

U.T.S. LIBRARY U.C. BERKELEY

REPORT ON
ENGINEERING AND ECONOMIC FEATURES
OF
PASSENGER TRANSPORTATION OPERATIONS, SERVICE AND FACILITIES

ON THE

PASADENA SHORT LINE
PASADENA OAK KNOLL LINE
MONROVIA-GLENDORA LINE
SIERRA MADRE LINE
SIERRA VISTA LOCAL LINE
BALDWIN PARK LINE

OF

PACIFIC ELECTRIC RAILWAY COMPANY
LOS ANGELES, CALIFORNIA

LIBRARY
JAN 21 1987
UNIVERSITY OF CALIFORNIA
INSTITUTE OF TRANSPORTATION

COMPARING

1. - Present Rail Operations
2. - Rail Operations with One-Man P.C.C. Cars
3. - Modernized Motor Coach Operation

Submitted To

MR. O. A. SMITH, PRESIDENT

A F A
FEB 11 1949

January 15, 1949

Bureau of Research
No. 49-1

Arthur C. Jenkins
Consulting Engineer

15090589

HE4491

.L7

J4

1949

v. 1

REPORT ON
COMPARATIVE ECONOMICS, SERVICE AND
OPERATING RESULTS OF
PASSENGER TRANSPORTATION SERVICE ON THE

LIBRARY

JAN 21 1987

PASADENA SHORT LINE

PASADENA OAK KNOLL LINE

MONROVIA-GLENDORA LINE

SIERRA MADRE LINE

SIERRA VISTA LOCAL LINE

BALDWIN PARK LINE

UNIVERSITY OF CALIFORNIA
INSTITUTE OF TRANSPORTATION

January 15, 1949

Page 19

ARTHUR C. JENKINS

M. AM. SOC. C. E., M. AM. INST. E. E., M. SOC. A. E.

CONSULTING ENGINEER

870 MARKET STREET

SAN FRANCISCO 2, CALIFORNIA

DOUGLAS 2-8023

January 15, 1949

Mr. O. A. Smith, President
Pacific Electric Railway Company
675 Pacific Electric Building
Los Angeles, California

Dear Sir:

As a part of the systemwide rehabilitation studies which you have requested, there is submitted herewith for your consideration a report relating to modernization of the Northern District passenger service, as presently conducted by rail lines.

This report is one of several that will cover the entire passenger rail system and sets forth the comparative financial results to be expected under the several plans of operation studied. Analysis of the financial status of the Company, the problems confronting it under continued rail operation and the need for modernization of facilities, indicated the desirability of proceeding with this phase of the survey in advance of others due to its heavy bearing upon the Company's financial status.

During the year of 1947 system passenger rail operations were conducted at a net loss of \$3,426,189. Despite increases in fares that became effective on February 1, 1948 and substantial economies of operation brought about during that year, an operating loss before bond interest on passenger rail operations was incurred in the amount of \$2,893,962 during the twelve months' period ending October 31, 1948. To attempt to further reduce the deficit by lowering the standard of maintenance and service on the rail lines would not be prudent. Other means must be adopted.

It has been the purpose of this study to develop a method of operation that will maintain a high standard of service to the public and at the same time convert the heavy losses presently and heretofore incurred on the Northern District Rail Lines into a reasonable profit. Results of the studies indicate conclusively that these objectives can be realized through elimination of rail service and establishment of modern motor coach operation.

It is estimated that under continued rail service, these six lines will suffer an annual operating loss of \$970,000 without giving consideration to interest on bonds and other appropriate deductions from income. As compared with that loss, establishment of motor coach service will produce an operating profit of at least \$155,000 or a net improvement of approximately \$1,125,000, and at the same time provide the public with an adequate

Mr. O. A. Smith, President
January 15, 1949

service of high standard commensurate with similar types of service in effect throughout the Country.

Continued rail operation using either present equipment or new P.C.C. cars would result in heavy financial losses even if track and roadway and facilities were in first class condition. Actually, however, to continue rail service of any character will require an estimated expenditure in excess of \$2,700,000 to bring track and roadway up to proper operating standards.

Upon the basis of the studies made and the content of this report, it is concluded that passenger rail service should be discontinued and that modern motor coach operation should be established. Such a modernized operation will redound to the benefit of both the public and the Company through providing an improved service and producing a measure of profit more nearly meeting that to which the Company is entitled.

Respectfully submitted,

Arthur C. Jenkins

ARTHUR C. JENKINS

Pacific Electric Railway Company

REPORT ON
NORTHERN DISTRICT PASSENGER RAIL LINES

F O R E W O R D

In the preparation of basic data, assembly of field information, development of cost, revenue and other financial data, the files, resources and personnel of the various departments of the Company have been drawn upon to a substantial extent.

Preparation of the material necessary to completion of this report has involved comprehensive field surveys, exhaustive study of records, extensive cost analysis and the preparation of numerous sets of detailed schedules and manpower assignments, all based upon actual conditions, official records of the Company and practical operating practices.

The wholehearted cooperation and assistance rendered by the various departments and offices of the Company in this work has been of inestimable value. Service rendered by the Research Bureau, Schedule Bureau, Engineering Department and Passenger Traffic Department are worthy of special mention. It is desired to particularly acknowledge the assistance rendered by Mr. H. O. Marler, Passenger Traffic Manager, Mr. D. R. Lewis, Engineering Assistant to the President, and Mr. L. H. Appel, Research Engineer and his staff.

ARTHUR C. JENKINS

Pacific Electric Railway Company

REPORT ON
NORTHERN DISTRICT LINES

TABLE OF CONTENTS

	<u>Page</u>
Letter of Transmittal	
Foreword	
A - BASIC CONSIDERATIONS	
Purpose and Scope of Study	1
Fundamental Premise	1
Financial Rehabilitation and Service Modernization Requirements. .	2
General Modernization Program	2
Related Proceedings and Reports	3
Types of Operation Considered	3
Methods of Computation	4
Revenue	4
Expenses	5
Depreciation	5
Traffic Checks	5
B - FINANCIAL ANALYSIS	
Summary of Results	5
Improvement in Net Operating Income	6
System Deficit	7
Equivalent Fare Increase	7
C - PRESENT RAIL OPERATION	
Description of Routes:	
Pasadena Short Line	8
Pasadena Oak Knoll Line	9
Monrovia-Glendora Line	9
Sierra Madre Line	10
Sierra Vista Local Line	10
Baldwin Park Line	10
Mileage Schedules	11
Service Characteristics:	
Pasadena Short Line	11
Pasadena Oak Knoll Line	12
Monrovia-Glendora Line	12
Sierra Madre Line	12
Sierra Vista Local Line	13
Baldwin Park Line	13
Characteristics of Area Served	13
Traffic Characteristics and Trends	14

TABLE OF CONTENTS
(Continued)

	<u>Page</u>
C - (Contd).	
Equipment and Facilities:	
Rail Cars	16
Interlocking Plants	16
Electrical Substations	17
Track and Roadway	17
Freight Operations	17
Future Passenger Earning Prospects	18
D - RAIL OPERATION WITH P.C.C. TYPE CARS	
Routes and Service	18
Equipment Requirements	19
Track Rehabilitation	19
Other Facilities Required for P.C.C. Operation	20
Financial Results	21
Rail Shuttle-Motor Coach Feeder Plan	21
E - PROPOSED MOTOR COACH OPERATIONS	
Routes and Service	22
Pasadena Short Line	23
Pasadena Oak Knoll Line	23
Monrovia-Glendora Line	23
Sierra Vista Local Line	23
Los Angeles-Baldwin Park Line	23
Sierra Madre Line	24
Equipment Requirement for Motor Coach Operation	24
Other Facilities	25
Financial Results	25
Suitability of Motor Coaches	26
Prior Reports and Proceedings	26
Prospect for Rail Rapid Transit	28
Load Factors	28
Freight Rail Connection at Azusa	28
F - SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS	
Conclusions	29
Recommendations	31

A P P E N D I X

TABLE OF CONTENTS

LIST OF TABLES

<u>No.</u>	<u>Page No.</u>
1. Consolidated Summary of Estimated Financial Results of Operation Under Various Plans for Northern District Lines . .	i

A P P E N D I X

TABLE OF CONTENTS
(Continued)

LIST OF TABLES (Contd).

<u>No.</u>		<u>Page No.</u>
<u>Estimated Financial Results by Lines:</u>		
2.	Pasadena Oak Knoll and Short Lines	ii
3.	Monrovia-Glendora Line	iii
4.	Sierra Madre Line	iv
5.	Sierra Vista Line	v
6.	Baldwin Park Line	vi
7.	Proposed Northern District Shuttle Service	vii
<u>Comparative Service and Operating Data:</u>		
8.	Pasadena Oak Knoll and Short Lines	viii
9.	Monrovia-Glendora Line	ix
10.	Sierra Madre Line	x
11.	Baldwin Park Line	xi
12.	Cost of Additional Facilities and Equipment	xii
13.	Ledger Value of Facilities to be Abandoned	xiii
<u>Estimated Salvage and Cost of Removal:</u>		
14.	Consolidated Summary	xiv
15.	Pasadena Oak Knoll and Short Lines	xv
16.	Monrovia-Glendora Line and Sierra Madre Line	xvi
17.	Sierra Vista and Alhambra Lines	xvii
18.	Joint Trackage	xviii
<u>Present Condition of Track and Roadway:</u>		
19.	Pasadena Oak Knoll and Short Lines	xix
20.	Monrovia-Glendora, Sierra Madre and Baldwin Park Lines	xx
21.	Estimated Cost of Rehabilitation for Continued Rail Operations	xxi
<u>Passenger Statistics and Trends by Lines:</u>		
22.	Pasadena Short Line	xxii
23.	Pasadena Oak Knoll Line	xxiii
24.	Monrovia-Glendora Line	xxiv
25.	Sierra Madre Line	xxv
26.	Sierra Vista Line	xxvi
27.	Baldwin Park Line	xxvii

LIST OF MAPS AND CHARTS

<u>No.</u>		<u>Page No.</u>
I.	Map of Pacific Electric Railway System	xxviii
II.	Map of Present Routes of Northern District	xxix
III.	Map of Proposed Motor Coach Routes	xxx

A P P E N D I X

TABLE OF CONTENTS
(Concluded)

LIST OF MAPS AND CHARTS (Contd).

<u>No.</u>		<u>Page No.</u>
	Charts - Passengers, Seats, and Units of Equipment at <u>Maximum Load Points:</u>	
IV.	Pasadena Short Line	xxxi
V.	Pasadena Oak Knoll Line	xxxii
VI.	Monrovia-Glendora Line.	xxxiii
VII.	Sierra Madre Line	xxxiv
VIII.	Sierra Vista Line	xxxv
IX.	Baldwin Park Line	xxxvi
X.	Chart - Trend of Passengers and Revenue by Lines	xxxvii
XI.	Sketch of Proposed New Motor Coach Terminal - 6th & Main	xxxviii

Pacific Electric Railway Company

COMPARATIVE ECONOMICS, SERVICE AND
OPERATING RESULTS

NORTHERN DISTRICT PASSENGER RAIL LINES

A - BASIC CONSIDERATIONS

PURPOSE AND SCOPE OF STUDY

The purpose of this study is basically to determine whether or not it may be possible to preserve passenger rail service on the Northern District Lines either by application of revised methods of service, operations and facilities of the present plant, or rearrangement of those elements to accommodate new P.C.C. type rail cars operated under the most modern practices and procedure, and in the event that both such rail programs should prove to be infeasible, to develop some other plan of operation that will fulfill the requirements of adequate service and reasonable financial returns.

In view of the widespread desire on behalf of many public and civic representatives that rail service be preserved, this study has taken into consideration all practical advantages of rail rehabilitation through use of most up-to-date rail cars of the P.C.C. type and the reconstruction of facilities required for this operation.

FUNDAMENTAL PREMISE

It has been accepted as a basic assumption in conducting this survey and in deriving the conclusions and recommendations set forth herein that the only way in which the public can continue to be supplied with passenger transportation service by Pacific Electric Railway Company is for the physical and financial elements of the operation to be adjusted to the extent necessary to produce a reasonable profit to the carrier and a correspondingly adequate standard of service to the public. To propound the theory that standards of service are paramount to the financial solvency of the carrier who is required to provide that service is tantamount to depriving private industry of its fundamental incentive to remain in business and its inherent rights under the principles of free enterprise upon which the foundation of our economic system is established.

The problem can be epitomized as consisting of two primary responsibilities, first that of the carrier to discharge its obligation to the public in the most efficient and effective manner through the exercise of prudent and far-sighted managerial discretion, and the second, is the obligation of the persons benefiting from the service to pay a sufficient amount in return to offset the cost of providing it and, in addition, assure the Company of a

reasonable measure of profit. To attain the desired balance of interests and equities it is essential that the problems of both principals and the restrictions under which they must function, be thoroughly understood and the superficial effects of minutia be subordinated to the paramount issues that go to the more profound consideration of survival or extinction of the transportation system.

FINANCIAL REHABILITATION AND SERVICE MODERNIZATION REQUIREMENTS

For the year of 1947 consolidated operations of this carrier were conducted at a net loss of \$1,760,072.98. Passenger operations, including both rail and motor coach lines, were conducted during that year at an operating loss* of \$2,793,875.97. Passenger service conducted by rail incurred a loss for the year of \$3,426,188.91. Some relief was experienced during 1948 as a result of the increase in fares that became effective on February 1st of that year and through drastic economies effected in many departments. Despite those improvements, passenger rail operations suffered an operating loss* for the most recent twelve month period for which figures are available of \$2,893,962. This figure applies to the twelve months ending October 31, 1948. Of that loss 77 per cent was chargeable to interurban rail lines and 23 per cent to so-called local lines. Of the 77 per cent representing interurban rail line losses, the five interurban lines of the Northern District, under consideration herein, were responsible for 57 per cent or \$1,270,000.

In view of these losses it has not been possible for the Company to maintain the desirable top level of facility maintenance and similarly it has not been possible under the circumstances to follow a long range program of rail car replacement. Consequently, the service to the public has not been at the highest standard that could have been possible through use of modernized operations and facilities. In drawing this conclusion a distinction must be made between types of service. Actually, under the rule of a seat per passenger which is adhered to within reasonably practical limits, the individual passenger has a more commodious service than would be the case with new P.C.C. cars. Both the P.C.C. rail car and the modern motor coach offer higher schedule speeds due to their lighter weight and higher rates of acceleration and deceleration. As to interior arrangement and seating there is very little difference between the P.C.C. car and the modern motor coach. The latter does possess the important advantage of free steering maneuverability.

Viewing the problem in its broad aspects there is real and urgent need for financial rehabilitation and service modernization on these lines of the Northern District, and the results of the studies made indicate conclusively that the only feasible plan to accomplish both objectives is through establishment of motor coach service in lieu of the antiquated and non-profitable rail operations. Revenue potentialities are not sufficient to support the heavy cost of maintaining the fixed facilities required for rail operation.

GENERAL MODERNIZATION PROGRAM

This report on the Northern District interurban passenger rail lines and the northern end of the Watts-Sierra Vista Local Line is one of several such reports that will cover all rail passenger lines both interurban and local.

* - Before allocation of bond interest and other appropriate deductions from operating income.

In the systemwide modernization program it is intended to study not only the rail passenger lines but also all existing motor coach lines for the purpose of determining the extent to which service improvements can be made and their financial status improved. It is not only the rail passenger lines that are suffering deficits. Recent analysis discloses that of the 25 motor coach lines operated by the Company, only 8 were profitable. The remaining 17 lines were operated at a loss.

RELATED PROCEEDINGS AND REPORTS

As indicated above, this and other reports are a part of the major modernization program. This report and others already prepared and presently in process of completion are directly related to the formal proceedings before the Public Utilities Commission of the State of California in Applications Nos. 23053 and 27466 and Case No. 4843.

The Commission's Decision No. 41152 dated January 19, 1948, in those proceedings and exhibits submitted by Commission and Company witnesses prior thereto are all closely related to this report and those others of the same series. There is also a direct relationship between this report and exhibits and testimony submitted in evidence before the Commission at the hearing held in Los Angeles on October 13, 1948. Specifically, the exhibits referred to were Nos. 46, 47, 48 and 49. This report also covers one phase of the studies recommended in the Preliminary Report submitted to the President of the Company dated July 15, 1948.

Considerable of the basic and supporting theory behind the findings set forth herein will be found in the exhibits and testimony above referred to and for sake of brevity, they will not be repeated as this report will be made a part of the same proceeding.

TYPES OF OPERATION CONSIDERED

All possibilities of economies through continued operation of rail service under present conditions have been explored and a determination reached that rail passenger service as conducted with present equipment and facilities cannot be made to pay its way, and that to bring about a reasonable relationship between earnings and cost of providing service, major changes are mandatory. In order that due consideration be given to all possible means of accomplishing the desired results through modernization of facilities and service, the scope of the survey has been extended to include,

- (a) A replacement of the existing rail cars with modern light-weight, stream-lined PCC-type cars equipped for one-man operation.
- (b) Shuttle rail operation between Los Angeles and Sierra Vista and motor coach distribution from Sierra Vista.
- (c) Conversion of present rail operations to highway service utilizing modern motor coaches.

The systemwide modernization program has been segregated into several parts, each one applying to a natural subdivision of the rail system generally embracing those lines serving a specific geographic area and conforming to the operating divisions of the system. This study covers only those rail

lines included in the Northern District and other studies will be submitted covering rail operations in the Southern and Western Districts.

In conducting the surveys and developing the financial estimates under the various methods of operation outlined above, two standards of loading have been used including that presently in effect as prescribed by the Public Utilities Commission of the State of California and another providing for less restrictive loading standards on interurban lines during the morning and evening peak traffic periods. Present standards provide a seat for each passenger on interurban lines throughout the entire day. The computations made herein where higher load standards are used, contemplate 150 per cent load factor on rail cars and 60 passengers for a 45 passenger capacity motor coach on interurban lines with no passengers standing longer than thirty minutes from the central loading area.

It is not intended that the interurban load factors described above are to apply except during the short peak hours morning and evening.

METHODS OF COMPUTATION

Revenue - Under each of the plans considered, revenue has been estimated upon the basis of actual earnings during the months of 1948 projected for a period of twelve months. There has been no speculation as to the probability of increased traffic due to new types of equipment. Extensive analysis of various sources of information on this subject has been made and it appears that there is wide variance between the views of operating managers on various properties throughout the country as to whether or not new equipment in replacement of old actually produces any increased traffic, and on those properties where induced traffic has been agreed to exist there is difference of opinion as to the estimated amount. It appears that if new equipment does induce additional traffic there would probably be no difference in the percentage as between new rail cars and new motor coaches. If it should be assumed that new equipment would induce additional traffic, it would be logical to expect the increase to occur during peak periods as well as off-peak periods, thereby increasing to a corresponding degree the operating expenses which would be reflected in the final estimates of net earnings, as the costs of operation as computed herein adhere closely to the loading standards applied in each instance.

If it were a matter of computing the financial advantages of one type of equipment over another in replacement of vehicles on profitable lines, the provision for an increment of induced traffic, if such should be determined to be proper, would possibly be of importance. However, when considering rail lines of the Northern District of this Company which are currently operated at a substantial and constant loss, the relatively small element of financial improvement that might exist through induced traffic is rendered insignificant when compared with the magnitude of economical improvement possible through replacement of older more costly rail equipment with modern motor coaches.

In this connection when comparing the merits of modern rail cars with those of modern motor coaches it should be kept in mind that the elements ordinarily considered to be traffic stimulating are frequency of service, schedule, speed and fares. As to frequency of service and schedule speed, motor coaches have the advantage over modern rail equipment and correspondingly should be expected to develop a greater stimulation of traffic if any

consideration is to be given to such effects of modernization.

Upon this basis of reasoning, annual revenue for lines of the Northern District as included herein under the conversion plan has been estimated to be no different from current earnings expanded to a twelve months' period.

Expenses - Operating expenses, as reflected by the estimates of financial results of operation contained herein, represent actual costs in accordance with the accounting records of the Company. These have been carefully analyzed and segregated into sufficiently minute detail to afford final results that are as accurate as it is practicable to determine. Cost of trainmen's wages for present operation have been computed upon the basis of the actual cost per car mile during the first six months of 1948, increased to reflect the higher wage rates that became effective on October 16, 1948. No allowance has been made for increase in clerical wages which will probably be retroactive to sometime in 1948. For other plans of operation, wages of trainmen and operators have been estimated upon the basis of the actual schedules and manpower requirements determined to be necessary upon the basis of field traffic checks taken on each line. In view of the fact that in the systemwide modernization program all rail lines are to be considered for modernization, full costs and taxes have been used instead of out-of-pocket costs, except to the extent that certain modifications were required as a means of eliminating inconsistencies that might otherwise obviously exist.

When considering a systemwide modernization program, the only equitable basis of computation is that of full cost. The theory of out-of-pocket cost should only be applied in isolated instances where service or operating changes on a minor scale would have no direct bearing upon costs of a general nature that would not be reduced by the changes contemplated.

Depreciation - Depreciation expenses have been computed upon the basis of actual rates presently used by the Company for accounting purposes. Under the revised depreciation formula recently prescribed by the Interstate Commerce Commission for application to Pacific Electric properties, it might be contended that charges assigned to Ways and Structures accounts are unnecessarily high. However, whatever the difference might be, it would amply be offset by the fact that a service life of only seven years has been applied to motor coaches in the financial estimates, whereas actually the Public Utilities Commission has approved a life of ten years for such equipment. Use of a ten-year life instead of seven would increase the financial advantage of motor coach operation by approximately \$92,571.

Traffic Checks - Cost of operation as applied to the estimates contained herein are based upon schedules prepared in conformance with actual traffic as determined by special field traffic checks on each line involved, covering the full operating period of the day.

B - FINANCIAL ANALYSIS

SUMMARY OF RESULTS

There are included in the Appendix a number of financial statements containing the results of the analysis of various methods of operation on the Northern District rail lines. The results of each individual line are shown

in detail on separate statements and the combined findings are condensed on a summary Table No. 1, which, in brief, shows as follows:

ESTIMATED ANNUAL FINANCIAL RESULTS OF
NORTHERN DISTRICT LINES

	<u>Net Operating</u> <u>Income</u>	<u>Units of</u> <u>Equipment</u> <u>Required</u>
<u>AT PRESENT LOADING STANDARDS</u>		
<u>Present Rail Operations</u>		
Pasadena Oak Knoll and Short Lines	\$(180,936)	35
Monrovia-Glendora Line	(293,742)	20
Sierra Madre Line	(64,618)	9
Sierra Vista Local (North)	(152,358)	16
El Monte-Baldwin Park Line	(281,770)	22
Total	\$(973,424)	102
Rail Operation - P.C.C. Cars	(459,770)	101
Motor Coach Operation	155,334	120
 <u>AT PROPOSED LOADING STANDARDS</u>		
Present Rail Operations	\$(800,093)	80
Rail Operations - P.C.C. Cars	(271,218)	78
Motor Coach Operation	304,862	101

(RED FIGURES)

IMPROVEMENT IN NET OPERATING INCOME

Under each plan of operation one set of computations has been prepared to show the results under loading standards of a seat per passenger on inter-urban lines as presently required and in effect, and another to show the results under loading standards permitting a reasonable standing load on inter-urban lines during the peak traffic periods. The theory relative to loading standards is set forth in Exhibit No. 49 submitted to the Public Utilities Commission at the hearing on October 13, 1948 in Application No. 27466 and Case No. 4843, and also in the report on the Venice Short Line.

It will be noted that whereas the combination of Northern District Passenger Rail Lines operate at an aggregate annual operating loss of \$973,424, modernization through use of motor coaches will result in an annual net operating profit of \$155,344 at present loading standards and \$304,862 at more lenient loading standards, or a net financial improvement of more than \$1,125,000 at present loading standards and approximately \$1,275,000 under the proposed loading standards.

Under P.C.C. car operation the table shows an estimated annual loss of \$459,770 at present loading standards and a loss of \$271,218 under proposed loading standards. From Table No. 1 it will be noted that the Sierra Madre line will operate at a loss even under motor coach operation.

These estimates indicate that under motor coach operation, at present loading standards, approximately 7.5 per cent of gross revenue would be retained as net and under the more lenient loading standard about 15 per cent

would be retained. It is considered that for this type of industry where labor costs are such a high percentage of total operating expenses, an operating ratio of 15 per cent is not excessive. Although the theory of reasonable rate of return on appropriate rate base for utility properties has been adopted as the standard measurement of earnings over a period of many years, the tendency in the transportation industry, particularly that which is predominantly motor coach operation, has been away from rate of return and directed towards operating ratio.

The need for such a revision of theory for application to transit operators has been forcibly emphasized during and subsequent to the war by the repeated annual demands for increase in wage rates of employees. In virtually all cases such wage increases were granted after lengthy negotiations and in many instances after further lengthy arbitration. The formula by which such wage increases are accomplished carries with it a retroactive provision making whatever increases are finally granted effective as of the date of expiration of the previous contract even though the settlement may not be reached until several months after expiration.

During the meantime the Company's earnings continue on a normal basis with no provision being made for acquiring a sufficient amount of revenue to offset the cost of increased wages. The operator is precluded from filing an application for increased fares to offset increased wages until such time as the amount of increased costs has been definitely determined. Even after such determination has been made by the Company, there usually is a retroactive period of considerable magnitude which cannot be compensated for even if increased fares could be made effective immediately upon signing of the labor agreement. Usually that period of time is extended considerably before relief can be had through increased fares, if such are granted.

This means that the operating Company is subjected to the increased cost of labor, without compensation through increased fares, for a period of several months before relief is obtained. Fare increases, when they finally are permitted, do not ordinarily make provision for the interim loss. It must be absorbed by the Company.

This is only one example of the contingencies confronting an operating transit company. Earnings in this industry are closely attuned to other developments in the area served such as strikes, increases in cost of fuel without warning, increases in price of equipment and other items necessary for continuation of operation.

SYSTEM DEFICIT

It should be assumed upon the basic principles of business economy that an operator is entitled to earn a sufficient amount of revenue to meet costs of operation and provide a reasonable profit. On the rail lines involved in this study such is not the case. Actually it is estimated that the five rail lines considered in the Northern District will incur an annual net operating loss of approximately \$973,000. For the year of 1947 the entire rail passenger service incurred a deficit of approximately \$3,500,000. On the system operation as a whole for that year the net income represented a loss of \$1,760,000, despite the fact that freight business produced an operating profit of \$1,851,000.

EQUIVALENT FARE INCREASE

Upon the basis of a rough estimate of the investment required under motor

coach operation, the profit under present loading standards would result in a return on the investment of approximately 4.5 per cent. To realize this financial improvement through fare adjustment would require an average increase in fares as applying to these lines, of 55 per cent and at the more lenient loading standards, 62 per cent. These increases are upon the assumption that no traffic would be lost, however, it is highly questionable that existing traffic would be retained under such heavy fare increases.

In order for the Company to realize such a financial improvement through reduction of costs, it would be necessary to curtail present operating expenses 37 per cent. This would be equivalent to eliminating completely more than the total cost of operations of the Pasadena Oak Knoll and Short Lines. This percentage is based upon present maintenance standards of equipment and track and roadway. Actually, those standards have been permitted to drop down to the bare essentials for reasonably safe and satisfactory operation and, therefore, continued rail service would necessitate an annual expenditure of much more than is now incurred in order that deferred maintenance would be picked up for normal continued operation. It is obvious that under these conditions it is impossible to realize even the minimum reasonable net earnings under continued rail operation, and that the only solution, if service is to be preserved, is to discontinue the costly rail service and establish modern motor coach lines.

C - PRESENT RAIL OPERATION

The six passenger rail lines covered by this study operate from the Sixth and Main Street Terminal in Los Angeles and are identified as follows:

Pasadena Short Line
Pasadena Oak Knoll Line
Monrovia-Glendora Line
Sierra Madre Line
Sierra Vista Local Line
Baldwin Park Line

Maps Nos. 1 and 2 of the Appendix show their routing with relation to the area served and the system operations. Various characteristics of the individual lines are set forth below.

DESCRIPTION OF ROUTE

Pasadena Short Line - A common route is followed by both the Pasadena Short Line and the Pasadena Oak Knoll Line between Main Street Station, Los Angeles, and Oneonta Station on Huntington Drive. For a description of route between those points, refer to Los Angeles-Pasadena via Oak Knoll Line.

From Oneonta Station at Fair Oaks Avenue and Huntington Drive in South Pasadena, the Pasadena Short Line proceeds north on Fair Oaks Avenue, over private right-of-way for a short distance, thence along paved street through the residential and business sections of South Pasadena and through the commercial and business districts of Pasadena to the car house on Fair Oaks Avenue north of Colorado Street.

Fair Oaks Avenue is situated several blocks west of the business center

near Azusa. Arcadia is the home of the famous Santa Anita Park race track.

This line uses the inside tracks of the four-track system between Indian Village and El Molino, running "limited" between those points.

Sierra Madre Line - This line follows the same route as the Glendora Line from Los Angeles to San Marino, and for description of route between such points, refer to the latter line. At San Marino, the Sierra Madre Line branches off to the north and east on private right-of-way paralleling Sierra Madre Boulevard to Michillinda Avenue, thence in paved city street to Baldwin Avenue in Sierra Madre, and via Baldwin Avenue and private right-of-way to the end of the line at Mountain Trail Avenue in Sierra Madre.

From San Marino the Line operates through residential districts, the business and light industrial sections of East Pasadena, an agricultural area, and finally the community of Sierra Madre. Shuttle bus service is now provided on this line between San Marino and Sierra Madre at night and during off-peaks and on Sundays.

Sierra Vista Local Line - This local line operates from 103rd Street in Watts over the outside tracks of the four-track system on private right-of-way paralleling Long Beach Avenue and other streets to Olympic Boulevard, thence in paved streets over Olympic Boulevard, 9th Street, Main Street, 1st Street, Los Angeles Street, and Aliso Street to private right-of-way commencing at Mission Road. From Mission Road, the route to Sierra Vista is the same as for the Pasadena Oak Knoll Line, except that between Indian Village and Sierra Vista, the outside tracks of the four-track system are used.

The northern end of this line, between downtown Los Angeles and Sierra Vista, serves a varied territory. Commencing in downtown Los Angeles, there is first the older mercantile area, followed by the Civic Center, the Los Angeles Union Passenger Terminal, an industrial area, the Los Angeles General Hospital (at some distance from the line), various residential districts and finally the business and residential district of El Sereno, along Huntington Drive.

Travel on the Sierra Vista end of this line is approximately one-half in volume of that on the Watts end of the line.

Baldwin Park Line - This line operates out of Main Street Station, Los Angeles, over the same route as the Pasadena, Monrovia and Sierra Madre lines to Valley Junction, a distance of 3.31 miles. At Valley Junction, the line branches off toward the east over the old San Bernardino rail line, serving the communities of Alhambra, Monterey Park, Wilmar, Rosemead, El Monte and Baldwin Park. The line is in private right-of-way and of double track, with the exception of bridges over Rio Hondo and San Gabriel Rivers. For almost the entire distance of 14.43 miles from Valley Junction to Baldwin Park, the line is adjacent to or closely paralleled by highways, the principal ones being Ramona Boulevard in Los Angeles and Alhambra, San Bernardino Road in El Monte, and West Ramona Boulevard in Baldwin Park. Between the western limit of Alhambra and El Monte, the line lies about midway between Valley Boulevard and Garvey Avenue, the principal east-west highways through this area.

The route serves residential areas of varying degrees of population,

Pasadena Oak Knoll Line

Length of route 13.95 Miles
 Number of trains operated (daily except Saturdays & Sun.) 41 to Pasadena
 40 to Los Angeles

Daily Except Saturdays and Sundays

Los Angeles - Pasadena	AM Peak	Base	PM Peak	Night
Scheduled running time	58"	56"	59"	50"
Cars required (13 - 1100 Class) (2 - 1200 Class)	13	4	15	4
Average miles per hour	14.4	14.9	14.2	16.7
Approximate headways	15"-20"	20"-30"	15"-20"	40"-60"

Monrovia-Glendora Line

Length of route 17.89 Mi.-Monrovia
 26.07 " -Glendora
 Number of trains (daily except Saturdays & Sundays) . . . 40 LA to Monrovia
 *24 LA to Glendora
 38 Monrovia to LA
 *24 Glendora to LA

* - The Glendora trains are included in the count of trains serving Monrovia.

Daily Except Saturdays and Sundays

Los Angeles to -->	AM Peak		Base		PM Peak		Night	
	Monro- via	Glen- dora	Monro- via	Glen- dora	Monro- via	Glen- dora	Monro via	Glen dora
Scheduled running time	57"	77"	54"	74"	60"	80"	48"	67"
Cars requires (16 - 1100 Class) (2 - 1200 Class)	--18--		--5--		--18--		--4--	
Average miles per hr.	18.8	20.3	19.9	21.1	17.9	19.5	22.4	23.3
Approximate headways	15"	30"	30"	60"	10-20"	30"	40-	40-
							70"	70"

Sierra Madre Line

Length of route 17.0 miles
 Number of trains (daily except Saturdays and Sundays):
 11 thru, LA to Sierra Madre
 1 shuttle, San Marino to Sierra Madre
 9 thru, Sierra Madre to LA
 3 shuttle, Sierra Madre to San Marino
 Number of bus trips (daily except Saturdays and Sundays):
 13 Sierra Madre to San Marino
 13 San Marino-Sierra Madre

Daily Except Saturdays and Sundays

Los Angeles-Sierra Madre	AM Peak	Base	PM Peak	Night
Scheduled running time	63"	-	64"	-
Cars required (8 - 1100 Class)	8	no thru	8	no thru
Average miles per hour	16.2	ser-	15.9	ser-
Approximate headways	15"	vice	10-25"	vice

Simultaneously with the increase in population the patronage on the respective lines increased during the period through 1944 and 1945. Subsequently a substantial decline in traffic started and has continued without interruption despite continued increase in population in the areas served. Increases in population of a number of the cities served by the Northern District Lines as compiled by the Regional Planning Commission of Los Angeles County are as follows:

<u>City</u>	<u>Population</u>		<u>Per Cent Increase</u>
	<u>April 1940</u>	<u>October 1948</u>	
Arcadia	9,122	20,524	124.99
Azusa	5,209	9,673	85.70
Glendora	2,822	3,583	26.97
Monrovia	12,807	19,550	52.65
Pasadena	81,864	110,091	34.48
San Marino	8,175	11,417	39.66
Sierra Madre	4,581	7,142	55.90
South Pasadena	14,356	17,713	23.38
El Monte	4,746	7,702	62.20

TRAFFIC CHARACTERISTICS AND TRENDS

Excluding the Sierra Vista Local Line, the five interurban lines considered in this report carry 42.64 per cent of the total passengers carried on all interurban lines of the system. The per cent of total that each carries is shown as follows:

<u>Line</u>	<u>Per Cent</u>
Pasadena Short Line	10.02
Pasadena Oak Knoll Line	11.55
Monrovia-Glendora Line	9.48
Sierra Madre Line	9.72
Baldwin Park Line	1.87

Of the total passenger rail lines on the system, five are designated for traffic analysis purposes as local lines, including the Watts-Sierra Vista Line. For the month of November 1948, which may be considered as a typical month for comparative purposes, the so-called local lines carried 4,464,581 passengers as compared with 1,589,650 passengers on the interurban rail lines. Of the local traffic the Watts-Sierra Vista Line carried 816,042 passengers of which approximately 35 per cent were handled by the north end of the line between Los Angeles and Sierra Vista, that portion which is considered in this report. This would amount to approximately 285,600 passengers. The trend of revenue and patronage on each of the lines involved is set forth on individual tables attached to the Appendix showing the trend by years from 1938 to and including 1947, and by months for the years of 1947 and 1948. For the Baldwin Park Line the Table of Statistics applies only to the period of May 1947 through October 1948. Prior to May of 1947 conditions on the Baldwin Park Line were different from present and the comparison could not be established beyond that date.

FUTURE PASSENGER EARNING PROSPECTS

Analysis of the operating service and economical characteristics of the Northern District Lines when related to the characteristics of the territory served by them does not indicate the possibility of future profitable operations by continued rail passenger service. It is estimated that these lines in the aggregate are operating at an annual loss of \$889,892, or 29.62 cents loss for each car mile operated. The losses for the individual lines are as follows:

<u>Line</u>	<u>Net Operating Loss</u>
Oak Knoll & Pasadena Short Lines .	\$ 180,936
Monrovia-Glendora Line	293,742
Sierra Madre (rail and motor coach) Line	64,618
Sierra Vista Line	68,826
El Monte-Baldwin Park Line	281,770
Total	<u>\$ 899,892</u>

These lines are typical of interurban passenger operations on all properties of like character. They are subjected to extremely heavy peak loads and very light off-peak traffic. During the morning and evening peak between 23 per cent and 36 per cent of the total traffic for the day is handled. During the sharpest twenty-minute peak 40 per cent of maximum hourly load is carried. This condition necessitates the use of a large number of cars that are required for only one round trip per day which contributes substantially to the high cost of operation and the nonprofitable earnings.

A comparison of the number of cars required during the peak and during the base is as follows:

<u>Line</u>	<u>Total Units</u>	
	<u>Peak</u>	<u>Base</u>
Pasadena Short Line	16	4
Pasadena Oak Knoll Line	15	4
Baldwin Park Line	20	3
Monrovia-Glendora-Sierra Madre Line	26	5
Watts-Sierra Vista	32	14

D - RAIL OPERATION WITH P.C.C. TYPE CARS

ROUTES AND SERVICE

Routes under the plan of P.C.C. car operation were considered to be the same as those of present rail operation. Service would, of course, be based upon the requirements indicated by traffic checks and the effects of one-man operation upon speeds and running time. Service characteristics and equipment requirements are shown in comparative form on several tables attached to the Appendix and need not be repeated here.

no schedules at all

Complete schedules were prepared to provide for this type of operation and financial estimates were computed from that data and actual costs of present operations were modified to be applicable to P.C.C. cars where necessary.

EQUIPMENT REQUIREMENTS

To perform rail service under this plan would require 101 units of P.C.C. type cars at present loading standards, at a cost of about \$40,000 each, or a total cost of \$4,040,000. At the more lenient load factors, 78 units would be needed, at a total cost of \$3,120,000, a reduction in investment of \$920,000.

TRACK REHABILITATION

For continuation of rail operation with new P.C.C. type cars, present cars, or other type of new cars, an extensive reconstruction program would be necessary to bring existing track and roadway up to proper standard for satisfactory service. A considerably higher standard of track maintenance is required for P.C.C. type cars than for the older type of conventional design. Actual trial runs on the Venice Short Line have been made with P.C.C. type cars and the results were highly unsatisfactory due to the unevenness of the track. The present P.C.C. type cars operated on the Glendale Line were originally purchased for use on the Venice Short Line, but they proved unsatisfactory and were transferred to the Glendale Line where they are now permanently assigned.

For long-stop high speed operation on open track the sensitive rubber suspension of the P.C.C. car tends to set up synchronous oscillations that must be dampened by stopping the car. This condition is experienced frequently on the Glendale Line on paved track where the standard of maintenance is low.

It is estimated that the cost of rehabilitation of track and roadway for continued rail operation would be approximately \$2,800,000 as shown in detail by Table No. 21 of the Appendix. It is estimated that this cost would be divided in amount of \$753,000 immediately and \$2,043,000 over a period of five years. These figures compare with the estimate in Exhibit No. 32 submitted by the Commission's engineers in amount of \$3,284,000 for the Northern District Lines.

The Northern District rail lines have in general been maintained in a fairly satisfactory operating condition, but there is a large amount of extraordinary maintenance and rehabilitation of track facilities which should be started immediately and completed within the next five years regardless of type of rail equipment used.

In the event of substitution of P.C.C. cars, the program would of necessity have to be speeded up so that the type of track facilities required for the P.C.C. car would be available as soon as practicable in order to obtain satisfactory and efficient performance. The inherent requirement of the P.C.C. car is a high class rigid track structure.

It is estimated that the immediate and future Maintenance of Way expense during the next five years, based on present costs, will be approx-

lets see what they do

imately as follows:

<u>Line</u>	<u>Immediate</u>	<u>Future</u>	<u>Total</u>
Pasadena Short Line	\$ 73,528	\$ 254,794	\$ 328,322
Oak Knoll Line	90,186	282,943	373,129
Monrovia-Glendora Line	187,792	659,173	846,965
Sierra Madre Line	104,000	368,000	472,000
Sub Total	<u>\$455,506</u>	<u>\$1,564,910</u>	<u>\$2,020,416</u>
Common Code Tracks or Facilities between Valley Jct. and El Molino	<u>\$166,935</u>	<u>\$ 99,470</u>	<u>\$ 266,405</u>
Sixth & San Pedro-Valley Jct.	\$ 98,247	\$ 248,688	\$ 346,935
Baldwin Park-Covina Line	32,565	130,263	162,828
Grand Total	<u>\$753,253</u>	<u>\$2,043,331</u>	<u>\$2,796,584</u>

In the event of abandonment of rail passenger service on all of the above lines under study, maintenance of present power facilities between Valley Junction and Azusa would be required until such time as the freight service on the Monrovia-Glendora Line is handled by Diesel-electric units. This would mean temporary retention of the Sierra Park, Pasadena, Arcadia and Azusa substations together with transmission lines and trolley feeders.

Simultaneous inauguration of Diesel freight operation with the abandonment of passenger rail service together with construction of track connection between the Monrovia-Glendora Line with the Baldwin Park-Covina Line, would permit total abandonment of all power facilities referred to above.

OTHER FACILITIES REQUIRED FOR P.C.C. OPERATION

In addition to track rehabilitation, continued rail operation, whether with P.C.C. or conventional type cars, would require in accordance with Recommendation No. 13 of Appendix "A" of the Public Utilities Commission, Decision No. 41152, an expenditure of approximately \$1,500,000 for expansion of rail facilities at the 6th and Main Street Terminal in Los Angeles. In the event the East By-Pass should be constructed, under Recommendation No. 40 an expenditure of about \$3,500,000 would be necessary to make track connection thereto. Under Recommendation No. 25 an expenditure of about \$870,000 would be required to construct two additional main tracks between Echandia Junction and Indian Village. Although Recommendation No. 36 does not specify the nature or extent of enlargement or rearrangement of Macy Street Car Shops considered to be necessary, any appreciable alteration would entail considerable cost. Added cost for electric feeder on the Sierra Madre Line would also be necessary in amount of \$20,000.

It must be kept in mind when considering these betterments that outside money to finance them could not possibly be obtained in view of the operating losses consistently incurred, and there is no source from which to draw funds of such magnitude from within the Company.

Summarizing the costs that would be necessary to continue rail operation using new cars is approximately as follows:

<u>Item</u>	<u>Amount</u>
101 P.C.C. Type Cars, or Others	\$4,040,000
Expansion Main St. Terminal	1,500,000
Additional Track - Echandia to Indian Village	870,000
Macy Street Car Shops	50,000
Sierra Madre Feeder	20,000
Track Rehabilitation	2,800,000
Track Circuit Changes	76,000
Total	<u>\$9,356,000</u>

FINANCIAL RESULTS

Table No. 1 of the Appendix and the several detailed financial statements applying to individual lines show conclusively that continued rail operation either with new cars or present cars would be highly nonprofitable. Even at increased load factors the operation with P.C.C. type cars would result in an annual loss of \$271,000 and at present loading standards the loss would be \$460,000. When comparing these losses under rail operation with the profits of motor coach operation of \$305,000 and \$155,000 respectively, there should be no question as to the logical course of action.

Substitution of P.C.C. type one-man cars for present 1100-1200 Class steel rail equipment would produce a net loss on a full cost basis of \$459,770 or 15.49 cents per car mile. On proposed load standard the loss would amount to \$271,218 or 9.8 cents per car mile operated. Results by lines are as follows:

<u>Line</u>	<u>Net Operating Results</u>	
	<u>Present Load Factor</u>	<u>Proposed Load Factor</u>
Oak Knoll & Pasadena Short Line	\$ (41,781)	\$ 31,336
Monrovia-Glendora Line	(172,221)	(123,935)
Sierra Madre Line	(96,319)	(76,566)
Sierra Vista Line	16,873	16,873
LA-Baldwin Park Line	(166,322)	(118,926)
Total	<u>(\$ 459,770)</u>	<u>(\$ 271,218)</u>

(RED FIGURES)

The above includes only ordinary Way and Structure expense and does not include the extraordinary and rehabilitation costs.

RAIL SHUTTLE-MOTOR COACH FEEDER PLAN

Preliminary observation of the characteristics of the Northern District Lines indicated the possible feasibility of establishing a passenger rail shuttle operation between downtown Los Angeles and Sierra Vista transferring passengers to motor coach lines radiating from a transfer terminal at that point. Motor coach routes were laid out, operating schedules prepared for both motor coach and rail lines and financial estimates were prepared. The

results of the analysis indicated that under present loading standards this type of operation would result in an annual net operating loss of \$90,835. At increased loading standards the plan was estimated to result in an estimated profit of \$84,100.

Aside from the unfavorable prospects of such an operation financially, and the cost that would be incurred in building a transfer terminal, a number of difficult operating problems would be present. Inbound from the outlying territory little difficulty would be encountered in transferring passengers from small vehicles to larger rail cars. In the opposite direction, however, it would be necessary to transfer heavy peak traffic from large capacity rail cars to smaller capacity motor coaches, thereby creating a real problem of congestion and confusion. In addition, there would, of course, be opposition on behalf of the public against the transfer in each direction. The financial results of this analysis are shown on Table No. 7 in the Appendix.

The proposal contemplated a frequent rail service consisting of two, three, and four-car trains operating between Los Angeles and Sierra Vista which would connect with coaches at Sierra Vista operating on consistently frequent schedules over the present rail routes including the Alhambra-Temple City coach line but excepting the Los Angeles-Baldwin Park rail line.

The scheduled service was sufficient to provide for a train arriving and leaving the terminals on the average of from 4 to 13 minutes during the peaks and every 20 minutes during the base period. Motor coach schedules were arranged accordingly so as to make all meets practicable.

The primary advantage of the proposed plan would be in the reduction of the number of units operating over the streets and highways, especially during the peak periods, but this was considered as outweighed by the relative inconvenience to the passengers destined beyond Sierra Vista.

E - PROPOSED MOTOR COACH OPERATION

ROUTES AND SERVICE

Map No. 3 in the Appendix shows the general arrangement of proposed motor coach lines as developed by this study. Substantially the routes follow the present rail lines, deviating only where necessary due to lack of suitable roadways nearer the rail lines. The principle variation to this rule is in connection with the Baldwin Park Line where a suitable parallel roadway is only available for a portion of the distance covered by the rail line. In that instance, however, there are existing motor coach lines on each side of the rail line and parallel to it at a distance of about one-half mile.

Pasadena Short Line and Pasadena Oak Knoll Line - In order to effect maximum economies in scheduling and use of equipment it is planned to tie the Pasadena Short Line and Pasadena Oak Knoll Line together in a loop operation. Route proposed for motor coach operation parallels as nearly as possible present rail line. During peak periods it is also proposed to operate limited schedules between Los Angeles and Pasadena over Arroyo Seco Parkway.

Specific routes of parallel operations are as follows:

- a. Pasadena Short Line - Commencing at new motor coach terminal on Los Angeles Street, just south of 6th Street, thence via Los Angeles Street, 6th Street, San Pedro Street, Aliso Street, Ramona Freeway, down ramp to Mission Road, Mission Road, Huntington Drive (south), Fremont Avenue, Huntington Drive (north) Fair Oaks Avenue to Colorado Street. Length of route 11.65 miles.

Thence inbound via Pasadena Oak Knoll Line as follows: Colorado Street, Lake Avenue, Oak Knoll Circle, Oak Knoll Avenue, Huntington Drive (north) Granada Avenue, Huntington Drive (south), Mission Road, up ramp to Ramona Freeway, Ramona Freeway, Aliso Street, San Pedro Street, 5th Street, Maple Avenue to rear entrance of Terminal located on Los Angeles Street.

- b. Pasadena Oak Knoll Line - Commencing at Terminal on Los Angeles Street, just south of 6th Street, thence via Los Angeles Street, 6th Street, San Pedro Street, Aliso Street, Ramona Freeway, down ramp to Mission Road, Mission Road, Huntington Drive (south), Granada Avenue, Huntington Drive (north), Oak Knoll Avenue, Oak Knoll Circle, Lake Avenue to Colorado Street and Fair Oaks Avenue. Length of route 14.60 miles.

Thence inbound via Pasadena Short Line as follows: Fair Oaks Avenue, Huntington Drive (north), Fremont Avenue, Huntington Drive (south), Mission Road, up ramp to Ramona Freeway, Ramona Freeway, Aliso Street, San Pedro Street, 5th Street, Maple Avenue to rear entrance of Terminal located on Los Angeles Street.

Sierra Vista Local Line - Commencing at Sierra Vista Station, Huntington Drive (south), Soto Street, Marengo Street, Mission Road, up ramp to Ramona Freeway, Ramona Freeway, Aliso Street, Los Angeles Street to 8th Street. Thence outbound via 8th Street, Main Street, Aliso Street, and continuing along reverse of inbound route. Length of one-way route 8.2 miles.

Monrovia-Glendora Line - Commencing at Terminal on Los Angeles Street, just south of 6th Street, thence via Los Angeles Street, 6th Street, San Pedro Street, Aliso Street, Ramona Freeway, down ramp to Mission Road, Mission Road, Huntington Drive (south), Holly Avenue, Huntington Drive, First Avenue (Arcadia), Colorado Boulevard, Mayflower Avenue (Monrovia), Olive Avenue, Shamrock Avenue, Huntington Drive, Falling Leaf Avenue, Foothill Boulevard (through Duarte and Azusa), Citrus Avenue, Foothill Boulevard (Glendora), and Michigan Avenue to Pacific Electric Station Glendora.

Return via reverse of above route to San Pedro Street and 5th Street, Los Angeles, thence via 5th Street, Maple Avenue to rear entrance of Terminal located on Los Angeles Street. Length of route 27.5 miles.

Los Angeles-Baldwin Park Line - Present rail operations will be supplanted by motor coaches as follows:

- a. Los Angeles to San Gabriel Boulevard via Hellman Avenue - Commencing at new motor coach Terminal on Los Angeles Street just south of 6th Street thence via Los Angeles Street, 6th Street, San Pedro Street,

Aliso Street, Ramona Freeway and Hellman Avenue (Alhambra-Monterey Park) to San Gabriel Boulevard (Wilmar). Return via reverse of above route to San Pedro Street and 5th Street, Los Angeles, thence 5th Street, Maple Avenue to rear of Terminal located on Los Angeles Street. Length of route 10.35 miles.

- b. Between San Gabriel Boulevard and El Monte - Service on existing Valley Boulevard and Garvey Avenue motor coach lines will be augmented to absorb present volume of traffic handled on rail line. Between San Gabriel Boulevard and El Monte there are no highways paralleling present rail line with the exception of Garvey Avenue and Valley Boulevard which are approximately one-half mile on either side of rail line.
- c. Between El Monte and Baldwin Park - Present Garvey Avenue motor coach line will be augmented and extended between El Monte and Baldwin Park paralleling present rail line and on highway immediately south of rail line as follows:

From El Monte Station via Columbia Street to Valley Boulevard, San Bernardino Road, thence via San Bernardino Road and West Ramona Boulevard to Baldwin Park. Length of additional route 4.2 miles.

Sierra Madre Line - Commencing at Terminal on Los Angeles Street, just south of 6th Street, thence via Los Angeles Street, 6th Street, San Pedro Street, Aliso Street, Ramona Freeway, down ramp to Mission Road, Mission Road, Huntington Drive (south), Sierra Madre Boulevard, Kersting Court, Baldwin Avenue and Highland Avenue to Mountain Trail Avenue, Sierra Madre.

Return, via Mountain Trail Avenue, Montecito Avenue, Baldwin Avenue, Sierra Madre Boulevard, Huntington Drive (south), Mission Road, Macy Street, Lyon Street, Aliso Street, San Pedro Street, 5th Street, Maple Avenue to rear entrance of Terminal located on Los Angeles Street. Length of route 17.1 miles.

Service proposed on the motor coach lines is designed on the basis of traffic checks and is set forth in detail for each line on tables attached to the Appendix. Estimated service is, of course, subject to changes from time to time depending upon fluctuations in traffic volume.

EQUIPMENT REQUIREMENTS FOR MOTOR COACH OPERATION

Table No. 1 and individual line tables show the comparative number of vehicles required for all types of operation considered. A summary of motor coach requirements under that type of operation are as follows:

<u>Line</u>	<u>No. of Units Required</u>	
	<u>At Present Load Factors</u>	<u>At Proposed Load Factors</u>
Pasadena Lines	33	27
Monrovia-Glendora	32	24
Sierra Madre	8	8
Sierra Vista	19	19
Baldwin Park	<u>28</u>	<u>23</u>
Total	120	101

It is proposed to use 45 passenger capacity coaches at an approximate cost of \$18,000 each. Total cost of equipment would be \$2,160,000 or \$1,818,000 at proposed load factors.

OTHER FACILITIES

In addition to motor coaches required, as shown above, other facilities would be required as follows:

Expanded Terminal at Main Street Station	\$ 100,000
Shop Facilities at Macy Street	125,000
Revision of Car House at Pasadena	35,000
Miscellaneous	10,000
Total	<u>\$ 270,000</u>

Chart No. XI in the Appendix shows the proposed Motor Coach Terminal layout at Main Street Station. With discontinuance of rail passenger operation as proposed there would be no further need for the car shops and facilities at Macy Street. The Macy Street property should be converted into a modern motor coach repair and service facility of sufficient capacity to relieve Torrance Shops of all motor coach repairs and overhauling. The facility should be carefully designed to comply with most modern practices and equipped with the latest and most efficient types of machinery and tools.

A systematically planned preventive maintenance schedule should be established for the entire motor coach fleet and all equipment be kept in first class condition at all times as to mechanical features, cleanliness, painting and body repair.

FINANCIAL RESULTS

Motor coach operation in lieu of present rail service would produce a net combined profit of \$155,334 at present load standards, or approximately 4.41 cents per mile. This is an annual financial improvement at the rate of \$1,128,758. Even in this instance, the Sierra Madre service shows a loss on full cost basis.

On a basis of proposed 133 per cent load factor for interurban lines, the combined motor coach operation would show a profit of \$304,862 or 9.23 cents per mile. A summary of the financial results by lines is as follows:

<u>Line</u>	<u>Net Operating Results</u>	
	<u>Present Load Factor</u>	<u>Proposed Load Factor</u>
Oak Knoll & Pasadena Short Line	\$ 153,385	\$ 200,704
Monrovia-Glendora	19,255	76,998
Sierra Madre	(24,884)	(2,533)
Sierra Vista	3,442	3,442
El Monte-Baldwin Park	4,096	26,251
Total	<u>\$ 155,334</u>	<u>\$ 304,862</u>
Present Annual Loss	973,424	973,424
Net Financial Improvement	<u>\$1,128,758</u>	<u>\$1,278,286</u>

SUITABILITY OF MOTOR COACHES

Experience of this Company has conclusively demonstrated the ability of motor coaches to perform satisfactorily in replacement of rail lines in all districts. With reference to the Northern District specifically rail service to Alhambra and Temple City was replaced by motor coaches, rail service between Baldwin Park and San Bernardino was likewise superceded by highway operation. In the City of Pasadena rail lines were completely replaced by motor coaches. In other instances such as on the Sunland Line, motor coaches pioneered the passenger transportation field.

The ability of motor coaches operating over streets and highways to satisfactorily meet the most rigid transportation requirements has become such a firmly established fact that in the operating industry there is no longer any question. This type of service has long since served its apprenticeship passed through the painful stages of makeshift equipment and procedure and now stands firmly on a sound foundation of proven ability. It should be emphasized that motor coaches are particularly well adapted to relatively long haul interurban and suburban types of operation such as is found on the lines of the Northern District. Even in heavy density local traffic the vehicle has dispelled all logical contentions as to its inadequacy. On the Wilshire Boulevard motor coach line of the Los Angeles Motor Coach Lines as heavy traffic is carried as on the heaviest streetcar lines in the City using P.C.C. type cars. In other large cities rubber tired vehicles are rapidly replacing streetcar lines. Certainly this trend would not continue if there were serious question as to the ability of motor coaches to give a complete and satisfactory service. In connection with this subject attention is directed to Exhibit No. 48 in this proceeding for more extensive treatment of the subject.

PRIOR REPORTS AND PROCEEDINGS

Prior to the last World War the Company was progressing rapidly on a rehabilitation program which contemplated replacement of a number of additional rail lines with motor coach service. In connection with Application No. 21656 of the California Railroad Commission extensive surveys were made of the entire operations and service of the Company to determine the extent to which economies might be effected through replacement of nonprofitable rail lines with motor coach service as a means of avoiding fare increases. As an outgrowth of that study and the Company rehabilitation program, local passenger service in the City of Pasadena was discontinued. Passenger rail service between Los Angeles, Alhambra, San Gabriel and Temple City was replaced with motor coach service, and passenger rail operations between Los Angeles and San Bernardino were discontinued beyond Baldwin Park. Motor coach service was established to take its place.

Local passenger rail service in the City of San Bernardino was discontinued and likewise between San Bernardino, Riverside and Corona.

Numerous other rail passenger services were discontinued during the same period of time and in some instances with no replacement service due to the low revenue potentialities. The necessity of effecting the economical benefits of motor coach operation were realized then and the justifications are as sound today as they were then. Actually, with increased costs of labor and material during the interim, combined with the greater competitive

aspect of the private automobile, the situation is more acute under present day conditions.

In Volume IV of the reports submitted by the Commission's engineering staff in Application 21656 prior to the war, the findings relative to the Northern District Lines were set forth together with analyses of other interurban lines of the system. As to the Pasadena Lines, it was stated in that report that service on the Oak Knoll Line should be considered for discontinuance in favor of motor coach operation, and as to the Short Line attention was directed to the advantages of motor coach service between Los Angeles and Pasadena over the Arroyo Seco Parkway.

As to the Sierra Madre Line, the low traffic characteristics were commented upon in that report and it was stated as follows:

"Existing patronage, however, does not justify continued operation of passenger rail service as at present."

The report commented upon the Monrovia-Glendora Line as follows:

"Although this line shows a fairly good revenue per car mile on a comparative basis with other lines of the system, the major portion of the business is derived between Monrovia and Los Angeles, with very light patronage between Monrovia and Glendora. There appears to be no justification for continued rail passenger operation beyond Monrovia, based upon the existing traffic, and certainly there is no justification for continued maintenance of double track between Monrovia and Azusa."

Subsequent to that report the former rail line to San Gabriel and Temple City via Alhambra has been replaced with motor coach operation. In June 1937 the Company filed its 33rd supplemental Application No. 17984 with the Railroad Commission asking permission to operate motor coach service between Los Angeles and Pasadena via the Arroyo Seco Parkway.

In September 1940, the Company filed its first amendment to 33rd Supplemental Application No. 17984 requesting authority to operate interurban motor coach service between Los Angeles, South Pasadena, Pasadena and Altadena over the Arroyo Seco Parkway.

In the latter part of September 1940, Applications 23715 and 42nd Supplemental Application No. 17984 requested authority to abandon rail passenger service between Los Angeles and Pasadena and to abandon tracks north of Huntington Drive and to reroute and extend the Garfield Avenue motor coach line so as to operate into Pasadena and extend Sierra Vista local service beyond Sierra Vista to El Molino.

In February 1941, First Supplement to Applications Nos. 23715 and 17984, 42nd Supplement, was filed by the Company requesting authority to furnish interurban service along Huntington Drive through revised schedules of Los Angeles-Glendora and Los Angeles-Sierra Madre service instead of serving the area by extended Sierra Vista local service.

6. Motor coach routes in replacement of rail lines as described in this report follow as nearly parallel to existing rail lines as is physically possible except for terminal routing in downtown Los Angeles and limited schedules over the Arroyo Seco Parkway on the Pasadena Short Line.
7. Suitable motor coach storage, service, repair and overhaul facilities be established at the Macy Street facilities, designed according to most modern and efficient standards.
8. Servicing and repair of passenger rail cars at Macy Street be discontinued and the facilities be altered to the extent necessary to provide for expanded motor coach facilities.
9. In designing the motor coach facilities at Macy Street provision be made for absorbing all motor coach repair and overhaul presently conducted at Torrance Shops.
10. Suitable storage and service facilities for motor coaches be provided in Pasadena, Sierra Madre, Monrovia, Glendora, Baldwin Park and El Monte to the extent required for security and short-line operation.
11. A motor coach terminal be provided at the rear of the Main Street Station to accommodate the additional motor coach operations.

Respectfully submitted,

ARTHUR C. JENKINS
CONSULTING ENGINEER

TABLE NO. 1
S U M M A R Y
OF
ESTIMATED ANNUAL FINANCIAL RESULTS FROM
PRESENT AND PROPOSED OPERATIONS

N O R T H E R N D I S T R I C T L I N E S

	LOAD FACTOR	REVENUES	EXPENSES AND TAXES	NET	MILEAGE	UNITS, INCL. SPARES
	(1)	(2)	(3)	(4)	(5)	(6)
<u>PRESENT RAIL OPERATIONS</u>						
1	PASADENA OAK KNOLL AND PASADENA SHORT LINE	PRESENT \$797,218	\$978,154	\$(180,936)	936,901	35
2	MONROVIA-GLENDORA	DO 481,059	774,801	(293,742)	778,145	20
3	SIERRA MADRE (RAIL & COACH)	DO 105,105	169,723	(64,618)	183,360	9
4	SIERRA VISTA	DO 332,729	485,087	(152,358)	634,308	16
5	EL MONTE-BALDWIN PARK	DO 342,694	624,464	(281,770)	595,061	22
6	TOTAL	\$2,058,805	\$3,032,229	\$(973,424)	3,127,775	102
7	PASADENA OAK KNOLL AND PASADENA SHORT LINE	PROPOSED \$797,218	\$907,194	\$(109,976)	856,866	25
8	MONROVIA-GLENDORA	DO 481,059	730,246	(249,187)	727,149	16
9	SIERRA MADRE (RAIL & COACH)	DO 105,105	160,379	(55,274)	174,612	7
10	SIERRA VISTA	PRESENT 332,729	485,087	(152,358)	634,308	16
11	EL MONTE-BALDWIN PARK	PROPOSED 342,694	575,992	(233,298)	544,741	16
12	TOTAL	\$2,058,805	\$2,858,898	\$(800,093)	2,937,676	80
<u>P.C.C. CAR -- ONE-MAN OPERATION</u>						
13	PASADENA OAK KNOLL AND PASADENA SHORT LINE	PRESENT \$797,218	\$838,999	\$(41,781)	936,901	35
14	MONROVIA-GLENDORA	DO 481,059	653,280	(172,221)	778,145	20
15	SIERRA MADRE	DO 105,105	201,424	(96,319)	189,978	9
16	SIERRA VISTA	DO 332,729	315,856	16,873	467,494	15
17	EL MONTE-BALDWIN PARK	DO 342,694	509,016	(166,322)	595,061	22
18	TOTAL	\$2,058,805	\$2,518,575	\$(459,770)	2,967,579	101
19	PASADENA OAK KNOLL AND PASADENA SHORT LINE	PROPOSED \$797,218	\$765,882	\$ 31,336	856,866	25
20	MONROVIA-GLENDORA	DO 481,059	604,994	(123,935)	727,149	16
21	SIERRA MADRE	DO 105,105	181,671	(76,566)	172,732	6
22	SIERRA VISTA	PRESENT 332,729	315,856	16,873	467,494	15
23	EL MONTE-BALDWIN PARK	PROPOSED 342,694	461,620	(118,926)	544,741	16
24	TOTAL	\$2,058,805	\$2,330,023	\$(271,218)	2,768,982	78
<u>MOTOR COACH OPERATION</u>						
25	PASADENA OAK KNOLL AND PASADENA SHORT LINE	PRESENT \$738,352	\$584,967	\$ 153,385	1,120,707	33
26	MONROVIA-GLENDORA	DO 539,925	520,670	19,255	967,824	32
27	SIERRA MADRE	DO 105,105	129,949	(24,844)	241,936	8
28	SIERRA VISTA	DO 332,729	329,287	3,442	635,104	19
29	EL MONTE-BALDWIN PARK	DO 325,876	321,780	4,096	558,039	28
30	TOTAL	\$2,041,987	\$1,886,653	\$155,334	3,523,610	120
31	PASADENA OAK KNOLL AND PASADENA SHORT LINE	PROPOSED \$738,352	\$537,648	\$200,704	1,053,252	27
32	MONROVIA-GLENDORA	DO 539,925	462,927	76,998	888,261	24
33	SIERRA MADRE	DO 105,105	107,638	(2,533)	187,740	8
34	SIERRA VISTA	PRESENT 332,729	329,287	3,442	635,104	19
35	EL MONTE-BALDWIN PARK	PROPOSED 325,876	299,625	26,251	540,546	23
36	TOTAL	\$2,041,987	\$1,737,125	\$304,862	3,304,903	101

() - FIGURES INCLOSED IN BRACKETS INDICATE LOSS

TABLE NO. 2

PASADENA OAK KNOLL LINE
PASADENA SHORT LINE
ESTIMATED ANNUAL FINANCIAL RESULTS FROM OPERATIONS

NO.	ITEM	PRESENT RAIL LINE OPERATIONS						PROPOSED ONE-MAN RAIL OPERATIONS						PROPOSED MOTOR COACH LOOP OPERATION	
		PRESENT LOAD FACTOR			PROPOSED LOAD FACTOR			PRESENT LOAD FACTOR			PROPOSED LOAD FACTOR			PRESENT L.F.	PROPOSED L.F.
		PASADENA OAK KNOLL	PASADENA SHORT LINE	TOTAL	PASADENA OAK KNOLL	PASADENA SHORT LINE	TOTAL	PASADENA OAK KNOLL	PASADENA SHORT LINE	TOTAL	PASADENA OAK KNOLL	PASADENA SHORT LINE	TOTAL		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	
1	PASSENGER REVENUE	\$371,031	\$418,599	\$789,630	\$371,031	\$418,599	\$789,630	\$371,031	\$418,599	\$789,630	\$371,031	\$418,599	\$789,630	\$730,764	\$730,764
2	OTHER REVENUE	3,961	3,627	7,588	3,961	3,627	7,588	3,961	3,627	7,588	3,961	3,627	7,588	7,588	7,588
3	TOTAL REVENUE	374,992	422,226	797,218	374,992	422,226	797,218	374,992	422,226	797,218	374,992	422,226	797,218	738,352	738,352
4	OPERATING EXPENSES & TAXES	507,623	470,531	978,154	477,934	429,260	907,194	438,178	400,821	838,999	405,652	360,230	765,882	584,967	537,648
5	NET INCOME OR LOSS	\$(132,631)	\$(48,305)	\$(180,936)	\$(102,942)	\$(7,034)	\$(109,976)	\$(63,186)	\$21,405	\$(41,781)	\$(30,660)	\$61,996	\$31,336	\$153,385	\$200,704
----- DETAIL OF OPERATING EXPENSES AND TAXES -----															
I. WAY & STRUCTURES															
6	MAINTENANCE	\$ 61,375	\$ 50,063	\$111,438	\$ 61,375	\$ 50,063	\$111,438	\$ 61,375	\$ 50,063	\$111,438	\$ 61,375	\$ 50,063	\$111,438	\$ 3,586	\$ 3,370
7	DEPRECIATION	17,900	16,391	34,291	16,648	14,713	31,361	17,900	16,391	34,291	16,648	14,713	31,361	1,905	1,791
8	TOTAL WAY & STRUCTURES	79,275	66,454	145,729	78,023	64,776	142,799	79,275	66,454	145,729	78,023	64,776	142,799	5,491	5,161
II. EQUIPMENT															
9	MAINTENANCE	31,790	36,347	68,137	29,567	32,645	62,212	17,851	16,346	34,197	16,603	14,673	31,276	50,432	47,396
10	TIRES & TUBES	--	--	--	--	--	--	--	--	--	--	--	--	13,785	12,955
11	DEPRECIATION - INCLUDING RENT OF LEASED UNITS	20,203	17,427	37,530	18,790	15,642	34,432	34,000	36,000	70,000	24,000	26,000	50,000	84,857	69,429
12	OTHER EQUIPMENT COSTS	14,623	13,390	28,013	13,601	12,020	25,621	14,623	13,390	28,013	13,601	12,020	25,621	6,948	6,530
13	TOTAL EQUIPMENT	66,616	67,164	133,780	61,958	60,307	122,265	66,474	65,736	132,210	54,204	52,693	106,897	156,022	136,310
III. POWER															
14	POWER USED	27,889	25,281	53,170	25,939	22,693	48,632	22,887	20,958	43,845	21,287	18,812	40,099	--	--
15	OTHER POWER COSTS	15,134	13,718	28,852	14,076	12,314	26,390	12,419	11,373	23,792	11,551	10,208	21,759	--	--
16	TOTAL POWER	43,023	38,999	82,022	40,015	35,007	75,022	35,306	32,331	67,637	32,838	29,020	61,858	--	--
IV. CONDUCTING TRANSPORTATION															
17	TRAINMEN'S - OPERATORS' WAGES	150,183	145,594	295,777	139,691	130,689	270,380	87,975	85,267	173,262	81,831	76,540	158,371	170,347	160,094
18	INSPECTING, CLEANING & LUBRICATING EQUIPMENT	35,191	33,140	69,331	33,660	29,748	63,408	35,191	33,140	69,331	33,660	29,748	63,408	37,432	35,179
19	ONEONTA TOWER - MAINTENANCE & OPERATION	4,773	4,773	9,546	4,773	4,773	9,546	4,773	4,773	9,546	4,773	4,773	9,546	--	--
20	FLAGMEN & SWITCHTENDERS	2,242	2,242	4,484	2,242	2,242	4,484	5,618	3,699	9,317	5,618	3,699	9,317	--	--
21	FUEL & OIL	--	--	--	--	--	--	--	--	--	--	--	--	61,639	57,929
22	OTHER TRANSPORTATION COSTS	27,730	25,392	53,122	25,791	22,793	48,584	27,730	25,392	53,122	25,791	22,793	48,584	46,733	43,921
23	TOTAL CONDUCTING TRANSPORTATION	221,119	211,141	432,260	206,157	190,245	396,402	162,287	152,291	314,578	151,673	137,553	289,226	316,151	297,123
24	V. TRAFFIC	3,423	3,135	6,558	3,184	2,814	5,998	3,423	3,135	6,558	3,184	2,814	5,998	4,147	3,897
VI. GENERAL															
25	INJURIES & DAMAGES	24,404	22,347	46,751	22,698	20,060	42,758	24,404	22,347	46,751	22,698	20,060	42,758	16,923	15,904
26	OTHER GENERAL COSTS	38,440	35,200	73,640	35,753	31,597	67,350	38,440	35,200	73,640	35,753	31,597	67,350	42,085	39,084
27	TOTAL GENERAL	62,844	57,547	120,391	58,451	51,657	110,108	62,844	57,547	120,391	58,451	51,657	110,108	59,008	54,988
TAXES															
28	UNEMPLOYMENT INSURANCE & CARRIERS' TAXING ACT	19,671	18,355	38,026	16,494	16,718	33,212	16,917	15,591	32,508	15,627	13,981	29,608	20,605	18,954
29	AD VALOREM TAX	9,982	5,873	15,855	9,982	5,873	15,855	9,982	5,873	15,855	9,982	5,873	15,855	--	--
30	FRANCHISE TAX	1,212	1,238	2,450	1,212	1,238	2,450	1,212	1,238	2,450	1,212	1,238	2,450	--	--
31	L. A. CITY LICENSE	458	625	1,083	458	625	1,083	458	625	1,083	458	625	1,083	10,739	10,739
32	LICENSE, WEIGHT FEE, REGISTRATION, ETC.	--	--	--	--	--	--	--	--	--	--	--	--	12,804	10,476
33	TOTAL TAXES	31,323	26,091	57,414	30,146	24,454	54,600	28,569	23,327	51,896	27,279	21,717	48,996	44,148	40,169
34	TOTAL OPERATING EXPENSES & TAXES	\$507,623	\$470,531	\$978,154	\$477,934	\$429,260	\$907,194	\$438,178	\$400,821	\$838,999	\$405,652	\$360,230	\$765,882	\$584,967	\$537,648
35	CLASS OF EQUIPMENT	1000-1100	1000-1100	1000-1100	1000-1100	1000-1100	1000-1100	P.C.C.	P.C.C.	P.C.C.	P.C.C.	P.C.C.	P.C.C.	MOTOR COACHES	MOTOR COACHES
36	NUMBER OF UNITS, INCLUDING SPARES	17	18	35	12	13	25	17	18	35	12	13	25	33	27
37	MILEAGE	489,062	447,839	936,901	454,871	401,995	856,866	489,062	447,839	936,901	454,871	401,995	856,866	1,120,707	1,053,252
38	AVERAGE MILES PER UNIT	28,768	24,880	26,769	37,906	30,923	34,275	28,768	24,880	26,769	37,906	30,923	34,275	33,961	39,009

() - FIGURES IN BRACKETS INDICATE LOSS.

TABLE NO. 3
MONROVIA - GLENDORA LINE
ESTIMATED ANNUAL FINANCIAL RESULTS FROM OPERATIONS

NO.	ITEM	PRESENT RAIL OPERATIONS		PROPOSED ONE-MAN RAIL OPERATIONS		PROPOSED MOTOR COACH OPERATIONS	
		PRESENT L.F.	PROPOSED L.F.	PRESENT L.F.	PROPOSED L.F.	PRESENT L.F.	PROPOSED L.F.
		(1)	(2)	(3)	(4)	(5)	(6)
1	PASSENGER REVENUE	\$474,756	\$474,756	\$474,756	\$474,756	\$533,622	\$533,622
2	OTHER REVENUE	6,303	6,303	6,303	6,303	6,303	6,303
3	TOTAL REVENUE	481,059	481,059	481,059	481,059	539,925	539,925
4	OPERATING EXPENSES & TAXES	774,801	730,246	653,280	604,994	520,670	462,927
5	NET INCOME OR LOSS	\$(293,742)	\$(249,187)	\$(172,221)	\$(123,935)	\$ 19,255	76,998
---- DETAIL OF OPERATING EXPENSES AND TAXES ----							
I. WAY & STRUCTURES							
6	MAINTENANCE	\$ 74,949	\$ 74,949	\$ 74,949	\$ 74,949	\$ 3,097	\$ 2,842
7	DEPRECIATION	28,480	26,614	28,480	26,614	1,645	1,510
8	TOTAL WAY & STRUCTURES	103,429	101,563	103,429	101,563	4,742	4,352
II. EQUIPMENT							
9	MAINTENANCE	46,533	43,484	28,402	26,541	43,552	39,972
10	TIRES & TUBES	--	--	--	--	11,904	10,926
11	DEPRECIATION, INCLUDING RENT OF LEASED UNITS	32,838	30,686	40,000	26,000	82,286	61,714
12	OTHER EQUIPMENT COSTS	23,267	21,742	23,267	21,742	6,001	5,507
13	TOTAL EQUIPMENT	102,638	95,912	91,669	74,283	143,743	118,119
III. POWER							
14	POWER USED	44,709	41,779	36,415	34,029	--	--
15	OTHER POWER COSTS	24,261	22,671	19,760	18,465	--	--
16	TOTAL POWER	68,970	64,450	56,175	52,494	--	--
IV. CONDUCTING TRANSPORTATION							
17	TRAINMEN-OPERATORS WAGES	245,588	229,488	150,057	140,194	147,109	135,016
18	INSPECTING, CLEANING & LUBRICATING EQUIPMENT	57,583	53,809	57,583	53,809	32,325	29,668
19	ONEONTA TOWER - MAINTENANCE & OPERATION	3,671	3,671	3,671	3,671	--	--
20	FLAGMEN & SWITCHTENDERS	1,722	1,722	4,316	4,316	--	--
21	FUEL & OIL	--	--	--	--	53,230	48,854
22	OTHER TRANSPORTATION COSTS	44,121	41,229	44,121	41,229	40,358	37,040
23	TOTAL CONDUCTING TRANSPORTATION	352,685	329,919	259,748	243,219	273,022	250,578
24	V. TRAFFIC	5,447	5,090	5,447	5,090	3,581	3,287
VI. GENERAL							
25	INJURIES & DAMAGES	38,829	36,285	38,829	36,285	14,614	13,413
26	OTHER GENERAL COSTS	61,162	57,154	61,162	57,154	35,732	33,051
27	TOTAL GENERAL	99,991	93,439	99,991	93,439	50,346	46,464
TAXES							
28	UNEMPLOYMENT INSURANCE & CARRIERS TAXING ACT	30,280	28,512	25,460	23,545	18,114	16,109
29	AD VALOREM TAX	10,780	10,780	10,780	10,780	--	--
30	FRANCHISE TAX	125	125	125	125	--	--
31	L.A. CITY LICENSE	456	456	456	456	3,169	3,169
32	LICENSE, WT. FEE, REGIS., ETC.	--	--	--	--	12,416	9,312
33	STATE 3% GROSS RECEIPTS TAX	--	--	--	--	11,537	11,537
34	TOTAL TAXES	41,641	39,873	36,821	34,906	45,236	40,127
35	TOTAL OPERATING EXPENSES AND TAXES	\$774,801	\$730,246	\$653,280	\$604,994	\$520,670	\$462,927
36	CLASS OF EQUIPMENT	1100	1100	P.C.C.	P.C.C.	MOTOR COACHES	MOTOR COACHES
37	NUMBER OF UNITS, INCL. SPARES	20	16	20	16	32	24
38	MILEAGE	778,145	727,149	778,145	727,149	967,824	888,261
39	AVERAGE MILES PER UNIT	38,907	45,447	38,907	45,447	30,245	37,011

() - FIGURES INCLOSED IN BRACKETS INDICATE LOSS.

TABLE NO. 4

SIERRA MADRE LINE
ESTIMATED ANNUAL FINANCIAL RESULTS FROM OPERATIONS

NO.	ITEM	PRESENT OPERATIONS AND PRESENT LOAD FACTOR			PRESENT OPERATIONS AND PROPOSED LOAD FACTOR			PROPOSED ONE-MAN RAIL OPERATIONS		PROPOSED MOTOR COACH OPERATIONS	
		RAIL LINE	MOTOR COACH	T O T A L	RAIL LINE	MOTOR COACH	T O T A L	PRESENT L.F.	PROPOSED L.F.	PRESENT L.F.	PROPOSED L.F.
		1	PASSENGER REVENUE	\$ 81,817	\$ 21,749	\$103,566	\$ 81,817	\$ 21,749	\$103,566	\$103,566	\$103,566
2	OTHER REVENUE	1,216	323	1,539	1,216	323	1,539	1,539	1,539	1,539	1,539
3	TOTAL REVENUE	83,033	22,072	105,105	83,033	22,072	105,105	105,105	105,105	105,105	105,105
4	OPERATING EXPENSES & TAXES	134,847	34,876	169,723	125,503	34,876	160,379	201,424	181,671	129,949	107,638
5	NET LOSS	\$(51,814)	\$(12,804)	\$(64,618)	\$(42,470)	\$(12,804)	\$(55,274)	\$(96,319)	\$(76,566)	\$(24,844)	\$(2,533)
----- DETAIL OF OPERATING EXPENSES AND TAXES -----											
<u>I. WAY & STRUCTURES</u>											
6	MAINTENANCE	\$ 14,714	\$ 237	\$ 14,951	\$ 14,137	\$ 237	\$ 14,374	\$ 22,232	\$ 22,232	\$ 774	\$ 601
7	DEPRECIATION	4,002	126	4,128	3,682	126	3,808	6,953	6,322	411	319
8	TOTAL WAY & STRUCTURES	18,716	363	19,079	17,819	363	18,182	29,185	28,554	1,185	920
<u>II. EQUIPMENT</u>											
9	MAINTENANCE	6,539	3,331	9,870	6,016	3,331	9,347	6,934	6,305	10,887	8,448
10	TIRES & TUBES	--	910	910	--	910	910	--	--	2,976	2,309
11	DEPRECIATION, INCLUDING RENT OF LEASED UNITS	4,614	2,571	7,185	4,245	2,571	6,816	18,000	12,000	20,571	20,571
12	OTHER EQUIPMENT COSTS	3,269	459	3,728	3,008	459	3,467	5,680	5,165	1,500	1,164
13	TOTAL EQUIPMENT	14,422	7,271	21,693	13,269	7,271	20,540	30,614	23,470	35,934	32,492
<u>III. POWER</u>											
14	POWER USED	6,282	--	6,282	5,780	--	5,780	8,890	8,083	--	--
15	OTHER POWER COSTS	3,409	--	3,409	3,136	--	3,136	4,824	4,386	--	--
16	TOTAL POWER	9,691	--	9,691	8,916	--	8,916	13,714	12,469	--	--
<u>IV. CONDUCTING TRANSPORTATION</u>											
17	TRAINMEN-OPERATORS WAGES	47,751	11,250	59,001	43,930	11,250	55,180	58,991	53,633	36,774	28,536
18	INSPECTING, CLEANING AND LUBRICATING EQUIPMENT	8,091	2,472	10,563	7,444	2,472	9,916	14,058	12,782	8,081	6,271
19	ONEONTA TOWER - MAINTENANCE & OPERATION	740	--	740	740	--	740	740	740	--	--
20	FLAGMEN & SWITCHTENDERS	348	--	348	348	--	348	873	873	--	--
21	FUEL & OIL	--	4,071	4,071	--	4,071	4,071	--	--	13,306	10,326
22	OTHER TRANSPORTATION COSTS	6,200	3,086	9,286	5,704	3,086	8,790	10,772	9,794	10,089	7,829
23	TOTAL CONDUCTING TRANSPORTATION	63,130	20,879	84,009	58,166	20,879	79,045	85,434	77,822	68,250	52,962
24	V. TRAFFIC	765	274	1,039	704	274	978	1,330	1,209	895	695
<u>VI. GENERAL</u>											
25	INJURIES & DAMAGES	5,456	1,118	6,574	5,020	1,118	6,138	9,480	8,619	3,653	2,835
26	OTHER GENERAL COSTS	8,594	2,702	11,296	7,907	2,702	10,609	14,932	13,577	8,842	7,363
27	TOTAL GENERAL	14,050	3,820	17,870	12,927	3,820	16,747	24,412	22,196	12,495	10,198
<u>TAXES</u>											
28	UNEMPLOYMENT INSURANCE & CARRIERS TAXING ACT	4,988	1,242	6,230	4,617	1,242	5,859	7,628	6,844	4,525	3,706
29	AD VALOREM TAX	8,772	--	8,772	8,772	--	8,772	8,772	8,772	--	--
30	FRANCHISE TAX	230	--	230	230	--	230	230	230	--	--
31	L.A.CITY LICENSE	83	--	83	83	--	83	105	105	1,075	1,075
32	LICENSE, WEIGHT FEE, REGIS., ETC.	--	388	388	--	388	388	--	--	3,104	3,104
33	STATE 3% GROSS RECEIPTS TAX	--	639	639	--	639	639	--	--	2,486	2,486
34	TOTAL TAXES	14,073	2,269	16,342	13,702	2,269	15,971	16,735	15,951	11,190	10,371
35	TOTAL OPERATING EXP. & TAXES	\$134,847	\$ 34,876	\$169,723	\$125,503	\$ 34,876	\$160,379	\$201,424	\$181,671	\$129,949	\$107,638
36	CLASS OF EQUIPMENT	1100	MOTOR COACHES	1100/M.C.	1100	MOTOR COACHES	1100/M.C.	P.C.C.	P.C.C.	MOTOR COACHES	MOTOR COACHES
37	NUMBER OF UNITS, INCL. SPARES	8	1	9	6	1	7	9	6	8	8
38	MILEAGE	109,344	74,016	183,360	100,596	74,016	174,612	189,978	172,732	241,936	187,740
39	AVERAGE MILES PER UNIT	13,668	74,016	20,373	16,766	74,016	24,945	21,109	28,789	30,242	23,458

() - FIGURES INCLOSED IN BRACKETS INDICATE LOSS

TABLE NO. 5

WATTS - SIERRA VISTA LINE
ESTIMATED ANNUAL FINANCIAL RESULTS FROM OPERATIONS
 (BASED ON PRESENT LOAD FACTOR)

NO.	ITEM	PROPOSED ONE-MAN RAIL OPERATIONS				PROPOSED MOTOR COACH OPERATIONS	
		PRESENT RAIL OPERATIONS	Los ANGELES-SIERRA VISTA	Los ANGELES-WATTS	T O T A L	LOS ANGELES-SIERRA VISTA PLAN 'A'	PLAN 'B'
		(1)	(2)	(3)	(4)	(5)	(6)
1	PASSENGER REVENUE	\$943,259	\$330,141	\$613,118	\$943,259	\$330,141	\$239,540 #
2	OTHER REVENUE	6,470	2,588	3,882	6,470	2,588	2,588
3	TOTAL REVENUE	949,729	332,729	617,000	949,729	332,729	242,128
4	OPERATING EXPENSES & TAXES	970,174	315,856	447,204	763,060	329,287	236,466
5	NET INCOME OR LOSS	\$(20,445)	\$ 16,873	\$169,796	\$186,669	\$ 3,442	\$ 5,662
----- DETAIL OF OPERATING EXPENSES AND TAXES -----							
I. WAY & STRUCTURES							
6	MAINTENANCE	\$ 56,973	\$ 25,671	\$ 31,302	\$ 56,973	\$ 2,032	\$ 1,403
7	DEPRECIATION	5,074	1,870	2,768	4,638	1,080	746
8	TOTAL WAY & STRUCTURES	62,047	27,541	34,070	61,611	3,112	2,149
II. EQUIPMENT							
9	MAINTENANCE	59,244	17,064	25,261	42,325	28,580	19,738
10	TIRES & TUBES	--	--	--	--	7,812	5,395
11	DEPRECIATION	29,178	30,000	40,000	70,000	48,857	41,143
12	OTHER EQUIPMENT COSTS	16,999	6,264	9,274	15,538	3,938	2,719
13	TOTAL EQUIPMENT	105,421	53,328	74,535	127,863	89,187	68,995
III. POWER							
14	POWER USED	68,358	21,877	32,388	54,265	--	--
15	OTHER POWER COSTS	37,094	11,872	17,575	29,447	--	--
16	TOTAL POWER	105,452	33,749	49,963	83,712	--	--
IV. CONDUCTING TRANSPORTATION							
17	TRAINMEN-OPERATORS WAGES	410,514	92,283	136,617	228,900	96,536	66,669
18	INSPECTING, CLEANING & LUBRICATING EQUIPMENT	93,878	34,595	51,214	85,809	21,212	14,650
19	FLAGMEN & SWITCHTENDERS	7,452	6,714	3,081	9,795	--	--
20	FUEL & OIL	--	--	--	--	34,931	24,124
21	OTHER TRANSPORTATION COSTS	47,066	17,344	25,676	43,020	26,484	18,290
22	TOTAL CONDUCTING TRANSPORTATION	558,610	150,936	216,588	367,524	179,163	123,733
23	V. TRAFFIC	6,977	2,571	3,807	6,378	2,350	1,623
VI. GENERAL							
24	INJURIES & DAMAGES	20,932	7,714	11,419	19,133	9,590	6,623
25	OTHER GENERAL COSTS	66,095	24,356	36,058	60,414	18,947	13,071
26	TOTAL GENERAL	87,027	32,070	47,477	79,547	28,537	19,694
TAXES							
27	UNEMPLOYMENT INSURANCE & CARRIERS TAXING ACT	38,225	12,398	17,612	30,010	11,519	8,237
28	AD VALOREM TAX	1,610	1,581	29	1,610	--	--
29	L.A. CITY LICENSE	4,805	1,682	3,123	4,805	8,047	5,827
30	LICENSE, WEIGHT FEE, REGISTRATION, ETC.	--	--	--	--	7,372	6,208
31	TOTAL TAXES	44,640	15,661	20,764	36,425	26,938	20,272
32	TOTAL OPERATING EXPENSES AND TAXES	\$970,174	\$315,856	\$447,204	\$763,060	\$329,287	\$236,466
33	CLASS OF EQUIPMENT	600-700	P.C.C.	P.C.C.	P.C.C.	MOTOR COACHES	MOTOR COACHES
34	NUMBER OF UNITS, INCL. SPARES	33	15	20	35	19	16
35	MILEAGE	1,268,616	467,494	692,082	1,159,576	635,104	438,615
36	AVERAGE MILES PER UNIT	38,443	31,166	34,604	33,131	33,427	27,413

() - FIGURES INCLUDED IN BRACKETS INDICATE LOSS.

- PASSENGER REVENUE UNDER PLAN 'B' DOES NOT INCLUDE APPROXIMATELY \$35,000 THAT WOULD BE RETAINED THROUGH HANDLING A PORTION OF PRESENT SIERRA VISTA LINE PASSENGERS ON OTHER P.E. LINES.

PLAN 'A' INCLUDES PATRONAGE IN AREA BETWEEN MISSION ROAD-ALISO ST. AND MISSION ROAD-HUNTINGTON DR.
 PLAN 'R' DOES NOT INCLUDE PATRONAGE IN AREA BETWEEN MISSION ROAD-ALISO ST. AND MISSION ROAD-HUNTINGTON DRIVE.

TABLE NO. 6

EL MONTE -- BALDWIN PARK LINE
ESTIMATED ANNUAL FINANCIAL RESULTS FROM OPERATIONS

NO.	ITEM	PRESENT RAIL OPERATIONS		PROPOSED ONE-MAN RAIL OPERATIONS		PROPOSED MOTOR COACH OPERATIONS			
		PRESENT L.F.	PROPOSED L.F.	PRESENT L.F.	PROPOSED L.F.	PLAN NO. 1		PLAN NO. 2	
		(1)	(2)	(3)	(4)	PRESENT L.F.	PROPOSED L.F.	PRESENT L.F.	PROPOSED L.F.
1	PASSENGER REVENUE	\$337,874	\$337,874	\$337,874	\$337,874	\$321,056	\$321,056	\$321,056	\$321,056
2	OTHER REVENUE	4,820	4,820	4,820	4,820	4,820	4,820	4,820	4,820
3	TOTAL REVENUE	342,694	342,694	342,694	342,694	325,876	325,876	325,876	325,876
4	OPERATING EXPENSES & TAXES	624,464	575,992	509,016	461,620	369,322	338,334	321,780	299,625
5	NET INCOME OR LOSS	\$(281,770)	\$(233,298)	\$(166,322)	\$(118,926)	\$(43,446)	\$(12,458)	\$ 4,096	\$ 26,251
----- DETAIL OF OPERATING EXPENSES AND TAXES -----									
I. WAY & STRUCTURES									
6	MAINTENANCE	\$ 48,087	\$ 48,087	\$ 48,087	\$ 48,087	\$ 2,136	\$ 1,975	\$ 1,786	\$ 1,730
7	DEPRECIATION	21,779	19,938	21,779	19,938	1,135	1,049	949	919
8	TOTAL WAY & STRUCTURES	69,866	68,025	69,866	68,025	3,271	3,024	2,735	2,649
II. EQUIPMENT									
9	MAINTENANCE	75,454	69,073	21,720	19,883	30,038	27,772	25,112	24,325
10	TIRES & TUBES	--	--	--	--	8,210	7,591	6,864	6,649
11	DEPRECIATION	21,958	20,101	44,000	32,000	74,571	66,857	72,000	59,143
12	OTHER EQUIPMENT COSTS	17,792	16,288	17,792	16,288	4,139	3,826	3,460	3,351
13	TOTAL EQUIPMENT	115,204	105,462	83,512	68,171	116,958	106,046	107,436	93,468
III. POWER									
14	POWER USED	38,463	35,211	27,847	25,492	--	--	--	--
15	OTHER POWER COSTS	20,872	19,107	15,111	13,833	--	--	--	--
16	TOTAL POWER	59,335	54,318	42,958	39,325	--	--	--	--
IV. CONDUCTING TRANSPORTATION									
17	TRAINMEN-OPERATORS WAGES	191,594	175,407	126,697	115,975	90,189	82,006	75,066	72,908
18	INSPECTING, CLEANING & LUBRICATING EQUIPMENT	44,035	40,311	44,035	40,311	22,295	20,613	18,639	18,054
19	FLAGMEN & SWITCHTENDERS	463	463	--	--	--	--	--	--
20	FUEL & OIL	--	--	--	--	36,713	33,943	30,692	29,730
21	OTHER TRANSPORTATION COSTS	38,084	34,863	40,643	37,206	27,835	25,735	23,270	22,541
22	TOTAL CONDUCTING TRANSPORTATION	274,176	251,044	211,375	193,492	177,032	162,297	147,667	143,233
23	V. TRAFFIC	4,165	3,813	4,165	3,813	2,470	2,283	2,065	2,000
VI. GENERAL									
24	INJURIES AND DAMAGES	29,694	27,183	29,694	27,183	10,079	9,319	8,426	8,162
25	OTHER GENERAL COSTS	46,772	42,817	46,772	42,817	25,032	23,143	20,926	20,270
26	TOTAL GENERAL	76,466	70,000	76,466	70,000	35,111	32,462	29,352	28,432
TAXES									
27	UNEMP. Ins. & CARRIERS TAX ACT	24,747	22,825	20,169	18,289	12,757	11,663	11,021	10,279
27-A	STATE 3% GROSS RECEIPTS TAX	--	--	--	--	7,927	7,927	7,927	7,927
28	AD VALOREM TAX	255	255	255	255	--	--	--	--
29	L.A. CITY LICENSE	250	250	250	250	2,544	2,544	2,713	2,713
30	LICENSE, WEIGHT FEE, REGISTRATION, ETC.	--	--	--	--	11,252	10,088	10,864	8,924
31	TOTAL TAXES	25,252	23,330	20,674	18,794	34,480	32,222	32,525	29,843
32	TOTAL OPERATING EXPENSES & TAXES	\$624,464	\$575,992	\$509,016	\$461,620	\$369,322	\$338,334	\$321,780	\$299,625
33	CLASS OF EQUIPMENT	1200	1200	P.C.C.	P.C.C.	MOTOR COACHES	MOTOR COACHES	MOTOR COACHES	MOTOR COACHES
34	NUMBER OF UNITS, INCL. SPARES	22	16	22	16	29	26	28	23
35	MILEAGE	595,061	544,741	595,061	544,741	667,512	617,145	558,039	540,546
36	AVERAGE MILES PER UNIT	27,048	34,046	27,048	34,046	23,018	23,736	19,930	23,502

() - FIGURES IN BRACKETS INDICATE LOSS.

PLAN NO. 1 - RAIL ABANDONMENT, NO DIRECT MOTOR COACH SUBSTITUTION.

PLAN NO. 2 - RAIL ABANDONMENT, WITH DIRECT MOTOR COACH SUBSTITUTION AS FAR EAST AS SAN GABRIEL BLVD., IDENTIFIED AS "HELLMAN AVENUE PLAN".

TABLE NO. 7

PROPOSED NORTHERN DISTRICT SHUTTLE RAIL SERVICE
ESTIMATED ANNUAL FINANCIAL RESULTS FROM OPERATIONS

NO.	ITEM	PRESENT LOAD FACTOR					PROPOSED LOAD FACTOR						
		RAIL SHUTTLE SERVICE	MOTOR COACH OPERATIONS-SIERRA VISTA TO				RAIL SHUTTLE SERVICE	MOTOR COACH OPERATIONS-SIERRA VISTA TO					
		6TH & MAIN - SIERRA VISTA	PASADENA (LOOP)	MONROVIA GLENDORA	SIERRA MADRE	ALHAMBRA TEMPLE CITY	TOTAL	6TH & MAIN - SIERRA VISTA	PASADENA (LOOP)	MONROVIA GLENDORA	SIERRA MADRE	ALHAMBRA TEMPLE CITY	TOTAL
1	PASSENGER REVENUE	--	--	--	--	--	\$1,869,148	--	--	--	--	--	\$1,869,148
2	OTHER REVENUE	--	--	--	--	--	21,930	--	--	--	--	--	21,930
3	TOTAL REVENUE	--	--	--	--	--	1,891,078	--	--	--	--	--	1,891,078
4	OPERATING EXPENSES & TAXES	--	--	--	--	--	1,981,913	--	--	--	--	--	1,806,978
5	NET INCOME OR LOSS	--	--	--	--	--	\$(90,835)	--	--	--	--	--	\$84,100
---- DETAIL OF OPERATING EXPENSES AND TAXES ----													
I. WAY & STRUCTURES													
6	MAINTENANCE	\$105,000	\$ 1,668	\$ 2,269	\$ 486	\$ 1,820	\$ 111,243	\$105,000	\$ 1,591	\$ 2,218	\$ 486	\$ 1,578	\$ 110,873
7	DEPRECIATION	39,505	886	1,206	258	967	42,822	35,167	845	1,178	258	838	38,286
8	TOTAL WAY & STRUCTURES	144,505	2,554	3,475	744	2,787	154,065	140,167	2,436	3,396	744	2,416	149,159
II. EQUIPMENT													
9	MAINTENANCE	64,547	23,457	31,911	6,835	25,598	152,348	57,459	22,380	31,192	6,835	22,193	140,059
10	TIRES & TUBES	--	6,412	8,722	1,868	6,997	23,999	--	6,117	8,526	1,868	6,066	22,577
11	DEPRECIATION	45,550	48,857	56,571	15,429	54,000	220,407	40,548	36,000	46,286	15,429	46,286	184,549
12	OTHER EQUIPMENT COSTS	32,273	3,232	4,397	942	3,527	44,371	28,730	3,084	4,298	942	3,058	40,112
13	TOTAL EQUIPMENT	142,370	81,958	101,601	25,074	90,122	441,125	126,737	67,581	90,302	25,074	77,603	387,297
III. POWER													
14	POWER USED	62,016	--	--	--	--	62,016	55,207	--	--	--	--	55,207
15	OTHER POWER COSTS	33,653	--	--	--	--	33,653	29,958	--	--	--	--	29,958
16	TOTAL POWER	95,669	--	--	--	--	95,669	85,165	--	--	--	--	85,165
IV. CONDUCTING TRANSPORTATION													
17	TRAINMEN-OPERATORS WAGES	194,288	84,447	114,881	24,607	92,152	510,375	172,955	80,570	112,291	24,607	79,893	470,316
18	INSPECTING, CLEANING & LUBRICATING EQUIPMENT	79,874	17,411	23,685	5,073	18,999	145,042	71,104	16,511	23,151	5,073	16,472	132,411
19	FUEL & OIL	--	28,670	39,003	8,354	31,286	107,313	--	27,354	38,123	8,354	27,124	100,955
20	OTHER TRANSPORTATION COSTS	73,721	21,737	29,571	6,334	23,721	155,084	65,627	20,739	28,905	6,334	20,565	142,170
21	TOTAL CONDUCTING TRANSPORTATION	347,883	152,265	207,140	44,368	166,158	917,814	309,686	145,274	202,470	44,368	144,054	845,852
22	V. TRAFFIC	7,556	1,929	2,624	562	2,105	14,776	6,726	1,840	2,565	562	1,825	13,518
VI. GENERAL													
23	INJURIES & DAMAGES	53,861	7,871	10,708	2,294	8,590	83,324	47,947	7,510	10,467	2,294	7,447	75,665
24	OTHER GENERAL COSTS	84,839	19,548	26,593	5,696	21,332	158,008	75,524	18,650	25,993	5,696	18,494	144,357
25	TOTAL GENERAL	138,700	27,419	37,301	7,990	29,922	241,332	123,471	26,160	36,460	7,990	25,941	220,022
TAXES													
26	UNEMPLOYMENT INSURANCE & CARRIERS TAXING ACT	36,207	10,139	13,417	3,000	11,091	73,854	32,708	9,269	12,771	3,000	9,595	67,343
27	AD VALOREM TAX	8,390	--	--	--	--	8,390	8,390	--	--	--	--	8,390
28	L.A. CITY LICENSE	2,065	--	--	--	--	2,065	2,065	--	--	--	--	2,065
29	LICENSE, WEIGHT FEE, REGISTRATION, ETC.	--	7,372	8,536	2,328	8,148	26,384	--	5,432	6,984	2,328	6,984	21,728
30	STATE 3% GROSS RECEIPTS TAX	--	--	3,846	829	1,764	6,439	--	--	3,846	829	1,764	6,439
31	TOTAL TAXES	46,662	17,511	25,799	6,157	21,003	117,132	43,163	14,701	23,601	6,157	18,343	105,965
32	TOTAL OPERATING EXPENSES & TAXES	\$923,345	\$283,636	\$377,940	\$ 84,895	\$312,097	\$1,981,913	\$835,115	\$257,992	\$358,794	\$84,895	\$270,182	\$1,806,978
33	CLASS OF EQUIPMENT	1100-1200	MOTOR COACHES	MOTOR COACHES	MOTOR COACHES	MOTOR COACHES	1100-1200 M/C	1100	MOTOR COACHES	MOTOR COACHES	MOTOR COACHES	MOTOR COACHES	1100-M/C
34	NUMBER OF UNITS, INCL. SPARES	57	19	22	6	21	125	38	14	18	6	18	94
35	MILEAGE	1,079,375	521,277	709,141	151,895	568,842	3,030,530	960,859	497,343	693,154	151,895	493,168	2,796,419
36	AVERAGE MILES PER UNIT	18,936	27,436	32,234	25,316	27,088	24,244	25,286	35,525	38,509	25,316	27,398	29,749

() - FIGURES IN BRACKETS INDICATE LOSS.

TABLE NO. 8

LOS ANGELES - PASADENA LINES

COMPARATIVE SERVICE AND OPERATING DATA UNDER VARIOUS PLANS CONSIDERED

NO.	ITEM	PASADENA OAK KNOLL LINE				PASADENA SHORT LINE				LOS ANGELES-PASADENA MOTOR COACH LINES			
		TWO-MAN RAIL		ONE-MAN RAIL		TWO-MAN RAIL		ONE-MAN RAIL		PRESENT		PROPOSED	
		PRESENT L.F.	PROPOSED L.F.	PRESENT L.F.	PROPOSED L.F.	PRESENT L.F.	PROPOSED L.F.	PRESENT L.F.	PROPOSED L.F.	OAK KNOLL	SHORT LINE	OAK KNOLL	SHORT LINE
I. VEHICLES REQUIRED (DAILY EXCEPT SATS. & SUNS.)													
1	AM PEAK	13	9	13	9	15	9	15	9	28		21	
2	BASE	4	4	4	4	4	4	4	4	10		10	
3	PM PEAK	15	10	15	10	16	11	16	11	30		24	
4	NIGHT	4	4	4	4	3	3	3	3	7		7	
5	VEHICLES IN SERVICE	15	10	15	10	16	11	16	11	30		24	
6	SPARES	2	2	2	2	2	2	2	2	3		3	
7	TOTAL	17	12	17	12	18	13	18	13	33		27	
II. APPROXIMATE HEADWAYS BETWEEN LOS ANGELES AND PASADENA (DAILY EXCEPT SATS. & SUNS.)													
8	AM PEAK	15"-20"	15"-20"	15"-20"	15"-20"	10"-20"	10"-20"	10"-20"	10"-20"	12"-14"	2"-10"	15"-19"	4"-14"
9	BASE	20"-30"	20"-30"	20"-30"	20"-30"	20"-30"	20"-30"	20"-30"	20"-30"	20"	20"	20"	20"
10	PM PEAK	15"-20"	15"-20"	15"-20"	15"-20"	10"-20"	10"-20"	10"-20"	10"-20"	9"-12"	4"-6"	10"-15"	5"-10"
11	NIGHT	40"-60"	40"-60"	40"-60"	40"-60"	40"-60"	40"-60"	40"-60"	40"-60"	30"-40"	30"-40"	30"-40"	30"-40"
III. APPROXIMATE NUMBER OF ONE WAY TRIPS BETWEEN LOS ANGELES AND PASADENA (DAILY EXCEPT SATS. & SUNS.)													
12	OUTBOUND TO PASADENA	41	41	41	41	45	44	45	44	56	69	53	65
13	INBOUND TO LOS ANGELES	40	40	40	40	46	44	46	44	58	67	55	63
IV. APPROXIMATE RUNNING TIME BETWEEN LOS ANGELES AND PASADENA (DAILY EXCEPT SATURDAYS & SUNDAYS)													
14	AM PEAK	58"	58"	64"	64"	44"	44"	48"	48"	55"	43"	55"	43"
15	BASE	56"	56"	62"	62"	41"	41"	45"	45"	50"	39"	50"	39"
16	PM PEAK	59"	59"	65"	65"	45"	45"	49"	49"	58"	46"	58"	46"
17	NIGHT	50"	50"	55"	55"	37"	37"	41"	41"	52"	37"	52"	37"
V. APPROXIMATE SPREAD OF SERVICE (DAILY EXCEPT SATURDAYS & SUNDAYS)													
18		5 00 AM TO 1 30 AM	5 00 AM TO 1 30 AM	5 00 AM TO 1 30 AM	5 00 AM TO 1 30 AM	5 00 AM TO 3 00 AM	5 00 AM TO 3 00 AM	5 00 AM TO 3 00 AM	5 00 AM TO 3 00 AM	5 00 AM TO 12 30 AM	5 00 AM TO 2 00 AM	5 00 AM TO 11 45 PM	5 00 AM TO 1 30 AM

VIII

TABLE NO. 9

LOS ANGELES - MONROVIA - GLEN DORA LINE
COMPARATIVE SERVICE AND OPERATING DATA UNDER VARIOUS PLANS CONSIDERED

NO.	ITEM	TWO-MAN RAIL OPERATIONS				ONE-MAN RAIL OPERATIONS				MOTOR COACH OPERATIONS							
		PRESENT L.F.		PROPOSED L.F.		PRESENT L.F.		PROPOSED L.F.		PRESENT L.F.				PROPOSED L.F.			
I. VEHICLES REQUIRED (DAILY EXCEPT SATS. & SUNS.)																	
1	AM PEAK	18		14		18		14		26							20
2	BASE	5		5		5		5		9							9
3	PM PEAK	18		14		18		14		29							22
4	NIGHT	4		4		4		4		4							4
5	VEHICLES IN SERVICE	18		14		18		14		29							22
6	SPARES	2		2		2		2		3							2
7	TOTAL	20		16		20		16		32							24
II. APPROXIMATE HEADWAYS BETWEEN LOS ANGELES AND --- (DAILY EXCEPT SATS. & SUNS.)																	
		GLEN-DORA	MONRO-VIA	GLEN-DORA	MONRO-VIA	GLEN-DORA	MONRO-VIA	GLEN-DORA	MONRO-VIA	GLEN-DORA	MONRO-VIA	BALDWIN AVE.	SAN MARINO	GLEN-DORA	MONRO-VIA	BALDWIN AVE.	SAN MARINO
8	AM PEAK	30 ^A	15"	15"-40"	15"-20"	30"	15"	15"-40"	15"-20"	30"	9"-15"	6"-10"	4"-10"	30"	15"	6"-10"	6"-10"
9	BASE	60"	30"	60"	30"	60"	30"	60"	30"	40"	20"	20"	20"	40"	20"	20"	20"
10	PM PEAK	30"	10"-20"	25"-30"	12"-20"	30"	10"-20"	25"-30"	12"-20"	30"	6"-10"	5"-10"	4"-10"	30"	6"-10"	5"-10"	5"-10"
11	NIGHT	40"-70"	40"-70"	40"-70"	40"-70"	40"-70"	40"-70"	40"-70"	40"-70"	40"-60"	30"-60"	30"-60"	30"-60"	40"-60"	30"-60"	30"-60"	30"-60"
III. APPROXIMATE NUMBER OF ONE-WAY TRIPS BETWEEN LOS ANGELES AND --- (DAILY EXCEPT SATS. & SUNS.)																	
		GLEN-DORA	MONRO-VIA	GLEN-DORA	MONRO-VIA	GLEN-DORA	MONRO-VIA	GLEN-DORA	MONRO-VIA	GLEN-DORA	MONRO-VIA	BALDWIN AVE.	SAN MARINO	GLEN-DORA	MONRO-VIA	BALDWIN AVE.	SAN MARINO
12	OUTBOUND FROM LOS ANGELES	24	40	23	37	24	40	23	37	29	56	62	(1)70	28	55	60	60
13	INBOUND TO LOS ANGELES	24	38	23	36	24	38	23	36	29	54	60	(2)65	28	55	59	61
IV. APPROXIMATE RUNNING TIME BETWEEN LOS ANGELES AND --- (DAILY EXCEPT SATS. & SUNS.)																	
		GLEN-DORA	MONRO-VIA	GLEN-DORA	MONRO-VIA	GLEN-DORA	MONRO-VIA	GLEN-DORA	MONRO-VIA	GLEN-DORA	MONRO-VIA	BALDWIN AVE.	SAN MARINO	GLEN-DORA	MONRO-VIA	BALDWIN AVE.	SAN MARINO
14	AM PEAK	77"	57"	77"	57"	83"	63"	83"	63"	(L)81"	(L)60"	(L)44"	(L)35"	91"	65"	49"	40"
15	BASE	74"	54"	74"	54"	80"	60"	80"	60"	85"	61"	46"	37"	85"	61"	46"	37"
16	PM PEAK	80"	60"	80"	60"	86"	66"	86"	66"	(L)85"	(L)63"	(L)46"	(L)37"	94"	68"	50"	40"
17	NIGHT	67"	48"	67"	48"	73"	54"	73"	54"	82"	60"	46"	37"	82"	60"	46"	37"
V. APPROXIMATE SPREAD OF SERVICE (DAILY EXCEPT SATS. & SUNS.)																	
18		4 30 AM TO 1 45 AM		4 50 AM TO 12 30 AM		4 30 AM TO 1 45 AM		4 50 AM TO 12 30 AM		5 00 AM TO 1 30 AM				5 00 AM TO 1 30 AM			

(1) - INCLUDES 8 TRIPS FROM LOS ANGELES TO EL MOLINO JUNCTION.
(2) - INCLUDES 5 TRIPS FROM EL MOLINO JUNCTION TO LOS ANGELES.
(L) - RUNNING TIME FOR LIMITED TRIPS.

XI

TABLE NO. 10

LOS ANGELES - SIERRA MADRE LINE

COMPARATIVE SERVICE AND OPERATING DATA UNDER VARIOUS PLANS CONSIDERED

NO.	ITEM	COMBINED TWO-MAN RAIL & BUS (PRESENT L. F.)			ONE-MAN RAIL OPERATIONS		MOTOR COACH OPERATIONS	
		RAIL	BUS	BOTH	PRESENT L.F.	PROPOSED L.F.	PRESENT L.F.	PROPOSED L.F.
<u>I. VEHICLES REQUIRED (DAILY EXCEPT SATS. & SUNS.)</u>								
1	AM PEAK	8	-	8	8	5	7	6
2	BASE	-	1	1	1	1	1	1
3	PM PEAK	8	-	8	8	5	7	7
4	NIGHT	-	1	1	1	1	1	1
5	VEHICLES IN SERVICE	8	1	9	8	5	7	7
6	SPARES	1	-	1	1	1	1	1
7	TOTAL	9	1	10	9	6	8	8
<u>II. APPROXIMATE HEADWAYS BETWEEN LOS ANGELES AND SIERRA MADRE (1) (DAILY EXCEPT SATURDAYS AND SUNDAYS)</u>								
8	AM PEAK	15"	-	15"	15"	15"-20"	15"	15"
9	BASE	-	60"	60"	60"	60"	60"	60"
10	PM PEAK	10"-25"	-	10"-25"	10"-25"	12"-25"	15"	15"
11	NIGHT	-	70"	70"	70"	70"	60"-80"	60"-80"
<u>III. APPROXIMATE NUMBER OF ONE WAY TRIPS BETWEEN LOS ANGELES AND SIERRA MADRE (1) (DAILY EXCEPT SATS. & SUNS.)</u>								
12	OUTBOUND TO SIERRA MADRE	12	13	25	25	25	25	24
13	INBOUND TO LOS ANGELES	12	13	25	25	25	25	24
<u>IV. APPROXIMATE RUNNING TIME BETWEEN SIERRA MADRE AND — (DAILY EXCEPT SATS. AND SUNS.)</u>								
		Los ANGELES	SAN MARINO		Los ANGELES	SAN MARINO	Los ANGELES	SAN MARINO
14	AM PEAK	63"	-		68"	-	(L) 60"	-
15	BASE	-	20"		-	20"	-	19"
16	PM PEAK	64"	-		69"	-	(L) 60"	-
17	NIGHT	-	20"		-	20"	-	19"
18	V. APPROXIMATE SPREAD OF SERVICE (DAILY EXCEPT SATS. & SUNS.)	5 00 AM TO 1 45 AM			5 00 AM TO 1 45 AM		5 40 AM TO 12 30 AM	

(1) - INCLUDES THROUGH TRIPS LOS ANGELES-SIERRA MADRE, AS WELL AS TRIPS WHERE TRANSFER IS REQUIRED AT SAN MARINO.
(L) - RUNNING TIME FOR LIMITED SERVICE.

NO.	I T E M	TWO-MAN RAIL OPERATION		ONE-MAN RAIL OPERATION		L. A. - EL MONTE VIA VALLEY BLVD MOTOR COACH LINE		L. A. - EL MONTE - COVINA - POMONA VIA GARVEY AVE. MOTOR COACH LINE	
		PRESENT L.F.	PROPOSED L.F.	PRESENT L.F.	PROPOSED L.F.	PRESENT L.F.		PRESENT L.F.	
		(1)	(2)	(3)	(4)	(5)		(6)	
I. VEHICLES REQUIRED (DAILY EXCEPT SATS. & SUNS.)									
1	AM PEAK	20	14	20	14	24		25	
2	BASE	3	3	3	3	6		8	
3	PM PEAK	20	14	20	14	26		28	
4	NIGHT	3	3	3	3	4		6	
5	VEHICLES IN SERVICE	20	14	20	14	26		28	
6	SPARES	2	2	2	2	3		3	
7	TOTAL	22	16	22	16	29		31	
II. APPROXIMATE HEADWAYS BETWEEN LOS ANGELES AND (DAILY EX. SATS. & SUNS.)									
		BALDWIN PARK	BALDWIN PARK	BALDWIN PARK	BALDWIN PARK	GARFIELD AVE	EL MONTE	EL MONTE	BALDWIN PARK
8	AM PEAK	15"-30"	20"-30"	15"-30"	20"-30"	6"	6"-15"	8"-10"	15"-30"
9	BASE	40"	40"	40"	40"	10"-20"	10"-20"	20"-25"	60"
10	PM PEAK	15"-30"	20"-30"	15"-30"	20"-30"	5"-10"	7"-10"	5"-10"	20"
11	NIGHT	60"	60"	60"	60"	30"	30"	30"-45"	100"
III. APPROXIMATE NUMBER OF ONE-WAY TRIPS BETWEEN LOS ANGELES AND (DAILY EX. SATS. & SUNS.)									
		BALDWIN PARK	BALDWIN PARK	BALDWIN PARK	BALDWIN PARK	GARFIELD AVE	EL MONTE	EL MONTE	BALDWIN PARK
12	OUTBOUND FROM LOS ANGELES	① 34	① 31	① 34	① 31	67	56	64	13
	LIMITEDS--	-	-	-	-	19	19	7	7
13	INBOUND TO LOS ANGELES	② 32	② 29	② 32	② 32	66	54	59	12
	LIMITEDS--	-	-	-	-	14	14	8	8
IV. APPROXIMATE RUNNING TIME BETWEEN LOS ANGELES AND (DAILY EX. SATS. & SUNS.)									
		BALDWIN PARK	BALDWIN PARK	BALDWIN PARK	BALDWIN PARK	GARFIELD AVE.	EL MONTE	EL MONTE	BALDWIN PARK
14	AM PEAK	60"	60"	65"	65"	33"	--	48"	--
	LIMITEDS--	--	--	--	--	28"	48"	--	53"
15	BASE	53"	53"	58"	58"	33"	53"	47"	63"
16	PM PEAK	60"	60"	65"	65"	37"	--	57"	--
	LIMITEDS--	--	--	--	--	29"	50"	--	55"
17	NIGHT	50"	50"	55"	55"	29"	45"	45"	56"
18	V. APPROXIMATE SPREAD OF SERVICE (DAILY EXCEPT SATS. & SUNS.)	5 45 AM TO 12 30 AM		5 45 AM TO 12 30 AM		4 00 AM TO 2 15 AM		6 00 AM TO 12 30 AM	

① - INCLUDES 1 TRIP TO EL MONTE ONLY.
 ② - INCLUDES 1 TRIP FROM ORANGE AVE ONLY.
 ③ - INCLUDES 3 TRIPS TO ROSEMEAD BLVD ONLY.
 ④ - INCLUDES 2 TRIPS FROM EL MONTE ONLY.
 ⑤ - DOES NOT INCLUDE HEADWAYS PROVIDED BY COACHES RUNNING LIMITED. WEST OF GARFIELD.
 ⑥ - INCLUDES 1 TRIP TO OR FROM ROSEMEAD BLVD. ONLY.

TABLE NO. 11

S ANGELES - EL MONTE - BALDWIN PARK LINES

COMPARATIVE SERVICE AND OPERATING DATA UNDER VARIOUS PLANS CONSIDERED

PLAN NO. 1

L.A.-EL MONTE VIA VALLEY BLVD MOTOR COACH LINE				L.A.-EL MONTE-COVINA-POMONA VIA GARVEY AVE MOTOR COACH LINE						L.A.-EL M MOT	
PRESENT L.F.		PROPOSED L.F.		PRESENT L.F.			PROPOSED L.F.			PRESENT L.F.	
(7)		(8)		(9)			(10)			(11)	
30		25		38			33			25	
8		8		11			11			6	
36		26		46			39			29	
4		4		6			6			4	
36		26		46			39			29	
3		3		4			4			3	
39		29		50			43			32	
⑤ GARFIELD AVE	EL MONTE	⑤ GARFIELD AVE	EL MONTE	⑦ SAN GABRIEL BLVD.	EL MONTE	BALDWIN PARK	⑦ SAN GABRIEL BLVD.	EL MONTE	BALDWIN PARK	⑤ GARFIELD AVE.	EL M
6"-15"	6"-15"	6"-15"	6"-15"	5"-15"	5"-17"	10"-17"	7"-17"	7"-17"	10"-17"	7"-19"	7"-
15"	15"	15"	15"	15"	15"	15"-30"	15"	15"	15"-30"	20"	20"
5"-10"	6"-10"	6"-12"	6"-13"	4"-10"	6"-10"	8"-15"	5"-15"	8"-11"	8"-18"	5"-14"	5"-
30"	30"	30"	30"	30"	30"	30"-50"	30"	30"	30"-50"	30"-35"	30"-
GARFIELD AVE	EL MONTE	GARFIELD AVE	EL MONTE	SAN GABRIEL BLVD.	EL MONTE	BALDWIN PARK	SAN GABRIEL BLVD.	EL MONTE	BALDWIN PARK	GARFIELD AVE.	EL M
83	③ 58	74	56	90	67	42	84	70	43	67	⑥ 5
20	④ 26	20	20	14	22	15	9	17	15	17	(10) 2
74	⑥ 60	70	60	78	63	42	75	64	40	64	5
16	⑨ 22	15	15	14	20	② 15	10	16	② 17	12	(11) 1
GARFIELD AVE	EL MONTE	GARFIELD AVE	EL MONTE	SAN GABRIEL BLVD.	EL MONTE	BALDWIN PARK	SAN GABRIEL BLVD.	EL MONTE	BALDWIN PARK	GARFIELD AVE.	EL M
33"	--	33"	--	36"	--	--	36"	--	--	33"	--
28"	44"-48"	28"	48"	32"	41"-45"	53"	32"	41"-45"	53"	28"	44"-
33"	50"	33"	50"	35"	47"	56"-61"	35"	47"	56"-61"	33"	50"
37"	--	37"	--	41"	--	--	41"	--	--	37"	--
31"	48"-50"	31"	48"-50"	33"	43"-49"	55"-58"	33"	43"-49"	55"-58"	31"	48"-
29"	45"	29"	45"	30"	42"	52"	30"	42"	52"	29"	45"
5 50 AM TO 12 15 AM	5 50 AM TO 12 15 AM	5 50 AM TO 12 15 AM	5 50 AM TO 12 15 AM	5 50 AM TO 12 45 AM	5 50 AM TO 12 45 AM	5 50 AM TO 12 45 AM	5 50 AM TO 12 45 AM	5 50 AM TO 12 45 AM	5 50 AM TO 12 45 AM	5 50 AM TO 11 55	5 50 AM TO 11 55

⑦ - DOES NOT INCLUDE HEADWAYS PROVIDED BY COACHES RUNNING LIMITED WEST OF SAN GABRIEL BLVD.
 ⑧ - INCLUDES 8 TRIPS TO ROSEMEAD BLVD. ONLY
 ⑨ - INCLUDES 9 TRIPS FROM ROSEMEAD BLVD. ONLY.
 (10) - INCLUDES 6 TRIPS TO ROSEMEAD BLVD. ONLY.
 (11) - INCLUDES 5 TRIPS FROM ROSEMEAD BLVD. ONLY.

PLAN NO. 1

PLAN NO. 2

PLAN NO. 2

EL MONTE VIA VALLEY BLVD OR COACH LINE			L.A.-EL MONTE-COVINA-POMONA VIA GARVEY AVE MOTOR COACH LINE						L.A.-WILMAR VIA HELLMAN AVE MOTOR COACH LINE	
PROPOSED L.F.			PRESENT L.F.			PROPOSED L.F.			PRESENT L.F.	PROPOSED L.F.
(12)			(13)			(14)			(15)	(16)
	20			34			30		8	6
	6			9			9		2	2
	22			39			33		12	8
	4			6			6		1	1
	22			39			33		12	8
	2			4			3		1	1
	24			43			36		13	9
EL MONTE	⑤ GARFIELD AVE.	EL MONTE	⑦ SAN GABRIEL BLVD.	EL MONTE	BALDWIN PARK	⑦ SAN GABRIEL BLVD.	EL MONTE	BALDWIN PARK	SAN GABRIEL BLVD.	SAN GABRIEL BLVD.
15"	8"-15"	5"-10"	8"-15"	6"-13"	7"-27"	11"-20"	7"-17"	7"-27"	7"-25"	8"-30"
"	20"	20"	15"	15"	15"-30"	20"	20"	20"-40"	45"	45"
12"	7"-18"	5"-11"	7"-15"	4"-11"	7"-22"	9"-18"	5"-15"	7"-22"	6"-17"	11"-17"
35"	30"-35"	30"-35"	30"	30"	30"-60"	30"	30"	30"-60"	80"	80"
EL MONTE	GARFIELD AVE.	EL MONTE	SAN GABRIEL BLVD.	EL MONTE	BALDWIN PARK	SAN GABRIEL BLVD.	EL MONTE	BALDWIN PARK	SAN GABRIEL BLVD.	SAN GABRIEL BLVD.
0	65	53	66	54	33	64	53	33	37	30
2	15	15	12	20	13	8	16	15	--	--
3	62	55	62	55	35	57	55	36	32	28
8	12	12	11	16	② 13	8	13	② 14	--	--
EL MONTE	GARFIELD AVE.	EL MONTE	SAN GABRIEL BLVD.	EL MONTE	BALDWIN PARK	SAN GABRIEL BLVD.	EL MONTE	BALDWIN PARK	SAN GABRIEL BLVD.	SAN GABRIEL BLVD.
16"	33"	--	36"	--	--	36"	--	--	41"	41"
"	28"	48"	32"	41"-45"	53"	32"	41"-45"	53"	--	--
"	33"	50"	35"	47"	56"-61"	35"	47"	56"-61"	38"	38"
50"	37"	--	41"	--	--	41"	--	--	43"	43"
"	31"	50"	33"	44"-49"	55"-58"	33"	44"-49"	55"-58"	--	--
"	29"	45"	30"	42"	52"	30"	42"	52"	33"	33"
5 PM	5 50 AM TO 11 55 PM		6 00 AM TO 12 45 AM			6 00 AM TO 12 45 AM			5 45 AM TO 12 15 AM	

PRESENT L.A.-BALDWIN PARK RAIL PASSENGER SERVICE TO BE DISCONTINUED, WITH ADDITIONAL SERVICE TO BE PROVIDED ON L.A.-EL MONTE VIA VALLEY BLVD. AND L.A.-EL MONTE-COVINA-POMONA MOTOR COACH LINES.

PRESENT L.A.-BALDWIN PARK RAIL PASSENGER SERVICE TO BE DISCONTINUED, WITH ADDITIONAL SERVICE TO BE PROVIDED ON L.A.-EL MONTE VIA VALLEY BLVD. AND L.A.-EL MONTE-COVINA-POMONA MOTOR COACH LINES, AS WELL AS NEW L.A.-WILMAR VIA HELLMAN AVE. MOTOR COACH LINE TO BE ESTABLISHED.

TABLE NO. 12

ESTIMATED COST OF ADDITIONAL FACILITIES AND EQUIPMENT REQUIRED

<u>Item</u>	Rail Operation		Proposed	
	Continued		Motor Coach Operation	
	With P.C.C. Cars			
	(A)	(B)	(A)	(B)
(1) P.C.C. Cars @ \$40,000	\$4,040,000	\$3,120,000		
(2) Immediate Expense - Recondition tracks	753,253	753,253		
(3) Subsequent Track Expense	2,043,331	2,043,331		
(4) Expansion - 6th & Main St. Terminal	1,500,000	1,500,000	\$ 100,000	\$ 100,000
(5) Additional Track - Echandia to Indian Village	870,000	870,000		
(6) Macy Street Car Shops (and Garage)	50,000	50,000	125,000	125,000
(7) Sierra Madre Feeder	20,000	20,000		
(8) Track Circuit Changes	76,000	76,000		
(9) Motor Coaches required @ \$18,000			2,160,000	1,818,000
(10) Pasadena carhouse changes			35,000	35,000
(11) Miscellaneous - signs - loading platforms, etc.			10,000	10,000
(12) Track Connection between Monrovia-Glendora Line and Baldwin Park Line			<u>355,000</u>	<u>355,000</u>
(13) Total Estimated Cost	\$9,352,584	\$8,432,584	\$2,785,000	\$2,443,000
(14) Total Cost, excluding Subsequent Track Program	\$7,309,253	\$6,389,253	--	--

A - Present Load Standard
B - Proposed Revised Load Standard

TABLE NO. 13

ESTIMATED LEDGER VALUE OF FACILITIES TO BE ABANDONED

ACCT. NO.	DESCRIPTION OF ACCOUNT	PASADENA SHORT LINE	PASADENA OAK KNOLL	MONROVIA LINE	SIERRA MADRE LINE	ALHAMBRA LINE	WEST ALHAMBRA LINE	WATTS-SIERRA VISTA LINE	SAN PEDRO ST. VIADUCT NORTH TO ALISO ST.	SAN PEDRO & ALISO STS. TO MACY ST. YARDS
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
501	ENGINEERING	\$ 66,037	\$ 14,880	\$ 42,689	\$ 12,332	\$ 1,852	\$ 1,684	\$ 9,612	\$ 1,624	\$ 33,944
502	RIGHT OF WAY	435,537	28,514	253,083	82,875	20,232	15,610	--	--	127,878
503	OTHER LAND USED IN ELECTRIC RAILWAY OPERATIONS	38,321	--	3,156	16,460	--	1,344	--	--	--
504	GRADING	257,286	36,147	65,529	38,838	2,963	1,343	16,720	783	5,013
505	BALLAST	65,647	19,071	42,362	11,577	2,942	274	10,265	378	4,226
506	TIES	82,002	29,839	60,964	27,788	4,250	3,391	13,035	748	6,274
507	RAILS, RAIL FASTENINGS & JOINTS	234,713	120,268	184,363	64,602	12,824	9,239	53,752	1,246	16,281
508	SPECIAL WORK	30,723	22,109	13,086	4,956	2,703	1,880	57,378	22,865	12,495
510	TRACK AND ROADWAY LABOR	131,159	31,825	93,633	34,171	7,846	4,462	17,500	2,304	18,837
511	PAVING	103,193	98,266	31,747	4,749	1,167	965	62,074	1,236	16,882
515	BRIDGES, TRESTLES & CULVERTS	319,665	6,316	71,778	27,386	4,002	186	12,737	1,463	106,580
516	CROSSINGS, FENCES & SIGNS	39,270	4,260	26,544	6,657	1,413	470	--	--	8
517	SIGNALS & INTERLOCKERS	115,484	168	69,190	8,525	182	225	--	--	2,700
518	COMMUNICATION SYSTEMS	7,119	46	5,869	1,117	200	227	--	--	104
521	DISTRIBUTION SYSTEM	197,847	62,944	210,865	47,292	6,509	12,404	--	2,209	6,409
523	SHOPS, CARHOUSES & GARAGES	2,557	--	--	--	581	--	--	--	--
524	STATIONS, MISC. BUILDINGS AND STRUCTURES	21,977	--	26,111	8,269	--	5,345	--	--	2,361
539	POWER PLANTS	53,165	--	24,734	--	--	--	--	--	--
542	POWER PLANT EQUIPMENT	272,925	--	99,531	--	--	--	--	--	--
544	TRANSMISSION SYSTEM	32,601	--	26,375	--	--	--	--	--	--
545	FRANCHISES	1,297	2,190	--	400	--	--	--	--	--
	TOTAL	\$2,508,525	\$476,843	\$1,351,609	\$397,994	\$69,666	\$59,049	\$253,073	\$34,856	\$359,992

- (2) - VALLEY JUNCTION TO END OF LINE AT WALNUT STREET, PASADENA. (INCLUDES PASADENA & SIERRA PARK SUBSTATIONS, AND TRANSMISSION LINE FROM VALLEY JUNCTION TO ONEONTA).
- (3) - EL MOLINO TO FAIR OAKS AVENUE & COLORADO STREET.
- (4) - ONEONTA TO MONROVIA (MYRTLE STREET), EXCEPT PORTION THROUGH ARCADIA BETWEEN HUNTINGTON DRIVE AND SANTA ANITA AVENUE. (INCLUDES OVERHEAD CONSTRUCTION AND TELEPHONE LINES, MONROVIA TO GLENDORA; ARCADIA AND AZUSA SUBSTATIONS, AND TRANSMISSION LINE FROM ONEONTA TO AZUSA.)
- (5) - SAN MARINO TO THE END OF THE LINE AT SIERRA MADRE.
- (6) - SIERRA VISTA TO RAYMOND AVENUE, ALHAMBRA.
- (7) - CONNECTION WITH ALHAMBRA-SAN GABRIEL LINE TO THE END NEAR THE SOUTHERN PACIFIC TRACKS, ALHAMBRA.
- (8) - NINTH & SAN PEDRO STREET, VIA NINTH STREET, MAIN STREET, FIRST STREET, LOS ANGELES STREET, ALISO STREET, TO SWITCH POINT AT ALISO & SAN PEDRO STREETS.
- (9) - SAN PEDRO STREET FROM THE INTERSECTION OF THE TRACKS ON THE VIADUCT NORTHERLY TO ALISO STREET.
- (10) - SAN PEDRO AND ALISO STREETS TO THE MACY STREET YARDS.

TABLE NO. 14

S U M M A R Y

ESTIMATED SALVAGE AND COST TO REMOVE FACILITIES TO BE ABANDONED

<u>Item</u>	<u>Track and Facilities</u>	<u>Cost to Remove (1)</u>	<u>Salvage (2)</u>	<u>Net Cost to Remove (3)</u>
(1)	Track	\$455,044	\$188,623	\$266,421
(2)	Overhead	85,876	48,485	37,391
(3)	Signals	30,095	3,870	26,225
(4)	Bridges	<u>195,975</u>	<u>18,567</u>	<u>117,408</u>
(5)	Total	<u>\$766,990</u>	<u>\$259,545</u>	<u>\$507,445</u>
(6)	Land Salvage			<u>249,675</u>
(7)	Net Salvage			<u>(\$257,770)</u>

By Lines:

Oak Knoll Line	\$ 83,621	\$ 10,976	\$(72,645)
Pasadena Short Line	87,610	95,730	8,120
Sierra Madre Line	62,828	76,839	14,011
Alhambra Line	7,463	12,816	5,353
Monrovia Line	143,366	80,041	(63,325)
Sierra Vista Line	45,435	522	(44,913)
Track owned by City (6th & San Pedro - Aliso & San Pedro)	240	50	(190)
Aliso & San Pedro Sts. to Macy Street Yard	23,490	3,097	20,393
Joint Trackage	<u>312,937</u>	<u>229,149</u>	<u>(83,788)</u>
Total	<u>\$766,990</u>	<u>\$509,220</u>	<u>(\$257,770)</u>

(RED FIGURES)

TABLE NO. 15

ESTIMATED SALVAGE AND COST TO REMOVE FACILITIES TO BE ABANDONED
OAK KNOLL LINE - EL MOLINO TO FAIR OAKS & COLORADO

<u>Item</u>	<u>Track and Facilities</u>	<u>Cost to Remove</u> (1)	<u>Salvage</u> (2)	<u>Net Cost to Remove</u> (3)
(1)	Track	\$75,840	\$ 6,932	\$68,908
(2)	Overhead	7,021	2,959	4,062
(3)	Signals	<u>760</u>	<u>210</u>	<u>550</u>
(4)	Total	<u>\$83,621</u>	<u>\$10,101</u>	\$73,520
(5)	Land Salvage ..			<u>875</u>
(6)	Net Salvage			<u>(\$72,645)</u>

(RED FIGURES)

ESTIMATED SALVAGE AND COST TO REMOVE FACILITIES TO BE ABANDONED
PASADENA SHORT LINE - ONEONTA TO CARHOUSE AT WALNUT STREET

<u>Item</u>	<u>Track and Facilities</u>	<u>Cost to Remove</u> (1)	<u>Salvage</u> (2)	<u>Net Cost to Remove</u> (3)
(1)	Track	\$78,275	\$ 5,690	\$72,585
(2)	Overhead	9,025	6,005	3,020
(3)	Signals	<u>310</u>	<u>60</u>	<u>250</u>
(4)	Total	<u>\$87,610</u>	<u>\$11,755</u>	\$75,855
(5)	Land Salvage ..			<u>83,975</u>
(6)	Net Salvage			<u>\$ 8,120</u>

TABLE NO. 16

ESTIMATED SALVAGE AND COST TO REMOVE FACILITIES TO BE ABANDONED
MONROVIA LINE - EL MOLINO TO SAN MARINO - SAN MARINO
TO ARCADIA - ARCADIA TO MONROVIA

<u>Item</u>	<u>Track and Facilities</u>	<u>Cost to Remove</u> (1)	<u>Salvage</u> (2)	<u>Net Cost to Remove</u> (3)
(1)	Track	\$ 83,058	\$48,125	\$34,933
(2)	Overhead	25,258	15,082	10,176
(3)	Signals	9,615	820	8,795
(4)	Bridges	<u>25,435</u>	<u>2,624</u>	<u>22,811</u>
(5)	Total	<u>\$143,366</u>	<u>\$66,651</u>	\$76,715
(6)	Land Salvage			<u>13,390</u>
(7)	Net Salvage			<u>(\$63,325)</u>

(RED FIGURES)

ESTIMATED SALVAGE AND COST TO REMOVE FACILITIES TO BE ABANDONED
SIERRA MADRE LINE - SAN MARINO TO END OF LINE AT SIERRA MADRE

<u>Item</u>	<u>Track and Facilities</u>	<u>Cost to Remove</u> (1)	<u>Salvage</u> (2)	<u>Net Cost to Remove</u> (3)
(1)	Track	\$44,687	\$25,791	\$18,896
(2)	Overhead	8,461	6,133	2,328
(3)	Signals	3,660	510	3,150
(4)	Bridges	<u>6,020</u>	<u>625</u>	<u>5,395</u>
(5)	Total	<u>\$62,828</u>	<u>\$33,059</u>	\$29,769
(6)	Land Salvage			<u>43,780</u>
(7)	Net Salvage			<u>\$14,011</u>

TABLE NO. 17

ESTIMATED SALVAGE AND COST TO REMOVE FACILITIES TO BE ABANDONED
WATTS-SIERRA VISTA LINE - NINTH & SAN PEDRO TO
ALISO & SAN PEDRO VIA NINTH ST., MAIN ST.,
LOS ANGELES ST., ALISO STREET

<u>Item</u>	<u>Track and Facilities</u>	<u>Cost to Remove</u> (1)	<u>Salvage</u> (2)	<u>Net Cost to Remove</u> (3)
(1)	Track	\$43,985	\$ -	\$43,985
(2)	Overhead	<u>1,450</u>	<u>522</u>	<u>928</u>
(3)	Total	<u>\$45,435</u>	<u>\$ 522</u>	<u>\$44,913</u>
(4)	Land Salvage			-
(5)	Net Salvage			<u>(\$44,913)</u>

SIXTH & SAN PEDRO TO ALISO & SAN PEDRO
(Track and Overhead Owned by City of Los Angeles)

(1)	Signals	\$ 240	\$ 50	\$ 190
-----	---------------	--------	-------	--------

ALISO & SAN PEDRO STREETS TO MACY STREET YARDS

(1)	Track	\$20,615	\$ 2,205	\$18,410
(2)	Overhead	2,225	802	1,423
(3)	Signals	<u>650</u>	<u>90</u>	<u>560</u>
(4)	Total	<u>\$23,490</u>	<u>\$ 3,097</u>	<u>\$20,393</u>

ESTIMATED SALVAGE AND COST TO REMOVE FACILITIES TO BE ABANDONED
ALHAMBRA LINE - SIERRA VISTA TO WEST ALHAMBRA

<u>Item</u>	<u>Track and Facilities</u>	<u>Cost to Remove</u> (1)	<u>Salvage</u> (2)	<u>Net Cost to Remove</u> (3)
(1)	Track	\$ 5,236	\$ 4,080	\$ 1,156
(2)	Overhead	2,107	1,096	1,011
(3)	Signals	<u>120</u>	<u>30</u>	<u>90</u>
(4)	Total	<u>\$ 7,463</u>	<u>\$ 5,206</u>	<u>\$ 2,257</u>
(5)	Land Salvage			<u>7,610</u>
(6)	Net Salvage			<u>\$ 5,353</u>

(RED FIGURES)

TABLE NO. 18

ESTIMATED SALVAGE AND COST TO REMOVE FACILITIES TO BE ABANDONED

JOINT TRACKAGE

- (a) Valley Jct. to Indian Village
- (b) Indian Village to Sierra Vista
- (c) Sierra Vista to Oneonta
- (d) Oneonta to El Molino

<u>Item</u>	<u>Track and Facilities</u>	<u>Cost to Remove (1)</u>	<u>Salvage (2)</u>	<u>Net Cost to Remove (3)</u>
(1)	Track	\$103,348	\$ 95,800	\$ 7,548
(2)	Overhead	30,329	15,886	14,443
(3)	Signals	14,740	2,100	12,640
(4)	Bridges	<u>164,520</u>	<u>15,318</u>	<u>149,202</u>
(5)	Total	<u>\$312,937</u>	<u>\$129,104</u>	\$183,833
(6)	Land Salvage			(a) 20,395
				(b) 29,200
				(c) 13,600
				(d) <u>36,850</u>
				100,045
(7)	Net Salvage			<u>(\$ 83,788)</u>

(RED FIGURES)

TABLE NO. 19

ESTIMATED PRESENT CONDITION OF TRACK AND ROADWAY
PASADENA SHORT LINE - VALLEY JUNCTION TO
FAIR OAKS AVENUE & COLORADO STREET

Item	Section		Rail & Date Installed				Estimated Condition		
	From	To	Rail Weight		Date		Rails	Ties	Bal.
			(Lb.)		Installed				
			(3)	(4)	(5)	(6)			
		Local	Main	Local	Main	Local	Main		
(1)	Valley Jct.	Indian Village							
	Outbound		90		1943	60	60	40	
	Inbound		90		1937	55	65	65	
(2)	Indian Village	Topaz	60	90	1906	1945	15	60	65
					1910				
(3)	Topaz	Eastern Ave.	60	90	1910		15	60	55
(4)	Eastern Ave.	Van Horne	60	90	1910		15	60	65
(5)	Van Horne	Oneonta	60	90	1910		15	60	55
(6)	Oneonta	Monterey Rd.	60			1902		35	45
(7)	Monterey Rd.	Mission St.							
		(Rehabilitated)	91		1947		75	75	75
(8)	Mission St.	Hotel Raymond	128G		1926		50	60	60
(9)	Hotel Raymond	California St.	91		1915		30	40	40
(10)	Calif. &								
	Fair Oaks	Raymond & Green	128G		1914		50	50	50
(11)	Green St.	Colorado St.	72		1908		25	25	25

OAK KNOLL LINE - EL MOLINO TO
FAIR OAKS AVENUE AND COLORADO STREET

Item	Section		Rail & Date Installed				Estimated Condition		
	From	To	Rail Weight		Date		Rails	Ties	Bal.
			(Lb.)		Installed				
			(3)	(4)	(5)	(6)			
		Local	Main	Local	Main	Local	Main		
(1)	Oneonta	El Molino	70	90	1910	1945	20	60	60
(2)	El Molino	Huntington							
		Hotel	60		1906		30	60	60
(3)	Huntington								
	Hotel	Colorado St.	91		1914		30	30	50
(4)	Colorado St.								
	& Lake Ave.	Raymond	128G		1923		45	45	65

TABLE NO. 20

ESTIMATED PRESENT CONDITION OF TRACK AND ROADWAY
MONROVIA-GLENDORA LINE - (EL MOLINO TO GLENDORA)

Item	Section		Rail & Date Installed		Estimated Condition Per Cent		
	From	To	Rail Weight	Date	Rails	Ties	Bal.
	(1)	(2)	(Lb.)	Installed			
(1)	El Molino	1st Ave., Arcadia	60	1903	25	50	50
(2)	1st Ave., Arcadia	5th Ave., Arcadia	75	1927	45	50	50
(3)	5th Ave., Arcadia	9th Ave., Monrovia	60	1907	25	50	50
(4)	9th Ave., Monrovia	Shamrock Ave.	75	1926	35	40	40
(5)	Shamrock Ave.	Azusa	70	1907	35	50	50
(6)	Azusa, City of	Azusa, City of	75	1923	75	75	75
(7)	Azusa	Glendora	70	1907	35	50	50

SIERRA MADRE LINE

Item	Section		Rail & Date Installed		Estimated Condition Per Cent		
	From	To	Rail Weight	Date	Rails	Ties	Bal.
	(1)	(2)	(Lb.)	Installed			
(1)	San Marino	Colorado St.	60	1904	40	50	50
(2)	Colorado St.	Central Ave., Sierra Madre	60	1906	40	50	50
(3)	Central Ave.	Sierra Madre Station	72	1933	50	50	50
(4)	Sierra Madre Station	Wilson Trail	60	1906	40	50	50

BALDWIN PARK LINE

Item	Section		Rail & Date Installed		Estimated Condition Per Cent		
	From	To	Rail Weight	Date	Rails	Ties	Bal.
	(1)	(2)	(Lb.)	Installed			
(1)	Valley Jct.	Baldwin Park					
	Inbound		90	1927	80	75	75
	Outbound		90	1945	90	75	75

TABLE NO. 21

ESTIMATED COST OF REHABILITATION

PASADENA SHORT LINE

Item	Section		Immediate (1)	Future (2)	Total Amount (3)
	From	To			
(1)	Oneonta	California St.	\$ 67,600	\$254,794	\$322,394
(2)	California St.	Carhouse (Walnut St.)	5,928	-	5,928
(3)		Sub-total	\$ 73,528	\$254,794	\$328,322

PASADENA OAK KNOLL LINE

(4)	El Molino	Huntington Hotel	\$ 15,418	\$ 16,889	\$ 32,307
(5)	Huntington Hotel	Oak Knoll Circle	47,566	180,864	228,430
(6)	Oak Knoll Circle	Fair Oaks & Colorado	27,202	85,190	112,392
(7)		Sub-total	\$ 90,186	\$282,943	\$373,129

MONROVIA-GLENDORA LINE

(8)	El Molino Jct.	San Marino Jct.	\$ 12,891	\$ 51,564	\$ 64,455
(9)	San Marino Jct.	Santa Anita Ave. (Arcadia)	47,494	189,981	237,475
(10)	Santa Anita Ave.	Myrtle Ave. (Monrovia)	35,467	141,866	177,333
(11)	Myrtle Ave.	Pasadena Ave. (Glendora)	91,940	275,762	367,702
(12)		Sub-total	\$187,792	\$659,173	\$846,965

SIERRA MADRE LINE

(13)	San Marino	Sierra Madre	\$104,000	\$368,000	\$472,000
------	------------	--------------	-----------	-----------	-----------

EL MONTE-BALDWIN PARK LINE

(14)	Valley Jct.	Baldwin Park	\$ 32,565	\$130,263	\$162,828
------	-------------	--------------	-----------	-----------	-----------

COMMON CODE TRACKS

(15)	Valley Jct.	El Molino	\$166,935	\$ 99,470	\$266,405
(16)	Sixth & San Pedro	Valley Jct.	98,247	248,688	346,935
(17)		Sub-total	\$265,181	\$348,158	\$613,340
(18)		Combined Total	\$753,253	\$2,043,331	\$2,796,584

TABLE NO. 22

STATISTICS AND TRENDS
PASADENA VIA SHORT LINE

Month or Year	Revenue Passengers	% Incr. Over Same Period Prior Year	Passenger Revenue	Vehicle Miles	(Cents) Revenue Per Mile	(Cents) Revenue Per Passenger
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1938	1,425,056		\$ 197,981	468,495	42.26	13.89
1939	1,385,806	(2.76)	205,245	463,644	44.27	14.81
1940	1,384,818	(.07)	182,481	468,343	38.96	13.18
1941	1,418,990	2.47	184,964	438,225	42.21	13.03
1942	1,889,395	33.21	251,857	476,421	52.86	13.33
1943	2,462,576	30.34	340,501	534,682	63.68	14.03
1944	2,954,838	19.99	397,306	592,733	67.03	13.45
1945	3,014,188	2.01	417,655	610,040	68.46	13.86
1946	2,956,939	1.90	424,743	585,518	72.54	14.36
<u>1947</u>						
Jan.	257,961	(12.03)	42,878	52,521	81.64	16.62
Feb.	211,213	(9.02)	35,079	42,536	82.47	16.61
Mch.	226,984	(11.25)	36,965	45,922	80.50	16.29
Apr.	215,650	(16.77)	35,620	44,907	79.32	16.52
May	215,522	(10.82)	34,947	44,975	77.70	16.22
June	200,329	(16.69)	33,440	43,126	77.54	16.69
July	209,199	(17.11)	34,756	43,314	80.24	16.61
Aug.	210,530	(15.22)	36,183	42,865	84.41	17.19
Sept.	201,374	(13.18)	34,110	41,994	81.23	16.94
Oct.	204,743	(13.97)	31,772	44,246	71.81	15.52
Nov.	191,989	(13.39)	31,968	41,676	76.71	16.65
Dec.	203,897	(15.84)	31,639	44,572	70.98	15.52
Total '47	2,549,391	(13.78)	419,357	532,654	78.72	16.45
<u>1948</u>						
Jan.	229,481	(11.04)	37,456	49,949	74.99	16.32
Feb.	182,353	(13.66)	33,170	39,997	82.93	18.19
Mch.	196,770	(13.31)	37,112	43,122	86.06	18.86
Apr.	184,996	(14.21)	34,271	41,165	83.25	18.53
May	182,570	(15.29)	33,921	43,757	77.52	18.58
June	183,190	(8.56)	34,700	41,604	83.41	18.94
July	185,467	(11.34)	36,151	38,796	93.18	19.49
Aug.	186,965	(11.19)	37,105	38,126	97.32	19.85
Sept.	179,405	(10.91)	34,376	37,249	92.29	19.16
Oct.	180,567	(11.81)	34,458	38,293	89.99	19.08
Total to Date						
10 mos. 1948	1,891,764	(12.15)	\$ 352,720	412,058	85.60	18.65

(RED FIGURES)

TABLE NO. 23

STATISTICS AND TRENDS
PASADENA VIA OAK KNOLL LINE

Month or Year	Revenue Passengers	% Incr. Over Same Period Prior Year	Passenger Revenue	Vehicle Miles	(Cents) Revenue Per Mile	(Cents) Revenue Per Passenger
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1938	1,568,936		\$ 233,651	576,264	40.55	14.89
1939	1,479,562	(5.70)	219,558	553,780	39.65	14.84
1940	1,487,951	.57	201,543	548,634	36.74	13.55
1941	1,545,224	3.85	210,908	536,478	39.31	13.65
1942	2,084,278	34.89	294,418	573,188	51.36	14.13
1943	2,623,445	25.87	369,010	654,436	56.39	14.07
1944	2,906,414	10.79	386,634	713,296	54.20	13.30
1945	2,853,785	(1.81)	393,239	718,424	54.74	13.78
1946	2,707,648	(5.12)	391,582	701,615	55.81	14.46
<u>1947</u>						
Jan.	246,280	(6.62)	39,866	61,712	64.60	16.19
Feb.	201,768	(8.08)	32,608	51,673	63.10	16.16
Mch.	209,009	(11.28)	33,060	54,515	60.64	15.82
Apr.	201,938	(16.29)	32,495	53,135	61.16	16.09
May	198,784	(5.81)	31,337	53,150	58.96	15.76
June	197,549	(12.45)	32,133	51,850	61.97	16.27
July	188,855	(18.55)	30,558	51,194	59.69	16.18
Aug.	182,066	(18.87)	30,470	49,963	60.99	16.74
Sept.	188,223	(8.79)	31,064	48,613	63.90	16.50
Oct.	197,360	(10.29)	29,758	52,721	56.44	15.08
Nov.	179,147	(13.00)	29,075	48,912	59.44	16.23
Dec.	190,985	(14.11)	28,790	51,239	56.19	15.07
Total '47	2,381,964	(12.03)	381,214	628,677	60.64	16.00
<u>1948</u>						
Jan.	206,747	(16.05)	32,860	54,816	59.95	15.89
Feb.	168,125	(16.67)	29,043	46,942	61.87	17.27
Mch.	182,609	(12.63)	32,761	51,044	64.18	17.94
Apr.	172,725	(14.47)	30,385	49,258	61.69	17.59
May	169,481	(14.74)	29,926	49,034	61.03	17.66
June	174,187	(11.83)	31,380	49,273	63.69	18.02
July	169,157	(10.43)	31,315	42,687	73.36	18.51
Aug.	163,494	(10.20)	30,866	41,406	74.54	18.88
Sept.	153,214	(18.60)	27,964	40,300	69.39	18.25
Oct.	156,860	(20.52)	29,239	41,575	70.33	18.64
Total to date 10 Mos. 1948	1,716,599	(14.67)	\$ 305,739	466,335	65.56	17.81

(RED FIGURES)

TABLE NO. 24

STATISTICS AND TRENDS
MONROVIA-GLENDORA LINE

Month or Year	Revenue Passengers	% Incr. Over Same Period Prior Year	Passenger Revenue	Vehicle Miles	(Cents) Revenue Per Mile	(Cents) Revenue Per Passenger
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1938	850,839		\$ 189,843	522,551	36.33	22.31
1939	838,159	(1.49)	195,025	506,194	38.53	23.27
1940	895,139	6.80	187,356	507,313	36.93	20.93
1941	1,002,126	11.95	199,255	511,668	38.94	19.88
1942	1,323,765	32.10	266,766	564,536	47.25	20.15
1943	2,444,625	84.67	477,954	971,003	49.22	19.55
1944	2,500,928	2.30	470,131	956,124	49.17	18.80
1945	2,730,816	9.19	540,801	973,008	55.58	19.80
1946	2,551,850	(6.55)	541,214	902,726	59.95	21.21
<u>1947</u>						
Jan.	342,744	(7.61)	87,794	102,641	85.54	25.62
Feb.	289,741	(12.48)	73,986	89,789	82.40	25.54
Mch.	210,481	(25.76)	48,682	77,630	62.71	23.13
Apr.	153,738	(25.77)	33,667	62,584	53.79	21.90
May	156,643	(11.79)	33,642	63,193	53.24	21.48
June	151,915	(10.11)	33,594	60,905	55.16	22.11
July	148,151	(18.51)	32,579	61,624	52.87	21.99
Aug.	143,692	(16.01)	32,691	61,402	53.24	22.75
Sept.	146,130	(7.37)	32,815	60,425	54.31	22.46
Oct.	159,847	(2.62)	32,816	63,409	51.75	20.53
Nov.	148,804	(3.64)	32,858	60,164	54.61	22.08
Dec.	180,751	(1.43)	38,920	70,194	55.45	21.53
Total '47	2,232,637	(12.51)	514,044	833,960	61.64	23.02
<u>1948</u>						
Jan.	303,983	(11.31)	75,704	99,918	75.77	24.90
Feb.	263,259	(9.14)	74,784	91,165	82.03	28.41
Mch.	189,379	(10.03)	52,170	72,237	72.22	27.55
Apr.	178,734	16.26	48,583	70,521	68.89	27.18
May	169,945	8.49	45,683	68,235	66.95	26.83
June	145,174	(4.44)	38,573	61,446	62.78	26.57
July	143,592	(3.08)	39,266	62,949	62.38	27.35
Aug.	140,331	(2.34)	39,158	63,059	62.10	27.90
Sept.	138,389	(5.30)	37,311	61,363	60.80	26.96
Oct.	145,608	(8.91)	38,433	63,609	60.42	26.39
Total to Date 10 Mos. 1948	1,818,394	(4.45)	\$489,665	714,502	68.53	26.93

(RED FIGURES)

TABLE NO. 25

STATISTICS AND TRENDS
SIERRA MADRE LINE

Month or Year (1)	Revenue Passengers (2)	% Incr. Over Same Period Prior Year (3)	Passenger Revenue (4)	Vehicle Miles (5)	(Cents) Revenue Per Mile (6)	(Cents) Revenue Per Passenger (7)
1938	299,122	.	\$ 50,984	152,786	33.37	17.04
1939	287,971	(3.73)	50,972	147,253	34.62	17.70
1940	309,475	7.47	47,157	147,206	32.03	15.24
1941	321,495	3.88	43,577	150,326	28.99	13.55
1942	450,635	40.17	62,844	165,176	38.05	13.95
1943	533,708	18.43	73,799	185,107	39.87	13.83
1944	625,311	17.16	82,426	192,385	42.84	13.18
1945	618,190	(1.14)	89,335	198,038	45.11	14.45
1946	594,494	(3.83)	90,345	200,372	45.13	15.20
<u>1947</u>						
Jan.	59,575	6.42	10,099	18,876	53.50	16.95
Feb.	48,504	3.24	8,212	16,125	50.93	16.93
Mch.	52,088	.59	8,628	17,610	48.99	16.56
Apr.	49,880	(7.33)	8,358	16,916	49.41	16.76
May	48,838	4.75	8,065	17,170	46.97	16.51
June	47,942	(.66)	8,149	16,469	49.48	17.00
July	47,567	(3.20)	8,086	15,548	52.01	17.00
Aug.	44,593	(6.76)	7,776	15,026	51.75	17.44
Sept.	44,894	(1.21)	7,766	14,550	53.37	17.30
Oct.	52,210	1.14	8,278	15,907	52.04	15.86
Nov.	47,351	.28	8,085	14,406	56.12	17.07
Dec.	48,899	(1.79)	7,745	16,386	47.27	15.84
Total '47	592,341	(.36)	99,247	194,989	50.99	16.76
<u>1948</u>						
Jan.	54,836	(7.95)	9,115	16,161	56.40	16.62
Feb.	45,599	(5.99)	8,098	14,149	57.23	17.76
Mch.	50,011	(3.99)	9,278	15,899	58.36	18.55
Apr.	48,343	(3.08)	8,704	15,425	56.43	18.00
May	46,469	(4.85)	8,382	14,814	56.58	18.04
*June	46,085	(3.87)	8,379	15,390	54.44	18.18
July	42,594	(9.70)	7,787	15,295	50.91	18.28
Aug.	42,231	(5.30)	7,881	15,744	50.06	18.66
Sept.	41,502	(7.56)	7,571	14,981	50.54	18.24
Oct.	43,500	(16.68)	7,786	15,253	51.05	17.90
Total to Date 10 Mos. 1948	461,170	(7.04)	\$ 82,981	153,111	54.20	17.99

*June 11, 1948 and subsequent includes San Marino-Sierra Madre M. C.

(RED FIGURES)

TABLE NO. 26

STATISTICS AND TRENDS
WATTS-SIERRA VISTA LINE

Month or Year	Revenue Passengers	% Incr. Over Same Period Prior Year	Passenger Revenue	Vehicle Miles	(Cents) Revenue Per Mile	(Cents) Revenue Per Passenger
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1938	4,688,449		\$ 307,425	1,044,451	29.43	6.56
1939	6,457,378	37.73	405,402	1,389,500	29.18	6.28
1940	4,808,601	(25.53)	321,872	960,464	33.51	6.69
1941	5,287,675	9.96	341,232	960,233	35.54	6.45
1942	6,434,506	21.69	443,995	1,004,775	44.19	6.90
1943	7,824,010	21.59	613,043	1,217,165	50.37	7.84
1944	11,507,205	47.08	854,820	1,428,971	59.82	7.43
1945	12,973,031	12.74	903,463	1,571,839	57.48	6.96
1946	13,664,061	5.33	928,051	1,543,299	60.13	6.79
<u>1947</u>						
Jan.	1,107,151	2.45	77,340	121,668	63.57	6.99
Feb.	989,896	(1.95)	68,963	111,609	61.79	6.97
Mch.	1,064,240	(4.30)	72,750	124,623	58.38	6.84
Apr.	1,040,600	(7.12)	72,099	118,969	60.60	6.93
May	1,042,676	(28.03)	70,893	121,521	58.34	6.80
June	1,023,978	(4.53)	71,723	117,757	60.91	7.00
July	1,040,682	(10.90)	72,545	123,750	58.62	6.97
Aug.	1,048,712	(10.88)	75,619	124,457	60.76	7.21
Sept.	1,036,874	(4.50)	73,701	120,886	60.97	7.11
Oct.	1,061,386	(8.06)	69,062	123,194	56.06	6.51
Nov.	991,095	(7.24)	69,277	120,359	57.56	6.99
Dec.	1,052,810	(9.76)	68,466	130,397	52.51	6.50
Total '47	12,500,100	(8.52)	862,438	1,459,190	59.10	6.90
<u>1948</u>						
Jan.	1,023,541	(7.55)	70,087	125,854	55.69	6.85
Feb.	831,446	(16.01)	75,939	112,714	67.37	9.13
Mch.	902,265	(15.22)	85,555	115,909	73.81	12.85
Apr.	825,429	(20.68)	76,779	112,190	68.44	9.30
May	813,247	(22.00)	75,912	110,745	68.55	9.33
June	798,885	(21.98)	76,040	107,048	71.03	9.52
July	812,444	(21.93)	79,598	109,077	72.97	9.80
Aug.	812,628	(22.51)	81,106	109,718	73.92	9.98
Sept.	780,171	(24.76)	75,240	106,307	70.78	9.64
Oct.	792,518	(25.33)	77,032	110,580	69.66	9.72
Total to Date 10 Mos. 1948	8,392,574	(19.74)	\$ 773,288	1,120,142	69.03	9.21

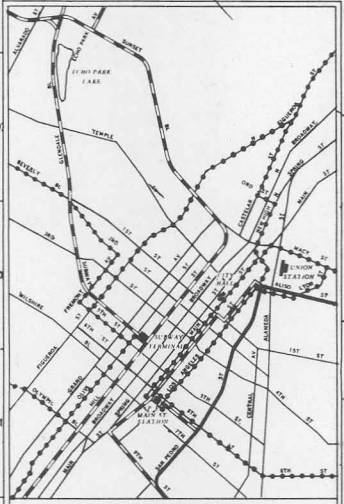
(RED FIGURES)

TABLE NO. 27

STATISTICS AND TRENDS
LOS ANGELES-EL MONTE-BALDWIN PARK LINE

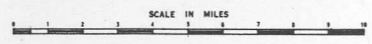
Month or Year	Revenue Passengers	% Incr. Over Same Period Prior Year	Passenger Revenue	Vehicle Miles	(Cents) Revenue Per Mile	(Cents) Revenue Per Passenger
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>1947</u>						
May	154,890		\$ 24,891	54,183	45.94	16.07
June	150,685		24,215	50,646	47.81	16.07
July	154,811		24,878	51,783	48.04	16.07
Aug.	154,447		24,820	51,667	48.04	16.07
Sept.	152,058		24,436	50,416	48.47	16.07
Oct.	161,910		26,019	52,491	49.57	16.07
Nov.	151,076		24,278	50,088	48.47	16.07
Dec.	164,758		26,477	54,994	48.15	16.07
Total Last 8 Mos. 1947	1,244,635		\$200,014	416,268	48.05	16.07
<u>1948</u>						
Jan.	156,462		\$ 25,143	53,443	47.05	16.07
Feb.	139,294		26,981	47,754	56.50	20.39
Mar.	153,745		29,780	53,237	55.94	19.37
Apr.	141,885		27,483	51,188	53.69	19.37
May	141,728	(8.50)	27,453	50,375	54.50	19.37
June	144,973	(3.79)	28,081	46,799	60.00	19.37
July	142,033	(8.25)	27,512	45,540	60.41	19.37
Aug.	141,163	(8.60)	27,343	46,064	59.36	19.37
Sept.	137,038	(9.88)	26,544	47,561	55.81	19.37
Oct.	137,170	(15.28)	26,570	47,608	55.81	19.37
Total to date 10 Mos. 1948	1,437,491	-	\$272,890	489,569	55.74	19.01

(RED FIGURES)





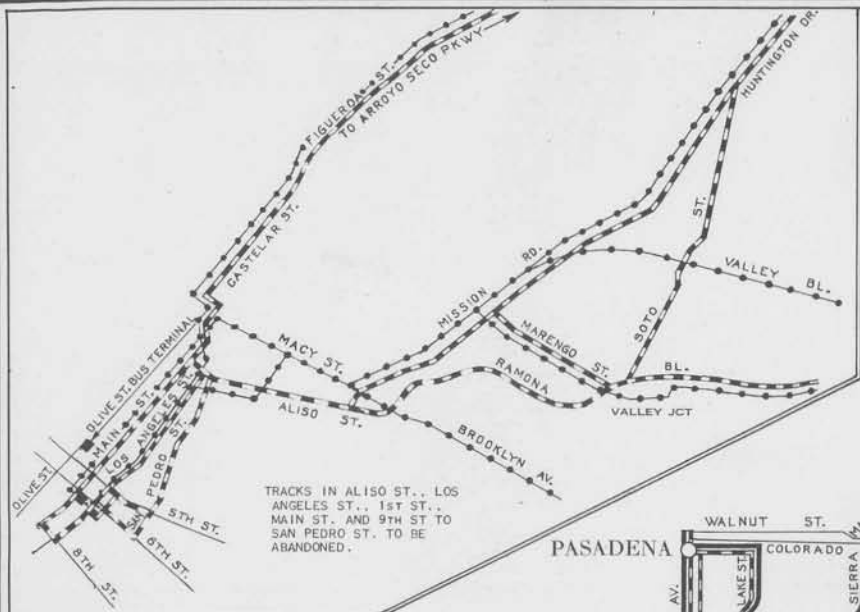
**RAIL AND MOTOR COACH LINES
OF THE
PACIFIC ELECTRIC RAILWAY
IN
SOUTHERN CALIFORNIA**



- LEGEND**
- RAIL LINES—PASSENGER AND FREIGHT
 - - - RAIL LINES—PASSENGER ONLY
 - · · RAIL LINES—FREIGHT ONLY
 - ○ ○ ○ ○ MOTOR COACH LINES

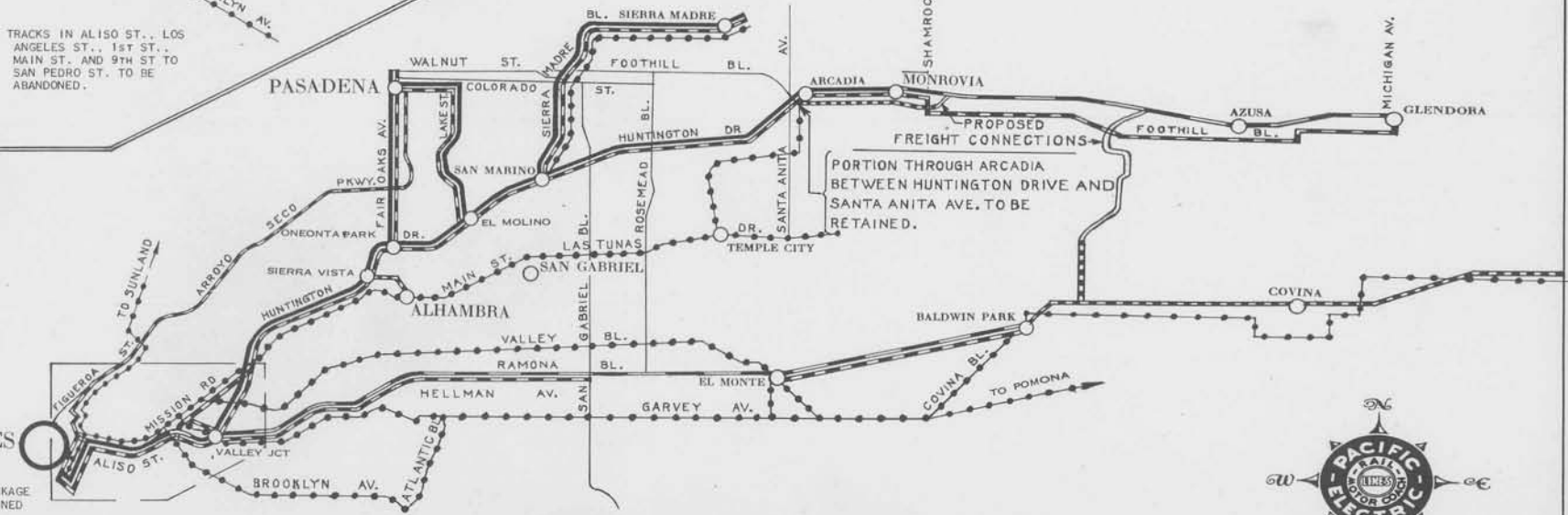
CONTRACTED BY CA

XXX



LOS ANGELES

VIADUCT TRACKAGE TO BE RETAINED



LEGEND

- PRESENT FREIGHT RAIL LINES.
- PRESENT MOTOR COACH LINES.
- PROPOSED RAIL PASSENGER SERVICE ABANDONMENT.
- PROPOSED RAIL ABANDONMENT.
- PROPOSED MOTOR COACH LINES.
- PROPOSED FREIGHT CONNECTIONS

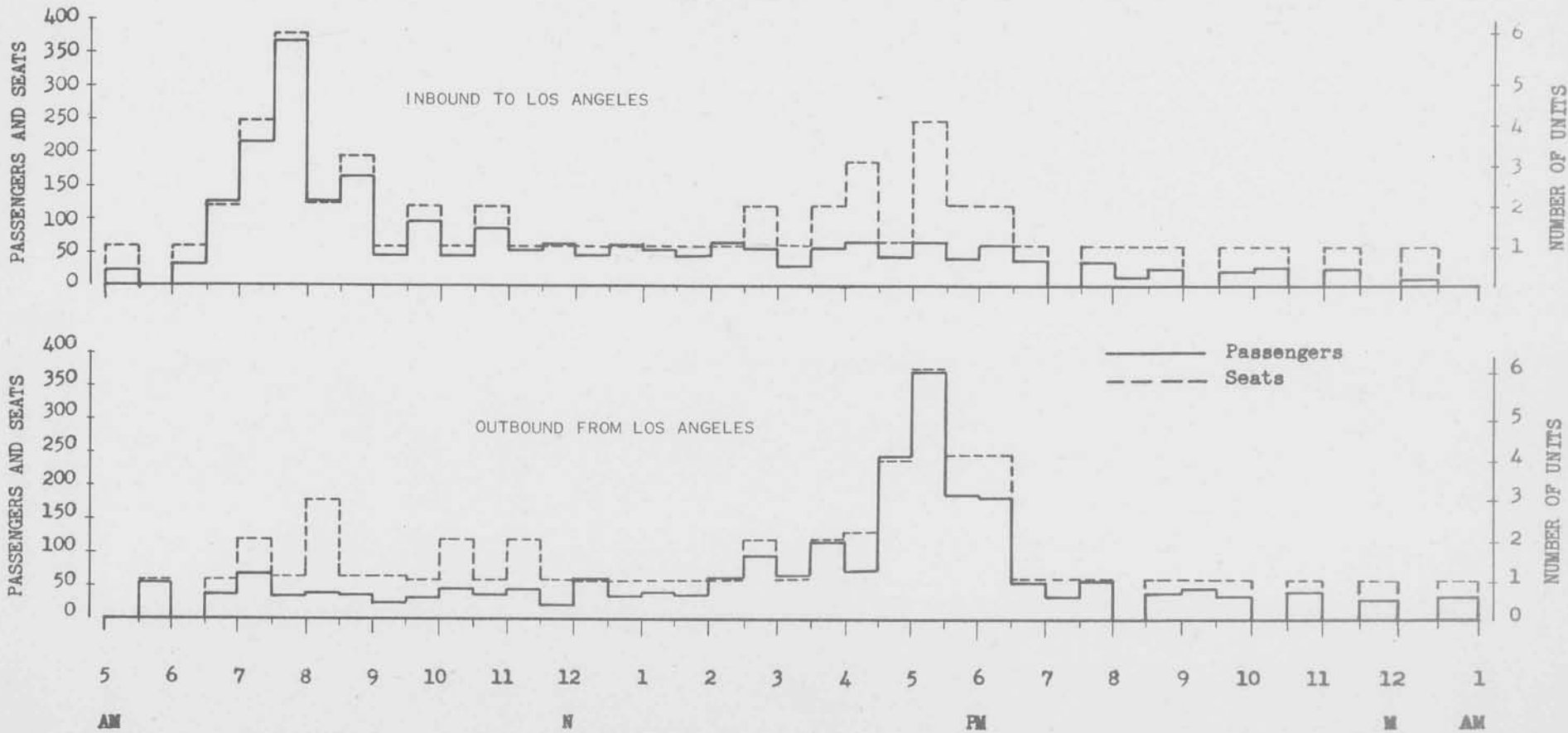
FEB. 5, 1949

MAP NO. III

PACIFIC ELECTRIC RAILWAY COMPANY
PASADENA SHORT LINE

PASSENGERS, SEATS, AND UNITS OF EQUIPMENT
ARRIVING AT VALLEY JUNCTION INBOUND AND LEAVING VALLEY JUNCTION OUTBOUND
BY HALF-HOUR PERIODS ON MONDAY, AUGUST 16, 1948

CHART NO. IV

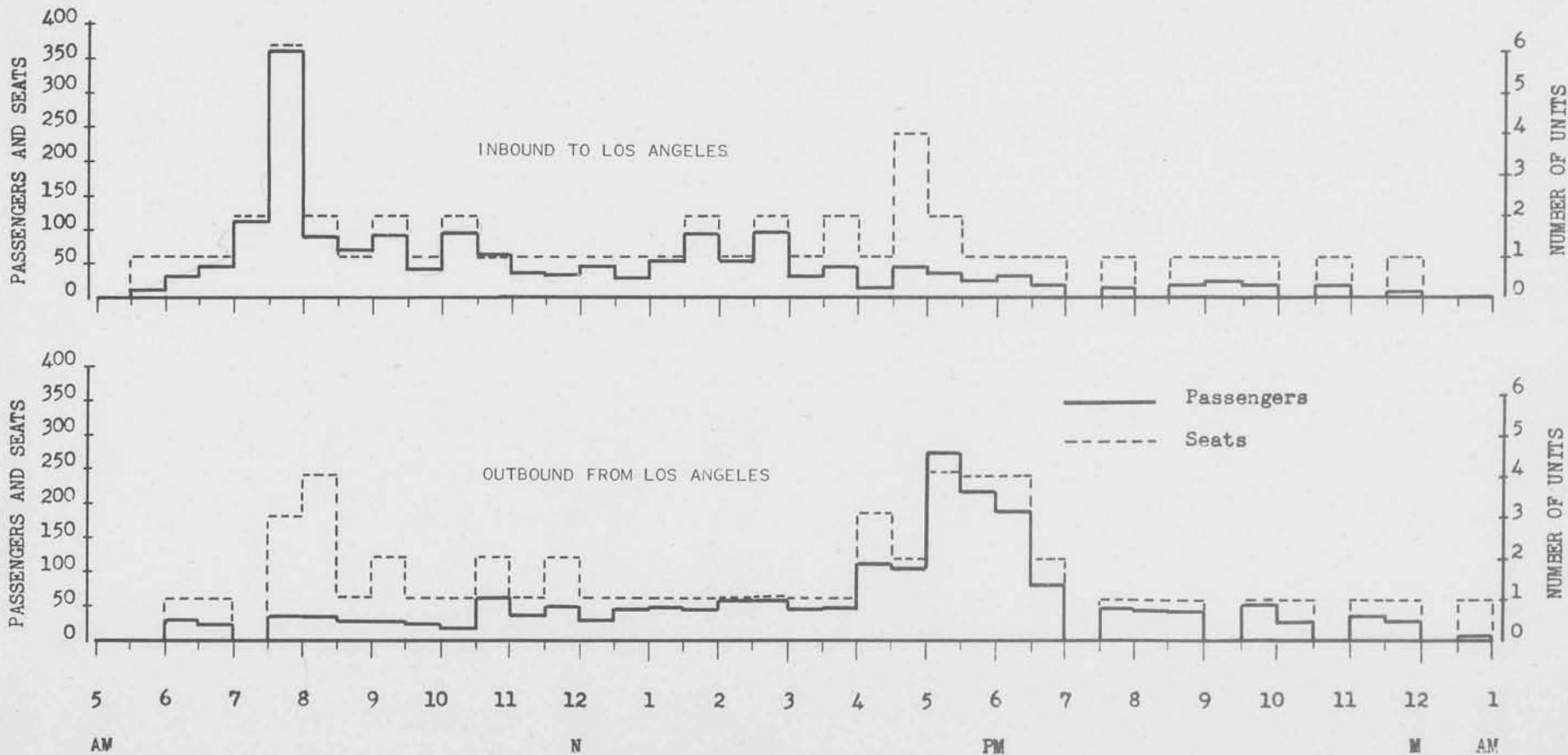


1333

PACIFIC ELECTRIC RAILWAY COMPANY
PASADENA OAK KNOLL LINE

PASSENGERS, SEATS, AND UNITS OF EQUIPMENT
ARRIVING AT VALLEY JUNCTION INBOUND AND LEAVING VALLEY JUNCTION OUTBOUND
BY HALF-HOUR PERIODS ON MONDAY, AUGUST 16, 1948

CHART NO. V



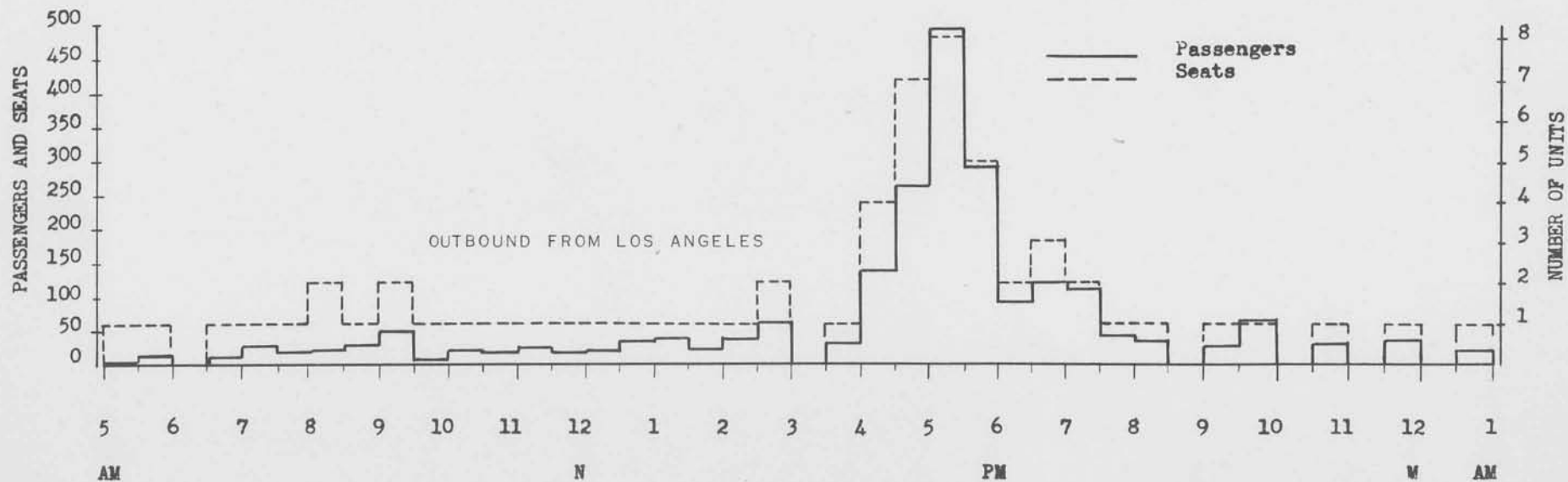
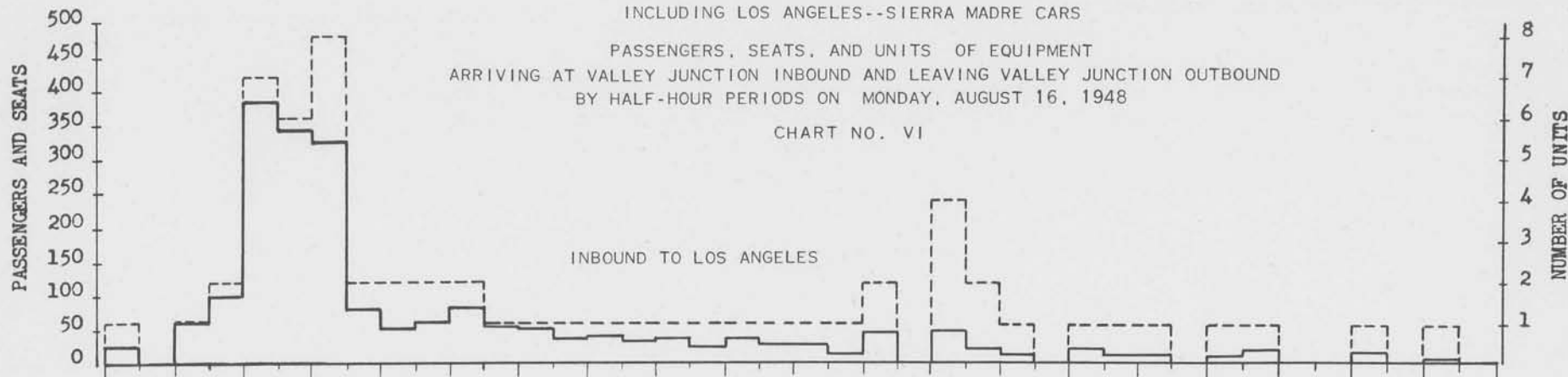
ixxx

PACIFIC ELECTRIC RAILWAY COMPANY

LOS ANGELES - GLENDORA RAIL LINE
INCLUDING LOS ANGELES--SIERRA MADRE CARS

PASSENGERS, SEATS, AND UNITS OF EQUIPMENT
ARRIVING AT VALLEY JUNCTION INBOUND AND LEAVING VALLEY JUNCTION OUTBOUND
BY HALF-HOUR PERIODS ON MONDAY, AUGUST 16, 1948

CHART NO. VI



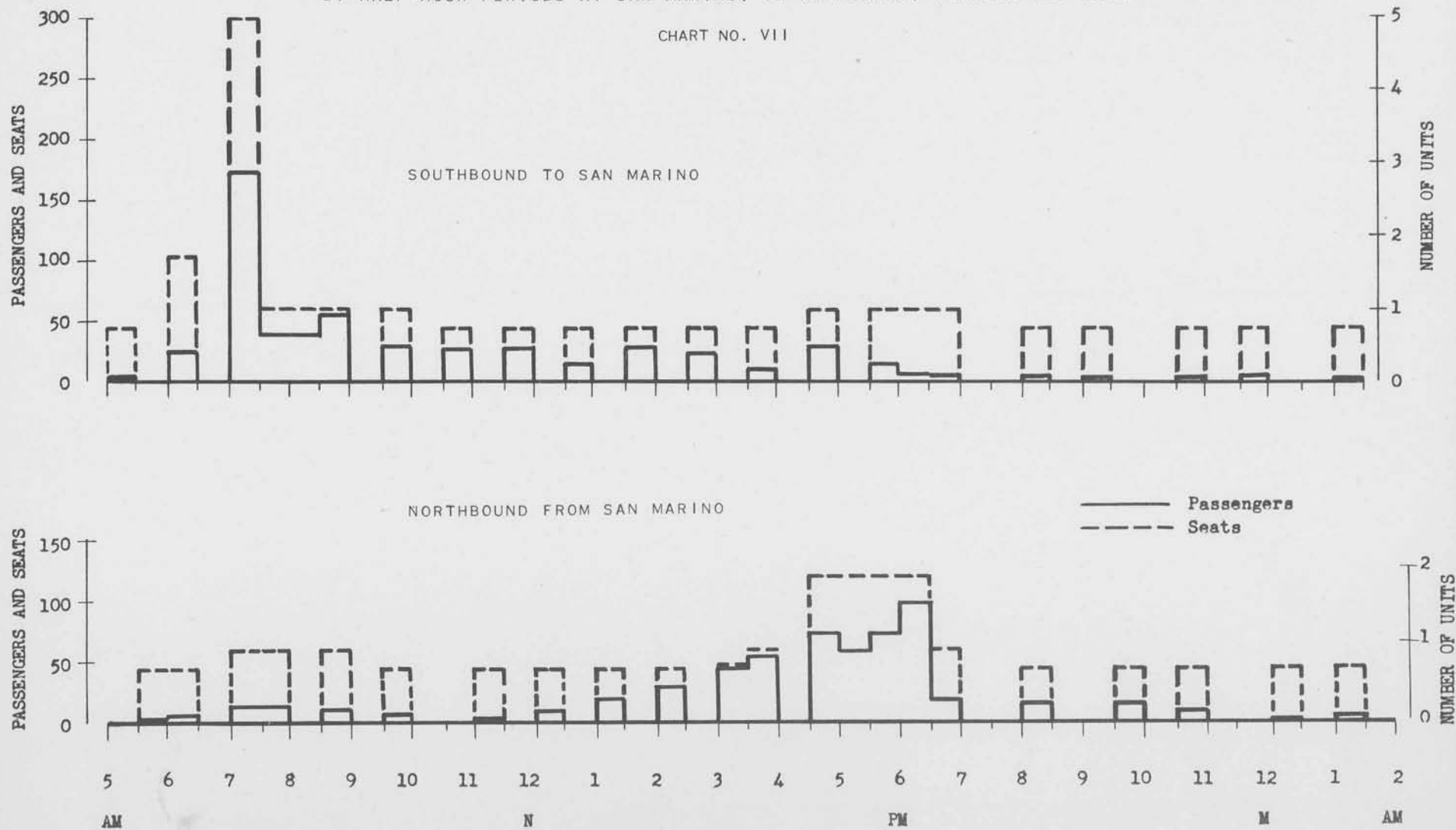
||||xxx

PACIFIC ELECTRIC RAILWAY COMPANY

SAN MARINO - SIERRA MADRE RAIL AND MOTOR COACH LINES

MAXIMUM PASSENGERS, SEATS, AND UNITS OF EQUIPMENT, NORTH OF SAN MARINO
BY HALF-HOUR PERIODS AT SAN MARINO, ON WEDNESDAY, OCTOBER 20, 1948

CHART NO. VII

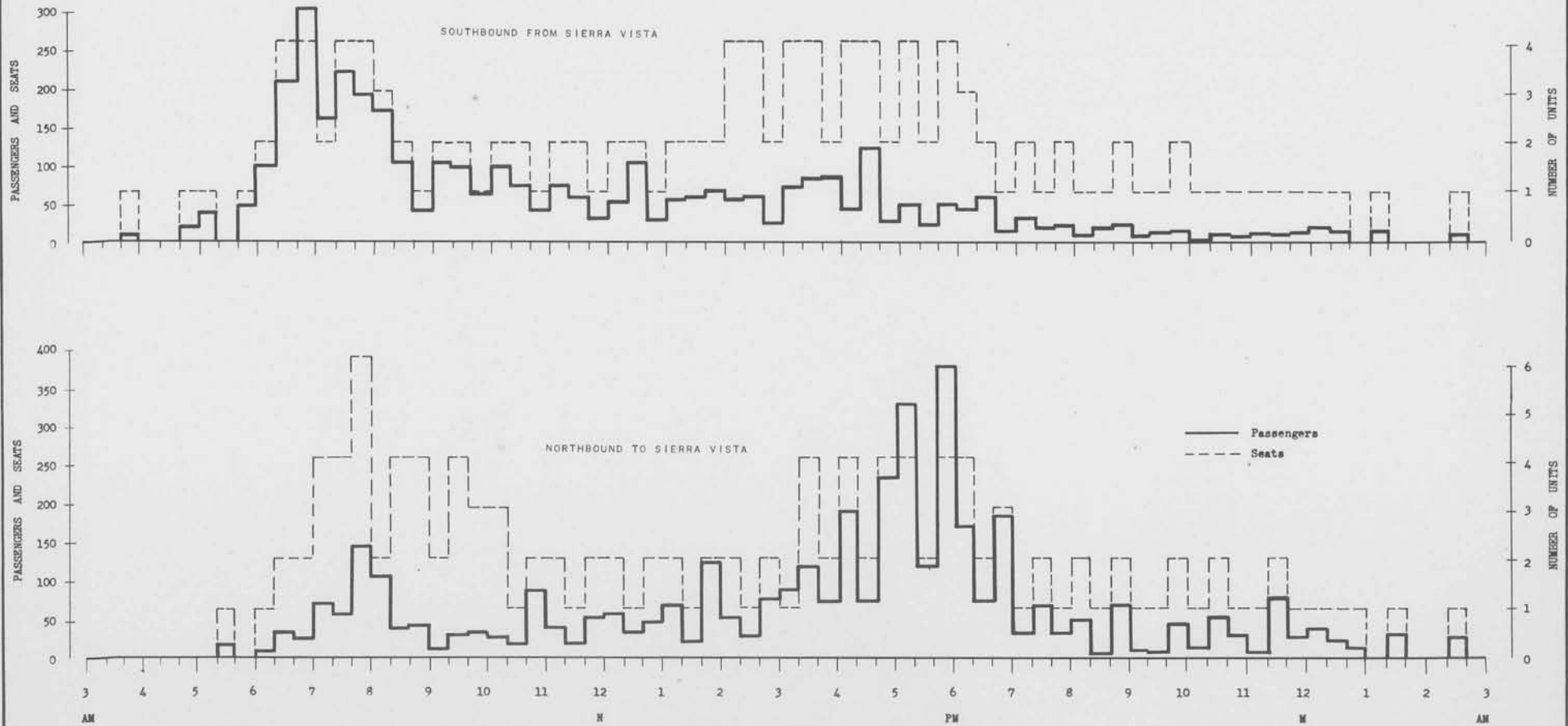


AJXXX

PACIFIC ELECTRIC RAILWAY COMPANY
WATTS--SIERRA VISTA RAIL LINE

PASSENGERS, SEATS, AND UNITS OF EQUIPMENT
ARRIVING AT ALISO STREET AND MISSION ROAD SOUTHBOUND AND LEAVING ALISO STREET AND MISSION ROAD NORTHBOUND
BY 20-MINUTE PERIODS, ON THURSDAY, OCTOBER 14, 1948

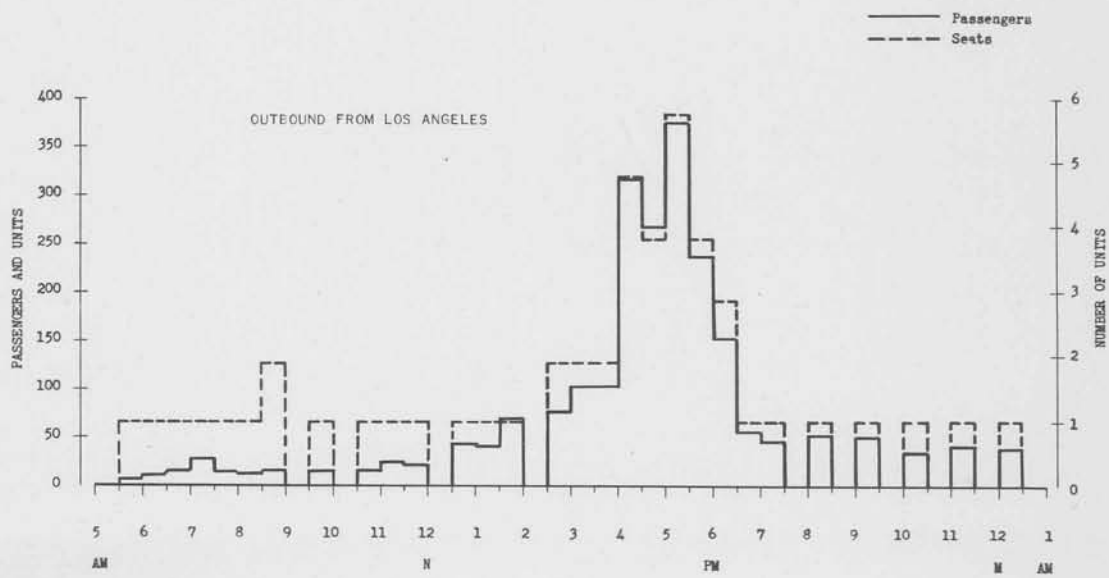
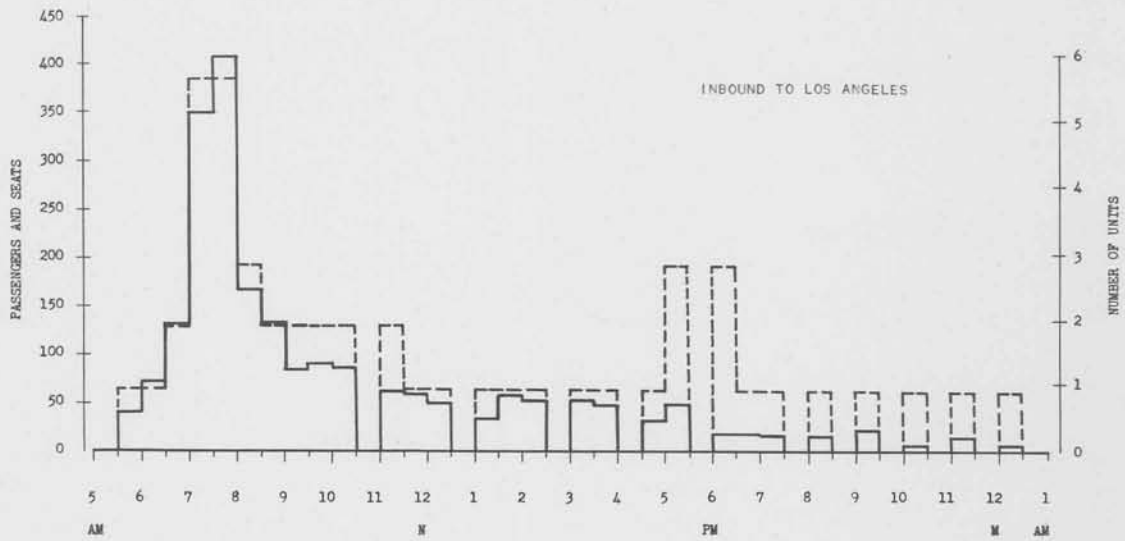
CHART NO. VIII



PACIFIC ELECTRIC RAILWAY COMPANY
 LOS ANGELES-BALDWIN PARK RAIL LINE

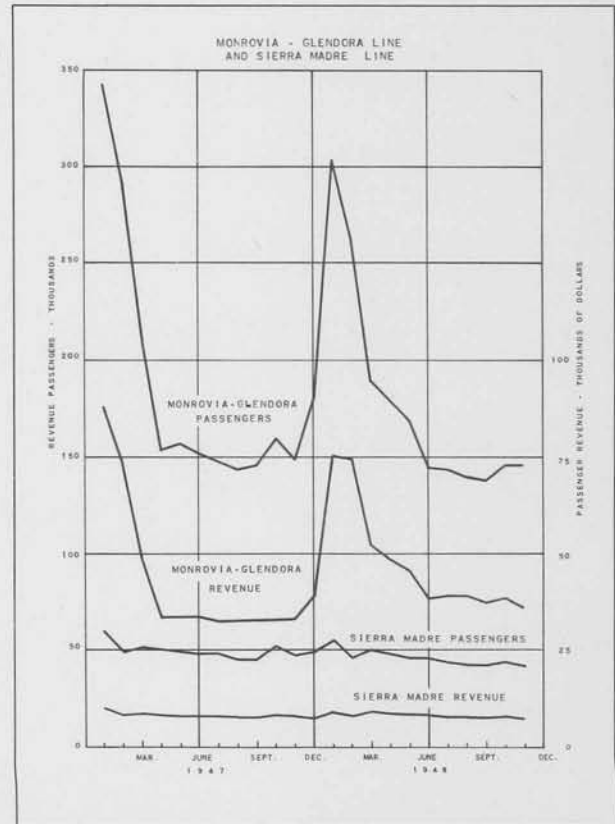
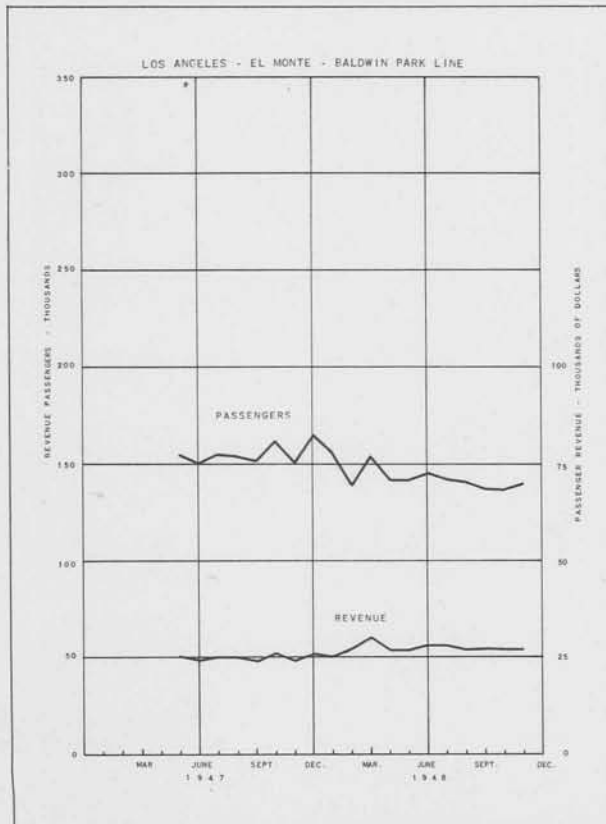
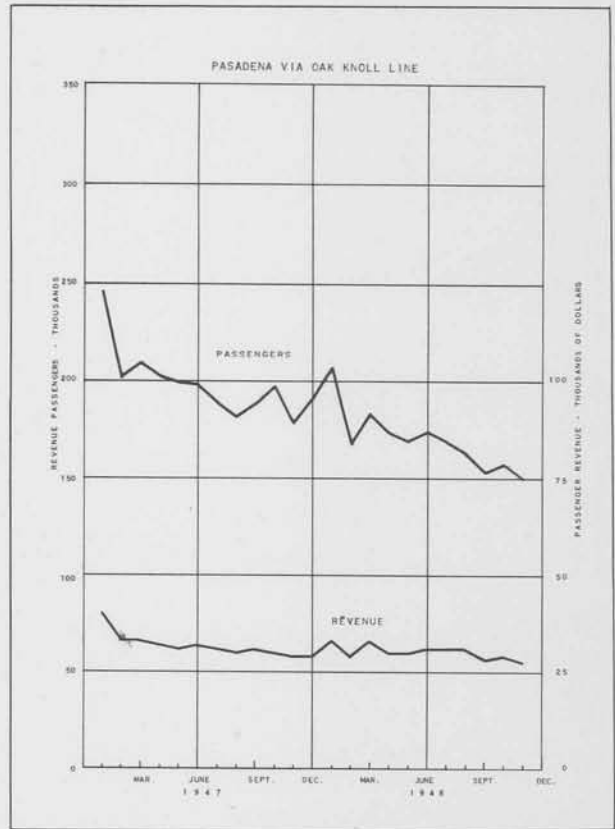
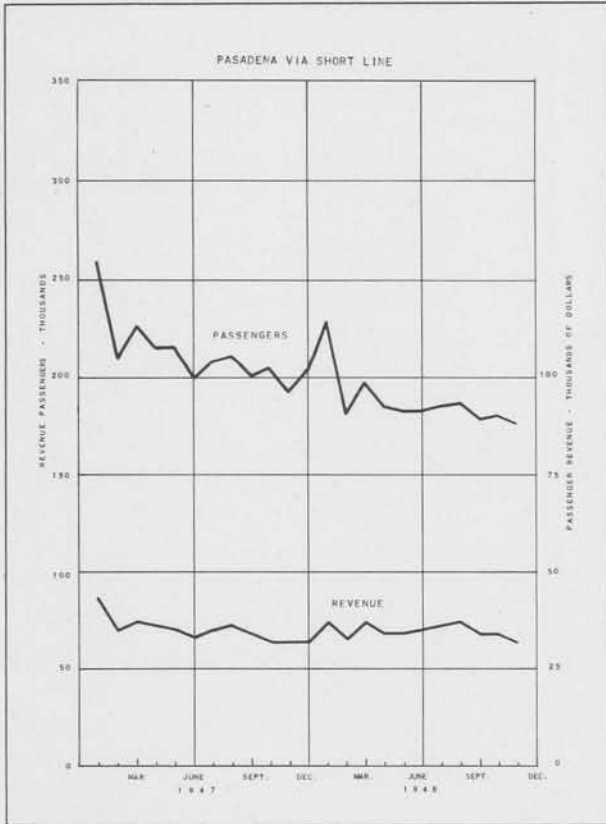
PASSENGERS, SEATS, AND UNITS OF EQUIPMENT
 ARRIVING AT VALLEY JUNCTION INBOUND AND LEAVING VALLEY JUNCTION OUTBOUND
 BY HALF-HOUR PERIODS ON WEDNESDAY, OCTOBER 20, 1948

CHART NO. IX



TREND OF PASSENGERS AND REVENUE BY LINES

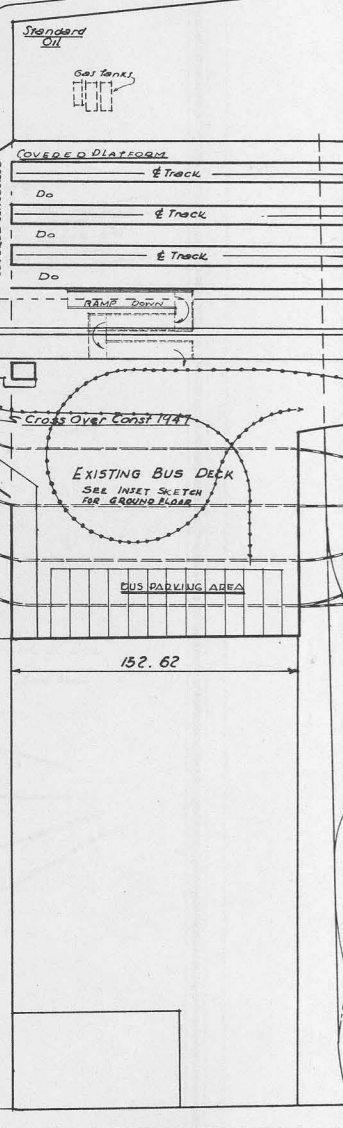
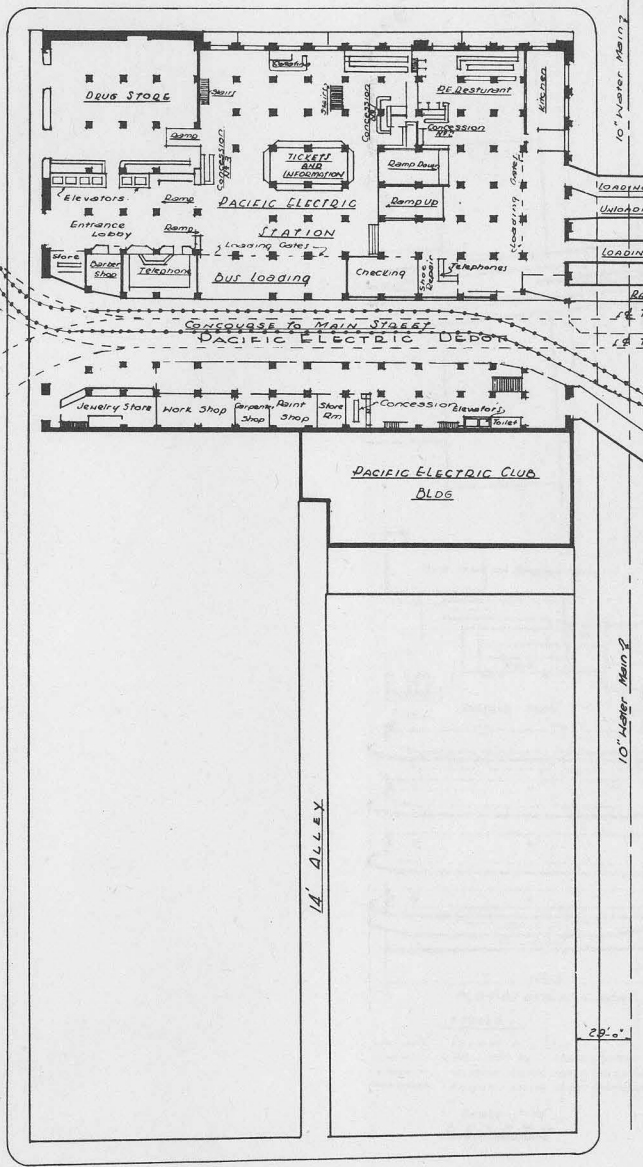
CHART NO. X



MAIN STREET

STREET

SIXTH



E. 35th - 2nd E. N. T H

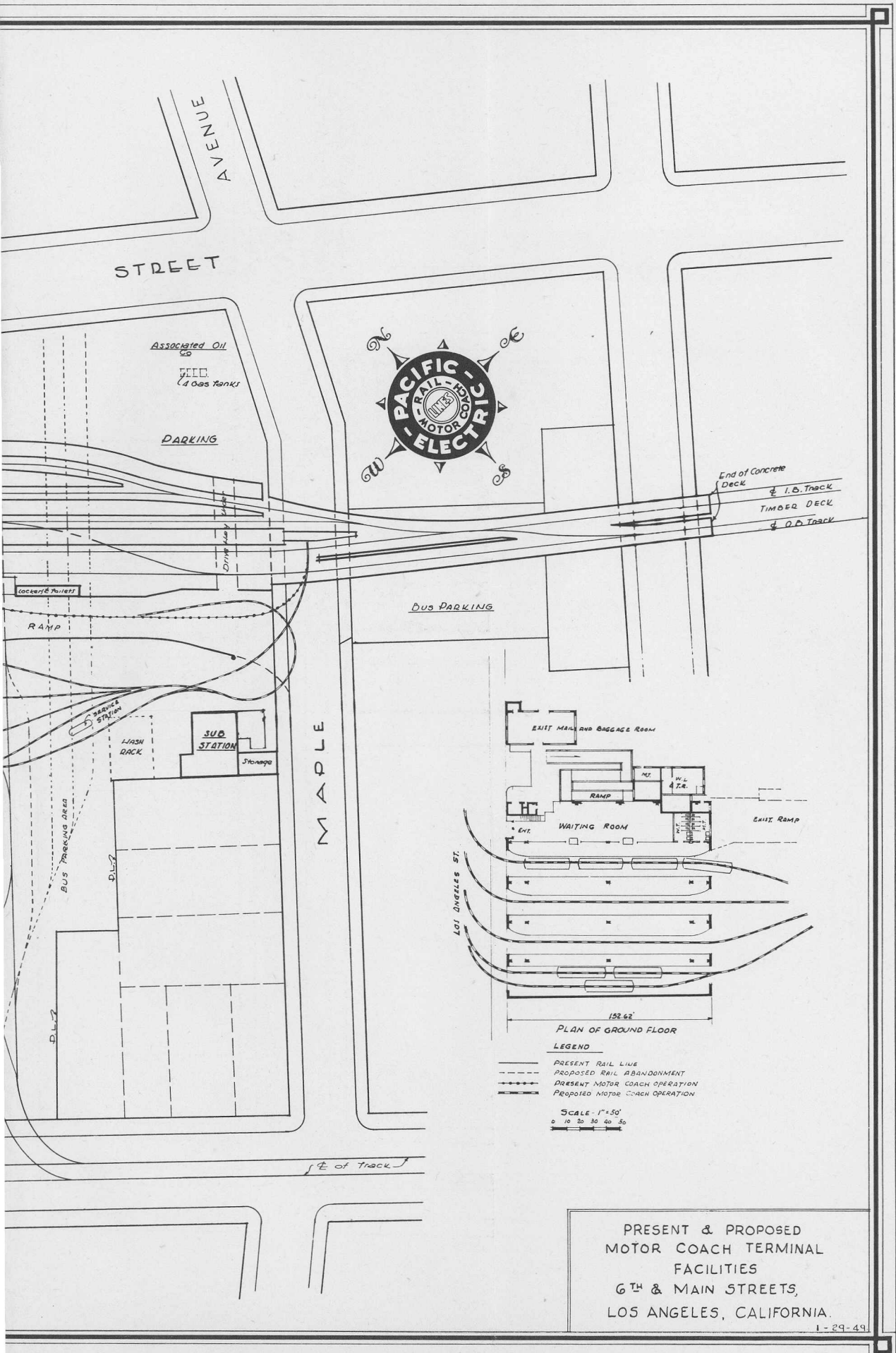
STREET

LOS ANGELES
247.46

LA ALLEY

10' Higher Main St

29'0"



PRESENT & PROPOSED
MOTOR COACH TERMINAL
FACILITIES
6TH & MAIN STREETS,
LOS ANGELES, CALIFORNIA.

W. H.
MAR 4 - 1949

PR 3-D1(8)(SD)

Handwritten:
New Transit, Capital
File
OSC

REPORT ON
ENGINEERING AND ECONOMIC FEATURES
OF
PASSENGER TRANSPORTATION OPERATIONS, SERVICE AND FACILITIES

ON THE

SANTA ANA LINE
NEWPORT BEACH LINE
LONG BEACH LINE
SAN PEDRO LINE
WATTS LOCAL LINE

OF

PACIFIC ELECTRIC RAILWAY COMPANY
LOS ANGELES, CALIFORNIA

COMPARING

- 1. - Present Rail Operations
- 2. - Rail Operations with One-Man P.C.C. Cars
- 3. - Modernized Motor Coach Operation

SUBMITTED TO

MR. O. A. SMITH, PRESIDENT

January 31, 1949

Bureau of Research
No. 49-2

Arthur C. Jenkins
Consulting Engineer

15090648

HE4491

L7

J4

1949

v.2

REPORT ON
COMPARATIVE ECONOMICS, SERVICE AND
OPERATING RESULTS OF
PASSENGER TRANSPORTATION SERVICE ON THE

SANTA ANA LINE

NEWPORT BEACH LINE

LONG BEACH LINE

SAN PEDRO LINE

WATTS LOCAL LINE

January 31, 1949

ARTHUR C. JENKINS

M. AM. SOC. C. E., M. AM. INST. E. E., M. SOC. A. E.

CONSULTING ENGINEER

870 MARKET STREET

SAN FRANCISCO 2, CALIFORNIA

DOUGLAS 2-8023

January 31, 1949

Mr. O. A. Smith, President
Pacific Electric Railway Company
675 Pacific Electric Building
Los Angeles, California

Dear Sir:

As a part of the systemwide rehabilitation studies which you have requested, there is submitted herewith for your consideration a report covering the Southern District passenger rail lines.

This report is one of several that will cover the entire passenger rail system and sets forth the comparative financial results to be expected under the plans of operation studied. Although the comprehensive rehabilitation plan is to cover all phases of the Company's operations, financial results of operation indicated the desirability of proceeding with the rail line modernization survey in advance of others, due to the heavy loss incurred in that branch of service.

During the year of 1947, system passenger rail operations were conducted at a net operating loss of \$3,426,189. Despite the increase of fares that became effective February 1, 1948 and substantial economies brought about during that year, an operating loss before bond interest for passenger rail operations was incurred during the twelve months' period ending October 1, 1948 in amount of \$2,893,962. To attempt further economy through reduction of maintenance and service standards would not be advisable. Other means must be adopted.

Analysis of the Southern District operations indicates that for the present rail passenger service should be continued on the Long Beach Line, the San Pedro Line and the Watts Local Line. It may prove desirable at a later date to make major changes in those lines by consolidation of service or partial motor coach replacement, but at this time it appears desirable to continue the rail service.

This leaves only the Santa Ana Line as the principal problem in the Southern District. The Newport Beach Line is relatively unimportant as its service consists of only one round trip daily during winter and two during summer. Rail traffic can satisfactorily be absorbed by existing motor coach line by addition of a few schedules. Therefore, effort has been concentrated upon the Santa Ana Line in this report.

Mr. O. A. Smith, President
January 31, 1949

Whereas under present conditions, the Santa Ana Line incurs an annual operating loss of \$204,079, that loss can be eliminated and a profit of \$2,400 realized through discontinuance of passenger rail service and establishment of express motor coach service between Santa Ana and Los Angeles over the most direct route.

Present traffic and revenue certainly cannot justify continued rail passenger service and a review of the line's history indicates no possible hope of future development sufficient to financially justify continuation of the line.

Respectfully submitted,

Arthur C. Jenkins

ARTHUR C. JENKINS

Pacific Electric Railway Company

REPORT ON
SOUTHERN DISTRICT PASSENGER RAIL LINES

F O R E W O R D

In the preparation of basic data, assembly of field information, development of cost, revenue and other financial data, the files, resources and personnel of the various departments of the Company have been drawn upon to a substantial extent.

Preparation of the material necessary to completion of this report has involved comprehensive field surveys, exhaustive study of records, extensive cost analysis and the preparation of numerous sets of detailed schedules and manpower assignments, all based upon actual conditions, official records of the Company and standard operating practices.

The wholehearted cooperation and assistance rendered by the various departments and offices of the Company in this work has been of inestimable value. Service rendered by the Research Bureau, Schedule Bureau, Engineering Department and Passenger Traffic Department are worthy of special mention. It is desired to particularly acknowledge the assistance rendered by Mr. H. O. Marler, Passenger Traffic Manager, Mr. D. R. Lewis, Engineering Assistant to the President, and Mr. L. H. Appel, Research Engineer and his staff.

ARTHUR C. JENKINS

Pacific Electric Railway Company

REPORT ON
SOUTHERN DISTRICT LINES

TABLE OF CONTENTS

	<u>Page</u>
Letter of Transmittal	
Foreword	
A - BASIC CONSIDERATIONS	
Purpose and Scope of Study	1
Fundamental Premise	1
Financial Rehabilitation and Service Modernization Requirements.	2
General Modernization Program	3
Public Utilities Commission Proceedings	3
Types of Operation Considered	3
Methods of Computation	4
Description of Southern District Lines	4
B - FINANCIAL ANALYSIS	
Present Status of Net Earnings	5
Santa Ana Line	5
Watts Local Line	6
Long Beach, San Pedro and Newport Lines	6
Operating Ratio and Equivalent Fare Increase	7
C - PRESENT AND PROPOSED OPERATIONS	
Present Routes:	
Santa Ana Rail Line	7
Newport Beach Rail Line	7
Newport Beach Motor Coach Line	8
Present Service:	
Santa Ana Rail Line	8
Newport Beach Rail Line	9
Newport Beach Motor Coach Line	9
Proposed Routes and Service:	
Santa Ana Line	9
Additional Motor Coach Service LA-Newport Beach	10
Traffic Characteristics and Trends	10
Equipment and Facilities	11
Freight Operation	12
Prospects of Future Development	13
Other Operators Serving the Area	13
Similarity to Conditions in Other Areas	13
Prior Proceedings	13

TABLE OF CONTENTS
(Continued)

	<u>Page</u>
C - (Contd).	
Alternate Operation	14
Rehabilitation Requirements	15
D - SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS	
Conclusions	15
Recommendations	16

A P P E N D I X

TABLE OF CONTENTS

LIST OF TABLES

<u>No.</u>		<u>Page No.</u>
1.	Estimated Annual Financial Results from Operations Santa Ana Rail Line	i
2.	Estimated Annual Financial Results from Long Beach, San Pedro, and Newport Beach Rail Line	ii
3.	Statistics and Trends - Santa Ana Rail Line	iii
4.	" " " - Los Angeles-Newport Rail Line	iv
5.	" " " - Los Angeles-Long Beach Line	v
6.	" " " - Los Angeles-San Pedro Line	vi
7.	Estimated Costs of Additional Facilities and Equipment Required	vii
8.	Rehabilitation and Deferred Maintenance - Southern District	viii
9.	Check - On & Off Passengers - LA-Santa Ana Rail Line (inbound only)	ix

LIST OF MAPS AND CHARTS

<u>No.</u>		<u>Page No.</u>
I.	Map of Present Routes (Map 1)	x
II.	Map of Proposed Operations (Map 2)	xi
III.	Chart - Los Angeles-Santa Ana - Passenger and Seats Arriving and Leaving Watts	xii
IV.	Chart - Los Angeles-Santa Ana - Passengers On and Off at Inbound Stations	xiii

* * * *

Pacific Electric Railway Company

COMPARATIVE ECONOMICS, SERVICE AND
OPERATING RESULTS

SOUTHERN DISTRICT PASSENGER RAIL LINES

A - BASIC CONSIDERATIONS

PURPOSE AND SCOPE OF STUDY

The purpose of this study is to analyze the financial and operational characteristics of passenger rail lines of the Southern District of Pacific Electric Railway Company, to determine the extent to which they contribute to the system loss on passenger rail operations, and to develop whatever means may be available to eliminate the loss by rearrangement of operations and modernization of facilities and service. The studies have been conducted with full recognition of the necessity for maintaining the highest possible standard of service to the public at lowest reasonable fares commensurate with the cost of operations.

In line with previous studies of this same series, the scope of analysis has been extended to include the possibilities of new type rail cars of the P.C.C. design as compared with present rail equipment, and the use of motor coaches in replacement of rail operations. The use of conventional P.C.C. type cars was not given full consideration in this instance as urban type of equipment would not be adaptable to the long-haul high-speed operation between Los Angeles and points as far south as Santa Ana, Long Beach and San Pedro. The results of the study do not indicate the desirability, as a part of the primary stages of modernization, to substitute motor coaches for rail service on all lines of the Southern District.

In connection with the Southern District, more so than the Northern District, the motor coach operations presently conducted bear a closer relationship to the over-all problem. In the Southern District, motor coach lines of the Company already operate between Los Angeles and Santa Ana and also between Los Angeles and Newport Beach. The nature of the problem is less involved with respect to the Newport Beach Line, but is much more difficult when considering alternate highway service to Santa Ana, due to the absence of parallel highways immediately adjacent to the rail line.

FUNDAMENTAL PREMISE

In connection with the Southern District the same general concept of objective exists as applies to other rail lines of the system. It has been accepted as a basic assumption in conducting the survey and in deriving the

conclusions and recommendations set forth herein, that the only way in which the public generally can continue to be supplied with passenger transportation of any character by Pacific Electric Railway Company or any other carrier, is for the physical and financial elements of the operation to be adjusted to the extent necessary to produce a reasonable profit to the operator. To propound the theory that standards of service are paramount to the financial solvency of the carrier who is required to provide that service, is tantamount to depriving private industry of its fundamental incentive to remain in business and its inherent rights under the principle of free enterprise upon which the foundation of the economic system of the Country is established.

The problem can be epitomized as consisting of two primary responsibilities: First, that of the carrier to discharge its obligation to the public in the most efficient and effective manner through the exercise of prudent and farsighted managerial discretion; and the second, the obligation of the persons benefiting from the service to pay a sufficient amount in return to offset the cost of providing it and in addition, to assure the Company of a reasonable measure of profit. To attain the desired balance of interests and equities, it is essential that the problems of both principals and the restrictions under which they must function be thoroughly understood and the superficial effects of minutia be subordinated to the paramount issues that go to the more profound consideration of survival or extinction of the transportation system.

FINANCIAL REHABILITATION AND SERVICE MODERNIZATION REQUIREMENTS

The general status of the Company's financial condition has been described in the report on the Venice Short Line, No. PR 3-D1(8)(a), the report on the Northern District Lines, No. PR 3-D1(8)(d,e,f,g), and other exhibits submitted in evidence before the Public Utilities Commission in current proceedings to avoid repetition those considerations will not be repeated herein but reference to them is urged.

To provide an indication of the necessity for conducting this survey, mention will be made only of the major financial picture. Passenger rail service on the lines of Pacific Electric Railway Company for the year of 1947 suffered an operating loss of approximately \$3,500,000. Although some relief was experienced during 1948 as a result of the increase in fares that became effective on February 1st of that year and economies effected through concerted effort on behalf of all departments, most recent figures indicate that during the twelve months' period ending October 31, 1948, passenger rail lines had incurred a loss of \$2,900,000. Of that loss 77% was chargeable to interurban rail lines and 23% to the so-called local lines.

In view of these losses it would not have been prudent for the Company to launch upon a program of rail modernization without first making a careful analysis of the financial possibilities of the future. Maintenance of track and roadway and facilities on the Southern District follow along the same general line as those of other Districts of the system. Except for the Long Beach and San Pedro Lines, maintenance is considerably below proper standard for continued satisfactory rail passenger service and the cost involved to completely rehabilitate on a satisfactory basis is not justified under the existing conditions of patronage and earnings, or under the potential earning or traffic possibilities of the area served.

GENERAL MODERNIZATION PROGRAM

This report on the Southern District interurban lines and the Watts Local Line is one of several reports covering the entire rail passenger operation. Other studies and reports will cover the existing motor coach lines of the system which also are incurring operating losses. The urgency, however, is greater on the interurban passenger rail lines and for that reason they have been accorded prior consideration.

PUBLIC UTILITIES COMMISSION PROCEEDINGS

This study falls within the scope of the Company's general modernization program which is directly related to the proceedings before the Public Utilities Commission of the State of California in Applications Nos. 23053 and 27466, and Case No. 4843. The Commission's Decision No. 41152, dated January 19, 1948, in those proceedings, and exhibits submitted by Commission and Company witnesses prior thereto, are all closely related to this report and those others of the same series. There is also a direct relationship between the subject matter herein and exhibits and testimony submitted in evidence before the Commission at the hearing held in Los Angeles on October 13, 1948, in connection with the Company's application for extension of time on certain provisions of the Commission's order. Particular reference is directed to Exhibits Nos. 46, 47, 48 and 49, and testimony pertaining to them.

TYPES OF OPERATION CONSIDERED

A number of types of operation were considered in studying the Southern District lines, including complete replacement of rail equipment with motor coach operation and also partial discontinuance of service on certain lines. In view of the peculiarities of the area served and the arrangement of the lines themselves, the problem has been considerably different from that found in the Northern or Western Districts.

Also, as indicated above, it would not be practicable to use the light-weight small-capacity P.C.C. type cars designed for urban operation, on the long-haul service of the principal Southern District lines. Use of such equipment, however, could be adapted to the southern end of the Watts-Sierra Vista Line which has been considered to remain as a rail operation for the present.

As to the Santa Ana Line, a careful analysis of statistics and earning condition indicates the desirability of complete discontinuance of rail service. Consideration has been given to the feasibility of cutting the rail service back to Bellflower. However, such an operation could not be conducted at a profit and it was concluded that the only ultimate solution is complete discontinuance of rail passenger service on the line.

On the Newport Beach Line there is only one round trip daily during winter and two during summer operated by rail and it is considered desirable to completely discontinue that service and absorb the traffic on the existing motor coach line by addition of schedules.

As to the Long Beach and San Pedro Lines, consideration was given to the possibility of substituting motor coaches for rail service but in view of the

relatively good condition of track and roadway and the fact that a considerable expenditure has been made recently in completely overhauling and rehabilitating the large-sized type 300 and 400 steel rail cars for the service, and further in view of the fact that these two lines combined possess better than average earning potentialities, it was considered desirable to retain them at least for the time being in rail operation.

METHODS OF COMPUTATION

The methods of computation of financial estimates contained in this report are the same as those used and described in the Venice Short Line and the Northern District reports and it is suggested that reference be made thereto rather than to repeat the complete data herein. Suffice it to say that the estimates contained in this report are based, to the fullest extent possible, upon actual conditions, actual schedules, traffic checks made during representative periods, and the application of most recent wage rates to the schedules and run assignments computed for the purpose.

DESCRIPTION OF SOUTHERN DISTRICT LINES

The Southern District rail lines consist of the following:

- Los Angeles-Long Beach Line
- Los Angeles-San Pedro Line
- Los Angeles-Balboa Line
- Los Angeles-Santa Ana Line
- Los Angeles-Watts Local Line

Detailed specifications of these lines will be found in a following section. In general they may be described at this point as radiating from Los Angeles into the area to the south, all operating over common track between the Los Angeles Main Street Passenger Terminal and Watts. At Watts the Santa Ana Line diverges and proceeds southeasterly over a diagonal route to Santa Ana. From Watts the San Pedro and Newport Beach lines proceed over common track to Dominguez Junction. At that point the San Pedro Line diverges and proceeds southwesterly to San Pedro. From Dominguez Junction the Long Beach and Newport Beach Lines proceed southerly to the Willow Street Junction at which point the latter diverges from the Long Beach Line and proceeds southeasterly along the ocean front to Newport Beach. The track has been removed between Newport Beach and Balboa and motor coach service was substituted for rail operation sometime ago. From Willow Street Junction the Long Beach Line proceeds along American Avenue for a relatively short distance through the main business section of Long Beach to a terminal near the ocean front. The relative locations and lengths of the lines can be observed by reference to the map attached to the Appendix.

Between Los Angeles and Watts the lines operate over a four-track right-of-way which traverses a completely built-up industrial and manufacturing area, with flanking residential sections. On the Santa Ana Line between Watts and the Los Angeles River a residential area is traversed and between Los Angeles River and Garden Grove the territory is largely occupied by agricultural activities, dairy farms, grazing areas and citrus groves. Along the line south of Bellflower the population density is very light, the heaviest concentration being at the town of Garden Grove a few miles north of Santa

Ana. The Santa Ana Line is unique in that none of its length between the Los Angeles River and Santa Ana is parallel to automobile highways. It crosses almost all of the north and south, and east and west highways on a diagonal, making it virtually impossible to establish a motor coach operation that would parallel the line directly throughout its entire length or for any small portion of its length.

After leaving Watts on the San Pedro, Long Beach and Newport Beach Lines, the territory is quite sparsely settled with exception of the City of Compton and the more thickly populated areas near Long Beach and the industrial area of San Pedro and Wilmington.

Beyond Willow Street the line to Newport Beach is basically a freight line and passenger service consists of only one round-trip per day during winter and two during summer. The Watts Local Line is the southern end of the Watts-Sierra Vista Local Line. For purpose of this study it has been contemplated that the northern end of the line to Sierra Vista would be converted to motor coach operation and the Watts end retained as rail.

B - FINANCIAL ANALYSIS

PRESENT STATUS OF NET EARNINGS

The general earning status of the Southern District Lines has been referred to in a previous section under Basic Considerations relating the Southern District to other Districts and showing the financial results of operation for the twelve months' period ending October 31, 1948.

In connection with the economic analyses made for the purpose of this report a complete annual operating cost and revenue statement has been prepared on an estimated basis projected into the coming twelve months' period. These calculations have been made upon the basis described above as to the method of computation.

Santa Ana Line - It will be noted from Table No. 1 of the Appendix that rail passenger operations, if continued on the Santa Ana Line will incur an annual loss of \$204,079. Due to the impossibility of establishing a motor coach service directly paralleling the rail line that would provide all present patrons with continued service, a direct comparison of motor coach costs in replacement service cannot be computed. The situation is one where the passenger rail line is to be abandoned and the traffic between Santa Ana and Los Angeles will be taken care of by an amplification of existing motor coach operations to the extent required to meet traffic demands. Intermediate points must be served by other means.

It is estimated that the additional service by motor coach will operate at a profit of \$2,400 annually. Under these conditions, the financial improvement will be essentially the elimination of loss that would be experienced under continued operation by rail. Estimates of financial results of operation as shown in detail by Table No. 1 of the Appendix are summarized as follows:

<u>Type of Operation</u>	<u>Per Cent Load Factor</u>	<u>Net Operating Income</u>	<u>No. of Units Required</u>
Present Rail	Present - 100%	(\$204,079)	18
	150	(166,692)	14
One-Man Rail	Present - 100	(135,781)	23
	150	(98,042)	18
One-Man Rail to Bellflower	Present - 100		
	(1 hr. Base)	(76,597)	15
	(30 min. Base)	(101,834)	15
	- 150		
	(1 hr. Base)	(38,441)	11
	(30 min. Base)	(64,697)	11
Motor Coach	Present	\$ 2,386	3

(RED FIGURES)

The above figures apply to the end results of operation on the Santa Ana Line alone and do not include the corresponding figures that might apply to the Long Beach, San Pedro and the Watts Local Lines.

Estimates were made of the results that would accrue from cutting the Santa Ana Line back to Bellflower instead of eliminating the line entirely. The results are shown in detail on Table No. 1. Briefly, the data can be summarized as follows:

One-Man Operation to Bellflower

<u>Plan</u>	<u>Net Operating Loss</u>
<u>Hourly Base Service</u>	
Present Load Factors	\$ 76,597
Proposed Load Factors	38,441
<u>Half Hourly Base Service</u>	
Present Load Factors	101,834
Proposed Load Factors	64,697

It will be seen from this summary that short line service to Bellflower cannot be conducted profitably under one-man operation. Actually, there is serious question as to whether one-man cars would be permitted on this line due to freight service and other complications.

Watts Local Line - Under present operations the Watts-Sierra Vista Local rail line is estimated to incur an annual operating loss of \$20,445. By separating the north and south ends of the line and using one-man operation on the Watts end, it is estimated that an operating profit would be realized in amount of \$169,800 annually. If it should develop that one-man operation cannot be effected, then that profit would be reduced to about \$100,800.

Long Beach, San Pedro and Newport Beach Lines - Table No. 2 of the Appendix shows the financial results of operation as estimated for the Long Beach, the San Pedro and the Newport Beach passenger rail lines. Annual

operating net for these lines is estimated at a \$33,295 profit, \$79,224 loss, and \$21,567 loss, respectively. These figures indicate that combining the Long Beach and San Pedro Lines during off-peak periods might well eliminate the loss for the San Pedro Line or at least, materially reduce it.

As to the Newport Beach Line there is no hope of converting the loss into a profit under continued rail service. Actually, even upon discontinuance of rail service and absorption of the traffic by the existing motor coach line, the latter will continue to operate at a loss of more than \$80,000 annually. At present the motor coach line is operated at an annual loss of \$75,000. Under the circumstances it might be wise to turn the operation over to some other carrier already operating on restrictions between Long Beach and Balboa.

OPERATING RATIO AND EQUIVALENT FARE INCREASE

Upon the basis of the estimates made relative to the Santa Ana Line, it appears that the overall financial improvement will be approximately \$206,500 annually. Elimination of the present heavy annual loss is, of course, a real gain and to obtain the same net financial improvement through an increase in fares would require a 44.5 per cent increase; and correspondingly, to effect the same improvement through reduction in cost of operation would require a curtailment of 30.5 per cent of operating expenses. It is obvious that neither one nor the other of these could be accomplished.

C - PRESENT AND PROPOSED OPERATIONS

PRESENT ROUTES

Santa Ana Rail Line - From Main Street Station in Los Angeles, the Santa Ana Line operates via elevated structure to San Pedro Street, thence in paved city streets along San Pedro Street, Ninth Street and Olympic Boulevard to Hooper Avenue, thence southerly over private right-of-way paralleling Long Beach Avenue, Santa Ana Boulevard, Fernwood Avenue (Lynwood) and continuing in a diagonal direction through Clearwater, Bellflower, Artesia, and Garden Grove to Artesia Street, Santa Ana, thence in paved city street along Fourth Street to Pacific Electric's Santa Ana Station.

On the four-track system over private right-of-way between Olympic Boulevard and Hooper Avenue in Los Angeles, and 103rd Street in Watts, the Santa Ana Line service is operated on the inside pair of tracks, with double-track operation over 0.76 miles from Watts to Socorro, and single-track operation for 22.82 miles from Socorro to King Street at the western city limit of Santa Ana. From King Street to Santa Ana station, the line is double track, for a distance of 2.53 miles.

From the Los Angeles River (which lies a little east of Lynwood) to Santa Ana, the Santa Ana Line passes through agricultural areas, with little residential or commercial development, except in the communities of Clearwater, Bellflower, Artesia, Garden Grove, and Santa Ana. Industries along the line are infrequent. Freight service is operated over the entire length of the line from Los Angeles to Santa Ana and beyond to Greenville.

Newport Beach Rail Line - This line follows the same route as the Long

Beach Line between Los Angeles and Willow Street in Long Beach, at which point it branches easterly through Long Beach to Seal Beach, thence follow- in the ocean front to Newport Beach. From approximately Willow Street to Newport Beach, the line is single track.

Only one round trip per day, daily except Sundays, is operated on the line for the transportation of passengers, particularly between Los Angeles and East Long Beach, Seal Beach, Huntington Beach, and Newport. The principal passenger transportation service between such points is provided by the Los Angeles-Balboa Motor Coach Line.

Numerous industries are located on the section of this line east of Willow Street in East Long Beach, Seal Beach, Huntington Beach and Newport Beach. Freight service is provided over the entire line between Los Angeles and Newport Beach.

Newport Beach Motor Coach Line - Motor coach service is now operated from Main Street Station in Los Angeles, via 6th Street, Boyle Avenue, 8th Street, Olympic Boulevard, Anaheim-Telegraph Road, Lakewood Boulevard and Pacific Coast Highway through a portion of Long Beach, thence through Seal Beach, Sunset Beach, Huntington Beach, and Newport Beach to Balboa. There is also an alternate route through Belmont Shore (Long Beach), via Ximeno Avenue, 2nd Street, Central Avenue and Main Street (Seal Beach) to Pacific Coast Highway.

Population along the route is centered in the communities of East Los Angeles, West Bellflower, Lakewood Village, Belmont Shore (a part of the City of Long Beach), Seal Beach, Sunset Beach, Huntington Beach, Newport Beach and Balboa. Between such communities there is much territory that is sparsely settled or undeveloped in any way and little or no traffic is produced. With exception of the Belmont Shore and Newport-Balboa areas, the density of population is comparatively low in the communities named. From Seal Beach to Balboa, the beach towns are popular summer resorts, with many residents remaining there only during summer months. Whereas, in the early years of the rail line there was relatively heavy recreational travel, that traffic now moves largely by automobile.

The route serves the Vultee Aircraft plant near Downey and the former Douglas Aircraft plant at Lakewood Village, but since the war little passenger traffic is developed by these industries.

PRESENT SERVICE

<u>Santa Ana Rail Line</u>	
Length of route	15.33 miles to Bellflower 33.49 miles to Santa Ana
Number of trains (daily except Saturdays and Sundays):	
	28 LA to Bellflower
	22 LA to Santa Ana
	29 Bellflower to LA
	22 Santa Ana to LA

(Santa Ana Rail Line continued next page)

(Santa Ana Rail Line continued from page 8)

LOS ANGELES to - - - - -	Daily Except Saturdays and Sundays							
	AM PEAK		BASE		PM PEAK		NIGHT	
	Bell- flower	Santa Ana	Bell- flower	Santa Ana	Bell- flower	Santa Ana	Bell- flower	Santa Ana
Scheduled running time	40"Ltd 49"Loc	82"Ltd 91"Loc	45"	91"	41"Ltd 47"Loc	88"Ltd 92"Loc	44"	85"
Cars required	--17--		--4--		--14--		--3--	
(4 - 1200 Class)								
(13 - 300-400-450 Class)								
Average miles per hr.	23.0Ltd 18.8Loc	27.9	20.4	22.1	22.4Ltd 19.6Loc	25.8	20.9	23.6
Approximate headways	20-30"	30-40"	30-60"	60"	20-30"	25-35"	70-80"	70-80"

Newport Beach Rail Line

Length of Route 38.0 miles

Number of trains (daily except Sundays):

Winter - 1 - LA to Newport

1 - Newport to LA

Summer - 2 - LA to Newport

2 - Newport to LA

Scheduled running time - approximately 1 hr. 25 minutes

Cars required: 2 - 1200-Class

Average miles per hour - 26.8

Newport Beach Motor Coach Line

	via Pacific Coast Highway		via Ximeno Ave. and 2nd Street	
	Seal Beach	Balboa	Seal Beach	Balboa
	Length of route	27.4	43.35	29.0
Number of one-way trips (daily except Saturdays and Sundays)				
Outbound	2	1	*21	9
Inbound	2	2	#22	7
Scheduled running time	61"	1'34"	1'6"- 1'16"	1'40"- 1'49"
Motor coaches required - 15 (various types)				
Average miles per hour	26.9	27.6	26.4- 22.9	27.0- 24.8

* - includes 2 trips to Lakewood Village

- includes 2 trips from 7th & Ximeno and

3 trips from Lakewood Village

Seal Beach trips include trips running through
to or from Balboa.

PROPOSED ROUTES AND SERVICE

Santa Ana Line - In the event of discontinuance of through rail passenger service between Los Angeles and Santa Ana, it is proposed to establish

additional limited motor coach service between such cities direct via Firestone Boulevard and Santa Ana Boulevard, serving only Santa Ana.

For the most part, Pacific Electric now operates its Los Angeles-Santa Ana motor coach service over the route proposed, the exceptions being on Firestone Boulevard and Santa Ana Boulevard between Buena Park and Santa Ana.

	<u>Limited Route via Firestone and Santa Ana Blvds.</u>
Length of route	33.4 miles
Number of one-way trips per day (daily except Saturdays and Sundays)	
Outbound	3
Inbound	3
Scheduled running time	1:5"
Average miles per hour	30.8 miles
Number of coaches required	3

Additional Motor Coach Service LA-Newport Beach - Should present Los Angeles-Newport Beach rail passenger service be discontinued, it is proposed to establish one additional round trip by motor coach between Los Angeles and Balboa, and two additional round trips by motor coach between Los Angeles and Seal Beach to meet winter traffic requirements and proportionately more schedules during summer months when travel increases.

TRAFFIC CHARACTERISTICS AND TRENDS

As a part of the appendix of this report there will be found a number of statistical tables showing the characteristics of traffic volume, revenue, and other data on the several Southern District lines for a period of years from 1938 to and including 1948, with monthly breakdown from January 1947 to and including October of 1948. Percentages of increase or decrease in revenue passengers by months during 1947 and 1948 compared with the same month of the previous year are shown on each of the statements referred to.

It is significant to note that with exception of the Newport Beach Line there has been a material reduction each month in the number of passengers carried as compared with the same month of the previous year on each of the Southern District rail lines, particularly the Watts Local Line, the San Pedro Line and the Long Beach Line. On the latter two lines the percentage decrease has been in excess of 10 per cent for each month of the year of 1948, averaging for the eleven months 15.51 per cent decrease on the San Pedro Line; 23.10 per cent on the Long Beach Line; and for a ten months' period ending October 31, 1948, an average decrease of 19.74 per cent on the Watts end of the Watts-Sierra Vista Line. The percentage of decrease on the Santa Ana Line has not been as heavy as on the other main Southern District Lines. However, the traffic on the Santa Ana Line, as indicated by the statistical table, indicates that there has been almost a standard monthly pattern established which has not fluctuated to any considerable extent. This would indicate that on that line the traffic carried has been reduced to a post-war minimum of necessity riders and that although there has been a decrease, on the average, for the first ten months of 1948 of 10.51 per cent, the rate of diminution is not as great as on the other heavier volume lines.

There is a distinct difference between the revenue in cents per car mile

on the Santa Ana Line as compared with the other two main Southern District Lines. For the ten months' period of 1948 the average revenue per mile was only 65.68 cents on the Santa Ana Line as compared with 89.24 cents on the San Pedro Line and 93.40 cents on the Long Beach Line. This is another indication of the need for concentrated attention upon the Santa Ana Line.

Looking further to the Newport Beach Line, it will be noted that the revenue per car mile is only an average of 58.15 cents for the first eleven months of 1948.

Traffic checks were made on the Santa Ana Rail Line and the results are shown by Table No. 9 and Chart No. IV. in the Appendix. The check shows that intermediate points between Santa Ana and Bellflower contributed only 20.6 per cent of the total traffic; that 38.8 per cent originated in Santa Ana, and 40.8 per cent originated at Bellflower and west. It should be kept in mind when referring to this traffic data that there are 22 round trips daily on week days between Los Angeles and Santa Ana and 28 between Los Angeles and Bellflower.

The ratio of passengers to seats on the Santa Ana Rail Line is shown by Charts in the Appendix.

EQUIPMENT AND FACILITIES

Equipment presently used on the Southern District Lines consists of thirty units of 300, 400 and 1200 Class cars on the Long Beach Line; twenty-six units of the 300, 400 and 1200 Class cars on the San Pedro Line; and three units of 1200 Class on the Newport Beach Line. On the Santa Ana Line a maximum of eighteen units are required. During the base period four units of 1200 Class are used and during the peak period ten units of the 300, 400 and 450 Class cars are operated.

As to assignment of rail passenger cars, no change will be necessary on the Southern District rail lines that will remain in operation. The Long Beach and San Pedro Lines will continue to be equipped with the type of cars presently in operation.

There has been some consideration given to the possible advisability of using 600 Class cars on the Long Beach and San Pedro Lines in the event that the Northern District replacement program is authorized by the Public Utilities Commission and motor coach service is placed in operation on the line involved. If that is accomplished, there will be a surplus of 600 Class cars available. Careful consideration of all of the elements involved, however, indicate that there would be no advantage in using the 600 Class cars on the Long Beach and San Pedro Lines. This is because of the fact that the large capacity steel rail cars of the 300 and 400 Class that have recently been completely rebuilt and equipped for operation on the Long Beach and San Pedro Lines are in excellent condition and have a higher economic passenger capacity than the 600 Class cars.

As to the motor coaches to be used on the Santa Ana and Newport Beach Lines, they will be of the conventional type of modern design.

The 300, 400 and 450 Class rail cars used on the Southern District Lines are of heavy duty all-steel construction, built for long distance interurban

service. They were obtained from the San Francisco Bay Area, some of them formerly having been operated on the Northwestern Pacific Railway inter-urban passenger service in Marin County and others were formerly operated by Interurban Electric Railway Company between San Francisco and Oakland in commutation service. These cars were put into service on Pacific Electric operations during the war when the heavy traffic of war industries in the Long Beach-San Pedro-Wilmington Area overtaxed the facilities then available. Subsequent to the war these cars were put through the shops at Torrance and completely rehabilitated as to their interiors, including installation of new and modern overhead lighting, completely new seats and installation of interior panelling both overhead and on the sides. Approximately \$7,500 was spent on each car in this program. With this reconstruction work the cars should be capable of providing satisfactory service with no unreasonable maintenance cost for a considerable number of years.

As to other facilities in connection with the Southern District Lines it is not contemplated that any change will be made except removal of passenger station facilities on the Santa Ana Line and the Newport Beach Line where not required for motor coach operation, and eventual conversion from electric power to diesel locomotive power in freight operations on those two lines.

Rail service on the Long Beach, San Pedro and Watts Local Lines will continue to be operated from and to the Main Street Passenger Terminal in Los Angeles over the present route via San Pedro Avenue and the rail ramp to the station.

In the event that the Sierra Vista end of the Watts-Sierra Vista Line is replaced by motor coaches as recommended in the Northern District Report, the Watts end of the line should be rerouted to follow the same tracks as the Long Beach and San Pedro Lines to the rear of the Main Street Terminal, thereby eliminating rail operations on Ninth Street and Main Street.

FREIGHT OPERATION

Heavy freight service is conducted over the Southern District rail lines, particularly between Amoco Junction and Watts along the four-track right-of-way and between Watts and the Long Beach-Wilmington-San Pedro Area. A relatively heavy freight traffic is also conducted on the Santa Ana Line. Freight service is also performed on the Newport Beach Line between Long Beach and Newport Beach. For the year of 1947 gross freight revenue on the Santa Ana Line amounted to \$290,000, which is only about \$86,000 more than the estimated operating loss on passenger operations. Out of each dollar of gross freight revenue only about 16.5 cents is retained as operating net which would mean that on the Santa Ana Line only \$47,800 of operating profit would accrue. This is, of course, not sufficient to justify maintaining the passenger loss of \$204,000, if the problem of keeping both freight and passenger or losing both.

Under the proposed rearrangement of operations there will be no appreciable change in freight service excepting on the Santa Ana Line. Under present conditions the operation of passenger and freight service jointly over the single track portion of the line results in interference with both passenger and freight operation. By elimination of passenger service it will be possible to materially expedite freight movements, eliminating the delays that are

now required in providing for meeting of freight and passenger trains. This expedited freight operation will result in some reduction in freight costs by cutting down the number of crew hours.

PROSPECTS OF FUTURE DEVELOPMENT

A review of the history of the Santa Ana Line indicates conclusively that the future holds no reasonable prospects for substantial increase in passenger traffic and certainly does not possess favorable potentialities as to improved passenger earning conditions. As indicated above, the area served by this line is predominantly agricultural with sparsely settled residential areas at long intervals apart. Its primary function from a passenger carrying standpoint is as a connection between Santa Ana and Los Angeles.

This line is typical of other rail lines of the system presently existing and already discontinued. Population and commercial development, in accordance with modern trends, have taken place along the principal highway routes and in general those communities that formerly thrived along the rail line, with exception of Bellflower and Garden Grove, have deteriorated and even in those two communities the business centers have developed toward the principal automotive arteries.

OTHER OPERATORS SERVING THE AREA

There is an appreciable amount of traffic between Garden Grove and Santa Ana of a local character, but many miles are wasted between Los Angeles and Garden Grove to carry those local passengers which could easily be accommodated by extension of lines of the local Santa Ana motor coach operator.

A survey has been made of other operators in the general area served by the Santa Ana Line and it develops that there exists an extensive network of independent operators serving the same communities served by the rail line of Pacific Electric. This is particularly true in the area surrounding Bellflower and communities to the immediate south.

No doubt satisfactory arrangements could be worked out to extend the service of these independent carriers so as to adequately meet requirements of the communities that would otherwise be left without service by discontinuance of the Santa Ana passenger rail line. Even if such were not possible, the traffic is not sufficient to justify continued rail service.

SIMILARITY TO CONDITIONS IN OTHER AREAS

The principal problem involved in considering discontinuance of passenger service on the Santa Ana Line is the absence of parallel highways in the immediate vicinity of the line. The advisability of discontinuing passenger service on this line has been considered previously on numerous occasions over a period of years extending prior to World War II. In each instance the inability to provide a parallel service has been the predominant factor in discarding the proposal. Conditions have now developed to a point where this consideration can no longer be allowed to control.

PRIOR PROCEEDINGS

Elimination of rail passenger service on this line will result in a situation typical of that with which the Company has been confronted on other

passenger rail lines where inadequacy of traffic has justified discontinuance of passenger rail service, and the State Railroad Commission authorized abandonment without substitute service. As examples, attention is directed to the area formerly served by the Redondo Beach via Gardena Line and the Torrance line. In each of those instances the traffic was insufficient to justify continuation of rail service and it was discontinued without replacement by motor coach operation under provision of the Commission's Decision No. 32599 dated December 5, 1939.

In Exhibit No. 73 submitted by the Commission's Engineering Staff on March 31, 1939 in Application No. 21656, the Santa Ana Line was discussed at considerable length commencing at Page 26. Quoting from that report, this was said by the Commission Engineers:

"Combined patronage of both passenger and freight is not sufficient to justify continuation of the rail service."

"Even in spite of this condition of restrictive routes, consideration should be given to the abandonment of passenger rail service beyond Bellflower."

In view of the consolidated proceedings under which these matters are to be considered, it is necessary that reference be made to Exhibit No. 32 submitted by the Commission's Engineering Staff in this proceeding and point out certain conditions that are not apparent from that report. On Page 37 of the report, a tabulation is shown of the traffic and earning statistics of the Santa Ana Line from 1938 to and including 1946. Each statistical indication in that table shows a remarkable increase in 1946 as compared with 1939 with exception of the revenue per passenger. It points out that traffic on that line in 1945 was 723 per cent of that carried in 1940. Passenger revenue was shown to be \$635,905 in 1945 as compared with \$81,612 in 1940. Those figures standing alone without corresponding cost figures might give the wrong impression as to the value of this line in passenger service. For comparison of more recent figures, the passenger revenue for the year of 1947 was \$492,843 and the cost of operation exclusive of any share of bond interest or fixed charges, was \$792,257. Whereas, Exhibit 32 shows revenue per mile of \$0.56 in 1946, the cost of operation per mile in 1947 was \$0.9967 per mile. Revenue per mile for the year of 1947 was \$0.6195, which resulted in an operating net loss of 37.72 cents per each car mile operated. Under these conditions it is prohibitive to think of expending large sums for reconstruction of rail facilities or of establishing express service.

ALTERNATE OPERATION

As indicated heretofore, the intermediate traffic on the Santa Ana Line is extremely light, the principal volume being between the City of Santa Ana and Los Angeles. It is proposed herein that this need be met by establishing modern motor coach service between Santa Ana and Los Angeles on non-stop schedules operated over the most direct route during the morning and evening peak period of traffic. Motor coach operation is already provided between Santa Ana and Los Angeles over two alternate routes; however, they are not limited or express schedules and require a considerably longer time in transit than would be true on the proposed express schedules.

Some consideration has been given to the advisability of retaining rail

service on the Santa Ana Line as far south as Bellflower but such an operation would be conducted at a loss of about \$101,000 per year. Therefore, it is concluded that the appropriate action at this time is to discontinue passenger service on the Santa Ana Line throughout its entire length.

REHABILITATION REQUIREMENTS

The standard of maintenance of track and roadway on the Santa Ana Line is materially below par and to bring its condition up to a proper level for continued rail passenger service, whether with new equipment or old, will require a large expenditure during the coming few years. It is estimated that an immediate expenditure of approximately \$879,000 would be required, followed by a further cost of approximately \$218,000, or a total of \$1,097,000. The immediate requirements for rehabilitation on the Long Beach and San Pedro Lines are only about \$107,000. Details as to these costs are set forth in a table of the appendix.

For freight operation only on the Santa Ana Line, the present condition of track and roadway, with a normal maintenance program, will be satisfactory.

D - SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS

Based upon the results of the survey conducted in connection with the Southern District passenger rail lines as set forth in this report, it is concluded that:

1. There is no justification, either present or potential, for continuation of passenger rail service on the Santa Ana Line.
2. Present operations of rail passenger service are conducted at an annual operating net loss of \$204,000.
3. Under no other form of rail operation can a profitable service be performed.
4. Continued rail passenger service to Bellflower only would be operated at a loss of \$102,000 annually.
5. For each car mile operated in passenger service during 1947 a loss of 37.72 cents was incurred.
6. Discontinuance of rail passenger service will permit abandonment of electrical substations and distribution facilities at material savings in cost of operation and maintenance, through use of diesel locomotives in freight operation.
7. There is no hope that development in the area served will ever produce sufficient revenue to justify continued rail passenger operation on the lines involved.
8. Capital and reconstruction expenditures of approximately \$894,000 on a nonprofitable rail line will be avoided.

9. There appears to be no prospect of obtaining sufficient financing to carry out the large expenditures for continued rail service.
10. The net financial improvement of motor coach substitution over present rail operation would be \$206,000 annually.
11. To bring the present deficit up to that reasonable return by fare adjustment would require an increase in rates of about 44.5 per cent, assuming no loss of patronage.
12. The differential in improved net income as between substitution of P.C.C. cars and motor coaches is so greatly in favor of the latter that controversial estimates of traffic stimulation and other relatively minor issues can be dispensed with completely.
13. By obtaining the required financial improvement through substitution of types of vehicles, drastic increases in passenger fares that would otherwise be mandatory, may be avoided.
14. Discontinuance of passenger rail service on the Santa Ana Line will present no different problems than those that existed in connection with other lines previously abandoned without substitute motor coach service. (C.R.C. Dec. 32599, 12-5-39).
15. The loading characteristics and traffic on this line are such that motor coach operation can meet all requirements in a highly satisfactory manner.
16. There is no feasible means of converting the losses of this line into a reasonable profit.
17. Rail passenger service should be continued on the Long Beach, San Pedro and Watts Local Lines for the present.
18. Pacific Electric Railway Company is not pioneering this movement from rails to highways, but is actually bringing up the rear in the procession after having suffered financial adversity for a much longer period of years than its fellow operators have been able to survive.

RECOMMENDATIONS

Based upon the above conclusions and the results of the survey generally, it is recommended that:

1. Rail passenger service be discontinued in its entirety on the Santa Ana Line.
2. Expedited peak-hour limited-schedule service be established by motor coach between Santa Ana and Los Angeles over the most direct route using equipment of most modern type designed for comfort and convenience in long-haul service.

3. Permit the local Santa Ana operator to extend service between Santa Ana and Garden Grove.
4. Permit existing independent carriers in the vicinity between Watts and Bellflower and at other points along the line to carry traffic on an unrestricted basis.
5. Discontinue rail passenger service on the Newport Beach Line.
6. Provide for the absorption of traffic now carried on the Newport Beach Rail Line on existing motor coach service between Los Angeles and Newport Beach.
7. At the earliest convenient time replace electric power facilities on freight operations of the Santa Ana Line and other exclusively freight lines of the Southern District with diesel locomotives.
8. To the extent possible without interference to important freight functions, abandon trackage on the Newport Beach Line.
9. Reroute the Watts Local rail line so as to operate from the rail terminal at the Main Street station over the ramp and along San Pedro Street on joint trackage with the Long Beach and San Pedro Lines.
10. Motor coach operation in replacement of rail service be routed as described herein and make use of the proposed expanded motor coach terminal facilities in the rear of the Main Street station.
11. Passenger rail service be continued on the Long Beach, San Pedro and Watts local lines for the present.
12. Consideration be given to establishing shuttle service on the San Pedro Line between San Pedro and Dominguez Junction during off-peak hours.

Respectfully submitted,

ARTHUR C. JENKINS
CONSULTING ENGINEER

TABLE NO. 1

SANTA ANA LINE
ESTIMATED ANNUAL FINANCIAL RESULTS FROM OPERATIONS

NO.	ITEM	PRESENT RAIL OPERATION		PROPOSED ONE-MAN RAIL OPERATION		PROPOSED ONE-MAN RAIL OPERATION LOS ANGELES -- BELLFLOWER				PROPOSED LOS ANGELES- SANTA ANA LTD. MOTOR COACH SERVICE
						PLAN 'A'		PLAN 'B'		
		PRESENT L.F.	PROPOSED L.F.	PRESENT L.F.	PROPOSED L.F.	PRESENT L.F.	PROPOSED L.F.	PRESENT L.F.	PROPOSED L.F.	
1	PASSENGER REVENUE	\$467,176	\$467,176	\$467,176	\$467,176	\$233,588	\$233,588	\$233,588	\$233,588	\$ 45,990
2	OTHER REVENUE	5,446	5,446	5,446	5,446	2,723	2,723	2,723	2,723	621
3	TOTAL REVENUE	472,622	472,622	472,622	472,622	236,311	236,311	236,311	236,311	46,611
4	OPERATING EXPENSES & TAXES	676,701	639,314	608,403	570,660	312,908	274,752	338,145	301,008	44,225
5	NET INCOME OR LOSS	\$(204,079)	\$(166,692)	\$(135,781)	\$(98,042)	\$(76,597)	\$(38,441)	\$(101,834)	\$(64,697)	\$ 2,386
----- DETAIL OF OPERATING EXPENSES -----										
<u>I. WAY & STRUCTURES</u>										
6	MAINTENANCE	\$ 88,858	\$ 88,858	\$ 88,858	\$ 88,858	\$ 37,437	\$ 37,437	\$ 37,437	\$ 37,437	\$ 192
7	DEPRECIATION	24,608	23,031	27,454	25,848	13,294	11,659	15,189	13,554	92
8	TOTAL WAY & STRUCTURES	113,466	111,889	116,312	114,706	50,731	49,096	52,626	50,991	284
<u>II. EQUIPMENT</u>										
9	MAINTENANCE	53,787	50,341	27,379	25,777	13,258	11,627	15,147	13,517	3,449
10	TIRES & TUBES	--	--	--	--	--	--	--	--	943
11	DEPRECIATION	9,213	8,623	46,000	36,000	30,000	22,000	30,000	22,000	7,714
12	OTHER EQUIPMENT COSTS	20,103	18,815	22,428	21,116	10,861	9,525	12,408	11,073	383
13	TOTAL EQUIPMENT	83,103	77,779	95,807	82,893	54,119	43,152	57,555	46,590	12,489
<u>III. POWER</u>										
14	POWER USED	44,827	41,954	35,103	33,050	16,998	14,908	19,421	17,330	--
15	OTHER POWER COSTS	24,325	22,766	19,048	17,934	9,224	8,090	10,539	9,404	--
16	TOTAL POWER	69,152	64,720	54,151	50,984	26,222	22,998	29,960	26,734	--
<u>IV. CONDUCTING TRANSPORTATION</u>										
17	TRAINMEN-OPERATORS WAGES	196,726	184,122	108,986	102,615	68,264	59,857	69,051	61,623	15,660
18	INSPECTING, CLEANING & LUBRICATING EQUIPMENT	49,753	46,565	55,507	52,261	26,879	23,573	30,710	27,404	2,560
19	FUEL & OIL	--	--	--	--	--	--	--	--	4,216
20	OTHER TRANSPORTATION COSTS	45,921	42,979	51,232	48,235	24,809	21,758	28,344	25,293	2,300
21	TOTAL CONDUCTING TRANSPORTATION	292,400	273,666	215,725	203,111	119,952	105,188	128,105	114,320	24,736
22	V. TRAFFIC	4,706	4,405	5,251	4,944	2,543	2,230	2,905	2,592	253
<u>VI. GENERAL</u>										
23	INJURIES & DAMAGES	33,550	31,400	37,430	35,241	18,125	15,896	20,708	18,479	767
24	OTHER GENERAL COSTS	52,846	49,460	58,958	55,509	28,550	25,039	32,619	29,108	1,533
25	TOTAL GENERAL	86,396	80,860	96,388	90,750	46,675	40,935	53,327	47,587	2,300
<u>TAXES</u>										
26	UNEMP. INS. & CARRIERS TAX ACT	26,813	25,330	24,104	22,607	12,400	10,887	13,401	11,928	1,526
27	L.A. CITY LICENSE	244	244	244	244	266	266	266	266	126
28	FRANCHISE TAX	421	421	421	421	--	--	--	--	--
29	LICENSE, WT. FEE, REGIS., ETC.	--	--	--	--	--	--	--	--	1,164
30	STATE 3% GROSS RECEIPTS TAX	--	--	--	--	--	--	--	--	1,347
31	TOTAL TAXES	27,478	25,995	24,769	23,272	12,666	11,153	13,667	12,194	4,163
32	TOTAL OPERATING EXPENSES & TAXES	\$676,701	\$639,314	\$608,403	\$570,660	\$312,908	\$274,752	\$338,145	\$301,008	\$ 44,225
33	CLASS OF EQUIPMENT	300-400- 1200	300-400- 1200	P.C.C.	P.C.C.	P.C.C.	P.C.C.	P.C.C.	P.C.C.	MOTOR COACHES
34	NUMBER OF UNITS, INCL. SPARES	18	14	23	18	15	11	15	11	3
35	MILEAGE	672,338	629,261	750,100	706,226	363,229	318,558	414,999	370,328	76,650
36	AVERAGE MILES PER UNIT	37,352	44,947	32,613	39,235	24,215	28,960	27,667	33,666	25,550

() - FIGURES IN BRACKETS INDICATE LOSS.

TABLE NO. 2

ESTIMATED ANNUAL FINANCIAL RESULTS FROM OPERATIONS

Item	Present Passenger Rail Operations		
	LA-Long Beach (1)	LA-San Pedro (2)	LA-Newport Bch. (3)
(1) Passenger Revenue	\$1,300,400	\$ 959,890	\$ 23,800
(2) Other Revenues	11,543	9,096	329
(3) Total Revenue	\$1,311,943	\$ 968,986	\$ 24,129
(4) Operating Expenses & Taxes..	1,278,648	1,048,210	45,696
(5) Net Income or Loss	\$ 33,295	(\$ 79,224)	(\$ 21,567)

(RED FIGURES)

Detail of Operating Expenses

<u>I. WAY & STRUCTURES</u>			
(6) Maintenance	\$ 107,721	\$ 74,429	*
(7) Depreciation	52,155	41,101	*
(8) Total Way & Structures..	\$ 159,876	\$ 115,530	*
<u>II. EQUIPMENT</u>			
(9) Maintenance	\$ 114,000	\$ 89,840	\$ 3,250
(10) Depreciation	9,847	10,433	2,148
(11) Other Equipment Costs.....	42,608	33,578	1,215
(12) Total Equipment	\$ 166,455	\$ 133,851	\$ 6,613
<u>III. POWER</u>			
(13) Power Used	\$ 100,126	\$ 78,718	\$ 2,626
(14) Other Power Costs.....	54,332	42,716	11,132
(15) Total Power	\$ 154,458	\$ 121,434	\$ 13,758
<u>IV. CONDUCTING TRANSPORTATION</u>			
(16) Trainmen's Wages	\$ 304,380	\$ 288,499	\$ 12,187
(17) Inspecting, Cleaning & Lubricating Cars	105,450	83,102	3,006
(18) Other Transportation Costs .	97,328	76,701	2,775
(19) Total Conductg. Transp...	\$ 507,158	\$ 448,302	\$ 17,968
<u>V. TRAFFIC</u>	\$ 9,975	\$ 7,861	\$ 284
<u>VI. GENERAL</u>			
(20) Injuries & Damages	\$ 71,108	\$ 56,038	\$ 2,027
(21) Other General Costs	112,005	88,268	3,193
(22) Total General	\$ 183,113	\$ 144,306	\$ 5,220
<u>TAXES</u>	\$ 97,613	\$ 76,926	\$ 1,853
(23) <u>TOTAL OPERATING EXPENSES & TAXES</u>	\$1,278,648	\$1,048,210	\$ 45,696
(24) Class of Equipment	300-400-1200	300-400-1200	1200
(25) Number of Units	30	26	3
(26) Mileage	1,425,000	1,123,000	40,624
(27) Average Miles Per Unit	47,500	43,192	13,541

TABLE NO. 3

STATISTICS AND TRENDS
LOS ANGELES-SANTA ANA LINE

Month or Year	Revenue Passengers	% Incr. Over Same Period Prior Year	Passenger Revenue	Vehicle Miles	Revenue Per Mile	Revenue Per Passenger
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1938	315,603		95,354	339,949	28.05	30.21
1939	301,931	(4.33)	92,059	348,784	26.39	30.49
1940	343,984	13.93	81,612	348,885	23.39	23.73
1941	405,422	17.86	98,423	343,484	28.60	24.28
1942	750,758	85.18	199,061	440,797	45.16	26.51
1943	1,558,209	107.55	423,479	773,697	54.73	27.18
1944	2,270,201	45.69	590,800	1,001,143	59.01	26.02
1945	2,479,296	9.21	635,905	1,030,924	61.68	25.65
1946	2,231,655	(9.99)	501,139	894,937	56.00	22.46
<u>1947</u>						
Jan.	181,090	(2.85)	43,226	71,080	60.81	23.87
Feb.	164,223	(5.36)	39,200	66,210	59.21	23.87
Mch.	176,722	(4.58)	42,184	72,510	58.18	23.86
Apr.	170,723	(8.51)	40,752	67,334	60.52	23.87
May	169,202	(11.03)	40,339	66,371	60.85	23.87
June	168,134	(6.47)	40,134	64,184	62.53	23.87
July	172,749	(9.62)	41,235	66,031	62.45	23.87
Aug.	176,021	(10.75)	42,016	64,237	65.41	23.87
Sept.	170,984	(4.94)	40,814	62,050	65.78	23.87
Oct.	176,087	(3.70)	42,032	66,019	63.67	23.87
Nov.	165,022	(12.86)	39,391	63,442	62.09	23.87
Dec.	173,731	(8.35)	41,470	66,059	62.78	23.87
Total '47	2,064,688	(7.48)	492,843	795,527	61.95	23.87
<u>1948</u>						
Jan.	160,093	(11.59)	38,214	64,750	59.02	23.87
Feb.	146,005	(8.80)	37,728	59,503	63.41	25.84
Mch.	158,391	(10.37)	40,928	63,770	64.18	25.85
Apr.	144,723	(15.23)	37,396	59,820	62.51	25.84
May	148,599	(12.18)	38,398	61,731	62.20	25.84
June	150,236	(10.65)	38,821	59,463	65.29	25.84
July	157,414	(8.88)	40,676	59,816	68.00	25.84
Aug.	160,393	(8.88)	41,446	58,606	70.72	25.84
Sept.	158,138	(7.51)	40,863	56,960	71.74	25.84
Oct.	160,511	(8.85)	42,519	59,976	70.89	26.49
Total to Date 10 Mos. 1948	1,544,503	(10.51)	396,989	804,395	65.68	25.70

(RED FIGURES)

TABLE NO. 4

STATISTICS AND TRENDS
LOS ANGELES-NEWPORT BEACH LINE

Month or Year	Revenue Passengers	% Incr. Over Same Period Prior Year	Passenger Revenue	Vehicle Miles	Revenue Per Mile	Revenue Per Passenger
(1)	(2)	(3)	(4)	(5)	(6)	(7)
*						
1943	115,932		47,522	87,972	54.02	40.99
1944	8,085	(93.03)	3,285	10,380	31.65	40.63
1945	13,405	65.80	5,378	17,379	30.95	40.12
1946	24,225	80.72	9,547	18,529	51.52	39.41
<u>1947</u>						
Jan.	3,759		1,298	1,980	65.56	34.53
Feb.	3,797	#See	1,311	1,824	71.88	34.53
Mch.	4,287	Note	1,480	1,976	74.90	34.52
Apr.	4,142		1,430	1,976	72.37	34.52
May	4,053		1,410	1,976	71.36	34.79
June	4,526	#150.47	1,575	2,736	57.57	34.80
July	5,373	5.87	1,869	4,238	44.10	34.79
Aug.	5,423	11.88	1,887	4,576	41.24	34.80
Sept.	4,599	33.00	1,600	3,588	44.59	34.79
Oct.	4,624	44.91	1,609	3,151	51.06	34.80
Nov.	4,159	50.42	1,447	2,722	53.16	34.79
Dec.	4,436	43.93	1,543	3,004	51.36	34.78
Total '47	53,178	119.52	18,459	33,747	54.70	34.71
<u>1948</u>						
Jan.	4,841	28.78	1,684	2,980	56.51	34.79
Feb.	4,507	18.70	1,792	2,732	65.59	39.76
Mch.	5,343	24.63	2,124	3,151	67.41	39.75
Apr.	4,917	18.71	1,955	3,028	64.56	39.76
May	4,472	10.34	1,778	2,856	62.25	39.76
June	4,832	6.76	1,921	3,656	52.54	39.76
July	5,913	10.05	2,351	4,616	50.93	39.76
Aug.	6,173	13.83	2,454	4,700	52.21	39.75
Sept.	4,893	6.39	1,945	3,815	50.98	39.75
Oct.	4,880	5.54	1,912	2,980	64.16	39.18
Nov.	4,619	11.06	1,809	2,846	63.56	39.16
Total to Date 11 Mos. 1948	55,390	13.64	21,725	37,360	58.15	39.22

*--Service curtailed due to war.

#--No 1946 Service Prior to June 17, 1946.

TABLE NO. 5

STATISTICS AND TRENDS
LOS ANGELES-LONG BEACH LINE

Month or Year	Revenue Passengers	% Incr. Over Same Period Prior Year	Passenger Revenue	Vehicle Miles	Revenue Per Mile	Revenue Per Passenger
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1938	2,192,161		604,941	1,128,272	53.62	27.60
1939	1,929,701	(11.97)	551,283	1,037,337	53.14	28.57
1940	1,816,701	(5.86)	454,542	994,846	45.69	25.02
1941	1,934,873	6.50	522,667	1,005,001	52.01	27.01
1942	2,852,306	47.42	819,184	1,297,314	63.14	28.72
1943	4,645,961	62.88	1,284,675	1,501,320	85.57	27.65
1944	6,361,299	36.92	1,666,536	1,714,640	97.19	26.20
1945	7,881,677	23.90	1,949,402	1,975,800	98.66	24.73
1946	6,968,209	(11.59)	1,805,838	1,885,858	95.76	25.92
<u>1947</u>						
Jan.	459,951	(42.35)	93,232	127,751	72.98	20.27
Feb.	412,308	(38.04)	83,575	108,601	76.96	20.27
Mch.	453,692	(29.35)	121,181	126,987	95.43	26.71
Apr.	449,392	(25.96)	120,033	119,882	100.13	26.71
May	446,723	(19.62)	119,320	118,366	100.81	26.71
June	484,080	(14.98)	129,298	117,183	110.34	26.71
July	567,409	(5.75)	151,555	137,801	109.98	26.71
Aug.	507,468	(9.60)	135,545	133,374	101.63	26.71
Sept.	445,563	(13.19)	119,010	123,265	96.55	26.71
Oct.	431,171	(11.94)	115,166	117,865	97.71	26.71
Nov.	417,955	(11.21)	111,636	121,092	92.19	26.71
Dec.	424,143	(13.88)	113,289	127,804	88.64	26.71
Total '47	5,499,855	(21.07)	1,412,840	1,479,971	95.46	25.69
<u>1948</u>						
Jan.	413,429	(10.11)	110,427	124,693	88.56	26.71
Feb.	379,668	(7.92)	114,812	115,236	99.63	30.24
Mch.	402,284	(11.33)	121,651	122,069	99.66	30.24
Apr.	373,480	(16.89)	112,940	113,487	99.52	30.24
May	396,427	(11.26)	119,880	121,645	98.55	30.24
June	396,142	(18.17)	119,793	122,508	97.78	30.24
July	429,837	(24.25)	129,983	135,852	95.68	30.24
Aug.	418,712	(17.49)	126,619	137,176	92.30	30.24
Sept.	362,352	(18.68)	109,575	124,439	88.06	30.24
Oct.	334,737	(22.37)	101,358	121,915	83.14	30.28
Nov.	322,517	(22.83)	97,658	114,982	84.93	30.28
Total to Date 11 Mos. 1948	4,229,585	(23.10)	1,264,696	1,354,002	93.40	29.90

(RED FIGURES)

TABLE NO. 6

STATISTICS AND TRENDS
LOS ANGELES-SAN PEDRO LINE

Month or Year	Revenue Passengers	% Incr. Over Same Period Prior Year	Passenger Revenue	Vehicle Miles	Revenue Per Mile	Revenue Per Passenger
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1938	1,293,506		256,952	709,201	36.23	19.86
1939	1,214,008	(6.15)	248,735	660,060	37.68	20.49
1940	1,222,325	.69	215,592	658,932	32.72	17.64
1941	1,415,153	15.78	280,743	689,103	40.74	19.84
1942	2,988,891	111.21	656,872	1,314,762	49.96	21.98
1943	5,735,381	91.92	1,252,186	2,086,715	60.01	21.83
1944	7,759,583	35.29	1,724,877	2,302,429	74.92	22.23
1945	8,580,265	10.58	1,881,542	2,477,686	75.94	21.93
1946	6,602,355	(23.05)	1,437,898	1,935,275	74.30	21.78
1947						
Jan.	477,363	(36.54)	127,504	137,070	93.02	26.71
Feb.	429,289	(35.08)	114,663	118,763	96.55	26.71
Mar.	430,517	(34.82)	87,266	111,654	78.16	20.27
Apr.	409,292	(29.81)	82,963	106,088	78.20	20.27
May	407,683	(20.42)	82,637	107,784	76.67	20.27
June	401,769	(21.30)	81,439	102,774	79.24	20.27
July	409,228	(23.87)	82,951	108,363	76.55	20.27
Aug.	397,862	(23.75)	80,647	105,980	76.10	20.27
Sept.	392,081	(16.45)	79,475	101,506	78.30	20.27
Oct.	418,412	(11.88)	84,812	106,678	79.50	20.27
Nov.	394,006	(11.22)	79,865	102,159	78.18	20.27
Dec.	410,565	(13.60)	83,222	108,285	76.85	20.27
Total '47	4,978,067	(24.60)	1,067,444	1,317,104	81.04	21.44
1948						
Jan.	404,691	(15.22)	82,031	104,735	78.32	20.27
Feb.	350,076	(18.45)	80,938	89,600	90.33	23.12
Mar.	377,851	(12.23)	87,359	94,532	92.41	23.12
Apr.	343,489	(16.08)	79,415	90,144	88.10	23.12
May	347,709	(14.71)	80,390	92,311	87.09	23.12
June	337,958	(15.88)	78,136	90,628	86.22	23.12
July	347,577	(15.07)	80,360	93,436	86.01	23.12
Aug.	342,964	(13.80)	79,293	93,619	84.70	23.12
Sept.	327,804	(16.39)	75,788	85,301	88.85	23.12
Oct.	327,507	(21.73)	73,165	87,942	83.20	22.34
Nov.	315,121	(20.02)	70,398	84,162	83.65	22.34
Total to Date						
11 Mos. 1948	3,822,747	(16.31)	867,273	1,006,410	86.17	22.69

(RED FIGURES)

TABLE NO. 7

ESTIMATED COSTS OF ADDITIONAL FACILITIES AND
EQUIPMENT REQUIRED

<u>Item</u>	Rail Operations Continued with P.C.C. Cars - One-Man Operated -				Proposed Motor Coach Operations
	<u>L.A. - Santa Ana</u>		<u>L.A. - Bellflower</u>		
	<u>- A -</u>	<u>- B -</u>	<u>- A -</u>	<u>- B -</u>	
	<u>(1)</u>	<u>(2)</u>	<u>(3)</u>	<u>(4)</u>	
(1) P.C.C. Cars Re- quired @ \$40,000	\$ 920,000	\$ 720,000	\$ 600,000	\$ 440,000	-
(2) Motor Coaches Re- quired @ \$18,000					\$108,000
(3) Additional Track Facilities - 8th & Hooper					15,000
(4) Immediate Track Expense	403,156	403,156	96,942	96,942	
(5) Subsequent Track Expense	217,844	217,844	184,462	184,462	
(6) Block Signal Installation	-	-	-	-	
(a) Watts-Bellflower	180,000	180,000	180,000	180,000	
(b) Bellflower-Santa Ana	200,000	200,000	-	-	
(c) Siding Tracks	96,000	96,000	-	-	
(7) Total Estimated Cost	\$2,017,000	\$1,817,000	\$1,061,404	\$ 901,404	\$123,000
(8) Total Excluding Subsequent Track Program	\$1,799,156	\$1,599,156	\$ 876,942	\$ 716,942	

A - Present Load Standards

B - Proposed Revised Load Standards

TABLE NO. 8

REHABILITATION AND DEFERRED MAINTENANCE
SOUTHERN DISTRICT

SANTA ANA LINE

<u>Item</u>	<u>Section</u>		<u>Immediate</u>	<u>Future</u>	<u>Total</u>
	<u>From</u>	<u>To</u>			
	<u>Watts - Santa Ana</u>		<u>(1)</u>	<u>(2)</u>	<u>(3)</u>
(1)	Watts	Bellflower	\$ 276,942	\$184,462	\$ 461,404
(2)	Bellflower	Santa Ana	602,214	33,382	635,596
		Total	\$ 879,156	\$217,844	\$1,097,000

LONG BEACH LINE

6th & San Pedro-Morgan Yard

(4)	6th & San Pedro	9th & San Pedro	\$ 28,464	\$113,856	\$ 142,320
(5)	9th & San Pedro	9th & Hooper	5,937	-	5,937
(6)	9th & Hooper	Watts	26,501	106,006	132,507
(7)	Watts	Dominguez Jct.	14,833	59,330	74,163
(8)	Dominguez Jct.	Morgan Yard, Long Beach	12,827	51,306	64,133
(9)		Total	\$ 88,562	\$330,498	\$ 419,060

SAN PEDRO LINE

(10)	Dominguez Jct.	San Pedro	\$ 18,860	\$ 75,441	\$ 94,301
(11)		Combined Total	\$ 986,578	\$623,783	\$1,610,361

TABLE NO. 9

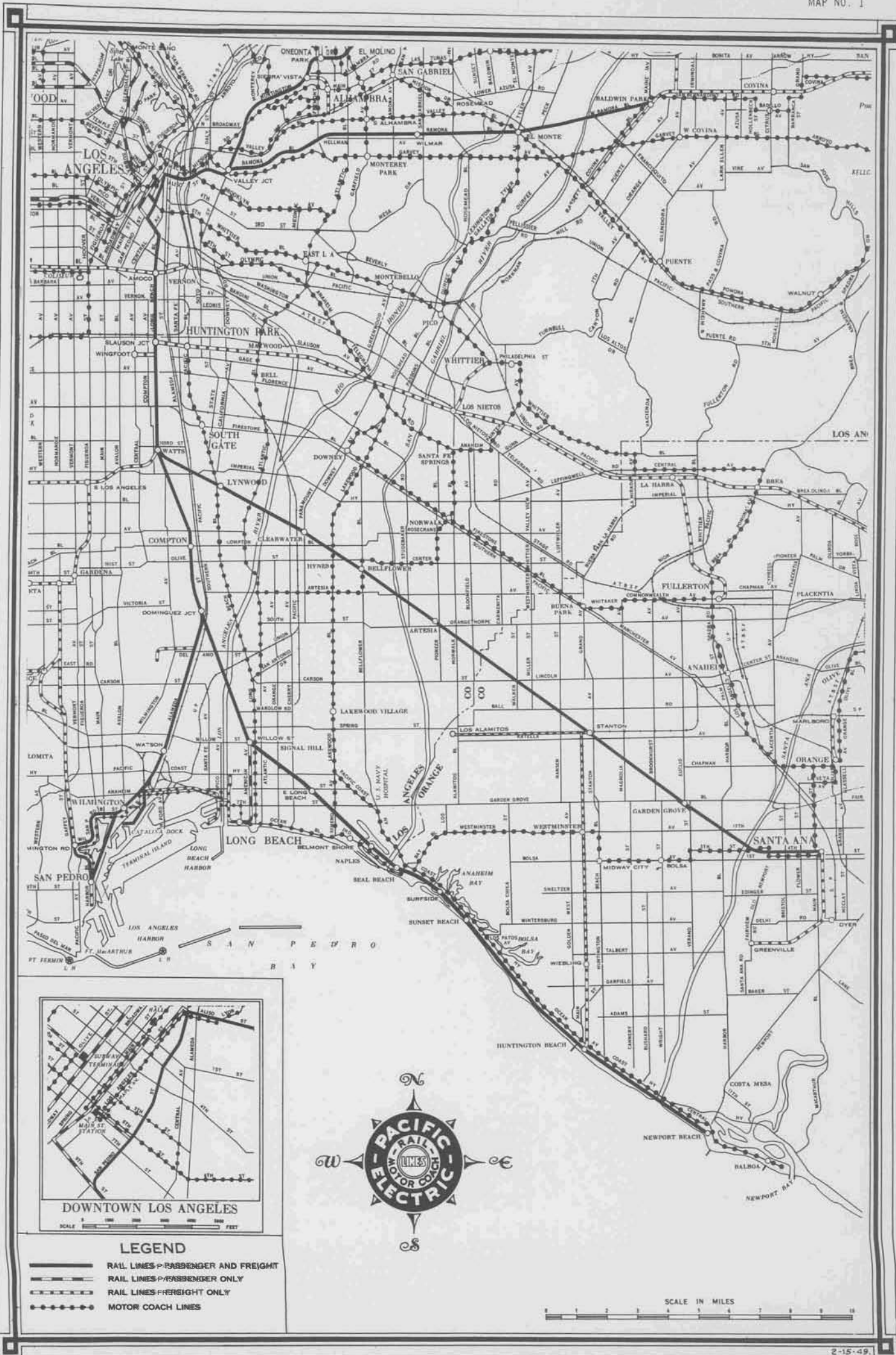
CHECK OF ON AND OFF PASSENGERS
L.A.-SANTA ANA RAIL LINE (INBOUND ONLY)
MONDAY, AUGUST 9, 1948

<u>Stops</u>	Psgrs.	Accu- mulated	Psgrs.	Accu- mulated	Psgrs.
	<u>On</u>	<u>Psgrs.</u>	<u>Off</u>	<u>Psgrs.</u>	<u>On</u>
	<u>(1)</u>	<u>(2)</u>	<u>(3)</u>	<u>(4)</u>	<u>(5)</u>
Santa Ana (Station to Artesia St.)	668	668	84	84	584
West Santa Ana	1	669	7	91	578
King Street	-	669	8	99	570
Willowick	-	669	2	101	568
Harbor Blvd.	3	672	24	125	547
Emerald Avenue	1	673	2	127	546
Garden Grove Rd.	-	673	8	135	538
Garden Grove Sta.	48	721	142	277	444
Stanford Avenue	1	722	-	277	445
Mesto	2	724	-	277	447
Harperville	4	728	9	286	442
Cordorniz	1	729	7	293	436
Vignola	-	729	2	295	434
Katella	-	729	-	295	434
Stanton	30	759	49	344	415
S.P. Crossing	-	759	-	344	415
Lobo	3	762	1	345	417
Hansen	8	770	16	361	409
Shirley	2	772	-	361	411
Miller Street	2	774	1	362	412
Cypress	57	831	15	377	454
Moody	8	839	3	380	459
Del Amo Street	4	843	-	380	463
Crescentia	5	848	1	381	467
Norwalk	9	857	-	381	476
Artesia Sta.	137	994	31	412	582
16th Street, Artesia	4	998	-	412	586
Gridley Road	2	1000	-	412	588
Studebaker Road	2	1002	-	412	590
Palo Verde Avenue	4	1006	2	414	592
Woodruff Avenue	18	1024	3	417	607
Bellflower Sta.	316	1340	89	506	834
Clark Avenue	18	1358	1	507	851
Lakewood Blvd.	24	1382	7	514	868
Downey Avenue	6	1388	10	524	864
Clearwater-Paramount Blvd.	109	1497	14	538	959
Hollydale-Garfield	97	1594	8	546	1048
Morton-Wright Rd.	20	1614	4	550	1064
Central Gardens-Atlantic	112	1726	12	562	1164

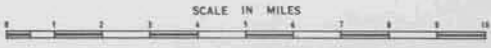
Continued on next page.

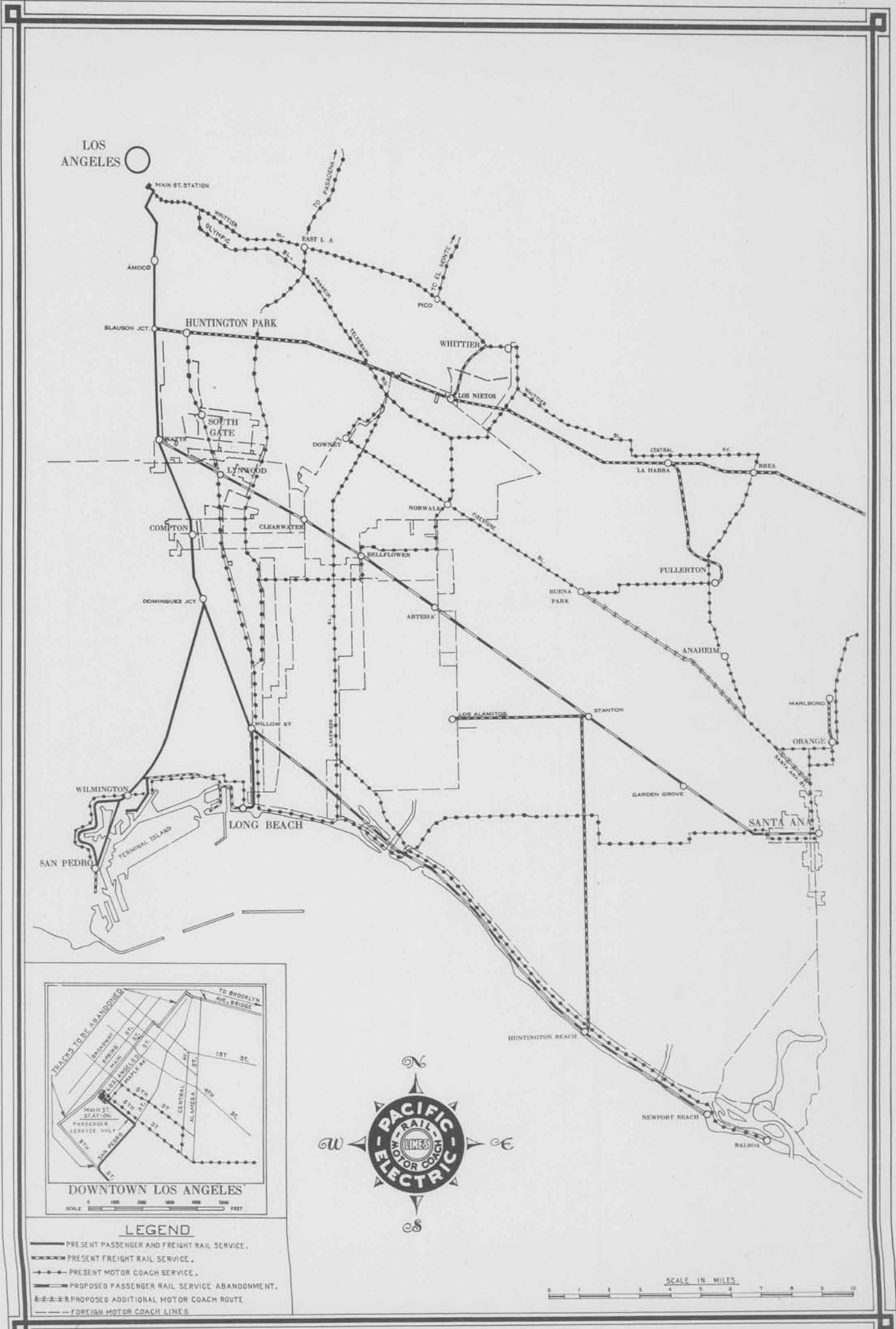
TABLE NO. 9 (Continued)

<u>Stops</u>	Psgrs.	Accu-	Psgrs.	Accu-	Psgrs.
	On	mulated	On	mulated	On
	(1)	(2)	Off	Off	Board
	(1)	(2)	(3)	(4)	(5)
Caress Avenue	73	1799	1	563	1236
Lugo-Bullis Road	99	1898	8	571	1327
Lynwood Station	329	2227	140	711	1516
Modejeska Park	26	2253	2	713	1540
Imperial Highway	18	2271	5	718	1563
Palomar-Alameda Street	113	2384	27	745	1639
Socorro	78	2462	5	750	1712
Wilmington Avenue	19	2481	4	754	1727
Watts	285	2766	97	851	1915
Slauson Avenue	42	2808	57	908	1900
Vernon Avenue	18	2826	63	971	1855
Los Angeles	4	2830	1859	2830	0

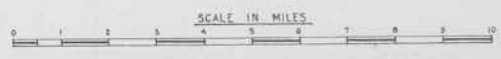


- LEGEND**
- RAIL LINES - PASSENGER AND FREIGHT
 - - - RAIL LINES - PASSENGER ONLY
 - RAIL LINES - FREIGHT ONLY
 - MOTOR COACH LINES





- LEGEND**
- PRESENT PASSENGER AND FREIGHT RAIL SERVICE.
 - - - PRESENT FREIGHT RAIL SERVICE.
 - · · PRESENT MOTOR COACH SERVICE.
 - · - · - PROPOSED PASSENGER RAIL SERVICE ABANDONMENT.
 - · - · - PROPOSED ADDITIONAL MOTOR COACH ROUTE.
 - - - FOREIGN MOTOR COACH LINES.



PACIFIC ELECTRIC RAILWAY COMPANY
 LOS ANGELES - SANTA ANA LINE

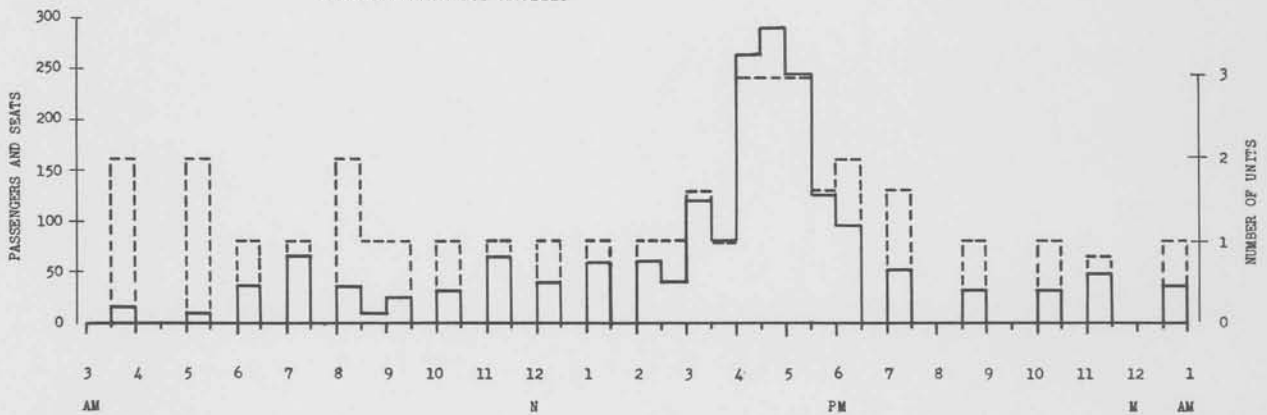
PASSENGERS, SEATS, AND UNITS OF EQUIPMENT
 ARRIVING AT WATTS INBOUND AND LEAVING WATTS, OUTBOUND
 BY HALF-HOUR PERIODS ON WEDNESDAY, OCTOBER 20, 1948

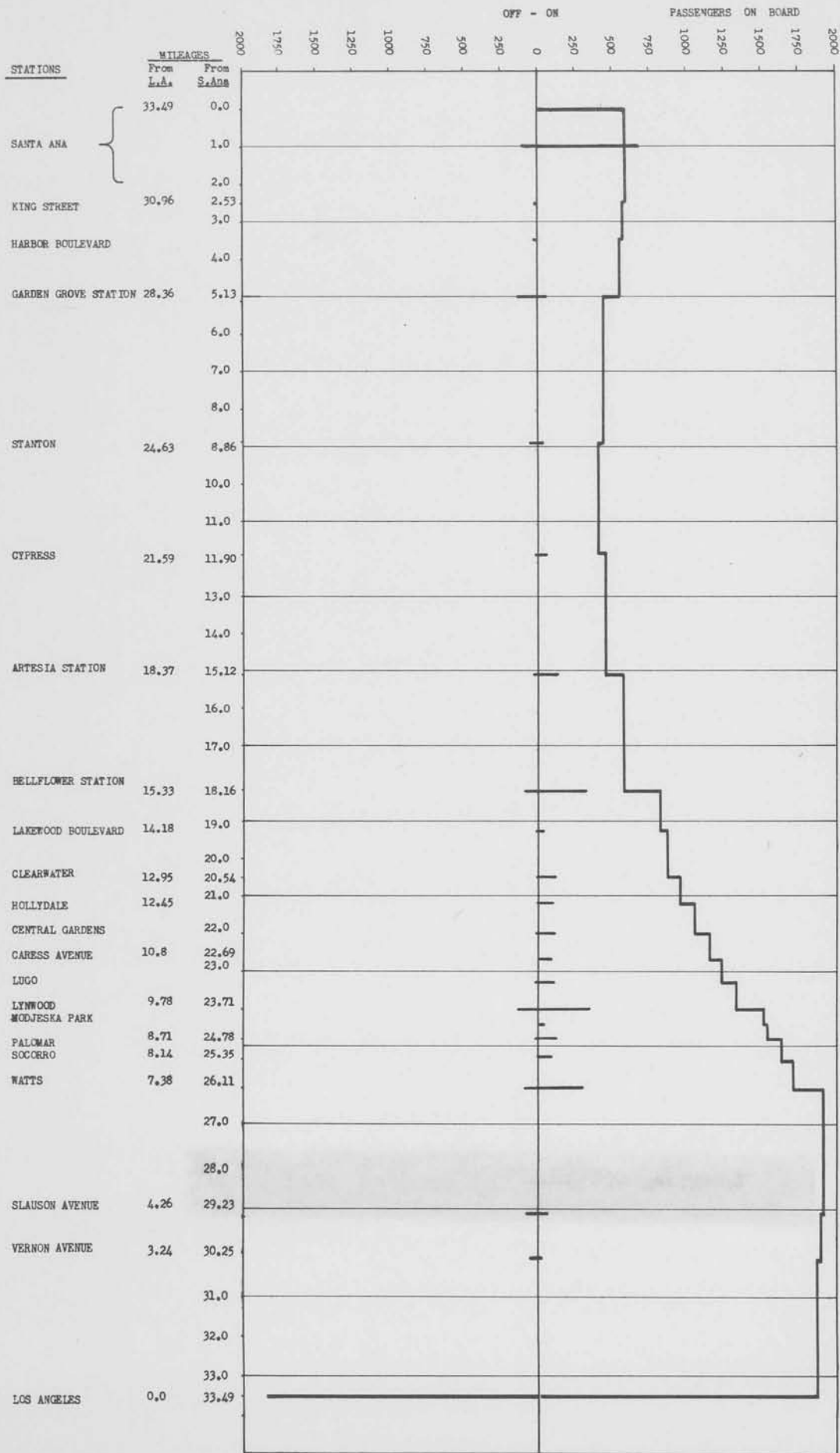
CHART NO. III

INBOUND TO LOS ANGELES



OUTBOUND FROM LOS ANGELES





PACIFIC ELECTRIC RAILWAY COMPANY
 LOS ANGELES -- SANTA ANA LINE
 PASSENGERS ON, OFF, AND ON BOARD CARS (ALL INBOUND TRIPS)
 MONDAY, AUGUST 9, 1948
 CHART NO. 1V

Mass transit, Report
- W. J. Jenkins
J. J. C.

MAR 4 - 1949

PR 3-D1(8)(b, c, h)

REPORT ON
ENGINEERING AND ECONOMIC FEATURES
OF
PASSENGER TRANSPORTATION OPERATIONS, SERVICE AND FACILITIES
OF THE
WESTERN DISTRICT RAIL LINES
SUBWAY-SANTA MONICA BLVD.-W.HOLLYWOOD-SAN FERNANDO VALLEY
SUBWAY-HOLLYWOOD BLVD.-SAN VICENTE BLVD.
GLENDALE-BURBANK
AND
SAN FERNANDO VALLEY MOTOR COACH LINE
OF
PACIFIC ELECTRIC RAILWAY COMPANY
LOS ANGELES, CALIFORNIA

COMPARING

- 1. - Present Rail Operations Unchanged
- 2. - Rail Operations with One-Man 600-Class and P.C.C. Cars.
- 3. - Modified Motor Coach Operation

Submitted To

MR. O. A. SMITH, PRESIDENT

January 31, 1949

Bureau of Research
No. 49-3

Arthur C. Jenkins
Consulting Engineer

15090693

HE4491

.L7

J4

1949

U.3

REPORT ON
COMPARATIVE ECONOMICS, SERVICE AND
OPERATING RESULTS OF
PASSENGER TRANSPORTATION SERVICE ON THE
WESTERN DISTRICT RAIL LINES
AND
SAN FERNANDO VALLEY MOTOR COACH LINE

January 31, 1949

ARTHUR C. JENKINS

M. AM. SOC. C. E., M. AM. INST. E. E., M. SOC. A. E.

CONSULTING ENGINEER

870 MARKET STREET

SAN FRANCISCO 2, CALIFORNIA

DOUGLAS 2-8023

January 31, 1949

Mr. O. A. Smith, President
Pacific Electric Railway Company
675 Pacific Electric Building
Los Angeles, California

Dear Sir:

Submitted herewith is a report on present Western District passenger rail lines and San Fernando Valley motor coach lines, and recommendations as to modernization of operations through rearrangement of rail service in part, replacement of rail service by motor coaches in part, and transfer of San Fernando Valley local motor coach lines to another carrier.

This study is one of several requested by you in connection with the systemwide modernization program and its purpose was to develop means of eliminating heavy passenger service losses and at the same time to preserve adequate service for the public, commensurate with existing conditions.

During the year of 1947 system passenger rail operations were conducted at a net operating loss of \$3,426,189. Despite an increase in fares that became effective on February 1, 1948, and substantial economies in operations brought about during that year the losses for the twelve months period ending October 31, 1948 amounted to \$2,893,962.

It is estimated that continued rail passenger service as presently conducted will result in an annual operating loss for Western District rail lines exclusive of the Venice Short Line, of \$494,000 before bond interest charges. When adding the San Fernando Valley motor coach lines, the loss would be increased to \$652,000. Under the revised plan of operation proposed herein the total loss would be converted into an operating profit of \$291,000, or a net improvement of \$943,000.

This report primarily is concerned with rail operations from Los Angeles to the San Fernando Valley, Hollywood, Beverly Hills, Echo Park, and San Vicente Boulevard areas. The Venice Short Line has been covered by a separate report.

The Glendale-Burbank Line has been included for comparison only as no change in its route or type of equipment is contemplated at this time. Plans are already under way for changing the Glendale-Burbank rail line to one-man operation which will place the line on a profitable operating basis. This line is already equipped with modern P.C.C. type cars designed for one-man operation. Under these conditions it is not proposed that motor coaches be used in replacement of rail service on the line.

Mr. O. A. Smith, President
January 31, 1949

To continue rail operations over the remaining lines would require for track reconstruction and rehabilitation, an expenditure of \$2,089,000, to establish a proper standard of maintenance.

When relating the financial status of these lines to the entire system the maximum benefit would be derived through complete replacement of rail service by motor coach operation on the entire Santa Monica Boulevard, San Fernando Valley, Hollywood, and San Vicente Boulevard Lines. In view, however, of the fairly good condition of track and roadway on Hollywood Boulevard and over the pass into San Fernando Valley, it is considered that for the present, rail service should be continued on that line, with certain modifications. It is proposed to cut the San Fernando Valley rail line back to North Hollywood with suitable motor coach replacement and to relocate the line through Hollywood from Santa Monica Boulevard to Hollywood Boulevard, and to replace present rail service with motor coaches on Santa Monica Boulevard.

This proposed plan will not produce the margin of profit to which the Company is entitled but will materially improve its financial position and will at the same time, provide an adequate service to the public.

Respectfully submitted,

Arthur C. Jenkins
ARTHUR C. JENKINS

Pacific Electric Railway Company

REPORT ON
WESTERN DISTRICT PASSENGER RAIL LINES
AND
SAN FERNANDO VALLEY MOTOR COACH LINES

F O R E W O R D

In the preparation of basic data, assembly of field information, development of cost, revenue and other financial data, the files, resources and personnel of the various departments of the Company have been drawn upon to a substantial extent.

Preparation of the material necessary to completion of this report has involved comprehensive field surveys, exhaustive study of records, extensive cost analysis and the preparation of numerous sets of detailed schedules and manpower assignments, all based upon actual conditions, official records of the Company and standard operating practices.

Assistance rendered by the various departments of the Company in this work has been of inestimable value. Service of the Research Bureau, Schedule Bureau, and Passenger Traffic Department are worthy of special mention. It is desired to particularly acknowledge the painstaking efforts and personal counsel rendered by Mr. D. R. Lewis, Engineering Assistant to the President, and Mr. L. H. Appel, Research Engineer, and his staff. Without their able assistance the degree of completeness attained could not have been realized.

ARTHUR C. JENKINS

Pacific Electric Railway Company

REPORT ON
WESTERN DISTRICT LINES

TABLE OF CONTENTS

	<u>Page</u>
Letter of Transmittal	
Foreword	
A - BASIC CONSIDERATIONS	
Purpose and Scope of Study	1
Proposed Changes in Operation	2
General Modernization Program	3
Related Proceedings and Reports	3
Fundamental Premise	4
Types of Operation Considered	5
B - FINANCIAL ANALYSIS	
Financial Rehabilitation and Service Modernization Requirements	5
Summary of Financial Results of Proposed Plan	6
Operating Ratio and Equivalent Fare Increase	7
Methods of Computation	8
Revenue	8
Expenses	8
Depreciation	8
Future Earning Prospects	9
Decline in Traffic and Revenue	9
Rehabilitation Cost	10
C - PRESENT OPERATIONS	
Character of Area Served	11
Nature of Operations:	
Los Angeles-Hollywood Area	11
San Fernando Valley Area	12
Present Routes:	
Subway-Hollywood Blvd.-San Vicente Blvd. Line	12
Subway-Santa Monica Blvd.-West Hollywood-San Fernando Valley Line	13
Present Service:	
<u>Subway-Hollywood Blvd.-San Vicente Blvd. Line</u>	13
(1) Gardner Street to Genesee & San Vicente	13
(2) Subway-Hollywood Boulevard	14
(3) Echo Park Avenue Line	14
(4) Operating Characteristics	14

TABLE OF CONTENTS
(Continued)

	<u>Page</u>
C - (Contd.)	
<u>Subway-Santa Monica Blvd.-West Hollywood-San Fernando</u>	
<u>Valley Line</u>	15
(1) Subway-Santa Monica Blvd.-San Fernando Valley Line	15
(2) Subway-Santa Monica Blvd.-West Hollywood Line . .	15
(3) Operating Characteristics	16
Mileage Table	16
Equipment and Facilities:	
Rail Cars	17
Other Facilities	18
Subway Terminal	18
Traffic Characteristics	18
D - PROPOSED OPERATIONS	
General Arrangement	18
Motivating Considerations	20
Types of Operation Considered	21
Effect of Freeways and Rail Rapid Transit	22
Suitability of Motor Coaches	23
Routing and Service:	
Proposed Los Angeles-Santa Monica Blvd.-Hollywood-West	
Hollywood Motor Coach Line	24
Proposed Subway-Hollywood Blvd.-Beverly Hills-North	
Hollywood Rail Line	24
Proposed Echo Park Avenue Motor Coach Line	25
Proposed Hill Street-Sunset Blvd. Motor Coach Line	25
Proposed LA-Van Nuys via Riverside Drive Motor Coach Line,	
including alternate route via Chandler Boulevard	26
Proposed Hollywood-Ventura Blvd.-Van Nuys Motor Coach Line	26
Equipment and Facilities	27
E - SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS	
Conclusions	28
Recommendations	32

A P P E N D I X

TABLE OF CONTENTS

LIST OF TABLES

<u>No.</u>		<u>Page No.</u>
1.	Estimated Annual Financial Results from Operations	i
2.	Estimated Cost of Additional Facilities and Equipment	
	Required	ii

A P P E N D I X

TABLE OF CONTENTS
(Concluded)

LIST OF TABLES (Contd).

<u>No.</u>		<u>Page No.</u>
3.	Estimated Cost of Rehabilitation	iii
4.	Estimated Salvage and Cost to Remove Facilities to be Abandoned	iv
5.	Statistics and Trends - Subway-Hollywood Blvd.-San Vicente Line	v
6.	Statistics and Trends - Subway-West Hollywood-San Fernando Valley Line	vi
7.	Statistics and Trends - Los Angeles-Glendale-Burbank Line	vii
8.	Estimated Ledger Value of Facilities to be Abandoned	viii

LIST OF MAPS AND CHARTS

<u>No.</u>		<u>Page No.</u>
I.	Map of Present Routes and Operations	ix
II.	Map of Proposed Routes and Operations	x
III.	Present San Fernando Valley Operations, including Asbury Rapid Transit Lines	xi
IV.	Trend of Passengers and Revenue	xii
V.	Trend of Passengers and Revenue - Los Angeles-Glendale- Burbank Line	xiii
 <u>Charts - Passengers, Seats, and Units of Equipment at Maximum Load Points:</u>		
VI.	Hollywood Boulevard-Hill Street Line - Grand Avenue and Sunset Boulevard	xiv
VII.	Hollywood Boulevard Rail Line - Western Avenue	xv
VIII.	Hollywood Boulevard-Subway Rail Line	xvi
IX.	Los Angeles-Santa Monica Blvd.-West Hollywood Rail Line - Sunset & Bonnie Brae	xvii
X.	Los Angeles-Santa Monica Blvd.-West Hollywood Rail Line - Santa Monica Blvd. and Western Avenue	xviii
XI.	Los Angeles-Santa Monica-Van Nuys Rail Line at North Hollywood	xix
XII.	Los Angeles-Santa Monica Blvd.-Van Nuys Rail Line at Cahuenga Pass	xx
XIII.	Echo Park Avenue Rail Line - Sunset Blvd. and Grand	xxi
XIV.	Echo Park Avenue Line - Sunset and Echo Park	xxii

Pacific Electric Railway Company

COMPARATIVE ECONOMICS, SERVICE AND
OPERATING RESULTS

WESTERN DISTRICT PASSENGER RAIL LINES
AND
SAN FERNANDO VALLEY MOTOR COACH LINES

A - BASIC CONSIDERATIONS

PURPOSE AND SCOPE OF STUDY

The purpose of this study is basically to determine whether or not it may be possible to preserve passenger rail service on the Western District Lines either by application of revised methods of service, operations and facilities of the present plant, or rearrangement of those elements to accommodate new one-man P.C.C. type rail cars operated under the most modern practices and procedure, and in the event that both such rail programs should prove to be infeasible, to develop some other plan of operation that will fulfill the requirements of adequate service and reasonable financial returns.

In view of the widespread desire on behalf of many public and civic representatives that rail service be preserved, this study has taken into consideration all practical advantages of rail rehabilitation through use of one-man operation of present 600 class cars, use of most up-to-date rail cars of the P.C.C. type, and the reconstruction of facilities required for such operation.

This study has been confined to the Western District Lines with exclusion of the Venice Short Line, which has been the subject of another independent and complete report. The report transmitted herewith is one of several that have been prepared for the purpose of covering the financial and operating characteristics of passenger rail lines of the system.

Although the Glendale-Burbank Line has been included in financial statements of estimated operating results, it is not dealt with to any extent throughout the report generally. No change in the line is proposed herein and reference is made to it only to show the total Western District status. The financial improvement on the Glendale-Burbank Line results from the anticipated one-man car operation.

In laying out the general program for the systemwide rehabilitation survey, it was contemplated that as each subdivision of the property was studied, it would be submitted for consideration of the Company and for consideration of the Public Utilities Commission of the State of California separate from the others with the expectation that independent action could be exercised and the program be processed in parts, rather than reserving all considerations for one application. Due to the process by which the studies have been conducted and the reports prepared, there is of necessity some

degree of repetition of the basic theories and principles. This has been considered desirable in order that each report be substantially complete in itself. To reduce repetition to a minimum, certain of the elements covered in previous reports will not be repeated herein, but reference will be made to them.

PROPOSED CHANGES IN OPERATION

In analyzing the Western District rail passenger lines for purpose of this report, the Venice Short Line has been excluded. A separate report has been prepared to cover that line.

The Glendale-Burbank Line has been included only for the purpose of showing its earning status and the benefits that will be derived from conversion to one-man operation. No physical changes in the route or type of equipment on the line is contemplated herein. It is, of course, understood that Class 600 cars will be substituted for the older type cars on the line as soon as they become available from other lines.

Therefore, the principal content of this report is directed toward the following lines:

- (1) Rail: Subway-Santa Monica Blvd.-West Hollywood-San Fernando Valley
- (2) Rail: Subway-Hollywood Blvd.-San Vicente Blvd.
- (3) Motor Coach: San Fernando Valley Local Lines

The above designation of the rail lines is somewhat confusing when attempting to visualize the physical operation; however, a more complete description of routes and service will be found in other sections of the report.

To briefly outline the changes proposed herein, reference will be made to the streets over which the lines operate and to the commonly understood designations. The changes proposed are as follows:

- (1) Discontinue rail service beyond North Hollywood on the San Fernando Valley Line.
- (2) Provide replacement service by augmenting to the extent necessary the service on the Riverside Drive motor coach line and routing a new leg over Chandler Boulevard and Van Nuys Boulevard along the route of the present rail line, thereby giving through service from Los Angeles to all persons now so served by rail.
- (3) Relinquish all local motor coach lines in San Fernando Valley to the other existing local operator in that area, Asbury Rapid Transit Lines, or to some other carrier who may be interested.
- (4) Retain for Pacific Electric operation only the through lines into Hollywood and Los Angeles, as follows:
 - (a) Rail line from North Hollywood to Los Angeles

- (b) Ventura Boulevard Motor Coach Line from Tarzana to Hollywood with augmented service over a branch line from Sherman Oaks to Van Nuys thereby providing direct service to Hollywood for those persons presently so served by rail.
 - (c) Riverside Drive Motor Coach Line over present route between Van Nuys and Los Angeles augmented by additional service over a new branch line from North Hollywood to Van Nuys via Chandler Boulevard and Van Nuys Boulevard, thereby preserving through service into Los Angeles.
- (5) Reroute the San Fernando Valley rail line so as to operate over Hollywood Boulevard instead of on Santa Monica Boulevard between the intersection of Santa Monica Boulevard and Sunset Boulevard and the intersection of Santa Monica Boulevard and Highland Avenue.
 - (6) Continue Local rail service along Hollywood Boulevard extending beyond Highland Avenue to Beverly Hills.
 - (7) Establish a Motor Coach Line on Santa Monica Boulevard from West Hollywood along Santa Monica Boulevard, Sunset Boulevard and Hill Street to Eleventh Street.
 - (8) Replace rail service on Echo Park Avenue by motor coach service operating over Echo Park Avenue, Sunset Boulevard and Hill Street to Eleventh Street.
 - (9) Discontinue rail service without motor coach replacement on the Venice Boulevard-San Vicente Boulevard Line and turn traffic over to Los Angeles Transit Lines.
 - (10) Discontinue use of rails from the intersection of Bonnie Brae Street and Sunset Boulevard, along Sunset Boulevard, Hill Street, and Venice Boulevard to Vineyard. All remaining rail service of the Western District would operate out of the Subway.

GENERAL MODERNIZATION PROGRAM

This report on the Western District passenger rail lines is one of several such reports that will cover all rail passenger lines both interurban and local.

In the systemwide modernization program it is intended to study not only the rail passenger lines but also all existing motor coach lines for the purpose of determining the extent to which service improvements can be made and their financial status improved. It is not only the rail passenger lines that are suffering deficits. Recent analysis discloses that of the 25 motor coach lines operated by the Company, only 8 were profitable. The remaining 17 lines were operated at a loss.

RELATED PROCEEDINGS AND REPORTS

As indicated above, this and other reports are a part of the major

modernization program. These reports are directly related to the formal proceedings before the Public Utilities Commission of the State of California in Applications Nos. 23053 and 27466 and Case No. 4843.

The Commission's Decision No. 41152 dated January 19, 1948, in those proceedings, and exhibits submitted by Commission and Company witnesses prior thereto, are all closely related to the findings hereof. There is also a direct relationship between this report and exhibits and testimony submitted in evidence before the Commission at the hearing held in Los Angeles on October 13, 1948. Specifically, the exhibits referred to were as follows:

<u>Exhibit</u> <u>No.</u>	<u>Content</u>
46	Summary of Recommended Procedure from Preliminary Report of July 15, 1948, to Mr. O. A. Smith by Consulting Engineer.
47	Condensed Excerpts from the Preliminary Report.
48	Statistical Data and Trends Applying to the Transit Industry of the United States.
49	Passenger Loading Standards - Their Effect Upon Lines of Pacific Electric Railway Company.

This report also covers one phase of the studies recommended in the Preliminary Report submitted to the President of the Company, dated July 15, 1948.

Considerable of the basic and supporting theory behind the findings set forth herein will be found in the exhibits and testimony above referred to and for sake of brevity, they will not be repeated as this report will be made a part of the same proceeding.

FUNDAMENTAL PREMISE

It has been accepted as a basic assumption in conducting this survey and in deriving the conclusions and recommendations set forth herein that the only way in which the public can continue to be supplied with passenger transportation service by Pacific Electric Railway Company is for the physical and financial elements of the operation to be adjusted to the extent necessary to produce a reasonable profit to the carrier and a correspondingly adequate standard of service to the public. To propound the theory that standards of service are paramount to the financial solvency of the carrier who is required to provide that service is tantamount to depriving private industry of its fundamental incentive to remain in business and its inherent rights under the principles of free enterprise upon which the foundation of our economic system is established.

The problem can be epitomized as consisting of two primary responsibilities, first that of the carrier to discharge its obligation to the public in the most efficient and effective manner through the exercise of prudent and far-sighted managerial judgement, and the second, is the obligation of the persons benefiting from the service to pay a sufficient amount in return to offset the cost of providing it and, in addition, assure the Company of a reasonable measure of profit. To attain the desired balance of interests and equities it is essential that the problems of both principals and the re-

strictions under which they must function, be thoroughly understood and the superficial effects of minutia be subordinated to the paramount issues that go to the more profound consideration of survival or extinction of the transportation system.

TYPES OF OPERATION CONSIDERED

All possibilities of economies through continued operation of rail service under present conditions have been explored and a determination reached that rail passenger service as conducted with present equipment and facilities cannot be made to pay its way, and that to bring about a reasonable relationship between earnings and cost of providing service, major changes are mandatory. In order that due consideration be given to all feasible means of accomplishing the desired results through modernization of facilities and service, the scope of the survey has been extended to include,

- (a) Use of present 600-Class cars under one-man operation.
- (b) Modified use of electric trolley coaches.
- (c) Replacement of the existing rail cars with modern PCC-type cars equipped for one-man operation.
- (d) Conversion of present rail operations to highway service utilizing modern motor coaches in whole or in part.
- (e) Elimination of light feeder lines by transfer to another carrier.

The systemwide modernization program has been segregated into several parts, each one applying to a natural subdivision of the rail system generally embracing those lines serving a specific geographic area and conforming to the operating divisions of the system. This study covers only those lines included in the Western District and other studies will be submitted covering rail operations in the Southern, and Northern Districts.

B - FINANCIAL ANALYSIS

FINANCIAL REHABILITATION AND SERVICE MODERNIZATION REQUIREMENTS

For the year of 1947, consolidated operations of this carrier were conducted at a net loss of \$1,760,072.98. Passenger operations, including both rail and motor coach lines, contributed to that figure a loss of \$2,793,875.97. Passenger service by rail contributed to that latter figure a loss for the year of \$3,426,188.91. Some relief was experienced during 1948 as a result of the increase in fares that became effective on February 1st of that year and through drastic economies effected in many departments. Despite those improvements, passenger rail operations suffered an operating loss* for the most recent twelve month period for which figures are available of \$2,893,962. This figure applies to the twelve months ending October 31, 1948. Of that loss 77 per cent was chargeable to interurban rail lines and 23 per cent to so-called local lines. Of the total loss on rail lines for the year 1947, interurban lines were responsible for \$2,550,272.37 and local lines \$875,916.54.

System local rail lines, as considered in segregating the operating re-

* - Before allocation of bond interest and other appropriate deductions from operating income.

sults, consist of the Watts-Sierra Vista Line, Santa Monica Boulevard-West Hollywood-San Fernando Valley Line, Glendale-Burbank Line, Venice Short Line, and the Subway-Hollywood Boulevard Line.

For the first six months of 1948 these local lines combined, incurred an operating loss of \$265,168. No one of the lines was operated during that period of time at a profit. The San Fernando Valley-Santa Monica Boulevard Line operated at a loss of \$99,173 for the six months and the Subway-Hollywood Boulevard Line incurred a loss of \$72,875. The Glendale-Burbank Line was the only one of the five that closely approached a break-even point. It incurred a loss of only \$3,892 during the six months' period.

As a result of the general decline in patronage and heavy losses incurred in this local passenger service, the track and roadway on the lines involved has been permitted to fall to a sub-standard of maintenance and continued rail operation would require material increases in the cost of rehabilitation of track and roadway structure. This condition is particularly true on the Santa Monica Boulevard Line.

SUMMARY OF FINANCIAL RESULTS OF PROPOSED PLAN

There are included in the Appendix financial statements containing the results of the analysis of various methods of operation on the Western District lines. The results of each individual line are shown in detail separately. The combined findings are condensed in brief as follows:

Proposed Plan
Estimated Annual Financial Results of
Western District Lines

Item	Line	Operating Income		
		Present (1)	Proposed (2)	Improvement (3)
(1)	Subway-Santa Monica Blvd.- W. Hollywood-San Fernando Valley	\$(256,498)	\$243,126	
(2)	Glendale-Burbank	(59,256)	59,244	
(3)	Subway-Hollywood Blvd.-San Vicente-Echo Park	(177,778)	31,068	
(4)	San Fernando Valley Motor Coach Lines	(158,580)	(42,369)	
	Total	\$(652,112)	\$291,069	\$943,181

(RED FIGURES)

Analyses of financial results under three types of continued rail operation on the rail lines considered for change, excluding Items 2 and 4 above, indicated the following results:

	Annual Operating Income
(1) Present Operation	\$(434,276)
(2) 600-Class Cars, 1-Man Oper.	13,901
(3) P.C.C. Type Cars, 1-Man Oper.	(85,361)
(4) Proposed Operation	291,069

(RED FIGURES)

The principal feature disclosed by the financial estimates referred to is that the aggregate deficit of the rail lines studied under present rail operations would be \$652,112, including the Glendale-Burbank Line, and under the proposed rearrangement of operations utilizing motor coaches, the maximum improvement in financial status would bring about a net operating profit of \$291,069, or an overall financial improvement of \$943,181.

OPERATING RATIO AND EQUIVALENT FARE INCREASE

To realize this financial improvement through fare adjustment would require an average increase in fares, as applying to these lines, of 21.4 per cent and for the Company to realize such a betterment through reduction of costs, it would be necessary to reduce operating expenses 18.6 per cent. This percentage is based upon present maintenance standards of equipment and track and roadway as reflected by current operating expenses.

These estimates indicate that under the proposed operation approximately 7 per cent of gross revenue would be retained as net operating profit. This is only about one-half the amount justified. The operating ratio would be 93 per cent.

It is considered that for this type of industry where labor costs are such a high percentage of total operating expenses, retention of 15 per cent of gross is not excessive. Although the theory of reasonable rate of return on appropriate rate base for utility properties has been adopted as the standard measurement of earnings over a period of many years, the tendency in the transportation industry, particularly that which is predominantly motor coach operation, has been away from rate of return and directed towards operating ratio.

The need for such a revision of theory for application to transit operators has been forcibly emphasized during and subsequent to the war by the repeated annual demands for increase in wage rates of employees. In virtually all cases such wage increases were granted after lengthy negotiations and in many instances after further lengthy arbitration. The formula by which such wage increases are accomplished carries with it a retroactive provision making whatever increases are finally granted effective as of the date of expiration of the previous contract even though the settlement may not be reached until several months after expiration.

During the meantime the Company's earnings continue on a normal basis with no provision being made for acquiring a sufficient amount of revenue to offset the cost of increased wages. The operator is precluded from filing an application for increased fares to offset increased wages until such time as the amount of increased costs has been definitely determined. Even after such determination has been made by the Company, there usually is a retroactive period of considerable magnitude which cannot be compensated for even if increased fares could be made effective immediately upon signing of the labor agreement. Usually that period of time is extended considerably before relief can be had through increased fares, if such are granted.

This means that the operating Company is subjected to the increased cost of labor, without compensation through increased fares, for a period of several months before relief is obtained. Fare increases, when they finally are permitted, do not ordinarily make provision for the interim loss. It must be absorbed by the Company.

This is only one example of the contingencies confronting an operating transit company. Earnings in this industry are closely attuned to other developments in the area served such as strikes, increases in cost of fuel without warning, increases in price of equipment and other items necessary for continuation of operation.

METHODS OF COMPUTATION

Revenue - Under each of the plans considered, revenue has been estimated upon the basis of actual earnings during the months of 1948 projected for a period of twelve months. There has been no speculation as to the probability of increased traffic due to new types of equipment. Extensive analysis of various sources of information on this subject has been made and it appears that there is wide variance between the views of operating managers on various properties throughout the country as to whether or not new equipment in replacement of old actually produces any increased traffic, and on those properties where induced traffic has been agreed to exist there is difference of opinion as to the estimated amount. It appears that if new equipment does induce additional traffic there would probably be no difference in the percentage as between new rail cars and new motor coaches. If it should be assumed that new equipment would induce additional traffic, it would be logical to expect the increase to occur during peak periods as well as off-peak periods, thereby increasing to a corresponding degree the operating expenses which would be reflected in the final estimates of net earnings, as the costs of operation as computed herein adhere closely to the loading standards applied in each instance.

In this connection when comparing the merits of modern rail cars with those of modern motor coaches it should be kept in mind that the elements ordinarily considered to be traffic stimulating are frequency of service, schedule, speed and fares. As to frequency of service and schedule speed, motor coaches have the advantage over modern rail equipment and correspondingly should be expected to develop a greater stimulation of traffic if any consideration is to be given to such effects of modernization.

Expenses - Operating expenses, as reflected by the estimates of financial results of operation contained herein, represent actual costs in accordance with the accounting records of the Company. These have been carefully analyzed and segregated into sufficiently minute detail to afford final results that are as accurate as it is practicable to determine. Cost of trainmen's wages for present operation have been computed upon the basis of the actual cost per car mile, increased to reflect the higher wage rates that became effective on October 16, 1948. No allowance has been made for increase in clerical wages which will probably be retroactive to sometime in 1948.

In view of the fact that in the systemwide modernization program all rail lines are to be considered for modernization, full costs and taxes have been used instead of out-of-pocket costs. When considering a systemwide modernization program, the only equitable basis of computation is that of full cost. The theory of out-of-pocket cost should only be applied in isolated instances where service or operating changes on a minor scale would have no direct bearing upon costs of a general nature that would not be reduced by the changes contemplated.

Depreciation - Depreciation expenses have been computed upon the basis

of actual rates presently used by the Company for accounting purposes. Under the revised depreciation formula recently prescribed by the Interstate Commerce Commission for application to Pacific Electric properties, it might be contended that charges assigned to Ways and Structures accounts are unnecessarily high. However, whatever the difference might be, it would amply be offset by the fact that a service life of only seven years has been applied to motor coaches in the financial estimates, whereas actually the Public Utilities Commission has approved a life of ten years for such equipment. Use of a ten-year life instead of seven would appreciably increase the financial advantage of motor coach operation.

FUTURE EARNING PROSPECTS

Review of the history of passenger transportation in the area served by the lines considered herein provides no hope for material betterment of financial prospects in the future. Further delay in effecting remedial measures in anticipation of better times to come cannot be justified. Although San Fernando Valley is still sparsely settled, it has experienced the maximum increase in population during recent years, of the Los Angeles Metropolitan Area. Despite this fact passenger traffic has steadily decreased month by month since January of 1947. Due to the distances involved, use of the private automobile, decentralization of business and entertainment centers, and low density of population in the area, mass transportation has gradually been reduced to a level well below the plane of profitable operation. All indications point toward a continuation of that trend.

There are those who will contend that poor service and lack of modern facilities are largely responsible for the slow strangulation of transit. Such reasoning is not based upon fact. It has been the natural course of events that has caused the difficulty and not the failure of the carrier to reasonably discharge its obligation. If Pacific Electric Railway were alone in its financial predicament and other obvious causes were absent, then it might logically be argued that it had guided its own fate. Such is not the case, however. This Company is experiencing the same problems that are plaguing the industry throughout the country. There is no simple solution and no plan of rail mass transportation within the realms of reason, will ever bring back the necessary traffic volume and spread under normal conditions to provide a profitable operation.

It is easy to see, with the millions of dollars being spent to construct freeways for the multitude of private automobiles, how the life blood of mass transportation has been drained. No such funds can be obtained from the transit riding group to finance elaborate facilities. The average person using his automobile on the costly freeways is paying the bill, whether he realizes it or not. The cost per mile of his transportation is manyfold that which he would pay by mass transportation. However, he pays it willingly and without recourse. The same man would be prone to complain about the relatively low fare on mass transit and condemn the service as well. The vanishing American transit systems are following the course charted by the will of the people and not by choice of management.

DECLINE IN TRAFFIC AND REVENUE

Reference to Tables Nos. 5, 6 and 7, in the Appendix will show the downward trend in traffic and the corresponding trend of revenue for the years

from 1938 to 1946 and by months for 1947 and 1948. The trend during post war years is highly significant. Although the monthly downward trend during 1947 was continuous it was not of unusually large magnitude. In 1948 the downward trend each month compared with the same month of the previous year, was exceedingly heavy, ranging between 15 and 26 per cent. Although an increase in fares became effective in February of 1948, the decrease in traffic was so great during subsequent months that revenue was less than before the increase. For the full year of 1948, on the Santa Monica Blvd.-San Fernando Valley rail line there was a decrease of 20.39 per cent in revenue passengers and a decrease of 5.53 per cent in passenger revenue, despite the increase in fares. On the Hollywood Blvd.-San Vicente-Echo Park Line there was a decrease of 16.44 per cent in revenue passengers and a decrease of 1.44 per cent in passenger revenue. It appears that the point of diminishing returns under present conditions on these lines, has been reached unless the relationship is due to normal travel decline.

On the Glendale-Burbank Line the same condition is true despite the fact that the line is equipped with modern P.C.C. type cars. A heavy increase in the rate of decrease of revenue passengers month by month compared with the same months of the previous year, commenced in March of 1948, the month following the increase in fares. For the full year of 1948 there was a decrease in revenue passengers of 16.9 per cent as compared with 1947. There was a decrease of 9.9 per cent during 1947 as compared with 1946.

Passenger revenue on the Glendale-Burbank Line decreased 12.9 per cent in 1947 over 1946 and 5.4 per cent in 1948 over 1947 despite the increase in fares.

The reduction in traffic has resulted principally during the off-peak periods and evening hours. Contrariwise there has been no comparative diminution of traffic in the peak periods, thus necessitating the continuation of the use of maximum equipment requirements for a minimum period of the day.

REHABILITATION COST

Condition of the Western District track and roadway (not including Glendale or Venice Boulevard Lines) varies from good to poor. The Hollywood Boulevard Line between the intersection of Fourth and Hill Streets and Hollywood Junction is in good condition requiring but a nominal expenditure during the next five years. Between Hollywood Junction and Crescent Junction (Fairfax Avenue) condition is also relatively good and will require but a nominal expenditure for repairs during the next five years.

The Santa Monica Boulevard Line between Hollywood Junction and Beverly Hills is, in general, in very poor condition and will require an expenditure of approximately \$1,480,000 to rehabilitate. This work normally should be undertaken as soon as practicable as the track structure is unsatisfactory even for present rail passenger operations.

Condition of track on the Echo Park Line is poor and in need of immediate reconstruction if rail passenger service is to be continued.

The Hollywood-Van Nuys portion of the Santa Monica-West Hollywood-Van Nuys Line is in good condition between Santa Monica Boulevard and Vineland

Avenue. Beyond this point and particularly through the paved street portion of Van Nuys, the tracks are in need of major reconstruction. Track should be relayed with 90# rail within the next two to three years.

Total rehabilitation cost for continued rail passenger operation is estimated to be \$2,089,580. Of that amount \$422,760 should be spent immediately and the remainder of \$1,666,820, over a period of about five years. Table No. 3 of the Appendix provides a breakdown of those figures.

Of that total amount \$1,923,000 would be saved under the plan of operation herein, in addition to an estimated cost of \$230,000 for lowering of tracks in Van Nuys at insistence of the City of Los Angeles in connection with street work on Van Nuys Boulevard, and \$64,000 for block signalling beyond North Hollywood. Both of these latter amounts would also be saved.

C - PRESENT OPERATIONS

CHARACTER OF AREA SERVED

Along those rail lines under consideration for modification, excluding for the moment the San Fernando Valley, the area is almost entirely built up with older residential structures with numerous business districts along their lengths. Aside from the downtown business section of Los Angeles, the Hollywood district along Hollywood Boulevard and Santa Monica Boulevard represent the greatest concentration of secondary business activity. All of the lines are flanked on either side by well populated residential areas primarily of older type construction. In other words, these lines serve well established areas with reasonably dense population.

In the San Fernando Valley area the section between Hollywood and North Hollywood is of fair density except for that portion on private right-of-way over Cahuenga Pass. Between North Hollywood and Van Nuys population density falls off to a very low point in the agricultural portion returning to good density in the vicinity of Van Nuys. Beyond Van Nuys to the north and to the west the population is extremely sparse except for small communities here and there. The country is largely agricultural although gradually building up residentially. Percentage of growth of population in the Valley has been very high compared to the Los Angeles Metropolitan Area generally.

NATURE OF OPERATIONS

Los Angeles-Hollywood Area - Operations in the Los Angeles-Hollywood areas are typically local rail service largely over track in paved streets. The lines form a large letter "U" with its top facing west. From Beverly Hills the lines proceed easterly through Hollywood then southerly through the business section of Los Angeles and then westerly along Venice Boulevard and San Vicente Boulevard to a point south of and a little to the east of the beginning. Along that portion of the route through Hollywood, Pacific Electric has exclusive rights. However, on Venice Boulevard the line is flanked on either side by parallel rail lines of the Los Angeles Transit Lines, at a short distance. Los Angeles Transit Lines service is sufficiently closely spaced in the area from Hill Street to Vineyard to satisfactorily handle all traffic now carried by Pacific Electric along Venice Boulevard.

With division of the Los Angeles Motor Coach Lines the area now served by Pacific Electric along San Vicente could probably be adequately served by Los Angeles Transit Lines.

San Fernando Valley Area - Operations in San Fernando Valley consist of the rail line from downtown Los Angeles through Hollywood and over Cahuenga Pass into the Valley, extending through North Hollywood and Van Nuys to a terminus at North Sherman Way. In addition to the rail passenger line Pacific Electric operates an extensive network of local and suburban motor coach lines covering an area from Universal City to San Fernando, Northridge, Reseda, Canoga Park and Woodland Hills. Much of the area served by these lines is extremely low in population density, being agricultural in large part to the west of Van Nuys.

In addition to Pacific Electric motor coach lines in the Valley, there is a network of motor coach lines of the Asbury Rapid Transit System, in many instances duplicating and paralleling the routes of Pacific Electric.

It would appear that both carriers would benefit financially and the public would benefit by improved service of a better coordinated nature if arrangements could be made whereby all of Pacific Electric's motor coach operations except through lines into Los Angeles and Hollywood, could be turned over to Asbury Rapid Transit Lines on an agreed basis of operation.

PRESENT ROUTES

Subway-Hollywood Blvd.-San Vicente Blvd. Line - The portion of this line from Gardner Street to the intersection of Genesee Street and San Vicente Boulevard provides through service between those points traversing downtown Los Angeles and the Hollywood business district. The route of operation from the Hollywood terminal is along private right-of-way to La Brea Avenue and Hollywood Boulevard, thence via Hollywood Boulevard, Hill Street, and Venice Boulevard to Victoria Avenue, thence via private right-of-way to end of line at Genesee Street and San Vicente Boulevard. The length of this route is 16.01 miles. The line operates jointly with other local lines except between Echo Park Avenue and Park Avenue on Sunset Boulevard (.29 miles), and between Vineyard Junction and Genesee Street and San Vicente Boulevard (1.775 miles).

The Subway-Hollywood Blvd.-Beverly Hills portion connects the downtown Los Angeles area with the Hollywood shopping district passing through Hollywood to Beverly Hills Station. Operation is via private right-of-way tunnel from the Subway Terminal, via Glendale Boulevard, Park Avenue, Sunset Boulevard, Hollywood Boulevard to La Brea Avenue, thence via private right-of-way to Fairfax Avenue and Santa Monica Boulevard, thence via Santa Monica Boulevard to Croft Avenue, at which point the tracks enter private right-of-way, occupying the center of Santa Monica Boulevard, to Beverly Hills Station, a distance of 11.70 miles. The line operates jointly with other local lines except between West Hollywood Station and Beverly Hills Station, a distance of 1.328 miles.

The Echo Park Avenue portion operates from 11th & Hill Streets via Hill Street, Sunset Boulevard and Echo Park Avenue to the terminus at Cerro Gordo Street, a distance of 4.56 miles. The line operates jointly with other local lines on Hill Street and Sunset Boulevard.

Subway-Santa Monica Blvd.-West Hollywood-San Fernando Valley Line -
From Subway Terminal, Los Angeles, this line is operated through a railroad tunnel approximately one mile long, thence along Glendale Boulevard, Park Avenue, Sunset Boulevard and Santa Monica Boulevard to Highland Avenue, where the service divides, a part continuing along Santa Monica Boulevard to West Hollywood, and the other part turning north on Highland Avenue and over Cahuenga Pass to San Fernando Valley.

From Highland Avenue, the West Hollywood service continues along Santa Monica Boulevard to Croft Avenue, thence in private right-of-way between the two roadways of Santa Monica Boulevard to approximately Hilldale Avenue, West Hollywood, a distance of 10.05 miles from Subway Terminal.

The San Fernando Valley service turns north off Santa Monica Boulevard at Highland Avenue to Hollywood Parkway (Cahuenga Pass), where it enters private right-of-way closely paralleling Hollywood Parkway, Ventura Boulevard, Vineland Avenue, Chandler Boulevard (North Hollywood), and Van Nuys Boulevard to Calvert Street, Van Nuys, thence in Van Nuys Boulevard, through the business section of Van Nuys, to Van Owen Street, and continuing from that point via private right-of-way to Sherman Way, Van Nuys, a distance of 19.93 miles from Subway Terminal.

From Subway Terminal to the intersection of Sunset Boulevard and Santa Monica Boulevard (3.74 miles), trackage is used jointly with other local lines, as well as from Fairfax Avenue and Santa Monica Boulevard to West Hollywood, a distance of 1.61 miles. Line is double track, except for the following sections: (a) 0.66 miles between Los Nogales stop and Moorpark Street; (b) 4.99 miles between North Hollywood and Calvert Street, Van Nuys. For a distance of 2.26 miles the single track between North Hollywood and Van Nuys is used jointly with Southern Pacific.

From Subway Terminal to West Hollywood, or to Highland Avenue and Hollywood Parkway (Cahuenga Pass), the line traverses well developed residential and business districts. No freight traffic is handled on this line in San Fernando Valley, although there is a large amount of freight traffic handled thereon via Santa Monica Air Line and West Los Angeles, to and from the West Hollywood and Hollywood industries along Santa Monica Boulevard west of approximately Highland Avenue.

After leaving Hollywood through Cahuenga Pass, the line enters the San Fernando Valley, serving a portion of the Universal City, North Hollywood and Van Nuys residential and business districts, as well as the intervening residential areas.

PRESENT SERVICE

Subway-Hollywood Blvd.-San Vicente Blvd. Line - From an operating point of view there are three distinct lines under this caption. For accounting purposes, however, they are viewed as only one operation. Service segregations are as follows:

1. Gardner Street to Genesee & San Vicente

This line provides a through service between the intersection of Genesee Street and San Vicente Boulevard and downtown Los Angeles and the Hollywood

business district, with a terminal at the intersection of Gardner Street and Sunset Boulevard in Hollywood. The length of this route is 16.01 miles.

After 7:00 p.m. daily the line operates between Gardner Street, and 11th Street on Hill Street. The local service on Hill Street south of 11th and along Venice Boulevard to Vineyard Junction is performed by the inter-urban trains of the Venice Short Line. Shuttle service is operated daily after 7:00 p.m. between Vineyard Junction and Genesee Street on San Vicente Boulevard.

This line operates over joint track with the Venice Short Line from Vineyard Junction to the Hill Street Station, a distance of 5.48 miles, there being a total of about 302 scheduled train movements over this section of track per day.

2. Subway - Hollywood Boulevard

This line connects the downtown Los Angeles area with the Hollywood shopping district, passing through Hollywood to Beverly Hills Station. The distance covered in the operation of this line is 11.70 miles.

After approximately 7:00 p.m. daily the route operates from Bonnie Brae on Sunset Boulevard via Sunset Boulevard and Hill Street to 11th Street, instead of through private right-of-way tunnel to the Subway Terminal. From the intersection of Park Avenue and Glendale Boulevard to the Subway Terminal, 2.01 miles of the route are used jointly with the Glendale-Burbank line, which maintains a daily schedule of 274 movements.

3. Echo Park Avenue Line

This line operates from 11th on Hill Street via Hill Street to Sunset Boulevard, thence via Sunset Boulevard and Echo Park Avenue to the terminus at Cerro Gordo Street. Present rail service operates throughout the day until approximately 8:30 p.m. On Sundays shuttle service is operated along Echo Park Avenue between Sunset Boulevard and Cerro Gordo on approximately a twenty minute headway. The route distance from 11th and Hill Streets to Echo Park Avenue and Sunset Boulevard is 3.31 miles, and on Echo Park Avenue from Sunset Boulevard to Cerro Gordo Street, 1.25 miles.

4. Operating Characteristics

Hollywood Blvd. Lines

Length of Route:

16.01 Miles	-	Genesee St. & San Vicente to Gardner St. and Sunset Blvd.
14.20 "	-	Vineyard to Gardner St. & Sunset Blvd.
11.70 "	-	Subway to Beverly Hills
19.50 "	-	Genesee St. & San Vicente to Beverly Hills
10.26 "	-	Subway to West Hollywood Station
18.06 "	-	Genesee St. & San Vicente to West Hollywood
13.15 "	-	11th & Hill to Beverly Hills
11.71 "	-	11th & Hill to West Hollywood
9.66 "	-	11th & Hill to Gardner
8.21 "	-	Subway to Gardner
4.56 "	-	11th & Hill to Cerro Gordo

Number of Trains Operated:

(Daily except Sat. & Sun)

- 81 Genesee St. & San Vicente Blvd. to Gardner St.
- 77 Gardner St. to Genesee St. & San Vicente Blvd.
- 83 Subway to Beverly Hills
- 80 Beverly Hills to Subway
- 44 11th & Hill Sts. to Gardner St.
- 46 Gardner St. to 11th & Hill St.
- 120 11th & Hill St. to Cerro Gordo
- 117 Cerro Gordo to 11th & Hill Sts.

Gardner St. to Genesee St.
and San Vicente

Daily Except Saturdays and Sundays

	<u>A.M. Peak</u>	<u>Base</u>	<u>P.M. Peak</u>	<u>Night</u>
Scheduled running time	82"	78"	86"	(Combined
Cars required	40	19	42	(Service
Average miles per hour	11.7	12.3	11.2	(with
Approximate headways	9-10"	10"	9-10"	(Venice
				(Short Line

Subway-Hollywood Blvd.-
Beverly Hills

Scheduled running time	54"	54"	54"	(No service
Cars required	18	13	22	(after
Average miles per hour	13.0	13.0	13.0	(7:00 P.M.
Approximate headways	9-10"	10"	9-10"	(

Echo Park Avenue

Scheduled running time	32"	30"	35"	(No service
Cars required	13	8	13	(on Hill St.
Average miles per hour	8.6	9.1	7.8	(after
Approximate headways	6"	10"	6"	(7:50 P.M.

Subway-Santa Monica Blvd.-West Hollywood-San Fernando Valley - From an operating point of view this is two distinct lines. For accounting purposes, however, they are viewed only as one. Service segregations are as follows:

1. Subway-Santa Monica Blvd.-San Fernando Valley Line

The total length of the route between Subway Terminal and North Sherman Way in Van Nuys is 19.93 miles. Starting at 5:00 p.m. approximately half of the service terminates at North Hollywood Station. Portions of the route are used jointly by other local rail lines involved and also by the Glendale-Burbank interurban line for a distance of 2.01 miles between Subway Terminal and Park Avenue and Glendale Boulevard. There are 137 scheduled movements per day.

2. Subway - Santa Monica Boulevard-West Hollywood

This line provides local service between Los Angeles and West Hollywood. The total length of the route between Subway Terminal and West Hollywood Station is 10.05 miles. The majority of the route is used jointly with the other local lines and the Glendale Burbank Line. There are 114 scheduled train movements per day.

3. Operating Characteristics

Length of Route:

10.05 Miles - Subway to West Hollywood
 19.93 " - Subway to Van Nuys

Number of Trains Operated:

(Daily except Sat. & Sun)

64 Subway to West Hollywood
 65 West Hollywood to Subway
 67 Subway to North Hollywood
 69 North Hollywood to Subway
 *50 Subway to Van Nuys
 *51 Van Nuys to Subway

* - The Van Nuys trains are included in count of trains serving North Hollywood.

Los Angeles (Subway Terminal) to West Hollywood

Daily Except Saturdays and Sundays

	<u>A.M. Peak</u>	<u>Base</u>	<u>P.M. Peak</u>	<u>Night</u>
Scheduled running time	45"	45"	45"	41"
Cars required (9 600-Class cars)	9	6	9	5
Average miles per hour	13.4	13.4	13.4	14.7
Approximate headways	15"	20"	15"	20"-30"

Daily Except Saturdays and Sundays

<u>Los Angeles (Subway Terminal) to . . .</u>	<u>A.M. PEAK</u>		<u>BASE</u>		<u>P.M. PEAK</u>		<u>NIGHT</u>	
	<u>North</u>	<u>Van</u>	<u>North</u>	<u>Van</u>	<u>North</u>	<u>Van</u>	<u>North</u>	<u>Van</u>
	<u>Hwd</u>	<u>Nuys</u>	<u>Hwd</u>	<u>Nuys</u>	<u>Hwd</u>	<u>Nuys</u>	<u>Hwd</u>	<u>Nuys</u>
Scheduled running time (Loc.)	56"	81"	56"	80"	59"	84"	53"	75"
Scheduled running time (Ltd.)	52	75	-	-	55	80	-	-
Cars required (31 600-Class)	-	28	-	16	-	31	-	8
Average miles per hour	14.8- 16.6	14.8- 15.9	14.8	14.9	14.0- 15.0	14.2- 14.9	15.6	15.9
Approximate headways	12"	17"	20"	20"	11"	17"	20-40"	40"

MILEAGE TABLE

Hollywood Boulevard Lines

<u>From Genesee & San Vicente to:</u>	<u>Miles</u>
Vineyard	1.81
11th & Hill Streets	6.35
Hill Street Station (Subway Terminal).....	7.29
Bonnie Brae Street	9.95

<u>From Genesee & San Vicente to: (contd.)</u>		<u>Miles</u>
Hollywood Junction		11.54
Gardner Street		16.01
Fairfax Avenue		16.71
West Hollywood Station		18.06
Beverly Hills Station		19.50
<u>Echo Park Avenue Line</u>		

<u>From 11th & Hill Streets to:</u>		
Hill Street Station		0.94
Temple & Hill Streets		1.55
Sunset Blvd. & Echo Park Avenue		3.31
Morton Avenue Siding		3.72
Marsden Street Siding		3.97
Cerro Gordo Street		4.56

Santa Monica Boulevard-West Hollywood-Van Nuys Lines

<u>From Los Angeles to:</u>		
Hollywood Junction		3.74
Santa Monica Blvd. & Western Avenue		5.43
Santa Monica Blvd. & Highland Avenue		7.12
Santa Monica Blvd. & Fairfax Avenue		8.44
West Hollywood		10.05
Cahuenga Pass		8.66
Universal City		11.11
North Hollywood		13.83
Kester		16.09
Circle Drive		17.71
Calvert		18.74
Van Nuys (Victory Blvd.)		19.09
Sherman Way		19.93

EQUIPMENT AND FACILITIES

Rail Cars - Rail car assignments to the several lines on a physical operation basis, together with Peak to Base ratio, are as follows:

Rail Car Assignments

<u>Item</u>	<u>Line</u> (1)	<u>Class of Car</u> (2)	<u>No. of Cars Assigned</u>		<u>Peak to Base Ratio</u> (5)
			<u>Peak</u> (3)	<u>Base</u> (4)	
1.	Santa Monica Blvd.-Van Nuys	600-700	31	16	1.93
2.	Santa Monica Blvd.-W. Hollywood	600-700	9	6	1.50
3.	Hollywood Boulevard	600-700	64	32	2.00
4.	Echo Park Avenue	100	13	8	1.63
5.	Glendale-Burbank	600-700	7	-	-
6.	" "	950	3		
7.	" "	5000	<u>28</u>	<u>12</u>	
8.	Total Glendale-Burbank		<u>38</u>	<u>12</u>	3.17
9.	Grand Total		155	74	2.09

All of the above classes of cars are of relatively modern design and well suited to urban type operation, except the 950 Class assigned to the Glendale-Burbank Line during peak periods. The 5000 Class is of the P.C.C. type of recent design. All are built for double end operation and multiple unit service.

Characteristics of the cars are as follows:

Characteristics of Rail Cars

No.	Item (1)	Class of Car		
		100 (2)	600-700 (3)	5000 (4)
1.	Number Available	15	160	30
2.	Type of Construction	Steel	Steel	Steel
3.	Year Built	1930	1922-28	1940
4.	Seating Capacity	40	65	59
5.	Number of Motors	4	4	4
6.	Horsepower per Motor	35	65	55
7.	Acceleration Rate-mphps	2.0	2.5	4.5
8.	Speed - mph	29	37	42

Other Facilities - Other facilities consist of the usual substations, electrical distribution facilities, waiting stations, track and roadway, and the Subway Terminal which is used only by Western District Lines.

Subway Terminal - The Subway was constructed by Pacific Electric and opened to traffic in 1925. It is double tracked, 1.045 miles in length, 28 feet in width and 19 feet 9½ inches in height above the rails. There are five loading tracks in the Terminal each 370 feet long. The floor of the main waiting room of the Terminal Building is 29 feet above the top of rails in the Subway. Access to the loading area is via low angle ramps. Exit from the Subway is on the west side of Hill Street between Fourth and Fifth Streets, a short distance north of the center of the downtown business center of Los Angeles.

TRAFFIC CHARACTERISTICS

Characteristics of traffic and other pertinent statistical data are shown by tables and charts in the Appendix. The steady decline in traffic has already been commented upon in a previous section of this report. The ratio of peak traffic to off-peak volume is indicated by the equipment assignment figures on the table on Page 17. The trend of traffic on all lines is steadily downward.

D - PROPOSED OPERATIONS

GENERAL ARRANGEMENT

The general arrangement of operations as proposed herein contemplate elimination of all Western District rail lines except, (1) the Glendale-Burbank Line, (2) the San Fernando Valley Line and (3) local operation via the Subway, Sunset Boulevard, Hollywood Boulevard and Santa Monica Boulevard beyond Fairfax Avenue to Beverly Hills Station. It is proposed to cut the San

Fernando Valley rail line back to North Hollywood.

Specifically, it is proposed to make the following changes:

- (1) Discontinue rail service beyond North Hollywood on the San Fernando Valley Line.
- (2) Provide replacement service by augmenting to the extent necessary the service on the Riverside Drive motor coach line and routing a new leg over Chandler Boulevard and Van Nuys Boulevard along the route of the present rail line, thereby giving through service from Los Angeles to all persons now so served by rail.
- (3) Relinquish all local motor coach lines in San Fernando Valley to the other existing local operator in that area, Asbury Rapid Transit Lines, or to some other carrier who may be interested.
- (4) Retain for Pacific Electric operation only the through lines into Hollywood and Los Angeles, as follows:
 - (a) Rail line from North Hollywood to Los Angeles
 - (b) Ventura Boulevard Motor Coach Line from Tarzana to Hollywood with augmented service over a branch line from Sherman Oaks to Van Nuys thereby providing direct service to Hollywood for those persons presently so served by rail.
 - (c) Riverside Drive Motor Coach Line over present route between Van Nuys and Los Angeles augmented by additional service over a new branch line from North Hollywood to Van Nuys via Chandler Boulevard and Van Nuys Boulevard, thereby preserving through service into Los Angeles.
- (5) Reroute the San Fernando Valley rail line so as to operate over Hollywood Boulevard instead of on Santa Monica Boulevard between the intersection of Santa Monica Boulevard and Sunset Boulevard and the intersection of Santa Monica Boulevard and Highland Avenue.
- (6) Continue Local rail service along Hollywood Boulevard extending beyond Highland Avenue to Beverly Hills.
- (7) Establish a Motor Coach Line on Santa Monica Boulevard from West Hollywood along Santa Monica Boulevard, Sunset Boulevard and Hill Street to Eleventh Street.
- (8) Replace rail service on Echo Park Avenue by motor coach service operating over Echo Park Avenue, Sunset Boulevard and Hill Street to Eleventh Street.
- (9) Discontinue rail service without motor coach replacement on the Venice Boulevard-San Vicente Boulevard Line and turn

traffic over to Los Angeles Transit Lines.

- (10) Discontinue use of rails from the intersection of Alvarado Street and Sunset Boulevard, along Sunset Boulevard, Hill Street, and Venice Boulevard to Vineyard. All remaining rail service of the Western District would operate out of the Subway.

MOTIVATING CONSIDERATIONS

The primary objective of this survey is to seek means whereby the financial losses incurred from passenger operations in the Western District can be eliminated and a type of service devised that will be profitable and will also adequately meet the reasonable requirements of the public.

For the first six months of 1948, which is the latest statistical data compiled, the financial results of operation for the lines considered herein for change, were as follows:

<u>Item</u>	<u>Line</u>	<u>Revenue</u>	<u>Expenses</u>	<u>Net Operating Loss</u>
	(1)	(2)	(3)	(4)
1.	Subway-Santa Monica Blvd. -West Hollywood-San Fernando Valley	\$ 575,706	\$ 674,879	(\$ 99,173)
2.	Subway-Hollywood Blvd. -San Vicente	956,521	1,029,396	(72,875)
3.	Hollywood-Ventura Blvd. (M. C.)	116,378	123,194	(6,816)
4.	North Hollywood (M. C.)	35,825	52,212	(16,387)
5.	Van Nuys-Canoga Park (M. C.)...	22,919	27,837	(4,918)
6.	Van Nuys-San Fernando (M. C.)..	15,933	21,269	(5,336)
7.	Van Nuys-Birmingham Hosp. (M. C.)	19,509	23,472	(3,963)
8.	L. A. -No. Hollywood-Van Nuys(M. C.)	98,782	114,284	(15,502)
9.	Total 6 Months	\$1,841,573	\$2,066,543	(\$ 224,970)
10.	Total 12 Months	\$3,683,146	\$4,133,086	(\$ 449,940)

As pointed out previously under Section B - Financial Analysis, the condition of heavy financial loss is systemwide and not confined to any one district. Passenger rail lines for the year of 1947, on a systemwide basis, incurred an aggregate loss of \$3,426,189. For the year of 1948 the condition is not much improved. On the basis of the first six months, which do not fully reflect increases in labor rates, the loss on passenger rail lines will be \$2,323,918. Of a total of 26 motor coach lines, 17 were operated at a loss during the first six months of 1948.

For the Company to be able to continue providing service of any character drastic measures must be taken to improve its financial status. The proposed plan herein will convert the losses of the Western District into a profit and will afford the public a reasonable service comparable with the standards of operation and equipment generally found throughout the transit properties of the Country. No unreasonable hardships will be imposed upon anyone by the proposed plan of operation. On the other hand it will provide a measure of profit that will enable the Company to concentrate on high class service and facilities.

Passenger transportation operations and service in and to San Fernando Valley have been the subject of controversy over a period of many years. Numerous proceedings have been processed before the Public Utilities Commission of California dealing with expansion, contraction and rearrangement of passenger transportation lines in the Valley as well as to adjudicate competitive aspirations of the two principal carriers serving the same general territory.

In the early days electric rail lines were projected into thinly populated areas where it was expected that heavy growth would take place along the lines and generate a profitable volume of traffic. Such developments actually were the order of the day in the early stages of expansion of many large cities. That condition no longer exists. Over the past fifteen years the electric passenger rail lines in Southern California have been steadily disappearing. The extent of such operations in San Fernando Valley have been gradually reduced as profits from operation turned into losses. Even in the densely populated areas of the main section of Los Angeles it has been necessary to replace many rail lines with motor coach service. The City of San Francisco, on its municipally owned property, is rapidly replacing rail lines with rubber-tired vehicles. The same is true of the city-owned property in Seattle.

In Exhibit No. 32, prepared and submitted by Public Utilities Commission Engineers, it was said relative to the San Fernando Valley rail line:

"The future of rail service to the San Fernando Valley depends greatly upon the provision of a rapid transit right of way between Hollywood and the Subway Terminal in Los Angeles. When the Hollywood Freeway has been completed, the running time by automobile or by bus will then be much lower than that of the rail line operating over city streets and subject to numerous traffic delays. The public will undoubtedly demand bus operation over the freeway and since the present plans for the Hollywood Freeway do not make any provision for rail operation, the future of the San Fernando Valley rail line is problematical."

Aside from the rail line in San Fernando Valley, the motor coach lines present a great problem. Due to competitive influences Pacific Electric has a network of motor coach lines serving the same general territory as those of Asbury Rapid Transit Lines. Pacific Electric is losing money on its operations and the other carrier is earning less than would be the case if the two carriers were not dividing up the revenue.

It appears reasonable to expect that if Pacific Electric would withdraw from local short-haul operations and turn the entire network other than through lines, over to Asbury Rapid Transit Lines, Pacific Electric would enjoy a financial improvement by eliminating its losses, the other carrier would bolster up his earnings and the public would have a better service coverage by redesigning the operations on a systematic and fully coordinated basis.

TYPES OF OPERATION CONSIDERED

A number of service and operating arrangements were studied in attempting to find the most suitable plan for the Western District lines. In addition

to the basic studies of each line as presently operated, financial estimates were made of the results of one-man car operation with both the present 600-Class cars and with new P.C.C. type cars. Consideration was also given to the comparative characteristics of electric trolley coaches.

After extensive analysis of the relative merits of the several plans studied it has been concluded that present 600-Class cars converted to one-man operation will be most economical and will provide a standard of basic service favorably comparable to the P.C.C. type car.

The 600-Class car is well constructed, is of attractive design, has good interior arrangement, is of steel construction and is of relatively recent construction. With proper modification for one-man operation it will perform years of highly satisfactory service. Furthermore, the future of rail operation of any character must be viewed with apprehension when considered in the light of the obvious trend during the past. Under such conditions of uncertainty it would be highly questionable judgement on the part of management to purchase either new rail equipment or new trolley coach equipment when vehicles of suitable design are already on hand and in good operating condition.

Streetcar investment must be amortized over a period of about twenty years, trolley coaches twelve years or more and motor coaches seven to ten years. Within twenty years the transportation picture of this area will be much changed and the Company would quite likely find itself in the position of possessing fine new cars but insufficient traffic, if any, to carry on them. They would have no other market because the trend is away from rail cars to rubber tired vehicles.

The same consideration applies to electric trolley coaches. They are a fixed route vehicle and if rendered unnecessary due to change in traffic flow, could not be transferred to some other line. The market for disposal of such vehicles to other carriers is not great.

On the other hand, the flexibility of the motor coach, its freedom of route assignment and widespread standard use makes it adaptable for easy disposal. Its relatively shorter service life insures amortization of investment within a shorter span of years.

At the present time the San Diego Electric Railway Company has announced its intention of disposing of its relatively new, modern type P.C.C. cars and to replace them with motor coaches.

Giving full consideration to the advantages of the various types of vehicle, the present and future problems to the extent they can be foreseen, and the highly important factor of financial balance, it is concluded that the plan proposed herein is the most favorable to the equities of all parties concerned.

EFFECT OF FREEWAYS AND RAIL RAPID TRANSIT

Throughout all of the studies and in arriving at final conclusions it was considered necessary to keep in mind the changes that are to be made in the general automobile traffic pattern by the new freeways that are already in the first stages of construction. When the Hollywood Parkway is completed it will pass from the downtown area of Los Angeles through the heavily populated

area served by Pacific Electric and will continue through Hollywood and north into San Fernando Valley through Cahuenga Pass. Furthermore sight must not be lost of the possible future construction of rail rapid transit lines. Realization of rail rapid transit into San Fernando Valley is a very remote possibility and if ever developed it will be so far in the future that Pacific Electric planning at present must not be guided too strongly as to basic design in anticipation of that form of transit facility.

As to the impracticability of retaining nonprofitable rail lines for possible use in a rail rapid transit system, if such should develop, reference should be made to the subject as treated on Page 22 of the Venice Short Line report.

The immediate problem that is of real importance now and not in the distant future, is the effect that the new automobile freeways will have upon the daily traffic pattern. The freeways will be additional to the present highway system and if past experience is repeated, which will no doubt be the case, the freeways will be filled to capacity in a relatively short length of time. It is reasonable to expect that a substantial portion of that traffic will consist of erstwhile Pacific Electric patrons.

Therefore, in planning the type of operation proposed herein it was considered to be fundamental that nothing be done that would interfere with future adjustments that will probably be made necessary by the freeway system. This is one of the principal reasons for designing the service to make fullest use of existing types of equipment which are suitable for a considerable number of years of satisfactory service. The economic and physical aspects of the problem both present and future rule against the introduction at this time of trolley coaches that would be only a small part of the total system, would complicate the parts and maintenance problems, and would not possess the degree of flexibility that might be needed in the near future to adjust operations to meet the changes in demand that may be created by the freeways.

SUITABILITY OF MOTOR COACHES

Experience of this Company as well as many others has conclusively demonstrated the ability of motor coaches to perform satisfactorily in replacement of rail lines in all districts. With reference to the Northern District, rail service to Alhambra and Temple City was replaced by motor coaches, rail service between Baldwin Park and San Bernardino was likewise superceded by highway operation. In the City of Pasadena rail lines were completely replaced by motor coaches. In other instances such as on the Sunland Line, motor coaches pioneered the passenger transportation field.

The ability of motor coaches operating over streets and highways to satisfactorily meet the most rigid transportation requirements has become such a firmly established fact that in the operating industry there is no longer any question. This type of service has long since served its apprenticeship, passed through the painful stages of makeshift equipment and procedure and now stands firmly on a sound foundation of proven ability. In heavy density local traffic the vehicle has dispelled all logical contentions as to its inadequacy. On the Wilshire Boulevard motor coach line of the Los Angeles Motor Coach Lines as heavy traffic is carried as on the heaviest streetcar lines in the City using P.C.C. type cars. In other large cities rubber tired vehicles are rapidly replacing streetcar lines. Certainly this trend would not continue if

there were serious question as to the ability of motor coaches to give a complete and satisfactory service. In connection with this subject attention is directed to Exhibit No. 48 in this proceeding for more extensive treatment.

ROUTING AND SERVICE

Proposed Los Angeles-Santa Monica Blvd.-Hollywood-West Hollywood Motor Coach Line - Route is from 12th & Hill Streets in Los Angeles, via Hill Street, Sunset Boulevard, and Santa Monica Boulevard to Highland Avenue, where service divides, one branch proceeding via Highland Avenue to Hollywood Boulevard and the other branch to continue via Santa Monica Boulevard to West Hollywood.

This line is designed to assist in handling the heavy local traffic along Hill Street and Sunset Boulevard, as well as the traffic along Santa Monica Boulevard as far west as West Hollywood or to Hollywood Boulevard and Highland Avenue.

Length of route:

12th & Hill Streets to West Hollywood	11.4 miles
Highland & Santa Monica Blvd. to	
Hollywood Blvd.	1.0 "
	12.4 "

Number of trips(daily except Saturdays & Sundays):

- 64 to West Hollywood
- 63 West Hollywood to Los Angeles
- 58 to Hollywood Blvd. & Highland Ave.
- 56 Hollywood Blvd. & Highland Ave. to Los Angeles

	Daily Except Saturdays and Sundays								
	AM PEAK		BASE		PM PEAK		NIGHT		
	West	West	West	West	West	West	West	West	
Los Angeles (12th & Hill) to--	Hwd.	Hwd.	Hwd.	Hwd.	Hwd.	Hwd.	Hwd.	Hwd.	Hwd.
Scheduled running time	58"	48"	55"	46"	58"	48"	50"	41"	
Coaches required..	--26--		--11--		--23--		--7--		
Average miles per hour	11.8	11.9	12.4	12.4	11.8	11.9	13.7	13.9	
Approximate head- ways	12"	13"	20"	20"	9"	12"	30"	30"	

Proposed Subway-Hollywood Blvd.-Beverly Hills-North Hollywood Rail Line - Between Subway Terminal and Beverly Hills, rail service to be operated over the same route as now followed, and present service to be augmented to include trips at night and all day Sundays and holidays. It is also proposed to operate added trips between Subway Terminal and Gardner Street as the traffic demands.

Between Subway Terminal and North Hollywood, rail service is proposed to be operated over the same route as the Subway-Beverly Hills trips as far west as Highland Avenue, thence along Highland Avenue and present route to North Hollywood Station.

Length of route:

Subway to Beverly Hills	11.7 miles
Subway to North Hollywood	13.3 "

Number of trains (daily except Saturdays and Sundays):

115 to Beverly Hills, West Hollywood or Gardner Jct.
 114 Beverly Hills, West Hollywood or Gardner Jct. to Los Angeles
 58 to North Hollywood
 57 North Hollywood to Los Angeles

<u>Los Angeles to Beverly Hills</u>	<u>Daily Except Saturdays and Sundays</u>			
	<u>AM PEAK</u>	<u>BASE</u>	<u>PM PEAK</u>	<u>NIGHT</u>
Scheduled Running Time	58"	58"	58"	54"
Cars required (600-Class)	28	17	32	14
Average miles per hour	12.1	12.1	12.1	13.0
Approximate headways	8"	10"	8"	10"

<u>Los Angeles to North Hollywood</u>	<u>Daily Except Saturdays and Sundays</u>			
	<u>AM PEAK</u>	<u>BASE</u>	<u>PM PEAK</u>	<u>NIGHT</u>
Scheduled Running Time	60"	60"	60"	56"
Cars required (600-Class)	17	7	17	5
Average miles per hour	13.3	13.3	13.3	14.3
Approximate headways	15"	20"	14"	20-40"

Proposed Echo Park Avenue Motor Coach Line - Proposed route is from 12th & Hill Streets, Los Angeles, via Hill Street, Sunset Boulevard and Echo Park Avenue to Cerro Gordo Street.

Length of route:

12th & Hill Streets to Cerro Gordo Street 4.6 miles

Number of trips:

101 - Cerro Gordo to 12th & Hill Streets
 14 - Cerro Gordo to Sunset & Echo Park Avenue
 (Same number in opposite direction)

<u>12th & Hill to Cerro Gordo</u>	<u>Daily Except Saturdays and Sundays</u>			
	<u>AM PEAK</u>	<u>BASE</u>	<u>PM PEAK</u>	<u>NIGHT</u>
Scheduled running time	30"	28"	30"	(shuttle)
Coaches Required	12	7	12	1
Average miles per hour	9.1	9.8	9.1	9.8
Approximate headways	7"	10"	7"	20"

Proposed Hill St.-Sunset Blvd. Motor Coach Line - This operation is proposed to be put into effect at such time as the motor coach operation of Los Angeles Motor Coach Lines is divided between Los Angeles Transit Lines and Pacific Electric Railway.

Service is proposed to be operated from 12th & Hill Streets, via Hill Street and Sunset Boulevard to Vermont Avenue.

Operations on this line are designed to carry the major load of local

traffic to and from points along Sunset Boulevard between Hill Street and Vermont Avenue.

Length of route:

12th & Hill Sts. to Sunset & Vermont 6.1 miles

Number of trips (daily except Saturdays and Sundays):

180 - 12th & Hill to Sunset & Vermont
180 - Sunset & Vermont to 12th & Hill

12th & Hill Sts.
to Vermont &
Sunset

	Daily Except Saturdays and Sundays			
	AM PEAK	BASE	PM PEAK	NIGHT
Scheduled running time	33"	30"	33"	30"
Coaches required	23	8	23	8
Average miles per hour	11.1	12.2	11.1	12.2
Approximate headways	3"-4"	10"	3"-4"	10"

Proposed LA-Van Nuys via Riverside Drive Motor Coach Line, including alternate route via Chandler Blvd. - In addition to the present route, it is proposed to establish an additional alternate route between North Hollywood and Van Nuys from the intersection of Chandler Boulevard and Lankershim Boulevard, via Chandler Boulevard and Van Nuys Boulevard to Victory Boulevard. Length of proposed additional route is 5.3 miles.

Number of trips (daily except Saturdays and Sundays):

31 - Los Angeles to Van Nuys via Victory Blvd.
27 - Los Angeles to Van Nuys via Chandler Blvd.
5 - No. Hollywood to Van Nuys via Chandler Blvd.
32 - Van Nuys to Los Angeles via Victory Blvd.
27 - Van Nuys to Los Angeles via Chandler Blvd.
5 - Van Nuys to North Hollywood via Chandler Blvd.

Los Angeles to Van Nuys	Daily Except Saturdays and Sundays							
	AM PEAK		BASE		PM PEAK		NIGHT	
	Via Vic- tory Blvd.	Via Chan- dler Blvd.	Via Vic- tory Blvd.	Via Chan- dler Blvd.	Via Vic- tory Blvd.	Via Chan- dler Blvd.	Via Vic- tory Blvd.	Via Chan- dler Blvd.
Scheduled running time	61"	61"	61"	61"	65"	65"	57"	57"
Coaches required	--24--		--7--		--23--		--3--	
Approximate mile per hour	22.6	22.6	22.6	22.6	21.2	21.2	24.2	24.2
Approximate headways	10"	12"	40"	40"	12"	12"	80"	80"

Proposed Hollywood-Ventura Blvd.-Van Nuys Motor Coach Line - Route changes proposed in this operation are:

- (a) Discontinuance of service between Tarzana and Woodland Hills and between Tarzana and Northridge.
- (b) Extension of service from Ventura & Van Nuys Boulevards along Van Nuys Boulevard to Sherman Way, Van Nuys.

Length of route:

Hollywood & Vine to Ventura & Reseda Blvd., Tarzana ... 14.6 miles
Ventura & Van Nuys Blvds. to Sherman Way, Van Nuys 3.6 "

Number of trips (daily except Saturdays & Sundays):

71 - Hollywood to Ventura & Van Nuys Blvds.
71 - Ventura & Van Nuys Blvds. to Hollywood
35 - Hollywood to Ventura & Reseda Blvds., Tarzana
34 - Tarzana to Hollywood
36 - Hollywood to Van Nuys
37 - Van Nuys to Hollywood

<u>Hollywood to Ventura and Van Nuys Blvds.</u>	<u>Daily Except Saturdays and Sundays</u>			
	<u>AM PEAK</u>	<u>BASE</u>	<u>PM PEAK</u>	<u>NIGHT</u>
Scheduled Running Time	28"	28"	36"	35"
#Coaches Required	10	6	12	4
Average miles per hour	20.0	20.0	15.5	15.9
Approximate headways	13"	20"	9"	30"
<u>Hollywood to Ventura and Reseda Blvds., Tarzana</u>				
Scheduled Running Time	46"	46"	51"	50"
Average miles per hour	19.0	19.0	17.2	17.5
Approximate headways	24"	40"	20"	60"
<u>Hollywood to Van Nuys</u>				
Scheduled Running Time	37"	37"	44"	43"
Average miles per hour	20.9	20.9	17.6	18.0
Approximate headways	20"	40"	17"	60"

- "Coaches Required" include equipment serving all points on this line.

P.M. Peak and Night running times calculated via outbound route.

EQUIPMENT AND FACILITIES

Passenger equipment requirements under the proposed plan of operation is estimated as follows:

(See following page for Equipment Requirements)

Equipment Requirements

Item	Line	Present		Proposed	
		Class (1)	No. (2)	Class (3)	No. (4)
(1)	Santa Monica Blvd.-Van Nuys	600	31		--
(2)	Santa Monica Blvd.-W. Hollywood	600	9	M.C.	28
(3)	Hollywood Blvd.	600	64		
(4)	Hollywood Blvd., No. Hollywood- Beverly Hills			600	54
(5)	Echo Park Ave.	100	13	M.C.	12
(6)	Hollywood-Ventura Blvd.	M.C.	8	M.C.	13
(7)	North Hollywood	M.C.	3		--
(8)	Van Nuys-Canoga Park	M.C.	2		--
(9)	Van Nuys-San Fernando	M.C.	1		--
(10)	Van Nuys-Birmingham Hospital	M.C.	2		--
(11)	L.A.-No. Hollywood-Van Nuys	M.C.	18	M.C.	27
(12)	No. Hollywood-Sherman Oaks	M.C.	2		--
	Total Rail Cars		117		54
	Total Motor Coaches		36		80

Facilities other than passenger carrying equipment will remain substantially the same as at present so far as rail operations are concerned except that the San Fernando Valley rail line will be cut back to North Hollywood and the route from the Subway Terminal in Los Angeles will follow Hollywood Boulevard instead of Santa Monica Boulevard. Track beyond North Hollywood will be removed except that portion owned by Southern Pacific Company and used jointly by Pacific Electric. Electrical distribution facilities will correspondingly be eliminated where not needed for the portion of track retained.

All Western District rail lines under the proposed plan will operate into the Subway Terminal and there will be no rail operation on Hill Street in downtown Los Angeles providing the Venice Short Line proposal is approved.

Rail cars of the remaining lines will be maintained and serviced at the West Hollywood shops. Motor coaches also will be repaired at that point.

E - SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS

Based upon the results of studies made of the Western District passenger lines of Pacific Electric Railway Company and the findings as set forth in this report, it is concluded that:

1. Due to the substantial financial losses incurred on the Western District lines it is essential that immediate steps be taken to reverse these losses by establishing a type of service that can be operated on a profitable basis.
2. Careful examination of the causes contributing to the deficit, indicates that the only practicable means of sufficient relief is

through adjustment of the character of service performed so as to take full advantage of economies that will accrue from replacement of unjustified rail service by less costly motor coach operation and conversion of two-man car operation to one-man operation on those rail lines to be retained.

3. Although this report is primarily confined to a consideration of means by which non-profitable rail passenger lines may be placed in a satisfactory earning status, the close relationship of the San Fernando Valley motor coach lines to the plan of rail service considered and their importance to residents of the several communities served, indicates the desirability of bringing them into the analysis at this time.
4. On Western District rail lines and the San Fernando local motor coach lines, Pacific Electric presently incurs an annual operating loss of approximately \$652,000, whereas, under the proposed operation set forth herein, a profit of \$291,000 would be realized, resulting in a net improvement of \$943,000 per year.
5. For the year of 1947, system passenger rail service was conducted at a loss of \$3,426,000, and for the twelve months ending October 31, 1948 the loss was \$2,894,000.
6. In addition to the losses incurred by passenger rail operations, there were only eight motor coach lines out of a system total of 26 that earned a profit during the year of 1948.
7. The method of operation and routing proposed herein will produce a measure of profit more nearly equal to that to which the Company is entitled and will at the same time preserve an adequate standard of service conducted in accordance with practices, procedures, and equipment of character and type universally accepted in the transit industry.
8. To retain present rail lines without curtailment, economies could be effected by introduction of one-man operation, however, on that basis and using new P.C.C. cars a profit of only \$13,900 per year would result and by using 600-Class cars converted to one-man operation, a profit of only \$85,000 would be earned, as compared with an annual profit of \$291,000 that would result from the plan of operation proposed herein.
9. To continue full rail operation over the Hollywood-San Vicente, Echo Park Avenue and San Fernando Valley routes would require the expenditure of \$2,319,580 for track and roadway reconstruction and \$64,000 for block signals beyond North Hollywood.
10. Under the proposed plan the necessary expenditures for track reconstruction and signalling will be reduced by \$2,217,000.
11. To realize through increased fares, the financial improvement possible under the plan of operation proposed herein, assuming no loss of patronage, would require an increase of 21.4 per cent in passenger rates.

12. In accomplishing the financial adjustment sought, the Company should not be satisfied to reach a break-even status, but should strive for the reasonable measure of profit to which it is entitled.
13. For the purpose of this report the Venice Short Line and the Glendale-Burbank Line have been excluded except as the latter has a general bearing upon the District's over-all financial showing. A separate report has been prepared on the Venice Short Line. The Glendale-Burbank Line is under consideration at the present time for partial one-man operation applying to 5000-Class cars only. That type of operation is practicable and desirable and should be extended to the entire operation as soon as feasible.
14. Due to the relatively small volume of traffic and the high cost of maintenance together with the large sums that will be required in the near future for reconstruction of track and roadway, continuation of rail operation on the San Fernando Valley Line beyond North Hollywood cannot be justified.
15. Whereas the local motor coach lines of Pacific Electric in San Fernando Valley are unusually costly to operate, are non-profitable and do not in all instances fully meet the requirement of the communities served due to the competitive situation, it appears that the public would be benefitted as well as both the other carrier, Asbury Rapid Transit Lines, and Pacific Electric, if the latter were to turn over all of its local lines in the Valley to the former. That carrier due to more favorable operating conditions and opportunity of coordinating service with present operations, could no doubt perform the service on a profitable basis and more nearly meet the complete requirements of the area.
16. If such a transfer of local lines should not meet with approval, there should be a study made of the motor coach service in the Valley to develop a more economical system. In any event, there is no justification for continuation of service beyond Tarzana either on Ventura Boulevard or Reseda Boulevard, nor beyond Reseda on Sherman Way.
17. Pacific Electric should reduce the extent of its operations to providing direct service from the Valley into Los Angeles and Hollywood, leaving further development of local services to the local operator.
18. In view of present earning conditions the Company should not be expected to retain rail facilities in the expectation of their possible future need in connection with rail rapid transit. Preservation of rail lines for such purposes, if considered to be necessary, should be the responsibility of the public and not the Company.
19. In view of the industry-wide trend in mass transportation away from transit vehicles to the private automobile there is no

probability that San Fernando Valley will ever be in a position to support rail passenger transportation on an enduring and profitable basis beyond North Hollywood.

20. Completion of extensive automobile freeways that are now under construction, one of which will connect downtown Los Angeles with Hollywood and Cahuenga Pass, will no doubt have a decided effect upon the traffic pattern of Pacific Electric lines in and from the areas served by the freeways, including San Fernando Valley and Hollywood. It would not be prudent for the Company to acquire new equipment of fixed route variety at heavy expenditure in view of the possibility of its becoming surplus upon completion of the freeways.
21. Due to the relatively small volume of traffic on the San Vicente-Venice Boulevard local rail line in Los Angeles and the fact that the line is paralleled on one side by the Pico Boulevard Line and on the other by the Washington Boulevard Line of Los Angeles Transit Lines, each within easy walking distance of Venice Boulevard, from Vineyard to Hill Street, there is no justification for continuation of the Pacific Electric rail line and no real need for motor coach replacement.
22. In view of the financial losses presently incurred, the impending high cost of track reconstruction and the absence of any indication of potential improvement of a material nature in the future, motor coach operation should be established to replace passenger rail service along Santa Monica Boulevard through Hollywood to the Los Angeles business district, and along Echo Park Avenue, Sunset Boulevard and Hill Street.
23. All rail service should be discontinued and tracks abandoned on Echo Park Avenue, on Sunset Boulevard from Alvarado Street to Hill Street, along Hill Street, and on Venice Boulevard from Hill Street to Vineyard.
24. In view of the relatively good condition of track and roadway on Hollywood Boulevard, the San Fernando Valley rail operation should be discontinued on Santa Monica Boulevard and conducted over Hollywood Boulevard and Highland Avenue.
25. By reason of continuation of rail service on Hollywood Boulevard for the San Fernando Valley Line, local rail operation along that street should be continued and operated beyond Highland Avenue over track presently in place in Hollywood Boulevard and continuing west on Santa Monica Boulevard beyond Fairfax Avenue, through West Hollywood to Beverly Hills.
26. Elimination of rail operations on Hill Street in downtown Los Angeles will contribute substantially to a reduction of vehicular congestion on that street, particularly if rail service on the Venice Short Line is also replaced by motor coaches as proposed.
27. Establishment of the plan proposed herein when combined with other parts of the systemwide program, will avoid the necessity

of increases in fares that would otherwise be imminent.

28. Pacific Electric is not pioneering the movement from costly rail operation to more economical highway transportation, but is actually bringing up the rear in the industry-wide procession, after having suffered financial adversities for a much longer period of years than its fellow operators in other cities on the Coast and throughout the country generally, have been able to survive.

RECOMMENDATIONS

Based upon the above conclusions and other data submitted in this report, it is recommended that:

1. Rail service beyond North Hollywood on the San Fernando Valley Line be discontinued.
2. Motor coach service on the Los Angeles-Van Nuys-Riverside Drive Line be augmented to the extent necessary to handle the traffic presently using the rail line from Los Angeles to points beyond North Hollywood, and the line be split at North Hollywood with one leg continuing as at present and the other being routed over Chandler Boulevard and Van Nuys Boulevard, paralleling the present rail lines.
3. Eliminate the Northridge and Woodland Hills branches of the Hollywood-Ventura Boulevard Line, augmenting the remaining service to provide for a branch line from Sherman Oaks to Van Nuys that will continue to provide direct service between Van Nuys and Hollywood.
4. Turn over to Asbury Rapid Transit Lines, or other suitable carrier, all motor coach operations of Pacific Electric in San Fernando Valley, with exception of the Ventura Boulevard Line as described above and the Van Nuys-Los Angeles motor coach line as described above.
5. Reroute the San Fernando Valley rail line so as to operate from the Subway Terminal over Glendale Boulevard, Sunset Boulevard, Hollywood Boulevard, and Highland Avenue, instead of from the Subway Terminal over Glendale Boulevard, Sunset Boulevard, Santa Monica Boulevard, and on Highland Avenue between Santa Monica Boulevard and Hollywood Boulevard.
6. Establish local rail operation from the Subway Terminal over Glendale Boulevard, Sunset Boulevard, Hollywood Boulevard, private right-of-way, to Fairfax Avenue, thence over Santa Monica Boulevard to Beverly Hills.
7. Establish a motor coach line to operate from West Hollywood or vicinity, along Santa Monica Boulevard, Sunset Boulevard and Hill Street to 12th Street.
8. Establish motor coach service in replacement of the present rail

service along Echo Park Avenue, Sunset Boulevard and Hill Street to 12th Street.

9. Discontinue without replacement rail passenger service on San Vicente Boulevard, Venice Boulevard and Hill Street, turning over all traffic presently handled, to the parallel lines of Los Angeles Transit Lines.
10. In the remaining rail service between Los Angeles and Beverly Hills via Hollywood Boulevard, and between Los Angeles and San Fernando Valley, use existing 600-Class cars converted for one-man operation.
11. Abandon all electrical distribution facilities and track and roadway:
 - (a) Between North Hollywood and North Sherman Way in Van Nuys,
 - (b) Along Santa Monica Boulevard between its point of intersection on the east with Sunset Boulevard, and the most westerly point of freight operation between Vine Street and Western Avenue,
 - (c) On Echo Park Avenue,
 - (d) On Sunset Boulevard between Alvarado Street and Hill Street,
 - (e) On Hill Street between Sunset Boulevard and Venice Boulevard, and
 - (f) On Venice Boulevard between Hill Street and Vineyard.
12. Establish full one-man operation on the Glendale-Burbank Line as soon as possible.

Respectfully submitted,

ARTHUR C. JENKINS
CONSULTING ENGINEER

		PRESENT OPERATIONS				
No.	ITEM	Subway-Santa Monica Blvd- W. Hollywood Van Nuys Rail Line	Subway-Hwd.Bd. San Vicente Echo Park Ave Rail Line	Van Nuys - Birmingham Hospital Motor Coach Line	Hollywood- Ventura Bd. Motor Coach Line	L. A. -No. Ho Nuys via R Motor C Present
		(1)	(2)	(3)	(4)	(5)
1	Passenger Revenue	\$1,125,067	\$1,755,446	\$35,745	\$220,834	\$235,682
2	Other Revenue	8,741	11,405	450	2,798	2,960
3	Total Revenue	1,133,808	1,766,851	36,195	223,632	238,642
4	Operating Expenses & Taxes	1,390,306	1,944,629	42,724	235,589	317,991
5	Net Income or Loss	\$ (256,498)	\$ (177,778)	\$(6,529)	\$(11,957)	\$(79,349)
<u>I. WAY & STRUCTURES</u>						
6	Maintenance	\$ 154,071	\$ 228,768	\$ 282	\$ 1,756	\$ 1,857
7	Depreciation	18,854	24,599	150	933	987
8	Total Way & Structures	172,925	253,367	432	2,689	2,844
<u>II. EQUIPMENT</u>						
9	Maintenance	80,042	99,421	3,968	24,689	26,120
10	Tires and Tubes	--	--	1,085	6,748	7,140
11	Depreciation, Incl. Rent of Leased Units	39,421	60,669	5,143	25,714	51,429
12	Other Equipment Costs	22,967	29,966	547	3,402	3,599
13	Total Equipment	142,430	190,056	10,743	60,553	88,288
<u>III. POWER</u>						
14	Power Used	92,355	114,201	--	--	--
15	Other Power Costs	50,116	61,970	--	--	--
16	Total Power	142,471	176,171	--	--	--
<u>IV. CONDUCTING TRANSPORTATION</u>						
17	Trainmen's-Operators' Wages	524,818	781,706	14,488	68,581	94,498
18	Inspecting, Cleaning & Lubricating Equipment	126,834	165,482	2,945	18,325	19,387
19	Fuel & Oil	--	--	4,850	30,176	31,925
20	Other Transportation Costs	70,958	92,580	1,032	6,419	24,205
21	Total Conducting Transportation	722,610	1,039,768	23,315	123,501	170,015
22	V. TRAFFIC	9,427	12,299	326	2,030	2,148
<u>VI. GENERAL</u>						
23	Injuries & Damages	28,281	36,898	1,332	8,285	8,765
24	Other General Costs	89,298	116,508	3,307	20,574	21,767
25	Total General	117,579	153,406	4,639	28,859	30,532
<u>TAXES</u>						
26	Unemployment Insurance and Carriers' Tax Act	53,997	75,375	1,599	8,944	11,195
27	Ad Valorem Tax	21,862	26,489	--	--	--
28	License, Weight Fee, Registration, Etc.	--	--	776	3,492	7,760
29	L. A. City License	7,005	17,698	894	5,521	5,209
30	Calif. State 3% Gross Receipts Tax	--	--	--	--	--
31	Total Taxes	82,864	119,562	3,269	17,957	24,164
32	TOTAL OPERATING EXPENSES AND TAXES	\$1,390,306	\$1,944,629	\$42,724	\$235,589	\$317,991
33	Class of Equipment	600	100-600	Motor Coaches	Motor Coaches	Motor Coaches
34	Mileage	1,713,971	2,236,240	88,182	548,648	580,452
35	Number of Units, Including Spares	44	80	2	10	20
36	Average Miles Per Unit	38,954	27,953	44,091	54,865	29,023

() - Figures in brackets indicate LOSS.

TABLE NO. 1

WESTERN DISTRICT LINES
(as described below)

ESTIMATED ANNUAL FINANCIAL RESULTS FROM OPERATIONS

PRESENT OPERATIONS					PROPOSED OPERATIONS				
Hollywood-Van Nesbit Dr. Line	North Hollywood Motor Coach Line	Van Nuys- Canoga Park Motor Coach Line	Van Nuys- San Fernando Motor Coach Line	North Holly- wood--Studio City--Sherman Oaks Motor Coach Line	Subway- Hollywood Blvd. - Beverly Hills No. Hollywood Rail Line	Hollywood- Ventura Bd. Van Nuys Motor Coach Line	Los Angeles- Santa Monica Blvd. West Hollywood Hollywood Motor Coach Line	Echo Park Ave. Motor Coach Line	Hi Su Mo
(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	
\$413,224	\$65,351	\$40,230	\$27,808	\$14,664	\$1,401,124	\$292,449	\$485,993	\$177,196	\$
4,573	1,066	660	481	328	8,834	3,205	4,515	1,451	
417,797	66,417	40,890	28,289	14,992	1,409,958	295,654	490,508	178,647	
469,903	92,526	50,943	39,653	28,211	1,166,832	285,917	467,888	173,129	
\$(52,106)	\$(26,109)	\$(10,053)	\$(11,364)	\$(13,219)	\$ 243,126	\$ 9,737	\$ 22,620	\$ 5,518	\$
----- DETAIL OF OPERATING EXPENSES AND TAXES -----									
\$ 2,870	\$ 668	\$ 414	\$ 302	\$ 206	\$ 138,571	\$ 2,011	\$ 2,833	\$ 910	\$
1,524	355	220	160	109	19,053	1,068	1,505	484	
4,394	1,024	634	462	315	157,624	3,079	4,338	1,394	
40,354	10,562	6,586	4,776	3,339	80,891	28,277	39,839	12,799	
11,030	2,532	1,568	1,147	819	--	7,729	10,889	3,498	
69,429	6,860	4,252	3,100	2,229	39,839	33,429	72,000	30,857	
5,560	1,295	803	585	399	23,211	3,896	5,489	1,763	
126,373	21,249	13,209	9,608	6,786	143,941	73,331	128,217	48,917	
--	--	--	--	--	93,334	--	--	--	
--	--	--	--	--	50,647	--	--	--	
--	--	--	--	--	143,981	--	--	--	
145,993	29,300	12,296	11,557	7,635	315,768	78,549	154,930	54,695	
29,952	6,980	4,324	3,153	2,145	128,178	20,988	29,569	9,500	
49,322	11,624	7,206	5,248	3,522	--	34,561	48,692	15,643	
26,634	2,445	1,515	1,104	2,680	71,710	18,789	10,358	11,860	
251,901	50,349	25,341	21,062	15,982	515,656	152,887	243,549	91,698	
3,318	773	479	349	238	9,527	2,325	3,276	1,052	
13,541	3,155	1,956	1,425	971	28,580	9,489	13,368	4,295	
33,629	7,836	4,856	3,539	2,410	90,244	23,565	33,199	10,666	
47,170	10,991	6,812	4,964	3,381	118,824	33,054	46,567	14,961	
16,924	4,738	2,432	1,997	1,050	44,999	10,348	17,233	6,021	
--	--	--	--	--	23,265	--	--	--	
10,476	846	618	293	459	--	5,044	10,864	4,656	
9,347	2,556	1,418	918	--	9,015	5,849	9,556	4,430	
--	--	--	--	--	--	--	4,288	--	
36,747	8,140	4,468	3,208	1,509	77,279	21,241	41,941	15,107	
\$469,903	\$92,526	\$50,943	\$39,653	\$28,211	\$1,166,832	\$285,917	\$467,888	\$173,129	\$
Motor Coaches	Motor Coaches	Motor Coaches	Motor Coaches	Motor Coaches	600	Motor Coaches	Motor Coaches	Motor Coaches	Motor Coaches
896,762	208,958	129,494	94,366	64,278	1,732,136	628,388	885,314	284,424	
27	3	2	1	2	54	13	28	12	
33,213	69,653	64,747	94,366	32,139	32,077	48,338	31,618	24,035	

TABLE NO. 2

ESTIMATED COST OF ADDITIONAL FACILITIES AND EQUIPMENT REQUIRED

<u>Item</u>	<u>Present Operations Continued with P.C.C. Cars (1)</u>	<u>Proposed Combined Motor Coach and Rail Operations (2)</u>
(1) P.C.C. Cars @ \$40,000	\$5,400,000	-
(2) Cost to convert 600-Class cars for one-man Operation	-	\$ 162,000
(3) Immediate Track Expense	422,764	38,100
(4) Subsequent Track Expense	1,666,816	128,169
(5) Block Signals - Wilcox - Van Nuys	77,000	-
(6) Block Signals - Wilcox - North Hollywood	-	13,000
(7) Siding - Laurel Canyon Blvd.	9,800	-
(8) Additional motor coaches @ \$18,000	-	1,350,000
(9) Garage facilities - Van Nuys	-	15,000
(10) Additional garage facilities - W. Hollywood	-	3,000
(11) Curve connection & switch - Hollywood Blvd. & Highland	-	19,000
(12) Miscellaneous	-	5,000
(13) Total Estimated Cost	\$7,576,380	\$1,733,269
(14) Total Excluding Subsequent Track Expense (5-Year Program)	\$5,909,564	\$1,605,100

TABLE NO. 3

ESTIMATED COST OF REHABILITATION
WESTERN DISTRICT

Hollywood Boulevard Line

Item	Section		Present (1)	Future (2)	Total Amount (3)
	From	To			
	<u>Forth & Hill - Crescent Jct. (Fairfax)</u>				
(1)	Fourth & Hill	Park Avenue	\$ 7,533	\$ 30,130	\$ 37,663
(2)	Park Avenue	Hollywood Jct.	6,059	-	6,059
(3)	Hollywood Jct.	Crescent Jct. (Fairfax)	<u>23,863</u>	<u>95,455</u>	<u>119,318</u>
(4)		Sub-total	\$ <u>37,455</u>	\$ <u>125,585</u>	\$ <u>163,040</u>
*(5)	Fourth & Hill	Vineyard	\$ 44,830	\$ 530,160	\$ 574,990

*-Included in Venice Short Line Study 48-1-A, 11-30-48

Santa Monica Boulevard Line

	<u>Hollywood Jct. - Beverly Hills Station</u>				
(6)	Hollywood Jct.	Seward Street	\$ 88,372	\$ 353,487	\$ 441,859
(7)	Seward Street	Beverly Hills Sta.	<u>207,782</u>	<u>831,126</u>	<u>1,038,908</u>
(8)		Sub-total	\$ <u>296,154</u>	\$ <u>1,184,613</u>	\$ <u>1,480,767</u>

Echo Park Line

(9)	Sunset Blvd.	Cerro Gordo	\$ 37,931	\$ 151,722	\$ 189,653
-----	--------------	-------------	-----------	------------	------------

Hollywood-Van Nuys Line

(10)	Santa Monica Blvd.	North Hollywood	\$ 8,178	\$ 32,714	\$ 40,892
(11)	North Hollywood	Van Nuys	<u>43,046</u>	<u>172,182</u>	<u>215,228</u>
(12)		Sub-total	\$ <u>51,224</u>	\$ <u>204,896</u>	\$ <u>256,120</u>
(13)		*Combined Total	\$422,764	\$1,666,816	\$2,089,580

*-Excluding Item #5

NOTE: In addition there is a contract between the City of Los Angeles and the Pacific Electric to lower and reconstruct tracks through the business section of Van Nuys involving an estimated expenditure of \$230,000. This work is to be undertaken at the convenience of the City, probably within the next two to three years.

TABLE NO. 4

ESTIMATED SALVAGE AND COST TO REMOVE
FACILITIES TO BE ABANDONED

<u>Item</u>	<u>Hollywood & W.16th Street</u>	<u>Cost to</u> <u>Remove</u> <u>(1)</u>	<u>Salvage</u> <u>(2)</u>	<u>Net Cost to</u> <u>Remove</u> <u>(3)</u>
(1)	Fourth & Hill-Vineyard	\$157,305	\$12,316	(<u>\$144,989</u>)
(2)	Fourth & Hill-Park Ave.	<u>70,726</u>	<u>6,833</u>	(<u>63,893</u>)
(3)	Total	\$228,031	\$19,149	(<u>\$208,882</u>)
<u>Santa Monica Blvd.-W.Hollywood-</u> <u>San Fernando Valley</u>				
(4)	Hollywood Jct.-Gordon via Santa Monica Blvd.	\$ 51,510	\$ 1,204	(<u>\$ 50,306</u>)
(5)	Santa Monica Blvd.-Hollywood Blvd.-North Hollywood- Van Nuys	<u>73,300</u>	<u>22,500</u>	(<u>\$ 50,800</u>)
(6)	Total	\$124,810	\$23,704	(<u>\$101,106</u>)
<u>Echo Park Line</u>				
(7)	Sunset Blvd.-Cerro Gordo St..	\$ 19,009	\$ 390	(<u>\$ 18,619</u>)
(8)	Combined Total	<u>\$371,850</u>	<u>\$ 43,243</u>	(<u>\$328,607</u>)

(RED FIGURES)

TABLE NO. 5

STATISTICS AND TRENDS
SUBWAY-HOLLYWOOD BLVD.-SAN VICENTE BLVD. LINE

Month or Year	Revenue Passengers	% Incr. Over Same Period Prior Year	Passenger Revenue	Vehicle Miles	(Cents) Revenue Per Mile	(Cents) Revenue Per Passenger
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1938	13,252,841		\$ 813,537	2,022,375	40.23	6.14
1939	12,294,199	(7.23)	767,696	1,871,915	41.01	6.24
1940	14,727,642	19.79	936,403	2,242,540	41.76	6.36
1941	* -		-	-		
1942	* -		-	-		
1943	#23,626,896		1,750,224	2,565,852	68.21	7.41
1944	27,603,925	16.83	1,932,915	2,796,896	69.11	7.00
1945	28,456,069	3.09	1,964,753	2,833,956	69.33	6.90
1946	28,199,805	(.90)	1,978,241	2,784,873	71.04	7.02
1947						
Jan.	2,271,772	(3.17)	167,526	230,805	72.58	7.37
Feb.	2,112,941	(3.14)	155,386	208,207	74.63	7.35
Mch.	2,293,391	(3.14)	165,572	229,156	72.25	7.22
Apr.	2,194,159	(7.63)	160,680	224,189	71.67	7.32
May	2,207,341	(24.01)	158,530	227,956	69.54	7.18
June	2,098,644	(6.90)	155,284	220,391	70.46	7.40
July	2,152,945	(8.80)	158,619	227,009	69.87	7.37
Aug.	2,134,498	(8.96)	162,505	226,283	71.81	7.61
Sept.	2,082,760	(5.44)	156,386	218,672	71.52	7.51
Oct.	2,230,519	(5.33)	153,189	229,909	66.63	6.87
Nov.	2,088,707	(4.58)	154,204	216,090	71.36	7.38
Dec.	2,194,472	(5.29)	150,670	229,295	65.71	6.87
Total '47	26,062,149	(7.58)	1,898,551	2,687,962	70.63	7.28
1948						
Jan.	2,115,448	(6.88)	152,965	228,291	67.00	7.23
Feb.	1,783,647	(15.58)	150,242	212,729	70.63	8.42
Mch.	1,870,248	(18.45)	163,475	229,619	71.19	8.74
Apr.	1,800,788	(17.93)	154,569	220,114	70.22	8.58
May	1,811,113	(17.95)	155,818	221,937	70.21	8.60
June	1,789,783	(14.72)	157,138	218,429	71.94	8.78
July	1,789,158	(16.90)	161,575	212,325	76.10	9.03
Aug.	1,764,915	(17.32)	162,377	211,298	76.85	9.20
Sept.	1,705,043	(18.14)	151,638	205,300	73.86	8.89
Oct.	1,766,659	(20.80)	155,804	212,540	73.31	8.82
Nov.	1,744,761	(16.47)	146,783	206,672	71.06	8.41
Total to Date 11 Mos. 1948	19,941,563	(16.45)	\$1,712,384	2,379,254	71.97	8.59

*--Hollywood Blvd. & Venice Short Line reports consolidated for 1941 and 1942.

#--Projected for year on basis of eight months.

TABLE NO. 6

STATISTICS AND TRENDS
SUBWAY-SANTA MONICA BLVD.-W. HOLLYWOOD-SAN FERNANDO VALLEY LINE

Month or Year	Revenue Passengers	% Incr. Over Same Period Prior Year	Passenger Revenue	Vehicle Miles	(Cents) Revenue Per Mile	(Cents) Revenue Per Passenger
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1938	6,216,298		\$ 409,709	1,238,946	33.07	6.59
1939	5,626,479	(9.49)	426,682	1,225,045	34.83	7.58
1940	6,270,672	11.45	492,126	1,253,827	39.25	7.85
1941	7,240,724	15.47	540,084	1,287,008	41.96	7.46
1942	8,891,669	22.80	740,619	1,485,806	49.85	8.33
1943	11,231,415	26.31	1,058,901	1,886,740	56.12	9.43
1944	13,232,657	17.82	1,215,751	2,077,930	58.51	9.19
1945	14,075,855	6.37	1,281,351	2,126,788	60.25	9.10
1946	14,398,781	2.29	1,339,859	2,128,716	62.94	9.31
<u>1947</u>						
Jan.	1,200,088	(1.32)	110,827	180,342	61.45	9.23
Feb.	1,093,805	(2.28)	100,694	161,911	62.19	9.21
Mch.	1,185,630	(2.29)	107,172	178,062	60.19	9.04
Apr.	1,145,851	(7.90)	105,063	171,934	61.11	9.17
May	1,117,898	(13.46)	100,540	176,364	57.01	8.99
June	1,062,713	(6.68)	98,475	165,782	59.40	9.27
July	1,062,905	(13.63)	98,048	168,563	58.17	9.22
Aug.	1,043,314	(14.54)	99,502	168,934	58.90	9.54
Sept.	1,003,589	(12.14)	94,334	160,949	58.61	9.40
Oct.	1,083,197	(12.10)	93,152	167,530	55.60	8.60
Nov.	994,150	(14.00)	91,899	153,761	59.77	9.24
Dec.	1,041,320	(12.73)	89,511	163,652	54.70	8.60
Total '47	13,034,460	(9.48)	1,189,217	2,017,784	58.94	9.12
<u>1948</u>						
Jan.	1,021,663	(14.87)	92,453	160,790	57.50	9.05
Feb.	886,058	(18.99)	93,619	149,923	62.44	10.57
Mch.	874,560	(26.24)	95,983	161,050	59.60	10.98
Apr.	859,097	(25.03)	92,555	152,714	60.61	10.77
May	861,370	(22.95)	92,990	144,901	64.17	10.80
June	842,154	(20.75)	92,797	143,866	64.50	11.02
July	854,977	(19.56)	96,895	147,010	65.91	11.33
Aug.	834,271	(20.04)	96,376	148,562	64.87	11.55
Sept.	818,778	(18.42)	91,385	141,969	64.37	11.16
Oct.	845,483	(21.95)	95,338	145,835	65.37	11.28
Nov.	828,259	(16.69)	89,107	141,026	63.18	10.76
Total to Date 11 Mos. 1948	9,526,670	(20.57)	\$1,029,498	1,637,646	62.86	10.81

(RED FIGURES)

TABLE NO. 7

STATISTICS AND TRENDS
L. A. - GLENDALE - BURBANK LINE

Month or Year	Revenue Passengers	% Incr. Over Same Period Prior Year	Passenger Revenue	Vehicle Miles	(Cents) Revenue Per Mile	(Cents) Revenue Per Passenger
(1)	(2)	(3)	(4)	(5)	(6)	(7)
<u>1938</u> Rail	442,533		\$ 111,354	289,507		
M/C	<u>2,866,671</u>		268,978	<u>891,962</u>		
Comb.	3,309,204		\$ 380,332	1,181,469	32.19	11.49
<u>1939</u> Rail	903,052		\$ 107,387	278,150		
M/C	<u>2,767,825</u>		270,977	<u>832,874</u>		
Comb.	3,670,877	10.93	\$ 378,364	1,161,024	32.59	10.31
<u>1940</u> Rail	1,449,292		\$ 148,972	349,488		
M/C	<u>2,468,332</u>		246,788	<u>763,395</u>		
Comb.	3,917,624	6.72	\$ 395,760	1,112,883	35.56	10.10
<u>1941</u> Rail	5,387,850	37.53	\$ 488,595	1,015,423	48.12	9.07
1942	7,088,571	31.57	703,196	1,184,543	59.36	9.92
1943	8,895,152	25.49	908,318	1,429,228	63.55	10.21
1944	9,993,187	12.34	975,569	1,477,315	66.04	9.76
1945	10,150,007	1.57	997,003	1,485,599	67.11	9.82
1946	10,174,003	.24	1,039,767	1,455,938	71.42	10.22
<u>1947</u>						
Jan.	817,179	(8.68)	81,681	116,054	70.38	10.00
Feb.	745,255	(9.44)	74,305	104,576	71.05	9.97
Mar.	801,791	(10.10)	78,472	114,867	68.32	9.79
Apr.	779,687	(15.79)	77,410	114,206	67.78	9.93
May	781,242	(9.21)	76,116	114,056	66.74	9.74
June	778,437	(5.65)	78,103	105,762	73.84	10.03
July	751,038	(11.91)	75,033	110,590	67.85	9.99
Aug.	745,251	(13.27)	76,888	109,823	70.01	10.32
Sept.	715,444	(8.75)	72,864	106,067	68.70	10.18
Oct.	763,559	(7.51)	71,150	111,761	63.66	9.32
Nov.	706,852	(9.81)	70,760	104,477	67.73	10.01
Dec.	780,565	(7.92)	72,631	116,271	62.47	9.30
Total '47	9,166,300	(9.90)	905,413	1,328,510	68.15	9.88
<u>1948</u>						
Jan.	743,717	(8.99)	72,921	109,970	66.31	9.80
Feb.	678,413	(8.97)	73,992	102,479	72.20	10.91
Mar.	609,920	(23.93)	69,052	111,339	62.02	11.32
Apr.	608,393	(21.97)	67,609	105,118	64.32	11.11
May	634,724	(18.75)	70,741	104,465	67.72	11.15
June	623,061	(19.96)	70,823	102,677	68.98	11.37
July	621,996	(17.18)	72,794	104,355	69.76	11.70
Aug.	618,879	(16.96)	73,800	104,391	70.70	11.92
Sept.	594,943	(16.84)	68,519	101,961	67.20	11.52
Oct.	619,691	(18.84)	72,808	105,704	68.88	11.75
Nov.	605,661	(14.32)	67,817	105,774	64.11	11.20
Dec.	658,111	(15.69)	75,764	120,562	62.84	11.51
Total 1948	7,617,509	(16.90)	\$ 856,640	1,278,795	66.99	11.25

TABLE NO. 8

ESTIMATED LEDGER VALUE OF FACILITIES TO BE ABANDONED

ACCT. NO.	DESCRIPTION OF ACCOUNT	HILL STREET -VENICE BD. LINE	SURFACE TRACKS HILL STREET STATION	HILL STREET- SUNSET BLVD. LINE	ECHO PARK AVE. LINE	SANTA MONICA BLVD. LINE	HIGHLAND AVE. LINE	VAN NUYS LINE
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
501	Engineering	\$25,824	\$822	\$30,673	\$1,706	\$6,229	\$1,855	\$14,547
502	Right of Way	12,714	-	37,028	-	52	-	22,434
503	Other Land Used in Electric Railway Operations	7,093	-	-	-	-	-	4,999
504	Grading	54,318	935	37,802	10,995	21,821	6,544	17,719
505	Ballast	30,428	265	13,515	6,576	10,443	4,925	26,642
506	Ties	35,613	2,632	21,752	3,841	17,828	6,309	26,214
507	Rails, Rail Fastenings & Joints	183,989	2,886	79,306	21,256	69,113	25,598	53,610
508	Special Work	42,137	22,172	14,064	10,873	2,514	5,610	2,590
510	Track and Roadway Labor	68,021	3,848	25,756	10,062	36,341	10,621	37,186
511	Paving	168,160	3,000	83,935	18,653	75,153	23,949	14,787
513	Tunnels & Subways	-	-	421,938	-	-	-	-
515	Bridges, Trestles & Culverts	6,927	-	2,655	-	879	649	9,080
516	Crossings, Fences & Signs	7,441	19	183	24	500	97	6,481
517	Signals & Interlockers	-	507	-	3,693	-	-	14,682
518	Communication System	3,313	-	505	-	467	312	2,288
521	Distribution System	85,932	4,965	32,425	6,789	21,177	15,464	51,534
523	Shops, Carhouses & Garages	-	656	-	-	-	-	1,362
524	Stations, Miscellaneous Buildings and Structures	963	-	530	10	-	354	10,243
539	Power Plants	10,037	-	-	-	-	-	9,461
542	Power Plant Equipment	40,979	-	-	-	-	-	48,458
544	Transmission System	31,708	-	-	-	-	-	4,827
	Total	\$815,597	\$42,707	\$802,067	\$94,478	\$262,517	\$102,287	\$379,144

(2) - 4th & Hill Streets to Victoria Ave. & Venice Blvd.

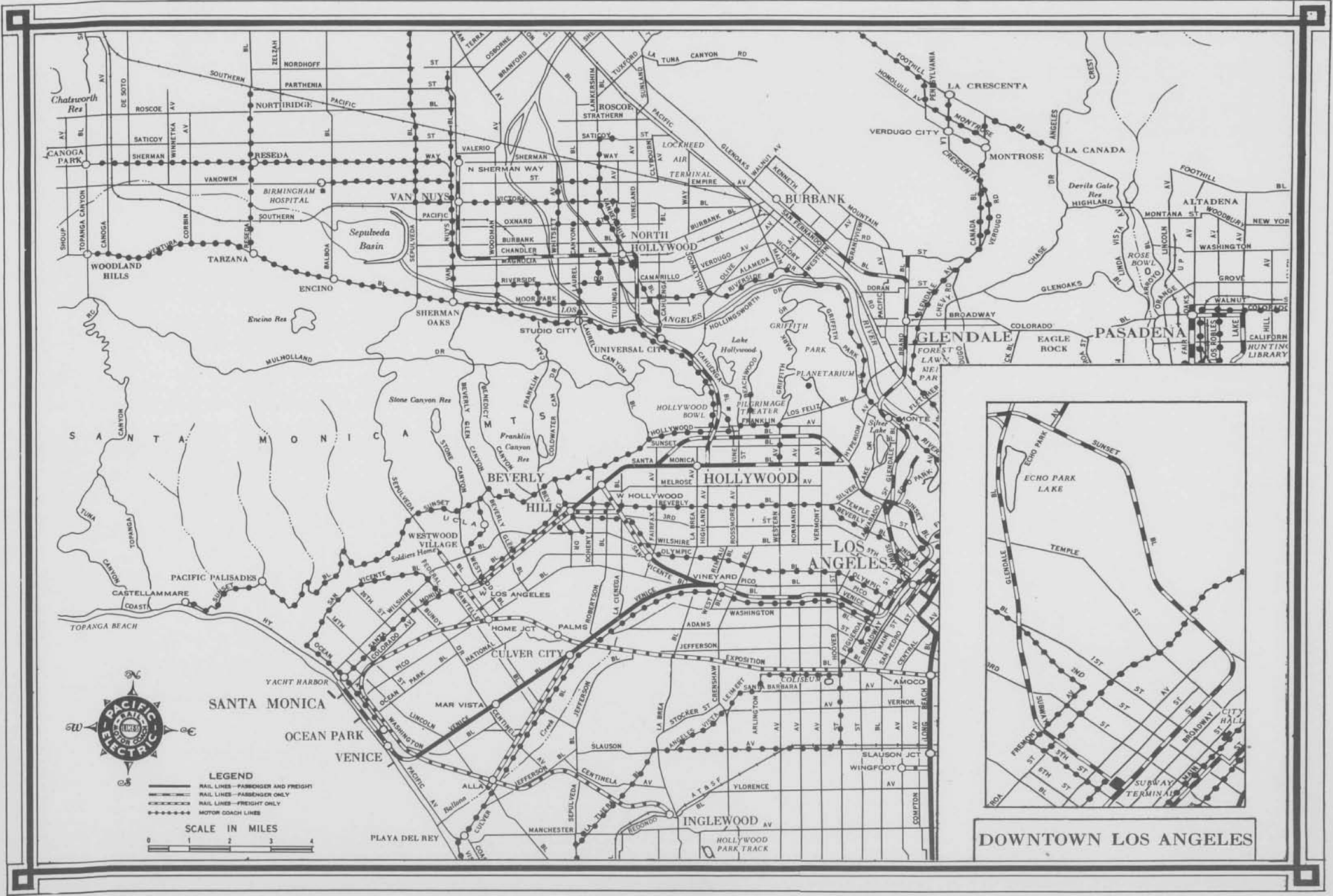
(4) - 4th & Hill Streets to Park Ave. & Sunset Blvd.

(5) - Sunset Blvd. & Echo Park Ave. to Cerro Gordo St. & Echo Park Ave.

(6) - Hollywood Jct. to Gordon St. & Santa Monica Blvd.

(7) - Along Highland Ave. from Santa Monica Blvd. to north side of Hollywood Blvd.

(8) - From North Hollywood, at connection with Southern Pacific track, to end of line at Van Nuys

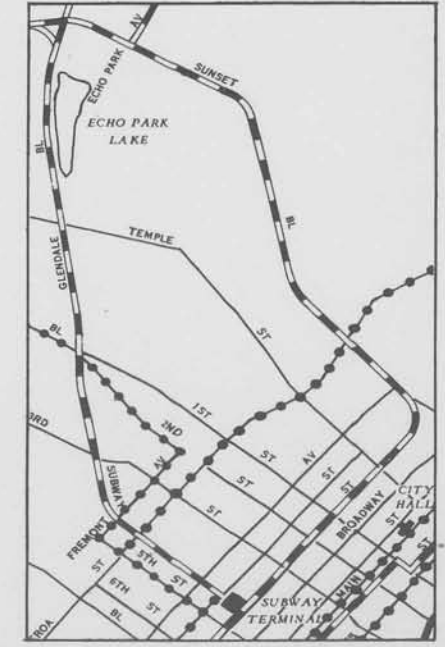


XI

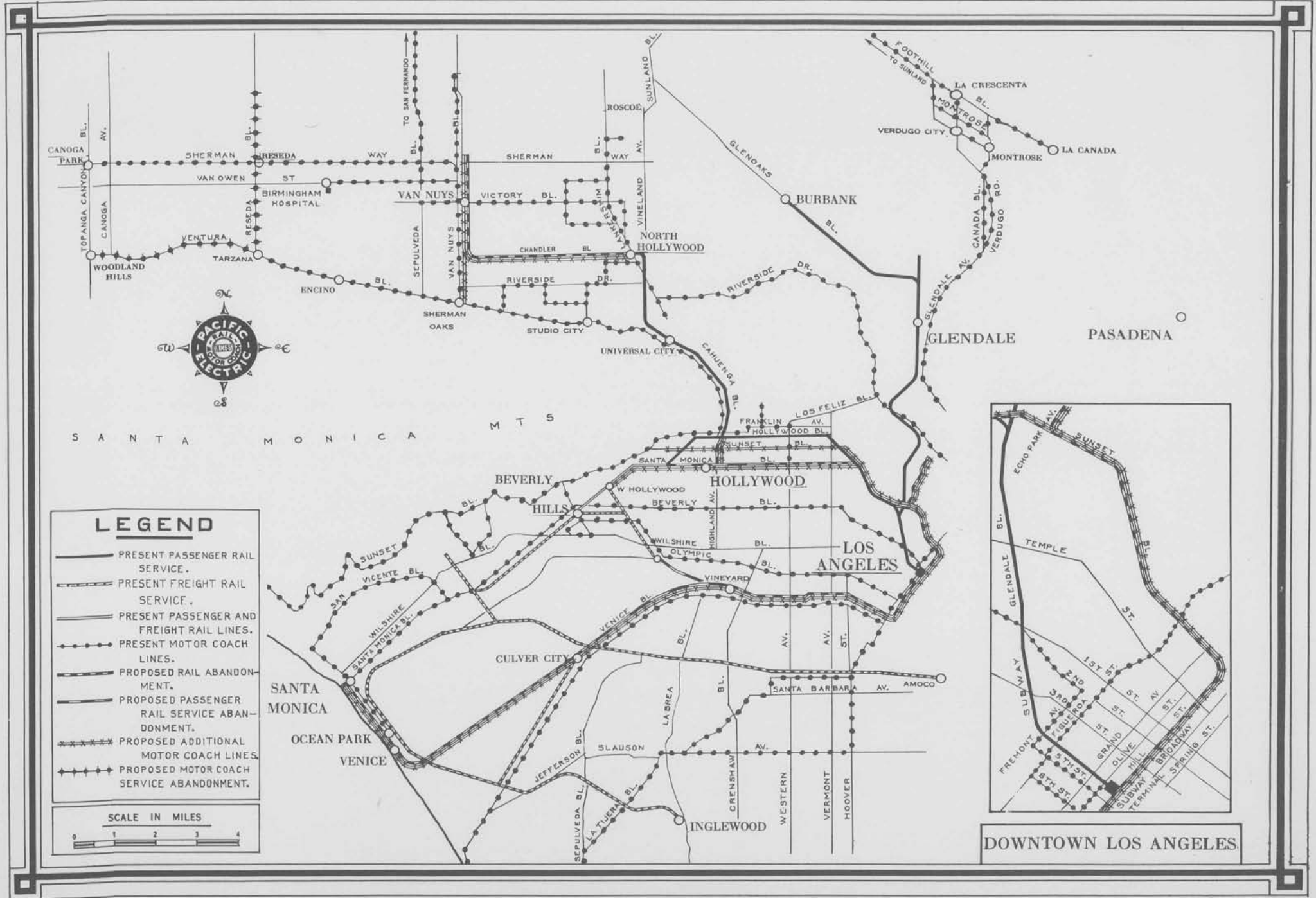


LEGEND
 RAIL LINES—PASSENGER AND FREIGHT
 RAIL LINES—PASSENGER ONLY
 RAIL LINES—FREIGHT ONLY
 MOTOR COACH LINES

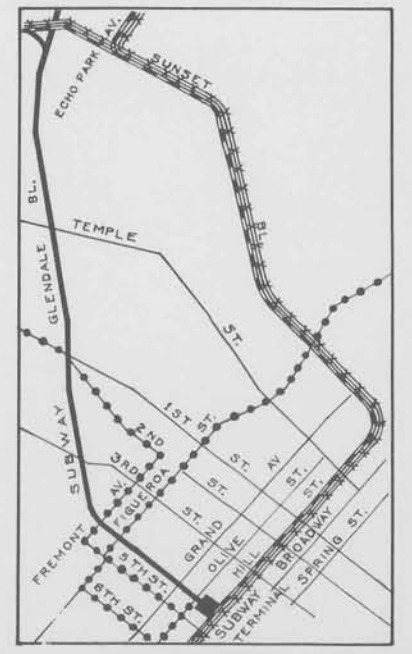
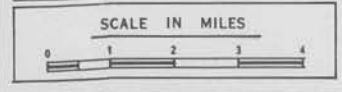
SCALE IN MILES
 0 1 2 3 4



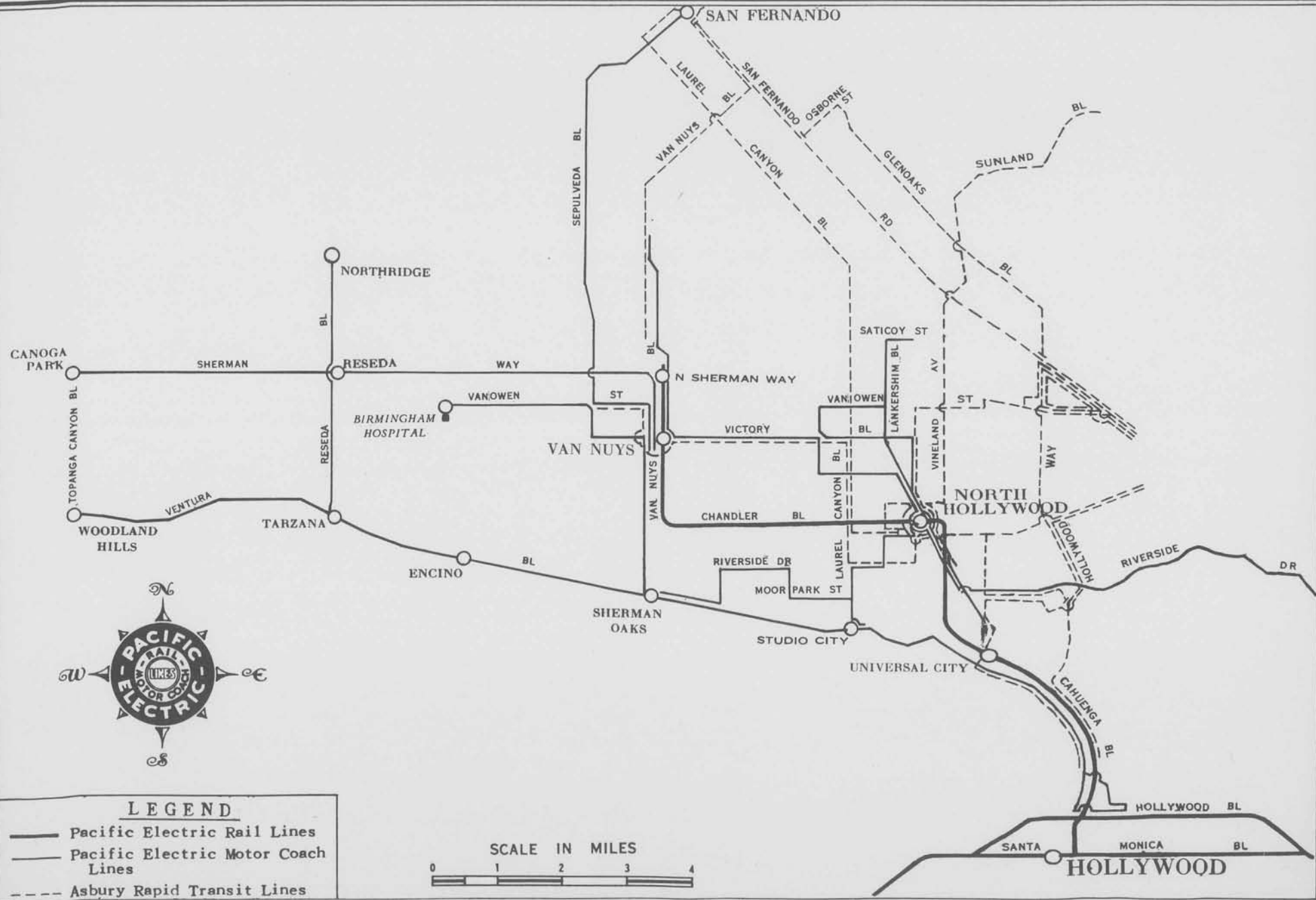
DOWNTOWN LOS ANGELES



- LEGEND**
- PRESENT PASSENGER RAIL SERVICE.
 - PRESENT FREIGHT RAIL SERVICE.
 - PRESENT PASSENGER AND FREIGHT RAIL LINES.
 - PRESENT MOTOR COACH LINES.
 - PROPOSED RAIL ABANDONMENT.
 - PROPOSED PASSENGER RAIL SERVICE ABANDONMENT.
 - PROPOSED ADDITIONAL MOTOR COACH LINES.
 - PROPOSED MOTOR COACH SERVICE ABANDONMENT.

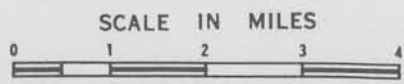


DOWNTOWN LOS ANGELES



LEGEND

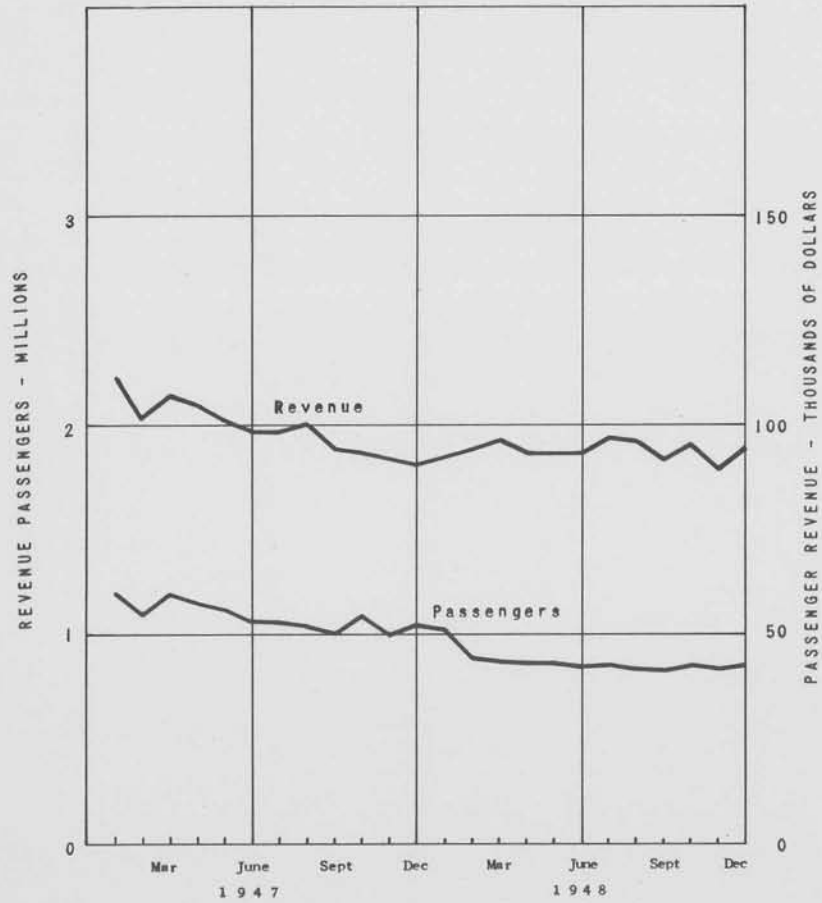
- Pacific Electric Rail Lines
- Pacific Electric Motor Coach Lines
- - - Asbury Rapid Transit Lines



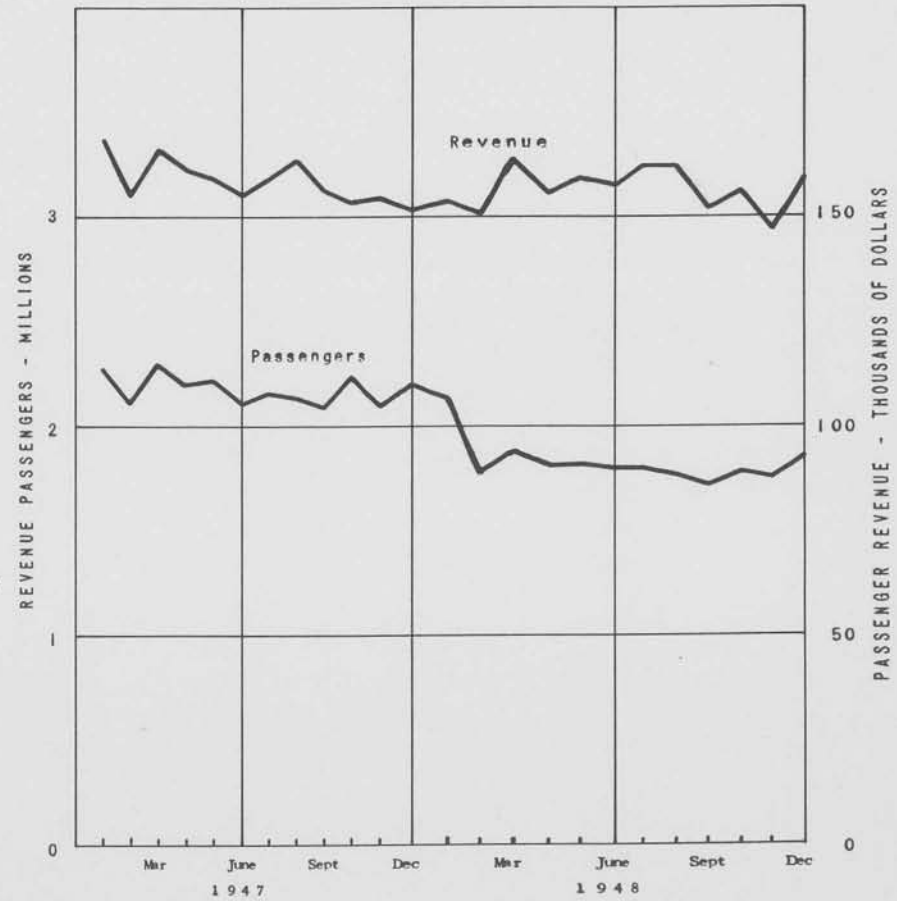
TREND OF PASSENGERS AND REVENUE BY LINES

CHART NO. IV

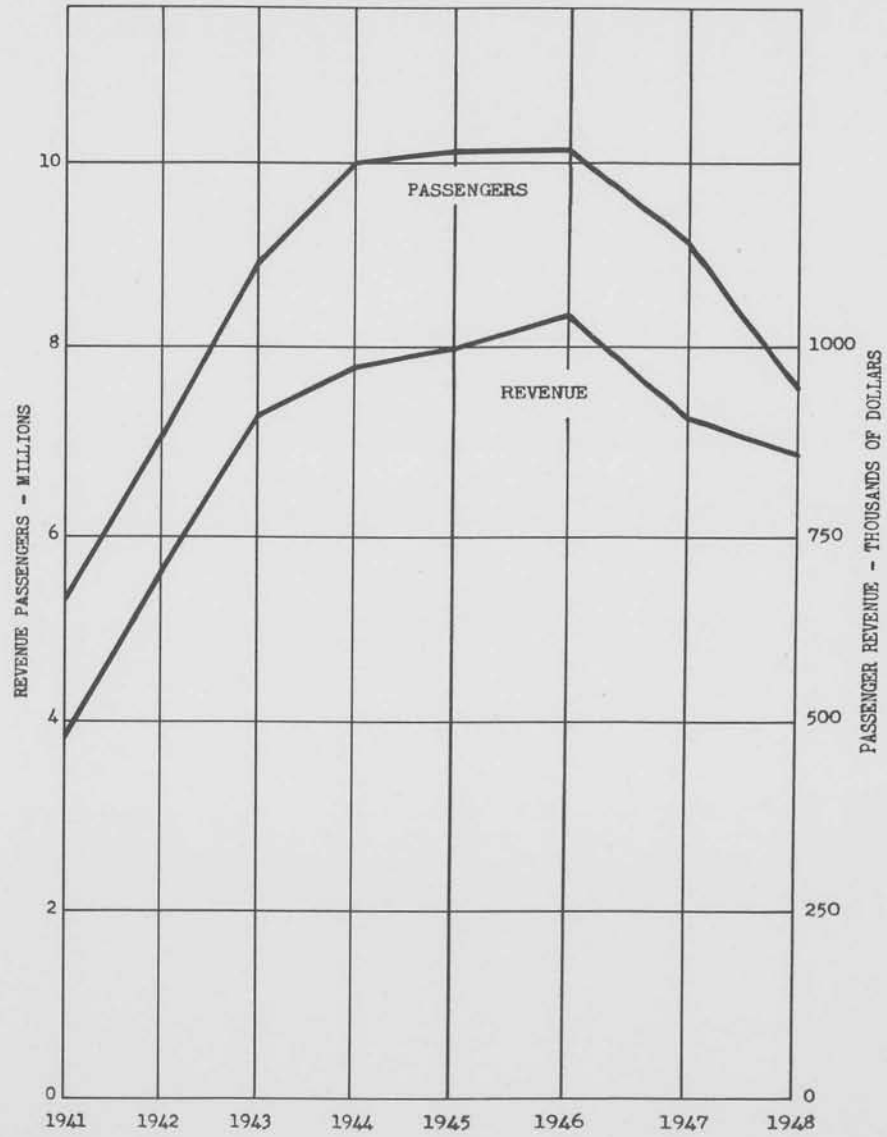
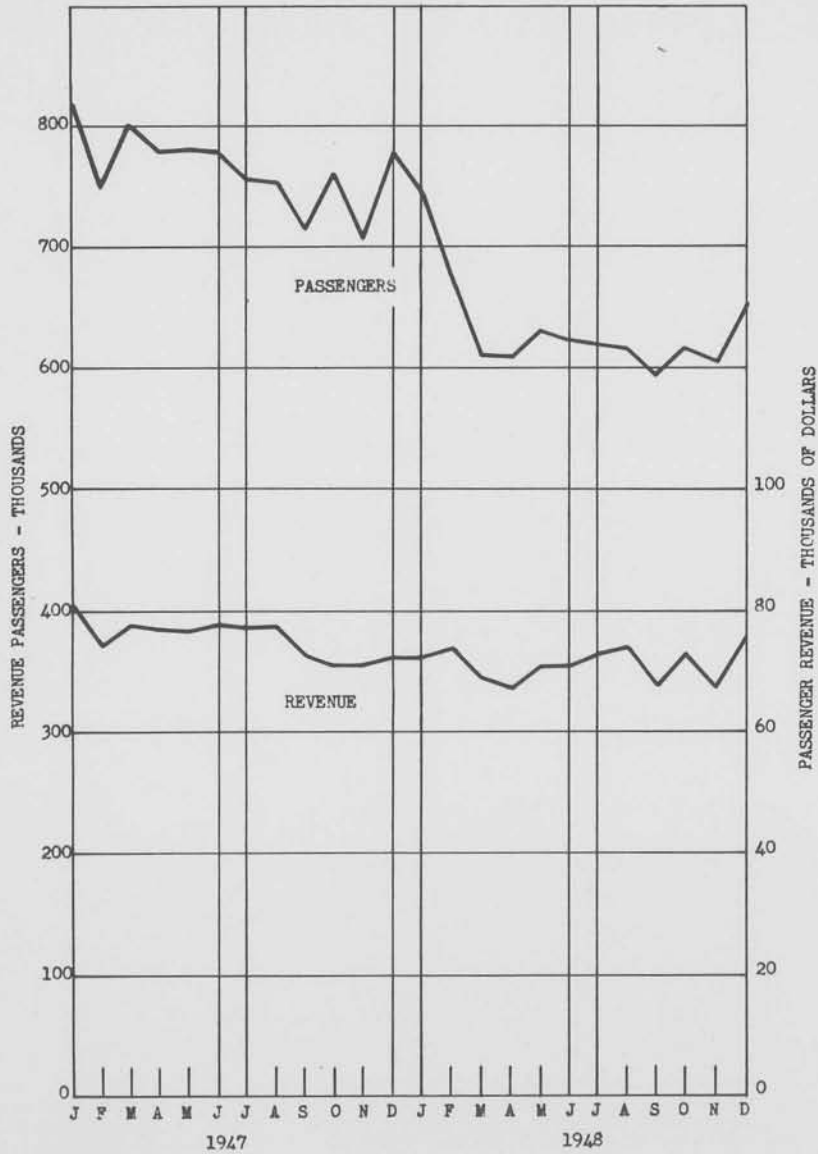
SUBWAY-SANTA MONICA BLVD.-WEST HOLLYWOOD-VAN NUYS LINE



SUBWAY-HOLLYWOOD BLVD.-SAN VICENTE BLVD. LINE

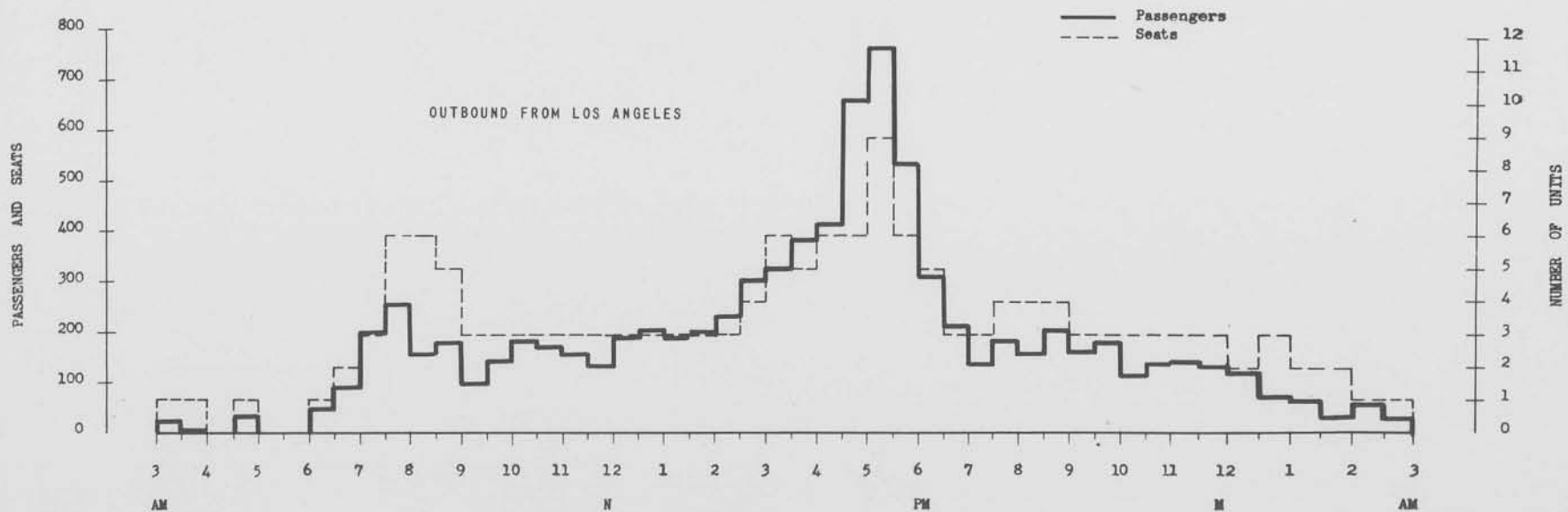
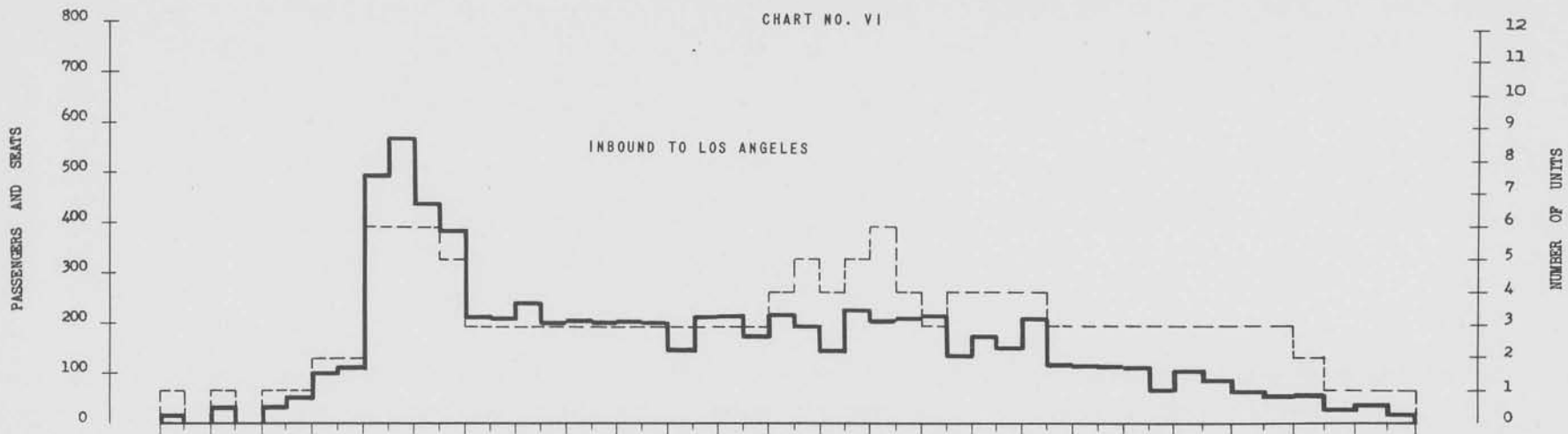


PACIFIC ELECTRIC RAILWAY COMPANY
 LOS ANGELES - GLENDALE - BURBANK RAIL LINE
 TREND OF PASSENGERS AND REVENUE
 CHART V



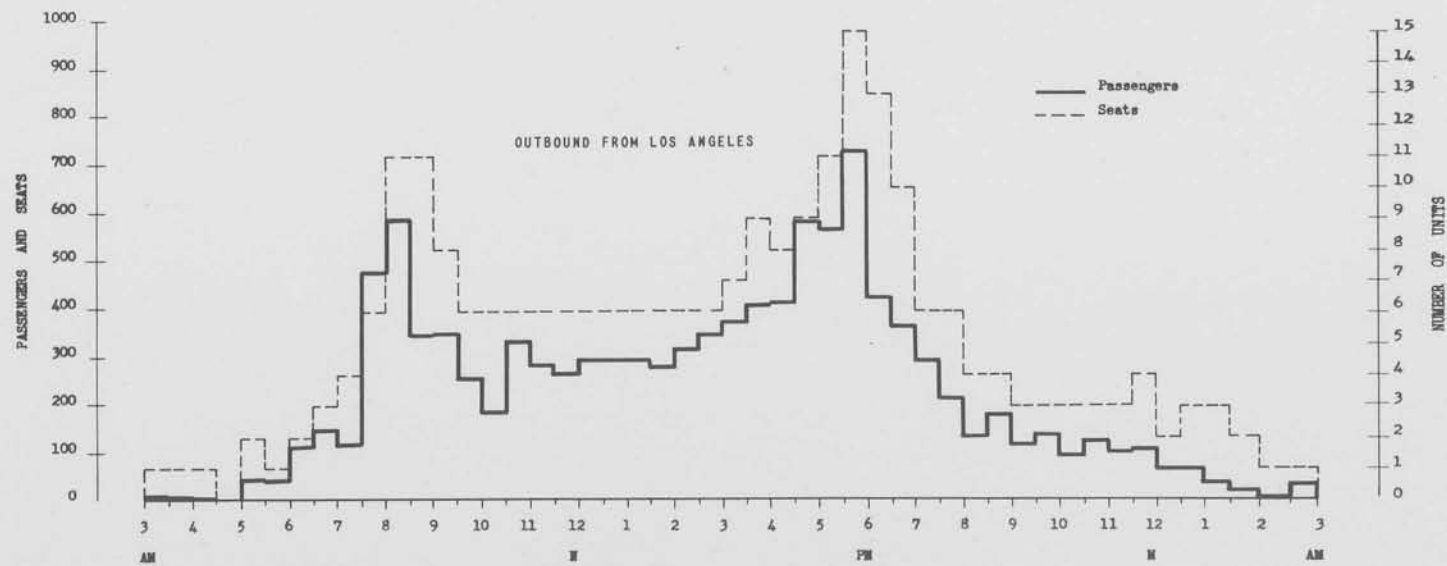
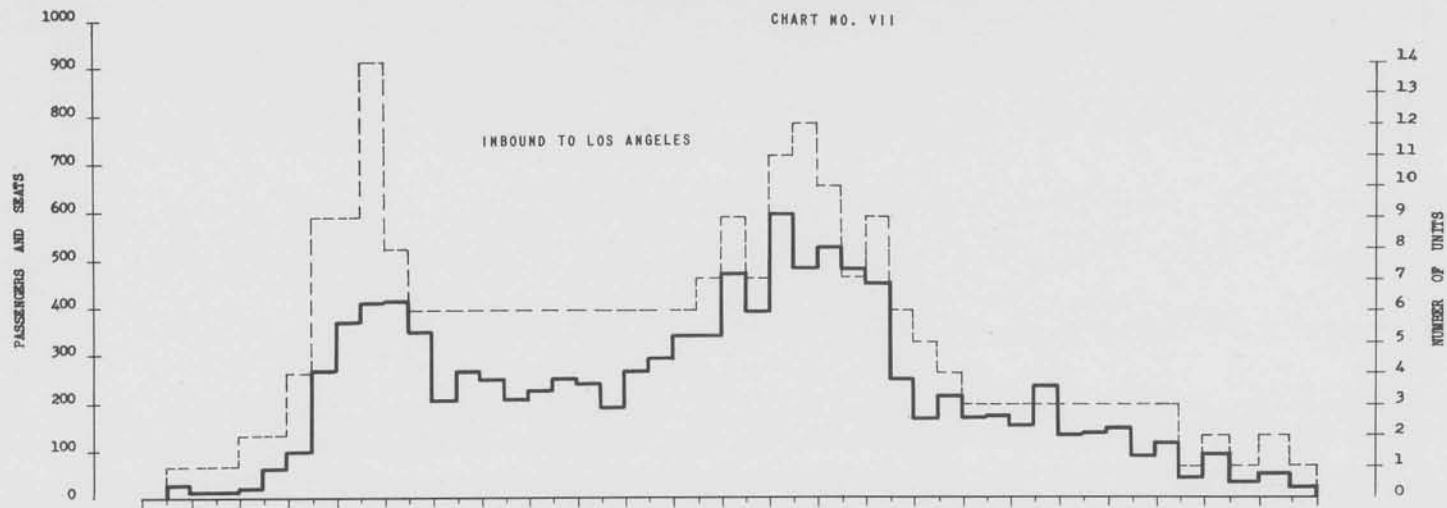
PACIFIC ELECTRIC RAILWAY COMPANY
 HOLLYWOOD BLVD. - HILL STREET RAIL LINE
 PASSENGERS, SEATS, AND UNITS OF EQUIPMENT
 LEAVING SUNSET BLVD. AND GRAND AVENUE INBOUND AND SUNSET BLVD. AND HILL STREET OUTBOUND
 BY HALF-HOUR PERIODS ON TUESDAY, OCTOBER 19, 1948

CHART NO. VI



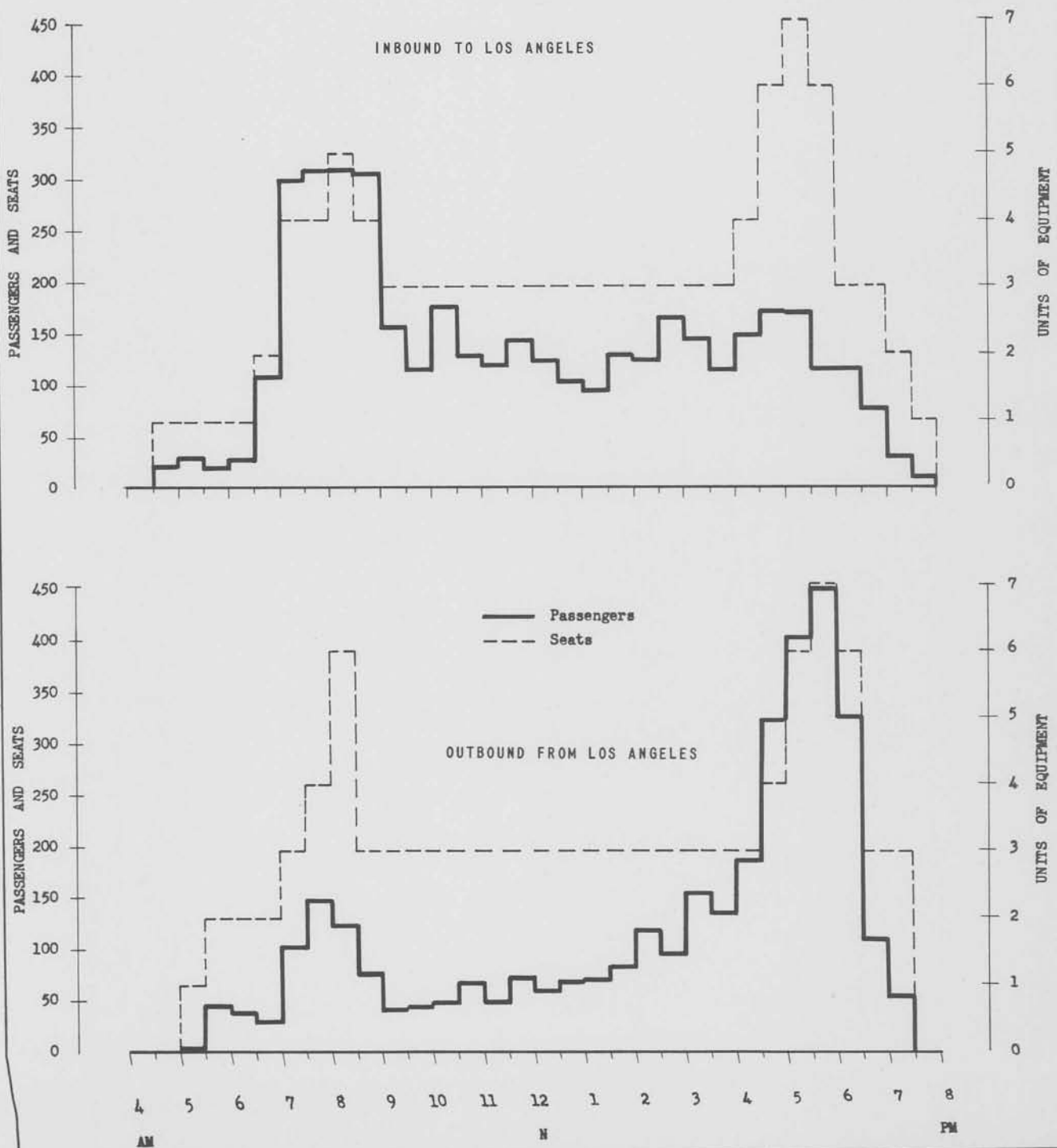
PACIFIC ELECTRIC RAILWAY COMPANY
 HOLLYWOOD BLVD. RAIL LINE
 PASSENGERS, SEATS, AND UNITS OF EQUIPMENT
 ARRIVING AT WESTERN AVENUE INBOUND AND LEAVING WESTERN AVENUE OUTBOUND
 BY HALF-HOUR PERIODS, ON TUESDAY, OCTOBER 19, 1948

CHART NO. VII



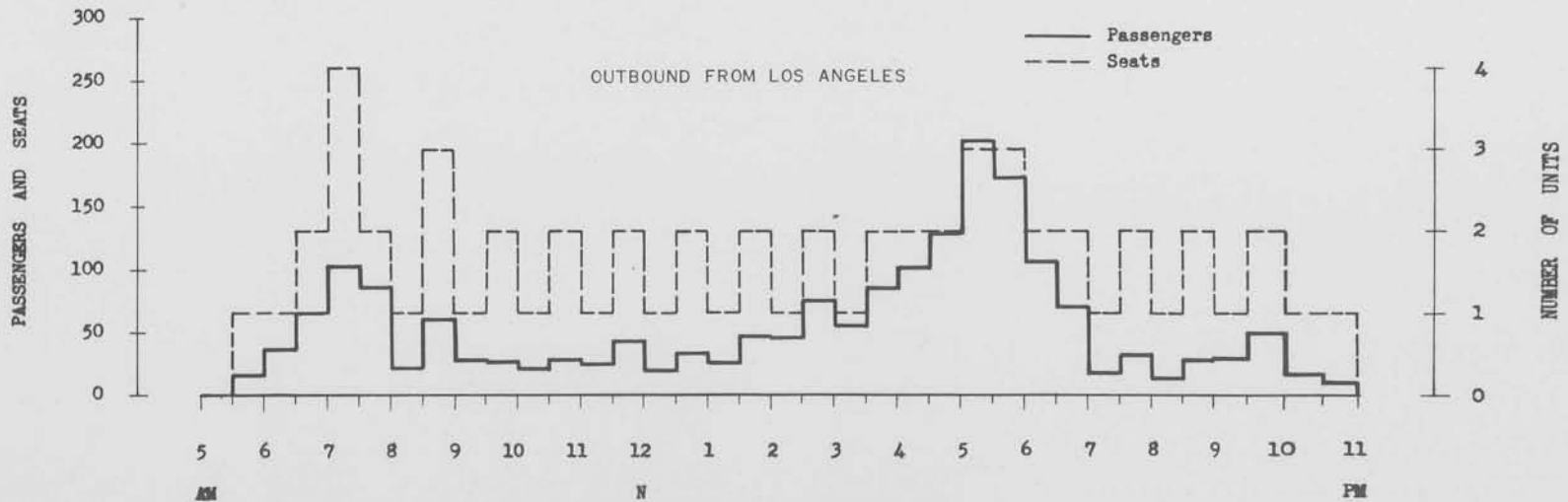
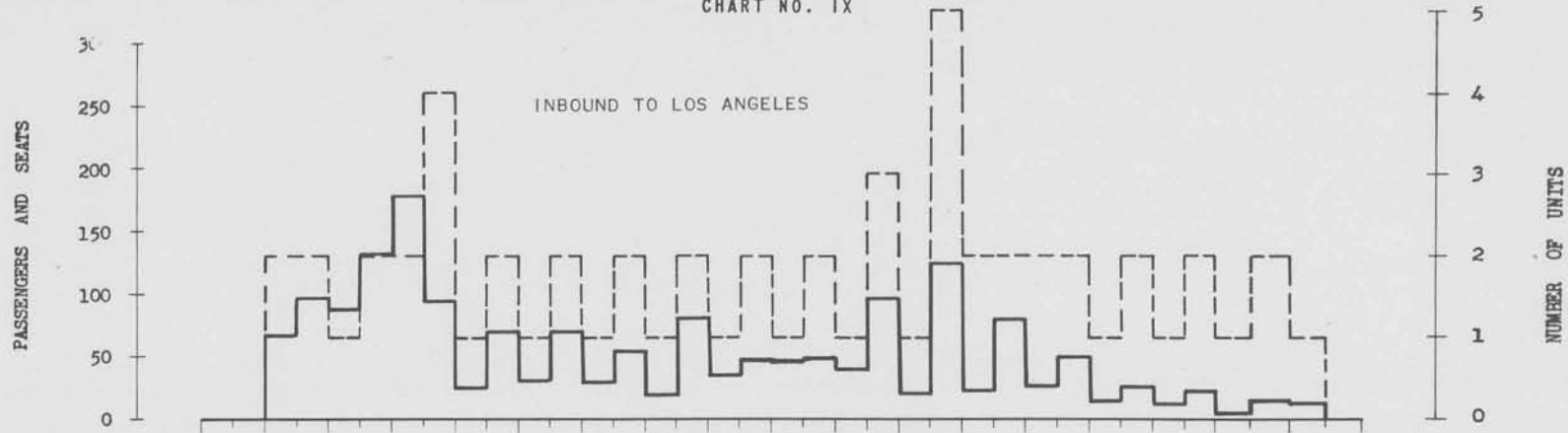
PACIFIC ELECTRIC RAILWAY COMPANY
 HOLLYWOOD BLVD. - SUBWAY RAIL LINE
 PASSENGERS, SEATS, AND UNITS OF EQUIPMENT
 LEAVING BONNIE BRAE STREET, BY HALF-HOUR PERIODS ON TUESDAY, OCTOBER 19, 1948

CHART NO. VIII



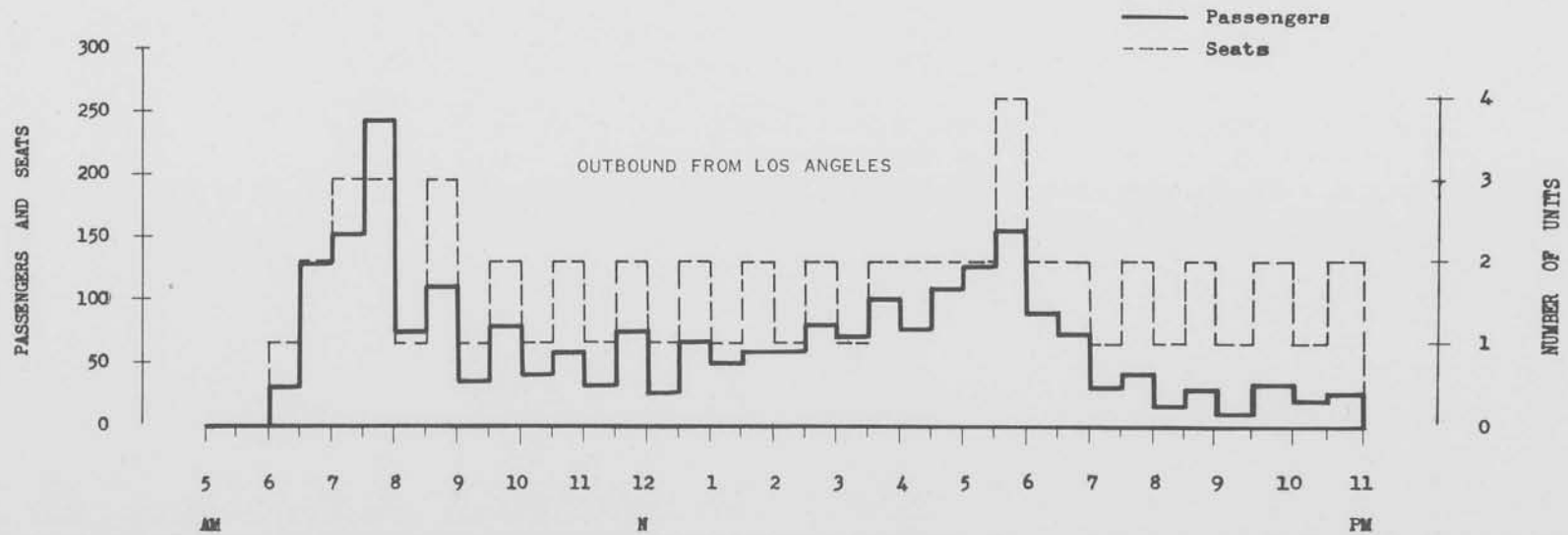
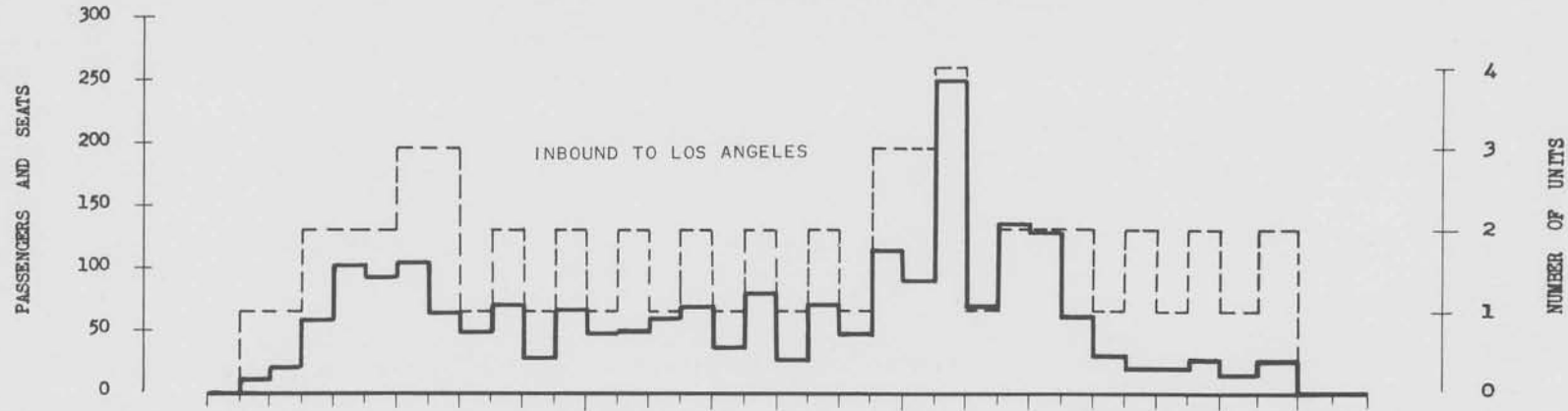
PACIFIC ELECTRIC RAILWAY COMPANY
 LOS ANGELES - SANTA MONICA BLVD - WEST HOLLYWOOD RAIL LINE
 PASSENGERS, SEATS, AND UNITS OF EQUIPMENT
 ARRIVING AT BONNIE BRAE STREET BY HALF-HOUR PERIODS ON THURSDAY, OCTOBER 28, 1948

CHART NO. IX



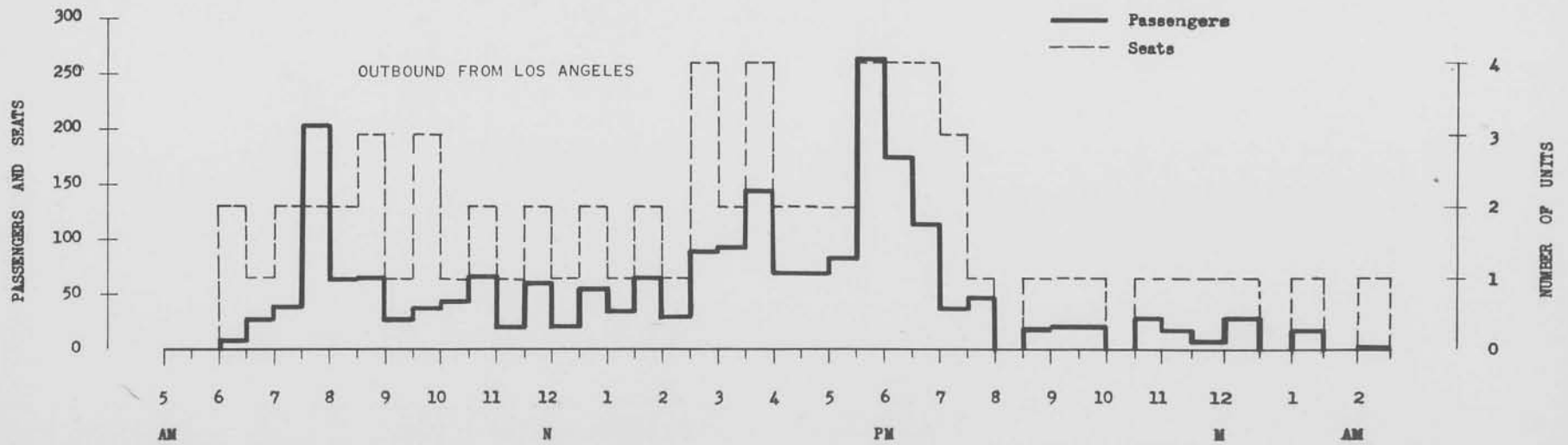
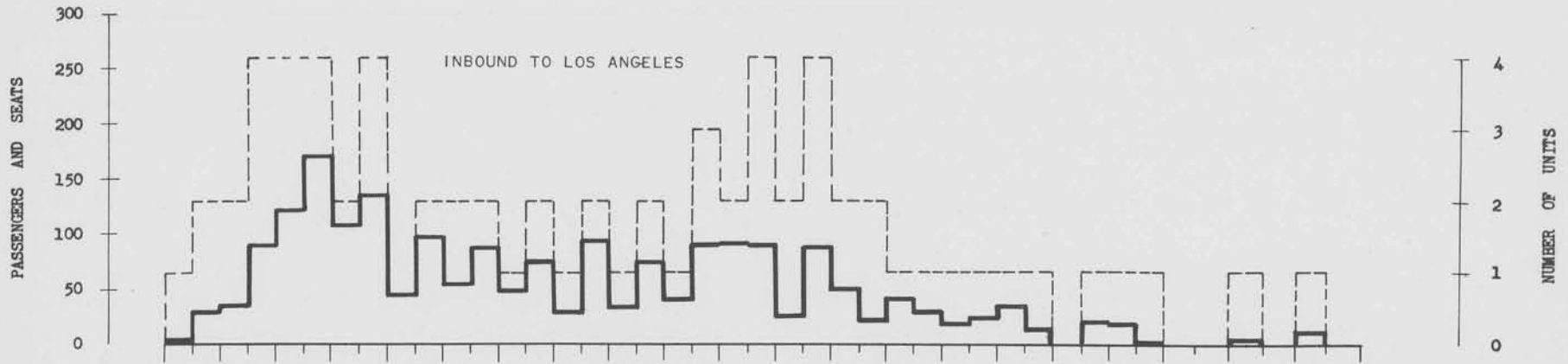
PACIFIC ELECTRIC RAILWAY COMPANY
 LOS ANGELES - SANTA MONICA BLVD - WEST HOLLYWOOD RAIL LINE
 PASSENGERS, SEATS, AND UNITS OF EQUIPMENT
 ARRIVING AT WESTERN AVENUE BY HALF-HOUR PERIODS ON THURSDAY, OCTOBER 28, 1948

CHART NO. X



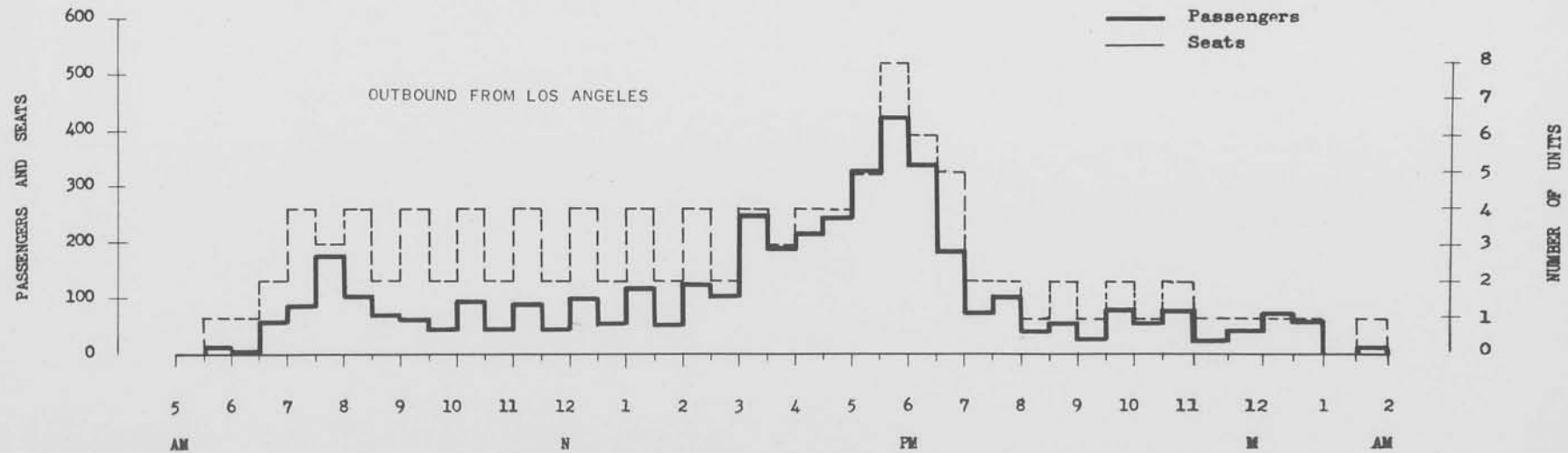
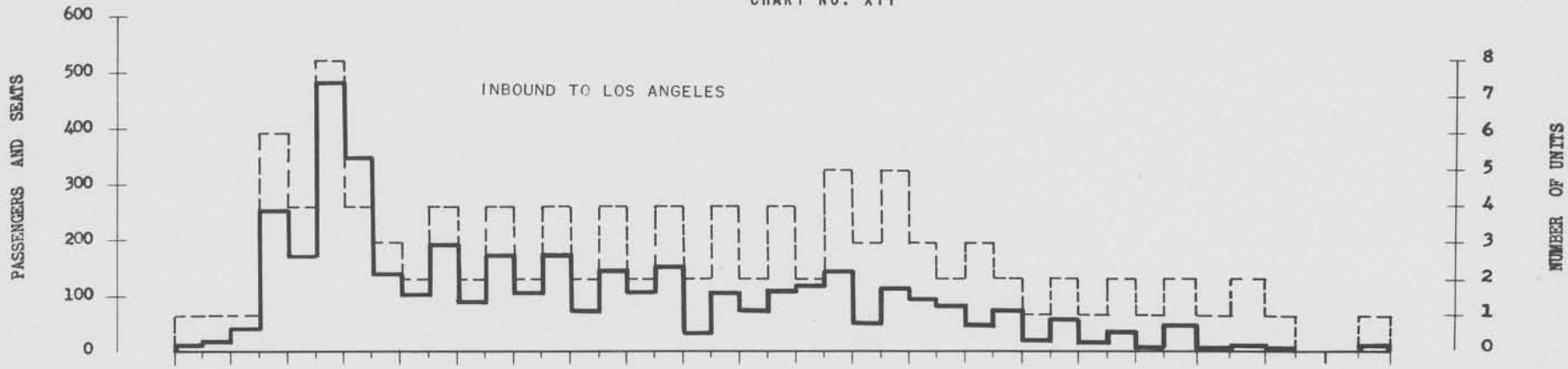
PACIFIC ELECTRIC RAILWAY COMPANY
 LOS ANGELES - SANTA MONICA BLVD. - VAN NUYS RAIL LINE
 PASSENGERS, SEATS, AND UNITS OF EQUIPMENT
 ARRIVING AT NORTH HOLLYWOOD INBOUND AND LEAVING NORTH HOLLYWOOD OUTBOUND
 BY HALF-HOUR PERIODS ON WEDNESDAY, NOVEMBER 10, 1948

CHART NO. XI



PACIFIC ELECTRIC RAILWAY COMPANY
 LOS ANGELES - SANTA MONICA BLVD. - VAN NUYS RAIL LINE
 PASSENGERS, SEATS, AND UNITS OF EQUIPMENT
 ARRIVING AT CAHUENGA PASS INBOUND, AND LEAVING CAHUENGA PASS OUTBOUND
 BY HALF-HOUR PERIODS ON WEDNESDAY, NOVEMBER 10, 1948

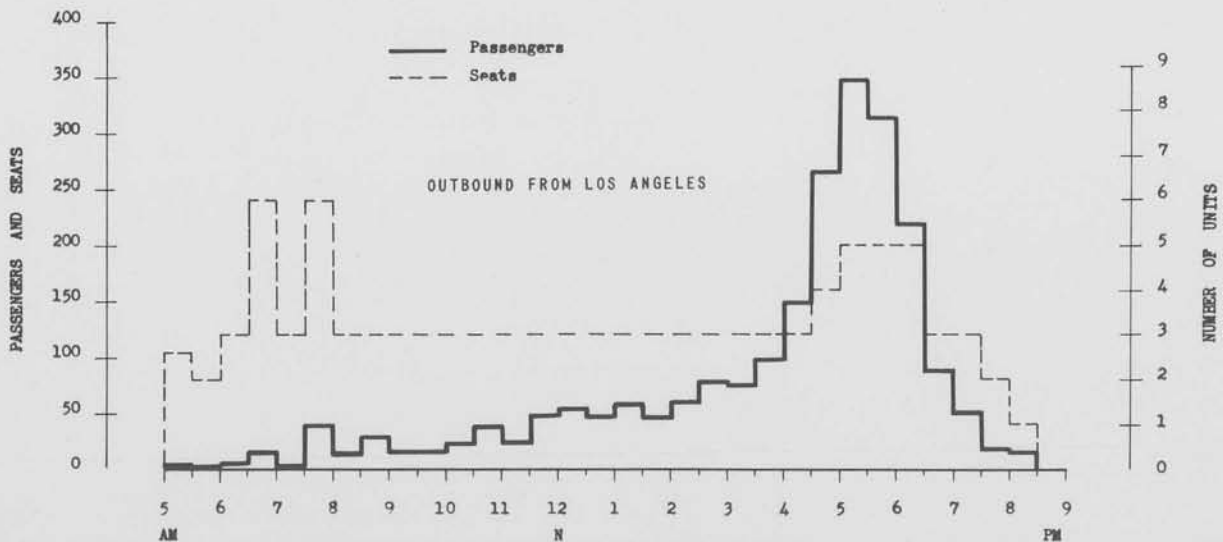
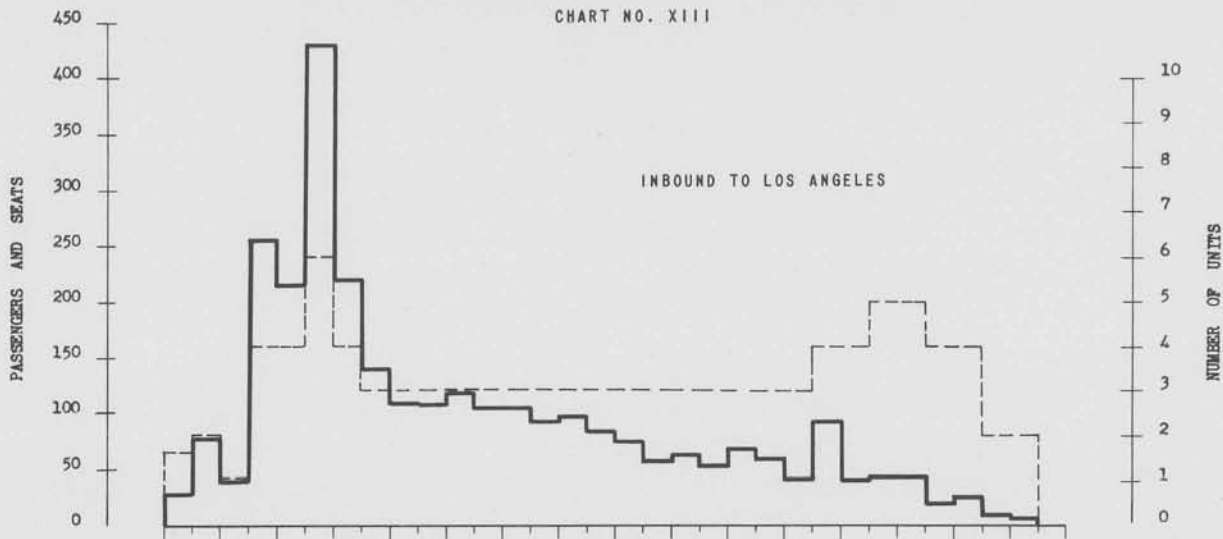
CHART NO. XII



PACIFIC ELECTRIC RAILWAY COMPANY
 ECHO PARK AVENUE RAIL LINE

PASSENGERS, SEATS, AND UNITS OF EQUIPMENT
 ARRIVING AT SUNSET BLVD. AND GRAND AVENUE, INBOUND
 AND LEAVING SUNSET BLVD. AND HILL STREET, OUTBOUND
 BY HALF-HOUR PERIODS, ON TUESDAY, OCTOBER 19, 1948

CHART NO. XIII



PACIFIC ELECTRIC RAILWAY COMPANY
 ECHO PARK AVENUE RAIL LINE
 PASSENGERS, SEATS, AND UNITS OF EQUIPMENT
 ARRIVING AT SUNSET BLVD. AND ECHO PARK AVENUE, INBOUND
 AND LEAVING SUNSET BLVD. AND ECHO PARK AVENUE OUTBOUND
 BY HALF-HOUR PERIODS, ON TUESDAY, OCTOBER 19, 1948

CHART NO. XIV

