REPORT ON
STREAMLINE, LIGHT-WEIGHT, HIGH-SPEED PASSENGER TRAINS

Issued 1950

COVERDALE & COLPITTS
CONSULTING ENGINEERS
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FOREWORD

THERE are now in service on American railways 260 streamline trains. In addition, cars in considerable numbers are in course of construction in the plants of the car manufacturing companies and, in a few instances, in the shops of railroad companies. The fleet is already an imposing one, providing extraordinary travel comforts and conveniences on a considerable portion of the railroad mileage of the country. The rapid expansion of their operations in the relatively short period since the inauguration of the first of the new type trains late in 1934, and particularly the large number placed in service in recent years, is convincing evidence of their popularity with the traveling public.

In gathering the data for this report we have found that many large railroads operating important streamline trains have not resumed the practice, discontinued during the war, of keeping accounts and statistics relating to individual trains. To compile this information now from original sources would entail considerable expense which would appear to be unwarranted from the standpoint of the owner line.

While the report would be more informative were we able to present performance statements for all of the streamline trains now in operation, those for which the figures are available to us, however, are sufficient in number and importance to represent, we believe, a fair cross section of the whole service. In some instances where complete figures are unobtainable we are able to present certain unit earnings and expenses and ratios that are somewhat indicative of the operating results.

CHAPTER I

BRIEF HISTORICAL SKETCH OF STREAMLINE TRAIN DEVELOPMENT

THIS is the seventh report this firm has issued on the results of streamline train operations. Our sixth report dealt only with the record of the Silver Meteors of the Seaboard Air Line for the period from February 2, 1939 to March 31, 1945, and disclosed the remarkable increase in travel on these trains—and correspondingly in the gross and net earnings—during the war period. In that report we outlined the factors which had been most responsible for the favorable public response to the streamline train. Because that outline is equally pertinent to this more extensive report we repeat it.

"Due largely to the automobile and improved public highways, the travel customs of the people of the United States and Canada altered materially during the years intervening between the First and Second World Wars. This change was reflected in a steady decline in passenger-miles and revenues on all lines throughout the period. On the other hand, business activity was generally on a high level during the 1920's and the freight traffic of the lines, despite the growing inroads of trucks, expanded to the largest volume in their history. But with the advent of the great depression in 1930, railroad earnings, both passenger and freight, suffered a sharp recession which continued in subsequent years to the point where many of the lines, constituting about one third of the mileage, found it necessary to seek refuge in receivership.

"The first reaction of railroad managements to the decline in passenger traffic was to reduce the expenses attached to the movement, and the early experiments in producing economies were directed toward eliminating or shortening light traffic trains or substituting gasoline-electric motorcars for steam trains. While these motorcars realized operating economies, neither the service they provided, the speed at which they operated, nor their travel appeal acted to restore an appreciable volume of traffic to the rails. It may be said, however, that it was through knowledge gained in the operation of these motorcars that the potentialities of the internal combustion engine for railway use came to be understood and resulted in the development of the Diesel-electric engine that supplies the motive power for many of the streamline high-speed trains now running on many roads.

"A new development that has been of great aid in recent years in popularizing railroad travel is air conditioning.

"The date when air conditioning was first introduced in railway passenger cars is somewhat vague. It would appear that the first car was so equipped in 1929, followed in 1930 by an installation in two dining cars and later in a whole train of seven cars—the Columbian of the Baltimore and Ohio. By 1932, air conditioning had been installed in over 300 cars of various types. Up to 1942, when the Government prohibited the manufacture of railroad passenger cars, over 13,000 sleepers, parlor cars, and coaches had been air conditioned, including cars of most of the principal lines in the United States and Canada.

"The innovation was an instantaneous success in that it surpassed any other single agency in promoting travel comfort. More than any other recent development it served first to point the way toward arresting the passenger traffic decline on the railroads and then to assist in regaining a measure of the

favor of the traveling public they formerly enjoyed.

"The air conditioning of railway cars has permitted the introduction of many other striking travel-appeal innovations in respect of the use of new materials and new conceptions of design in the interior decorative treatment, for in sealing the cars air conditioning banished the obstacles which smoke, dust, and cinders had placed in the way of employing attractive color tones, mural paintings, fine draperies, and pleasing lighting effects.

"On November 11, 1934, the first regularly scheduled streamline, light-weight passenger train, the Pioneer Zephyr, was placed in operation on the Chicago, Burlington & Quincy between Kansas City, Missouri, and Omaha-Lincoln, Nebraska. It was built by the Budd Company, of stainless steel, powered by a Diesel-electric 600 HP unit, air conditioned, the interior decorated in the modern style and provided with many new travel comforts and conveniences.

"This train and one other, the City of Salina of the Union Pacific, may be said to have revealed the form of things to come in the way of railway passenger equipment and service. While only 3-car trains of substandard dimensions, with the power unit housed in the forward car, they nevertheless were responsible for setting the pattern of streamline train philosophy that since has been more or less generally followed. Both trains disclosed the influence of the automobile and airplane in their airflow lines and in the fact that they were built as light as the safety factor would permit so as to minimize the power requirements for high speed.

"The public reception of the Pioneer Zephyr was most gratifying both to the Burlington and the Budd Company. The train is now nearly 11 years old and still is operating in regular service. Though entirely outmoded in the light of subsequent improvements, it was instrumental, as the evolution proceeded, in proving the soundness of the basic principles of design and decoration, and of the use of stainless steel as the strongest and longest-lived structural material and protective covering for cars of standard dimensions to operate at high speed in long trains on long runs at high availability.

"The City of Salina paralleled the Pioneer Zephyr in design and appointments, and in the first stages of this development contributed heavily toward publicizing and popularizing the new railroad vehicle. It was a 3-car Pullman-built aluminum alloy train, sub-standard in size and powered by a 600 HP oil-electric unit. The train's initial tryout was an extensive exhibition tour of the country, after which it was placed on view at the Century of Progress (World's Fair) in Chicago. Both on its tour and at the Fair it attracted wide attention and won extraordinary public acclaim. It was installed in regular service on the Union Pacific between Kansas City, Topeka, and Salina on January 31, 1935. On December 16, 1941, it was withdrawn from service and dismantled.

"A pair of streamline trains, the Rebels of the Gulf, Mobile and Ohio, were the first of the modern type to be built by the American Car and Foundry Company. They are 3-car corten steel trains of less than standard dimensions, powered by 660 HP Diesel-electric locomotives. They were placed in service between New Orleans, La., and Jackson, Tenn., on July 29, 1935. The trains have been remarkably successful, both from the standpoint of public acceptance and earning power and, after ten years of service, still are operating on regular schedules.

"These trains, the Pioneer Zephyr, the City of Salina, and the Rebels, represented the initial contributions to the art of streamline train design and construction by the three largest car builders in the country—the Budd Company, the Pullman-Standard Car Manufacturing Company, and the American Car and Foundry Company. Since the advent of these introductory trains, each manufacturer has greatly improved the structural design, manufacturing technic, and decorative treatment of the cars and has added

numerous new features for increasing the pleasure of travel by train.

"During the ensuing four years, that is, from 1935 to 1938, there were placed in operation on different roads, exclusive of individual cars, 51 trains, of which 46 were light-weight trains varying from 3 to 14 cars, and 5 were semilight-weight.

"From 1939 to 1942, 57 light-weight and 2 semilight-weight trains were placed in service. In the latter year, war restrictions were imposed and since then no new passenger cars of the modern type have been built.

"Now, in 1945, after the passage of a decade since the Pioneer Zephyr was placed in service by the Burlington, we may well ask if the streamline, light-weight, high-speed railway passenger train has been justified as a new railway merchandising medium. Judging from the widespread interest the subject has aroused on the part of railway managements and the public generally, by the tangible evidence of increased patronage and high train-mile earnings, by the rapid increase in the number of streamline, light-weight cars built and placed in service up to the time the necessary materials and man power for their construction were diverted to war needs, and by the large number of orders received by manufacturers during the war period, the answer is emphatically in the affirmative.

"Though deliveries cannot be made at the present time (the war period), many unfilled orders for streamline trains are on the books of the manufacturers and many more are in the offing. When labor and essential materials are fully available for the purpose, we predict that modern passenger trains will be built in much larger numbers than in the prewar period, and this will play an important part in our postwar economy.

"While not pertinent to this report, it may be said here that railroad managements, in quickly recognizing the many advantages from a public appeal and operating standpoint attaching to these new streamline, light-weight, high-speed trains, and in installing them in large numbers in the prewar period, have greatly aided the war effort and have delayed the time for placing war restrictions on civilian travel."

CHAPTER II

PASSENGER TRAFFIC PRIOR TO, DURING, AND AFTER THE WAR

Following the end of the war period travel on the railroads declined sharply, and the decline has been continuous since then, as shown below by the statistics in the table of passenger traffic for the years 1937 to 1948, and for the first 6 months of 1949.

Disregarding the unprecedented increase in passenger traffic and earnings during the war years and the subsequent rapid decline, the striking facts disclosed in this table are that, despite the marked reduction from the traffic of the war period—

(a) passenger traffic in the country as a whole is currently (first half 1949) about 152 per cent of that of the period immediately preceding the war,

(b) passenger rates in general are about 134 per cent of the prewar level and,

(c) as a result of (a) and (b), passenger revenues are currently about 206 per cent of those of the prewar years.

To what extent the postwar figures of traffic and earnings are indicative of future trends we express no opinion. It might be pointed out, however, that when traffic again builds up to that of 1947 it will represent 207 per cent in volume and, at current passenger rates, 280 per cent in revenue of the corresponding prewar figures.

STATISTICS OF PASSENGER TRAFFIC CLASS I ROADS
(Other than Commutation)

Item		Period							
		Ave. 1937–1940	1941	1942	Ave. 1943–1945	1946	1947	1948	First Half 1949 (4)
EASTERN DISTRICT									
Pass.-Miles	(1)	9.0	11.2	19.5	31.9	24.0	18.0	15.9	12.8
Pass. Rev.	(2)	198	230	426	653	528	434	435	386
Rev. per Pass.-Mile	(3)	2.21	2.05	2.18	2.05	2.20	2.40	2.73	3.01
SOUTHERN DISTRICT									
Pass.-Miles	(1)	3.0	4.8	10.1	16.4	10.0	6.7	6.0	5.2
Pass. Rev.	(2)	55	85	196	329	207	147	143	136
Rev. per Pass.-Mile	(3)	1.87	1.75	1.96	2.01	2.06	2.18	2.39	2.57
WESTERN DISTRICT									
Pass.-Miles	(1)	7.2	9.2	19.3	38.1	24.8	15.1	13.4	11.2
Pass. Rev.	(2)	126	158	353	680	461	315	310	260
Rev. per Pass.-Mile	(3)	1.76	1.72	1.83	1.79	1.86	2.09	2.31	2.32
TOTAL CLASS I ROADS									
Pass.-Miles	(1)	19.2	25.2	48.9	86.4	58.8	39.8	35.3	29.2
Pass. Rev.	(2)	379	473	975	1662	1196	896	888	782
Rev. per Pass.-Mile	(3)	1.99	1.87	2.00	1.92	2.03	2.24	2.51	2.67

(1) Billions. (2) Millions of Dollars. (3) Cents. (4) On a yearly basis.
Note: The traffic of the years for which averages are given remained fairly constant.

CHAPTER III

SOURCES OF TRAFFIC ON STREAMLINE TRAINS

Prior to World War II a number of railroads operating streamline trains undertook to ascertain the sources of the traffic on these trains by surveys of one kind or another, but principally through questionnaires distributed to the passengers.

As was to be expected, the results of these surveys were not always conclusive. In general, however, they indicated that the popularity of the new trains was due almost wholly to their superior accommodations and high speed, and that a considerable proportion of their traffic had been obtained from sources other than older trains and to that extent could be regarded as new to the rails.

Upon the outbreak of war, surveys of this nature were discontinued and they have not since been resumed, except in a few isolated instances.

In an effort to probe this question further, we requested the views of a large number of railroad executives as to the extent, in their opinion, the new type trains have diverted traffic from the highways and retrieved traffic from the air, or have withdrawn traffic from other trains on the same road.

We cannot say that the answers to this inquiry have been productive of information even as conclusive as that provided by prewar questionnaires, except in the case of the Southern Pacific which will be discussed later. This is due in large part to the lack of definite data respecting the sources of postwar streamline train traffic and the natural reluctance of railroad executives, in the absence of late polls or other traffic analyses, to express opinions which may be regarded by others as more authoritative than the facts available to them would justify.

Notwithstanding the indefiniteness of many of the replies to our inquiry, there is a thread of positive opinion running through all of them which, in composite form, may be summarized as follows:

1. It is more or less generally accepted as a fact that the streamline train has been instrumental in holding to the rails traffic that otherwise would have been lost to competitive transportation agencies, the automobile principally and the bus and airplane in lesser degree, notwithstanding these have enjoyed the benefits at small cost of large publicly

financed facilities, and, in the case of the air lines, high subsidies from air mail as well.

2. It is felt that modern streamline trains have held their own against the competition of the airplane and in some cases have retrieved a certain amount of traffic from the air, particularly in the period before rail coach fares were raised. Now that rail fares have been increased and air fares reduced, the opinion is expressed that the new trains have lost some of their effectiveness in this respect.

3. The new trains, particularly on long hauls, but in many instances also on short hauls (notably the short distance Rock Island Rockets and Burlington Zephyrs), have been remarkably successful in securing new rail traffic.

The consensus of opinion of the executives tends to confirm the results of prewar questionnaires: (a) that generally as each new train is put on a portion of its traffic is diverted from other trains, varying in amount on different roads; (b) that in each instance an important segment of the new train's traffic is built up from the highways; and (c) that in some cases a not inconsiderable amount is traffic generated by the new trains which otherwise would not have moved at all.

Items (b) and (c) may be said to be newly created rail traffic. They represent the net traffic gains in streamline train operation and taken together are frequently a large percentage of the total.

4. It also appears to be the belief that the streamline train is the most effective vehicle presently in the possession of the railroads for meeting the competition of other common carriers and for reversing the trend toward encroachment upon railroad traffic by the private automobile.

While the replies to our inquiry in all cases are informative, as the foregoing digest indicates, perhaps the most illuminating and factual is that of Mr. A. T. Mercier, president of the Southern Pacific. The Shasta Daylights, trains of fifteen coaches, Diesel-electric powered, were installed on July 10, 1949 for operation between San Francisco and Portland. Between August 11 and 18, questionnaires were distributed on the train on 14 separate trips, in both directions. An abstract of the information obtained from these questionnaires is given below:

The total high count of the passengers on these 14 trips combined was 6,317, of which 3,562, or 56 per cent, answered the questionnaires.

Q. 1. HOW DID YOU HAPPEN TO CHOOSE THE SHASTA DAYLIGHT?

I like the Daylight schedule	2,204 or 28%
To see the scenery	1,944 or 24%
I wanted to ride a new train	1,507 or 19%
Because the fare is low . .	1,429 or 18%
Because I have used your other Daylights and like them	905 or 11%
Total answers	7,989

Q. 2. IF THERE HAD BEEN NO SHASTA DAYLIGHT WOULD YOU HAVE

Taken another train	1,757 or 49%
Used a plane	606 or 17%
I would not have made the trip	482 or 14%
Used an automobile	381 or 11%
Used a bus	334 or 9%
Total answers	3,560

Q. 3. WILL YOU TAKE THE SHASTA DAYLIGHT ON FUTURE TRIPS?

Yes	3,415 or 97%
No	94 or 3%
Total answers	3,509

Q. 4. HOW DID YOU LEARN ABOUT THE SHASTA DAYLIGHT?

From advertising	2,322 or 60%
From a friend	832 or 21%
From railroad agent	728 or 19%
Total answers	3,882

Q. 5. ARE THERE CHILDREN UNDER 12 TRAVELING WITH YOU?

Yes	373 or 9%
number of children	515 or 13%
No	3,071 or 78%
Total answers	3,959

ARE YOU A MAN OR WOMAN?

Man	1,072 or 30%
Woman	2,490 or 70%
Total answers	3,562

Q. 6. WHERE DO YOU LIVE?

Southern California	438 or 12%
Northern California	1,339 or 38%
Oregon and Washington	1,160 or 33%
British Columbia and other	625 or 17%
Total answers	3,562

It would appear from the answers to these questions that about 50 per cent of the patronage of the Shasta Daylights is new Southern Pacific business.

A highly significant fact also is that 97 per cent of those answering Question 3 stated that they would use the Shasta Daylight on future trips. Another indication of the popularity of the train is that reservations currently are sold out from 8 to 10 days in advance.

A somewhat similar Southern Pacific survey made in July 1939 indicated that about 40 per cent of the passengers on the original Daylights would have used transportation other than rail had those trains not been available. A more extensive survey made in June 1940 supported a corresponding conclusion respecting the Noon Daylights.

The striking results of the recent Shasta Daylight survey, coupled with those of the much earlier polls, are evidence of the great and sustained popularity of these fine trains and justify confidence that they will continue to win public approval.

Detailed operating results of other older Southern Pacific streamline trains will be found on pages 64 and 65.

We have studied this question of the sources of traffic on streamline trains since they were first introduced in 1934 and have written a number of reports concerning their operation. For this reason we have some warrant for expressing our own views on the subject.

The introduction of air brakes, automatic couplers, electric lighting, etc., toward the end of the last century, followed by the steel passenger car, were major advances in railroad car appliances and construction. They promoted safety of train operation and

added measurably to the comfort of rail travel.

With the coming of the automobile, however, it gradually came to be recognized that a new and potent competitor of the railroads had entered the field with attributes of independence of fixed rail routes and timetables, reasonably low cost transportation and availability for movement at any time to any place at the will of the rider. During the 'twenties and early 'thirties all automotive vehicles, but particularly the automobile and bus, improved by leaps and bounds. Along with the improvements, their cost was reduced to a point that brought them within reach of large groups, and the highways they rode upon were hard-surfaced and greatly extended at low cost to the users.

The commercial airplane of this period had largely created its own traffic and had not yet become an important contender for passenger business, but evidence that the public was becoming increasingly air-minded was fast accumulating, with prospects of consequences ominous to the railroads.

In the face of these extraordinary developments forward-looking railroad managements began to be apprehensive that, with the depressed economic conditions and the new and growing competition, railroad passenger traffic was in danger of suffering extreme loss.

The feeling of the time was more or less general that the railroads had not kept pace with the transportation demands of the public. During this period of rapid improvement of the automobile and airplane, and indeed up until 1934, very little had been accomplished toward introducing new appointments in passenger cars that might be expected to appeal to the traveler as effective offsets to the advantages the new vehicles offered.

Then suddenly out of the troubled sky came the streamline train in which new metals and new concepts of design and construction, developed in large part by the automobile and airplane builder, were adopted without restraint, improved upon and adapted to railroad car construction. Thus was produced a handsome vehicle: light-weight, high-speed, Diesel-electric powered and smooth riding. And, in the years following, in utilizing the much greater spaces available for the introduction of luxurious appointments, attractive decorations, air conditioning, commodious lounge and dining facilities and many other comforts and conveniences, there were gradually built into the cars the many distinctive features of the modern train, planned with the sole thought of making rail travel a pleasant experience. All these were supplied to the passenger at such low cost that the new trains at once took hold and won the patronage of large numbers of people.

The streamline train thus early developed extraordinarily high earning power which continued to grow up to the war period. Though railroad passenger

earnings have declined appreciably since the war ended, as was to be expected, it should be pointed out again that they are currently about 206 per cent of those immediately preceding the war. This result has been attained, we believe, in large part through the popularity of the streamline train. The statements of earnings of the large number of trains presented in this report confirms this view.

While in late years, with the easing of many of the discomforts of air travel, with larger and more stable planes of great speed and high safety factor, and enjoying public benefits denied the railroads, travel by commercial airplane has grown to important dimensions, today the principal competitor of the railroads in the passenger field is the private automobile. It should be kept in mind, however, that the main source from which diversions may be made to the railroads is the vast highway system, which in fact constitutes an enormous reservoir of partially potential rail traffic.

That highway travel is susceptible of being diverted to the rails has already been clearly demonstrated by the performance of the streamline trains now in operation. And in this connection it may be mentioned that extraordinarily attractive new types of passenger equipment have been developed: the Talgo train of the American Car and Foundry Company; and the RDC-1, rail-diesel car, of the Budd Company.

The Train of Tomorrow of the General Motors Corporation was built to demonstrate that company's views respecting streamline train design and appointments. The train, constructed by Pullman, contains many new and strikingly attractive features that appealed strongly to the large numbers of people who inspected it during an extended exhibition tour of the country. This contribution to the art by General Motors has stimulated research and development programs on the part of both railroad managements and car builders.

These new vehicles represent an additional and persuasive bid for the traveler's favor, and are especially designed to cause the highways to yield more and more of their traffic to the rails as the greater comfort, speed, safety, and low cost of rail travel come to be better known.

May we say also that our studies lead us to agree with the views expressed by the railroad executives concerning the travel appeal of the streamline train. We might add that their sustained high earnings in the postwar period of general traffic decline appear to us to afford assurance of steadily increasing public acceptance of the streamline train as the principal medium for volume travel, with consequent betterment of the position of the railroads in the field of passenger transportation.

CHAPTER IV

REVENUES AND EXPENSES

In our 1945 report on the operating results of the Silver Meteors of the Seaboard Air Line we explained our reasons for not including in the statements of revenues and expenses certain items which are legitimate charges against the service.

The fleet of streamline trains on American railroads has been greatly enlarged since the report on the Silver Meteors was written. In the interest of uniformity and to permit of instructive comparisons, the form for displaying revenues and expenses we have used in the past has been adhered to in this report. Again we emphasize that, because of the exclusion of these items, the figures of Net Revenue in the statements do not represent the net profit from the operation. Rather the term Net Revenue as used here may be regarded only as a fair measure of the performance of the train by comparison with others, or with the same train in other periods.

We cannot claim accounting accuracy for these reports. They do, however, indicate the volume of traffic the trains carry and the total revenue therefrom with a high degree of accuracy. The items included under Train Expenses contain the great bulk of the costs of operation and are subject more or less to the same degree of control on all lines and, although some of the items are necessarily estimates, these may be stated fairly correctly. This leaves other items of cost which vary considerably and are not comparable road by road and if included, we feel, would tend to distort the comparisons. For example, added maintenance of way cost attributable to the running of these trains is dependent partly on track conditions, and at best can only be roughly estimated. Interest is the product of the rate—which varies on different roads—and the amount of equipment obligations outstanding against the trains as of any period under consideration. Depreciation rates are still a matter of opinion amongst railroad officers. Advertising is related to the general publicity policies of the companies. These and other items which we exclude would not, it seems to us, add to the value of the report to the railroad executive.

In a word, the report is designed primarily to demonstrate factually the great popularity of trains of the modern type, and to enable a railroad executive who may be contemplating the advisability of substituting streamline trains for trains of conventional type to study the items of Train Expenses attaching to the operation of the new trains on lines situated somewhat similarly to his own, with assurance that the figures submitted are reliable, and, by applying such amounts for items not included as would properly be applicable to his own peculiar conditions, to reach a correct conclusion.

CHAPTER V

DESCRIPTIONS OF STREAMLINE TRAINS AND STATEMENTS OF THEIR REVENUES AND EXPENSES

In this chapter are given brief descriptions of 66 streamline name trains of 20 railroads, their consist and general characteristics, followed in the case of each line by statements of revenues and expenses, usually for the years 1947 and 1948.

As in our previous reports, in cases where two or more complete trains are assigned a train name, we have taken the liberty of pluralizing the name.

Formerly named the FLYING YANKEE, operated between Boston and Bangor, this stainless steel, streamline train was renamed the CHESHIRE and was placed in service between Boston and White River Junction, Vermont, on November 12, 1944.

The Cheshire is a 3-car Budd-built train, the forward car housing a General Motors 600 HP Diesel-electric power unit.

The train contains 120 coach seats and 12 parlor car seats in the observation end, all salable. The estimated occupancy was 53 per cent in 1947 and 50 per cent in 1948.

While the train was undergoing repairs in 1947 and 1948 the service was continued with conventional type equipment, sometimes powered by steam and at other times by a 2000 HP Diesel-electric locomotive.

A statement of the revenues and expenses of the Cheshire for 1947 and 1948 follows:

BOSTON AND MAINE RAILROAD

REVENUES AND EXPENSES

Item	CHESHIRE BOSTON-WHITE RIVER JUNCTION 1 Train 3 Passenger-train cars 1 Round trip daily Monday to Friday 1 Trip each way Saturday and Sunday Operation begun November 12, 1944			
	Year ended December 31, 1947		Year ended December 31, 1948	
	Amount	Per Train-Mile	Amount	Per Train-Mile
PASSENGER REVENUE (est.)	$ 132,990	$ 1.837	$ 166,769	$ 1.831
TRAIN EXPENSES				
Wages of crews	42,617	.589	59,758	.656
Fuel	2,443	.034	4,189	.046
Lubricants	418	.006	486	.005
Train supplies and expenses	4,439	.061	6,246	.068
Power plant maintenance	8,219	.113	14,125	.156
Train maintenance	11,790	.163	15,237	.167
TOTAL Train Expenses	69,926	.966	100,041	1.098
NET REVENUE	63,064	.871	66,728	.733
Per cent of Revenues	47.4		40.0	
ROUTE-MILES	153		153	
TRAIN-MILES	72,377		91,083	
PASSENGER-MILES (est.)	4,968,510		5,949,985	

Notes:

On account of repairs, unit was out of service 152 trips in 1947 and 29 trips in 1948, out of a potential schedule of 624 trips, or an availability of 76.0 per cent and 95.0 per cent respectively.

Annual shop repairs based on the first 11 general overhauls from January 1, 1947, through September 30, 1948, 3.05¢ per mile on power plant and 10.43¢ per mile on train. Revised October 1, 1948, to include 12 general overhauls, 3.20¢ per mile on power plant and 10.21¢ per mile on train.

Unit in shop January 19, 1947 to March 13, 1947 for general overhaul.

Wage increase of 15.5¢ per hour for crews effective November 1, 1947 and 10¢ per hour effective October 16, 1948.

Passenger fares were increased from 2.5¢ to 3.0¢ per mile on July 19, 1948.

BALTIMORE AND OHIO

The Baltimore and Ohio, between Jersey City and Philadelphia, uses the multiple track lines of the Central Railroad of New Jersey and the Reading. The Company operates a motor coach train connection service between trainside at Jersey City and three inland terminals in New York City and one in Brooklyn.

The principal trains in the streamline fleet of the Baltimore and Ohio, described below, are powered by General Motors Diesel-electrics, with the exception of the Cincinnatians which are hauled by specially designed steam locomotives. The consists given are those of October 1948, and are, therefore, subject to subsequent revisions.

Abbreviations in Tables: Wash.—Washington; Chgo.—Chicago; J. C.—Jersey City; St. L.—St. Louis.

The original COLUMBIANS were air conditioned in 1931, the first trains to be so equipped. They were modernized in 1937 and the motive power changed from steam to two Diesel-electric units of 4000 HP in 1945.

The consist of the Columbians, operating between Washington and Chicago, as of October 1948, is shown below:

Item	Wash. to Chgo.	Chgo. to Wash.
Mail	2*	
Coffee shoppe-baggage-dormitory	1	1
Coach	4†	4†
Diner	1	1
Sleeper	2*	
Lounge-observation	1	1
TOTAL number of cars	11	7
Number of salable coach seats	208	222
Number of non-salable seats (excluding sleepers)	116	104

Notes:

* One mail car and two sleepers from Pittsburgh.

† One coach handled to and from Jersey City on the Capitol Limiteds.

New light-weight, streamline, Pullman-built cars were installed on May 15, 1949, each train including a stratadome car—the first in the East.

The salable coach seating capacity of the new trains was increased to 266. The car exteriors are painted the Company's standard royal blue; the interiors are attractively decorated with varying color schemes and murals.

The ROYAL BLUE, offering a de luxe reserved seat coach service between Jersey City and Washington, began operation in 1935. In 1937 the equipment was transferred to the Alton Railroad for service between St. Louis and Chicago, named the Ann Rutledge, and was replaced by a streamline 9-car train newly rebuilt in the Company's shops. The motive power was later changed from steam to two Diesel-electric units of 4000 HP.

The train make-up is: mail car, baggage-coach, three coaches, coffee shoppe, diner, parlor car and a lounge-observation; with a total of 230 salable seats and 124 non-salable. An extra coach is added, eastbound on Fridays and westbound on Saturdays.

All of the cars were originally built by Pullman.

The CAPITOL LIMITEDS, in operation since 1923, are sleeping car and coach trains between Jersey City and Washington, and all-sleeping car trains between Washington and Chicago. Steam locomotives were replaced by 2-unit Diesel-electrics in June 1937.

The trains were entirely modernized in 1938. In 1948 four new Pullman-built bedroom and roomette sleeping cars were substituted for a like number

of older heavy-weight cars. Ten additional sleepers of the same kind are on order with Pullman and will replace older cars.

In July 1947, 3-unit Diesel-electrics of 4500 HP were assigned to the trains to permit movement over the Alleghenys without helpers.

The make-up of the trains, as of October 1948, is shown in the table below:

Item	J. C. to Wash.	Wash. and Chgo.	Wash. to J. C.
Baggage-mail			1
Coffee shoppe-baggage-dormitory	1	1	1
Coach	3*		3*
Diner	1	2	1
Sleeper	4	11†	4
Lounge-observation		1	
TOTAL number of cars	9	15	10
Number of salable coach seats	214		214
Number of non-salable seats in coffee shoppe and diners	71	100	71

Notes:

* One Jersey City coach is handled between Washington and Chicago on the Columbians.

† Includes Los Angeles sleeper.

The sleepers provide sections, compartments, drawing rooms, bedrooms, and roomettes. All of the cars are Pullman-built.

The NATIONAL LIMITEDS, old established trains operating between Jersey City, Washington and St. Louis, were entirely modernized in June 1940.

In 1948 four new Pullman-built bedroom and roomette sleepers were substituted for an equal number of heavy-weight cars. De luxe coaches, with reserved seats, provide low cost accommodations for long distance travelers.

The sleepers provide sections, compartments, drawing rooms, bedrooms and roomettes. The cars are Pullman-built.

Prior to 1940, steam power had been replaced by 2-unit Diesel-electrics of 3600 HP between Jersey City and Washington, and 4000 HP between Washington and St. Louis.

The consist of the National Limiteds, as of October 1948, is shown below:

Item	Westbound		Eastbound	
	J. C. to Wash.	Wash. to St. L.	St. L. to Wash.	Wash. to J. C.
Mail		1	1*	
Baggage-mail	1			
Baggage-express				1
Coffee shop-bag-dorm	1	1	1	1
Coach	4	3	3	3
Diner	1	1	1	1
Sleeper	1	4†	5†	2†
Sleeper	1§	1§	1§	1§
Observation-lounge		1	1	
Parlor				1
TOTAL No. of cars	9	12	13	10
Number of salable coach and parlor-car seats	232	164	162	190
Number of non-salable coffee shoppe and diner seats	58	58	58	58

Notes:

* For Cincinnati.

† Include Texas and Oklahoma Sleepers.

§ To and from Louisville via North Vernon, Ind.

The CINCINNATIANS, splendidly appointed 5-car all-coach trains, operating on a fast schedule between Baltimore, Washington and Cincinnati, were inaugurated on January 19, 1947.

The exteriors of the cars are painted the familiar royal blue of the Baltimore and Ohio and the interiors are pleasingly decorated in varied color schemes.

The locomotives are Pacific type of

50,000-pound tractive power. The exteriors are streamlined to conform with the cars.

The Pullman-built cars were rebuilt in the Company's shops.

The trains consist of a coffee shoppe-

THE BALTIMORE AND OHIO RAILROAD

REVENUES AND EXPENSES

Item	Trains and Routes							
	COLUMBIANS Washington-Chicago				ROYAL BLUE Jersey City-Washington			
	2 Trains 11 Passenger-train cars each (1) Each one way trip daily				1 Train 9 Passenger-train cars (3) One round trip daily			
	Operation begun April 25, 1937 (2)				Operation begun September 3, 1937 (4)			
	Year ended December 31, 1947		Year ended December 31, 1948		Year ended December 31, 1947		Year ended December 31, 1948	
	Amount	Per Train-Mile	Amount	Per Train-Mile	Amount (7)	Per Train-Mile	Amount (7)	Per Train-Mile
	$	$	$	$	$	$	$	$
REVENUES								
Passenger revenue—in coaches	1,820,704		1,686,685		475,650		515,280	
Passenger revenue—in Pullman cars			276,431					
TOTAL Passenger Revenue	1,820,704	3.199	1,963,116	3.453	475,650	2.870	515,280	3.123
Revenue from sale of seats					19,084		20,481	
Pullman contract revenue			−5,583					
Mail, Express, etc., revenue	103,115		103,918		4,232		5,455	
TOTAL Revenues	1,923,819	3.380	2,061,451	3.626	498,966	3.011	541,216	3.280
TRAIN EXPENSES								
Wages of crews	268,736	.472	291,776	.513	88,040	.532	101,668	.616
Fuel	113,906	.200	128,986	.226	33,258	.200	38,559	.234
Lubricants	20,233	.035	19,535	.034	5,904	.036	5,844	.035
Train supplies and expenses	138,350	.243	159,321	.280	37,470	.226	43,779	.265
Power plant maintenance—Diesel-electric (8)	144,741	.254	157,668	.278	42,066	.254	51,585	.313
" " " —Steam (8)	1,783	.003	767	.001	1,022	.006	352	.002
" " " —Helper (8)	989	.002	894	.002				
Train maintenance (8)	267,169	.470	272,525	.480	73,699	.445	78,616	.477
TOTAL Train Expenses	955,907	1.679	1,031,472	1.814	281,459	1.699	320,403	1.942
Dining-Buffet—Net loss	56,908	.100	70,283	.124	17,281	.104	30,502	.185
TOTAL, Including D-B net loss	1,012,815	1.779	1,101,755	1.938	298,740	1.803	350,905	2.127
NET REVENUE	911,004	1.601	959,696	1.688	200,226	1.208	190,311	1.153
Per cent of revenues	47.4		46.6		40.1		35.2	
ROUTE-MILES	774		774		224		224	
TRAIN-MILES	569,220		568,563		165,701		165,002	
PASSENGER-MILES	93,780,364		85,484,321		23,887,144		22,209,027	

Notes:

(1) 11 cars westbound; 7 cars eastbound.

(2) Date entire trains were modernized. New equipment installed May 15, 1949.

(3) 1 coach with 68 salable seats added on Fridays eastbound and on Saturdays westbound.

(4) Date entire trains were modernized.

baggage-dormitory, three coaches, and an observation-lounge-diner, with 168 salable seats and 68 non-salable seats.

Statements of the revenues and expenses of these trains, for the years 1947 and 1948, follow:

THE BALTIMORE AND OHIO RAILROAD

REVENUES AND EXPENSES

Trains and Routes											
CAPITOL LIMITEDS Jersey City-Chicago				NATIONAL LIMITEDS Jersey City-St. Louis				CINCINNATIANS Baltimore-Cincinnati			
3 Trains 15 Passenger-train cars each (5) Each one way trip daily				4 Trains 12 Passenger-train cars each (6) Each one way trip daily				2 Trains 5 Passenger-train cars each Each one way trip daily			
Operation begun November 23, 1938 (4)				Operation begun June 28, 1940 (4)				Operation begun January 19, 1947			
Year ended December 31, 1947		Year ended December 31, 1948		Year ended December 31, 1947		Year ended December 31, 1948		11 months 13 days ended December 31, 1947		Year ended December 31, 1948	
Amount (7)	Per Train-Mile	Amount (7)	Per Train-Mile	Amount (7)	Per Train-Mile	Amount (7)	Per Train-Mile	Amount	Per Train-Mile	Amount	Per Train-Mile
$	$	$	$	$	$	$	$	$	$	$	$
294,319		336,002		1,275,649		1,400,421		719,161		756,084	
39,001		3,163,531		1,436,816		1,515,264					
3,233,320	4.434	3,499,533	4.769	2,712,465	3.349	2,915,685	3.617	719,161	1.796	756,084	1.790
4,911		104		2,714		5,408					
+290,524		+366,679		−51,062		+14,218					
20,098		23,644		179,884		241,377		1,103			
3,548,853	4.867	3,889,960	5.301	2,844,001	3.512	3,176,688	3.940	720,264	1.798	756,084	1.790
338,324	.464	385,413	.525	415,156	.512	463,821	.575	160,018	.400	189,338	.448
182,382	.251	228,880	.312	183,983	.227	204,707	.253	122,208	.305	165,146	.391
32,027	.044	34,696	.047	32,044	.040	30,436	.038	18,870	.047	20,718	.049
159,951	.219	194,718	.265	187,082	.231	216,048	.268	53,258	.133	65,888	.156
211,634	.290	274,875	.375	199,013	.246	218,448	.271				
19,812	.027	1,488	.002	15,069	.019	2,089	.003	172,596	.431	188,954	.447
6,676	.009	183		27,393	.034	25,341	.032				
104,968	.144	122,237	.167	249,107	.307	276,576	.343	103,914	.259	117,628	.279
1,055,774	1.448	1,242,490	1.693	1,308,847	1.616	1,437,466	1.783	630,864	1.575	747,672	1.770
66,484	.091	109,263	.149	89,548	.111	100,997	.125	82,981	.207	74,111	.175
1,122,258	1.539	1,351,753	1.842	1,398,395	1.727	1,538,463	1.908	713,845	1.782	821,783	1.945
2,426,595	3.328	2,538,207	3.459	1,445,606	1.785	1,638,225	2.032	6,419	.016	−65,699	−.155
68.4		65.3		50.8		51.6		0.9		−8.7	
998		998		1,101		1,101		577		577	
729,141		733,788		809,913		806,183		400,438		422,364	
115,132,039		112,427,989		116,926,009		109,782,536		31,375,735		27,941,254	

(5) Between Jersey City and Washington, 9 cars westbound and 10 cars eastbound.

(6) Between Jersey City and Washington, 9 cars westbound, 10 cars eastbound. Between Washington and St. Louis, 12 cars westbound, 13 cars eastbound.

(7) Includes revenues and expenses of C.R.R. of N. J. and Reading between Jersey City and Philadelphia.

(8) Includes running and back shop repair costs. Enginehouse expenses excluded.

CENTRAL OF GEORGIA

The action of the Central of Georgia in introducing small streamline trains for fast local service has been attended with marked success, as the accompanying statement shows.

The MAN O' WAR, a newly equipped train, the name symbolizing speed and dependability, on June 24, 1947, replaced a steam train of old style coaches, operating between Columbus and Atlanta (117 miles) at an out-of-pocket loss. In overcoming this loss, the full benefit of the inauguration of the Man O' War is not, therefore, reflected in the statement of revenues and expenses of that train.

The Man O' War is a 4-car train consisting of a baggage-coach, two coaches and a tavern-observation car, with 152 salable seats and 56 non-salable, and has carried an average of 103 passengers per trip during the period of its operation. It is powered by a single 2000 HP General Motors Diesel-electric unit. The train makes nine scheduled stops and one flag stop in each direction, and operates at an average speed of about 41 mph. It was built by Budd and is distinctively and tastefully decorated.

The NANCY HANKS II was introduced on July 17, 1947, as an addition to the service, with a much faster schedule of 52 mph between Savannah, Macon and Atlanta, 294 miles, than two other trains that take care of most of the local traffic. It is a 5-car train containing a baggage-coach, a partition coach, two coaches and a tavern-lounge car, with 216 salable seats and 54 non-salable. During the period of its operation it has carried an average of 243 passengers per trip. This is well in excess of the salable seats in the normal train and is arranged for by extra cars on weekends and on special occasions when as many as 600 passengers have been carried.

The train was built by the American Car and Foundry Company. The exteriors are painted the road's standard gray and blue, and the interiors are pleasingly decorated in the same color scheme. It is powered similarly to the Man O' War. The train is very popular and has proved a valuable asset to the road.

There follows a statement of the revenues and expenses of Man O' War and Nancy Hanks II for 1947 and 1948. The expenses shown for power plant maintenance are the average for ten Diesel-electrics, eight acquired in 1946 and two in 1948, and are, therefore, smaller than normal. The amounts for train maintenance are based on actual charges for labor and material, plus shop expenses, etc., reported and recorded monthly since the purchase of the equipment.

CENTRAL OF GEORGIA RAILWAY

REVENUES AND EXPENSES

Item	Trains and Routes							
	MAN O' WAR Columbus-Atlanta				NANCY HANKS II Savannah-Atlanta			
	1 Train 4 Passenger-train cars Two round trips daily				1 Train 5 Passenger-train cars One round trip daily			
	Operation begun June 24, 1947				Operation begun July 17, 1947			
	6 months 7 days ended December 31, 1947		Year ended December 31, 1948		5 months 15 days ended December 31, 1947		Year ended December 31, 1948	
	Amount	Per Train-Mile	Amount	Per Train-Mile	Amount	Per Train-Mile	Amount	Per Train-Mile
REVENUES	$	$	$	$	$	$	$	$
Passenger revenue in coaches	144,109	1.612	248,139	1.449	188,637	1.910	427,477	1.986
Mail and express revenue	17,588		37,863					
Mail revenue					4,051		10,731	
TOTAL Revenues	161,697	1.809	286,002	1.670	192,688	1.951	438,208	2.036
TRAIN EXPENSES								
Wages of crews	39,055	.437	78,670	.459	41,538	.420	100,629	.468
Fuel	11,790	.132	28,768	.168	13,940	.141	41,206	.191
Lubricants	894	.010	1,713	.010	988	.010	2,152	.010
Train supplies and expenses	8,505	.095	17,932	.105	7,338	.075	24,775	.115
Power plant maintenance	6,417	.072	18,910	.111	7,104	.072	23,759	.110
Train maintenance	6,349	.071	12,239	.071	6,652	.067	18,902	.088
Other expenses (1)	31,515	.353	60,341	.352	11,673	.118	27,959	.130
TOTAL Train Expenses	104,525	1.170	218,573	1.276	89,233	.903	239,382	1.112
Dining-Buffet, net gain or loss	−2,489	−.027	−2,869	−.017	+241	+.002	+8,421	+.039
TOTAL, Including D-B. net gain or loss	107,014	1.197	221,442	1.293	88,992	.901	230,961	1.073
NET REVENUE	54,683	.612	64,560	.377	103,696	1.050	207,247	.963
Per cent of Revenues	33.8		22.6		53.8		47.3	
ROUTE-MILES	117		117		294		294	
TRAIN-MILES	89,388		171,288		98,784		215,208	
PASSENGER-MILES	8,006,082		13,785,532		12,410,375		28,123,527	

Note:

(1) Included in "Other Expenses" are the following:

	MAN O' WAR		NANCY HANKS II	
	1947	1948	1947	1948
Terminal expenses	$15,251	$29,077	$8,921	$21,953
Trackage	11,428	22,000		
Total	$26,679	$51,077	$8,921	$21,953

CHICAGO, MILWAUKEE, ST. PAUL AND PACIFIC

The original HIAWATHAS of the Milwaukee Road were placed in service between Chicago and the Twin Cities on May 29, 1935—a period marked by the introduction of new conceptions of passenger car design and by colorful, artistic treatment of interiors not practical before air conditioning.

The public response to these new trains was enthusiastic and, since their inaugural, the Hiawatha service has been enlarged by additional trains that provide a complete range of travel accommodations.

Upon establishment of duplicate Hiawathas on the same route, on January 21, 1939, they were named the MORNING HIAWATHAS and the original trains the AFTERNOON HIAWATHAS. The rapid growth of travel on these trains is shown in the following table:

Year Ended	Passenger-Miles	
	AFTERNOON HIAWATHAS	MORNING HIAWATHAS
June 30, 1940	55,451,597	31,748,759
June 30, 1941	58,775,867	35,102,484
December 31, 1947	83,650,304	62,538,953
December 31, 1948	83,879,588	62,710,169

The MIDWEST HIAWATHAS, at the time of inauguration, carried mixed types of equipment, were not considered streamline trains and, therefore, separate operating figures were not prepared. They are Chicago-Omaha-Sioux Falls trains, which diverge and converge at Manilla, Iowa.

The Olympians have operated for many years between Chicago and Seattle. On June 29, 1947, their equipment was replaced by streamline trains, the name changed to OLYMPIAN HIAWATHAS, and the running time reduced 14 hours.

The cars, excepting the Pullman sleepers, were designed and built in the Company's shops and are luxuriously appointed throughout. The car bodies are of welded corten steel construction, combining exceptional strength with moderate weight. The skytop lounge cars are a departure from the usual style of observation car in that the window area is carried well up into the roof line, thereby affording passengers a wide and unobstructed view. The touralux sleepers, featured on the Olympian Hiawathas, provide the privacy and comfort of standard sleeping cars but at lower rates.

Each of the above trains is hauled by a 4000 HP Diesel-electric locomotive in two units, built by General Motors, except that those of the Olympian Hiawathas were built by Fairbanks-Morse.

Statements of the revenues and expenses of the Hiawathas for the years 1947 and 1948 follow on pages 30 and 31.

CHICAGO, MILWAUKEE, ST. PAUL AND PACIFIC RAILROAD

REVENUES AND EXPENSES

Item	Trains and Routes							
	AFTERNOON HIAWATHAS Chicago-Twin Cities				MORNING HIAWATHAS Chicago-Twin Cities			
	2 Trains 12 Passenger-train cars each Each one way trip daily				2 Trains 14 Passenger-train cars each Each one way trip daily			
	Operation begun May 29, 1935				Operation begun January 21, 1939			
	Year ended December 31, 1947		Year ended December 31, 1948		Year ended December 31, 1947		Year ended December 31, 1948	
	Amount	Per Train-Mile	Amount	Per Train-Mile	Amount	Per Train-Mile	Amount	Per Train-Mile
REVENUES	$	$	$	$	$	$	$	$
Passenger revenue in coaches	1,586,798		1,556,145		1,213,821		1,164,340	
Passenger revenue in parlor cars	489,939		502,974		395,694		399,072	
TOTAL Passenger Revenue	2,076,737	6.741	2,059,119	6.666	1,609,515	5.225	1,563,412	5.061
Mail and Express revenue	105,521		113,018		494,453		559,836	
TOTAL Revenues	2,182,258	7.084	2,172,137	7.032	2,103,968	6.830	2,123,248	6.8
TRAIN EXPENSES								
Wages of crews	191,536	.622	211,875	.686	201,042	.653	222,399	.720
Fuel	83,081	.269	116,394	.377	79,955	.259	119,633	.387
Lubricants	10,692	.035	10,740	.035	10,151	.033	10,848	.035
Train supplies and expenses	81,635	.265	91,533	.296	91,971	.299	104,707	.339
Power plant maintenance (1)	95,738	.311	124,233	.402	94,500	.307	124,260	.402
Train maintenance (1)	186,661	.606	193,872	.628	194,176	.630	209,134	.677
Other expenses (2)	97,889	.318	100,219	.324	102,897	.334	108,955	.353
TOTAL Train Expenses	747,232	2.426	848,866	2.748	774,692	2.515	899,936	2.913
Dining-Buffet, net loss	120,352	.390	118,060	.382	72,308	.235	69,340	.224
TOTAL, Incl. D-B net loss	867,584	2.816	966,926	3.130	847,000	2.750	969,276	3.137
NET REVENUE	1,314,674	4.268	1,205,211	3.902	1,256,968	4.080	1,153,972	3.736
Per cent of revenues	60.2		55.5		59.7		54.4	
ROUTE-MILES	422		422		422		422	
TRAIN-MILES	308,060		308,904		308,060		308,904	
PASSENGER-MILES	83,650,304		83,879,588		62,538,953		62,710,169	

Notes:

(1) Expenses include both running and back shop repairs.

(2) Includes enginehouse expenses, supplies for locomotives, vacation allowances and the following other expenses:

	AFTERNOON HIAWATHAS		MORNING HIAWATHAS		MIDWEST HIAWATHAS		OLYMPIAN HIAWATHAS	
	1947	1948	1947	1948	1947	1948	1947	1948
	$	$	$	$	$	$	$	$
Terminal expenses	31,366	35,670	35,068	41,195	34,132	36,152	46,136	107,548
Payroll taxes	39,784	34,733	41,727	37,114	45,463	39,917	98,713	150,064
Inside expenses Touralux cars							58,101	119,87
TOTAL	71,150	70,403	76,795	78,309	79,595	76,069	202,950	377,48

CHICAGO, MILWAUKEE, ST. PAUL AND PACIFIC RAILROAD

REVENUES AND EXPENSES

Item	Trains and Routes							
	MIDWEST HIAWATHAS Chicago-Omaha-Sioux Falls				OLYMPIAN HIAWATHAS Chicago-Seattle-Tacoma			
	2 Trains 8 Passenger-train cars each Each one way trip daily				6 Trains 10 Passenger-train cars each (3) Each one way trip daily			
	Operation begun December 11, 1940				Operation begun June 29, 1947			
	Year ended December 31, 1947		Year ended December 31, 1948		6 months 2 days ended December 31, 1947		Year ended December 31, 1948	
	Amount	Per Train-Mile	Amount	Per Train-Mile	Amount	Per Train-Mile	Amount	Per Train-Mile
Revenues	$	$	$	$	$	$	$	$
Passenger revenue in coaches	1,119,459		1,097,016		1,351,367		2,670,284	
Passenger revenue in parlor cars	340,291		281,989				(3) 4,570	
Passenger revenue in tourist sleepers					986,979		1,832,007	
Passenger revenue in Pullman sleepers					447,078		1,264,944	
Total Passenger Revenue	1,459,750	2.990	1,379,005	2.816	2,785,424	3.360	5,771,805	3.539
Pullman contract revenue (Net)					29,956		65,735	
Mail and Express revenue	208,006		230,961		86,816		69,227	
Total Revenues	1,667,756	3.416	1,609,966	3.288	2,902,196	3.501	5,906,767	3.621
Train Expenses								
Wages of crews	255,835	.524	291,236	.595	446,882	.539	896,758	.550
Fuel	162,596	.333	233,859	.478	219,334	.264	575,766	.353
Lubricants	8,214	.017	9,321	.019	28,134	.034	57,135	.035
Train supplies and expenses	42,933	.088	63,898	.130	156,438	.189	270,347	.166
Power plant maintenance (1)	117,156	.240	147,752	.302	300,659	.363	691,228	.424
Train maintenance (1)	183,405	.376	199,957	.408	395,765	.478	686,975	.421
Other expenses (2)	112,013	.229	117,875	.241	279,911	.338	549,549	.337
Total Train Expenses	882,152	1.807	1,063,898	2.173	1,827,123	2.205	3,727,758	2.286
Dining-Buffet, net loss	63,348	.130	60,251	.123	114,802	.138	219,587	.134
Total, Incl. D-B net loss	945,500	1.937	1,124,149	2.296	1,941,925	2.343	3,947,345	2.420
Net Revenue	722,256	1.479	485,817	.992	960,271	1.158	1,959,422	1.201
Per cent of revenues	43.3		30.2		33.1		33.2	
Route-Miles	669		669		2,228		2,228	
Train-Miles	488,188		489,708		828,814		1,630,896	
Passenger-Miles	56,421,352		56,596,923		112,310,928		221,000,293	

Note:

(3) Parlor car added December 1, 1948. Operated from Chicago to Minneapolis, westbound only.

The normal consist and seating capacity of the Hiawathas are shown in the table below.

Item	Afternoon Hiawathas	Morning Hiawathas	Midwest Hiawathas	Olympian Hiawathas
	Chicago-Twin Cities		Chicago-Omaha-Sioux Falls	Chicago-Seattle
Mail		1		
Mail—Express			1	
Express	1	3	1	
Baggage—Dormitory				1
Reclining Seat Lounge Coach	7	6	3	2
Coach—Touralux Sleeping Car*				1
Tip Top Tap Car	1	1		
Tip Top Tap—Dining Car			1	
Tip Top Grill Car				1
Diner	1	1		1
Drawing Room Parlor Car	1	1	1	1†
Touralux Sleeping Car§				2
Skytop Lounge Drawing Room Parlor Car	1	1		
Pullman Skytop Lounge Sleeping Car‡				1
Pullman Bedroom Car‖				1
Beaver Tail Parlor-Observation Car			1	
Total Number of Cars	12	14	8	11
Salable seats	428	376	216	353
Non-salable seats	202	196	107	148

* 8 Sections.

† Chicago to Minneapolis, westbound only.

§ 14 Sections in each car.

‡ 8 Double Bedrooms.

‖ 10 Roomettes, 6 Double Bedrooms.

CHICAGO, BURLINGTON & QUINCY

In November 1934, on the Burlington, the small Budd-built original ZEPHYR made its debut in regular service between Kansas City and Lincoln, Neb. It was successful beyond the expectations of the railroad or the builder, and from this first step in streamline train operation has evolved the 11 Burlington Zephyr trains serving the principal cities on the System, as well as California through the CALIFORNIA ZEPHYRS, operated in conjunction with the Denver and Rio Grande Western and the Western Pacific.

The early renown of the Burlington's fleet of Zephyrs has been enhanced by the magnificent new streamline trains recently placed in service, including the TWIN ZEPHYRS. The latter operate between Chicago and the Twin Cities and were the first regular trains with cars featuring the vista-dome—a glass-enclosed observatory from which passengers may enjoy an unobstructed panorama of the countryside—an innovation first introduced by the Burlington in 1945 from designs by General Motors.

Because the revenues and expenses of passenger-train operations on the Burlington have not been compiled for all individual trains in recent years, statistics for the Zephyrs are not available, except for the Twin Zephyrs, Zephyr 9902 and the Nebraska Zephyrs, covering different periods up to June 30, 1949, in which they operated with their present streamline equipment; and for the California Zephyrs from the beginning of service on March 20, 1949 to June 30, 1949.

The 7-car Twin Zephyrs began operating with a completely new Budd-built train on December 17, 1947, comprising a baggage-club-lounge, four vista-dome coaches, a diner and a vista-dome parlor car; hauled by a General Motors 2-unit 3800 HP Diesel-electric locomotive.

Zephyr 9902 began operation between Chicago and Hannibal, Mo., on July 20, 1947. It is a fully articulated 4-car train built by Budd, consisting of a power plant-baggage car, buffet-dinette-coach, coach and coach-parlor car. The power unit is a General Motors 600 HP Diesel-electric engine.

THE NEBRASKA ZEPHYRS, operating between Chicago, Omaha and Lincoln, were initiated on November 16, 1947, with equipment formerly of the Twin Zephyrs. There are eight Budd-built cars in each train: a baggage car, baggage-cocktail-lounge, three coaches, coach-dinette, diner and parlor-lounge car; the locomotive a General Motors 2000 HP Diesel-electric. These trains also are fully articulated except for the first, or baggage, car.

The seating capacity of these trains is as follows:

Train	Coach Seats	Parlor	Vista-Dome	C'tail Lounge-Buffet-Club	Diner	Din-ette	Lunch Stools	No. of Seats	
								Sale	Non-Sale
Twin Zephyrs	212	36*	120	38	48			406	48
Zephyr 9902	107	24				16	4	147	4
Nebraska Zephyrs	202	33*†		34	33	16		289	33

* Includes drawing room.
† Exclusive of 4 lounge seats.

The percentage of occupancy is not available, other than may be deduced from the figures of passengers per train-mile, which, during representative months of 1948, averaged for the through trip about 67 per cent of salable seats on the Twin Zephyrs, 50 per cent on Zephyr 9902 and 41 per cent on the Nebraska Zephyrs.

The provision of improved equipment—in design, construction and decoration—for commuter service has been receiving consideration by lines handling a large amount of traffic of this class. One of these is the Burlington, which has ordered from the Budd Company 30 two-level gallery suburban coaches seating 148 passengers each, an increase of about 50 per cent over the capacity of the ordinary passenger car. The increased passenger load per car, while resulting in operating savings, is expected to create favorable publicity and good will among commuter patrons.

Following is a statement of the revenues and expenses of the Twin Zephyrs, Zephyr 9902 and the Nebraska Zephyrs for different periods.

A statement of the revenues and expenses of the California Zephyrs will be found in the following section.

CHICAGO, BURLINGTON & QUINCY RAILROAD

REVENUES AND EXPENSES

Item	Trains and Routes					
	TWIN ZEPHYRS CHICAGO-ST. PAUL-MINNEAPOLIS		ZEPHYR NO. 9902 CHICAGO-HANNIBAL, Mo.		NEBRASKA ZEPHYRS CHICAGO-OMAHA-LINCOLN	
	2 Trains 7 Passenger-train cars each Each one round trip daily		1 Train 4 Passenger-train cars One round trip daily		2 Trains 8 Passenger-train cars each Each one way trip daily	
	Operation begun December 18, 1936		Operation begun July 20, 1947		Operation begun November 16, 1947	
	1 year, 3 mos. ended June 30, 1949		1 year, 11 mos. ended June 30, 1949		1 year, 7 mos. ended June 30, 1949	
	Amount	Per Tr.-Mi.	Amount	Per Tr.-Mi.	Amount	Per Tr.-Mi.
	$	$	$	$	$	$
REVENUES						
Passenger revenue	3,424,036	4.296	689,046	1.642	1,347,160	2.106
Passenger revenue in parlor cars	55,592		19,880		49,498	
TOTAL Passenger Revenue	3,479,628	4.365	708,926	1.689	1,396,658	2.183
Mail, Express and Miscellaneous revenue					86,411	
TOTAL Revenues	3,479,628	4.365	708,926	1.689	1,483,069	2.318
TRAIN EXPENSES						
Wages of crews	342,909	.430	161,800	.386	286,236	.447
Fuel	130,663	.164	23,100	.055	62,895	.098
Lubricants	6,092	.008	3,160	.008	5,841	.009
Train supplies and expenses	13,869	.017	6,459	.015	11,084	.017
Power plant maintenance	168,330	.211	48,731	.116	79,806	.125
Train maintenance	81,988	.103	22,726	.054	54,742	.086
Other expenses (1)	124,666	.156	85,396	.203	44,040	.069
TOTAL Train Expenses	868,517	1.089	351,372	.837	544,644	.851
Dining-Buffet, net loss	92,411	.116	36,043	.086	116,619	.183
TOTAL, Including D-B net loss	960,928	1.205	387,415	.923	661,263	1.034
NET REVENUE	2,518,700	3.160	321,511	.766	821,806	1.284
Per cent of revenues	72.4		45.3		55.4	
ROUTE-MILES	441		281		551	
TRAIN-MILES	797,088		419,710		639,815	
PASSENGER-MILES	134,622,972		32,347,289		61,996,906	

Notes:	TWIN ZEPHYRS	ZEPHYR 9902	NEBRASKA ZEPHYRS
(1) Other expenses include:			
Terminal expense	$124,644	$30,363	$41,637
Protection cost	22	55,033	2,403
TOTAL	124,666	85,396	44,040

Steam power protected the run of Zephyr 9902 in June 1949, while that train was on display at the Railroad Fair in Chicago.

CALIFORNIA ZEPHYRS

CHICAGO, BURLINGTON & QUINCY
DENVER AND RIO GRANDE WESTERN
WESTERN PACIFIC

The CALIFORNIA ZEPHYRS, with ceremonies befitting the addition of a de luxe streamliner to the growing fleet of new luxury trains, with Budd-built cars, were placed in service on March 20, 1949, between Chicago and San Francisco over the Burlington, Denver and Rio Grande Western and Western Pacific, replacing on a much faster schedule the Exposition Flyer.

The trains are hauled by Diesel-electric locomotives between Chicago and Denver and between Salt Lake City and Oakland Pier by General Motors 4500 HP in 3-units, and between Denver and Salt Lake City by Am. Loco. Co.-Gen. Elec. 6000 HP in 3-units.

Five cars in each train are provided with vista-domes and the trains are scheduled to pass through the most interesting sections of the route during daylight hours.

Each train consists of 11 cars of the following classes and seating capacity:

Cars	Salable Seats or Berths	Non-Salable Seats or Berths
1 Baggage car		
3 Chair cars—vista-dome	138	72
1 Buffet-lounge—vista-dome*		50
2 10-roomette, 6-bedroom sleeping cars	44	
1 Diner		48
1 16-section sleeping car	32	
1 10-roomette, 6-bedroom sleeping car†	22	
1 1-drawing room, 3-bedroom, obsn., vista-dome	9	54
11 Cars Total	245	224

Notes:
* Includes dormitory for dining-car crew.
† Operates between New York and Oakland Pier.

Following is a statement of occupancy percentages of the California Zephyrs during the periods indicated:

Period	Westbound				Eastbound			
	On W. P.		On D. & R. G. W.		On W. P.		On D. & R. G. W.	
	Coach Per Cent	Sleeper Per Cent	Aver. No. of Pass.	Per Cent of Cap.	Coach Per Cent	Sleeper Per Cent	Aver. No. of Pass.	Per Cent of Cap.
March 1949			146	59.8			161	65.7
April 1949	57.2	64.7	154	62.9	80.9	75.4	192	78.3
May 1949	74.5	76.5	190	77.6	96.1	83.9	217	88.6
June 1949	100.0	87.8	244	100.0	100.0	92.8	244	100.0
July 1949	100.0	89.5	253	103.3	100.0	89.6	244	100.0
August 1949			242	98.8			249	101.6

The total salable seat capacity of 245 assumes double occupancy of all bedrooms and drawing rooms though not always possible to attain this high average. Aside from two upper berths held for sleeping car crews, it frequently becomes necessary to sell bedrooms for single occupancy. Again, some of the averages in excess of capacity are due to a moderate amount of short-haul traffic where the same space on a single trip is sold more than once.

A statement follows of the revenues and expenses of the California Zephyrs for a 3-month period in 1949.

CHICAGO, BURLINGTON & QUINCY RAILROAD
THE DENVER AND RIO GRANDE WESTERN RAILROAD
THE WESTERN PACIFIC RAILROAD
REVENUES AND EXPENSES

Item	CALIFORNIA ZEPHYRS Chicago-San Francisco							
	6 Trains 11 Passenger-train cars each Each one way trip daily.							
	Operation begun March 20, 1949							
	3 months 12 days ended June 30, 1949							
	C.B. & Q. Chicago-Denver		D. & R.G.W. Denver-Salt Lake City		W.P. Salt Lake City-San Francisco		C.B. & Q. D. & R.G.W. W.P. Combined	
	Amount	Per Train-Mile	Amount	Per Train-Mile	Amount	Per Train-Mile	Amount	Per Train-Mile
	$	$	$	$	$	$	$	$
REVENUES								
Passenger revenue	809,137						809,137	
Passenger revenue—in coaches			216,356		279,036		495,392	
Passenger revenue—in Pullman cars			222,001		378,666		600,667	
TOTAL Passenger Revenue	809,137	3.806	438,357	3.759	657,702	3.477	1,905,196	3.675
Pullman contract revenue	45,451		8,625				54,076	
Mail, Express and Miscellaneous revenue	36,093		24,477		14,112		74,682	
TOTAL REVENUES	890,681	4.190	471,459	4.042	671,814	3.552	2,033,954	3.923
TRAIN EXPENSES								
Wages of crews	107,189	.504	65,569	.562	107,584	.569	280,342	.541
Fuel	82,600	.389	49,592	.425	41,719	.221	173,911	.335
Lubricants	4,975	.023	3,780	.032	4,666	.025	13,421	.026
Train supplies and expenses			14,412	.124	42,533	.225	56,945	.110
Power plant maintenance			(2)77,909	.668	(5)66,092	.349	144,001	.278
Power plant maintenance and supplies	43,666	.205					43,666	.084
Train maintenance			(3)29,202	.250	(5)79,325	.419	108,527	.209
Train maintenance and supplies	40,264	.190					40,264	.078
Other expenses	(1)48,591	.229	(4)48,196	.413	(6)38,217	.202	135,004	.260
TOTAL Train Expenses	327,285	1.540	288,660	2.474	380,136	2.010	996,081	1.921
Dining-Buffet, net loss	54,496	.256	22,358	.192	46,577	.246	123,431	.238
TOTAL, Including D-B. Net loss	381,781	1.796	311,018	2.666	426,713	2.256	1,119,512	2.159
NET REVENUE	508,900	2.394	160,441	1.376	245,101	1.296	914,442	1.764
Per cent of revenues	57.1		34.0		36.5		44.9	
ROUTE-MILES:	1,036		570				2,531–2,536	
Oakland to Salt Lake City (7)					925			
Salt Lake City to Oakland (7)					930			
TRAIN-MILES	212,592		116,630		189,151		518,373	
PASSENGER-MILES	33,934,438		21,034,538		28,112,193		83,081,169	

Notes:

(1) Terminal expenses at Chicago and Denver $30,175; payroll taxes and vacation allowances $18,416.
(2) Includes running repairs and a portion of enginehouse expenses.
(3) Running repairs only.
(4) Principal items are: Use of passenger terminals $20,505 and advertising $16,432.
(5) Actual costs, including general or back shop repairs, incurred in repairing locomotive and cars.
(6) Includes $24,409 terminal expenses.
(7) W.P. and S.P. operate their single track roads between Weso and Alazon, Nevada, jointly as a double track, and S.P. mileage is five miles greater.

CHICAGO, ROCK ISLAND AND PACIFIC

One of the lines that pioneered in the development and operation of streamline trains was the Rock Island.

THE PEORIA ROCKET, placed in service on September 19, 1937, became the nucleus of its present fleet of eight Rockets and the GOLDEN STATES; the latter operating between Chicago and the West Coast in conjunction with the Southern Pacific.

A measure of the Rock Island's success in the operation of these trains is indicated by the large percentage increases in the passenger mileage of the schedules in existence for several years, as shown in the opposite column:

Train	Period	Per Cent
PEORIA ROCKET	1948 over 1939	85
DES MOINES ROCKET	1948 over 1939	47
TEXAS ROCKETS	1948 over 1940	63
ROCKY MOUNTAIN ROCKETS	1948 over 1941	115

Other Rock Island Rocket trains are the CHOCTAW ROCKETS, ZEPHYR ROCKETS, TWIN STAR ROCKETS and the CORN BELT ROCKET.

The routes of each Rocket train, the normal consist, the number of salable and non-salable seats, and the percentage of occupancy will be found in the following table:

Note:

The consist of the Golden States appears in the section of this report devoted to the trains of the Southern Pacific.

Item	PEORIA ROCKET	DES MOINES ROCKET	TEXAS ROCKETS	ROCKY MOUNTAIN ROCKETS	CHOCTAW ROCKETS	ZEPHYR ROCKETS	TWIN STAR ROCKETS	CORN BELT ROCKET
	Chicago-Peoria	Chicago-Des Moines	Kansas City-Dallas	Chicago-Denver	Memphis-Amarillo	St. Louis-Minneapolis	Minneapolis-Houston	Omaha to Chicago
Mail				1(f)		1		1
Baggage			1(b)	1	1	1	1(c)	1(d)
Baggage-Dinette	1	1	1(b)					
Chair	3(a)	3(a)	2	3(a)	2(e)	2	3	4
Diner	1	1	1	1			1	1
Diner-Parlor-Observation					1	1		1
Club-Diner-Dormitory				1				
Parlor								1
Parlor-Lounge-Observation	1	1	1				1	
Sleeper				2(a)	1(e)	2	1(c)	
Sleeper-Observation				1				
TOTAL No. of Cars	6(a)	6(a)	5	10(a)	5	7	7(a)	9(ag)
Salable seats	239	239	192	234	218	183	253	263
Non-salable	2	2			2			
Percentage of occupancy	70	70	72	80	58	68	78	80

Notes:

(a) Additional cars added when traffic warrants.
(b) Baggage car operated in one direction and a baggage-dinette in the other direction.
(c) Baggage car and sleeper operated south of Kansas City only part of the time.
(d) Baggage car operated on alternate days only.
(e) A chair car and a sleeper did not operate west of El Reno during a portion of 1948.
(f) Mail-Baggage.
(g) Some cars operated to Chicago from Des Moines and Rock Island only. Train runs eastbound only.

The Rocket trains are extraordinarily well appointed and attractively decorated. The cars are both Budd- and Pullman-built.

The Rockets employ Diesel-electric locomotives of widely varying size, built by General Motors and Alco—G. E.

The Des Moines, Twin Star and Zephyr Rockets are powered by 2000 HP units.

The Rocky Mountain Rockets employ two units, varying according to traffic demands, of 3000 or 4000 HP. West of Limon, Col., the units are separated, one hauling the Denver section, the other the Colorado Springs section.

CHICAGO, ROCK ISLAND AND PACIFIC RAILROAD

REVENUES AND EXPENSES

Item	Trains and Routes															
	PEORIA ROCKET Chicago-Peoria				DES MOINES ROCKET Chicago-Des Moines				TEXAS ROCKETS Kansas City-Dallas Via Oklahoma City				ROCKY MOUNTAIN ROCKETS Chicago-Denver-Colorado Springs (4)			
	1 Train 6 Passenger-train cars Two round trips daily				1 Train 6 Passenger-train cars One round trip daily				2 Trains 5 Passenger-train cars each Each one way trip daily				2 Trains 10 Passenger-train cars each Each one way trip daily			
	Operation begun September 19, 1937				Operation begun September 26, 1937				Operation begun November 15, 1938				Operation begun November 12, 1939			
	Year ended Dec. 31, 1947		Year ended Dec. 31, 1948		Year ended Dec. 31, 1947		Year ended Dec. 31, 1948		Year ended Dec. 31, 1947		Year ended Dec. 31, 1948		Year ended Dec. 31, 1947		Year ended Dec. 31, 1948	
	Amt.	Per Tr.-Mile	Amt.	Per Tr.-Mile	Amt.	Per Tr.-Mile	Amt.	Per Tr.-Mile	Amt.	Per Tr.-Mile	Amt.	Per Tr.-Mile	Amt.	Per Tr.-Mile	Amt.	Per Tr.-Mile
	$	$	$	$	$	$	$	$	$	$	$	$	$	$	$	$
REVENUES																
Pass. revenue in coaches and Pullmans	737,033	3.136	794,760	3.372	823,754	3.152	818,703	3.124	922,985	1.856	920,966	1.847	2,522,710	2.972	2,560,753	3.0
Pullman contract revenue													25,976		24,156	
Mail and express revenue	9,748		10,610						35,491		44,227		357,918		457,252	
TOTAL REVENUES	746,781	3.177	805,370	3.417	823,754	3.152	818,703	3.124	958,476	1.928	965,193	1.936	2,906,604	3.425	3,042,161	3.5
TRAIN EXPENSES																
Wages of crews	94,249	.401	108,649	.460	112,870	.432	126,214	.482	193,679	.389	218,846	.438	363,178	.428	427,185	.5
Fuel	18,392	.078	30,388	.129	33,618	.129	46,845	.178	56,521	.113	79,577	.160	165,135	.195	244,547	.2
Lubricants (locomotive) (1)	1,767	.008	2,290	.010	2,563	.010	2,652	.010	4,771	.010	4,856	.010	12,904	.015	15,343	.0
Train supplies and expenses	31,979	.136	37,380	.159	33,421	.128	35,837	.137	70,850	.143	65,868	.132	99,309	.117	118,711	.1
Power plant maintenance (2)	66,104	.281	33,626	.143	35,662	.136	36,096	.138	96,041	.193	96,518	.194	202,585	.239	218,922	.2
Train maintenance (2)	38,175	.162	53,313	.226	51,188	.196	64,290	.245	71,878	.145	89,001	.178	163,883	.193	247,873	.2
Other expenses (3)	5,351	.023	5,871	.025	1,040	.004	1,043	.004	786	.002	414	.001	4,255	.005	4,700	.0
TOTAL TRAIN EXPENSES	256,017	1.089	271,517	1.152	270,362	1.035	312,977	1.194	494,526	.995	555,080	1.113	1,011,249	1.192	1,277,281	1.5
Dining-Buffet, net loss	4,996	.021	12,846	.054	540	.002	7,508	.029	26,754	.054	39,900	.080	67,950	.080	74,403	.0
TOTAL, incl. D-B net loss	261,013	1.110	284,363	1.206	270,902	1.037	320,485	1.223	521,280	1.049	594,980	1.193	1,079,199	1.272	1,351,684	1.5
NET REVENUE	485,768	2.067	521,007	2.211	552,852	2.115	498,218	1.901	437,196	.879	370,213	.743	1,827,405	2.153	1,690,477	1.9
Per cent of revenues	65.0		64.7		67.1		60.9		45.6		38.4		62.9		55.6	
ROUTE-MILES	161		161		358		358		681		681		1,162		1,162	
TRAIN-MILES	235,060		235,693		261,340		262,061		497,192		498,536		848,696		846,497	
PASSENGER-MILES	36,625,846		35,294,181		41,081,846		36,211,045		46,451,897		41,073,636		126,135,500		111,337,0	

Notes:

(1) Passenger-car lubricants included in train supplies and expenses.

(2) Includes all repairs: running, general, back shop and accident.

(3) Includes trackage, turning, piloting, etc.

(4) Trains divide and converge at Limon, Colo.

The Corn Belt Rocket, operating eastbound only, also employs two units, depending on traffic needs, of 3000 or 4000 HP.

The Texas Rockets normally use a 1200 HP or a 2000 HP unit and occasionally two units of 1200 HP each.

The Choctaw and Peoria Rockets are powered by one unit of 1200 HP, except that the latter at times requires a 2000 HP unit.

There follows a statement of the revenues and expenses of the Rocket trains for the years 1947 and 1948. The Rock Island does not maintain separate revvenue and expense accounts of the operation of the Golden States on its line.

CHICAGO, ROCK ISLAND AND PACIFIC RAILROAD

REVENUES AND EXPENSES

Trains and Routes															
CHOCTAW ROCKETS Memphis-Amarillo				ZEPHYR ROCKETS St. Louis-Minneapolis (5)				TWIN STAR ROCKETS Minneapolis-Houston (6)				CORN BELT ROCKET Omaha to Chicago			
2 Trains 5 Passenger-train cars each Each one way trip daily				2 Trains 7 Passenger-train cars each Each one way trip daily				3 Trains 7 Passenger-train cars each Each one way trip daily				1 Train 9 Passenger-train cars One way eastbound trip daily (7)			
Operation begun November 17, 1940				Operation begun January 7, 1941				Operation begun January 14, 1945				Operation begun November 23, 1947			
Year ended December 31, 1947		Year ended December 31, 1948		Year ended December 31, 1947		Year ended December 31, 1948		Year ended December 31, 1947		Year ended December 31, 1948		1 month and 8 days ended December 31, 1947		Year ended December 31, 1948	
Amount	Per Train-Mile	Amount	Per Train-Mile	Amount	Per Train-Mile	Amount	Per Train-Mile	Amount	Per Train-Mile	Amount	Per Train-Mile	Amount	Per Train-Mile	Amount	Per Train-Mile
$	$	$	$	$	$	$	$	$	$	$	$	$	$	$	$
848,603	1.530	759,160	1.376	522,151	1.951	527,144	1.968	2,729,902	2.739	2,947,999	2.956	49,190	2.508	564,955	3.069
−2,126		−413		−4,071		3,086		10,454		14,224					
161,724		189,536		164,341		206,329		164,332		209,074		4,791		72,381	
1,008,201	1.818	948,283	1.719	682,421	2.550	736,559	2.749	2,904,688	2.914	3,171,297	3.180	53,981	2.752	637,336	3.462
228,437	.412	255,479	.463	126,189	.472	140,917	.526	416,814	.418	479,019	.480	9,660	.492	93,290	.507
49,483	.089	75,111	.136	39,630	.148	58,151	.217	126,526	.127	183,206	.184	4,491	.229	44,332	.241
3,916	.007	3,966	.007	2,521	.009	2,624	.010	9,427	.010	9,725	.010	300	.015	3,461	.019
45,352	.082	53,745	.098	44,366	.166	47,851	.179	118,968	.120	138,661	.139	2,314	.118	24,098	.131
93,364	.168	123,659	.224	36,264	.136	35,903	.134	146,866	.147	133,816	.134	3,708	.189	55,359	.301
99,342	.179	94,508	.171	47,476	.177	58,699	.219	196,754	.197	255,922	.257	3,865	.197	53,582	.291
3,698	.007	3,810	.007	551	.002	553	.002	799	.001	817	.001	154	.008	2,255	.012
523,592	.944	610,278	1.106	296,997	1.110	344,698	1.287	1,016,154	1.020	1,201,166	1.205	24,492	1.248	276,377	1.502
27,586	.050	31,798	.058	40,976	.153	49,409	.184	35,635	.035	78,224	.078	3,192	.163	10,562	.057
551,178	.994	642,076	1.164	337,973	1.263	394,107	1.471	1,051,789	1.055	1,279,390	1.283	27,684	1.411	286,939	1.559
457,023	.824	306,207	.555	344,448	1.287	342,452	1.278	1,852,899	1.859	1,891,907	1.897	26,297	1.341	350,397	1.903
45.3		32.3		50.5		46.5		63.8		59.7		48.7		55.0	
761		761		366		366		1,362		1,362		503		503	
554,634		551,731		267,623		267,912		996,682		997,246		19,617		184,113	
43,356,153		34,376,454		26,693,076		23,892,181		137,879,948		132,152,227		2,400,000		24,756,545	

Notes:

(5) Operate over C.B. & Q. between St. Louis and Burlington, Iowa. Revenues and expenses include only C.R.I. & P. operations between Burlington and Minneapolis.

(6) Operate over B.-R.I. between Teague, Texas, and Houston.

(7) The opposite, or westbound, train is not operated as a Rocket train.

FLORIDA EAST COAST

Streamline train operation on the Florida East Coast began in December 1939, when there were installed two Budd-built 7-car all-coach trains purchased by it, and two similar Budd-built trains purchased by the Atlantic Coast Line. One of the former trains and the two latter, christened THE CHAMPIONS, were placed in daily service between New York and Miami. The other train of the Florida East Coast, named the HENRY M. FLAGLER, was operated in a daily round-trip run between Jacksonville and Miami.

Although the Henry M. Flagler was remunerative on the Jacksonville-Miami run, it was renamed the DIXIE FLAGLER and contributed as one of three trains in a pool to establish a daily coordinated 7-car all-coach service between Chicago and Miami by three different routes. The Dixie Flagler departed from Chicago on its first trip, via the Chicago & Eastern Illinois, on December 17, 1940, followed the next day by the Pullman-built CITY OF MIAMI, via the Illinois Central, and a day later by the Budd-built SOUTH WIND, via the Pennsylvania. The service thus established in effect continued the service previously provided by the Henry M. Flagler.

At the time the 3-route Chicago-Miami service was inaugurated it was the intention temporarily to discontinue the trains at the end of the Florida winter season, but it was found that the volume of travel warranted their retention throughout the year.

In the following table there are shown the normal consist, the number of seats salable and non-salable and the percentage of occupancy:

Item	Jacksonville-Miami	
	CHAMPIONS	DIXIE FLAGLER, CITY OF MIAMI, SOUTH WIND Designated Nos. 3 & 4
Combination Bag., Dorm. and Coach	2	1
Coach	9	4
Tavern-Lounge-Observation	1	1
Tavern-Lounge	1	
Diner	2	1
TOTAL No. of Cars	15	7
Salable seats	574	230
Non-salable seats	26	20
Percentage of occupancy:		
1947	55.4	59.2
1948	54.7	

The locomotives are General Motors Diesel-electrics; two units of 4000 HP furnishing the power for the Champions, and one of 2000 HP for Trains 3 and 4.

Following is a statement of the revenues and expenses of the Champions for the years 1947 and 1948. For the Dixie Flagler, City of Miami and South Wind—designated Nos. 3 and 4 on the Florida East Coast—the figures are for 1947 only, with December estimated, since the Company had discontinued assembling data for these trains.

FLORIDA EAST COAST RAILWAY

REVENUES AND EXPENSES

Item	JACKSONVILLE–MIAMI					
	Champions (1)				Dixie Flagler City of Miami South Wind	
	3 Trains 15 Passenger-train cars each Each one way trip daily				3 Trains 7 Passenger-train cars each (2) Each one round trip every third day (3)	
	Operation begun December 1, 1939				Operation begun December 18, 1940	
	Year ended December 31, 1947		Year ended December 31, 1948		Year ended December 31, 1947	
	Amount (4)	Per Tr.-Mile	Amount (4)	Per Tr.-Mile	Amount (4), (5)	Per Tr.-Mile
	$	$	$	$	$	$
Passenger revenue	1,866,314	7.388	1,897,765	7.493	953,875	3.776
Mail and miscellaneous revenue	15,969		16,945		3,193	
Total Revenues	1,882,283	7.451	1,914,710	7.560	957,068	3.789
Train Expenses						
Wages of crews	158,962	.629	187,991	.742	127,043	.503
Fuel oil	73,463	.291	102,462	.405	38,358	.152
Lubricants	9,192	.036	8,906	.035	4,672	.019
Train supplies and expenses	57,609	.228	73,867	.292	20,778	.082
Power plant maintenance (6)	99,701	.395	87,395	.345	52,499	.208
Train maintenance (6)	215,831	.854	262,921	1.038	76,137	.301
Other expenses (7)	153,744	.609	110,616	.437	60,653	.240
Total Train Expenses	768,502	3.042	834,158	3.294	380,140	1.505
Dining-Buffet—net loss	36,467	.144	17,243	.068	8,179	.032
Total, Incl. D-B. net loss	804,969	3.186	851,401	3.362	388,319	1.537
Net Revenue	1,077,314	4.265	1,063,309	4.198	568,749	2.252
Per cent of revenues	57.2		55.5		59.4	
Route-Miles	346		346		346	
Train-Miles	252,630		253,272		252,580	
Passenger-Miles	90,225,000		90,703,000		45,881,433	

Notes:

(1) The Champions operate a daily service between New York and Miami.

(2) In December 1947 handled 5 to 7 additional cars of conventional type, consisting of coaches, sleepers and diner.

(3) Each train performs one round trip between Chicago–Miami every third day on alternate days, effecting a daily service between Chicago-Miami.

(4) Revenues and expenses are for F.E.C. operations between Jacksonville-Miami.

(5) Month of December 1947 estimated.

(6) Cover both running and general repairs.

(7) Other expenses include following amounts:

	Champions		Dixie Flagler, City of Miami and South Wind
	1947	1948	1947
Jacksonville terminal expenses	$98,251	$107,655	$49,609
Equipment rentals	29,956	24,379 (Cr.)	4,444 (Cr.)

GULF, MOBILE AND OHIO

The predecessor railroad, the Gulf, Mobile and Northern, was one of those roads which early explored the economics of the problem of providing equipment and service of a nature that would meet the special needs of its patrons. Its REBELS, the first streamline trains in the South, were an evolution rather than an innovation, since the Company had operated gas-electric trains at a much earlier period.

The Company's present lines embrace those of the former Alton Railroad, and consequently serve a much larger territory, reaching from Chicago and Kansas City to the Gulf. The streamline trains of the Company now include the ABRAHAM LINCOLN, ANN RUTLEDGE, GULF COAST REBELS and the REBELS.

The table below shows the routes of these trains and the normal consist of each.

Item	ABRAHAM LINCOLN ST. LOUIS-CHICAGO		ANN RUTLEDGE CHICAGO-ST. LOUIS		GULF COAST REBELS ST. LOUIS-MOBILE		REBELS ST. LOUIS-NEW ORLEANS	
	No. Cars	No. Seats	No. Cars	No. Seats	No. Cars	No. Seats	No. Cars	No. Seats
Motor Car							1	
Mail					1			
Mail-Baggage							1	
Baggage					1			
Baggage-Bar	1	32	1	32				
Coach-Dormitory					1	48		
Coach	5(a)	340	4(b)	256	2(a)	128		
Coach-Lunch Counter							1(c)	54(d)
Diner	1		1					
Diner-Lounge					1			
Lounge	1		1					
Drawing Room Parlor	2	48	2	48				
Parlor-Observation	1	18	1	18				
Sleeper	2				2			
Sleeper-Observation							1	18(e)
Normal Consist	13		10		8		4	
TOTAL No. Seats		438		354		176		72

Notes:

(a) 1 additional coach added Fridays, Saturdays and Sundays—64 seats.

(b) 2 additional coaches added Fridays, Saturdays and Sundays—64 seats each.

(c) 1 additional coach operates regularly between Jackson, Miss., and New Orleans—64 seats.

(d) 54 coach seats.

(e) 10 lounge seats and 8 seats at tables in observation end.

In addition to the seating capacity shown in the foregoing table there is available the following space:

ABRAHAM LINCOLN:

Diner 44; Lounge 22; parlor cars—2 drawing rooms

Chicago-Oklahoma City sleeper; 14 roomettes; 4 double bedrooms

Chicago-Mobile sleeper; 10 sections; 2 compartments; 1 drawing room

ANN RUTLEDGE:

Diner 40; Lounge 22; parlor cars—2 drawing rooms

GULF COAST REBELS:

Diner 24; Lounge 14

Chicago-Mobile sleeper; 8 sections; 3 bedrooms; 1 drawing room

St. Louis-Montgomery sleeper; 12 sections; 1 drawing room

REBELS:

Lunch counter 8

Sleeper-Observation; 6 sections; 1 drawing room; 12 seats

The Company considers all seats salable except dining seats. The percentage of occupancy in the coaches fluctuates between 90 and 100, and approximately 98 per cent of the parlor car space is sold on each trip.

A comparison of the passenger-miles of the Abraham Lincoln and Ann Rutledge for the past 10 years shows a satisfactory growth in the patronage of these trains. Comparable figures for the Rebels are not available.

Year Ended	ABRAHAM LINCOLN	ANN RUTLEDGE
June 30, 1939	28,324,267	22,328,867
June 30, 1940	31,307,772	25,119,486
June 30, 1941	33,506,884	28,697,956
May 31, 1949	58,632,184	37,979,742

All of the cars, including the sleeper-observation car on the Rebels, were built by the American Car and Foundry Company. The standard sleepers were built by Pullman.

Within the past 18 months the Company has placed in service eleven new coaches and four new parlor cars, and now has on order four sleeping cars with the American Car and Foundry Co. In addition, two dining cars are being rebuilt in the Company's shops. When this program is completed all of the Company's major trains will be modern in every respect.

The Abraham Lincoln and Ann Rutledge are hauled by 2-unit 4000 HP General Motors Diesel-electrics, and the Gulf Coast Rebels by a 2000 HP Alco-G. E. Diesel-electric unit.

Three sets of equipment are required to protect the Rebels' schedules. Two sets are each hauled by a 660 HP motor car. The other is of conventional type, powered by a 2000 HP Diesel-electric unit. The figures in the operating statement which follows are the revenues and expenses of the two light-weight sets projected to cover all three. The operating statement also shows the revenues and expenses of the other streamline trains for the year ended May 31, 1949.

GULF, MOBILE AND OHIO RAILROAD

REVENUES AND EXPENSES

Item	Trains and Routes							
	ABRAHAM LINCOLN St. Louis-Chicago		ANN RUTLEDGE Chicago-St. Louis		GULF COAST REBELS St. Louis-Mobile		REBELS St. Louis-New Orleans	
	1 Train 13 Passenger-train cars One round trip daily		1 Train 10 Passenger-train cars One round trip daily		2 Trains 8 Passenger-train cars each Each one way trip daily		3 Trains 4 Passenger-train cars each (4) Each one way trip daily	
	Operation begun June 24, 1935		Operation begun July 26, 1937		Operation begun October 27, 1940		Operation begun April 5, 1942	
	Year ended May 31, 1949		Year ended May 31, 1949		Year ended May 31, 1949		Year ended May 31, 1949	
	Amount	Per Train-Mile	Amount	Per Train-Mile	Amount	Per Train-Mile	Amount	Per Train-Mile
	$	$	$	$	$	$	$	$
REVENUES								
Passenger revenue	(1) 1,532,182		993,573		(1)844,442		355,213	
Passenger revenue—in parlor cars	75,002		53,184		(5) 1,287		2,827	
Passenger revenue—in sleeping cars							16,619	
TOTAL Passenger Revenue	1,607,184	7.752	1,046,757	5.049	845,729	1.761	374,659	.674
Mail and Express revenue	251		62,690		268,817		156,480	
TOTAL Revenues	1,607,435	7.753	1,109,447	5.351	1,114,546	2.320	531,139	.955
TRAIN EXPENSES								
Wages of crews	132,134	.637	117,581	.567	249,087	.519	185,964	.334
Fuel	74,901	.361	66,940	.323	90,067	.188	36,268	.065
Lubricants	4,779	.023	6,348	.031	5,433	.011	(6)	
Train supplies and expenses	97,038	.468	86,938	.419	123,017	.256	18,412	.033
Power plant maintenance (2)	70,293	.339	64,617	.312	95,280	.198	63,636	.115
Train maintenance (2)	177,346	.856	158,886	.766	224,824	.468	100,043	.180
Other expenses (3)	284,662	1.373	255,888	1.234	128,186	.267	106,696	.192
TOTAL Train Expenses	841,153	4.057	757,198	3.652	915,894	1.907	511,019	.919
Dining-Buffet, net gain or loss	+851	+.004	−5,399	−.026	−36,655	−.076	−9,145	−.016
TOTAL, Incl. D-B net gain or loss	840,302	4.053	762,597	3.678	952,549	1.983	520,164	.935
NET REVENUE	767,133	3.700	346,850	1.673	161,997	.337	10,975	.020
Per cent of Revenues	47.7		31.3		14.5		2.1	
ROUTE-MILES	284		284		648		751	
TRAIN-MILES	207,320		207,320		480,260		556,260	
PASSENGER-MILES	58,632,184		37,979,742		32,617,201		15,958,647	

Notes:

(1) Include passenger revenue in sleeping cars.

(2) Includes a proportion of general and back shop repairs.

(3) Include enginehouse expenses, water and other locomotive supplies. Also, joint facility expenses at terminals and retirement and unemployment taxes as detailed below:

	Abraham Lincoln	Ann Rutledge	Gulf Coast Rebels	Rebels
Joint facility expenses	$255,241	$228,315	$ 82,959	$60,320
Retirement and unemployment taxes	22,799	20,950	34,327	20,899
Totals	$278,040	$249,265	$117,286	$81,219

(4) An additional coach carried daily between Jackson, Miss., and New Orleans.

(5) Revenue from lounge-car seats.

(6) Lubricants for Rebels' motor cars included in train supplies and expenses.

MISSOURI–KANSAS–TEXAS

The new streamline TEXAS SPECIALS, operating on the St. Louis-San Francisco Railway between St. Louis, Mo., and Vinita, Okla., and on the Missouri-Kansas-Texas Railroad between Vinita, Okla., and San Antonio, Texas, made their initial run in each direction on May 16, 1948, on a schedule that reduced the previous running time between termini by about 4 hours. For these trains the Katy and Frisco purchased 28 streamline light-weight cars, and some standard equipment is employed to meet the service requirements.

The cars for the new trains were built by Pullman, and in their appointments special attention has been given to the comfort of coach passengers. The trains are powered by a General Motors 2-unit 4000 HP Diesel-electric between St. Louis, Mo., and Waco, Texas, and by steam locomotives between Waco and San Antonio.

The normal consist of each train is: a baggage-mail car, a coach-lounge-buffet, two coaches, a diner, six sleepers and an observation-lounge, with an average of 256 salable seats and 54 non-salable seats. The sleepers provide all-enclosed sleeping accommodations.

The following statement gives the Missouri-Kansas-Texas revenues and expenses of the Texas Specials between Vinita and San Antonio for the year ended May 31, 1949. On page 69 will be found the revenues and expenses of these trains on the St. Louis-San Francisco portion of the route.

MISSOURI–KANSAS–TEXAS RAILROAD

REVENUES AND EXPENSES

Item	TEXAS SPECIALS (1) ST. LOUIS-SAN ANTONIO	
	3 Trains 12 Passenger-train cars each Each one way trip daily	
	Operation begun May 16, 1948	
	Year ended May 31, 1949	
	Amount (2)	Per Train-Mile
	$	$
REVENUES		
Passenger revenue—in coaches	643,056	
Passenger revenue—in Pullman cars	931,045	
Total Passenger Revenue	1,574,101	3.473
Pullman contract revenue	38,291	
Mail revenue	142,627	
Total Revenues	1,755,019	3.872
TRAIN EXPENSES		
Wages of crews	231,536	.511
Fuel	163,984	.362
Train supplies and expenses	96,320	.212
Power plant maintenance (3)	188,881	.417
Train maintenance (3)	164,603	.363
Other locomotive supplies	19,586	.043
Enginehouse expenses	24,799	.055
TOTAL Train Expenses	889,709	1.963
Dining and Buffet—Net loss	20,429	.045
TOTAL, Incl. D-B. Net loss	910,138	2.008
NET REVENUE	844,881	1.864
Per cent of revenues	48.1	
ROUTE-MILES	621	
TRAIN-MILES	453,287	
PASSENGER-MILES (estimated)	22,995,250	

Notes:

(1) Operate over St. L.-S. F. between St. Louis and Vinita, Okla., thence M.K.T.

(2) Revenues and expenses are for M.K.T. only.

(3) Includes a proportion of general or back shop repairs.

MISSOURI PACIFIC

The Missouri Pacific, like all large railways serving an extensive territory and obliged to meet the competition of all types of transportation agencies for both short and long hauls, has been faced with many difficult problems in developing its passenger traffic resources. The subject is one to which the Company has given intensive study over a long period and which has resulted in the establishment of a fleet of modern streamline, light-weight trains that now serve the wide area extending from Colorado and Nebraska to the lower Rio Grande valley of Texas and, in conjunction with the Texas and Pacific Railway, to southwest Texas as far as El Paso.

The Missouri River Eagles were the first streamliners installed by the Company—in March 1940. These two 6-car trains were placed in a fast daily service between St. Louis, Kansas City and Omaha. Each train comprises a mail-baggage car, a storage-mail car, two coaches seating 132 passengers, a diner-bar-lounge with seats for 44, and a parlor-observation car seating 37. On alternate days one of the new planetarium coaches is carried, seating 46 persons in the coach section and 24 in the dome. The cars are of aluminum alloy construction and were built by the American Car and Foundry Co. The locomotives are 2000 HP General Motors Diesel-electrics.

The passenger mileage of the Missouri River Eagles was 23.4 million in 1941, 47.1 million in 1947 and 41.6 million in 1948.

The Delta Eagle, a name significant of the delta country the line traverses in the Mississippi River valley, was the second streamline train service to be instituted by the Missouri Pacific—on June 1, 1941—between Memphis, Tenn., and Tallulah, La., a relatively thin traffic territory. The Delta Eagle replaced a steam train, and was designed to serve the route in the most economical and practicable manner and at the same time retrieve local traffic in a section where minimum service had been provided.

The train consists of a 1000 HP General Motors Diesel-electric locomotive, with a baggage room in the rear, a coach with 60 seats, and a lounge-coach with 48 seats, and containing also a compact kitchen and grill counter. Mail is carried in a special compartment at the forward end of the first coach. An additional light-weight coach is added on week ends. The cars were built by the St. Louis Car Company.

The Colorado Eagles were placed in service on June 21, 1942. These two 8-car streamline trains replaced conventional type cars on the Missouri Pacific between St. Louis and Pueblo,

and on the Denver and Rio Grande Western Railroad between Pueblo and Denver. Excluding head-end cars, the present normal consist of the Colorado Eagles is as follows:

Cars	Route	Seats and Rooms
1 Dormitory-Grill Coach	St. Louis-Denver	48 coach seats
1 Coach	"	56 " "
1 Planetarium Coach	"	46 coach and 24 dome seats
1 Dining-Lounge	"	32 dining and 18 lounge seats
2 Sleepers	"	14 roomettes and 4 bedrooms each
1 Sleeper	Wichita-Denver	8 sections; 1 drawing room; 3 bedrooms
1 Coach	St. Louis-Kansas City	64 seats

All of the cars are light-weight with the exception of the Wichita-Denver sleeper. The three sleeping cars were built by Pullman, the balance of the cars by Budd. The locomotives are General Motors 2-unit Diesel-electrics of 4000 HP.

After the induction of the Colorado Eagles war restrictions caused postponement of the Company's passenger train program. Immediately following the war's end orders were placed for new modern trains. On August 15, 1948, the WEST TEXAS EAGLES and the SOUTH TEXAS EAGLES were placed in service, followed by the VALLEY EAGLES on November 1, 1948.

The WEST TEXAS EAGLES, to and from El Paso, are primarily 11-car trains between St. Louis and Ft. Worth. At Ft. Worth, on the Texas and Pacific, the make-up of the train is changed. Aside from head-end cars, the normal Missouri Pacific consist is as shown below:

Cars	Route	Seats and Rooms
1 Divided Coach	St. Louis-El Paso	64 coach seats
1 Coach	"	60 " "
1 Diner	St. Louis-Ft. Worth	44 dining seats
1 Sleeper-Lounge	"	5 bedrooms; 26 seats
1 Sleeper	"	14 roomettes; 2 bedrooms; 1 drawing room
1 Sleeper	New York-El Paso	14 roomettes; 4 bedrooms
1 Sleeper	Washington-Ft. Worth	14 roomettes; 4 bedrooms
1 Divided Coach	Memphis-Ft. Worth	64 coach seats
1 Sleeper	"	14 roomettes; 4 bedrooms

The train is hauled by 2-unit 4000 HP General Motors Diesel-electric locomotives. The sleepers were built by Pullman and the other cars by American Car and Foundry Company.

The SOUTH TEXAS EAGLES operate as one section between St. Louis and Palestine, Texas. At the latter point the trains diverge and converge; one

section operating to and from Houston-Galveston, the other to and from San Antonio. They are powered by General Motors Diesel-electric locomotives as follows:

4000 HP	Between St. Louis and Palestine
2000 HP	Between Palestine and San Antonio
4000 HP	Between Palestine and Houston
2000 HP	Between Houston and Galveston

The normal consist of the South Texas Eagles, other than head-end cars, is given below:

Cars	Route	Seats and Rooms
1 Divided Coach-Dormitory	St. Louis-Houston	52 coach seats
1 Coach*	St. Louis-Corpus Christi	60 " "
1 Dining-Lounge	St. Louis-Houston	32 dining; 18 lounge seats
1 Sleeper	St. Louis-Galveston	14 roomettes; 2 bedrooms; 1 drawing room
1 Sleeper	New York-Houston	10 roomettes; 6 bedrooms
1 Sleeper	Washington-Houston	10 roomettes; 5 bedrooms
1 Sleeper	Memphis-Houston	14 roomettes; 4 bedrooms
1 Divided Coach-Dormitory	St. Louis-San Antonio	52 coach seats
1 Coach	"	60 coach seats
1 Dining-Lounge	"	32 dining; 18 lounge seats
1 Sleeper	"	14 roomettes, 4 bedrooms
1 Sleeper	"	6 sections; 6 roomettes; 4 bedrooms
1 Sleeper	New York-San Antonio	10 roomettes; 5 bedrooms

* Interchanged with the Valley Eagles at Houston.

The sleepers were built by Pullman, the other cars by American Car and Foundry Company.

At San Antonio a direct connection is made in both directions with the Aztec Eagles which operate between San Antonio and Mexico City with conventional type equipment, skirted and painted the Eagle colors.

The Valley Eagles, all-coach trains of streamline light-weight cars, were established to provide a daylight service between the lower Rio Grande valley of Texas and Corpus Christi, Houston and San Antonio. Exclusive of head-end cars, the normal consist is as shown in the lower table on this page:

The coaches are equipped with a stateroom seating five persons, which can be used for the accommodation of passengers holding first-class tickets.

Cars	Route	Seats
1 Grill Coach	Houston-Brownsville	52 coach and 6 grill
Coach	"	60 coach
Coach	St. Louis-Houston-Corpus Christi	60 coach
Coach	San Antonio-Brownsville	60 coach

The locomotives are General Motors 2000 HP Diesel-electrics. The cars were built by the American Car and Foundry Company.

There follows a statement of the revenues and expenses of the Missouri Pacific Eagles described above.

MISSOURI PACIFIC RAILROAD

REVENUES AND EXPENSES

Item	Trains and Routes							
	MISSOURI RIVER EAGLES St. Louis-Kansas City-Omaha				DELTA EAGLE Memphis, Tenn.-Tallulah, La.			
	2 Trains 6 Passenger-train cars each Each one way trip daily				1 Train 2 Passenger-train cars (2) One round trip daily			
	Operation begun March 10, 1940				Operation begun June 1, 1941			
	Year ended December 31, 1947		Year ended December 31, 1948		Year ended December 31, 1947		Year ended December 31, 1948	
	Amount	Per Train-Mile	Amount	Per Train-Mile	Amount	Per Train-Mile	Amount	Per Train-Mile
	$	$	$	$	$	$	$	$
Revenues								
Passenger revenue—in coaches	779,529		783,365		181,414		172,404	
Passenger revenue—in Pullmans	144,235		122,914					
Total Passenger Revenue	923,764	2.878	906,279	2.712	181,414	1.013	172,404	.949
Parlor car, Mail, Express, etc., revenue	382,142		282,340					
Mail, Express, etc., revenue					33,785		37,222	
Total Revenues	1,305,906	4.069	1,188,619	3.557	215,199	1.202	209,626	1.154
Train Expenses								
Wages of crews	159,756	.498	183,775	.550	68,316	.382	72,215	.398
Fuel	43,626	.136	76,933	.230	16,759	.094	24,453	.135
Lubricants	7,974	.025	11,743	.035	5,652	.031	8,860	.049
Train supplies and expenses	53,856	.167	54,824	.164	15,421	.086	17,961	.099
Power plant maintenance (1)	111,199	.346	74,911	.224	43,481	.243	40,401	.222
Train maintenance (1)	88,472	.276	99,549	.298	23,910	.133	24,557	.135
Total Train Expenses	464,883	1.448	501,735	1.501	173,539	.969	188,447	1.038
Dining-Buffet—net gain or loss	−680	−.002	−19,890	−.060	−4,533	−.026	−2,872	−.015
Total, incl. D-B net gain or loss	465,563	1.450	521,625	1.561	178,072	.995	191,319	1.053
Net Revenue	840,343	2.619	666,994	1.996	37,127	.207	18,307	.101
Per cent of revenues	64.4		56.1		17.3		8.7	
Route-Miles	478		478		259		259	
Train-Miles	320,983		334,237		179,014		181,618	
Passenger-Miles	47,118,986		41,614,993		9,432,525		8,076,457	

Notes:

(1) Includes any expenses incurred in performance of general or back shop repairs.

(2) Baggage compartment in 1000 HP Diesel-electric locomotive.

(3) Revenues and expenses are for Missouri Pacific R.R. operation between St. Louis and Pueblo, except that dining car figures are for entire run between St. Louis and Denver.

MISSOURI PACIFIC RAILROAD

REVENUES AND EXPENSES

Trains and Routes									
COLORADO EAGLES St. Louis-Denver				WEST TEXAS EAGLES St. Louis-El Paso		SOUTH TEXAS EAGLES St. Louis-San Antonio-Houston-Galveston		VALLEY EAGLES Houston-San Antonio-Brownsville, Texas	
2 Trains 9 Passenger-train cars each Each one way trip daily				2 Trains 11 Passenger-train cars each (4) Each one way trip daily		2 Trains 14 Passenger-train cars each (6) Each one way trip daily		2 Trains 5 Passenger-train cars each Each one way trip daily	
Operation begun June 21, 1942				Operation begun August 15, 1948		Operation begun August 15, 1948		Operation begun November 1, 1948	
Year ended December 31, 1947		Year ended December 31, 1948		4 months 17 days ended December 31, 1948		4 months 17 days ended December 31, 1948		2 months ended December 31, 1948	
Amount (3)	Per Train-Mile	Amount (3)	Per Train-Mile	Amount (5)	Per Train-Mile	Amount (5)	Per Train-Mile	Amount	Per Train-Mile
$	$	$	$	$	$	$	$	$	$
1,505,234		1,455,414		638,641		665,515		46,723	
672,296		581,684		399,641		569,787			
2,177,530	3.404	2,037,098	3.185	1,038,282	2.767	1,235,302	3.966	46,723	1.030
215,141		322,977		335,718		90,947		20,147	
2,392,671	3.740	2,360,075	3.690	1,374,000	3.662	1,326,249	4.258	66,870	1.474
277,832	.434	305,220	.477	194,298	.518	160,605	.516	23,658	.521
135,890	.212	220,702	.345	120,280	.321	79,016	.254	5,830	.128
27,226	.043	35,672	.055	18,180	.048	13,648	.044	972	.022
64,705	.101	55,349	.087	17,565	.047	22,377	.072	3,095	.067
308,445	.482	225,719	.353	64,017	.171	44,343	.142	3,490	.077
97,008	.152	126,389	.198	31,086	.083	16,267	.052	3,227	.071
911,106	1.424	969,051	1.515	445,426	1.188	336,256	1.080	40,272	.886
+2,901	+.004	−21,915	−.034	−36,249	−.096	−36,789	−.118	−311	−.007
908,205	1.420	990,966	1.549	481,675	1.284	373,045	1.198	40,583	.893
1,484,466	2.320	1,369,109	2.141	892,325	2.378	953,204	3.060	26,287	.581
62.1		58.0		64.9		71.9		39.3	
892		892		1,387		1,123		372	
639,732		639,696		375,131		311,438		45,384	
107,614,451		91,487,248		43,311,704		50,643,645		2,173,144	

Notes:

(4) Primarily an 11-car train between St. Louis and Ft. Worth.

(5) Includes operations over the Texas and Pacific Railway.

(6) Trains operate as one section of 14 cars between St. Louis and Palestine.

NASHVILLE, CHATTANOOGA & ST. LOUIS

The Nashville, Chattanooga & St. Louis Railway is one of the five carriers participating in the handling of the 7-car Budd-built DIXIE FLAGLER, a Chicago-Florida streamliner described in the section relating to the trains of the Florida East Coast. Formerly employing steam power it is now hauled by a General Motors Diesel-electric locomotive in two units of 3000 HP.

The GEORGIANS commenced operations between St. Louis and Atlanta on November 17, 1946. The route traversed was over the Louisville & Nashville between St. Louis and Nashville, and the Nashville, Chattanooga & St. Louis between Nashville and Atlanta. They were 6-car streamline trains, each consisting of four coaches, a diner and one tavern-lounge, with a capacity of 224 salable seats and 114 non-salable. The operation of these trains was suspended from May 15 to June 1, 1948, on which latter date they were placed in a fast overnight service between Chicago and Atlanta over the Chicago and Eastern Illinois between Chicago and Evansville, the L. & N. between Evansville and Nashville, and the N. C. & St. L. between Nashville and Atlanta, with a connecting service between St. Louis and Evansville over the L. & N. On the N. C. & St. L. they are 11-car trains, each comprising a baggage-dormitory, four coaches, a diner, a tavern-lounge and four sleepers; with a capacity of 224 salable seats, 114 non-salable seats, and 87 berths. The standard type sleepers were built by Pullman, aluminum painted to accord with the other cars which were built by the American Car and Foundry Company. Each train is powered by a General Motors Diesel-electric locomotive in two units of 3000 HP.

The CITY OF MEMPHIS, a de luxe coach steam powered streamliner, designed and built in the Company's shops at Nashville, was inaugurated on May 17, 1947, to operate a fast round-trip daily service between Memphis and Nashville. A 5-car train (formerly 6 cars), it consists of a baggage-express-mail, two coaches, a diner-tavern and a coach-observation, with 142 salable and 86 non-salable seats.

A statement follows of the revenues and expenses of the Dixie Flagler, Georgians and the City of Memphis, for different periods.

THE NASHVILLE, CHATTANOOGA & ST. LOUIS RAILWAY

REVENUES AND EXPENSES

Item	Trains and Routes													
	DIXIE FLAGLER (1) Chicago–Miami				GEORGIANS (2) Chicago–Atlanta						CITY OF MEMPHIS Memphis–Nashville			
	1 Train 7 Passenger-train cars One round trip every third day				2 Trains 6 Passenger-train cars each Each one way trip daily				2 Trains 11 Passenger-train cars each Each one way trip daily		1 Train 5 Passenger-train cars (3) One round trip daily			
	Operation begun December 17, 1940				Operation begun November 17, 1946				Operation begun June 1, 1948		Operation begun May 17, 1947			
	Year ended Dec. 31, 1947		Year ended Dec. 31, 1948		Year ended Dec. 31, 1947		4 mos. 15 days ended May 15, 1948		7 months ended Dec. 31, 1948		7 mos. 15 days ended Dec. 31, 1947		Year ended Dec. 31, 1948	
	Amount(4)	Per Train-mile	Amount(4)	Per Train-mile	Amount(4)	Per Train-mile	Amount(4)	Per Train-mile	Amount(4)	Per Train-mile	Amount	Per Train-mile	Amount	Per Train-mile
	$	$	$	$	$	$	$	$	$	$	$	$	$	$
REVENUES														
Passenger revenue—in coaches	(7)276,302		289,657		345,081		153,410		252,378		199,172		275,567	
Passenger revenue—in Pullman cars									184,831					
TOTAL Passenger Revenue	276,302	3.929	289,657	4.119	345,081	1.652	153,410	1.958	437,209	3.559	199,172	1.827	275,567	1.580
Mail and Express revenue											29,901		54,333	
TOTAL Revenues	276,302	3.929	289,657	4.119	345,081	1.652	153,410	1.958	437,209	3.559	229,073	2.101	329,900	1.892
TRAIN EXPENSES														
Wages of crews	39,290	.559	43,699	.622	84,814	.406	32,942	.420	57,731	.470	46,616	.428	72,194	.414
Fuel	21,230	.302	25,107	.357	31,274	.150	15,845	.202	45,082	.367	25,321	.232	45,228	.259
Lubricants	955	.014	1,128	.016	3,268	.016	1,013	.013	2,828	.023	1,208	.011	2,316	.013
Train supplies and expenses	10,214	.145	10,139	.144	23,204	.111	10,710	.137	17,384	.142	17,595	.161	30,574	.175
Power plant maintenance (5)	21,191	.301	25,494	.363	33,240	.159	11,416	.146	20,047	.163	28,215	.259	69,274	.398
Train maintenance (5)	10,730	.153	15,190	.216	26,941	.129	19,791	.253	(7)22,306	.181	13,297	.122	22,378	.128
Other expenses (6)	18,176	.258	17,174	.244	56,302	.269	19,875	.254	50,822	.414	53,258	.489	97,645	.560
TOTAL Train Expenses	121,786	1.732	137,931	1.962	259,043	1.240	111,592	1.425	216,200	1.760	185,510	1.702	339,609	1.947
Dining-Buffet, net gain or loss	−4,089	−.058	−5,077	−.072	+16,176	+.077	−9,207	−.117	−9,853	−.080	−14,953	−.137	−18,712	−.108
TOTAL, Including D-B. net gain or loss	125,875	1.790	143,008	2.034	242,867	1.163	120,799	1.542	226,053	1.840	200,463	1.839	358,321	2.055
NET REVENUE	150,427	2.139	146,649	2.085	102,214	.489	32,611	.416	211,156	1.719	28,610	.262	−28,421	−.163
Per cent of Revenues	54.4		50.6		29.6		21.3		48.3		12.5		−8.6	
ROUTE-MILES	287		287		287		287		287		238		238	
TRAIN-MILES	70,315		70,315		208,936		78,351		122,836		109,004		174,416	
PASSENGER-MILES (est.)	12,559,173		11,822,752		15,685,480		7,095,735		15,375,984		12,067,046		16,701,012	

Notes:

(1) Operates between Chicago and Miami every third day, via C. & E.I., Evansville, L. & N., Nashville, N.C. & St. L., Atlanta, A.C.L., Jacksonville, F.E.C., Miami.

(2) From inaugural date to May 15, 1948, operated as a streamline coach train between St. Louis and Atlanta via L. & N., Nashville and N.C. & St. L. Service was suspended from May 15 to June 1, 1948, when it began operating between Chicago and Atlanta with coaches and sleepers via C. & E.I., Evansville, L. & N., Nashville, N.C. & St. L., Atlanta, with a connecting service between St. Louis and Evansville via L. & N.

(3) Originally a 6-car train.

(4) Revenues and expenses are for N.C. & St. L. operations between Nashville and Atlanta.

(5) Include general or back shop repairs and running repairs.

(6) Include enginehouse expenses, water and other supplies for locomotives, joint terminal expense, railroad retirement taxes and vacation costs, and advertising. Excludes Hire of Equipment.

(7) Estimated.

READING

The CRUSADER of the Reading is a Budd-built light-weight, stainless steel streamline train of five cars, drawn by a steam locomotive fitted with a streamline jacket, the lines of which follow the contour of the cars. It makes two round trips daily, except Sundays and holidays, between Philadelphia and Jersey City, on morning and afternoon schedules adjusted to the requirements of commuter travel.

The train consists of four reclining chair cars and a diner-cocktail lounge car. The two end chair cars are designed as observation cars to obviate the necessity for turning the train at either terminal.

The coaches have a seating capacity of 276, of which 52 are in the smoking lounge; the diner has 24 seats and the cocktail lounge 27 seats; a total of 327.

Normally only the dining car seats are considered non-salable. In actual practice, however, on many trips these seats are occupied for the entire distance by passengers who do not purchase other seats.

The percentage of occupancy varies with the days of the week and the season. On certain days, particularly Mondays, during the winter months the departure from Philadelphia in the early morning and from Jersey City in the late afternoon carry nearly capacity loads, the patronage tapering off during the summer. The over-all occupancy averages about 200 passengers.

The WALL STREET commenced operation in a daily round-trip service between Philadelphia and Jersey City on March 1, 1948. It is a 5-car train, drawn by a steam locomotive, and consists of three coaches, a dining car with cocktail lounge and a club car. All of the equipment was built in the Company's shops. The exterior color scheme is two-tone green, the interiors attractively decorated in pastel shades. The cars are air conditioned and provided with seats of modern design.

The SCHUYLKILL was inaugurated on November 14, 1948. It is a steam-powered train with thoroughly modernized equipment consisting of nine cars, making on an accelerated schedule two round trips on weekdays and one round trip on Sundays, between Pottsville, Reading and Philadelphia. The train comprises the following classes of equipment with 564 seats: a combination passenger-baggage car, three reclining seat coaches and smoking lounge, four coaches with conventional type seats, and one grill-coach with 14 seats in the grill section and 32 seats in the coach section.

The Pacific type steam locomotive was built, and the cars rebuilt, in the Company's shops. All cars are air conditioned. The exterior and interior color schemes follow those of the Wall Street.

The KING COAL was placed in service on September 25, 1949. It is an 11-car train operating daily between Philadelphia, Reading, Pottsville and Shamokin. The train, drawn by a steam locomotive, comprises a combination passenger-baggage car, five reclining seat coaches with smoking lounge, a diner with cocktail lounge and reserved seat section, and four conventional type coaches; providing, in all, 652 seats.

The Pacific type locomotive was built, and the cars rebuilt, in the Company's shops. All cars are air conditioned; the exterior finish and the interior color scheme match the Wall Street and the Schuylkill.

Following is a statement of the revenues and expenses of the Crusader for the years 1947 and 1948. The figures are not available from which similar statements for the other trains may be compiled.

READING COMPANY

REVENUES AND EXPENSES

Item	CRUSADER PHILADELPHIA-JERSEY CITY (1) 1 Train 5 Passenger-train cars Two round trips daily except Sundays and holidays Operation begun Dec. 13, 1937			
	Year ended Dec. 31, 1947		Year ended Dec. 31, 1948	
	Amount	Per Train-Mile	Amount	Per Train-Mile
PASSENGER REVENUE	$ 266,200	$ 2.409	$ 235,893	$ 2.203
TRAIN EXPENSES				
Wages of crews	43,272	.392	44,510	.416
Fuel	37,933	.343	39,571	.369
Lubricants	1,266	.011	1,200	.011
Train supplies and expenses	13,085	.118	15,559	.146
Power plant maintenance (2)	35,685	.323	44,106	.412
Train maintenance (3)	18,425	.167	18,933	.176
Other expenses	1,340	.012	1,340	.013
TOTAL Train Expenses	151,006	1.366	165,219	1.543
Dining-Buffet, net loss	5,282	.048	13,422	.125
TOTAL, Incl. D-B net loss	156,288	1.414	178,641	1.668
NET REVENUE	109,912	.995	57,252	.535
Per cent of Revenues	41.3		24.3	
ROUTE-MILES	91		91	
TRAIN-MILES	110,520		107,100	
PASSENGER-MILES (est.)	15,890,415		12,532,473	

Notes:

(1) Operates over Central R. R. of New Jersey between Bound Brook Jct., N. J., and Jersey City.

(2) Running repairs; cleaning and handling at enginehouses.

(3) Running repairs.

SEABOARD AIR LINE

The venture of the Seaboard Air Line in February 1939, in introducing in the Southeast a streamline, light-weight, high-speed coach train service between New York and Florida has proved to have been an extraordinarily successful one, not only from its own standpoint of increased revenue and improved public relations, but from that also of other railways and of the commercial interests of the territory they all serve.

The 7-car SILVER METEOR was the modest beginning of this venture which has grown from its tri-weekly round-trip schedule between New York and Florida, to three 17-car New York-Florida streamline trains each way daily.

At the opening of the 1946-1947 winter season, the Seaboard ownership of light-weight stainless steel passenger-train cars, plus similar Pennsylvania Railroad equipment allocated to joint service, amounted to a total of 42 cars for operation in streamline trains between New York and the South. Beginning in December 1946 this equipment, together with certain standard type coaches and sleepers, was assigned to the Silver Meteors and to auxiliary trains —the ADVANCE SILVER METEORS— which ran until May 17, 1947.

Early in 1947, the Seaboard received from the Budd Company 30 light-weight stainless steel passenger-train cars, and there were contributed by the Pennsylvania and the Richmond, Fredericksburg and Potomac, 18 such cars for interline service with the Seaboard. Upon receipt of this equipment, part of it was used to displace the standard type heavy-weight equipment in the Silver Meteors and the Advance Silver Meteors. The remainder was assigned to the new SILVER COMETS which were placed in service between New York and Atlanta-Birmingham on May 18, 1947.

Effective with the inauguration of winter schedules in December 1947, in addition to retaining the Silver Meteors and the Silver Comets, the SILVER STARS were placed in operation between New York and Miami-St. Petersburg until the end of the winter season, May 1, 1948.

Owing to a continuing demand for a streamline train scheduled to leave New York in the forenoon and arrive at South Florida points before noon, the Silver Stars were re-established on August 1, 1948, as a year-round train between New York and Miami, with a service to the Florida West Coast from December 15 to the end of the winter season in April.

In 1940, the first full year of operation of the Silver Meteors, the passenger-miles were estimated at 113 millions; in 1941, with an enlarged consist during a portion of the year, the passenger-miles were 194 millions. In 1947, with the Silver Meteors, the Advance Silver Meteors and the Silver Stars, it is estimated there were 333 million passenger-miles and, in 1948, 339 million passenger-miles. The latter volume represents an increase of 200 per cent over 1940,

75 per cent over 1941, and a slight increase over 1947.

The normal winter and summer make-up of the New York-Florida trains is shown in the following table:

Item	Between New York and Wildwood		
	Silver Meteors Winter and Summer	Silver Stars	
		Winter	Summer
Baggage-dormitory	1	1*	1*
Coach	7	6	4
Tavern-coach		1	1
Observation-coach		1	
Tavern-observation	1		
Diner	2	2	1
Sleeper	6*	6*	4*
Total Cars	17	17	11

* Standard type equipment

The trains diverge and converge at Wildwood, Florida. Of the 17 cars of the Silver Meteors, 11 go to and come from Miami; the remainder, with the addition of a combination passenger-baggage car, going to and coming from Tampa-St. Petersburg.

The same break-up applies to the Silver Stars in the winter season, but in summer the 11 cars go through to Miami.

Between New York and Birmingham, in order better to accommodate the traffic in certain areas, the number of cars on the Silver Comets is increased or reduced, as shown below for southbound movement:

Between	Class of Equipment	Winter		Summer	
		No. of Cars	Total Consist	No. of Cars	Total Consist
New York-Washington	Passenger-baggage-dormitory	1		1	
	Coach	3		5	
	Tavern-observation	1		1	
	Diner	1		1	
	Sleeper	3*	9	3*	11
Washington-Hamlet, N. C.	Add: Sleeper	1*	10	1*	12
Hamlet-Atlanta	Add: Mail-baggage	1*		1*	
	Coach	1		1	
	Sleeper	1*	13	1*	15
Atlanta-Birmingham	Cut-out: Coach	1		1	
	Sleeper	3*	9	3*	11

* Standard type equipment

The seating space on these trains, exclusive of sleeping car accommodations, is shown in the following table:

Item		Winter 1946–47	Summer 1947	Winter 1947–48	Summer 1948	Winter 1948–49
Silver Meteors	Salable seats	356	364	312	364	312
	Non-salable seats	54	58	58	58	58
	Total	410	422	370	422	370
Silver Stars	Salable seats	394	..	390	238	390
	Non-salable seats	24	..	54	24	54
	Total	418	..	444	262	444
Silver Comets	Salable seats	..	330	226	330	226
	Non-salable seats	..	58	58	58	58
	Total	..	388	284	388	284

While definite records are not available, the percentage of occupancy of coach seats on a year-round basis has been approximately 85.

The cars, except those of conventional type, were built by Budd.

All Diesel-electric locomotive units are of 2000 HP, built by General Motors.

The Silver Meteors are powered by three Diesel-electric units between Richmond and Wildwood, two between Wildwood and Miami, and one between Wildwood and St. Petersburg.

The Silver Stars are ordinarily hauled by two Diesel-electric units between Richmond and Miami. Occasionally three are employed between Hamlet, N. C., and Jacksonville.

The Silver Comets are drawn by two Diesel-electric units between Richmond and Hamlet; from two to three between Hamlet and Atlanta, and two between Atlanta and Birmingham.

During the period from May 28 to August 25, 1949, the Seaboard received from the builders and placed in service on the above trains a total of 31 new type light-weight sleeping cars—22 of Seaboard, 6 of Pennsylvania and 3 of R. F. & P. ownership. Of the 22 Seaboard cars, 13 were built by Pullman, 6 by Budd and 3 by the American Car and Foundry Co. The 6 Pennsylvania cars were built by Budd, and the 3 R. F. & P. cars by Pullman.

The 31 new cars have been assigned as follows: 15 to the Silver Meteors, 8 each to the Silver Stars and the Silver Comets. Heavy-weight sleeping cars remaining in operation in these trains in the latter part of 1949 are 3 each in the Silver Meteors and Silver Stars and 5 in the Silver Comets. It will be seen that these trains are now almost completely outfitted with new, modern equipment.

The following statement shows the revenues and expenses of the Silver Meteors, Silver Stars and Silver Comets for different periods in 1947 and 1948, and for the Advance Silver Meteors for the 4-month period of its operation.

SEABOARD AIR LINE RAILROAD

REVENUES AND EXPENSES

Item	Trains and Routes													
	SILVER METEORS Richmond-Miami-St. Petersburg				ADVANCE SILVER METEORS Richmond-Miami-St. Petersburg		SILVER STARS Richmond-Miami-St. Petersburg (1)				SILVER COMETS Richmond-Atlanta-Birmingham			
	3 Trains 17 Passenger-train cars each Each one way trip daily				3 Trains 17 Passenger-train cars each Each one way trip daily		3 Trains 17 Passenger-train cars each (2) Each one way trip daily				3 Trains 13 Passenger-train cars each (3) Each one way trip daily			
	Operation begun February 2, 1939				Operation begun Dec. 12, 1946		Operation begun December 12, 1947				Operation begun May 18, 1947			
	Year ended Dec. 31, 1947		Year ended Dec. 31, 1948		4 mos. 17 days ended May 17, 1947		20 days ended Dec. 31, 1947		9 mos. 1 day ended Dec. 31, 1948 (1)		7 mos. 14 days ended Dec. 31, 1947		Year ended Dec. 31, 1948	
	Amount	Per Train-Mile	Amount	Per Train-Mile	Amount	Per Train-Mile	Amount	Per Train-Mile	Amount	Per Train-Mile	Amount	Per Train-Mile	Amount	Per Train-Mile
	$	$	$	$	$	$	$	$	$	$	$	$	$	$
REVENUES														
Passenger revenue in coaches	3,546,268		3,787,278		1,288,391		108,457		1,771,692		855,438		1,279,160	
Passenger revenue in Pullman cars	1,554,890		1,545,224		656,208		83,155		955,125		513,333		801,398	
TOTAL Passenger Revenue	5,101,158	5.872	5,332,502	6.122	1,944,599	6.056	191,612	4.196	2,726,817	4.462	1,368,771	4.008	2,080,558	3.787
Pullman contract revenue	107,926		110,259		34,420		609		55,994		21,648		18,652	
Mail and Express revenue	2,487		2,938		352		10,543		100,537		56,739		113,211	
TOTAL Revenues	5,211,571	5.999	5,445,699	6.252	1,979,371	6.164	202,764	4.440	2,883,348	4.718	1,447,158	4.238	2,212,421	4.027
TRAIN EXPENSES														
Wages of crews	484,167	.557	529,359	.608	166,169	.517	29,317	.642	360,108	.589	181,936	.533	318,262	.579
Fuel	266,958	.307	365,232	.419	100,096	.312	14,059	.308	222,066	.364	109,351	.320	205,326	.374
Lubricants	34,834	.040	32,134	.037	12,858	.040	1,826	.040	20,232	.033	14,454	.042	18,886	.034
Train supplies and expenses	213,352	.246	234,463	.269	82,227	.256	11,769	.258	148,952	.244	81,918	.240	132,023	.240
Power plant maintenance (4)	324,205	.373	336,121	.386	119,666	.373	16,993	.372	211,626	.346	134,526	.394	197,549	.360
Train maintenance (4)	388,780	.448	401,412	.461	159,242	.496	18,986	.416	245,410	.402	141,165	.413	223,324	.406
Other expenses (5)	481,037	.554	473,502	.544	115,900	.361	13,680	.299	210,200	.344	125,169	.367	180,430	.329
TOTAL Train Expenses	2,193,333	2.525	2,372,223	2.724	756,158	2.355	106,630	2.335	1,418,594	2.322	788,519	2.309	1,275,800	2.322
Dining-Buffet, net loss	150,881	.174	144,634	.166	41,169	.128	13,580	.297	94,908	.155	64,776	.190	75,704	.138
TOTAL, Including D-B net loss	2,344,214	2.699	2,516,857	2.890	797,327	2.483	120,210	2.632	1,513,502	2.477	853,295	2.499	1,351,504	2.460
NET REVENUE	2,867,357	3.300	2,928,842	3.362	1,182,044	3.681	82,554	1.808	1,369,846	2.241	593,863	1.739	860,917	1.567
Per cent of revenues	55.0		53.8		59.7		40.7		47.5		41.0		38.9	
ROUTE-MILES between Richmond and														
Miami, southbound	1,050		1,050		1,032		1,032		1,032(6) 1,049(7)					
Miami, northbound	1,052		1,052		1,052		1,032		1,032(6) 1,052(7)					
St. Petersburg, southbound	910		910		892		892		892(6) 909(8)					
St. Petersburg, northbound	912		912		912		892		892(6) 912(8)					
Birmingham, southbound											750		750	
Birmingham, northbound											751		751	
TRAIN-MILES	868,700		871,080		321,117		45,669		611,088		341,477		549,366	
PASSENGER-MILES (est.)	236,062,082		226,272,646		89,011,517		8,486,080		113,408,885		61,861,885		85,519,205	

Notes:

(1) Silver Stars, in 1948, operated to Miami-St. Petersburg January 1 to May 1; to Miami August 1 to December 15; and to Miami-St. Petersburg December 16 to December 31.

(2) 11 cars in summer operation.

(3) 15 cars in summer operation.

(4) Does not include any maintenance that may have accrued during the year over and above that which was actually expended on both running and heavy repairs.

(5) Include Union Station Expenses in the following amounts:

	Silver Meteors	Advance Silver Meteors	Silver Stars	Silver Comets
1947	$243,849	$45,384	$2,448	$51,485
1948	260,153	..	92,561	80,848

(6) January 1 to May 1.

(7) August 1 to December 31.

(8) December 16 to December 31.

SOUTHERN PACIFIC

The original CITY OF SAN FRANCISCO began operation on June 14, 1936, between Chicago and San Francisco with a small, articulated train running every sixth day. From the patronage this train received it became evident that fast streamline trains affording new and unusual conveniences appealed strongly to the traveler. Accordingly, the Southern Pacific undertook an extensive program for modernizing its passenger service.

The more spectacular moves in this aggressive program were the inauguration of the new DAYLIGHTS between Los Angeles and San Francisco, the SUNBEAMS on a non-stop schedule between Houston and Dallas, and the re-equipping of the CITY OF SAN FRANCISCO with a streamline train of standard dimensions.

The popularity of the new Daylights, as evidenced by the frequency with which all seats on the trains were sold out, led to the installation in March 1940, of an additional streamline Daylight service, thus establishing the MORNING DAYLIGHTS and the NOON DAYLIGHTS.

The new SHASTA DAYLIGHTS, inaugurated on July 10, 1949, for service between San Francisco and Portland, were a direct result of the success attending the operation of the San Francisco-Los Angeles Daylights. This new service also has been accorded a decidedly favorable response from the public. With a capacity of 442 seats, the average number of through passengers carried was 399 northbound and 402 southbound, with intermediate travelers lifting these averages to 475 and 482, respectively, for the period from July 10 to July 31, 1949.

The GOLDEN STATES, formerly the Golden State Limiteds, operating between Chicago and Los Angeles over the Southern Pacific and Rock Island became, on January 3, 1948, extra-fare trains and were placed on an expedited schedule with practically all new streamline equipment. New equipment is now on order to replace modernized diners and lounge cars on these trains.

Other Southern Pacific streamline trains are the LARKS, operating between San Francisco and Los Angeles, and the SAN JOAQUIN DAYLIGHTS, between Oakland and Los Angeles.

The normal summer consist and seating capacity of each of the Company's streamliners are given in the following table:

Item	Morning Daylights	Noon Daylights	Sunbeams	City of San Francisco	Larks	(a) San Joaquin Daylights	Golden States	Shasta Daylights
Mail				1	1	1	1	1
Baggage		1	1		1			
Baggage-Mail			1	1				
Baggage-Dormitory				1				
Dormitory							1	
Baggage-Chair	1					1		
Chair	12	8	4	3		9	3	9
Dormitory-Kitchen					1(b)			
Coffee Shop	1	1		1		1	1	1
Kitchen	(b) 1	(b) 1						(b) 1
Diner	1	1		1	1(b)	1	1	1
Diner-Lounge			1					
Tavern	1	1				1		1
Lounge					1(b)		1(c)	
Club				1				
Parlor	1		1					
Parlor-Observation	1	1						1
Buffet-Lounge-Sleeper-Observation					1			
Sleeper				7	13		4	
Total Number Cars	19	14	8	16	19	14	12	15
Salable Seats	648	390	236	282	304	458	230	442
Non-salable Seats	218	218	32	124	122	152	114	204
Total Number Seats	866	608	268	406	426	610	344	646
Power	(d)	(d)	(d)	(e)	(f)	(d)	(g)	(h)

Notes:
(a) Includes Sacramento Daylights.
(b) Articulated.
(c) Lounge operates 2 out of 5 trips; on other 3 days an observation sleeper with 6 salable and 20 non-salable seats.
(d) Steam power.
(e) General Motors Diesel-electric formerly operated between Oakland and Chicago, but with assignment of jointly owned equipment in December 1948, S. P. owned Diesels (one 5800 HP GM and one 6000 HP Alco-G.E.) operated between Oakland and Ogden only. In 1949 the 5800 HP Diesel-electric was replaced by a 6000 HP Alco-G.E. Diesel-electric.
(f) Hauled by General Motors Diesel-electric between Los Angeles and San Luis Obispo, and by 4-8-4 steam locomotive between San Luis Obispo and San Francisco.
(g) General Motors Diesel-electric locomotive in three units of 6000 HP.
(h) Alco-G.E. Diesel-electric locomotive in three units of 6000 HP.

All of the cars in these trains were built by Pullman.

It is expected that during the summer of 1950 the famous Sunset Limiteds, operated for many years between New Orleans and Los Angeles, will be provided with entirely new equipment and will be placed on a considerably faster schedule.

In order to implement this program the Company has ordered 78 stainless steel cars (including protection equipment) from the Budd Company to provide five 15-car Diesel-powered luxury trains. The motifs of the interior decoration of the new Sunset Limiteds will be of Southern and Southwestern origin. The proposed consist of these trains is as follows:

Cars	Number of Seats		Total
	Salable	Non-salable	
1 Baggage-Mail			
1 Baggage-Dormitory			
4 Chair	188		188
1 Coffee Shop-Lounge		46	46
1 Diner		48	48
1 Lounge		39	39
6 Sleepers	132		132
15 Total	320	133	453

Following are statements of the revenues and expenses of the trains described in the foregoing, for the years 1947 and 1948.

SOUTHERN PACIFIC COMPANY

REVENUES AND EXPENSES

Item	Trains and Routes											
	MORNING DAYLIGHTS San Francisco-Los Angeles				NOON DAYLIGHTS San Francisco-Los Angeles				SUNBEAMS Houston-Dallas			
	2 Trains 19 Passenger-train cars each (2) Each one way trip daily				2 Trains 14 Passenger-train cars each (4) Each one way trip daily				2 Trains 8 Passenger-train cars each (Each one way trip daily			
	Operation begun March 21, 1937 (3)				Operation begun March 30, 1940 (5)				Operation begun September 19, 1937 (7)			
	Year ended December 31, 1947		Year ended December 31, 1948		Year ended December 31, 1947		Year ended December 31, 1948		Year ended December 31, 1947		Year ended December 31, 1948	
	Amount	Per Train-Mile	Amount	Per Train-Mile	Amount	Per Train-Mile	Amount	Per Train-Mile	Amount	Per Train-Mile	Amount	Per Trai Mi
	$	$	$	$	$	$	$	$	$	$	$	$
REVENUES												
Passenger revenue—in coaches	2,882,484		2,945,260		1,605,948		1,674,623		451,151		380,016	
Passenger revenue—in parlor cars									130,226		143,522	
Passenger revenue—in Pullman cars												
Revenue from parlor car seat fares									24,052		25,045	
TOTAL Passenger revenue	2,882,484	8.40	2,945,260	8.56	1,605,948	4.68	1,674,623	4.87	605,429	3.14	548,583	2.8
Pullman contract revenue												
Mail, express, baggage revenue	28,766		28,670		50,187		59,545		79,497		88,508	
TOTAL Revenues	2,911,250	8.48	2,973,930	8.64	1,656,135	4.83	1,734,168	5.04	684,926	3.55	637,091	3.2
TRAIN EXPENSES												
Wages of crews	247,137	.72	277,777	.81	237,313	.69	224,832	.65	101,254	.52	113,666	.5
Fuel	111,535	.32	163,399	.47	99,795	.29	146,199	.43	47,986	.25	69,450	.3
Lubricants	10,375	.03	11,217	.03	9,062	.02	10,020	.03	5,416	.03	6,739	.0
Train supplies and expenses	174,885	.51	174,344	.50	119,707	.35	122,546	.36	32,387	.17	37,558	.1
Power plant maintenance	157,416	.46	187,750	.55	153,842	.45	185,547	.54	55,574	.29	62,748	.3
Train maintenance	265,089	.77	308,837	.90	181,450	.53	217,081	.63	41,692	.22	56,486	.2
Other expenses (1)	50,147	.15	58,951	.17	48,542	.14	58,253	.17	15,962	.08	17,684	.0
TOTAL Train Expenses	1,016,584	2.96	1,182,275	3.43	849,711	2.47	964,478	2.81	300,271	1.56	364,331	1.8
Dining-Buffet, net loss	148,135	.43	191,625	.56	163,707	.48	259,373	.75	21,523	.11	24,774	.1
TOTAL, incl. D-B net loss	1,164,719	3.39	1,373,900	3.99	1,013,418	2.95	1,223,851	3.56	321,794	1.67	389,105	2.0
NET REVENUE	1,746,531	5.09	1,600,030	4.65	642,717	1.88	510,317	1.48	363,132	1.88	247,986	1.2
Per cent of Revenues	60.0		53.8		38.8		29.4		53.0		38.9	
ROUTE-MILES		470		470		470		470		264		264
San Francisco-Los Angeles												
Oakland Pier-San Jose												
Oakland Pier-Los Angeles												
Sacramento-Lathrop												
TRAIN-MILES		343,100		344,040		343,100		344,040		192,720		193,248
PASSENGER-MILES		190,892,980		168,300,571		103,609,548		93,034,611		32,169,172		26,856,018

Notes:

(1) Includes following amounts for train passenger agents on trains shown below:

	1947	1948
Morning Daylights	$12,055	$14,063
Noon Daylights	11,314	13,891
San Joaquin Daylights	18,466	22,631

(2) 15 cars in winter season.
(3) Date light-weight equipment placed in trains.
(4) 12 cars in winter season.
(5) Due to war, discontinued January 5, 1942; re-established April 14, 1946.
(6) 7 cars in 1947.
(7) Date light-weight equipment placed in trains.
(8) Operates via S. P., Ogden, U. P., Omaha, C. & N. W., Chicago.

SOUTHERN PACIFIC COMPANY

REVENUES AND EXPENSES

Trains and Routes														
CITY OF SAN FRANCISCO San Francisco-Chicago (8)				LARKS San Francisco-Oakland Pier-Los Angeles				SAN JOAQUIN DAYLIGHTS Oakland Pier-Sacramento-Los Angeles				GOLDEN STATES Los Angeles-Chicago (15)	
4 Trains 16 Passenger-train cars each Each one way trip daily				2 Trains (11) 19 Passenger-train cars each (11) Each one way trip daily				2 Trains (13) 14 Passenger-train cars each (14) Each one way trip daily				5 Trains 12 Passenger-train cars each (16) Each one way trip daily	
Operation begun January 2, 1938 (9)				Operation begun March 2, 1941 (12)				Operation begun July 4, 1941				Operation begun January 3, 1948 (17)	
Year ended December 31, 1947		Year ended December 31, 1948		Year ended December 31, 1947		Year ended December 31, 1948		Year ended December 31, 1947		Year ended December 31, 1948		11 months 29 days ended December 31, 1948	
Amount (10)	Per Train-Mile	Amount (10)	Per Train-Mile	Amount	Per Train-Mile	Amount	Per Train-Mile	Amount	Per Train-Mile	Amount	Per Train-Mile	Amount (18)	Per Train-Mile
$	$	$	$	$	$	$	$	$	$	$	$	$	$
720,436		1,391,312						1,623,419		1,570,808		1,806,877	
1,478,602		2,093,371		2,017,944		2,069,080						1,627,326	
2,199,038	6.22	3,484,683	6.08	2,017,944	5.35	2,069,080	5.47	1,623,419	4.04	1,570,808	3.90	3,434,203	4.09
121,319		222,138		−72,913		14,480						86,730	
74,790		260,632		246,419		307,968		157,211		195,927		355,366	
2,395,147	6.77	3,967,453	6.93	2,191,450	5.81	2,391,528	6.32	1,780,630	4.43	1,766,735	4.38	3,876,299	4.62
188,963	.54	347,408	.61	194,766	.52	216,133	.57	280,004	.70	300,328	.74	462,775	.55
131,265	.37	253,464	.44	151,508	.40	187,137	.50	172,217	.43	252,298	.63	248,982	.30
11,298	.03	18,601	.03	11,162	.03	12,389	.03	12,819	.03	14,019	.03	26,734	.03
145,735	.41	244,155	.43	185,925	.49	189,068	.50	141,814	.35	135,397	.34	333,573	.40
88,885	.25	233,007	.41	170,455	.45	186,581	.49	231,248	.58	279,014	.69	332,889	.40
220,903	.63	432,503	.75	281,823	.75	334,920	.89	214,960	.54	239,848	.60	590,901	.70
13,836	.04	26,093	.04	41,248	.11	38,066	.10	74,425	.18	89,339	.22	33,244	.04
800,885	2.27	1,555,231	2.71	1,036,887	2.75	1,164,294	3.08	1,127,487	2.81	1,310,243	3.25	2,029,098	2.42
106,716	.30	216,806	.38	82,487	.22	110,955	.29	126,239	.31	176,111	.44	54,112	.06
907,601	2.57	1,772,037	3.09	1,119,374	2.97	1,275,249	3.37	1,253,726	3.12	1,486,354	3.69	2,083,210	2.48
1,487,546	4.20	2,195,416	3.84	1,072,076	2.84	1,116,279	2.95	526,904	1.31	280,381	.69	1,793,089	2.14
62.1		55.3		48.9		46.7		29.6		15.9		46.3	
	774		774		470		470						1,157
					43		43						
									478		478		
									58		58		
353,690		572,848		377,410		378,444		401,734		403,332		838,810	
99,503,982		147,033,038		85,250,147		72,171,414		108,660,108		90,779,561		155,408,440	

(9) Established June 14, 1936, with small articulated train running every 6th day.
Replaced January 2, 1938, with new train of standard dimensions, continuing service every 6 days.
Second train placed in service July 26, 1941, providing service every 3 days.
Operated 3 times per week commencing October 1, 1946, and until September 1, 1947, when placed on daily schedule.
(10) Revenues and expenses are for S. P. operations between San Francisco and Ogden.
(11) Includes San Francisco Larks and Oakland Larks. Latter trains run between Oakland Pier and San Jose only.
Both trains operate as a single unit between San Jose and Los Angeles.
(12) Progressively streamlined commencing with first car March 2, 1941, and completed with addition of articulated triple unit on July 10, 1941.
(13) Includes San Joaquin Daylights and Sacramento Daylights. The latter trains were established June 2, 1946, and run between Sacramento and Lathrop only. Both trains operate as a single unit between Lathrop and Los Angeles.
(14) Consolidated consist of San Joaquin and Sacramento Daylights. Reduced to 11 cars in winter season.
(15) Operates via S. P., Santa Rosa, N. M., C. R. I. & P., Chicago.
(16) 3 Chicago-Phoenix sleeping cars added in winter season.
(17) Operation begun January 3, 1948, westbound, and January 4, 1948, eastbound, with all streamline, light-weight cars.
(18) Revenues and expenses are for S. P. operations between Los Angeles and Santa Rosa, N. M.

SOUTHERN RAILWAY

Although the Southern Railway had long participated with three other lines in the operation of the popular CRESCENT LIMITEDS between New York and New Orleans, it decided to establish a fast streamline train service between the East and New Orleans over a route that would utilize its own tracks for the entire distance, except between New York and Washington. At the same time, in conjunction with the Norfolk & Western, it inaugurated a new, fast passenger service between Washington and Memphis, partially equipping the train with streamline, light-weight cars.

The SOUTHERNERS, an all-coach, streamline, light-weight train, for the new New York-New Orleans route, was inaugurated in March 1941.

The TENNESSEANS, for the new Washington-Memphis route, was established in May 1941, the train consisting of streamline coaches and conventional type sleepers and head-end cars.

The Southerners and Tennesseans are currently being re-equipped with new streamline equipment of the latest design, by Budd and Pullman.

In addition to new equipment for the Southerners and Tennesseans, new light-weight cars are being received from American Car and Foundry, Budd and Pullman which will completely modernize The CRESCENTS and The ROYAL PALMS—the latter on the Southern operating between Cincinnati and Jacksonville—now Diesel powered but carrying conventional type equipment. An outstanding feature of the new trains is that the sleepers will be all-room cars throughout.

The all-coach Southerners provide 298 salable seats between New York and Atlanta on weekdays and 350 on week ends; and, between Atlanta and New Orleans, 242. They contain 54 non-salable seats, of which 18 are in the observation car and 36 in the tavern car. The Southerners carried a daily average of 269 passengers in 1947 and 284 in 1948.

Normally there are 186 salable seats on the Tennesseans (not including sleepers) and 54 non-salable seats of which 18 are in the observation car and 36 in the tavern car. The Tennesseans carried a daily average of 273 passengers in 1947 and 274 in 1948.

The Southerners are powered by single-unit 2000 HP Diesel-electric locomotives. The service of the Tennesseans requires a 2-unit Diesel-electric of 4000 HP between Washington and Lynchburg (connection with Norfolk & Western) and a 2-unit Diesel-electric of 4000 HP each way between Bristol and Memphis. All are General Motors locomotives.

There follows a statement of the operating results of the Southerners and the Tennesseans for the years 1947 and 1948. Similar figures for the Crescents and the Royal Palms are not available.

SOUTHERN RAILWAY

REVENUES AND EXPENSES

Item	Trains and Routes							
	SOUTHERNERS New York-New Orleans				TENNESSEANS Washington-Memphis			
	3 Trains 8 Passenger-train cars each (1) Each one way trip daily				3 Trains 12 Passenger-train cars each (6) Each one way trip daily			
	Operation begun March 31, 1941				Operation begun May 17, 1941			
	Year ended Dec. 31, 1947		Year ended Dec. 31, 1948		Year ended Dec. 31, 1947		Year ended Dec. 31, 1948	
	Amount (2)	Per Train-Mile	Amount (2)	Per Train-Mile	Amount (7)	Per Train-Mile	Amount (7)	Per Train-Mile
	$	$	$	$	$	$	$	$
Passenger revenue	3,687,103	4.355	3,742,345	4.416	2,065,377	3.904	1,967,358	3.658
Mail and Express revenue					488,257		686,826	
Total Revenues	3,687,103	4.355	3,742,345	4.416	2,553,634	4.826	2,654,184	4.935
Train Expenses								
Wages of crews (3)	457,604	.541	504,171	.595	269,447	.509	299,293	.556
Fuel	143,273	.169	210,178	.248	164,922	.312	257,102	.478
Lubricants	17,780	.021	19,115	.023	3,880	.007	10,508	.020
Train supplies and expenses	121,127	.143	144,021	.170	121,450	.230	112,438	.209
Power plant maintenance (4)	318,106	.375	229,826	.271	71,737	.136	143,128	.266
Train maintenance (5)	210,451	.249	141,788	.167	178,189	.336	115,475	.215
Total Train Expenses	1,268,341	1.498	1,249,099	1.474	809,625	1.530	937,944	1.744
Dining-Buffet, net gain or loss	+127,485	+.151	+93,549	+.110	+23,846	+.045	−14,442	−.027
Total, Incl. D-B net gain or loss	1,140,856	1.347	1,155,550	1.364	785,779	1.485	952,386	1.771
Net Revenue	2,546,247	3.008	2,586,795	3.052	1,767,855	3.341	1,701,798	3.164
Per cent of Revenues	69.1		69.1		69.2		64.1	
Route-Miles	1,157		1,157		724		724	
Train-Miles	846,566		847,392		529,106		537,792	
Passenger-Miles	184,355,135		167,068,983		87,170,982		76,336,190	

Notes:

(1) 7 cars between Atlanta and New Orleans.

(2) Revenues and expenses are for Southern Railway operations between Washington and New Orleans.

(3) Include hostess and train attendants.

(4) Includes all repairs, both running and class repairs, made in back shops, together with enginehouse cost.

(5) Includes all actual maintenance and repair costs.

(6) Includes 2 conventional type head-end cars and 5 standard sleepers as follows: 1 New York-Memphis, 1 Washington-Memphis, 1 Bristol-Nashville via NC & St. L., 1 Knoxville-Memphis and 1 Chattanooga-Memphis.

(7) Revenues and expenses do not include operations over N. & W. between Lynchburg and Bristol.

ST. LOUIS–SAN FRANCISCO

The streamline TEXAS SPECIALS, between St. Louis and Texas points, are jointly operated by the Frisco and Missouri-Kansas-Texas. A description of the trains is given in the section of this report relating to Katy trains, as well as their revenues and expenses on the latter line between Vinita, Okla., and San Antonio.

The METEORS, on May 15, 1948, commenced a daily 2-way service between St. Louis and Tulsa-Oklahoma City with new streamline Pullman-built equipment in each train, powered by a General Motors 4000 HP Diesel-electric locomotive; reducing by 3 hours the running time of the conventional type trains displaced by the new Meteors. The northbound train of twelve cars consists of a baggage-mail car, a coach-dormitory with 28 seats, three coaches with 56 seats each, a chair-lounge-buffet with 26 seats and 25 lounge chairs, five all-room sleepers, and a diner-lounge-observation accommodating 24 diners and 18 lounge seats. Eleven cars are carried southbound.

There follows a statement of the revenues and expenses of the Texas Specials operating on the Frisco between St. Louis and Vinita, as well as for the Meteors which operate between St. Louis and Tulsa-Oklahoma City.

ST. LOUIS–SAN FRANCISCO RAILWAY

REVENUES AND EXPENSES

Item	Trains and Routes			
	TEXAS SPECIALS (1) St. Louis-San Antonio		METEORS St. Louis-Oklahoma City	
	3 Trains 12 Passenger-train cars each Each one way trip daily		2 Trains 12 Passenger-train cars each (2) Each one way trip daily	
	Operation begun May 16, 1948		Operation begun May 15, 1948	
	7 months 16 days ended Dec. 31, 1948		7 months 17 days ended Dec. 31, 1948	
	Amount (3)	Per Train-Mile	Amount	Per Train-Mile
	$	$	$	$
REVENUES				
Passenger revenue—in coaches	295,289		347,843	
Passenger revenue—in Pullman cars	571,041		420,505	
TOTAL Passenger Revenue	866,330	5.221	768,348	3.070
Pullman contract revenue	39,355		5,099	
Head-end revenue	72,525		93,031	
TOTAL Revenues	978,210	5.896	866,478	3.462
TRAIN EXPENSES				
Wages of crews	88,917	.536	132,092	.528
Fuel	54,823	.330	82,705	.330
Lubricants	3,185	.019	4,806	.019
Train supplies and expenses	68,904	.415	84,233	.337
Power plant maintenance (4)	38,160	.230	57,571	.230
Train maintenance (5)	32,623	.197	48,175	.192
Other expenses	13,415	.081	19,980	.080
TOTAL Train Expenses	300,027	1.808	429,562	1.716
Dining and Buffet, Net loss	21,805	.132	22,935	.092
TOTAL, Incl. D-B Net loss	321,832	1.940	452,497	1.808
NET REVENUE	656,378	3.956	413,981	1.654
Per cent of revenues	67.1		47.8	
ROUTE-MILES	361		542	
TRAIN-MILES	165,919		250,315	
PASSENGER-MILES (est.)	34,818,121		30,919,425	

Notes:

(1) Operate over St. L.-S. F. between St. Louis and Vinita, Okla., thence M.K.T.

(2) 11 cars southbound and 12 cars northbound.

(3) Revenues and expenses are for St. L.-S. F. only.

(4) Total expenditures for repairs, including back shop.

(5) Running repairs only. No heavy repairs required in 1948.

TEXAS AND PACIFIC

The introduction in August 1948 of the Texas Eagles was the important result of the large postwar passenger equipment program of the Texas and Pacific and the Missouri Pacific, and marked the advent of the former into the field of modern streamline train operation.

On August 15, 1948, the WEST TEXAS EAGLES were placed in service between St. Louis and El Paso, over the Missouri Pacific between St. Louis and Texarkana, and thence via the Texas and Pacific. Certain classes of equipment are added to or cut out at Texarkana and Dallas, and at Ft. Worth the consists of the trains are considerably revised, as shown by the following west- and eastbound normal train lists:

TEXARKANA TO FT. WORTH

Mail-Express Car	Dallas	to Los Angeles
Storage Mail Car	Texarkana	" Dallas
Bag.-Mail, Bag.-Dorm., Diner, Sleeper-Lounge & Sleeper	St. Louis	" Ft. Worth
2 Coaches	"	" El Paso
Sleeper	New York	" "
Sleeper	Washington	" Ft. Worth
Sleeper and Coach	Memphis	" "

Total: 13 light-weight cars; 188 salable seats in coaches; average daily occupancy 85 per cent. Maximum 14 cars, minimum 10 cars, per train. Powered by two 2000 HP Diesel-electric units.

FT. WORTH TO EL PASO

Express-Mail Car	Dallas	to Los Angeles
Exp. Car, Coach & Diner Lounge	Ft. Worth	" El Paso
Storage Mail Car	"	" El Paso–Los Angeles
Bag.-Mail, and Bag.-Dormitory	"	" El Paso
2 Coaches	St. Louis	" El Paso
Sleeper	New York	" "

Total: 7 light-weight pass. cars and 3 standard-weight head-end cars; 184 salable seats in coaches; average daily occupancy 68 per cent. Maximum 14 cars, minimum 10 cars, per train. Powered by two 2000 HP Diesel-electric units.

EL PASO TO FT. WORTH

Storage Mail Car	El Paso	to Texarkana
Storage Mail Car	"	" Dallas
Storage Mail Car	Los Angeles	" Ft. Worth
Exp.-Bag.-Mail	"	" Dallas
Mail-Express Car	El Paso	" Ft. Worth
Mail-Bag., Bag.-Dorm., & Diner-Lounge	"	" New Orleans
2 Coaches	"	" St. Louis
Coach	"	" Ft. Worth–Texarkana
Sleeper	"	" New York

Total: 7 light-weight passenger cars and 5 standard-weight head-end cars; 184 salable seats in coaches; average daily occupancy 66 per cent. Maximum 14 cars, minimum 10 cars, per train. Powered by two 2000 HP Diesel-electric units.

FT. WORTH TO TEXARKANA

Storage Mail Car	Dallas	to Texarkana
Mail-Bag., Bag.-Dorm., Diner, Sleeper-Lounge & Sleeper	Ft. Worth	" St. Louis
2 Coaches	El Paso	" "
Coach (De Luxe)	"	" Texarkana
Sleeper	Ft. Worth	" Washington
Sleeper	El Paso	" New York
Coach & Sleeper	Ft. Worth	" Memphis

Total: 13 light-weight cars; 248 salable seats in coaches; average daily occupancy 87 per cent. Maximum 14 cars, minimum 10 cars, per train. Powered by two 2000 HP Diesel-electric units.

The SOUTH TEXAS EAGLES began operation on August 15, 1948. They operate as one section between St. Louis and Palestine, Texas, and are handled by the Texas and Pacific between Texarkana and Longview, Texas. These trains and their consists are described in the section devoted to the trains of the Missouri Pacific.

The sleeping cars on the West Texas Eagles and South Texas Eagles were built by Pullman, and the other equipment by American Car and Foundry Company. The Diesel-electric locomotives were built by General Motors.

The LOUISIANA EAGLES, introduced on October 10, 1948, operate between New Orleans and Ft. Worth. They are powered by steam locomotives. The cars are light-weight, with the exception of certain head-end cars and sleepers. The sleepers were built by Pullman, and the other cars by American Car and Foundry Company. The trains operate each way daily, with a maximum of 17 and a minimum of 12 cars per train. The normal consists are shown below:

NEW ORLEANS TO FT. WORTH

Bag.-Exp., 3 Mdse., Coach & 2 Sleepers	New Orleans	to Alexandria
Merchandise Car	"	" Shreveport, La.-Marshall, Tex.
Merchandise Car	Shreveport	" Marshall
Exp., Bag.-Mail, Bag.-Dorm., 2 Coaches, Diner-Lounge, & 2 Sleepers	New Orleans	" Ft. Worth

Total: 17 cars; 124 salable seats in coaches; average daily occupancy 74 per cent.

FT. WORTH TO NEW ORLEANS

Bag.-Exp., Coach and 2 Sleepers	Alexandria	to New Orleans
Storage-Mail Car	El Paso	" Dallas
Express-Mail Car*	Los Angeles	" Dallas
Express-Mail Car	Dallas	" Shreveport
Express Car, 2 Coaches, 2 Sleepers	Ft. Worth	" New Orleans
Bag.-Mail, Bag.-Dorm., & Diner-Lounge*	El Paso	" New Orleans

* From West Texas Eagles

Total: 15 cars; 124 salable seats in coaches; average daily occupancy 56 per cent.

A statement of the revenues and expenses of these trains follows:

THE TEXAS AND PACIFIC RAILWAY

REVENUES AND EXPENSES

Item	Trains and Routes					
	WEST TEXAS EAGLES (1) St. Louis-El Paso		SOUTH TEXAS EAGLES (3) St. Louis-San Antonio-Houston-Galveston		LOUISIANA EAGLES New Orleans-Ft. Worth	
	2 Trains 11 Passenger-train cars each (1) Each one way daily		2 Trains 14 Passenger-train cars each Each one way daily		2 Trains 15 Passenger-train cars each (7) Each one way daily	
	Operation begun August 15, 1948		Operation begun August 15, 1948		Operation begun October 10, 1948	
	4 months 17 days ended Dec. 31, 1948		4 months 17 days ended Dec. 31, 1948		2 months 22 days ended Dec. 31, 1948	
	Amount (2)	Per Train-Mile	Amount (4)	Per Train-Mile	Amount	Per Train-Mile
	$	$	$	$	$	$
REVENUES:						
Passenger revenue—in coaches	412,512		65,784		92,887	
Passenger revenue—in Pullman cars	191,255		66,044		68,863	
TOTAL Passenger Revenue	603,767	2.516	131,828	5.328	161,750	1.762
Pullman contract revenue	23,933				6,838	
Mail, Express and Misc. revenue	278,900		9,802		102,613	
TOTAL Revenues	906,600	3.779	141,630	5.724	271,201	2.955
TRAIN EXPENSES						
Wages of crews	133,105	.555	14,038	.567	46,378	.505
Fuel	72,184	.301	8,445	.341	44,517	.485
Lubricants	4,460	.019	462	.019	899	.010
Train supplies and expenses	11,231	.047	336	.014	12,666	.138
Power plant maintenance (5)	44,236	.184	4,557	.184	30,594	.333
Train maintenance (5)	24,065	.100	1,146	.046	9,542	.104
Other expenses (6)	9,105	.038	753	.031	3,397	.037
TOTAL Train Expenses	298,386	1.244	29,737	1.202	147,993	1.612
Dining-Buffet, net loss	26,660	.111			2,449	.027
TOTAL, Incl. D-B net loss	325,046	1.355	29,737	1.202	150,442	1.639
NET REVENUE	581,554	2.424	111,893	4.522	120,759	1.316
Per cent of revenues	64.1		79.0		44.5	
ROUTE-MILES	863		89		553	
TRAIN-MILES	239,914		24,742		91,798	
PASSENGER-MILES	25,581,079		5,348,895		6,681,529	

Notes:

(1) Operate between St. Louis and El Paso via Missouri Pacific R. R., Texarkana, Ark.-Tex., Texas and Pacific Ry., El Paso. Maximum 14 cars, minimum 10 cars.

(2) Revenues and expenses are for T. & P. operations between Texarkana and El Paso.

(3) Operate between St. Louis and San Antonio, Houston, Galveston via Missouri Pacific R. R., Texarkana, T. & P., Longview, Texas, International-Great Northern R. R.

(4) Revenues and expenses are for T. & P. operations between Texarkana and Longview, Tex.

(5) Covers all repair costs including general or back shop repairs.

(6) Include enginehouse expenses, locomotive supplies, and water furnished steam substitution locomotives.

(7) Maximum 17 cars, minimum 12 cars.

WABASH

The CITY OF ST. LOUIS was the first streamline train of the Wabash. It began operation on June 2, 1946, when, in conjunction with the Union Pacific, it was placed in service to run between St. Louis and Cheyenne, through Denver. The equipment is partially streamlined and, with the exception of the Diesel-electric power and a baggage car, is owned by the Union Pacific.

Westbound, the cars of the City of St. Louis are assembled at Cheyenne in Union Pacific trains for Pacific Coast points. Eastbound, the operation is reversed. Aside from head-end cars—two westbound and one eastbound—the normal make-up of the trains on the Wabash is four coaches with 48 seats each, three sleepers, a diner and a dormitory-lounge car, with an additional sleeper during the summer months. On the Union Pacific between Kansas City and Cheyenne there are changes in the consist, principally in head-end cars.

The 7-car streamliner CITY OF KANSAS CITY was installed on November 26, 1947 to provide a daily return service between St. Louis and Kansas City on an average schedule of about 52 mph for the round trip of 556 miles in which there are 9 regular and flag stops between termini.

The train was built by the American Car and Foundry Company and is powered by a General Motors 2000 HP Diesel-electric unit. It consists of a baggage car, baggage-mail car, coffee-shop coach, two coaches, diner and a parlor-observation car. It has 205 salable seats and 100 non-salable. The percentage of occupancy was: in 1947, 71.4 per cent and, in 1948, 70.4 per cent.

The exterior of the train was designed and decorated to lend harmony throughout its entire length. The interior is attractively decorated. A feature of the dining car is the cocktail lounge, with 14 seats.

A statement follows of the revenues and expenses of the City of St. Louis and the City of Kansas City.

WABASH RAILROAD

REVENUES AND EXPENSES

Item	Trains and Routes							
	CITY OF ST. LOUIS St. Louis–Cheyenne				CITY OF KANSAS CITY St. Louis–Kansas City			
	3 Trains 11 Passenger-train cars each (1) Each one way trip daily				1 Train 7 Passenger-train cars One round trip daily			
	Operation begun June 2, 1946				Operation begun November 26, 1947			
	Year ended December 31, 1947		Year ended December 31, 1948		1 month 5 days ended December 31, 1947		Year ended December 31, 1948	
	Amount(2)	Per Train-Mile	Amount(2)	Per Train-Mile	Amount	Per Train-Mile	Amount	Per Train-Mile
	$	$	$	$	$	$	$	$
REVENUES								
Passenger revenue—in coaches	484,593		519,387		32,320		322,001	
Passenger revenue—in Pullman cars	252,005		252,382		9,954		68,545	
TOTAL Passenger Revenue	736,598	3.630	771,769	3.709	42,274	2.112	390,546	1.919
Pullman contract revenue	64,958		64,466		1,394		12,171	
Mail and Express revenue	93,395		130,288		13,729		166,738	
TOTAL Revenues	894,951	4.410	966,523	4.644	57,397	2.868	569,455	2.798
TRAIN EXPENSES								
Wages of crew	85,803	.423	99,767	.479	7,748	.387	87,663	.431
Fuel	43,265	.213	68,985	.331	4,305	.215	45,879	.225
Lubricants	6,244	.031	6,972	.034	365	.019	3,814	.019
Train supplies and expenses	39,989	.197	40,496	.195	3,180	.159	33,595	.165
Power plant maintenance (3)	73,651	.363	64,425	.310	4,723	.236	58,211	.286
Train maintenance (4)	96,653	.476	103,107	.495	7,372	.368	80,481	.395
Other expenses (5)	123,412	.608	155,818	.749	11,090	.554	133,403	.656
TOTAL Train Expenses	469,017	2.311	539,570	2.593	38,783	1.938	443,046	2.177
Dining-Buffet, net loss	30,109	.148	35,548	.171	4,368	.218	36,514	.179
TOTAL, Including D-B net loss	499,126	2.459	575,118	2.764	43,151	2.156	479,560	2.356
NET REVENUE	395,825	1.951	391,405	1.880	14,246	.712	89,895	.442
Per cent of revenues	44.2		40.5		24.8		15.8	
ROUTE-MILES	278		278		278		278	
TRAIN-MILES	202,940		208,107		20,016		203,496	
PASSENGER-MILES	37,286,674		34,988,912		1,966,232		16,340,837	

Notes: (1) 10 cars eastbound, Kansas City to St. Louis.

(2) Revenues and expenses are for Wabash operations between St. Louis and Kansas City.

(3) Includes only running repairs.

(4) Includes amounts expended by Wabash for running repairs, and amounts paid to Pullman Company for maintenance and operation of Pullman cars, segregated as follows:

	City of St. Louis		City of Kansas City	
	1947	1948	1947	1948
Wabash	$31,899	$40,814	$5,688	$58,225
Pullman Company	64,754	62,293	1,684	22,256

(5) Principal items included in "Other Expenses" are:

	City of St. Louis		City of Kansas City	
	1947	1948	1947	1948
Terminal station costs	$107,207	$137,579	$10,018	$123,460
Trackage costs	13,060	13,449	126	1,297
Enginehouse expenses	2,623	4,149	871	7,878
Total	$122,890	$155,177	$11,015	$132,635

CHAPTER VI

STREAMLINE TRAINS OF LINES FOR WHICH STATEMENTS OF REVENUES AND EXPENSES ARE UNAVAILABLE

This chapter contains references to many high-class name trains of railroads which, for reasons stated in the Foreword, have been unable to furnish data respecting their earnings and expenses. In this group are included many of the finest trains in the country operated by a number of the most important lines. Their performance records, could they be displayed, would doubtless greatly augment the list of streamline trains of high earning power presented in this report.

ATLANTIC COAST LINE

In December 1939, the CHAMPIONS, comprising three 7-car streamline Budd-built all-coach trains, were placed in a daily service between New York and Miami, via the Pennsylvania Railroad between New York and Washington, the Richmond, Fredericksburg and Potomac between Washington and Richmond, the Atlantic Coast Line between Richmond and Jacksonville, and the Florida East Coast between Jacksonville and Miami.

This initial streamline train service received such favorable public response as to warrant their increase to fourteen cars in the 1940–1941 winter season.

In May 1941 the all-coach Champions were withdrawn, and there were substituted new coach and sleeping car fast trains serving both coasts of Florida: one, the EAST COACH CHAMPIONS, operating between New York and Miami; the other, the WEST COAST CHAMPIONS, between New York and Tampa-St. Petersburg.

During the winter season of 1948–1949 the East Coast Champions carried sixteen cars (excluding a southbound baggage-mail car): a baggage-dormitory, ten coaches and a coach-lounge, two diners, one tavern-lounge and a tavern-lounge-observation. In the spring and summer season of 1949, five sleepers were substituted for four coaches and a tavern-lounge car, the total remaining the same.

During the winter season of 1948–1949 the West Coast Champions handled sixteen cars southbound, comprising five coaches and a baggage-dormitory-coach, seven sleepers, two diners and a tavern-lounge. Northbound two additional sleepers were added, making a total of eighteen cars.

In the spring and summer season of 1949 the West Coast Champions handled seventeen cars in each direction (excepting a northbound baggage-mail car), consisting of a baggage-dormitory, seven coaches, two diners, a tavern-lounge and six sleepers. Only ten cars, however, served the West Coast traffic, as three coaches, three sleepers and a diner were handled on the Miamian between Jacksonville and Miami via the Florida East Coast.

Since the recent receipt of new light-weight equipment, from the American Car and Foundry Co. and Pullman, the Champions now are completely streamlined.

General Motors Diesel-electric 4000 HP locomotives (2 units) haul the East Coast Champions, and 6000 HP (3 units) the West Coast Champions.

The success that attended the operation of the New York-Florida streamline trains led to the establishment of similar services between Chicago and Florida. Commencing in December 1940 all-coach streamline trains were installed to run between Chicago and Miami by three separate routes, with the Atlantic Coast Line as an intermediate carrier between Atlanta and Jacksonville of the Budd-built DIXIE FLAGLER; between Albany, Georgia, and Jacksonville of the Pullman-built CITY OF MIAMI; and between Montgomery and Jacksonville of the Budd-built SOUTH WIND.

Following are Company estimates of the revenue per train-mile of each of these trains:

	12 months ended May 31, 1949	
	Southbound	Northbound
East Coast Champions	$8.85	$8.99
West Coast Champions	4.64	5.86
Dixie Flagler	3.93	4.18
City of Miami	5.02	5.40
South Wind	4.05	4.44

ATCHISON, TOPEKA AND SANTA FE

In May 1936, the SUPER CHIEF, the forerunner of one of the country's finest fleets of streamline trains, began operation on a 39¾ hour once-a-week schedule in each direction, between Chicago and Los Angeles. It consisted of heavy conventional type equipment and, although it was unique only in its Diesel-electric locomotive, its popularity with the traveling public quickly became apparent. A year later the train was re-equipped and as such became the first streamliner on the Santa Fe.

In February 1938, a second streamline Super Chief was added and the trains were placed on a semi-weekly instead of a weekly round trip schedule. In September 1946, they began operating on alternate days and, in February 1948, became daily trains, re-equipped with new cars providing room accommodations only.

Having demonstrated the popularity of the all-sleeping car Super Chiefs it was decided to install also a de luxe all-coach service between Chicago and Los Angeles. This was accomplished by the introduction of the EL CAPITANS, in February 1938, on a semi-weekly round trip schedule of 39¾ hours in each direction. In September 1946, they began operating every other day instead of twice a week and, in February 1948, in response to the demand for comfortable, low-cost travel, upon the receipt of new equipment, they were placed on a daily schedule.

Pending the construction of these new trains and their Diesel-electric locomotives in the postwar period, the six trains required for the daily CHIEFS (established in 1926) were re-equipped with new streamline light-weight cars with the same completeness of appointments as had been provided for the Super Chiefs.

Other fine streamline trains placed in service by the Santa Fe were: in 1938 the SAN DIEGANS, Los Angeles-San Diego; the CHICAGOANS and KANSAS CITYANS, Chicago-Oklahoma City; the GOLDEN GATES, Bakersfield-Oakland; in 1939, the TULSANS, Kansas City-Tulsa; and, in April 1948, the TEXAS CHIEFS, Chicago-Galveston. All of these trains are hauled by Diesel-electric locomotives.

The companies participating in the building of Santa Fe streamline trains were the American Car and Foundry Co., Budd, and Pullman.

CHESAPEAKE AND OHIO

In August 1946 the Pere Marquette (since merged with the Chesapeake and Ohio) placed in service, between Detroit, Lansing and Grand Rapids, twin 7-car streamline trains, named the PERE MARQUETTES, consisting of a mail-baggage car, an express car, a diner, three coaches and an observation-lounge, with a schedule of three single trips each way daily and a single round trip on Sundays. They are powered by 2000 HP General Motors Diesel-electric locomotives.

In order to provide improved passenger service between Grand Rapids and Chicago, in lieu of steam-powered trains of conventional type equipment, in October 1948 the Chesapeake and Ohio placed two new streamline Diesel-electric powered all-coach Pere Marquettes in daylight service; one train making a round trip daily, carrying through cars for a connection at Holland, Michigan, to and from Muskegon; the second train making a round trip daily except Sundays without a Muskegon connection.

The equipment for the Pere Marquettes is Pullman-built.

CHICAGO AND EASTERN ILLINOIS

In October 1946 the Chicago & Eastern Illinois inaugurated a streamline light-weight train service between Chicago and Cypress, Illinois, with the 4-car MEADOWLARK, making a daily round trip of 690 miles.

In November 1946, the Company also established a new daily streamline train service with the WHIPPOORWILL, operating between Evansville and Chicago. The train makes a daily round trip of 575 miles.

Both of the new trains were Pullman-built, drawn by General Motors Diesel-electric locomotives.

The Chicago & Eastern Illinois also participates with other lines in the operation of the DIXIE FLAGLER, a Chicago-Miami train, and the GEORGIAN, a Chicago-Atlanta train. Reference to these two trains is made elsewhere in this report.

CHICAGO AND NORTH WESTERN

The North Western was among the roads which early undertook a program for the improvement of its passenger service. In 1935 conventional type equipment was reconditioned and redecorated for two 7-car trains, the 400's, to provide a fast service between Chicago and the Twin Cities, powered by steam locomotives. In 1939 the trains were enlarged and re-equipped with streamline light-weight cars drawn by Diesel-electrics.

In addition to the TWIN CITIES 400's, in 1942 the Company placed in service the following streamliners:

Name of Train	Between
CAPITOL 400	Chicago and Madison
CITY OF MILWAUKEE 400	Chicago and Milwaukee
MINNESOTA 400	Wyveville and Mankato
PENINSULA 400	Chicago and Ishpeming
SHORELAND (VALLEY) 400	Chicago and Green Bay

The North Western also participates with the Union Pacific and the Southern Pacific in the movement of celebrated streamline light-weight trains: the City of Portland, between Chicago and Portland; the City of San Francisco, between Chicago and San Francisco; the City of Los Angeles, between Chicago and Los Angeles; and the City of Denver, between Chicago and Denver.

CHICAGO, INDIANAPOLIS AND LOUISVILLE

The Chicago, Indianapolis and Louisville placed in service between Chicago and Indianapolis the HOOSIER in August 1947, and the TIPPECANOE in November 1947. The Company also began operation in February 1948 of the THOROUGHBRED between Chicago and Louisville.

These streamline trains are composed of cars originally built for the United States Army by the American Car and Foundry Co., reconverted and colorfully decorated, both interiors and exteriors, in the Company's shops. The trains are hauled by Diesel-electric locomotives.

DELAWARE, LACKAWANNA AND WESTERN

In November 1949 the Delaware, Lackawanna and Western placed in a two-way daily service, between Hoboken and Buffalo, two newly built 10-car streamline light-weight trains, reviving the name PHOEBE SNOW. They are all-coach trains with accompanying diners and tavern-lounge-observation cars, powered by General Motors 4500 HP (3 unit) Diesel-electric locomotives. On the westbound trip the train handles a light-weight all-room sleeper for Chicago.

The Phoebe Snows displaced the Lackawanna Limiteds, which carried conventional type equipment.

To provide streamline light-weight equipment for the Phoebe Snows and other of its trains, the Company acquired fifteen coaches and nine all-room sleepers from the American Car and Foundry Company, ten coaches from Pullman, and two diners and two tavern-lounge cars from Budd.

GREAT NORTHERN

The new streamline EMPIRE BUILDERS of the Great Northern and Chicago, Burlington & Quincy, operating between Chicago and Seattle-Portland on a fast schedule, were placed in service in February 1947. They comprise five 12-car trains built by Pullman, four of which are owned by the Great Northern and one by the Burlington. Each train is drawn by a General Motors 2-unit 4000 HP Diesel-electric locomotive, with a consist of one mail-baggage car, four coaches, a lounge-lunch-counter-dormitory, a diner, four sleepers and a sleeper-lounge-observation.

The capacity of each train is 200 coach passengers and 101 sleeper passengers.

ILLINOIS CENTRAL

The streamline train service of the Illinois Central is a notable development.

The 4-car GREEN DIAMOND, placed in a daily round trip service between Chicago and St. Louis in May 1936, was the first of the Company's fleet of streamliners. In January 1949 new streamline equipment, built in the Company's shops and by Pullman, replaced the old. The train is hauled by General Motors Diesel-electric locomotives of 4000 HP (2 units).

The CITY OF MIAMI, one of three 7-car all-coach streamliners operating via three different routes between Chicago and Miami, made its initial trip in December 1940. In April 1949, sleepers were added, and the train now carries thirteen cars drawn by General Motors Diesel-electrics of 4000 HP (2 units). The equipment was built in the Company's shops and by Pullman.

The LAND O' CORN, making a daily round trip between Waterloo, Iowa, and Chicago, commenced operation in October 1941 as a 2-car train propelled by three 225 HP oil-burning engines. In February 1947 a new streamline Diesel powered train of four coaches and a diner-lounge was placed in service. In April 1948 the consist was increased to nine Company-built cars, hauled by a General Motors Diesel-electric of 4000 HP (2 units). Three of the cars are handled only between Chicago and Freeport, Illinois.

The streamline PANAMA LIMITEDS, Chicago-New Orleans, with a connecting train between St. Louis and Carbondale, were installed in May 1942, replacing old established trains of conventional type. Each train of fourteen cars is hauled by General Motors 4000 HP (2 units) Diesel-electric locomotives. The cars were built in the Company's shops and by Pullman.

The MISS LOU operated between Chicago and St. Louis, first as the Green Diamond and later, from May 1936 to April 1947, as the Daylight. In April 1947, as the Miss Lou, it was placed in a daily round trip service between Jackson, Miss., and New Orleans, La. It consists of five fully articulated lightweight Pullman-built cars, the forward car housing a 1200 HP General Motors Diesel-electric engine.

The CITY OF NEW ORLEANS, new all-coach streamliners, began operating in April 1947, between Chicago and New Orleans, with a through car connecting service between St. Louis-Louisville and New Orleans. These modern streamliners furnish fast train service to local communities that is calculated to stimulate rail travel between local stations as well as between metropolitan centers. They complete the 921-mile trip in 16 hours, make 23 stops and maintain an average over-all speed of 57 mph, thereby providing daylight de luxe

coach service between Chicago and New Orleans on a dawn-to-dusk schedule. The stops are so spaced that almost all intermediate stations on the route are within easy reach of the trains, thus affording the smaller localities the same superior service as the larger cities.

The trains are powered by General Motors Diesel-electric locomotives of 4000 HP (2 units). The coaches were built by Pullman. The other cars were reconstructed in the Company's shops.

The DAYLIGHT performs one round trip daily between Chicago and St. Louis. In September 1946, Diesel-electric power was substituted for steam power, and gradual streamlining of the train was completed in January 1948. The seven cars, built in the Company's shops, are hauled by General Motors Diesel-electrics of 4000 HP (2 units).

The passenger revenue per train-mile of the foregoing mentioned trains for the months of April, May, and June 1949 was as follows:

GREEN DIAMOND	$2.40	MISS LOU	$1.41
CITY OF MIAMI	4.01	CITY OF NEW ORLEANS	5.55
LAND O' CORN	2.01	DAYLIGHT	2.34
PANAMA LIMITEDS	3.30		

KANSAS CITY SOUTHERN

In September 1940 the Kansas City Southern inaugurated a streamline train service on a fast schedule between Kansas City and New Orleans, a territory previously without such service. The trains were named the SOUTHERN BELLES.

In April 1949 the equipment of the Southern Belles was replaced with two new trains, the replaced equipment supplying cars for new fast trains—Nos. 9 and 10—each way daily between Kansas City and New Orleans.

Each of the new Southern Belles normally comprises a mail-baggage-dormitory car, two chair cars, a diner, two sleepers and a tavern-bar-observation car, drawn by a 3000 HP General Motors Diesel-electric locomotive of 2 units. One of the sleepers serves Port Arthur.

Except for the sleepers, which are Pullman-built, all of the new cars were built by the American Car and Foundry Company.

From May 14 to July 12, 1949, the revenue from the Southern Belles and trains Nos. 9 and 10 averaged $1.58 per train-mile, and the out-of-pocket cost of operation—excluding dining cars—averaged $1.36 per train-mile.

LOUISVILLE AND NASHVILLE

The Louisville & Nashville is a participating carrier of the DIXIE FLAGLER and the SOUTH WIND: Chicago-Florida streamline trains referred to in the section of this report relating to Florida East Coast streamline trains. They began operation in December 1940 as all-coach trains. Sleeping cars were added in April 1949.

It also participates in the movement of the GEORGIAN: a Chicago-St. Louis-Atlanta coach and sleeper streamline train, referred to in the section of this report devoted to streamline trains of the Nashville, Chattanooga & St. Louis.

In November 1946 the HUMMING BIRDS were installed: two 7-car all-coach Diesel-powered streamline trains—operating between Cincinnati and New Orleans—built by the American Car and Foundry Company. Since July 1948 these trains have carried sleeping cars.

NEW YORK CENTRAL

In catering to the travel requirements of the heavily populated territory it serves, the New York Central operates a large fleet of fine passenger trains that reflect the latest advances in the design and construction of modern equipment.

The most celebrated of its streamline light-weight fleet are the 14-car, New York - Chicago, TWENTIETH CENTURY LIMITEDS, for which completely new trains were provided in September 1948. They comprise nine all-room sleepers with several types of accommodations, a bedroom - lounge - observation, a club-lounge, a twin-unit 64-seat diner and kitchen-dormitory, and a mail-baggage car.

Other outstanding members of its completely streamlined fleet are the following:

The newly equipped COMMODORE VANDERBILTS, New York-Chicago, 14-car all-room sleeping car trains, now on a 16-hour schedule, carry ten sleepers, a sleeper - lounge - observation, a 64 - seat diner, a kitchen-lounge and a baggage-dormitory car.

The PACEMAKERS, New York-Chicago, all-coach trains, with new equipment, have a normal consist of thirteen cars comprising nine coaches, a lounge-observation, a lounge-kitchen, a 64-seat diner and a baggage-dormitory car.

The NEW ENGLAND STATES, two completely re-equipped 14-car all-room sleeper and coach trains, operating daily between Boston and Chicago, have a normal consist of three coaches, seven sleepers, one sleeper-lounge-observation, one diner-lounge, one diner and one baggage-dormitory car.

The DETROITERS are New York-Detroit all-sleeper 13-car trains. They comprise ten all-room sleepers, one bedroom-lounge, one diner and one baggage-dormitory car.

The TWILIGHT LIMITEDS, Detroit-Chicago trains, have a normal consist of eleven cars: five coaches, one drawing room-parlor car, one parlor-observation, two diner-lounges, one tavern-lounge and one diner.

The EMPIRE STATE EXPRESS is a 15-car train in each direction: nine New York-Cleveland cars, and six New York-Detroit cars. Between New York and Cleveland the consist is: one mail-baggage, one tavern-lounge, one parlor car, one diner, four coaches and an observation car; between New York and Detroit, one parlor car, one diner and four coaches.

The JAMES WHITCOMB RILEY, inaugurated in April 1941 as a 7-car train between Cincinnati and Chicago, has

been enlarged to a normal consist of nine all new cars, with a coach added on Fridays and Sundays, and two additional coaches in the summer months. The regular make-up is a combination baggage-coach, five coaches, a diner and a diner-lounge, and an observation car.

The CHICAGO MERCURYS, Chicago-Detroit, have a normal consist of ten cars, with an extra coach at week ends, comprising a combination baggage-coach, four coaches, a tavern-lounge, a diner and diner-lounge, a parlor car and a parlor-observation car.

The cars in these trains are Budd- and Pullman-built.

The CLEVELAND MERCURY, Cleveland-Detroit, carries normally ten cars: a combination baggage-coach, four coaches, a kitchen-coach, a diner, a lounge, a parlor car and a parlor-observation car. All cars are original Mercury equipment, built in the Company's shops.

All of these trains are Diesel-electric powered, except those arriving at and departing from Grand Central station, New York, which are drawn by electric locomotives between New York and Harmon; and, excepting also, the James Whitcomb Riley and the Cleveland Mercury, which are powered by steam locomotives.

NORFOLK AND WESTERN

In April 1946 the Norfolk and Western placed in service between Norfolk and Cincinnati the all-coach streamline light-weight POWHATAN ARROWS, hauled by steam locomotives. These trains will shortly be re-equipped with new Pullman-built cars.

The first of twenty new, all-room Budd-built sleepers have been received and placed in joint service between Bristol, Tenn., and New York, and between Norfolk and Chicago. As rapidly as the balance of the new sleepers are delivered they will be placed in all of the Company's principal trains.

The Norfolk and Western handles between Lynchburg and Bristol the streamline TENNESSEANS of the Southern Railway operating between Washington and Memphis, referred to in the section devoted to the streamline trains of the Southern Railway.

NORTHERN PACIFIC

Under a modernization program, there was received by the Northern Pacific in October 1946 the first consignment of equipment for streamlining the NORTH COAST LIMITEDS, old and popular name trains running between Chicago, the Twin Cities and the North Pacific Coast, via the Burlington and the Northern Pacific. As final delivery of the modern cars was not made until September 1948, the conversion of the North Coast Limiteds to their present equipment of Pullman-built cars has been gradual.

Six trains or sets of equipment perform the service, ranging from twelve to sixteen cars per train. They are hauled by General Motors Diesel-electric locomotives of 4500 HP in three units.

The estimated average occupancy of the North Coast Limiteds for the month of June 1949 was:

	Per Cent		Per Cent
Coach seats	76	Compartments	75
Roomettes	64	Bedrooms	82
Duplex Roomettes	68		

The revenue per train-mile from October 1, 1948 to May 31, 1949 was: Westbound $3.86; Eastbound $4.26. The earnings in this eight-months' period are not entirely representative since the normally heavier traffic months are June, July, August, and September.

In addition to participating with other roads in the movement of streamline trains between New York-Chicago and Florida, the Pennsylvania Railroad, in serving the extensive territory tributary to its lines, operates exclusively over its own rails a large fleet of fine streamline light-weight high-speed trains.

The leaders of the Company's streamline fleet are the long famous BROADWAY LIMITEDS, operating between New York and Chicago. They were completely re-equipped in March 1949. Their consist of fifteen cars, with several distinct types of sleeping accommodations, comprises ten sleepers, a buffet-lounge-sleeper, a bar-lounge - observation - sleeper, a 68 - seat diner, a kitchen dormitory, and a standard-weight baggage-mail car.

The PITTSBURGHERS, all-room New York-Pittsburgh trains of twelve cars each, were re-equipped in September 1949. Each train consists of three 21-roomette sleepers, five sleepers with various other types of private rooms, two bar-lounge sleepers, a diner and a standard-weight baggage car.

The TRAIL BLAZERS, New York-Chicago de luxe all-coach 10-car trains, were re-equipped in January 1947 with six 44-seat coaches, a baggage-bar-lounge car, a twin-unit 68-seat diner and kitchen- dormitory, and an observation-lounge-buffet.

The JEFFERSONIANS, likewise de luxe all-coach trains, operating between New York and St. Louis, were newly equipped in February 1947, with six 44-seat coaches, a recreation car, a twin-unit 68-seat diner and kitchen-dormitory, an observation-buffet-lounge and a standard-weight baggage car.

In addition to the foregoing trains, and except for head-end cars and a few standard-weight section-type sleepers, others have been completely equipped with streamline light-weight cars in 1949, as follows:

The GENERALS, New York-Chicago 14-car all-sleeper trains, in June 1949 and now on a 16-hour schedule.

The LIBERTY LIMITEDS, Washington-Chicago 12-car coach and sleeper trains, in April 1949.

The CINCINNATI LIMITEDS, New York-Cincinnati 14-car coach and sleeper trains, in October 1949.

The SPIRIT OF ST. LOUIS, New York-Washington-St. Louis 14-car coach and sleeper trains, in August 1949.

The RED ARROWS, New York-Washington-Detroit 13-car coach and sleeper trains, in April 1949. These trains also carry conventional type coaches between New York and Harrisburg.

The GOLDEN TRIANGLES, Pittsburgh-Chicago 11-car coach and sleeper trains, in September 1949. Head-end cars of conventional type are added on certain days.

The trains are powered by electric locomotives between New York, Washington and Harrisburg, and by Diesel-electrics west of Baltimore and Harrisburg.

The Diesel-electric locomotives were built by General Motors, Baldwin, Alco-G. E. and Fairbanks-Morse.

The new cars were built by American Car and Foundry Company, Budd and Pullman, as well as in the Altoona shops of the Company.

UNION PACIFIC

The Union Pacific was an outstanding pioneer in the development and promotion of the streamline train and in the design of furnishings to provide new rail-travel comforts. In 1934, the introduction on a coast-to-coast tour of the City of Salina and the test run of the new City of Portland from Los Angeles to New York were events of historical importance in this development.

The splendid fleet of streamline trains presently operated in conjunction with the Chicago and North Western and the Southern Pacific comprise the following:

Name of Train	Termini	Placed in Service
City of Portland*	Chicago-Portland	June 6, 1935
City of San Francisco*	Chicago-San Francisco	June 14, 1936
City of Los Angeles*	Chicago-Los Angeles	May 15, 1936
City of Denver	Chicago-Denver	June 18, 1936

* Originally ran one round trip every six days.

In June 1946 the Union Pacific, in conjunction with the Wabash, placed in service the City of St. Louis between St. Louis and Cheyenne. Westbound the cars are assembled at Cheyenne into trains for the Pacific Coast. Eastbound, the operation is reversed.

The trains are Pullman-built, and are hauled by Diesel-electric locomotives.

AFTER-WORD

The interested railroad executive, in perusing this document, will find ample material, particularly in the statements of revenues and expenses of the individual trains, from which to reach conclusions as to the value of the modern streamline train in his effort to augment the profits from the passenger traffic of his own road. The factual data respecting the large number of trains herein presented permits of such study in the cases of both small and large trains, on short and long runs, in light and heavy traffic territory; and, in displaying the actual results of operation under a wide variety of conditions, they provide a much broader measure of the benefits to be derived from improved passenger service on new routes than has heretofore been available.

In closing this report we wish to thank the numerous railroad executives who have furnished us the information with respect to their trains on which the report is based. We are particularly grateful to those who have provided us with complete performance statements of individual trains where the accounts had been so kept as to make this possible, and for participating with us in the voluminous correspondence necessary to place the figures for different lines on a comparable footing. We believe the report will be welcomed by the whole railroad fraternity.