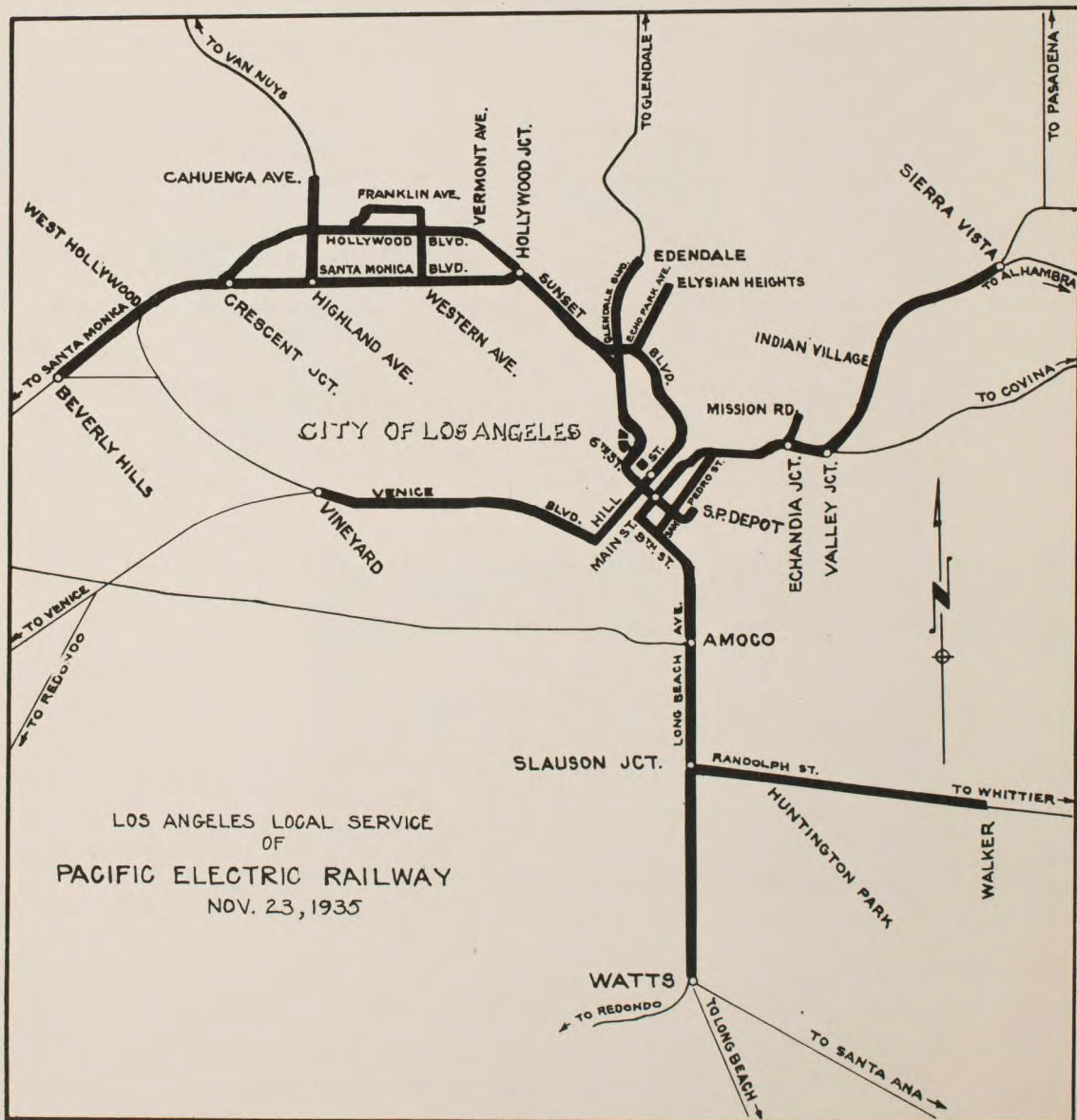
LOCAL SERVICE

The properties of the Pacific Electric Railway devoted to the Los Angeles local

service comprise in general the track structure, which is quite largely used in common with its interurban service; the subway and subway terminal, which, likewise, are used in common with interurban service; the local line equipment (owned by Southern Pacific Company); and such facilities of the Pacific Electric System which are of a system-wide nature and require allocation to the local lines. Many other items of property may be mentioned in this category, such as the electrical transmission and distribution system, the general shops of the company at Torrance, and the general office building at 6th and Main Streets, Los Angeles.

Way and Structures

The following map shows the Los Angeles Local Service of the Pacific Electric Railway indicated by the heavy black lines.



The mileage of track in the Los Angeles Local Service is as follows:

	Miles (E.S.T.)
Girder Rail	49.9
T. Rail in Pavement	11.4
Open Track	63.8
Storage Yard	<u>12.8</u>
Total	137.9

Except for the Elysian Park line and the Franklin Avenue line from Santa Monica Boulevard to Vine Street and Hollywood Boulevard, all of the lines carry interurban passenger, mail and express cars, and in addition freight is carried on the Sierra Vista, Watts, Walker and Hollywood lines between Highland Avenue and Beverly Hills.

Of the total mileage 4.5 miles are included as representative of the Pacific Electric portion of 3-rail track jointly owned and operated with the Los Angeles Railway. The 4-track lines to the south and east are included insofar as they are within the Los Angeles local service limits.

Subway

The Hollywood Subway, with terminal on Hill Street between 4th and 5th, was constructed about ten years ago, being opened to travel in 1926.



Subway Terminal

Hill Street
between
4th and 5th Streets

Opened to Traffic - 1926

Investment
in Subway
and Terminal only
\$3,700,000

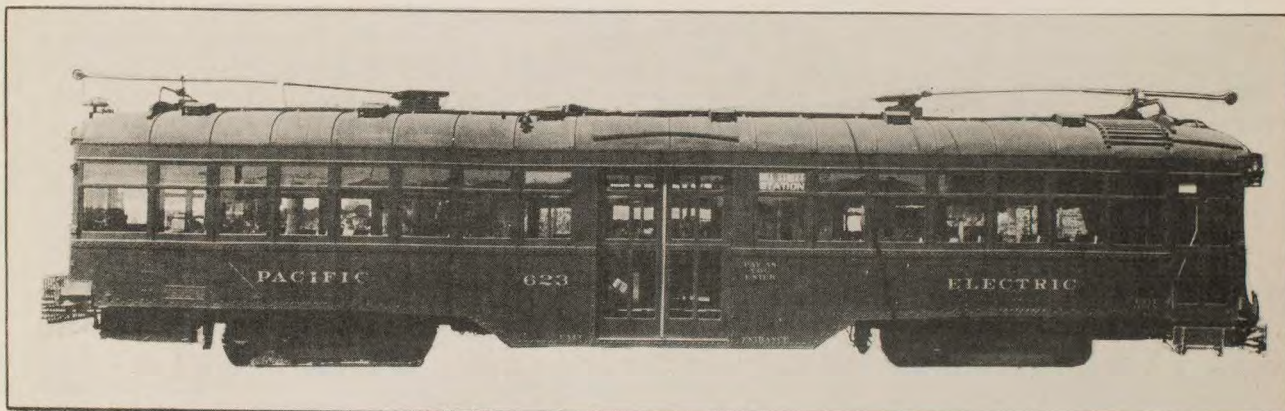
This subway, approximately 0.9 mile in length, accommodates principally the Hollywood and Glendale services of the Pacific Electric Railway. The surface interurban lines terminate just south of the subway terminal, using common station facilities.

Power

The power distribution is common to the Pacific Electric entire system. Energy is purchased from Southern California Edison Company; transmission facilities are available at 15,000 volts, 50 cycle, for inter-connection of sub stations. Fourteen sub stations supply direct current at 600 volts for operation of Los Angeles local service. All such stations supply energy for operation of interurban service as well.

Equipment

The equipment assigned to the Los Angeles local lines comprises 154 of the No. 600 series of cars, these being 65-passenger, center entrance, steel body cars. This equipment is leased to the Pacific Electric Railway Company by the Southern Pacific Company. In addition there are two Class 320 (Birney) cars and seven motor coaches assigned to Los Angeles Local Service. The coaches owned by Pacific Electric Railway and assigned to the Los Angeles Motor Coach Company are discussed in a following section.



Pacific Electric - Center Entrance Type
 Approximate average historical cost \$19,300
 Weight - 57,800 pounds

The above photograph shows the Class 600 equipment. There are a total of 160 cars of this type, 154 of which are assigned to the Los Angeles local service so that at the present time it is possible to render the entire local service of the Pacific Electric Railway with this type of equipment. These cars are of modern design, having been purchased for Pacific Electric use during the years 1922 to 1928. The cars are all steel construction equipped with pneumatic doors at the front end and at the center and can be operated either as one-man cars or two-man cars or in trains. They are not, however, arranged for one-man operation in peak hours. The seating capacity of 65, together with

standing room space of over 100 square feet, provides an equipment which satisfactorily meets the requirements of the service in which they are operated.

The two Birney type cars are in service on the Western Avenue line providing a shuttle service except for the peak loads.

Torrance Shops

The main overhauling and repair shops of the Pacific Electric System, occupying 125 acres of ground, are located at the City of Torrance. The general store is also located at this point. The shops comprise three main buildings, one containing the main shop, blacksmith shop, armature winding room, air brake equipment room and truck shop. The second building contains the erecting shop, the mill, and cabinet shop. The third building comprises the paint shop. The office of the shop superintendent and chief draftsman is also located at Torrance.

All general overhauling and heavy repairs, together with stores service, is rendered from Torrance for the entire Pacific Electric System. Cars operating on the local lines in Los Angeles depend upon Torrance shops entirely for general overhaul and major repairs.

Car Houses

Car storage facilities are located at eleven points for storage of Los Angeles local cars. The principal point is at West Hollywood. Other important points are at Watts, Sierra Vista and Los Angeles yards. Ordinary maintenance and inspection work and repairs of a minor nature are performed at these points.

SECTION F

PLANT AND EQUIPMENT ASSIGNED TO

LOS ANGELES MOTOR COACH COMPANY

Garage Facilities

The Virgil garage, located at the corner of Santa Monica Boulevard and Virgil Avenue, was built in 1923 and is the only garage belonging to the Los Angeles Motor Coach Company, although, strictly speaking, the Los Angeles Motor Coach Company owns no property, the Pacific Electric Railway and Los Angeles Railway having an undivided one-half interest in the real and personal property, except coaches.

The Virgil garage consists of a covered and an uncovered part, with a total capacity of 80 coaches. The covered part is partly two-story, the second story providing rooms for the manager and his staff, assembly room for coach operators, together with stationery storage, etc. Service station facilities are available at this garage.

Another part of the second story is for mechanical use, containing a storage space for tires and working space for some of the mechanical work, principally for unit

part and motor overhaul, battery room, store room, etc.

The lower floor is devoted to storage, except for three repair pits and on the Virgil frontage space for washing coaches.

Los Angeles Motor Coach Company also stores coaches of the Wilshire Boulevard line at Los Angeles Railway 16th Street garage and part of the equipment for its Western Avenue and Crenshaw-Vine-La Brea lines at Los Angeles Railway Car House No. 5. At the latter point there is a Los Angeles Motor Coach Company service station and provision for washing coaches.

Equipment

The motor coach equipment operated by the Los Angeles Motor Coach Company is of two general types; namely, single deck and double deck. The double deck equipment is used for service on Wilshire Boulevard and Sunset Boulevard, all other service being provided by single deck equipment. All of the double deck motor coaches were purchased prior to 1929, the last four having been acquired in 1928. As will be noted from the photograph to follow, the upper deck of these busses is not enclosed, and although they are normally rated at a capacity of 58 passengers, during rainy weather their capacity is reduced to that of the lower deck. These coaches are operated by two men, passengers entering the rear and paying as they board. The motor coaches regularly scheduled over Wilshire Boulevard to Santa Monica are of the single deck type with engines in the rear and only one operator. During the rush period, however, these busses are supplemented by double deck equipment.

Classification of passenger coach equipment operating out of Virgil garage and 54th and Second Avenue, as of September 1, 1935, is shown on the following table.

Type No.	Make	Body Type	Rear Exit	No. of Coaches	Coach Serial Number	Year Model	Average Wgt. per Coach	Cy-linders	Seating Capacity Exclusive of Crew	
6	Fageol	Double Deck		10	652 to 661, inc.	1924	15346	6	58	
6	Fageol	" "	" "	11	601 to 611 "	1924	15669	6	58	
6	Fageol	" "	" "	1	612	1925	16150	6	58	
6	Fageol	" "	" "	1	614	1925	15950	6	58	
6	Fageol	" "	" "	3	662 to 664, inc.	1925	15933	6	58	
6	Fageol	" "	" "	2	668 & 669	1924	15608	6	58	
30	Twin	Metropolitan	Yes	10	3001 to 3010, inc.	1928	16446	12	40	
30	Twin	" "	" "	16	3011 to 3026 "	1929	16537	12	40	
30	Twin	" "	" "	2	3027 & 3028	1930	16450	12	40	
31	Yellow	Conventional	No	14	3101 to 3114, inc.	1931	12485	6	25	
33	ACF	" "	" "	1	3301	1931	13120	6	21	
33	ACF	" "	" "	1	3302	1932	12840	6	20	
34	Utility	Metropolitan	" "	4	3401 to 3404, inc.	1933	6972	6	21	
36	GMC	Conventional	" "	2	3601 & 3602 "	1934	11160	6	23	
				Total	78					
Total double deck coaches						28				
Total single deck coaches						50				
Total Coaches						78				

There are also service cars, trucks, and miscellaneous equipment and structures which need not be mentioned in detail.

Classification of passenger coach equipment assignable to Los Angeles Motor Coach Company and operating from 16th Street Garage, as of September 1, 1935, is as follows:

Type No.	Make	Body Type	Rear Exit	No. of Coaches	Coach Serial Number	Year Model	Average Weight	Cylinders	Seating Capacity
7	Fageol	Double Deck	Yes	2	701 & 702	1924	15962	6	58
7	Fageol	" "	"	6	706 to 711, inc.	1925	16544	6	58
7	Fageol	" "	"	9	712 to 720	" 1926	17007	6	58
7	Fageol	" "	"	1	721	1927	17085	6	58
7	Fageol	" "	"	4	722 to 725	" 1928	17009	6	58
7	Fageol	" "	"	6	726 to 731	" 1926	16992	6	58
7	Fageol	" "	"	1	732	1925	15618	6	58
10	Yellow	Double Deck	"	1	1001	1925	15880	6	63
10	Yellow	" "	"	4	1002 to 1005	" 1926	15977	6	63
10	Yellow	" "	"	4	1006 to 1009	" 1927	16827	6	63
10	Yellow	" "	"	4	1010 to 1013	" 1928	16919	6	63
37	Yellow	Metropolitan No		8	3701 to 3708	" 1934	17114	6	41
Total				50					

A summary of the equipment assigned to Los Angeles Motor Coach Company follows:

	Virgil Garage(a)	16th St. Garage	Total
Single Deck	50	8	58
Double Deck	28	42	70
Total	78	50	128

(a) Includes Car House No. 5.

The following photograph shows one of the double deck coaches typical of those used in the service of the Los Angeles Motor Coach Company on its Wilshire Boulevard and Sunset Boulevard lines. In addition to the double deck busses there are also assigned to the Wilshire Boulevard line single deck coaches of modern design similar to coach No.2204 shown under Section D.

Yellow Coach

63 Passenger

Purchased in 1926

Cost \$11,200



CHAPTER VI

OPERATING ORGANIZATION

Operating organizations of the three companies with charts and explanations are contained in this chapter under sections, together with labor turnover and wage rate data, as follows:

- A. Organization - Los Angeles Railway
- B. Labor Turnover - Los Angeles Railway
- C. Payrolls and Wage Rates - Los Angeles Railway
- D. Organization and Wage Rates - Pacific Electric Railway
- E. Organization and Wage Rates - Los Angeles Motor Coach Company

SECTION A

OPERATING ORGANIZATION

LOS ANGELES RAILWAY

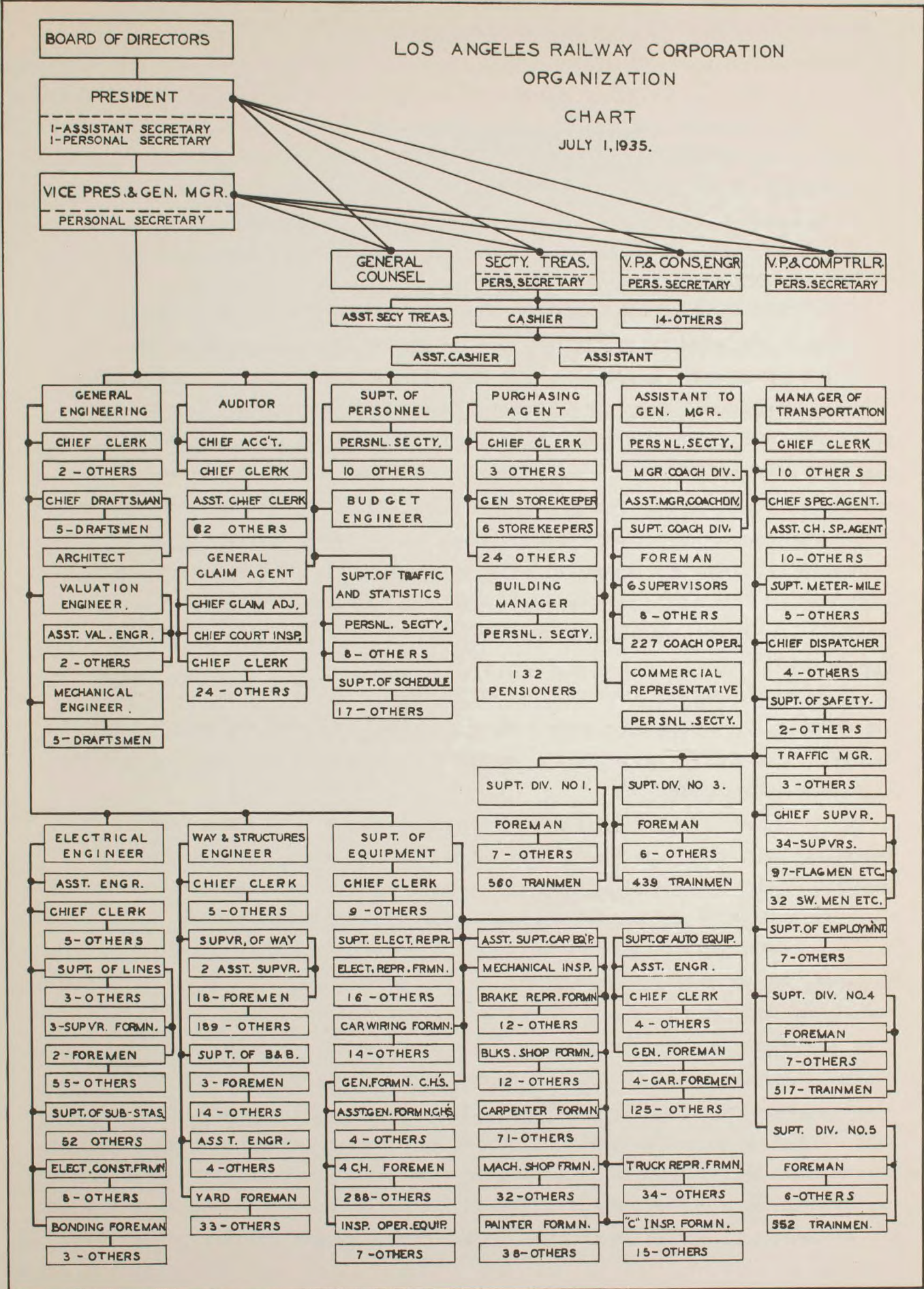
An organization chart of the entire personnel of the Los Angeles Railway Corporation is shown on the following page. The Vice-President and Consulting Engineer, Vice-President and Comptroller, Secretary-Treasurer, and General Counsel all report directly to both the President and the Vice-President and General Manager. All other departments of the organization report directly through their department heads to the Vice-President and General Manager. During the period when there was considerable construction work and maintenance being carried on, the Way and Structures, Equipment, and Electrical Departments reported to the Chief Engineer, who had under his direct supervision the General Engineering Department, consisting of the departments shown on the chart under that heading. However, the Chief Engineer was promoted in the year 1932 to Vice-President and General Manager, leaving the former position vacant, and it has not been filled to date. Construction work has fallen off to such an extent that it is considered not too great a burden on the Vice-President and General Manager to continue to directly supervise those departments.

The number of employees in the various departments, making up a total of 4,045, as of July 1, 1935, is as follows:

Office of President	3
" Vice-President & General Manager	2
" Vice-President & Consulting Engineer	2
" Vice-President & Comptroller	2
Dept. of Secretary-Treasurer	20
" Assistant to General Manager	247
" Auditing and Accounts	66
" Manager of Transportation	2,316
" Superintendent of Personnel	12
" Superintendent of Traffic and Statistics	23
Sub Total	2,693

LOS ANGELES RAILWAY CORPORATION ORGANIZATION

CHART JULY 1, 1935.



	Fwd.	2,693
Dept. of Superintendent of Equipment		715
" Electrical Engineer		140
" Way and Structures		274
" Claims		28
" Purchasing		36
" Publicity		2
" General Engineering		20
Office of Commercial Representative		2
" Budget Engineer		1
" Building Manager		2
" Pensioners		132
	Total	4,045

Manager of Transportation

The Manager of Transportation, who is responsible for the rail operations of the company, has under his supervision by far a greater number of employees than any other department head. In addition to his immediate office staff, he has jurisdiction over the Chief Special Agent and assistants, Dispatchers, Supervisors, Superintendent of Meters and Mileage, Superintendent of Safety, Traffic Manager, Superintendent of Employment, and the Superintendents of the four divisions, who, in turn, supervise the trainmen, except as to schedules. It may be said that this department is the most important of the entire organization. The successful, efficient and economical operation of this department directly affects the success of the company as a whole. Also because of the public contact of trainmen in the performance of their daily routine, the department has a major responsibility in maintaining good public relations.

Supervisors

The supervisory staff for the rail operations consists of one Chief Supervisor and 34 Supervisors. The Chief Supervisor is in general charge of his staff and receives reports from them daily and in case of emergencies goes out on the system and lends assistance where necessary.

In general, one supervisor is assigned to each rail line, there being a few exceptions, one of which is the "P" line, at the western terminal of which there is a supervisor located at all times to supervise the transfer of passengers from and to the motor coach lines connecting with the rail line at Fico and Rimpau Streets. Other supervisors are not located at one particular point of their lines but shift about from place to place. During certain hours each day, however, particularly the rush period in the morning and evening, the supervisors are located at a particular point on the line accessible to a telephone. They report to the Dispatcher's office at intervals of about thirty minutes, reporting any abnormalities which they have observed and receiving any instructions or information from the Dispatcher's office which may be necessary in keeping the cars in proper motion. The Dispatcher reports to the supervisor any abnormal conditions occurring any where else on his line of which he has been informed so that the supervisor may go to the point of trouble, straighten it out and put the cars back on as even a headway as possible. In cases of emergency the supervisors are not confined to their own line.

One supervisor is located in the downtown area and has charge of the downtown loaders, flagmen, etc. The other supervisors are usually located in the outlying districts. During the rush hours when the supervisors are located at one particular point they keep a record of the performance of each train, and when the headways become too great due to accidents or other conditions on the line, they switch cars back or relay them at the end of the line when there are available pull-out cars, for the purpose of maintaining a regular frequency. They are instructed to report any infractions of the rules by the trainmen and make daily reports of abnormal conditions which they consider should have the attention of the schedule department.

Traffic Manager

The Traffic Manager is in charge of the ticket office and ticket sales, including sub agencies and sales at schools as well as transfer orders and distribution to divisions. He also contacts parties for charter of cars and coaches and maintains contact with the Chamber of Commerce and various other civic organizations.

Trainmen

As of July 1, 1935, there were 2068 trainmen on the payroll of the company, 560 at Division No. 1, 439 at Division No. 3, 517 at Division No. 4, and 552 at Division No. 5. An applicant in applying for employment makes application which the company investigates and if acceptable, he is given a medical examination. Conductors are given one day class instruction and motormen three days on the instruction car which operates over the system. They are then assigned to divisions and given ten to fourteen days as student trainmen on all lines in that division. If they prove satisfactory they are then placed on the extra board and from 1920 to 1934 were allowed three months probationary period, which was changed to four months in 1934. From 1920 to October 1, 1933, split runs averaged $11\frac{1}{2}$ hours spread, with approximately 10 hours pay time. For straight runs with a minimum of 9 hours pay time, 25% of the runs were straight and 35% were regular runs for six days per week. After the adoption of the code on October 1, 1933, average spread time of split runs was reduced to 10 hours and the average pay time reduced to $8\frac{1}{2}$ hours per day. As a result, split runs were eliminated as far as possible, 50% of the runs being straight and all providing a six day week.

No vacations on pay are allowed the trainmen, although they are granted a maximum of ninety days leave of absence without pay. Applications are numbered as received and seniority prevails from date of employment in the selection of runs. The trainmen are provided recreation rooms at the division car houses. They are provided with complete medical and hospitalization service at \$1.00 per month, \$2,000 group life insurance for \$1.05 per month, and \$15.00 weekly sick and accident benefits for \$1.26 per month. Promotions are made upon ability and satisfactory service record of the trainmen.

Assistant to the General Manager

The Assistant to the General Manager supervises the operation of motor coaches of the Los Angeles Railway through the Manager of the Coach Division. The Superintendent of the Coach Division, who reports to the Manager, has a Division Foreman, six Supervisors, and approximately 227 Coach Operators. Supervisors attached to the Coach Division are provided with automobiles and do no rail supervision. In addition, the Assistant to the General Manager handles special assignments as assigned by the General Manager.

Commercial Representative

The Commercial Representative has charge of designing, printing, and issuing the weekly pass, publishes the LOS ANGELES RAILWAY RIDE GUIDE, which is distributed to passengers on the cars for the purpose of promoting the use of the weekly pass and stimulating riding. He also arranges and prepares advertisements for posters used on cars describing various events of public interest. Also, through his work he makes contacts with the public and handles certain complaints.

Superintendent of Personnel

The Superintendent of Personnel through his department keeps personnel records of all employees, attends to the rendering of medical service and hospitalization of employees, and keeps medical records. Medical panels report to his department. He also keeps a record of the employee group insurance and acts as agent for the insurance companies in the payment of sick and accident claims. Administration of wives' death benefit account also comes under his jurisdiction.

Budget Engineer

The Budget Engineer compiles the annual budget and keeps a record of the deviations therefrom. He also does miscellaneous work in the nature of special assignments.

Superintendent of Traffic and Statistics

The Superintendent of Traffic and Statistics is in charge of the Schedule Department which makes all schedules, time tables, and traffic checks for cars and coaches of the railway company. He also has charge of the Statistical Department which makes up special studies and keeps a running record in graphic form of the company's operations. Although the schedules are made up under the direction of the Superintendent of Schedules, who reports to the Superintendent of Traffic and Statistics, the enforcement of those schedules comes under the jurisdiction of the Manager of Transportation through his supervisors.

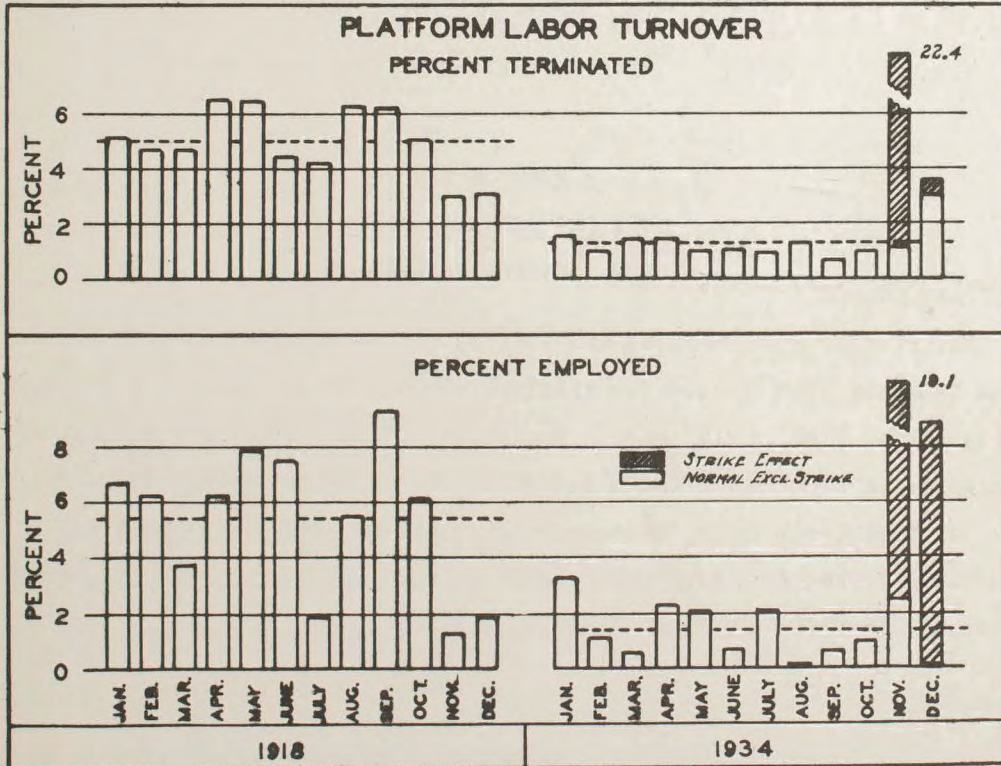
Other Departments

The functions of the other departments are largely explained by the titles on the organization chart, and in addition many of these departments are more fully covered in the chapter on operating expense.

SECTION B
PLATFORM LABOR TURNOVER
 LOS ANGELES RAILWAY

The percentage of labor turnover is quite significant in studying the service rendered to the public. The personal attitude of platform men toward the passengers has an important effect upon public opinion. Courteous and instructive answers to the many questions asked during the day means much toward promoting a friendship between the railway and its patrons. In other lines of industry great care is taken in the choice of men qualified and trained in the art of meeting the public, the importance of such selection being well known. In the street railway business the platform men are the contact men. They meet the public and instill in that public either a feeling of friendship or an antagonistic attitude which is not in the interest of the company's welfare.

In a study made by Railroad Commission engineers in 1919, the average service for platform men of the Los Angeles Railway Corporation was 6.24 years, with 48% having less than 3 years of service. The study also shows the labor turnover for a 6 year period from 1913 to 1918 to be about 40%. For the year 1918 the monthly turnover followed closely the usual seasonal trend, being heaviest in August and September, as shown on the following chart.



The average length of service for platform men as of June 30, 1935, was 7.49 years, 46.9% of the employees having less than three years of service. This condition

would have been considerably better had the strike not occurred in 1934. Eliminating the effects of the strike, the average length of service would have been 8.8 years with 31.8% having less than three years service.

It is apparent that the railway at the present time is in a period where it is training a large group of new employees, and as such training is completed and unsatisfactory employees eliminated, public relations should improve.

Platform labor turnover is also costly, which fact has been borne out since the strike by the increase in costs of injuries and damages as reflected by Operating Expense Account No. 92. The increased costs are also to be found in other accounts which are not so easily identified.

The following table summarizes the length of service of employees as of June 30, 1935, also the results had strike conditions been excluded.

Years of Service	Actual June 30, 1935		Excl. Strike Conditions	
	Number	Percent	Number	Percent
1 or Less	788	38.1%	410	19.8%
2	182	8.8	247	11.9
3	1	.1	6	.3
4	48	2.3	56	2.7
5	55	2.7	87	4.2
5-10	292	14.1	436	21.1
10-15	386	18.7	499	24.2
15-20	182	8.8	192	9.3
20-25	63	3.0	64	3.1
25-30	50	2.4	50	2.4
30-35	17	.8	17	.8
35-40	4	.2	4	.2
Total	2,068	100.0%	2,068	100.0%

SECTION C

PAYROLLS AND WAGE RATES

LOS ANGELES RAILWAY

General Office Payrolls

Salaries of the Executive and General and Administrative Officers were decreased on February 1, 1932, 10% for salaries of \$300.00 per month and over, and 5% for salaries less than \$300.00 per month. On August 1, 1932, there was another decrease of 10% on salaries in excess of \$300.00 per month, 5% on salaries from \$101.00 to \$299.00 per month, with no decrease in those salaries less than \$100.00 per month. On May 1, 1934, there was an increase of 5% applicable to salaries of \$5,000 or less per year, there being no increase of salaries in excess of \$5,000 per year.

Trainmen's Wages

General rate changes since 1920 applying to platform men in both rail and motor coach divisions and the corresponding hourly rates are shown on the table on the following page.

	4/16/23 to 1/1/30	1/1/30	2/1/32	8/1/32	10/1/33	4/30/34
<u>Rail Division:(a)</u>						
First 3 Months	\$0.49	\$0.49	\$0.46	\$0.4375	\$0.4375	\$0.46
Next 9 Months	.50	.50	.47	.4475	.4475	.47
Second Year	.51	.53	.50	.4750	.5000	.53
Third Year and After	.53	.56	.53	.5025	.5300	.56

	4/16/23 to 12/31/29	1/1/30	2/1/32	8/1/32	4/1/33	5/1/34
<u>Motor Coach Division:(b)</u>						
First 3 Months	\$0.53	\$0.53	\$0.50	\$0.475	\$0.475	\$0.50(c)
Next 9 Months	.54	.54	.51	.485	.485	.51
Second Year	.55	.56	.53	.5025	.53	.57
Third Year and After	.57	.58	.55	.5225	.55	.60

- (a) On one-man cars the rate is 4¢ greater than above on main lines and 2¢ greater on shuttle lines.
- (b) From 4/16/23 to 8/1/32 conductors' rates were 3¢ less than the above; from 8/1/32 to 9/30/33 2½¢ less; from 10/1/33 to 4/30/34 all were classed as operators.
- (c) Since 5/1/34 operators on heavy lines have been paid 2¢ more than those on light lines.

The bonus, which was instituted on April 3, 1929, of \$5.00 per month per man if he had a clear record, or less, depending upon the number of demerits, etc., together with a special award of \$40.00 allowed to those men who lost not more than 75 days time and who had a clear courtesy and accident record, with no demerits, was abolished November 30, 1932. There is no bonus paid platform men at the present time.

Shop, Sub Station and Construction Department Wages

Changes in the wages of shop, sub station and track and construction employees since March 15, 1920, have been approximately as follows:

Mar. 15, 1920	-	10%	Increase
Aug. 16, 1920	-	10%	Increase
Jan. 1, 1930	-	3%	Increase
Feb. 1, 1932	-	5%	Decrease
Aug. 1, 1932	-	5%	Decrease
May 1, 1934	-	5%	Increase

SECTION D

ORGANIZATION

PACIFIC ELECTRIC RAILWAY COMPANY

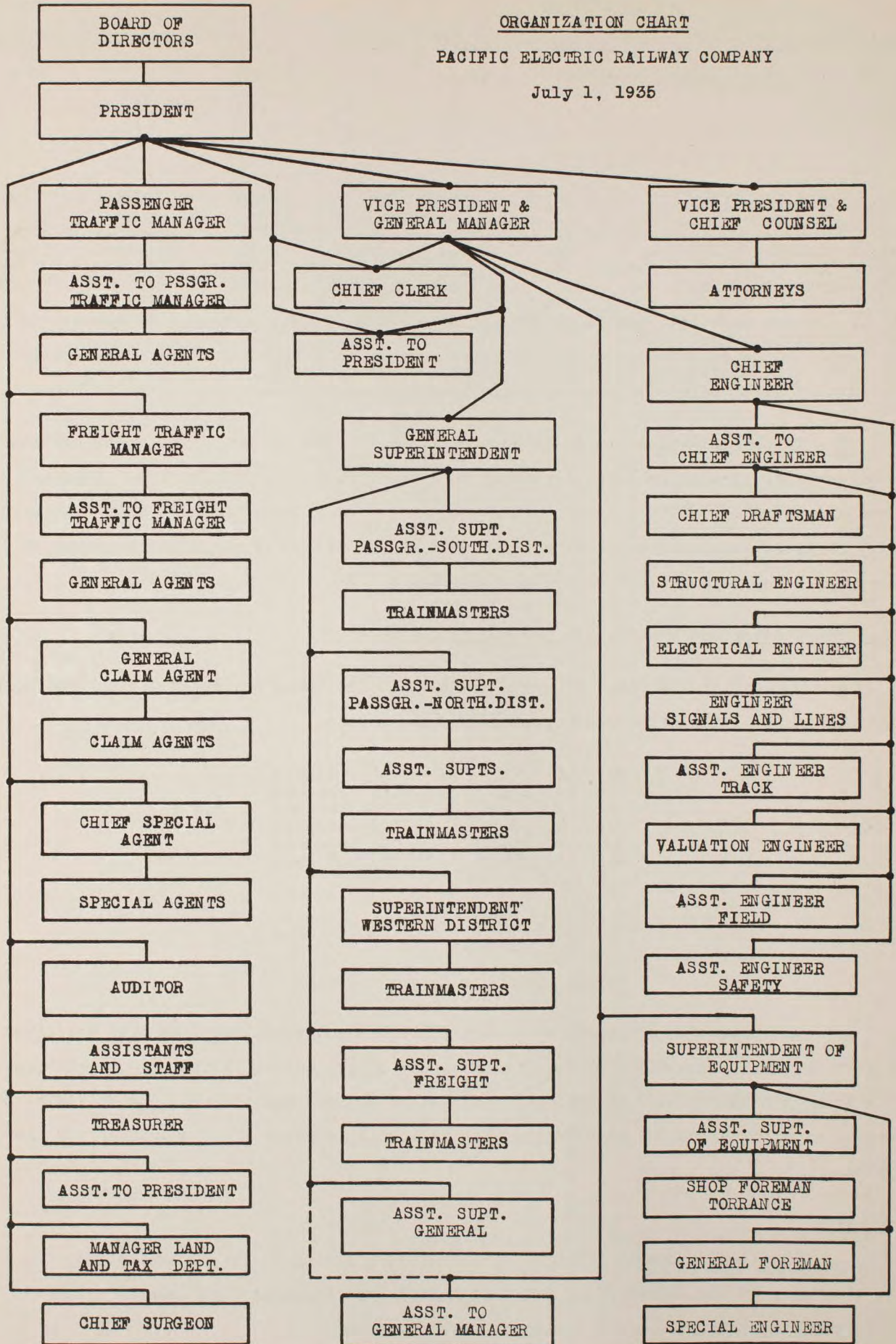
The operating organization of the Pacific Electric Railway has been developed to meet the management and operating requirements of the entire system and it is impracticable to make a segregation as between local and interurban operations. The following organization chart shows the relations of the various departments to one another for the system.

Executive

The local executive control of the company is vested in the President. Due to its ownership of the common stock and substantial bond holdings, the general financial policies are determined by the Southern Pacific Company.

ORGANIZATION CHART
PACIFIC ELECTRIC RAILWAY COMPANY

July 1, 1935



Legal

The Vice-President and Chief Counsel has jurisdiction over all legal matters of the company, including litigation incident to claims.

Operation

The Vice-President and General Manager is in charge of operations of the company. Transportation is in charge of the General Superintendent, who reports to the Vice-President and General Manager. Supervision of train operations and instruction and control of trainmen and agents is handled through Assistant Superintendents in each of three districts.

Engineering

All general engineering matters are supervised by the Chief Engineer, who reports to the Vice-President and General Manager. He is in charge of the design and construction of all physical structures and is responsible for the condition and maintenance of way and structures and electrical distribution.

Equipment

The maintenance of rolling stock and car houses is supervised by the Superintendent of Equipment, who reports to the Vice-President and General Manager.

Traffic

The Traffic Departments are charged with the duty of soliciting traffic and handling all matters pertaining to rates and tariffs. These departments report to the President.

Claims

The General Claim Agent reports to the President and is responsible for the handling of all claims arising through railway operation. The Claim Agent's time is divided between the Pacific Electric Railway Company, the Los Angeles Railway Corporation, and the Los Angeles Motor Coach Company.

Auditor

The Auditor in charge reports to the President.

Los Angeles Local Lines

Operation of the Los Angeles Local Rail Lines is carried out under direction of the General Superintendent through Western, Northern and Southern Districts, respectively.

Traffic Department activities would include only the Passenger Traffic Department since there are no freight operations involved.

Virtually all other departments in their respective jurisdiction exercise supervision over the Los Angeles Local Rail Lines as well as the remainder of the system.

Employees and Wages

The employees and wages of the Pacific Electric Railway for 1934 applicable to its system activities follows:

<u>Employees & Wages</u> 1934		<u>Average</u> <u>Employees</u>	<u>Payroll</u>
Executive Dept.		14	\$ 43,895
Treasury		7	16,330
Law		15	44,161
Claim		13	31,425
Accounting		156	222,065
Traffic		85	156,246
Operating - Misc.		34	60,193
Special Agent		12	17,995
Purchasing & Stores		88	101,421
Transportation Dept.		1,757	2,356,399
Engineering		638	594,686
Power and Equipment		1,001	1,109,871
Land and Tax		61	65,126
Miscellaneous		251	164,852
Flood Repair-68 men-aver. of 54 hrs.		6	1,817
Total		4,138	\$4,986,482

A comparative wage schedule for Los Angeles local rail line platform men, 1928 to date, follows:

	4/16/32 to <u>1/1/32</u>	<u>1/1/32</u>	<u>8/1/32</u>	<u>10/1/33</u>	<u>7/1/34</u>	<u>1/1/35</u>
First 3 Months	\$0.49	\$0.4650	\$0.4425	\$0.4650	\$0.4775	\$0.52
Next 9 Months	.50	.4750	.4525	.4750	.4875	.53
Second Year	.515	.49	.4650	.49	.5025	.545
Third Year	.525	.50	.4750	.50	.5125	.555
Fourth Year and After	.535	.51	.4850	.51	.5225	.565

Note: One-man car operators are paid 4¢ per hour additional based on local or street car rate.

It will be seen that the present wage rates are higher than before the depression.

SECTION E

OPERATING ORGANIZATION

LOS ANGELES MOTOR COACH COMPANY

The executive administration of the Los Angeles Motor Coach Company is carried out through the joint action of a director of each of the two companies. For the purposes of operation, the parent companies undertake to provide through their existing organizations the operating, traffic, legal, auditing, claims, and other services of a nature which may be effectively rendered through existing offices.

The actual operations are under the supervision of the Manager, with an Assistant Manager, Master Mechanic, and Chief Clerk in charge of operators, mechanics, and clerks, respectively. These forces are located at Virgil Street and Santa Monica Boulevard, except for such as are necessary in connection with the Wilshire line operations from the Sixteenth Street Garage, and the operations from Division No. 5 of the Los Angeles Railway. As noted on the chart, the Manager and Assistant Manager are joint employees of the Los Angeles Railway and fulfill similar functions in regard to the Coach

Division operations of the latter.

Wage Rates

The trend of wages is shown by the following statement covering operators wages per hour:

	8/18/23 to <u>12/31/29</u>	1/1/30 to <u>1/31/32</u>	2/1/32 to <u>7/31/32</u>	8/1/32 to <u>9/30/33</u>	10/1/33 to <u>4/30/34</u>
First 3 Months	\$0.53	\$0.53	\$0.50	\$0.475	\$0.475
Next 9 Months	.54	.54	.51	.485	.485
Second Year	.55	.56	.53	.505	.53
Third Year and After	.57	.58	.55	.525	.55

The present wages effective May 1, 1934, follow:

	<u>Double Deck Coaches</u>		<u>Single Deck Coaches</u>	
	<u>Operators</u>	<u>Conductors</u>	<u>Light Lines</u>	<u>Heavy Lines</u>
First 3 Months	\$0.48	\$0.46	\$0.48	\$0.50
Next 9 Months	.49	.47	.49	.51
Second Year	.55	.53	.55	.57
Third Year and After	.58	.55	.58	.60

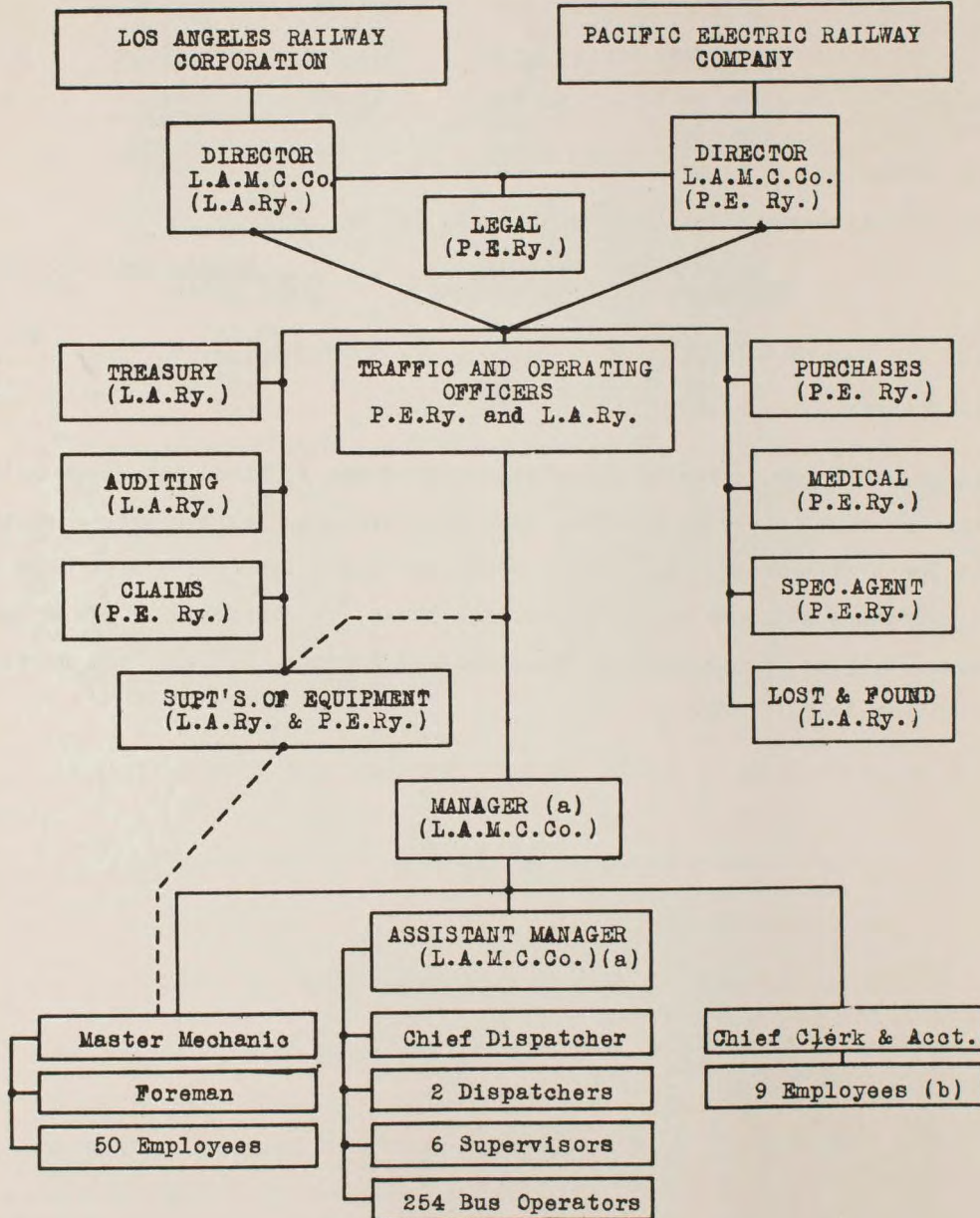
Conductors wages, prior to the adjustment of May 1, 1934, have been 3¢ less than the operators rate. It will be noted that this differential has been reduced to 2¢ in all except the last bracket. The May 1, 1934, was the first schedule to show a separate rate for operators on heavy single deck coach lines. A guarantee of \$90 a month is paid extra men. Waiting time allowance was abolished February 1, 1932, and service bonus was abolished November 30, 1932.

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ORGANIZATION CHART

LOS ANGELES MOTOR COACH COMPANY

July 1, 1935



(a) Joint employee of L.A. Ry.
 (b) 3 Joint employees of L. A. Ry.

L.A.Ry. - Los Angeles Railway
 P.E.Ry. - Pacific Electric Railway
 L.A.M.C.Co. - Los Angeles Motor Coach Company

CHAPTER VII

BALANCE SHEET STATEMENT

The financial situation of the Los Angeles Railway and Pacific Electric Railway may be set forth by a brief summary of the Assets and Liabilities of the respective companies. As discussed later, the Pacific Electric Railway operations involve other local and interurban passenger and freight operations in addition to its Los Angeles local lines, but at this point the corporate results only are shown. The chapter is divided into the following sections:

- A. Balance Sheet - Los Angeles Railway Corporation
- B. Balance Sheet - Pacific Electric Railway Company
- C. Balance Sheet - Los Angeles Motor Coach Company

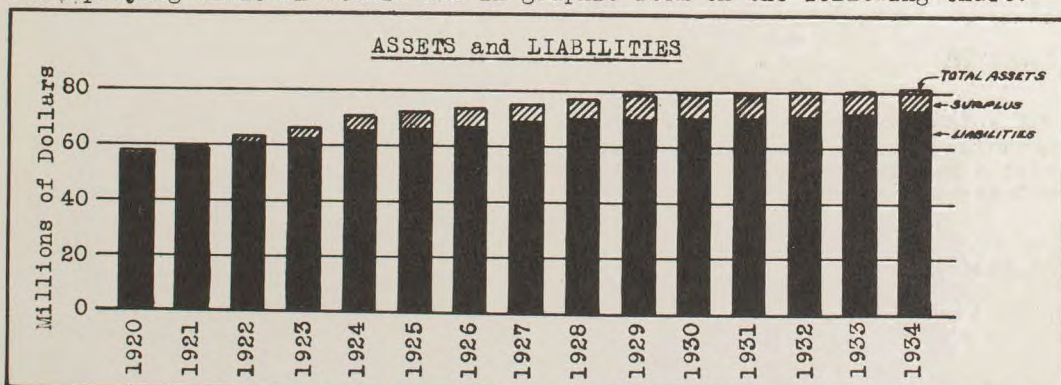
The Los Angeles Railway Corporation statements include the City Railway Company and its one-half, approximately, of the Los Angeles Motor Coach Company. The Pacific Electric Railway statements likewise include its one-half, approximately, of the Los Angeles Motor Coach Company.

SECTION A

LOS ANGELES RAILWAY CORPORATION

The Los Angeles Railway Corporation, (incorporated November 7, 1910), and its subsidiary, the City Railway Company of Los Angeles, (incorporated December 1, 1910), together constitute the true showing for Los Angeles Railway properties. The former is the operating company, also the owner of predecessor properties. New construction and extensions have been made by the City Railway.

The consolidated balance sheet for the Los Angeles Railway Corporation and the City Railway Company as of December 31st for the years 1920 to 1934, inclusive, is shown on the accompanying table in detail and in graphic form on the following chart.



Investment in Road and Equipment compose 89% of the total assets; therefore the trend of assets as shown by the chart reflects to a large extent the trend of that investment as shown by the company books.

Total assets have increased from \$58,055,369.61 in 1920 to \$81,300,283.37 in 1934, or 40%. Current assets as of December 31, 1934, were within \$4,000 of those as

of the year ending 1920. To the total, current assets represent only 1.45% in 1934, Road and Equipment 89.08%, and Sinking Funds 9.38%. Total liabilities increased from \$56,850,708.98 as of December 31, 1920, to \$73,839,076.21 in 1934, or 29.88%. As of December 31, 1934, capital stock made up 33.86% of the total Liabilities, Funded Debt 32.72%, Current Liabilities 12.91%, and Accrued Depreciation 20.23%. Accrued Depreciation increased from \$3,392,737.49 in 1920 to \$14,934,704.24 in 1934, or 340%.

For the year ending December 31, 1934, a more detailed analysis has been made of the consolidated balance sheet, breaking it down between Los Angeles Railway Corporation and City Railway Company as shown by the following table. Total assets for the two companies are \$69,113,056.79 and \$22,009,276.86, respectively, and their liabilities amount to \$63,839,076.21 and \$19,822,050.28, respectively. Assets of the City Railway Company consist of Road and Equipment \$19,822,050.28, which includes \$5,000,000.00 of Road and Franchises set up on the books when they were originally opened, and \$2,187,226.58 in sinking funds, there being no current assets. City Railway Company liabilities consist of \$5,000,000.00 Capital Stock, \$5,000,000.00 Funded Debt, and Loans and Notes Payable in amount of \$9,822,050.28. Corporate Surplus amounts to \$2,187,226.58, representing amounts held in sinking funds appropriated from Surplus. Of the \$5,000,000 funded debt, consisting of First Mortgage 5% Gold Bonds due February 1, 1941, \$2,813,000 are outstanding.

Balance Sheet

December 31, 1934

<u>ASSETS</u>	<u>Los Angeles Railway Corp.</u>	<u>City Railway Company of Los Angeles</u>	<u>Combined</u>	<u>Percent</u>
<u>Investments</u>				
Road and Equipment	\$52,602,345	\$19,822,050	\$72,424,395	89.08%
Sinking Funds	5,439,603	2,187,227	7,626,830	9.38
Stocks	10	-	10	-
<u>Current Assets</u>				
Cash	537,367	-	537,367	.66
Loans & Notes Rec.	9,869,550(1)	-	47,500	.06
Accounts Rec.	120,940	-	120,940	.15
Material & Supplies	440,653	-	440,653	.54
Other Current Assets	32,868	-	32,868	.04
<u>Deferred Assets</u>				
Unadjusted Debits	69,721	-	69,721	.09
 Total Assets	 <u>\$69,113,057</u>	 <u>\$22,009,277(1)</u>	 <u>\$81,300,284</u>	 <u>100.00%</u>

(1) Elimination of \$9,822,050 is made of inter-company obligation in combined statement.

Balance Sheet

December 31, 1934

<u>LIABILITIES</u>	<u>Los Angeles Railway Corp.</u>	<u>City Railway Company of Los Angeles</u>	<u>Combined</u>	<u>Percent</u>
<u>Capital Stock</u>	\$20,000,000	\$ 5,000,000	\$25,000,000	33.86%
<u>Funded Debt</u>	19,157,000	5,000,000	24,157,000	32.72
<u>Current Liabilities</u>				
Loans & Notes Pay.	3,877,964	9,822,050(1)	3,877,964	5.25
Audited Accts. & Wages Pay.	487,919	-	487,919	.66
Matured Interest Unpaid	5,001,425	-	5,001,425	6.77
Accrued Interest	171,983	-	171,983	.23
Other Current Liabilities	500	-	500	-
<u>Deferred Liabilities</u>				
<u>Unadjusted Credits</u>				
Tax Liability	53,277	-	53,277	.07
Reserve for Inj. & Dam.	60,000	-	60,000	.08
Accrued Depreciation	14,934,704	-	14,934,704	20.23
Unredeemed Tokens	92,960	-	92,960	.13
Other Unadjusted Credits	1,344	-	1,344	-
Total Liabilities	\$63,839,076	\$19,822,050(1)	\$73,839,076	100.00%
<u>CORPORATE SURPLUS</u>				
Fund Debt Retired by Surplus	973,000	-	973,000	13.04%
Sinking Fund Reserves	5,439,938	2,187,227	7,627,165	102.22
Total Appropriated Surplus	6,412,938	2,187,227	8,600,165	115.26
Profit & Loss Balance	(1,138,957)	-	(1,138,957)	(15.26)
	5,273,981	2,187,227	7,461,208	100.00%
Total Liabilities & Corp. Surp.	\$69,113,057	\$22,009,277(1)	\$81,300,284	

(1) Elimination of \$9,822,050 is made of inter-company obligation in combined statement.

The amount of \$9,822,050.28 shown as an elimination from each side represents loans by the Los Angeles Railway Corporation to the City Railway Company. When the City Railway Company was organized and the \$5,000,000 of stock issued and bonds sold, the proceeds were used for certain definite line construction and other property investment. In years subsequent to the disbursement of the entire proceeds, any additions to those particular lines or the particular property originally financed by the City Railway Company, were necessarily made by the Los Angeles Railway Corporation and the amounts so expended were shown on the assets side of the City Railway Company balance sheet under Road and Equipment and as Loans Payable on the liabilities side. On the Los Angeles Railway Corporation balance sheet the amount was shown as an asset under Loans

Receivable. In consolidating the two, however, the amounts offset and are deducted.

ROAD AND EQUIPMENT

Investment in road and equipment for each company as reflected by the books is shown on the following table for the period subsequent to June 30, 1914, and in total for the period to that date, the former in amount of \$21,429,280.13 and the latter \$46,203,115.24.

<u>Road and Equipment</u>	<u>Los Angeles Railway Corp.</u>	<u>City Railway Company of Los Angeles</u>	<u>Total</u>
Total Prior to June 30, 1914	\$42,536,219.16	\$ 3,666,896.08	\$46,203,115.24
Net Addition June 30, 1914, to date	10,274,125.93	11,155,154.20	21,429,280.13
Road and Franchises	-	5,000,000.00	5,000,000.00
Adjustment	(208,000.00)	-	(208,000.00)
Total Road and Equipment	<u>\$52,602,345.09</u>	<u>\$19,822,050.28</u>	<u>\$72,424,395.37</u>

To bring the actual road and equipment investment into agreement with the balance sheet, a deduction of \$208,000.00 must be made from the Los Angeles Railway Corporation figures, representing retirement of properties which were never distributed on the books to primary accounts; and an addition made to City Railway Company in amount of \$5,000,000.00 representing Road and Franchises.

The following table shows for the years 1912 to 1934, inclusive, yearly additions and betterments charged to capital on the books of the two companies and the net total book investment as of the end of each year. Investment in the Motor Coach Division is also shown separately. The accompanying chart shows combined net additions in graphic form. The additions declined from \$1,460,811.25 in 1913 to \$255,685.42 in 1919, then increased from that low to \$4,306,293.72 in 1924, dropping off in 1925 to recover some in 1926 to 1927, from which date a steady decline set in, persisting to an amount of \$706,403.29 in 1930 and dropping off to \$36,238.27 in 1931 and during 1932 and 1933 the retirements were greater than the additions. During 1934 additions amounted to \$291,047.32. The road and equipment accounts exceed by roughly \$25,000,000.00 the tangible properties of the companies, based on appraisal. This is discussed fully later in the report.

Investment in road and equipment as of December 31, 1934, segregated between Rail Division, Motor Coach Division, and Los Angeles Motor Coach Company is shown by the following table.

	<u>L.A. Rlwy. Corp.</u>	<u>City Rlwy. Co.</u>	<u>Total</u>
Los Angeles Rlwy. Corp.- Rail	\$51,822,042	\$18,005,841	\$69,827,883
" " " " - Motor Coach	524,284	1,268,438	1,792,722
Share of L. A. Motor Coach Co.	256,019	547,771	803,790
Total	<u>\$52,602,345</u>	<u>\$19,822,050</u>	<u>\$72,424,395</u>

CONSOLIDATED BALANCE SHEET
LOS ANGELES RAILWAY CORPORATION AND CITY RAILWAY COMPANY OF LOS ANGELES

Including Rail and Coach Divisions
and
Share of Los Angeles Motor Coach Company

As of December 31, each Year
from 1920 to 1934, inclusive

	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934
ASSETS															
Investments															
Road and Equipment	\$55,071,209.44	\$56,498,070.30	\$59,529,403.27	\$62,882,345.08	\$67,188,638.80	\$67,798,176.13	\$68,932,013.87	\$70,029,082.51	\$70,927,139.64	\$71,669,745.85	\$72,376,149.14	\$72,412,387.41	\$72,379,069.13	\$72,133,348.05	\$72,424,395.37
Sinking Funds	1,767,740.78	2,081,734.54	2,411,464.70	2,749,135.57	3,104,572.62	3,472,162.24	3,867,302.77	4,266,614.04	4,698,628.56	5,148,725.91	5,635,736.59	6,181,017.24	6,583,951.25	7,133,462.34	7,626,829.95
Investment in Affiliated Companies	10,000.00	105,000.00	919,000.00	103,000.00	118,000.00	-	-	105,000.00	-	57,280.00	-	-	-	-	-
Stocks	-	-	-	-	-	-	-	-	-	-	-	-	10.00	10.00	10.00
Bonds	-	-	-	-	-	-	-	-	-	-	59,280.00	48,280.00	-	-	-
Other Investments	-	-	-	-	6,000.00	6,000.00	6,000.00	6,000.00	6,000.00	6,000.00	-	-	-	-	-
Current Assets															
Cash	\$ 58,497.43	\$ 53,728.41	\$ 82,850.12	\$ 73,907.96	\$ 48,285.15	\$ 48,842.95	\$ 47,783.65	\$ 47,649.73	\$ 57,414.85	\$ 1,035,649.77	\$ 743,497.66	\$ 218,892.84	\$ 421,712.50	\$ 819,678.64	\$ 537,366.64
Loans and Notes Receivable (a)	146.60	20,146.60	20,146.60	13,128.22	9,770.90	27,533.95	2,437.47	15,814.62	22,500.75	22,500.00	40,000.00	30,000.00	27,000.00	27,000.00	47,500.00
Accounts Receivable	176,588.20	49,932.28	119,818.06	99,359.79	60,445.17	91,128.46	119,312.67	96,798.40	129,777.76	140,768.37	132,265.55	94,382.29	66,891.34	66,891.34	120,940.01
Material and Supplies	687,679.43	576,132.29	775,714.93	955,018.28	1,011,435.20	814,109.53	756,142.35	777,200.62	711,290.46	702,251.37	685,239.76	638,714.88	561,747.06	461,204.55	440,652.95
Other Current Assets	260,603.80	445,503.75	19,347.50	22,639.45	22,435.67	73,080.30	114,527.50	180,728.09	410,554.69	24,164.75	24,122.50	24,622.50	26,747.50	26,917.50	32,867.50
Deferred Assets	\$ 1,183,515.46	\$ 1,145,443.33	\$ 1,017,877.21	\$ 1,164,053.70	\$ 1,152,372.09	\$ 1,054,695.19	\$ 1,040,203.64	\$ 1,118,191.46	\$ 1,331,538.31	\$ 1,925,334.26	\$ 1,625,125.47	\$ 1,006,612.51	\$ 1,130,053.50	\$ 1,401,692.03	\$ 1,179,327.10
Unadjusted Debits	2,023.15	2,133.70	3,015.00	63,741.83	63,741.83	63,741.83	63,741.83	64,702.88	64,702.88	64,702.88	64,702.88	-	-	-	-
Total Assets	\$58,055,369.61	\$59,840,416.58	\$63,907,715.02	\$66,997,638.51	\$71,668,496.09	\$72,437,287.72	\$73,953,548.10	\$75,640,991.16	\$77,115,170.14	\$78,993,342.50	\$79,894,215.32	\$79,736,908.71	\$80,156,334.47	\$80,752,673.01	\$81,300,283.37
LIABILITIES AND CORPORATE SURPLUS															
Capital Stock	\$25,000,000.00	\$25,000,000.00	\$25,000,000.00	\$25,000,000.00	\$25,000,000.00	\$25,000,000.00	\$25,000,000.00	\$25,000,000.00	\$25,000,000.00	\$25,000,000.00	\$25,000,000.00	\$25,000,000.00	\$25,000,000.00	\$25,000,000.00	\$25,000,000.00
Funded Debt	24,048,000.00	24,048,000.00	24,852,000.00	24,852,000.00	24,852,000.00	24,852,000.00	24,852,000.00	24,852,000.00	24,464,000.00	24,423,000.00	24,382,000.00	24,339,000.00	24,292,000.00	24,221,000.00	24,157,000.00
Current Liabilities															
Loans and Notes Payable (a)	1,577,981.17	2,296,577.00	2,463,208.63	3,115,423.62	5,893,698.56	5,462,998.02	5,568,944.87	5,797,902.96	5,586,738.47	4,996,660.00	4,167,533.50	4,157,060.75	4,108,140.97	3,896,140.97	3,877,964.30
Audited Accounts and Wages Payable	538,852.44	374,782.75	797,506.65	848,486.89	590,328.38	466,144.70	498,372.63	619,219.93	643,371.76	572,688.75	684,809.42	467,447.70	405,191.21	392,116.94	487,918.34
Matured Interest Unpaid	1,868,250.00	2,342,950.00	2,820,500.02	3,259,125.00	3,721,450.02	3,918,775.00	4,374,950.00	4,650,600.00	4,828,150.00	4,828,150.00	4,828,150.00	4,828,150.00	4,899,525.00	4,950,475.00	5,001,425.00
Accrued Interest	209,483.35	209,483.35	230,233.33	230,233.35	230,233.35	230,233.35	230,233.35	230,233.33	225,383.34	224,870.83	220,358.33	219,820.83	176,670.83	172,916.67	171,983.33
Other Current Liabilities	207,010.28	259,289.31	274,013.65	278,973.03	9,577.76	9,245.77	9,589.69	9,617.60	9,142.34	10,345.29	10,276.44	8,124.56	-	2,383.34	500.00
Deferred Liabilities	\$ 4,401,577.24	\$ 5,483,082.41	\$ 6,585,462.28	\$ 7,732,241.89	\$10,445,288.05	\$10,087,396.84	\$10,682,090.52	\$11,307,573.82	\$11,292,785.91	\$10,632,714.87	\$ 9,911,127.69	\$ 9,680,603.84	\$ 9,589,528.01	\$ 9,414,032.92	\$ 9,539,790.97
Unadjusted Credits	8,394.25	-	859.50	-	-	-	-	-	451,068.22	-	-	-	-	-	-
Tax Liability	-	-	-	267,134.93	188,789.76	84,653.30	60,076.90	78,117.83	90,938.69	249,220.51	94,984.72	16,063.61	40,536.83	32,330.00	53,277.00
Reserve for Injuries and Damages	-	-	-	-	-	-	-	-	-	-	-	53,736.40	50,928.03	50,928.03	60,000.00
Accrued Depreciation	3,392,737.49	3,938,539.23	4,324,581.18	4,566,295.07	5,447,124.75	6,349,042.69	7,252,604.00	8,013,725.95	9,188,169.54	10,083,988.19	11,359,948.21	11,675,392.58	12,621,558.50	13,643,200.76	14,934,704.24
Unredeemed Tokens	-	-	-	-	-	-	-	-	58,893.14	85,694.12	94,813.56	97,871.88	95,149.94	95,625.87	92,960.13
Other Unadjusted Credits	-	-	247,769.64	859.50	729.50	6,281.85	16,559.62	10,100.60	215.00	215.00	222.43	480.62	29,929.81	468.09	1,343.87
Total Liabilities	\$ 3,392,737.49	\$ 3,938,539.23	\$ 4,572,350.82	\$ 4,834,289.50	\$ 5,636,644.01	\$ 6,439,977.84	\$ 7,329,240.52	\$ 8,101,944.38	\$ 9,338,216.37	\$10,419,117.82	\$11,549,968.92	\$11,843,545.09	\$12,838,103.11	\$13,822,552.75	\$15,142,285.24
Corporate Surplus															
Funded Debt Retired Thru Surplus	\$ 148,000.00	\$ 148,000.00	\$ 148,000.00	\$ 148,000.00	\$ 148,000.00	\$ 278,000.00	\$ 278,000.00	\$ 278,000.00	\$ 666,000.00	\$ 707,000.00	\$ 748,000.00	\$ 791,000.00	\$ 838,000.00	\$ 909,000.00	\$ 973,000.00
Sinking Fund Reserves	2,136,574.28	2,492,759.56	2,866,959.50	3,255,731.40	3,646,168.45	3,959,133.07	4,413,673.60	4,875,384.87	4,960,399.39	5,410,806.74	5,636,174.09	6,181,554.18	6,584,773.19	7,133,844.28	7,627,164.15
Total Appropriated Surplus	2,284,574.28	2,640,759.56	3,014,959.50	3,403,731.40	3,794,168.45	4,237,133.07	4,691,673.60	5,153,384.87	5,626,399.39	6,117,806.74	6,384,174.09	6,972,554.18	7,422,773.19	8,042,844.28	8,600,164.15
Profit and Loss Balance	(1,079,913.65)	(1,269,964.62)	(117,917.08)	1,175,375.72	1,940,395.58	1,820,779.97	1,398,543.46	1,226,088.09	942,700.25	2,400,703.07	2,666,944.62	1,901,205.60	1,013,930.16	252,243.06	(1,138,956.99)
Total Corporate Surplus	\$ 1,204,660.63	\$ 1,370,794.94	\$ 2,897,042.42	\$ 4,579,107.12	\$ 5,734,564.03	\$ 6,057,913.04	\$ 6,090,217.06	\$ 6,379,472.96	\$ 6,569,099.64	\$ 8,518,509.81	\$ 9,051,118.71	\$ 8,873,759.78	\$ 8,436,703.35	\$ 8,295,087.34	\$ 7,461,207.16
Total Liabilities & Corporate Surplus	\$58,055,369.61	\$59,840,416.58	\$63,907,715.02	\$66,997,638.51	\$71,668,496.09	\$72,437,287.72	\$73,953,548.10	\$75,640,991.16	\$77,115,170.14	\$78,993,342.50	\$79,894,215.32	\$79,736,908.71	\$80,156,334.47	\$80,752,673.01	\$81,300,283.37

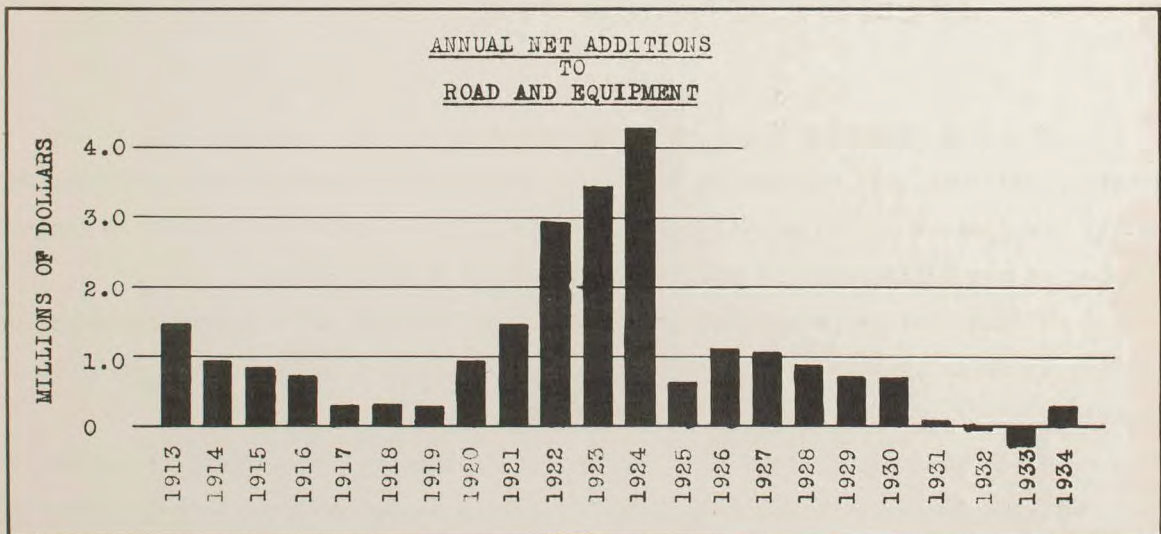
(Red Figures)

(a) After Elimination of Intercompany Accounts

INVESTMENT IN ROAD AND EQUIPMENT

(Book Figures)

Year	<u>NET ADDITIONS AND BETTERMENTS</u>			<u>TOTAL INVESTMENT AS OF DEC. 31st</u>		
	<u>L.A. Rlwy. Corp.</u>	<u>City Rlwy. Company</u>	<u>Total</u>	<u>L.A. Rlwy. Corp.</u>	<u>City Rlwy. Company</u>	<u>Total</u>
1912				\$41,623,159	\$ 7,638,231	\$49,261,390
1913	\$ 555,001	\$ 905,810	\$1,460,811	42,178,161	8,544,041	50,722,202
1914	771,007	204,886	975,893	42,949,168	8,748,927	51,698,095
1915	638,895	193,046	831,941	43,588,063	8,941,974	52,530,037
1916	474,941	254,460	729,401	44,063,004	9,196,434	53,259,438
1917	262,554	17,506	280,060	44,325,559	9,213,940	53,539,499
1918	232,335	81,284	313,619	44,557,894	9,295,224	53,853,118
1919	255,103	582	255,685	44,812,997	9,295,807	54,108,804
1920	409,062	553,344	962,406	45,222,058	9,849,151	55,071,209
1921	727,549	699,312	1,426,861	45,949,607	10,548,463	56,498,070
1922	1,627,051	1,340,540	2,967,591	47,576,658	11,889,003	59,465,661
1923	399,440	3,017,243	3,416,683	47,976,098	14,906,247	62,882,345
1924	1,185,872	3,120,422	4,306,294	49,161,970	18,026,669	67,188,639
1925	193,924	415,613	609,537	49,355,894	18,442,282	67,798,176
1926	393,015	740,823	1,133,838	49,748,909	19,183,105	68,932,014
1927	630,500	466,568	1,097,068	50,379,410	19,649,673	70,029,083
1928	495,888	402,169	898,057	50,875,298	20,051,842	70,927,140
1929	707,313	35,293	742,606	51,582,611	20,087,135	71,669,746
1930	658,769	47,634	706,403	52,241,380	20,134,769	72,376,149
1931	244,429	(208,191)	36,238	52,485,809	19,926,578	72,412,387
1932	51,775	(85,093)	(33,318)	52,537,585	19,841,484	72,379,069
1933	(201,776)	(43,945)	(245,721)	52,335,809	19,797,539	72,133,348
1934	266,536	24,511	291,047	52,602,345	19,822,050	72,424,395



SINKING FUNDS

Los Angeles Railway Corporation shows \$5,439,603.37 in Sinking Fund deposited

with Security-First National Bank of Los Angeles as follows:

First and Refunding 5% Gold Bonds Maturing 1940	\$5,291,000.00
Cash	126,557.54
Accrued Interest	<u>22,045.83</u>
	\$5,439,603.37

City Railway Company shows an amount of \$2,187,226.58 in Sinking Fund deposited with Security-First National Bank, Los Angeles, as follows:

First Mortgage 5% Gold Bonds Maturing 1941	\$2,187,000.00
Cash	<u>226.58</u>
	\$2,187,226.58

CASH

This item is self-explanatory and represents funds on hand and in the bank upon which immediate draft may be drawn for the purpose of current operation. On the balance sheet the amount is shown under Los Angeles Railway Corporation, as are all the current assets, that company being the operator.

LOANS AND NOTES RECEIVABLE

Loans and Notes Receivable as of December 31, 1934, were:

Los Angeles Motor Coach Company.	\$ 10,000.00
Los Angeles Railway Corp. - Uniform Acct.	7,500.00
" " " " - Loan Acct.	10,000.00
" " " " - Provident Fund Loans	15,000.00
Westside Land Company	5,000.00
Loan to City Railway Company	<u>9,822,050.28</u>
	\$9,869,550.28

The item of \$7,500 represents a fund set up for the use of platform men in purchasing uniforms, the amounts so used being deducted thereafter from their pay checks. Normally the fund is not so large, but on account of the strike and resultant increase in number of new employees, the amount was increased to that shown.

A loan fund is maintained upon which employees may draw for their personal use and repay by deductions from salary, the amount of the fund being \$10,000 as of December 31, 1934.

While the company pays pensions to its employees, a pension fund is not maintained, and the actual payments are charged directly to operating expense. There has been in effect until recently a plan whereby each employee set aside about 3% of his salary in a Provident Fund to which the company added an equal amount and invested the whole. An employee upon leaving the service of the company before expiration of five years was refunded the amount he had paid in plus interest. Upon leaving the service after five years had expired, he received in addition a certain amount of the money put

up by the company, plus interest, the amount being determined on the basis of the number of years service above the minimum. The plan was discontinued in 1932 as an economic measure and the funds returned to the employees in 1935.

On the balance sheet the City Railway Company shows \$14,822,050.28 as road and equipment, (after deducting capitalized stock), whereas their capital stock issue was only \$5,000,000. The difference was borrowed from the Los Angeles Railway Corporation in amount of \$9,822,050.28, as explained previously.

ACCOUNTS RECEIVABLE

This item is self-explanatory and represents generally current transactions such as interchange of tickets and transfers, and billing Pacific Electric Company for its share of accounting costs, etc., in connection with operating Los Angeles Motor Coach Company.

As of December 31, 1934, the following items made up the total of \$120,940.01.

	<u>Amount</u>	<u>Percent</u>
Los Angeles Motor Coach Company	\$ 67,685.05	56.0%
1/2 of L.A.M.C.Co. Accts. Receivable	8,881.77	7.3
Pacific Electric Railway Company	10,375.18	8.6
State of Calif. Dept. of Public Works	14,900.00	12.3
Rent of Main Office Building Rooms	2,698.32	2.2
Other	<u>16,399.69</u>	<u>13.6</u>
	\$120,940.01	100.0%

MATERIAL AND SUPPLIES

Material and supplies for current use in maintaining and operating the system are carried under this heading and represent parts for rolling stock repairs and maintenance, stationery, office supplies, etc., carried in stores.

As of December 31, 1934, the Material and Supplies balance was made up as follows:

	<u>Amount</u>	<u>Percent</u>
1/2 Los Angeles Motor Coach Company	\$ 9,365.30	2.1%
New Supplies in Stores	277,898.29	63.1
Used Supplies in Stores	137,437.30	31.2
Tokens on hand	<u>15,952.06</u>	<u>3.6</u>
	\$440,652.95	100.0%

The significance of "Used Supplies" is as follows. When parts of plant such as car body parts, truck parts, track and roadway parts, etc., are in such condition that they can be repaired and re-used, they are taken into stores at a salvage value, repaired, and put on the shelves for issue at a second hand value, being the salvage value plus the cost of labor and material used in their repair. Some of the items included in Material and Supplies are not yet repaired, being held until a sufficient number are accumulated to make a worth while shop repair order. There are also a

considerable quantity of parts such as armatures, seats and other parts which were salvaged from abandoned cars, being held in Material and Supplies at a scrap value for possible future use in replacement of similar parts on cars remaining in service.

Of the new supplies, rail and special work made up 24% of the total; trolley wire, cable, poles and fixtures 16%; car furnishings and trimmings 4%; motor parts 4%; automotive parts and supplies 5.5%; track fastenings 4%, ties and ballast 4%; and the balance miscellaneous parts, gasoline, stationery, etc. Of the used material and supplies, air brake material made up 10.7%; brake rigging and trucks 3.8%, motor parts 11%; complete motors, armatures and gears 27%; miscellaneous scrap 12.5%; automotive parts 11.1%; scrap rail 5.3%; and the balance miscellaneous items of parts and supplies.

OTHER CURRENT ASSETS

This amount is made up of two items:

Employees Working Fund	\$32,117.50
Advances - Traveling Expenses	750.00
	\$32,867.50

The Employees Working Fund is composed of amounts assigned to the Assistant Secretary-Treasurer, Claims Agent, and cashiers at carhouses.

UNADJUSTED DEBITS

The unadjusted debits comprise the following:

Prepaid Insurance	\$32,336.45
Incorporation Expense-The Los Angeles Rlwy	13,008.69
Unadjusted Charges to Work Orders	6,325.99
Appraisals	10,067.05
Franchise Deposits	1,250.00
Miscellaneous	6,732.77
	\$69,720.95

CAPITAL STOCK

Los Angeles Railway Corporation has an authorized stock issue of \$20,000,000 as of 1910, divided into 200,000 shares of common at par value of \$100 each, all of which was outstanding December 31, 1934, in the name of Henry E. Huntington Estate.

City Railway Company of Los Angeles has an authorized stock issue of \$5,000,000 as of 1910, divided into 50,000 shares of common at par value of \$100 each, all of which was outstanding as of December 31, 1934, in the name of the Los Angeles Railway Corporation.

FUNDED DEBT

The funded debt unmaturing of the Los Angeles Railway Corporation and City

Railway Company of Los Angeles, as of December 31, 1934, is made up of bonds as follows:

Los Angeles Railway Corporation

1. First Consolidated Mortgage 5% Gold Bonds. Los Angeles Traction Company of 1898 maturing December 1, 1938	\$ 250,000
2. First Mortgage 5% Gold Bonds. Los Angeles Railway Company of 1899, maturing October 1, 1938	4,027,000
3. First and Refunding 5% Gold Bonds. Los Angeles Railway Corporation of 1910, maturing December 1, 1940	<u>14,880,000</u>
	\$19,157,000

City Railway Company of Los Angeles

1. First Mortgage 5% Gold Bonds City Railway Company of Los Angeles of 1911, maturing February 1, 1941	<u>5,000,000</u>
Grand Total	\$24,157,000

Of the Los Angeles Railway Corporation issues, bonds to the value of \$25,500,000 were authorized, of which \$20,130,000 were issued. Of these, \$973,000 have been re-acquired by the company, leaving an outstanding balance as of December 31, 1934, of \$19,157,000, of which \$5,291,000 is held in a sinking fund. There is no provision in the trust deed of Mortgage No. 3 which will allow for redemption of the bonds prior to date of maturity. The sinking fund for the retirement of the three mortgages amounted to \$5,439,603.37 as of December 31, 1934.

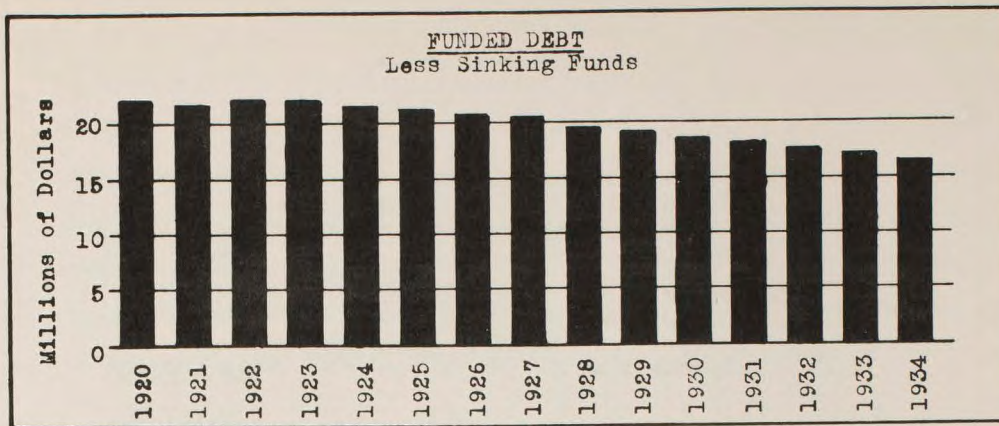
Of the City Railway Company issue, \$5,000,000 were authorized and issued, \$2,187,000 of which have been re-acquired and are held in a sinking fund for retirement of the bonds. The total amount held in the sinking fund as of December 31, 1934, is \$2,187,226.58.

The total bonded indebtedness shown by the balance sheet as of December 31, 1934, is \$24,157,000. The ownership of these bonds is as follows:

	L.A.Rlwy. Corp.	City Rlwy. Company	Total	Percent
Huntington Library and Art Gallery	\$ 2,845,000	\$ 977,000	\$ 3,822,000	15.8%
H.E. Huntington Estate	3,455,000	1,836,000	5,291,000	21.9
Public	<u>7,566,000</u>	<u>-</u>	<u>7,566,000</u>	<u>31.3</u>
Total Outstanding	13,866,000	2,813,000	16,679,000	69.0
Held in Sinking Fund	<u>5,291,000</u>	<u>2,187,000</u>	<u>7,478,000</u>	<u>31.0</u>
Total	<u>\$19,157,000</u>	<u>\$5,000,000</u>	<u>\$24,157,000</u>	<u>100.0%</u>

The following chart shows the trend of the outstanding bonded indebtedness

after deduction of bonds acquired through operation of sinking fund provisions.



LOANS & NOTES PAYABLE

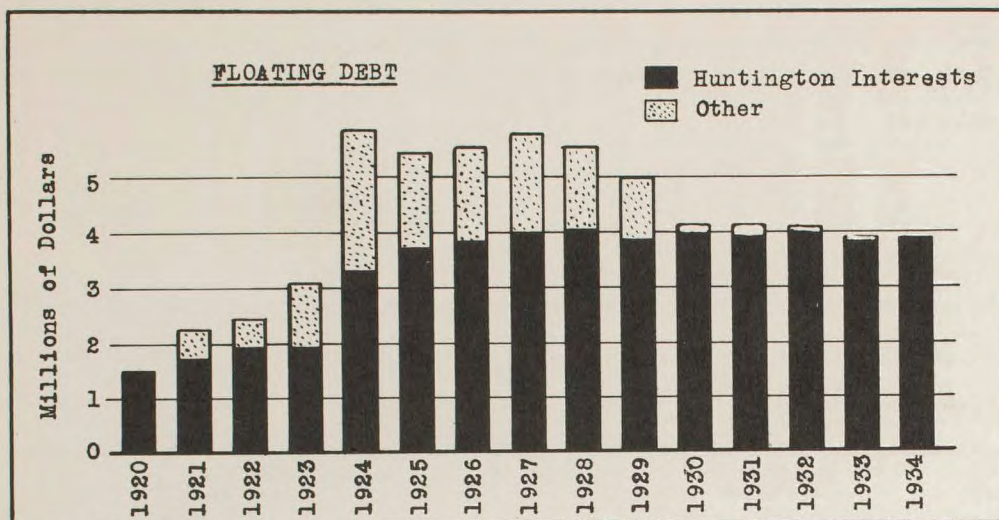
There is an amount of \$3,877,964.30 shown as Los Angeles Railway Corporation loans, the detail of which is as follows:

December 31, 1934

	<u>Date Due</u>	<u>Rate of Int.</u>	<u>Amount</u>	<u>Total</u>
5/12/34 Caroline H. Holladay and Security-First National Bank of Los Angeles, Executors of the Estate of Henry E. Huntington, deceased	5/12/35	5%	\$375,000.00	
5/12/34 "	5/12/35	5%	375,000.00	\$ 750,000.00
5/12/34 Huntington Land & Improvement Co.	5/12/35	6%	500,000.00	
5/12/34 "	5/12/35	6%	500,000.00	
5/12/34 "	5/12/35	6%	270,000.00	
5/12/34 "	5/12/35	5%	233,000.00	
7/17/34 "	5/12/35	5%	67,900.21	
12/31/34 "	5/12/35	5%	61,149.68	
8/21/34 "	On demand	5%	<u>39,964.41</u>	1,672,014.30
5/12/34 Redondo Improvement Co.	5/12/35	6%		<u>90,000.00</u>
				2,512,014.30
H.E. Huntington - Open Account				1,345,950.00
L. A. Motor Coach Co. - Loan				<u>20,000.00</u>
				\$3,877,964.30

Of the total, \$2,472,049.89 is covered by notes due May 12, 1935, \$39,964.41 on demand, and the balance on open account. The notes due in 1935 have since been renewed for another year as is the usual practice. A decrease in the debt of about \$2,000,000 has been effected during that period of eleven years. The reduction during this period has been largely in notes of interests other than the H. E. Huntington

Estate. The Huntington interest has remained at approximately four million dollars throughout the period. The following chart shows the status of the floating debt by years from 1920 to 1934.



The amount of \$9,822,050.28 shown on the balance sheet under City Railway Company is an inter-company transaction representing the difference between the capital stock of the City Railway Company and its actual investment in road and equipment, the difference having been made up by loans from the Los Angeles Railway Corporation.

AUDITED ACCOUNTS AND WAGES PAYABLE

This item, as the title implies, represents accrued wages of employees due for payment at a date differing from that of the balance sheet and open account balances payable at a later date, itemized as follows:

Vouchers	\$ 229,418.06
Employees Wages	248,337.13
Suspense	415.00
Collector of Internal Revenue	22.00
Agent of L.A. Railway Building	739.48
Employees Benefit Fund and Insurance	8,976.34
Sales Tax, State of California	10.33
	\$ 487,918.34

MATURED INTEREST UNPAID

There is due the Huntington Estate and affiliated companies an amount of \$5,001,425 in unpaid interest due on bonds as follows:

Los Angeles Railway Corp. Bonds	\$2,752,250.00
City Railway Co. of Los Angeles Bonds	<u>2,249,175.00</u>
	\$5,001,425.00

This amount has gradually accumulated over a period of years since 1917. No

interest is charged on the matured interest unpaid.

ACCRUED INTEREST

This item represents interest accrued on loans and notes payable and funded debt as of balance sheet date.

TAX LIABILITY

This item represents the amount of taxes accrued to date of balance sheet and unpaid as follows:

2% Franchises	\$ 50,000.00
Capital Stock	<u>3,277.00</u>
	\$ 53,277.00

RESERVE FOR INJURIES AND DAMAGES

As of December 31, 1934, there was shown a reserve for injuries and damages in amount of \$60,000. The estimated liability is based on the prediction of what the monthly claims will amount to and varies from month to month according to experience. A more complete analysis has been made of charges to the reserve and included under Operating Expenses.

ACCRUED DEPRECIATION

To this account are credited amounts charged to operating expense and other accounts, representing depreciation on property and equipment. The account is charged with the retirements of road and equipment, and the balance represents the reserves for accrued depreciation. Depreciation is discussed more fully later in this report.

UNREDEEMED TOKENS

Tokens sold and still in circulation to date of balance sheet represent an amount of \$92,960.13.

OTHER UNADJUSTED CREDITS

This item of \$1,343.87 represents small amounts held in suspense until further information is received.

FUNDED DEBT RETIRED THROUGH SURPLUS

This account consists of \$973,000 appropriated from surplus and expended discharging the principal of funded debt.

SINKING FUND RESERVES

These reserves represent the appropriation of surplus for paying off bonded indebtedness and are \$334.20 greater than the sinking funds shown under assets.

Los Angeles Railway Corp. Bonds	\$5,439,603.37
Los Angeles Railway Co. "	334.20
City Railway Co. of Los Angeles Bonds	<u>2,187,226.58</u>
	\$7,627,164.15

PROFIT AND LOSS BALANCE

The Profit and Loss Balance of \$(1,138,956.99) represents the loss as shown by the Income and Profit and Loss Statement, as of December 31, 1934, and represents as of that date the net status of the account since date of incorporation in the year 1910.

SECTION B

BALANCE SHEET

PACIFIC ELECTRIC RAILWAY COMPANY

The accounting of the Pacific Electric Railway Company is that prescribed by the uniform classification of accounts of the Interstate Commerce Commission for electric railways. The following Balance Sheet is shown as of December 31, 1925, 1929, and 1934.

	<u>December 31</u> 1925	<u>December 31</u> 1929	<u>December 31</u> 1934
<u>ASSETS</u>			
<u>Investments:</u>			
Road & Equipment	\$ 95,184,570.74	\$102,258,923.68	\$101,255,557.72
Sinking Funds	2,700.56	2,898.83	123,714.93
Investment in affiliated Co's.	4,404,446.04	2,471,019.50	4,309,468.33
Other Investments	244,410.98	586,085.45	603,301.59
Total Investments	99,836,128.32	105,318,927.46	106,292,042.57
<u>Current Assets:</u>			
Cash	735,586.45	598,922.36	278,937.89
Special Deposits	213,472.83	197,010.00	224,783.12
Loans & Notes Rec.	32,589.28	29,237.03	24,262.53
Misc. Accounts Rec.	727,590.60	685,525.34	289,204.25
Materials & Supplies	1,888,577.36	1,149,485.72	666,527.21
Interest, Dividends & Rents Rec.	4,225.38	4,483.88	3,775.84
Other Current Assets	25,529.83	10,204.32	7,217.39
Total Current Assets	3,627,571.73	2,674,868.65	1,494,708.23
<u>Deferred Assets:</u>	191,240.08	157,054.08	117,436.46
<u>Unadjusted Debits:</u>	9,195,319.36	8,987,094.71	8,485,708.35
Total Assets	\$112,850,259.49	\$117,137,944.90	\$116,389,895.61
<u>LIABILITIES</u>			
<u>Capital Stock:</u>	\$ 34,000,000.00	\$ 34,000,000.00	\$ 34,000,000.00
Grants in aid of Constr.	-	-	164,418.82
<u>Long Term Debt:</u>			
Funded Debt Unmatured-Bonds	55,883,000.00	54,398,500.00	50,503,610.00
Non-Negotiable Debt.to Affil.Co's.	13,137,542.23	20,726,113.77	36,631,253.23
Total Long Term Debt	69,020,542.23	75,124,613.77	87,134,863.23
<u>Current Liabilities:</u>			
Audited Accs.& Wages Pay.	811,562.34	824,458.84	392,690.44
Miscel. Accs. Pay.	205,982.69	233,183.01	148,160.80
Matured Int.,Dividends & Rents Unpaid	480,190.00	502,265.00	497,900.00
Matured Funded Debt	-	-	2,000.00
Accrued Int.,Dividends & Rents Pay.	635,293.79	620,512.06	563,382.03
Other Current Liabilities	142,207.26	166,061.50	71,903.19
Total Current Liabilities	2,275,236.08	2,346,480.41	1,676,036.46
<u>Deferred Liabilities:</u>	93,956.99	85,583.20	77,475.10
<u>Unadjusted Credits:</u>			
Tax Liability	13,874.38	13,050.29	(2,823.82)
Premium on Funded Debt	107,811.71	80,857.79	45,838.19
Accrued Depr'n..-Road & Equipment	6,117,972.56	7,903,588.32	9,015,020.44
Reserve for Amortization of Franchises	391.66	9,539.66	22,850.81
Other Unadjusted Credits	351,081.45	359,451.49	212,346.15
Total Unadjusted Credits	6,591,131.76	8,366,487.55	9,293,231.77
<u>Corporate Surplus:</u>			
Additions to Prop. through Surplus	663,056.11	1,615,043.08	1,729,251.10
Profit & Loss - Balance	206,336.32	(4,400,263.11)	(17,685,380.87)
Total Corporate Surplus	869,392.43	(2,785,220.03)	(15,956,129.77)
Total Liabilities	\$112,850,259.49	\$117,137,944.90	\$116,389,895.61

The foregoing profit and loss balance represents the status of that account as of December 31, 1934, as a result of operation since January 1, 1925, on which date an amount of \$14,055,586.27 owing to the Southern Pacific Company was written off the books.

Road and Equipment

Investment in road and equipment totalled \$101,255,557.72 on December 31, 1934, and has remained at this level since about 1928. It has been reduced slightly from the 1929 figure of \$102,258,923.68.

An historical reproduction cost valuation prepared by the Commission's staff (Exhibit 2, Application 13460), as of December 31, 1926, shows the following results with lands at the then market value.

Operative Property	\$ 70,618,279
Non-Operative Property	<u>7,937,778</u>
Total	78,556,057
Road and Equipment Account	\$ <u>95,335,144</u>
Difference	\$ 16,779,087

These figures do not include the cost of leased equipment operated by the Pacific Electric Railway.

Investments in Affiliated Companies

This includes stocks and advances as follows:

	<u>Amount</u>	<u>Class</u>
Pacific Electric Land Company - Stock (100%)	\$ 400,000.00	Non Carrier - Active
Motor Transit Company - Stock (66-2/3%)	1,958,075.07	Carrier - Active
Ontario & San Antonio Hts. R.R. Company (100%)	<u>237,502.37</u>	Carrier - Inactive
Total Stock	\$2,595,577.44	
Pacific Electric Land Company - Advances	1,665,890.89	
Motor Transit Company	42,000.00	
Harbor Belt Line Road	<u>6,000.00</u>	
Total Advances	\$1,713,890.89	
Total Investments in Affiliated Companies	<u>\$4,309,468.33</u>	

No interest is charged by the Pacific Electric Railway on advances.

Unadjusted Debits

The detail of unadjusted debits for year 1934 follows:

Rents and Insurance Premiums paid in advance	\$ 8,492.86
Discount on Capital Stock	6,350,500.00
Discount on Funded Debt	1,919,576.05
Other Unadjusted Debits	<u>207,139.44</u>
Total Unadjusted Debits	\$8,485,708.35

Capital Stock

The authorized stock issue is \$100,000,000 of common stock divided into 1,000,000 shares of \$100 par value each. All of the stock was issued at the time of

organization, September 1, 1911. Later \$66,000,000 which had been issued to affiliated companies was returned and cancelled, leaving a balance outstanding of \$34,000,000.

All of the stock except for directors qualifying shares is held by Southern Pacific Company.

Grants in Aid of Construction

This account includes the estimated money value at time of acquisition of land and other grants received from states, municipalities, and other public corporations as their contributions toward the construction or acquisition of property the cost of which is chargeable to road and equipment accounts. Grants or donations made by companies or individuals are credited to profit and loss account No. 305, "Donations." Charges to this account represent principally amounts received from public bodies in connection with grade separations, changes in grade, paving, etc.

Bonded Indebtedness

The detail of the present bonded indebtedness is as follows:

<u>Name of Obligation</u>	<u>Character of Obligation</u>	<u>Date of Issue</u>	<u>Date of Maturity</u>	<u>Rate of Interest</u>	<u>Amount Outstanding</u>	<u>Interest Paid & Accrued-1934</u>
Pac.Elec.Ry.Co.	1st Mtge.	3-12-02	1-1-42	5%	\$ 7,888,000	\$ 395,930.70
Cal.Pac.Ry. Co.	1st Mtge.	7-1-01	7-1-41	5	459,000	22,225.00
L.A.-H.B.& Red.Ry.Co.	1st Mtge.	5-1-02	5-1-42	5	74,000	3,750.00
L.A.Pac.R.R.Co.of Cal.	1st & Ref.	9-1-03	9-1-43	5	1,379,000	77,315.80
L.A.Pac.Co.	G.C.Mtge.	3-12-06	1-2-46	5	116,000	13,835.80
L.A.Pac.Co.	1st & Ref.	1-12-10	1-1-50	4	8,298,000	330,860.00
Redlands Central Ry.	1st Mtge.	7-1-07	7-1-37	5	33,000	1,650.00
Pac.Elec.Ry.Co.	Ref.Mtge.	9-1-11	9-1-61	5	32,080,000	1,598,900.00
Ont.& S.A.Hts.R.R.Co.	1st Mtge.	2-1-10	2-1-35	6	78,000	5,214.67
Total					\$50,405,000	\$2,449,681.97

Of the \$50,405,000 of bonds outstanding, \$26,245,000 are owned by Southern Pacific Company and \$24,160,000 are in the hands of the public. The Southern Pacific ownership is as follows:

Los Angeles Pacific Company - 1st Ref. Mtge. 1-12-1910	\$ 1,658,000
Pacific Electric Ry. Company- Refunding Mtge. 9-1-1911	24,544,000
Ontario & San Antonio Hts. R.R. Co. -1st Mtge.2-1-1910	43,000
Total	\$26,245,000

In addition to the above bonds there was outstanding \$98,610 in motor coach purchase obligations.

Due Affiliated Companies

The amount of \$36,631,253.23 shown as due affiliated companies is principally the open account balance due the Southern Pacific Company.

Accrued Depreciation - Road and Equipment

This account has been steadily increasing, totaling \$9,015,020.44 as of December 31, 1934, and is in respect of buildings, rolling stock, and power plant equipment.

Corporate Surplus

As shown, corporate surplus has decreased from \$869,392.43 as of December 31, 1925, to \$(15,956,129.77) on December 31, 1934. In addition, during 1925 an amount of \$14,055,586.27 owing Southern Pacific Company was written off, this being the balance as of December 31, 1924.

SECTION C

BALANCE SHEET

LOS ANGELES MOTOR COACH COMPANY

The operations of the Los Angeles Motor Coach Company are conducted as a joint agency of the Los Angeles Railway Corporation and Pacific Electric Railway Company, and consequently the assets, liabilities, revenues, and expenses of the Los Angeles Motor Coach Company are divided monthly and reflected on the books of the two railway corporations. In conducting the agency certain assets and liabilities are set up, particularly current and unadjusted items. These are as follows:

<u>Assets</u>			<u>As of</u>	<u>Liabilities</u>		
<u>Current Assets</u>	<u>Unadjusted Debits</u>	<u>Total</u>	<u>Dec.31</u>	<u>Current Liabilities</u>	<u>Unadjusted Credits</u>	<u>Total</u>
\$ 37,174.80	\$ 2,540.89	\$ 39,715.69	1923	\$ 39,715.69	\$ -	\$ 39,715.69
37,572.74	4,344.91	41,917.65	1924	41,917.65	-	41,917.65
64,512.78	6,830.75	71,343.53	1925	71,343.53	-	71,343.53
41,038.51	2,549.32	43,587.83	1926	43,587.83	-	43,587.83
57,887.56	107.02	57,994.58	1927	57,994.58	-	57,994.58
131,672.86	559.68	132,232.54	1928	132,232.54	-	132,232.54
195,062.56	945.41	196,007.97	1929	196,007.97	-	196,007.97
139,416.09	418.70	139,834.79	1930	139,834.79	-	139,834.79
118,477.99	122.48	118,600.47	1931	118,600.47	-	118,600.47
119,714.73	132.30	119,847.03	1932	119,480.41	366.62	119,847.03
120,372.55	232.25	120,604.80	1933	120,142.21	462.59	120,604.80
103,692.28	10,097.19	113,789.47	1934	113,159.43	630.04	113,789.47

(a) Including in 1923 only, investment of \$1,405.59.

The investment in Land, Buildings, and Equipment assignable to Los Angeles Motor Coach Company is carried directly on the books of the Los Angeles Railway Corporation and Pacific Electric Railway Company as shown by the following table. Investment in land has increased 19%, buildings 5%, passenger coaches 101%, and other equipment 227%, or in total, 85% from 1924 to 1934. The division of these various classes of property as between the two parent companies is approximately 50% to each, the exact amounts being shown for the year 1934 on the second table following.

As of Dec. 31	Land	Buildings	Passenger Coaches	Other Equipment	Total
1923	\$ -	\$ -	\$ 466,705.06	\$ 7,365.92	\$ 474,070.98
1924	48,625.70	122,404.45	655,132.58	15,251.45	841,414.18
1925	49,425.60	122,865.88	695,798.11	17,141.79	885,231.38
1926	49,597.76	123,939.12	770,824.28	18,171.04	962,532.20
1927	50,823.24	124,136.22	772,987.12	19,782.71	967,729.29
1928	50,823.24	127,770.57	1,169,756.06	39,523.08	1,387,872.95
1929	57,184.09	128,280.92	1,439,349.77	46,513.45	1,671,328.23
1930	57,322.05	128,280.92	1,464,036.81	47,268.94	1,696,908.72
1931	57,817.94	128,280.92	1,374,944.71	48,411.56	1,609,455.13
1932	57,817.94	128,280.92	1,289,739.81	49,145.18	1,524,983.85
1933	57,817.94	128,280.92	1,248,358.02	48,833.88	1,483,290.76
1934	57,817.94	128,712.55	1,319,946.01	49,959.13	1,556,435.63

As of December 31, 1934, the detail of the Investment, Assets and Liabilities follow:

Item	Los Angeles Railway Corp.	Pacific Electric Railway Co.	Los Angeles Motor Coach Co.	Total Assignable to L.A.M.C.Co.
Investment				
Land	\$ 28,926.47	\$ 28,891.47	-	\$ 57,817.94
Buildings	64,572.09	64,140.46	-	128,712.55
Passenger Coaches	684,561.87	635,384.14	-	1,319,946.01
Machinery, Tools, etc.	5,190.85	5,169.60	-	10,360.45
Spare Equipment	3,866.29	3,877.32	-	7,743.61
Fare Boxes	8,381.57	8,217.53	-	16,599.10
Service Cars	5,242.41	5,257.39	-	10,499.80
Furniture and Fixtures	2,378.07	2,378.10	-	4,756.17
Total Investment	<u>\$803,119.62</u>	<u>\$753,316.01</u>	-	<u>\$1,556,435.63</u>
Assets				
Cash	-	-	\$ 41,001.79	\$ 41,001.79
Loans Receivable	-	-	20,000.00	20,000.00
Los Angeles Railway Ac.	-	-	10,713.58	10,713.58
Pacific Electric Railway Ac.	-	-	3,999.47	3,999.47
Accounts Receivable	-	-	3,071.85	3,071.85
Employees Working Funds	-	-	6,175.00	6,175.00
Materials and Supplies	-	-	18,730.59	18,730.59
Insurance Paid in Advance	-	-	902.87	902.87
Other Unadjusted Debits	-	-	9,194.32	9,194.32
Total Assets	-	-	<u>\$113,789.47</u>	<u>\$ 113,789.47</u>
Liabilities				
Los Angeles Railway Ac.	-	-	-	-
Pacific Electric Railway Ac.	-	-	-	-
Audited Accts. and Wages Payable	-	-	113,159.43	113,159.43
Unredeemed Tickets	-	-	566.73	566.73
Other Unadjusted Credits	-	-	63.31	63.31
Total Liabilities	-	-	<u>\$113,789.47</u>	<u>113,789.47</u>

CHAPTER VIII

INCOME STATEMENTS

In presenting the Income Statement for the properties considered in this study, the chapter has been divided into the following sections:

- A. Income and Profit and Loss Statement for Los Angeles Railway Corporation
- B. Statement of Receipts and Disbursements for Los Angeles Railway Corporation
- C. System Income Statement for Pacific Electric Railway Company
- D. System Profit and Loss Statement for Pacific Electric Railway Company
- E. System Revenues - Pacific Electric Railway Company
- F. System Expenses - Pacific Electric Railway Company
- G. Segregation of Revenues and Expenses to Local Lines - Pacific Electric Railway Company
- H. Income Statement - Los Angeles Motor Coach Company

As will be explained, the City Railway Company and a share of the Los Angeles Motor Coach Company are included in the Los Angeles Railway Corporation Statements. Of necessity the Pacific Electric Railway Income Statements include all of its operations, both local and interurban passenger and freight, as well as its share of the Los Angeles Motor Coach Company. Certain further statements showing System Revenue and System Expense are shown, together with a segregation of these items as between the several operations of the Pacific Electric Railway. Finally, a statement covering the Los Angeles Motor Coach Company as an operating unit is presented.

SECTION A

INCOME AND PROFIT AND LOSS STATEMENT

LOS ANGELES RAILWAY CORPORATION

The Los Angeles Railway Corporation Consolidated Statement of Income and Profit and Loss includes operations of both that company and the City Railway Company and one-half of the joint agent, the Los Angeles Motor Coach Company. Interest on Funded Debt in amount of \$140,650 for the year ending December 31, 1934, is the only item on the statement which involves the City Railway Company. Therefore, a separate income statement for each of the two companies will not be shown. A separate set of books is kept for the City Railway Company, and inasmuch as certain of the physical properties are owned by that company, expenditures on additions and betterments as recorded on the books are

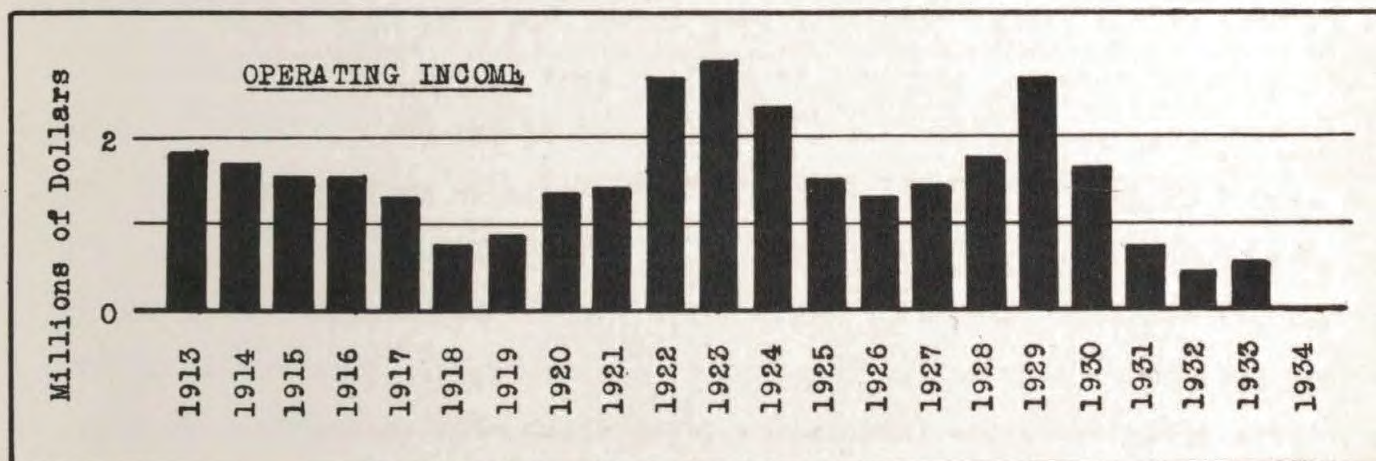
segregated. However, the City Railway Company books do not show any operating revenues or operating costs.

The following summary statement shows operating income as reflected by the company's records from 1913 to 1934, inclusive, and the detail by years from 1920 to 1934 is shown by the accompanying table.

Total Operating Income

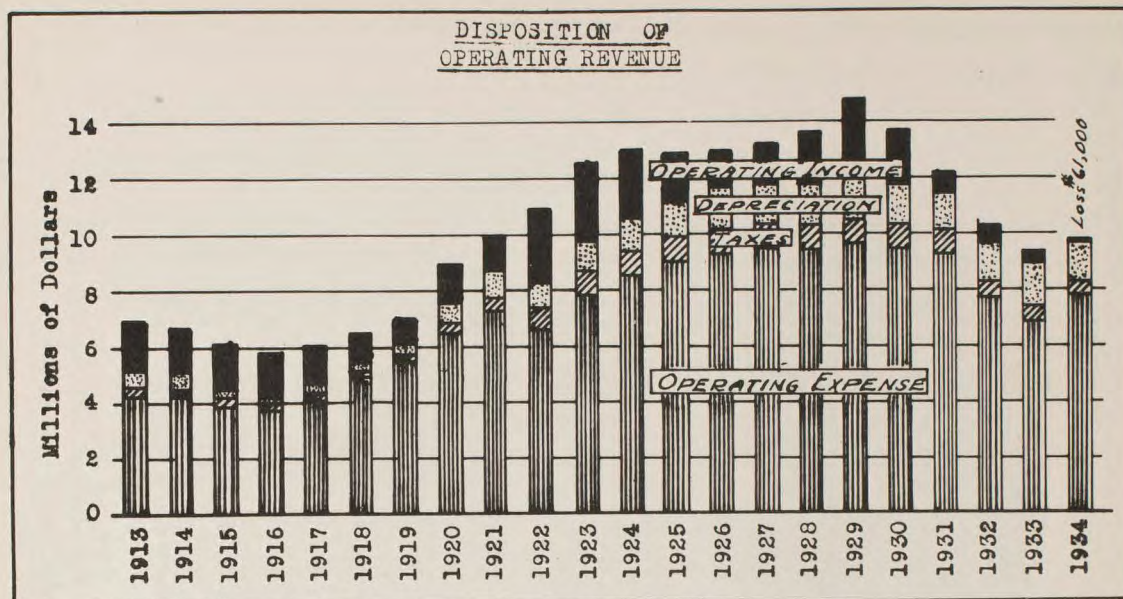
Year	Operating Expense	Depreciation	Taxes	Total Expense	Operating Revenue	Operating Income
1913	\$ 4,390,095	\$ 489,851	\$ 308,919	\$ 5,188,865	\$ 7,005,945	\$ 1,817,080
1914	4,211,030	473,225	369,600	5,053,855	6,756,214	1,702,359
1915	3,954,540	245,515	379,218	4,579,273	6,135,215	1,555,942
1916	3,713,941	236,552	349,222	4,299,715	5,861,832	1,562,117
1917	4,063,219	430,360	348,100	4,841,679	6,145,736	1,304,057
1918	4,989,723	460,635	338,800	5,789,158	6,577,639	788,481
1919	5,579,541	518,234	373,800	6,471,575	7,336,550	864,975
1920	6,515,871	730,813	396,000	7,642,684	9,032,292	1,389,608
1921	7,316,897	915,680	480,000	8,712,577	10,121,517	1,408,940
1922	6,646,205	977,442	809,000	8,432,647	11,118,874	2,686,227
1923	7,833,106	1,082,383	832,726	9,748,215	12,645,435	2,897,220
1924	8,575,060	1,279,387	868,054	10,722,501	13,097,426	2,374,925
1925	9,040,893	1,466,496	820,316	11,327,705	12,852,119	1,524,414
1926	9,365,098	1,565,900	807,925	11,738,923	13,021,482	1,282,559
1927	9,503,632	1,558,381	814,348	11,876,361	13,287,600	1,411,239
1928	9,431,621	1,570,954	833,675	11,836,250	13,626,231	1,789,981
1929	9,659,033	1,563,829	997,391	12,220,253	14,874,309	2,654,056
1930	9,553,016	1,585,122	953,714	12,091,852	13,732,651	1,640,799
1931	9,239,154	1,446,928	812,865	11,498,947	12,229,222	730,275
1932	7,777,217	1,457,810	678,295	9,913,322	10,338,587	425,265
1933	6,811,465	1,455,699	598,368	8,865,532	9,464,252	598,720
1934	7,842,441	1,433,217	589,410	9,865,068	9,804,744	(60,324)
Total	\$156,012,798	\$22,944,413	\$13,759,746	\$192,716,957	\$225,065,872	\$32,348,915

The following chart shows Operating Income over a period of twenty-two years.



In comparing the operating income and depreciation charges shown above, with those shown later for the Pacific Electric Railway, consideration should be given to the differences in methods of accounting for depreciation and gasoline tax.

The following chart shows in graphic form the disposition of operating revenues from 1913 to 1934, inclusive.



The chart shows operating revenues as declining from about seven million dollars in 1913 to six million in 1916; then there was a rapid uniform increase to thirteen million in 1924, with a slight decrease in 1925, followed by a gradual increase to over thirteen million in 1928. In 1929, the peak year, the revenue increased to near fifteen million, followed by a rapid descent to \$9,400,000 in 1933. The trend again changed in 1934 with a revenue of \$9,805,000, or 3.5% higher than 1933. The results from 1935 to date show a still further increase.

Operating income (operating revenue less operating expenses, taxes and depreciation) was at its peak in the years 1922, 1923, and 1929, with over \$2,500,000 net income in each of the years. The only year in which a loss is shown is 1934 when, in spite of increased revenue, compared to 1933, a loss of \$60,000 was incurred.

Operating revenue reached a peak in 1929 of \$14,874,309 and the revenue for 1934 in amount of \$9,804,744 is approximately the same as that for the year 1921. Operating expenses, however, were about \$1,000,000 higher than for the year 1921, being about on a par with the year 1923. The years 1922, 1923, and 1924 were the most prosperous for the company during the period in which the 5¢ fare was in effect. The year 1929 was effected by the increase of fares which went into effect in 1928, to the extent of increasing net operating income to a level almost equal to that of 1922. However, the effects of decreased patronage due to that increase of fares became evident in the years 1930 and 1931, which, of course, was augmented by the decrease in patronage brought on by the world-wide "Depression".

CONSOLIDATED INCOME AND PROFIT AND LOSS STATEMENT
LOS ANGELES RAILWAY CORPORATION AND CITY RAILWAY COMPANY OF LOS ANGELES
Including Rail and Coach Divisions
and
Share of Los Angeles Motor Coach Company
By Calendar Years - 1920 to 1934, inclusive

	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934
INCOME STATEMENT															
Passenger Revenue	\$ 8,980,243.35	\$ 10,065,714.66	\$ 10,989,500.85	\$ 12,511,260.47	\$ 12,951,846.24	\$ 12,708,733.45	\$ 12,879,916.90	\$ 13,157,277.78	\$ 13,499,453.95*	\$ 14,746,890.76	\$ 13,613,947.32	\$ 12,111,834.67	\$ 10,266,246.60	\$ 9,336,144.08	\$ 9,707,138.66
Other Revenue from Transportation	7,808.12	7,040.41	8,985.46	9,606.00	9,839.74	8,925.12	7,202.06	4,111.27	3,154.53	4,008.41	2,675.34	2,494.23	1,768.72	1,692.05	1,355.76
Revenue from Other Rail & Coach Operations	44,241.07	48,761.78	120,387.61	124,569.47	135,739.74	134,460.16	134,363.50	126,211.65	123,622.43	123,410.37	116,028.47	114,893.55	70,572.16	126,415.73	96,250.19
Operating Revenue	\$ 9,032,292.54	\$ 10,121,516.85	\$ 11,118,873.92	\$ 12,645,435.94	\$ 13,097,425.72	\$ 12,852,118.73	\$ 13,021,482.46	\$ 13,287,600.70	\$ 13,626,230.91	\$ 14,874,309.54	\$ 13,732,651.13	\$ 12,229,222.45	\$ 10,338,587.48	\$ 9,464,251.86	\$ 9,804,744.61
Operating Expenses	\$ 6,515,870.60	\$ 7,316,897.37	\$ 6,646,204.69	\$ 7,833,106.90	\$ 8,575,060.27	\$ 9,040,893.52	\$ 9,365,098.95	\$ 9,503,632.11	\$ 9,431,620.91	\$ 9,659,032.61	\$ 9,553,016.24	\$ 9,239,153.64	\$ 7,777,216.55	\$ 6,811,465.42	\$ 7,842,441.03
Depreciation	(a) 835,712.74	915,679.99	977,442.00	1,082,383.36	1,279,386.83	1,466,495.66	1,565,899.62	1,558,380.73	1,570,954.15	1,563,828.75	1,585,121.71	1,446,927.79	1,457,810.21	1,455,698.72	1,433,217.11
Total Operating Expenses	\$ 7,351,583.34	\$ 8,232,577.36	\$ 7,623,646.69	\$ 8,915,490.26	\$ 9,854,447.10	\$ 10,507,389.18	\$ 10,930,998.57	\$ 11,062,012.84	\$ 11,002,575.06	\$ 11,222,861.36	\$ 11,138,137.95	\$ 10,686,081.43	\$ 9,235,026.76	\$ 8,267,164.14	\$ 9,275,658.14
Net Operating Revenue	\$ 1,680,709.20	\$ 1,888,939.49	\$ 3,495,227.23	\$ 3,729,945.68	\$ 3,242,978.62	\$ 2,344,729.55	\$ 2,090,483.89	\$ 2,225,587.86	\$ 2,623,655.85	\$ 3,651,448.18	\$ 2,594,513.18	\$ 1,543,141.02	\$ 1,103,560.72	\$ 1,197,087.72	\$ 529,086.47
Taxes	\$ 396,000.00	\$ 480,000.00	\$ 809,000.00	\$ 832,726.36	\$ 868,054.40	\$ 820,315.51	\$ 807,925.78	\$ 814,347.48	\$ 833,675.21	\$ 997,391.58	\$ 953,713.89	\$ 812,865.87	\$ 678,295.05	\$ 598,367.80	\$ 589,410.29
Operating Income	\$ 1,284,709.20	\$ 1,408,939.49	\$ 2,686,227.23	\$ 2,897,219.32	\$ 2,374,924.22	\$ 1,524,414.04	\$ 1,282,558.11	\$ 1,411,240.38	\$ 1,789,980.64	\$ 2,654,056.60	\$ 1,640,799.29	\$ 730,275.15	\$ 425,265.67	\$ 598,719.92	\$ (60,323.82)
Income From Sinking Funds	\$ 116,229.18	\$ 139,727.93	\$ 155,810.16	\$ 147,670.87	\$ 170,437.05	\$ 182,589.62	\$ 210,140.53	\$ 214,311.27	\$ 247,014.52	\$ 270,097.35	\$ 307,010.68	\$ 365,280.65	\$ 368,496.51	\$ 469,511.09	\$ 418,367.61
Miscellaneous Income	6,195.53	4,478.11	19,644.70	5,416.60	3,382.81	1,900.93	1,039.74	456.96	707.74	6,812.19	2,851.91	2,772.54	1,782.89	252.97	183.41
Interest	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9,521.19
Non-Operating Income	\$ 122,424.71	\$ 144,206.04	\$ 175,454.86	\$ 153,087.47	\$ 173,819.86	\$ 184,490.55	\$ 211,180.27	\$ 214,768.23	\$ 247,722.26	\$ 276,909.54	\$ 309,862.59	\$ 368,053.19	\$ 370,279.40	\$ 469,764.06	\$ 428,072.21
Gross Income	\$ 1,407,133.91	\$ 1,553,145.53	\$ 2,861,682.09	\$ 3,050,306.79	\$ 2,548,744.08	\$ 1,708,904.59	\$ 1,493,738.38	\$ 1,626,008.61	\$ 2,037,702.90	\$ 2,930,966.14	\$ 1,950,661.88	\$ 1,098,328.34	\$ 795,545.07	\$ 1,068,483.98	\$ 367,748.39
Rent for Leased Road	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Miscellaneous Rents	-	-	56,160.00	16,830.91	7,448.60	1,050.00	1,050.00	1,050.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Miscellaneous Taxes	-	-	-	-	-	-	-	9,918.05	8,882.07	7,766.35	7,491.13	6,050.11	5,503.70	4,464.09	3,481.86
Interest on Funded Debt	1,202,400.00	1,202,400.00	1,219,150.00	1,242,600.00	1,242,600.00	1,242,600.00	1,242,600.00	1,242,600.00	1,228,250.43	1,222,687.49	1,220,757.08	1,218,675.97	1,107,055.00	1,104,793.62	1,100,983.04
Interest on Unfunded Debt	30,282.95	22,722.16	79,083.13	113,937.86	159,422.38	273,348.04	222,704.10	236,542.40	257,753.78	217,112.68	179,749.89	163,569.11	159,514.10	148,152.94	138,363.25
Miscellaneous Deductions	-	-	-	-	-	-	-	-	-	-	-	5,418.06	1,888.83	-	55.25
Total Deductions from Gross Income	\$ 1,232,682.95	\$ 1,225,122.16	\$ 1,354,393.13	\$ 1,373,368.77	\$ 1,409,470.98	\$ 1,516,998.04	\$ 1,466,354.10	\$ 1,490,110.45	\$ 1,494,986.28	\$ 1,447,666.52	\$ 1,408,098.10	\$ 1,393,813.25	\$ 1,274,061.63	\$ 1,257,510.65	\$ 1,242,983.40
Net Income to Profit and Loss	\$ 174,450.96	\$ 328,023.37	\$ 1,507,288.96	\$ 1,676,938.02	\$ 1,139,273.10	\$ 191,906.55	\$ 27,384.28	\$ 135,898.16	\$ 542,716.62	\$ 1,483,299.62	\$ 542,563.78	\$ (295,484.91)	\$ (478,516.56)	\$ (189,026.67)	\$ (875,235.01)
PROFIT AND LOSS STATEMENT															
Net Income for Year	\$ 174,450.96	\$ 328,023.37	\$ 1,507,288.96	\$ 1,676,938.02	\$ 1,139,273.10	\$ 191,906.55	\$ 27,384.28	\$ 135,898.16	\$ 542,716.62*	\$ 1,483,299.62	\$ 542,563.78	\$ (295,484.91)	\$ (478,516.56)	\$ (189,026.67)	\$ (875,235.01)
Sinking Fund Appropriations	320,495.01	342,610.44	359,730.16	383,771.90	390,437.05	442,964.62	454,540.53	461,711.27	467,014.52	491,407.35	528,138.18	588,380.09	495,781.51	661,071.09	557,319.87
Sub-total	(146,044.05)	(14,587.07)	1,147,558.80	1,293,166.12	748,836.05	(251,058.07)	(427,156.25)	(325,813.11)	75,702.10	991,892.27	14,425.60	(883,865.00)	(974,298.07)	(820,097.76)	(1,432,554.88)
Miscellaneous Credits	12,627.10	3,035.93	8,421.62	7,497.19	63,336.16	153,479.42	31,401.64	166,489.25	97,457.38	57,322.47	310,547.52	173,858.81	139,088.23	83,340.80	77,693.00
Sub-total	(133,416.95)	(11,551.14)	1,155,980.42	1,300,663.31	812,172.21	(97,578.65)	(395,754.61)	(159,323.86)	173,159.48	1,049,214.74	324,973.12	(710,006.19)	(835,209.84)	(736,756.96)	(1,354,861.88)
Miscellaneous Debits	8,651.33	178,499.83	3,932.88	7,370.51	47,152.35	22,036.96	26,481.90	13,131.51	5,479.10	42,280.14	58,731.57	55,732.83	52,065.60	24,930.14	36,338.17
Profit and Loss Balance for Year	(142,068.28)	(190,050.97)	1,152,047.54	1,293,292.80	765,019.86	(119,615.61)	(422,236.51)	(172,455.37)	167,680.38	1,006,934.60	266,241.55	(765,739.02)	(887,275.44)	(761,687.10)	(1,391,200.05)
Balance at Beginning of Year	(937,845.37)	(1,079,913.65)	(1,269,964.62)	(117,917.08)	1,175,375.72	1,940,395.58	1,820,779.97	1,398,543.46	1,226,088.09	1,393,768.47	2,400,703.07	2,666,944.62	1,901,205.60	1,013,930.16	252,243.06
Balance at End of Year	\$ (1,079,913.65)	\$ (1,269,964.62)	\$ (117,917.08)	\$ 1,175,375.72	\$ 1,940,395.58	\$ 1,820,779.97	\$ 1,398,543.46	\$ 1,226,088.09	\$ 1,393,768.47	\$ 2,400,703.07	\$ 2,666,944.62	\$ 1,901,205.60	\$ 1,013,930.16	\$ 252,243.06	\$ (1,138,956.99)

(Red Figures)

* Includes \$451,068.22 account of Refund Slips, credited to Profit and Loss in 1929.
(a) Includes \$104,900.00 applying to 1917 as allowed by Department of Internal Revenue.

Operating Income for the year 1934 segregated between Rail, Motor Coach Division, and share of Los Angeles Motor Coach Company is shown below.

	<u>Operating Income</u>			
	Year 1934			
	<u>Rail</u>	<u>Coach Division</u>	<u>Share of L.A.M.C.Co.</u>	<u>Total</u>
Operating Revenue:				
Passenger	\$8,206,843.80	\$839,750.85	\$660,544.01	\$9,707,138.66
Other Transportation	1,355.76	-	-	1,355.76
Other Operations	92,788.98	8,207.67	3,908.90	104,905.55
Inter-Company eliminations	(8,545.30)	-	(110.06)	(8,655.36)
Total Operating Revenue	\$8,292,443.24	\$847,958.52	\$664,342.85	\$9,804,744.61
Operating Expense:				
Way and Structures	506,408.19	-	-	506,408.19
Equipment	615,048.18	214,509.94	107,775.45	937,333.57
Power	776,626.16	-	-	776,626.16
Traffic	60,573.12	527.27	268.24	61,368.63
Conducting Transportation	3,407,232.86	532,733.13	309,783.48	4,249,749.47
General & Miscellaneous	1,142,481.93	102,227.78	74,900.66	1,319,610.37
Sub Total	\$6,508,370.44	\$849,998.12	\$492,727.83	\$7,851,096.39
Inter-Company eliminations	-	(110.06)	(8,545.30)	(8,655.36)
Depreciation*	1,306,258.08	86,599.86	40,359.17	1,433,217.11
Total Operating Expense	\$7,814,628.52	\$936,487.92	\$524,541.70	\$9,275,658.14
Net Revenue	486,360.02	(88,639.46)	131,365.91	529,086.47
Taxes	467,903.57	71,436.88	50,069.84	589,410.29
Operating Income	\$ 18,456.45	\$(160,076.34)	\$ 81,296.07	\$(60,323.82)

*Straight Line Basis

OPERATING REVENUE

Operating revenue for the year 1934 amounted to \$9,804,744.61, of which \$9,707,138.66 represented passenger revenue, \$96,250.19 revenue from other rail and coach operations, and \$1,355.76 other revenue from transportation, passenger revenue making up 95% of the total. Revenues are discussed in detail in the following chapter.

OPERATING EXPENSE, DEPRECIATION AND TAXES

Operating expenses followed closely the same general trend as operating revenue, although the yearly fluctuations are not as great as those of revenue. In the year 1934 expenses increased about \$1,000,000 over the previous year, due largely to strike conditions and increased service. A complete analysis of operating expense, depreciation and taxes is presented later in this report.

OTHER INCOME ACCOUNTS

Other income accounts, which are shown in detail on the Income Statement

accompanying this chapter, comprise various items which are analyzed for the year 1934 in the following paragraphs.

Income from Sinking Fund

This item represents income accrued on amounts held in sinking funds totaling \$5,439,603.37, and for the year 1934 amounted to \$418,367.61.

Interest (Earned)

This item of \$9,521.19 represents interest on \$400,000 deposited in savings account.

Miscellaneous Rents

The company rents land on Whittier Boulevard for which the annual charge is \$100.

Interest on Funded Debt

Interest accrued on funded debt for the year 1934 amounted to \$1,100,983.04. The following tabulation shows the bonds to which the interest applied.

	<u>Bonds</u>	<u>Interest</u>
Corporation Bonds	\$14,880,000.00	\$ 744,000.00
Traction Co. Bonds	250,000.00	12,500.00
Company Bonds	4,091,000.00	153,412.50
Company Bonds	4,027,000.00	50,420.54
City Rlwy. Co. Bonds	<u>5,000,000.00</u>	<u>140,650.00</u>
	\$28,248,000.00	\$1,100,983.04

Interest on Unfunded Debt

During the year 1934 an amount of \$138,363.25 was expended to cover interest on the floating debt, as follows:

Huntington Land & Improvement Co.	\$ 92,983.66
Redondo Improvement Co.	5,583.33
Estate of H. E. Huntington	39,229.12
5 Miscellaneous Items	<u>567.14</u>
	\$138,363.25

Sinking Fund Appropriations

The item of \$557,319.87 appropriated from surplus for the sinking fund is to be applied to -

Los Angeles Railway Corp. Bonds	\$493,367.61
Los Angeles Railway Company Bonds	<u>63,952.26</u>
	\$557,319.87

Miscellaneous Credits

Miscellaneous credits totaling \$77,693.00 consisted of items as follows:

Retirement of Autos & Trucks	\$ 1,041.78
Poles moved due to improvements	363.04
Donations to Co. - Ramona Blvd. Improvement	19,808.00
Bonds Bought - Corporation	32,325.00
" " - Company	17,706.80
Refund - Insurance	3,254.94
Inventory	1,010.18
Miscellaneous	974.38
Restaurant	<u>1,208.88</u>
	\$77,693.00

The above items represent profit on road and equipment sold by reason of excess sale price over the amount at which the property was carried in road and equipment account at the time of sale; donations to company of cash or property; transfers from other accounts to Profit and Loss; and amounts representing increases of resources not properly assignable to the income accounts of the fiscal period for which the accounts are stated.

Miscellaneous Debits

These charges represent items of property sold or otherwise retired and not replaced, amounts not provided for elsewhere by the uniform classification, amounts chargeable to Profit and Loss from other accounts, amounts written off in consequence of adjustments, and payments not properly chargeable to the income accounts of the fiscal period for which the accounts are stated.

Charges of this nature in amount of \$36,338.17 were made during the year 1934 as follows:

Retirements - Grading, etc.	\$ 7,797.52
Abandonment	210.00
Special Work in Supplies - scrapped	19,853.38
Operating Rights - East Side Transit Co.	8,050.00
Miscellaneous	<u>427.27</u>
	\$36,338.17

Profit and Loss balance as of December 31, 1934, was a deficit of \$1,138,956.99, being the first such occurrence since 1922.

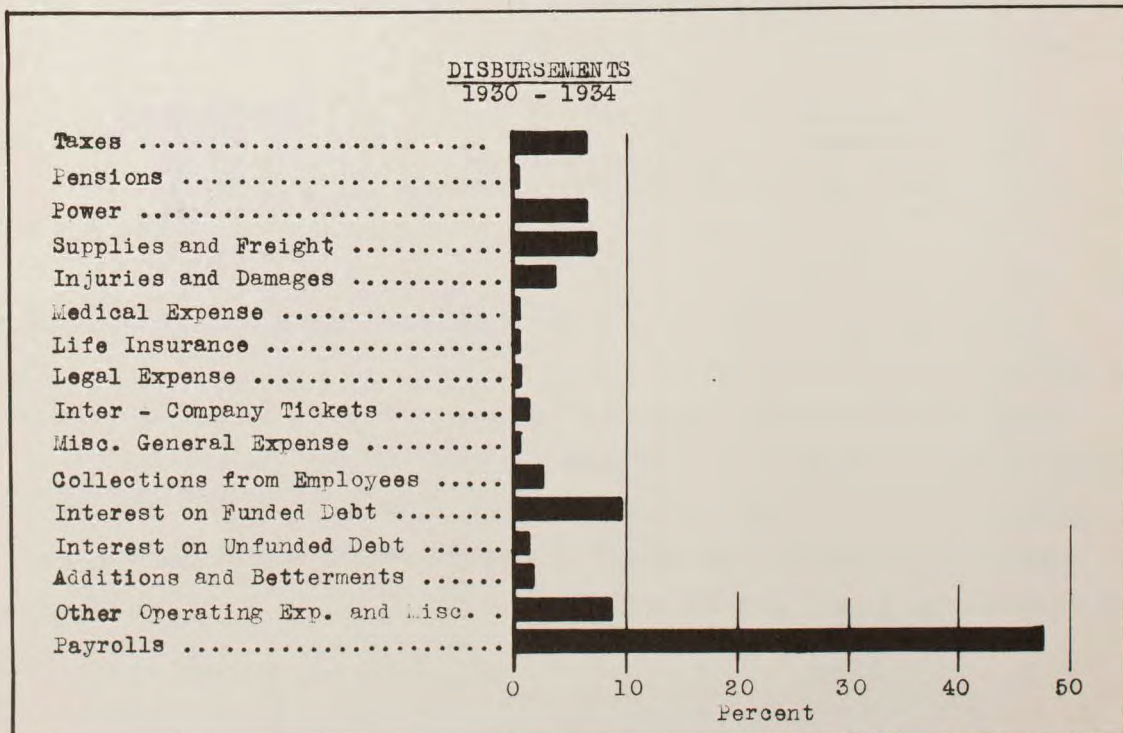
Net income to Profit and Loss for the year 1934 was a deficit of \$875,235.01 as against deficits for the years 1931, 1932 and 1933, of \$295,484.91, \$478,516.56, and \$189,026.67, respectively. The noticeable difference between 1933 and 1934 was in operating expenses which were about \$1,000,000 greater in 1934 than 1933, with revenues being correspondingly only \$340,000 greater.

SECTION B

RECEIPTS AND DISBURSEMENTS

LOS ANGELES RAILWAY CORPORATION

The accompanying table shows actual receipts and disbursements during the years 1930 to 1934, inclusive. For the year of 1934 there was a deficit of \$274,522.56, being responsible to a large extent to the out-of-pocket cost in connection with the strike and also to the purchase of motor coaches during the last three months of the year. The statement includes all monies paid out for any and all purposes including capital expenditures as well as operation and maintenance. In this respect the statement differs from that of Income and Profit and Loss. Referring to the totals as shown on the table for the five year period, it will be noted that 90.6% of the receipts were derived from revenues collected by agents and conductors. Of the disbursements, 47.5% represented payrolls, including both capital additions and betterments, and maintenance and operation. Next in importance was interest on funded debt, being 9.7% of the total. Supplies and freight represented 7.3%, power 6.8%, taxes 6.8%, and injuries and damages 3.8%. The item shown as Other Operating Expenses and Miscellaneous, representing 8.9% of the total, is made up of a great number of items, the greater portion of which represents operating expenses, the total of which has been shown elsewhere in the report.



LOS ANGELES RAILWAY CORPORATION

RECEIPTS AND DISBURSEMENTS

RAIL, MOTOR COACH, AND SHARE OF L.A.M.C.CO.

	<u>1930</u>	<u>1931</u>	<u>1932</u>	<u>1933</u>	<u>1934</u>	<u>Total</u>	<u>Percent</u>
<u>RECEIPTS:</u>							
Agents and Conductors	\$12,889,568.31	\$11,410,794.73	\$ 9,617,914.30	\$8,720,132.34	\$ 9,064,526.47	\$51,702,936.15	90.6
P.E. Rlwy. Tickets	-	-	2,260.75	4,866.03	30,957.49	38,084.27	.1
L.A.M.C. Co.	179,790.54	170,588.95	559,442.72	517,218.88	500,505.41	1,927,546.50	3.4
Provident Fund	126,919.80	90,269.30	92.70	-	-	217,281.80	.4
Other Accts.Receivable	726,300.29	754,386.05	313,617.79	53,338.25	116,142.08	1,963,784.46	3.4
Miscellaneous	324,792.77	333,865.18	266,233.10	168,848.85	102,326.01	1,196,065.91	2.1
Total Receipts	\$14,247,371.71	\$12,759,904.21	\$10,759,561.36	\$9,464,404.35	\$ 9,814,457.46	\$57,045,699.09	100.0
<u>DISBURSEMENTS:</u>							
Payrolls	6,636,597.13	6,352,792.83	4,969,449.49	4,435,123.41	4,951,166.45	27,345,129.31	47.5
Pensions	30,576.77	42,318.47	51,413.33	56,719.88	56,702.53	237,730.98	.4
Power	918,940.60	822,261.38	751,813.41	711,544.19	699,551.69	3,904,111.27	6.8
Supplies & Freight	1,229,025.62	1,044,715.20	665,013.21	543,531.90	734,311.55	4,216,597.48	7.3
Injuries & Damages	376,331.24	586,684.23	437,573.21	355,689.78	420,210.98	2,176,489.44	3.8
Medical Expense	89,452.23	51,617.60	29,308.69	12,886.45	18,219.46	201,484.43	.4
Group Life Insurance	34,758.52	69,905.62	66,851.92	42,482.90	45,560.72	259,559.68	.5
Legal	60,082.94	97,053.71	106,499.64	95,010.96	94,650.81	453,298.06	.8
Inter-Company Tickets	157,218.29	150,872.30	146,924.66	126,833.36	165,326.53	747,175.14	1.3
Miscel.General Expense	80,346.54	62,102.71	43,477.15	38,859.06	28,392.34	253,177.80	.4
Taxes	1,093,779.97	904,264.09	680,493.94	604,277.13	602,754.56	3,885,569.69	6.8
Interest on Funded Debt	1,221,150.00	1,221,257.64	1,022,550.00	1,054,300.00	1,051,698.05	5,570,955.69	9.7
Int. on Unfunded Debt	158,944.35	178,218.46	139,973.75	151,998.54	75,452.73	704,587.83	1.2
Additions & Betterments	231,939.58	385,302.60	122,507.51	63,898.33	170,950.96	974,598.98	1.7
Other Oper.Exp.& Miscel.	1,902,531.63	892,440.27	925,831.66	603,633.38	800,189.21	5,124,626.15	8.9
Collections from Emps.	297,946.99	411,423.42	399,022.90	169,707.46	173,841.45	1,451,942.22	2.5
Total Disbursements	\$14,519,622.40	\$13,273,230.53	\$10,558,704.47	\$9,066,496.73	\$10,088,980.02	\$57,507,034.15	100.0
Net Receipts	(272,250.69)	(513,326.32)	200,856.89	397,907.62	(274,522.56)	(461,335.06)	
Funds beginning of Year	978,200.80	705,950.11	192,623.79	393,480.68	791,388.30		
Funds end of Year	705,950.11	192,623.79	393,480.68	791,388.30	516,865.74		

Red Figure ()

SECTION C
SYSTEM INCOME STATEMENT
PACIFIC ELECTRIC RAILWAY

An income statement in summary form has been prepared for the period of 1916 to 1934, inclusive. The statement covers all operations of the company, including freight and interurban passenger operations and non-operating activities:

Year	Operating Revenue	Operating Expenses	Taxes	Operating Income	Mon Operating Income	Deduction from income	Net to Profit & Loss
1916	\$ 8,664,467	\$ 5,886,782	\$ 515,862	\$2,261,823	\$ 52,567	\$3,296,849	\$(982,459)
1917	9,267,130	6,257,982	518,835	2,490,313	65,730	3,441,159	(885,116)
1918	10,331,916	8,050,049	589,678	1,692,189	150,974	3,591,354	(1,748,191)
1919	11,278,016	9,808,720	571,524	897,772	134,824	3,800,322	(2,767,726)
1920	15,346,346	11,982,546	649,389	2,714,411	91,432	3,963,888	(1,158,045)
1921	17,096,117	13,097,725	805,968	3,192,424	104,382	4,096,439	(799,633)
1922	18,307,733	13,842,515	923,011	3,542,207	98,215	4,216,411	(575,989)
1923	21,641,554	16,164,458	1,013,344	4,463,752	216,292	4,349,129	330,915
1924	20,729,483	15,932,545	1,082,587	3,714,351	292,145	4,596,334	(589,838)
1925	19,514,325	15,976,044	1,181,699	2,356,582	539,355	2,938,375	(42,438)
1926	19,111,164	16,404,651	1,143,352	1,563,161	381,788	3,040,982	(1,096,033)
1927	19,614,541	16,351,455	1,113,665	2,149,421	243,797	2,989,922	(596,704)
1928	18,310,988	15,876,041	1,138,742	1,296,205	384,522	2,913,780	(1,233,053)
1929	18,417,335	15,499,321	1,112,611	1,805,403	376,658	2,897,622	(715,561)
1930	15,692,360	13,998,914	1,082,934	610,512	331,484	2,911,818	(1,967,822)
1931	13,281,619	12,051,266	938,165	292,188	220,868	2,767,543	(2,254,487)
1932	10,533,656	9,969,189	685,621	(121,154)	197,125	2,673,516	(2,597,545)
1933	9,062,840	8,639,789	580,037	(156,986)	193,486	2,650,902	(2,614,402)
1934	9,004,701	8,833,514	494,998	(323,811)	159,146	2,614,657	(2,779,322)

Gross revenue reached a peak in 1923 of \$21,641,000 and the present revenues of approximately \$9,000,000 approximate the revenue of the pre-war period.

SECTION D
SYSTEM PROFIT AND LOSS STATEMENT
PACIFIC ELECTRIC RAILWAY

The profit and loss statement for the year 1934 showing the corporate results for that year follows:

Balance beginning of year		\$ (14,494,849.73)
Credits:		
Transferred from Income Account	\$ (2,779,322.18)	
Profit on Road & Equipment Sold	(40,143.34)	
Donations	2,180.47	
Miscellaneous Credits	59,154.70	
Total Credits		(2,758,130.35)
Debits:		
Appropriation of Surplus for		
Investment in Physical Property	2,180.47	
Loss on Road & Equipment Retired	203,482.12	
Delayed Income Debits	191,234.07	
Miscellaneous Debits	35,504.13	
Total Debits		432,400.79
Balance end of year		\$ (17,685,380.87)

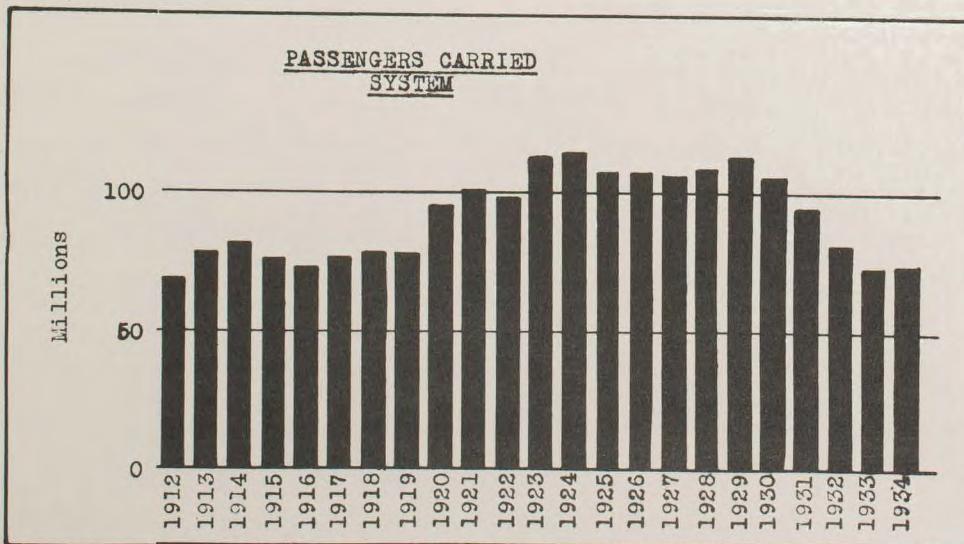
SECTION E

SYSTEM REVENUE

PACIFIC ELECTRIC COMPANY

A comparative revenue statement follows, which shows that passenger revenue in percent of total revenue has increased from 65% in 1926 to 70% in 1934. Freight revenues have decreased at a more rapid rate than passenger revenues, the former representing about 22% of the company's total revenue and the latter about 70% in 1934.

Acct. No.	Classification	1926		1930		1934	
		Amount	Percent	Amount	Percent	Amount	Percent
101	Passenger Revenue	\$12,324,394	64.49%	\$10,689,197	68.12%	\$6,259,966	69.52%
102	Baggage Rev.	4,700	.02	4,909	.03	5,389	.06
103	Special Car Rev.	6,607	.03	22,404	.14	14,439	.16
104	Mail Rev.	89,840	.47	102,660	.65	84,967	.94
105	Express Rev.	236,582	1.24	245,859	1.57	124,533	1.38
106	Milk Rev.	-	-	-	-	2,274	.03
107	Freight Rev.	5,795,491	30.32	3,768,485	24.01	1,979,473	21.98
108	Switching Rev.	264,895	1.39	84,050	.54	70,003	.78
109	Miscellaneous Rev.	12,831	.07	9,015	.06	3,209	.04
Total Rev. from Transp.		18,735,340	98.03	14,926,579	95.12	8,544,253	94.89
110	Station & Car Priv.	163,577	.86	194,165	1.24	95,027	1.06
111	Parcel Room Rents.	2,995	.02	4,353	.03	13,416	.15
112	Storage Rev.	9,238	.05	6,168	.04	1,278	.01
113	Demurrage	49,663	.26	15,038	.09	5,871	.07
114	Telephone Service	891	.01	699	.00	569	.01
115	Rent of Tracks & Fac.	8,077	.04	54,489	.35	33,224	.37
116	Rent of Equipment	80,989	.42	75,615	.48	79,703	.88
117	Rent of Bldgs., etc.	44,283	.23	401,990	2.56	223,764	2.48
118	Power	7,510	.04	7,110	.05	5,881	.06
119	Miscellaneous	8,601	.04	6,154	.04	1,718	.02
Total Rev.-Other Ry. Oper.		375,824	1.97	765,781	4.88	460,451	5.11
Total Ry. Oper. Revenues		\$19,111,164	100.00	\$15,692,360	100.00	\$9,004,704	100.00



An interesting analysis is provided in the following statement of passengers, revenue and car miles and derived data:

Passenger Revenue (Acct. No. 101)

Year	Total Passengers	Fare Passengers	Car Miles	Passenger Revenue (a)	Revenue Per Fare Passenger	Revenue Per Car Mile
1912	69,751,537	60,841,521	23,780,821	6,677,289	11.0	28.1
1913	78,803,806	68,686,203	26,169,388	7,328,047	10.7	28.0
1914	82,084,424	70,678,719	26,553,127	7,366,661	10.4	27.7
1915	76,070,474	64,719,754	26,362,589	6,893,205	10.6	26.1
1916	73,460,248	61,861,184	24,955,904	6,309,086	10.2	25.3
1917	76,696,999	65,028,315	26,898,331	6,730,706	10.3	25.0
1918	79,427,398	67,915,099	28,100,931	7,470,801	11.0	26.6
1919	78,454,065	68,279,676	25,455,989	8,122,870	11.9	31.9
1920	96,290,906	84,492,581	28,092,753	10,829,804	12.8	38.5
1921	101,617,806	88,639,486	28,912,254	11,956,812	13.5	41.4
1922	99,896,776	88,124,305	28,903,363	12,885,131	14.6	44.6
1923	113,134,117	100,073,544	31,208,881	14,516,318	14.5	46.5
1924	115,420,268	100,907,063	33,018,755	13,677,320	13.5	41.4
1925	108,955,939	94,752,809	32,082,087	12,592,345	13.3	39.2
1926	108,085,378	92,837,726	31,668,421	12,324,394	13.3	38.9
1927	107,356,816	91,628,084	31,402,540	12,166,609	13.3	38.7
1928	109,967,444	93,764,255	32,012,753	11,512,304	12.3	36.0
1929	113,880,406	97,017,151	32,485,649	11,632,978	12.0	35.8
1930	106,923,687	90,536,720	31,897,669	10,689,197	11.8	33.5
1931	95,298,824	80,084,197	29,628,941	9,210,400	11.5	31.1
1932	81,195,224	67,094,976	27,526,167	7,368,927	11.0	26.8
1933	72,861,097	59,732,040	25,481,310	6,313,867	10.6	24.8
1934	74,295,353	60,176,678	24,983,656	6,259,966	10.4	25.1

Note: Fiscal year ending June 30th used during period 1908-1915, inclusive.

(a) Accounts Nos. 101 and 103 from 1914 to 1919, inclusive.

Revenue per fare passenger has varied from 9.0¢ in 1909 to 14.6¢ in 1922. The present revenue per passenger is 10.4¢. Revenue per car mile has varied from its present figure of 25¢ per car mile to as high as 46¢ in 1923.

The ratio of local revenue to interurban revenue has been continually increasing as shown by the accompanying statement based on Passenger Revenue Account No. 101.

Year	Interurban Revenue			Local Revenue		
	Amount	Percent of Total	Index 1934 = 100	Amount	Percent of Total	Index 1934 = 100
1920	\$ 8,313,173	76.7%	244.5	\$2,516,631	23.3	88.0
1921	8,871,657	74.2	260.9	3,085,155	25.8	107.9
1922	9,411,149	73.0	276.8	3,473,982	27.0	121.5
1923	10,547,790	72.7	310.2	3,968,528	27.3	138.8
1924	9,498,837	69.4	279.4	4,178,483	30.6	146.1
1925	8,599,587	68.3	252.9	3,992,758	31.7	139.6
1926	8,383,494	68.0	246.6	3,940,900	32.0	137.8
1927	8,525,340	70.1	250.7	3,641,269	29.9	127.3
1928	7,971,090	69.2	234.4	3,541,214	30.8	123.8
1929	7,376,285	63.4	216.9	4,256,693	36.6	148.8
1930	6,622,275	62.0	194.8	4,066,922	38.0	142.2
1931	5,605,019	60.8	164.9	3,605,881	39.2	126.1
1932	4,313,616	58.5	126.9	3,055,311	41.5	106.8
1933	3,512,724	55.6	103.3	2,801,143	44.4	97.9
1934	3,400,028	54.3	100.0	2,859,938	45.7	100.0

An analysis of Local Passenger Revenue since 1920 shows that the revenue from Los Angeles City lines has held up much better than the revenues from the smaller city operations such as Pasadena, Glendale, Long Beach, and San Bernardino. This condition resulted to some extent from abandonment of about thirteen lines outside of Los Angeles since January 1, 1920.

Year	Los Angeles Local				Index 1934=100	All Other Local	Index 1934=100	Total Local
	Rail	M.C.	1/2 L.A.M.C.	Total				
1920	\$1,653,755	\$ -	\$ -	\$1,653,755	73.6	\$ 862,876	141.1	\$2,516,631
1921	2,081,798	-	-	2,081,798	92.6	1,003,357	164.1	3,085,155
1922	2,532,459	-	-	2,532,459	112.6	941,523	154.0	3,473,982
1923	2,972,859	-	28,425	3,001,284	133.5	967,244	158.2	3,968,528
1924	2,825,843	4,522	222,155	3,052,520	135.8	1,125,963	184.1	4,178,483
1925	2,623,014	3,844	291,534	2,918,392	129.8	1,074,366	175.7	3,992,758
1926	2,531,589	4,671	333,743	2,870,003	127.6	1,070,897	175.1	3,940,900
1927	2,520,059	5,972	359,969	2,886,000	128.4	755,269	123.5	3,641,269
1928	2,449,356	7,560	532,851	2,989,767	133.0	651,447	106.5	3,641,214
1929	2,477,305	10,288	740,760	3,228,353	143.6	1,063,874	174.0	4,292,227
1930	2,363,778	14,337	754,566	3,132,681	139.3	934,241	152.8	4,066,922
1931	2,040,124	19,159	712,471	2,771,754	123.3	834,127	136.4	3,605,881
1932	1,707,568	12,430	657,286	2,377,284	105.6	680,027	111.2	3,057,311
1933	1,567,860	7,145	626,780	2,201,785	97.9	599,358	98.0	2,801,143
1934	1,580,295	7,628	660,544	2,248,467	100.0	611,471	100.0	2,859,938

SECTION F

SYSTEM OPERATING EXPENSE

PACIFIC ELECTRIC RAILWAY

The major operating expense groups for the system for selected years show major reductions in all expense items.

Acct. No.	Group	1926		1930		1934	
		Amount	Percent	Amount	Percent	Amount	Percent
1	Way & Struct.	\$ 3,110,063	19.0%	\$ 2,024,773	14.5%	\$ 915,488	10.4%
2	Equipment	2,478,478	15.1	1,911,588	13.6	1,051,316	11.9
3	Power	1,785,631	10.9	1,569,523	11.2	1,099,346	12.4
4	Cond. Transp.	6,070,708	37.0	5,551,737	39.7	3,526,718	39.9
5	Traffic	203,429	1.2	285,430	2.1	181,070	2.1
6	Genl. & Misc.	2,797,221	17.1	2,676,871	19.1	2,064,055	23.4
7	Transp. for Inv.	(40,879)	(0.3)	(21,008)	(0.2)	(4,479)	(0.1)
	Total	\$16,404,651	100.0	\$13,998,914	100.0	\$8,833,514	100.0

Way and Structures Expense and Equipment Expense have been reduced proportionately greater than other items. These two groups totaled over 34% of the total expense in 1926, whereas in 1934 they amounted to but 22%. Conducting Transportation Expense has remained quite uniformly through the years at about 40%, while General Expense, which includes depreciation and equipment rental charges of a more or less fixed nature, has increased in relation to other costs. Inasmuch as the Pacific Electric Railway and the Los Angeles Railway account for depreciation expense by different methods, this fact should be kept in mind when comparisons are made of operating results of the two companies. If the Pacific Electric Railway used the same method as the Los Angeles Railway it would show a lower operating income.

SECTION G

SEGREGATION OF REVENUES AND EXPENSES

PACIFIC ELECTRIC RAILWAY

The railway prepares, as an operating routine, a segregation of revenues and expenses as between its various operations. A summary of the segregation for the year 1934 follows:

	<u>Freight Operations</u>	<u>Local Passenger</u>	<u>Interurban Passenger</u>	<u>Other Operations</u>	<u>Total</u>
<u>Operating Revenues</u>					
I Rev. from Transp.	\$2,063,782	\$2,859,951	\$3,422,238	\$198,280	\$8,544,251
II Rev. from Other Oper.	<u>117,240</u>	<u>15,127</u>	<u>137,683</u>	<u>190,400</u>	<u>460,450</u>
Total Oper. Revenue	2,181,022	2,875,078	3,559,921	388,680	9,004,701
<u>Operating Expenses</u>					
I Way & Structures	155,632	112,335	591,704	55,817	915,488
II Equipment	118,418	385,103	519,854	27,941	1,051,316
III Power	80,986	255,965	747,410	14,985	1,099,346
IV Conducting Transp.	651,152	1,297,437	1,515,289	62,840	3,526,718
V Traffic	43,934	44,860	92,276	-	181,070
VI Gen. & Misc.	592,370	636,812	769,074	65,798	2,064,054
VII Transp. for Inv. Cr.	<u>(4,478)</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>(4,478)</u>
Total Oper. Expenses	1,638,014	2,732,512	4,235,607	227,381	8,833,514
Taxes	<u>104,424</u>	<u>132,641</u>	<u>232,166</u>	<u>25,767</u>	<u>494,998</u>
Operating Income	\$ <u>438,584</u>	\$ <u>9,925</u>	\$ <u>(907,852)</u>	\$ <u>135,532</u>	\$ <u>(323,811)</u>

It will be seen that the largest income is from freight operation and from other operations (largely mail, express and Pacific Electric Building operations). Local passenger operations as a whole are unproductive of net revenue, while the interurban passenger service is operating at a serious loss. Motor coach operations are included in both the local and interurban passenger services.

The separation method provides that insofar as possible all charges shall be made directly. Way and Structures expense is assigned largely on a car mile basis, as between freight and passenger operation with various detail exceptions. Power is allocated on the basis of kilowatt hours per car mile in the various services. General and supervisory costs are allocated in accordance with prior segregations of appropriate accounts. The method involves a detail study for each account and cannot here be stated in full. A summary of the separation of revenues, expenses and taxes to the Los Angeles Local Lines from 1924 follows:

<u>Year</u>	<u>Operating Revenue</u>	<u>Operating Expense</u>	<u>Depreciation</u>	<u>Taxes</u>	<u>Operating Income</u>
1924	\$3,069,981.20	\$2,325,222.46	\$ 84,720.67	\$158,673.76	\$501,364.31
1925	2,938,346.86	2,358,803.40	95,109.02	152,412.94	332,021.50
1926	2,888,705.70	2,442,830.16	115,612.13	163,307.05	166,956.36
1927	2,905,213.48	2,500,349.57	101,120.65	159,527.15	144,216.11
1928	3,024,104.59	2,539,463.98	154,118.34	165,046.03	165,476.24
1929	3,248,279.87	2,702,965.21	147,355.45	174,441.03	223,518.18
1930	3,152,652.68	2,672,096.44	128,937.17	185,062.32	166,556.75
1931	2,790,535.36	2,414,596.43	79,404.99	172,176.67	124,357.27
1932	2,393,080.66	2,097,023.12	80,914.96	127,525.73	87,616.85
1933	2,217,958.48	1,882,246.59	77,534.87	113,728.88	144,448.14
1934	2,258,699.47	1,980,090.22	71,434.62	101,675.68	105,498.95

The Local Passenger Operations in 1934 were segregated as follows:

	Los Angeles Local Lines				Other Local	Total Local Lines
	Rail	FEMC	LAMC	Total		
Operating Revenues						
I Rev. from Transp.	\$1,580,294	\$ 7,628	\$660,544	\$2,248,466	\$611,485	\$2,859,951
II Rev. from Other Oper.	8,104	62	2,068	10,234	4,893	15,127
Total Oper. Revenues	1,588,398	7,690	662,612	2,258,700	616,378	2,875,078
Operating Expenses						
I Way & Structures	86,542	-	1,839	88,381	23,954	112,335
II Equipment	109,505	2,941	146,098	258,544	126,559	385,103
III Power	214,007	-	-	214,007	41,958	255,965
IV Conducting Transp	594,436	10,032	329,509	933,977	363,460	1,297,437
V Traffic	32,121	154	268	32,543	12,317	44,860
VI Gen. & Misc.	448,680	1,338	74,055	524,073	112,739	636,812
VII Transp. for Inv. Gr.	-	-	-	-	-	-
Total Oper. Exp.	1,485,291	14,465	551,769	2,051,525	680,987	2,732,512
Taxes	73,701	337	27,638	101,676	30,965	132,641
Operating Income	\$ 29,406	\$ (7,112)	\$ 83,205	\$ 105,499	\$ (95,574)	\$ 9,925

The classification and allocation of revenue and expense to Los Angeles Local Lines as shown is carried on in the same general manner as the segregation just described. As to revenue, only Accounts Nos. 101, Passenger Revenue, 103, Special Car Revenue, and 110, Station and Car Privileges, are allocated to local rail operations. Way and Structures expense is handled through accumulation of charges in memorandum work orders, and if freight is involved, an allocation between freight and passenger operation on a car mile basis is made. Ton miles are used in segregating the remainder as between local and interurban passenger operation.

The lines considered applicable to Los Angeles local service are as follows:

Rail Lines

Sierra Vista
 South Pasadena (abandoned Jan. 1, 1935)
 Watts
 Huntington Park (inaugurated Sept. 1, 1935)
 Edendale-Central Station
 Santa Monica Blvd.-West Hollywood
 Hill Street-Echo Park Avenue
 Western-Franklin Avenue
 Vineyard-Hollywood Boulevard
 Subway-Hollywood Boulevard
 Subway-Beverly Hills

Motor Coach Lines

Emery Park
 Annandale-Adelaide Place-Hermon (prior to Jan. 2, 1935)
 South Pasadena-Monterey Park (inaugurated Jan. 2, 1935)

Los Angeles Motor Coach Company - 1/2 Interest

SECTION H

INCOME STATEMENT

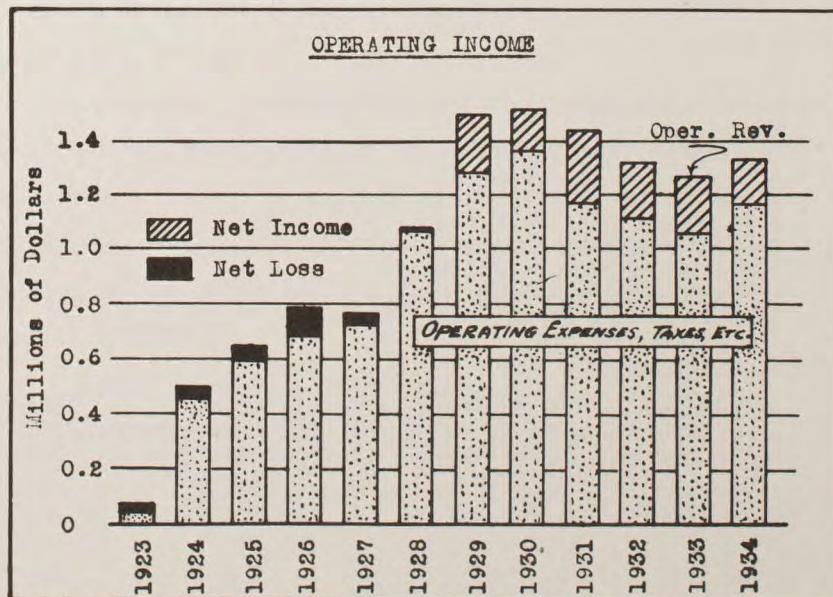
LOS ANGELES MOTOR COACH COMPANY

The income from operations of Los Angeles Motor Coach Company in summary form is set forth in the following table from date of inception of the service, August 18, 1923:

Year	Operating Revenue	Operating Expense	Taxes	Net Operating Income	Net Non Operating Income	Deductions from Gross Income	Net Income
1923	\$ 56,851.04	\$ 67,060.21	\$ 2,458.30	\$(12,667.47)	\$ 133.09	\$ 1,587.50	\$(14,121.88)
1924	448,765.96	487,706.74	15,019.09	(53,959.87)	1,092.29	1,300.00	(54,167.58)
1925	590,687.55	624,590.61	23,749.81	(57,652.87)	792.77	2,100.00	(58,960.10)
1926	675,921.08	731,335.22	39,306.52	(94,720.66)	774.73	2,100.00	(96,045.93)
1927	727,021.59	722,853.67	47,584.00	(43,416.08)	827.82	2,100.00	(44,688.26)
1928	1,072,040.71	1,016,021.54	61,425.65	(5,406.48)	1,329.04	2,100.00	(6,177.44)
1929	1,490,513.30	1,194,519.50	*92,813.64	203,180.16	2,137.46	2,100.00	203,217.62
1930	1,517,372.51	1,249,790.39	113,602.86	153,979.26	1,956.88	2,100.00	153,836.14
1931	1,432,554.72	1,062,064.63	106,349.58	264,140.51	1,274.97	10,836.12	254,579.36
1932	1,318,733.65	1,008,275.14	101,131.36	209,327.15	1,003.00	3,777.65	206,552.50
1933	1,261,981.19	954,983.68	100,377.56	206,619.95	470.71	2,870.92	204,219.74
1934	1,327,111.41	1,062,460.32	100,151.08	164,500.01	267.44	110.50	164,656.95

* Taxes include \$11,979.13 Income Tax for Los Angeles Railway Corporation only.

The following chart shows the revenue, expenses, and net income in visual form for the same period. As the legend indicates, the black blocks indicate net losses in which event the total of the column is the total expense of operation including taxes, while in the case of hatched blocks, a net income has been realized and the length of the column indicates the gross revenue of the year.



CHAPTER IX

OPERATING REVENUES

Passenger revenue derived from local transportation service operations in the Los Angeles Area during the year 1934 is as follows:

	Passenger Revenue	Percent	Revenue per Fare Passenger	Revenue per Car Mile
Los Angeles Railway Corp. - Rail	\$ 8,206,844		5.78¢	29.85¢
" " " " - Motor Coach	<u>839,751</u>		7.43¢	13.02¢
Total Los Angeles Railway	9,046,595	75.7%		
Pacific Electric Railway - Rail	1,580,295		6.81¢	29.75¢
" " " " - Motor Coach	<u>7,628</u>		7.60¢	7.28¢
Total Pacific Electric Railway	1,587,923	13.3%		
Los Angeles Motor Coach Company	<u>1,321,088</u>	<u>11.0%</u>	8.72¢	24.42¢
	<u>\$11,955,606</u>	<u>100.0%</u>		

Revenue per passenger for the Pacific Electric Railway Company rail lines was 16% higher than for the Los Angeles Railway Corporation although the revenue per car mile was practically the same because of a higher passenger pick-up per mile on the Los Angeles Railway. For the Los Angeles Motor Coach Company the revenue per mile was higher due to the basic 10¢ fare, whereas, with exception of through lines, the fares on coaches of the other two companies are the same as the rail fares.

In addition to the passenger revenue shown above there are certain other operating revenues. The total operating revenue for all companies in 1934 was \$12,063,445 after inter-company eliminations.

The operating revenues of the companies are discussed in the following sections:

<u>Section</u>	<u>Title</u>
A.	Revenues - Los Angeles Railway
B.	Rail Lines - Los Angeles Railway
C.	Motor Coach Lines - Los Angeles Railway
D.	Revenues - Pacific Electric Railway
E.	Revenues - Los Angeles Motor Coach Company

SECTION A

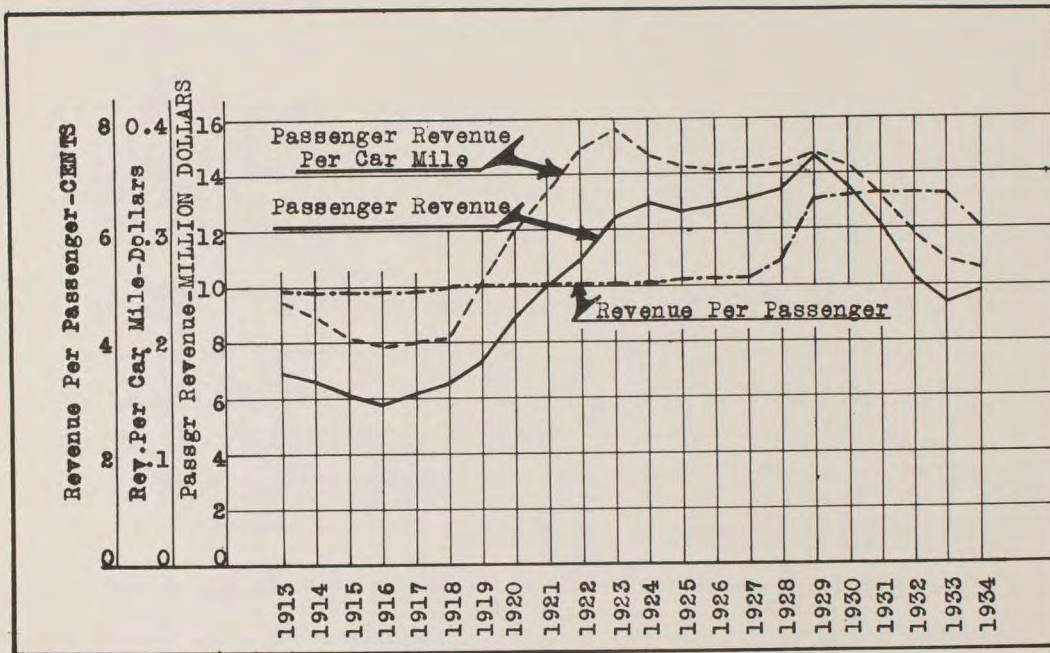
OPERATING REVENUES

LOS ANGELES RAILWAY

Inasmuch as the Los Angeles Railway operations, exclusive of its share of Los Angeles Motor Coach Company, accounted for 76% of the total revenue earned, 80% of total fare passengers, and 76% of the total car miles operated during the year of 1934, the following revenue analysis of that company will be more detailed than for the other companies.

The Los Angeles Railway Corporation revenue is mainly derived from its passenger transportation operations. For the year 1934 the operating revenue amounted to \$9,804,744. Of that amount 84% was earned by the Rail Division, 9% was earned by the Motor Coach Division, and the remaining 7% represents the Los Angeles Railway interest in the Los Angeles Motor Coach Company operations. Of the \$9,804,744, \$9,707,138, or 99%, represents passenger revenue, \$1,355 represents other revenue from transportation, and \$96,250 represents revenue from other rail and coach operations.

The following graphic chart shows the fluctuations of operating revenue over the period of years from 1913 to 1934, inclusive.



Operating revenues decreased gradually from 1913 to 1916 by about \$1,000,000, rising again by 1919 to about \$200,000 more than the 1913 figure.* During that period of time revenue passengers dropped off on a parallel curve, the passenger revenue per passenger remaining constant over the period and the total car miles remaining practically unchanged. In 1920 operating revenues commenced a rapid increase from \$7,300,000 in 1919 to a little over \$13,000,000 in 1924, in which year the peak of passengers carried was reached. Car miles operated, however, remained about the same over the entire period from 1913 to 1922 but increased in 1923 and 1924 by about six million miles, of which the new motor coach operation represented about two million and the balance of the increase was in rail mileage. This increase in car miles effected a decrease in passenger revenue per car mile in 1924, the peak having been reached in 1923. From 1925 to 1929 operating revenue increased gradually during the first four years and then rapidly jumped a little over a million dollars in 1929, which was the result of increased fares going into effect in October, 1928. From 1929 to 1933 there was a uniform, rapid decrease in operating revenues from \$14,874,309.54 to \$9,464,251.86, or 36%.

*Jitney competition was effective in the period of 1914 to 1918.

During the same period the total passengers carried dropped from 314,500,000 to 199,000,000, or about 37%. No doubt most of the decrease in passengers carried since 1930 has been due to the depression, although the rate increase in 1928 is largely accountable for the decrease in travel in 1929. Prior to October 21, 1928, the basic fare was 5¢. From that date to the present there has been in effect a 7¢ fare with tokens at 6½¢. On May 12, 1934, there was introduced a weekly pass for use on rail and motor coach lines at a purchase price of \$1.00. The pass is transferable, without restrictions as to time of day, and permits unlimited riding within the zone of issue. Another pass selling for \$1.50 is not restricted as to zone of issue but is good for transportation over the entire system of the Los Angeles Railway including both Rail and Motor Coach Divisions.

Operating revenue for the year 1934 segregated between passenger and other revenue is shown in the following tabulation.

	Rail Division	Coach Division	50% L.A. M.C. Co.	Inter-Co. Elimination	Total	Percent
<u>Passenger Revenue:</u>						
Cash and Tokens	\$7,012,043	\$809,134	\$644,264	\$ -	\$8,465,441	86.34%
Monthly Passes	-	-	1,372	-	1,372	.01
Weekly Passes	617,022	-	-	-	617,022	6.29
School Tickets	117,427	11,524	529	-	129,480	1.32
Coach Tickets	475,794	19,093	1,381	-	496,268	5.06
Interchange	(15,442)	-	12,998	-	(2,444)	(.02)
Total	8,206,844	839,751	660,544	-	9,707,139	99.00
<u>Other Revenue from Transportation:</u>						
Special Car	514	-	-	-	514	.01
Mail	407	-	-	-	407	.01
Express	404	-	-	-	404	-
Miscellaneous	31	-	-	-	31	-
Total	1,356	-	-	-	1,356	.02
<u>Revenue from Other Rail and Coach Operations:</u>						
Stat'n & Car Priv.	45,142	7,264	3,012	-	55,418	.57
Rent of Equip't.	1,784	944	897	(358)	3,267	.03
Misc. Rent	45,569	-	-	(8,297)	37,272	.38
Miscellaneous	294	-	-	-	294	-
Total	92,789	8,208	3,909	(8,655)	96,251	.98
Total Operating Rev.	\$8,300,989	\$847,959	\$664,453	\$(8,655)	\$9,804,746	100.00%
Percent	84.66%	8.65%	6.78%	(.09)%	100.00%	

Tokens are used on both the Rail and Motor Coach Divisions of the Los Angeles Railway Corporation but not used on the Los Angeles Motor Coach Company system. The item of "Interchange" represents interchange of tickets and transfers between the Los Angeles Railway, the Pacific Electric Railway, and the Los Angeles Motor Coach Company.

It will be noted from the above tabulation that passenger revenue represents 99% of operating revenue, 86.3% of which represents cash and token fares, 6.3% weekly passes, and 5.1% coach tickets. The division of operating revenue between sources of earnings is 84.6% Rail Division, 8.6% Motor Coach Division, and 6.8% Los Angeles Motor Coach Company.

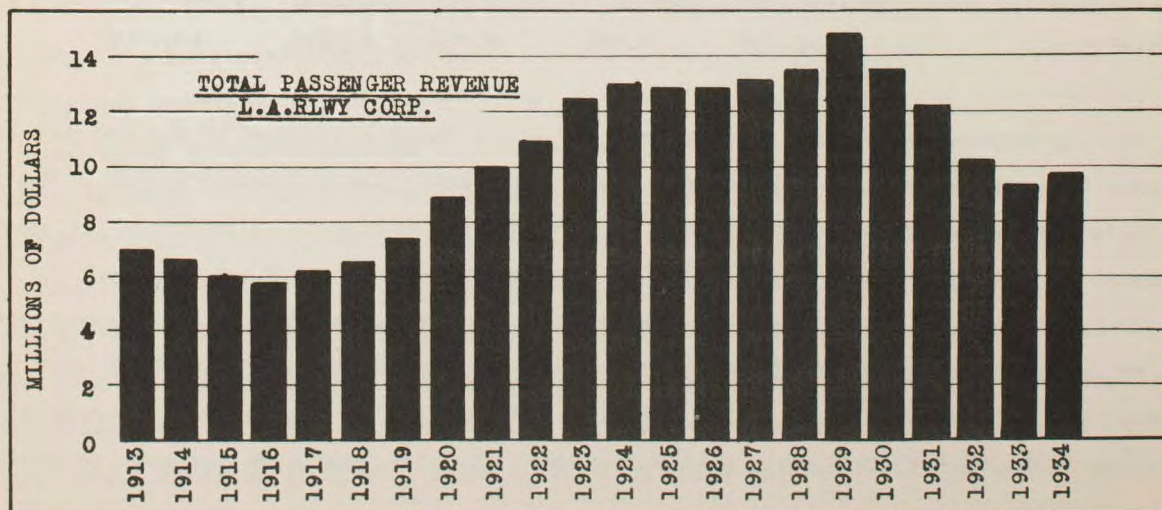
Passenger Revenue

The following tabulation for the rail and coach division and half of Los Angeles Motor Coach Company combined shows the trend of total passengers, revenue passengers, car miles, passenger and other revenue, passenger revenue per passenger and passenger revenue per car mile for the years 1913 to 1934, and the accompanying chart shows revenue trends in graphic form.

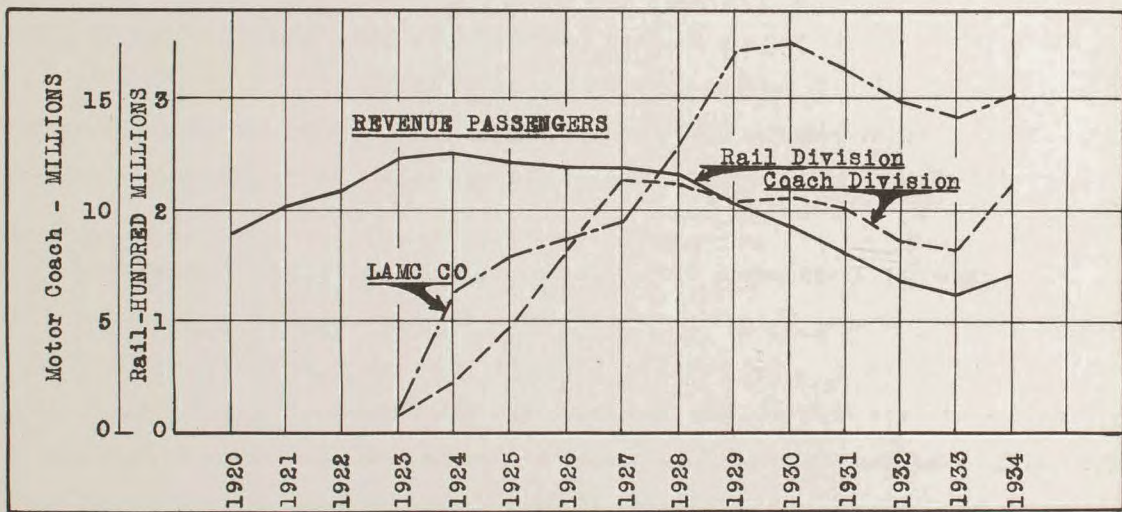
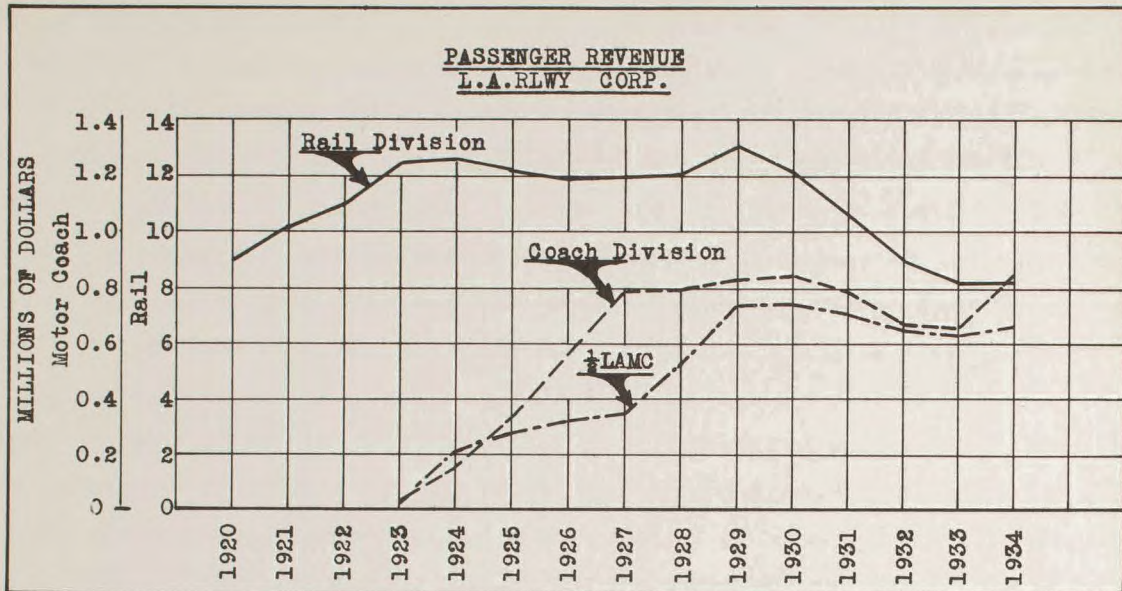
: Year :	Passenger Revenue :	Revenue Passengers :	Total Passengers :	Car and Coach Miles :	Revenue per Passenger :	Revenue per Car Mile :
1913	\$ 6,927,046.18	139,752,262	188,627,747	29,100,568	\$.050	\$.24
1914	6,658,243.65	134,994,022	185,761,691	29,814,812	.049	.22
1915	6,014,229.45	122,184,028	170,287,009	29,496,112	.049	.20
1916	5,772,515.95	117,336,924	164,800,136	29,135,639	.049	.20
1917	6,088,776.70	123,074,300	171,915,097	30,053,576	.049	.20
1918	6,519,877.75	130,358,704	182,181,408	31,243,680	.050	.21
1919	7,283,137.00	145,424,597	199,152,543	28,563,366	.050	.26
1920	8,980,243.35	179,227,041	247,749,056	29,980,055	.050	.30
1921	10,065,714.66	200,878,652	278,480,403	30,062,428	.050	.33
1922	10,989,500.85	219,022,470	303,139,305	29,458,292	.050	.37
1923	12,511,260.47	248,622,826	342,634,308	32,269,575	.050	.39
1924	12,951,846.24	255,643,966	352,974,629	35,139,827	.051	.37
1925	12,708,733.45	249,135,106	347,601,710	35,547,638	.051	.36
1926	12,879,916.90	250,780,579	349,334,172	36,336,430	.051	.35
1927	13,157,277.78	254,463,025	351,821,532	37,054,271	.052	.36
1928	*13,499,453.95	247,979,842	345,227,598	37,516,031	.054	.36
1929	14,746,890.76	223,730,740	314,471,604	39,975,831	.066	.37
1930	13,613,947.32	205,819,887	290,247,429	38,012,573	.066	.36
1931	12,111,834.67	182,502,485	258,473,133	36,656,385	.066	.33
1932	10,266,246.60	154,446,468	218,405,799	34,497,884	.067	.30
1933	9,336,144.08	140,539,517	199,001,490	34,479,904	.066	.27
1934	9,707,138.66	160,863,918	219,259,425	36,641,062	.060	.26

* Includes \$451,068.22 - Refund slips credited to Profit and Loss in 1929.

The trend of 1934 compared to 1933 must be studied with the weekly pass in mind, particularly in connection with revenue passengers and revenue per passenger. These comparisons are discussed later.



The following charts show passengers and revenue for the rail and motor coach operations for the years 1920 to 1934.



Coach operations began in 1923. Rail revenue, as a percent of total, has decreased from 97.1% in 1924 to 84.5% in 1934; Motor Coach Division revenue has increased from 1.2% in 1924 to 8.7% in 1934; and 1/2 Los Angeles Motor Coach Company from 1.7% in 1924 to 6.8% in 1934. This change in percentage was due to the fact that passenger revenue for the Rail Division was decreasing from 1924 to 1926, whereas the coach revenue was increasing rapidly during that period, and during the period from 1929 to 1933 the Rail Division revenues declined at a more rapid rate than did those of the Motor Coach Division and the Los Angeles Motor Coach Company. From 1927, during which year the coach division was well established, to 1933 there was a decrease in revenue on the Rail Division of \$3,943,000, or 33%, whereas the coach division revenues decreased \$136,000, or 17%.

Coach division revenue for 1934 came back to a level a little higher than that of 1929, whereas the Rail Division revenue in 1934 was about 38% less than 1929.

Motor Coach Division revenue increased steadily from \$31,785 in 1923, which represented only a portion of that year, to \$798,294 in 1927, following parallel to the revenue passengers carried. There was practically no change between 1927 and 1928, followed by a slight increase of about \$45,000 in 1930. The increase was contrary to the number of revenue passengers carried which decreased from 1927 to 1929, increasing a small amount in 1930. From 1930 to 1933, however, both revenue and passengers dropped in about the same ratio, both increasing in 1934 by 28% and 37%, respectively. Los Angeles Motor Coach Company revenue payable to Los Angeles Railway Corporation increased from \$28,426 in 1923 to \$222,193 in 1924, then increased gradually to \$359,969 in 1927, then more rapidly to \$740,760 in 1929, following parallel to the passengers carried. On May 4, 1928, the Wilshire Boulevard line of the Los Angeles Railway Corporation was taken over by the Los Angeles Motor Coach Company, which affected a transfer of both revenue and passengers from one source to the other in the latter part of 1928 and all of 1929.

From 1923 to 1928 there was not much change in rail revenue. In October of 1928 there was a fare increase from 5¢ to 7¢ which resulted in an increase of about \$1,000,000 in 1929, followed by a uniform decrease from \$13,175,895 in 1929 to \$8,055,843 in 1933, a drop of 39%. There was an increase of 2% in 1934.

Discussion of revenue by lines will be divided between Rail and Motor Coach Divisions. Los Angeles Motor Coach Company will be dealt with in its entirety later in this section.

In general, motor coach lines of the Los Angeles Railway Corporation act as feeders to the rail lines, there being only three through coach lines operating from the outlying districts into the downtown area, as previously outlined; namely, the Beverly Boulevard, the East 9th and Whittier, and the Figueroa Street lines. There is one line which serves a crosstown purpose on the south and east sides of the city in the outlying territory operating on Florence Avenue across the southern portion of the city, thence northerly on Soto Street to the County Hospital. Another crosstown line is the No. 54 which operates on Manchester Avenue, Firestone Boulevard and Santa Ana Street. The remainder of the motor coach lines are essentially extensions of the rail lines, serving a feeder purpose only. The company, however, segregates completely their motor coach operations from the rail operations. The figures so segregated for motor coach operation cannot be expected in all cases to represent an earning in themselves, but in reality should be considered as a part of the whole system. Due to the flexibility of bus operation, it has proven more satisfactory for extension into growing sections of the outskirts of Los Angeles than rail extensions.

SECTION B

RAIL LINES REVENUES

LOS ANGELES RAILWAY

Rail Revenue and Travel is set forth in the following tabulation for the years 1920 to 1934, inclusive, showing also the relation to total passenger revenue including motor coach operation.

Year	Amount	Index 1934 =100%	Percent of Total Psgr. Revenue	Passenger Revenue		Revenue Passengers Index 1934= 100%	Transfer Ratio
				per Rev. Passenger	Per Car Mile		
1920	\$ 8,980,243.35	109.4%	100.0%	5.0¢	30.0¢	126.2%	35.2%
1921	10,065,714.66	122.7	100.0	5.0	33.5	141.5	35.1
1922	10,989,500.85	133.9	100.0	5.0	37.3	154.2	35.1
1923	12,451,050.00	151.7	99.4	5.0	39.1	174.4	34.7
1924	12,577,881.34	153.3	97.1	5.0	38.0	176.2	35.1
1925	12,087,518.60	147.3	95.1	5.0	37.1	169.4	37.0
1926	11,985,143.83	146.0	93.0	5.0	37.2	167.7	37.0
1927	11,999,015.05	146.2	91.2	5.0	37.7	167.8	36.3
1928	12,172,976.25	148.3	90.2	5.3	38.6	162.1	37.2
1929	13,175,895.05	160.5	89.3	6.4	39.9	144.2	37.9
1930	12,010,138.16	146.3	88.2	6.4	39.4	131.3	38.5
1931	10,604,419.53	129.2	87.6	6.5	36.4	115.7	38.9
1932	8,931,951.79	108.8	87.0	6.5	33.5	97.5	38.4
1933	8,055,843.21	98.2	86.3	6.4	30.5	88.2	38.6
1934	8,206,843.80	100.0	84.5	5.8	29.9	100.0	33.0

The basic fare was increased from 5¢ to 7¢ with 6½¢ tokens in October, 1928, and a weekly pass placed on sale beginning on May 12, 1934. Also an inter-company transfer selling for 10¢ was placed in effect in February 1, 1934.

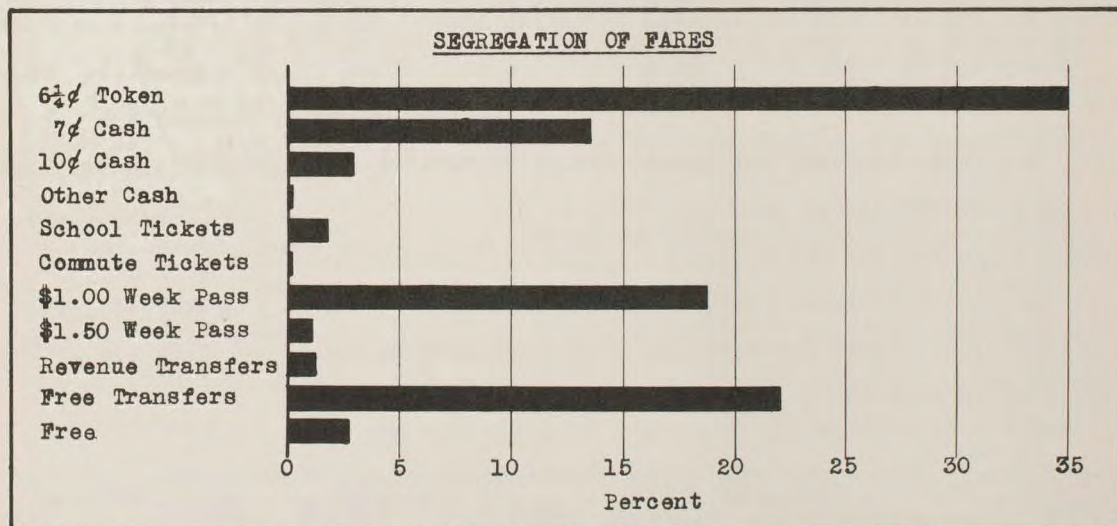
To analyze a recent period, and particularly to have a comparative period before and after the pass installation, there has been selected the first six months of 1933 and 1935 as follows:

Passengers	1st 6 Mo. 1933		1st 6 Mo. 1935		Increase	
	Number	Percent	Number	Percent	Number	Percent
6½¢ Tokens	42,219,108	47.8%	37,009,332	34.9%	(5,209,776)	(12.3)%
7¢ Cash	13,675,955	15.5	14,431,762	13.6	755,807	5.5
10¢ Cash	2,732,130	3.1	3,139,594	3.0	407,464	14.9
Other Cash	159,466	.2	156,988	.1	(2,478)	(1.6)
School Tickets	1,773,788	2.0	1,982,025	1.9	208,237	11.7
Commute Tickets	332,287	.4	274,575	.3	(57,712)	(17.4)
Sub Total	60,892,734	69.0	56,994,276	53.8	(3,898,458)	(6.4)
\$1.00 Weekly Pass	-	-	19,997,918	18.9	19,997,918	-
\$1.50 Weekly Pass	-	-	1,231,525	1.2	1,231,525	-
Revenue Transfers	936,920	1.0	1,386,328	1.3	449,408	48.0
Revenue Passengers	61,829,654	70.0	79,610,047	75.2	17,780,393	28.8
Free Transfers	23,905,247	27.0	23,269,646	22.0	(635,601)	(2.7)
Free Transportation	2,612,311	3.0	2,968,680	2.8	356,369	13.6
Total Passengers	88,347,212	100.0%	105,848,373	100.0%	17,501,161	19.8%

The foregoing table shows the passengers carried for the first 6 months of 1935 compared with the first 6 months of 1933, and the following tabulation shows a comparison of the revenue for the same periods.

Revenue	First 6 Months 1933		First 6 Months 1935		Increase	
	Amount	Percent	Amount	Percent	Amount	Percent
6½¢ Tokens	\$2,638,694	66.5%	\$2,313,083	54.4%	\$ (325,611)	(12.3)%
7¢ Cash	957,317	24.1	1,010,223	23.7	52,906	5.5
10¢ Cash	275,264	7.0	313,960	7.4	38,696	14.1
Other Cash	22,084	.6	21,747	.5	(337)	(1.5)
School Tickets	60,700	1.5	75,770	1.8	15,070	24.8
Commute Tickets	24,237	.6	20,556	.5	(3,681)	(15.2)
Sub Total	3,978,296	100.3	3,755,339	88.3	(222,957)	(5.6)
\$1.00 Weekly Pass	-	-	489,911	11.5	489,911	-
\$1.50 Weekly Pass	-	-	24,596	.6	24,596	-
Revenue Transfers	(4,272)	(.1)	(8,870)	(.2)	(4,598)	(107.6)
Refunds	(6,429)	(.2)	(8,207)	(.2)	(1,778)	(27.7)
Total Revenue	<u>\$3,967,595</u>	<u>100.0%</u>	<u>\$4,252,769</u>	<u>100.0%</u>	<u>\$ 285,174</u>	<u>7.2%</u>

The following chart shows in graphic form the relative magnitude of passenger travel by the various fare classifications in percent of total passengers carried, for the first 6 months of 1935.

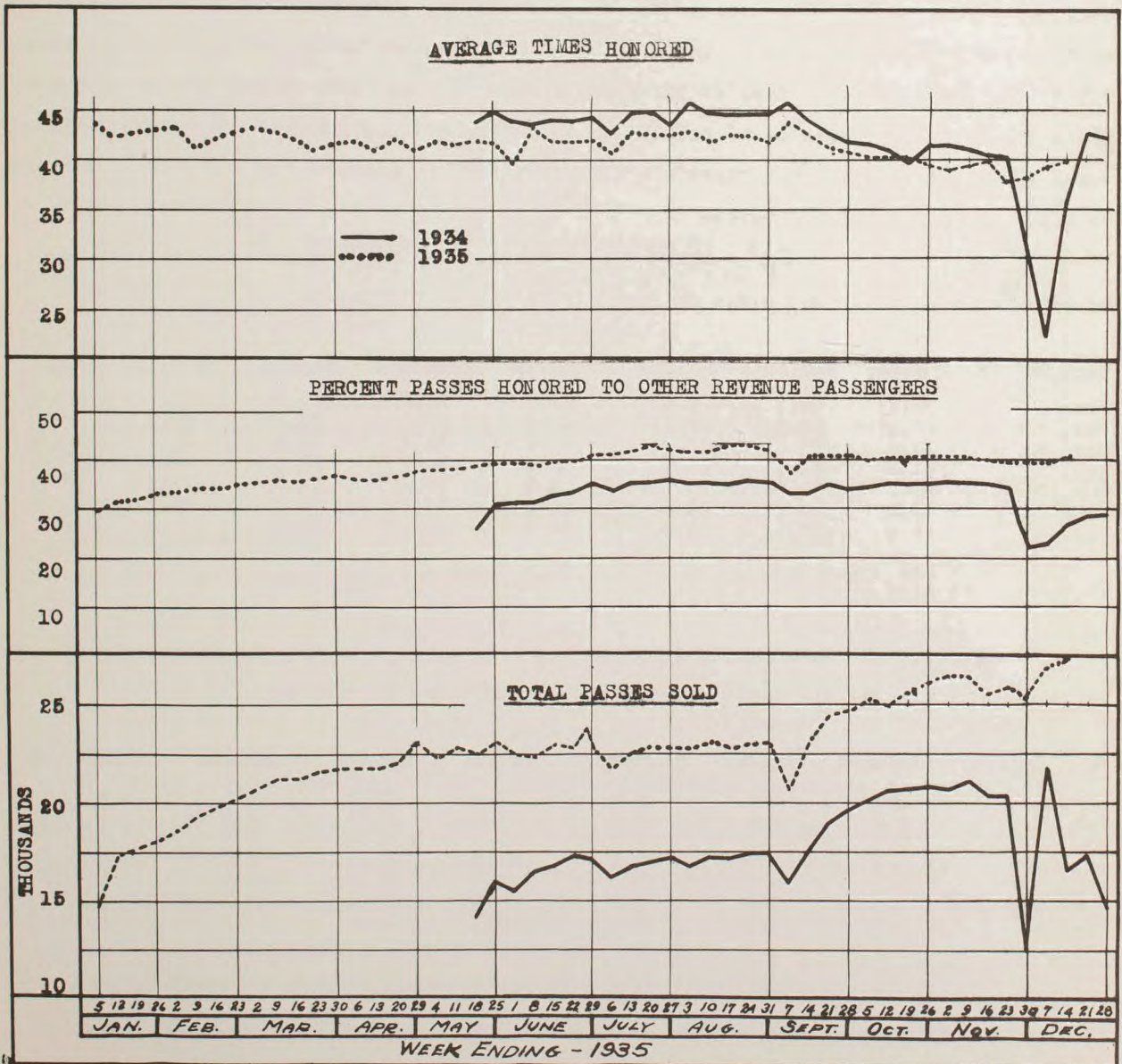


In analyzing these figures, it is proper to consider that business conditions have improved during the comparative period. Probably the increase in the 7¢ fare travel of 5.5% is more indicative of business changes than of any other single factor. The increase in the 10¢ fare of 14.9% reflects the inter-company transfer usage to a large extent.

Weekly Passes

Weekly passes were introduced on May 12, 1934, for use on rail and coach divisions of the Los Angeles Railway Corporation. The passes are transferable without restrictions as to time of day and permit unlimited riding within the zone of issue for

the \$1.00 pass and over the entire system for the \$1.50 pass. Weekly passes at the present time are used on an average of 40 times weekly. Since transfers are not issued on a weekly pass, it is apparent that the pass usage includes a considerable quantity of riding that formerly was classified as free transfer travel. The transfer ratio in the first six months of 1933 was 39%; in the first six months of 1935 it was 41%, when weekly pass travel is excluded. It may therefore be said that at least 40% of the riding on the weekly pass would fall in the category of transfer riding, or that the average riding of 40 on the pass is 140% of the completed trips taken. On this basis, the completed trips taken are approximately 29 a week, or about 3.5¢ per trip on the \$1.00 pass. Undoubtedly some of these trips are short convenience rides and Sunday riding which would not have occurred under the prior fare structure. The minimum use ordinarily will exceed the token rate, or 16 complete trips a week. Necessarily a pass sold in conjunction with a 6½¢ token fare will be used by the more than average street car user.



On the foregoing chart is shown weekly passes sold, percent of passes honored to other revenue passengers, and the average times honored for the period May 12, 1934, to December 14, 1935. The chart shows an appreciable increase in the total number of passes sold during 1935 as compared with 1934 and a corresponding increase in percentage of passes honored to other revenue passengers. However, the average times honored per pass has been declining during 1935. During 1935 the business conditions and the employment situation have been better than during 1934, which may also be responsible for the fewer rides per pass and the increased total number of passes sold. The unlimited transfer feature of the weekly pass has made it popular for use in hotels and rooming houses for general use of the patrons. There is a question, however, as to whether or not those additional rides taken because of the availability of the pass would be taken if a cash fare had to be paid. Therefore, it would seem that the company is carrying a considerably greater quantity of free transfer passengers under the heading of weekly pass passengers. There is undoubtedly some benefit derived from this free use of the weekly pass in the establishment of an increased public street car riding habit, which is borne out by the trend of the curves of the above chart. Of the total weekly passes sold only 4% of the total represent \$1.50 passes and the balance \$1.00 passes. However, of the total passes honored for the first six months of 1935 in amount of 21,229,443, 1,231,525, or 5.8%, represented \$1.50 passes.

The percent of passes honored to other revenue passengers for the first week of each month of the first seven months in 1935 are as follows:

<u>Week Ending</u>	<u>Sunday</u>	<u>Monday</u>	<u>Tuesday</u>	<u>Wednesday</u>	<u>Thursday</u>	<u>Friday</u>	<u>Saturday</u>	<u>Week</u>
Jan. 5	32.6	27.1	29.6*	27.3	27.2	30.5	29.9	28.7
Feb. 9	37.2	33.4	34.9	35.4	31.7	33.7	33.3	33.9
Mar. 9	39.6	34.0	35.0	34.5	36.5	34.5	34.7	35.2
Apr. 6	41.1	35.4	36.1	35.4	34.5	35.2	34.8	35.6
May 11	41.7	37.0	38.7	37.2	36.6	37.7	37.7	37.8
June 8	45.5	37.8	38.9	38.6	37.9	38.1	38.7	38.8
July 6	46.4	39.1	40.2	39.5	44.6**	39.0	41.1	40.7

* New Years Day

** July 4

Percent distribution of total passes sold by days of the week purchased for the first week of each of the first seven months of 1935 are as follows:

<u>Week Ending</u>	<u>Thursday</u>	<u>Friday</u>	<u>Saturday</u>	<u>Sunday</u>	<u>Monday</u>	<u>Tuesday</u>	<u>Wednesday</u>
Jan. 5	0.2	3.4	14.8	44.9	30.2	4.1	2.4
Feb. 9	0.1	4.0	14.8	41.5	31.2	8.6	(0.2)
Mar. 9	0.0	4.3	13.0	43.5	31.0	7.5	0.7
Apr. 6	0.1	3.6	13.9	41.3	31.9	9.0	0.2
May 11	0.1	4.0	13.5	41.8	29.5	10.0	1.1
June 8	-	3.0	12.8	42.6	30.6	11.2	(0.2)
July 6	-	3.1	12.2	38.8	30.1	13.4	2.4

The above tabulation shows the percent of passes honored to other revenue passengers has increased steadily from 32.6% the first week of January to 46.4% the first

week of July, an increase of 13.8%. The corresponding week's Monday increased 12%, Tuesday 10.6, Wednesday 12.2, Thursday 14.4, Friday 8.5, and Saturday 11.2, making for the week an increase of 12%. The percent increase in weekly passes sold, however, was 55% over the corresponding period. The percent distribution of total passes by the days purchased shows that the greatest number are purchased on Sunday for use during the following week; namely, 38.8% in the week of July. 30.1% were sold on Monday, which percent is practically the same as for the first week in July; 13.4% on Tuesday, which has increased from 4.1% for the first week of January. A very small percentage of the total are purchased on Wednesday.

Free Transportation

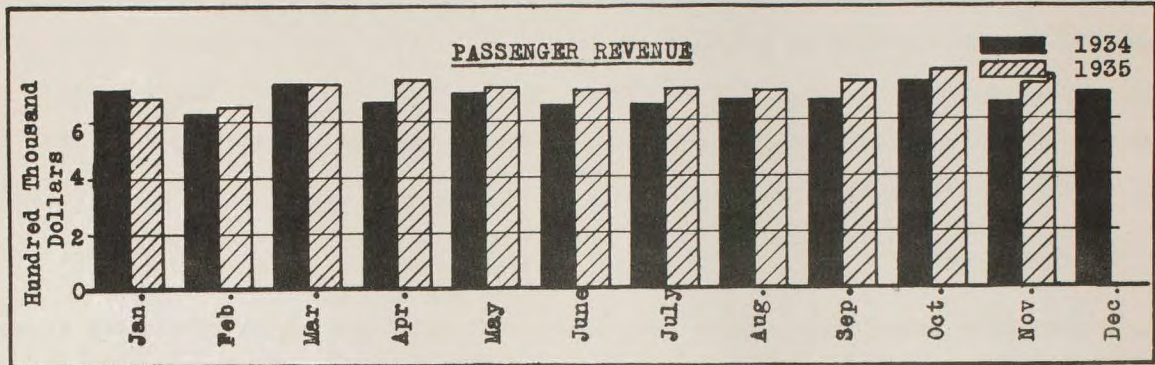
Free transportation on the Los Angeles Railway Corporation system was issued and outstanding as of September 21, 1935, to the extent of 6,231 passes for the Rail Division and 290 passes for the Motor Coach Division, as shown by the following statement. This statement shows the passes by general groups for the two divisions. Those passes issued for use on the Rail Division, 6,231, are not good for use on the Motor Coach Division and vice versa.

<u>Rail Division:</u>	<u>Passes Issued</u>	
LARY Directors, Executives & Executives' Families	-	41
Employees (Not including trainmen)	-	1,687
Trainmen	-	2,024
Coach Division Operators	-	225
Dependents of Employees	-	1,766
 <u>Complimentary:</u>		
City of Los Angeles	-	262
Railroad Commission, State of California	-	120
Miscellaneous	-	106
		488
Total		6,231
 <u>Motor Coach Division</u>		
Executives & Employees (Including Coach Division Operators)	-	250
 <u>Complimentary:</u>		
City of Los Angeles	-	36
Miscellaneous	-	4
		40
Total		290

Policemen in the City of Los Angeles are provided free transportation on the lines of the Los Angeles Railway Corporation by showing an identification when not in uniform and without identification when in uniform. Firemen in the employ of the city are also provided free transportation but must at all times present an identification card. Mail carriers in the employ of the Federal Government are provided free transportation when in uniform on certain lines as provided for in certain of the franchises. This privilege is not extended, however, on all lines.

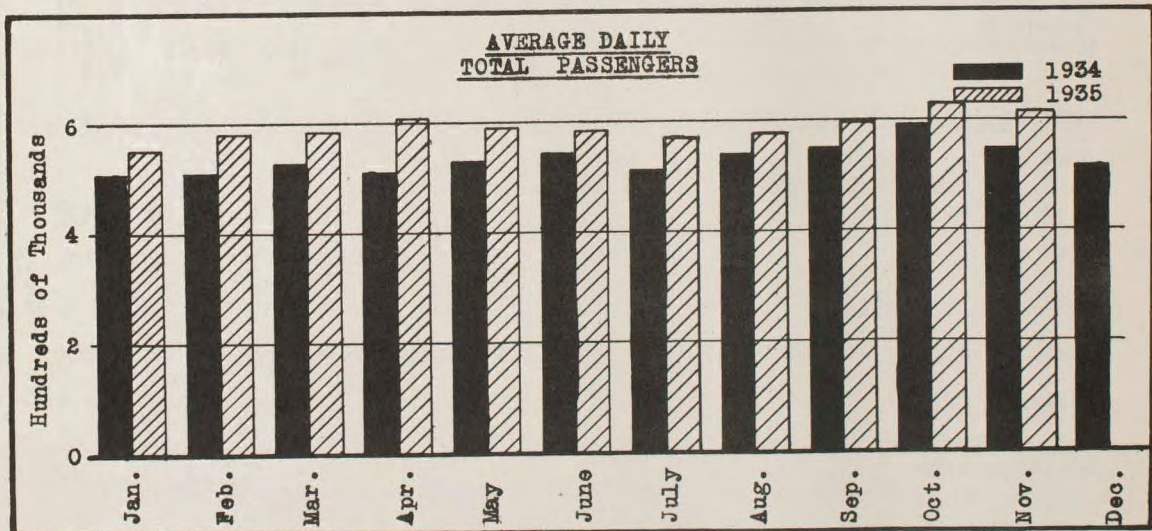
Revenue and Travel by Months

Passenger revenue is shown on the following chart by months for the year 1934 and 11 months of 1935.



It will be noted from the above chart that except for the month of January passenger revenue in 1935 shows an increase over the corresponding months of 1934. The decrease in January was the result of strike activities during that month.

The following chart shows the average daily travel by months for the year 1934 and 11 months of 1935 for total passengers.

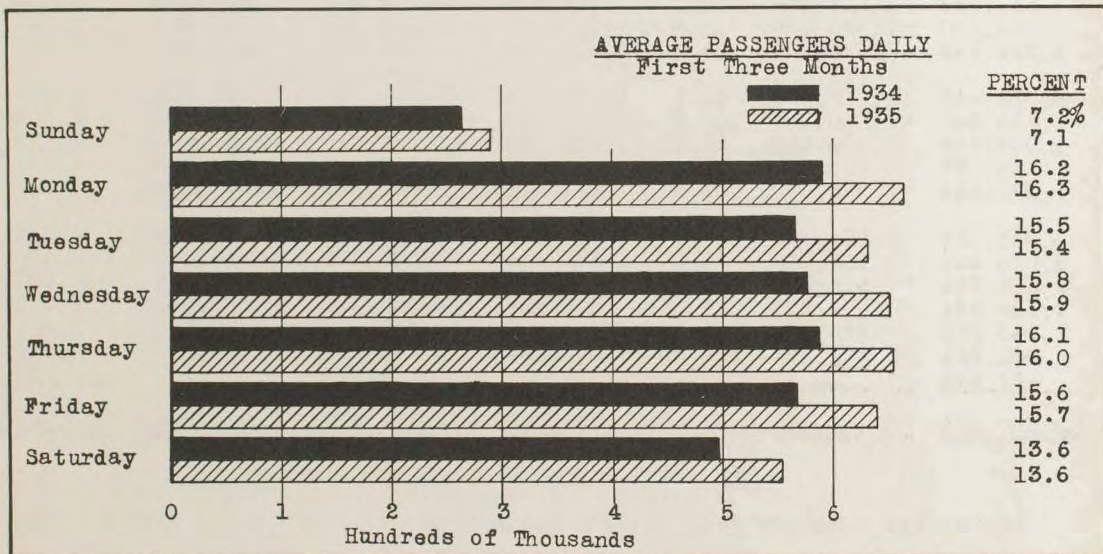


For 1934 the daily average did not vary appreciably during the first four months, increasing slightly in May and June and dropping in July, then increasing again to a peak in October, falling off to a point in December about equal to that of the first four months of the year. In 1935 there was an increase from 553,692 passengers per day to 606,987 during April, followed by a decrease during the summer months and an increase to a peak for the eleven months of 617,952 for the month of November. The spring peak was two months earlier in 1935 than in 1934, and the daily average was

considerably increased over 1934. For the first six months of 1935 the average daily passengers carried was 584,798 as compared to 523,126 for the corresponding period in 1934.

Travel by Days of Week

The normal average passengers carried daily during the first three months of 1934 and the corresponding months of 1935, excluding days which were abnormally high or low from such causes as conventions, dollar days, rain, etc., is shown in comparative form on the following chart. Although the actual number of passengers carried on each day during 1935 was higher than the corresponding days in 1934, the percent each day's travel represented of the weekly travel remained practically constant. Sunday travel in relation to week day travel has been decreasing over a period of years until it is now less than half a normal week day's traffic.



The following figures show the percent increase in passenger revenue by months for the first six months of 1935 over the corresponding months in 1934. In spite of the 3.6% decrease in January due to strike conditions, the six months total shows an increase of 3.5%.

<u>Month</u>	<u>January</u>	<u>February</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>	<u>Total</u>
Percent Increase	(3.63%)	2.78%	(.20%)	9.89%	5.08%	7.96%	3.52%

Revenue and Travel by Lines

The results for the first six months of 1935 by lines follows:

<u>First 6 Months of 1935</u>							
<u>Line</u>	<u>Cash & Ticket Fares</u>	<u>Free Transfers</u>	<u>Transfer Ratio</u>	<u>Weekly Passes</u>	<u>Sub Total</u>	<u>Free Passengers</u>	<u>Total</u>
A	2,471,257	746,864	30.2	890,643	4,108,764	106,113	4,214,877
B	2,181,744	1,071,030	49.1	979,176	4,231,950	81,129	4,313,079
D	612,745	258,865	42.2	322,943	1,194,553	22,657	1,217,210
F	1,908,578	634,475	33.2	684,450	3,227,503	117,997	3,345,500
G	264,122	131,239	49.7	167,610	562,971	25,360	588,331
H	2,460,348	842,034	34.2	909,045	4,211,427	84,932	4,296,359
I	94,521	92,667	98.0	61,761	248,949	6,749	255,698
J	3,532,687	1,671,403	47.3	1,234,782	6,438,872	160,983	6,599,855
K	270,538	217,299	80.3	132,668	620,505	26,561	647,066
L	3,133,579	916,102	29.2	954,535	5,004,216	121,657	5,125,873
N	1,538,268	414,594	26.9	677,699	2,630,561	74,286	2,704,847
O	1,452,680	736,872	50.7	676,619	2,866,171	80,013	2,946,184
P	5,247,569	1,802,076	34.3	1,724,691	8,774,336	261,174	9,035,510
R	3,836,250	1,490,439	38.8	1,237,677	6,564,366	156,587	6,720,953
S	4,162,985	1,663,907	39.9	1,459,118	7,286,010	215,794	7,501,804
U	3,839,045	1,718,522	44.8	1,472,171	7,029,738	187,790	7,217,528
V	2,636,456	2,640,967	100.2	1,125,433	6,402,856	180,713	6,583,569
W	4,907,542	1,496,048	30.5	1,626,156	8,029,746	235,604	8,265,350
2	629,337	234,280	37.2	284,844	1,148,461	33,158	1,181,619
3/4	2,193,634	906,570	41.3	861,763	3,961,967	52,113	4,014,080
5/6	3,828,329	1,034,708	27.0	1,274,703	6,137,740	244,678	6,382,418
7	2,046,416	507,328	24.8	575,358	3,129,102	110,545	3,239,647
8	1,569,561	518,356	33.0	570,890	2,658,807	174,975	2,833,782
9	1,589,684	472,856	29.7	577,932	2,640,472	103,821	2,744,293
10	1,543,000	488,374	31.7	517,912	2,549,286	76,718	2,626,004
Shut. Syst.	401,881	561,771	139.8	228,864	1,192,516	26,573	1,219,089
	27,848	-	-	-	27,848	-	27,848
Total	58,380,604	23,269,646	39.9	21,229,443	102,879,693	2,968,680	105,848,373

During the complete year of 1934 there were six lines which took in total receipts in excess of \$500,000, as shown by the table following; namely, the "P", "W", "5/6", "S", "R", and "U", of which the "P" and "W" lines exceeded \$600,000, the "P" line reaching very nearly \$700,000, it being the best revenue producing line of the system.

On the charts the line designated "Z" represents shuttle lines and miscellaneous.

Arranging the lines by \$100,000 groups, the following tabulation results:

\$ 0 to \$ 50,000	-	G, K, I, 2, Z
50,000 to 100,000	-	D
100,000 to 200,000	-	O
200,000 to 300,000	-	3, V, F, N, 10
300,000 to 400,000	-	L, 9, H, 7, A, B
400,000 to 500,000	-	J
500,000 to 600,000	-	5/6, S, R, U
600,000 to 700,000	-	P, W

Receipts per passenger is very uniform for all lines with exception of the "V", "K", "I", and shuttle lines. All of these lines are heavy transfer lines, the "V" and

"K" being cross-town lines, the "I" a short line, and "Z" the shuttle lines. The "5/6" line shows the highest receipts per passenger due to the fact that it is the only rail line which extends into the third zone. The "P" line shows the heaviest receipts per car mile, and the "I" and "K" lines, about equal, show the lowest receipts per car mile. The revenue passengers carried follow very closely the total receipts. Passenger pick up per car mile varies considerably on the different lines, the "P" line showing up better than any other, and the "I", "K", and "Z" lines being poorest.

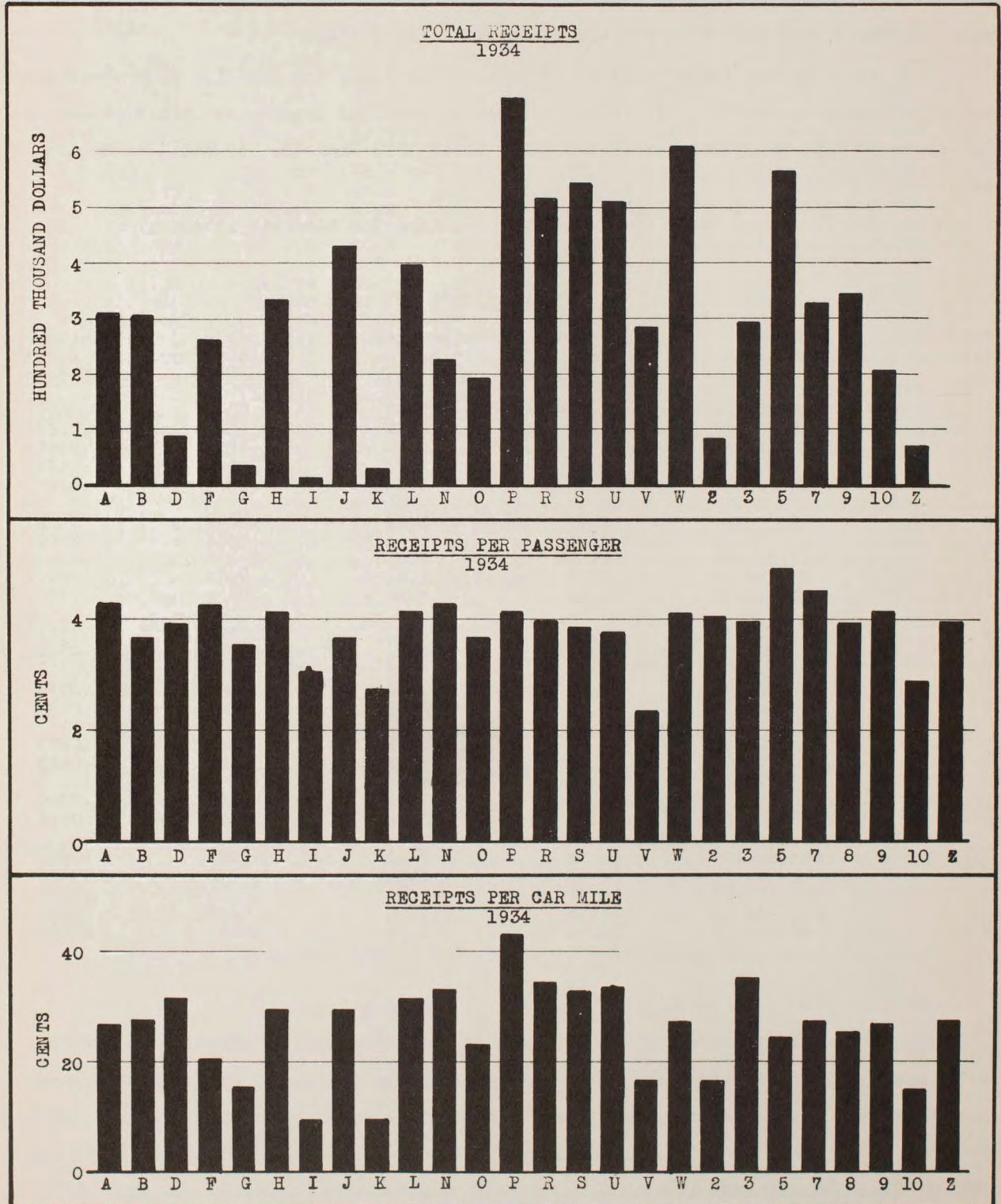
In comparing transfer ratio of the various lines the shuttles show the highest ratio, followed by the "I", "V", and "K" lines in order of importance, all of which are in excess of 50%, the remainder of the lines being less than 50%, or about an average of 25%.

The following table shows receipts by lines for the year 1934.

Rail Line	Year of 1934				
	Total Receipts	Receipts per Car Mile	Receipts per Car Hour	Receipts per Rev. Passenger	Receipts per Total Passenger
A	\$ 308,609.94	26.40¢	\$ 2.87	\$.0549	\$.0428
B	305,121.61	27.72	2.81	.0525	.0368
D	88,965.88	31.63	2.42	.0533	.0391
F	260,355.72	20.13	2.38	.0558	.0422
G	35,628.43	15.74	1.33	.0503	.0352
H	335,520.04	29.79	3.18	.0544	.0415
I	13,133.17	9.65	.82	.0557	.0305
J	429,539.27	29.85	3.39	.0517	.0364
K	29,823.22	9.96	1.01	.0471	.0277
L	398,619.09	31.52	3.46	.0534	.0416
N	222,033.89	33.20	2.91	.0537	.0428
O	191,308.05	23.06	2.41	.0531	.0368
P	694,749.47	42.87	4.48	.0552	.0415
R	512,956.45	34.32	3.87	.0543	.0399
S	540,722.27	32.59	3.61	.0527	.0382
U	507,520.45	33.94	3.62	.0531	.0377
V	280,675.60	16.62	1.96	.0432	.0233
W	605,444.97	27.26	3.22	.0532	.0410
Z	85,066.75	16.20	1.58	.0540	.0408
3/4	290,009.74	35.16	3.53	.0539	.0396
5/6	561,301.68	24.19	3.31	.0627	.0490
7/8	325,439.76	27.27	3.18	.0573	.0450
9	341,982.57	25.40	2.89	.0519	.0391
10	210,214.49	26.33	2.90	.0536	.0412
Shut.	69,841.35	14.94	1.14	.0599	.0289

The above table shows the "P" line as being the most outstanding as regards total receipts, receipts per car mile, and receipts per car hour. Receipts per revenue passenger were highest on the "5/6" line, which is due to the fact that the line extends into the outer zone. The "W" line was next in importance of total receipts, being about \$90,000 less than the "P" line.

The tabulation on the previous page is shown below in graphic form for the year 1934. The chart shows the receipts per passenger to be very much the same on all lines, the differences being due to the varying transfer ratios between one line and another.



SECTION C
MOTOR COACH REVENUES
 LOS ANGELES RAILWAY

Revenue from the Coach Division operations which began in 1923 has been as follows:

Year	Amount	Percent of Total Passenger Revenue	Passenger Revenue			Transfer Ratio	Revenue Passengers Index 1934=100
			Index 1934=100	Per Passenger	Per Car Mile		
1923	\$ 31,784.95	0.4%	3.8%	5.7¢	10.8¢	74.8%	5.0%
1924	151,772.37	1.2	18.1	6.9	14.7	50.6	19.5
1925	329,680.84	2.6	39.3	7.1	17.0	29.2	41.3
1926	561,030.32	4.4	66.8	6.7	18.7	26.3	73.8
1927	789,294.04	6.1	94.0	7.0	19.7	24.6	101.3
1928	793,626.57	5.9	94.5	7.1	18.4	30.7	99.7
1929	830,235.87	5.6	98.9	8.0	17.1	43.2	91.9
1930	849,243.58	6.2	101.1	8.0	16.0	45.9	94.6
1931	794,944.22	6.6	94.7	7.9	15.1	48.9	88.6
1932	677,008.92	6.6	80.6	8.0	12.9	48.5	75.3
1933	653,521.13	7.0	77.8	7.9	12.0	46.9	73.0
1934	839,750.85	8.7	100.0	7.4	13.0	40.5	100.0

Motor Coach Division revenues totalled 8.7% of the company's passenger revenue in 1923. Rail revenue was 84.5%, and the company's share of Los Angeles Motor Coach Company revenue was 6.8%.

Passengers carried segregated by the types of fares have been tabulated below for the first six months of 1933 as compared with the first six months of 1935.

Passengers	First 6 Months 1933		First 6 Months 1935		Increase	
	Number	Percent	Number	Percent	Number	Percent
6½¢ Tokens	1,060,682	17.8%	1,641,260	16.3%	580,578	54.7%
7¢ Cash	384,969	6.4	802,329	8.0	417,360	108.4
10¢ Cash	1,770,878	29.7	2,571,490	25.6	800,612	45.2
Other Cash	245,293	4.1	270,058	2.7	24,765	10.1
School Tickets	250,824	4.2	340,326	3.4	89,502	35.7
Commute Tickets	-	-	44	-	44	100.0
Sub Total	3,712,646	62.2	5,625,507	56.0	1,912,861	51.5
\$1.00 Weekly Pass	-	-	773,840	7.7	773,840	-
\$1.50 Weekly Pass	-	-	434,089	4.4	434,089	-
Revenue Transfer	246,815	4.1	361,398	3.6	114,583	46.4
Sub Total	3,959,461	66.3	7,194,834	71.7	3,235,373	81.7
Free Transfers	1,877,099	31.5	2,654,202	26.4	777,103	41.4
Free Transportation	129,840	2.2	192,177	1.9	62,337	48.0
Total	5,966,400	100.0%	10,041,213	100.0%	4,074,813	68.3%

The percent increase in total passengers for the first six months of 1935 over the corresponding months in 1934 is as follows:

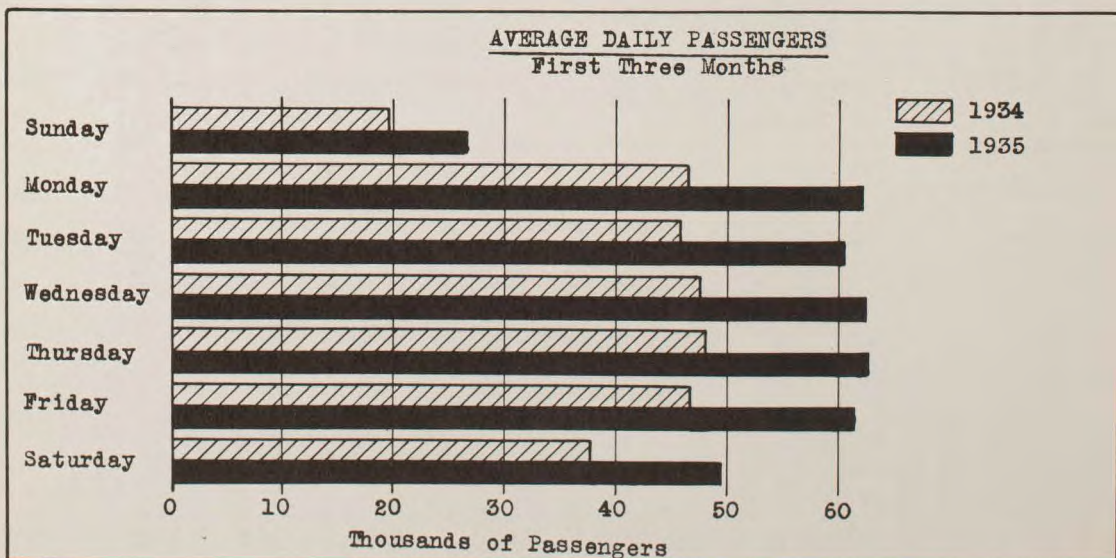
Month	January	February	March	April	May	June	Average
Percent Increase	18.84%	19.39%	17.85%	29.53%	25.22%	22.61%	22.24%

The following table shows a revenue comparison for the same period of time as the foregoing table showing a passenger comparison.

Revenue	First 6 Months 1933		First 6 Months 1935		Increase	
	Amount	Percent	Amount	Percent	Amount	Percent
6½¢ Tokens	\$ 66,293	21.7%	\$102,579	20.5%	\$ 36,286	54.7%
7¢ Cash	26,948	8.8	56,163	11.2	29,215	108.4
10¢ Cash	177,088	57.8	257,149	51.2	80,061	45.2
Other Cash	16,963	5.5	24,727	4.9	7,764	45.8
School Tickets	19,206	6.3	20,050	4.0	844	4.4
Commute Tickets	-	-	252	-	252	100.0
Sub Total	306,498	100.1	460,920	91.8	154,422	50.4
\$1.00 Weekly Pass	-	-	22,932	4.6	22,932	-
\$1.50 Weekly Pass	-	-	18,379	3.7	18,379	-
Revenue Transfers	-	-	-	-	-	-
Refunds	(152)	(.1)	(308)	(.1)	(156)	(102.6)
Total Revenue	\$306,346	100.0%	\$501,923	100.0%	\$195,577	63.8%

Normal average number of passengers carried daily during the first three months of 1934 and 1935 have been tabulated below and a corresponding chart drawn showing a comparison of the two years. Normal days only are included in the calculation and days abnormally high or low due to conventions, dollar days, rain, etc., have been excluded.

	First 3 Months 1934		First 3 Months 1935	
	Average Passengers Carried	Percent of Week	Average Passengers Carried	Percent of Week
Sunday	19,717	6.75%	26,710	6.94%
Monday	46,489	15.90	62,064	16.12
Tuesday	45,997	15.73	60,590	15.74
Wednesday	47,563	16.27	62,382	16.20
Thursday	48,069	16.44	62,587	16.25
Friday	46,755	15.99	61,201	15.89
Saturday	37,780	12.92	49,529	12.86
Week	41,767	100.00	55,009	100.00

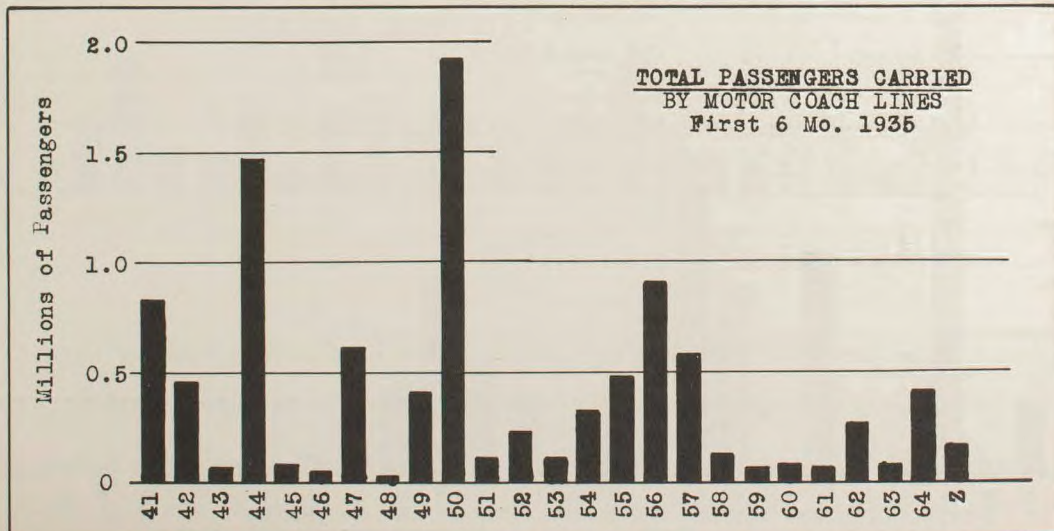


Revenue and Travel by Lines

First 6 Months of 1935

No.	Name of Line	Cash & Ticket Fares	Free Transfers	Transfer Ratio Percent	Weekly Passes	Free Passengers	Total Passengers
41	Alvarado	390,623	257,497	65.9%	168,739	12,116	828,975
42	Avalon-S.Pedro-S.Main	197,024	189,632	96.2	58,609	13,613	458,878
43	Ave.50 - El Paso	32,937	36,154	109.8	6,159	2,319	77,569
44	Beverly	1,171,222	155,068	13.2	117,301	9,377	1,452,968
45	Eagle Rock	51,142	29,980	58.6	6,263	3,573	90,958
46	E. Florence	36,298	24,679	68.0	4,123	642	65,742
47	E. 9th - Whittier	381,116	152,612	40.0	67,266	15,166	616,160
48	Fairview Heights	15,992	10,695	66.9	2,659	1,313	30,659
49	Figueroa	322,534	36,285	11.2	35,169	11,532	405,520
50	Florence-Soto	997,933	572,207	57.3	308,985	39,217	1,918,342
51	Hollydale	60,793	39,290	64.6	19,080	2,123	121,286
52	Inglewood	128,924	67,214	52.1	23,342	12,340	231,820
53	Lincoln Park	46,367	52,095	112.4	22,542	2,709	123,713
54	Manchester-Santa Ana	212,866	77,314	36.3	30,982	9,251	330,413
55	Maywood-Bell	320,787	138,981	43.3	28,829	10,057	498,654
56	Melrose	566,224	229,063	40.5	109,220	4,861	909,368
57	Normandie	290,911	217,784	74.9	68,546	15,694	592,935
58	Slauson	62,942	45,156	71.7	20,164	7,231	135,493
59	State-Southern	36,980	29,712	80.3	3,015	805	70,512
60	Van Ness	36,159	36,812	101.8	5,794	3,358	82,123
61	Verdugo	33,370	34,507	103.4	4,589	1,959	74,425
62	Wash-Adams-Jeff.	137,652	95,627	69.5	28,362	5,550	267,191
63	York	31,756	46,749	147.2	7,442	1,181	87,128
64	Highland Pk. (1/2/35)	257,561	79,089	30.7	60,749	6,190	403,589
	School Lines	166,792	-	-	-	-	166,792
	Total	<u>5,986,905</u>	<u>2,654,202</u>	<u>44.3%</u>	<u>1,207,929</u>	<u>192,177</u>	<u>10,041,213</u>

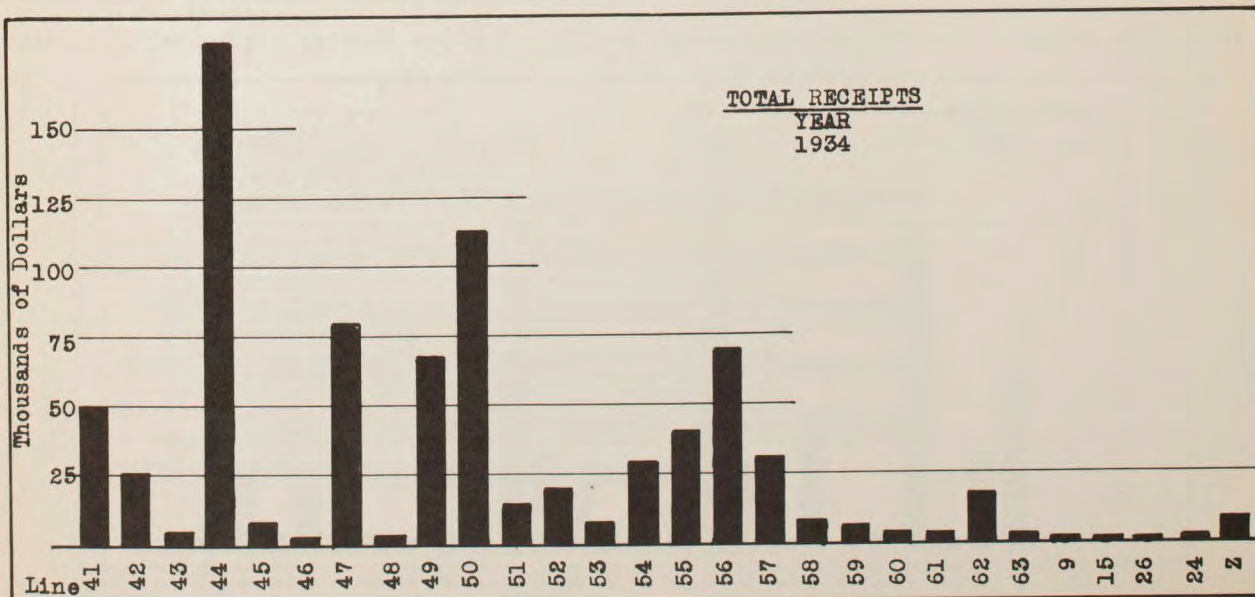
The above list of motor coach lines was changed somewhat during the year 1934 to the extent of combining the No. 9 Florence line and the No. 24 Soto line into the No. 50 Florence-Soto line as of January 23, 1934, and the extension of the No. 15 Manchester line over Santa Ana Street and given the number 54 and called the Manchester-Santa Ana line. The Olympic line No. 26 was changed in 1934 to a Los Angeles Motor Coach Co. line.



Total receipts, and receipts per passenger and per coach mile are shown by the following table and charts.

Year of 1934

Line	Total Receipts	Receipts per Coach Mile	Receipts per Coach Hour	Receipts per Rev. Passenger	Receipts per Total Passengers
41	\$ 50,521.85	21.65¢	\$ 2.14	\$.0548	\$.0352
42	25,564.86	7.03	.97	.0577	.0302
43	4,573.76	8.97	1.04	.0609	.0296
44	181,682.20	20.09	2.59	.0869	.0757
45	7,403.00	6.88	.88	.0778	.0471
46	2,473.37	5.27	.80	.0804	.0505
47	79,099.01	14.06	1.90	.0954	.0686
48	2,905.14	5.11	.67	.0823	.0476
49	67,111.85	13.14	1.70	.0971	.0860
50	113,494.99	14.15	2.01	.0594	.0394
51	14,845.15	8.64	1.23	.1020	.0644
52	20,172.84	9.11	1.18	.0734	.0468
53	7,151.20	11.60	1.05	.0599	.0307
54	29,509.37	7.55	1.28	.0740	.0527
55	40,778.17	11.17	1.54	.0775	.0535
56	69,971.05	18.13	2.34	.0607	.0445
57	31,875.36	8.93	1.23	.0608	.0353
58	7,345.77	6.44	.87	.0588	.0336
59	6,587.61	6.65	.96	.0804	.0472
60	4,397.49	7.58	1.01	.0679	.0348
61	3,965.30	8.07	.96	.0675	.0341
62	17,260.08	5.64	.90	.0657	.0412
63	3,460.67	9.57	.80	.0528	.0233
9	2,816.14	12.82	1.78	.0708	.0474
15	1,772.71	7.40	1.21	.0752	.0548
26	1,377.31	6.42	.84	.0624	.0436
24	2,736.72	14.27	1.94	.0678	.0397
Airp't	233.60	24.75	1.45	.1338	.1333
School	8,578.85	8.06	1.29	.0353	.0353

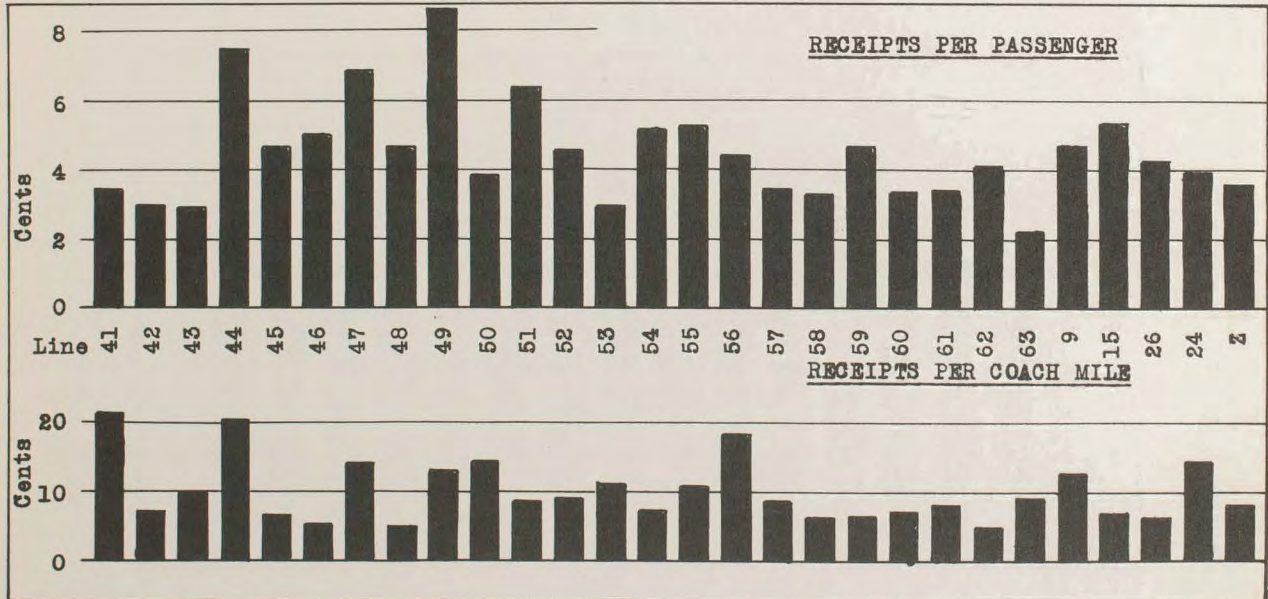


The foregoing table and chart show only one line with receipts in excess of \$150,000 for the year 1934; namely, the No. 44 line operating on Beverly Boulevard. The following shows the lines grouped by their earning capacities.

Over \$150,000	-	No. 44
\$125,000 to 150,000	-	0
100,000 to 125,000	-	No. 50
75,000 to 100,000	-	No. 47
50,000 to 75,000	-	No. 41,49,56
25,000 to 50,000	-	No. 42,54,55,57
Less than 25,000	-	13 lines

The above tabulation shows by far the greater majority of the lines earning less than \$25,000 per year, ten of them earning less than \$10,000 and six of those ten earning less than \$5,000 per year. Of all those lines shown, only three are through lines; namely, Nos. 44, 49, and 47, which three lines show the greatest earnings. All of the other lines are feeder lines with exception of Nos. 50 and 54.

Receipts per passenger, as shown by the following chart, vary considerably on the different lines, depending upon their respective transfer ratios, the highest receipts per passenger being earned by the No. 49 line, No. 44 and No. 47, in order of their importance, each of these three lines having a fare of 10¢.



Receipts per coach mile were highest on the No. 41 line, which is a 7¢ cross-town line operating on Alvarado Street. Next in order of importance come the Nos. 44, 56, 50, 47, and 49. Only two lines showed receipts per coach mile in excess of 20¢, being Nos. 41 and 44. Six lines fell in the group from 10¢ to 20¢ and fifteen less than 10¢.

SECTION D

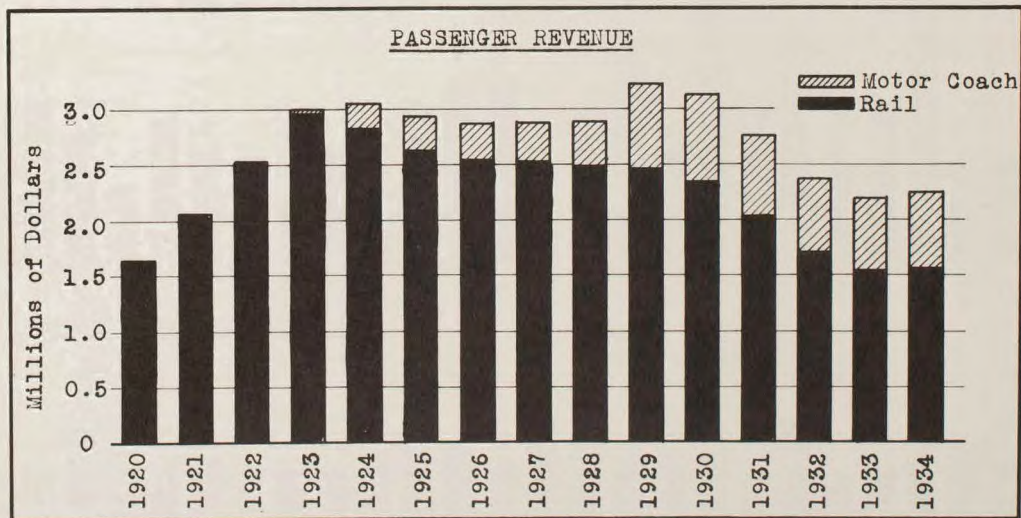
OPERATING REVENUES

PACIFIC ELECTRIC RAILWAY LOCAL LINES

In analyzing the revenues of the Pacific Electric Railway Company in Los Angeles it is necessary to separate the Local Lines from the system operations, which includes local services in other cities, interurban passengers and freight, mail and express operations. The local line revenues consist of those earned by the local rail lines, the local motor coach lines, and approximately 50% of those earned by the Los Angeles Motor Coach Company. Passenger revenue assignable to the Local Lines follows:

<u>Year</u>	<u>Rail</u>	<u>Percent</u>	<u>Motor Coach</u>	<u>Percent</u>	<u>½ L.A.M.Co.</u>	<u>Percent</u>	<u>Total</u>
1920	\$1,653,755	100.0%	\$ -	- %	\$ -	- %	\$1,653,755
1921	2,081,798	100.0	-	-	-	-	2,081,798
1922	2,532,459	100.0	-	-	-	-	2,532,459
1923	2,972,859	99.1	-	-	28,425	.9	3,001,284
1924	2,825,843	92.6	4,522	.1	222,155	7.3	3,052,520
1925	2,623,014	89.9	3,844	.1	291,534	10.0	2,918,392
1926	2,531,589	88.2	4,671	.2	333,743	11.6	2,870,003
1927	2,520,059	87.3	5,972	.2	359,969	12.5	2,886,000
1928	2,449,356	81.9	7,560	.3	532,851	17.8	2,989,767
1929	2,477,305	76.7	10,288	.3	740,760	23.0	3,228,353
1930	2,363,778	75.5	14,337	.5	754,566	24.0	3,132,681
1931	2,040,124	73.6	19,159	.7	712,471	25.7	2,771,754
1932	1,707,568	71.8	12,430	.5	657,286	27.7	2,377,284
1933	1,567,860	71.2	7,145	.3	626,780	28.5	2,201,785
1934	1,580,295	70.3	7,628	.3	660,544	29.4	2,248,467

The trend of revenue from 1920 is shown by the following chart:



In addition to the passenger revenues shown there are certain additional operating revenues of relatively minor importance. The following statement for 1934 shows these revenues:

	<u>Passenger Revenue</u>	<u>Other Oper. Revenue</u>	
Pacific Electric - Rail	\$1,580,295	\$ 8,103	\$1,588,398
" " - Coach	7,628	62	7,690
Share of Los Angeles M.C. Co.	660,544	2,068	662,612
Total	\$2,248,467	\$10,233	\$2,258,700

As the Los Angeles Motor Coach Company operations are considered in their entirety in another chapter, further reference at this point will be to Pacific Electric Railway Company operations only.

The rail line revenues and travel are summarized as follows:

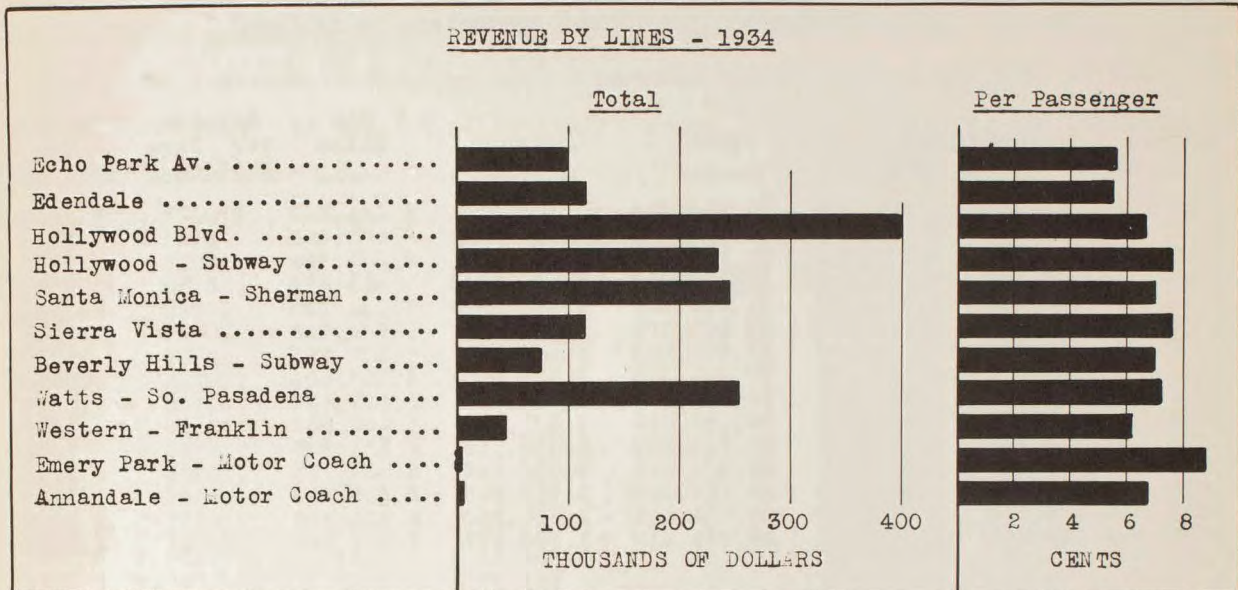
Year	Passengers		Total	Revenue (Ac.101)	Car Miles	Revenue per Fare Passenger	Revenue per Car Mile
	Fare	Transfer					
1920	28,654,182	2,592,630	31,246,812	\$1,653,755	6,164,261	\$.0577	\$.2683
1921	31,955,774	3,002,649	34,958,423	2,081,798	6,439,898	.0651	.3233
1922	32,530,391	3,331,800	35,862,191	2,532,459	6,699,989	.0778	.3780
1923	38,985,520	4,132,747	43,118,267	2,972,859	7,406,415	.0763	.4014
1924	37,201,101	4,110,855	41,311,956	2,825,843	7,132,480	.0760	.3962
1925	34,530,123	3,679,832	38,209,955	2,623,014	6,794,642	.0760	.3860
1926	33,367,569	3,909,038	37,276,607	2,531,589	6,570,453	.0759	.3853
1927	33,247,904	4,156,601	37,404,505	2,520,059	6,504,604	.0758	.3842
1928	32,878,893	3,982,682	36,861,575	2,449,356	6,537,427	.0745	.3747
1929	34,407,496	3,974,057	38,381,553	2,471,771	6,488,809	.0718	.3809
1930	32,811,959	3,953,549	36,765,508	2,363,778	6,431,537	.0720	.3675
1931	28,906,916	3,633,041	32,539,957	2,040,124	6,002,115	.0706	.3400
1932	24,883,107	3,281,736	28,164,843	1,707,568	5,623,236	.0686	.3037
1933	23,172,749	3,063,540	26,236,289	1,567,860	5,426,582	.0677	.2889
1934	23,222,267	3,660,051	26,882,318	1,580,295	5,311,053	.0681	.2975

The revenue and travel by lines in 1933 and 1934 is shown by the following statement:

Line	1933			1934		
	Fare Passengers	Revenue	Rev. per Passenger	Fare Passengers	Revenue	Rev. per Passenger
Echo Park Ave.	1,794,239	\$ 97,820	5.5¢	1,773,667	\$ 99,176	5.6¢
Edendale	2,141,358	118,165	5.5	2,107,992	116,445	5.5
Hollywood Blvd.	5,956,223	395,871	6.6	5,942,300	399,019	6.7
Hollywood (Subway)	2,967,149	222,139	7.5	3,064,974	232,097	7.6
Santa Monica-Sherman	3,426,628	234,479	6.8	3,517,782	245,815	7.0
Sierra Vista	1,533,853	116,509	7.6	1,540,027	116,483	7.6
Subway-Bev. Hills	1,104,267	76,700	6.9	1,084,290	75,517	7.0
Watts-S. Pasadena	3,634,002	261,560	7.2	3,513,952	253,741	7.2
Western-Franklin	615,030	44,617	7.3	677,283	42,002	6.2
Total Rail	<u>23,172,749</u>	<u>1,567,860</u>	<u>6.8</u>	<u>23,222,267</u>	<u>1,580,295</u>	<u>6.8</u>
Emery Park M.C.	41,031	3,636	8.9	39,184	3,452	8.8
Annandale " "	54,700	3,509	6.4	61,190	4,176	6.8
Total Motor Coach	<u>95,731</u>	<u>7,145</u>	<u>7.5</u>	<u>100,374</u>	<u>7,628</u>	<u>7.6</u>
Total	<u>23,268,480</u>	<u>\$1,575,005</u>	<u>6.8¢</u>	<u>23,322,641</u>	<u>\$1,587,923</u>	<u>6.8¢</u>

The average revenue per fare passenger is 6.8¢, varying from 5.5¢ on short lines such as Edendale and Echo Park lines to 7.6¢ on the longer lines, such as Hollywood rail line. During April of 1928 the fare structure of the local lines was revised from two zones of 5¢ and 10¢ to three zones of 5¢, 10, and 10¢ with a 6½¢ ticket good between Zones 1 and 2.

The revenue and travel by lines for the year 1934 is shown graphically as follows:



An analysis of the travel shows that 28,962,131 passengers were carried in 1934, of which 23,322,641, or 80%, were fare passengers, 13% transfer passengers and 7% free passengers, as follows:

Line	Passengers						
	Fare	Transfer	% of Fare	Fare and Transfer	Free	% of Fare	Total
Echo Park Ave.	1,773,667	213,434	12.0%	1,987,101	108,142	6.1%	2,095,243
Edendale	2,107,992	490,013	23.2	2,598,005	246,334	11.7	2,844,339
Hollywood Blvd.	5,942,300	714,125	12.0	6,656,425	294,347	5.0	6,950,772
Hollywood-Subway	3,064,974	470,280	15.3	3,535,254	152,656	5.0	3,687,910
Santa Monica-Sherman	3,517,782	714,567	20.3	4,232,349	259,368	7.2	4,491,717
Sierra Vista	1,540,027	186,242	12.1	1,726,269	182,559	11.9	1,908,828
Subway-Bev. Hills	1,084,290	181,950	16.8	1,266,240	63,541	5.9	1,329,781
Watts-S.Pasadena	3,513,952	397,044	11.3	3,910,996	579,333	16.5	4,490,329
Western-Franklin	677,283	292,396	43.2	969,679	24,701	3.6	994,380
Total Rail	23,222,267	3,660,051	15.8	26,882,318	1,910,981	8.2	28,793,299
Emery Park M.C.	39,184	45,994	117.4	85,178	40	.1	85,218
Annandale "	61,190	20,564	33.6	81,754	1,860	3.0	83,614
Total Motor Coach	100,374	66,558	66.3	166,932	1,900	1.9	168,832
Total	23,322,641	3,726,609	16.0%	27,049,250	1,912,881	8.2%	28,962,131
Percent	80.5%	12.9%		93.4%	6.6%		100%

Of the rail lines entering the downtown district, the Edendale line has the highest transfer ratio, or 23.2%. Free passenger travel is heaviest on the Watts line.

A summary of Pacific Electric fares by classes made on Wednesday, June 20, 1934, is as follows:

	Cash Coupon	Cash	Strip Ticket	Total	Percent of Total
5¢ Fare	138	31,319	11	31,468	41.0%
10¢ Fare	32	22,246	141	22,419	29.2
15¢ Fare		751	3	754	1.0
Other Fare		4	3	7	-
6½¢-Zone 1-Zone 2 Tickets				7,872	10.3
10¢-Zone 1-Crescent Jct. Tickets				206	.3
25¢ R.T.-Zone 1-Zone 4-PERY				300	.4
25¢ R.T.-Zone 1-Zone 4-LAMC				11	-
School Tickets-any 1 Zone				1,719	2.2
" " -any 2 or 3 Zones				162	.2
" " -Subway & LaBrea				119	.2
" " -Joint PERY-LAMC				20	-
" " -Other				154	.2
Employee Commutation				16	-
Interurban Tickets				185	.2
Sub Total				65,412	85.2
Transfers -PERY.				7,245	9.4
" -LARY.				2,349	3.1
" -LAMC.				1,777	2.3
Total				<u>76,783</u>	<u>100.0%</u>

The Pacific Electric Railway's Los Angeles Local Zone Fare has an inner zone approximately $2\frac{1}{2}$ miles from downtown Los Angeles. Within this zone the fare is 5¢ with transfer to other Pacific Electric local lines within the zone. The second zone is approximately 5 miles from the downtown area. Here again the fare within the zone is 5¢. The fare from this zone to the inner zone is 10¢ or 16 tickets for \$1.00 (6½¢). The fare to the third zone is 10¢. The third zone on the Hollywood lines embraces the Hollywood business center between Vermont and La Brea Avenues, the local fare of 5¢ being overlapped to Fairfax Avenue on the west. On the Watts line the zone extends from Florence Avenue to Watts, and on the Sierra Vista line from Rose Hill Park to Sierra Vista. A 10¢ fare is effective from Zone 3 to Zones 1, 2, and 4, and 15¢, 20¢, and 25¢ fares to such zones where the trip is through Zone 1. Zone 4 includes the area from La Brea Avenue to Doheny Drive, West Hollywood, also from Arroyo Verde Drive to Mission and Fair Oaks, South Pasadena. The fare from Zone 4 to Zone 1 is 15¢ one way, 25¢ round trip, and in the area between La Brea Avenue and Fairfax Avenue a 10-ride ticket is sold for \$1.00. School rates are in effect. The inter-company ticket has already been discussed.

Free transportation is provided by the Pacific Electric Railway to certain public agencies and private individuals in conformity with the practice as outlined for the Los Angeles Railway. A repetition of that list is not necessary at this point.

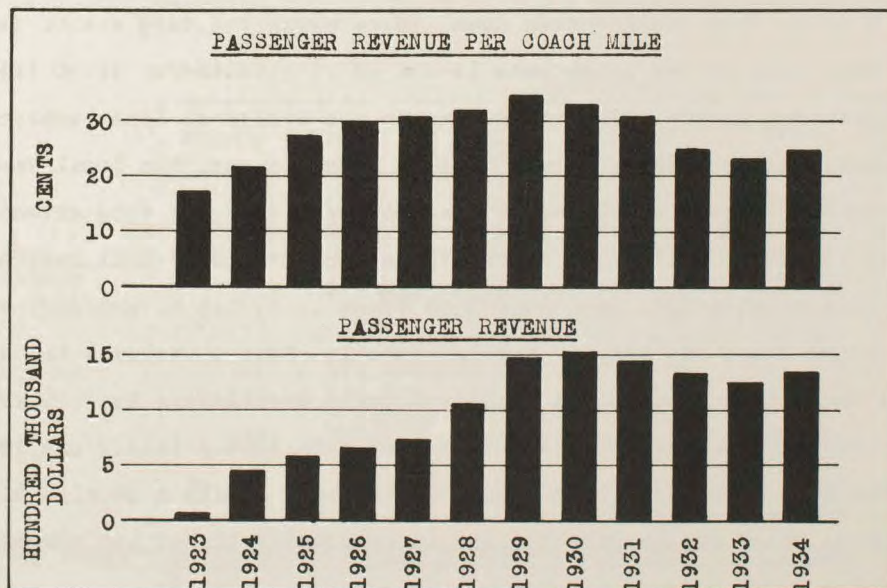
SECTION E

OPERATING REVENUES

LOS ANGELES MOTOR COACH COMPANY

The Los Angeles Motor Coach Company is a joint agency of the Los Angeles Railway Corporation and the Pacific Electric Railway Company organized for the purpose of supplying passenger transportation and service in the territory contiguous to the areas served exclusively by rail and motor coach lines of the two companies. The following analysis of revenues deals with the entire earnings of the company before distribution to parent companies.

Year	Passenger Revenue	Index	Revenue Passengers	Index	Revenue Per Revenue Passenger	Passenger Revenue Per Coach Mile
1923	\$ 56,851.04	4.3	911,056	6.0	6.24¢	17.66¢
1924	444,310.01	33.6	6,485,086	42.8	6.85	21.89
1925	583,067.99	44.1	7,992,057	52.8	7.29	27.86
1926	667,485.50	50.5	8,779,693	58.0	7.60	28.95
1927	719,937.37	54.5	9,549,867	63.0	7.55	30.73
1928	1,065,702.25	80.7	12,981,509	85.7	8.21	32.08
1929	1,481,519.68	112.1	17,092,329	112.8	8.67	34.80
1930	1,509,131.14	114.2	17,504,305	115.5	8.62	33.77
1931	1,424,941.82	107.9	16,382,751	108.1	8.70	31.31
1932	1,314,571.77	99.5	14,897,328	98.3	8.82	25.27
1933	1,253,559.47	94.9	14,258,468	94.1	8.79	23.83
1934	1,321,088.02	100.0	15,149,096	100.0	8.72	24.45



The revenue is that included in Account No. 500, Passenger Revenue. Included with Revenue Passengers are Pacific Electric Railway and Los Angeles Railway transfers received for which settlement is made. It will be noted that 1930 was the peak year of revenue and travel, declining from that year to 1933. Revenues and travel increased in 1934. Revenue per passenger has not varied greatly since 1928 when the Wilshire line

was transferred to the Los Angeles Motor Coach Company, but passenger revenue per coach mile has decreased materially since the peak in 1929, due to extensions of service.

Operating Revenue by accounts in total and per coach mile during the past three years is reported as follows:

Operating Revenues	1932	1933	1934	In Cents Per Coach Mile		
				1932	1933	1934
500 Passenger Revenue	\$1,314,571.77	\$1,253,559.47	\$1,321,088.02	25.23¢	23.79¢	24.42¢
520 Advertising	2,928.65	6,962.03	4,229.21	.06	.13	.08
522 Rent of Equipment	1,233.23	1,459.69	1,794.18	.02	.03	.03
Total Revenue	\$1,318,733.65	\$1,261,981.19	\$1,327,111.41	25.31¢	23.95¢	24.53¢

Account No. 522, Rent of Equipment, includes revenues received from rental of coaches for special services and parties.

An analysis of Account No. 500, Passenger Revenue, which is the principal account, for the years 1933 and 1934 follows. This analysis shows the passengers carried, revenues and revenue per passenger for various classifications.

	1933			1934		
	Passengers	Revenue	Rev. Per Psgr.	Passengers	Revenue	Rev. Per Psgr.
Cash and Ticket	10,962,706	\$1,228,202.34	11.20¢	11,563,204	\$1,291,471.54	11.17¢
School Tickets	82,651	3,350.45	4.05	78,501	2,466.36	3.14
U.S. Government	5,597	335.82	6.00	4,917	295.02	6.00
High School District	-	961.35	-	-	1,057.47	-
Cash Excess	-	149.55	-	-	68.39	-
Total Fare Passengers	11,050,954	1,232,999.51	11.16	11,646,622	1,295,358.78	11.12
L.A.Ry. Transfers Billed	2,416,239	120,432.12	4.98	2,699,545	135,351.11	5.01
P.E.Ry. " "	791,275	40,589.39	5.13	802,929	41,164.79	5.13
Total Rev. Passengers	14,258,468	1,394,021.02	9.78	15,149,096	1,471,874.68	9.72
Free Transfer Passengers	1,328,284	-	-	1,492,616	-	-
Total Free Passengers	15,586,752	1,394,021.02	8.94	16,641,712	1,471,874.68	8.84
Total Passengers	15,654,999	1,394,021.02	8.90	16,708,662	1,471,874.68	8.81
Less L.A.Ry. Transfers Pd.	2,193,573	110,011.67	5.02	2,369,359	118,613.62	5.01
" P.E.Ry. " "	596,357	30,182.92	5.06	631,262	31,905.27	5.05
" Refunds	-	266.96	-	-	267.77	-
Total Deductions	2,789,930	140,461.55	5.03	3,000,621	150,786.66	5.03
Net Total	-	\$1,253,559.47	-	-	\$1,321,088.02	-

The revenue per passenger, using the net total revenue related to the total Revenue Passengers, including Los Angeles Railway and Pacific Electric Railway transfers billed, was 8.79¢ in 1933 and 8.72¢ in 1934. The revenue per fare passenger in 1934 was 11.12¢ prior to consideration of inter-company transactions and refunds.

Inter-company transfers are settled on the basis of 50% to the Los Angeles

Motor Coach Company; the remainder to either or both of the parent companies.

Passengers carried during the year 1934 by lines, segregated as between revenue, free transfer, free and total passengers follows:

Line	Total Revenue Passengers	% of Total	Free Transfer Passengers	Free Transfer Ratio	Free Passengers	Total Passengers Carried
Hollywood-LongBeach-SanPedro	15,890	.10	-	-	79	15,969
Wilshire Boulevard	4,963,480	32.77	528,508	10.6%	12,418	5,504,406
Sunset Boulevard	3,179,318	20.99	245,031	7.7	23,660	3,448,009
Western Avenue	3,036,457	20.04	193,969	6.4	14,370	3,244,796
Crenshaw-Vine-LaBrea	2,769,836	18.28	399,379	14.4	12,182	3,181,397
Vermont-Glendale-Riverside	592,803	3.91	50,442	8.5	2,727	645,972
Silverlake-Hyperion-Talmadge	369,291	2.44	13,379	3.6	860	383,530
Olympic Blvd.(From 4/8/34)	175,863	1.16	61,908	35.2	654	238,425
Schools	46,158	.31	-	-	-	46,158
Total	15,149,096	100.00	1,492,616	9.9%	66,950	16,708,662
Percent	90.67		8.93		.40	100.0%

The revenue passengers carried in 1934 set up by lines to show revenue transfers billed as distinguished from fare passengers follows:

Line	Fare Passengers	Revenue Transfers Billed LARy	Revenue Transfers Billed PERY	Total Revenue Passengers	Revenue Transfer Ratio
Hollywood-Long Beach-San Pedro	14,430	-	1,460	15,890	10.1%
Wilshire Boulevard	4,394,339	528,692	40,449	4,963,480	12.9
Sunset Boulevard	2,674,397	421,295	83,626	3,179,318	18.9
Western Avenue	1,769,066	931,626	335,765	3,036,457	71.6
Crenshaw-Vine-LaBrea	2,023,843	588,276	157,717	2,769,836	36.9
Vermont-Glendale-Riverside	356,168	151,569	85,066	592,803	66.4
Silverlake-Hyperion-Talmadge	223,835	47,228	98,228	369,291	65.0
Olympic Boulevard	144,386	30,859	618	175,863	21.8
Schools	46,158	-	-	46,158	-
Total	11,646,622	2,699,545	802,929	15,149,096	30.1%

An analysis by lines of passenger revenue and revenue per fare passenger shows the following result for the years 1933 and 1934.

	Passenger Revenue		Revenue Per Fare Passenger		Total Passenger Pick-up Per Mile	
	1933	1934	1933	1934	1933	1934
Hollywood-LongBeach-SanPedro	\$ 5,799.67	\$ 5,334.45	38.92¢	36.97¢	.1	.1
Wilshire Boulevard	546,672.85	568,006.77	12.92	12.93	2.9	3.1
Sunset Boulevard	271,117.33	278,343.57	10.38	10.41	3.4	3.5
Western Avenue	176,054.91	176,924.91	10.00	10.00	4.0	4.1
Crenshaw-Vine-LaBrea	185,490.76	202,404.61	10.00	10.00	3.0	3.3
Vermont-Glendale-Riverside	25,613.06	31,726.72	08.89	08.91	1.9	2.3
Silverlake-Hyperion-Glendale	17,008.47	17,673.77	08.01	07.90	1.2	1.3
Olympic Blvd. (From 4/8/34)	-	12,270.01	-	08.50	-	1.3
Crescent Hgts. (To 1/28/33)	188.70	-	13.57	-	.7	-
Riverside Dr. (To 4/27/33)	2,205.03	-	09.31	-	2.3	-
School Lines	2,848.73	2,673.97	05.56	05.79	5.4	4.7
Sub Total	\$1,232,999.51	\$1,295,358.78	11.16¢	11.12¢	3.0	3.1
L.A.Ry. Transfers Billed	120,432.12	135,351.11				
P.E.Ry. " "	40,589.39	41,164.79				
Less L.A.Ry. Transfers Paid	110,011.67	118,613.62				
Less P.E.Ry. " "	30,182.92	31,905.27				
Less Refunds	266.96	267.77				
Total	\$1,253,559.47	\$1,321,088.02				

CHAPTER X

OPERATING EXPENSES

Analysis of operating expenses for the three companies has been set up under the following sections:

- A. Los Angeles Railway - System
- B. Los Angeles Railway - Rail Division
- C. Los Angeles Railway - Motor Coach Division
- D. Pacific Electric Railway - Local Lines
- E. Los Angeles Motor Coach Company

SECTION A

OPERATING EXPENSES

LOS ANGELES RAILWAY CORPORATION

SYSTEM

Operating expenses are such expenses as are necessary to the maintenance and operation of the property used in transportation service, the rendering of service and the collection of revenues in connection therewith. The Los Angeles Railway Corporation system of accounting for operating expenses as reflected by the Income and Profit and Loss Statement includes the Rail Division, Motor Coach Division, and one-half the Los Angeles Motor Coach Company. For the year ending December 31, 1934, the total expenses amounted to \$7,842,441.03, exclusive of depreciation, which latter amounted to \$1,433,217.11, totaling \$9,275,658.14. The following summary shows operating expenses for the year ending December 31, 1934, by accounting groups broken down between Rail Division, Motor Coach Division, and Los Angeles Motor Coach Company.

	Rail	Motor Coach Division	Share of L.A.M.C. Co.	Total
Way and Structures	\$ 506,408.19	\$ 214,509.94	\$ 107,775.45	\$ 506,408.19
Equipment	615,048.18	776,626.16	-	937,333.57
Power	3,407,232.86	532,733.13	309,783.49	4,249,749.47
Conducting Transportation	60,573.12	527.27	268.24	61,368.63
Traffic	1,142,481.93	102,227.78	74,900.65	1,319,610.37
General & Miscellaneous	6,508,370.44	849,998.12	492,727.83	7,851,096.39
Total Excl. Depreciation	<u>1,306,258.08</u>	<u>86,599.86</u>	<u>40,359.17</u>	<u>1,433,217.11</u>
Depreciation	7,814,628.52	936,597.98	533,087.00	9,284,313.50
Total Incl. Depreciation	-	(110.06)	(8,545.30)	(8,655.36)
Inter Company Eliminations	<u>\$7,814,628.52</u>	<u>\$936,487.92</u>	<u>\$524,541.70</u>	<u>\$9,275,658.14</u>
Total	84.25%	10.10%	5.65%	100.00%
Percent				

This section of the report will deal with the Los Angeles Railway Corporation, Rail division and Motor Coach Division only, the Los Angeles Motor Coach Company being discussed in its entirety later in this chapter.

in 1925, from which figure it did not vary greatly until 1930 when another decline started, bringing the figure down from \$9,535,341.10 in that year to \$7,046,145.97 in 1933, a decrease of 26%. Expense in 1934 increased about \$800,000 over the year 1933, the increase being in large part due to the expense in connection with the strike which commenced in the latter part of 1934. There was also a general increase in wage and salary rates in 1934 affecting all employees other than the general officers. The major part of the increase fell in the conducting transportation group. Over the period of fifteen years, conducting transportation and general and miscellaneous groups show the greatest fluctuation, and inasmuch as the two groups combined represent 58.8% of the total expense, the trend of the total operating expenses follows to a large extent that of these two groups. The relative magnitudes of the various accounting groups is as follows for the year 1934, together with average for the period of fifteen years.

	<u>Amount</u>	<u>Percent</u>	
		<u>1934</u>	<u>1920 to 1934</u>
Way and Structures	\$1,313,194	16.8%	15.2%
Equipment	1,114,520	14.3	14.7
Power	776,626	9.9	11.0
Conducting Transportation	3,407,233	43.6	46.2
Traffic	60,573	.8	.3
General & Miscellaneous	<u>1,142,482</u>	<u>14.6</u>	<u>12.6</u>
Total	\$7,814,628	100.0%	100.0%

After excluding depreciation the percentages in the above summary become as follows:

	<u>Amount</u>	<u>Percent</u>	
		<u>1934</u>	<u>1920 to 1934</u>
Way and Structures	\$ 506,408	7.8%	7.9%
Equipment	615,048	9.5	10.9
Power	776,626	11.9	12.7
Conducting Transportation	3,407,233	52.4	53.5
Traffic	60,573	.8	.4
General & Miscellaneous	<u>1,142,482</u>	<u>17.6</u>	<u>14.6</u>
Sub Total	6,508,370	100.0%	100.0%
Depreciation	<u>1,306,258</u>		
Total	\$7,814,628		

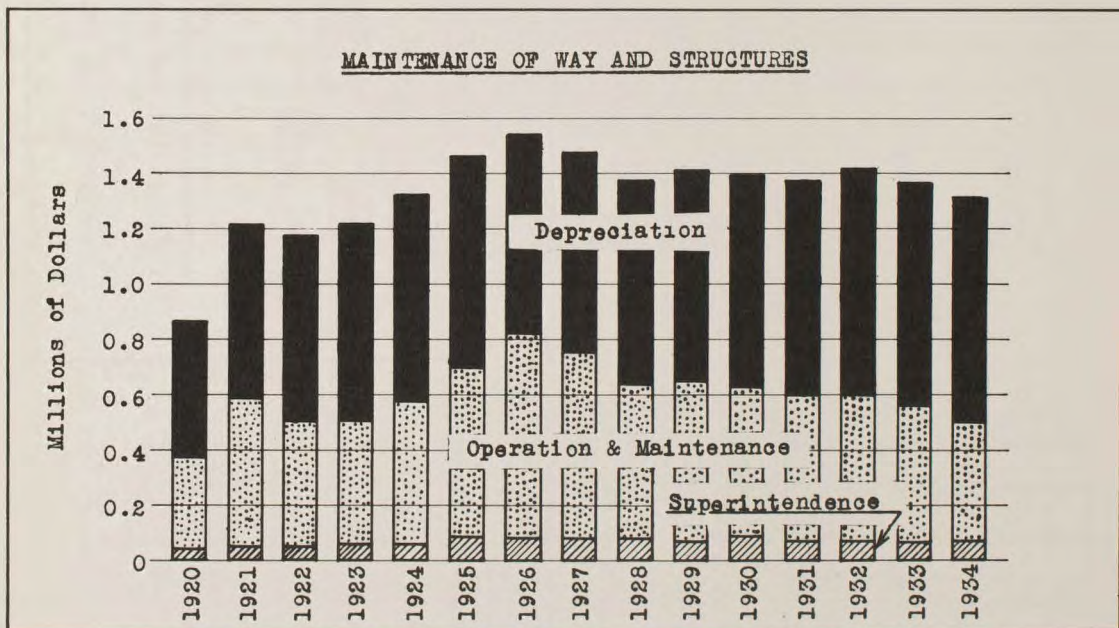
Deduction of depreciation from the above figures results in a decrease of Way and Structures from 15% of the total to 8%, and Equipment from 15% to 11%, increasing Conducting Transportation to 53.5% as against 46%. For the first six months of 1935 there has been an increase in total operating expense over the corresponding six months of 1934 of 14%. This increase is mainly in expense of Conducting Transportation, which was 11% greater than for 1934 and 24% less than for the corresponding period in 1929. This condition was partially due to strike activities which did not become quiet until

after several months of 1935 had elapsed.

GROUP I - WAY AND STRUCTURES

Accounts classified under the Way and Structures group are those to which are charged costs in connection with maintaining track and roadway, bridges, buildings, fencing, paving, signs, poles, trolleys, feeders, bonding, etc., including labor, material and depreciation.

The following chart shows the relative magnitude of charges for (a) Superintendence, (b) Operation and Maintenance, and (c) Depreciation, over a period of fifteen years. Depreciation has averaged 54.8% of the total group and is higher in the years 1932, 1933 and 1934 than in previous years. Of the expense, exclusive of Depreciation, Superintendence makes up about 12%, and has not varied appreciably in amount over the period, although the ratio has varied from 8.9% in 1921 to 13.2% in 1934.



Charges to primary accounts other than depreciation show a high point in 1926 of over \$800,000 for that year. The expense decreased rapidly in 1927 and 1928, then decreased gradually to 1934, where the 1922 and 1923 level of about \$500,000 annually was reached. The major fluctuations were affected mainly by Track and Roadway Labor and Paving costs.

The following table shows annual charges to accounts in this group by primary accounts for the years 1931 to 1934, inclusive.

Way and Structures

Acct. No.	1931	1932	1933	1934	Percent of * Total Exp.
1 Superintendence	\$ 77,755	\$ 70,988	\$ 66,920	\$ 66,692	1.02%
2 Ballast	395	2,031	2,035	1,781	.03
3 Ties	7,524	17,941	23,895	14,950	.23
4 Rails	309	264	782	810	.01
5 Rail Fast'gs. & Jts.	4,453	6,385	6,655	5,107	.08
6 Special Work	8,706	7,423	13,292	8,824	.14
8 Track & Roadway Labor	197,008	207,945	200,491	190,116	2.91
9 Misc. Track Expense	25,074	23,020	18,776	17,944	.28
10 Paving	97,843	113,646	80,155	63,621	.98
11 Cleaning & Sanding Track	35,475	32,534	29,719	32,970	.51
15 Bridges, Tres. & Culverts	1,590	1,088	401	435	-
16 Crossings, Fences & Signs	2,516	1,926	970	2,731	.04
17 Signals & Interlockers	129	154	116	187	-
18 Teleph. & Telegr. Lines	5,238	3,905	3,190	4,283	.07
19 Misc. Way Expense	5,412	3,992	8,277	3,654	.06
20 Poles & Fixtures	12,668	13,330	12,555	12,704	.20
22 Distribution System	65,894	61,710	46,003	45,785	.70
23 Misc. Elec. Line Exp.	6,585	5,586	4,477	5,594	.09
24 Bldgs., Fixt. & Grounds	45,538	35,132	39,034	28,220	.43
Sub Total	600,112	609,000	557,743	506,408	7.78%
Depreciation	771,918	805,353	808,548	806,786	
Total	<u>\$1,372,030</u>	<u>\$1,414,353</u>	<u>\$1,366,291</u>	<u>\$1,313,194</u>	

*Exclusive of Depreciation

Comparative figures showing by years the cost per car hour, per car mile, and per mile of equivalent single track operated, percent of total expense, and percent of 1920, are shown below, excluding depreciation.

Way and Structures

Year	Amount	Index 1920 = 100	Percent of Total	Cost per Car Mile	Cost per Car Hour	Cost per Mile of Track
1920	\$375,551.18	100%	5.76%	1.253¢	12.574¢	\$ 961.40
1921	586,889.04	156	8.02	1.952	18.937	1,525.93
1922	504,470.18	134	7.59	1.712	16.500	1,311.71
1923	508,473.52	135	6.55	1.598	15.314	1,284.19
1924	573,518.92	153	6.97	1.733	16.524	1,444.45
1925	703,976.29	187	8.28	2.162	20.751	1,754.24
1926	826,549.39	220	9.69	2.568	25.007	2,054.71
1927	759,553.93	202	8.97	2.387	23.544	1,867.56
1928	646,946.90	172	7.79	2.052	20.270	1,597.16
1929	658,325.59	175	7.82	1.995	20.404	1,640.16
1930	631,816.72	168	7.68	2.073	21.705	1,573.92
1931	600,112.19	160	7.53	2.061	21.937	1,479.71
1932	609,000.47	162	9.18	2.285	25.117	1,504.22
1933	557,743.00	149	9.74	2.112	23.259	1,379.83
1934	506,408.19	135	7.78	1.842	20.201	1,254.82

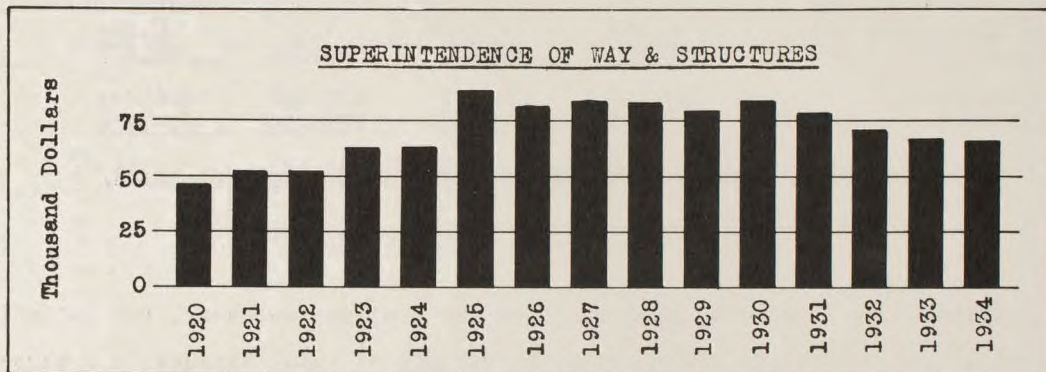
Account No. 1 - Superintendence

This account includes salaries and expenses of the Engineer and his assistants directly in charge of maintenance of way and structures and a portion of salaries and expenses of the General Engineering Office. As of July 31, 1935, the maintenance of

Way and Structures organization was as follows:

- 1 Engineer of Way and Structures
- 1 Chief Clerk
- 1 Supervisor of Way
- 1 Asst. Supervisor of Way
- 1 Supervisor of Buildings and Bridges
- 1 Assistant Engineer
- 1 Chief of Party
- 7 Other Employees

For the year 1934 this account was charged with \$66,691.70, or 13.17% of the total group. In 1920 \$45,895.59 was charged, which was 12.2% of the group total, and in 1929, \$78,906.41 was charged, or 12.0% of the total. The highest annual charge to the account was \$88,530.08 in 1925.



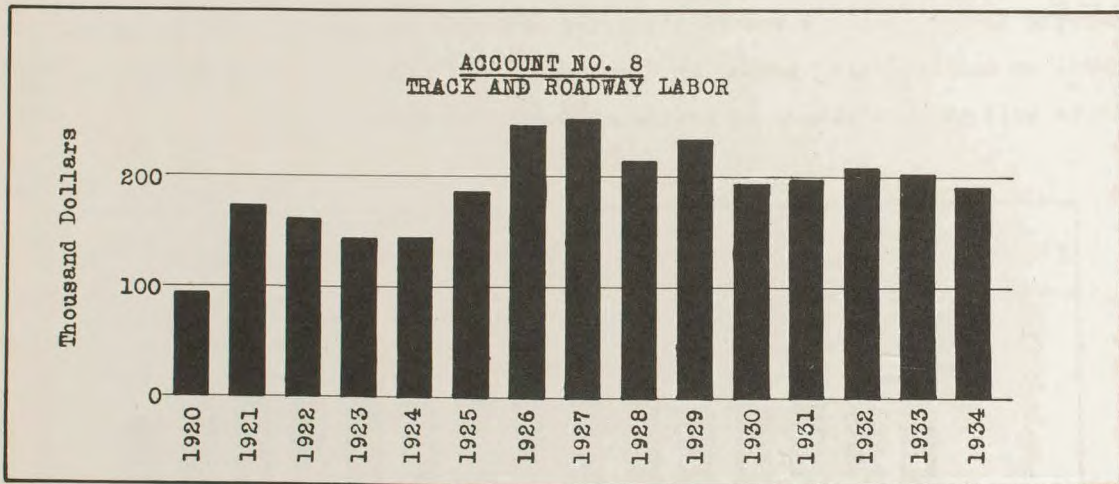
Year	Amount	Index 1920 = 100	Superintendence Percent		Cost per Car Mile	Cost per Car Hour	Cost(a) per \$100
			Group	Total Expense			
1920	\$45,895.59	100%	12.2%	.70%	.153¢	1.537¢	\$13.92
1921	51,913.28	113	8.9	.71	.173	1.675	9.70
1922	51,890.80	113	10.3	.78	.176	1.697	11.47
1923	62,584.31	136	12.3	.80	.197	1.885	14.04
1924	62,745.77	137	10.9	.76	.190	1.808	12.28
1925	88,530.08	193	12.6	1.04	.272	2.610	14.38
1926	81,238.76	177	9.8	.95	.252	2.458	10.90
1927	83,761.22	183	11.0	.99	.263	2.596	12.39
1928	83,065.08	181	12.8	1.00	.263	2.603	14.73
1929	78,906.41	172	12.0	.94	.239	2.446	13.62
1930	83,968.68	183	13.3	1.02	.275	2.885	15.33
1931	77,754.94	169	13.0	.98	.267	2.842	14.89
1932	70,987.54	155	11.7	1.07	.266	2.928	13.19
1933	66,920.07	146	12.0	1.17	.253	2.791	13.63
1934	66,691.70	145	13.2	1.02	.243	2.660	15.17

(a) Cost of Superintendence per \$100 of Way and Structures expense exclusive of depreciation.

Account No. 8 - Track and Roadway Labor

Charges to this account represent labor, of placing ballast, unloading and distributing ballast, re-laying ties, repairing and re-laying rails, fastenings and joints, special work, and all other track and roadway labor not properly chargeable to other accounts. This account is the most important of the Way and Structures Group

representing 37.5%, and 2.9% of total operating expense for the year 1934, these percents having increased steadily from 25.2% and 1.5%, respectively, in 1920. The following chart shows the annual charges to the account over a fifteen year period of 1920 to 1934 inclusive. The charges have fluctuated somewhat, the peak having been reached in 1927, followed by a smaller peak in 1929 and a decrease of about \$40,000 in 1930, rising gradually about \$15,000 from 1930 to 1932, then dropping off to the 1930 level in 1934. The trend of charges to this account for the years 1930 to 1934 has not followed that of most other accounts in that there was an increase from 1930 to 1932 and the year 1934 shows a decrease over the year 1933. In 1930, the maintenance program was reduced and in spite of a 5% increase in wages, the cost was considerably below that for 1929. In 1932 there was a 10% reduction in labor rates, but an increase in over-all expense, as considerable work was done during that year. During 1934 there was a 5% increase in wage rates. The rate at present in effect for track labor is 36¢ per hour.



Track and Roadway Labor

Year	Amount	Index 1920 = 100	Percent		Cost per Car Mile	Cost per Track Mile
			Group	Total		
1920	\$ 94,646.99	100%	25.2%	1.45%	.316¢	\$242.29
1921	171,635.41	181	29.2	2.35	.571	446.26
1922	160,900.32	170	31.9	2.43	.546	418.37
1923	143,285.16	151	28.2	1.84	.450	361.88
1924	144,203.49	152	25.1	1.75	.436	363.19
1925	186,102.41	197	26.4	2.19	.571	463.75
1926	246,538.77	260	29.8	2.89	.766	612.87
1927	250,660.89	265	33.0	2.96	.788	616.31
1928	214,584.53	227	33.2	2.59	.681	529.76
1929	234,358.74	248	35.6	2.78	.710	583.88
1930	192,348.81	203	30.5	2.34	.631	479.16
1931	197,007.50	208	32.8	2.48	.676	485.77
1932	207,944.61	220	34.1	3.14	.780	513.62
1933	200,490.86	212	36.0	3.50	.759	496.01
1934	190,115.91	201	37.5	2.91	.692	471.09

Account No. 9 - Miscellaneous Track and Roadway Expense

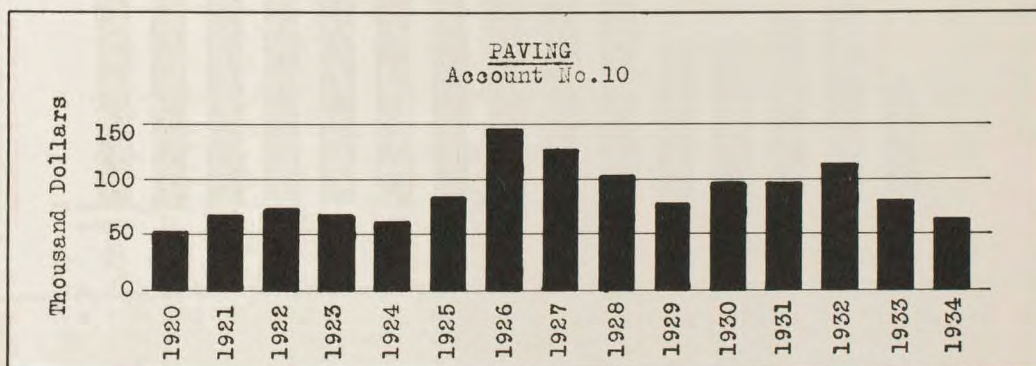
This account includes cost of roadway tools and incidental expenses that are not properly chargeable to any other accounts covering track and roadway maintenance. The account is credited with materials removed. Minimum and maximum years were as follows:

	Year	Amount	Percent Of		Cost per Car Mile
			Group	Total	
Minimum	1920	\$13,475.35	3.59%	0.21%	0.0449¢
Maximum	1923	30,674.67	6.03	0.40	0.0964
	1934	17,944.18	3.54	0.28	0.0653

The trend of this account follows closely that of Account No. 8, as the charges to one are somewhat in direct proportion to those of the other.

Account No. 10 - Paving

To this account are charged costs in connection with labor and material used in repairing paving, hauling and distributing material and removing old material. Cost of tearing up and replacing paving in connection with repairs is also charged to this account as well as maintenance of paving adjacent to company tracks.

Paving

Year	Amount	Index 1920 = 100	Percent Of		Cost per Car Mile	Cost per Track Mile
			Group	Total		
1920	\$ 50,135.79	100%	13.4%	.77%	.167¢	\$128.35
1921	66,194.55	132	11.3	.90	.220	172.11
1922	71,824.75	143	14.2	1.08	.244	186.76
1923	69,207.64	138	13.6	.89	.218	174.79
1924	60,306.84	120	10.5	.73	.182	151.89
1925	84,254.46	168	12.0	.99	.259	209.95
1926	144,807.42	289	17.5	1.70	.450	359.98
1927	128,627.14	257	16.9	1.52	.404	316.26
1928	103,634.47	207	16.0	1.25	.329	255.85
1929	79,784.46	159	12.1	.95	.242	198.78
1930	99,216.48	198	15.7	1.21	.325	247.16
1931	97,842.59	195	16.3	1.23	.336	241.25
1932	113,646.15	227	18.7	1.71	.426	280.70
1933	80,155.25	160	14.4	1.40	.304	198.30
1934	63,620.67	127	12.6	.98	.231	157.64

In 1926 the peak was reached, followed by a decrease to 1929, then a slight increase to 1932, after which there was a decline to 1934. During 1930, 1931, and 1932 considerable work was being done resulting in the increased cost during those years. In 1933 a cheaper paving material was developed and put into use by the company which resulted in about a 40% decrease in cost, which brought the total charges to this account down during 1933 and 1934 in spite of the wage increase in 1934. However, the City of Los Angeles has informed the company that the oil macadam now being used does not conform with city specifications and will have to be discontinued.

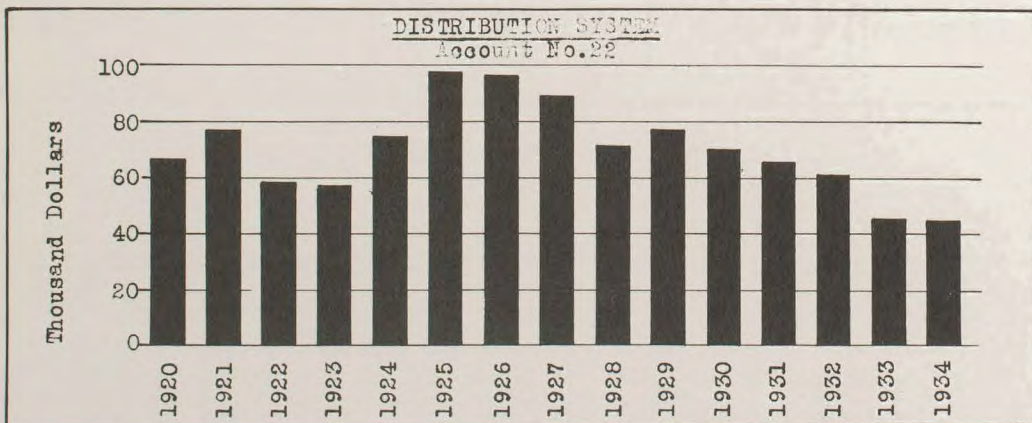
Account No. 11 - Cleaning and Sanding Track

This account includes cost of labor and material used in oiling roadway; cleaning, greasing, and sanding tracks; cost of sand, hauling, handling, and distributing thereof; and brooms, tools, etc., used incident to the work.

	Year	Amount	Percent Of		Cost per Car Mile
			Group	Total	
Minimum	1920	\$28,539.79	7.60%	0.44%	0.0952¢
Maximum	1925	41,484.09	5.89	0.49	0.1274
	1934	32,970.38	6.51	0.51	0.1199

Account No. 22 - Distribution System

This account includes the cost of labor and material used in repairing, overhead and underground low tension feeders from sub stations, including insulators and connections; track bonding including bonds, cost of punching or drilling rail, and testing for defective bonding; and overhead trolley including wire and all appurtenances.



In magnitude of charges, this account is fourth in importance of the Way and Structures group. It will be seen from the chart that the trend of charges to this account has been from \$67,579.28 in 1920 up to \$97,849.24 in 1925, from where it leveled off with a slight decrease in 1927, then decreased more rapidly to a low in 1934 of \$45,785.09. Charges are composed of approximately 80% labor and 20% material.

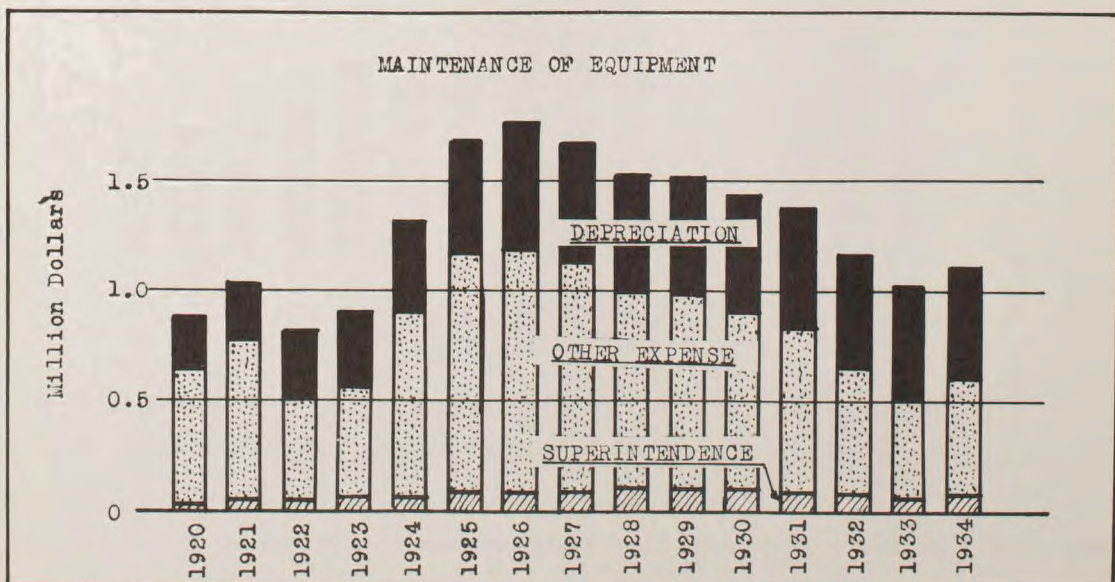
The trend of cost per car mile, as shown on the foregoing chart, dropped during the years 1922 and 1923, rising again to a peak in 1926, dropping off in 1927 and 1928, followed by a small increase in 1929 and to a general decline from that year to 1934. During 1929 there were 100 employees in the overhead maintenance crews, decreasing to 87 in 1930, 79 in 1931, 69 in 1932, 61 in 1933, and 60 in 1934 and 1935. In addition to this reduction in personnel, there was a reduction in rates during 1932 which contributed to the large decrease in expense in 1933.

Year	Amount	Index 1920 = 100	Percent		Cost per Car Mile	Cost per Track Mile
			Group	Total		
1920	\$67,579.28	100%	18.0%	1.04%	.225¢	\$173.00
1921	76,831.66	114	13.1	1.05	.256	199.77
1922	58,130.36	86	11.5	.87	.197	151.15
1923	57,620.46	85	11.3	.74	.181	145.52
1924	75,299.66	111	13.1	.92	.228	189.65
1925	97,849.24	145	13.9	1.15	.300	243.83
1926	96,948.69	143	11.7	1.14	.301	241.00
1927	89,763.19	133	11.8	1.06	.282	220.71
1928	70,919.18	105	11.0	.85	.225	175.08
1929	77,370.31	114	11.8	.92	.234	192.76
1930	70,858.28	105	11.2	.86	.232	176.51
1931	65,893.73	98	11.0	.83	.226	162.48
1932	61,709.86	91	10.1	.93	.231	152.42
1933	46,003.28	68	8.3	.80	.174	113.81
1934	45,785.09	68	9.0	.70	.167	113.45

GROUP II - EQUIPMENT

This group of accounts is used for accumulating the charges arising through maintenance of equipment including rolling stock; shop, service, and miscellaneous equipment; and superintendence in connection with such maintenance.

The accompanying chart shows in graphic form the charges by various accounts and for depreciation over a period of years from 1920 to 1934, inclusive. It will be noted that depreciation makes up an average of 36.2% of the total equipment expense over



the fifteen years, ranging from 27.6% in 1920 to 44.8% in 1934. Depreciation charges on equipment have increased from \$243,604.24 in 1920 to \$499,472.08 in 1934, or 105%, and such charges have not varied greatly since 1925. Of the remaining expense after deduction of depreciation, passenger and combination cars make up 54.5% for 1934.

The following table shows by years from 1920 to 1934 the charges to the equipment group of accounts, exclusive of depreciation, their percent of total expense ratio to 1920, cost per car hour, cost per car mile, and cost per car.

Year	Amount	Percent of Total	Index 1920 = 100	Cost per Car Mile	Cost per Car Hour	Cost per Car in Service
1920	\$ 638,382.55	9.80%	100%	2.129¢	21.374¢	\$ 699.98
1921	755,271.20	10.33	118	2.512	24.370	785.11
1922	521,493.25	7.85	82	1.770	17.057	515.31
1923	566,746.17	7.31	89	1.781	17.069	526.23
1924	901,264.52	10.95	141	2.724	25.967	738.74
1925	1,173,515.49	13.81	184	3.604	34.592	944.10
1926	1,197,327.25	14.04	188	3.720	36.225	1,053.06
1927	1,130,587.03	13.36	177	3.553	35.045	1,146.64
1928	990,453.71	11.93	155	3.141	31.032	990.45
1929	980,794.86	11.64	154	2.972	30.398	980.79
1930	902,280.05	10.97	141	2.960	30.997	949.77
1931	842,437.89	10.58	132	2.893	30.795	941.27
1932	658,241.24	9.91	103	2.469	27.148	907.92
1933	517,053.92	9.03	81	1.958	21.563	713.18
1934	615,048.18	9.45	96	2.237	24.535	793.61

The chart shows a rapid increase in annual charges to maintenance of equipment group of accounts from 1922 to 1926, then a gradual decrease to 1931, followed by a more rapid decrease in 1932 and 1933, and an increase in 1934. The gradual decrease from 1926 to 1931 was in part a result of a new system of periodic inspection of the equipment. In 1932 and 1933 the total number of employees was decreased and wages were cut, and as a result the systematic program of equipment inspection and repair was interrupted, resulting in deferred maintenance during those two years. The increase in 1934 was due to the restoration of part of the wage cut and the picking up of some deferred maintenance.

Maintenance of Equipment

Acct. No.	1931	1932	1933	1934	Percent of Total Exp.*
29 Superintendence	\$ 96,601	\$ 82,698	\$ 73,647	\$ 80,928	1.24%
30 Passenger Cars	467,234	343,086	264,123	335,239	5.16
32 Service Equipment	7,268	10,352	2,386	1,757	.03
33 Elect. Equip. of Cars	176,092	136,076	105,343	119,939	1.84
36 Shop Equipment	9,263	10,420	7,502	7,449	.11
37 Shop Expense	60,587	56,345	46,486	53,432	.82
38 Vehicles	25,229	18,690	17,557	16,274	.25
39 Misc. Equip. Expense	-	28	10	30	-
41 Equipment Retired	164	546	-	-	-
Sub Total	842,438	658,241	517,054	615,048	9.45
40 Depreciation	539,046	512,204	509,435	499,472	
Total	\$1,381,484	\$1,170,445	\$1,026,489	\$1,114,520	

* Excluding depreciation.

In 1925 a new system of cost analysis was instituted and a definite program of servicing cars was established under a manual of operation which materially reduced the annual charges to the equipment group of operating expense accounts. All cars in service are given a safety inspection every night when brought into the barns, which covers brake shoes, brake rigging, wheel flanges, motor gearcase and truck bolts. The regular inspection of cars and equipment is made on a service hour basis, the three major types of inspections being classified as "A", "B", and "C". Cars having "K" type control are given "A" inspection every 80 hours, "B" inspection every 960 hours, and "C" inspection every 1920 hours. Cars with "MU" type of control are given inspection "A" every 120 hours, inspection "B" every 960 hours, and inspection "C" every 1920 hours. No car is allowed to go into service until an "A" inspection is made if 30 days have elapsed since it was inspected regardless of whether it has been in operation or not.

An "A" inspection is always given a car that comes from the shop after being overhauled. Inspection "A" consists of cleaning the outside of compressor and inspecting it for air and oil leaks; draining reservoirs to remove all accumulated water and oil, inspecting motor brushes to see if any are worn, stuck tight, or broken; seeing that brush holders and terminals are tight; testing the brush spring tension; examining the commutator for loose bars, flat spots or blisters; cleaning the string band if necessary; examining compressor for proper lubrication, inspecting motor leads for worn, chafed or broken; inspecting suspension brackets and tightening if necessary; examining insulator hose and couplings for leaks and defects; seeing that there are extra fuses in their proper place; and testing compressor snap switch and inspecting operation of compressor.

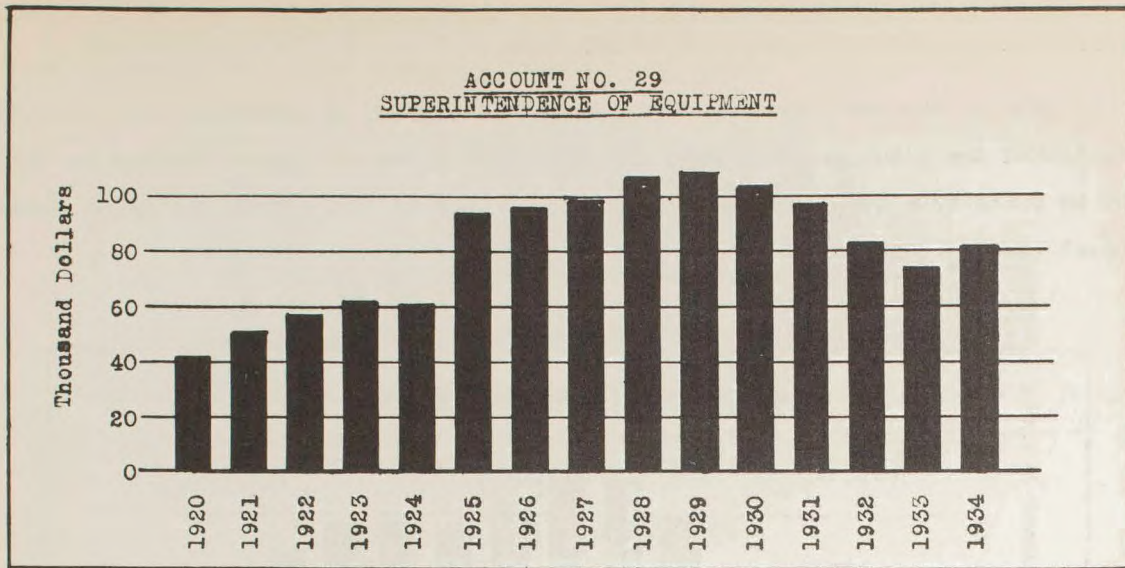
Inspection "B" consists of the same operations as Inspection "A", in addition to which the motors are blown out with compressed air and all brush holder insulators cleaned; compressor motor string bands are wiped off and shellaced, all hair strainers are cleaned and a test made of the time necessary to obtain maximum pressure in the air system.

Inspection "C" covers the same operations as inspection "B", in addition to which no further operations are made except to change the compressors every third "C" inspection.

In addition to these inspections all cars are taken in for a general overhaul at about 120,000 miles, at which time they are painted. This would run somewhere near every three years. However, the general overhaul has been deferred in recent years.

Account No. 29 - Superintendence

To this account are charged the salaries and expenses of the superintendent of equipment, general foreman of shops, superintendent of electrical repairs, mechanical engineer, draftsman, clerks and all shop foremen and men engaged in a supervisory capacity.



The account is charged with 40% of the salary and expenses of the general foreman of car houses, the division foreman, and office clerks. Office supplies, office furniture and equipment, repairs of the offices at the South Park shops and car house (used by mechanical department) are charged to this account. The cost of supervision over the fifteen years from 1920 to 1934, inclusive, as well as percent of 1920, percent of group, and unit cost data are as follows:

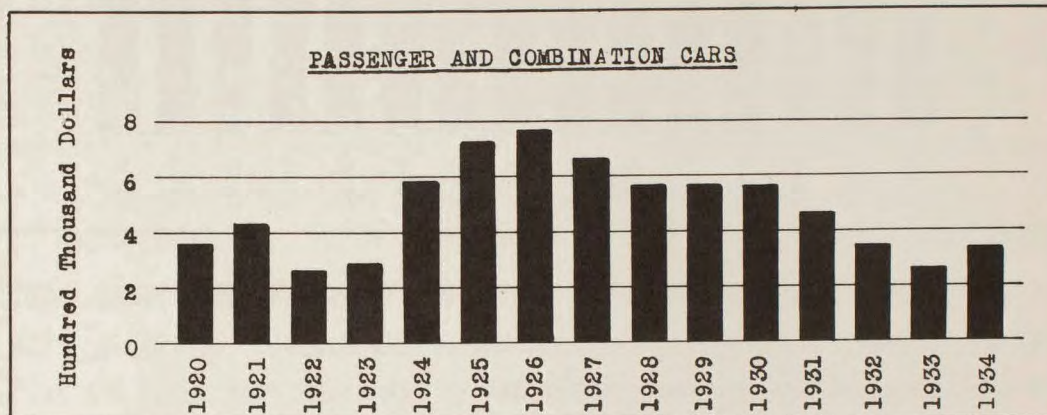
Year	Amount	Index 1920 = 100	Superintendence		Cost per Car Mile	Cost per Car Hour	Cost per Car in Service	Cost per \$100(a)
			Percent Group	Percent Total				
1920	\$41,050.74	100%	6.4%	.63%	.137¢	1.374¢	\$ 45.01	\$ 6.87
1921	50,451.72	123	6.7	.69	.168	1.628	52.44	7.16
1922	56,587.67	138	10.9	.85	.192	1.851	55.92	12.17
1923	61,751.30	150	10.9	.80	.194	1.860	57.34	12.23
1924	60,284.67	147	6.7	.73	.182	1.737	49.41	7.17
1925	93,223.46	227	7.9	1.10	.286	2.748	75.00	8.63
1926	95,350.89	232	8.0	1.12	.296	2.885	83.86	8.65
1927	98,239.17	239	8.7	1.16	.309	3.045	99.63	9.52
1928	105,767.26	258	10.7	1.27	.335	3.314	105.77	11.96
1929	107,956.84	263	11.0	1.28	.327	3.346	107.96	12.37
1930	102,627.40	250	11.4	1.25	.337	3.526	108.03	12.83
1931	96,601.10	235	11.5	1.21	.332	3.531	107.93	12.95
1932	82,698.03	201	12.6	1.25	.310	3.411	114.07	14.37
1933	73,647.41	179	14.2	1.29	.279	3.071	101.58	16.61
1934	80,928.10	197	13.2	1.24	.294	3.228	104.42	15.15

(a) Cost of Superintendence per \$100 of Equipment Expense exclusive of Depreciation.

The annual charges have ranged between a minimum of \$41,050.74 in 1920 to a maximum of \$107,956.84 in 1929, decreasing to \$73,647.41 in 1933, and increasing about \$7,000 in 1934. The first six months of 1935 show an increase over the same period in 1934 of 7%.

Account No. 30 - Passenger and Combination Cars

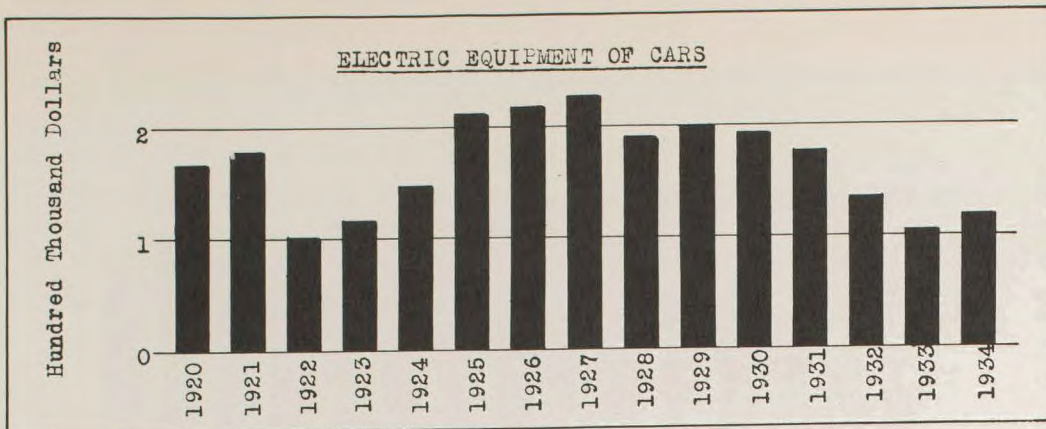
This is the most important of the equipment group of accounts, representing about 55% of the total group. The following table shows the annual charges to the account by years from 1920 to 1934, inclusive; percent of 1920, group and total expense; and cost data.

Passenger and Combination Cars

Year	Amount	Index 1920 = 100	Percent		Cost per Car Mile	Cost per Car Hour	Cost per Car in Service
			Group	Total			
1920	\$351,487.31	100%	55.1%	5.39%	1.172¢	11.769¢	\$385.40
1921	433,833.76	123	57.4	5.93	1.443	13.999	450.97
1922	266,749.98	76	51.2	4.02	.906	8.725	263.59
1923	288,980.85	82	51.0	3.72	.908	8.703	268.32
1924	579,782.94	165	64.3	7.05	1.752	16.704	475.23
1925	729,759.38	208	62.2	8.59	2.241	21.512	587.10
1926	761,989.92	217	63.6	8.93	2.368	23.054	670.18
1927	659,520.09	188	58.3	7.79	2.073	20.443	668.88
1928	561,884.91	160	56.7	6.77	1.782	17.605	561.88
1929	561,098.04	160	57.2	6.65	1.701	17.390	561.10
1930	502,718.87	143	55.7	6.11	1.649	17.270	529.18
1931	467,233.84	133	55.5	5.87	1.604	17.079	522.05
1932	343,086.40	98	52.1	5.16	1.287	14.150	473.22
1933	264,122.53	75	51.1	4.61	1.000	11.015	364.31
1934	335,239.32	95	54.5	5.16	1.219	13.373	432.57

Account No. 33 - Electric Equipment of Cars

To this account are charged the costs in connection with repairing the electric motive equipment and wiring of passenger and service cars. This account is second in importance of the group and the trend of annual charges has followed closely that of Account No. 30. The following table and chart show data for this account from 1920 to 1934, inclusive.



Electric Equipment of Cars

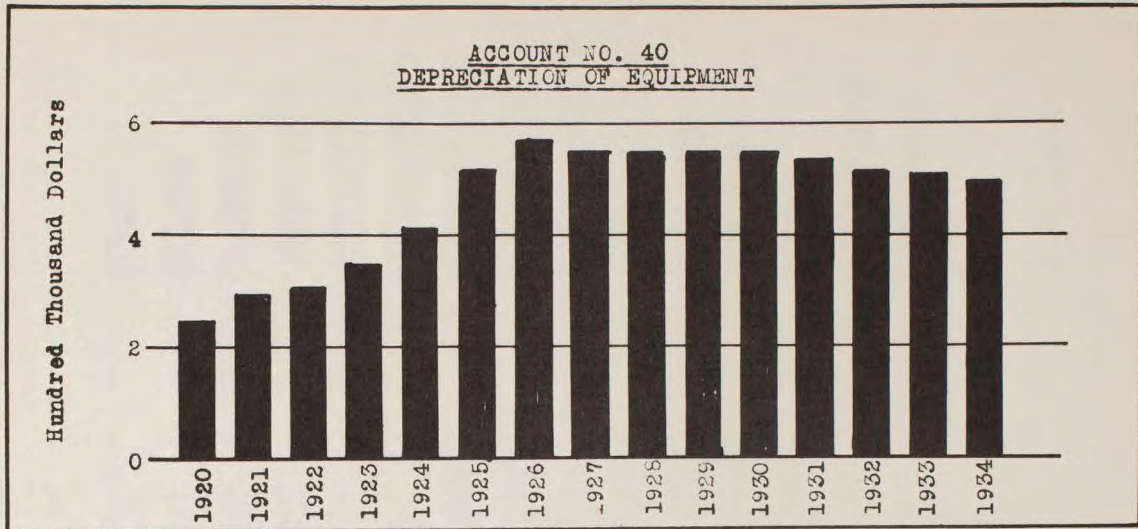
Year	Amount	Index 1920 = 100	Percent		Cost per Car Mile	Cost per Car Hour	Cost per Car in Service
			Group	Total			
1920	\$167,625.12	100%	26.3%	2.57%	.559¢	5.612¢	\$183.80
1921	178,513.95	106	23.6	2.44	.594	5.760	185.57
1922	100,546.08	60	19.3	1.51	.341	3.289	99.35
1923	116,761.12	70	20.6	1.50	.367	3.517	108.41
1924	146,915.92	88	16.3	1.79	.444	4.233	120.42
1925	210,537.11	126	18.0	2.48	.647	6.206	169.38
1926	217,567.82	130	18.2	2.55	.676	6.582	191.35
1927	228,324.93	136	20.2	2.71	.718	7.077	231.57
1928	189,017.15	113	19.1	2.28	.599	5.922	189.02
1929	198,526.34	118	20.2	2.36	.602	6.153	198.53
1930	191,513.40	114	21.2	2.33	.628	6.579	201.59
1931	176,091.77	105	20.9	2.21	.605	6.437	196.75
1932	136,076.13	81	20.7	2.05	.510	5.612	187.69
1933	105,343.29	63	20.4	1.84	.399	4.393	145.30
1934	119,938.98	72	19.5	1.84	.436	4.784	154.76

Account No. 37 - Shop Expense

This account includes expenses for heating and lighting shops; miscellaneous expenses of such shops including fuel, water and ice; the cost of oil, grease, waste and other material used in lubricating shop machinery and tools; cost of supplies and small tools used by mechanics and wages of employees in making and repairing the same; and pay of watchmen, sweepers, cleaners and other unskilled laborers employed in general work in and about shops and shop yards.

Account No. 40 - Depreciation of Equipment

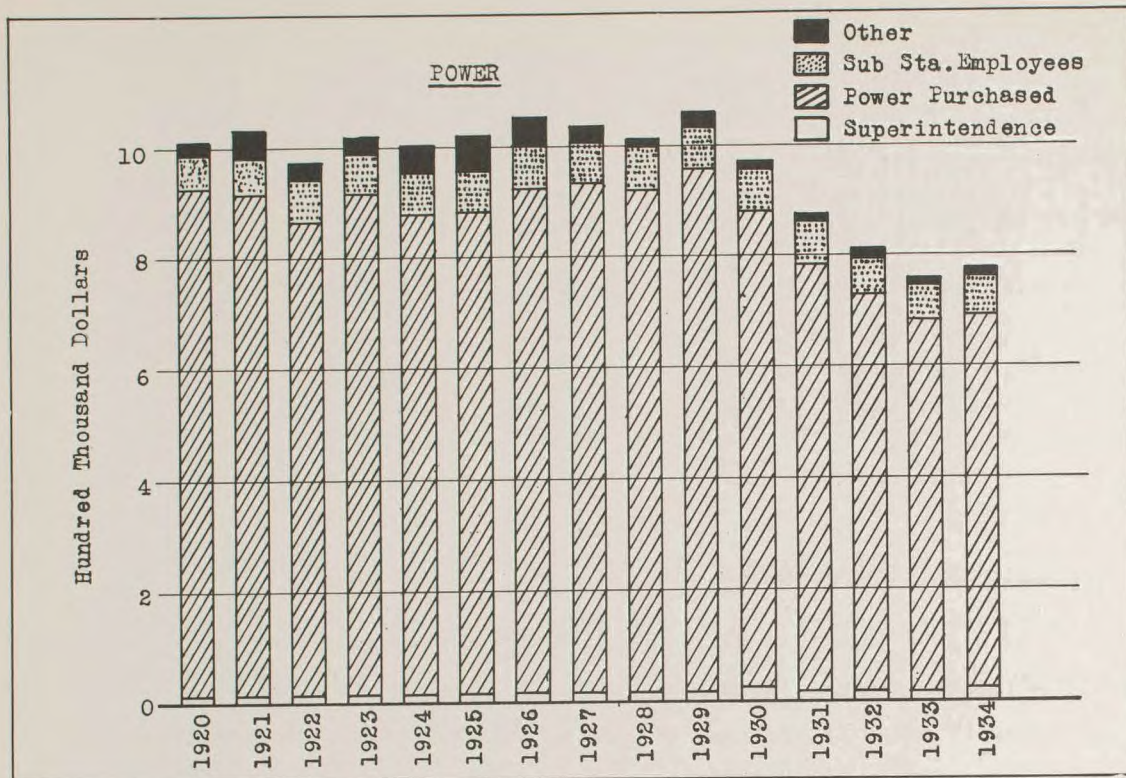
As has been mentioned before, depreciation charged to operating expense in this group of accounts represents 45% of the total group for the year of 1934, as compared to 27.6% in 1920. A more detailed discussion of depreciation will be found under that heading later in the report. The following table shows the annual amounts charged to operating expense to cover depreciation of equipment for the years 1920 to 1934, inclusive, also showing the percent of 1920, cost per car hour, cost per car mile, and cost per car in service.



Year	Amount	Index 1920 = 100	Percent of Total	Cost Per Car Hour	Cost Per Car Mile	Cost per Car in Service
1920	\$243,604.24	100%	27.62%	8.156¢	.813¢	\$267.11
1921	290,803.46	119	27.80	9.383	.967	302.29
1922	301,742.68	124	36.65	9.869	1.024	298.16
1923	348,339.96	143	38.07	10.491	1.095	323.44
1924	411,036.00	169	31.32	11.843	1.242	336.91
1925	517,041.00	212	30.58	15.241	1.588	415.96
1926	566,011.65	232	32.10	17.125	1.759	497.81
1927	541,335.00	222	32.38	16.780	1.701	549.02
1928	544,910.35	224	35.49	17.073	1.728	544.91
1929	542,871.83	223	35.63	16.826	1.645	542.87
1930	543,665.03	223	37.60	18.677	1.783	572.28
1931	539,045.70	221	39.02	19.704	1.851	602.29
1932	512,203.96	210	43.76	21.125	1.921	706.49
1933	509,434.87	209	49.63	21.245	1.929	702.67
1934	499,472.08	205	44.81	19.924	1.817	644.48

GROUP III- POWER

The expenses charged to this group cover the cost of repairing substations, substation buildings, fixtures and grounds, substation equipment, transmission system, cost of power purchased and other miscellaneous items. The accompanying chart shows the relative magnitude of annual charges to the various most important accounts under the power group over a period of fifteen years from 1920 to 1934, inclusive. This chart makes it immediately evident that the cost of purchased power is the controlling account of the group. For the year 1934 Superintendence represented 2.8% of the total charges to the group, Power Purchased 85.8%, Substation Employees 9.4%, the other three accounts being less than 1%, the total group representing 11.9% of the total operating expenses.



The following table shows the charges to the power group by primary account for the years 1931 to 1934, inclusive.

		<u>Power</u>				
<u>Acct. No.</u>	<u>Account</u>	<u>1931</u>	<u>1932</u>	<u>1933</u>	<u>1934</u>	<u>Percent of* Total Exp.</u>
45	Superintendence	\$ 19,382	\$ 19,489	\$ 18,255	\$ 21,625	.33%
46	Power Plant Bldgs., etc.	6,237	6,113	5,997	6,470	.10
48	Substation Equipment	11,180	21,465	12,367	15,618	.24
49	Transmission System	4,511	6,972	3,961	3,447	.05
57	Substation Employees	79,437	68,402	61,484	73,179	1.12
58	Substation Supplies, etc.	3,636	3,282	2,391	3,267	.05
59	Power Purchased	766,586	700,159	668,374	666,049	10.24
61	Power Transferred	(18,490)	(17,206)	(13,799)	(13,029)	(.20)
	Total Power	\$872,479	\$808,676	\$759,030	\$776,626	11.93%

*1934 exclusive of depreciation.

For the first six months of 1935 the total power group shows an increase over the first six months of 1934 of 9% and a decrease over the same period in 1929 of 32%. The table following shows charges to the power group by years from 1920 to 1934,

inclusive, the percent the group represents of total operating expenses by years, the ratio of annual charges to 1920 for each year, cost per mile and cost per car.

Year	Amount	Index 1920 = 100	Percent of Total	Cost Per Car Hour	Cost Per Car Mile	Cost per MKWH
1920	\$1,018,971.04	100%	15.64%	34.117¢	3.399¢	\$ 9.827
1921	1,035,414.83	102	14.15	33.410	3.444	10.396
1922	974,357.96	96	14.66	31.869	3.308	9.786
1923	1,018,767.43	100	13.12	30.682	3.202	9.235
1924	1,004,361.55	99	12.21	28.937	3.035	9.070
1925	1,023,872.44	100	12.04	30.181	3.144	9.219
1926	1,050,724.16	103	12.32	31.790	3.265	9.157
1927	1,036,788.44	102	12.25	32.137	3.258	8.985
1928	1,010,562.01	99	12.17	31.662	3.205	8.890
1929	1,065,482.06	105	12.65	33.023	3.229	8.929
1930	969,326.02	95	11.78	33.300	3.180	8.722
1931	872,478.59	86	10.96	31.893	2.996	8.557
1932	808,676.33	79	12.19	33.352	3.034	8.689
1933	759,029.53	74	13.25	31.654	2.874	8.250
1934	776,626.16	76	11.93	30.980	2.825	7.972

Account No. 45 - Superintendence

To this account are charged all salaries and the office and other expenses of officers and other assistants when directly in charge of or engaged in the maintenance and operation of substations, cost of supplies used by employees whose salaries are chargeable to this account, and the cost of repairing furniture and miscellaneous office expenses. The charges to the account include the salary and expenses of:

Electrical engineer - 60%
 Superintendent of substations
 Assistant electrical engineer
 Chief clerk - 60%
 Special clerk - 25%
 Electrical inspector - part time
 Clerk and stenographer
 Clerk
 Electrical designer
 Electrical tester
 Draftsman - part time

totaling for the year ending December 31, 1934, \$21,624.67, which represents 2.8% of the total charges to the group. The following table shows the trend of charges to this account over the fifteen year period of 1920 to 1934, inclusive, the percent of each year to 1920 this account represents of the group total and of the total operating expenses, as well as cost per car hour, cost per car mile and cost per 1000 KWH.

Year	Amount	Index 1920 = 100	Percent		Cost Per Car Hour	Cost Per Car Mile	Cost per MKWH
			Group	Total			
1920	\$10,864.93	100%	1.07%	.17%	.364¢	.036¢	\$.105
1921	10,756.92	99	1.04	.15	.347	.036	.108
1922	9,379.07	86	.96	.14	.307	.032	.094
1923	10,835.39	100	1.06	.14	.326	.034	.098
1924	15,097.32	139	1.50	.18	.435	.046	.136
1925	12,877.10	119	1.26	.15	.380	.040	.116
1926	17,989.96	166	1.71	.21	.544	.056	.157
1927	16,670.00	153	1.61	.20	.517	.052	.144
1928	17,040.98	157	1.69	.21	.534	.054	.150
1929	19,875.02	183	1.87	.24	.616	.060	.167
1930	23,116.07	213	2.38	.28	.794	.076	.208
1931	19,381.63	178	2.22	.24	.708	.067	.190
1932	19,489.27	179	2.41	.29	.804	.073	.209
1933	18,254.86	168	2.40	.32	.761	.069	.198
1934	21,624.67	199	2.78	.33	.863	.079	.222

For the first six months of 1935 the charges to this account show a decrease of 2% under 1934 and 3% under 1929.

Account No. 48 - Substation Equipment

The cost of labor and material used in repairing substation apparatus, including specially provided foundations and settings, storage batteries, transformers, converters, oil switches, switchboards, and appliances and wiring in connection with the same, are charged to this account. The charges have ranged from the minimum of \$11,179.98 in 1931 to a maximum of \$41,433.26 in 1925. Of the total charges to the account, labor represents about 70% and material 30%. The account for 1934 represented 2% of the total charges to the group.

	Year	Amount	Percent Of		Cost per Car Mile
			Group	Total	
Minimum	1931	\$11,179.98	1.28%	1.40%	.038¢
Maximum	1925	41,433.26	4.05	.49	.127
1934		15,617.78	2.01	.24	.057

Account No. 57 - Substation Employees

To this account is charged the cost of labor in substations other than for repair work, there being no material charges.

	Year	Amount	Percent Of		Cost per KWH
			Group	Total	
Minimum	1933	\$61,483.92	8.1%	1.07%	.067¢
Maximum	1927	81,840.93	7.9	.97	.071
1934		73,179.36	9.4	1.12	.075

Account No. 59 - Power Purchased

To this account is charged the cost of power purchased from other companies.

It represented 86% of the total charges to the group for the year of 1934. The company does not generate its own power but purchases it as alternating current delivered at their substations by the Southern California Edison Company at 15,000 volts. The company then converts the alternating current power to direct current at 600 volts for use in propelling its equipment. The cost of power purchased has varied from a minimum in 1934 of \$666,040.89 to a maximum of \$943,947.36 in 1929, the cost during the years 1920 to 1929 varying only slightly. The following table shows the charges to this account by years from 1920 to 1934, the ratio of the annual charges to those of 1920, the cost per car mile, the cost per car hour, and the cost per car, as well as the number of K.W.H. consumed annually.

Year	Amount	Index 1920=100	Percent of Group	KWH Purchased	Cost Per Car Mile	Cost Per Car Hour	Cost per KWH
1920	\$920,930.59	100%	90.37%	107,003.981	3.072¢	30.835¢	.8881¢
1921	910,536.29	99	87.94	99,099,217	3.029	29.380	.9142
1922	858,981.31	93	88.16	103,801,993	2.916	28.095	.8628
1923	907,782.55	99	89.11	117,713,942	2.853	27.340	.8229
1924	861,812.19	94	85.81	118,514,999	2.605	24.830	.7783
1925	869,800.67	94	84.94	114,173,787	2.671	25.640	.7832
1926	902,338.03	98	85.89	117,570,829	2.804	27.300	.7864
1927	910,884.76	99	87.86	118,633,019	2.863	28.235	.7894
1928	896,269.09	97	88.69	116,861,007	2.842	28.081	.7885
1929	943,947.36	102	88.59	121,917,780	2.861	29.256	.7911
1930	850,584.36	92	87.76	113,932,653	2.790	29.221	.7654
1931	766,585.88	83	87.86	103,901,438	2.632	28.022	.7519
1932	700,159.47	76	86.58	95,250,975	2.627	28.877	.7523
1933	668,373.85	73	88.06	94,345,520	2.531	27.873	.7265
1934	666,048.89	72	85.77	99,487,329	2.423	26.569	.6837

The rates paid for power have been reduced at various times since 1921. In 1921 the rate per KWH paid Southern California Edison Company for A.C. power at 15,000 volts was \$.0098, being reduced May, 1922, to \$.00828; November, 1923, to \$.00775; May, 1929, to \$.007325; and in September, 1933, a new contract was written with a rate averaging \$.00675, based on the following:

First 750,000 KWH at \$.013
All over at .006

The reduction in power rate, commencing September, 1933, was estimated to give approximately \$50,000 per year saving. This saving was practically lost during the period of December, 1934, to July, 1935, due to the effect of training of new platform men entering the service incident to the strike.

Economy meters were installed in 1930 and, together with the rate reduction, undoubtedly have reduced the cost of power. The cost per car mile in 1930 was 2.790¢ compared with 2.627¢ in 1932.

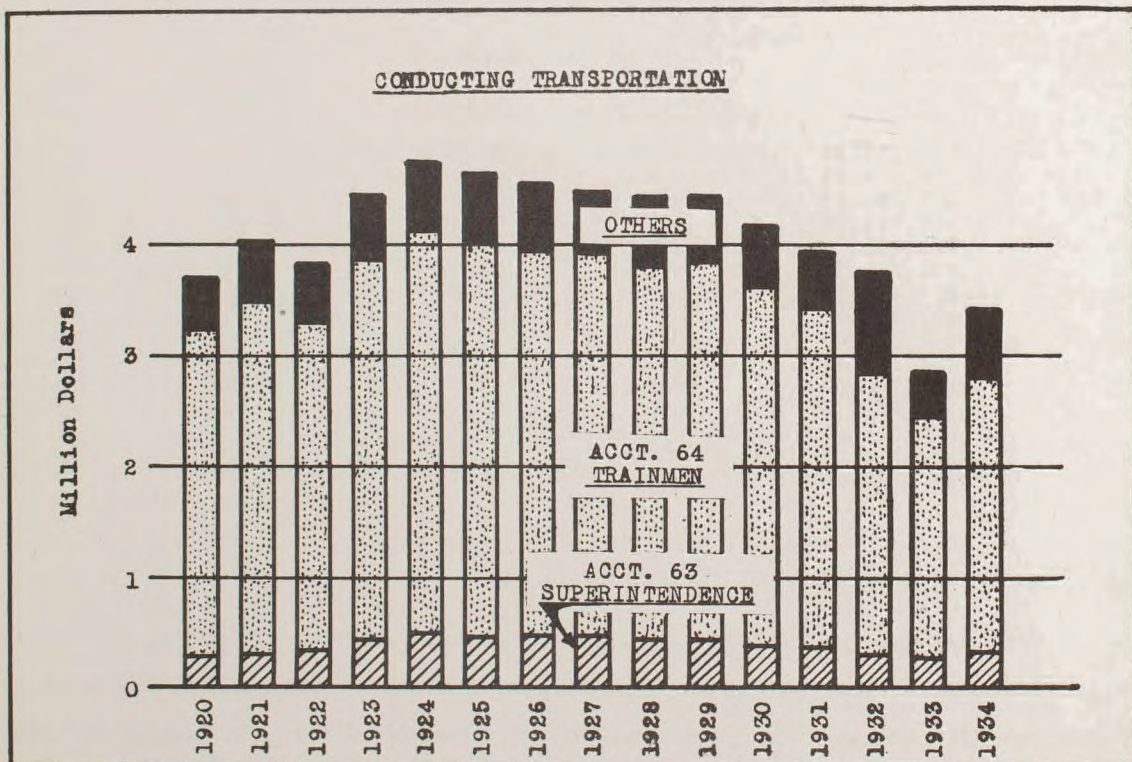
GROUP IV - CONDUCTING TRANSPORTATION

This group of accounts, ten in number, is charged with the salaries and

expenses of Manager of Transportation and assistants engaged in the supervision of transportation, the salaries of platform men and the wages of other employees engaged in maintaining stations, carhouses, signaling facilities, etc. For the year 1934 this group of accounts represented 52% of the total operating expenses. Under this group of accounts, the Manager of Transportation supervises the operation of about 2300 employees including:

- 1 Chief Special Agent
- 1 Assistant Chief Special Agent and 10 others
- 1 Superintendent of Meter and Mileage and his assistants
- 1 Chief Dispatcher and 4 others
- 1 Superintendent of Safety and 2 others
- 1 Traffic Manager and 3 others
- 1 Chief Supervisor
- 34 Supervisors
- 97 Flagmen, Watchmen and Information Men
- 32 Switchmen, Trolley-men and Traffic Men
- 1 Superintendent of Employment and 7 others
- 1 Superintendent of Division No. 1
- 560 Trainmen and 8 others
- 1 Superintendent of Division No. 3
- 439 Trainmen and 7 others
- 1 Superintendent of Division No. 4
- 517 Trainmen and 8 others
- 1 Superintendent of Division No. 5
- 552 Trainmen and 7 others

The following graphic chart shows the relative magnitude of the various accounts included in this group for the years 1920 to 1934, inclusive.



It will be seen from this chart that Account No. 64 is by far the most important. The cost gradually increased from \$2,987,301.93 in 1920 to \$3,664,158.14 in 1924, then gradually decreased to \$3,078,575.67 in 1931, dropping off rapidly to \$2,207,980.73

in 1933, followed by an increase in 1934 of about 10%. For the first six months of 1935 there has been an increase of 11% over the same period in 1934. This group of accounts reacted more directly to the strike activities in the latter part of 1934 and the early part of 1935 than any other group of accounts, and strike conditions were responsible for a considerable portion of the increased expense in 1934 over 1933.

The following table shows the annual charges by primary accounts for the years 1931 to 1934, inclusive, accompanied by another table showing total group charges by years from 1920 to 1934, inclusive, their ratio to 1920, the cost per car hour, and the cost per car mile.

Acct. No.	Account	1931	1932	1933	1934	Percent of* Total Exp.
63	Superintendence	\$ 376,353	\$ 300,207	\$ 252,437	\$ 301,340	4.63%
64	Conductors & Motormen	3,078,576	2,526,423	2,207,981	2,495,252	38.34
65	Mail Service	1,724	1,599	1,507	717	.01
66	Misc.Car Service Empl.	114,488	102,696	94,478	97,162	1.49
67	Misc.Car Service Exp.	64,915	59,101	53,761	62,529	.96
70	Carhouse Employees	259,964	218,052	191,587	214,291	3.29
71	Carhouse Expense	9,066	7,946	5,691	5,734	.09
72	Signals & Interlockers	7,772	7,333	7,133	7,090	.11
73	Telephone & Teleg.Lines	14,647	14,552	12,452	14,264	.22
78	Other Transp. Expenses	13,280	11,789	9,386	208,854	3.21
	Total	\$3,940,785	\$3,249,698	\$2,836,413	\$3,407,233	52.35%

* 1934 excluding depreciation.

Year	Amount	Index 1920 = 100	Percent of Total	Cost Per Car Hour	Cost Per Car Mile
1920	\$3,701,747.57	100%	56.81%	\$1.239	12.347¢
1921	4,029,619.22	109	55.07	1.300	13.404
1922	3,807,034.65	103	57.28	1.245	12.923
1923	4,446,799.06	120	57.28	1.339	13.978
1924	4,721,785.05	128	57.39	1.360	14.270
1925	4,621,301.13	125	54.37	1.362	14.191
1926	4,537,712.27	123	53.19	1.373	14.099
1927	4,491,847.59	121	53.07	1.392	14.116
1928	4,415,182.86	119	53.18	1.383	14.002
1929	4,442,515.58	120	52.73	1.377	13.464
1930	4,167,155.39	113	50.67	1.432	13.669
1931	3,940,785.46	106	49.50	1.441	13.531
1932	3,249,697.91	88	48.99	1.340	12.191
1933	2,836,413.29	77	49.52	1.183	10.742
1934	3,407,232.86	92	52.35	1.359	12.394

Account No. 63 - Superintendence of Transportation

This account includes the salaries of Manager of Transportation and assistants directly in charge of transportation, including the Chief Special Agent, Superintendent of Traffic and Statistics 75%, Superintendent of Schedules, Traffic Manager 50%, Supervisors, Dispatchers, Division Superintendents, Employment Department, Instructors, and portions of salaries of clerks in the Meter and Mileage Department, Ticket Office, Schedule Department, and about \$475.00 representing wages of flagmen. For the year 1934 this account represented 8.8% of the total charges to the group. The annual charges

increased gradually from 1920 to 1924, leveled off to 1928, decreased slightly in 1929, followed by another decrease in 1930, then a gradual decrease to \$252,437.06 in 1933, increasing by about 19% in 1934. The following table shows the annual charges to this account for the years 1920 to and including 1934, the cost per car mile, cost per car hour and percent of 1920.

Year	Amount	Index 1920 = 100	Percent		Cost Per Car Hour	Cost Per Car Mile	Supervision per \$100 of Expense
			Group	Total			
1920	\$280,993.92	100%	7.59%	4.31%	9.408¢	.937¢	\$ 8.21
1921	296,092.31	105	7.35	4.05	9.554	.985	7.93
1922	321,294.66	114	8.44	4.83	10.509	1.091	9.22
1923	427,660.86	152	9.62	5.51	12.880	1.344	10.64
1924	490,898.97	175	10.40	5.97	14.143	1.484	11.60
1925	465,034.38	165	10.06	5.47	13.708	1.428	11.19
1926	464,071.61	165	10.23	5.44	14.040	1.442	11.39
1927	478,232.78	170	10.65	5.65	14.824	1.503	11.92
1928	444,468.36	158	10.07	5.35	13.926	1.410	11.19
1929	430,735.86	153	9.70	5.11	13.350	1.305	10.74
1930	383,077.34	136	9.19	4.66	13.160	1.257	10.12
1931	376,353.00	134	9.55	4.73	13.757	1.292	10.56
1932	300,207.32	107	9.24	4.53	12.382	1.126	10.18
1933	252,437.06	90	8.90	4.41	10.527	.956	9.77
1934	301,340.31	107	8.84	4.63	12.021	1.096	9.70

Account No. 64 - Conductors, Motormen and Trainmen

To this account are charged the wages of motormen, conductors and other trainmen engaged in passenger service. As of July 1, 1935, there were four divisions as follows:

Division No. 1 - 560 Trainmen
No. 3 - 439 "
No. 4 - 517 "
No. 5 - 552 "

No distinction in wages is made by the company as between conductors and motormen. The following table shows the annual charges to this account by years from 1920 to 1934.

Year	Amount	Index 1920 = 100	Percent		Cost Per Car Hour	Cost Per Car Mile
			Group	Total		
1920	\$2,987,301.93	100%	80.70%	45.85%	\$ 1.000	9.964¢
1921	3,204,183.05	107	79.52	43.79	1.034	10.658
1922	2,994,962.09	100	78.68	45.07	.980	10.167
1923	3,467,721.05	116	77.98	44.67	1.044	10.900
1924	3,664,158.14	123	77.61	44.53	1.056	11.074
1925	3,577,878.92	120	77.43	42.09	1.055	10.987
1926	3,499,547.34	117	77.11	41.02	1.059	10.873
1927	3,435,398.20	115	76.47	40.59	1.065	10.796
1928	3,392,406.63	114	76.83	40.86	1.063	10.758
1929	3,438,444.85	115	77.40	40.80	1.066	10.421
1930	3,262,411.08	109	78.30	39.66	1.121	10.701
1931	3,078,575.67	103	78.11	38.66	1.125	10.571
1932	2,526,423.36	85	77.74	38.08	1.042	9.478
1933	2,207,980.73	74	77.85	38.55	.921	8.362
1934	2,495,252.16	84	73.23	38.34	.995	9.077

There was an upward trend from 1920 to 1924 of about \$680,000, reaching a peak in that

year, followed by a gradual decrease to 1931 and then a rapid drop to 1933 of about 28%. 1934 increased again by about 13% over 1933. For the first six months of 1935 there was an increase of 11% over the corresponding period in 1934.

Account No. 66 - Miscellaneous Car Service Employees

This account covers mainly the wages of switchmen, flagmen, and watchmen. The following tabulation shows the maximum and minimum over a period of fifteen years from 1920 to 1934. For the first six months of 1935 this account shows an increase of 3% over the corresponding period of 1934.

	Year	Amount	Percent Of		Cost per Car Mile
			Group	Total	
Minimum	1920	\$ 9,016.56	.24%	.14%	.030¢
Maximum	1925	135,369.54	2.93	1.59	.416
	1934	97,161.72	2.85	1.49	.353

Account No. 70 - Car House Employees

To this account are charged the wages of car house foremen, watchmen, car cleaners, and other miscellaneous employees not engaged in making repairs. The charges to this account represent 6.5% of the total charges to the group over the period of fifteen years. The following tabulation shows the maximum and minimum as compared with 1934.

	Year	Amount	Percent Of		Cost per Car Mile
			Group	Total	
Minimum	1933	\$191,586.82	6.75%	3.34%	.726¢
Maximum	1923	362,618.35	8.15	4.67	1.140
	1934	214,290.88	6.29	3.29	.780

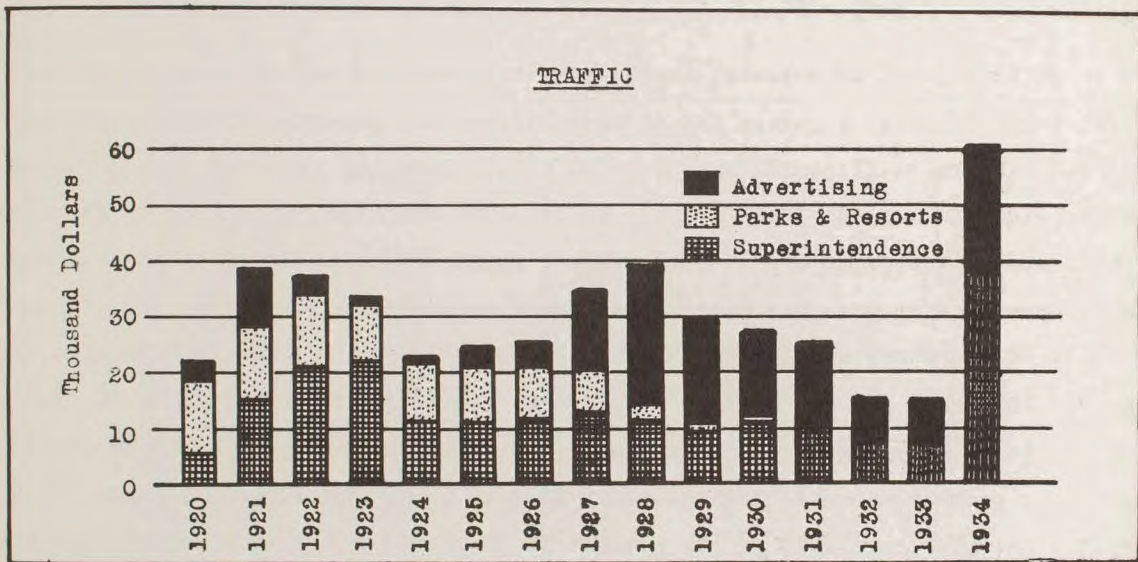
Account No. 78 - Other Transportation Expenses

To this account are charged all expenses in connection with conducting transportation not properly chargeable to other accounts, such as wages of crew on emergency vehicles, cost of getting derailed cars back on the track and the cost of salvaging wrecks. Charges have increased rather irregularly from \$3,905.00 in 1920 to \$17,186.98 in 1928, dropping off to \$9,386.18 in 1933, and increasing to \$208,854.23 in 1934. The first six months of 1935 show an increase of 40% over the corresponding period in 1934. This abnormal increase in the latter part of 1934 and the early part of 1935 was due to the violence displayed in connection with the strike.

GROUP V - TRAFFIC

To this group of accounts are charged all salaries and expenses of persons engaged in advertising, the cost of printing, publishing, and distributing time tables, folders and other advertising matter, signs on cars advertising special events, portable

signs for attracting traffic, bulletin board display cards and bill posting are charged to this group. There are only four accounts in this group, of which only three are used by the company, to one of which there have been no charges since 1931. The two remaining accounts being used are Superintendence and Solicitation, Account No. 79, and Advertising, Account No. 80, the charges to these two accounts for the year 1934 being \$36,996.36 and \$23,576.76, respectively. The total charges to this group of accounts represent less than 1% of the total operating expense charge. The following table shows by primary accounts the annual charges to this group for the years 1931 to 1934, accompanied by table showing the annual cost for the fifteen year period 1920 to 1934, inclusive, and the statistical data in connection therewith. The accompanying chart shows the annual charges in graphic form over the same period of years.



Acct. No.	1931	1932	1933	1934	Percent of* Total Exp.
79 Superintendence	\$ 9,760	\$ 7,111	\$ 6,093	\$36,996	.57%
80 Advertising	14,729	8,636	8,915	23,577	.36
81 Parks & Resorts	650	-	-	-	-
82 Misc. Expense	-	-	-	-	-
Total	\$25,139	\$15,747	\$15,008	\$60,573	.93%

* 1934 Exclusive of Depreciation

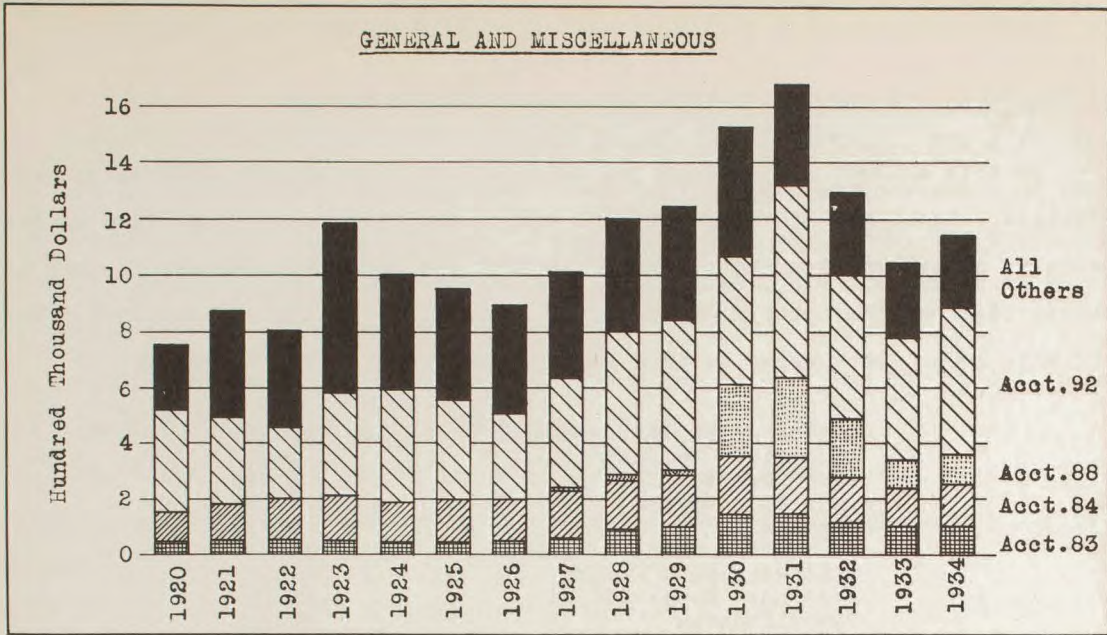
During 1934 the charges to this group increased from about \$15,000 to \$60,000, being mainly due to inclusion of commissions paid to trainmen for selling weekly passes, which procedure commenced during 1934. For each \$1.00 pass sold by a trainman he receives 5¢ and for each \$1.50 pass he receives 7¢. As shown by the above chart, charges to this account declined steadily from 1928 to 1933, whereas the cost per car mile and per car hour have been declining from 1930 to 1933.

Year	Amount	Traffic			
		Index 1920 = 100	Percent of Total	Cost Per Car Hour	Cost Per Car Mile
1920	\$22,315.82	100%	.34%	.747¢	.074¢
1921	38,747.52	174	.53	1.250	.129
1922	37,841.16	170	.57	1.238	.128
1923	33,891.96	152	.43	1.021	.107
1924	22,886.25	103	.28	.659	.069
1925	24,421.58	109	.29	.720	.075
1926	25,800.62	116	.30	.781	.080
1927	34,540.26	155	.41	1.071	.109
1928	39,388.91	177	.47	1.234	.125
1929	29,575.81	133	.35	.917	.090
1930	27,927.37	125	.34	.959	.092
1931	25,139.53	113	.32	.919	.086
1932	15,746.59	71	.24	.649	.059
1933	15,007.55	67	.26	.626	.057
1934	60,573.12	271	.93	2.416	.220

GENERAL AND MISCELLANEOUS

To this group of accounts are charged all salaries and expenses of general officers, legal expense, injuries and damages, insurance, general office purchases, stores expense and other miscellaneous expenses. Of total operating expenses this group of accounts represented in 1934 17.6%, having declined from a high in 1931 of 21.1%. The major accounts in the group are four in number; namely, Account No. 83, Salaries and Expenses of General Officers; Account No. 84, Salaries and Expenses of General Office Clerks; Account No. 88, Pensions and Gratuities; and Account No. 92, Injuries and Damages, representing 9%, 13.3%, 10.1%, and 46.4% of the group, respectively, and 1.6%, 2.3%, 1.8%, and 8.1% of the total operating expenses, respectively. The following table shows charges to this group by primary accounts for the years 1931 to 1934, inclusive, accompanied by chart showing the relative magnitude of the charges to the various accounts over a period of fifteen years from 1920 to 1934, inclusive. It will be noted from the chart that Account No. 92, Injuries and Damages, has made up a greater portion of the total charges to the group than any other account over that entire period of years. A table of statistics for the years 1920 to 1934 follows on which are shown total charges to the group, percent of total operating expenses, ratio to 1920, cost per car mile, and cost per car hour.

Acct. No.	Account	1931	1932	1933	1934	Percent of* Total Exp.
83	Genl. Officers	\$ 144,712	\$ 116,133	\$ 100,456	\$ 102,558	1.58%
84	Genl. Office Clerks	205,004	167,255	140,906	151,719	2.33
85	Supplies & Expenses	32,206	36,450	31,667	35,971	.55
86	Law Expenses	110,148	68,567	42,100	27,045	.42
87	Relief Dept. Exp.	1,080	860	-	-	-
88	Pensions & Gratuities	289,782	215,944	106,109	114,833	1.76
89	Misc. Genl. Expenses	64,723	49,591	47,421	55,553	.85
90	Valuation Expenses	10,107	6,614	5,034	6,662	.10
92	Injuries & Damages	691,716	511,833	441,116	529,650	8.14
93	Insurance	24,506	25,178	41,991	21,201	.33
94	Stationery & Prtg.	41,141	35,196	33,542	42,220	.65
95	Store Expenses	31,048	31,775	26,672	30,459	.47
96	Garage Expenses	33,979	27,064	25,902	24,611	.38
	Total	\$1,680,152	\$1,292,460	\$1,042,916	\$1,142,482	17.56%
	* 1934 Exclusive of Depreciation					



Year	Amount	Index 1920 = 100	Percent of Total	Cost Per Car Hour	Cost Per Car Mile	Percent Of Gross Revenue
1920	\$758,902.44	100%	11.65%	25.410¢	2.531¢	8.45%
1921	870,955.56	115	11.90	28.103	2.897	8.65
1922	801,007.49	106	12.05	26.199	2.719	7.29
1923	1,188,549.95	157	15.31	35.796	3.736	9.55
1924	1,003,998.01	132	12.20	28.927	3.034	7.98
1925	953,399.29	126	11.21	28.104	2.928	7.89
1926	892,160.10	118	10.46	26.992	2.772	7.44
1927	1,010,541.04	133	11.94	31.324	3.176	8.42
1928	1,199,007.90	158	14.46	37.566	3.802	9.85
1929	1,247,897.95	164	14.81	38.677	3.782	9.47
1930	1,526,807.52	201	18.56	52.451	5.008	12.71
1931	1,680,151.94	221	21.11	61.417	5.769	15.84
1932	1,292,460.19	170	19.49	53.305	4.848	14.47
1933	1,042,915.81	137	18.20	43.493	3.950	12.95
1934	1,142,481.93	151	17.56	45.574	4.156	13.92

Account No. 83 - Salaries and Expenses of General Officers

The foregoing chart shows the trend of annual charges to this account by years of 1920 to 1934. It will be noted that there was an increase from 1920 to 1921 of about \$14,000, 1922 and 1923 remaining little changed from 1921, followed by a drop in 1924 of about \$8,000. From 1925 to 1930 there was a uniform increase from \$51,602.01 to \$145,966.19, 1931 remaining about equal to 1930, followed by a decrease in 1932 and 1933, with another slight increase of \$2,000 in 1934. For the first six months of 1935 the charges to this account were 8% higher than for the corresponding period in 1934 and 4% higher than the corresponding period in 1929. To this account are charged the salaries and expenses of the President, Vice-President and General Manager, Vice-President and Consulting Engineer, Assistant to the General Manager, Secretary and Treasurer, Assistant Secretary and Treasurer, Vice-President and Comptroller, Purchasing Agent, Superintendent of Personnel, Auditor, Publicity Manager, Budget Engineer, Commercial Representative, one

stenographer and Chief Clerk of Publicity. For the month of May, 1935, of the total charges, salaries amounted to \$8,586.50 and expenses \$312.93.

Account No. 84 - Salaries and Expenses of General Office Clerks

To this account are charged the salaries and expenses of bookkeepers, cashiers, stenographers, clerks and all other general office employees whose time is not directly applicable to other expenses and accounts. During the year 1934 charges to this account represented 19.3% of the total group and 2.3% of the total operating expenses. For the month of May, 1935, the charges to this account consisted of the following:

Office of Building Manager	\$	555.36
Executive Staff Payroll		1,148.50
Treasurer's Office		1,947.95
Auditor's Office		5,907.74
Engineering		105.00
Purchasing Agent's Office		490.00
Statistician's Office		727.00
Personnel Dept. Office		1,532.00
Miscellaneous		396.21
Trainmen		40.20
Supervision Credit		(292.00)
Total		\$12,557.96

The foregoing chart shows the status of this account for the period of years from 1920 to 1934. Annual fluctuations have been rather gradual from \$105,000 in 1920 to \$163,000 in 1923, dropping off in 1924, followed by a gradual increase to a peak of \$205,000 in 1931. A decrease set in in 1932 and 1933 from \$205,000 to \$141,000 in the latter year. 1934 showed an increase of about \$11,000 over 1933, and the first six months of 1935 were 6% higher than for the same period in 1934.

Account No. 88 - Pensions and Gratuities

As has been mentioned previously, the company has no fixed method of setting aside a reserve for pensions although they do pension their employees and charge the cost thereof to operating expense. Employees having had twenty years of continuous service are entitled to a monthly pension of 1% of their average monthly salary or earnings for the last year worked, figures at rates in effect prior to August 1, 1932, on full time, times the years of service less one. The earnings of an employee working on a weekly basis are computed on the basis of rate per hour received during the year prior to August 1, 1932, at full time in hours per day and days per week for a period of one year. For example, the pension of an employee working in the shops would be based on a nine-hour day for a 5½-day week.

There is also charged into this account the expense in connection with medical service. Each employee has deducted from his pay check monthly \$1.00, which is impounded in a medical expense fund. The company provides medical service to the employees and the difference between the cost in any one month and the amount collected from the employees

is charged into this account. For the month of May, 1935, the cost to the company amounted to \$1,507.57.

The company also provides insurance on a cooperative basis to the employees, \$500.00 of free life insurance and \$1,500 additional life insurance. The difference between \$1.05, which the employee pays monthly, and the total monthly premium on the additional insurance is paid by the company. For the month of May, 1935, the company cost in connection with this additional insurance was \$4,019.75, the difference of \$6,748.14 being deducted from the employees' salaries.

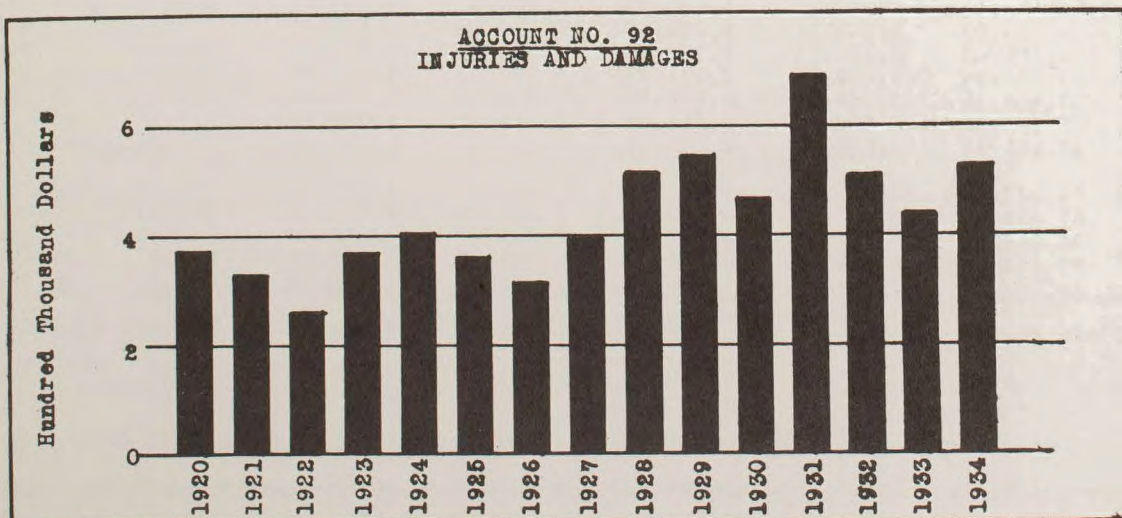
At the present time there are 132 pensioners on the pension payroll, which, during the month of May, 1935, amounted to \$4,631.68.

The total charges to the account for the month of May, 1935, were \$9,878.42. The foregoing chart shows the relative magnitude of charges to this account for the years 1920 to 1934.

Account No. 92 - Injuries and Damages

To this account are charged the amounts paid in claims resulting from injuries and damages to persons and property through the operation of the railway system, consisting of court and legal costs in connection therewith, witness fees, claim agents' expense, salaries of the general claim agent and his staff, and miscellaneous expense. This account is the largest of the group, representing 46.4% in 1934, and 8.1% of the total operating expense. The percent of total expense has varied from a low of 3.7% in 1926 to 6.5% in 1929, dropping off to 5.7% in 1930, increasing to a peak of 8.7% in 1931, dropping off slightly in 1932 and 1933, followed by an increase to 8.1% in 1934.

The following chart shows the annual charges to this account over a period of fifteen years from 1920 to 1934, and the accompanying table shows the amounts charged and various cost statistics.



The decrease in 1932 was responsible in a large part to the reorganization of the claims department. In that year the department was put in charge of a claim agent whose time was divided between the Pacific Electric Railway Company claim department and that of the Los Angeles Railway Corporation, which condition still exists. The cost of injuries and damages was declining steadily as a result of this reorganization until 1934, when an increase from 1933 was experienced. This increase was due principally to additional claims for damages because of injuries to passengers resulting from the strike and to the greater number of collisions with automobiles. Many new trainmen with very little or no experience and little training were hired to take the place of the strikers, which was the major cause of the increase in automobile collisions.

Year	Amount	Index 1920 = 100	Percent of Total Expense	Percent of Gross Revenue	Cost per Car Mile	Cost per Car in Service
1920	\$374,050.11	100%	5.74%	4.17%	1.248¢	\$410.14
1921	328,919.32	88	4.50	3.27	1.094	341.91
1922	262,204.02	70	3.95	2.39	.890	259.09
1923	370,058.97	99	4.77	2.97	1.163	343.60
1924	403,277.28	108	4.90	3.21	1.219	330.56
1925	360,076.07	96	4.23	2.98	1.106	289.68
1926	318,736.93	85	3.74	2.66	.990	280.33
1927	398,096.02	106	4.71	3.32	1.251	403.75
1928	513,298.25	137	6.18	4.22	1.628	513.30
1929	545,320.85	146	6.48	4.14	1.653	545.32
1930	469,484.74	126	5.72	3.91	1.540	494.19
1931	691,715.74	185	8.69	6.52	2.375	772.87
1932	511,833.45	137	7.72	5.73	1.920	705.98
1933	441,116.43	118	7.70	5.48	1.671	608.44
1934	529,650.32	142	8.14	6.45	1.927	683.42

The following table shows by months for the twelve months ending May 31, 1935, the amounts charged to this account segregated between claims paid and other costs, amounting to \$641,298.03.

	Claims Paid	Miscel. Expense	Court Costs and Legal Expense	Witness Fees	Salaries Claim Agent and Clerks	Claim Agents Expense	Total
<u>1934</u>							
June	\$ 21,642.61	\$ 2,841.07	\$ 6,630.53	\$ 1,402.58	\$ 4,554.52	\$ 101.79	\$ 37,173.10
July	18,516.03	3,525.88	6,296.55	700.34	4,516.93	89.35	33,645.08
Aug.	36,150.06	3,100.51	6,783.91	749.05	4,691.92	120.80	51,596.25
Sept.	18,127.44	4,649.04	5,461.35	909.63	4,808.86	161.17	34,117.49
Oct.	34,468.18	3,947.67	5,949.78	1,119.03	4,797.22	109.46	50,391.34
Nov.	17,724.95	3,523.12	6,314.08	1,494.71	4,835.79	119.45	34,012.10
Dec.	34,691.16	6,553.60	6,049.68	831.43	5,267.40	121.86	53,515.13
<u>1935</u>							
Jan.	71,017.42	5,148.65	5,933.48	946.48	4,787.93	120.37	87,954.33
Feb.	37,352.25	5,943.56	6,060.57	1,305.08	4,801.06	203.49	55,666.01
Mar.	54,612.99	6,212.75	6,647.12	1,389.58	4,831.50	232.63	73,926.57
Apr.	50,402.87	5,864.23	6,881.98	1,291.72	4,856.50	238.51	69,535.81
May	41,144.21	4,780.46	7,163.47	1,525.59	4,904.90	246.19	59,764.82
Total	\$435,850.17	\$56,090.54	\$76,172.50	\$13,665.22	\$57,654.53	\$1,865.07	\$641,298.03
Percent	67.96%	8.75%	11.88%	2.13%	8.99%	.29%	100.00%

The accompanying table shows for the same period the amounts paid for the various types of accidents. It will be noted that for this period the cost in connection with automobile collisions has increased from \$128,000 to \$185,000, representing 42.3% of the

total as against 39.1% for the year of 1934. The payments for accidents caused by falling off the car, inside the car, while alighting and while boarding also increased during the latter period. The total number of claims paid during the twelve months ending May 31, 1935, were 3760, representing an average cost of \$116.51 as against 2904 claims paid during the year 1934, at an average cost of \$112.83. The total number of claims paid increased by about 30%, whereas the average cost per claim increased only about 3%. Of the 3760 claims paid during the twelve months ending May 31, 1935, 1232, or 32.8%, were paid during the month in which the accident occurred. The remaining 2528, or 67.2%, were paid on an average of 2.7 months later than the date of accident. The total number of claims paid between 12 and 24 months after date of accident were 28, and those greater than 24 months were only 12. For the year 1934 there were 14,942 accidents reported and 2,904 claims paid. Not all of the claims covered accidents occurring in 1934, however.

Injuries and Damages
12 Months Ending May 31, 1935

<u>Type of Accident</u>	<u>Payments</u>			<u>Claims Paid</u>	
	<u>Amount</u>	<u>Aver. Cost</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
Persons Falling					
Inside Car	\$ 55,044.46	\$102.31	12.57%	537	14.28%
Alighting	49,975.32	205.66	11.41	243	6.46
Boarding	38,474.95	177.30	8.78	217	5.77
Other	5,485.00	609.44	1.25	9	.24
Persons Struck by Cars	24,916.95	230.71	5.69	108	2.87
Persons Injured by Doors	3,917.00	36.95	.89	106	2.82
Miscellaneous Injuries	16,432.08	53.18	3.75	309	8.22
Collisions with Auto-Vehicles	185,135.25	114.42	42.27	1,618	43.03
Collisions with Street Cars	45,523.94	206.93	10.39	220	5.85
Damaged Wearing Apparel	2,031.86	20.12	.46	101	2.69
Employees' Compensation	9,525.21	34.76	2.17	274	7.29
Altercations and Ejectments	1,150.50	82.18	.26	14	.37
Miscellaneous	463.24	115.81	.11	4	.11
Total Claims Paid	\$438,075.76	\$116.51	100.00%	3,760	100.00%
Miscellaneous Expense	56,090.54				
Court Costs and Legal Expense	76,172.50				
Witness Fees	13,665.22				
Salaries of Claim Agent and Clerks	57,654.53				
Claim Agent Expense	1,865.07				
Total Salaries and Expenses	\$643,523.62				
Cash Deposits	(2,225.59)				
Net Total Charged to Acct. No.92	\$641,298.03				

Comparative data on the number of various types of injuries to persons for the years 1928 to 1934 are as follows:

	1928	1929	1930	1931	1932	1933	1934
Collisions:							
Car with Persons	343	469	375	303	227	262	386
With Autos	436	537	484	474	302	244	376
With Other Vehicles	34	29	20	19	3	252	28
Boarding Cars	1,917	2,045	1,961	1,699	1,355	1,230	1,788
Alighting from Cars	1,708	1,750	1,715	662	1,588	1,593	1,846
On Cars	451	514	552	597	614	619	852
Fell Off Cars	58	51	51	35	26	89	101
Miscellaneous	815	809	1,003	940	733	682	1,116
Employees	719	776	655	558	485	359	590
Total	6,481	6,980	6,816	5,287	5,333	5,330	7,083

The item of \$56,090.54 shown as Miscellaneous Expense on the foregoing page represents costs as follows for the month of May, 1935:

Medical Examinations	\$1,213.60
X-Rays	743.00
Special Investigations	531.75
Special Work in Claim Dept.	244.92
Inspection of Autos	229.00
Medical Service	76.00
Photographs	27.50
Ambulance Service	44.00
Telegrams	10.18
Cab Hire	5.40
Supplies	2.36
Miscellaneous	<u>49.08</u>

Sub Total 3,176.79

Trainmen's Payroll	317.17
General Office	78.28
Occupational Medical Service	612.44
Industrial Insurance	511.52
Miscellaneous Supplies, etc.	<u>84.26</u>

Sub Total 1,603.67

Total \$4,780.46

MOTOR COACH DIVISION

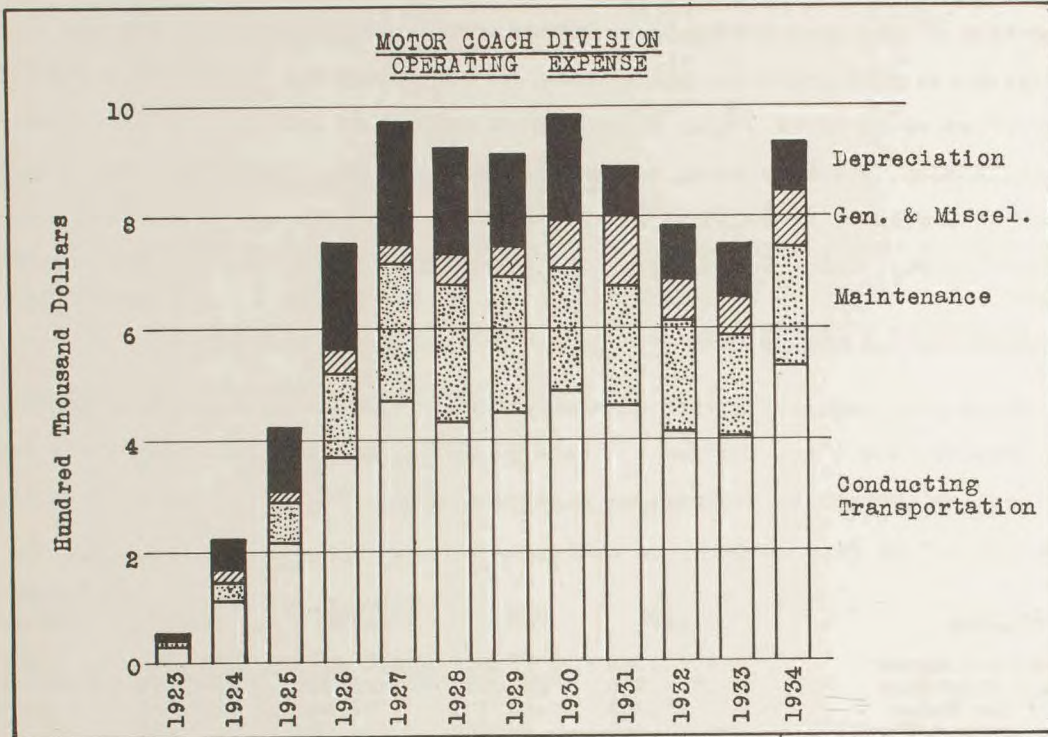
Accounting for the operating expenses of the Motor Coach Division of the Los Angeles Railway Corporation follows the uniform classification of accounts as prescribed by the Railroad Commission of the State of California for Class "A" automotive transportation companies. For the year 1934 operating expenses charged to the Motor Coach Division in amount of \$936,597.98, including depreciation, represented only 10% of total operating expense. By account groups the charges were as follows:

Group	Amount	Percent
I Conducting Transportation	\$532,733.13	62.6%
II Maintenance	214,509.94	25.3
III Traffic	527.27	.1
IV General and Miscellaneous	<u>102,227.78</u>	<u>12.0</u>
	849,998.12	100.0%
Depreciation	<u>86,599.86</u>	
Total	\$936,597.98	

Of the total coach division expenses depreciation represented 9.3%. The following chart shows annual charges to motor coach expense for the period of twelve years from 1923 to 1934, inclusive, by major accounts and with depreciation shown separately. This period embraces the entire operation of the coach division.

The following table shows coach division operating expense charges by major accounts for the years 1923 and 1934, inclusive. The chart shows operating expense charges as having increased from \$57,725.86 in 1923 to \$974,496.22 in 1927, followed by a decrease in 1928 and 1929 and an increase to a peak of \$986,723.10 in 1930. From 1930 to 1933 there was a decrease of 24%, reaching very nearly the 1926 level. For the year 1934,

however, there was an increase of 24.9% from \$749,591.38 to \$936,597.98. This increase was due mainly to the expense in connection with the strike. About \$130,000 of the increase was in the Conducting Transportation group, particularly Account No. 601, Passenger Car Operators, there being also an increase of about \$24,000 in Injuries and Damages. The first six months of 1935 show an increase of 26% over the corresponding period of 1934.



Year	Conducting Transportation	Maintenance	Traffic	General and Miscellaneous	Depreciation	Total
1923	\$ 30,719.39	\$ 8,558.32	\$ -	\$ 7,260.15	\$ 11,188.00	\$ 57,725.86
1924	115,596.53	34,793.67	168.00	15,818.68	58,173.99	224,550.87
1925	218,904.34	71,314.31	287.80	21,608.41	111,003.84	423,118.70
1926	367,695.08	158,414.02	275.05	37,177.91	188,336.18	751,898.24
1927	470,998.92	243,830.01	-	41,650.92	218,016.37	974,496.22
1928	435,351.59	245,298.95	-	55,259.56	187,511.59	923,421.69
1929	447,648.66	243,065.06	18.75	61,166.26	164,219.19	916,117.92
1930	484,809.61	224,619.26	-	89,155.87	188,138.36	986,723.10
1931	460,621.70	214,220.46	-	120,864.78	95,066.81	890,773.75
1932	413,551.12	199,827.49	57.00	76,614.48	95,239.64	785,289.73
1933	400,901.11	179,767.70	137.23	74,012.70	94,772.64	749,591.38
1934	532,733.13	214,509.94	527.27	102,227.78	86,599.86	936,597.98
Total	\$4,379,531.18	\$2,038,219.19	\$1,471.10	\$ 702,817.50	\$1,498,266.47	\$8,620,305.44
Percent	50.80%	23.64%	.02%	8.15%	17.39%	100.00%

All charges which are directly assignable to Motor Coach Division operation are charged to the proper operating expense account. The accounting department costs are prorated on the basis of actual time devoted to accounting for the coach division.

General administrative expenses, however, are not prorated to Motor Coach Division operation. Under Account No. 660, Salaries and Expenses of General Officers, only \$8,081.26 was charged to coach operation during the year of 1934.

The Sixteenth Street Garage provides the necessary facilities for maintaining and servicing the equipment of the Motor Coach Division, as well as the Wilshire line of the Los Angeles Motor Coach Company. Each month those charges applying to the Wilshire line of the Motor Coach Company which can be directly made thereto are so handled and a certain portion of the supervisory and clerical staff at the garage is charged to the Wilshire operation on a proration basis known as Percentage No. 1 and Percentage No. 2, the former of which is based on the direct labor charges to Account No. 632 on single and double deck coaches, Wilshire being the double deck coaches. Percentage No. 2 is based on the direct labor charges to Accounts No. 601 and 632 on single and double deck coaches. For the month of May, 1935, Percentage No. 1 amounted to 25.55% and No. 2 to 29.85%.

GROUP I - CONDUCTING TRANSPORTATION

Charges in connection with superintendence, operation, fuel, lubricants, garage labor and expense, etc., are charged to these accounts, and the following table shows the annual amounts so charged to the various primary accounts for the years 1931 to 1934, inclusive.

Acct. No.	Account	1931	1932	1933	1934	Percent of* Total Exp.
600	Superintendence	\$ 18,345	\$ 17,819	\$ 20,661	\$ 27,641	3.25%
601	Coach Operators	259,796	231,416	218,938	274,385	32.28
604	Fuel for Power	86,529	82,770	88,983	102,556	12.07
605	Lubriants & Supplies	11,899	8,127	6,006	7,452	.88
606	Service Car Expense	8,656	6,509	5,022	6,129	.72
610	Garage Labor & Expense	69,993	61,278	54,232	61,295	7.21
611	Other Transp. Expense	5,404	5,632	7,059	53,275	6.26
612	Telephone & Telegraph	-	-	-	-	-
	Total Cond. Transp.	\$460,622	\$413,551	\$400,901	\$532,733	62.67%

* 1934 Coach Division expenses excluding Depreciation.

For the year 1934 the group represented 62.7% of the total coach operating expense exclusive of depreciation. Cost per coach hour, per coach mile, and per mile of route operated are shown on the following table by years from 1923 to 1934, and the total amounts are shown graphically for the same period on foregoing chart. Of this group of accounts No. 601, Passenger Car Operators, is the most important, representing 51.5% of the group and 32.3% of the total coach operating expense.

Conducting Transportation

<u>Year</u>	<u>Amount</u>	<u>Index</u> <u>1924 = 100</u>	<u>Percent</u> <u>of</u> <u>Total</u>	<u>Cost</u> <u>Per Coach</u> <u>Mile</u>	<u>Cost</u> <u>Per Coach</u> <u>Hour</u>
1923	\$ 30,719.39	27%	66.01%	10.4¢	\$.92
1924	115,596.53	100	69.48	11.2	1.12
1925	218,904.34	189	70.14	11.3	1.19
1926	367,695.08	318	65.24	12.3	1.30
1927	470,998.92	407	62.26	11.6	1.28
1928	435,351.59	377	59.16	10.1	1.17
1929	447,648.66	387	59.54	9.2	1.09
1930	484,809.61	419	60.71	9.2	1.10
1931	460,621.70	398	57.89	8.8	1.07
1932	413,551.12	358	59.93	7.9	1.01
1933	400,901.11	347	61.23	7.4	.97
1934	532,733.13	461	62.67	8.3	1.11

Account No. 600 - Superintendence of Transportation

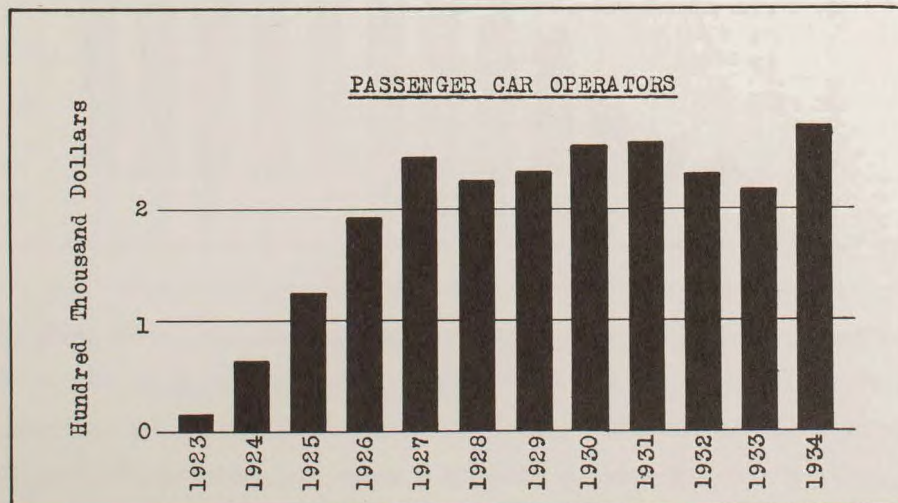
This account includes the salaries and expenses of employees engaged in supervision and inspection. A proportion of the office force of the Manager of Transportation is prorated to this account. Charges in connection with the operating department of the bus division at the Sixteenth Street Garage include -

- 1 Superintendent
- 8 Supervisors
- 1 Foreman
- 7 Clerks and Stenographers

The total charges to the account for the year 1934 amounted to 5.2% of the group and 3.3% of the total coach operating expense.

Account No. 601 - Passenger Car Operators

This account is the most important of the total coach division, representing in 1934 51.5% of the group and 32.3% of the total coach division expenses. The charges consist of the wages of operators engaged in passenger service, being 224 in number for the month of May, 1935. The following chart shows the charges to this account by years and the accompanying table shows cost information over the same period as to cost per coach hour and cost per coach mile.

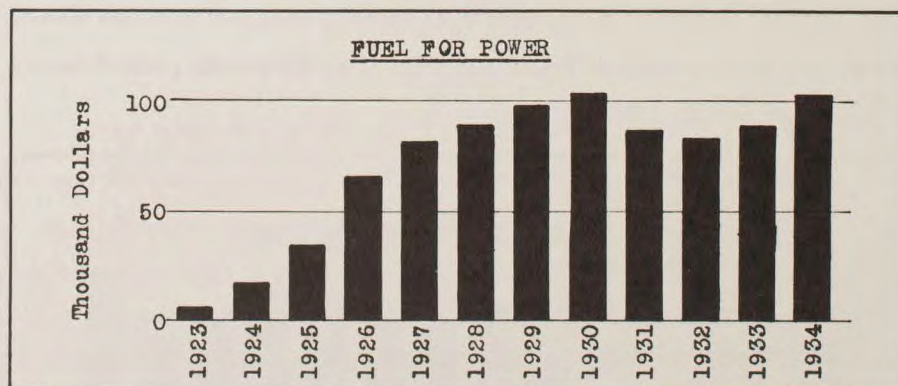


Year	Amount	Index 1924 = 100	Percent		Cost Per Coach Mile	Cost Per Coach Hour
			Group	Total		
1923	\$ 18,604.65	30%	60.56%	39.99%	6.31	\$.557
1924	62,802.54	100	54.34	37.75	6.06	.606
1925	125,431.45	200	57.30	40.19	6.48	.680
1926	193,357.45	308	52.59	34.30	6.45	.682
1927	247,271.50	394	52.51	32.69	6.09	.674
1928	225,295.57	359	51.75	30.61	5.21	.603
1929	232,772.54	371	52.00	30.96	4.79	.566
1930	258,158.39	411	53.25	32.33	4.88	.587
1931	259,796.20	414	56.40	32.65	4.94	.601
1932	231,415.96	368	55.96	33.54	4.42	.567
1933	218,938.03	349	54.61	33.43	4.02	.532
1934	274,385.47	437	51.50	32.28	4.25	.572

The charges to this account have increased from \$18,604.65 in 1923 to \$247,271.50 in 1927, dropping about \$22,000 in 1928, increasing about \$10,000 in 1929 and again in 1930 to \$258,158.39, remaining practically the same in 1931, followed by a decline of 15.7% from 1931 to 1933. 1934 showed an increase of \$55,447, which was mostly due to the strike conditions in the latter part of that year. The first six months of 1935 show an increase of 14% over the corresponding period in 1934.

Account No. 604 - Fuel for Power

This account takes second place in importance of the coach division expense accounts, being 19.3% of its group and 12.1% of the total coach operating expense for the year 1934. Charges to the account represent the cost of fuel used for power; namely, gasoline, which is purchased on a contract basis at a price somewhat reduced from that in general effect at service stations, there being a small quantity of gasoline purchased on the outside at regular prices. Charges to the account over the period from 1923 to 1934, inclusive, are shown in the accompanying chart by years.



The charges increased somewhat uniformly from \$17,629.69 in 1924 to a peak of \$104,807.94 in 1930, dropping off to \$82,770.44 in 1932, followed by increases in 1933 and 1934. The first six months of 1935 show an increase of 31% over the corresponding period for 1934. The charges to this account are, of course, affected by the fluctuation in the

price of gasoline. The chart shows a fairly uniform increase from \$17,630 in 1924 to \$105,000 in 1930, declining to 1932, then increasing again to \$102,500 in 1934. The total charges over the entire period are shown on the table following, as well as cost per coach mile and cost per coach hour.

Year	Amount	Index 1924 = 100	Percent		Cost Per Coach Mile	Cost Per Coach Hour
			Group	Total		
1923	\$ 5,150.30	29%	16.77%	11.07%	1.75¢	15.4¢
1924	17,629.69	100	15.25	10.60	1.70	17.0
1925	34,352.01	195	15.69	11.01	1.77	18.6
1926	65,036.19	369	17.69	11.54	2.17	22.9
1927	80,744.93	458	17.14	10.67	1.99	22.0
1928	89,551.16	508	20.57	12.17	2.07	24.0
1929	95,546.32	542	21.34	12.71	1.97	23.2
1930	104,807.94	594	21.62	13.12	1.98	23.8
1931	86,529.37	491	18.79	10.87	1.65	20.0
1932	82,770.44	469	20.01	11.99	1.58	20.3
1933	88,983.28	505	22.20	13.59	1.63	21.6
1934	102,555.54	582	19.25	12.07	1.59	21.4

The trend of the cost of fuel for power follows very nearly parallel with that of coach miles operated, which increased uniformly from 1924 to 1930, leveled off to 1932 and then increased slightly in 1933 and more rapidly to 1934. The recently purchased motor coaches give a higher fuel economy per passenger mile operated than do the older types.

Gasoline, at the present time, is purchased under a contract with the Associated Oil Company dated May 1, 1931, to run for a period of three years and continuing thereafter until terminated by a six months' written notice by either party. The contract provides that the price of gasoline, including State tax, shall be one cent less per gallon than the price charged resellers if delivered in quantities less than 3,000 gallons and one and one-half cents per gallon if delivered in quantities over 3,000 gallons. The price shall not be in excess of 11½¢ per gallon nor less than 8¢, except by increase or decrease in local, state, or governmental tax or taxes. However, if the price to resellers is below 8¢ the price shall be the same as to resellers. In no event shall the price per gallon be more than the retail price less 4¢. The minimum purchase is 750,000 gallons per year and the seller is not obligated to sell or deliver in excess of 3,000,000 gallons in any one year.

As of September 5, 1935, all the motor coaches of the Los Angeles Railway Corporation are powered by gasoline as fuel with the exception of eight Model 54 coaches. These eight are equipped for use of Butane gas and are operated on the Florence-Soto No. 50 line, Alvarado No. 41 line, and the East Ninth Street No. 47 line. The use of this gas is still in the experimental stage and the results so far point to it as having a satisfactory place for this type of service. The experiments were started in July of 1934, and at the present time three different types of carburetion are being used, that being the most difficult problem at the present time. The fuel is carried in liquid form in steel tanks tested for 175 pounds per square inch pressure and maintains its pressure as it gasifies within the tank. The tanks hold enough fuel to run a coach about 300 miles, which is well within the cruising range of one day's operation. Up to the present time no extensive tests have been

made in connection with the economy of this type of fuel as compared with gasoline although the general impression is that it will be cheaper. However, one of the main advantages to the use of Butane is the elimination of obnoxious fumes which are almost always present, to the discomfort of the passengers, in the gasoline coaches. The fumes from Butane are harmless.

Account No. 610 - Garage Labor and Expense

To this account are charged the wages of foremen, power, motor and brake inspectors, watchmen, car placers, shifters and cleaners, oilers and other garage employees not engaged in making repairs. It also includes the cost of fuel, light, water, ice, and other garage expenses of a similar nature. The account represented in 1934 11.5% of the group total and 7.2% of the total coach division expense. The charges reached the peak in 1927 of \$95,518.46, dropping off uniformly in that year to \$54,231.95 in 1933, followed by an increase to \$61,294.80 in 1934. The first six months of 1935 show an increase of 11% over the corresponding period for 1934.

Account No. 611 - Other Transportation Expenses

To this account are charged costs in connection with rent, heating and lighting, replacement of lamps, water, sanitary supplies, and janitor and coach operators' headquarters located at 758 East Sixteenth Street; salaries of secret operatives, and physical examination of applicants; repairs to loading zones and signs; first filling of coach gasoline tanks; and rent, supplies for, and cleaning of outside coach operators' toilets.

GROUP II - MAINTENANCE

To this account are charged all costs in connection with the maintenance of buildings, machinery and tools, equipment, etc., as well as depreciation. There are ten accounts in this group used by the company, five of which represent depreciation. This group of accounts, exclusive of depreciation, represents 25.2% of the total coach division operating expenses, the largest account in the group being No. 632-2, Passenger Car Repairs, which makes up 68.2% of the group total and 17.2% of the total coach division expense. No charges were made to Account No. 629, Superintendence of Equipment, until 1925, and none to Account No. 630, Buildings, Fixtures, and Grounds, until 1927, and none to Account No. 631, Machinery, Tools, Etc., until 1927. Accumulation of depreciation reserve on buildings was started in 1927 and on machinery and tools in 1928.

Of the five expense accounts other than depreciation, Account No. 629 represents 8.8%, No. 630 .5%, No. 631 .4%, No. 632-1 22.2%, and No. 632-2 68.1%. The total charges to the group increased uniformly from \$92,967.66 in 1924 to \$461,846.38 in 1927, dropping off somewhat uniformly to \$274,540.34 in 1933, followed by an increase of about \$250,000 in 1934. The entire group for the first six months of 1935 shows an increase

of 21% over the corresponding period in 1934.

The following table shows charges to this group by primary accounts for the years 1931 to 1934, inclusive.

Acct. No.	Account	1931	1932	1933	1934	Percent of Total Exp.*
629	Superintendence	\$ 17,848	\$ 16,980	\$ 16,162	\$ 18,843	2.22%
630	Bldgs., Fixtures & Grounds	1,595	1,534	1,031	1,034	.12
631	Machinery, Tools, etc.	1,201	1,121	639	769	.09
632-1	Tires and Tubes	41,063	41,228	39,771	47,595	5.60
632-2	Car Repairs	<u>152,514</u>	<u>138,964</u>	<u>122,165</u>	<u>146,269</u>	<u>17.21</u>
	Sub Total	214,221	199,827	179,768	214,510	25.24
633-A	Deprec. of Bldgs.	7,557	7,554	7,554	7,557	
633-B	" Machinery & Tools	3,333	3,344	3,583	3,592	
633-C	" Coaches	82,973	83,382	82,129	73,188	
633-D	" Service Cars	<u>1,203</u>	<u>960</u>	<u>1,506</u>	<u>2,263</u>	
	Total Depreciation	<u>95,066</u>	<u>95,240</u>	<u>94,772</u>	<u>86,600</u>	
	Total Maintenance	\$309,287	\$295,067	\$274,540	\$301,110	

* 1934 Coach Division expenses excluding depreciation.

The following table shows charges to the group by years from 1923 to 1934 and the corresponding cost per car mile and per car hour, excluding depreciation in all cases:

Year	Amount	Index 1924 = 100	Percent of Total	Cost Per Coach Mile	Cost Per Coach Hour
1923	\$ 8,558.32	25%	18.39%	2.90¢	25.6¢
1924	34,793.67	100	20.91	3.36	33.5
1925	71,314.31	205	22.85	3.68	38.7
1926	158,414.02	455	28.11	5.28	55.8
1927	243,830.01	701	32.23	6.00	66.5
1928	245,298.95	705	33.33	5.67	65.7
1929	243,065.06	699	32.33	5.01	59.1
1930	224,619.26	646	28.13	4.24	51.1
1931	214,220.46	616	26.92	4.07	49.5
1932	199,827.49	574	28.96	3.81	48.9
1933	179,767.70	517	27.45	3.30	43.7
1934	214,509.94	617	25.24	3.33	44.7

Account No. 629 - Superintendence of Equipment

This account has been introduced by the company in addition to those prescribed under the uniform classification of accounts and includes the supervision at the Sixteenth Street Garage as well as a certain portion of the salaries of the general office force. The garage force consists of a general, day, machine shop, P.M., and night foreman, three clerks, and one stenographer and switchboard operator. The entire salary of the automotive engineer of the executive staff is charged to this account, as well as a small charge in the way of structures department for timekeeping, a portion of the salary of the superintendent of equipment, and portions of the salaries of the general engineering department for work done in connection with the coach division. The charges to the account increased from \$700 in 1925 to a peak of \$22,566.29 in 1927, followed by a decline to \$17,778.99 in 1930, with an increase of only \$100 in 1931, and decreased in 1932 by about \$800. In 1933 there was a further decrease of about \$800, followed by an increase in 1934 of \$2,700. The

first six months of 1935 show an increase of 24% over the corresponding period in 1934.

Account No. 632-1 - Passenger Car Tires and Tubes

To this account is charged the cost of rental of tires and tubes for use on motor coaches. The company does not purchase these items but rents them from an agency on a mileage basis. The tire contract with the Firestone Tire & Rubber Company dated August 10, 1932, and extended to December 31, 1940, provides that tires on all coaches operated from the Sixteenth Street Garage shall be paid for by the operator on or before the tenth of each month for mileage run on tires furnished during the preceding month at the following rates:

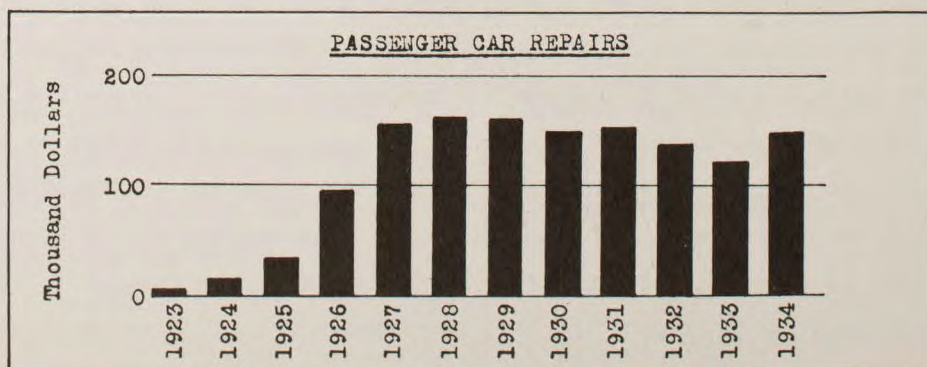
Single Deck Coaches	- .007¢ per coach mile
" " " (40 Passenger)	- .01 " " "
Double Deck Coaches	- .01 " " "
Twin Coaches (Large)	- .01 " " "
Twin Coaches (Small)	- .005¢ " " "

Beginning January 1, 1935, the Firestone Tire & Rubber Company are to pay all taxes arising under the Federal Revenue Act of 1932, the Los Angeles Railway Corporation to pay all other tax or excise levied or imposed upon the manufacturer and all property taxes on tires.

The charges to the account increased from \$17,402.51 in 1924 to a peak of \$59,483.85 in 1927, dropping off about \$8,000 in 1928, followed by an increase of \$4,500 in 1929 and another decrease in 1930 of \$2,500, decreasing to \$41,062.74 in 1931, from which figure it changed only a few dollars in 1932, decreasing again in 1933 about \$1,500, followed by an increase in 1934 of \$7,800, which increase followed the curve of coach miles operated, which also increased in 1934. The first six months of 1935 show a further increase of 13% above the corresponding period in 1934.

Account No. 632-2 - Passenger Car Repairs

The company breaks this account down into twelve sub-accounts for the purpose of accounting, which include all labor and material used in repairing the coach body and all its appurtenances, brakes, chassis, driving gear, electrical system, batteries, motor, fare boxes, tires and tubes, and miscellaneous repairs such as bumpers, exhaust pipes, gas tanks, license brackets, mirrors, radiators, windshield wipers, etc., and repairing of wrecks.



The foregoing chart shows the charges to the account by years to have increased rapidly from 1924 to 1927, then only slightly in 1928, followed by a very gradual decrease in 1933, and an increase of about 20% in 1934.

For the first six months of 1935 there was an increase of 35% over the corresponding period in 1934, which is in part due to the increase of wages and the program of bringing up deferred maintenance. The following table shows the charges to the account by years, the cost per coach mile, and the cost per coach hour.

Year	Amount	Index 1924 = 100	Percent		Cost Per Coach Mile	Cost Per Coach Hour
			Group	Total		
1923	\$ 5,237.42	30%	61.20%	11.25%	1.78¢	15.67¢
1924	17,391.16	100	49.98	10.45	1.68	16.77
1925	38,045.17	219	53.35	12.20	1.97	20.63
1926	97,538.63	561	61.57	17.31	3.25	34.38
1927	158,757.30	913	65.11	20.99	3.91	43.28
1928	166,375.10	957	67.83	22.60	3.85	44.56
1929	161,904.29	931	66.60	21.53	3.34	39.34
1930	149,806.73	861	66.69	18.76	2.83	34.08
1931	152,513.96	877	71.19	19.17	2.90	35.28
1932	138,963.98	799	69.54	20.14	2.65	34.05
1933	122,165.23	702	67.96	18.65	2.24	29.69
1934	146,269.37	841	68.19	17.21	2.27	30.50

GROUP III - TRAFFIC

There are three accounts in this group only, one of which is used by the company; namely, Account No. 651, Advertising. The charges to this account have been very small and have not been made each year. In 1924 there was \$168.00 charged to the account, \$287.80 in 1925, \$275.05 in 1926, nothing in 1927 and 1928, \$18.75 in 1929, nothing in 1930 or 1931, \$57.00 in 1932, \$137.23 in 1933, and \$527.27 in 1934.

GROUP IV - GENERAL AND MISCELLANEOUS

To this group of accounts are ordinarily charged salaries and expenses of general officers, salaries and expenses of general office clerks, general office supplies and expenses, stationery and printing, stores expense, insurance, injuries and damages, legal expense, taxes applicable to operation of rented facilities and equipment, and miscellaneous general expenses. However, inasmuch as the coach division is part of and in most cases an extension of the rail system, no elaborate system of proration is used in allocating salaries and expenses of general officers and general office clerks to the coach division. Of the total coach division operating expenses, this group of accounts represented 12% in 1934, salaries and expenses of general officers and office clerks making up only 2.6% of the total coach expense, as compared with 3.9% for the rail division.

The following table shows charges to this group by primary accounts for the years 1931 to 1934, inclusive.

Acct. No.	Account	1931	1932	1933	1934	Percent of Total Exp.*
660	General Officers	\$ 8,386	\$ 7,680	\$ 6,234	\$ 8,081	.95%
661	Gen. Office Clerks	16,659	15,221	13,180	13,712	1.61
662	Gen. Office Supplies, etc.	1,820	1,927	1,784	1,398	.16
663	Stationery & Printing	3,544	3,422	4,716	5,096	.60
664	Stores Expense	5,958	5,553	5,616	6,789	.80
665	Insurance	3,306	3,215	2,422	1,519	.18
666	Injuries & Damages	57,458	24,583	36,168	60,437	7.11
667	Law Expense	3,856	1,285	-	216	.03
669	Rent of Facilities	1,800	1,800	-	-	-
670	Rent of Equipment	-	36	-	10	-
671	Misc. General Expense	325	387	457	1,687	.20
672	Pensions & Gratuities	17,753	11,506	3,436	3,282	.39
	Total	\$120,865	\$76,615	\$74,013	\$102,227	12.03%

* 1934 Coach Division expense excluding depreciation.

The following tabulation shows the total charges to the group by years from 1923 to 1934, inclusive, and the cost per coach mile and per coach hour for each of the same years. The cost per mile has increased from 1.117¢ in 1925 to 2.299¢ in 1931, decreasing to 1.36¢ in 1933, followed by a slight increase in 1934. The first six months of 1935 show an increase over the corresponding period in 1934 of 64%.

Year	Amount	Index 1924 = 100	Percent of Total	Cost Per Coach Mile	Cost Per Coach Hour
1923	\$ 7,260.15	46%	15.60%	2.46¢	21.73¢
1924	15,818.68	100	9.51	1.53	15.25
1925	21,608.41	137	6.92	1.12	11.72
1926	37,177.91	235	6.60	1.24	13.11
1927	41,650.92	263	5.51	1.02	11.36
1928	55,259.56	349	7.51	1.28	14.80
1929	61,166.26	387	8.13	1.26	14.86
1930	89,155.87	564	11.16	1.69	20.28
1931	120,864.78	764	15.19	2.30	27.96
1932	76,614.48	484	11.10	1.46	18.77
1933	74,012.70	468	11.30	1.36	17.99
1934	102,227.78	646	12.03	1.59	21.32

Account No. 660 - Salaries and Expenses of General Officers

The charges to this account represent the salary of Manager of coach division, one-half the salary of the assistant to the General Manager of the railway company and one-half the salary of his personal secretary, \$50 of the Auditor's salary, \$50 of the Secretary and Treasurer's salary, and a portion of the salaries of the executive staff in amount of \$111.50 for the month of May, 1935. The charges to this account have increased from \$1,800 in 1923 to \$8,385.69 in 1931, dropping off to \$6,233.62 in 1933 and increasing about \$1,800 in 1934.

Account No. 661 - Salaries and Expenses of General Office Clerks

To this account are charged a portion of the salaries and expenses of the auditing department, which is determined on an actual time basis by use of time cards; a

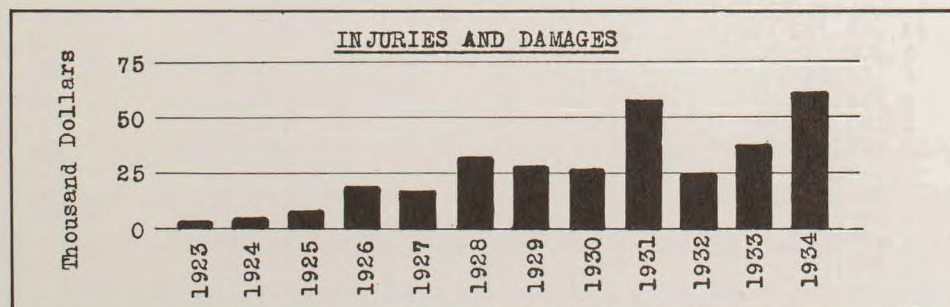
portion of the salary and expenses of the money-counting bureau of the treasury department in connection with counting of the money collected by the coach division; and a small portion of the salaries of four persons whose time is divided between coach division and the Los Angeles Motor Coach Company. The charges to this account represent 1.6% of the total coach division operating expenses and 13.4% of the group and have varied from \$5,322.95 in 1924 to \$17,660.64 in 1930, followed by a decrease to \$13,180.08 in 1933 and about \$500 increase in 1934.

Account No. 665 - Insurance

This account is charged with the premiums on public liability and property damage insurance carried on service cars; excess public liability, fire, theft, and riot, insurance on motor coaches; fire insurance on garage buildings; and cost of bonds of employees.

Account No. 666 - Injuries and Damages

This account includes expenditures on account of persons killed or injured; property damage, compensation paid employees injured while in performance of their duties; salaries and expenses of claim agents, investigators, adjusters and others engaged in the investigation of accidents and adjustment of claims; salaries, fees, and expenses of surgeons and doctors; medical and surgical supplies; nursing and hospital attendance, witness fees, etc. All injury and damage claims in connection with operation of the coach division are handled through the same channels as those in connection with rail operation. The following chart shows the erratic nature of annual charges to this account, and the accompanying table shows the total annual charges by years from 1923 to 1934, as well as the cost per coach mile, cost per coach hour, and percent of gross coach revenue.



Year	Amount	Index 1924 = 100	Percent		Cost	Cost	Percent
			Group	Total	Per Coach Mile	Per Coach Hour	Of Gross Revenue
1923	\$ 2,672.75	53%	36.82%	5.74%	.91¢	8.00¢	8.41%
1924	5,045.63	100	31.90	3.03	.49	4.87	3.32
1925	8,095.85	160	37.47	2.59	.42	4.39	2.46
1926	18,537.82	367	49.87	3.29	.62	6.54	3.30
1927	16,480.32	327	39.58	2.19	.41	4.49	2.06
1928	31,849.11	631	57.65	4.33	.74	8.53	4.01
1929	28,207.03	559	46.12	3.75	.58	6.85	3.40
1930	26,636.74	528	29.88	3.34	.50	6.06	3.14
1931	57,457.97	1,139	47.54	7.22	1.09	13.29	7.23
1932	24,582.92	487	32.09	3.56	.47	6.02	3.63
1933	36,167.81	717	48.87	5.52	.66	8.79	5.53
1934	60,437.17	1,198	59.12	7.11	.94	12.60	7.20

The charges were not very heavy until 1931, in which year they about doubled those of the previous year, dropping off again in 1932 and building up in 1933 and 1934 to \$60,437.17 in the latter year. The large increase in 1934 was due particularly to the violence in connection with the strike and the increased number of accidents resulting from the use of new operators in replacement of those out on strike. For the year 1934 charges to this account represented 7.1% of the total coach division expense and 59% of the charges to the group.

All Other Accounts

All other accounts under the coach division are charged similarly to the corresponding accounts in the Rail Division and are not very large in comparison with those accounts which have been discussed.

SECTION E

OPERATING EXPENSES

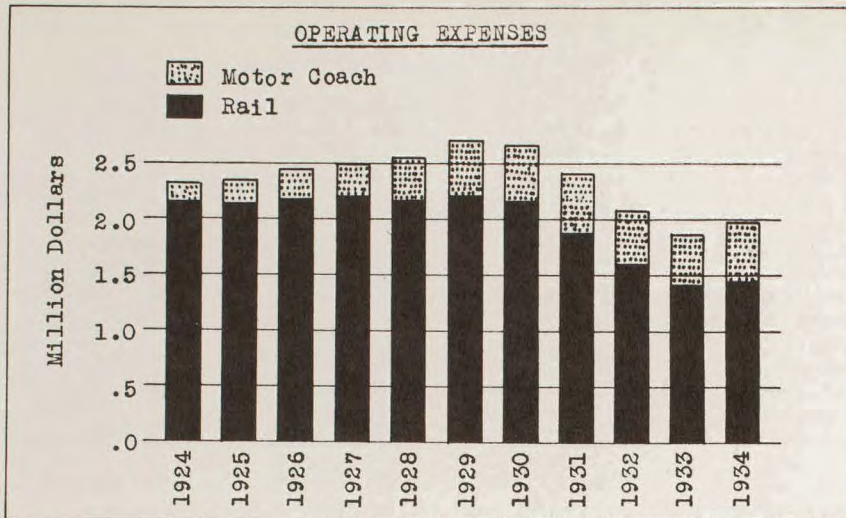
PACIFIC ELECTRIC RAILWAY

Operating Expenses of the Los Angeles Local Service rendered by the Pacific Electric Railway (excluding depreciation) have been as follows:

Year	<u>Pacific Electric</u>		Share of L.A.M.C.Co.	Total
	<u>Rail</u>	<u>Motor Coach</u>		
1924	\$2,140,792.07	\$ 4,902.66	\$179,527.73	\$2,325,222.46
1925	2,122,059.73	9,751.26	226,992.41	2,358,803.40
1926	2,157,077.34	12,879.34	272,873.48	2,442,830.16
1927	2,204,208.35	13,394.84	282,746.38	2,500,349.57
1928	2,123,681.50	18,342.23	397,440.25	2,539,463.98
1929	2,191,289.02	24,587.48	487,088.71	2,702,965.21
1930	2,112,922.34	25,962.69	533,211.41	2,672,096.44
1931	1,882,732.11	32,648.67	499,215.65	2,414,596.43
1932	1,595,849.82	21,184.94	479,988.36	2,097,023.12
1933	1,413,357.80	14,321.55	454,567.24	1,882,246.59
1934	1,451,376.98	14,274.86	514,438.38	1,980,090.22

As has previously been stated, the expenses of operation of the rail lines in many instances represent an allocation or segregation of book figures. In the case of motor coach operation the expenses are to a large extent direct charges, except, of course, that the share of the Los Angeles Motor Coach Company represents in most instances one-

half of the total expenses of that agency. The following chart sets forth the foregoing tabulation in graphic form.



The detail of expenses (excluding depreciation) for the year 1934 follows:

	Pacific Electric		Share of L.A.M.C.Co.	Total
	Rail	Motor Coach		
Way and Structures	\$ 64,946.20	\$ -	\$ 1,839.13	\$ 66,785.33
Equipment	107,175.25	2,750.20	108,767.60	218,693.05
Power	204,019.16	-	-	204,019.16
Conducting Transp.	594,436.04	10,032.47	329,508.34	933,976.85
Traffic	32,120.48	154.02	268.24	32,542.74
General & Misc.	241,415.70	1,338.17	74,055.07	316,808.94
Rent of Equipment	207,264.15	-	-	207,264.15
Total	\$1,451,376.98	\$14,274.86	\$514,438.38	\$1,980,090.22
Depreciation	33,913.61	190.68	37,330.33	71,434.62
Total	\$1,485,290.59	\$14,465.54	\$551,768.71	\$2,051,524.84

Depreciation and Taxes are considered separately in later chapters. Likewise the Los Angeles Motor Coach Company's operations are considered as a whole in a following section. It remains therefore to show certain further detail respecting the Pacific Electric local operating expense, and since the motor coach operations are relatively unimportant such further discussion is confined to the rail operations.

In the statements on the following pages the detail by accounts for the last three years is shown. Costs per car mile are also shown.

Way and Structures expense to a large extent is an allocated figure as between local and interurban operations of the track sections involved. Equipment expense except for Supervision is largely direct. Power is allocated based on studies of energy consumption of various classes of equipment. Transportation expense except Supervision is largely direct. General Expense is in the main a prorated cost, except for Injuries and Damages and Rent of Equipment.

GROUP I - WAY AND STRUCTURES

Acct. No.	Name	1932	1933	1934	1934
					Cost per Car Mile
1	Supt. Way & Struc.	\$13,474.76	\$12,831.50	\$ 8,994.51	.17¢
2	Ballast	224.83	1,342.51	171.48	-
3	Ties	3,048.06	2,504.18	701.02	.01
4	Rail	2,038.00	3,247.00	537.42	.01
5	Rail Fstg. & Jts.	4,070.68	2,062.65	1,354.28	.03
6	Special Work	2,090.00	3,185.82	1,267.41	.02
8	Track & Rdway Labor	25,536.53	24,142.73	19,045.63	.36
9	Misc. Tr. & Rdway Exp.	346.62	545.65	219.73	-
10	Paving	20,151.35	12,860.56	5,797.17	.11
11	Clean. & Sand. Track	3,276.44	1,977.66	1,245.88	.02
13	Tunnels & Subways	1,854.01	538.21	992.47	.02
15	Bridges, Tres. & Culv.	403.80	799.53	2,050.01	.04
16	Cross., Signs, Fences	1,629.83	2,147.01	1,544.59	.03
17	Signal & Interlocking	1,643.84	3,651.15	3,984.33	.08
18	Teleph. & Telegr. Lines	29.27	72.73	123.51	-
19	Misc. Way Expense	(2.66)	233.33	1.25	-
20	Poles & Fixtures	2,573.34	1,950.49	1,938.30	.04
22	Distribution System	13,499.61	12,803.23	12,737.08	.21
23	Misc. Elec. Line Exp.	.94	97.38	30.94	-
24	Bldgs., Fixt., Grounds	3,217.93	2,524.92	2,209.19	.04
	Total	\$99,107.18	\$89,518.24	\$64,946.20	1.22¢
	Total Cost per Car Mile	1.76¢	1.65¢	1.22¢	
	Car Miles	5,623,236	5,426,582	5,311,053	

GROUP II - EQUIPMENT

Acct. No.	Name	1932	1933	1934	1934
					Cost per Car Mile
29	Superintendence of Equip.	\$ 10,632.80	\$ 6,934.87	\$ 7,369.08	.14¢
30	Passenger & Comb. Cars	77,300.06	46,431.59	59,581.77	1.12¢
32	Service Equipment	807.02	591.22	1,169.04	.02
33	Elec. Equipment of Cars	27,347.82	14,560.01	19,212.16	.36
36	Shop Equipment	2,188.00	1,709.06	2,126.96	.04
37	Shop Expenses	17,917.27	12,088.02	15,151.68	.29
38	Vehicles	2,591.44	2,023.65	2,564.56	.05
39	Misc. Equipment Expense	22.40	-	-	-
	Total	\$138,806.81	\$84,338.42	\$107,175.25	2.02¢
	Total Cost per Car Mile	2.47¢	1.55¢	2.02¢	

GROUP III - POWER

	1932	1933	1934
Total	\$232,529.88	\$228,427.29	\$204,019.16
Total Cost per Car Mile	4.14¢	4.21¢	3.84¢

GROUP IV - CONDUCTING TRANSPORTATION

Acct. No.	Name	1932	1933	1934	1934
					Cost per Car Mile
63	Supt. of Transp.	\$ 44,428.44	\$ 35,963.99	\$ 36,854.02	.69¢
64	Psgr. Cond. M'men & T'men	500,028.95	453,759.02	462,557.61	8.71
66	Misc. Car Serv. Employees	13,290.58	16,575.49	17,172.76	.32
67	Misc. Car Serv. Exp.	15,556.49	14,621.88	14,842.55	.28
68	Station Employees	5,165.28	2,531.46	2,363.54	.04
69	Station Expenses	1,304.60	776.40	630.10	.01
70	Car House Employees	46,989.67	42,425.80	42,919.47	.81
71	Car House Expenses	1,220.76	1,149.11	907.67	.02
72	Oper. Sig. & Interlocking	18,589.58	13,720.26	13,727.86	.26
73	Oper. Teleph. & Telegr.	351.02	352.98	483.48	.01
78	Other Transp. Expenses	1,144.50	1,832.23	1,976.98	.04
	Total	\$648,069.87	\$583,708.62	\$594,436.04	11.19¢
	Total Cost per Car Mile	11.52¢	10.76¢	11.19¢	

GROUP V - TRAFFIC

Acct. No.	Name	Traffic		
		1932	1933	1934
79	Supt. & Solicitation	\$15,118.20	\$13,315.79	\$12,874.57
80	Advertising	26,086.68	17,735.54	19,245.91
	Total	\$41,204.88	\$31,051.33	\$32,120.48
	Total Cost per Car Mile	.73¢	.57¢	.60¢

GROUP VI - GENERAL AND ADMINISTRATIVE

Acct. No.		1932	1933	1934	1934
					Cost per Car Mile
83	Sal. & Exp. Gen. Officers	\$ 8,173.41	\$ 7,517.12	\$ 6,693.71	.13¢
84	Sal. & Exp. G. O. Clerks	44,450.18	48,896.80	50,328.60	.95
85	G. O. Supplies & Exp.	4,306.20	4,053.43	4,122.99	.08
86	Law Expenses	6,511.93	6,905.37	6,375.38	.12
88	Pensions & Grat.	18,256.71	21,277.12	18,898.80	.36
89	Misc. Gen. Exp.	7,753.05	6,526.02	6,994.68	.13
90	Valuation Exp.	852.27	2,167.04	852.83	.02
91	Amortization of Fran.	2,268.10	2,341.91	2,331.78	.04
92	Injuries & Damages	95,207.64	53,186.96	115,280.63	2.17
93	Insurance	2,742.06	2,356.87	2,149.44	.04
94	Stationery & Prtg.	12,901.54	10,485.99	10,411.89	.20
95	Store Exp.	14,648.80	11,653.14	12,155.62	.23
96	Garage & Stable Exp.	4,876.38	4,742.61	4,819.35	.09
	Sub Total	222,948.27	182,110.38	241,415.70	4.56
98	Rent of Equipment	213,182.93	214,203.52	207,264.15	3.90
	Total	\$436,131.20	\$396,313.90	\$448,679.85	8.46¢
	Cost per Car Mile	7.76¢	7.30¢	8.46¢	
	Rent of Equipment	3.79¢	3.95¢	3.90¢	
	Injuries & Damages	1.69	.98	2.17	
	All Other G. & A. Exp.	2.28	2.37	2.39	

Rent of Equipment

This account includes the depreciation and interest charges for the equipment in service on the Los Angeles local rail lines which is leased from the Southern Pacific Company. The charges for rent of equipment from 1930 have been as follows:

Year	Interest	Depreciation	Total
1930	\$144,893.67	\$144,733.77	\$289,627.44
1931	130,131.98	115,289.28	245,421.26
1932	112,666.08	100,516.85	213,182.93
1933	110,561.07	103,642.45	214,203.52
1934	103,938.33	103,325.82	207,264.15
1935 (7 mos)	58,492.72	43,592.09	102,084.81

The above charges include payments for rental of the major portion of the 160 cars of the No. 600-No.759 Series. Until 1932 in addition to the above, cars of the No. 50 Class were used on the Mendale line and rental on such equipment was included.

The assignment of cars to Los Angeles Local lines varies slightly month to month. For the month of July, 1935, the following assignment was made:

Series	Year Built	Total Cars	Local Lines
600-649	1922	50)
650-699	1924	50)
700-749	1925	50) 154
750-759	1928	10)

The contract under which the No.600-759 Series are rented from Southern Pacific Company was amended January 1, 1935.

Prior to January 1, 1935, the rental comprised an interest charge of 6% of the depreciated value and an annual depreciation charge of 3% of the cost of the body and 5% of the cost of the electrical equipment. Effective January 1, 1935, the modification in the contract provided for an interest rental of 3½% of the original cost and an annual depreciation charge of 2.66% of the cost. When the equipment is fully depreciated it may be purchased by the Pacific Electric Railway for its salvage value.

The average monthly charges on the old and new contracts follow:

	<u>Interest</u>	<u>Depreciation</u>	<u>Total</u>
Old Contract (Average Month - 1934)	\$8,662	\$8,610	\$17,272
New Contract (Average first 7 mos. 1935)	8,356	6,227	14,583

It will be noted that the interest at 3½% on the original cost is nearly as great as 6% of the depreciated cost. The original cost of the entire 160 cars is \$3,088,302, as of August 31, 1935. The depreciation accrued as of that date was \$1,379,924, or 44.7%.

SECTION F

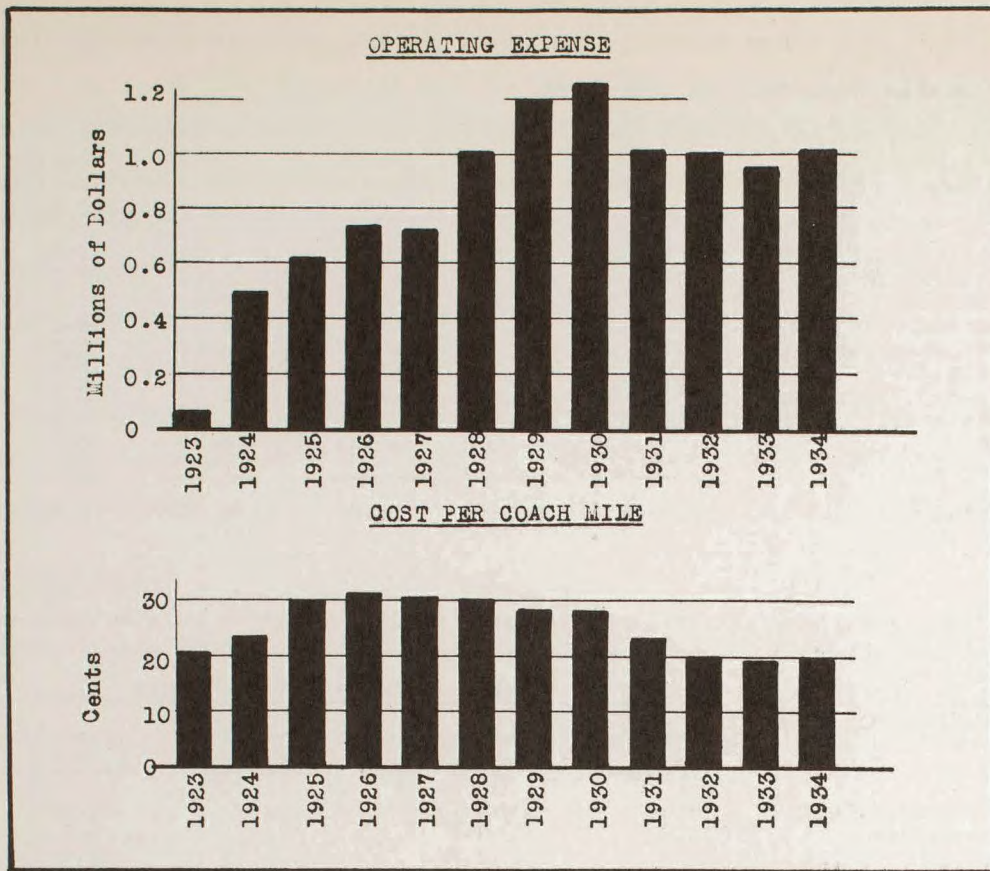
OPERATING EXPENSES

LOS ANGELES MOTOR COACH COMPANY

Operating Expense and Cost per Coach Mile for the Los Angeles Motor Coach Company is shown by the following table for the years 1923 to 1934, inclusive.

<u>Year</u>	<u>Operating Expense</u>	<u>Index 1934 = 100</u>	<u>Coach Miles</u>	<u>Cost per Coach Mile</u>
1923	\$ 67,060.21	6.3%	326,892	20.5¢
1924	487,706.74	45.9	2,071,999	23.5
1925	624,590.61	58.8	2,146,629	29.1
1926	731,335.22	68.8	2,366,745	30.9
1927	722,853.67	68.0	2,406,327	30.0
1928	1,016,021.54	95.6	3,421,927	29.7
1929	1,194,519.50	112.4	4,260,498	28.0
1930	1,249,790.39	117.6	4,474,216	27.9
1931	1,062,064.63	99.9	4,558,415	23.3
1932	1,008,275.14	94.9	5,210,459	19.4
1933	954,983.68	89.9	5,268,450	18.1
1934	1,062,460.32	100.0	5,410,832	19.6

The operating expense has remained remarkably constant since 1928 when the Wilshire line was transferred to the Coach Company, despite an increase in coach miles operated of over 58%. Conversely, the cost per coach mile has decreased from about 30¢ per mile to about 20¢ per mile. These trends are illustrated by the following charts.



Operating Expense comprises four major groups of expense as follows:

Group	1934	Percent of Total
I Conducting Transportation	\$ 619,566.94	58.3%
II Maintenance - Repairs	216,162.77	20.3
II Maintenance - Depreciation	77,689.50	7.3
III Traffic	536.49	.1
IV General and Miscellaneous	148,504.62	14.0
Total	\$1,062,460.32	100.0%

For purposes of analysis, depreciation has been set forth separately for the purpose of later detail consideration.

The expense of operation by lines, excluding depreciation and taxes, for the year 1934 follows:

Line	Conducting Transp.	Maintenance (Repairs)	Traffic	General	Total
Hollywd.-L.Beach-S.Pedro	\$ 7,463.23	\$ 2,348.52	\$ 59.88	\$ 1,572.15	\$ 11,443.78
Wilshire Boulevard	231,888.71	86,959.86	247.06	60,812.03	379,907.66
Sunset Boulevard	140,150.19	47,381.53	29.69	33,707.83	221,269.24
Western Avenue	84,862.70	32,225.44	24.22	17,654.90	134,767.26
Crenshaw-Vine-LaBrea	88,803.93	31,323.45	35.36	23,515.88	143,678.62
Vt.-Glendale-Riverside	25,324.30	6,181.23	50.58	4,462.08	36,018.19
Silverlake-Hyp.-Talmadge	24,622.10	6,151.73	12.95	3,854.95	34,641.73
Olympic Boulevard	15,567.05	3,267.89	76.47	2,766.49	21,677.90
School Lines	884.73	323.12	.28	158.31	1,366.44
Undistributed	-	-	-	-	-
Total	\$619,566.94	\$216,162.77	\$536.49	\$148,504.62	\$984,770.82

Certain operating data pertinent to a consideration of operating expense follows; likewise being for the year 1934.

Line	Coach Miles	Coach Hours	Coach Miles Per Hour	Coach Miles Per Gal. Gas	Operator Wage Per Mile	Coach Repair Per Mile
Hollywd.-L. Beach-S. Pedro	115,032	5,558	20.70	4.89	2.7¢	1.2¢
Wilshire Boulevard	1,786,006	128,693	13.88	3.95	7.7	3.4
Sunset Boulevard	981,138	77,742	12.62	3.63	9.0	3.6
Western Avenue	800,234	67,025	11.94	2.91	4.8	2.8
Crenshaw-Vine-LaBrea	952,267	69,714	13.66	3.88	4.2	2.1
Vt.-Glendale-Riverside	283,218	22,757	12.45	6.34	4.6	1.2
Silverlake-Hyp.-Talmadge	291,715	20,226	14.42	6.10	3.9	1.1
Olympic Boulevard	183,970	12,385	14.85	6.31	3.9	.8
School Lines	9,719	753	12.91	.378	4.3	2.2
Undistributed	7,533	-	-	-	-	-
Total	5,410,832	404,853	13.35	3.88	6.3¢	2.8¢

The operating expenses per coach mile in 1934 by lines were as follows:

Line	Cost per Coach Mile in Cents				
	Conducting Transp.	Maintenance (Repairs)	Traffic Expense	General Expense	Total
Hollywd.-L. Beach-S. Pedro	6.4¢	2.0¢	.1¢	1.4¢	9.9¢
Wilshire Boulevard	13.0	4.9	.0	3.4	21.3
Sunset Boulevard	14.3	4.8	-	3.4	22.5
Western Avenue	10.6	4.0	-	2.2	16.8
Crenshaw-Vine-LaBrea	9.3	3.3	-	2.5	15.1
Vt.-Glendale-Riverside	8.9	2.2	-	1.6	12.7
Silverlake-Hyp.-Talmadge	8.4	2.1	-	1.5	12.0
Olympic Boulevard	8.5	1.8	-	1.5	11.8
School Lines	9.1	3.3	-	1.6	14.0
Undistributed	-	-	-	-	-
Total	11.4¢	4.0¢	.1¢	2.7¢	18.2¢

GROUP I - CONDUCTING TRANSPORTATION

The expense classified as "conducting transportation" is shown in detail for the last three years in the accompanying statement, together with derived costs per coach mile.

No.	Account	1932	1933	1934	Cost per Mile in Cents		
					1932	1933	1934
600	Superintendence	\$ 22,125.08	\$ 22,698.61	\$ 25,663.87	.4¢	.4¢	.5¢
601	Operators & Conductors	335,685.53	308,766.02	338,031.63	6.5	5.9	6.3
604	Fuel for Power	100,989.60	111,312.63	110,688.21	1.9	2.1	2.0
605	Lubricants & Supplies	12,399.58	10,642.51	12,144.07	.3	.2	.2
606	Service Car Expenses	5,071.39	6,655.80	6,573.02	.1	.1	.1
607	Station Employees	450.90	370.18	389.58	.0	.0	.0
610	Garage Labor & Expenses	83,679.92	77,737.20	77,267.48	1.6	1.5	1.4
611	Other Transp. Expenses	12,595.75	10,316.60	48,809.08	.2	.2	.9
Total		\$572,997.75	\$548,499.55	\$619,566.94	11.0¢	10.4¢	11.4¢

The charges to Account No. 600 - Superintendence, include the salaries of the supervisors and a portion of cash receivers' salaries. Wages of operators and conductors make up the charges to Account No. 601.

Account No. 604, Fuel for Power, covers purchase of gasoline. The contract dated May 1, 1931, with Tide Water Associated Oil Company provides for minimum purchases of 400,000 gallons per year at 1½ cents less than price charged retailers when delivered in quantities of over 3,000 gallons. The effect of the contract is to provide for purchase at 4¢ less than the retail price. There were 1,391,807 gallons of gasoline consumed in 1934. Operations show a consumption of one gallon for 3.88 passenger coach miles operated. The standard grade of gasoline is used.

Account No. 610 covers garage labor incident to operation.

Account No. 611 in 1934 includes \$36,752.73 due to strike expense. The expense of checking coach operators is also included in this account, being performed by the Pacific Electric Railway organization and billed the Los Angeles Motor Coach Company.

GROUP II - MAINTENANCE

Maintenance Costs, exclusive of depreciation, are recorded in five classifications as follows:

No.	Account Name	1932	1933	1934	Cost per Mile in Cents		
					1932	1933	1934
629	Supt. of Equip.	\$ 14,979.75	\$ 14,703.74	\$ 13,641.49	.3¢	.3¢	.3¢
630	Bldgs., Fix.-Gr.	387.38	1,068.37	1,786.41	-	.1	-
631	Mchy., Tools, etc.	550.26	773.13	304.27	-	-	-
632-1	Tires & Tubes	56,705.37	49,515.38	51,089.11	1.1	.9	.9
632-2	Coach Repairs	<u>148,445.12</u>	<u>149,321.41</u>	<u>149,341.49</u>	<u>2.8</u>	<u>2.8</u>	<u>2.8</u>
	Total	\$221,067.88	\$215,382.03	\$216,162.77	4.2¢	4.1¢	4.0¢

Account No. 629, Supervision, covers the salaries of the Master Mechanic, General Foreman, and Mechanical Clerk.

Year	Coach Repairs per Mile	
1925	5.2¢	
1926	5.7	
1927	6.3	Coach Repairs, Account No. 632-2, have averaged about 2.8¢ per
1928	3.9	mile during the past three years, a substantial decrease from
1929	4.2	former years, the highest cost per mile being in 1927 when
1930	4.2	repairs cost 6.3¢ per mile.
1931	3.5	
1932	2.9	
1933	2.8	
1934	2.8	

Tire and Tube rental costs are largely governed by contract with Goodyear Tire & Rubber Company dated September 27, 1932, and extended to December 31, 1936. Under this contract tires and tubes are rented by the company at the following rates:

Single Deck Coaches	- .007¢	per coach mile
Double Deck Coaches	- .010¢	" " "
Twin Coaches (Large)	- .010¢	" " "
Service Truck	- .007¢	" " "

GROUP III - TRAFFIC

The charges to traffic expense have been nominal, being for advertising

(Account No. 651) in the amount of \$1,568.92, \$568.03, and \$536.49 in the years 1932, 1933, and 1934, respectively.

GROUP IV - GENERAL

The largest item in general expense comprises Injuries and Damages, as indicated in the following tabulation:

Acct. No.	Name				Cost per Mile in Cents		
		1932	1933	1934	1932	1933	1934
660	Sal. & Exp. Gen. Officers	\$ 10,280.54	\$ 10,044.00	\$ 9,272.30	0.2¢	0.2¢	0.2¢
661	Sal. & Exp. G.O. Clerks	26,494.99	23,870.82	24,197.11	.5	.5	.4
662	Gen. Office Sup. & Exp.	3,948.29	3,995.31	3,576.11	.1	.1	.1
663	Stationery & Prtg.	7,204.05	5,273.99	5,954.10	.1	.1	.1
664	Store Expenses	4,433.15	4,561.02	4,268.61	.1	.1	.1
665	Insurance	3,132.59	3,191.24	2,758.58	.1	.1	.1
666	Injuries & Damages	49,147.60	37,003.72	75,867.78	.9	.7	1.4
667	Law Expenses	1,471.01	2,120.00	2,465.34	-	-	-
669	Rent of Facilities	16,746.63	15,810.73	16,460.30	.3	.3	.3
670	Rent of Equipment	36.00	216.00	24.84	-	-	-
671	Misc. Gen. Expenses	1,336.01	1,224.73	2,310.68	-	-	-
672	Pensions & Gratuities	2,594.65	1,432.74	1,348.87	.1	-	-
	Total	\$126,825.51	\$108,744.30	\$148,504.62	2.4¢	2.1¢	2.7¢

A segregation of general expense by lines, as between Injuries and Damages, Rent of Facilities, and all other general expense follows for the year 1934:

Line	Injuries and Damages	Rent of Facilities	All Other General Expense	Total General Expense
Hollywood-Long Beach-San Pedro	\$ 313.90	\$ 460.30	\$ 797.95	\$ 1,572.15
Wilshire Boulevard	27,096.56	13,900.00	19,815.47	60,812.03
Sunset Boulevard	23,746.45	-	9,961.38	33,707.83
Western Avenue	8,202.32	1,327.01	8,125.57	17,654.90
Crenshaw-Vine-La Brea	13,076.87	772.99	9,666.02	23,515.88
Vermont-Glendale-Riverside	1,585.36	-	2,876.72	4,462.08
Silverlake-Hyperion-Talmadge	892.79	-	2,962.16	3,854.95
Olympic Boulevard	892.26	-	1,874.23	2,766.49
School Lines	61.27	-	97.04	158.31
Total	\$75,867.78	\$16,460.30	\$56,176.54	\$148,504.62

Account No. 660, Salary and Expense of General Officers, includes the salaries of the Manager and Assistant Manager, both being also on the payroll of the Los Angeles Railway Coach Division. Also included are payments to the owning companies for services at the following rates per month.

Treasurer	- \$ 50.00	- Los Angeles Railway
Auditor	- 50.00	- " " "
Purchasing Department	- 50.00	- Pacific Electric Railway
Total	\$150.00	

In Account No. 661, General Office Clerks, the salaries of the Chief Clerk and three clerks are included. Billing to the parent companies is also made as follows:

Cashier	- \$ 25.00	- Los Angeles Railway
Paymaster	- 25.00	- " " "
Total	\$ 50.00	

In addition the actual clerical forces of the Auditing Department of the Los Angeles Railway and the Purchasing Department of the Pacific Electric Railway are included, approximately \$1,200 monthly.

Insurance, Account No. 665, includes the following items in 1934:

Employees Bond	-	\$1,081.19
Fire	-	23.52
Fire - Garage and Equipment	-	1,388.21
Riot	-	223.24
Burglary	-	44.86
Forgery	-	<u>(2.44)</u>
Total		\$2,758.58

Injuries and Damages, Account No. 666, includes salaries, expenses, and claim payments. An analysis of Injuries and Damages expense for the past three years shows a substantial increase in claims paid as follows:

<u>Item</u>	<u>1932</u>	<u>1933</u>	<u>1934</u>
Claims Settled	\$34,910.74	\$23,817.78	\$58,978.72
Miscellaneous	2,293.85	1,621.58	3,286.53
Payroll	<u>11,943.01</u>	<u>11,564.36</u>	<u>13,602.53</u>
Total	\$49,147.60	\$37,003.72	\$75,867.78

Account No. 666 also includes monthly billing from Pacific Electric Railway as follows:

Legal Department - Claims	\$	25.00
Claim Department - Supervision		50.00
" " - Clerical		500.00
Legal Department - Clerical		450.00
Claim Department - Expense-Auto		<u>50.00</u>
Total		\$1,075.00

In addition Claim Case direct expense is billed, being \$387.50 in June, 1935.

Account No. 667, Legal Expense, includes supervision of \$25.00 a month billed by the Pacific Electric Railway.

The charges to Account No. 669, Rent of Facilities, during year 1934 includes rent space for storage of coaches at Sixteenth Street Garage of the Los Angeles Railway, this amount being classified to the Wilshire line. The total charges for the year are as follows:

Rent Space for Storage of Coaches at 16th St. Garage	\$13,900.00
Rent Space for Storage of Coaches at Div. #5 Car Barn	2,100.00
Station Facilities at Hollywood Stage Terminal	<u>460.30</u>
Total	\$16,460.30

CHAPTER XI

TAXES

Taxes assignable to operation of the Los Angeles Local Transportation Services are discussed in three sections, as follows:

- A. Taxes - Los Angeles Railway Corporation
- B. Taxes - Pacific Electric Railway Company
- C. Taxes - Los Angeles Motor Coach Company

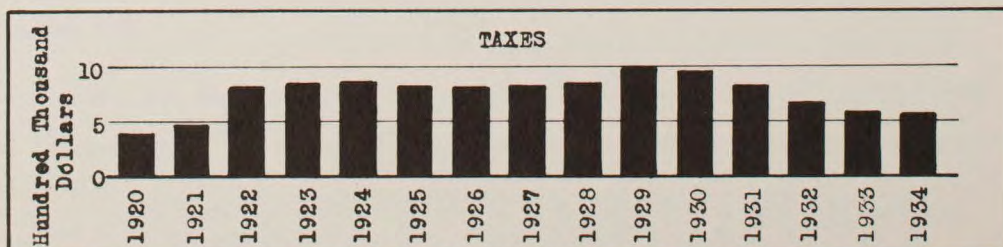
SECTION A

TAXES

LOS ANGELES RAILWAY CORPORATION

Taxes as paid by the Los Angeles Railway Corporation during the years 1920 to 1934 are shown by the following table and chart. Included in these figures are taxes levied by City, County, State and Federal governments covering, respectively, franchises, licenses, etc.; franchises, flood control, etc.; gross receipts, gasoline, license, sales, etc.; and income, capital, stock, etc.

Year	Amount	Index 1924 = 100	Percent of Operating Expense	Percent of Revenue
1920	\$396,000	45.6%	6.1%	4.4%
1921	480,000	55.3	6.6	4.8
1922	809,000	93.2	12.2	7.4
1923	832,726	95.9	10.6	6.7
1924	868,054	100.0	10.1	6.7
1925	820,316	94.5	9.1	6.5
1926	807,926	93.1	8.6	6.3
1927	814,347	93.8	8.6	6.2
1928	833,675	96.0	8.8	6.2
1929	997,392	114.9	10.3	6.8
1930	953,714	109.9	10.0	7.0
1931	812,866	93.6	8.8	6.7
1932	678,295	78.1	8.7	6.6
1933	598,368	68.9	8.8	6.4
1934	589,410	67.9	7.5	6.1



For the year 1934 the following table shows the tax burden segregated between Rail and Motor Coach operations and share of Los Angeles Motor Coach Company. The gross revenue tax of 4½% makes up the most important tax item, representing about 72% of the total for the year 1934.

Taxes Assignable to Railway Operations
(Account No. 215)
Year 1934

<u>City</u>	<u>Rail</u>	<u>Coach Division</u>	<u>Share of L.A.M.C.Co.</u>	<u>Total</u>	<u>Percent</u>
Franchise-City of Los Angeles	\$ 62,074.66	\$ -	\$ -	\$ 62,074.66	
Licenses -City of Los Angeles	60.00	-	114.00	174.00	
Franchise-City of Vernon	325.81	-	-	325.81	
Franchise-City of Huntington Park	69.41	-	-	69.41	
Total City Taxes	62,529.88	-	\$ 114.00	\$ 62,643.88	10.6%
<u>County</u>					
Franchise	2,115.37	-	-	2,115.37	
Flood Control	24,166.66	-	43.39	24,210.05	
Spur Track Franchise	10.00	-	-	10.00	
Other	320.32	-	-	320.32	
Total County Taxes	26,612.35	-	43.39	26,655.74	4.5
<u>State</u>					
Gross Receipts	362,898.33	\$30,344.28	\$27,426.63	\$420,669.24	
Gasoline	3,261.36	39,246.75	21,066.35	63,574.46	
Licenses	60.50	-	-	60.50	
Sales	5,250.03	1,822.41	1,233.47	8,305.91	
Other	294.44	11.72	10.92	317.08	
Total State Taxes	371,764.66	71,425.16	49,737.37	492,927.19	83.7
<u>Federal</u>					
Income	-	-	-	-	
Capital Stock	6,554.00	-	-	6,554.00	
Licenses-Bus	-	-	-	-	
Other	442.68	11.72	175.08	629.48	
Total Federal Taxes	6,996.68	11.72	175.08	7,183.48	1.2
Total Operative Taxes	\$467,903.57	\$71,436.88	\$50,069.84	\$589,410.29	100.0%

State taxes are paid semi-annually. The tax for the year July, 1934, to June, 1935, is based on 4½% of 1933 Gross Receipts. The first half of this tax was paid in July, 1934, and charged to expense during the last six months of 1934. The last half of the payment was made in January, 1935, and charged to expense during the first half of 1935. Under the new advalorem basis of taxation the first payment is due in December, 1935, and the second in April, 1936.

SECTION B

TAXES

PACIFIC ELECTRIC RAILWAY

Taxes assignable to operation of the Los Angeles local lines have comprised largely the State Gross Receipts Tax together with a franchise tax. Taxes paid since 1924 for the local operations follow:

Year	<u>Taxes</u>			Total	Percent of Revenue	Index 1924=100
	Rail	Motor Coach	Share of L.A.M.C.Co.			
1924	\$150,788.22	\$ 376.05	\$ 7,509.49	\$158,673.76	5.2%	100.0%
1925	140,144.13	393.69	11,875.12	152,412.94	5.2	96.1
1926	143,344.62	304.73	19,657.70	163,307.05	5.7	102.9
1927	135,195.01	533.52	23,798.62	159,527.15	5.5	100.5
1928	133,530.45	798.11	30,717.47	165,046.03	5.5	104.0
1929	133,023.18	995.56	40,422.29	174,441.03	5.4	109.9
1930	131,901.48	1,296.41	51,864.43	185,062.32	5.9	116.6
1931	117,401.94	1,661.74	53,112.99	172,176.67	6.2	108.5
1932	95,382.85	775.07	31,367.81	127,525.73	5.3	80.4
1933	83,920.60	406.62	29,401.66	113,728.88	5.1	71.7
1934	73,700.64	337.20	27,637.84	101,675.68	4.5	64.1

These taxes in recent years are largely the State Gross Receipts Tax, together with City Franchise Tax. The segregation of taxes as between these two items for the last three years follows, for the rail lines:

	<u>1932</u>	<u>1933</u>	<u>1934</u>
State	\$94,223.46	\$82,956.60	\$72,887.38
Franchise	<u>1,159.39</u>	<u>964.00</u>	<u>813.26</u>
Total	\$95,382.85	\$83,920.60	\$73,700.64

The Pacific Electric Railway classifies gasoline taxes to "Fuel for Power" account, so that the share of Los Angeles Motor Coach Company taxes shown is largely represented by one-half of the State Gross Receipts Tax.

SECTION C

TAXES

LOS ANGELES MOTOR COACH COMPANY

Taxes assignable to operation (Account No. 668) during the past three years were as follows:

	<u>Amount</u>	<u>Per Mile (Cents)</u>
1932	\$101,131.36	1.94¢
1933	100,377.56	1.90
1934	100,151.08	1.86

The taxes recorded for the year 1934 were:

<u>Item</u>	<u>Amount</u>	<u>Percent</u>
State Tax (41% of Gross Revenues)	\$ 54,858.53	54.8%
Gasoline (3¢ Gallon)	42,132.70	42.1
Sales (2½%)	2,466.95	2.5
Flood Control	104.74	.1
Check (2¢ each)	50.74	-
Sightseeing License	228.00	.2
Cotton Processing	287.58	.3
Agent's License	10.00	-
3% (Insurance)	<u>11.84</u>	-
Total	\$100,151.08	100.0%

The tax items are largely self-explanatory. In the Pacific Electric Railway records, many of the above items are classified to other accounts, as, for example, gasoline tax is included as a cost of conducting transportation.

CHAPTER XII

DEPRECIATION

The subject of Depreciation involves several elements such as the accrual, the reserve, and the accounting methods. These matters will be considered in the following order:

- A. Depreciation Reserve - Los Angeles Railway
- B. Depreciation Expense - Los Angeles Railway
- C. Depreciation - Motor Coach Equipment - Los Angeles Railway
- D. Depreciation - Pacific Electric Railway
- E. Depreciation - Los Angeles Motor Coach Company

SECTION A

DEPRECIATION RESERVE

LOS ANGELES RAILWAY

The reserve, of course, is in respect of all depreciable properties, including rail, motor coach, and the company's properties assignable to Los Angeles Motor Coach Company.

As of March 31, 1923, the properties of the company were valued by the Joint Committee, comprising engineers of the railway, Board of Public Utilities of Los Angeles, and the California Railroad Commission. In connection with Application No. 13323, the valuations were brought up to date of December 31, 1926, by the Commission's Engineering Department as follows:

Historical Reproduction Cost	\$40,900,951
Historical Reproduction Cost Less Depreciation	29,927,402 (a)
Accrued Depreciation	\$10,973,549

(a) Based on 4 year life for motor coaches

The Accrued Depreciation was determined on a straight line age life basis and may therefore be used as a test of the reserve. The reserve as of this date was \$7,252,604, or approximately \$2,720,000 under the determined accrued depreciation.

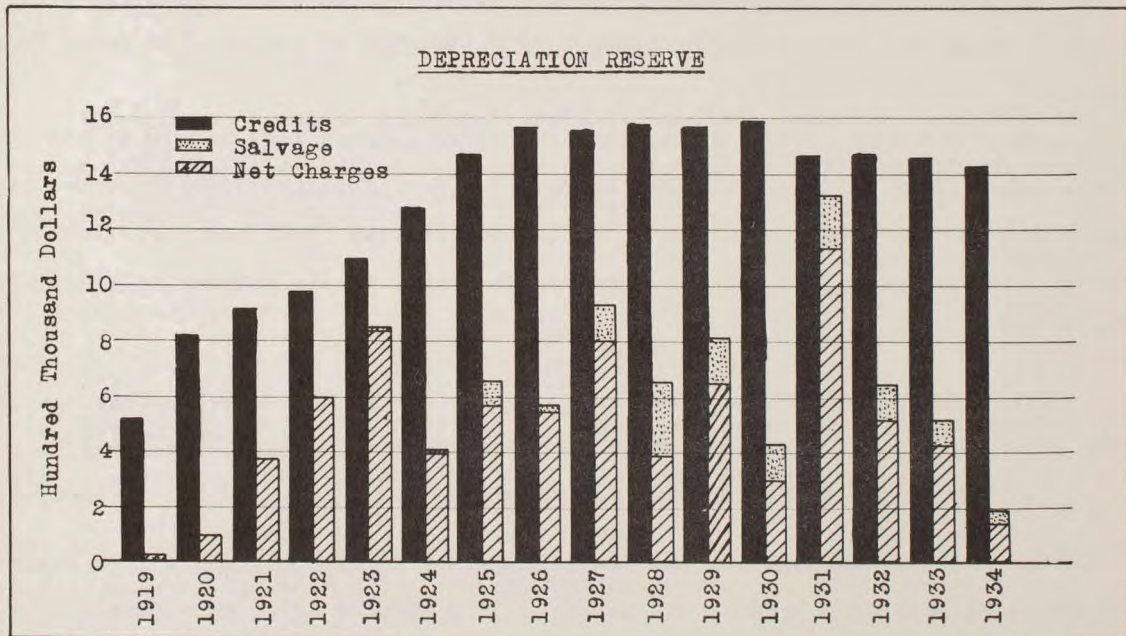
If the net increase in the reserve during the period 1926 to 1934 of \$7,682,100 be added to the accrued depreciation found to exist as of December 31, 1926, of \$10,973,549, then the accrued depreciation as of December 31, 1934, would be \$18,655,649, or 42% of the historical cost, indicating a percent condition of 58%.

For rate making purposes or purposes other than as put to in this report, these values do not express our opinion or conclusion as to the present value of this property.

The Reserve for Accrued Depreciation stated in summary form beginning with 1919 is as follows:

Depreciation Reserve Account
Rail, Motor Coach and Share of L.A.M.C. Co.

Year	Total Credits	Charges		Total Net Charges	Net Credit to Reserve	Credit Balance at End of Year
		Total Gross Charges	Salvage			
1919	€ 518,234	€ 34,817	€ -	€ 34,817	€ 483,417	€ 2,657,794
1920	835,713	100,769	-	100,769	734,944	3,392,738
1921	915,680	369,878	-	369,878	545,802	3,938,540
1922	977,442	591,400	-	591,400	386,042	4,324,582
1923	1,082,383	841,810	1,141	840,669	241,714	4,566,296
1924	1,279,387	402,608	4,051	398,557	880,830	5,447,126
1925	1,466,496	649,201	84,623	564,578	901,918	6,349,044
1926	1,565,900	575,394	17,955	557,439	1,008,461	7,357,505
1927	1,558,381	931,055	133,796	797,259	761,122	8,118,627
1928	1,570,954	643,144	246,633	396,511	1,174,443	9,293,070
1929	1,563,829	817,355	149,345	668,010	895,819	10,188,889
1930	1,585,122	436,986	127,824	309,162	1,275,960	11,464,849
1931	1,446,928	1,326,497	195,013	1,131,484	315,444	11,780,293
1932	1,457,810	627,873	116,229	511,644	946,166	12,726,459
1933	1,455,699	517,060	83,003	434,057	1,021,642	13,748,101
1934	1,433,217	189,630	47,916	141,714	1,291,503	15,039,604



Analysis of Retirements

It will be noted that total annual retirements credited to capital accounts as reflected by the above table do not agree with the gross charges as shown to depreciation reserve account. This condition may be due to several causes, one of which is retirement of automotive equipment on which full depreciation has not been accrued. When such occurs capital accounts are credited with the full value of the item, depreciation reserve is charged with the amount actually accrued thereto, plus salvage (salvage from depreciable items being retired is in all cases credited to depreciation reserve), and the remaining value is charged to operating expense. Also, when the accrued depreciation plus salvage is greater than the book value, depreciation reserve is charged with the accrual plus

salvage, capital is credited with the book value, and the difference is credited to profit and loss. When an item of property is retired on which depreciation is not set up, capital is credited with the book value and profit and loss is charged with the amount. Such items are land and Account No. 550, General Administration. Another accounting practice affecting the difference is to credit depreciation reserve with the scrap value of items removed from the field and taken into stock for later reclamation. When such items are reclaimed and ready for re-use, stock is credited and depreciation reserve charged with the scrap value. Depreciation reserve is then credited with reclaimed value of the article and stock charged.

Year	Way & Struct.	Retirements to Capital				Motor Coach	Total
		Equipment	Power	General			
1924	\$ 448,325	\$ 54,297	\$ 12,361	\$ -	\$ -	\$ 514,983	
1925	422,898	261,936	43,957	130	37,300	766,221	
1926	711,137	65,335	14,007	234	49,842	840,555	
1927	540,583	227,953	10,277	812	22,817	802,442	
1928	338,031	11,075	41,486	200	241,352	632,144	
1929	729,321	51,849	7,792	1,611	22,785	813,358	
1930	316,354	70,695	10,712	923	9,483	408,167	
1931	426,572	627,613	88,117	1,741	149,989	1,294,032	
1932	436,155	99,868	25,330	3,130	64,785	629,268	
1933	174,512	267,617	3,089	1,060	42,826	489,104	
1934	86,130	77,670	2,243	7,305	14,273	187,621	
	<u>\$4,630,018</u>	<u>\$1,815,908</u>	<u>\$259,371</u>	<u>\$17,146</u>	<u>\$655,452</u>	<u>\$7,377,895</u>	
Percent	62.8%	24.6%	3.5%	0.2%	8.9%	100.0%	

SECTION B

DEPRECIATION EXPENSE

LOS ANGELES RAILWAY

Prior to 1921 depreciation expense was charged according to the gross revenues available. Beginning in 1921, an accrual basis was established computed by the application of rates based on estimated service lives and applied to primary capital accounts. With the completion of the 1923 appraisal made jointly by engineers of the Railroad Commission, the City, and the Company, the service lives and salvage were re-studied and rates based thereon have been used for computing depreciation expense beginning 1924, for all accounts other than automotive equipment, lives of which have been adjusted from 4 years in 1924 to 7 years since January 1, 1931.

The following table shows company's calculation of depreciation expense for 1935 for all properties except automotive equipment, (Account No.633C and Account No. 633D, coaches and service cars in coach operation, and a part of Account No.40 covering automotive equipment in rail operations).

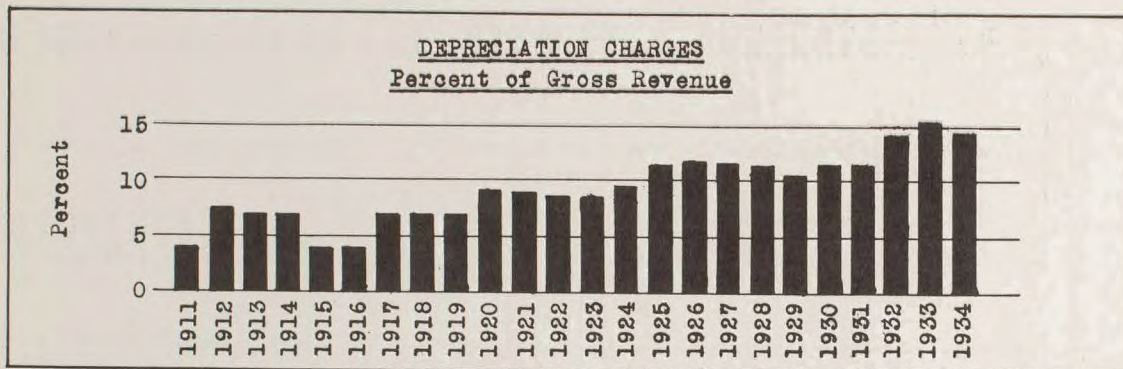
	<u>Acct.25</u>	<u>Acct.40</u>	<u>Acct.633A</u>	<u>Acct.633B</u>	<u>Total</u>
Track and Roadway	\$678,102	\$ -	\$ -	\$ -	\$ 678,102
Overhead Distribution	64,146	-	-	-	64,146
Buildings	55,355	-	9,764	-	65,119
Equipment	-	434,264	-	3,681	437,945
Power	<u>10,343</u>	<u>53,637</u>	<u>-</u>	<u>-</u>	<u>63,980</u>
Total	\$807,946	\$487,901	\$9,764	\$3,681	\$1,309,292

On the following page is shown the depreciation schedule for 1935 for all depreciable property except motor coaches.

The following tabulation shows annual depreciation charged to operating expenses in percent of gross revenue.

Year	Gross Revenue	Percent of Gross	Total Depr. Exp.	Year	Gross Revenue	Percent of Gross	Total Depr. Exp.
1911	\$5,843,378	4.0%	\$232,703	1923	\$12,650,853	8.6%	\$1,082,383
1912	6,616,025	7.6	500,000	1924	13,100,809	9.8	1,279,387
1913	7,005,433	7.0	489,851	1925	12,854,020	11.4	1,466,496
1914	6,762,123	7.0	473,225	1926	13,022,522	12.0	1,565,900
1915	6,137,964	4.0	245,514	1927	13,288,058	11.7	1,558,381
1916	5,864,561	4.0	234,552	1928	13,626,939	11.5	1,570,954
1917	6,148,012	7.0	430,361	1929	14,881,122	10.5	1,563,829
1918	6,580,508	7.0	460,635	1930	13,735,503	11.5	1,585,122
1919	7,338,175	7.1	518,234	1931	12,231,995	11.8	1,446,928
1920	9,038,488	9.2	730,813	1932	10,340,370	14.1	1,457,810
1921	10,125,995	9.0	915,680	1933	9,464,505	15.4	1,455,699
1922	11,138,519	8.8	977,442	1934	9,804,928	14.6	1,433,217

The following chart shows the above percentages in graphic form.



A summary of the street cars owned by the Los Angeles Railway Corporation is shown on the following page. As of June 30, 1935, there were 1081 cars owned by the company, 775 of which were in active service and 306 in temporary or permanent storage. The ages of these cars range all the way from 1896 to 1930, during which last year two Type M cars were purchased. This tabulation is based on the year of original acquisition of the equipment and does not in all cases mean that the entire car is as old as indicated, inasmuch as many of the older car bodies have been rebuilt several times and the electrical equipment on many of the cars is of a more modern date than the car bodies and trucks. Due to this continual program of rebuilding cars and replacement of equipment on them it is not possible to definitely group the cars into age classes. However, the fact still remains that the date of original acquisition does determine the age of some portion of the car, either the trucks, the bodies, or some of the equipment on them. In 1924 when the valuation of the Los Angeles Railway Corporation properties was made by the Joint Committee of Engineers, an historical reproduction cost was placed upon the passenger cars, Account No. 530, as of December 31, 1923, of \$5,024,103, and for electrical equipment of cars, Account No. 533, the cost was set at \$2,422,648; and less depreciation, these amounts were determined as being \$3,674,650 and \$1,805,539, respectively. This placed a condition percent on these accounts of 73.1% and 74.5%, respectively, which would give a remaining average life of 17.3 years.

LOS ANGELES RAILWAY CORPORATION
SUMMARY OF PASSENGER CARS
JUNE 30, 1935

Year Purchased	Bodies			Electrical Equipment						Combined		
	Lumber Purchased	Type	Cost	Motors			Control			Cost	Unit	Total
				Year	No.	Type	Year	No.	Type		Cost	Cost
1896	5	A)	\$ 24,392	1903	4	38B	-	2	K28)	\$ 24,864	\$ 6,157	\$ 49,256
1910	3	A)		1903	4	38B	-	2	K28)			
1896-1898	14	B)	61,170	1907	2	101	-	2	K11)	20,700	5,458	81,870
1902	1	B)		1907	2	101	-	2	K11)			
1902-1908	106	B	432,268	1922	2	269	1924	2	K68	341,850	7,303	774,118
1906	1	B	6,105	1922	2	269	1924	2	K68	3,225	9,330	9,330
1904-1908	42	B	171,276	1922	2	269	1924	2	K68	135,450	7,303	306,726
1898-1910	14	B	57,092	1907	4	101	1930	2	K35	49,560	7,618	106,652
1906	1	B	4,078	1903	4	38B	-	2	K28	3,459	7,537	7,537
1906	41	B	167,198	1911	4	306	1924	2	K28&35	129,675	7,241	296,873
1906	5	B	20,390	1903	4	38B	1924	2	K35	18,775	7,833	39,165
1906	17	B	69,326	1923	4	265	1924	2	K35	76,381	8,571	145,707
1903-1910	6	B)	685,104	1911-12	2	306	-	2	K11)	243,600	5,528	928,704
1910-1911	112	B)										
1912	50	B)										
1911	100	B	407,800	1903	2	38B	-	2	K11	177,100	5,849	584,900
1911	1	B	4,078	1917	2	249	-	2	K11	1,991	6,069	6,069
1896-1910	40	C)	173,150	1922	4	526	1924	2	K35)	300,500	9,473	473,650
1913-1914	10)										
1903-1905	5	C	17,315	1917	4	249	-	2	K28	18,140	7,091	35,455
1903	1	C	3,463	1911	4	306	1924	2	K35	2,996	6,459	6,459
1896-1910 PE	10	C	34,640	1911	4	306	-	2	K28	26,850	6,149	61,490
1902-1906	9	C)	34,640	1907	4	101	1931	2	K35)	33,780	6,842	68,420
1915	1	C)										
1896-1906	21	C	72,723	1903	2	38B	-	2	K11	35,259	5,142	107,982
1910 PE	5	C)	242,410	1911	2	306	-	2	K11)	101,290	4,910	343,700
1913	24	C)		1913								
1914	41	C)		1914								
1909	1	D	3,288	1917	2	249		2	K11	1,899	5,187	5,187
1911	1	E	3,930	1922	2	269	1924	2	K68	3,214	7,144	7,144
1896-1910 PE	16	F	81,696	1923	4	265	1923	2	HL	80,320	10,126	162,016
1920	43	G	218,770	1920	2	508&264	1920	2	K63	77,400	6,888	296,170
1921	21	G	112,686	1921	2	508&264	1921	2	K63	38,094	7,180	150,780
1921	25	H	262,035	1924	4	514	1921	2	HL	127,343	15,575	389,378
1922	50	H-1	455,965	1924	4	514	1922	2	HL	231,100	13,741	687,065
1923	17	H	159,868	1924	4	514	1923	2	HL	80,597	14,145	240,465
1923	58	H	532,782	1923	4	514&265	1923	2	HL	276,695	13,957	809,477
1924	65	H	570,318	1924	4	514	1924	2	HL	310,895	13,557	881,213
1924-1925	34	H-3	363,460	1924	4	514	1924	2	HL	162,622	15,473	526,082
1925	1	H-3	10,756	1924	4	514	1924	2	PCL	4,915	15,671	15,671
1923-1924	60	K	442,680	1924	4	514	1924	2	HL	286,860	12,159	729,540
1925	1	L	11,228	1925	4	514	1925	2	HL	5,150	16,378	16,378
1930	1	M	16,768	1930	4	516	1930		VA	6,737	23,505	23,505
1930	1	M	16,653	1930	4	701	1930	2	PCM	6,368	23,021	23,021
Total	1,081		\$5,951,501							\$3,445,654		\$9,397,155

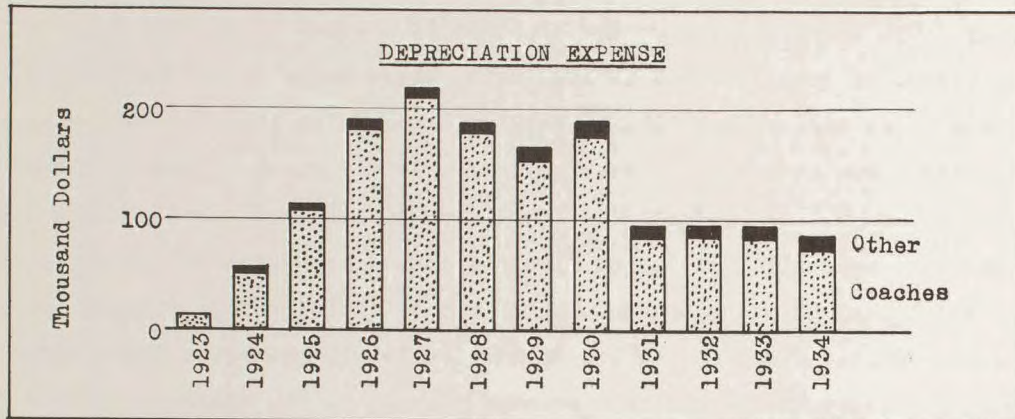
SECTION C

DEPRECIATION OF MOTOR COACH EQUIPMENT

LOS ANGELES RAILWAY

Depreciation Expense - Coach Division

The following chart shows the annual charges to Coach Division operating expenses covering depreciation of buildings, machinery and tools, coaches and service cars. Of these four sub-accounts, depreciation on coaches makes up 93.4% of the total.



The accompanying table shows the annual charges separately for the four sub-accounts as reflected in operating expenses.

Year	Buildings	Machinery and Tools	Coaches	Service Cars	Total
1923	\$ -	\$ -	\$ 11,188.00	\$ -	\$ 11,188.00
1924	-	-	56,462.69	1,711.30	58,173.99
1925	-	-	108,950.28	2,053.56	111,003.84
1926	-	-	185,107.21	3,228.97	188,336.18
1927	2,772.00	-	211,443.52	3,800.85	218,016.37
1928	6,684.00	480.00	177,618.46	2,729.13	187,511.59
1929	7,332.00	2,976.00	151,186.45	2,724.74	164,219.19
1930	7,521.00	3,261.00	175,527.41	1,828.95	188,138.36
1931	7,557.00	3,333.00	82,973.64	1,203.17	95,066.81
1932	7,554.00	3,344.00	83,381.64	960.00	95,239.64
1933	7,554.00	3,583.00	82,129.43	1,506.21	94,772.64
1934	7,557.00	3,592.00	73,188.39	2,262.47	86,599.86
Total	\$54,531.00	\$20,569.00	\$1,399,157.12	\$24,009.35	\$1,498,266.47
Percent	3.64%	1.37%	93.39%	1.60%	100.00%

Prior to January 1, 1927, depreciation expense on coaches was computed on the basis of a four year life. From January 1, 1927, to December 31, 1930, a five year life was used. On January 1, 1931, the undepreciated balance of investment in coaches then on hand was depreciated over the remaining number of months yet to expire on the five year life basis plus 24 months. Depreciation on all coaches purchased subsequent to January 1, 1931, has been computed on a seven year life basis. As of December 31, 1934, a reserve in respect of Coach Division had been accumulated in amount of \$1,498,266.47, gross.

The tables following list the motor coaches owned by the Los Angeles Railway Corporation and used in their Motor Coach Division, as well as those used by the Los Angeles Motor Coach Company. Inasmuch as depreciation is set up on motor coach equipment on a unit basis it was possible to determine the accrued depreciation on each unit of equipment, the age as of June 30, 1935, and the remaining service life. For those coaches used in the coach division the average age was 7.3 years, 7 coaches having been in use 11½ years and 14 coaches having been in use 12 years. 78 of the 136 coaches have been in use longer than 7 years, which is the average life used for setting up depreciation. 64 coaches owned by the Los Angeles Railway Corporation are used by the Los Angeles Motor Coach Company. The weighted average age of these 64 coaches as of June 30, 1935, was 7.1 years. The oldest of these coaches is 10½ years, there being 14 of that age, 5 9½ years, 32 having been in service longer than 7 years. Depreciation is no longer being accrued on those coaches which have been in service longer than 7 years. However, there has been no depreciation reserve fund established for the replacement of these coaches and any replacement which is made will have to be financed out of current earnings or by outside money. The total cost of motor coaches as of June 30, 1935, was \$1,923,645, excluding the two coaches jointly owned by the Los Angeles Railway Corporation and Pacific Electric Railway Company. Depreciation has been accrued thereon in the amount of \$1,623,537, leaving an undepreciated balance of \$290,107.

All properties other than automotive equipment are depreciated on a group basis under the straight line method. The Uniform System of Accounts of the Interstate Commerce Commission provides as follows respecting depreciation accounting:

"Depreciation accounts in which to include monthly charges to cover depreciation of way and structures, equipment, power plant buildings, and power plant equipment are provided in order that carriers may create reserves which will meet or reduce the amounts otherwise chargeable to Operating Expenses or to Profit and Loss Account to cover the cost of the renewal or retirement of property. Such depreciation charges should be upon a basis determined to be equitable according to the carrier's experience and best sources of information as to the actual accruals of current loss from depreciation. Depreciation charges with respect to property or equipment shall cease when the difference between the ledger value (estimated if not known) and the estimated scrap value shall have been credited to the depreciation reserve account. A statement of the bases used by the carrier for computing these charges shall be included in its annual report to the Commission.

Commencing July 1, 1914, carriers shall accrue depreciation on equipment (included in accounts Nos. 530 to 535), but the accrual of depreciation on way and structures, power plant buildings, and power plant and substation equipment is left optional with the carrier until such time as the Commission shall direct otherwise.

When equipment (included in accounts Nos. 530 to 535) is retired from service and proper charges for depreciation have not been made during its life, the ledger value of such equipment, less salvage and depreciation accrued to the date of retirement, shall be charged as follows: That portion of the actual loss from depreciation equitably assignable to the period prior to July 1, 1914, shall be charged to Profit and Loss and the remainder shall be charged to operating expense account No. 41, 'Equipment retired.'"

LOS ANGELES RAILWAY CORPORATION
COACHES USED IN COACH DIVISION

JUNE 30, 1935

Year	No.	Make	Type	Seat. Cap.	Original Cost		Book Cost	Salv.	Depre'ble	Accrued Deprec't'n	Undepr. Balance	Age	Rem. Life
					Total	Unit	6/30/35		Value				
1926	3	Yel.	SD	21	\$ 16,247.52	\$ 5,415.84	\$ 16,603.24	\$150	\$ 16,453.24	\$ 16,453.24	-	8½	(1½)
1927	4	"	"	21	23,988.32	5,997.08	24,463.98	200	24,263.98	24,263.98	-	8	(1)
1926	1	"	"	29	7,705.66	7,705.66	8,422.94	50	8,372.94	8,372.94	-	9½	(2½)
1926	1	"	"	29	11,355.69	11,355.69	9,894.80	50	9,844.80	9,844.80	-	8½	(1½)
1927	3	"	"	29	27,356.06	9,118.69	29,143.38	150	28,993.38	28,993.38	-	8½	(1½)
1927	4	"	"	29	38,971.53	9,742.88	39,113.96	200	38,913.96	38,913.96	-	8	(1)
1927	1	"	"	29	9,991.92	9,991.92	10,026.93	50	9,976.93	9,976.93	-	7½	(1½)
1934	6	"	"	41	73,330.21	12,221.70	73,335.49	300	73,035.49	6,672.00	\$ 66,363.49	½	6½
1926	1	Pag.	"	21	6,436.21	6,436.21	6,448.42	50	6,398.42	6,398.42	-	8½	(1½)
1923	14	"	"	29	116,141.88	8,295.85	116,669.93	700	115,969.93	115,538.34	431.59	12	(5)
1923	7	"	"	29	57,747.06	8,249.58	58,013.46	350	57,663.46	57,447.09	216.37	11½	(4½)
1925	6	"	"	29	49,335.08	8,222.51	49,397.94	300	49,097.94	49,085.46	12.48	10	(3)
1925	9	"	"	29	73,837.00	8,204.11	73,930.38	450	73,480.38	73,461.66	18.72	9½	(2½)
1926	9	"	"	29	80,055.87	8,895.10	82,757.02	450	82,307.02	82,127.15	179.87	8½	(1½)
1927	6	"	"	29	54,823.66	9,137.28	55,199.34	300	54,899.34	54,799.39	99.95	8½	(1½)
1927	5	"	"	29	45,694.53	9,138.90	45,926.33	250	45,676.33	45,676.33	-	7½	(1½)
1928	3	"	"	29	27,521.77	9,173.92	27,651.85	150	27,501.85	26,535.00	966.85	6½	(1½)
1930	5	"	"	29	42,259.12	8,451.82	42,485.15	250	42,235.15	30,420.00	11,815.15	5	2
1928	4	"	SDTC	40	46,095.84	11,523.96	47,754.98	200	47,554.98	47,554.98	-	7½	(1½)
1928	2	"	"	40	23,915.98	11,957.99	24,038.86	100	23,938.86	22,356.00	1,582.86	6½	(1½)
1929	8	"	"	40	95,781.01	11,972.63	96,234.94	400	95,834.94	86,944.00	8,890.94	6½	(1½)
1934	4	T.C.	SD	23	19,194.75	4,798.69	19,227.79	200	19,027.79	2,736.00	16,291.79	1	6
1932	1	White	"	21	5,027.10	5,027.10	5,030.61	50	4,980.61	2,400.00	2,580.61	3½	3½
1928	6	"	"	29	58,211.18	9,701.86	60,841.65	300	60,541.65	57,844.98	2,696.67	6	1
1928	3	"	"	29	29,230.27	9,743.42	29,520.21	150	29,370.21	27,729.49	1,640.72	6½	1½
1929	4	"	"	29	39,395.76	9,848.94	39,717.73	200	39,517.73	31,492.32	8,025.41	5½	1½
1930	3	"	"	29	29,686.52	9,895.50	29,920.53	150	29,770.53	22,433.49	7,337.04	5½	1½
1930	4	"	"	29	39,560.36	9,890.09	40,273.58	200	40,073.58	28,714.32	11,359.26	5	2
1930	1	"	"	29	9,875.28	9,875.28	10,354.53	50	10,304.53	6,389.83	3,914.70	4½	2½
1934	6	"	"	30	49,725.49	8,287.58	49,725.49	300	49,425.49	4,158.00	45,267.49	½	6½
1929	1	"	"	38	11,446.49	11,446.49	11,499.25	50	11,449.25	9,660.83	1,788.42	6	1
1929	1	"	"	38	11,137.09	11,137.09	11,141.61	50	11,091.61	8,824.83	2,266.78	5½	1½
Total 136					\$1,231,082.21		\$1,244,766.30	\$6,800	\$1,237,966.30	\$1,044,219.14	\$193,747.16	7.26	(.28)

DEPRECIATION

LOS ANGELES RAILWAY CORPORATION
COACHES USED BY LOS ANGELES MOTOR COACH COMPANY
 JUNE 30, 1935

Year	No.	Make	Type	Seat. Cap.	Original Cost		Book Cost 6/30/35	Salv.	Depre'ble Value	Accrued Deprec't'n	Undepre. Balance	Age	Rem. Life
					Total	Unit							
1931	7	Yel.	SD	25	\$ 42,848.58	\$ 6,121.23	\$ 42,848.58	\$350	\$ 42,498.58	\$ 22,680.00	\$19,818.58	3½	3½
1934	4	"	"	41	49,390.19	12,347.55	49,390.19	200	49,190.19	4,704.00	44,486.19	1½	6½
1925	1	"	DD	63	10,150.20	10,150.20	10,506.61	50	10,456.61	-	-	9½	(2½)
1926	2	"	"	63	22,528.39	11,264.19	23,525.23	100	23,425.23	23,425.23	-	9½	(2½)
1927	2	"	"	63	23,223.40	11,611.70	23,283.40	100	23,183.40	23,183.40	-	8½	(1½)
1928	2	"	"	63	24,273.30	12,136.65	24,333.30	100	24,233.30	23,248.00	985.30	6½	½
1928	2	Fag.	SDTC	40	23,478.78	11,739.39	24,080.47	100	23,980.47	23,792.00	188.47	7	-
1928	3	"	"	40	35,882.46	11,960.82	36,006.97	150	35,856.97	33,660.00	2,196.97	6½	½
1929	2	"	"	40	23,923.11	11,961.55	24,006.10	100	23,906.10	20,916.00	2,990.10	6	1
1929	6	"	"	40	71,746.47	11,957.74	71,766.26	300	71,466.26	57,168.00	14,298.26	5½	1½
1930	1	"	"	40	11,940.28	11,940.28	11,943.59	50	11,893.59	8,744.00	3,149.59	5	2
1924	13	"	DD	58	145,928.85	11,225.30	146,877.83	650	146,227.83	146,227.83	-	10½	(3½)
1925	1	"	"	58	11,198.99	11,198.99	11,495.35	50	11,445.35	11,445.35	-	10½	(3½)
1925	3	"	"	58	33,851.25	11,283.75	33,982.68	150	33,832.68	33,832.68	-	10	(3)
1925	2	"	"	58	22,313.72	11,156.86	22,906.44	100	22,806.44	22,806.44	-	10	(3)
1926	5	"	"	58	54,545.05	10,909.01	55,714.73	250	55,464.73	55,464.73	-	9½	(2½)
1926	2	"	"	58	21,864.61	10,932.31	22,457.33	100	22,357.33	22,357.33	-	9	(2)
1927	1	"	"	58	10,918.62	10,918.62	10,950.53	50	10,900.53	10,900.53	-	8½	(1½)
1928	2	"	"	58	22,458.07	11,229.04	22,521.89	100	22,421.89	22,361.95	59.94	7	-
1933	2	Uty	"	21	6,273.76	3,136.88	6,273.76	100	6,173.76	1,368.00	4,805.76	1½	5½
1934	1	GMC	"	23	4,007.27	4,007.27	4,007.27	50	3,957.27	576.00	3,381.27	1	6
Sub Total	64				\$ 672,745.35		\$ 678,878.51	\$3,200	\$ 675,678.51	\$ 579,318.08	\$ 96,360.43	7.06	(.06)
1932	2*	ACF	SD	21	3,232.67	1,616.34	3,232.67	100	3,132.67	1,526.00	1,606.67	3½	3½
Total	66				\$ 675,978.02		\$ 682,111.18	\$3,300	\$ 678,811.18	\$ 580,844.08	\$ 97,967.10		

* Owned jointly by Pacific Electric Railway and Los Angeles Railway.

SECTION D

DEPRECIATION

PACIFIC ELECTRIC RAILWAY

Under the uniform classification of accounts as provided for electric railways by the Interstate Commerce Commission, depreciation accounting is not required for all depreciable accounts. The Pacific Electric Railway follows, as nearly as it may under the electric classification, the steam railroad practice. Accordingly, the depreciation charges as such are carried only for equipment and certain large structures.

The reserve for accrued depreciation as of December 31, 1934, for the Pacific Electric System was \$9,015,020.44. The reserve has not been allocated as between the Los Angeles local lines and other operations of the company.

The depreciation charges included in the operating expense apportioned to the Los Angeles local rail lines for the last three years is as follows:

<u>Acct.</u> <u>No.</u>	<u>Name</u>	<u>1932</u>	<u>1933</u>	<u>1934</u>
25	Way and Structures	\$21,280.71	\$21,784.82	\$21,595.90
40	Equipment	7,680.46	3,023.86	2,329.58
50	Power	<u>10,871.56</u>	<u>10,449.48</u>	<u>9,988.13</u>
	Total	\$39,832.73	\$35,258.16	\$33,913.61

Charges to Account No. 25 includes the pro rata charges assignable to the Los Angeles local lines for depreciation expense of the following structures:

<u>Structure</u>	<u>Rate</u>
Pacific Electric Building	- 3 percent per annum
Subway and Terminal	- 2 percent per annum
Pacific Electric Club	- 2 percent per annum

It will be noted that these charges when allocated to the Los Angeles local lines approximate \$21,500 per annum. In Account No. 40, Equipment, the charges include depreciation for the owned equipment which is assigned to the Los Angeles local lines. At the present time there is a limited amount of such equipment. In the case of the rail lines there are two units of Class 320 (Birney 1-man) equipment, together with other miscellaneous equipment and such equipment as is specially assigned during the year. The depreciation charge on Class 600 and Class 700 center entrance cars used in the Los Angeles local service, however, is included in general expense under rent of equipment for the reason that all such cars are leased by the Pacific Electric from the Southern Pacific Company.

In the case of Account No. 40, Depreciation of Power Plant and Equipment, such equipment is depreciated on the basis of $4\frac{1}{2}\%$ per annum, which is the result of an estimated 20 year life with 10% salvage. The amounts of such depreciation allocated to the Los Angeles local rail service approximate \$10,000 per annum.

It will be noticed that there are no depreciation charges covering track and roadway accounts. Where replacements are made in kind, the cost of material used in replacement is charged to operating expense, irrespective of a change in the price level from the original cost of installation. Track and roadway labor costs incident to replacement whether in kind or involving a betterment, are charged to operation. It therefore requires a special study to determine a reasonable level of ordinary maintenance expense, together with a reasonable allowance for depreciation expense. These studies were made in 1927 and 1928 in connection with Application No. 13460.

In connection with the leased equipment, the contract prior to 1935 provided for an interest rental of 6% of the depreciated value, together with depreciation at the rate of 3% of cost for the body and 5% of cost for the electrical equipment. On January 1, 1935, this rate was changed to $3\frac{1}{2}\%$ of cost for interest rental and 2.66% of cost for depreciation. The rate used by the Commission in connection with Application No. 13460 was 2.857% for both body and equipment on a straight line basis and 1.107% on a 5% sinking fund basis.

Motor Coach Equipment

The unit method is used for depreciation of motor coach equipment, a 4 year life having been used until January 1, 1931. Since that date a 7 year life has been used with zero salvage providing for a depreciation rate of $14\frac{2}{7}\%$. Coaches assigned to Los Angeles Motor Coach Company are practically the same as has been detailed in the preceding section for the Los Angeles Railway.

SECTION E

DEPRECIATION

LOS ANGELES MOTOR COACH COMPANY

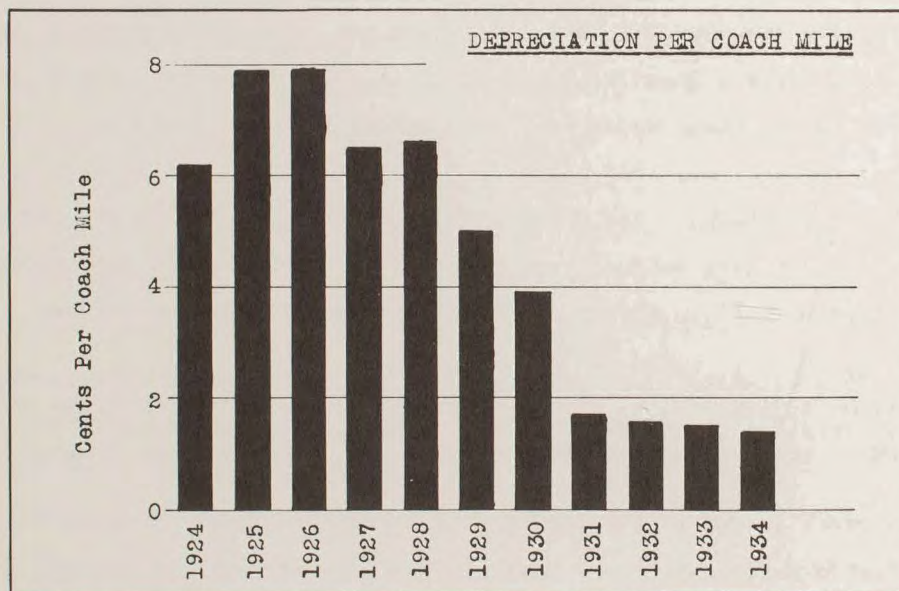
The annual charges for depreciation during the past three years by sub-accounts of Account No. 633 have been as follows:

Acct. No.	Name	1932	1933	1934	Cost per Mile in Cents		
					1932	1933	1934
633-A	Depre. of Bldgs.	\$ 2,174.00	\$ 2,174.00	\$ 2,174.00	.04¢	.04¢	.04¢
633-C	Depre. of Coaches	83,038.94	79,275.86	75,152.32	1.60	1.50	1.39
633-D	Depre. of Serv. Cars	602.14	339.91	363.18	.01	.01	.01
	Total	\$85,815.08	\$81,789.77	\$77,689.50	1.65¢	1.55¢	1.44¢

In respect of coaches, depreciation has been fully accrued in certain instances so that the foregoing depreciation expense covers only those coaches which have not been fully depreciated. The following statement shows the results of depreciation accounting:

Year	Average Investment in Equipment(b)	Depreciation Expense (a) Acct. No. 633	Percent of Investment	Depreciation per Coach Mile
1923	\$ 237,035.49	\$ 20,348.39	8.58%	- ¢
1924	572,227.51	127,294.86	22.25	6.2
1925	691,661.97	169,305.73	24.48	7.9
1926	750,967.61	186,879.25	24.89	7.9
1927	790,882.58	156,813.29	19.83	6.5
1928	1,001,024.49	222,295.22	22.21	6.6
1929	1,347,571.18	215,733.84	16.01	5.0
1930	1,498,584.49	176,296.48	11.76	3.9
1931	1,467,331.01	81,393.44	5.55	1.7
1932	1,381,120.63	85,815.08	6.21	1.6
1933	1,318,038.45	81,789.77	6.21	1.5
1934	1,333,548.52	77,689.50	5.83	1.4
Total		\$1,601,654.85	12.93%	

- (a) Amount in Acct. No. 633-A has not been eliminated due to small amount involved.
 (b) Amounts carried on books of parent companies, Land and Buildings, not included.



Depreciation expense on motor coach equipment was computed on the basis of 4, 5, and 7 year life since operations were started. The 7 year life has been used since January 1, 1931. Depreciation on buildings at the rate of 3.39% for Los Angeles Railway portion only.

The ledger value and depreciation accrued to date on the equipment operated at this time is as follows:

	Ledger Value	Accrued Depreciation	As of
Pacific Electric Ry.	\$ 631,906.74	\$ 537,401.85	(Aug. 31, 1935)
Los Angeles Ry.	678,878.51	579,318.08	(June 30, 1935)
Jointly Owned (Pacific Electric Ry.)	3,254.36	1,586.47	
(Los Angeles Ry.)	3,232.67	1,526.00	
Total	\$1,317,272.28	\$1,119,832.40	

CHAPTER XIII

RATE BASE

The rate base for the various properties is discussed in three sections as follows:

- A. Rate Base - Los Angeles Railway
- B. Rate Base - Pacific Electric Railway
- C. Rate Base - Los Angeles Motor Coach Company

SECTION A

LOS ANGELES RAILWAY CORPORATION

Prior Findings of Cost

There have been several detailed valuations made of the physical properties of the Los Angeles Railway Corporation in the past. The valuation upon which the Railroad Commission has based subsequent findings of Historic Reproduction Cost was prepared in 1924 as of March 31, 1923. This valuation was made jointly by engineers of the State Railroad Commission, the Board of Public Utilities of the City of Los Angeles, and the Los Angeles Railway Corporation. The value established in that proceeding for Historic Reproduction Cost in amount of \$32,597,715 was defined as follows:

"The estimated market value of land as of the date of valuation plus the estimated cost of the other physical properties of the utility at the time of the installation of the various items to which are added overhead expenditures for engineering, law, interest, and similar items."

Subsequent to the establishment of the above value as of March 31, 1923, Railroad Commission engineers made a thorough study of overhead allowances which were made therein. As a result an adjustment was made to the above figure, reducing it to \$31,666,656, which amount was used as a base in the proceeding before the Railroad Commission under Application No. 13323, Decision No. 18531, in the year 1927. In preparing the Historic Reproduction Cost used in that proceeding the revised 1923 value was brought forward by adding net Additions and Betterments to the property during the period March 31, 1923, to December 31, 1926, arriving at a value as of that date in amount of \$41,914,052, including Material and Supplies, and Construction Work in Progress, the former in amount of \$756,142 and the latter \$256,959. Exclusive of those two items the Historic Reproduction Cost as of December 31, 1926, was set at \$40,900,951, and less depreciation, at \$29,927,402. The Reproduction Cost New as of the same date was determined to be \$53,040,648, and less depreciation, \$36,159,547.

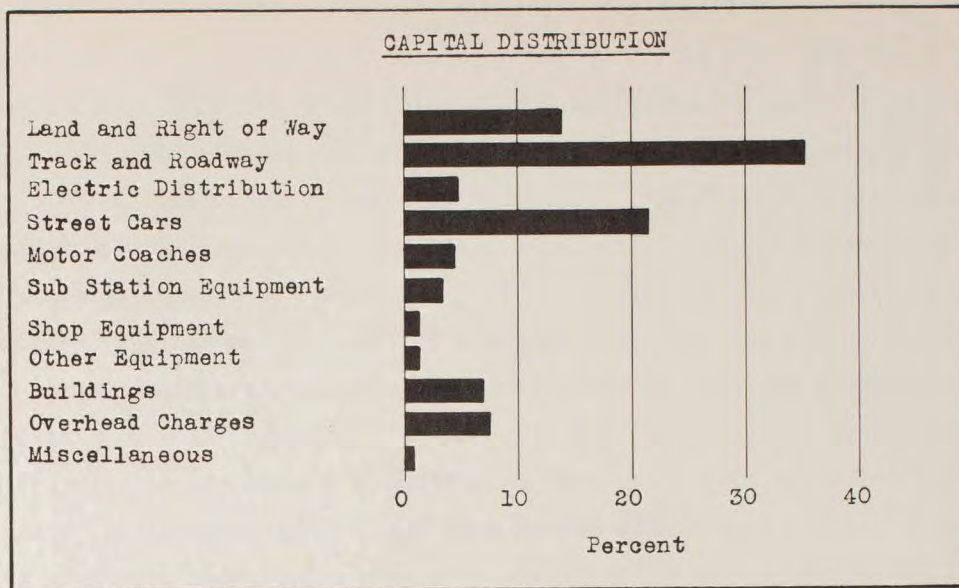
Historic Reproduction Cost

The table on the second page following shows the steps taken in bringing the 1923 valuation up to December 31, 1926. To those values so established for use in Application No. 13323 have been added net Additions and Betterments as recorded by the company Valuation Department, bringing the value forward to a Historic Reproduction Cost as of December 31, 1934, in amount of \$44,678,378. It should be clearly understood that this figure was derived by adding Additions and Betterments reflected by the company records to a value established by the Railroad Commission in 1926, and should be considered as subject to possible revision upon a more thorough analysis of the overhead charges, retirements, and non operative property included in the Additions and Betterments from 1926 to 1934. Additions and Betterments, as recorded by the Valuation Department, are not entirely in agreement with those reflected by the Accounting Department records due to the different premises upon which the two departments record such transactions, the former being on a physical basis and the latter an accounting basis. Certain adjustments were made by the Valuation Department representing transfers between accounts, transfers between operative and non operative property, and minor corrections in the records. The value of Historic Reproduction Cost arrived at by using Valuation Department Additions and Betterments is \$44,678,378, whereas that arrived at by using Additions and Betterments as reflected by the books is \$44,393,333, making a difference of \$285,045. In order to effect a reconciliation between the two it is necessary to add to the book figures the Construction Work in Progress as of December 31, 1926, in amount of \$256,959, representing Additions and Betterments prior to December 31, 1926, which were undistributed to the separate accounts as of that date. There should also be deducted from the total as of December 31, 1934, arrived at by using book figures, an amount of \$8,660, which represents the Construction Work in Progress as of that date not included in the Valuation Department's figures as of December 31, 1934. After these adjustments are made there remains a small difference which consists of net transfers as noted above. The principal item included in the adjustments column of the foregoing table represents an item of land in an amount of \$150,000 which was listed in the 1926 valuation and later duplicated in the company records when the work order was closed. It was therefore deducted when discovered.

Percent distribution of total historic fixed capital as of December 31, 1934, by items of property is shown by the following table.

	<u>Amount</u>	<u>Percent</u>
Land and Right of Way	\$ 6,256,073	14.00%
Track and Roadway	15,701,269	35.14
Electric Distribution	2,137,461	4.78
Buildings	2,989,912	6.69
Motor Coaches	1,964,534	4.40
Street Cars	9,654,378	21.61
Shop Equipment	509,467	1.14
Substation Equipment	1,435,967	3.22
Other Equipment	568,765	1.27
Overheads	3,286,115	7.36
Miscellaneous	174,437	.39
Total	\$44,678,378	100.00%

The accompanying chart shows the foregoing percentage graphically.



Retirements, and Additions and Betterments for Accounts Nos. 501, Engineering, and 502, Miscellaneous and General Expense, for the purpose of this study, are the actual charges to those accounts as reflected by the company records.

The following table shows net additions and betterments to fixed capital during the years 1927 to 1934, inclusive, segregated between accounting groups, Equipment being set up separately for rail and motor coach, as reflected by accounting records.

Year	Way and Structures	Street Car Equipment	Motor Coach Equipment	Other Equipment	Power Facilities	Gen.&Misc. Investment	Total
1927	\$ 723,049	\$(3,663)	\$265,305	\$ 51,996	\$ 32,517	\$ 27,865	\$1,097,069
1928	676,013	3,698	24,687	42,714	128,144	22,801	898,057
1929	315,463	15,085	312,031	49,578	26,791	23,658	742,606
1930	393,625	132,300	131,908	22,413	6,988	19,169	706,403
1931	378,606	(406,223)	(100,350)	27,295	117,977	18,933	36,238
1932	11,612	(4,460)	(64,660)	1,418	10,509	12,263	(33,318)
1933	(46,403)	(174,043)	(29,992)	(112)	(715)	5,544	(245,721)
1934	103,063	3,055	188,122	-	(366)	(2,827)	291,047
Total	\$2,555,028	\$(434,251)	\$727,051	\$195,302	\$321,845	\$127,406	\$3,492,381
Percent	73.16%	(12.43)%	20.81%	5.59%	9.22%	3.65%	100.00%

The above tabulation shows an average of 73% of total net additions as having been invested in Way and Structures over the period of eight years. Street car equipment over the period shows a net retirement of \$434,251 and motor coach equipment a net addition of \$727,051. During the period there were only two new cars purchased. Those were the two Type M cars which were acquired in 1930. Motor coach equipment account reflected substantial net additions for the years 1927, 1929, and 1930, net retirements during the following three years, and a net addition during 1934.

Los Angeles Railway Corporation
Operative Property
*Dec. 31, 1934

Acct: No.:	Account	Application No. 13323				Case No. 4002			
		Valuation	Retirements:	A's & B's	Total	Adjustments:	Retirements:	A's & B's	Total
		3/31/23	3/31/23	3/31/23	as of	12/31/26	12/31/26	12/31/26	as of
		Joint Report	to	to	12/31/26	to	to	to	12/31/34
502	Right of Way	\$ 2,872,316	\$ 1,501	\$ 60,213	\$ 2,931,028	\$ 82	\$ 33	\$ 17,641	\$ 2,948,718
503	Other Land	2,519,953	323	422,961	2,942,591	(151,789)	12,200	333,552	3,112,154
504	Grading	1,568,697	10,231	180,056	1,738,522	22,107	48,625	315,176	2,027,180
505	Ballast	803,450	59,875	185,461	929,036	(33,187)	105,407	206,626	997,068
506	Ties	775,448	130,365	237,469	882,552	236	197,298	321,393	1,006,883
507	Rails	2,358,855	242,469	733,113	(3,288,391)	(34,354)	320,619	709,657	3,643,075
507	Rail Fastgs. & Jts.	438,892							
508	Special Work	1,120,456	261,878	332,365	1,190,943	43,207	471,363	546,462	1,309,249
510	Track & Rdwy. Labor	1,583,816	290,067	568,156	1,861,905	8,352	406,306	502,758	1,966,709
511	Paving	2,805,228	347,177	689,993	3,148,044	19,382	615,047	981,280	3,533,659
512	Road Machy. & Tools	73,007	-	14,242	87,249	(2,137)	31,098	50,838	104,852
515	Bridges & Culverts	388,442	19,861	19,366	387,947	(1,537)	143,382	768,852	1,011,880
516	Cross. Signs & Fences	56,332	1,763	19,423	73,992	(15,017)	15,016	94,497	138,456
517	Signal Apparatus	7,190	1,250	1,417	7,357	(172)	2,488	862	5,559
518	Telephone Lines	48,182	3,897	8,498	52,783	230	6,246	14,784	61,551
519	Poles & Fixtures	241,350	39,683	124,910	326,577	1,615	196,393	307,868	439,667
521	Distribution System	1,214,513	162,188	357,226	1,409,551	9,957	347,675	410,873	1,482,706
522	General Office Bldg.	817,665	-	-	817,665	-	-	371	818,036
523	Shops & Car Houses	870,710	95,465	431,243	1,206,488	(10,771)	15,940	43,895	1,223,672
524	Stations & Misc. Bldgs.	146,708	9,395	320,701	458,014	(9,347)	51,441	220,974	618,200
529	Other Expenditures	-	47	8,533	8,486	(4,779)	549	2,725	5,883
530	Passenger Cars	4,387,651	92,052	2,193,219	6,488,818	(48,409)	929,774	610,170	6,120,805
532	Service Equipment	179,871	18,810	42,036	203,097	31,279	50,714	29,327	212,989
533	Elec. Equipmt. of Cars	2,073,509	211,102	1,792,979	3,655,386	(9,615)	314,322	202,124	3,533,573
536	Shop Equipment	246,193	25,667	157,045	377,571	(989)	33,457	166,342	509,467
537	Furniture	60,080	159	31,756	91,677	9,802	12,893	79,968	168,554
538	Busses	-	-	1,263,423	1,263,423	(24,635)	586,610	1,312,356	1,964,534
538	Miscel. Equipment	128,148	89,884	155,628	193,892	26,714	133,689	164,007	250,924
540	Sub Station Bldgs.	215,246	5,011	70,513	280,748	(971)	18,263	68,490	330,004
543	Sub Station Equipmt.	964,624	59,443	299,585	1,204,766	255	134,286	365,232	1,435,967
544	Transmission System	141,092	10,393	43,794	174,493	449	29,732	69,878	215,088
545	Franchises	197,459	550	3,997	200,906	16	12,369	6,648	195,201
	Sub Total	29,305,083	2,190,506	10,769,321	37,883,898	(174,026)	5,243,235	8,925,626	41,392,263
547	Interest Dur. Const.	1,034,267	98,148	402,790	1,338,909	-	-	-	1,338,909
501	Engineering	711,693	73,110	217,892	856,475	-	5,017	137,144	988,602
546	Law Expenditures)								
548	Injuries & Damages)	615,613	56,544	262,600	821,669		6,786	143,721	958,604
549	Taxes)								
550	Miscellaneous)								
	Total	\$31,666,656	\$2,418,308	\$11,652,603	\$40,900,951	\$(174,026)	\$5,255,038	\$9,206,491	\$44,678,378

RATE BASE

Historic fixed capital by years from 1926 to 1934 is shown by the following tabulation built up by adding net additions as reflected by the accounting department records to the cost established by the Commission Engineers in Application No. 13323 as of December 31, 1926. There is also shown Historic Reproduction Cost Less Depreciation as established in that proceeding, which has been brought forward by annual depreciation accruals as reflected by the books.

Year	<u>Historic Reproduction Cost</u>			<u>Historic Reproduction Cost Less Depreciation *</u>			
	Beginning of Year	Net Additions During Year	End of Year	<u>Accrued Depreciation</u>			End of Year
				Beginning of Year	Net Increase During Year	End of Year	
1926	\$ -	\$ -	\$40,900,951	\$ -	\$ -	\$10,973,549	\$29,927,402
1927	40,900,951	1,097,069	41,998,020	10,973,549	761,122	11,734,671	30,263,349
1928	41,998,020	898,057	42,896,077	11,734,671	1,174,444	12,909,115	29,986,962
1929	42,896,077	742,606	43,638,683	12,909,115	895,818	13,804,933	29,833,750
1930	43,638,683	706,403	44,345,086	13,804,933	1,275,960	15,080,893	29,264,193
1931	44,345,086	36,238	44,381,324	15,080,893	315,445	15,396,338	28,984,986
1932	44,381,324	(33,318)	44,348,006	15,396,338	946,166	16,342,504	28,005,502
1933	44,348,006	(245,721)	44,102,285	16,342,504	1,021,642	17,364,146	26,738,139
1934	44,102,285	291,047	44,393,332	17,364,146	1,291,503	18,655,649	25,737,683

* Straight line basis as computed by Company.

Rate Base

The Historic Reproduction Cost of the fixed capital for the years 1924, 1925, and 1926 were those determined by Railroad Commission engineers under Application No. 13323. To those amounts have been added an allowance for Material and Supplies for use in operation and maintenance, the segregation between New Construction, and Operation and Maintenance being made on the basis of 59% for the former and 41% for the latter, which ratios were established by Railroad Commission engineers for use under Application No. 13323. This proration applies only to the years 1924 to 1926, inclusive.

In the determination of the value of operative property for the years 1924, 1925, and 1926 there was added to the cost of Additions and Betterments overhead allowances including Interest During Construction, which was to cover the cost of money prior to the time the new property was placed in operation and earning a return. Such being the case, it seems proper to exclude from the base on which a return is to be calculated, Work in Progress, and Material and Supplies to be used in construction.

To the value of Historic Reproduction Cost as of December 31, 1926, which was established under Application No. 13323 there have been added annual net Additions and Betterments for the years 1927 to 1934, inclusive. Inasmuch as the company charges no Interest During Construction it is proper to make an allowance for Construction Work in Progress, and Material and Supplies when adding annual net Additions and Betterments, which has been done in computing the rate base herein.

The following tabulation sets forth the rate base by years from 1924 to 1934, calculated by the usual formula.

<u>Year</u>	<u>Amount</u>	<u>Year</u>	<u>Amount</u>
1924	\$37,218,000	1930	\$44,850,000
1925	39,740,000	1931	45,213,000
1926	41,120,000	1932	45,259,000
1927	42,224,000 *	1933	45,043,000
1928	43,365,000	1934	44,990,000
1929	44,164,000		

* In its Decision No. 19521 dated March 26, 1928, the Commission established a reasonable rate base at \$42,000,000 for the year 1927.

SECTION B

RATE BASE

PACIFIC ELECTRIC RAILWAY COMPANY

System

An inventory and appraisal of the company's system on the Historical Reproduction Cost basis was made in 1914. This valuation has been brought forward by the Commission's Engineering Department on two occasions; namely, as of December 31, 1920, and as of December 31, 1926. The latter figure is shown by Exhibit No. 2 in Application No. 13460, and an estimated rate base for the system of \$76,530,437, as of December 31, 1927, was developed. If the original cost of leased equipment is included, the rate base becomes \$88,103,479, as follows:

Valuation as of December 31, 1926	\$70,618,279
Estimated Net Additions & Betterments for 1927	3,032,250
Overhead portion of Pacific Electric Building	1,679,908
Materials and Supplies & Working Capital	1,200,000
Total Less Leased Equipment	76,530,437
Original Cost of Leased Equipment	11,573,042
Total Estimated Rate Base	\$88,103,479

If the leased equipment is included, then the expenses must be adjusted to include depreciation expense for same and exclude the rental charges.

For the system, these figures have been brought up to 1934 by net book additions, with the result that the system rate base for 1934 (excluding leased equipment) has been determined to be approximately \$77,779,000, compared with the December 31, 1927, rate base of \$76,530,000. These bases for each year from 1914 to 1934 are shown in connection with the rate of return studies.

Land figures are market value as of December 31, 1919, with subsequent transactions at recorded cost.

Los Angeles Local Lines

In connection with Application No. 13460, a detail study of the rate base for the Los Angeles Local Service was made. This study necessarily involved a number of allocations of property as between local passenger, interurban passenger, and freight operations. The first step insofar as track structure was concerned was to allocate

valuation sections as between sections having local service operations and those not having such operation. The next step consisted of allocating the total value of the portion of each section having local service as between local and other services on a use basis. Other capital items requiring allocation were segregated on a use basis, the detail depending on the nature of the property involved.

In preparing the present study, at our request, the company has added net book additions to the various local service sections to bring these accounts to August, 1935. The percentages based on use, however, have not been changed from the 1926 figure because of the detail studies required. At this time certain of these percentages may be considerably at variance from the 1926 study. The results of this study follow:

Historical Cost of Operating Properties
Pacific Electric Railway Local Lines
August, 1935

<u>Line or Item</u>	<u>Val. Sect.</u>	<u>Total Value of Item</u>	<u>Percent to Local Lines</u>	<u>Amount</u>
Hollywood-Cahuenga Pass	3	\$ 185,649	62%	\$ 115,102
Franklin Ave. Line	6	269,292	100	269,292
Hollywood Line	7	2,002,085	90	1,801,877
Elysian Line	8	84,549	100	84,549
Hill St. Terminal-Subway	10	3,697,890	49	1,811,966
Colegrove Line	13	674,799	79	533,091
West 16th St. Line	14	1,146,529	40	458,612
6th E. Main Terminal	26	3,241,940	16	518,710
East 9th St. Line	27	168,207	41	68,965
Watts Line	28	1,916,826	21	402,533
Whittier Line (To Walker)	30	446,294	74	332,489
East 6th St. Line	61	65,639	98	64,326
Edendale Line	62	611,803	59	360,964
Sierra Vista Line	64	1,703,243	34	579,103
South Pasadena Line	65	44,990	100	44,990
San Pedro St. Municipal Ry.	113	47,161	26	12,262
Sherman Car House Site (Ac. 503)	7	60,991	60	36,595
" " " " (" 523)	7	133,465	60	80,079
" " " " (" 536)	7	45,780	60	27,468
Watts Car House (" 523)	28	8,195	100	8,195
Macy St. Car House " (" 523)	64	98,902	22	21,758
" " Shop. Equip. " (" 536)	64	28,943	22	6,367
Torrance Shops-Land, Equip. & Fac.	42	2,342,137	17	409,874
Substation Bldgs. (Equip. Ac. 540-543)	Various	1,137,903	41	465,586
Transmission Lines (Ac. 544)		156,599	34	52,960
Overheads (Ac. 523)		33,826	46	15,563
" " (" 536)		6,785	47	3,202
" Torrance Shops		269,276	17	47,123
" Substa. Bldgs. & Equip.		96,958	41	40,219
" (Ac. 544)		22,080	34	7,429
Motor Coach Equipment				674,325
L.A.M.C.Co.-Land, Garages, etc.				100,580
Service Equip.-Rail & Auto		345,370	18	63,893
P.S. Motor Coach-Land, Garage, etc.				5,716
Materials & Supplies-Rail & Auto		764,924	18	141,511
Overheads-Car, Auto & Serv. Equip.				19,455
Total excluding Leased Equipment				9,686,729
Local Car Equipment - Rail (154 cars) Leased				2,977,007
Total including Leased Equipment				\$12,663,736

It will be noted that this rate base is substantially the same as found in 1927; namely, \$12,694,000, including leased equipment.

In comparing these figures with those pertaining to the Los Angeles Railway it should be pointed out that while both are on an historical reproduction cost basis, the additions to the valuations are on a different basis. In the case of the Pacific Electric Railway, the additions have been used since 1914, and for the Los Angeles Railway since 1923. The Los Angeles Railway, in reconstructing a section of track, credits capital with the entire original cost of the track and charges capital with the entire cost of reconstructed track. The Pacific Electric Railway, under similar circumstances, charges only the difference in cost of material as between original construction and reconstruction. Any additional labor cost is charged to operation. Lands are included at market value as of December 31, 1919, for the Pacific Electric Railway, and March 31, 1923, for the Los Angeles Railway, with subsequent transactions at recorded cost.

SECTION C

RATE BASE

LOS ANGELES MOTOR COACH COMPANY

The investment in equipment and facilities of the parent companies assigned to the Los Angeles Motor Coach Company as of December 31, 1934, was \$1,556,000. To this should be added an allowance for materials and supplies and other working assets as follows:

	<u>Dec. 31, 1934</u>
Equipment and Facilities	\$1,556,000
Working Assets	<u>50,000</u>
Rate Base	\$1,606,000

It should be pointed out that the rate base as developed herein is the historical investment, undepreciated. A depreciated base, at the present time, would be unduly low because the age of much of the equipment in relation to its anticipated life is quite high.

The above figures do not include a proration of investment in executive offices of either of the parent companies.

Prorata amounts of the above rate base are included in the rate bases for the Los Angeles Railway and Pacific Electric Railway previously shown.

CHAPTER XIV

RATE OF RETURN

The Rate of Return calculated in accordance with the Commission's traditional historical cost method for all of the local properties in the area under consideration for the year 1934 may be briefly summarized as follows:

	<u>Net Revenue</u>	<u>Rate Base</u>	<u>Rate of Return</u>
Los Angeles Railway	\$338,718	\$45,000,000	0.75%
Pacific Electric Railway	<u>287,000</u>	<u>12,500,000</u>	<u>2.30</u>
Entire Service Area	\$625,718	\$57,500,000	1.09%

The Los Angeles Motor Coach Company operations are included in the above results. The detail of these figures is presented in three sections as follows:

- A. Rate of Return - Los Angeles Railway
- B. Rate of Return - Pacific Electric Railway
- C. Rate of Return - Los Angeles Motor Coach Company

SECTION A

RATE OF RETURN

LOS ANGELES RAILWAY CORPORATION

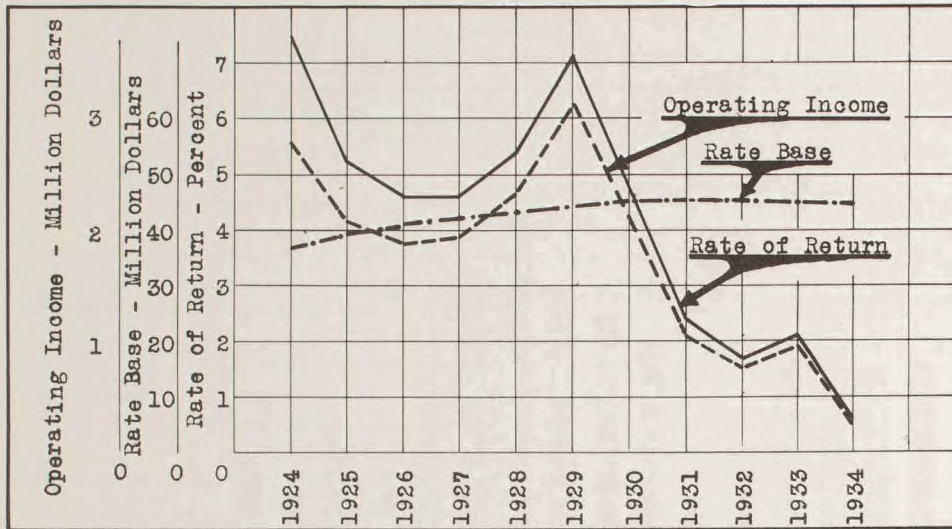
The following table shows the rate base and rate of return for the Los Angeles Railway Corporation including both rail and motor coach operations for the years 1924 to 1934, inclusive.

<u>Year</u>	<u>Operating Revenue</u>	<u>Operating Expense</u>	<u>Depreciation</u>	<u>Taxes</u>	<u>Operating Income</u>	<u>Rate Base</u>	<u>Rate of Return</u>
1924	\$13,097,426	\$8,575,060	\$ 862,140	\$868,054	\$2,792,172	\$37,200,000	7.5%
1925	12,852,119	9,040,893	919,147	820,316	2,071,763	39,700,000	5.2
1926	13,021,482	9,365,098	964,474	807,925	1,883,985	41,100,000	4.6
1927	13,287,600	9,503,632	1,009,808	814,348	1,959,812	42,200,000	4.6
1928	13,626,231	9,431,621	1,036,490	833,675	2,324,445	43,400,000	5.4
1929	14,874,309	9,659,033	1,081,636	997,392	3,136,248	44,200,000	7.1
1930	13,732,651	9,553,016	1,108,015	953,714	2,117,906	44,800,000	4.7
1931	12,229,222	9,239,154	1,104,407	812,866	1,072,795	45,200,000	2.4
1932	10,338,587	7,777,217	1,102,435	678,295	780,640	45,300,000	1.7
1933	9,464,252	6,811,465	1,093,448	598,368	960,971	45,000,000	2.1
1934	9,804,745	7,842,441	1,117,989	589,410	254,905	45,000,000	0.6

In computing the rate of return for the years 1924 to 1934, inclusive, for the Los Angeles Railway Corporation, operating revenues, operating expenses, and taxes have been taken from the Consolidated Statement of Income and Profit and Loss. Depreciation has been calculated on a 5% sinking fund basis, using a 7-year life on motor coaches. On properties other than motor coaches an average life of 21.8 years was used. This life was established in the joint report prepared by the engineers of the City of Los Angeles, Los Angeles Railway Corporation, and the Railroad Commission. The rate base used was computed by the Railroad Commission's usual formula, as explained in the preceding chapter. Had a

10-year life for motor coach equipment been used in 1934 the rate of return would have been 0.75%.

The following chart shows in graphic form the trend of operating income, the rate base, and the rate of return for the ten year period from 1924 to 1934, inclusive.



SECTION B

RATE OF RETURN

PACIFIC ELECTRIC RAILWAY

System

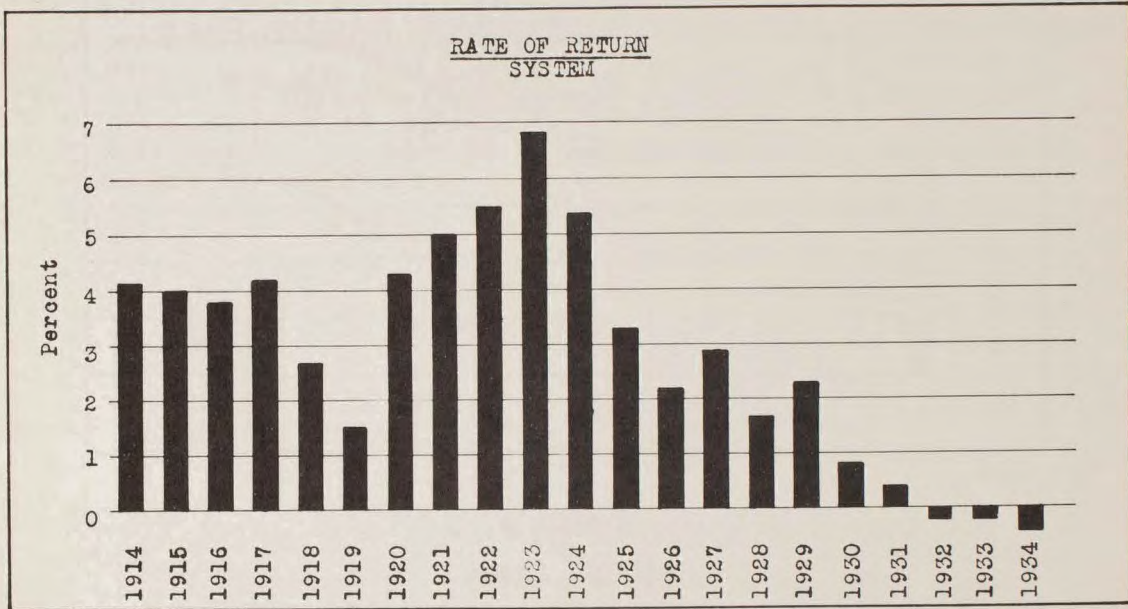
A statement of financial results of operation for the Entire System of the Pacific Electric Railway taken from the company's records shows the following results:

Year	Operating Revenue	Expense and Taxes	Net Income	Approximate Rate Base	Approximate Rate of Return
*1914	\$ 9,467,483	\$ 7,100,572	\$2,366,911	\$57,509,000	4.1%
*1915	8,874,507	6,523,279	2,351,228	58,809,000	4.0
1916	8,664,467	6,402,644	2,261,823	59,342,000	3.8
1917	9,267,130	6,776,817	2,490,313	60,336,000	4.2
1918	10,331,916	8,639,727	1,692,189	61,666,000	2.7
1919	11,278,016	10,380,244	897,772	62,933,000	1.5
1920	15,346,346	12,631,935	2,714,411	63,727,000	4.3
1921	17,096,117	13,903,693	3,192,424	64,360,000	5.0
1922	18,307,733	14,765,526	3,542,207	64,704,000	5.5
1923	21,641,554	17,177,802	4,463,752	66,248,000	6.8
1924	20,729,483	17,015,132	3,714,351	69,273,000	5.4
1925	19,514,325	17,157,743	2,356,582	71,697,000	3.3
1926	19,111,164	17,548,003	1,563,161	71,858,000	2.2
1927	19,614,541	17,465,120	2,149,421	74,667,000	2.9
1928	18,310,988	17,014,784	1,296,204	76,671,000	1.7
1929	18,417,335	16,611,931	1,805,404	78,782,000	2.3
1930	15,692,360	15,081,848	610,512	78,164,000	.8
1931	13,281,619	12,989,431	292,188	78,662,000	.4
1932	10,533,656	10,654,810	(121,154)	78,289,000	(.2)
1933	9,062,840	9,219,826	(156,986)	78,419,000	(.2)
1934	9,004,701	9,328,512	(323,811)	77,779,000	(.4)

* Fiscal years ending June 30.

In these computations, leased equipment is not included in the rate base, but rental expense including interest is included in operating expense.

The rate base is computed from the Commission's study of December 31, 1926, together with net book additions as shown by the annual reports. No detail analysis of these figures has been made at this time, nor has depreciation expense been adjusted in any way. The following chart shows graphically the rate of return since 1914.



Local Lines

There have been changes in the Los Angeles Local Service within the last year; for example, the abandonment of the South Pasadena line and the inauguration of Walker local service. Due to the detail involved, a rate base was developed only for the most recent condition as regards physical properties, in total amount of \$12,553,000, which includes leased equipment. However, the allocation of properties between local and inter-urban was made largely on the basis of percentages determined for use in 1926, based on the then existing operations.

In considering expenses, rental of leased equipment has been eliminated and depreciation expense recalculated to allow for such equipment as if it were owned. Depreciation expense for equipment and large buildings has been included on the 5% sinking fund basis for comparative purposes, although, of course, the present rate of return does not justify its use. The company uses the retirement method of depreciation accounting for plant other than equipment and large buildings, and no endeavor has been made to restate the figures for that class of property.

For the Pacific Electric Railway Local Lines the income, rate base, and rate of return for the year of 1934 follow:

Operating Revenue		\$ 2,259,000
Operating Expense	\$ 1,773,000	
Taxes	102,000	
Depreciation	<u>97,000</u>	
Total Expense		<u>1,972,000</u>
Net Revenue		287,000
Rate Base		\$12,500,000
Rate of Return		2.3%

The rate of return as computed above is not entirely comparable to the calculations for the Los Angeles Railway in respect of depreciation. This matter is more fully discussed in Chapter XXII, Financial Requirements.

SECTION C

RATE OF RETURN

LOS ANGELES MOTOR COACH COMPANY

The financial results of operation for the Los Angeles Motor Coach Company expressed in rate of return is as follows:

Investment - Dec. 31, 1934		\$1,556,000
Material and Supplies and Working Cash		<u>50,000</u>
Rate Base		1,606,000
Revenue - Year 1934		1,327,000
Expense (excl. Taxes & Depreciation)		984,000
Taxes		100,000
Depreciation Expense		<u>111,000</u>
Total Expense		1,195,000
Net Revenue		\$ 132,000
Rate of Return		8.2%

These results are not entirely indicative of the earnings of the company if it had operated as an independent company, as the rate base includes no allowance for general office investment and the expense contains nominal amounts for management expense. Depreciation has been computed on a 30-year life for buildings and a 10-year life for coaches and equipment, all calculations being on a 5% sinking fund basis. The results for Los Angeles Motor Coach Company are included in the respective rates of return for the parent companies previously shown.

CHAPTER XV

EARNINGS BY LINES

This chapter deals with earnings of the individual lines of the operating companies. The material is presented in the following sections:

- A. Los Angeles Railway
- B. Rail Lines of Los Angeles Railway
- C. Motor Coach Lines of Los Angeles Railway
- D. Pacific Electric Railway
- E. Rail Lines of Pacific Electric Railway
- F. Motor Coach Lines of Pacific Electric Railway
- G. Lines of Los Angeles Motor Coach Company

SECTION A
EARNINGS BY GROUPS
LOS ANGELES RAILWAY

Operating income earned by the Rail Division, Motor Coach Division, and one-half Los Angeles Motor Coach Company, as reflected by the books for the years 1924 to 1934, is as follows:

Year	Operating Income *			Total
	Rail Division	Motor Coach Division	Share of L.A.M.C.Co.	
1924	\$ 2,470,682.64	\$ (76,865.84)	\$ (26,341.18)	\$ 2,367,475.62
1925	1,657,788.17	(103,198.91)	(31,225.22)	1,523,364.04
1926	1,542,005.75	(211,193.50)	(49,304.14)	1,281,508.11
1927	1,649,099.01	(214,223.98)	(24,684.65)	1,410,190.38
1928	1,978,387.11	(186,456.54)	(2,049.93)	1,789,880.64
1929	2,710,293.07	(152,189.76)	95,853.29	2,653,956.60
1930	1,776,893.67	(207,694.81)	71,500.43	1,640,699.29
1931	761,827.59	(162,993.42)	131,340.98	730,175.15
1932	484,317.68	(160,589.81)	101,437.80	425,165.67
1933	647,554.30	(150,863.81)	101,929.43	598,619.92
1934	18,356.45	(160,076.34)	81,296.07	(60,423.82)
Total	\$15,697,205.44	\$ (1,786,346.72)	\$449,752.88	\$14,360,611.60

There being no exact method of prorating revenues and expenses to the individual lines, the tables below were computed by applying system averages to the total number of passengers carried and to the number of car miles and car hours operated. Revenues were distributed on the basis of total passengers carried and the expenses on the basis of the amounts of service as reflected by car miles and car hours; or, in greater detail, the total passenger revenue for the rail lines (Account No. 101) was divided by the total number of passengers carried, and the average fare thus obtained was applied to the total number of passengers carried on each line. Way and Structures expense, including the depreciation, was divided by the total car miles operated, and the average cost per car mile thus obtained was applied to the number of car miles operated on each line. Equipment expense and Power expense were handled in a similar manner. Conducting Transportation expense (Account No. 64) was handled differently. The one-man hours were multiplied by the prevailing hourly rate and the result of the total subtracted from the total cost of Account No. 64. The remainder was divided by the two-man hours, from which was developed an average hourly two-man rate. This average rate was then applied to the two-man hours for each line, and the resulting cost was added to the one-man hour cost (if any) for that line. Conducting Transportation expense, other than Account No. 64, was arrived at by

*Excluding Miscellaneous Rents

subtracting Account No. 64 from the total, including traffic, and the resulting amount prorated on the same basis as Way and Structures expense.

General and Miscellaneous Expense was also prorated on the same basis as Way and Structures; namely, on the basis of car miles. Account No. 215, Taxes Assignable to Railway Operation, was divided by Account No. 101, Passenger Revenue, and the average percentage so obtained was applied to the revenue developed for each line as described above.

The method of proration of revenues would essentially create a difference between the amount actually collected on the different lines and the amount allocated to those various lines on the proration basis. The revenue actually collected on the cars and recorded by lines makes up 93% of the total passenger revenue as reflected by Account No. 101 for the year 1934. The difference of 7% in amount of \$562,259.94 for 1934 represents tickets, tokens, etc., sold through the traffic department ticket office, coach ticket sales, etc. While in making the proration of revenue on a total passenger basis the above difference is distributed, another complication arises in that some lines with a heavy transfer ratio are allocated more revenue than actually collected, and some lines with a low transfer ratio and a high percentage of the total collections are allocated amounts less than those actually collected.

SECTION B

EARNINGS OF RAIL LINES

LOS ANGELES RAILWAY

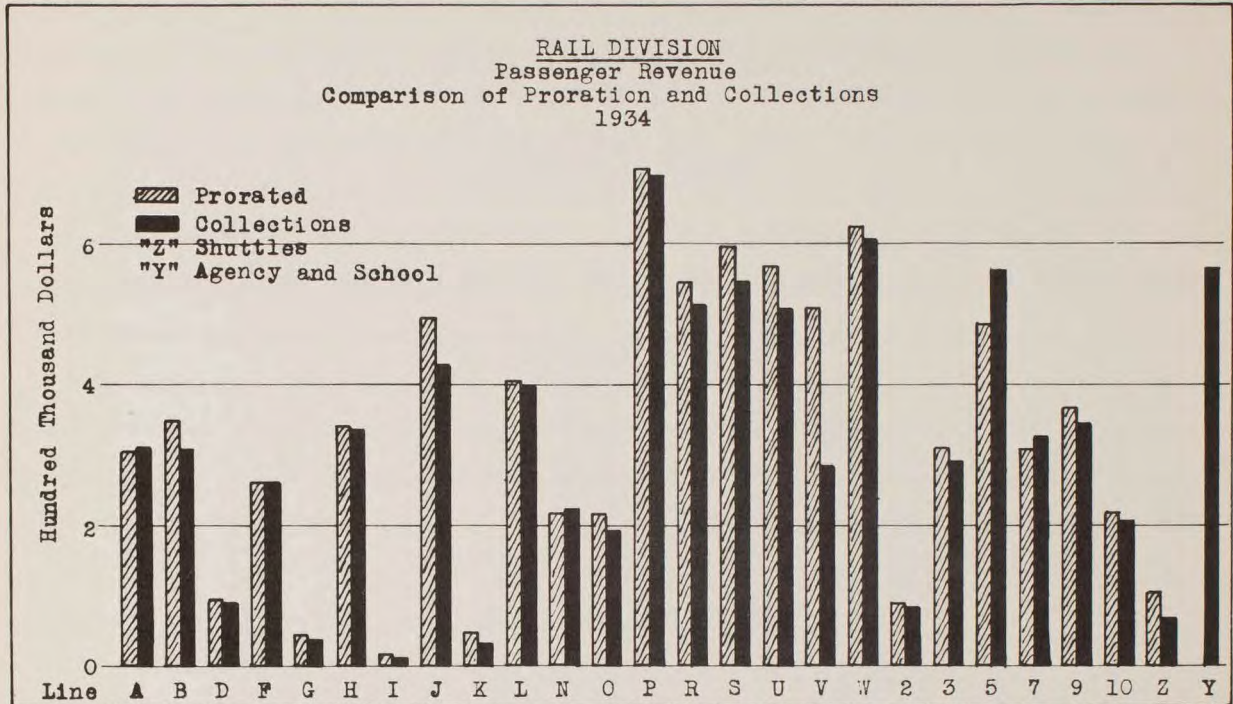
Results of operation by individual lines for the Rail Division of the Los Angeles Railway Corporation are shown by the following tabulation for the year 1934.

Rail Line Net Revenue Year 1934

Line	Total Passengers	Passenger Revenue	Operating Expense	Net Revenue Before Depreciation	Depreciation	Net Revenue
A	7,208,146	\$ 303,849.78	\$ 305,352.57	\$ (1,502.79)	\$ 55,553.99	\$ (57,056.78)
B	8,288,362	349,384.85	266,877.93	82,506.92	52,297.44	30,209.48
D	2,275,170	95,906.76	80,859.82	15,046.94	13,365.89	1,681.05
F	6,173,408	260,231.78	276,125.68	(15,893.90)	61,468.13	(77,362.03)
G	1,012,691	42,688.64	51,811.35	(9,122.71)	10,757.71	(19,880.42)
H	8,077,665	340,503.20	298,675.66	41,827.54	53,525.71	(11,698.17)
I	430,157	18,132.69	38,381.82	(20,249.13)	6,467.67	(26,716.80)
J	11,798,866	497,365.46	376,653.34	120,712.12	68,378.00	52,334.12
K	1,075,622	45,341.41	65,209.48	(19,868.07)	14,224.20	(34,092.27)
L	9,581,169	403,881.40	333,031.73	70,849.67	60,098.59	10,751.08
N	5,188,662	218,721.13	166,892.60	51,828.53	31,780.87	20,047.66
O	5,202,628	219,309.85	185,613.78	33,696.07	39,420.79	(5,724.72)
P	16,742,047	705,738.67	446,042.00	259,696.67	77,006.99	182,689.68
R	12,864,639	542,291.70	393,654.09	148,637.61	71,024.14	77,613.47
S	14,167,616	597,216.96	438,963.47	158,253.49	78,838.45	79,415.04
U	13,460,571	567,412.42	403,275.94	164,136.48	71,052.75	93,083.73
V	12,035,160	507,326.12	431,710.15	75,615.97	80,247.48	(4,631.51)
W	14,750,849	621,802.37	565,062.03	56,740.34	105,530.50	(48,790.16)
2	2,086,239	87,942.62	116,867.41	(28,924.79)	24,956.83	(53,881.62)
3/4	7,324,419	308,751.11	217,941.01	90,810.10	39,194.61	51,615.49
5/6	11,453,078	482,789.23	551,091.97	(68,302.74)	110,236.09	(178,538.83)
7/8	7,231,741	304,844.40	304,066.48	777.92	56,698.21	(55,920.29)
9	8,744,547	368,614.72	345,648.05	22,966.67	63,981.90	(41,015.23)
10	5,098,476	214,919.46	204,391.45	10,528.01	37,931.83	(27,403.82)
Shut.	2,416,802	101,877.07	112,074.20	(10,197.13)	22,219.31	(32,416.44)
Total	194,688,730	\$8,206,843.80	\$6,976,274.01	\$1,230,569.79	\$1,306,258.08	\$ (75,688.29)

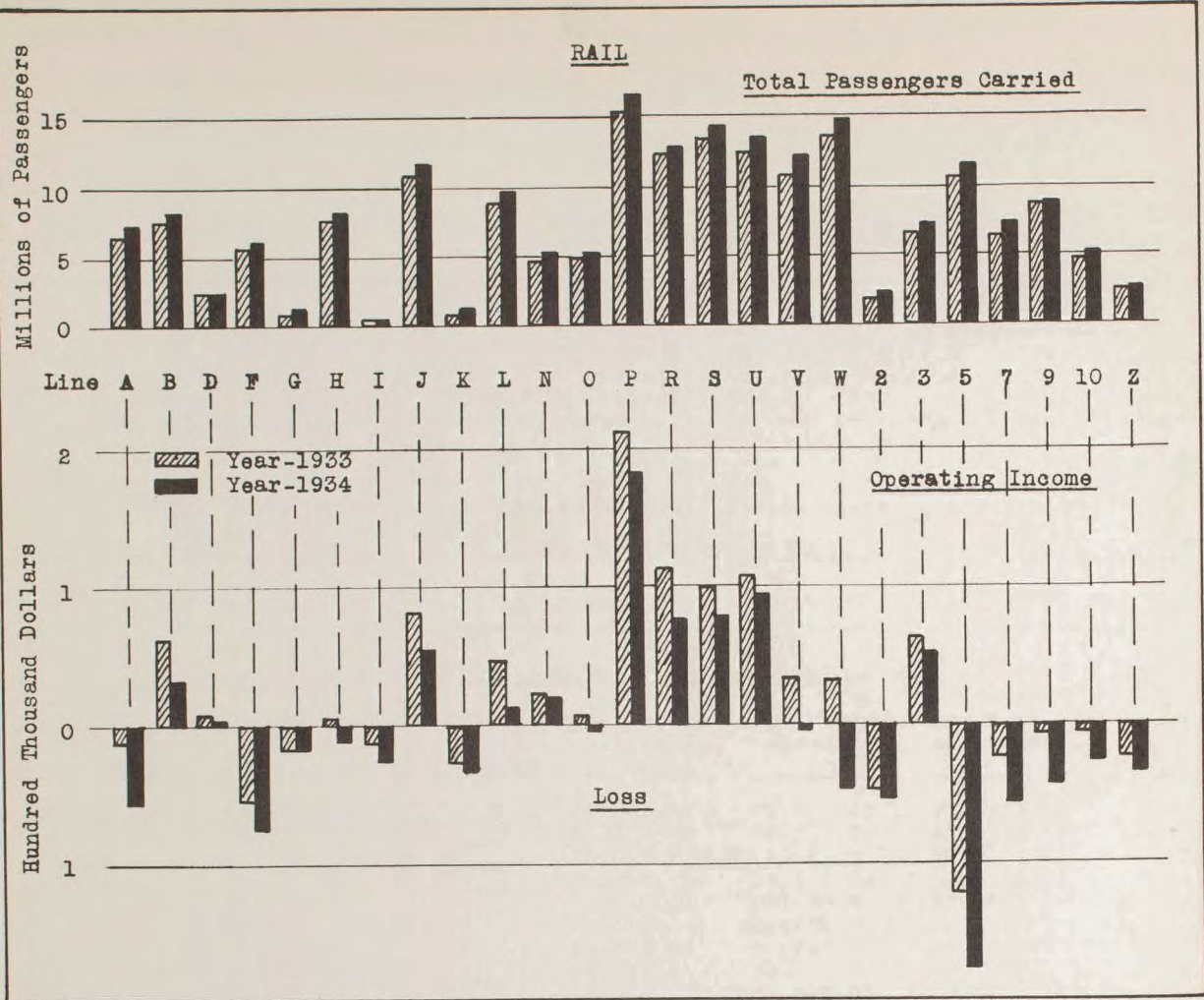
The preceding net revenue in amount of $\$75,688.29$ reflects only passenger revenue and therefore differs from the operating income as shown for total Rail Division in the foregoing table.

The following chart shows passenger revenue by lines as actually collected on those lines and as allocated to the lines on the proration basis for rail operation.



It will be noted from the chart that with exception of a few lines the proration method seems to be fairly equitable, the outstanding examples to the contrary being the "V" line, which was allocated revenue almost twice that actually collected, and the "5" line, which was allocated revenue about $\$60,000$ less than it actually collected. The "5" line is the longest line of the system and extends beyond the inner zone on both the north end and the south end. On the south end of the line there are three fare zones and on the north end two. This means that the average fare per passenger collected on this line is higher than the average fare collected on any other line of the system. This accounts for the reduction in the amount of revenue prorated as compared to that actually collected.

Operating income by lines for the years 1933 and 1934 as determined on the basis of prorating revenues and expenses, as already described, is shown on the following chart for the Rail Division. On the same chart there is shown the total passengers carried by lines corresponding to the operating income, which gives a better understanding of the magnitude of operating income in relation to the total passengers carried by lines. The operating incomes as shown by the chart are those resulting after deducting operating expense, depreciation and taxes from passenger revenue. It will be noted that those lines showing the heaviest patronage also show the largest income with exception of "A", "H", "5", "7" and "9", which, although relatively heavy lines, show losses.



For the year 1933, as shown by the chart, there were only 14 lines of the 24 which showed an income, and in 1934 there were only 10 lines showing an income. The "P" line shows the greatest income for both 1933 and 1934, the "R", "S" and "U" lines being very nearly on a par and each representing about half the income of the "P" line. The "5" line shows the greatest loss for both 1933 and 1934, being \$120,000 for 1933 and \$178,000 for 1934. With the exception of the "G" line, all lines showing losses show heavier losses in 1934 than in 1933, and, correspondingly, those lines showing a gain show less for 1933 than for 1934. The decreased income as a whole in 1934 as compared with 1933 was due to an increase of about one million dollars in operating expenses, the total operating revenue being only \$340,394 greater in 1934 than 1933. This increase in operating expense was due mainly to increased wages during 1934, increased maintenance program, and to expenses arising in connection with the strike during the last part of the year.

SECTION C

EARNINGS OF MOTOR COACH LINES

LOS ANGELES RAILWAY

The following chart shows a comparison of passenger revenue by motor coach lines as allocated compared with actual collections on each line. There appears to be no

outstanding inconsistency of distributing the revenue for motor coach operation on the basis of proration. The motor coach route numbers and description are as follows:

Motor Coach Routes

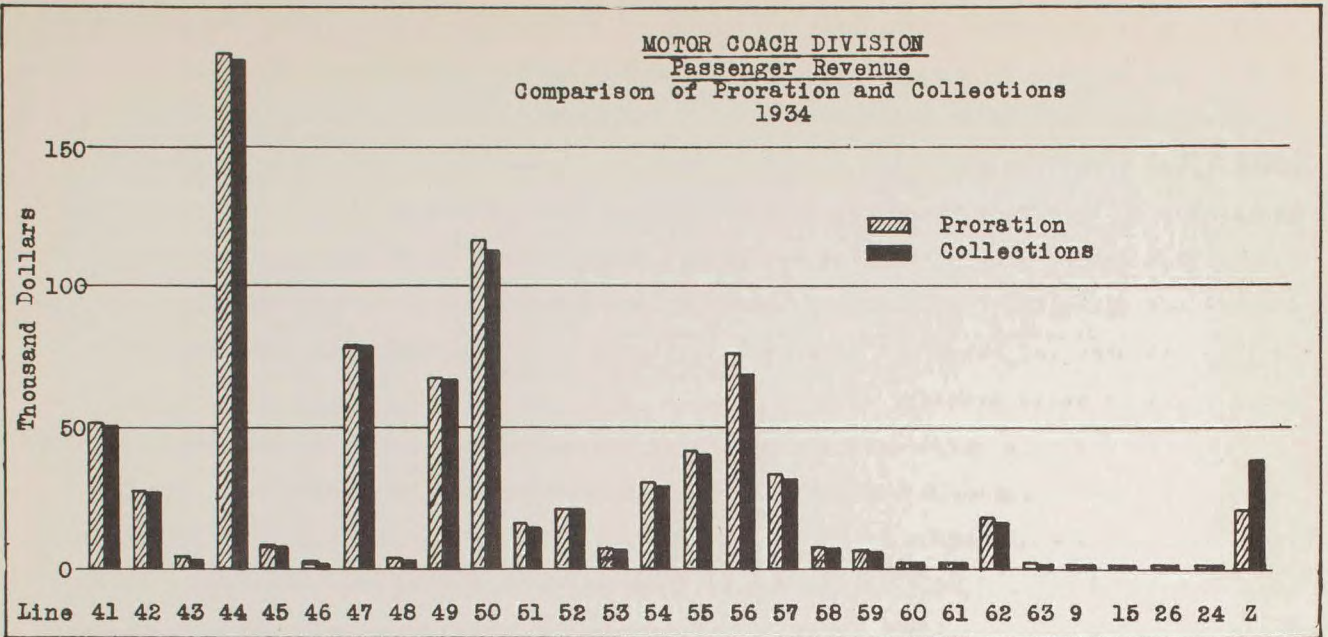
No.41 - Alvarado	No.51 - Hollydale	No.61 - Verdugo
42 - Avalon-S'Pedro-S.Main	52 - Inglewood	62 - Wash.-Adams-Jeff.
43 - Ave. 50 - El Paso	53 - Lincoln Park	63 - York
44 - Beverly	54 - Manchester-Santa Ana	9 - Florence
45 - Eagle Rock	55 - Maywood - Bell	15 - Manchester
46 - East Florence	56 - Melrose	26 - Olympic
47 - E. 9th - Whittier	57 - Normandie	24 - Soto
48 - Fairview Heights	58 - Slauson	(Miscellaneous
49 - Figueroa	59 - State - Southern	Z (Airport Local & Exp.
50 - Florence - Soto	60 - Van Ness	(School Lines

The following table shows revenues and expenses of motor coach operation by lines for 1934:

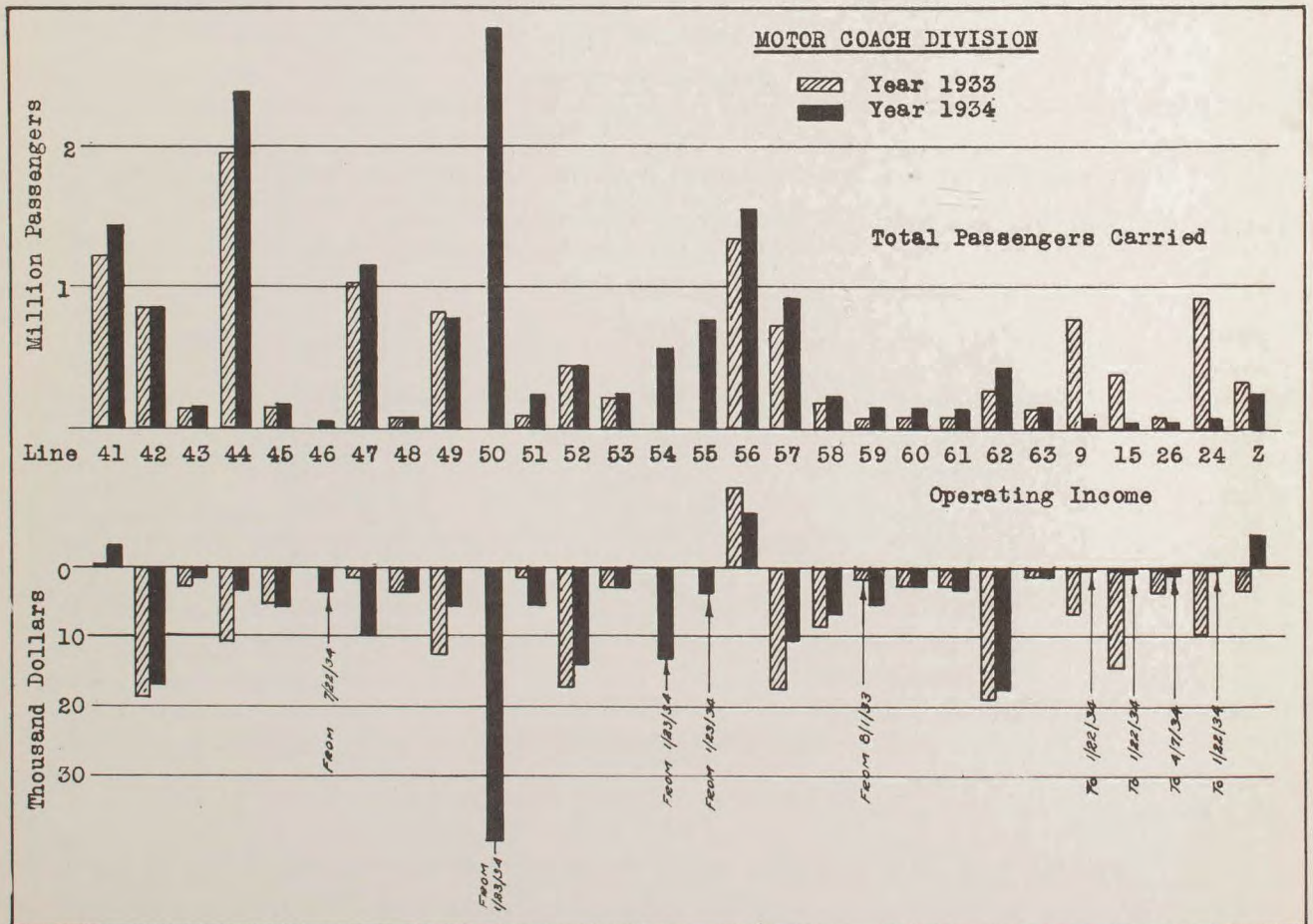
Coach Line Net Revenue Year 1934

Line	Total Passengers	Passenger Revenue	Operating Expense	Net Revenue Before Depreciation	Depreciation	Net Revenue
41	1,435,921	\$ 51,393.92	\$ 42,463.40	\$ 8,930.52	\$ 5,734.25	\$ 3,196.27
42	846,614	27,131.68	42,822.74	(15,691.06)	875.32	(16,566.38)
43	154,577	4,759.44	6,504.89	(1,745.45)	122.70	(1,868.15)
44	2,400,262	183,683.70	157,844.01	25,839.69	29,095.93	3,256.24
45	157,021	7,883.79	13,512.49	(5,628.70)	258.65	(5,887.35)
46	48,942	2,533.76	6,094.12	(3,560.36)	204.91	(3,765.27)
47	1,152,948	79,749.98	85,978.84	(6,228.86)	3,722.70	(9,951.56)
48	61,058	3,098.85	6,875.37	(3,776.52)	138.96	(3,915.48)
49	780,670	67,666.66	69,947.50	(2,278.84)	3,558.69	(5,837.53)
50	2,880,969	117,664.17	136,790.24	(19,126.07)	19,977.95	(39,104.02)
51	230,396	15,128.00	20,066.07	(4,938.07)	414.80	(5,352.87)
52	430,758	21,152.62	29,445.54	(8,292.92)	2,111.85	(10,404.77)
53	233,057	7,290.87	9,372.59	(2,081.72)	878.43	(2,960.15)
54	559,854	30,635.13	40,666.87	(10,031.74)	3,037.65	(13,069.39)
55	762,215	41,641.15	44,264.42	(2,623.27)	1,221.85	(3,845.12)
56	1,571,666	76,162.78	58,882.67	17,280.11	9,383.62	7,896.49
57	904,143	34,772.93	44,084.94	(9,312.01)	900.63	(10,212.64)
58	218,440	7,652.16	13,685.53	(6,033.37)	337.18	(6,370.55)
59	139,508	6,738.90	11,634.16	(4,895.26)	329.06	(5,224.32)
60	126,458	4,544.05	6,976.08	(2,432.03)	139.37	(2,571.40)
61	116,301	4,065.13	7,265.27	(3,200.14)	119.20	(3,319.34)
62	418,950	18,020.46	34,128.21	(16,107.75)	1,481.60	(17,589.35)
63	148,244	3,993.09	5,624.09	(1,631.00)	87.15	(1,718.15)
9	59,438	2,980.78	3,132.98	(152.20)	480.80	(633.00)
15	32,364	1,843.30	2,496.17	(652.87)	207.94	(860.81)
26	31,595	1,586.96	2,666.24	(1,079.28)	85.97	(1,165.25)
24	68,938	2,802.20	2,889.91	(87.71)	520.88	(608.59)
Misc.	1,753	235.65	277.69	(42.04)	36.80	(78.84)
School	243,204	20,200.55	15,041.97	5,158.58	1,135.02	4,023.56
Undist.		943.86		943.86		943.86
Total	16,216,364	\$847,958.52	\$921,435.00	\$(73,476.48)	\$86,599.86	\$(160,076.34)

From the following chart it will be noted that Route No. 44, Beverly Boulevard, is the most outstanding as regards passenger revenue, with No. 50, Florence-Soto, being the next in importance, followed by Nos. 47, 56 and 9, respectively.



Operating income for the motor coach lines is shown on the following chart. A loss is noted on all lines with the exception of two, Route No. 41, Alvarado, and Route No. 56, Melrose.



The net revenue as shown for these lines was computed on the same basis as described

heretofore in connection with the rail lines, on a proration basis. Separate records are kept by the company to account for the Motor Coach Division operations as regards revenues, operating expenses, taxes and depreciation. The actual revenue collected on the motor coach lines is reflected by the records. Operating expenses in general are directly chargeable to the Motor Coach Division operations with exception of Supervision and the General and Miscellaneous group of accounts. There appears to be too small an amount of General and Miscellaneous Expense prorated to the Motor Coach Division operating expenses. If this distribution were made on a more equitable basis the losses as indicated by the chart would be still greater.

On the same chart with the operating income are shown for the purpose of comparing the relative importance of the line, the total passengers carried by each for the years 1933 and 1934. Routes No. 50 and 44 are shown to be the heaviest lines, they having carried 2,881,969 and 2,400,262 passengers, respectively, during the year 1934. These two lines carried almost one-third of the total passengers during the year 1934, in spite of which fact they both show losses instead of a net earning during the year. The chart shows Route No. 50 for the year 1934 only, and Route Nos. 9 and 24 for 1933 only. The latter two routes; namely, Florence Avenue and Soto Street were combined in January of 1934 into the Florence-Soto route, which was designated as No. 50 and so shown on the chart.

SECTION D

EARNINGS BY GROUPS

PACIFIC ELECTRIC RAILWAY

The earnings of the lines classified as the Los Angeles local lines of the Pacific Electric Railway have been as follows from 1924 to 1934:

Year	<u>Operating Income</u>			
	<u>Rail Lines</u>	<u>P.E.Motor Coach</u>	<u>Share of L.A.M.C.Co.</u>	<u>Total</u>
1924	\$531,096.77	\$(1,478.92)	\$(28,253.54)	\$501,364.31
1925	367,233.73	(7,730.57)	(27,481.66)	332,021.50
1926	222,500.90	(9,397.42)	(46,147.12)	166,956.36
1927	173,094.26	(9,096.74)	(19,781.41)	144,216.11
1928	184,567.71	(13,718.74)	(5,372.73)	165,476.24
1929	132,118.80	(16,478.52)	107,877.90	223,518.18
1930	95,003.73	(12,551.19)	84,104.21	166,556.75
1931	15,762.15	(14,930.17)	123,525.29	124,357.27
1932	(10,811.25)	(9,580.68)	108,008.78	87,616.85
1933	48,319.34	(7,681.31)	103,810.11	144,448.14
1934	29,406.50	(7,113.04)	83,205.49	105,498.95

SECTION E

EARNINGS OF RAIL LINES

PACIFIC ELECTRIC RAILWAY

For the year 1933 a special study was made of the local rail lines of the Pacific Electric Railway, allocating the expenses to these lines. The result of this study follows:

Line	Operating Revenue	Operating Expense	Depreciation	Taxes	Net Income
Edendale-Central Sta.	\$ 119,488.62	\$ 144,513.96	\$ 2,009.02	\$ 6,926.31	\$(33,960.67)
Hill St.-Echo Park	98,904.99	103,378.46	1,230.70	4,254.21	(9,958.38)
S.Monica-W.Hollywood	236,473.84	190,847.30	12,379.95	12,445.91	20,800.68
Sierra Vista	117,620.47	130,782.59	1,549.45	6,423.43	(21,135.00)
Subway-Beverly	77,180.04	47,506.78	1,785.00	1,081.24	26,807.02
Subway-Hollywood	223,470.58	165,542.39	8,708.95	13,334.37	35,884.87
Vineyard-Hollywood	398,554.18	287,524.44	3,147.78	20,671.57	87,210.39
Watts-S. Pasadena	264,068.84	301,884.63	3,716.76	14,076.49	(55,609.04)
Western-Franklin Ave.	45,094.34	41,377.25	730.55	4,707.07	(1,720.53)
Total	\$1,580,855.90	\$1,413,357.80	\$35,258.16	\$83,920.60	\$ 48,319.34

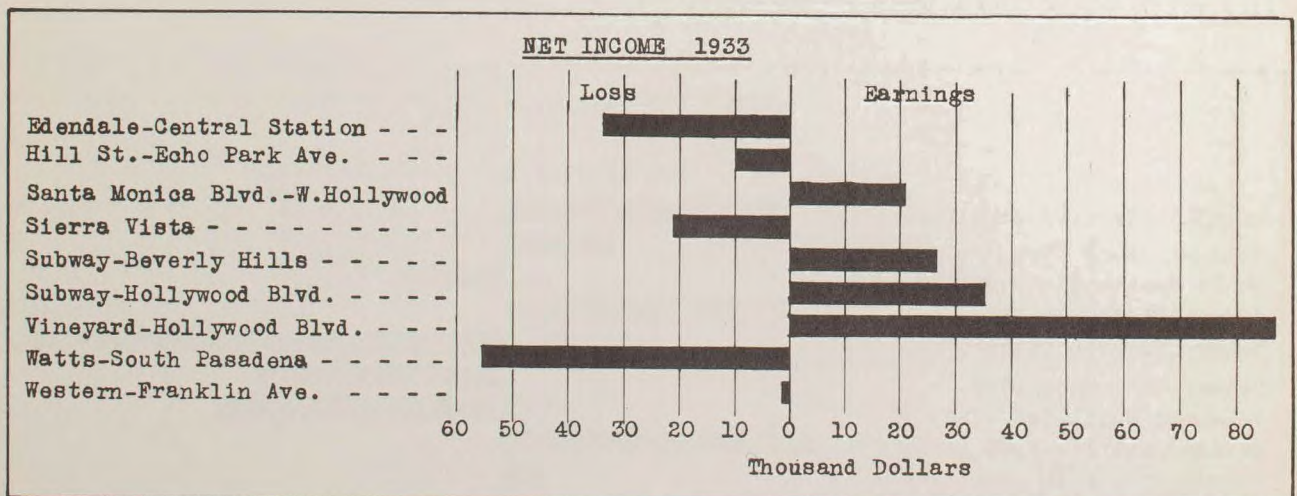
The cost per car mile for each of the above lines follows:

	Operating Revenue per Car Mile	Operating Expense per Car Mile	Depreciation per Car Mile	Taxes per Car Mile	Net Income per Car Mile
Edendale-Central Sta.	27.4¢	33.1¢	.5¢	1.6¢	(7.8)¢
Hill St.-Echo Park	25.4	26.5	.3	1.1	(2.5)
S. Monica-W.Hollywood	27.0	21.8	1.4	1.4	2.4
Sierra Vista	23.9	26.6	.3	1.3	(4.3)
Subway-Beverly	43.4	26.7	1.0	.6	15.1
Subway-Hollywood	36.9	27.4	1.4	2.2	5.9
Vineyard-Hollywood	38.6	27.8	.3	2.0	8.5
Watts-S. Pasadena	22.5	25.8	.3	1.2	(4.8)
Western-Franklin Ave.	24.1	22.1	.4	2.5	(.9)
Total	29.5¢	26.3¢	.7¢	1.6¢	.9¢

Since 1933, increased costs have occurred because of increases in platform men's wages. The new basis of taxation effective in 1935 has also tended to increase the tax accruals chargeable to the local lines.

Rental of Equipment is included in the expense items, including depreciation and interest factors. The total charge for 1933 was \$214,203.52, or 4¢ per car mile.

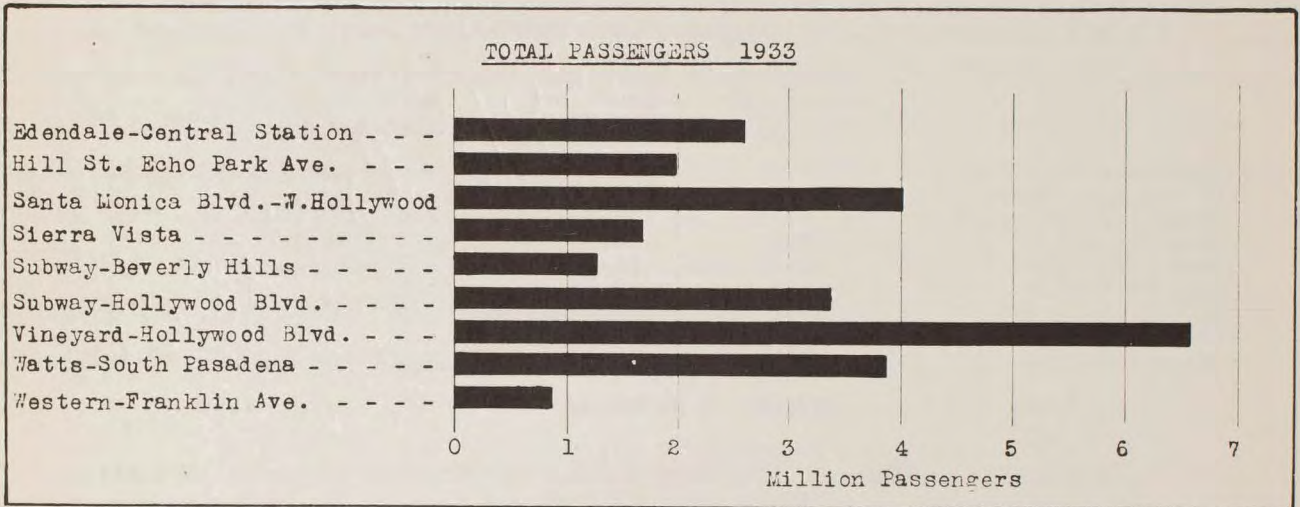
Net Income is shown graphically in the following chart for the year 1933.



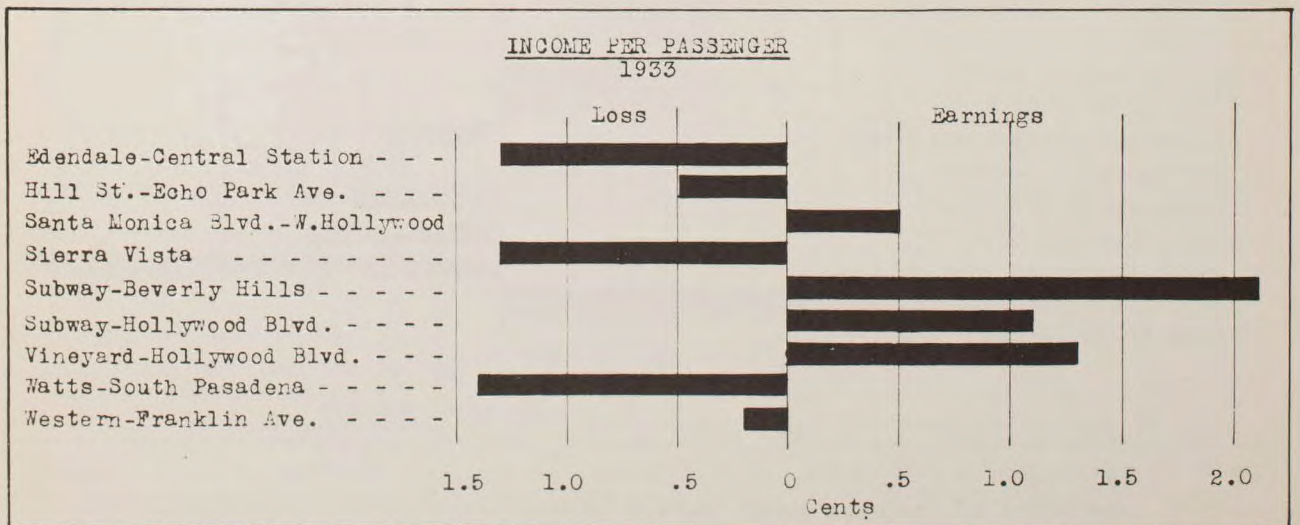
Operation of the nine lines plotted on the foregoing chart resulted in net

earning on only four. The greatest income was earned by the Vineyard-Hollywood Boulevard line in amount of \$87,210, the other three having earned less than half that amount. The greatest loss was suffered by the Watts-South Pasadena line in amount of \$55,609.

The following chart shows graphically the total passengers carried by the various lines during the year 1933. Again the Vineyard-Hollywood Boulevard line stands out as the most important line, it having carried in excess of six and one-half million passengers. None of the remaining lines carried passengers in excess of four million during the year, the smallest volume having been on the Western-Franklin line which carried less than one million.



Income per passenger for the year 1933 is plotted below by lines and shows substantially the same division of lines as between earnings and losses, although the Subway-Beverly Hills line exceeded all other in earnings. That line earned in excess of 2¢ per passenger, whereas the next in importance was the Vineyard-Hollywood Boulevard line which earned about 1¼¢ per passenger.



SECTION F

EARNINGS OF MOTOR COACH LINES

PACIFIC ELECTRIC RAILWAY

The earnings of the two motor coach lines of the Pacific Electric Railway as operated in 1934 are as follows:

	1934					
	Emery Park		Hermon Dist.		Total Amount	Per Mile
	Total	Per Mile	Total	Per Mile		
Operating Revenue:						
500 Passenger Revenue	\$3,452.04	6.8¢	\$4,175.87	7.6¢	\$ 7,627.91	7.2¢
520 Station & Other Privileges	27.81	.1	26.82	.1	54.63	.1
523 Rent from Properties	3.44	-	3.72	-	7.16	-
Operating Revenue	3,483.29	6.9	4,206.41	7.7	7,689.70	7.3
Operating Expense:						
I Conducting Transportation	5,067.47	10.1	4,965.00	9.1	10,032.47	9.5
II Maintenance (a)	1,422.11	2.8	1,518.77	2.8	2,940.88	2.8
III Traffic	70.01	.1	84.01	.1	154.02	.2
IV General & Miscellaneous	683.15	1.4	655.02	1.2	1,338.17	1.3
Operating Expense	7,242.74	14.4	7,222.80	13.2	14,465.54	13.8
Taxes	173.64	.3	163.56	.3	337.20	.3
Total Expense	7,416.38	14.7	7,386.36	13.5	14,802.74	14.1
Net Operating Income	<u>\$(3,933.09)</u>	<u>(7.8)¢</u>	<u>\$(3,179.95)</u>	<u>(5.8)¢</u>	<u>\$(7,113.04)</u>	<u>(6.8)¢</u>
(a) Includes Depreciation	\$ 90.78		\$ 99.90		\$ 190.68	
Coach Miles	50,224		54,543		104,767	
Total Passengers	85,178		81,754		166,932	
Loss per Passenger	4.6¢		3.9¢		6.8¢	

The Hermon District line was discontinued January 2, 1935, and the South Pasadena-Monterey Road-Highland Park line substituted. The results of operation of this line for the first eight months of 1935 follow:

	First 8 Months, 1935	
	Amount	Per Mile
Operating Revenue:		
500 Passenger Revenue	\$11,483.87	7.7¢
520 Station and Car Privileges	68.47	.1
523 Rent from Properties	15.79	-
Operating Revenue	11,568.13	7.8
Operating Expense:		
I Conducting Transportation	12,804.02	8.7
II Maintenance (a)	3,394.49	2.3
III Traffic	224.74	.2
IV General and Miscellaneous	1,513.17	1.0
Operating Expense	17,936.42	12.2
Taxes	204.35	.1
Total Expense	18,140.77	12.3
Net Operating Income	<u>\$(6,572.64)</u>	<u>(4.5)¢</u>
(a) Includes Depreciation	\$ 1,464.88	
Coach Miles	147,662	

SECTION G

EARNINGS BY LINES

LOS ANGELES MOTOR COACH COMPANY

The operating results for each line for the calendar year 1934 follow:

<u>Line</u>	<u>Operating Revenue</u>	<u>Operating Expense</u>	<u>Depreciation</u>	<u>Taxes</u>	<u>Operating Income</u>
Hollywood-Long Beach-San Pedro	\$ 5,919	\$ 11,444	\$ 1,900	\$ 1,005	\$ (8,430)
Wilshire Boulevard	567,987	379,908	15,267	38,187	134,625
Sunset Boulevard	277,884	221,269	1,005	20,295	35,315
Western Avenue	196,973	134,767	25,272	16,967	19,967
Crenshaw-Vine-LaBrea	209,226	143,679	24,028	16,680	24,839
Vermont-Glendale-Riverside	33,669	36,018	3,842	2,918	(9,109)
Silverlake-Hyperion-Talmadge	19,093	34,642	3,820	2,417	(21,786)
Olympic Boulevard (From 4-8-34)	11,884	21,677	2,301	1,487	(13,581)
School Lines	2,682	1,366	255	195	866
Undistributed	1,794	-	-	-	1,794
Total	\$1,327,111	\$984,770	\$77,690	\$100,151	\$164,500

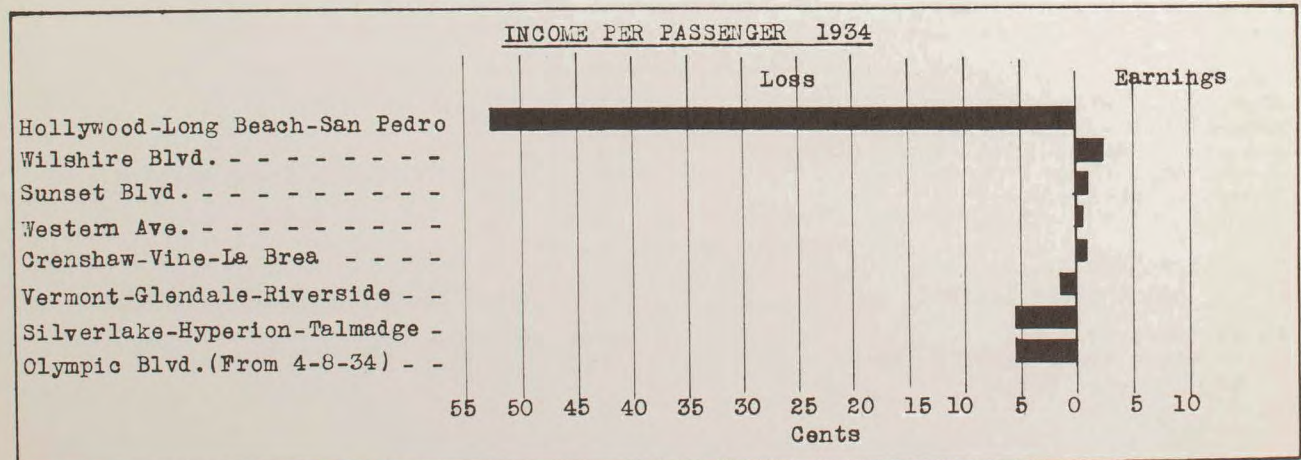
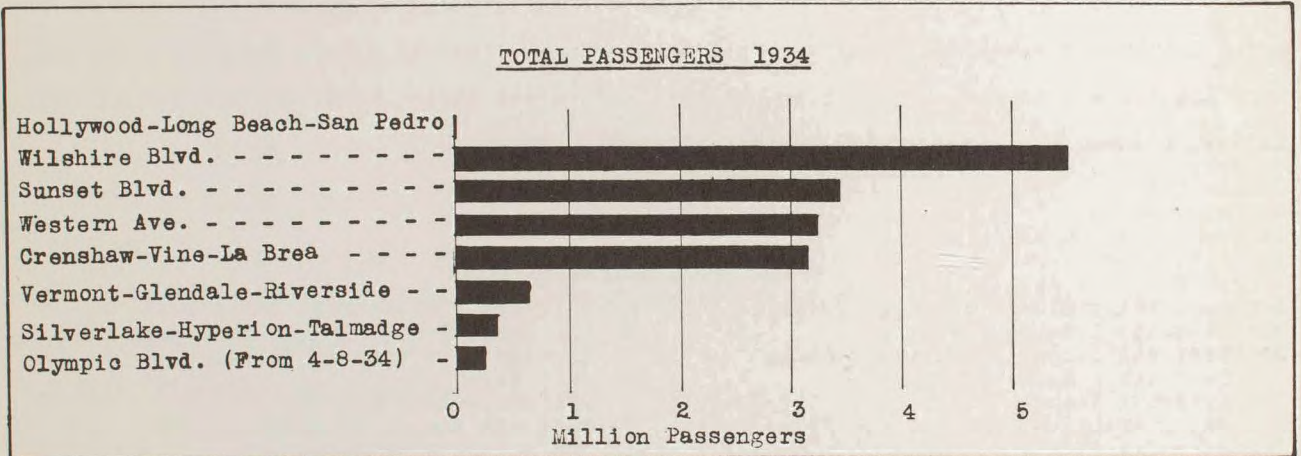
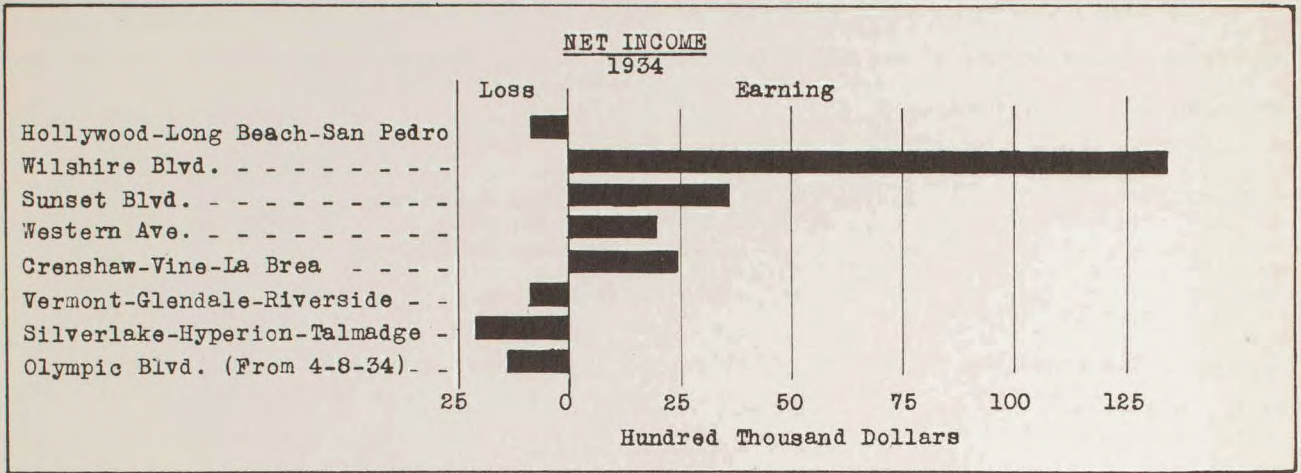
The coach miles operated in 1934, together with the operating revenue, expense and operating income per coach mile are as follows:

<u>Line</u>	<u>In Cents per Coach Mile Operated</u>					<u>Operating Income</u>
	<u>Revenue</u>	<u>Expense</u>	<u>Depreciation</u>	<u>Taxes</u>	<u>Total Expense</u>	
Hollywood-Long Beach-San Pedro	5.1¢	9.9¢	1.6¢	.9¢	12.4¢	(7.3)¢
Wilshire Blvd.	31.8	21.3	.9	2.1	24.3	7.5
Sunset Blvd.	28.3	22.5	.1	2.1	24.7	3.6
Western Avenue	24.6	16.8	3.2	2.1	22.1	2.5
Crenshaw-Vine-La Brea	22.0	15.1	2.5	1.8	19.4	2.6
Vermont-Glendale-Riverside	11.9	12.7	1.4	1.0	15.1	(3.2)
Silverlake-Hyperion-Talmadge	6.5	11.9	1.3	.8	14.0	(7.5)
Olympic Blvd. (From 4-8-34)	6.4	11.7	1.3	.8	13.8	(7.4)
School Lines	27.6	14.1	2.6	2.0	18.7	8.9
Undistributed	23.8	-	-	-	-	23.8
Total	24.5¢	18.2¢	1.4¢	1.9¢	21.5¢	3.0¢

It will be noted that the Wilshire Boulevard line is the outstanding line in all respects, considering gross revenue, mileage operated, net operating income and gross revenue and operating income per coach mile. The operating expense per coach mile is slightly less than the Sunset line, both lines, however, being high because of the use of two-men crews in many instances.

The depreciation expense included is that shown by the books, and in many instances is not representative because depreciation for many coaches in service has been fully accrued.

The following charts show net income, total passengers carried, and income per passenger for year 1934. The Wilshire line is outstanding both in earnings and travel. Sunset Boulevard, Western Avenue and Crenshaw-Vine-LaBrea Avenue are all good earners.



CHAPTER XVI

PRESENT SERVICE

In this chapter will be presented the principal characteristics of the present service rendered by the three transportation utilities included in the study. The chapter is in the following sections:

- A. General Statement of Routes
- B. Entire Operations - Los Angeles Railway
- C. Rail Routes - Los Angeles Railway
- D. Motor Coach Routes - Los Angeles Railway
- E. Pacific Electric Railway
- F. Los Angeles Motor Coach Company

The Route Map accompanying the report (last page of report) shows the present routes operated.

SECTION A

GENERAL STATEMENT OF ROUTES

Service is rendered in the Los Angeles Area by means of 33 main rail routes and 5 main coach routes entering the downtown business district of Los Angeles. In addition there are a number of crosstown, shuttle and feeder lines, both rail and coach. The following shows the lines in the various classifications:

MAIN ROUTES - RAIL

Los Angeles Railway

- | | |
|--|--|
| A West Adams Blvd. & Angeleno Heights | R Whittier Blvd. & West 3rd Street |
| B Brooklyn & Hooper Avenues | S San Pedro Street & Western Avenue |
| D West 6th Street & Central Station | U University & Central Avenue |
| F East 4th & Hoover Streets | W West Washington Blvd. & Highland Park |
| G Griffith Avenue | 2 Griffin Avenue & Crown Hill |
| H Maple Avenue and Heliotrope Drive | 3 West 6th Street & Larchmont Blvd. |
| I West 1st Street | 5-6 Eagle Rock & Hawthorne |
| J West Jefferson Blvd. & Huntington Park | 7 South Broadway & Civic Center |
| L West 11th & West Temple Streets | 8 West 54th Street & Civic Center |
| N West 9th Street & Civic Center | 9 West 48th Street & East 2nd Street |
| O North & South Main | 10 Lincoln Park-Vernon & Arlington Avenues |
| P West Pico & East 1st Street | |

Pacific Electric Railway

- | | |
|--|--|
| Edendale - Central Station | Subway - Hollywood Blvd. |
| Hill Street - Echo Park Avenue | Vineyard - Hollywood Blvd. |
| L.A.-Santa Monica Blvd.-West Hollywood | L.A. - Watts |
| L.A.-Sierra Vista | L.A. - Western-Franklin (peak service) |
| Subway - Beverly Hills | L.A. - Walker |

MAIN ROUTES - MOTOR COACH

Los Angeles Railway

- No.44 Beverly Blvd.
- 47 East 9th & Whittier Blvd.
- 49 Figueroa Street

Los Angeles Motor Coach Company

- No.82 Wilshire Blvd.
- 83 Sunset Blvd.

CROSSTOWN, SHUTTLES & FEEDERS

Los Angeles Railway - Rail

V Vernon & Vermont Avenues	34 Gage Street - Shuttle
K East Jefferson Blvd. & So. Vermont Ave.	35 Indiana Street - "
31 Boyle Avenue - Shuttle	36 Mateo Street - "
32 Edgeware Road- " (part time)	37 61st Street - "
33 Evergreen Ave.- "	

Los Angeles Railway - Motor Coach

No. 41 Alvarado Street	No. 54 Manchester-Firestone-Santa Ana Street
42 Avalon-San Pedro-S. Main Street	55 Maywood - Bell
43 Ave. 50 & El Paso Drive	56 Melrose Avenue
45 Eagle Rock	57 Normandie Avenue
46 East Florence Avenue	58 Slauson Avenue
48 Fairview Heights	59 State - Southern
50 Florence-Soto	60 Van Ness Avenue
51 Hollydale	61 Verdugo Road
52 Inglewood	62 Washington-Adams-Jefferson
53 Lincoln Park Avenue	63 York Boulevard
	64 Highland Park

Pacific Electric Railway

Rail	- L.A.-Western-Franklin
Motor Coach	- Emery Park
	- South Pasadena-Highland Park-Monterey Road

Los Angeles Motor Coach Company

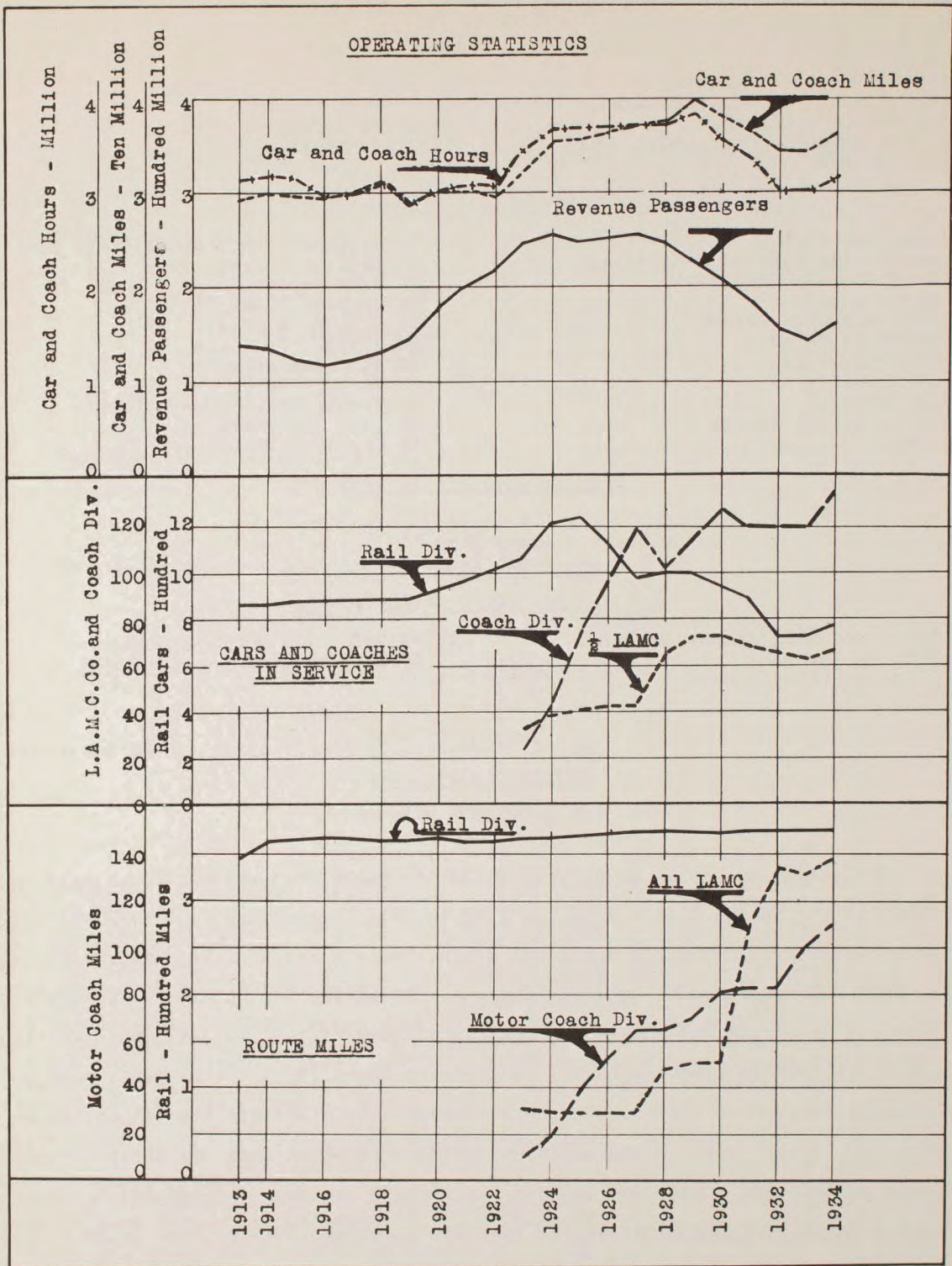
No. 81 Hollywood-Long Beach-San Pedro	No. 86 Vermont-Glendale-Riverside
84 Western Avenue	87 Silverlake-Hyperion-Talmadge
85 Crenshaw-Vine-La Brea	88 Olympic Blvd.

SECTION B

ENTIRE OPERATIONS

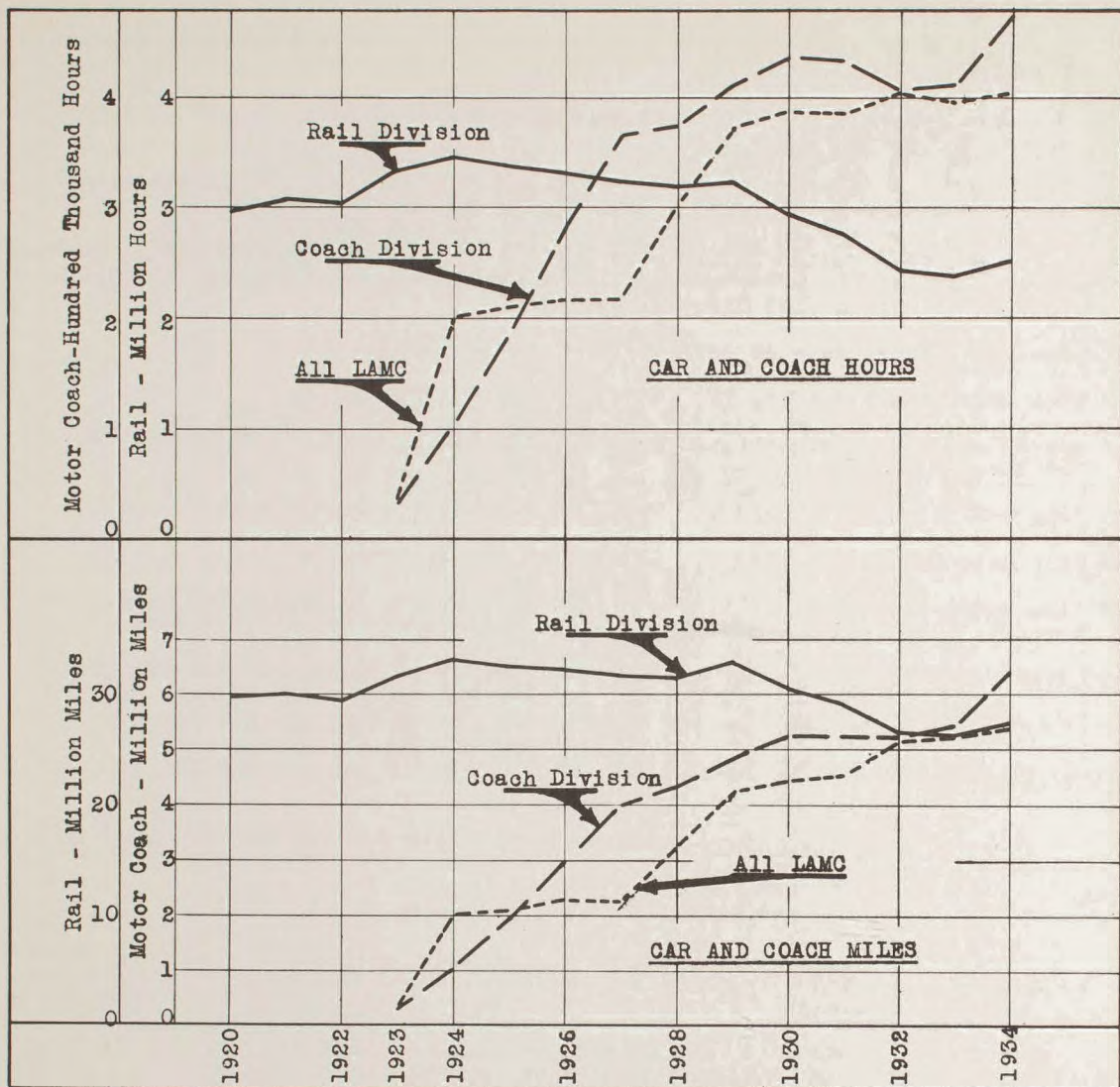
LOS ANGELES RAILWAY

The charts appearing on the two following pages show graphically operating statistics for the years 1913 to 1934 and 1920 to 1934, respectively. The chart headed "Operating Statistics" shows car and coach hours, car and coach miles, and revenue passengers for Rail and Motor Coach Divisions and one-half of the Los Angeles Motor Coach Company. The set of curves shows cars and coaches in service for the rail and coach divisions and those coaches operated by the Los Angeles Motor Coach Company and owned by the Los Angeles Railway. The third set of curves shows route miles for the two divisions and the entire Los Angeles Motor Coach Company. It will be noted from the first two sets of curves that street cars in service followed in general the trend of revenue passengers, reaching a peak in 1925 and dropping off to a low in 1932. Coaches used in service of the coach division and the Los Angeles Motor Coach Company, however, have in general increased over that period of time. Route miles as shown by the third set of curves reflect a rapid increase for both the motor coach operations from 1923 to 1934, whereas for the Rail Division route miles have been practically constant since 1914.



The chart on the following page shows two sets of curves, one for car and coach hours and the other for car and coach miles segregated between rail and coach divisions and the entire operation of the Los Angeles Motor Coach Company. These curves represent the component parts of the first set of curves on the foregoing chart. Although car and coach miles for motor coach operations have increased each year since the operations were started, car and coach hours dropped off slightly in 1930, 1931 and 1932, increasing

again in 1934. The year 1934 showed an increase for car hours and miles for the rail operations also.



SECTION C

RAIL LINE SERVICE

LOS ANGELES RAILWAY

History of Rail Service Changes

Changes from time to time have been made in the street car routes. A general change in routing was made in 1920. For the purpose of this report, important changes made since January, 1, 1929, are briefly listed as follows:

"A" line formed June 12, 1932, from a combination of former "2" and "3" lines. On Nov. 11, 1934, half of the service on the Sunset and Beaudry (north) end was rerouted to Edgeware Road Branch.

"G" line terminated at Sunset and Beaudry July 20, 1930. Terminal changed to North Spring and Bellevue Streets on June 12, 1932, and on June 2, 1935, to North Spring and Macy Streets.

- "H" line - 50% of service turned back at Jefferson and Maple Avenue during base period.
- "L" line changed on June 12, 1932, to its present route, combining portions of former "L" and "C" lines.
- "N" line changed on June 12, 1932, from service to Santa Fe Station to present terminus at Civic Center.
- "O" line extended August 9, 1931, on Main Street from Slauson Avenue to Florence Avenue.
- "R" line branch on Larchmont changed on January 11, 1931, to "3" line and all service operated to 3rd and La Brea Avenue.
- "S" line extended January 11, 1931, on Central Avenue from 77th Street to Manchester, and on December 25, 1934, all service routed via Central Avenue, providing shuttle service on 61st Street line.
- "2" line established June 12, 1932.
- "3" line established January 11, 1931.
- "7" and "8" line established June 12, 1932, absorbing portions of former "M" and "N" lines.
- "7" line established November 11, 1934, from former "8" and "9" line.
- "8" line established November 11, 1934, from former "7" and "9" line.
- "9" line established June 12, 1932, absorbing portions of former "M" line. Line separated November 11, 1934, absorbing portions of "7" and "8" lines.
- "10" line established June 12, 1932, from portions of former "M" and "A" lines.

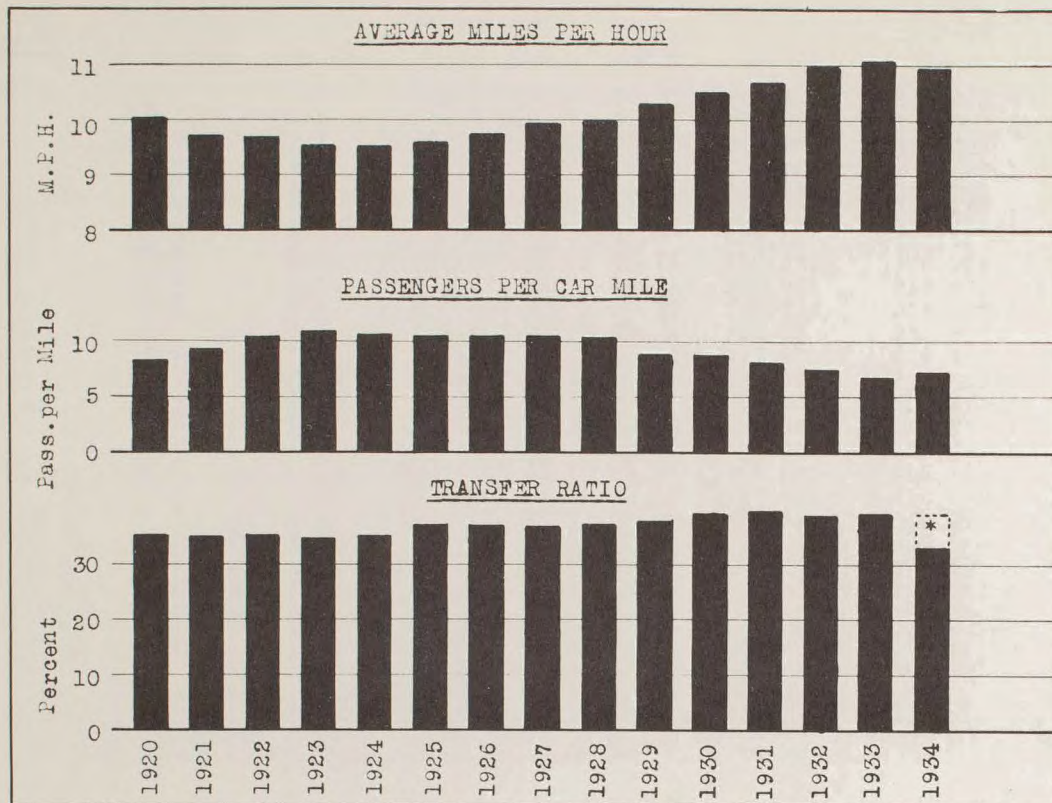
Operating Statistics

The following tabulation shows operating data for the Rail Division from 1920 to 1934.

Year	Miles of Revenue Track	Cars in Service	Car Miles	Miles per Hour	Total Passengers Carried	Total Passengers Per Car Mile
1920	366.78	926	29,980,056	10.04	247,749,056	8.26
1921	360.76	962	30,062,428	9.70	278,480,403	9.26
1922	360.76	1,012	29,458,292	9.64	303,139,305	10.29
1923	367.13	1,077	31,813,926	9.58	341,171,607	10.72
1924	367.38	1,220	33,089,169	9.53	346,213,241	10.46
1925	370.14	1,243	32,564,123	9.60	337,259,529	10.36
1926	371.15	1,137	32,184,312	9.74	333,999,608	10.38
1927	374.88	986	31,821,071	9.86	332,351,789	10.44
1928	375.07	1,000	31,532,662	9.88	323,244,398	10.25
1929	373.61	1,000	32,996,047	10.23	289,938,238	8.79
1930	373.27	950	30,485,617	10.47	264,725,465	8.68
1931	376.05	895	29,123,452	10.65	234,215,637	8.04
1932	375.60	725	26,656,917	10.99	197,247,503	7.40
1933	375.26	725	26,406,038	11.01	178,806,594	6.77
1934	376.58	775	27,490,183	10.97	194,688,730	7.08

Cars in service decreased from 1243 in 1925 to 725 in 1933, or 41.6%; car miles operated decreased from a peak of 33,089,169 in 1924 to a low of 26,406,038 in 1933, or 20.2%; total passengers carried decreased from a peak of 346,213,241 in 1924 to a low of 178,806,594 in 1933, or 48.3%; and passengers per car mile decreased from 10.72 in 1923 to 6.77 in 1933, or 36.8%.

The following charts show average miles per hour, passengers per car mile, and transfer ratio for the period 1920 to 1934.



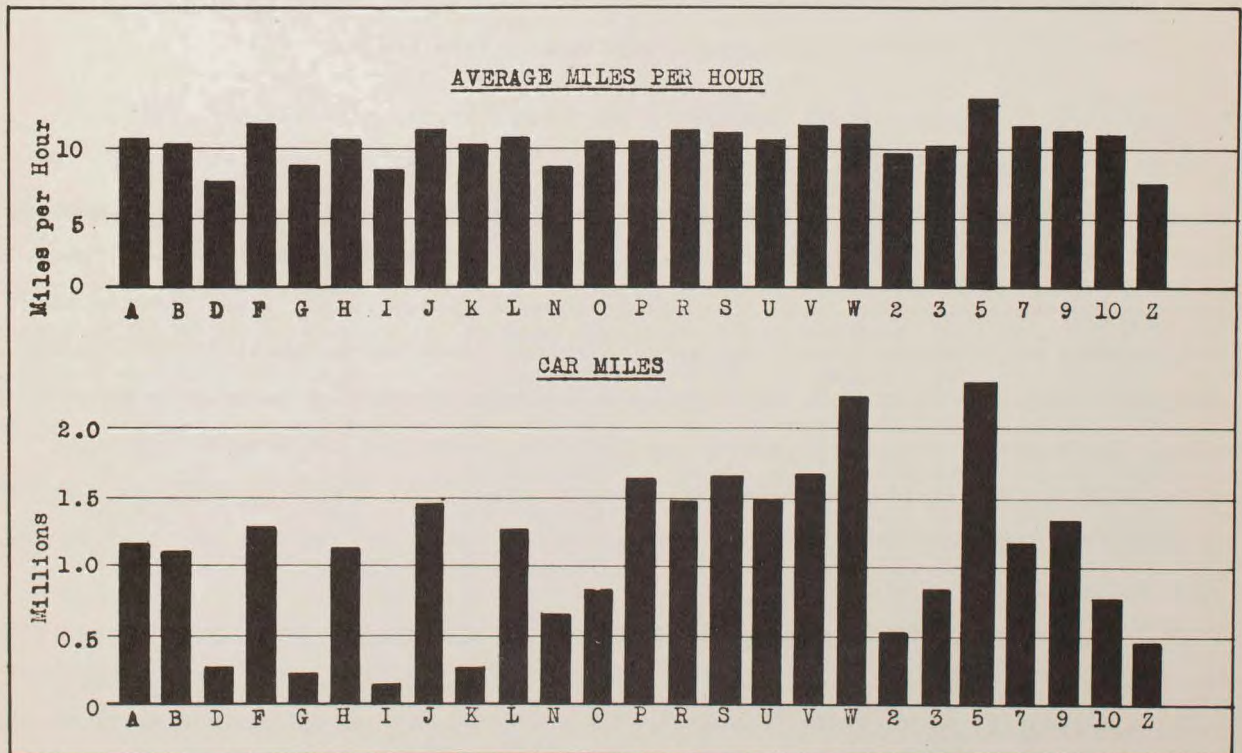
* After adjusting for weekly pass use.

The average schedule speed as shown by the above chart has been increasing gradually from 9.53 miles per hour in 1924 to 11.01 in 1933, an increase of 16%. This increase in schedule speed has been accomplished in spite of the fact that automobile traffic on the streets of Los Angeles has also been rapidly increasing over the same period of years, which would tend to reduce schedule speeds rather than increase them, other things being equal. The increase in schedule speed may be partially due to the decrease in passengers carried as shown by the foregoing chart of passengers per car mile. The transfer ratio as shown by the foregoing chart has not changed appreciably since 1920, it having been 35.3 in that year and a maximum of 38.9 in 1931, an increase of 10%. The transfer ratio as shown represents the ratio between free transfer passengers and revenue passengers.

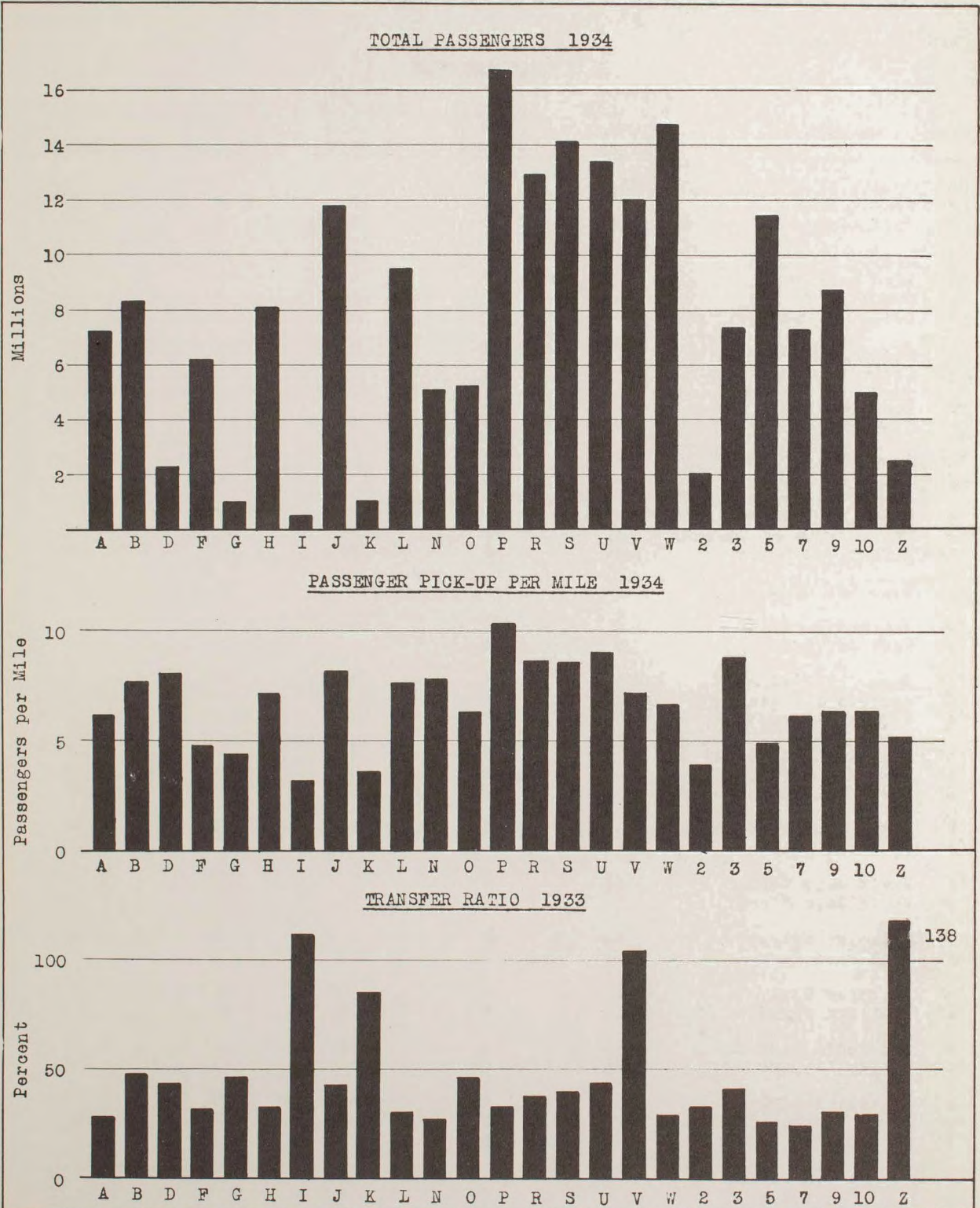
Due to installing the weekly pass system the transfer ratio as obtained from the number of transfers actually collected, dropped off in 1934. This condition, however, was brought about through the use of weekly passes by passengers who would otherwise have used transfers. The dotted portion of the bar for 1934 indicates the ratio after adjusting to account for use of passes.

Various operating and travel data are shown by lines by the following tabulation and charts for the year 1934. The letter "Z" has been used to indicate shuttle lines and miscellaneous.

Line	Car Miles	Car Hours	Miles per Hour	Total Passengers	Percent of Total	Passenger Pick Up per Mile	Miles Run per 1000 Passengers
A	1,169,133	107,706	10.85	7,208,146	3.7%	6.17	162
B	1,100,599	108,759	10.12	8,288,362	4.2	7.53	133
D	281,285	36,710	7.66	2,275,170	1.2	8.09	124
F	1,293,596	109,409	11.82	6,173,408	3.2	4.77	210
G	226,396	26,703	8.48	1,012,691	.5	4.47	224
H	1,126,448	105,408	10.69	8,077,665	4.1	7.17	139
I	136,112	16,050	8.48	430,157	.2	3.16	316
J	1,439,014	126,721	11.35	11,798,866	6.1	8.20	122
K	299,348	29,452	10.16	1,075,622	.6	3.59	278
L	1,264,774	115,073	10.99	9,581,169	4.9	7.58	132
N	668,828	76,399	8.75	5,188,662	2.7	7.76	129
O	829,610	79,425	10.44	5,202,628	2.7	6.27	159
P	1,620,611	155,245	10.44	16,742,047	8.6	10.33	97
R	1,494,702	132,624	11.27	12,864,639	6.6	8.61	116
S	1,659,154	149,839	11.07	14,167,616	7.3	8.54	117
U	1,495,304	140,025	10.68	13,460,571	6.9	9.00	111
V	1,688,807	143,322	11.78	12,035,160	6.1	7.13	140
W	2,220,888	188,122	11.81	14,750,849	7.6	6.64	151
2	525,216	53,696	9.78	2,086,239	1.1	3.97	252
3/4	824,850	82,129	10.04	7,324,419	3.8	8.88	113
5/6	2,319,917	169,654	13.67	11,453,078	5.9	4.94	203
7/8	1,193,213	102,414	11.65	7,231,741	3.7	6.06	165
9	1,346,498	118,321	11.38	8,744,547	4.5	6.49	154
10	798,275	72,563	11.00	5,098,476	2.6	6.39	157
Shut.(Z)	467,605	61,087	7.65	2,416,802	1.2	5.17	193
Total	27,490,183	2,506,856	10.97	194,688,730	100.0%	7.08	141



The average miles per hour on the various lines ranges from a low of 7.66 on the "D" line to a high of 13.67 on the "5/6" line, the average for all lines being 10.97%. In total car miles operated, the "5/6" and "W" lines rank at the top of the list.



Present Headways

The following tabulation shows existing headways on rail lines as of August 13, 1935, for the peak and base periods. The headways as shown in the various periods of the day represent inbound from terminal or district indicated in all period except the P.M. rush which represent the headways entering the congested district for the terminal or district indicated.

		<u>Rail Line Headways</u>				
Line	District	Average	DAY BASE	Average	EARLY NIGHT	NIGHT BASE
		A.M. RUSH 7:00am 8:30am	8:30am 4:30pm	P.M. RUSH 4:30pm 6:00pm	6:00pm 9:00pm	9:00pm 12:30am
'A'	Temple St. Branch	11	12	10	(a)	(a)
'A'	Sunset Branch	11	12	10	8	15
'A'	West Adams	3	6	3½	8	15
'B'	Miller & Ramona	4	(b)	7	(b)	(b)
'B'	Alma & Ramona	4	(b)	4	(b)	(b)
'B'	Brooklyn Ave.	4	7	4	8	10
'B'	Hooper Avenue	6	7	5½	8	10
'D'	Central Station	10	12	7	10	10
'D'	West 6th Street	10	12	7	10	10
'F'	East 4th Street	6	8	6	15	15
'F'	Hoover Street	4½	8	4½	15	15
'G'	North Spring	9	14	9	(c)	(c)
'G'	Griffith Avenue	8	14	7	(c)	(c)
'H'	Maple Ave. (Jefferson St)	-	12	-	-	-
'H'	Maple Ave. (3rd Street)	5½	12	5½	10	12
'H'	Heliotrope Drive	4½	6	3½	10	12
'I'	West 1st Street	10	12	9	10	10
'J'	Huntington Park	4	6	4½	8	12
'J'	West Jefferson	4	6	4	8	12
'K'	East Jefferson	12	12	12	20	20
'K'	Jefferson & Vermont	12	12	12	20	20
'K'	Vermont Avenue	12	12	12	(c)	(c)
'L'	Fountain & Edgemont	8	8	8	8	12
'L'	Fountain & Virgil	4	8	4	8	12
'L'	West 11th Street	4	8	5	8	12
'N'	Civic Center	4	6	4½	8	12
'N'	West 9th Street	4	6	4½	8	12
'O'	North Main Street	6½	8	7	10	12
'O'	South Main Street	7	8	7	10	12
'P'	East 1st Street	3½	5	3	7½	10
'P'	West Pico Street	2½	5	2½	7½	10
'R'	Whittier Blvd	4	6	3½	10	10
'R'	West 3rd Street	4	6	3½	10	10
'S'	San Pedro Street	4½	6	4½	10	10
'S'	Western Avenue	3½	6	3	10	10
'U'	Central Avenue	4½	6	5	7½	10
'U'	South Vermont (Branch)	8	12	8	15	20
'U'	39th Street (Branch)	8	12	8	15	20
'V'	Vermont Ave.	3½	6	4½	7½	10
'V'	Downey Rd Branch	10	12	9	15	20
'V'	Santa Fe Ave Branch	5½	12	7½	15	20

Line	District	Average	DAY BASE	Average	EARLY NIGHT	NIGHT BASE
		A.M. RUSH 7:00am 8:30am	8:30am 4:30pm	P.M. RUSH 4:30pm 6:00pm	6:00pm 9:00pm	9:00pm 12:30pm
'W'	No Figueroa	6	10	6	12	16
'W'	York Blvd Branch	6	10	6	12	16
'W'	West Washington Street	3½	5	3½	6	8
2	Griffin Avenue	9	10	10	10	15
2	Crown Hill	8	10	9	10	15
3	Central Station	5½	6	4	10	12
3	West 6th Street	3½	6	3½	10	12
5-6	Eagle Rock City	4½	8	4	15	15
5-6	Hawthorne	6	8	3½	15	15
5-6	Inglewood	4	8	3½	15	15
7	Civic Center	4½	8	5	15	15
7	South Broadway	4½	8	4	15	15
8	Civic Center	4½	8	5	15	15
8	West 54th Street	3½	8	4	15	15
9	East 2nd Street	5½	8	5	15	15
9	West 48th Street	4	8	4½	15	15
10	Lincoln Park	10	10	10	10	12
10	Vernon & Arlington	10	10	10	10	12
10	54th & Crenshaw	11½	(c)	10	(c)	(c)
Shuttle Lines: (Z)						
	Boyle	9	12	7	(c)	(c)
	Edgeware Road	-	-	-	8	12
	Evergreen	6½	8	6½	10	15
	Gage	6	10	7	15	10
	Indiana	8	12	8	15	15
	Mateo	8	20	7	20	(c)
	61st Street	10	12	10	10	10

- (a) See Edgeware Road
 (b) See Evergreen
 (c) No Service

Equipment Required to Fill Schedule

CARS IN SERVICE daily except Saturdays and Sundays as of September 26, 1935,
 are as follows:

Line	AM RUSH	MID-DAY	PM RUSH	EARLY NIGHT	LATE NIGHT
	to 8:30 AM	to 4:30 PM	to 6:00 PM	to 9:00 PM	to 12:30
'A'	29	18	31	12	8
'B'	27	15	26	12	9
'D'	5	4	8	5	5
'F'	29	17	30	8	8
'G'	8	5	11	No Service	No Service
'H'	24	18	28	10	7
'I'	2	2	2	2	2
'J'	32	22	34	15	10
'K'	6	6	6	2	2
'L'	28	16	29	14	9
'N'	17	13	17	8	7
'O'	17	13	17	10	9
'P'	41	24	47	14	10
'R'	31	20	35	11	10
'S'	35	23	41	12	11
'U'	30	22	33	17	12
'V'	39	19	30	14	11
'W'	50	30	52	21	16
Sub Total	450	287	477	187	146

PRESENT SERVICE

<u>Line</u>	<u>AM RUSH</u> <u>to</u> <u>8:30 AM</u>	<u>MID-DAY</u> <u>to</u> <u>4:30 PM</u>	<u>PM RUSH</u> <u>to</u> <u>6:00 PM</u>	<u>EARLY NIGHT</u> <u>to</u> <u>9:00 PM</u>	<u>LATE NIGHT</u> <u>to</u> <u>12:30</u>
Fwd.	450	287	477	187	146
'2'	10	9	10	8	5
'3'	25	14	27	8	8
5-6	45	24	56	12	11
'7'	23	12	25	6	5
'8'	25	11	23	5	5
'9'	22	12	22	6	5
'10'	18	11	19	11	8
Shuttle Lines:					
Boyle	1	1	1	No. Service	No Service
Evergreen	3	5	3	4	3
Gage	2	1	2	1	1
Indiana	2	1	2	1	1
Mateo	2	1	2	1	No Service
61st St	1	1	1	1	1
Total	<u>629</u>	<u>390</u>	<u>670</u>	<u>251</u>	<u>199</u>

Assignment of Cars

The assignment of cars, exclusive of spare equipment, to lines as of September 19, 1935, follows:

<u>Line</u>	<u>Max.Cars</u>	<u>Body</u>	<u>Motors</u>	<u>Line</u>	<u>Max.Cars</u>	<u>Body</u>	<u>Motors</u>
				Fwd. 322			
'A'	31	C	2	'S'	42	B	2
		C	4			F	4
'B'	27	B	4			H	4
'D'	8	C	4	'U'	34	B	2
		B	4	'V'	39	C	2
'F'	30	B	2	'W'	56	B	2
'G'	11	G	2			K	4
'H'	28	B	2	'2'	10	B	2
'I'	2	A	4	'3&4'	27	B	4
'J'	34	B	2			H	4
		H	4	'5&6'	56	B	2
'K'	6	B	2			H-3	4
'L'	29	C	4	'7'	25	H-4	4
'N'	17	M	4	'8'	25	B	2
		H-4	4			K	4
'O'	17	B	4	'9'	22	B	2
'P'	47	B	2			K	4
		H	4	'10'	19	B	2
'R'	35	B	4	E Side	10	G	2
		H	2	Edgware	1	G	2
				61st	1	B	2
Sub Total	322			Total	689		

SECTION D

MOTOR COACH SERVICE

LOS ANGELES RAILWAY

History of Motor Coach Service

The first motor coach line established by the Los Angeles Railway was the South San Pedro Street extension on December 11, 1922. Since that date many additions and changes have been made, which are summarized in the following statements. The first statement covers the lines which are now in operation, as follows, as of September 1, 1935.

<u>No.</u>	<u>Name</u>	<u>Line Originally Established</u>	<u>No. of Changes in Route Since Original Routing</u>	<u>Present Routing Established</u>
41	Alvarado St.	11-25-25	1	12-20-26
42	Avalon-San Pedro-Main	12-11-22	11	8-9-31
43	Ave. 50 and El Paso	4-22-29	1	1-2-35
44	Beverly Blvd. (d)	10-15-23	15(e)	11-9-34
45	Eagle Rock City	9-8-25	3	3-7-32
46	East Florence Ave.	7-22-34	0	7-22-34
47	East 9th & Whittier Blvd.	5-1-27	3	4-17-35
48	Fairview Heights	2-16-29	2	8-1-35
49	Figueroa Street	9-22-24	3	11-3-27
50	Florence Ave. & Soto St.	6-17-25	9	5-2-34
51	Hollydale	8-1-33(a)	1	7-22-34
52	Inglewood	7-6-25	1	4-2-33
53	Lincoln Park Ave.	6-11-23	2	5-8-32
54	Manchester-Firestone-Santa Ana	4-1-26	7	1-23-34
55	Maywood-Bell	1-23-34(b)	2	6-15-34
56	Melrose Ave. (d)	9-6-24	7	8-14-33
57	South Normandie Ave.	10-19-25	5	9-26-34
58	Slauson Ave.	3-27-33	4	9-28-33
59	State-Southern	8-1-33(a)	3	7-22-34
60	Van Ness Ave.	6-1-30	1	6-25-34
61	Verdugo Road	12-1-26	4	9-12-34
62	Washington-Adams-Jefferson	10-25-25	8	3-1-33
63	York Blvd.	10-8-23	1(c)	5-13-30
64	Highland Park	1-2-35	0	1-2-35

(a) Acquired Southgate Municipal Bus Service.

(b) Acquired from Eastside Transit Company.

(c) Service discontinued 12-1-23 to 4-21-24.

(d) Melrose and Beverly lines operated as one line 4-17-32 to 8-14-33.

(e) Extended to downtown business district 8-14-33.

The following lines were started as Los Angeles Railway operations and later transferred to Los Angeles Motor Coach Company:

<u>Line</u>	<u>Date Established</u>	<u>Date Transferred</u>
La Brea Ave.	7-3-27	5-4-28
Olympic Blvd.	4-1-31	4-7-34
Wilshire Blvd.	10-10-23	5-4-28

The following lines were established and later discontinued:

<u>Line</u>	<u>Date Established</u>	<u>Date Discontinued</u>	<u>Reason</u>
Crescent Heights	11-13-27	2-1-28	Lack of patronage
Crown Hill (Temp.)	9-14-31	5-8-32	Rail reconstruction
Edgeware Road (Temp.)	9-14-31	3-16-32	" "
Mateo Street (Temp.)	8-18-30	7-27-31	Viaduct construction
Olympic Village (Temp.)	6-20-32	8-21-32	Olympic Games
Santa Fe Ave.-South	11-6-24	10-23-32	Lack of patronage

Application to the Railroad Commission was recently made for authority to abandon the No. 48, Fairview Heights line, the No. 49, Figueroa Street line, and the portion of the No. 42, Avalon-San Pedro-Main Street line on San Pedro Avenue. Subsequently the application for abandonment of the Figueroa Street line was withdrawn and a trial operation of a new route on the Fairview Heights line agreed to.

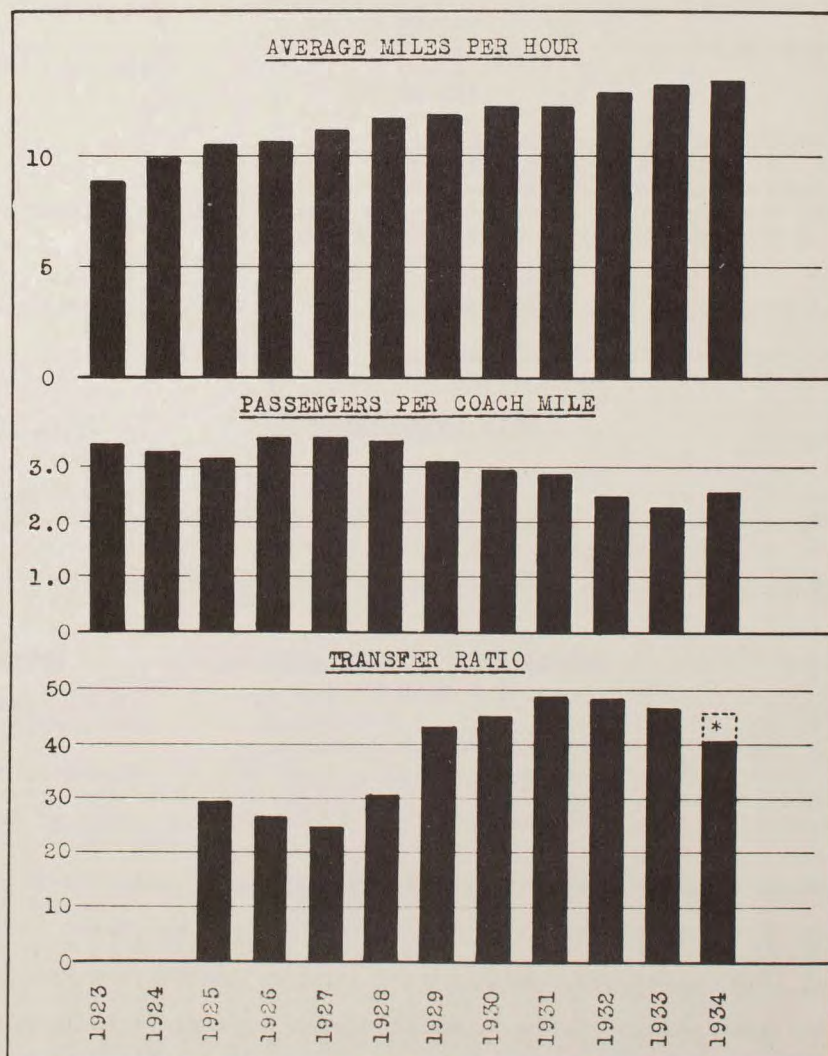
Operating Statistics

Operating information for the Coach Division since its inception in 1923

follows:

Year	Miles of Route	Coaches		Coach Miles	Miles per Hour	Total Passengers Carried	Total Passengers Per Coach Mile
		Assigned	Scheduled				
1923	11.22	24	15	294,732	8.82	1,003,799	3.41
1924	19.89	43	29	1,035,664	9.98	3,361,966	3.25
1925	39.76	74	58	1,935,119	10.49	6,105,539	3.16
1926	53.62	96	65	2,999,409	10.57	10,652,828	3.55
1927	64.82	119	94	4,061,699	11.07	14,400,456	3.54
1928	65.16	102	89	4,322,161	11.58	14,880,210	3.44
1929	69.99	116	101	4,851,243	11.79	15,088,126	3.11
1930	81.07	128	100	5,292,275	12.04	15,812,497	2.99
1931	83.07	120	95	5,257,451	12.16	15,152,838	2.88
1932	83.48	120	92	5,240,359	12.84	12,884,662	2.46
1933	101.14	120	102	5,443,871	13.23	12,367,396	2.27
1934	111.54	136	110	6,449,229	13.45	16,216,364	2.51

Average miles per hour, passengers per coach mile, and transfer ratio are shown by the following charts.

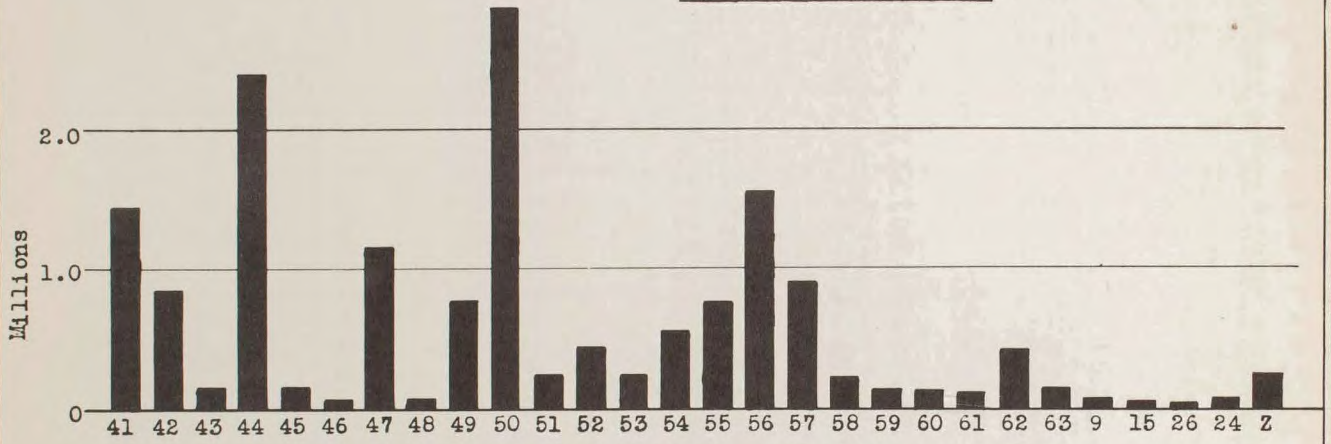


*After adjusting for weekly pass.

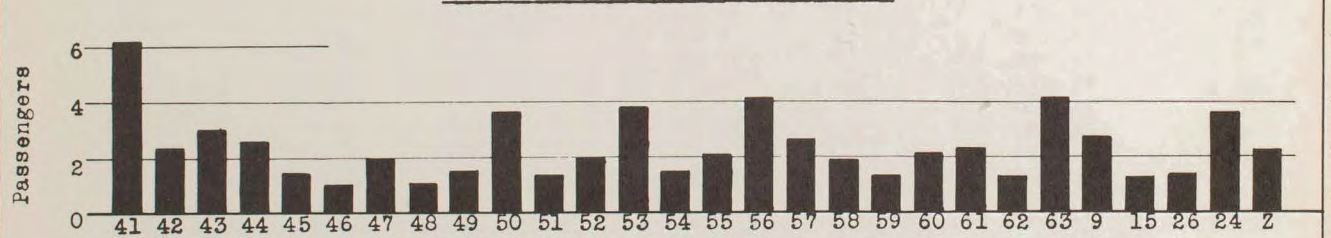
Schedule speed has been increased from 8.8 m.p.h. in 1923 to 13.44 in 1934, or 53%. This increase has probably been due to use of more modern equipment, increased efficiency of supervision and operation, the increase in speed of other automotive vehicles using the same roadway, and in large measure to extensions of service in outlying territory where higher operating speeds are possible. Average motor coach speed exceeds that of rail cars by 2.47 m.p.h. for the year 1934, that for rail being 10.97.

Passengers per car mile have decreased gradually from 3.55 in 1926 to 2.27 in 1933, increasing slightly in 1934 to 2.51. This trend has not followed the trend of coach miles which increased from 2,999,409 in 1926 to 5,292,275 in 1930, an increase of 76% in coach miles. Passengers carried increased from 10,652,828 in 1926 to 15,812,497 in 1930, an increase of about 50%.

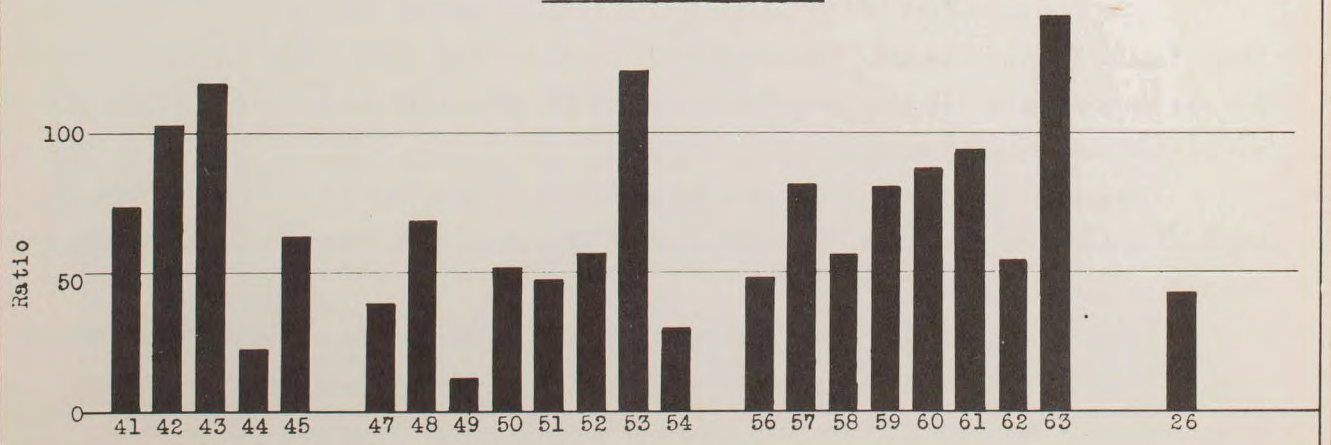
TOTAL PASSENGERS 1934



PASSENGER PICK-UP PER MILE 1934



TRANSFER RATIO 1933



The foregoing charts show two lines carrying in excess of two million passengers for the year 1934, the No. 50, Florence-Soto line, being close to three million and the No. 44, Beverly Boulevard line, carrying approximately two and one-half million. The following tabulation shows the total passengers carried during the year 1934 by groups.

2,500,000 to 3,000,000	-	No. 50
2,000,000 to 2,500,000	-	No. 44
1,000,000 to 2,000,000	-	No. 56, 41, 47
500,000 to 1,000,000	-	No. 57, 42, 49, 55, 54
250,000 to 500,000	-	No. 52, 62
Less than 250,000	-	All others

Travel and operating information by lines for the year 1934 has been tabulated

below:

Line	Coach Miles	Coach Hours	Miles per Hour	Total Passengers	Passenger Pick Up per Mile	Miles Run per 1000 Passengers
41	233,330	23,649	9.87	1,435,921	6.15	162
42	363,694	26,320	13.82	846,614	2.33	430
43	50,972	4,387	11.62	154,677	3.03	330
44	904,205	70,216	12.88	2,400,262	2.65	377
45	107,551	8,392	12.82	157,021	1.46	685
46	46,931	3,088	15.20	48,942	1.04	959
47	562,885	41,634	13.52	1,152,948	2.05	488
48	56,875	4,367	13.02	61,058	1.07	931
49	510,657	39,362	12.97	780,670	1.53	654
50	802,028	56,566	14.18	2,880,969	3.59	278
51	171,869	12,029	14.29	230,396	1.34	746
52	221,463	17,116	12.94	430,758	1.95	514
53	61,668	6,807	9.06	233,057	3.78	265
54	391,010	22,986	17.01	559,854	1.43	698
55	364,991	26,471	13.79	762,215	2.09	479
56	385,859	29,912	12.90	1,571,666	4.07	246
57	356,898	25,906	13.78	904,143	2.53	395
58	114,069	8,426	13.54	218,440	1.91	522
59	99,052	6,892	14.37	139,508	1.41	710
60	57,995	4,337	13.37	126,458	2.18	459
61	49,106	4,145	11.85	116,301	2.37	422
62	306,069	19,273	15.88	418,950	1.37	731
63	36,163	4,311	8.39	148,244	4.10	244
9	21,963	1,585	13.86	59,438	2.71	370
15	23,970	1,464	16.37	32,364	1.35	741
26	21,452	1,633	13.14	31,595	1.47	679
24	19,180	1,414	13.56	68,938	3.59	278
Airp't	944	161	5.86	1,753	1.86	539
School	106,380	6,661	15.97	243,204	2.29	437
Total	<u>6,449,229</u>	<u>479,510</u>	<u>13.45</u>	<u>16,216,364</u>	<u>2.51</u>	<u>398</u>

The Florence-Soto No. 50 line carried more passengers during 1934 than any other line, followed by the Beverly Boulevard line, which carried about 400,000 less. Receipts for the former, with its high transfer ratio and 7¢ fare, were less, however, than for the latter with its low ratio and 10¢ fare.

There was a variation in speed from 8.39 miles per hour on the No. 63 line to 17.01 on the No. 54, Manchester-Firestone-Santa Ana line. The former is a short line and the latter one of the longest.

Passenger pick-up per mile ranges from 1.04 on the No. 46, East Florence Avenue line, to 6.15 on the No. 41, Alvarado Street line. The No. 48, Fairview Heights line, shows a pick-up per mile of only 1.07 passengers.

Headways and Coaches in Service

Daily Except Saturdays and Sundays

No.	Line	AM - Rush to 9:00 AM		Midday to 4:00 PM		PM - Rush to 6:30 PM		Early Night to 8:00 PM		Late Night to Close	
		MC'S.	Hdwy.	MC'S.	Hdwy.	MC'S.	Hdwy.	MC'S.	Hdwy.	MC'S.	Hdwy.
41	Alvarado	4	10	4	9	4	10	4	12	3	12
42	Ava-S.Ped.Mn.	5	10	4	12	5	10	3	15	3	15
43	Avenue 50	1	15	1	15	1	15	1	15	-	-
44	Beverly	22	4½	11	8	24	4½	9	10	6	15
45	Eagle Rock	2	12	2	15	2	12½	2	15	2	15
46	East Florence	1	20	1	20	1	20	1	20	1	20
47	East 9th St.	11	7½	7	10	12	6½	6	18	3	20
48	Fairview Hts.	1	20	1	20	1	20	1	20	-	-
49	Figueroa	7	9	7	10	9	8½	6	15	4	15
50	Florence-Soto	17	7	13	11	13	10	10	11	7	15
51	Hollydale	2	30	2	30	2	30	2	30	1	60
52	Inglewood	3	12	3	12	3	12	3	15	2	20
53	Lincoln Park	1	10	1	10	1	10	1	15	1	15
54	Man-Fire-S.Ana	4	20	4	20	4	20	3	30	3	30
55	Maywood-Bell	4	15	4	15	5	13	3	20	3	20
56	Melrose	7	6½	4	10	6	7	5	10	3	12
57	Normandie	7	7½	4	12	8	6½	7	13	3	15
58	Slauson	2	15	2	15	2	15	2	15	-	-
59	State-Southern	1	20	1	20	1	20	1	20	1	20
60	Van Ness	1	20	1	20	1	20	1	20	-	-
61	Verdugo Road	1	12	1	15	1	12	1	12	-	-
62	Wash-Adams-Jeff.	4	10	3	15	4	10	2	20	2	20
63	York Blvd.	1	12	1	15	1	12	1	15	-	-
64	Highland Park	4	13	4	15	4	15	4	15	3	20
Total		113		86		115		79		51	

Length of Route and Equipment Usually Assigned to Lines

No.	Line	Miles One-Way	Equipment	
			Type No.	Seating Capacity
41	Alvarado Street	2.99	18	30
42	Avalon-San-Pedro-Main	5.35	3	29
43	Avenue 50-El Paso Drive	1.39	3	29
44	Beverly Blvd.	9.19	20,21,22,25*	39 to 41
45	Eagle Rock City	2.84	3	29
46	East Florence Avenue	2.51	1	21
47	East 9th-Whittier Blvd.	7.55	16	29
48	Fairview Heights	2.68	3	29
49	Figueroa Street	7.23	16	29
50	Florence-Soto	13.79	19	29
51	Hollydale (County Farm)	7.05	3	29
52	Inglewood	3.84	3	29
53	Lincoln Park Avenue	.86	24	21
54	Manchester-Firestone-S.Ana	11.53	1,4	21,23
55	Maywood-Bell	7.48	15	29
56	Melrose Avenue	4.07	9,23	29
57	Normandie Avenue	5.50	3	29
58	Slauson Avenue	3.39	3	29
59	State-Southern	2.40	1	21
60	Van Ness Avenue	2.38	3	29
61	Verdugo Road	1.34	12	21
62	Wash-Adams-Jefferson	5.57	1,4	21
63	York Blvd.	.86	3	29
64	Highland Park	5.74	15	29
Total		117.53		

* Type 25, new 41-passenger equipment; delivery in Sept. 1935.

Note: Airport Express Line operates between Pershing Square and Los Angeles Municipal Airport, and Airport Local Line operates along Imperial Highway, between Hawthorne Boulevard and Los Angeles Municipal Airport, at times of special events at this airport, and are not included in the above statement. The equipment used depends upon requirements each time.

SECTION E

PRESENT SERVICE

PACIFIC ELECTRIC RAILWAY COMPANY

History of Service

The following statements show some of the important changes in service of the Los Angeles local lines since 1920.

Hollywood Boulevard Line

2-7-26 Service operated into new Subway Terminal instead of Hill Street Station.

1-18-32 Hollywood-Venice Line changed to operate to Subway instead of Hill Street Station.

Sierra Vista Line

2-1-20 Sierra Vista line established. Separated from Alhambra-San Gabriel Line and 10-min. service operated during AM and PM peak periods with 20-min. service until 7:00 PM; then service performed by Alhambra-San Gabriel Line trains.

Watts-South Pasadena Line

2-10-23 Watts-South Pasadena Line split into two separate lines.

11-16-32 Service on Watts and South Pasadena Line consolidated.

2-2-35 Local rail service discontinued between General Hospital and South Pasadena, and motor coach service substituted.

Echo Park Avenue Line

1-18-32 Operated through to Vineyard instead of 12th and Hill at nights and all day Sundays.

Santa Monica Boulevard Line

2-7-26 Operated into new Subway Terminal instead of Hill Street Station.

Western & Franklin Line

12-3-24 Changed from a shuttle service between Vine and Hollywood and Santa Monica Boulevard and Western to a through service from Vine and Hollywood to 12th and Hill.

10-1-32 Changed from a through service to a 15 min. shuttle service with 6 trips inbound in the morning and 6 outbound in the evening peak to and from Vineyard daily except Sunday.

Walker

9-1-35 Service established from 6th and Main Streets to Walker Station, replacing Whittier interurban line.

Operating Statistics

Mileage and travel data covering Pacific Electric Railway Company's rail and motor coach lines, respectively, follow:

Year	Total Passengers	Car Miles	Rail		Total Passengers	Car Miles	Psgr.Pickup per Mile
			Psgr.Pickup per Mile	Year			
1920	31,246,812	6,164,261	5.07	1928	36,861,575	6,537,427	5.64
1921	34,958,423	6,439,898	5.43	1929	38,381,553	6,488,809	5.91
1922	36,862,191	6,699,989	5.35	1930	36,765,508	6,431,537	5.72
1923	43,118,267	7,406,415	5.82	1931	32,539,957	6,002,115	5.42
1924	41,311,956	7,132,480	5.79	1932	28,164,843	5,623,236	5.01
1925	38,209,955	6,794,642	5.62	1933	26,236,289	5,426,582	4.83
1926	37,276,607	6,570,453	5.67	1934	26,882,318	5,311,053	5.06
1927	37,404,505	6,504,604	5.75				

Year	Total Passengers	Coach Miles	Motor Coach		Coach Miles	Psgr. Pickup per Mile	
			Psgr. Pickup per Mile	Year			
1924	121,848	41,192	2.96	1930	361,204	176,194	2.05
1925	77,462	59,038	1.31	1931	463,533	227,601	2.04
1926	93,925	64,898	1.45	1932	312,533	176,061	1.78
1927	125,334	94,906	1.32	1933	158,666	115,343	1.38
1928	208,909	114,981	1.82	1934	166,932	104,767	1.59
1929	280,489	147,200	1.91				

Average Speed and Passengers per Car Mile

The following statement by lines shows the average schedule speed, based on week day schedules, including lay-over time. The passenger pick-up by lines is also shown:

Local Line	Average Speed in Miles per Hour	Passenger Pick-Up per Mile (1934)
Edendale	8.73	6.02
Echo Park Ave.	9.05	5.04
Santa Monica Blvd.	11.64	4.98
Hollywood-Subway	11.58	5.84
Hollywood-Vineyard	11.48	6.43
Western & Franklin Ave.	9.78	5.09
Watts	11.05	3.56
Sierra Vista	11.99	3.55
Walker	13.45	
Average	10.95	5.06

Existing Service

Rail

The following statement shows the headways operating on the various Los Angeles local rail lines as of September 1, 1935, the schedule being in effect daily except Sunday.

Line	Headway Opening to 6:00 AM	Headway 6:00 AM to 7:00 AM	Headway Morning Peak	Headway Base	Headway Evening Peak	Headway Evening	Headway Late Night
Edendale	20 min	10 min	7 min	10 min	7 min	10 min	20 min
Echo Park Avenue	20	15	10	15	10	15	15
Santa Monica Blvd. (a)	10	10	7½	10	7½	10	20
Western-Franklin (b)	-	12	10	15	10	15	15
Hollywood-Subway	20	15	10	10	8	15	15
Hollywood-Hill Street	20	10	10	10	10	15	30
Vineyard (c)	20	10	7	10	6	15	15
Sierra Vista	20	20	10	12	10	20	20
Watts-General Hospital	15	10	10	10	10	20	30
Walker Local	-	30	20	20	20	20	30

(a) Half of service to Cahuenga Pass and half to West Hollywood.

(b) Shuttle service between Vine and Hollywood and Western and Santa Monica except 6 trips inbound in morning and 7 outbound in evening from 12th and Hill Streets.

(c) From opening of service to 5:00, through service to Vineyard from Gardner Jct., after 5:00 PM service from Echo Park Avenue line.

All of the rail equipment used in service of Los Angeles Local Lines as of September 1, 1935, as shown on the following tabulation is of the 600 and 700 class center entrance type except two Birney one-man cars on the Western-Franklin line. Spare

equipment comprising 28 cars is assigned to the service, making a total of 154 - 600 and 700 class cars and 2 - 300 class cars.

Line	Opening to 6:00 AM	6:00 AM to 7:00 AM	Morning Peak	Base Headway	Evening Peak	Evening	Late Night
Edendale	6	9	11	7	11	7	3
Echo Park Avenue	3	6	6	4	11	7	7
Santa Monica Blvd.	8	13	15	10	16	10	6
Hollywood Blvd.	14	27	45	29	49	14	9
Western-Franklin	2	4	8	2	9	2	2
Sierra Vista	4	7	10	6	13	4	3
Watts-General Hospital	6	7	15	11	15	7	5
Walker Local	1	4	4	4	4	3	3
Total	44	77	114	73	128	54	38

Motor Coach

The motor coach lines classified in this study as Los Angeles Local Lines include the Emery Park Motor Coach Line and South Pasadena-Highland Park-Monterey Road Coach Line. The South Pasadena line was established January 2, 1935, in lieu of the South Pasadena local rail service and a portion of the Annandale-Adelaide Place-Hermon Local Motor Coach Line. The Annandale line now terminates at Avenue 57 and North Figueroa Street and is considered as a Pasadena local motor coach line. The Emery Park service was established on July 15, 1929, and the Annandale-Adelaide Place-Hermon line on April 2, 1928. The Hyperion-Glendale Motor Coach Line, formerly operated by the Pacific Electric Railway was transferred to the Los Angeles Motor Coach Company on July 1, 1932. The present service rendered on these lines is shown by the following table.

	<u>Emery Park Line</u>	<u>South Pasadena- Highland Park- Monterey Road Line</u>
	<u>minutes</u>	<u>minutes</u>
6:00 AM to 7:00 AM	30	15
Morning Peak	30	15
Base Headway	30	15
Evening Peak	30	15
Evening	30	15
Late Night	30	30

Intervals between trips on Emery Park line are irregular in some instances in order to make connections with Sierra Vista Local rail line service.

One motor coach (Class 200) is assigned to the Emery Park line, with no spares.

Three motor coaches (Class 150) are assigned to the South Pasadena-Highland Park-Monterey Road line, with one spare.

The Hollywood-Beverly Hills line via Sunset Boulevard is classed as an inter-urban service and has not been included in the study, although in certain respects it should be considered as partly a local service.

SECTION F

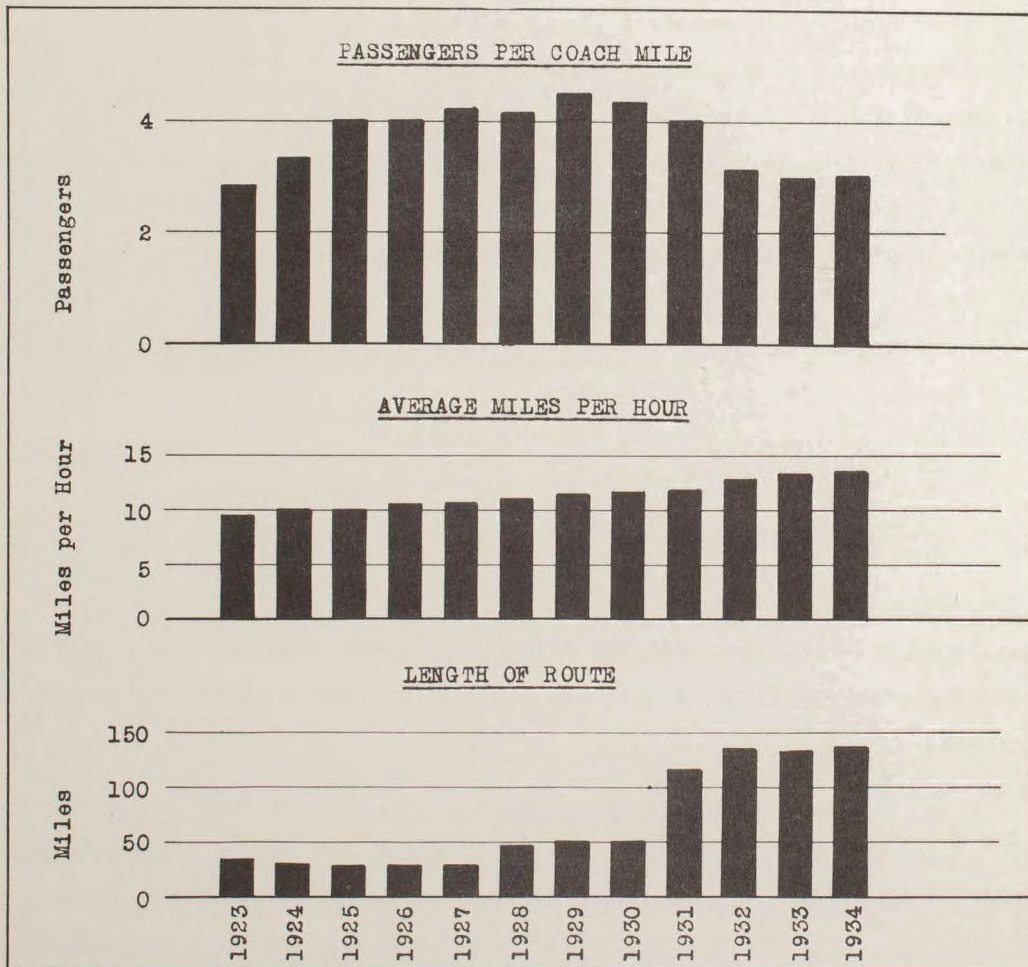
PRESENT SERVICE

LOS ANGELES MOTOR COACH COMPANY

The Los Angeles Motor Coach Company is a joint agency of the Los Angeles Railway and the Pacific Electric Railway organized for the purpose of supplying public passenger transportation service in the areas contiguous to the territory served exclusively by rail or motor coach lines of the two companies.

The agency began operations August 18, 1923, being then known as Los Angeles Motor Bus Company. The Western Avenue line was the first line to be operated, and in December of the same year operation of the Sunset Boulevard line and Vermont Avenue line was begun. It was through the medium of these lines that transfers between the Los Angeles Railway and the Pacific Electric Railway local lines were first established.

The following charts and tabulation show length of route, average speed and total passengers per coach mile by years.



Year	As of December 31		Total Coach Miles	Miles per Hour	Total Passengers Carried	Total Passengers Per Coach Mile
	Length of Route	Coaches Assigned Scheduled				
1923	31.92	66 22	326,892	9.17	917,804	2.81
1924	30.09	78 51	2,071,999	10.08	6,798,844	3.28
1925	29.02	80 59	2,146,629	9.92	8,473,285	3.94
1926	29.69	86 63	2,366,745	10.58	9,363,474	3.95
1927	29.79	86 64	2,406,327	10.73	10,138,576	4.21
1928	48.02	130 108	3,421,927	10.96	14,205,979	4.15
1929	50.75	146 118	4,260,498	11.42	18,890,480	4.43
1930	50.75	148 111	4,474,216	11.48	19,418,933	4.34
1931	115.85	136 105	4,558,415	11.82	18,209,317	3.99
1932	133.80	129 104	5,210,459	12.84	16,547,268	3.17
1933	131.91	123 101	5,268,450	13.27	15,654,999	2.97
1934	137.61	131 105	5,410,832	13.35	16,708,662	3.09

The increased coach mileage and miles per hour has been due largely to extensions into newer serving areas.

A chronological record showing the inauguration of service on the various lines follows:

No.	Name	Line Originally Established	No. of Changes in Route Since Original Routing	Present Routing Established
81	Hollywood-LongBeach-SanPedro	Nov. 1, 1931(e)	4	Apr. 24, 1934
82	Wilshire Boulevard	May 4, 1928(c)	3	Sept. 16, 1934
83	Sunset Boulevard	Dec. 20, 1923	2	Dec. 6, 1928
84	Western Avenue	Aug. 18, 1923	3	July 19, 1924
85	Crenshaw-Vine-LaBrea	Dec. 1, 1924(d)	7	Jan. 22, 1933
86	Vermont Avenue Griffith Park Greek Theatre - Observatory	Dec. 20, 1923) Jan. 5, 1924)(a) July 16, 1931	6 1	Apr. 30, 1933 May 15, 1935
87	Silverlake-Hyperion-Talmadge	July 1, 1932(b)	2	July 16, 1934
88	Olympic Boulevard	Apr. 8, 1934(c)	1	Jan. 28, 1935

- (a) Taken over from City of Los Angeles. (In part)
 (b) Taken over from Pacific Electric Railway. (In part)
 (c) Taken over from Los Angeles Railway. (In part)
 (d) La Brea line taken over from Los Angeles Railway May 4, 1928. (In part)
 (e) Taken over in part from West Side Transit Company.

Beverly Hills local line was established Sept. 1, 1933, and discontinued Nov. 12, 1933. Crescent Heights line was established Feb. 8, 1932, and discontinued Jan. 29, 1933.

It will be seen from the above chart and tabulation that the speed of this service has been increasing gradually from 9.92 miles per hour in 1925 to 13.35 in 1934, which latter compares very closely with the average speed of the Los Angeles Railway Coach Division for 1934. Total passengers carried by the two companies also are about equal.

Length of Routes and Equipment Usually Assigned to Lines
As of Sept. 1, 1935

No.	Line	Miles One-Way	Equipment	
			Type Number	Seating Capacity
81	Hollywood-Long Beach-San Pedro	60.04	33	21 Parlor Car
82	Wilshire Boulevard	18.10	{ DD 7 & 10 SD 3 }	{ 58 to 63 41 }
83	Sunset Boulevard	10.22	DD 6	58
84	Western Avenue	10.15	30	39
85	Crenshaw-Vine-La Brea	14.23	30 & 31	39 & 25
86	Vermont-Glendale-Riverside	10.98	34	21
87	Silverlake-Hyperion-Talmadge	8.19	31	25
88	Olympic Boulevard	6.91	31 & 36	25 & 21

Note: Service to the municipal Greek Theatre and Planetarium in Griffith Park is handled by the Greek Theatre line, which is a part of the Vermont-Glendale-Riverside line, the receipts from the Greek Theatre line being included in the reports of revenue on Vermont-Glendale-Riverside line.
DD - Double Deck; SD - Single Deck.
Line 81 - Total certificated one way miles

Headways in Minutes and Equipment Required
As of Sept. 1, 1935

No.	Line	AM Rush		Midday		PM Rush		Evening	
		Hdwy.	Equip.	Hdwy.	Equip.	Hdwy.	Equip.	Hdwy.	Equip.
81	Hollywood-Long Beach-San Pedro	4 trips to L. Beach daily; 1 trip to S. Pedro daily							
82	Wilshire Boulevard	Local (2½)	20	6	12	2	24	7½-10) 14	
	(a) Express	6	16	10	12	5½	18		
83	Sunset Boulevard	3	18	8½	12	3	23	10-15	6
84	Western Avenue	6	14	10	10	6	15	10-15	7
85	Crenshaw-Vine-La Brea	10	12	10	12	8½	14	10-15	8
86	Vermont-Glendale-Riverside	15	4	15	4	15	4	15-20	3
87	Silverlake-Hyperion-Talmadge	15	4	20	3	15	4	20	3
88	Olympic Boulevard	10	3	10	3	10	3	20	2

(a) First trip leaves downtown 6:38 AM; last 6:00 PM)
" " " S.Monica 7:00 AM; " 5:25 PM) Express

CHAPTER XVII

TRAFFIC, ROUTING AND SERVICE

This chapter presents a summary of the studies which have been made affecting service and routing. The material is shown in the following order:

- A. General Principles
- B. Traffic Flow - All Lines
- C. Origination and Destination of Passengers (1924)
- D. Traffic Checks - Los Angeles Railway - Rail Lines
- E. Traffic Checks - Los Angeles Railway - Motor Coach
- F. Traffic Checks - Pacific Electric Railway
- G. Traffic Checks - Los Angeles Motor Coach Company
- H. Standards of Service
- I. Regularity of Service
- J. Spacing of Car Stops
- K. One-Man Car Operation
- L. Service Changes and Rerouting
- M. Other Traffic Problems
- N. Conclusions and Recommendations

SECTION A

GENERAL PRINCIPLES

The general principles relating to transportation service are important to consider at this time before entering the detail discussion of traffic, service and routing considerations which are discussed in this chapter. It is the general aim of any transportation service to provide the most direct lines and services between points where travel is heaviest, such as between residential and central business or industrial districts. Turning movements should be reduced to a minimum, especially in congested territory. It is evident, therefore, that through routing wherever practical, that is, from one side of the city through the downtown section to another section of the city, is the most desirable form of routing. The transportation demands on the two ends of a through route should be approximately the same. Where certain general sections of the city are more populous than other sections, naturally additional service must be furnished that section of the city from the downtown district on lines which operate through the district to a suitable terminus at the edge of the business district.

In Los Angeles the difference in gauge of the two rail lines is a barrier to any rerouting involving the two companies' operations, and therefore these studies have been considered separately for the two properties, having in mind, however, the general relationships which should exist between the two. The studies are also premised on the basis that where no substantial public improvement or economy results from a possible change compared with the existing conditions, then the weight of judgment should be thrown in favor of existing conditions for the obvious reason that any change disturbing existing routes causes public reaction and should be made only where there are substantial

offsetting benefits.

In the matter of service it is recognized that it is impractical to provide a seat for every passenger during the rush hour period at the basic rates of fare now charged, and operation employed during the peak hour with reasonable overloads should be permitted. The matter of regulation enters into the determination of reasonable loading standards, and this is discussed in detail later. During the base periods seats should be provided for all passengers, barring accidents and major interruptions to service and special considerations over which the company has no control. On the through motor coach lines operated on a higher base fare, however, an obligation exists to provide a higher grade service.

In this study the checks and analyses have in the main been confined to normal week day travel, as this travel is representative of the major part of the company's operation. Travel is seasonal to some extent. It is lower than normal in the summer months during school holidays and is higher in December. Our basic information is largely from the months of May and October, and naturally seasonal adjustments enter into the service. Likewise, no endeavor has been made to study in detail the Saturday, Sunday, or late evening service. Sunday service is approximately half of week day service, and it may be said that the analyses in this report cover the service rendered for 70% of the total traffic.

The general travel trend in Los Angeles at this time is decidedly upward. It is obvious therefore that the present traffic studies should reflect situations where increased service and consequently increased costs are the natural results of the situation rather than curtailment of service. These changes are properly justifiable by anticipated increases in revenue. There are certain instances in which we point out possibilities of rerouting which may accomplish the improved service without added expense, along with certain general traffic advantages.

SECTION B

TRAFFIC FLOW - ALL LINES

To afford an overall view of traffic flow at the outset of this discussion there is presented herewith special study of traffic conditions in November, 1935, on the local transit lines, selecting for this purpose the outbound flow from the downtown district during the rush period 4 P.M. to 6 P.M. The results of this study are shown in chart form by the accompanying traffic flow map which has been prepared at our request by the Statistical Department of the Los Angeles Railway based on special checks made by the Los Angeles Railway, Pacific Electric Railway, and Los Angeles Motor Coach Company for this purpose. The map shows in black, outbound travel on Los Angeles Railway lines, in red, similar information for the Pacific Electric Railway's local lines, and in green, the routes of the Los Angeles Motor Coach Company. Coach lines which have a traffic flow

in the direction of maximum travel of less than 200 passengers during the two hour period are shown by dotted line. It will be noted that the traffic is heaviest to the west and to the south, and that the crosstown lines such as Vernon Avenue on the south, Vermont Avenue on the west, Western Avenue, Vine Street, and La Brea lines are important crosstown services.

Also, a second chart prepared for our study by the Board of Public Utilities and Transportation of Los Angeles shows the flow of travel as represented by the street car movement in the downtown district of Los Angeles, the legend indicating separately Los Angeles Railway and Pacific Electric Railway operation. Motor coach routes are not shown on the map, and the Pacific Electric operations include the interurban service. All car movements are shown including movements into and out of service. In the case of train operation each train has been considered as one car for the purpose of this map.

It will be noted that Broadway between Second Street and Broadway Place carries heavy travel. The heaviest travel is between Broadway Place and Eleventh Street on Main Street where over 160 cars pass the intersection during the hour of 5 P.M. to 6 P.M. Travel on Broadway between Second and Broadway Place is heavy, totaling over 140 car movements during this hour. The third section of heavy travel is on Broadway between Temple Street and First Street where the total of cars equaled 140. The car movement on Hill Street between the Pacific Electric surface terminal and Fifth Street, approximately one-half block, is heavy, totaling 127 cars, and is further complicated by the turning movements into the Pacific Electric Station and the turning movement of the "2" line of the Los Angeles Railway at Fifth and Hill Streets. Travel on Seventh Street between Grand Avenue and Maple Street totaled 123 cars during the hour. These comments take care of, to a large extent, the congested locations. The intersection having the largest number of cars in total is, as would be expected, at Seventh and Broadway.

Insofar as turning movement is concerned, it will be noted that rerouting plans have gradually eliminated such movements to a large extent so that at the present time most of the service is operated in a manner which does not require turns in the downtown area. Possibly the outstanding location at the present time in this regard is at First Street and Broadway. Referring to the chart, it will be noted that on First Street all cars turn into Broadway either north or south; in other words, there is no movement of cars on First Street directly across Broadway. Approximately half of the total movement of cars on Broadway approaching First Street turn onto First either to the west or east.

Another intersection which is the source of some congestion due to the turning movement is at Eleventh and Main Streets. At this intersection there is no regular service schedule to turn, but the cars for the "B" line when pulling into service on the south end of the line approach on Eleventh Street, turn north onto Main, then northwest to Broadway Place, using the cross-over, thence southerly on Main Street, past Eleventh Street, turning east to Twelfth Street. This movement is more pronounced during the period

4 P.M. to 5 P.M., as these cars are going into service than it is during the period 5 P.M. to 6 P.M.

Another interesting comparison brought out by the chart is that Spring Street has less travel during this period compared to either Main, Broadway, or Hill Streets, when Pacific Electric Railway movements are considered.

It should be recalled that Hill Street in addition to the rail movement shown on the chart has the motor coach service of the Beverly line from Second Street to Olympic Boulevard, the Wilshire, Sunset, and Figueroa lines from Fifth to Eighth Streets, and Castellamare line from Fifth to Sixth Streets. These are all southbound movements with the exception of the Beverly line, which is both north and southbound.

SECTION C

ORIGINATION AND DESTINATION OF PASSENGERS (1924)

The only comprehensive check as to the origination and destination of passengers on the local lines is that which was made in 1924. An origination and destination check of cash fare passengers boarding cars at points between the respective ends of each line and the boundaries of the congested district of Los Angeles, was made on all inbound cars and busses operated by the Los Angeles Railway, certain local lines of the Pacific Electric Railway, and the then operated lines of the Los Angeles Motor Coach Company in the early part of the year 1924. The field check was made during the period February to April, 1924, in connection with the Joint Report of that year, and included all local lines as then operated except the Watts and Sierra Vista local lines.

The check was made by a crew of men expressly employed for that purpose, working during the morning rush period from 6 A.M. to 10 A.M., and in the afternoon from 3 P.M. to 6 P.M. on Tuesdays, Wednesdays, Thursdays, and Fridays. Cards were distributed on inbound trips for the passengers to fill in and approximately 90% of the passengers responded. It was considered that the check represented an individual canvass of approximately 50% of the patrons of the local lines.

Movement of Passenger Traffic

One result of the check was to establish the relationship of "direct" riding to "indirect." In the first classification the passenger boarded a car and completed his journey without use of a transfer; in the latter a transfer was used.

This check shows that as of the date of check 71% of the patrons were served with "direct" service and 29% with "indirect" service.

Summarizing this study, it is found that the Pacific Electric lines have the highest percentage of direct riding, and the coach operation of the Los Angeles Railway the lowest. It will be noted that there is but a small percentage of crosstown riding on the Los Angeles Railway, but a high percentage on the Motor Coach Company. Of the




PASSENGER TRAFFIC FLOW

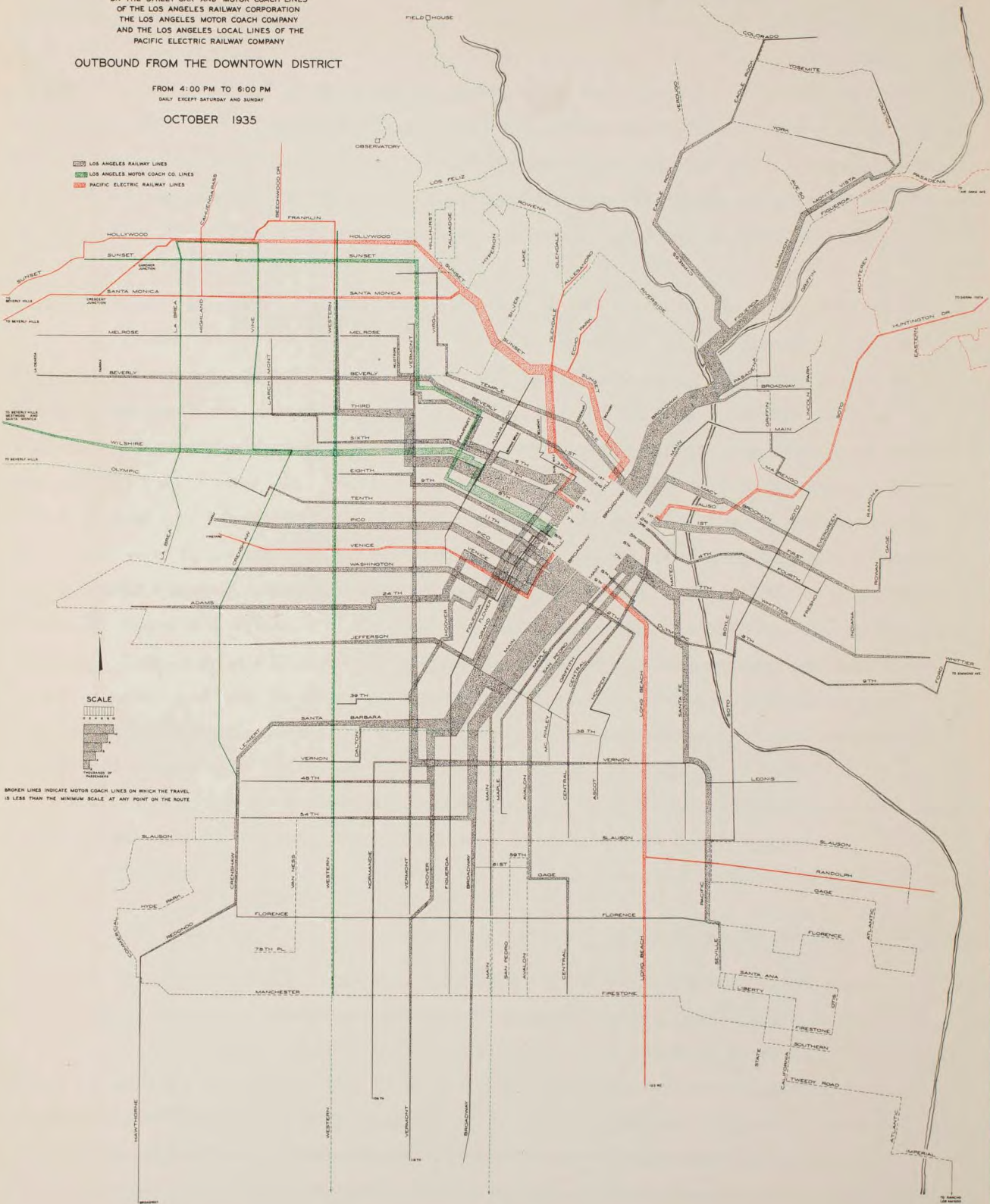
ON THE STREET CAR AND MOTOR COACH LINES
OF THE LOS ANGELES RAILWAY CORPORATION
THE LOS ANGELES MOTOR COACH COMPANY
AND THE LOS ANGELES LOCAL LINES OF THE
PACIFIC ELECTRIC RAILWAY COMPANY

OUTBOUND FROM THE DOWNTOWN DISTRICT

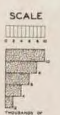
FROM 4:00 PM TO 6:00 PM
DAILY EXCEPT SATURDAY AND SUNDAY

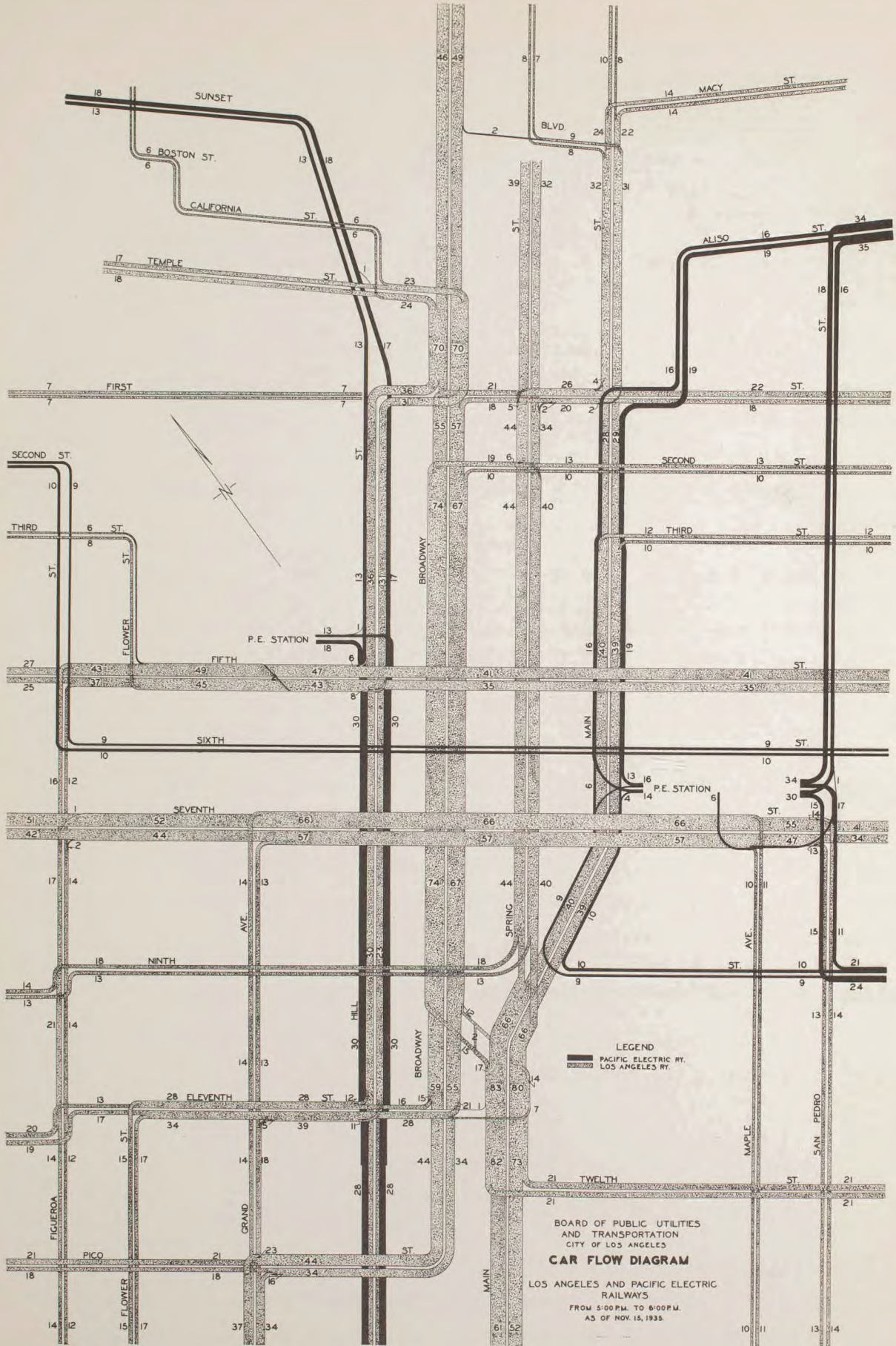
OCTOBER 1935

-  LOS ANGELES RAILWAY LINES
-  LOS ANGELES MOTOR COACH CO. LINES
-  PACIFIC ELECTRIC RAILWAY LINES



BROKEN LINES INDICATE MOTOR COACH LINES ON WHICH THE TRAVEL IS LESS THAN THE WINDOW SCALE AT ANY POINT ON THE ROUTE





total entering the congested district of 71.6%, 54.9% had destinations in the downtown district and 16.7% traveled through the congested district to points outside the district.

The detail of the check follows:

<u>Direct</u>	<u>L.A.Ry.</u>	<u>L.A.Ry. Coach</u>	<u>L.A.Motor Coach</u>	<u>P.E.Ry.</u>	<u>Total</u>
(a) Same End	14.0%	23.2%	15.1%	25.2%	15.3%
(b) To Cong. Dist	50.8	22.9	18.6	60.1	49.4
(c) To Opp. End	3.4	-	-	-	2.9
(d) Cross Town	2.8	-	41.3	-	3.4
Percent of Total	71.0%	46.1%	75.0%	85.3%	71.0%
<u>Indirect</u>					
(a) Cross Town	10.1%	14.8%	13.8%	6.0%	9.7%
(b) Thru Town	14.6	12.7	8.9	8.7	13.8
(c) Cong. Dist.	4.3	26.4	2.3	-	5.5
Percent of Total	29.0	53.9	25.0	14.7	29.0
Total	100.0%	100.0%	100.0%	100.0%	100.0%

The following tabulation shows the above information set up in more detailed manner.

<u>To Congested Dist.</u>	<u>L.A.Ry.</u>	<u>L.A.Ry. Coach</u>	<u>L.A.Motor Coach</u>	<u>P.E.Ry.</u>	<u>Total</u>
Direct	50.8%	22.9%	18.6%	60.1%	49.4%
Indirect	4.3	26.4	2.3	-	5.5
Total	55.1	49.3	20.9	60.1	54.9
<u>Thru Congested Dist.</u>					
Direct	3.4	-	-	-	2.9
Indirect	14.6	12.7	8.9	8.7	13.8
Total	18.0	12.7	8.9	8.7	16.7
Total Entering Dist.	73.1%	62.0%	29.8%	68.8%	71.6%

There is a very small percentage (2.9%) of riding through the downtown area on direct routes. It is not believed that operating changes since 1924 have been of a nature to alter this conclusion.

Origination and Destination by Districts

A further study was made by districts dividing the city into six sections or districts, one being the central business district, as follows:

1. Congested District
2. Hollywood
3. Western Section
4. Southern Section
5. Eastern Section
6. Northern Section

Under these districts, the passenger flow from one part of the city to another was found to be as shown in the tabulation on the following page. It will be seen that the bulk of the travel from all districts is to the central business district of Los

Angeles, totaling 112,732, or 56% of the 202,469 passengers checked.

<u>Between and</u>	<u>Congested District</u>	<u>North</u>	<u>East</u>	<u>South</u>	<u>West</u>	<u>Hollywood</u>
North	13,958	5,137	-	-	-	-
East	13,675	3,437	3,801	-	-	-
South	37,554	5,624	7,895	18,905	-	-
West	39,079	5,612	6,746	12,663	12,397	-
Hollywood	8,466	656	306	669	4,099	1,790

The next largest block in all cases is that travel which originates and terminates within the same district, ranging from 12.1% in the Hollywood district to 26.6% in the South District.

Of all other blocks of travel, on a numerical basis there is considerable interchange between the South and East Districts and between the South and West Districts. Here it is probable that there has been the greatest change in conditions since 1924 with the building up of the Western District and the consequent greater requirements of travel between the Hollywood and Western Districts.

Average Passenger Haul

From the origination and destination check, studies were made of the average passenger haul. Without detailing the steps, the results of the engineers' studies at that time follow:

	<u>L.A. Rlwy.</u>		<u>P.E.Ry.</u>	<u>L.A.M.</u>
	<u>Rail</u>	<u>M.C.</u>	<u>Local</u>	<u>Coach Co.</u>
To Same End	2.1 mi.	2.5 mi.	1.7 mi.	2.9 mi.
To Opposite End	5.9	-	-	-
To Congested District	<u>3.9</u>	<u>4.9</u>	<u>5.1</u>	<u>6.8</u>
Total Same Lines	3.9	4.1	4.1	3.0
Thru Congested Dist. to Various Lines	6.3	6.7	6.7	9.2
Crosstown	<u>6.7</u>	<u>6.7</u>	<u>6.7</u>	<u>9.2</u>
Total	4.3 mi.	4.9 mi.	4.5 mi.	5.2 mi.

In the foregoing studies, the riding within the congested area was not available, but from other data it was determined that this traffic would have no material bearing on the above figures.

SECTION D

TRAFFIC

LOS ANGELES RAILWAY RAIL LINES

Analysis of Traffic on the Main Rail Routes

For the purposes of the present study a complete check of travel throughout the day (6 A.M. to 12 Midnight) has been made on each of two days in October, 1935, at the approximate maximum load points on each of the rail lines entering and leaving the

downtown district. In addition, other specific studies have been made as necessary. There has also been available a complete 18-hour check at the heavy load points made in May of this year and a number of other similar checks in previous periods.

Travel Origin Check of 1929

In 1929 the Los Angeles Railway made a check of the distribution of passenger travel by lines. This check was made for the week of November 12 to 18, 1929, inclusive. The conductor reported the total fares collected and the total passengers on the car at pre-determined locations on each line. Through this means the load characteristics of each line as well as the cumulative originating passengers were determined. This check was summarized by the company in both chart and tabular form and has been available for our use in this study. It has been of valuable assistance both in the traffic and in the fare analyses made in this report.

Total Daily Travel

The following table shows the average daily loads at maximum points, average hourly base travel, and maximum inbound and outbound load over a 20 minute period expressed on an hourly basis.

Line	Total Passengers at Check Pt.	Average Hourly Base Load	Maximum Load		
			Inbound	Outbound	
A	24th & Vermont	12,911	683	1,791	1,845
	Temple & Broadway	3,045	181	267	372
B	12th & Main	8,173	410	930	999
	Macy & Main	10,639	457	1,728	1,275
D	5th & Figueroa	4,147	220	333	420
F	54th & Hoover	7,290	348	894	1,251
	3rd & Los Angeles	5,906	292	579	546
G	12th & Maple Ave.	2,134	107	291	216
H	7th & Figueroa	12,144	730	1,248	1,455
	12th & Maple	5,952	308	732	726
J	Vernon & Santa Fe	13,182	675	1,143	1,407
	Jefferson & Grand	9,710	506	1,230	1,242
L	11th & Figueroa	9,139	503	1,035	1,188
	Temple & Broadway	12,699	703	1,344	1,467
N	9th & Figueroa	9,947	529	1,389	1,209
C	12th & Main	5,447	288	486	489
	Macy & No. Main	6,526	337	657	531
P	1st & Mission	14,914	792	1,734	1,914
	Pico & Georgia	19,923	1,075	1,797	2,331
R	7th & Figueroa	14,720	822	1,299	1,431
	7th & Boyle	13,311	646	1,893	1,797
S	7th & Figueroa	15,674	841	1,566	1,797
	Wash. & San Pedro	12,155	581	1,509	1,329
U	Wash. & Estrella	10,031	552	1,116	1,296
	12th & Central	11,847	621	984	1,107
V	Olympic & Vermont	15,466	725	2,415	1,104
	Vernon & Avalon	10,580	398	1,185	1,098
W	Ave. 28 & No. Figueroa	14,903	780	1,644	1,965
	Wash. & Estrella	12,911	699	1,563	1,575
	Sub Total	305,426	15,809	34,782	35,382

Line	Checking Point		Total Passengers at Check Pt.	Average Hourly Base Load	Maximum Load	
					Inbound	Outbound
		Fwd.	305,426	15,809	34,782	35,382
2	5th & Flower		3,181	175	237	390
	Sunset & Broadway		2,563	147	297	315
3	5th & Figueroa		15,342	878	1,731	1,818
5/6	Ave. 28 & Figueroa		10,917	570	1,500	1,404
	Santa Barbara & Vermont		12,681	613	1,299	2,019
7	Vernon & Broadway		11,106	547	1,617	1,404
8	" " "		9,366	444	1,407	1,338
9	Pico & Grand		9,172	524	1,242	1,353
10	" " "		5,188	282	849	972
	Sunset & Broadway		5,818	299	495	465
		Total	390,760	20,288	45,456	46,860

Measured in total travel the "P" line west is the heaviest by far, with nearly 20,000 passengers at the heavy load point. The next highest is the "S" line west with 15,700 passengers. The range of the other lines is apparent from the table.

For purposes of analysis, the study will be considered in two parts:

- A. Base loads - 9 A.M. to 4 P.M.
- B. Peak loads

The first deals with those factors involved in determining basic headways and determination of whether any advantage may be secured through rerouting.

The analysis of peak loads is important primarily from a service standpoint, but is also necessary to check any conclusions reached as to rerouting based on base load studies.

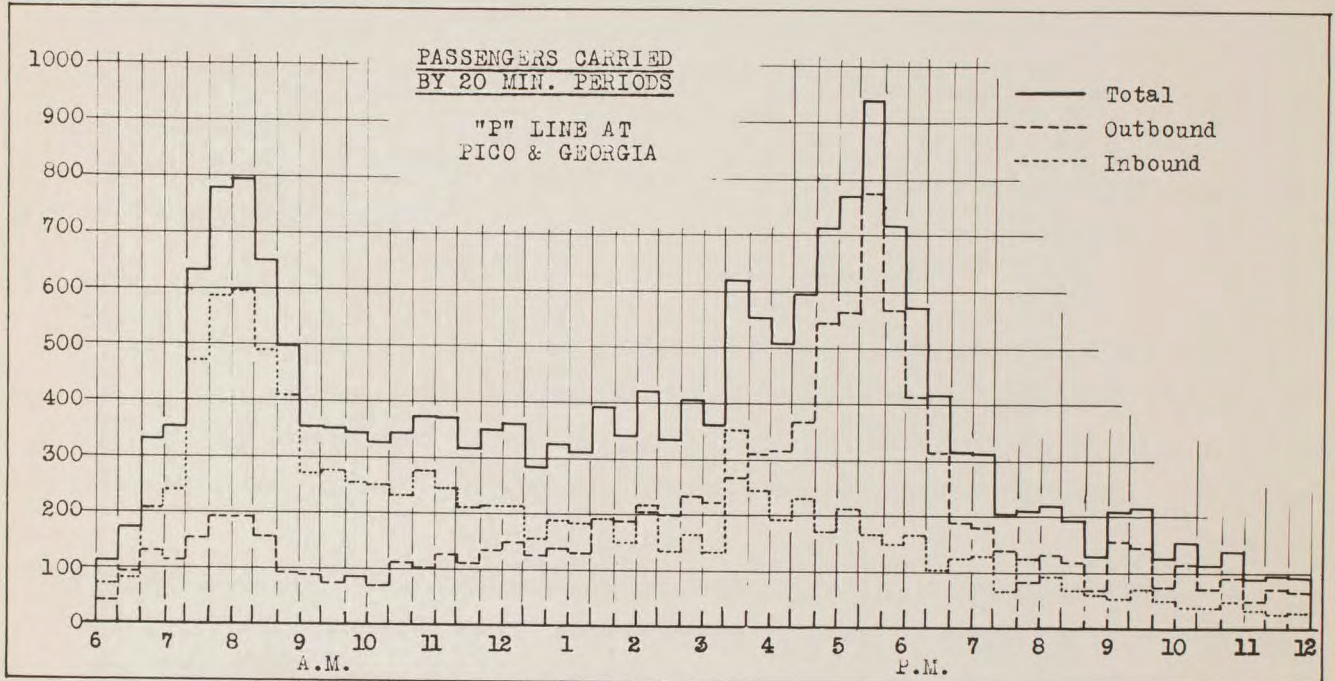
Because of the relatively smaller volume of Sunday travel and night travel and limitations of time, specific analysis of these services has not been made.

Before entering the detail studies an analysis of a typical daily load curve will be made.

Typical Hourly Load Distribution

Each line, of course, has characteristics peculiar to the territory served. In general, however, the hourly traffic characteristics of most of the lines are the same. The chart on the following page shows the results of a check made on the "P" line at Pico and Georgia Streets. This location is a short distance west of the downtown business district. The inbound peak occurred in the 20 minute interval from 8:00 A.M. to 8:20 A.M. when 600 passengers were carried, or at the rate of 1800 per hour. From this point the travel declined rapidly until 9:00 A.M., following which the trend was much more even, although gradually declining. It will be noted that the inbound traffic continued to decline throughout the day except for a secondary peak at 3:20 P.M. caused by school traffic. The trend of travel outbound is approximately the reverse of the inbound travel. It will be noted that there is a small outbound peak in the morning reaching nearly 200 passengers per 20 minute interval caused largely by school traffic. The morning outbound travel beginning at 9:00 A.M. is about one-third of the volume of the inbound travel at

that time, but continues to increase until in the period from one to two o'clock the travel in both directions is about equal. From that time on the outbound travel steadily increases until the evening peak is reached. For this line the peak of travel reached 775 passengers per 20 minute interval during the 20 minutes of 5:20 P.M. to 5:40 P.M., which represents the travel leaving the center of the congested area from about 5:00 P.M. to 5:25 P.M. By seven o'clock the outbound travel has again reached approximately the level of the inbound travel, about 100 passengers per 20 minute interval, and travel in both directions continues to decline.



Analyzing all originating traffic based on the hour of the day shows the following result:

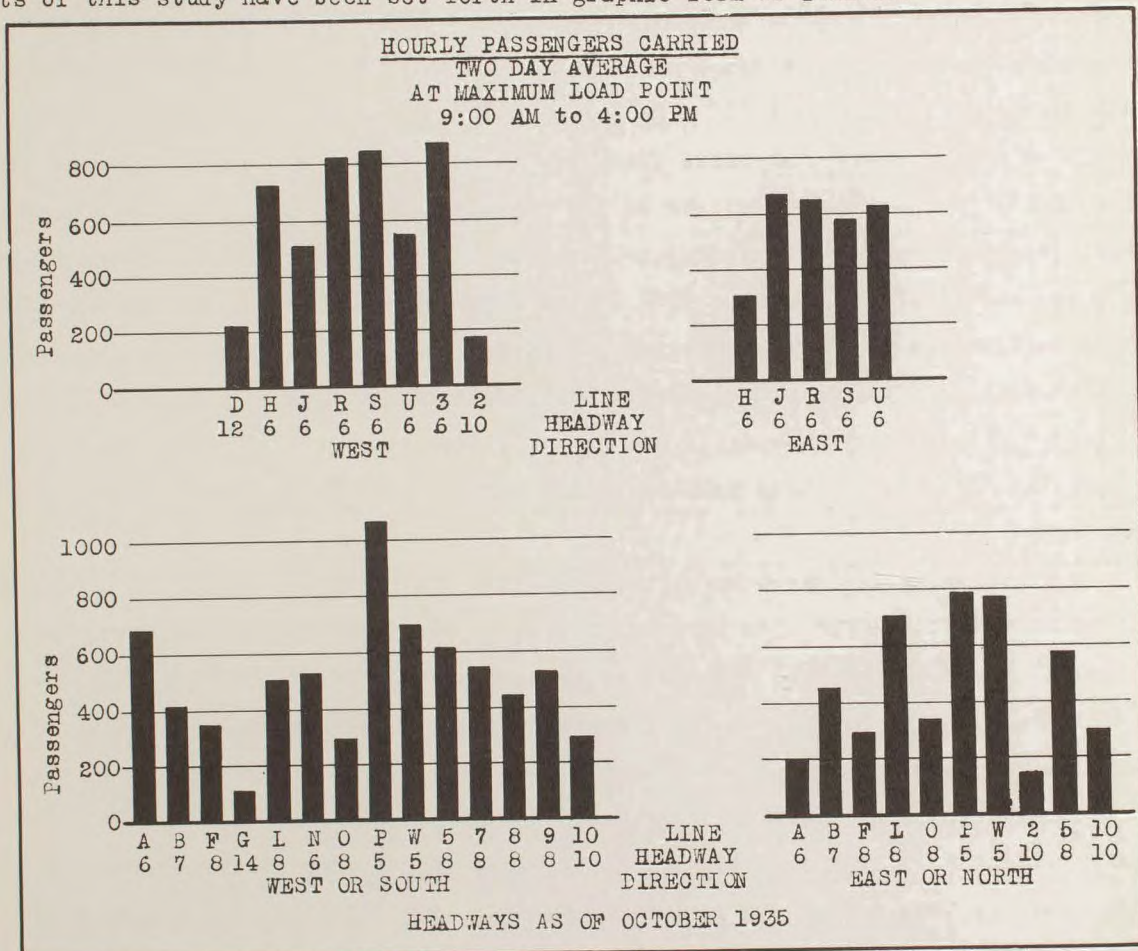
Hour	Percent of Total	Hour	Percent of Total	Hour	Percent of Total
12 to 1 A.M.	.3%	10 to 11 A.M.	4.9%	5 to 6 P.M.	7.5%
1 to 5	.5	11 to 12 N.	4.8	6 to 7	4.1
5 to 6	1.9	12 to 1 P.M.	4.9	7 to 8	3.0
6 to 7	7.4	1 to 2	5.4	8 to 9	2.4
7 to 8	11.4	2 to 3	6.3	9 to 10	1.9
8 to 9	5.9	3 to 4	8.1	10 to 11	1.5
9 to 10	4.7	4 to 5	12.1	11 to 12 Mid.	1.0

As previously stated, the characteristics of each line differ. Some lines will have a more pronounced peak in relation to base load than the one shown, while others will have less pronounced peaks in relation to the base load.

On the south end of the "B" line conditions are reversed from that of the ordinary line. The inbound peak is in the evening and the outbound peak is in the morning due to the industrial section to the south east of the business center. On this line there are also the usual inbound morning and outbound evening peaks, although not as pronounced as those just mentioned, and the base loads are also substantial.

Study of Base Loads

In order to analyze the general flow of travel of the various lines in a comparative period with the objective of determining whether any rerouting of lines entering the downtown district should be made, studies have been made of the average base load travel. From the analysis of the travel flow throughout the day, which has been discussed, it will be noticed that the travel from 9:00 AM to 4:00 PM, if both inbound and outbound travel is considered, is fairly constant throughout this period, and for the purpose of this study this period has been considered as the base period. The results of this study have been set forth in graphic form as follows:



In presenting this summary the lines have been grouped into what would seem to be the logical grouping from the directional viewpoint; for example, the first group consists of those lines which enter the downtown congested district on east and west streets; namely, "D", "H", "J", "R", "S", "U", "3" and "2". Adjoining this group is a group headed "East", which includes the eastern ends of the same group of lines. The lower portion of the chart, in a similar manner, groups the lines which enter and pass through the downtown business district on the north and south streets such as Hill, Broadway, Spring and Main Streets.

From this study it will be noticed that the heaviest line is the "P" line to

the west, having an average of 1075 passengers per hour. The next heaviest line is the "3", which enters the downtown business district from the west on Fifth Street and has an average base load travel of 878 passengers per hour. The lightest line of any of these is the "G" line with an average of 107 passengers per hour.

Considering other lines which enter from the west, it will be found that the "R" and "S" lines each carry over 800 passengers per hour and the "H" line has over 700 passengers per hour. The "J" and "U" lines average about 500 passengers per hour, and the "D" and "2" lines are light lines with approximately 200 passengers per hour. As at present operated, the "D" and "3" lines terminate at the Central Station not far east of the downtown district, and the travel on the easterly end of these lines is not an important consideration in their operation since the "U" line service is sufficient for the territory served. The "2" line turns at Fifth and Hill Streets and operates northerly on Hill Street. The other lines are through lines, and in the case of the "R" and the "S" the easterly portions of the lines, as shown by the chart, are somewhat lighter, averaging around 600 passengers per hour. The "J" and the "U" lines, on the other hand, have a slightly higher load on the east ends than on the west ends. The outstanding indications from a consideration of these lines is the remarkable showing made by the "3" line, which is a comparatively new line on Fifth Street west, and the fact that the "D" line on Fifth Street is not carrying its proportion of the travel; also the fact that the "H" line is badly unbalanced and that the "2" line serves a limited number of passengers.

Considering the lines which operate along the north and south downtown streets, it is apparent that the "P" line is much heavier to the west than to the east. The development of the motor coach terminal at the end of the "P" line where connection is made with the lines of the Bay Cities Transit Company and the municipal line of the City of Santa Monica, has added materially to the travel on the westerly portion of this line. The "P" line to the west should be considered for additional service. The "W" line has approximately equal travel on both ends of the line and in comparison to other service has more service than needed on a 5 minute headway. The "5" line likewise is well balanced but apparently, when compared to other lines, should be considered for more than its present 8 minute headway. The "A" line is quite unbalanced, with 683 passengers per hour on the west end compared to 181 on the north end. The "L" line, on the other hand, is much heavier on the north than it is on the west; namely, 703 passengers to the north compared to 503 to the west, and the passenger flow to the north end shows that this line, with an 8 minute headway, has much heavier travel than many lines having 6 minute headways. The "7", "8" and "9" lines operating to the south, and the "N" line operating to the west, handle about 500 passengers per hour. The "B" line carries about 400 passengers per hour on both ends of the line. The "F", "O" and "10" lines likewise are reasonably balanced with about 300 passengers per hour. The north end of the "2" line is very light.

However, it is reasonably balanced with the west end of the line. The figures supporting the above charts and also supporting charts to follow are as follows:

Line	Point of Check	Both Directions		Passengers per 100 Seats
		Average Seats per Hour	Average Passengers per Hour	
A	24th & Vermont	963	683	71
	Temple & Broadway	932	181	19
B	Macy & Main	660	457	69
	12th & Main	694	410	59
D	5th & Figueroa	487	220	45
F	54th & Hoover	606	348	57
	3rd & Los Angeles	594	292	49
G	12th & Maple	253	107	42
H	12th & Maple	842	308	37
	7th & Figueroa	852	730	86
J	Jefferson & Grand	1,033	506	49
	Vernon & Santa Fe	1,036	675	65
L	11th & Figueroa	730	503	69
	Temple & Broadway	717	703	98
N	9th & Figueroa	919	529	58
O	Macy & Main	586	337	58
	12th & Main	600	288	48
P	Pico & Georgia	1,215	1,075	88
	1st & Mission	1,196	792	66
R	7th & Boyle	1,003	646	64
	7th & Figueroa	1,025	822	80
S	Washington & San Pedro	1,014	581	57
	7th & Figueroa	1,029	841	82
U	12th & Central	1,029	621	60
	Washington & Estrella	1,025	552	54
V	Olympic & Vermont	963	725	75
	Vernon & Avalon	950	398	42
W	Avenue 28 & Figueroa	1,207	780	65
	Washington & Estrella	1,200	699	58
2	Sunset & Broadway	463	147	32
	5th & Flower	460	175	38
3	5th & Figueroa	1,029	878	85
5/6	Avenue 28 & Figueroa	750	570	76
	Santa Barbara & Vermont	791	613	77
7	Vernon & Broadway	693	547	79
8	Vernon & Broadway	754	444	59
9	Pico & Grand	743	524	71
10	Sunset & North Broadway	509	299	59
	Pico & Grand	500	282	56
	Total	32,052	20,288	63

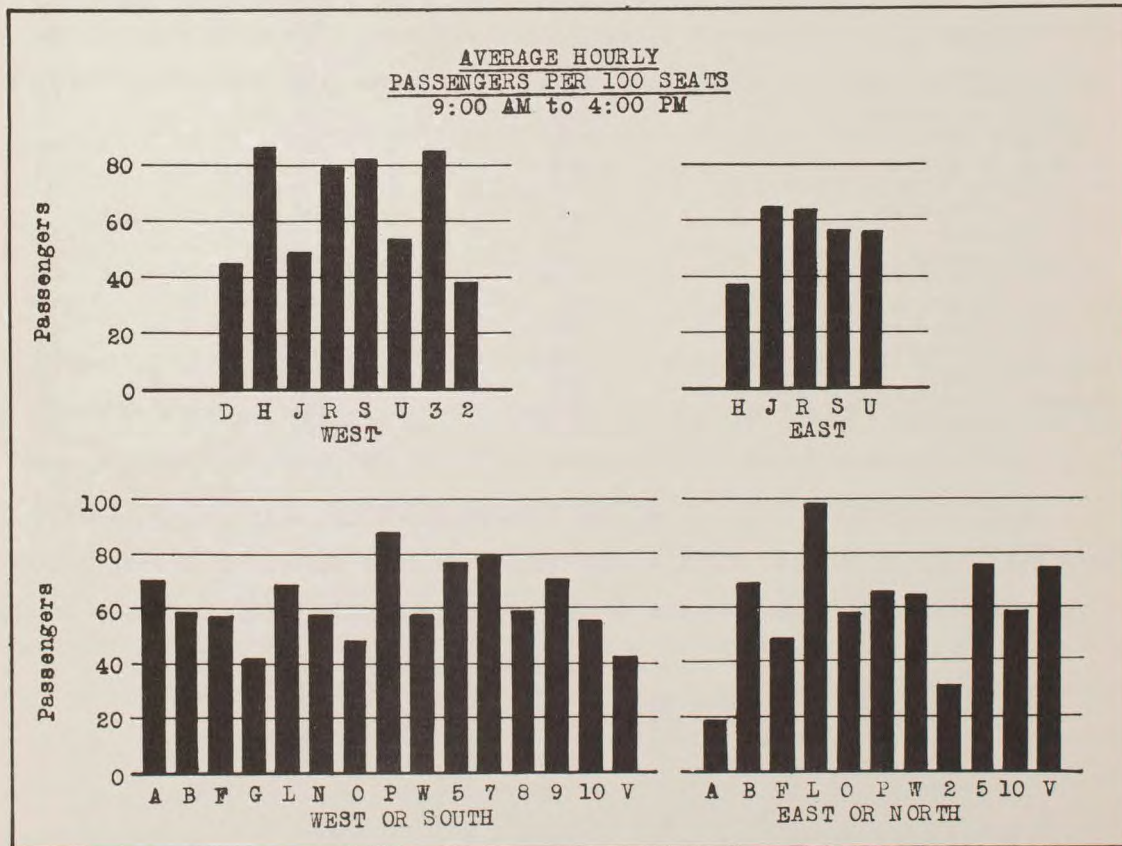
Considering those lines which are through lines, the ratio of the travel on the heavy end compared to the travel on the light end is a convenient indication of the travel balance of the line, a line having a factor of one being perfectly balanced.

Line 5/6	-	1.01
10	-	1.05
U	-	1.11
W	-	1.12
F	-	1.16
B	-	1.17
2	-	1.19
O	-	1.21
R	-	1.25
P	-	1.33
J	-	1.33
L	-	1.42
S	-	1.44
H	-	2.32
A	-	3.74

From this table it is readily apparent that the "A" line is the line most badly out of balance, considering the relative volume of travel on both ends of the line, with the "H" line next. The "5" line, according to this check, is perfectly balanced.

Analysis of Service Provided During Base Period

The preceding chart and discussion related largely to the passenger flow on the various lines. The following chart has been prepared to relate the passenger flow to the service provided. As a convenient measurement there has been determined the number of passengers carried for each 100 seats provided during the base period 9:00 A.M. to 4:00 P.M. on each of the lines. The lines have been grouped in the chart in the same order in which they were presented in the preceding chart; namely, first those which cross the downtown district on east and west streets, and secondly those which pass through the district on the north and south streets. This chart, of course, averages all service throughout the period 9:00 A.M. to 4:00 P.M. and is intended as an overall test rather than as a test of specific cases of overloading.



The outstanding line as shown by these charts is the "L" line to the north, where, on the average throughout this period, practically every seat was occupied. This, of course, means that many cars were operated with loads considerably in excess of a seated load. Other lines which had more than 80 passengers per 100 seats during this

period include the "P" line to the west, the "H" line to the west, the "S" line to the west, and the "3" line to the west. On the other hand, there were a number of lines where less than 50 passengers per 100 seats were carried. Such lines included the "D" and "J" lines to the west, "2" line both west and north, "A" line to the north, "G" line and the "O" line to the south.

With this basic information as to travel and service, both base and peak service will be considered again in a later section in relation to the standards of service which should be provided.

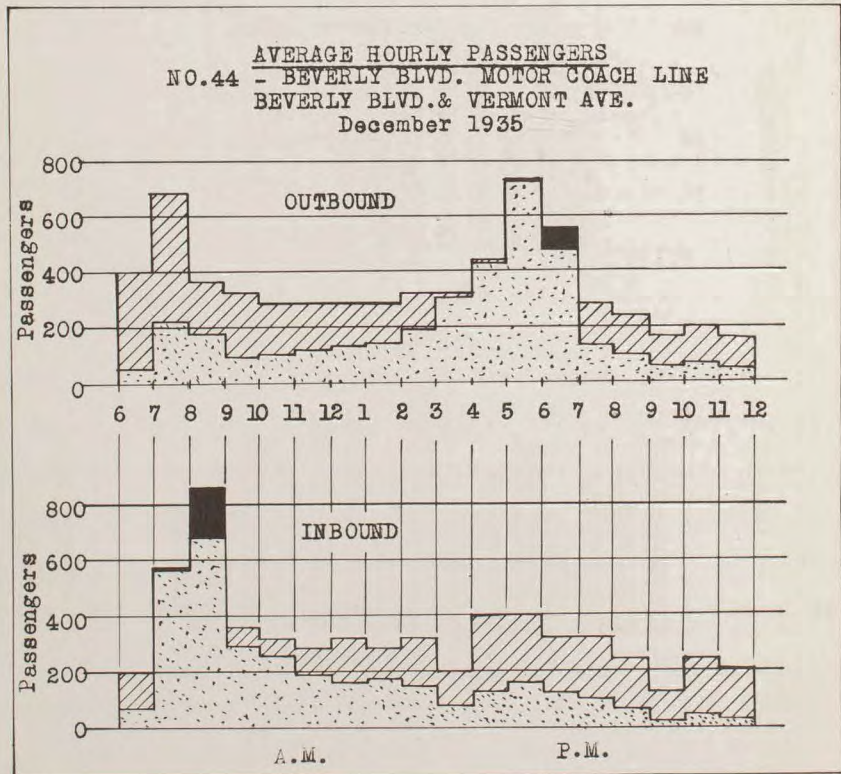
SECTION E

TRAFFIC CHECKS

LOS ANGELES RAILWAY
MOTOR COACH LINES

The Los Angeles Railway through its Motor Coach Division operates a number of lines, three of which are so-called "through" lines operating from the downtown districts. The remainder are in the nature of crosstown lines and feeder routes. The most important of the lines is the Beverly Boulevard coach line, and in this case the line is operated on a 10¢ cash fare basis. Several checks of the travel in relation to service have been made, and a recent check; namely, December 3, 1935, at Beverly Boulevard and Vermont Avenue is as follows:

Shaded area represents excess seats
Dotted area represents passengers
Solid black area represents standees



The results shown here represent an improvement over a previous check made at our request, through the addition of more service during the peak hours, but it is still

apparent that there are substantial ~~over~~-loads, particularly in the inbound morning period from 8 A.M. to 9 A.M., and in the outbound period from 6 P.M. to 7 P.M. It is believed that the lines of this character operated at higher than the basic fare should be provided with a higher rate of service and that seats should be provided on the average for passengers carried. It is believed that a twenty minute average is reasonable and that the company's objective should be, where it maintains such service at a higher rate of fare, to provide a higher grade of service. The same comment applies to the Figueroa Street and East Ninth Street lines.

The remaining coach lines are feeder and crosstown routes which it has not been possible to study in detail, but where as a rule the loading question is not as important as on the through lines.

SECTION F

TRAFFIC CHECKS

PACIFIC ELECTRIC RAILWAY

Checks similar to those made on the Los Angeles Railway have been made on the local lines of the Pacific Electric Railway. In general the service of this company has been found to be entirely adequate, and for the sake of brevity the details of these checks have been summarized in the following table, using the base period 9 A.M. to 4 P.M.

<u>Line</u>	<u>Checking Point</u>	<u>Seats</u>	<u>Passengers</u>	<u>Percent</u>
Hollywood-Hill St.	Temple & Hill	5,395	4,011	74%
Hollywood-Subway	1st & Beverly	5,460	2,250	41
Santa Monica-Subway	1st & Beverly	5,720	1,911	33
Edendale	1st & Beverly	5,460	1,598	29
Echo Park	Temple & Hill	3,835	1,312	34
Vineyard	Venice & Hill	5,590	1,738	31
Watts	9th & Hooper	5,395	1,866	35
Walker	9th & Hooper	2,665	278	10
Sierra Vista	Enchandia Jct.	4,615	1,439	31
	Total	44,135	16,403	37

In the above table the period 9 A.M. to 4 P.M. has been shown, and it will be noted that on all of the lines an adequate service is being rendered. In the case of the Hollywood line where service is divided between the Subway and Hill Street surface lines it is impractical to consider the operation of this service other than on a divided basis, as there will necessarily result conditions which are beyond the company's control as to a division of this business. A summary of outbound **peak service** is shown as follows:

<u>Line</u>	<u>Checking Point</u>	<u>Seats</u>	<u>Passengers</u>	<u>Percent</u>
Hollywood-Hill St.	Temple & Hill	650	737	113
Hollywood-Subway	1st & Beverly	455	579	127
Santa Monica-Subway	1st & Beverly	325	285	88
Western-Franklin	Temple & Hill	130	158	121
Edendale	1st & Beverly	260	290	111
Echo Park	Temple & Hill	195	222	114
Vineyard	Venice & Hill	455	422	93
Watts	9th & Hooper	325	328	101
Walker	9th & Hooper	130	133	102
Sierra Vista	Enchandia Jct.	390	309	79
	Total	3,315	3,463	104

Service during the peak hours on the Pacific Electric Railway is adequate as shown by the foregoing summary of outbound service measured by the maximum 20 minute peak adjusted to an hourly basis. Substantially similar results obtained during the in-bound morning peak.

SECTION G

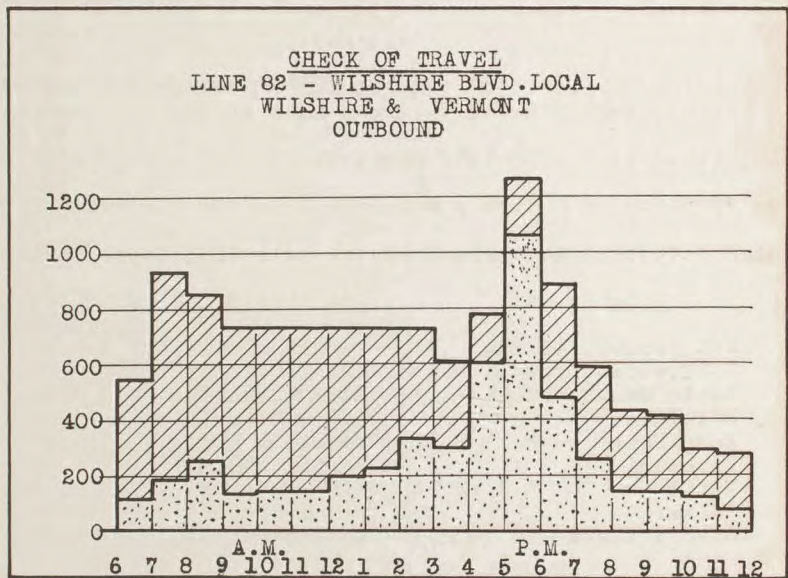
TRAFFIC CHECKS

LOS ANGELES MOTOR COACH COMPANY

The principal line of the Los Angeles Motor Coach Company is the Wilshire operation. This in general consists of a local service between Los Angeles and Fairfax Avenue and an express service between Los Angeles and points west of Fairfax. The checks show that a high grade service is being operated on this route, a typical check made at Wilshire and Vermont on the local service being shown by the accompanying chart.

Dotted Area
Indicates Passengers

Shaded Area
Indicates Excess Seats



The Sunset Boulevard line likewise is being operated on a basis which provides adequate service.

In case of the Western Avenue crosstown line, checks made during the peak hours indicate that there are standing passengers over a two hour period in the morning and one hour period in the evening. This is a condition which should be corrected if the line is continued on its present 10¢ cash fare basis.

The same condition is true on the Crenshaw-Vine line but to a lesser extent, based on checks made at Santa Monica Boulevard and Vine Street. However, at La Brea Avenue there were more seats than passengers, based on hourly averages.

SECTION H

STANDARDS OF SERVICERush Hour Service

Rush Hour service may be measured in several ways. The most common practice is to set up a standard of maximum permissible overload during a stated interval. Another basis is to prescribe a minimum of standing room space per standee. A third method is to prescribe by a standing time basis, the point at which a seat will be provided per passenger over a reasonable interval.

Requirements of Other Cities

Requirements of other cities, where overload percentages are set up, are as follows:

<u>City</u>	<u>Seats per 100 Passengers</u>
Baltimore	67
Chicago	85
Milwaukee	67
Portland, Ore.	62
Seattle	75
St. Louis	73 (3 min. headway)
Winnipeg	52

Cities having a minimum space requirement per standee are as follows:

<u>City</u>	<u>Square Feet per Standee</u>
Cincinnati	4
Cleveland	4
Kansas City	4
Philadelphia	4
Washington, D.C.	7

These requirements are, in many instances, not rigidly enforced. The requirements as a rule apply to an average period of from fifteen to thirty minutes and not to individual cars. It is apparent, therefore, that regularity of service has a bearing in these studies and that an average requirement must also have in consideration the regularity of service which it is practicable to maintain.

National Standards

In the Charles H. Coffin Award of the American Electric Railway Association in 1931 the following summarization of service standards was made:

"Service Standards steadily bettered as indicated by relation between seat miles and passengers. High service standards in car loading, on two-man cars 67 seats per 100 passengers, rush periods; 90 seats per 100 passengers, transition period; 110 to 133 seats per 100 passengers in non rush periods. On one-man cars, 80 seats per 100 passengers in peak periods."

Restating these conclusions, we find that the standard for maximum loads for peak service is as follows:

Two-man operation - 150 passengers per 100 seats or 50%
 One-man operation - 125 " " 100 " " 25%

For non rush service the standard is from 90 to 75 passengers per 100 seats, except in the transition period where 111 passengers per 100 seats would be permitted.

The above, of course, is not a requirement. It is merely the conclusion of those charged with the Coffin Award, but is quoted to present the viewpoint of such of the industry as were represented in that study.

Los Angeles Requirements

The present understanding as to service between the Board of Public Utilities and Transportation and the Los Angeles Railway dates back to October 31, 1930, when an agreement of 70% overload requirement for a 20 minute interval at maximum load points was reached. This provides 59 seats per 100 passengers, and on a square foot basis the following:

		Seats	Square Feet Standing Room	Square Feet Per Passenger On 70% Basis
Los Angeles Railway	Type B	48	121	3.9
" "	Type C	48	130	3.6
" "	Type H	52	138	3.8
" "	Type H-4	48	155	4.6

The 70% rule did not provide, in all cases, satisfactory service on the longer lines, and on October 31, 1934, through the Joint Committee, the railway agreed that it would provide seats for passengers at points 25 minutes distant from the downtown district on the longer lines.

The Board of Public Utilities and Transportation has kept a record of performance for several years, and it is apparent that substantial progress has been made in the matter of peak hour service. The following shows a summary of checks made at various periods and is presented for an overall view of the trend:

Year	Passengers Per Car	Overload Based on 50 Passengers
1926	84	78%
1928	90	80
1932	73	46
1934	69	38
1935	68	36

Present Study

In the present study there are available checks made on two representative week days in October, 1935.

The following lines show travel in excess of 70% overload at the maximum point during the heaviest 20 minute interval during the morning and evening rush periods:

<u>Line</u>	<u>Point</u>	<u>Average Passengers</u>	<u>Average Percent Overload (2 Days)</u>
<u>Inbound</u>			
"A"	24th & Vermont	597	78%
"B"	Macy & Main	576	92
"H"	7th & Figueroa	416	72
"R"	7th & Boyle	631	74
"S"	Washington & San Pedro	503	77
"10"	Sunset & Broadway	165	88
<u>Outbound</u>			
"A"	24th & Vermont	615	72
"B"	Macy & Main	425	78
"L"	Temple & Broadway	489	73
"R"	7th & Boyle	599	92
"10"	Sunset & Broadway	155	76

Many of the lines show loading of less than 50%.

The lines on which one-man cars are operated during rush hour periods were checked as follows:

<u>Inbound</u>			
"F"	54th & Hoover	298	24%
"F"	3rd & Los Angeles	193	61
"G"	12th & Maple	97	30
"O"	12th & Maple	162	35
"O"	Macy & North Main	219	37
"2"	5th & Flower	79	No overload
"2"	Sunset & Broadway	99	23
<u>Outbound</u>			
"F"	54th & Hoover	417	34
"F"	3rd & Los Angeles	182	33
"G"	12th & Maple	72	No overload
"O"	12th & Main	163	36
"O"	Macy & North Main	148	48
"2"	5th & Flower	130	9
"2"	Sunset & Broadway	105	11

These lines, except the "G" line, are operated with Type B equipment with minor rearrangements for one-man operation. This type of equipment is not a satisfactory type for one-man car operation particularly during peaks.

Lines having over 50% during hour from 7:00 A.M. to 8:00 A.M. follow:

<u>Inbound</u>			
"A"	24th & Vermont	1,322	57%
"B"	Macy & Main	1,316	87
"H"	7th & Figueroa	1,072 (a)	63
"L"	Temple & Broadway	985 (a)	52
"N"	9th & Figueroa	1,114 (a)	55
"R"	7th & Boyle	1,579	69
"S"	Washington & San Pedro	1,139	51

(a) 8:00 to 9:00 A.M.

Lines having over 50% during hour from 5:00 to 6:00 P.M. follow:

<u>Outbound</u>			
"A"	24th & Vermont	1,464	70%
"B"	Macy & Main	1,119	75
"H"	7th & Figueroa	1,250	58
"L"	Temple & Broadway	1,062	64
"N"	9th & Figueroa	1,070	53
"R"	7th & Boyle	1,336	56
"7"	So. Broadway & Civic Center	1,178	54

When one-man car operation is employed during peak loads, it is believed that

the percentage of overload at maximum points should not exceed 50% over 20 minute interval.

25 Minute Point Checks

Checks at the 25 minute points over the 20 minute maximum outbound period follow:

<u>Line</u>	<u>Check Point</u>	<u>Seats</u>	<u>Passengers</u>	<u>Percent</u>
"A"	Adams & 4th Ave.	432	485	112%
"F"	Slauson & Hoover	200	313	156
"J"	Clarendon & Pacific	416	442	106
"P"	Pico & 3rd Ave.	624	485	78
"R"	3rd & Larchmont	312	148	47
"S"	61st & Avalon	260	299	115
"V"	Vernon & Vermont	144	122	85
"W"	Ave. 50 & Monte Vista	416	568	137
"W"	Washington & 8th Ave.	346	300	87
"3"	3rd & Larchmont	468	126	27
"5"	Glendale Jct.	260	315	121
"5"	Van Ness & Santa Barbara	416	398	96
"7"	Florence & Broadway	336	280	83
"8"	54th & Normandie	336	298	89
"9"	48th & Normandie	468	212	45

These checks indicated substantial overloads on the day checked on the "A" line (west), "F" line (south), "S" line (south), "W" line (north), and "5" line (north).

Base Period

In general, in the base period at least a seat should be provided for each passenger over a reasonable period. In this study the base period has been considered from 9:00 A.M. to 4:00 P.M. As has been pointed out, inbound travel is heaviest in the morning and outbound in the afternoon, reaching common levels about midday. As a rule if there are 70 passengers per 100 seats when averaging both inbound and outbound service throughout this period, a not unreasonable service is being rendered. The chart which has been already presented in Section D shows passengers per hundred seats during this period, from which it will be noted that "L" (north), "P" (west), "H" (west), "3" (west), and "S" (west) carried in excess of 80 passengers per 100 seats provided. On the other hand, a number of lines carried less than 50 passengers per one hundred seats.

As a further guide, an analysis of inbound service shows the following lines where passengers exceeded seats provided over an average of one hour, omitting lines where the overload occurred during the transition periods, 9 A.M. to 10 A.M. and 3 P.M. to 4 P.M.

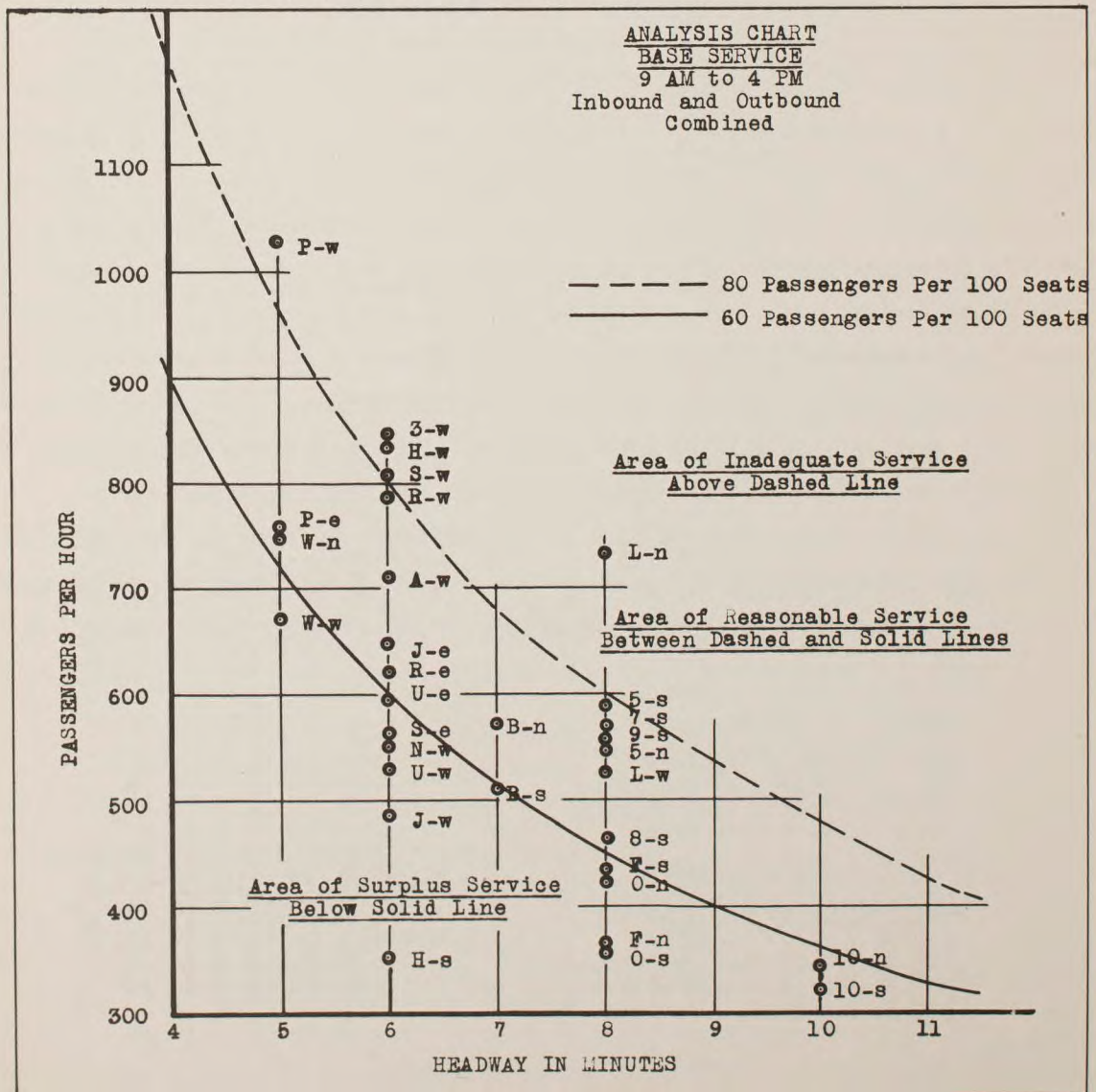
<u>Line</u>	<u>Point</u>	<u>Period</u>
"H"	7th & Figueroa	9:00 AM to 12:00 N
"L"	Temple & Broadway	9:00 AM to 2:00 PM
"N"	9th & Figueroa	9:00 AM to 10:00 AM
"P"	Pico & Georgia	9:00 AM to 12:00 N
		3:00 PM to 4:00 PM
"R"	7th & Figueroa	10:00 AM to 12:00 N
"S"	7th & Figueroa	9:00 AM to 11:00 AM
"3"	5th & Figueroa	9:00 AM to 11:00 AM
		1:00 PM to 2:00 PM
"5"	Santa Barbara & Vermont	9:00 AM to 11:00 AM
"5"	Ave. 28 & Figueroa	9:00 AM to 11:00 AM
"7"	Vernon & Broadway	9:00 AM to 11:00 AM
"9"	Pico & Grand	9:00 AM to 11:00 AM

In a similar manner, outbound, lines carrying more passengers than seats provided prior to 4:00 P.M., follow:

Line	Point	Period
"H"	7th & Figueroa	3:00 PM to 4:00 PM
"L"	Temple & Broadway	1:00 PM to 4:00 PM
"P"	Pico & Georgia	2:00 PM to 4:00 PM
"3"	5th & Figueroa	2:00 PM to 3:00 PM
"5"	Santa Barbara & Vermont	2:00 PM to 4:00 PM

Entire Base Period

The following chart shows headways and passengers per hour in both directions for 80 and 60 passengers per 100 seats. On the same chart have been plotted actual average passengers per hour in both directions for the various rail lines. The curves are derived on the basis of 50 seats per car and the actual numbers have been adjusted to that base. In general, those lines plotted on the chart which fall above the "80" curve should have a shorter headway with the same equipment and, correspondingly, those falling below the "60" mark should have their headways lengthened.



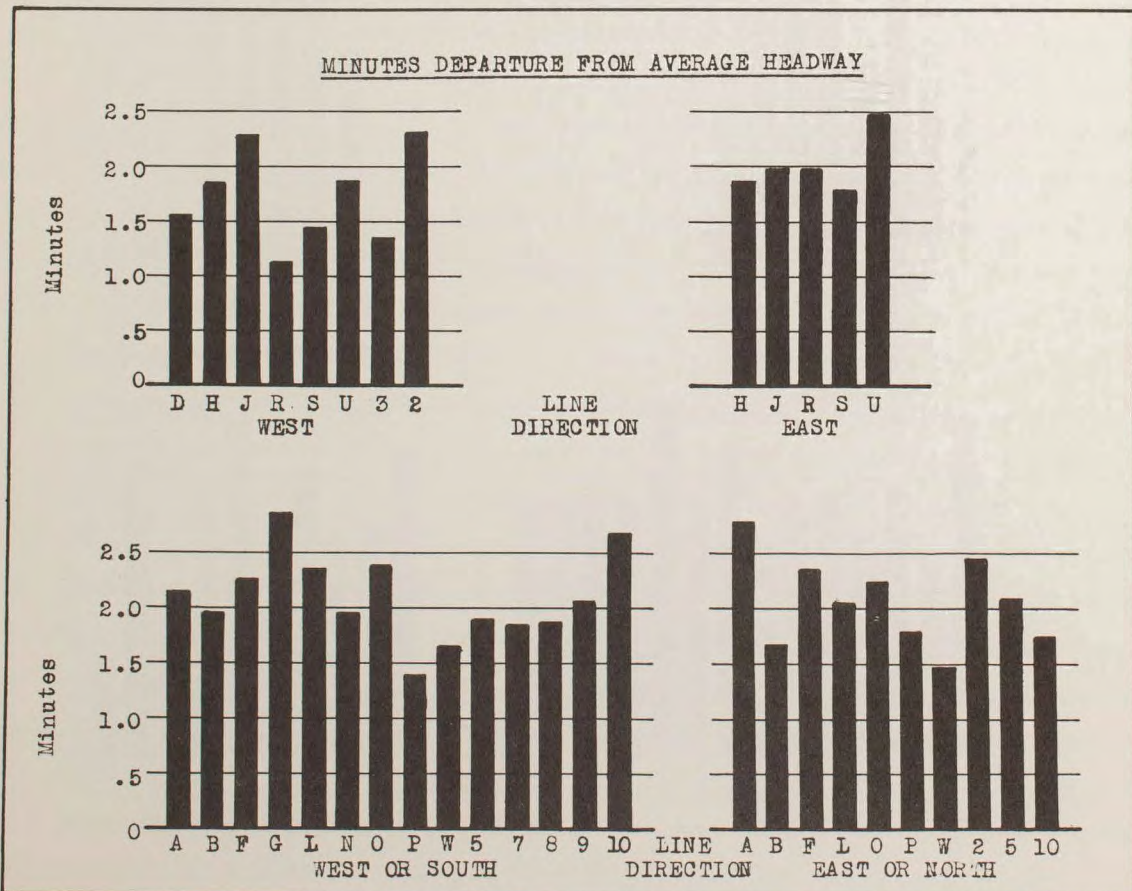
The letters in small type indicate the direction from which the line enters the downtown area. This chart is to indicate service relationships in a general manner and was used in conjunction with the detail charts which we have prepared for each line, but which cannot be duplicated in a summary report of this character.

The chart shows lines "L"(n), "P"(w), "3"(w), "H"(w), "S"(w), "R"(w), and "5"(s) in the area which borders on inadequate service, while a number of lines such as "H"(s), "F"(n), "O"(s), and "J"(w) are in the area which would indicate that a reduction in service might be justified.

SECTION I

REGULARITY OF SERVICE

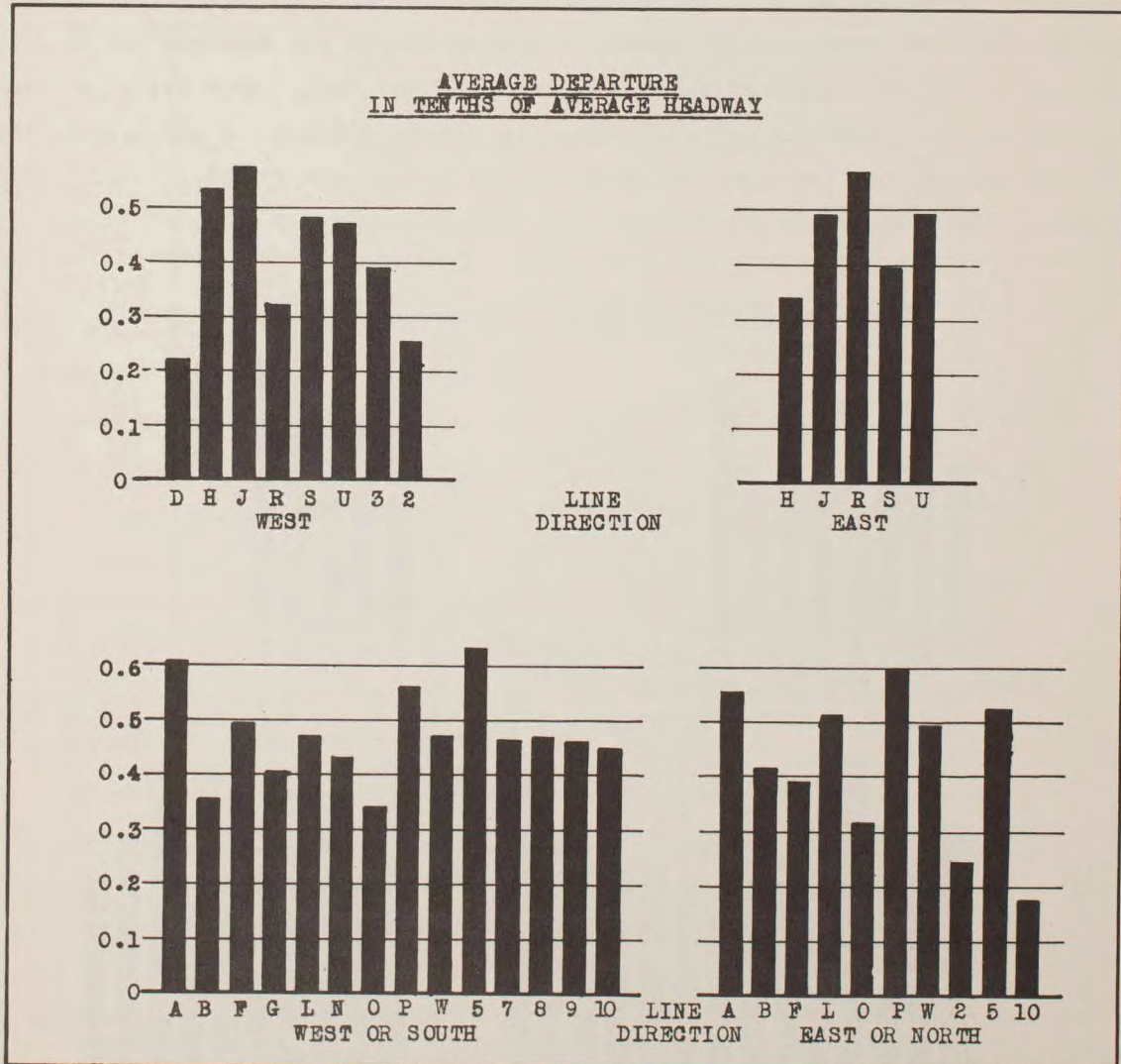
The question of regularity of service has been raised on several occasions, but most discussions relate to general observations with reference to the subject. In an endeavor to approach the question in a more specific manner some studies have been made which are presented for whatever they are worth in further consideration of this matter. In preparing these studies checks of headway during the outbound period of 4:30 P.M. to 6:00 P.M. on each of three separate days were made. Each day's performance on each line was then measured by determining the average headway. A measurement was then made of the departure of the cars from that headway during this period. The following chart shows the average departure from an even headway in minutes for each of the lines.



It is, of course recognized that some of this departure may be in the schedule itself, but since the last control point on each of the lines is prior to entering the downtown business district, the effect of differences in the headway due to the schedule cannot readily be determined. In any event a uniform method has been employed for all lines so that for comparative purposes it is believed that the results are representative of the performance on various lines.

The line with the highest irregularity as measured by this method is the "G" line, and the next highest is the "A" line (north). The "2" line and the "U" line also show high average departure measured in minutes. The "R" line to the west shows the best regularity, the average departure being but slightly over one minute.

To the public, of course, the departure in minutes is also necessarily related to the average headway, and the following chart has been arranged to reflect the departure as measured by minutes related to the average headway and expressed as a ratio of the average headway.



On this basis the two lines which show the highest percentage departure are the "5" line to the south and the "A" line to the west. The "P" line to the east is also high. Here it will be noted that the "G" line, which had the highest actual minutes departure, is about average due to the long headway on the "G" line. The "10" line to the north showed the lowest percentage of any of the lines.

It is concluded from the above studies that no one line can be said to be decidedly more irregular than other lines. We believe that the standards of service as discussed in the preceding section may in general be applied as representative of all lines.

SECTION J

SPACING OF CAR STOPS

One of the important items in connection with service is the location of car stops. This is a feature which affects the public both directly and indirectly. If the stops are placed too close, the average speed is lowered and as a result the travel time between points on the line is increased to the detriment of all except short haul riders. If the stops are placed too far apart, the walking distance for some of the patrons becomes prohibitive. Of course the fewer the stops the higher the schedule speed and the lower the operating cost, which indirectly is of advantage to the public. Street car stop locations should be considered largely in relation to other traffic using the street and the relation to intersecting streets, particularly between traffic arteries.

In general, so far as street railway practice is concerned, location of stops approximately eight to the mile is recommended as standard practice. In Los Angeles before the war cars stopped practically at every block, but during the war period the skip-stop system was inaugurated. Location of stops is under the supervision of the Board of Public Utilities and Transportation of the City of Los Angeles, acting in cooperation with the City's Traffic Signal Department and the carriers involved. Since the skip-stop system was inaugurated location of stops in many instances has been altered due to the introduction of traffic signals and boulevard stops. The present policy of the Board is to maintain stops, where practical, at all traffic signals and boulevard stop intersections. Due to the street development of the city many of the principal traffic arteries are approximately 1320 feet apart. The Board's policy, in general, is to provide for an intermediate stop in such cases, which it will be seen provides for approximately eight stops per mile and presents a reasonable spacing. There are, of course, many cases where stops must be located to suit the particular street layout and other special considerations. The average spacing of stops on the Los Angeles Railway is 800 feet, or 6.6 to the mile. In general it is believed that this represents, if anything, a slightly greater spacing than desirable and that the matter of spacing of car stops is one which is being adequately handled at the present time in accordance with sound practice.

SECTION K

ONE-MAN CAR OPERATION

Serious consideration has been given to the question of one-man operation of street cars. It is a fact that this form of economy in operation has been successfully placed in effect on the majority of street car systems in the United States. The savings in platform labor possible under this plan are available for improvements in service in other respects, and it is in the public interest that such operation should be carried out under such circumstances and with the proper equipment so that both the public convenience and safety will be fully met.

As a general proposition, one-man operation of street cars is sound if proper equipment is available. The motorman and conductor are not as a rule performing their respective duties at the same instant. The motorman for the most part is busy only when the car is enroute; the conductor is busy only when the car is stopped, this latter condition being modified by the opportunity of the conductor to collect fares on his platform after the car actually starts in motion. The combining of the duties of the two men into the hands of one is, therefore, entirely practical. The Los Angeles Railway has established one-man operation on a number of routes including "7", "8", "N", "B", "F", "O", "2", and "G" lines, as well as shuttle lines.

At this time the "7", "8", "N", and "B" lines are operated by one man, except during peak hours, with Type H-4 equipment redesigned for one-man operation with safety features and rear door exit. The "F", "O", "2", and "G" lines are operated throughout the day with one-man cars, as are shuttle lines. A serious criticism of the "B", "2", "F", and "O" operation is the use of the old Type B car with no rear exit available, and this is particularly true of peak hour operation of the "F" and "O" lines.

Extension of such service should be made from time to time as properly equipped cars are available for the service.

The development of one-man car operation in Los Angeles has been hindered by attacks on the desirability of such operation from time to time from various sources; and the use of equipment which would not permit of satisfactory public reception. The remodeled Type H-4 car, while of course not to be compared with the new "Presidents' Conference" type car, has a reasonable equipment arrangement for one-man car operation, and we recommend that a trial of operation on "N" line for the entire operating period be made. This trial should be inaugurated with every attention to the details necessary to insure public reception; namely, ample service and ground loaders wherever any possible need exists until experience has demonstrated at which points the loaders may be dispensed with.

The new equipment program, discussed later, is predicated on one-man operation, and in our opinion it is entirely practicable with such equipment.

SECTION L

SERVICE CHANGES AND REROUTING

In this section the service needs of the local lines will be discussed and rerouting considered to the extent it may be desirable to provide better service with a minimum of cost.

At this point we may state that as a general proposition the present routings are found to be reasonable and no large operating economy nor general improvement in traffic conditions can be brought about by a general rerouting plan.

This does not mean that as traffic and other changes occur, route changes should not be considered or made. In the following study we have approached the problem from the viewpoint of determining, first, where the public should have better service, and secondly, where a surplus of service is rendered. In some instances other matters are controlling. It should be understood that many plans have been reviewed in reaching the conclusions here stated, and no endeavor is made to review all of these studies.

"A" Line

From all of the foregoing information it is apparent that the "A" line to the west is in need of its present service, whereas to the north the present service is entirely out of proportion to the travel. It may be said that the north service is operated largely in lieu of some better terminal for this line.

On the Angeleno Heights branch approximately 1200 passengers ride daily. On the Edgeware Road branch approximately 1000 passengers ride daily.

"L" Line

The "L" line is operated at the present time with an 8 minute headway, and the conclusion from the checks presented is that the travel on the "L" line to the north is such as to justify a better service. Undoubtedly this has not been done by the railway companies because of the operating problem which it encounters on the single track portion of this line from Virgil and Fountain Avenues to Edgemont Street and Fountain Avenue.

A check shows that about 1300 passengers daily in each direction board or alight at stops on the single track section of this line on Fountain Avenue, and that the largest percentage leave the cars at the terminal at Edgemont Street.

A check of distribution of travel by hours on the "L" line at Temple Street and Broadway shows that the passengers exceeded the seats provided during six hours of the day inbound and seven hours of the day outbound. This represents a service condition which must be corrected.

"P" Line

The west end of the "P" line operating on Pico Street, as has been previously stated, has grown to where it is heavy and, insofar as base service is concerned, should be provided with additional service. This is the heaviest line, handling approximately

20,000 passengers at the usual checking point.

REARRANGEMENT OF "A", "L", AND "P" LINES

From a consideration of the studies which have previously been set forth it is believed that a rearrangement of the "A", "L", and "P" lines can be considered with a resulting improvement in public service and at a minimum of increased cost. A recommendation is made based on detail study, as follows:

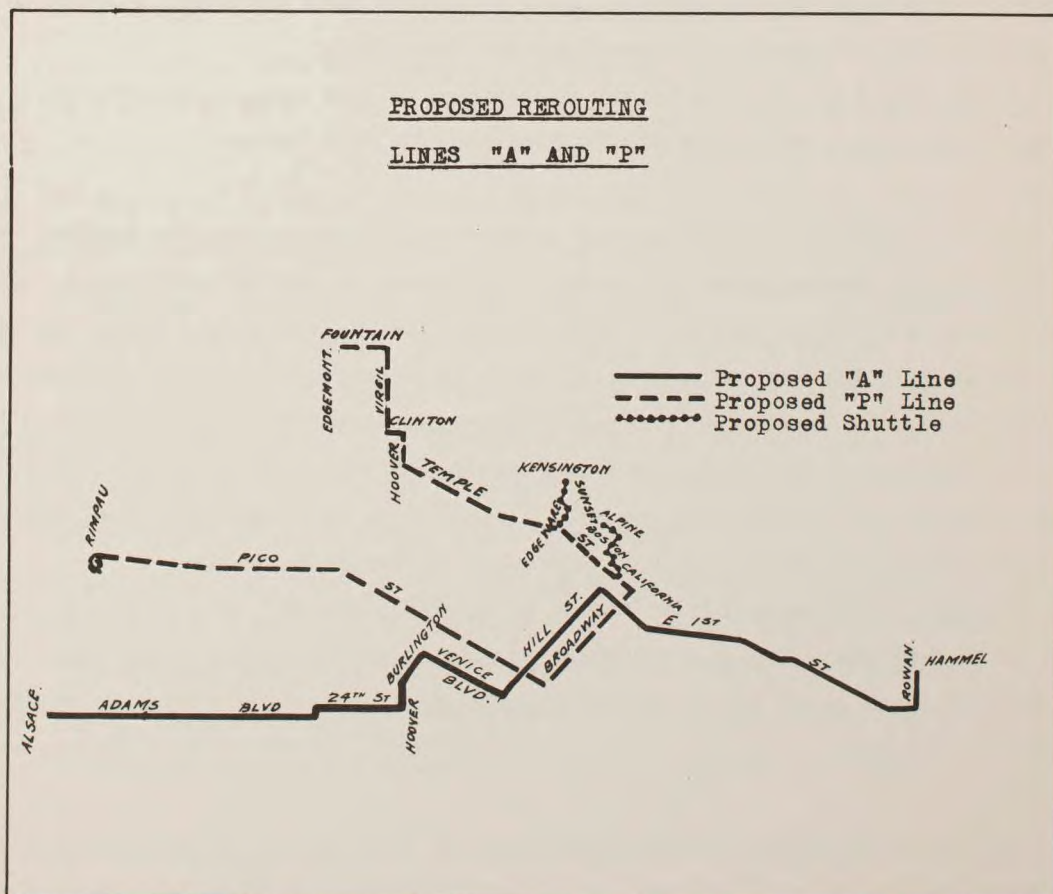
Reroute the "P" line so that instead of turning east on First Street and continuing east on East First Street, the line would continue north on Broadway to Temple Street on the route of the present "L" line, providing a 4 minute base headway.

On the northerly end of the present "L" line operate every other car through to the end of the line at Fountain Avenue and Edgemont Street and turn the alternate cars at Fountain and Virgil Avenues, or at Clinton and Virgil.

The present "A" line to be operated over its present route to the west but after turning from Hill to First Street, continue east on East First Street over the route of the present easterly portion of the "P" line.

The present "A" service on the north to be discontinued and shuttle service to be operated on the Beaudry and Edgeware branches, connecting with the new 4 minute service on the "P" line.

The present "L" line service to the west to be operated either on Spring Street to a terminal at Spring Street and Sunset Boulevard, or on Hill Street and the Angeleno Heights branch in lieu of shuttle service, until such time as the entire line is replaced with motor coach service. (See next chapter)



This plan has the disadvantage of any rerouting in that it disturbs existing relationships. We are of the opinion there is no serious question involved in the proposed change. The plan will provide shuttle service on Edgeware Road and Angeleno Heights branches where through service is now provided. Probably the most important objection is the operation of Type C equipment on East First Street in lieu of Type H equipment.

This plan will have the advantage of providing a substantial service improvement at a minimum cost. It will practically eliminate car turning movements at First Street and Broadway, a very decided traffic improvement, particularly with First Street planned as an important east and west thoroughfare. It will reduce materially the cars on Broadway in the block between First and Temple, relieving traffic congestion in this block. It will ultimately reduce traffic on Hill Street, allowing for additional motor coach service on this street.

In lieu of adopting this plan the company should double track the north end of the "L" line, operate the line on a 5 minute headway, and operate the "P" line on a 4 minute headway.

"5" Line

The "5" line, now operated on an 8 minute base service, should, in our opinion, have a more frequent service. We have no plan to offer other than to increase the service on the line as now operated, say, at least to a 7 minute headway.

"7" and "8" Lines

These lines were on an 8 minute headway, but with the establishment of one-man operation the company increased the service to 6 minutes. This was an entirely proper step so as to minimize public reaction. It is probable, unless traffic further increases, that these lines may be operated during most of the base period on a 7 minute headway with adequate service.

"F" and "O" Lines

The traffic checks show that these lines, both of which are operated on an 8 minute base headway, might as far as operation is concerned be rerouted. "F" (South) and "O" (North) justify an 8 minute headway, while "F" (North) and "O" (South), if connected, could be operated on a 10 minute headway with entire satisfaction.

"R", "S", "3", and "H" Lines

The checks on these lines indicate the need of a 5 minute headway to the west in all cases. A number of plans have been reviewed. The "R", "S", and "H" are operated alternately on Seventh Street, and any change affecting one will affect the others.

Likewise the "3" and "D" are somewhat inter-dependent, although the "D" line has declined to the point where it is of minor importance.

The problem with this entire group of lines is the heavier volume of travel to the west compared with the east.

We recommend, in the following chapter, the extension of the Melrose line into the downtown district by a motor coach service. This line will have the effect of reducing to some extent the "H", "3", and "S" travel, and it may be that such reduction will be sufficient to maintain the present 6 minute headway.

Likewise such a line may offer an opportunity to eliminate the "D" line, operating the "I" line southerly to Sixth and Alvarado Streets.

With the bulk of travel to the west, the establishment of terminal facilities east of the downtown area becomes desirable, particularly on Fifth Street. An off-street terminal may be provided for \$50,000, near Maple Avenue. The operation of the "3" line from this terminal will save \$9,000 annually, together with one car. It is believed such a terminal should be provided. A similar terminal on Seventh Street may be provided for \$95,000, but we have not found a suitable combination of lines under present traffic conditions to make a justifiable recommendation at this location.

"2" and "G" Lines

These lines might be recombined to operate the "2" line across town on Fifth Street to a terminal, and operate the "G" line northerly on the route of the "2" line (North). This was the routing at one time. Turning movements at Fifth and Hill, First and Hill, and First and Broadway would be eliminated in the downtown area. Some service adjustments would have to be made and some public reaction anticipated.

Beverly Coach Line

The checks on this line indicate that a satisfactory service consistent with the higher base fare charged has not been rendered. We understand the company has ordered additional coaches to correct this situation.

Pacific Electric Railway Lines

The only problem existing on these lines is on the Hollywood lines. Overall this service is satisfactory, and the necessity of dividing the service between the Subway and Hill Street surface lines precludes any change at this time. A peak hour service condition which should be studied was noted on the Western-Franklin line at Temple and Hill Streets in the morning service. Some consideration was given the possibilities of combining the Watts and Sierra Vista service to form a through service via Main Street, but it is concluded that the disadvantages of these proposals more than outweigh the advantages to be obtained from them.

Los Angeles Motor Coach Company Lines

The Los Angeles Motor Coach Company line on Western Avenue is overcrowded during peak hours at Wilshire Boulevard and Western Avenue, and this should be corrected. A similar problem exists on the Crenshaw-Vine-La Brea line.

Peak Service

The maximum 70% overload rule and the 25 minute passenger-seat rule of the

Board of Public Utilities and Transportation are rules which are entirely reasonable and fair to the company. The public is entitled to that service. It is obvious that as the rules apply to a 20 minute period, many individual cars will have loads exceeding these figures.

We have shown the results of the checks along these lines, and in the cases mentioned increased peak service should be provided.

All Service

The studies herein are based on the most recent checks available. Travel trend is upward at the present time.

The application of the principles reviewed and presented in this study should be made by the companies to the travel changes as they occur from time to time, and it is recommended that the long established informal policy wherein the City of Los Angeles has regulated the service of the Los Angeles Railway, without raising any jurisdictional questions, be continued. It is believed that the studies and conclusions of this report should be made effective and the application of the basic principles continued.

SECTION M

OTHER TRAFFIC PROBLEMS

Traffic Delays in Downtown District

Congestion of traffic in the downtown district and consequent delays to movement of traffic in general and street cars in particular through the business district is a serious problem in Los Angeles. The most recent check (1931) shows that no less than 275,000 automobiles enter the downtown area daily. Examples may be cited such as the fact that on one line of the Los Angeles Railway in the evening rush period a full half hour is consumed in crossing the business district from First and Spring to Ninth and Figueroa. On the same line in the opposite direction the schedule calls for thirteen minutes running time from Eighth Street and Western Avenue to Ninth and Figueroa Streets, a distance of three miles, while equal running time of thirteen minutes for only eight-tenths of a mile from Ninth and Figueroa Streets to Seventh and Spring Streets is allowed. The nature of the causes of the delays can be indicated by the following examples:

Double parking of trucks and automobiles and careless parking, particularly of trucks, forcing in some cases a line of traffic out over the rails. This is not pronounced during rush hours because of the no parking rule from 4:30 to 6:00 P.M.

Automobiles failing to keep in line, often blocking car tracks by as little as a foot. Recent painting of traffic lanes on Broadway has had excellent results along this line, and the city's traffic department is to be commended for this work.

Turning movements by street cars, particularly at such intersections as First Street and Broadway, Fifth and Hill Streets, and at the Subway Terminal.

Left-hand turns of automobiles and trucks in and out of alleys, garages, and parking lots. There are twenty-two parking lots on Hill Street alone in the business district and a large number of garages and parking lots on Spring Street. The importance of this feature is shown by the fact that the average running time for street cars (5 to 6 P.M.) on Broadway between Second Street and Eighth Street, where there are few garages, is 7.3 minutes, whereas on Spring Street, with less street car traffic and with the same two-man operation, the average time interval was 9.5 minutes, or 30% slower than Broadway.

Some photographs accompany this section which are illustrative of some of the traffic situations of these carriers.

Control of traffic in these respects will require restrictions upon individuals and business firms as well as possible modification of the operations of the carriers with whom this report is primarily concerned. Such restrictions and changes will result in apparent increase in expense or loss in patronage that must be offset by general benefits coming from the freer flow of traffic, conservation of time and greater convenience to the entire public in entering and leaving the downtown business district. The details of the necessary restrictions can be determined and justified to the local officials responsible for their administration and to the public only by a study perhaps supplemented by some experimentation. We cannot too strongly urge that this whole subject be thoroughly gone into in a joint study conducted by the street railway companies and the city officials responsible for traffic control.

Pull-In and Pull-Out Movement

During our study we have noticed instances where it appears that improvement in traffic conditions and also cost of service might be made by some investment in facilities to expedite these movements. At this time only four car houses are active. With the traffic increases now being realized, it may be desirable to reopen a fifth division, and accordingly, connections should not be constructed if not necessary for operation under a plan of operation with five car houses.

However, intersections like Eleventh and Main Streets should be relieved of all unnecessary movements. Spring Street should be connected with appropriate curves to Sunset Boulevard tracks. Suitable additional connections to Division No. 5 may be justified.

In addition, cars are operated through the downtown area in many instances before going into peak service in the opposite direction. These movements should be eliminated in all possible instances.

VISUAL EXAMPLES OF VARIOUS TRAFFIC SITUATIONS



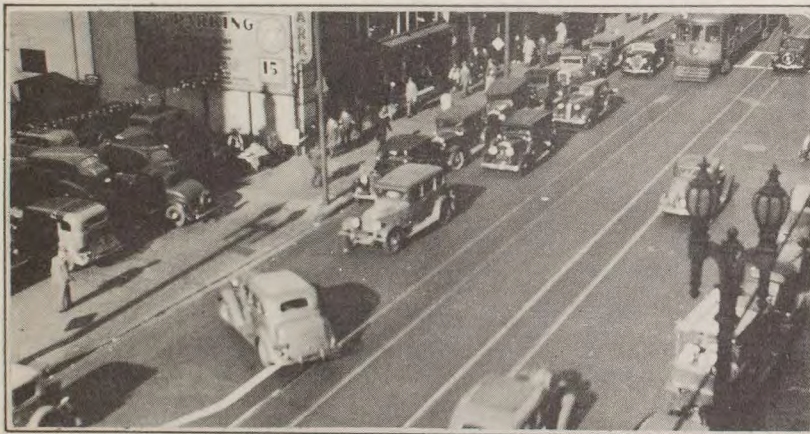
Hill Street, North
of Fifth Street

Showing trains entering and
leaving Subway surface tracks



Pershing Square
Downtown Coach Terminal

Hill Street between
5th and 6th Streets



Spring Street Near 8th

Typical Left Hand Turn
into Parking Lot



First Street at Broadway
Looking West on 1st

Showing turning movement
of "A", "2" and "P" cars

VISUAL EXAMPLES OF VARIOUS TRAFFIC SITUATIONS

Street Car and Motor Coach
Terminal at
Pico and Rimpau

Loop System for
All Operations
providing for off-street facilities

Seventh Street
Looking West from
Broadway



Fifth Street
Looking West at Hill Street

An example of undesirable
turning movement in
Downtown Area

Main and Spring Streets
Looking North

A complicated traffic problem
and an illustration of barrier
of different rail gauges to
unification. A cross-town route
would otherwise be a practicability
at this point



SECTION II

CONCLUSIONS AND RECOMMENDATIONS

In summarizing the study of traffic, service and routing, we may say:

1. In general the service rendered by the local carriers is adequate. Increased base rail service should be provided on lines "P" (west), "L" (north), "3" (west), "H" (west), "R" (west), and "S" (west), "5" (north) and "5" (south). Plans to provide such service are discussed in some detail. Base service may properly be decreased on lines "H" (south), "O" (south), "F" (north), "A" (north), and line "D". A rerouting plan to in part accomplish these purposes is presented, which would

- (a) Connect "P" (west) with "L" (north)
- (b) Connect "A" (west) with "P" (east)
- (c) Ultimately substitute motor coach service on "L" (west)

A terminal on Fifth Street east of Los Angeles Street is recommended to care for increasing travel on Fifth Street (west).

2. Peak rail service should be governed by the 70% overload (20 minute period) rule at maximum points, and by the seat per passenger rule at 25 minute points. Lines on which additional service is required to comply with these rules are pointed out.

3. Motor coach service operated on a 10¢ base fare should be given "seat per passenger" service, and additional service on Beverly Boulevard, Western Avenue, and Vine Street is justified.

4. One-man car operation with properly equipped cars is entirely feasible and is a prerequisite to the purchase of new equipment. Adoption of full one-man car operation on the "N" line at this time is recommended.

5. There should be full cooperation between the City authorities and the street railways toward the common end of reducing as far as is possible those sources of traffic delay and congestion in the downtown area. Such concerted action will result in mutual benefit to all factions concerned including the downtown merchants and the general public, both riders and pedestrians.

6. A thorough study should be made by the Los Angeles Railway of the pull-in and pull-out movement of cars, both toward the end of relieving traffic congestion and promoting operating economies.

CHAPTER XVIII

EXTENSIONS AND ABANDONMENTS

Under the heading of "Extensions and Abandonments" we will consider a number of important subjects, some of which are related to the preceding chapter on "Service and Routing" and some of which go into questions beyond the present service. It has seemed logical to present these matters in the following order:

- A. Extension of Service
- B. Substitution of Motor Coach for Rail Service
- C. Abandonment of Service
- D. Rail Route Changes
- E. Rapid Transit
- F. Union Terminal Facilities

SECTION A

EXTENSION OF SERVICE

There have been from time to time numerous suggestions for the extension of service in the Los Angeles area. Probably at some time or other every line has been considered for extension, and, as a matter of fact, since 1920 the Los Angeles Railway has made a number of extensions to its rail lines. These extensions have been as follows:

		<u>S. T.</u> <u>Miles</u>
1920	Western Avenue - Melrose to Santa Monica	0.983
	West 48th Street - 2nd Avenue to 6th Avenue	.437
1923	West 3rd - Larchmont to La Brea	2.322
	Angeleno Heights	.377
	Wabash and Indiana to Bridge Street	.916
	North Vermont - 1st to Monroe	1.850
	Evergreen Avenue - 1st to Brooklyn	.498
	Monroe - Vermont to New Hampshire	.153
1924	Central Avenue - 71st Place to 77th Street	1.109
	East 7th Street	.224
1925	Edgware Road - Temple to Bellevue	.204
	Melrose Avenue - Normandie to Western	.979
1926	West 8th Street - Hobart to Western	.478
1927	Leonis Blvd.- Pacific Blvd. to Downey Road	2.315
1930	Central Avenue - 77th Street to Manchester	1.245
	Grand Avenue - Jefferson to Santa Barbara	1.394
1931	West 48th Street - 6th Avenue to Crenshaw	.843
	South Main Street - Slauson to Florence	1.975

Most of the extensions in service, however, have been through motor coach operation. As has already been pointed out, motor coach service was first inaugurated in 1923 and has now grown to the point where such operation represents nearly 15% of the total operations in the local service area when measured by passengers carried and a much larger percentage if measured by route miles operated. There have been in a few instances substitution of motor coach for rail service.

The purpose of this section will be to discuss the matter of extensions in service in a general manner, it being understood that this question is an ever-present one, and with the growth of the territory it is properly a subject to review from time to time. It should also be borne in mind that as a rule the consideration of extension of service if used in partially developed territory involves operation which, considered by itself, may not be self-supporting, and the question arises of whether or not the entire system should carry the extension. This is probably true of most of the extensions of rail service, which will be considered herein.

Rail Lines of the Los Angeles Railway

One approach to the question of rail service may be through a determination of the amount of travel which is carried to the ends of the rail lines. A recent check made during the hours of 4 P.M. to 6 P.M., at the ends of the rail lines, is of interest as showing where relatively heavy volumes of travel were carried to the ends of the present main lines. Some of the lines which show fairly high travel in this respect are as follows:

<u>Line</u>	<u>Passengers</u>	<u>Line</u>	<u>Passengers</u>
"A" (west)*	339	"P" (west)*	897
"H" (west)*	352	"R" (east)	459
"J" (south)*	544	"R" (west)	297
"J" (west)*	236	"S" (south)*	230
"I" (west)*	217	"S" (west)*	623
"L" (north)	210	"V" (north)	241
"N" (west)	194	"W" (west)*	366
"O" (south)*	232	"Z" (west)*	270
"P" (east)	579	"8" (south)*	239

* Indicates connection with motor coach lines.

The lines not mentioned in general carry less than 200 to the end of the line.

It will be noted that the "P" line (west) is outstanding in the way of travel to the end of the line, and of course this is to be expected because of the connection with the Santa Monica Municipal Motor Coach Service and the lines of the Bay Cities Transit Company at Pico Street and Rimpau Boulevard. Here a loop terminal has been installed, a photograph of which is shown in the preceding chapter, which provides adequate off-street connections. It is of interest to note that nearly as many people were handled at this terminal as were handled on the Wilshire Boulevard line on the express service at Fairfax Avenue.

The "S" line west carries a large number of passengers to the end of the line, largely for transferring at Santa Monica Boulevard and Western Avenue. The "J" line in Huntington Park carries a number of passengers to the end of the line, some of whom transfer to the motor coach lines in South Gate. It will be noted that "H" line and "3" line appear in the list, indicating a transfer movement to the Melrose coach line.

No doubt requests have been made from time to time for extensions on the ends of practically all rail lines by various organizations and groups. We have reviewed seven specific proposals including the Third Street line, the cost of track and substations alone totaling over a million and a quarter dollars, without consideration of the new equipment which might be required.

As a policy, we believe, as expressed later in detail, new money should at first be provided for new modern equipment on rail lines. As to extensions, the provision of feeder coach lines initially, as has been the practice, is an entirely reasonable and proper approach; and as these lines increase in traffic, through coach routes may be established to the downtown area.

We therefore conclude at this time to make no recommendation for extension of rail lines of the Los Angeles Railway.

Motor Coach Service - Los Angeles Railway

In reviewing the motor coach operations of the Los Angeles Railway, we believe the Melrose line has reached the point where it should be extended to the downtown area. Such an extension will serve a threefold purpose.

- (a) Provide through service for present patrons and attract additional business.
- (b) Provide a service on Third Street between Vermont Avenue and the downtown area.
- (c) Relieve to some extent service requirements on "H", "3", and "S" rail lines and probably make possible the elimination of the "D" and "2" lines.

Such a line to be operated along the following route has been studied:

From Melrose Avenue and La Cienega Boulevard, thence via Melrose Avenue, Vermont Avenue, Third Street, Fremont Avenue, Second Street, and Hill Street to Olympic Boulevard.

It has been reviewed on both a 7¢ and a 10¢ fare basis. We believe that the route should be established on a 10¢ fare basis to Fairfax Avenue.

This plan will require an investment of \$300,000 in coaches and \$50,000 in garage. Considering all angles of this extension, we believe the net revenue of the company will not be impaired after the first few months of operation.

A cross-town service on Washington Street between Santa Fe Avenue and Vermont Avenue is a desirable route from the viewpoint of inter-exchange of passengers, but has not been considered to the extent that a recommendation is made. We believe the company should seriously consider this plan, also the extension of the Alvarado coach line to

Santa Barbara Avenue on the south.

Various other coach extensions have been considered, but we believe at this time the above items are the outstanding requirements.

Pacific Electric Railway

A study was made of extending local service beyond Vineyard to Beverly Hills, but the conclusion reached was that the advantages were not sufficient to recommend it at this time.

The Edendale line may be considered for extension to the Atwater district if the plan to augment the existing Glendale interurban service with motor coach service is consummated and when the results therefrom are known.

Los Angeles Motor Coach Company

The outstanding cases of extension requirements of this service are:

1. Third Street - La Brea Avenue to Beverly Hills
2. Fairfax Avenue - Pico Street to Hollywood
3. Fletcher Drive - from present service in Silver Lake area to a connection with "5" line service

Proposals to make the first two extensions have been filed with the public authorities by the company during the course of our study.

The Fletcher Drive extension will provide a cross connection between Eagle Rock and Hollywood areas and should be made if a plan can be adopted which will make the extension possible at reasonable cost in connection with present service.

SECTION B

SUBSTITUTION OF MOTOR COACH SERVICE FOR RAIL SERVICE

The general situation with reference to the substitution of motor coach service for rail service has been given considerable thought in our study. There is no need in this report to review the possible entire substitution of motor coach service for rail service, such a substitution being an entirely unwarranted plan under the situation now existing, let alone a consideration of the increased costs and traffic congestion which would be caused thereby.

We have approached the problem from the point of view that, as explained in the previous section, motor coach service may be provided in lieu of rail extensions, thus relieving to some extent rail line equipment requirements. In this section we will review possible cases of where motor coach service may be directly substituted for rail service.

In this connection it may be noted that on January 2, 1935, quite an extensive substitution of this character was made, wherein the South Pasadena local railway was abandoned and motor coach service of both the Pacific Electric Railway and Los Angeles

Railway were substituted in part therefor. In this case the controlling matter was the need for rehabilitation of the rail line involving a considerable new capital expenditure. It was considered that this capital expenditure was not justified.

We believe this example may be taken as typical of the substitution of motor coach for rail service which should be carried out at this time. In reviewing all lines of the local carriers, having in mind a consideration of rail renewals and changes which may be made, we find only one situation that calls for discussion.

The "L" line to the west passes along Olympic Boulevard, a considerable portion being along the same thoroughfare which the State Highway Commission plans to build as a through traffic artery. At the time when major track reconstruction is required, or incident to this highway work, it is our opinion that motor coach service should be substituted for the rail service. This substitution will have the effect of reducing the rail equipment needs and has been considered in a later chapter wherein the acquisition of 230 new rail cars has been recommended. In other words, if this substitution is not made within the next few years there will be need for a larger number of street cars.

There may be some other lines which ultimately should be properly considered for substitution of motor coach service. In fact, several situations have been reviewed by us but at this time we have no comment to offer other than the "L" line substitution which has been discussed.

SECTION C

ABANDONMENT OF SERVICE

In reviewing the possible abandonment of service, it may be stated as a general principle that the basic element to consider is the reduction in cost to the carrier incident to the abandonment. In other words, any large system must necessarily operate service within the area which it is endeavoring to serve unless it is shown that a particular line is operating at such a loss that it provides an unreasonable drain upon the system. Many of the feeder motor coach lines of the Los Angeles Railway and Pacific Electric Railway are not operating on a profitable basis in and of themselves. In connection with rail lines there are, in our opinion, a few such lines.

Rail Lines

In studying the rail lines in general those which have revenues of less than 13¢ per car mile are probably operating at a loss. The only rail lines of the Los Angeles Railway which are in this class are the shuttle lines "I" and "K". There may be some ends of rail lines which are not of themselves entirely justified. These conclusions apply only in the case where there is no substantial out-of-pocket cost incident to track maintenance or reconstruction, and it is apparent that when large reconstruction jobs are at hand the particular line on which the reconstruction work is contemplated must be

reviewed. It is our opinion that such a line as the north end of "A" north of Temple Street is one on which no substantial capital expenditure should be made, but in general we have no recommendation to offer at this time regarding any of these lines.

The shuttle service, such as the 61st Street line which operated over a route only three-quarters of a mile long through an area in which other service was provided, obviously was not justified and the Company during the course of our study filed an application with the Commission for the abandonment of that service, which application was granted.

Motor Coach Lines

For motor coach service, as has been stated, many of the feeder lines must necessarily operate at a loss, and it is a question when an unreasonable out-of-pocket loss is being encountered. Possibly the outstanding cases of losing lines are those in the Huntington Park-Southgate area and the Fairview Heights area near Inglewood. We have not felt that the economies to be effected from elimination of these lines is sufficient at this time to justify a recommendation with reference to their abandonment.

SECTION D

RAIL ROUTE CHANGES

Possibilities which will provide a more flexible rail system are as follows:

1. Construct trackage on Santa Barbara Street between Figueroa and Main Street
2. Construct trackage on Washington Street from Grand Avenue to Broadway, thence north on Broadway to Pico Street
3. Install suitable loops at Spring Street and Sunset Boulevard

With the exception of the last item, we do not believe these expenditures should be considered until the equipment requirements have been met.

SECTION E

RAPID TRANSIT

In analyzing the problems of mass transportation in Los Angeles, one which stands out in importance is that of moving public as well as private transportation vehicles through the congested downtown heavy traffic area. Provision for expediting such movement has been made by the city authorities by installation of traffic signals at all important intersections, prohibition of left-hand turns at certain important intersections, elimination of curb parking during the rush hours of the evening, and various other means. Most of those measures are of mutual benefit to both automobile and street car movement. It is doubtful, however, that the traffic signal interval best suited to automobile travel is equally well suited to street car travel. With existing conditions of mixed types of conveyance traveling at the same level, the problem, considering its

complexity, has been handled most satisfactorily.

Rapid Transit has been discussed at various times and suggested in several reports prepared in the past as a method of solving, to a great extent, the mass transportation problem of Los Angeles. Such plans have considered elevated and subway railways, both of which are used in some of the large eastern cities and have proved satisfactory.

Elevated railways have the disadvantages of reducing property values along their routes through the business area, and if the present type of equipment is continued in use, would amplify existing noisy operation, which is highly undesirable. Elevated tracks are not so costly as subways, however, and are well suited to the local climate.

Because of the high cost of subway construction and the correspondingly high carrying charges, it has been the somewhat general practice for public authorities to assist in building or partly financing such projects. The tendency has been toward public ownership and private operation of such facilities.

Subways as used in New York, Brooklyn, and Philadelphia provide rail facilities for specially constructed subway trains designed for transporting for considerable distances underground, tremendous volumes of people from highly centralized areas of skyscraper office buildings.

In Boston the subsurface ways have been adopted, which are not as costly as the regular subway and make possible the use of surface equipment operated underground through the congested loading area. The cars come to the surface outside the heavy traffic zone to distribute their passengers via the regular surface routes.

If subways were to be seriously considered as a solution to the mass transportation problem in the downtown area of Los Angeles, the latter plan would lend itself more satisfactorily to the existing conditions both practically and economically.

Los Angeles does not experience an enormous exodus of office, business, and factory workers over a short period of time comparable to New York or Philadelphia. However, a subway system would undoubtedly prove of great benefit in providing high speed service with few stops for long haul traffic between the central business district and the outlying area as well as the elimination of noisy cars from the streets. Whether the need is great enough to justify the necessary expenditure of from \$4,000,000 to \$8,000,000 per mile for double track facilities exclusive of equipment is beyond the scope of this report.

SECTION F

UNION TERMINAL FACILITIES

For many years there have been plans under way for the construction of a Union Terminal which would bring all the steam trains of the various companies together in a common terminal. At the present time there appears to be little doubt that the construc-

tion of that project will be realized within a few years. Preliminary plans have been drawn and grading work has already commenced.

The tract upon which the terminal is to be built is bounded on the north by Macy Street, on the west by Alameda Street, and on the south by Aliso Street. The Los Angeles Railway has operative tracks on Macy Street; the Southern Pacific Company main line steam trains operate over Alameda Street; and the Pacific Electric Railway operates over Aliso Street. The close proximity of the lines of the two local street railways to the terminal site makes easy access possible for both, and the plans of the station provide for such contact. Inasmuch as Macy Street, from which the Los Angeles Railway would turn into the terminal, is a very heavily traveled automobile artery, turning movements of street cars eastbound at a point only about one hundred or two hundred feet distant from the traffic signals on Alameda Street would prove to some extent undesirable. Also, it has been suggested that the presence of the existing type of cars at the terminal would not promote favorable public reaction.

Based upon the amount of travel to and from the existing stations by street car, it appears that a motor coach service would be quite well adapted to such a purpose. There would be provided the advantage of a service to the public comparable to that now provided by taxi cabs. The motor coaches of modern design, of which many are now used in the service of the Los Angeles Railway, would undoubtedly be more inviting than street cars and would provide a more comfortable and faster ride as well as a more convenient accessibility to the passengers. We have made no detailed study to determine whether this service should be provided in the nature of a shuttle line or the extension of an existing line. A route could be chosen in either case which would also provide fast, convenient service to the Civic Center, for which there has been considerable demand.

In the event that motor coach service is provided to and from the Union Terminal by means other than an extension of a through line, a loop operation should be given consideration. Such a loop could be routed so as to provide short haul accommodations for the downtown area as well as transportation to persons wishing to go to the various hotels, business houses, and the Civic Center from the Union Terminal. In general the routing might be from the Union Terminal through the Civic Center, south through the business district, east on Tenth or Twelfth Street, and north on Los Angeles Street to the Union Terminal. A more detailed route would have to be worked out in event the plan would prove desirable. Such a service at a low fare for short haul riders with no transfer privileges, and the regular inner zone fare with a joint privilege to either of the two local rail systems would be desirable and should be studied by the managements of the two companies.

CHAPTER XIX

PLANT AND EQUIPMENT REQUIREMENTS

The plant and equipment requirements of the Los Angeles local transportation services involve a number of considerations, particularly since the requirements arise from several sources. The outstanding problem is the provision of additional and modernized rail equipment for Los Angeles Railway. Certain requirements arise through the rerouting and extension recommendations. Particularly concerning the track structure of the companies, there is the maintenance and reconstruction program to be considered and such changes as may become necessary due to requirements of public authorities incident to street and highway changes. It has been considered logical, therefore, to discuss these matters in the following sections:

- A. Rail Equipment Program - Los Angeles Railway
- B. Other Plant Requirements - Los Angeles Railway
- C. Pacific Electric Railway
- D. Los Angeles Motor Coach Company

SECTION A

RAIL EQUIPMENT PROGRAM

LOS ANGELES RAILWAY

The Los Angeles Railway at the present time has 1081 rail cars, of which 329 are of the longer type, end entrance car. Of these, 313 were originally constructed since 1920. The 16 cars (Type F) are of an earlier type reconstructed. The older type cars include the Type B, end entrance, of which there are 511, or 47% of all the cars; Type C, which is the old type center entrance car, with 167 cars, or 15% of the total; and the Type G, or Birney safety car, of which there are 64. As of September 19, 1935, 689 cars were required to fulfill the schedules for the rail lines.

Analyzing the rail travel, it is found that the following lines in general carry over 9,000 passengers per day at the maximum points.

Line	Maximum Cars in Service	Present Equipment		Line	Maximum Cars in Service	Present Equipment	
		Base	Peak			Base	Peak
A	31	Type C	Type C	Fwd.	263		
H	28	B	B	U	34	Type B	Type B
J	34	H	H,B	W	56	H	H,B
L	29	C	C	3	27	H	H,B
N	17	H	H	5	56	H	H,B
P	47	H	H,B	7	25	H	H
R	35	H	H,B	8	25	H	H,B
S	42	H	H,B	9	22	H	H,B
Sub Total 263				Total 508			

In the foregoing table in order to simplify the statement, Types F, K, L, and M have been shown as Type H because of the similar characteristics of these cars, making a

total of 329 in this group. Likewise no distinction has been made as to cars equipped for one-man two-man operation. It will be noted that practically all of the lines which have Type H cars in service during the base period also have Type B cars assigned for use during the peak period. The "N" line has Type H cars throughout the day, and under the new schedule adopted for lines "7" and "8" in November, 1935, using one-man operation except during the peak period, all of the cars on these lines are of remodeled Type H.

It will be noted that the "A" and "L" lines are fully equipped with Type C cars and that the "U" and "H" lines are fully equipped with Class B cars.

Other lines include the "B" and "F" lines, which are moderately heavy; the "V" line, which is a heavy crosstown line; and several others, together with the shuttle lines, as follows:

<u>Line</u>	<u>Maximum Cars in Service</u>	<u>Present Equipment</u>
B	27	Type B
D	8	C,B
F	30	B
O	17	B
V	39	C
2	10	B
10	19	B
G	11	Birney
K	6	B
Shuttles	<u>14</u>	Birney,B
Total	181	

It will be seen that for the important lines at the present time 508 cars are required for schedules. If these lines were to be fully equipped it would require approximately 10% of spare equipment, or a total of approximately 560 cars. There are 313 of the Type H cars which have been built and placed in service since 1920. It is apparent, therefore, that if these cars were used on the important lines, together with the 16 Type F cars and additional cars acquired to completely fill these schedules, a total of about 230 new cars must be acquired.

For the remaining lines it is apparent that there is no prospect of additional equipment for these services if all the heavier lines are to be fully equipped with new cars or Type H cars.

Under such a plan providing for all of the important lines to be equipped either with new or Type H cars, the remaining lines would have to be equipped with such cars as the Class B type, together with the Birney one-man cars on the shuttle lines.

Undoubtedly the trend in service in the territory which is not now served by rail lines is toward motor coach service, and likewise the trend on lines where extensive track reconstruction is necessary is toward substitution of motor coach service and abandonment of rail lines, as evidenced by the recent substitution of motor coach service on Madison Avenue, New York.

While in general the track structure of the Los Angeles Railway is in good condition, there are certain lines such as the "L" line where the reconstruction of portions

of the line will be required if it is to be continued in service. In such an event undoubtedly motor coach service should be substituted, thus relieving to a certain extent the rail equipment requirements of the system. There are certain other instances where inauguration of motor coach service will tend to reduce to some extent rail equipment requirements.

On the other hand, if travel continues to increase as it has in the past year, the equipment requirements of the main lines will be greater than shown herein. Other factors affecting the new equipment requirements include loading requirements and speed of operation. It is anticipated that schedule speeds will be increased as lines are fully equipped with new equipment. However, under one-man operation the present loading standards should be made more rigid. While some of these factors are offsetting, the probable overall effect will be toward a greater equipment requirement than has been shown.

It is apparent, therefore, that there is ample justification at this time for the purchase of 230 new rail cars as soon as possible. Coupled with the above program, the company, along with its present plan of adapting Type H cars to one-man two-man operation, which includes also safety features and improved illumination, should follow out some further modernization of these cars. One of the major objectives in looking toward a betterment in the local street transportation system in Los Angeles is to reduce the noise of the street cars. This can be attacked from two angles; one, providing improvements so as to modernize the 313 Type H cars now in service, and the other, replacing the older cars with new ones. The most ideal plan would be to immediately substitute new equipment on the entire system. This plan, however, would cost in excess of ten million dollars and cannot be financed at this time. There is also the element of making the greatest use of the facilities which are now available, as it is in the public's interest to operate the system as economically as possible since, in the last analysis, it is the rider who pays for the cost of service.

Presidents' Conference Cars

There has been considerable experimental work underway during the past three years looking toward the development of a street car which operates very quietly and at the same time affords greater comfort to the patrons of the line in the way of riding qualities and lighting facilities. One of these branches of investigation has been under the direction of Dr. C. F. Hirschfield, who has been conducting experiments for a committee of street railway presidents commonly referred to as the "Presidents' Committee." The Los Angeles Railway has membership on this committee. This work has now advanced to a point where a number of street car companies have purchased, and others have placed orders for, new cars for their systems. The thought of bringing new street cars to Los Angeles, along the lines of these modern developments, was in the minds of the Joint Committee working on these problems for the past year. Some of the recent purchases are

listed below, all of which are designed for one-man or two-man operation.

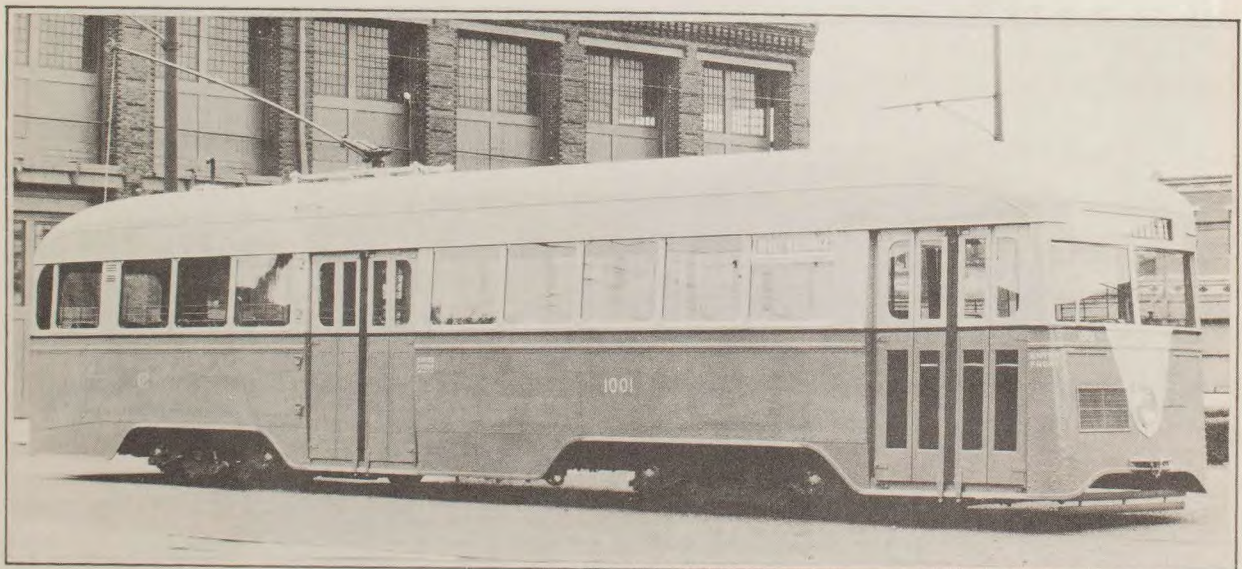
<u>Company</u>	<u>Mfrs.</u>	<u>Year Purchased</u>	<u>No. Purchased</u>
Indianapolis Ry.	Brill	1935	65
Detroit Dept. of Street Ry.	(Own Shop)	1935	1
Chicago Surface Lines	Brill	1934	1
" " "	Pullman	1934	1
" " "	"	1935	100**
Capitol Transit Co.	Brill	1935	10
" " "	St.L.C.Co.	1935	10
Brooklyn & Queens Tr. Corp.			
Bodies	St.L.C.Co.	1935	100*
Trucks	Clark Eq.Co.	1935	100*

* Orders placed but delivery not yet made.

** Bids asked for.

In all recent car designs, speed, comfort, light weight, and elimination of noise have been the primary objectives. Use of light weight metals has made it possible to cut down weight without sacrifice of strength. More modern and newly designed electrical equipment has made possible higher running speeds and greater rates of uniform acceleration. Rubber has been introduced as a medium of noise elimination. Large pneumatically operated safety doors have been incorporated in the design, which, with the low floor levels, makes more rapid loading and unloading possible with greater safety.

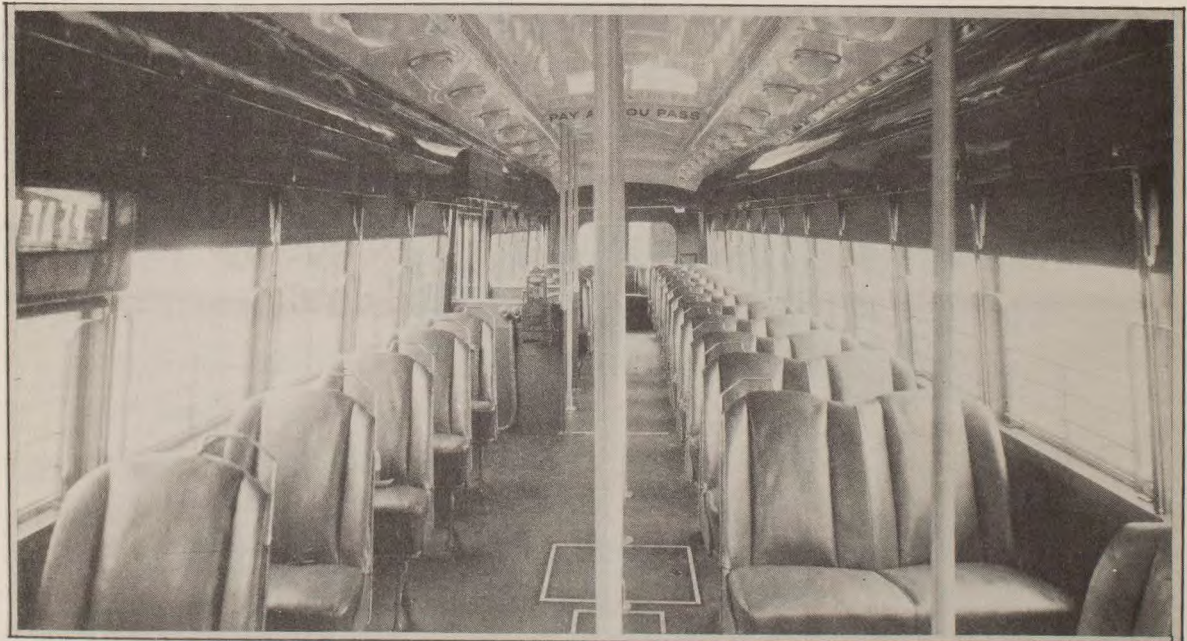
The purchase of cars by the Capitol Transit Company is one of the most recent. Embraced in the design of these cars is smooth and rapid acceleration and deceleration, high running speeds, positive ventilation combined with the heating system, quiet operation, roomy seats, ample illumination, automatic safety devices, and a pleasing combination of contour and color. Body design is modern streamlined with paneled windows and modified skirting effects as shown by the following photograph of one of the cars built by The J. G. Brill Company.



There are double doors on the front and at the center, the former operated by quick acting air door engines controlled by a selective hand valve for either independent or simultaneous operation of the two. This car is designed for two-man operation, although slight modifications would make them suitable for one-man. The center doors are operated by treadle step or by push button at the front end and are equipped with sensitive edges. Both front and center doors are interlocked with control circuit and brakes. The first step is $14\frac{1}{2}$ inches from street level and each of the other two are $8\frac{3}{4}$ inches with no floor ramp. The front vestibule slopes at 12 degrees to eliminate internal reflections. Forced ventilation is provided by means of blower fans installed under the rear longitudinal seat. The unit has a variable circulating capacity and at maximum can completely change the air inside the car approximately every two minutes. Heating of coach interior is accomplished by use of panel type electric heating units.

The trucks of these cars were designed especially for the purchaser and include some important features found on Presidents' Conference car. In those built by the St. Louis Car Company no steel coil or elliptic springs are used, rubber in shear being substituted. Such use of rubber materially reduces the noise, much to the comfort of the riders and general public.

Seats are provided for 48 passengers. They are light weight spring cushioned type, upholstered with leather with individual curved backs as shown by the photograph below.



Lighting is provided by dome lights mounted over each seat. Both air and magnetic track brakes are used, the former acting first and the latter for bringing the car to a final stop. This combination permits rate of uniform deceleration of $4\frac{1}{2}$ m.p.h.p.s. with comfort to the passengers and emergency braking rate of 8 m.p.h.p.s.

Wheels are of rolled steel and 24 inches in diameter. These differ from the Presidents' Conference car in that the latter is equipped with resilient wheels incorporating rubber discs in their design for further reducing noise. Use of the resilient wheel makes necessary the exertion of braking effort mostly by the track brake and dynamic features of the motors with a minimum of effort applied to the wheels.

Each truck is equipped with two 55 H.P. motors provided with a small auxiliary field for use with dynamic braking if that should prove desirable.

Control equipment is of the automatic type arranged for rheostatic parallel operation of the motors. There are 19 resistance steps and 2 steps of field shunting, which insures smooth acceleration and maintenance of almost constant tractive effort. Acceleration is automatic with a choice of four rates of acceleration and a switching position. The maximum rate is $4\frac{1}{2}$ m.p.h.p.s. Total weight of the car ready for operation is 34,700 pounds.

As regards quick get-away in traffic and quiet operation, these cars are said to compare very well with the modern automobile.

Single end operation has been quite generally adopted as a standard in new street car designs, whether the car is to be operated by one man or two men. The single end car has operating control equipment on one end only, making it necessary to turn the car around at the end of its route. Such construction affords a reduction in first cost of about \$1,200 a year. Offsetting that saving, however, is the cost of providing loops at terminals and car houses.

The single end car has advantages at terminals compared with double end cars, and in many instances the loop construction will have provided off-street terminals. The seating arrangement is somewhat better in the single end car. The double end car has operating advantages in emergencies and for reversing direction at cross-overs.

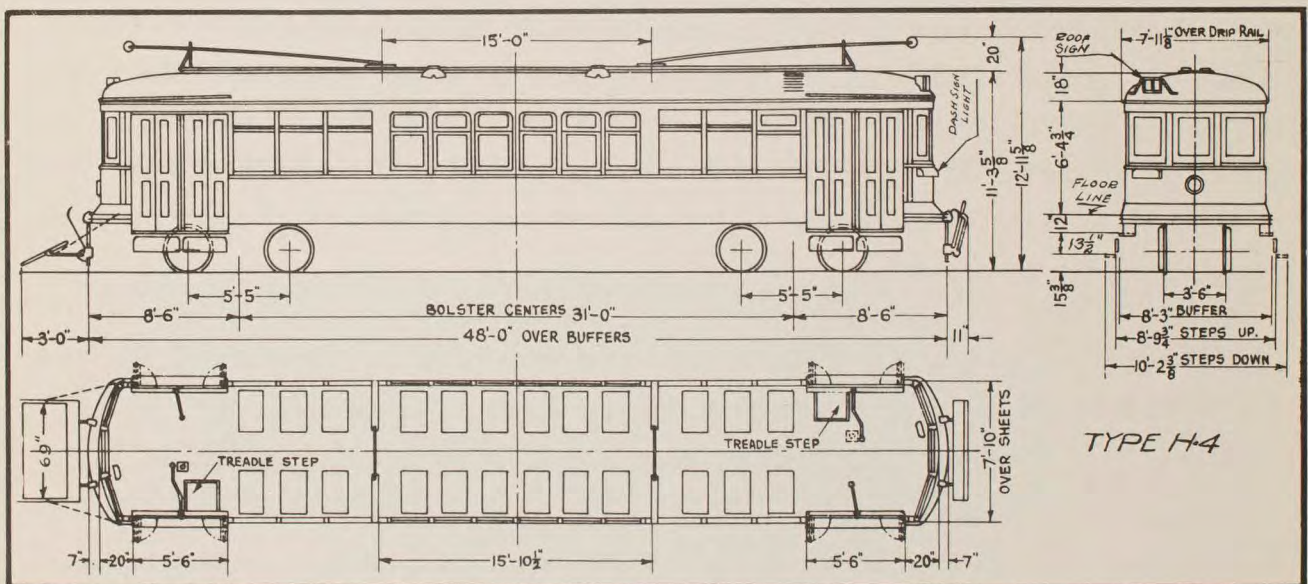
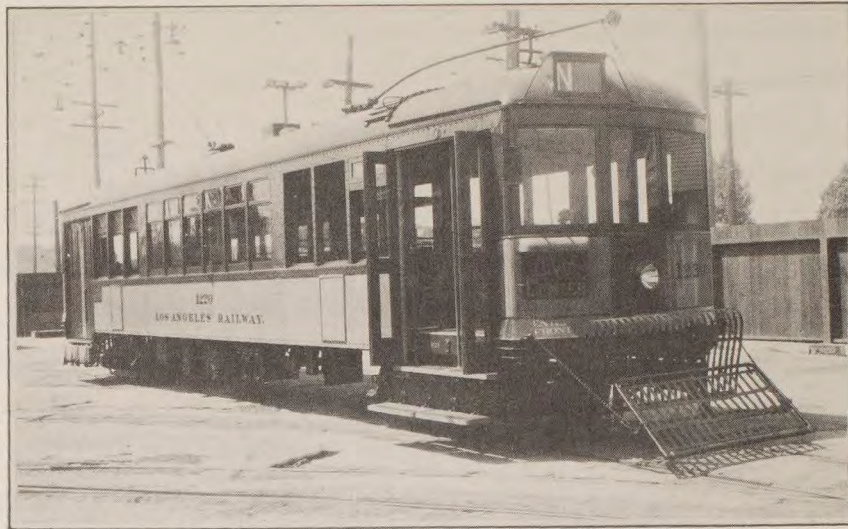
We believe that the company is justified in investing \$16,000 each in 230 new, modern street cars, or a total of \$3,700,000.

Remodeling of Present Equipment

The Los Angeles Railway has rebuilt 73 of the existing Type H cars for the purpose of modernization and conversion to one-man two-man operation. A photograph of one of the rebuilt cars is shown on the following page together with print showing general design of the car.

Rebuilding of these cars consisted of installing folding doors and steps on both front and rear, the former to be operated from the operator's controls and the latter by treadle step. Air engines were installed for operating doors and steps. Hunter type roll route indicators were installed, making it possible to change the sign from within the car. Additional electric control safety devices were installed and an improved lighting arrangement consisting of diffusion lenses to reduce glare and more evenly

distribute the illumination. Interiors of cars were finished in green except the ceiling, which was painted with white enamel. The cost of the job was about \$2,400 per car.



Noise

One of the most objectionable features of the Los Angeles Railway street cars; namely, noise, was not reduced in the conversion program, although the company is at present engaged in active research along such lines in their mechanical shops.

The noise produced by a street car in traveling over the rails is not traceable to any one part of the equipment, but is made up of many components of which some are more pronounced than others. Where there are many sources of noise the elimination of one will affect the general level only slightly. Noise in street cars is produced by impact and friction of rails and wheels; vibration of rails, ties, tie plates, earth, and surrounding buildings and structures; vibrations in truck parts and in the body set up by

vibration of wheels; motors for traction and compressors; and gears.

It appears from general observation and inspection of equipment that much of the noise produced by the Los Angeles Railway cars is due to uneven wheel surfaces. This condition may be traced to the improper design or operation of the brake rigging, improper brake shoe material, or improper manipulation of braking mechanism. It has been quite generally observed that when coming to a stop from a reasonable running speed, the car wheels slide on the rails. This produces many small flat spots, the unevenness of which is responsible for a large part of the noise. Aside from being a source of annoyance to the general public, this condition increases the maintenance cost. By correcting this feature the general noise level, in our opinion, could be substantially reduced.

Summarizing, the modernization program for Type H cars should include not alone the features embodied in the present conversion of these cars to one-man operation, but further improvements looking toward reduction of noise. It is probable that most can be accomplished along this line through improvements in braking equipment. Consideration has also been given to installation of upholstered seats where not already provided, enclosing of open sections, etc., but these improvements would increase the cost to an extent we do not believe justified. We believe the company may properly expend not to exceed \$2,500 per car to reduce noise and improve braking on 329 cars, and \$2,500 to provide for one-man operating features together with improved lighting features on the 256 cars not already equipped.

SECTION B

OTHER PLANT REQUIREMENTS

LOS ANGELES RAILWAY

Way and Structures

In general the trackage on the system is in good condition. There are, however, certain sections of track which will require reconstruction or partial reconstruction within the next two or three years. Included in the sections which will require retieing and reballasting are approximately 24.5 miles single track. In the entire reconstruction there will be approximately 6.5 miles of single track, using 116 lb. girder rail.

There are a number of proposed city improvements which if carried out will affect the track, such as cutting down of the First Street hill from Hill to Fremont; the Colorado Boulevard improvement from Townsend to Eagle Rock Boulevard; improvement of Crenshaw Boulevard from Slauson to 60th; removal of tracks on 10th Street; the construction of under-pass at Macy Street in connection with the new Union Depot; paving in of tracks on Santa Barbara from Figueroa to Sutro; and other lesser jobs.

Sub Station and Distribution Facilities

Expenditures anticipated on sub stations during the next few years consist of possible change of exterior design of the Plaza Sub Station required by civic organizations,

such exterior remodeling involving some interior alterations on both the building and equipment; and construction of a new sub station at 79th and Broadway necessitated by low voltage conditions on South Broadway and South Vermont. The approximate cost of this work is \$442,000.

Motor Coach Facilities

The necessary capital expenditures in connection with extensions and new service recommended herein covering additional motor coaches and garage facilities amount to approximately \$650,000. Replacement of coaches within the next several years, it is anticipated, will involve an expenditure of about \$400,000.

SECTION C

PACIFIC ELECTRIC RAILWAY

There is no problem insofar as new equipment needs are concerned on the Pacific Electric Railway local lines. Cars in present service are of a reasonably modern design and amply able to handle the existing traffic and some considerable increase.

There is one objectionable feature to the Pacific Electric Railway cars in common with those of the Los Angeles Railway; namely, noise. Interior noise of the 600 Class cars is not objectionable due to the all-steel body construction and composition floors. However, street noise produced is on about the same level as that of the yellow cars. Steps should be taken to determine what degree of relief of this condition is possible without unreasonable expenditures.

In connection with reconstruction of track, the only major projects anticipated within the next two or three years are the reconstruction of Santa Monica Boulevard from the old city limit at Seward Street to private right-of-way at Croft Avenue, West Hollywood; and Highland Avenue from Franklin Place to Cahuenga Avenue.

SECTION D

LOS ANGELES MOTOR COACH COMPANY

Extensions and replacements of motor coach equipment of the Los Angeles Motor Coach Company during the next few years, including the new Fairfax Avenue line, will amount to approximately \$1,000,000. This covers largely replacement of double deck coaches.

CHAPTER XX

FARES

The fares of the Los Angeles Railway, Pacific Electric Railway Local Lines, and Los Angeles Motor Coach Company are upon three different bases. The Los Angeles Railway fare in general comprises a city-wide 7¢ fare with 6¼¢ tokens and the weekly pass. The Pacific Electric local system is based on the zone plan of 5¢ and 10¢ fares. The Los Angeles Motor Coach Company lines are on a 10¢ cash fare basis. This chapter is presented in the following sections:

- A. Present Fares - Los Angeles Railway
- B. Present Fares - Pacific Electric Railway
- C. Present Fares - Los Angeles Motor Coach Company
- D. Zone Plan of Fares
- E. A 5¢ Fare Basis
- F. Summary

SECTION A

PRESENT FARES

LOS ANGELES RAILWAY

The fares of the Los Angeles Railway are established largely on a city-wide flat fare basis. However, a few of the longer rail lines and some motor coach extensions have zone fares. Three motor coach lines entering the downtown district are on a higher fare level.

The basic fare on the Los Angeles Railway for many years was 5¢. On October 21, 1928, through action of the Federal Court, the basic fare was increased to 7¢ with four tokens for 25¢ (6¼¢). This is the basic fare in effect at this time.

Through action of the Joint Committee, the limits of the application of the basic fare within the inner zone were adjusted and made to more nearly conform to a circle with a radius of six miles from downtown Los Angeles. Also through this committee the carriers agreed to and did on February 2, 1934, establish a 10¢ Inter-Company Transfer. The Los Angeles Railway also established a weekly pass on May 13, 1934.

The fares in effect at this time may be briefly described as follows, without endeavoring to follow the tariff detail:

Rail Lines

Inter Zone Fares - Between Inner Zone and Zone 2, a one way fare of 10¢ is applicable. 40-Ride School ticket rate is \$2.40. Between Inner Zone and Zone 3 a fare of 15¢ is applicable.

Intra Zone Fares - A fare of 7¢ or 4 tokens for 25¢ (6¼¢) is effective within

each zone. 40-Ride School ticket books are sold for \$1.40. The inner zone embraces all rail lines except as follows:

- Zone 2 - South Broadway line, south of Manchester Ave.
- " 2 - Vermont Ave. line, south of Manchester Ave.
- " 2 - Eagle Rock line, north of Avenue 45
- " 2 - Hawthorne line, from Crenshaw Blvd. and Slauson Ave. to Arbor Vitae St.
- Zone 3 - Hawthorne line, from Arbor Vitae St. to Hawthorne

Commutation fares without transfer privilege are available from points in Zone 2 to downtown Los Angeles at the rate of \$2.10 for a 30-ride family Commutation Ticket.

Motor Coach Lines

All of the feeder and crosstown coach operations of the Los Angeles Railway have the same basic fare as the rail lines, including Zones 1, 2, 3, and 4.

Fares between Inner Zone and Zone 2 are 10¢ one way, with 40-Ride School ticket for \$2.40. A 15¢ fare is effective between Zone 3 and the Inner Zone, and a 20¢ fare between Zone 4 and inner zone. In certain instances 10¢ and 15¢ fares are also available between various other zones and sub zones. A 30-ride family ticket without transfer privilege, good over entire Hollydale line, is sold for \$3.00, and good east of Otis Street only for \$2.10.

Through Motor Coach Lines

Fares on the lines classified as "through motor coach lines" are as follows:

<u>Line</u>	<u>One Way Fare</u>	<u>40-Ride School Ticket</u>	<u>Transfers To or From</u>
Beverly Blvd. Sec. 1 - East of Fairfax Ave.	10¢	\$2.40	Inner Zone
" " Sec. 2 - Entire line	15		" "
" " Sec. 3 - West of Larchmont Blvd.	10	2.40	None
Figueroa St.	10	2.40	Inner Zone
East 9th St. and Whittier Blvd.	10	2.40	" "

Weekly Passes

The weekly passes placed on sale in 1934 were:

<u>Kind of Pass</u>	<u>Effective</u>	<u>Limits of Use</u>	<u>Price</u>
Inner Zone	May 13, 1934	Inner Zone	\$1.00
Zones 2,3,4	July 8, 1934	Zones 2, 3, and 4 and overlaps	1.00
System	May 13, 1934	Entire System, including through lines	1.50

These passes are good for transportation of bearer, during any week, Sunday to Saturday, inclusive. In addition pass is good for adult and two children under 12 years of age on Sundays and Holidays.

Inter-Company Transfer

The transfer arrangement, effective February 1, 1934, provides for issuance of transfers on a 10¢ fare good between points in Inner Zone of Los Angeles Railway and points in Zones 1 and 2 of the Pacific Electric Railway Los Angeles local lines, and in certain

instances between points in Zone 3 of the Pacific Electric Railway, also to lines of the Los Angeles Motor Coach Company. A joint 6¢ school ticket was placed in effect November 1, 1934, good when used via a Los Angeles Motor Coach Company line.

SECTION B

PRESENT FARES

PACIFIC ELECTRIC RAILWAY LOS ANGELES LOCAL LINES

The Pacific Electric Railway's Los Angeles Local Zone Fare has an inner zone approximately two and one-half miles from downtown Los Angeles. Within this zone the fare is 5¢ with transfer to other Pacific Electric local lines within the zone. The second zone is approximately five miles from the downtown area. Here again the fare within the zone is 5¢. The fare from this zone to the inner zone is 10¢, or 16 tickets for \$1.00 (6¼¢). The fare to the third zone is 10¢. The third zone on the Hollywood lines embraces the Hollywood business center between Vermont and La Brea Avenues, the local fare of 5¢ being overlapped to Fairfax Avenue on the west. On the Watts line the zone extends from Florence Avenue to Watts, and on the Sierra Vista line from Rose Hill Park to Sierra Vista. A 10¢ fare is effective from Zone 3 to Zones 1, 2, and 4, and 15¢, 20¢, and 25¢ fares to such zones where the trip is through Zone 1. Zone 4 includes the area from La Brea Avenue to Doheny Drive and West Hollywood, also from Arroyo Verde Drive to Mission and Fair Oaks, South Pasadena. The fare from Zone 4 to Zone 1 is 15¢ one way, 25¢ round trip, and in the area between La Brea Avenue and Fairfax Avenue a 10-ride ticket is sold for \$1.00. School rates are in effect. The inter-company ticket has already been discussed.

SECTION C

PRESENT FARES

LOS ANGELES MOTOR COACH COMPANY

The basic fare on these lines is 10¢ including transfer to its own or Los Angeles Railway or Pacific Electric lines in the appropriate areas. On the Sunset Boulevard line a 15¢ one way, 25¢ round trip fare is effective from Los Angeles to points west of La Brea Avenue. There are 6¢ fares on Vermont-Silverlake-Riverside Drive lines and on the Olympic Boulevard line. The Wilshire line fare is on a zone basis west of Fairfax Avenue, the basic 10¢ fare applying from Los Angeles to Fairfax Avenue.

School tickets, commutation tickets, and inter-company tickets are available. In general transfers are issued on all fares except 6¢ fares.

The summaries presented herein are not intended to be specific as to each fare on file. The present fare arrangements on each company's own lines and in particular the inter-company arrangements are complicated, and for particular rates reference must be made to the tariff.

SECTION D

ZONE FARE

The present fares of the Pacific Electric Railway are on a 5-10¢ zone plan, and the Los Angeles Railway on its longer lines has zones in effect beyond the basic city fare limit. The latter has been established as a circle of 6-mile radius from downtown Los Angeles, adjusted to meet reasonable fare breaking points.

If a zone fare plan were to be established, an inner zone approximating two to three miles from Los Angeles would appear to be a reasonable test of zone points. The form of fare should take the form of single coin fares, viz., 5¢ within zones and 10¢ between zones. Coupled with the 10¢ fare should be some lower fare for regular riders.

For the purpose of study, the following plan has been selected:

An inner zone extending about $2\frac{1}{2}$ miles from downtown Los Angeles with an outer zone corresponding to the present 6-mile zone. Fares to be 5¢ intra-zone and 10¢ between zones. Also between zones, a token rate of $7\frac{1}{2}$ ¢ (selling 4 for 30¢) and the retention of the present weekly pass. The inter zone fare to include trips from Zone 2 through the inner zone to other points in Zone 2.

For the purpose of analysis of this proposition a study was made of the Los Angeles Railway rail lines based on the 1929 origination check equated by lines to 1935 conditions. From this study it was concluded that of the total travel, 50% would be affected by the inner zone fares, 10% by outer zone fares, and 40% by between zone fares.

An analysis was then made of the present distribution of travel as between classes of fares, and an estimate prepared from a consideration of the probable effect of the fare change in each zone upon each class of business.

The results of this study indicated that total revenue for the area studied would not be materially changed under the zone plan.

There would be some further considerations, such as the effect in the present outer zones of the Los Angeles Railway, its motor coach service, the Los Angeles Motor Coach Company, and the Pacific Electric Railway. The Pacific Electric Railway Zone 1 - Zone 2 ticket rate should be increased from $6\frac{1}{4}$ ¢ to $7\frac{1}{2}$ ¢ to be consistent. The competitive effects on the Los Angeles Motor Coach Company and Pacific Electric Railway, it is believed, will be largely offsetting.

There are certain operating features which would be involved in the zone plan. Operating with two men per car, there is no question but that the zone plan is workable. With one man per car the question of checking passengers at zone points becomes a matter which must be considered. A pay-as-you-enter inbound and pay-as-you-leave outbound system, which is in effect in some localities, probably would not be practical in Los Angeles because of the through routing of lines. On lines where one-man cars are operated it would be necessary either to stop the car at the zone point so that the operator could

check or to provide a checker at the zone point for that purpose. It is probable that some combination of both of these forms would be the method of operation under zone plan, providing checkers during the peak hours of service. The zone plan would increase traffic in the inner zone substantially and would undoubtedly require some additional service. It is apparent, therefore, that operating expense would be increased to some extent by the introduction of the zone plan. The zone plan as proposed will result in a decrease in fare to approximately 50% of the travelers, no change to about 15%, and an increase to about 35%.

SECTION E

A 5¢ FARE BASIS

Discussion has been had from time to time on the question of a 5¢ fare instead of the present fare systems on the local rail lines. Such an arrangement may also be the subject of consideration in later sections of the report dealing with possible subsidies to the local operating companies, and for these reasons some general study has been given to this question.

For the purpose of making an estimate a plan has been adopted under which a 5¢ fare would be effective within the present 6-mile zone of the Los Angeles Railway, and of course for intra zone riding in the outer zones of the Los Angeles Railway. Coach lines other than through lines would be treated in a similar manner, but it has been considered that fares on the through lines of the Los Angeles Railway and Los Angeles Motor Coach Company would not be changed. On the Pacific Electric System the existing zone plan has been retained but with this change; namely, that a 5¢ fare would apply through any two zones and the 10¢ fare would apply only for rides between more than two zones.

On the Los Angeles Railway lines the reduction from 7¢ cash fares (6½¢ tokens) to 5¢ would undoubtedly stimulate riding, but to what extent is a matter of opinion. In the case of pass holders, these would be in two groups, some of whom would be benefited by the 5¢ fare instead of the present fares and would no longer select a weekly pass if it were available, while another group would pay increased fares under the 5¢ plan. It is believed in general that these two groups would be offsetting and that to the approximately 25,000 weekly pass users the reduction to 5¢ would not affect revenue. It is our judgment that in the case of the rail lines of the Los Angeles Railway a reduction such as has been outlined would result in an annual loss of revenue of approximately \$900,000. Following through some of the procedure in the case of the Pacific Electric Company's local lines, it is estimated that the reduction in gross revenue would be approximately \$60,000. We have not considered the coach operations in the above estimates, and it is believed that the total loss in gross revenue would exceed a million dollars under these plans.

The estimates contemplate the probability of certain increased business and therefore an increase in operating expense to some extent will necessarily follow.

SECTION F

SUMMARY

The present arrangements have come about largely as the result of adjustments from time to time where the companies have been separately considered. Thus, the 7¢-6¼¢ Los Angeles Railway fare was established through Federal Court order, the Pacific Electric Zone fares through order of the Railroad Commission, and the fares on the Los Angeles Motor Coach lines largely through filing at the time of establishment of the lines.

The present proceeding is the first time the fares of all three carriers have been involved in a single action before the Railroad Commission.

It is apparent that the different bases of fares and the multiplicity of fares under each base is an undesirable situation from the viewpoint of mere confusion and uncertainty to the traveling public, particularly the casual users of the service. A more serious criticism involves possible discrimination as between various territory served by the lines.

Viewing the fare situation from another angle, it may be said that these fares in general have been in effect for six to seven years, and the regular users of the service have become accustomed to the various arrangements. Business has likewise accommodated itself to the existing conditions. These comments are not intended to necessarily justify retaining the existing fare structure, but merely by way of foreword to emphasize the fact that any constructive measure will necessarily disturb and rearrange to some extent the present practices and may call forth criticism of those disturbed. If a plan is constructive and is meritorious and is of benefit to the majority of the interested parties, it should be carried out, but the parties must recognize and anticipate the complaint of those adversely affected.

Changes in fares are necessarily of prime importance to the patrons, to the carriers involved, and to the community in general. Since this is so, the subject is one which should have wide and open discussion before a plan is effective. In this case where it is apparent that the carriers cannot risk substantial losses in gross revenue and it is doubtful whether increased fares would substantially increase gross revenue, a revised fare plan should come about through substantial agreement of the parties.

Here, again, in discussing the subject, reference should be made to the "Basic Considerations" for the study. If the existing carriers are to continue into the future with their operations substantially as at present, the possibilities for simplification and unification of fares are limited, whereas under some form of coordinated or unified operation, more far reaching rearrangements might properly be made.

With these preliminaries as a basis for discussion, the present system of fares may be examined in more detail and its good points and faults pointed out.

The Los Angeles railway fares have in general been established on a city-wide fare basis. As early as 1914 the Board of Public Utilities and Transportation advocated a "one city - one fare" basis of rates, and in general on the rail lines that policy has been the dominating one. There are a few exceptions, four to be exact, where rail lines extend to such distances that zone fares were established. And of course the city has expanded so much in the intervening years that no one would advocate a city-wide fare on a transportation service to Van Nuys, Venice, or San Pedro, all of which are now within Los Angeles city boundaries.

With the growth of Los Angeles, demands for extension of transportation service were met with motor coach service. In the territory not adjacent to Pacific Electric Railway service, the Los Angeles Railway met the demands by means of feeder or shuttle motor coach service, connecting with the terminals of its rail lines. As these extensions were made, many were placed on a zone basis, that is, a higher fare was charged if a transfer to the rail line was desired. In those instances where motor coach lines through to the downtown area have been established, a 10¢ cash fare has been adopted.

In 1933 and 1934 the Joint Committee after studying the Los Angeles Railway situation, adopted as a principle that the base fare should apply within a circle of 6-mile radius from Seventh and Broadway, and that transfers between rail lines and feeder coach lines within this area should be issued on payment of the 7¢ or token fare. In general, this basis is the one now in effect.

On the Pacific Electric lines, historically the fares have been on a partial zone basis since 1920 and on the present zone basis since 1928. These lines are operated in conjunction with an interurban system where inherently fares must be fixed on a distance basis, as distinguished from the Los Angeles Railway in its early history where the strictly local traffic centering on downtown Los Angeles was handled on a 5¢ system fare basis. Historically then, it is a natural development that the local business of the Pacific Electric Railway be continued on the same fare principle used on its interurban lines, and that as the Los Angeles Railway extended its local lines it did so at the same system fare which had previously prevailed.

Another difference in the two companies' operations is that on the Los Angeles Railway there is no community of outstanding or dominating position other than downtown Los Angeles. On the Pacific Electric Railway, however, Hollywood has developed to a position of importance as a community tributary to Los Angeles but having a substantial business center of its own. Under these conditions a character of travel develops which differs in its inherent characteristics from that found on the Los Angeles Railway; namely, the traffic between two communities each having a business center.

With the growth of the territory, the point was reached where the serving areas of the Pacific Electric and Los Angeles Railway came into conflict. For the purpose of

serving the territory adjacent to both lines, the joint agency, Los Angeles Motor Coach Company was established. Except for some 6¢ fares established at the early period of this operation, some of which were subsequently withdrawn, these lines have been operated on a 10¢ cash fare including transfer to lines of either parent company.

The present fare arrangement on the Pacific Electric Railway has the advantage of being based on distance and of having in general single coin fares. The present inner zone arrangement of the Los Angeles Railway has the advantage of freedom from collection detail which a zone fare requires. The present 10¢ fare of the Los Angeles Motor Coach Company on through lines, such as Sunset Boulevard and Wilshire Boulevard, places these lines on a higher base fare than the rail lines.

Possibly the outstanding criticism of the present fare arrangement is in the Western District where virtually all north and south crosstown fares, except Vermont Avenue, are 10¢, while easterly the 7¢-6½¢ fares of the Los Angeles Railway and the 10¢-5¢ fares of the Pacific Electric Railway apply.

In conclusion, we may say, considering only at this time the operation of these properties as now operated and not considering coordinated or unified service, that:

1. The present fare arrangement, although operating and used by the public is complicated, particularly as regards inter-company fares and the several systems in use.
2. A zone plan of fares on the Los Angeles Railway may be placed in effect which will not substantially alter the present gross revenue, which will increase fares for 35% and reduce fares for 50% of the patrons. This plan has certain operating disadvantages. It will also necessarily for a time after its adoption result in reaction from the patrons who are adversely affected, but would place fares on an inherently sounder basis than the present.
3. A 5¢ fare will probably result in reduction in revenue of over \$1,000,000 a year if placed in effect on all local lines. The earnings of the utilities are such that no major reduction in revenues can be justified.
4. A 10¢ cash fare on the Los Angeles Railway instead of the 7¢ cash fare now in effect would not substantially increase revenues of the Los Angeles Railway.
5. The present zone plan of the Pacific Electric Railway should not be altered in any substantial respect.
6. The 10¢ fares on through motor coach lines can be justified only on the basis of superior service, and in certain cases this service is not being rendered.
7. The fares on crosstown lines on Western Avenue, Vine Street, La Brea, and the proposed Fairfax line (all Los Angeles Motor Coach Company) are 10¢ minimum, and lower fares without transfer should be placed in effect on these lines. While travel will be increased thereby, it is estimated there will be a reduction in revenue, not sufficient, however, to deter the carrying out of this plan.
8. The weekly pass use is increasing at a more rapid rate than other forms of fare and its continued sale is justified.

CHAPTER XXI

FRANCHISE SITUATION

The problem resulting from the multiplicity of franchises under which the street railway companies of Los Angeles are operating has long been recognized. As early as 1921 the Railroad Commission, in its decision respecting the fares of the Los Angeles Railway Corporation (Decision No. 9029 in Application No. 4238, 19 C.R.C. 980), remarked:

"To both the city and the company a permanent settlement of the franchise question is of utmost importance. Several important franchises covering some of the company's essential lines will expire in the near future. A re-granting of piecemeal franchises will not be to the best interests of the city. Since, under the terms of the present franchises, the company retains the track structure and all other property, the company can, in case the franchise is not re-granted, take up the track and discontinue operation. For the city to acquire the railway properties piecemeal at the expiration of the franchises would practically be out of the question.

The best solution, from the point of view of both the city and the company, would seem to be the acceptance by both parties of a form of so-called 'indeterminate resettlement franchise.' Such a franchise can be drawn to protect properly all parties and interests. The new franchise should cover all of the company's operation within the city limits of Los Angeles.

The conditions of a resettlement franchise will, of course, be the subject of negotiations between the city and the company. Since at best it will take considerable time before a matter of such magnitude can be agreed upon and settled, it would seem of utmost importance to both parties to commence negotiations at once. In any event, the franchise question should be settled before any considerable number of franchises expire, in order to put the company in a position where it can make proper provision for financing such reconstruction and new construction as may become necessary. If, in a resettlement franchise, adequate provision is made for the taking over of the street railway system by the city under proper methods of determining the value of the property and the payment of just compensation, the further development of street car facilities will progress as it should with the rapid and continued growth of the city. In the absence of an adequate franchise, the further street car development must lag and service must suffer."

At the time that decision was rendered no provision was contained in the City Charter under which the numerous existing separate, individual-line franchises could be replaced by a single, modern, "indeterminate" franchise. In 1925, however, the Charter of Los Angeles was revised, and certain indeterminate franchise provisions were included. No public utility has, however, applied for such a franchise during the decade that has elapsed since the new Charter was adopted.

Many reasons could be assigned to account for this failure on the part of Los Angeles utilities to take advantage of this better type of franchise, but the chief reason appears to be a general consensus of opinion that the indeterminate franchise provisions, so adopted in 1925, are not suitable for their intended purpose. In a study undertaken in 1934 by the City Attorney's office it was concluded that this view was justified, and a number of provisions were pointed out as "unworkable." The present Charter prescribes definite rate regulations, provides possibilities for arbitrary orders, and contains provision for acquisition of properties at actual cost without provision for severance

damages, and sets forth bond acquisition provisions which would not be satisfactory to existing bond holders. The City Attorney's office, in collaboration with the City Council and with representatives of various utilities, other city officials, and many other citizens and civic bodies, drafted an amendment particularly calculated to obviate these objections to the 1925 Charter provisions, and in many respects strengthening the position of the City in respect to such indeterminate franchises.

This Amendment failed of adoption at an election held in September, 1934, by a comparatively small number of votes, since which date nothing further has been done toward rendering more workable the admittedly inadequate existing Charter provisions.

It thus appears that the unsatisfactory franchise situation to which the Railroad Commission directed public attention in 1921 has not been bettered during the interim. Instead, the matter has been allowed to drift, and except for the efforts of the City Attorney and his public utilities staff during 1934 no particular effort seems to have been put forward either by the City or by these utilities toward bettering the situation.

In September, 1934, the City Attorney reported that the Pacific Electric Railway was operating in the City of Los Angeles under no less than 114 separate city franchises, and that the Los Angeles Railway was then operating under 110 such franchises, with varying expiration dates and every imaginable type of provision and condition. A similar multiplicity of franchises exists today. Not only is this situation unsatisfactory from the standpoint of these utilities, but from the point of view of the City the problem has become complex. For example, it is reported to be difficult to determine with accuracy even the amounts which are payable as taxes under this mass of franchises.

The serious character of this problem is increased by the fact that the key franchises of the Los Angeles Railway Corporation are due to expire between the years 1938 and 1941. During this period its underlying bonds, in an amount greater than \$15,000,000 are to mature. It is obvious that this company will be much better equipped to meet its refinancing problems if a satisfactory type of resettlement franchise can be agreed upon. A situation of like character, differing only in the degree of seriousness, confronts the Pacific Electric Railway. Any large refinancing program would be made more practicable on the part of both of these corporations if the existing franchise problem was cleared up.

In view of the general opinion that the existing indeterminate franchise provisions of the City Charter are unworkable, and cannot be made the basis of a proper solution of the problem, and in view of the further fact that the other Charter provisions (relative to separate, individual line franchises) have not been altered in any material degree to better the situation since the Railroad Commission's 1921 decision, it seems probable that some Charter revision will be necessary as a basis for any permanent solution of this problem. The consensus of informed opinion at this time seems to point to the desirability

of some form of indeterminate franchise (or "terminable permit") as the way out of this difficulty. Such permits can be drafted which will be in all respects fair to the public and at the same time eliminate the objections of the utilities to the present franchise methods in vogue in Los Angeles.

It is believed that the City government should renew the effort to procure the adoption of a workable and practicable Charter provision, under which action to cure the present unsatisfactory franchise situation can move forward. If some such action is taken, one barrier to the obtaining of necessary new capital to place in operation the more fundamental requirements of the companies as indicated in this report will be removed. Such action is of as great importance to the public as it is to the carriers, and it is recommended that steps be taken at once by the responsible authorities to obtain a permanent solution of this difficulty.

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CHAPTER XXII

FINANCIAL REQUIREMENTS

It is the purpose of this chapter to discuss the results of operation based on the present operations for the year 1935 and to consider the new capital requirements and other financial problems which confront these carriers. This discussion will be presented in several sections as follows:

- A. Results of Operation - Year 1935
- B. New capital requirements
- C. Mortgage refunding requirements

SECTION A

RESULTS OF OPERATION - YEAR 1935

In arriving at the anticipated results of operation for the year 1935 the actual revenues and expenses for the first nine months of the year are available at this time. Based on these operations, an estimate has been made for the remaining three months providing a basis for stating the year's operations. In addition, adjustments have been made in certain instances as will be explained. The results of these studies are summarized in the following table:

	<u>L.A.Rlwy.</u>	<u>P.E.Rlwy.</u>	<u>Total</u>
Rate Base	\$45,000,000	\$12,500,000	\$57,500,000
Operating Revenue	10,512,000	2,331,000	12,843,000
Way and Structures	520,000	80,000	600,000
Equipment Expense	1,010,000	225,000	1,235,000
Power	790,000	190,000	980,000
Conducting Transp.	4,057,000	982,000	5,039,000
Traffic	85,000	32,000	117,000
Genl. and Misc.	682,000	171,000	853,000
Injuries and Damages	630,000	107,000	737,000
Taxes	<u>665,000</u>	<u>133,000</u>	<u>798,000</u>
Total Expense	\$8,439,000	\$ 1,920,000	\$10,359,000
Net Avail. for Depr.&Return	\$2,073,000	411,000	\$ 2,484,000
Percent before Depreciation	4.6%	3.3%	4.3%

In the above, expense of depreciation as such has been eliminated. There have also been eliminated the charges for rental of equipment in the case of the Pacific Electric Railway. Such elimination should not be understood as criticism of these charges, but they have been eliminated in order to determine the net revenue available for depreciation and return.

It will be seen that the net revenue available for depreciation and return is 4.6% on the Los Angeles Railway compared with 3.3% on the Pacific Electric Railway.

An endeavor has been made to adjust the operating expenses of the Los Angeles Railway and the Motor Coach Company in the early part of the year to a more normal basis, it being realized that there were some expenses incurred following the strike which it is expected will not be normal expenses. The full cost of the strike is reflected in various accounts and an endeavor has been made to adjust the expenses to a normal basis consistent with the revenues and car mileage operation during the period. Injuries and damages have shown a decided upward trend, in part due to the labor turnover incident to the strike and in part due to a settlement of certain large claims during this period. Here again an endeavor has been made to include an average allowance for injuries and damages. Taxes have been adjusted based on the best information available at this time to the new basis of taxation on ad valorem basis in lieu of the former gross receipts tax, and the 1936 tax incident to the Social Securities bill has been included.

Under the Commission's usual method of determining the earnings for rate making purposes, the net revenue is related to the undepreciated historical investment after allowing for depreciation expense on a sinking fund basis. The rate base as developed in Chapter XIII has been used, it being understood that the base comprises the valuation of 1923 plus book gross additions to date, less retirements of property.

No detailed study has been made at this time of the propriety of the present rates of depreciation as applied on the Los Angeles Railway, and insofar as the Pacific Electric Railway is concerned, its accounting method does not provide for depreciation expense other than on equipment and large structures. These matters have been discussed in Chapter XII.

In viewing the depreciation question it may be said that the depreciation accruals for the Los Angeles Railway, as shown by the books, will be about \$1,438,000 for 1935, or 3.2% of the rate base, while the Pacific Electric Railway depreciation accruals will total \$129,000, or 1.0% of the rate base, including the depreciation component of rental payments for leased equipment. The reason for the large difference in these charges comes about because Pacific Electric Railway uses the retirement accounting method as to all properties except equipment and large structures, while the Los Angeles Railway uses depreciation accrual accounting method for all depreciable properties. For this reason it is apparent that the depreciation expense as recorded by the two companies are not directly comparable. In Chapter XIV, Rate of Return, a study was made of these accruals and a conversion to 5% sinking fund annuities made for all classes of property where depreciation accounting is employed by the carriers. However, no attempt was made to restate the Pacific Electric retirement method to sinking fund annuity method. In the retirement method charges during years of heavy reconstruction or retirement exceed the corresponding sinking fund annuity. In years when very little reconstruction of lines is under way the charges will be less than the sinking fund annuity. The latter situation exists at the present time. Without the benefit of detail study, both as to Los Angeles

Railway and Pacific Electric Railway, but for the purpose of this discussion we may take 2% of the rate base as a reasonable depreciation accrual on the 5% sinking fund basis for both companies. The rate of return statement using this method follows:

	<u>L.A.Rlwy.</u>	<u>P.E.Rlwy.</u>	<u>Total</u>
Rate Base	\$45,000,000	\$12,500,000	\$57,500,000
Net before Depreciation	2,073,000	411,000	2,484,000
Depreciation Accrual	<u>900,000</u>	<u>250,000</u>	<u>1,150,000</u>
Net for Return	\$ 1,173,000	\$ 161,000	1,334,000
Rate of Return	2.6%	1.3%	2.3%

The results by the above sinking fund method indicate an earning position of about 2.6% for the Los Angeles Railway and 1.3% for the Pacific Electric Railway. Straight line depreciation has not been used, as it is properly associated only with a depreciated rate base.

The earnings of the Los Angeles Motor Coach Company if separately considered are substantially higher, being in the neighborhood of 15%; but these operations have been included with those of the respective parent companies in the above statements.

We may also view the results had retirement accounting methods been in effect for both companies. Actual net charges to depreciation reserve for the Los Angeles Railway in 1935 will approximate \$72,000, while actual retirement and reserve charges of the Pacific Electric Railway are very low for the year. Results for the year 1935 under retirement accounting would be:

	<u>L.A.Rlwy.</u>		
Rate Base	\$45,000,000	\$12,500,000	\$57,500,000
Net before Depreciation	2,073,000	411,000	2,484,000
Retirements	<u>72,000</u>	<u>2,000</u>	<u>74,000</u>
Net for Return	\$ 2,001,000	\$ 409,000	\$ 2,410,000
Rate of Return	4.4%	3.3%	4.2%

Of course, this method makes no provision for the replacement of plant and equipment in times such as these. The depreciation accrual method is the soundest as it makes provision over the years for replacement of properties.

SECTION B

NEW CAPITAL REQUIREMENTS

Summarizing the results of the discussion of the plant and equipment of these companies and the needs for the future as outlined in Chapter XIX, it will be seen that it is imperative for the continued successful operation of these properties that means be afforded to provide for the purchase of new equipment, both rail and motor coach, and a certain needed improvement in other properties of the companies. As a result of these studies it is recommended that not less than the following amounts of new capital be provided for these purposes for the Los Angeles Railway at the earliest possible time.

	<u>Amount</u>
New rail equipment	\$3,700,000
Reconstruction of existing Type H equipment	1,500,000
Other requirements	<u>1,200,000</u>
Total	\$6,400,000

The larger items are self-supporting, that is, the new and remodeled equipment will attract new business and permit of operating economies so that net income will be increased more than sufficient to pay carrying charges.

In the case of the Pacific Electric Railway there are no outstanding new capital requirements. There are some sections of track which will have to be reconstructed in the near future which have been outlined in more detail in the chapter on Plant and Equipment. There will also be some expense attached to whatever measures are found necessary for the reduction of noise in the 600 Class cars.

In the case of the Los Angeles Motor Coach Company it is anticipated that within the next few years a replacement expenditure of approximately a million dollars will be necessary, including such new investment as is required through extension of service.

SECTION C

MORTGAGE REFUNDING REQUIREMENTS

As of December 31, 1934, the unmatured funded debt of the Los Angeles Railway Company and City Railway Company of Los Angeles totaled \$24,157,000. Of this amount \$7,478,000 has been reacquired and is held in sinking funds. Of the remaining \$16,679,000 outstanding, \$7,566,000 are held by the general public, \$3,822,000 by the Huntington Library & Art Gallery, and \$5,291,000 by the H. E. Huntington Estate.

Analyzing the \$7,566,000 of bonds held by the general public, it is found that these holdings are in three issues as follows:

<u>Issuing Company and Title of Security</u>	<u>Total Less Re- Acquired Bonds</u>	<u>Bonds in Hands of Public</u>	<u>Percent</u>
Los Angeles Traction Co. 1st Consolidated Mortgage 5% Gold Bonds due Dec. 1, 1938	\$ 250,000	\$ 250,000	100%
Los Angeles Railway Co. 1st Mortgage 5% Gold Bonds due Oct. 1, 1938	4,027,000	3,906,000	97%
Los Angeles Railway Corp. 1st & Refunding Mortgage 5% Gold Bonds due Dec. 1, 1940	9,589,000	3,410,000	36%

The issue of the City Railway Company of Los Angeles, 1st Mortgage 5% Gold Bonds due February 1, 1941, is held by the Huntington Interests. It is apparent that refunding arrangements must be made for the 1938 and 1940 maturities which are held by the general public to the extent of \$7,500,000.

In the case of the Pacific Electric Railway, the largest issue of bonds is not due until 1961. However, there is an issue due in 1942; namely, the Pacific Electric Railway Company First Mortgage Bonds. As of December 31, 1934, there were \$7,888,000 of these bonds outstanding.

CHAPTER XXIII

COORDINATION OF FARES AND SERVICE

The object of this chapter and the following chapter is to discuss in a general manner the various methods that might be employed in an endeavor to more closely associate the operations of the local transportation agencies operating in and about Los Angeles.

This chapter deals with the possibility of coordination of fares and service of the present operators through some method which basically retains the separate identity of the properties. The word "coordination" is used to mean a closer relationship in the operation of the local properties, with the retention, however, of two managements. In the following chapter relating to possible unification of the properties the word "unification" is understood as the operation of the entire local street railway and motor coach service in and about Los Angeles under one management through a form of lease or purchase.

In discussing the subject of coordination a brief historical statement should be made at the outset. The present properties of the Pacific Electric Railway and the Los Angeles Railway at one time were held for a number of years in the single ownership of H. E. Huntington. Since sale of the old traction company lines to the Los Angeles Railway in 1911, however, separate management and operating organizations have been employed for the two services, the Pacific Electric Railway being engaged basically in rendering inter-urban service and the Los Angeles Railway being engaged in rendering local service. In the early period these services were quite distinct in their nature. With the separation of ownership of the two properties separate operating organizations have been continued to the present time.

As the City of Los Angeles and adjoining communities grew during the intervening period, Los Angeles Railway service was extended initially through rail extensions and in later years through motor coach service, supplementing and extending its rail service. The Pacific Electric Railway had a local line service supplementing its interurban service for the handling of traffic on its various interurban routes, and in particular the traffic between Hollywood and Los Angeles. In later years, likewise the Pacific Electric Railway employed motor coach service to supplement its rail service and serve new territory.

Beginning about 1922 the rapid growth of Los Angeles, particularly in the western residential districts and in the Hollywood area, brought about demands for extension of local service of the Los Angeles Railway into areas theretofore exclusively served by the Pacific Electric Railway. This, together with other factors, led to the formation of a joint agency in 1923 known as the Los Angeles Motor Coach Company through which the two companies endeavored to supply transportation service in those areas where the interests of both parent companies were involved. The service of the latter company has grown since then until it now plays an important part in rendering local service in the Los

Angeles area. Its operations are under the joint management of the executive officers of the two parent companies.

To a certain extent it may be said that there is now a coordination of services between the Pacific Electric Railway and Los Angeles Railway through the operation of the Los Angeles Motor Coach Company's lines on a joint basis. In other words, this represents an endeavor of the two parent companies to jointly operate in territory which may be considered common to the two operations and which would probably have resulted in competitive service had it not been for the working out of the Los Angeles Motor Coach Company as an operating arrangement.

The discussion along the lines of coordination, therefore, may be taken to mean the further carrying out of joint arrangements on some equitable basis. The public is interested in the best possible service with an equitable inter-company fare arrangement. The carriers are interested in rendering that service with the least amount of duplication and expense. Under coordination of service and fares as considered in this chapter it is understood that the two managements will continue to function as they have in the past in providing local service. The mechanics of accomplishing a more completely coordinated service may take the form of either of two methods:

(1) An extension of the present policy of dividing the gross revenue of inter-company fare arrangements and continuing service in common serving areas through the agency of the Los Angeles Motor Coach Company.

(2) A pooling arrangement under which the revenues and expenses of the local operations of the two companies would be pooled and the net revenue divided upon an equitable basis. To a certain extent this is now done by the companies in the operation of the Los Angeles Motor Coach Company.

What Can Coordination Accomplish?

Under a plan of coordination as discussed herein two operating managements will necessarily continue in operation, and while there may be some minor saving, it would not be expected that there would be major economies resulting from management, legal and accounting, under a coordinated basis of service as compared to the present method of operation. In fact it would be reasonable to expect certain increased accounting costs although not of a substantial nature.

In the case of operating matters there are certain duplications of service which might be eliminated with a decrease in operating expense on the combined systems. An example of such a condition is the service rendered on the northern end of the "A" line along north Figueroa Street in the same territory served by the Hollywood lines of the Pacific Electric Railway on Sunset Boulevard. To a minor extent duplication of service may be said to exist on Hill Street in the downtown area, and to a certain extent there is a duplication of service of the two companies on Pico Street, Venice Boulevard,

and Washington Street. In these cases there may be some minor economies which could be effected and which could be credited to the benefit of the coordination plan if made effective, although there would be no public benefit, and as a matter of fact, complaints from such of the public as would be directly and adversely affected.

We come, therefore, to the final possible advantage of coordination; namely, fares. It is obvious that no change in fares can be made which will generally affect the level of earnings of both companies any more than could such fare changes be made on the companies individually. We must, therefore, deal with possible rearrangements or minor adjustments of fares which will not seriously affect the companies' earning situation.

It should be pointed out that through an action of the Joint Committee an inter-company transfer was placed in effect in 1934 which provides for most combinations of through travel between the two companies at a 10¢ fare. This action, it would appear, through agreement of the two companies to divide the revenues of the joint ticket, takes care of the majority of the complaints existing from the lack of such an inter-company transfer for the casual rider.

Another very desirable extension of the use of the weekly pass which it is believed should have serious consideration under the plan of further coordination, is the effectiveness of a weekly pass which would be good over the entire system of the Los Angeles Railway, all lines of the Los Angeles Motor Coach Company east of Fairfax Avenue, and all local lines of the Pacific Electric Railway within Zones 1, 2, and 3, and including Fairfax Avenue. While such a pass may ultimately be sold at a lower price, it is believed that a proper initial rate would be \$1.50. Such a pass would undoubtedly do much to remove the feeling of separate operations on the part of the regular rider who has to make use of facilities of more than one company at the present time and would not seriously affect the revenues of the companies. This plan could be carried out by an agreement between the companies on a percent of gross revenue or some other equitable arrangement.

Conclusion

In conclusion it may be stated that the considerations discussed in this chapter are merely an extension of what is now being done by the two managements through the Los Angeles Motor Coach Company and to a limited extent through the inter-company ticket arrangement. The carrying out of further steps along this line can be done with a minimum of disturbance of existing relations through extensions of service by means of the agency, the Los Angeles Motor Coach Company, and the settlement of inter-system ticket and pass arrangements on an agreed basis. It is therefore recommended that the companies consider seriously the inauguration of the weekly pass selling for \$1.50 good on all lines of the Los Angeles Railway, the Los Angeles Motor Coach Company lines east of Fairfax Avenue, and local lines of the Pacific Electric Railway in Zones 1, 2, and 3, the division of revenues to be on an agreed basis.

CHAPTER XXIV

UNIFICATION OF PROPERTIES

In this chapter relative advantages and disadvantages of possible means of unification of Los Angeles local transportation properties will be considered.

Definition

In the following discussion the word "unification" is understood as the operation of the entire local transportation services in and about Los Angeles, both rail and motor coach, under one management and under conditions permitting the planning and the adoption of the best possible unified local transportation service for the public.

It has been considered that such unification would embrace the services rendered within an area of eight to ten miles from the downtown business district of Los Angeles and possibly in certain instances a greater distance. It has been considered, however, that the interurban service such as rendered by the Pacific Electric Railway and its subsidiary, the Motor Transit Company, would be excluded.

Method of Effecting Unification

There are a number of methods by which a unified service could be accomplished. For analysis purposes eight possible methods have been selected, grouping purchase and lease proposals, so that discussion may be limited to five items:

1. Purchase or lease of the Los Angeles Railway by the Pacific Electric Railway.
2. Purchase or lease of the Pacific Electric Railway's local lines by the Los Angeles Railway.
3. Purchase or lease of both of the present properties by a new operating company.
4. Purchase of the present properties by the City of Los Angeles.
5. Purchase of the present properties by a public transportation district to be specially created for that purpose.

Advantages of Unification

A unified local system would be in a better position to meet the overall requirements of the community, the extent depending upon the nature of the provision for new capital requirements and the extent of the unified area. Under unification undoubtedly certain savings would be effected through the operation under a single operating management. There are certain instances in which improved service could be given and duplications of service could be eliminated.

Unquestionably many matters such as fare and service changes could be more readily agreed upon and carried out under a unification plan, as contrasted to the present

dual management, particularly where the interests of the present two railways are both affected.

Factors to be Considered in Unification

In studying particular plans of unification some of the things which must be considered are:

- a. Outstanding securities of the present companies
- b. Values of properties to be acquired or leased
- c. The effect of the particular form of unification upon the total revenue of the new operation compared to the present operation
- d. The effect on the traveling public of the unified service compared to the present service
- e. The results in connection with the operating expenses of the unified service compared to the present service
- f. The operating methods considering the plant and equipment of the unified property compared with the present operations
- g. The availability of new capital for future requirements
- h. Consideration of employee working conditions

Each of these items would differ depending upon the type of unification effected, and these matters will be discussed in connection with each of the proposed methods of unification.

Purchase or Lease of the Los Angeles Railway Company by the Pacific Electric Railway

Under a plan of purchase of the Los Angeles Railway by the Pacific Electric Railway undoubtedly the operations of the Los Angeles local lines could be carried out by the present management of the Pacific Electric Railway with certain operating savings. The purchase price would be dependent upon the investment, reproduction cost less depreciation, earnings and outstanding obligations, at some agreed price. The Pacific Electric Railway is owned by the Southern Pacific Company, and it is problematical in view of all the circumstances at this time whether the Southern Pacific Company would be interested in acquiring additional local transportation lines. From the standpoint of rendering a completely unified service, however, the acquisition of the Los Angeles Railway properties by the Pacific Electric Railway would have certain advantages, particularly when there are to be extensions of service which might have a bearing on its longer interurban lines. However, because of the lower earning position of the interurban lines, such a combination would not improve the present possibilities for obtaining new capital. It is believed that this combination would provide the most opportunities for effecting reductions in operating expense, but it would, on the other hand, involve labor complications inasmuch as the one has organized labor and the other has not.

Purchase or Lease of the Pacific Electric Local Lines by the Los Angeles Railway

Any consideration of the acquisition of the local lines of the Pacific Electric Railway by the Los Angeles Railway or any other party immediately raises the question as to which of the Pacific Electric properties would be acquired. Most of the properties are jointly used as between the Pacific Electric interurban passenger service and freight, and the local Los Angeles service. The track over which the Sierra Vista line is operated and also the Watts line is definitely interurban in character, and undoubtedly these properties would never be acquired by a local company, assuming the Pacific Electric Railway Company to remain as the operator of the interurban freight and passenger services. Similar considerations but in a lesser degree would apply to Hollywood, Edendale, and Vineyard lines. There would also be the question of the Torrance shops where all major repair work on the local equipment is performed, the Pacific Electric terminal and general office building, electric transmission and distribution facilities, car houses, and other facilities which are now jointly used. Unquestionably after a plan of operation was established it would be found necessary for the Los Angeles Railway to make use of many of the Pacific Electric Railway facilities jointly, paying for the same on a rental basis. There might also arise in certain cases a question of severance damage for those facilities which would not be used by the Los Angeles Railway under the plan of operation to be adopted.

It is believed that this arrangement would not permit of the operating economies which could be developed in the first plan. There would again arise the question of union and non-union labor, particularly inasmuch as certain of the Los Angeles Railway lines would be operated jointly with the Pacific Electric Railway's interurban service. Fare and service changes under either of the two plans could be readily accomplished except that there would be certain conflicts of interest in outlying territory in the latter plan.

Purchase or Lease of the Present Properties by a New Operating Company

Under this plan a new company would be formed for the purpose of acquiring the Los Angeles Railway and the local lines of the Pacific Electric Railway either through purchase or lease. This plan would require the establishment of a value for the Los Angeles Railway as well as such properties of the Pacific Electric Railway as would be acquired. In many respects it would have the same advantages and disadvantages which would be incident to the acquisition of the Pacific Electric local lines by the Los Angeles Railway. A possible advantage of this plan over the former plan would be that it might be easier to secure new capital through the medium of a new company.

Purchase of Present Properties by the City of Los Angeles

In considering the purchase of the present properties by the City of Los Angeles it is possible that new capital for the improving of the local transportation service may

be more readily secured. All of the complications of the acquisition or lease of portions of the Pacific Electric System remain. A problem would arise in connection with the operation of such properties by the City of Los Angeles relative to service in adjoining communities, which, while such operations undoubtedly could be legally undertaken in many instances, would result in an unsatisfactory situation. In connection with operation by the City of Los Angeles approximately the same savings in management costs would be effected as under the last two plans. A wider latitude in adjusting fares would be possible under such operation than under any of the preceding plans.

Purchase of the Present Properties by a Public Transportation District
to be Specially Created for that Purpose

In general, the advantage of this arrangement compared to acquisition or lease of the properties by the City of Los Angeles is that an organization would be established which is in a position to improve the service requirements of both the City of Los Angeles and the adjoining communities and could render such service on a broader basis than could the City of Los Angeles. In other respects the advantages and disadvantages of this plan would be the same as though the City of Los Angeles acquired the properties.

Gauge of Track

The Los Angeles Railway is narrow gauge (3'6"), while the Pacific Electric lines are standard gauge. It is of course apparent that the gauge of the Pacific Electric Railway lines could not be changed because of its interurban and freight operations. To reconstruct the Los Angeles Railway to standard gauge would require the complete rebuilding of the system, and it is obvious, as has been demonstrated in previous reports, that there is no plan of unification under which the gauges of the two systems can be standardized. This in itself eliminates what otherwise would be a very promising field in unification; namely, the consolidation of car houses, car shops, and other facilities, and the freer inter-connection of the various lines insofar as routing and service are concerned.

Development to the West

The continued growth of the area between Los Angeles and Santa Monica raises a question in any plan of unification of the extent to which such unification should be provided. In former studies it has been considered that eight to ten miles from downtown Los Angeles is the reasonable limit of such unified service, and this limit appears to be proper for studies at this time with the exception of the territory to the west and the possible exception of service into the Glendale area. One of the Los Angeles Motor Coach Company lines now operates to Santa Monica, and with the activity of the municipal lines operated by the Cities of Culver City and Santa Monica it would appear that if unified operation were not carried out in this entire area, there would remain the problems

of non-unified service in this territory. Unified service in this area is to a large extent possible under the first plan discussed; namely, the acquisition of the Los Angeles Railway by the Pacific Electric Railway, but in all other plans it would involve the acquisition of considerable of the Pacific Electric Railway's interurban lines.

New Capital Requirements Under Unification

The new capital requirements to render an adequate service are not materially changed under any plan of operation on a unified basis compared to the present operation. In other words, there are certain definite needs for new facilities which are present at this time and would be present under any unified plan of operation.

Unification and Rapid Transit

Insofar as operation is concerned, unification under the Pacific Electric plan would provide the ideal arrangement for an ultimate rapid transit service, but the financing of such improvements would be best carried out under a public ownership plan.

Unification in Relation to Franchise Requirements and Taxes

Obviously unification carried out under some form of public ownership would eliminate the tax item in the expenses incurred under private ownership. Such an elimination, while on the surface effecting a saving in costs, ultimately would make no difference as other tax payers would be called upon to make up the difference. The same is true in connection with the franchise requirements, which undoubtedly would be eliminated under public operation.

Unification and Public Relations

Unification has decided advantage in this item. The present dual management arrangement is of itself conducive to less satisfactory public relations than a single system would be. Beyond this consideration it is undoubtedly true that a single ownership and operating management could find it easier to deal with both the patrons of the local service and the public authorities.

Unification and Extensions of Service

Any extensions of service as made through motor coach operation involve both new capital and, as a result, added operating costs. It is believed that it would be found easier to make extensions of service into newer territory under the public ownership plan, but that such extensions could be reasonably carried out under any of the plans discussed.

Conclusion

A definite determination of results under any of these plans requires the setting up of a detailed plan of acquisition and operation. It has not been possible in connection with this study of the present operations to make these detailed studies. From the general study, however, which we have given the situation as to unification we have reached the conclusion that because of differences in gauge, labor conditions, and operating methods, and the problems incident to a separation of Pacific Electric properties, no substantial savings will result from unification. Offsetting this, however, would be the advantages of one management, possible improved financial stability, and possible simplification of the fare structure.

Without the benefit of detail study of a particular plan, but confining the conclusion to the general proposition of unification and weighing its advantages and disadvantages, we are unable to recommend any plan as being so outstanding that it should be placed in effect.

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CHAPTER XXV

SUMMARY AND CONCLUSIONS

The Los Angeles Railway and the local lines of the Pacific Electric Railway, together with their agency, Los Angeles Motor Coach Company, serve on the average over a quarter million patrons, and account for nearly 800,000 separate trips each day in the area within an eight mile radius of downtown Los Angeles. This service is rendered in competition with perhaps the most intensive use of the private automobile of any major community in the world.

The problem of local mass transportation in Los Angeles as conducted by these carriers is of vital importance to the owners of the properties, the business interests, and not least to the patrons and public generally.

The difference in track gauge of the two companies is a barrier to complete unification of these properties. While the Pacific Electric lines are standard gauge, the Los Angeles Railway has narrow gauge tracks, which presents a serious obstacle to the providing of the kind of service a community such as Los Angeles naturally desires.

Neither of these transit agencies is in favorable financial condition. Los Angeles Railway faces important maturities of underlying bonds within the next five years. Pacific Electric Railway also has important bond maturities in the next few years.

Over sixty percent of the rail passenger equipment of the Los Angeles Railway is old and with the new developments, is seriously out of harmony with the reasonable public requirements of a great city.

The fares in effect on the three systems are constructed on essentially different bases, and in many respects lack unity as between carriers.

These fundamental facts are not new. They have been set forth in various prior studies and reports in the past. It has been the purpose of this report, in presenting summaries and recommendations, to utilize the results of the previous studies insofar as they presently apply and to keep the recommendations within the range of practicability and reasonable hope of accomplishment in the near future.

SECTION A

NEW EQUIPMENT

The most serious situation and one which must be remedied lies in the character of a substantial part of the older street car equipment of the Los Angeles Railway. The minimum requirement to put the company in a state of reasonable operating efficiency is at least two hundred modern, up-to-date street cars which will provide high rates of acceleration and speed with a minimum of noise, low floor level, and comfortable interior

accommodations. It is believed the purchase of new equipment is fully justified by operating economies and increased traffic and that the Los Angeles Railway should exert every effort to acquire such new rail equipment at the earliest possible date.

SECTION B

PRESENT EQUIPMENT

Noise constitutes a most serious objection to the present equipment both of the Los Angeles Railway and Pacific Electric Railway from the viewpoint of the property owner, car rider, and public generally. The Los Angeles Railway is engaging in experiments looking toward a reduction of noise, and it is believed that the responsible management of each company should immediately devote itself to the elimination of some of the noise resulting from street car operation.

SECTION C

ONE-MAN CAR OPERATION

Operation of street cars by one man is entirely practicable if properly equipped cars are used. Any new equipment should be designed for that type of operation. Also the existing cars originally built since 1920 should be remodeled with safety doors and equipment suitable for such service, together with modernization and reduction in noise in this class of equipment.

SECTION D

SERVICE

The service rendered by the companies has been studied in a comprehensive manner. Service is a matter which has day-to-day requirements, and it has been the intent to study major service requirements rather than minor details. The important conclusions in regard to service are:

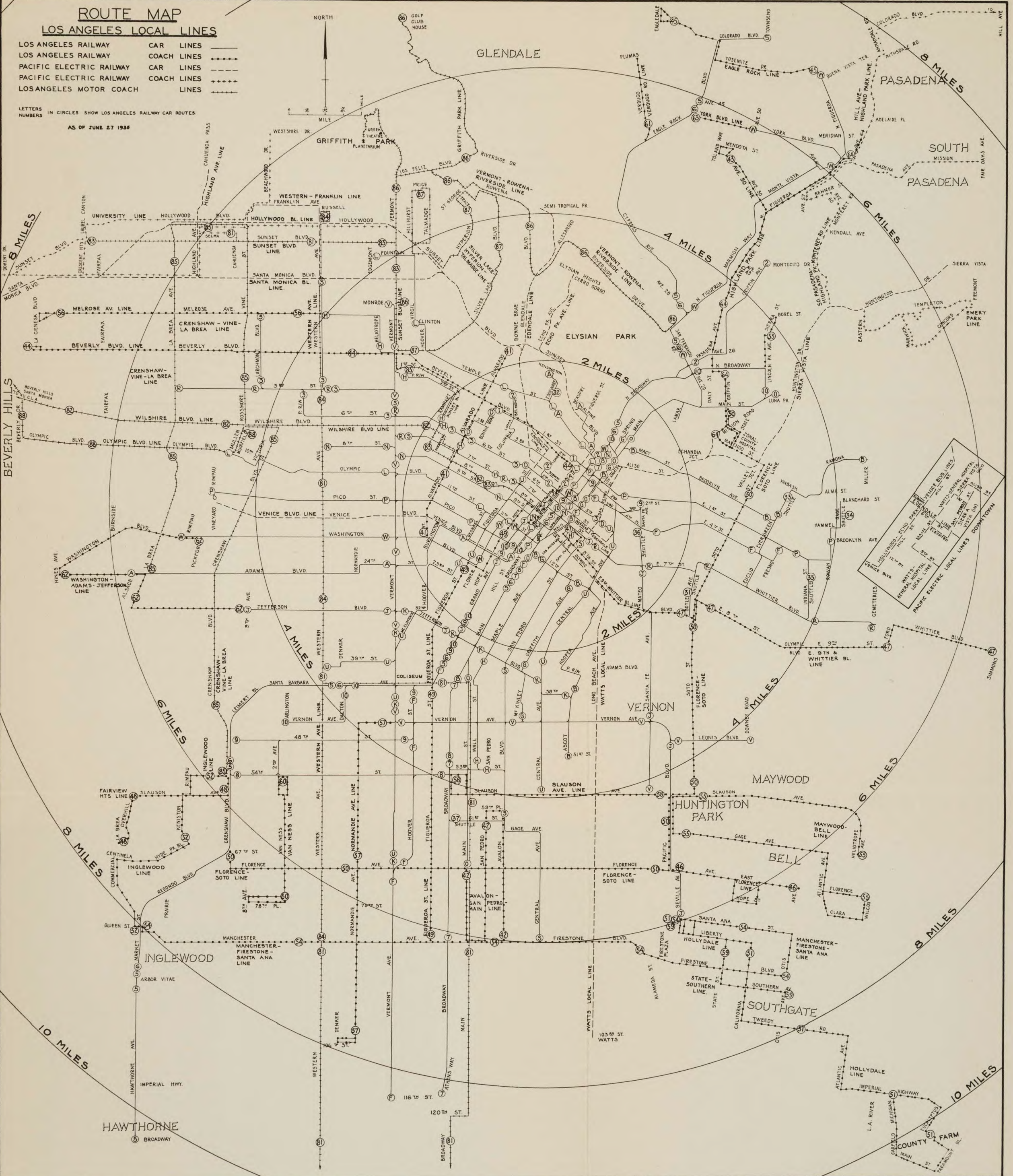
1. Need for added basic service on Temple Street "L" line, and need for added basic service on Pico Street "P" line. A suggested rerouting plan wherein such added service might be provided without added cost is through the combination of the Temple Street and Pico Street lines.
2. Need for added basic service on the "H", "R", "S", and "3" lines to the west of downtown Los Angeles.
3. Need for improved peak service on certain lines as detailed in the report.
4. Installation of a motor coach line on Fairfax Avenue from Pico Street to Hollywood is recommended.
5. Extension of Melrose Avenue coach line to downtown Los Angeles via Melrose Avenue, Vermont Avenue, and Third Street.

ROUTE MAP LOS ANGELES LOCAL LINES

- LOS ANGELES RAILWAY CAR LINES ———
- LOS ANGELES RAILWAY COACH LINES - - - - -
- PACIFIC ELECTRIC RAILWAY CAR LINES - - - - -
- PACIFIC ELECTRIC RAILWAY COACH LINES + + + + +
- LOS ANGELES MOTOR COACH LINES ———

LETTERS IN CIRCLES SHOW LOS ANGELES RAILWAY CAR ROUTES.

AS OF JUNE 27 1936



SECTION E

FARES

The three systems have three different fare structures. The development of these structures has reasonably well grounded historical background. The differences are unfortunate, but it is possible that any attempt to standardize fares under present conditions would result in objections outweighing the benefits.

Present fares have been analyzed, and the outstanding recommendation is that a token fare of $6\frac{1}{4}\text{¢}$ be provided on the Western and Vine-La Brea coach lines of the Los Angeles Motor Coach Company on a zone basis without transfer, in lieu of the present 10¢ cash fare.

It appears to be impracticable to reduce all fares to 5¢ at this time as it is estimated that a loss of over \$1,000,000 a year would be sustained in gross revenue of the local lines, even though present 10¢ fares were not reduced. The estimate contemplates substantially increased travel as a result of the reduction. A zone plan, however, may be established on the Los Angeles Railway similar to the Pacific Electric zone plan without serious effect on revenue. Whether such a plan should be adopted is a matter of broad public policy.

SECTION F

COORDINATION AND UNIFICATION

Possibilities of a more complete coordination of the local systems and of a number of plans for actual unification of the properties have been reviewed in the report. While the general idea is alluring, a consideration of the subject indicates many serious practicable barriers, chief of which is the difference in track gauge of the two systems. Out of our review of this entire subject we have concluded, from the public standpoint, that there is one further step in coordination which may logically and properly be placed in effect by the carriers and that is an all-company, system-wide pass selling for not more than \$1.50 a week. This pass will provide a more attractive fare to the regular rider who must now use the lines of more than one carrier.

CONCLUSION

The recommendations made, if carried out, will substantially improve local transportation conditions. They should be carried out promptly, and their ultimate effect will not adversely affect net income of the carriers.

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