Transit Fact Book

1945

AMERICAN *Fransit* Associa

292 MADISON AVE

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NEW YORK 17, N.Y.

Annual Summary of Basic Data and Trends in the Transit Industry of the United States

TRANSIT FACT BOOK

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1945

THIS is the third annual edition of the Transit Fact Book compiled by the statistical department of the American Transit Association. It is identified as the 1945 edition and covers the operations of the industry through the year 1944 with the latest plant and equipment data as of December 31, 1944. The figures given are in all cases totals for the whole transit industry of the United States.

The transit industry herein represented comprises all organized local passenger transportation agencies except taxicabs and suburban railroads. Included are (1) electric street railways, (2) elevated and subway lines, (3) interurban electric railways, (4) local motor bus lines and (5) trolley coach lines.

The primary sources of the data herein developed are the financial and statistical reports received by the American Transit Association from transit companies representing 85 to 95 per cent of the transit industry.

Prepared by

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THE YEAR 1944 IN THE TRANSIT INDUSTRY

IN 1944 the transit industry continued to operate at capacity as it had throughout 1943. And there was not much change in the capacity. More vehicles were operated but the average number of miles operated per vehicle was slightly lower. The performance in this respect was noteworthy. With new vehicles strictly rationed, with spare parts in slow supply and the manpower problem continuously critical all of the resources of the managements in skill and ingenuity were required to keep the vehicles in service. That the performance of the vehicles was held practically at the same level as 1943 was, under the circumstances, a very remarkable accomplishment.

The increased capacity thus made available was utilized to the utmost. There was no slackening in the demand for transportation although there were sporadic variations from time to time in different localities as the pace of war production or military activities in those localities slackened or was stepped up. The slight slump in traffic which occurred in December, 1943 proved to be only temporary. It was more than made up in January, 1944 and thereafter throughout the remainder of the year traffic continued to run about 4 to 5 per cent above the 1943 level.

As a result, the industry carried a billion more passengers in 1944 than in 1943 reaching a total of 23,017,000,000, a new all-time high in the series of war-induced tops which began in 1942.

While the industry thus continued to set new traffic records the increase of its earning power was definitely arrested. In 1942 and 1943 operating revenues tended to run away from the operating expenses, but in 1944 the latter began to catch up again. Wartime conditions are not conducive to efficient operation. Manpower shortages necessitated longer hours of work and the stiffer overtime penalties added materially to the cost of operation. Heavier loading reduced schedule speed thus further increasing costs. These factors together with the continuing increase in basic labor rates and material prices were responsible for a rather substantial curtailment of the industry's earning power in 1944.

As the year drew to its close and signs of the ending of the war in Europe appeared this trend became a matter of growing concern. Attention was centered on plans for controlling costs in the future and for providing a type of service that would attract and permanently hold as large a proportion as possible of the war-induced transit riding.

The future prosperity of the industry, it was clearly seen as the year closed, depended on its success in dealing with these two problems. A decline in traffic after the war was inevitable. Every management recognized that. The problem is to hold the decline to a minimum. That means that new equipment must be procured at the earliest possible moment and that maintenance of equipment must be restored to pre-war standards or better as fast as the manpower and materials to do it can be obtained. It means further that the layout of lines and service schedules must be studied intensively so that service may be given where and when it will be most attractive to the public. At the same time, costs must be brought under control so that the total cost of the required service may be kept within the limits set by the diminishing revenues. Following is a summary of the principal statistics of the transit industry in 1944:

1.	Number of Operating Companies (Dec. 31, 1944): Total	844
	(a) Electric Railway Companies (Total)	178 97 5 76
	Railway Exclusively	85 64 1 28
	(b) Trolley Coach Companies (Total) (All Urban)	45
	Trolley Coach Exclusively* *Trolley Coach and Motor Bus Combined	4 12
	(c) Motor Bus Companies (Total)	754 475 279
	Motor Bus Exclusively	650

^{*} Included also in item (C)

Distribution of Transit Companies by Population Groups

(NOTE: Each company is counted only in the population group of the largest city it serves)

POPULATION GROUP	ELECTRIC RAILWAYS (INCL. JOINT TROLLEY COACH AND/OR MOTOR BUS OPERATIONS)	COMBINED		MOTOR BUS EXCLUSIVELY	GRAND TOTAL
Over 1,000,000	12		_	21	33
500,000 - 1,000,000	10 -		_	2	12
250,000 - 500,000	18	1		15	34
100,000 - 250,000		6	3	32	64
50,000 - 100,000		3	1	70	96
Less Than 50,000	17	2	_	239	258
Suburban and Other	76	_		271	347
TOTAL	178	12	4	650	844

2.	Miles of Line and Miles of Route Operated (Dec. 31, 1944)
	(a) Electric Railway Line Mileage9,412Surface Railway Line Mileage9,030Subway and Elevated Line Mileage382
	(b) Trolley Coach Line Mileage 1,164 (c) Motor Bus Line Mileage 38,307
	Total Line Mileage
6	Surface Railway—Miles of Single Track 16,860 Subway and Elevated—Miles of Single Track 1,252
	(e) Trolley Coach—Miles of Negative Overhead Wire. 2,390 (f) Motor Bus—Miles of Route Round Trip 87,700
3.	Passenger Vehicles Owned (Dec. 31, 1944): Total 89,240
	(a) Electric Railway Cars 37,285 Surface Railway Cars 27,180 Subway and Elevated Cars 10,105
	(b) Trolley Coaches
	(c) Motor Buses
4.	Investment (Dec. 31, 1944): Total \$4,271,100,000
	(a) Electric Railway
	Surface Railway 1,596,000,000 Subway and Elevated 2,050,000,000
	(b) Trolley Coach
	(c) Motor Bus
_	
5.	Operating Revenues—1944—Total \$1,362,300,000
	(a) Electric Railway 709,600,000
	Surface Railway 562,100,000
	Subway and Elevated 147,500,000
	(b) Trolley Coach
	(c) Motor Bus 585,200,000
6.	Passenger Revenue—1944—Total \$1,296,900,000
	(a) Electric Railway 655,500,000
	Surface Railway 509,000,000
	Subway and Elevated
	(b) Trolley Coach
	(c) Motor Bus 574,300,000
7.	Vehicle Miles Operated—1944—Total 3,284,500,000
	(a) Electric Railway Car Miles 1,438,900,000
	Surface Railway Car Miles 977,900,000
	Subway and Elevated Car Miles 461,000,000
	(b) Trolley Coach Miles
	(c) Motor Bus Miles

8. Total Passengers Carried—1944—Total 23,017,000,000
(a) Electric Railway
Surface Railway 9,516,000,000
Subway and Elevated
(c) Motor Bus 9,646,000,000
9. Revenue Passengers Carried—1944—Total. 18,735,400,000
(a) Electric Railway 9,652,500,000
Surface Railway 7,169,400,000
Subway and Elevated
(b) Trolley Coach 986,800,000
(c) Motor Bus 8,096,100,000
10. Number of Employees (Average 1944)—Total 242,000
(a) Electric Railway 132,300
Surface Railway 98,700
Subway and Elevated
(b) Trolley Coach 8,100
(c) Motor Bus
, ,
11. Payroll—1944—Total \$599,000,000
(a) Electric Railway
Surface Railway 254,129,000
Subway and Elevated 85,749,000
(b) Trolley Coach
(c) Motor Bus 240,480,000
12. Expenditures for Materials—1944—Total \$176,741,000
(a) Maintenance Materials 76,561,000
(b) Operating Materials 100,180,000
I. Coal
II. Gasoline
III. Diesel Oil
IV. Lubricants
V. Electric Power (Purchased) 41,160,000
13. Electrical Energy Consumed (Kw-hr.)—1944 7,019,000,000
14. Urban Riding Habit—1944
(Revenue Rides per capita of Population)
Cities over 1,000,000 Population
Cities 500,000-1,000,000 Population 420
Cities 250,000-500,000 Population
Cities 100,000-250,000 Population 302
Cities 50,000-100,000 Population
Cities 25,000-50,000 Population

RESULTS OF OPERATIONS IN 1944

TRANSIT operations in 1944 were featured by two important developments. For the first time since war conditions began operating expenses increased more than operating revenues. Also for the first year since the beginning of the war taxes showed signs of leveling off.

A comparison of the results of transit operations in 1944 and 1943 is shown in Chart I. Operating revenues increased from 1,294 million dollars in 1943 to a new all-time high of 1,362.3 millions in 1944. The increase was 5.28 per cent. Operating expenses in the same time increased 8.48 per cent or from 933 million to 1,012 million dollars. The result was that net operating revenue dropped from 361 million dollars to 350.2 millions. The operating ratio, that is, the ratio of operating expenses to operating revenue, climbed from 72.10 per cent in 1943 to 74.29 per cent in 1944.

Taxes which through 1943 had been increasing at an astonishing rate since the beginning of the war, increased only 1.56 per cent in 1944. A large number of companies, particularly among the larger companies, reported substantial decreases in taxes. The reports were, in fact, spotty insofar as increases and decreases in taxes were concerned, but on balance there resulted the small increase indicated on the chart. The increase was not in proportion to the increase in revenue, however, and, as the chart shows, the ratio of taxes to operating revenue dropped from 14.40 to 13.89 per cent.

Small as the increase in taxes was, when added to the increase in operating expenses it produced a decrease of 7.85 per cent in the operating income, that is the net after operating expenses and taxes. In 1944 the operating income, which measures approximately the amount available for return on the investment, was 161 millions of dollars, while in 1943 it was 174.7 millions.

In proportion to the gross revenues the shrinkage in earnings was somewhat greater than indicated by these figures. The ratio of operating income to the operating revenues, that is the share of the gross remaining to the investors in the business, shrunk from 13.50 per cent in 1943 to 11.82 per cent in 1944.

Primary responsibility for the reduction in the earning power of the transit industry in 1944 can be ascribed to two principal factors: higher labor costs and reduced efficiency due to wartime operating conditions. In other words, the unit cost of labor increased and more units were required for each dollar of revenue collected. There were increases in other items of cost also, but their contribution to the net result was minor compared with the two factors mentioned.

TEM	1944	1943	PER CENT CHANGE -1944 over 1943	er 1943
			-10 -8 -6 -4 -0 0 +2 +4 +6 +8	1 +6 +8
NG REVENUE	OPERATING REVENUE \$1,362,300,000 \$1,294,000,000	2,124,000,000	825	
NG EXPENSE	OPERATING EXPENSE 1,012,070,000 932,970,000	932,970,000	878	
NET REVENUE	350,230,000	36,030,000	<u> </u>	
TAXES	189,250,000	186,340,000	951	
OPERATING INCOME	160,980,000	174,690,000	587	
OPERATING OPERATING EXPENSE	74.29%	72.10%	3.04	in
TAXES OPERATING	13.89%	14.40%	354	
OPERATING OPERATING INCOME DEVENIE	11.82%	13.50%	1244	
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· Chart II shows the distribution of the transit dollar of revenue based on the operations of surface lines only, that is with the operations of the subway and elevated rapid transit lines omitted. In the inner circle or pie the dollar of revenue is broken down according to the principal divisions provided by the standard systems of accounts; in the outer rim or tire the same dollar of revenue is divided among salaries and wages (total payroll), materials cost and all other costs and charges including return on investment and surplus.

Out of each dollar of revenue 42.3 cents goes to meet the payroll that is for compensation for labor and other personal services; 13.0 cents goes for the purchase of materials used in the maintenance and operation of the property, a total of 55.3 cents for personal services and materials. Included in this total is the cost of operation, 39.3 cents and the cost of maintenance, 13.2 cents shown in the inner circle. Taxes absorb 15.1 cents of the transit dollar and depreciation 9.1 cents. Injuries and damages take 4.2 cents out of each dollar, while administrative and other operating expenses account for 7.1 cents. Annual charges, including interest and rentals, amount to 7.0 cents and there is left finally 5.0 cents out of each dollar for dividends and surplus.

In Chart III is shown graphically the comparative results of

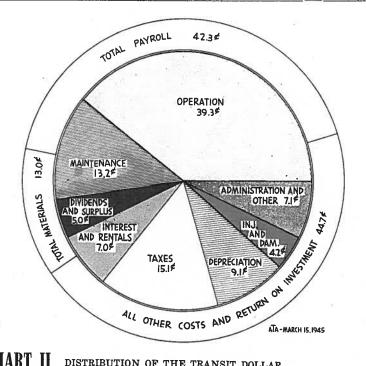


CHART II DISTRIBUTION OF THE TRANSIT DOLLAR

transit operations for the 10-year period 1935 to 1944. From 681 million dollars in 1935 operating revenue increased to slightly more than 1362 millions in 1944, just 100 per cent. In the same period operating expenses and taxes increased from 585 million to 1200 million dollars or slightly more than 100 per cent. Operating income, the balance remaining after operating expenses and taxes, increased from 96 million dollars to 161 million, approximately 68 per cent.

Practically all of these increases occurred after 1940, that is, after the original national defense program got under way. Prior to that the operating revenues had been fluctuating around 725 million dollars while operating expenses and taxes had been edging upward rather steadily, going from 585 million dollars in 1935 to 660 millions in 1940. In the intervening years there had been a dip in the recession year 1938, but although by 1940 operating revenue had climbed back above the 1935 level, due to the steady increase in expenses net operating income failed by 20 million dollars to reach its 1935 level in 1940.

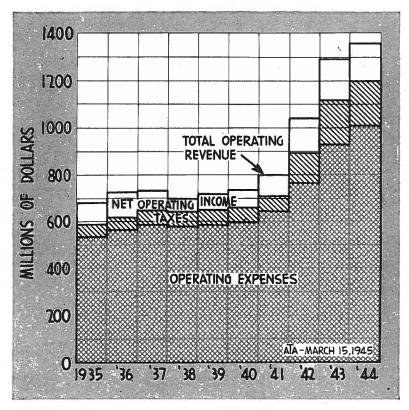


CHART III RESULTS OF TRANSIT OPERATIONS-1935-1944.

TRANSIT TRAFFIC IN 1944

THE transit lines of the United States carried a billion more passengers in 1944 than they did in 1943. The respective totals were slightly more than 23 billion passengers in 1944 and 22 billions in 1943. While the rate of increase, 4.6 per cent, does not compare with those of 1942 and 1943 it should be remembered that it came on top of those increases and represented a further substantial advance to new high levels.

Table 1 shows the total traffic in 1944 with the passengers carried on the subway and elevated lines separated out and the balance of the passengers—the surface traffic—classified according to type of service and population served. In Table 2 the revenue passengers are classified in the same manner. In Chart V the per cent change from 1943 of the traffic in each of the population groups is shown.

An examination of Tables 1 and 2 reveals that the great bulk of the transit traffic is in the largest cities. Surface railway traffic is concentrated in the cities over 500,000 and practically all of the subway and elevated traffic is in cities over 1,000,000 population. Motor bus traffic tends to concentrate in cities from 50,000 to 500,000 although, due to the motorization of a large part of the surface lines in New York City, there is a rather substantial representation of bus passengers in the cities over 1,000,000. Trolley coach traffic is definitely concentrated in cities between 250,000 and 500,000 population, the number in this group being more than

TABLE NO. 1

Total Passengers Carried on Transit Lines of the United States in 1944

Distributed by Type of Service and Population Groups

	RAILWAY (Millions)	TROLLEY COACH (Millions)	MOTOR BUS (Millions)	GRAND TOTAL (Millions)
Subway and Elevated	2,621	_	_	2,621
Surface Lines: Population Group			=	8
Over 1,000,000	3,949 2,456	78 193	1,687 874	5,714 3,523
250,000 - 500,000	1,462 662	513 233	1,890 1,934	3,865 2,829
50,000 - 100,000	429 218	128 89	1,580 638	2,137 945
Suburban and Other	340		1,043	1,383
TOTAL	12,137	1,234	9,646	23,017

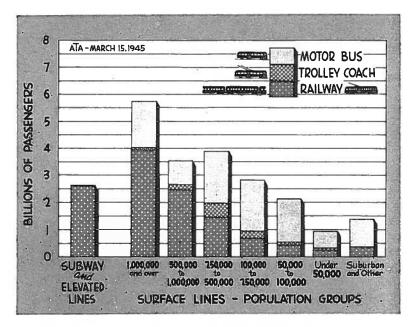


CHART IV DISTRIBUTION OF TOTAL TRANSIT PASSENGERS IN THE

twice the number in any of the other groups either above or below it in the population scale. In connection with this, it is worthy of note that the total number of passengers of all types in cities between 250,000 and 500,000 exceeds the number in the group immediately above it, that is, in the group between 500,000 and 1,000,000, although with this one exception the volume of traffic tends to be greater in each successive group as you go upward in the population scale. The greatest number of bus passengers is found in the group of cities between 100,000 and 250,000 but it exceeds the groups above and below it only by relatively small amounts.

In Chart IV the distribution of transit passengers in 1944 is presented graphically both as to population groups and as to types of service. In this representation the deviation, already referred to, of the population group between 250,000 and 500,000 from the general trend as you pass from the group of largest cities down to the group of smallest cities is more immediately apparent. It also tends to call attention to and emphasize the concentration of transit riding in the larger cities.

Revenue passengers are shown in Table 2 distributed in the same manner as the total passengers in Table 1. As generally defined the number of revenue passengers is equivalent to the number of completed journeys or trips taken by paying passengers

TABLE NO. 2

Revenue Passengers Carried on Transit Lines of United States in 1944

Distributed by Type of Service and Population Groups

	RAILWAY (Millions)	TROLLEY COACH (Millions)	MOTOR BUS (Millions)	GRAND TOTAL (Millions)
Subway and Elevated	2,483		_	2,483
Surface Lines: Population Group	-			
Over 1,000,000	2,877 1,790	45 140	1,489 611	4,411 2,541
250,000 - 500,000	1,053 542	409 205	1,453 1,610	2,915 2,357
50,000 - 100,000	384 204	111 77	1,373 596	1,868 877
Suburban and Other	319		964	1,283
TOTAL	9,652	987	8,096	18,735

and is thus distinguished from the number of total passengers which measures the total number of separate rides taken by all riders on transit lines whether paying passengers or not. However, on some systems, where they have zone fares, the number of fares collected rather than the number of completed journeys may be reported as revenue passengers, and on others, where they have the weekly pass, transfer rides taken by pass holders may be reported in the number of revenue passengers. Most of the difference between revenue passengers and total passengers is accounted for by transfer rides and the balance of the difference is made up of free passengers.

A comparison of Tables 1 and 2 reveals that the greatest differences between the number of revenue passengers and the number of total passengers occur on the surface railway lines and in the groups of the larger cities. There is more necessity for transferring in the large cities than in the small cities due to layout of the large cities and the distances involved, and this fact probably also accounts for the greater amount of transferring on the railways as compared with the buses since the railways are mainly found in the large cities. The relatively small amount of transferring on the subway and elevated lines indicated by the figures in the two tables is slightly misleading. There is a considerable amount of additional transferring between trains at stations that is not recorded, particularly in New York.

COMPARISON WITH 1943

THROUGHOUT the year 1944 transit riding maintained a steady margin of increase above the level of 1943. There were certain minor variations in the respective trends of the two years, but generally 1944 kept a steady margin of increase over 1943. The most notable variation occurred in December. In 1943 a rather sharp slump occurred in December which seemed at the time to presage the end of the long rise which had begun in 1940. January 1944 saw an immediate recovery and from then on throughout the rest of the year the traffic continued to register gains over 1943. There was no drop in December corresponding to the 1943 slump and in consequence the per cent increase in December 1944 over December 1943 was greater than in the preceding months.

Reference to Chart V shows that the greatest gain in traffic in 1944 was made in cities under 50,000 population as has been the case since the defense program started. The disparity, however, was not as great as in the immediately preceding war years. The increase in cities under 50,000 in 1944 was 10.7 per cent. In suburban areas it was 10.6 per cent and in cities between 50,000 and 100,000 it was 9.9 per cent. These three groups in fact ran right close together in their rate of increase over 1943.

TRANSIT GROUP	MILLIONS	PASSENGERS				PER	CI	N1	C	A	NGE		
TRANSIT GROUP	1944	1943	-2	()	+2		4	-	5	8	10	12
SUBWAY and ELEVATED	2,62/	2,656		7.3				1.00	I .		59.0		1 1
SURFACE LINES PopulationGroup-Cities	3.9				11000		i.		å			÷	
Over 1,000,000	5,714	5,554				2.9 ≡							
500,000-1,000,000	3,523	3,382			E	4.2 <i>≣</i>						, å	
250,000-500,000	3,865	3,584			E	7.8=							
100,000-250,000	2,829	2,775			7.	93					1, 4		
50, 100-100,000	2,/37	1,944	3			9.9							
Less Than 50,000	945	854				<i>0.7=</i>	=						
Suburban & Other	/,383	1,251			1/0	0.6 <u>=</u>							
UNITED STATES	23,017	22,000	4		2	1.6≣				ΑĪ	A-MAI	CH 15, P	945

CHART V PERCENTAGE INCREASES IN TOTAL PASSENGERS IN VARIOUS POPULATION GROUPS—1944 COMPARED WITH 1943.

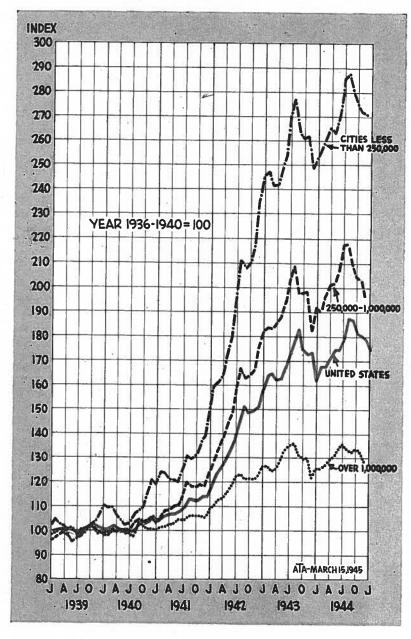


CHART VI TREND OF TOTAL TRANSIT PASSENGERS IN VARIOUS POPULATION GROUPS SHOWN BY INDEX NUMBERS BASED ON PERIOD 1936-1940 AS 100.

When you come to the next group, the cities between 100,000 and 250,000 population, there is a marked falling off in the rate of increase. It was only 1.9 per cent. The experience of this group is entirely out of line with that of the other groups as the chart very plainly shows. For instance, the group immediately above it, the cities between 250,000 and 500,000, had an increase of 7.8 per cent. The cities between 100,000 and 250,000 are located for the most part in the east and war production in many of these medium sized industrial cities in the east slowed down during the year. Some of them are also located near army training centers which to a large degree were emptied of their personnel in 1943 and 1944. There was some evidence of it in the 1943 traffic returns of this group which even then was slightly out of line and in 1944 it became definitely pronounced.

By contrast the rate of increase of the group of cities between 250,000 and 500,000 held up remarkably well. Its increase of 7.8 per cent over 1943 was nearly twice as great as that of the next higher group between 500,000 and 1,000,000 and compares well with the increases in the smaller cities. The group between 500,000 and 1,000,000 had an increase of 4.2 per cent which was a reasonably good showing when considered in the light of the trend from group to group. On the other hand, the group over 1,000,000 population had an increase of only 2.9 per cent. The cities in this group are also confined for the most part in the east and felt the effect of the slowing down of war production in that section. Only the surface traffic was included in arriving at the per cent increase of this group. As has already been pointed out, subway and elevated traffic which is confined almost entirely to cities over 1,000,000 population, actually decreased in 1944.

In Chart VI the monthly trend of traffic during the years 1939 to 1944 inclusive is shown on an index basis. For the purpose of this chart, the traffic in the cities has been divided into three classes: cities less than 250,000 population, 250,000 to 500,000, and over 1.000,000. Separate indexes have been computed for each group using the averages of the years 1936 to 1940 as the base of 100 in each group. In addition the index of traffic in the United States as a whole, computed on the same base, is also shown. The effect of the war on transit traffic and where that effect has been most felt is clearly illustrated in this chart. As of the end of 1944 transit traffic in the country as a whole was 75 per cent above the 1936-40 level. In the smaller cities, those under 250,000 population it was up 170 per cent. In cities between 250,000 and 1,000,000 the increase was just under 100 per cent as of the end of 1944 and in cities over 1,000,000 it was less than 30 per cent above the base period.

LONG TERM TREND OF TRAFFIC

CHART VII presents graphically the trend of transit traffic since 1922. It is based on total passengers carried and shows the relative proportion of the total traffic carried by the street cars, the subway and elevated lines, the motor buses and the trolley coaches throughout the period. In Table 3 the figures on the number of passengers carried by each of these four types of service are given for the same period, 1922 to 1944 inclusive.

Prior to the present war the peak year of transit traffic was 1926 when something more than 17 billion passengers were carried. The year 1926 marks an important mile post in the history of the transit industry or with more accuracy perhaps it might be said it dates the end of an era in the evolution of local transportation. It is the year in which the first great wave of expansion of transit traffic was finally arrested by the growth of private transportation. Its importance has been obscured by later, more spectacular developments, such as the effect of the great depression and that of the second world war. These great events, while exerting a profound influence on transit, may properly be classed as transient in their effects. They were temporary influences imposed on the industry from without. The culmination of trend which occurred in 1926, on the other hand, was the product of underlying forces within the field of local transportation itself.

For nearly a generation before 1926 the means by which the individual could provide private transportation for himself economically had been developing simultaneously with the expansion of local public transportation and the multiplication and growth of cities. The price of the automobile was being brought within the means of practically everybody and hard-surfaced roads were being extended practically everywhere. At the same time, however, cities were increasing in population and expanding in area. The necessity for transportation within cities and between cities kept increasing with the result that the volume of both public and private transportation increased together. However, a certain portion of private transportation represented a shift from public transportation and this portion increased as the cost of private transportation was reduced and parking space began to be provided around places of employment. Its effect was not apparent for some years, but after World War I it increased rapidly and the growth of traffic on transit lines came to a pause in 1926 with a peak of 17 billion passengers.

The total continued to hover around 17 billions until the big depression. For four years following 1929 it declined continuously

finally reaching its low point at 11 1-3 billions in 1933. Most of the loss was in the street car traffic but even the buses which had been rapidly expanding their operations prior to 1929, lost traffic during this period, their total dropping from 2.6 billions in 1929 to about 2 billions in 1933. Trolley coaches were a negligible factor in the traffic total in those years.

After 1933, traffic increased slowly but steadily except for the recession year 1938 when there was a slight setback. This is shown in Table 3. Recovery was resumed in 1940 and continued until the war boom took over and raised traffic to new high levels.

The feature of the traffic record during the last 10 years has been the expansion of the bus and to a lesser degree that of the trolley coach. From only slightly more than 2 billions at the bottom of the depression, the number of bus passengers has increased to over 9 billions in 1944. Similarly trolley coach traffic has increased from 68 millions to one and one-quarter billions during the same period. Although trolley coach traffic is smaller and its field of operation somewhat more restricted than that of the motor bus, its growth during this period has been, considered by itself, even more impressive than that of its automotive counterpart.

Surface railway traffic reached a low point in 1940 when slightly less than six billion passengers were carried. It represented a decline which had been going on with some occasional interruptions

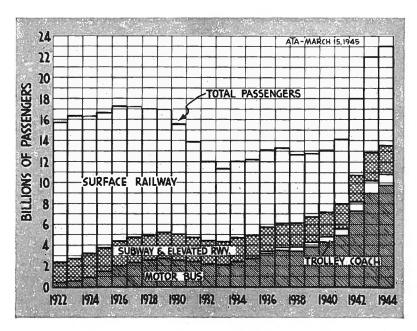


CHART VII TOTAL PASSENGERS CARRIED BY TRANSIT COMPANIES IN THE UNITED STATES 1922-1944.

since before the depression. In addition to the effects of the depression, the principal cause of it was the conversion to bus operation which was going on steadily in the smaller cities. Reference to Table 16 on page 42 will show that the amount of street railway track in service was reduced by more than 8,000 miles during the period shown in this table.

In 1941, however, street railway traffic turned upward and crossed the six billion line again even before the full war production program and the curtailment of private automobile use had set in. By 1943 it was back above nine billion, a figure not reached since 1931, and in 1944 it went to nine and one-half billion.

Traffic on the subway and elevated lines—the rapid transit lines—has had a steady but rather slow increase in the last 10 years. There were small decreases in 1937 and 1938 in spite of the opening of new subway lines in New York, but in 1939 the traffic turned up again. Though not affected by the war as much as the other services the rapid transit lines carried increasing loads and reached a new high at 2,656 million passengers in 1943. In 1944, however, the traffic receded to 2,621 million due to substantial decreases on the New York subways.

TABLE NO. 3

Total Transit Passengers in the United States
by Types of Service—1922 to 1944

		RAILWAY				
CALEN- DAR YEAR	SURFACE	SUBWAY AND ELEVATED	TOTAL	TROLLEY COACH	MOTOR BUS	GRAND TOTAL
	(Millions)	(Millions)	(Millions)	(Millions)	(Millions)	(Millions)
1922	13,389	1,942	15,331		404	15,735
1923	13,569	2,081	15,650	-	661	16,311
1924	13,105	2,207	15,312		989	16,301
1925	12,903	2,264	15,167		1,484	16,651
1926	12,875	2,350	15,225		2,009	17,234
1927	12,450	2,451	14,901		2,300	17,201
1928	12,026	2,492	14,518	3	2,468	16,989
1929	11,787	2,571	14,358	5	2,622	16,985
1930	10,513	2,559	13,072	16	2.479	15,567
1931	9,175	2,408	11,583	28	2,313	13,924
1932	7,648	2,204	9,852	37	2,136	12,025
1933	7,074	2,133	9,207	45	2,075	11,327
1934	7,394	2,206	9,600	68	2,370	12,038
1935	7,276	2,236	9,512	- 96	2,618	12,226
1936	7,501	2,323	9,824	143	3,179	13,146
1937	7,161	2,307	9,468	289	3,489	13,246
1938	6,545	2,236	8,781	389	3,475	12,645
1939	6,171	2,368	8,539	445	3,853	12,837
1940	5,943	2,382	8,325	534	4,239	13,098
1941	6,081	2,421	8,502	652	4,931	14,085
1942	7,290	2,566	9,856	899	7,245	18,000
1943	9,150	2,656	11,806	1,175	9,019	22,000
1944	9,516	2,621	12,137	1,234	9,646	23,017

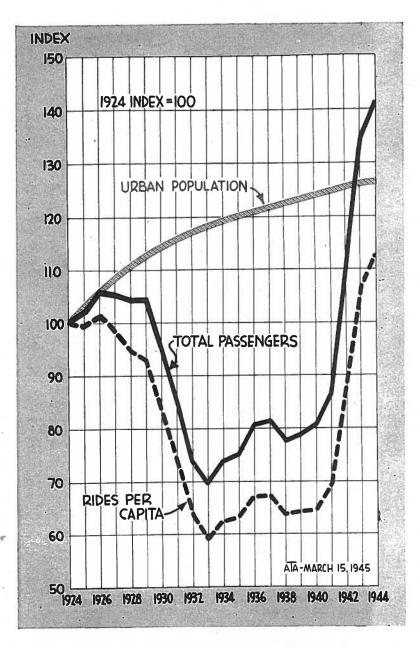


CHART VIII COMPARATIVE TRENDS OF TOTAL PASSENGERS, URBAN POPULATION AND RIDES PER CAPITA—1924-1944.

RIDES PER CAPITA

CHART VIII shows the trend of transit riding in relation to the urban population of the United States over the period from 1924 down through 1944. The urban population is defined as the total population of all places having more than 2,500 inhabitants.

To bring out the comparative trends the urban population, the total number of transit rides and the number of rides per capita of population have been put on an index basis with the year 1924 taken as 100. The subsequent, respective trends of the three indexes appear in the chart.

Starting at 100 in 1924 the index of rides per capita dropped to 99.6 in 1925 and then rose to 101.1 in 1926. This remained the high point until the year 1943 when the index rose to 106.6. In the intervening years it had registered a low of 59.0 at the bottom of the depression. From this low it rose to 67.2 in 1937 and then in 1938 in the business recession of that year it dropped again to 63.8. Thereafter it rallied and under the impetus of the defense and war programs it finally in 1943 went through the old 1926 high. In 1944 it rose further to 111.4 the high to date. At this level it represents an average of 302 transit rides per capita of urban population. This figure does not represent what is technically known as the "riding habit." It is the average total number of rides, including revenue rides, transfer rides and free rides taken annually by the urban residents of the United States.

TABLE NO. 4

Ten Year Record of Revenue Passengers Carried on Transit Lines of the United States Distributed by Types of Service—1935-1944

		RAILWAY				
CALEN- DAR YEAR	SURFACE	SUBWAY AND ELEVATED	TOTAL	TROLLEY	MOTOR BUS	GRAND TOTAL
	(Millions)	(Millions)	(Millions)	(Millions)	(Millions)	(Millions)
1935	5,156.2	2,252.3°	7,408.5	76.5	2,297.3	9,782.3
1936	5,276.0	2,339.4	7,615.4	122.6	2,773.7	10,511.7
1937	4,979.4	2,228.2	7,207.6	230.8	2,997.1	10,435.5
1938	4,439.4	2,261.8	6,701.2	312.4	2,971.1	9,984.7
1939	4,310.4	2,289.8	6,600.2	357.8	3,294.3	10,252.3
1940	4,182.5	2,281.9	6,464.4	419.2	3,620.1	10,503.7
1941	4,276.3	2,298.1	6,574.4	521.0	4,206.1	11,301.5
1942	5,141.5	2,447.2	7,588.7	718.0	6,194.5	14,501.2
1943	6,893.7	2,516.3	9,410.0	938.0	7,570.0	17,918.0
1944	7,169.4	2,483.1	9,652.5	986.8	8,096.1	18,735.4

ANNUAL RATE OF TRAFFIC

N Chart IX is shown the annual rate at which passengers were being carried during each month of the years 1938 and 1941 to 1944 inclusive.

The 1944 curve is notable for the further emergence of the normal seasonal pattern of transit traffic which has been obscured by the abnormal wartime conditions prevailing during the last few years. In 1942, in fact, the normal pattern was completely eliminated by the rapidly increasing traffic which established new highs with each succeeding month regardless of seasonal influences.

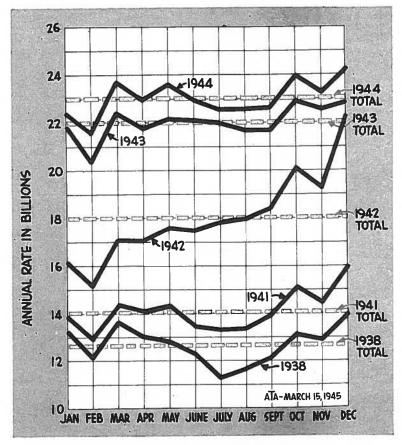


CHART IX ANNUAL RATE INDICATED BY THE NUMBER OF PASSENGERS CARRIED IN EACH OF THE MONTHS OF THE YEARS 1938 AND 1941 TO 1944 INCLUSIVE.

TRANSIT REVENUES

TABLE 5 shows the total operating revenue of the transit companies of the United States distributed, first, according to the type of service, and, second, according to the population groups from which it is derived. This distribution is similar to that of the revenue and total passengers given in Tables 1 and 2.

Slightly more than half of the \$1,362,300,000 of transit revenue in 1944 was derived from railway service, including service on the subway and elevated lines. Total revenue from railway operation amounted to \$709,600,000 of which \$147,500,000 is credited to the subway and elevated lines. Bus operation accounted for \$585,200,000 or approximately 43 per cent of the total. Trolley coach revenue, \$67,500,000, represented less than 5 per cent of the total.

The distribution of revenue among the population groups follows very closely the distribution of passengers. The most important difference is that the proportion of the total revenue contributed by the cities over 1,000,000 and the subway and elevated lines is somewhat less than these two groups' proportion of the total passengers. This is due principally to the low fare in New York whose operations weigh very heavily in these groups.

Table 6 shows the total transit revenue in each month of 1944 compared with the revenue in the corresponding month of 1943. It is of interest principally as showing the steady level maintained by the revenue throughout the year and the quite constant margin of increase maintained over 1943.

TABLE NO. 5

Transit Operating Revenue for Year 1944 Distributed by Types of Service and Population Groups

*	RAILWAY (Millions)	TROLLEY COACH (Millions)	MOTOR BUS (Millions)	GRAND TOTAL (Millions)
Subway and Elevated	147.5		_	147.5
Surface Lines: Population Group				
Over 1,000,000	193.7	3.4	100.2	297.3
500,000 - 1,000,000	127.4	9.1	45.1	181.6
250,000 - 500,000	82.1	29.3	107.1	218.5
100,000 - 250,000	38.8	12.3	125.3	176.4
50,000 - 100,000	27.5	7.6	89.4	124.5
Less Than 50,000	11.7=	5.8	37.4	54.9
Suburban and Other	80.9	_	80.7	161.6
TOTAL	709.6	67.5	585.2	1,362.3

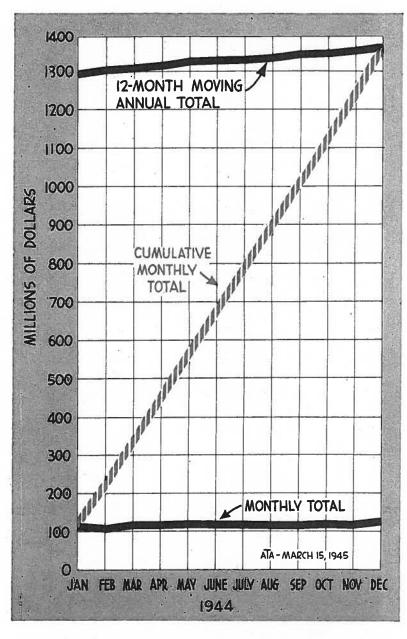


CHART X TRENDS OF TRANSIT REVENUE IN 1944 SHOWING MONTHLY TREND, CUMULATIVE MONTHLY TREND AND TREND OF 12-MONTH MOVING TOTAL.

The monthly revenues are plotted in Chart X in the form of a "Z" chart which serves to bring out the trend during the year. First each month's revenue is plotted along the bottom of the chart. Because of the fairly steady level of revenue throughout the year there is not much variation in this line other than the seasonal fluctuations. Then the cumulative total revenue in 1944 as of the end of each month is plotted, the line rising diagonally from the lower left hand corner to the upper right hand corner. Finally across the top of the chart is plotted the twelve-month total of revenue as of the end of each month of 1944 from January through December. The slope of this line is especially interesting, particularly when compared with the corresponding line in the similar chart of the 1943 revenues in last year's Fact Book. The rise is not so steep as it was last year and the angle made with the cumulative curve rising diagonally across the chart, is greater. If revenues should start to decrease the slope of this line would be reversed as would that of the line of the monthly revenues at the bottom of the chart and the shape of the "Z" would be distorted.

The overall trend of transit revenue from 1935 to 1944 is shown in Chart XI distributed according to type of service. In Chart XII is shown the per cent distribution for the same years.

In 1935 the total operating revenue of the industry amounted to \$681,400,000. It increased to \$733,500,000 in 1937 and then dropped off to \$700,800,000 in 1938 in the business recession of that year. The rise was resumed in 1939 and by 1941 the revenue had reached \$800,300,000, having already experienced the stimulating effect of the defense program. War activity then became dominant, private automotive transportation was curtailed and transit revenue rose to its all-time peak of \$1,362,300,000 in 1944.

TABLE NO. 6

Transit Operating Revenue by Months—1944 and 1943

	1944	1943
January	\$112,100,000	\$108,100,000
February	106,400,000	100,200,000
March	114,400,000	108,800,000
April	112,700,000	106,100,000
May	116,600,000	109,000,000
June	113,100,000	109,200,000
July	111,700,000	108,000,000
August	111,300,000	107,300,000
September	111,200,000	105,300,000
October	117,100,000	110,600,000
November	113,600,000	108,400,000
December	122,100,000	113,000,000
TOTAL	\$1,362,300,000	\$1,294,000,000

In 1935 surface railway operations produced 56.94 per cent of the total transit revenues and the subway and elevated lines accounted for 19.34 per cent more making a total of 76.28 per cent derived from rail service. Bus revenue amounted to 22.91 per cent while the trolley coach accounted for only 0.81 per cent.

By 1944 the motor bus had increased its share to 42.96 per cent of the total although beginning in 1942 the extension of bus service was definitely restricted by war conditions and the rubber shortage. By 1942 the motor bus share of transit revenue had reached 41.77 per cent and the small increase in this share in the following two years was due to the restriction mentioned.

Surface railway revenue reversed the trend of the bus revenue. From 56.94 per cent in 1935 its share of the total revenue declined to 39.68 per cent in 1942. Under the influence of the curtailment of private transportation and the restrictions on motor buses this trend was reversed and the surface railways' share of the total revenue recovered to 41.26 per cent in 1944.

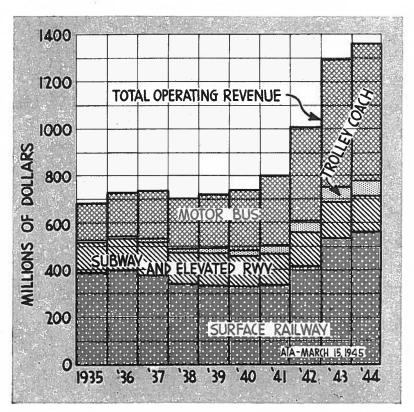


CHART XI TREND AND DISTRIBUTION OF TRANSIT OPERATING REV-

TABLE NO. 7

Trend and Distribution of Transit Operating Revenue in the United States by Types of Service—1935-1944

		RAILWAY			-	
CALEN- DAR YEAR	SURFACE	SUBWAY AND ELEVATED	TOTAL	TROLLEY COACH	MOTOR BUS	GRAND TOTAL
	(Millions)	(Millions)	(Millions)	(Millions)	(Millions)	(Millions)
1935	\$388.0	\$131.8	\$519.8	\$ 5.5	\$156.1	\$681.4
1936	397.8	135.6	533.4	7.6	186.9	727.9
1937	380.7	134.8	515.5	14.2	203.8	733.5
1938	339.5	131.1	470.6	18.9	211.3	700.8
1939	332.8	132.9	465.7	21.7	233.3	720.7
1940	327.1	129.0	456.1	25.0	255.9	737.0
1941	332.9	133.6	466.5	34.5	299.3	800.3
1942	412.7	144.3	557.0	48.6	434.4	1,040.0
1943	537.0	149.0	686.0	63.7	544.3	1,294.0
1944	562.1	147.5	709.6	67.5	585.2	1,362.3

While the revenue of the subway and elevated lines had increased from \$131,800,000 in 1935 to \$147,500,000 in 1944, it represented only 10.83 per cent of the total transit revenue in the latter year compared with 19.34 per cent in 1935. Total revenue of

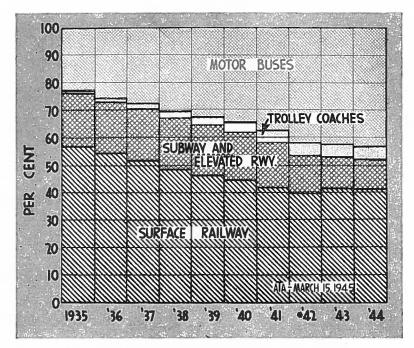


CHART XII PERCENTAGE DISTRIBUTION OF TRANSIT REVENUE BY TYPES OF SERVICE 1935-1944.

the surface, elevated and subway lines in 1944 represented 52.09 per cent of the total while in 1935 it represented 76.28 per cent.

On the other hand, trolley coach revenue increased more proportionally than that of any of the other services during this 10-year period. Its share of total transit revenue, therefore, expanded from 0.81 per cent in 1935 to 4.95 per cent in 1944.

Passenger revenue in the 10-year period 1935 to 1944 distributed according to type of service, is shown in Table 9. Its trend over this period does not differ materially from that of the total operating revenue of the industry. In conjunction with it there is also shown in Table 8, the number of vehicle miles operated by each of the types of vehicle during this 10-year period.

From these two tables and from Table 4 showing revenue passengers some interesting ratios are plotted in Chart XIII: the average passenger revenue per revenue passenger, the number of revenue passengers per vehicle mile and the average passenger revenue per vehicle mile. All types of transit operations are included.

With the advent of the defense program in 1941 the number of passengers per vehicle mile began to climb and by 1944 had reached 5.70 an increase of 41 per cent over 1940. There was also a slight increase in the average revenue per passenger during this period, from 6.68 cents to 6.92 cents. This reflected, not an increase in fares, but an increase in the relative proportion of high-fare rides, principally by war workers to war plants which are frequently situated at out-of-the-way places requiring special service. The increase in the number of passengers per vehicle mile and the slight rise in the average revenue per passenger produced an increase in the revenue per mile of 46 per cent.

TABLE NO. 8

Ten Year Record of Revenue Vehicle Miles Operated in the United States by Each Type of Transit Vehicle—1935 to 1944

-		RAILWAY			Č4	
CALEN- DAR YEAR	SURFACE	SUBWAY AND ELEVATED	TOTAL	TROLLEY COACH	MOTOR BUS	GRAND TOTAL
	(Millions)	(Millions)	(Millions)	(Millions)	(Millions)	(Millions)
1935	1,096.6	447.4	1,544.0	19.0	764.0	2,327.0
1936	1,080.9	461.6	1,542.5	26.3	864.2	2,433.0
1937	1,029.2	469.1	1,498.3	49.7	957.0	2,505.0
1938	922.3	457.4	1,379.7	67.9	986.4	2,434.0
1939	878.3	* 469.4	1,347.7	74.9	1,047.4	2,470.0
1940	844.7	470.8	1,315.5	86.0	1,194.5	2,596.0
1941	792.2	472.8	1,265.0	98.4	1,313.0	2,676.4
1942	850.4	469.6	1,320.0	115.7	1,612.0	3,047.7
1943	978.0	461.7	1,439.7	129.7	1,693.0	3,262.4
1944	977.9	461.0	1,438.9	132.3	1,713.3	3,284.5

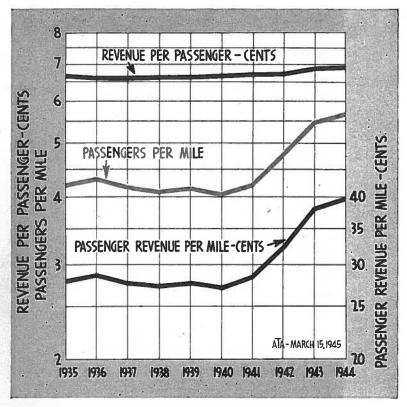


CHART XIII TRENDS OF PASSENGER REVENUE PER REVENUE PASSENGER, REVENUE PASSENGERS PER VEHICLE MILE, 1935-44.

TABLE NO. 9

Trend and Distribution of Transit Passenger Revenue in the United

States by Types of Service—1935-1944

		RAILWAY				
CALEN- DAR YEAR	SURFACE	SUBWAY AND ELEVATED	TOTAL	TROLLEY COACHES	MOTOR BUSES	GRAND TOTAL
mile .	(Millions)	(Millions)	(Millions)	(Millions)	(Millions)	(Millions)
1935	\$357.8	\$127.8	\$485.6	\$ 5.5	\$151.2	\$642.3
1936	365.2	131.8	497.0	7.6	180.9	685.5
1937	347.1	130.8	477.9	14.1	197.7	689.7
1938	311.0	128.0	439.0	18.8	205.1	662.9
1939	303.7	130.0	433.7	21.6	226.2	681.5
1940	299.0	128.8	427.8	24.9	248.8	701.5
1941	301.8	131.7	433.5	34.3	291.0	758.8
1942	365.0	139.7	504.7	48.4	426.0	979.1
1943	490.6	147.5	638.1	63.3	534.2	1,235.6
1944	509.0	146.5	655.5	67.1	574.3	1,296.9

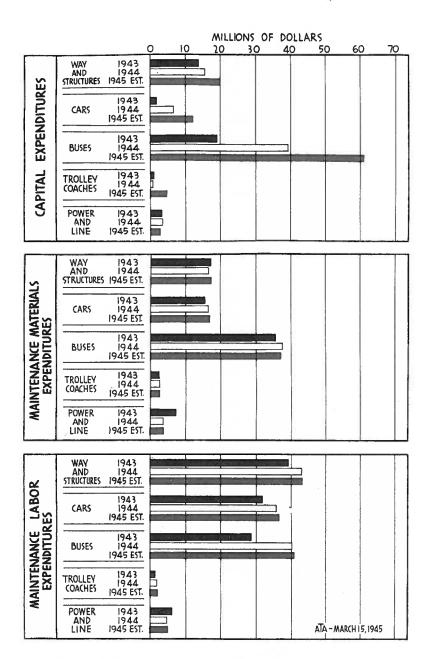


CHART XIV CAPITAL AND MAINTENANCE EXPENDITURES OF TRANSIT COMPANIES IN THE UNITED STATES IN 1943 AND 1944 AND FORECAST FOR 1945.

CAPITAL AND MAINTENANCE EXPENDITURES

CAPITAL and maintenance expenditures of transit companies in 1944 in comparison with 1943 are shown in Table 10 with anticipated expenditures in 1945 as forecast by the companies themselves. Chart XIV presents graphically the comparison between expenditures in 1944 and 1943 and also the 1945 forecast.

TABLE NO. 10

Capital and Maintenance Expenditures of Transit Companies in the United States in 1943 and 1944 and Forecast for 1945

	1943 (Thousands)	1944 (Thousands)	1945 FORECAST (Thousands)
CAPITAL EXPEN	DITURES		
Way and Structures Cars Buses Trolley Coaches Power and Line TOTAL CAPITAL EXPENDITURES	1,800 19,000	\$ 15,450 6,800 39,162 780 3,400 \$ 65,592	\$ 20,000 12,000 61,000 5,000 3,100 \$101,100
MAINTENANCE EXPENDIT	URES-MATE	RIALS	
Way and Structures Cars Buses Trolley Coaches Power and Line TOTAL MAINT.—MATERIALS	\$ 17,100 15,300 35,400 2,300 7,200 \$ 77,300	\$ 16,640 16,230 37,320 2,493 3,878 \$ 76,561	\$ 17,350 16,840 37,270 2,740 4,140 \$ 78,340
MAINTENANCE EXPEND	ITURES—LAB	OR	
Way and Structures. Cars. Buses. Trolley Coaches. Power and Line.	\$ 39,300 31,900 29,000 1,700 6,100	\$ 43,080 36,020 40,240 1,994 5,009	\$ 43,530 37,110 41,190 2,230 5,340
TOTAL MAINTENANCE-LABOR	\$108,000	\$126,343	\$129,400
TOTAL MAINTENANCE—MATE RIALS & LABOR	\$185,300	\$202,904	\$207,740
GRAND TOTAL—CAPITAL & MAINTENANCE EXPENDITURES.	\$224,600	\$268,496	\$308,840
Fuel and Lubricants	\$ 55,800	\$ 60,020	\$ 60,300

Total expenditures for both new equipment and maintenance increased substantially in 1944 over 1943, but they did not quite come up to the forecast of expenditures made at the beginning of 1944. That forecast was for the expenditure of \$283,300,000 for new equipment, maintenance material and maintenance labor in 1944. Actual expenditure as indicated by reports received at the end of the year was \$268,496,000. In 1943 the reported expenditure was \$224,600,000.

Capital expenditures, that is, expenditures for new equipment, amounted in 1944 to \$65,592,000 which compares with \$39,300,000 spent in 1943. The largest single item of expenditure under this heading, \$39,162,000, went for new buses. The corresponding expenditure in 1943 was \$19,000,000. A sufficient explanation of this increase is found in the fact that the WPB authorized the construction of more buses in 1944. For the same reason the expenditures for new street cars increased from \$1,800,000 in 1943 to \$6,800,000 in 1944. On the other hand, there were no new authorizations for the construction of trolley coaches in 1944, the output being confined to the completion of the construction authorized in 1943. Trolley coach capital expenditure, therefore dropped from \$1,600,000 in 1943 to \$780,000 in 1944.

Last year's forecast of expenditures for new power and line equipment indicated a decrease from \$3,300,000 to \$1,500,000, but actually they increased to \$3,400,000. Ability to get what was wanted as well as the heavy wear on all equipment was a factor in this increase.

In the way and structures department expenditures for new equipment increased from \$13,600,000 to \$15,450,000. The forecast was for \$18,600,000, but government restrictions were the controlling factor.

MAINTENANCE MATERIALS AND LABOR

Expenditures for maintenance materials and maintenance labor increased from \$185,300,000 to \$202,904,000, but the increase was all in the labor expenditures. Expenditures for maintenance materials decreased from \$77,300,000 to \$76,561,000. The forecast for maintenance materials had been \$83,550,000. The material was wanted and was required, but it couldn't be had.

The forecast on the expenditures for maintenance labor, on the other hand, was exceeded. Only \$124,600,000 had been forecast but the amount spent was \$126,343,000 which compares with \$108,000,000 spent in 1943.

FORECAST OF EXPENDITURES IN 1945

A TOTAL of \$308,840,000 is forecast as the expenditures of the transit industry in 1945 for new equipment and maintenance of existing property and equipment. This sum is \$25,000,000 more than the forecast for 1944 made at this time last year, and is \$40,000,000 more than the expenditure ultimately made in 1944.

The anticipated increases are almost entirely in the field of capital expenditures. Only moderate increases are forecast for maintenance expenditures. Total expenditures for new equipment are expected to reach \$101,100,000 which compares with \$65,592,000 in 1944. New rolling stock will absorb most of the additional money with \$61,000,000 being allocated to new buses, \$12,000,000 to new cars and \$5,000,000 to new trolley coaches. However, it is estimated that \$20,000,000 will be spent on way and structures which is nearly \$5,000,000 more than was spent in 1944. In the power and line departments capital expenditures are forecast at \$3,100,000 which is less than was spent in 1944, but is more than double the amount that was forecast for 1944 last year.

Only moderate increases in maintenance expenditures are forecast for 1945. For maintenance materials the total for 1945 is put at \$78,340,000 which compares with \$76,561,000 spent in 1944. Maintenance labor costs are placed at \$129,400,000 for 1945 compared with \$126,343,000 in 1944.

These forecasts, as all forecasts of expenditures necessarily must be at this time, are tentative and subject to revision. Ordinarily, under normal peacetime conditions, such forecasts represent what the companies estimate they must spend to keep their properties running efficiently plus estimates of additional expenditures which they definitely plan to make during the year in the way of improvements or for the purpose of expansion. Forecasts made under such conditions are in the nature of budgets representing commitments by the several companies and in the absence of unusual and unforeseen developments their practical realization may confidently be expected.

At this time, however, a company's ability to carry out its plans is dependent upon the following factors none of which is under its control: the approval of the government and its release of the required material, the ability to get the material that the government has released, the ability to get and retain the necessary manpower to do the work. All of these factors are subject to the exigencies of the wartime economy. Under these circumstances, forecasts represent compromises between what the companies would like to do and what they think they may be able or permitted to do.

NEW EQUIPMENT DELIVERED IN 1944

In Table 11 the new vehicles delivered in 1944 are classified according to the size of the community to which they were delivered. The motor buses are further classified into three groups according to their seating capacities. A very interesting feature of this table is the fact that the distribution of the new vehicles among the population groups follows the same pattern as the distribution of traffic increases among the same groups. That is, the largest number of vehicles was delivered to the smallest cities just as the largest increases in traffic percentagewise have occurred in the group of the smallest cities. Furthermore, the number of new vehicles delivered tapers off gradually as the size of the cities increase until the smallest number of deliveries is found in the group of the largest cities. This also is strictly in accordance with the trend of traffic increases among the several population groups.

The motor bus deliveries are presented graphically in Chart XV and their allocation among the several city population groups is also shown in this chart. Only vehicles delivered to companies in the continental United States are included in the table and chart.

The total number of new transit vehicles delivered in the United States in 1944 was 4,146. The number delivered in 1943 was 1,400. Of the 4,146 deliveries in 1944, 3,807 were motor buses, 284 were street cars, and 55 were trolley coaches. The corresponding figures for 1943 were 1,251 buses, 32 street cars and 117 trolley coaches. Only integral type buses are included in the bus total. The WPB authorized the construction of 5,200 transit motor buses

TABLE NO. 11

New Transit Equipment Delivered in 1944 Classified According to Population Group and Seating Capacity of Buses

POPULATION GROUP	STREET CARS	TROLLEY COACHES	мото	MOTOR BUSES (INTEGRAL ONLY)				
TOTOLATION GROOT	49-55 SEATS	44 SEATS	25 SEATS OR LESS	26-34 SEATS	35 SEATS OR MORE	TOTAL	VEHICLES	
Over 1,000,000 500,000 - 1,000,000	2 282	6	_	15	102 27	117 27	125 315	
250,000 - 500,000		33	3	250	316	569	602	
100,000 - 250,000 50,000 - 100,000		3 7	46	284 521	344 237	628 804	631 811	
Less Than 50,000	_		36	824	164	1,024	1,024	
Suburban and Other.			14	467	157	638	638	
TOTAL	284	55	99	2,361	1,347	3,807	4,146	

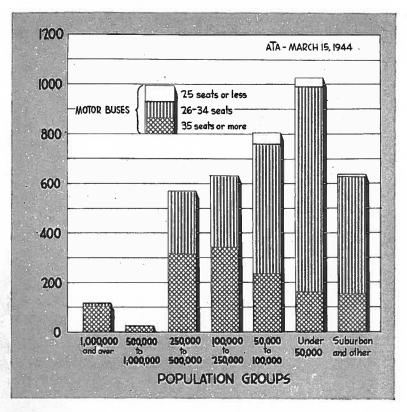


CHART XV NEW MOTOR BUSES DELIVERED TO TRANSIT COMPANIES IN THE UNITED STATES IN 1944.

and 530 street cars which leaves a carry-over of 1,393 buses and 246 street cars into 1945. There were no authorizations for the construction of trolley coaches in 1944, the 55 delivered being carry-overs from the 1943 authorizations.

New authorizations of the WPB for construction in 1945 are: 6,413 transit buses, 599 street cars and 323 trolley coaches. The number of transit buses includes some of this type that are slated for delivery in Canada but the number of these has not been reported. Total authorizations for Canadian deliveries are reported as 280, including transit and parlor types. The figures on the number of street cars and trolley coaches authorized in 1945 as given above are for the United States only. In addition 40 street cars and 25 trolley coaches have been authorized for delivery in Canada making a total of 639 street cars and 348 trolley coaches authorized for construction in 1945.

The 284 new street cars were delivered entirely to cities in excess of 500,000 population. Only 2 cars were delivered to the

group over 1,000,000 population and these were part of a larger order on which delivery had been completed in 1943 except for these 2 cars. All of the other 282 cars delivered in 1944 went to cities between 500,000 and 1,000,000 population.

Of the 55 new trolley coaches 33 or more than half went to cities between 250,000 and 500,000. This is no more than might be expected since very nearly half of all of the trolley coaches in existence at this time are in this group of cities. The remaining 22 trolley coaches were distributed quite evenly among the two population groups just above and the two groups just below the 250,000 to 500,000 group.

More than a quarter of the 3,807 new motor buses delivered in 1944 went to cities of less than 50,000 population. The number was 1,024. This is a rather extraordinary contrast with last year when only 71 out of 1,251 buses went to these very small cities. In 1944 at least the new buses went where they were most needed. The group between 50,000 and 100,000 received the second largest number of new buses, 804. Only 27 buses were delivered to the group between 500,000 and 1,000,000. This is the group which took all except two of the street cars. With the exception of this one group, the number of buses delivered increases consistently as the population decreases, from the 117 buses delivered in cities over 1,000,000 population, to the 1,024 delivered in cities less than 50,000. The allocation of the new buses in 1944 was entirely consistent with the trends of traffic.

The greater part of the buses delivered in 1944, 2,361 out of 3,807, were in the medium-size class with seating capacities between 26 to 34. This was also the case in 1943 and wartime restrictions are undoubtedly responsible. Only 99 buses of 25 seats or less were delivered indicating that when capacity operation is the order of the day the small bus is not in demand. On the other hand, the large buses, with seating capacities of 35 or more, continued to enjoy a good measure of the popularity which they had when the war began. The number delivered in 1944 was 1,347 slightly more than a third of the total. Probably more would have been taken if they could have been had.

In general the large buses tended to go to the larger cities and the small and medium-sized buses to the smaller cities. Thus in the cities below 50,000 population 824 of the 1,024 buses delivered were in the medium-size class while all but 15 of the 144 buses delivered to cities over 500,000 were in the 35 seats or more class. There were exceptions though. Actually the largest number of large buses, 344, was taken by the group between 100,000 and 250,000 which certainly cannot be classed as large cities. As for the small buses with seating capacities of 25 or less, all but 3 of the total of 99 went to cities of less than 100,000 or to suburban lines.

TREND OF EQUIPMENT DISTRIBUTION

ALTHOUGH 4,146 pieces of new equipment were delivered in 1944, the increase in the total number of vehicles available for service at the end of the year was only 1,133. There were 3,013 vehicles scrapped during the year. The number is surprisingly large and can indicate only one thing—that the new vehicles delivered in 1944 were very close to the absolute minimum required to keep local transit functioning.

Reports indicate that 3,013 scrapped vehicles were divided as follows: 2,508 motor buses, 354 surface railway cars, 150 subway and elevated cars and 1 trolley coach.

The net increase of 1,133 vehicles brought the total number of transit passenger vehicles owned up to 89,240 as of the end of 1944. It is made up of 48,400 motor buses, 27,180 surface railway cars, 10,105 subway and elevated cars and 3,555 trolley coaches.

Compared with 1943 the number of motor buses increased by 1,300 and the number of trolley coaches increased by 54. There was a decrease of 70 in the number of surface railway cars and of 150 in the number of subway and elevated cars making a total decrease of 220 in the number of all railway passenger cars.

In Table 14 is shown the record of passenger equipment owned by the transit industry in the last 10 years. The number of vehicles of each type is shown separately. While the numbers of motor buses and trolley coaches reached in 1944 the highest they have ever been the number of railway cars has receded from peak

TABLE NO. 12

Transit Passenger Equipment in 1944 Showing Types of Vehicles and Their Distribution by Population Groups

	RAILWAY CARS	TROLLEY COACHES	MOTOR BUSES	GRAND TOTAL
Subway and Elevated	10,105			10,105
Surface Lines: Population Group				
Over 1,000,000	9,700 6,380	234 479	9,080 5,680	19,014 12,539
250,000 - 500,000 100,000 - 250,000	4,570 2,220	1,528 701	7,050 8,370	13,148
50,000 - 100,000		370 243	7,620 6,510	9,620 7,653
Suburban and Other	1,780		4,090	5,870
TOTAL	37,285	3,555	48,400	89,240

levels reached in the past. The total number of all vehicles increased with only one interruption from 71,744 in 1935 to 89,240 in 1944. The one interruption occurred in the so-called recession year of 1938 when the total number of vehicles dropped to 73,137 from 74,367 in 1937.

Conversions from street railway to motor bus operation were the principal causes of the diverse trends in the number of cars and motor buses during this 10-year period. In 1935 there were 40,050 surface street cars and 20,700 motor buses. By 1940 the number of cars had dropped to 26,630 while the number of buses had increased to 35,000. Shortly after that the effect of defense and war conditions began to set in and the decrease in the number of surface railway cars was stopped. Between 1940 and the end of 1943 the number of cars increased to 27,250. In 1944, as has already been pointed out, the number of cars junked exceeded the number of new cars delivered and the total number declined to 27,180. Meanwhile the number of buses had increased without interruption to 48,400 at the end of 1944. Since 1942 the rate of increase has been reduced drastically by government restrictions on the construction of new buses. Between 1940 and 1942 the

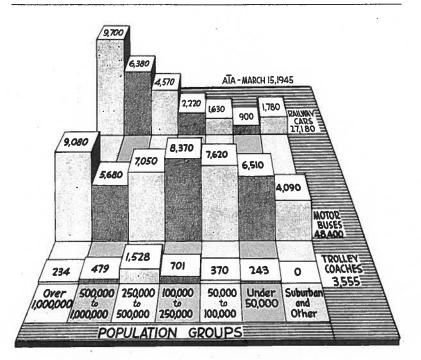


CHART XVI NUMBER OF UNITS OF EACH TYPE OF TRANSIT EQUIP-MENT IN THE UNITED STATES IN 1944 DISTRIBUTED BY POPULATION GROUPS.

TABLE NO. 13

Ten Year Record of New Passenger Equipment Delivered to Transit Companies in the United States—1935 to 1944

		RAILWAY CARS				
CALEN- DAR YEAR SURFACE	SUBWAY AND ELEVATED	TOTAL	TROLLEY COACHES	MOTOR BUSES	GRAND TOTAL	
1935	100	651	751	211	3,806	4,768
1936	573	0	573	538	4,572	5,683
1937	342	300	642	462	3,908	5,012
1938	145	53	198	184	2,498	2,880
1939	371	150	521	587	3,918	5,026
1940	463	15 –	478	310	3,984	4,772
1941	462	0	462	411	5,600	6,473
1942	284	0	284	336	7,200	7,820
1943	32	0	32	117	1,251	1,400
1944	284	0	284	55	3,807	4,146

number of buses increased from 35,000 to 46,000 whereas between 1942 and 1944 it increased only from 46,000 to 48,400.

Trolley coaches have had an increase comparable to that of the motor buses during this period. From a total of 578 in 1935 they have increased without interruption to 3,555 in 1944. Like the buses too their increase since 1942 has been slowed down by WPB regulations. No new authorizations for the construction of trolley coaches were issued in 1944.

There has not been much change in the number of subway and elevated cars in the last 10 years. There were 10,416 cars in 1935 and 10,105 in 1944. The maximum number reached was 11,205 in 1938. The demolition of the elevated roads in New York is responsible for the decline from this number to the 1944 figure.

TABLE NO. 14

Trend of Total Transit Passenger Equipment in the United States
1935 to 1944

		RAILWAY CARS	5			
AS OF DEC. 31 SURFACE	SUBWAY AND ELEVATED	TOTAL	TROLLEY COACHES	MOTOR BUSES	GRAND TOTAL	
1935 1936 1937 1938 1939 1940 1941 1942 1943 1944	40,050 37,180 34,180 31,400 29,320 26,630 27,092 27,230 27,250 27,180	10,416 10,923 11,032 11,205 11,052 11,032 10,578 10,278 10,255 10,105	50,466 48,103 45,212 42,605 40,372 37,662 37,670 37,508 37,505 37,285	578 1,136 1,655 2,032 2,184 2,802 3,029 3,385 3,501 3,555	20,700 23,900 27,500 28,500 32,600 35,000 46,000 47,100 48,400	71,744 73,139 74,367 73,137 75,156 75,464 79,999 86,893 88,107 89,240

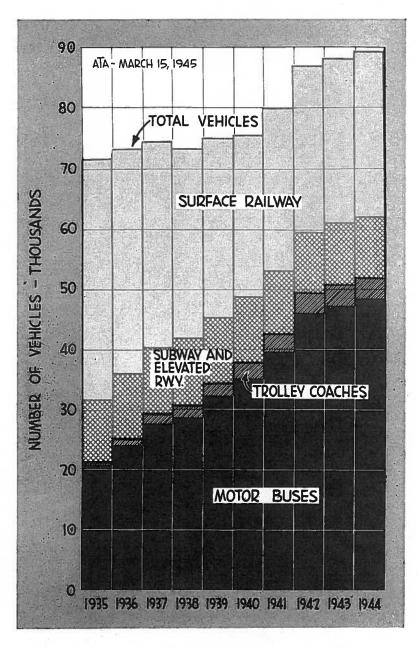


CHART XVII TREND OF EACH TYPE OF TRANSIT PASSENGER EQUIPMENT IN THE UNITED STATES—1935-1944.

CAPACITY OF TRANSIT VEHICLES

THE new vehicles delivered in 1944 added very little to the passenger-carrying capacity of the transit industry and the disparity between the rate of increase in traffic and the rate of expansion of carrying capacity was widened. The reduction in the number of surface, subway and elevated railway cars offset a large part of the additional capacity provided by the increased number of motor buses and trolley coaches.

In Chart XVIII the net effect of the new equipment on the total carrying capacity of the industry is shown, and the effect on the comparative trends of transit traffic and transit capacity is shown in Chart XIX. It is apparent from Chart XVIII that the increase in capacity was quite small and it is equally apparent from Chart XIX that it was not adequate to meet the increase in traffic which occurred in 1944. The spread between the curve of traffic and the curve of capacity, both of which in Chart XIX are indexed on the basis of the year 1938, is greater than it has ever been. The traffic curve in 1944 was 82 per cent above the 1938 base while the curve of capacity was only 11.2 per cent higher.

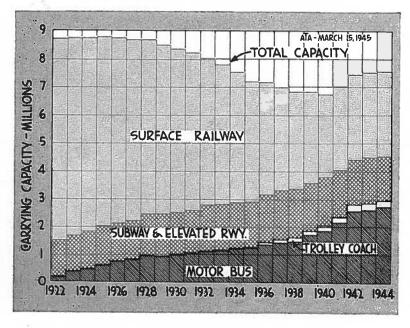


CHART XVIII TREND OF TOTAL PASSENGER-CARRYING CAPACITY OF ALL TRANSIT EQUIPMENT IN THE U. S. 1922-1944.

The year 1938 was taken as the base for these curves because it was the last year immediately preceding the upturn in traffic induced first by the defense program and then by the war production industrial expansion.

In the period prior to 1938, as the chart shows, the industry's passenger-carrying capacity had been drastically reduced to adapt it to the reduction in traffic which followed the depression. Obviously such an adjustment cannot be made immediately when traffic declines; it is a gradual process. The chart shows that the reduction in capacity was still going on after the traffic turned upward again in 1934. It is possible, therefore, that the process of adjustment was not completed by 1938, that there may still have been some excess capacity in that year. However, there is evidence that traffic and capacity were in approximate equilibrium by 1938 and that no serious distortion of the relative trends subsequently is caused by using the year 1938 as a base of comparison.

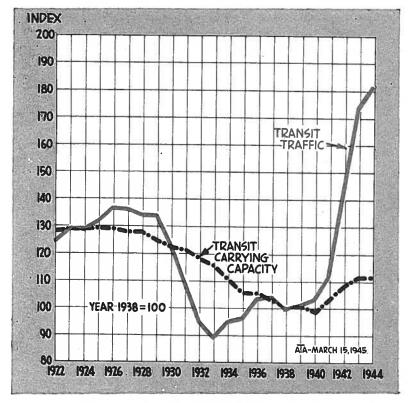


CHART XIX COMPARATIVE TRENDS OF TOTAL TRANSIT PASSENGERS AND THE TOTAL CARRYING CAPACITY OF ALL TRANSIT EQUIPMENT, 1922-1944.

TRACK AND ROUTE MILEAGE

NLY minor changes in railway track and bus route mileage occurred in 1944. They are shown in Table 16 which gives a 10-year record of the mileage of each of the types of transit service. Extensions could be made only with the approval of ODT and absolute essentiality had to be shown before such approval could be obtained.

The round-trip length of bus routes was increased by 700 miles bringing the total for the country up to 87,700. Trolley coach route mileage measured by the number of miles of negative overhead wire, remained unchanged at 2,390. There was a decrease of 98 miles in railway track of which 8 miles were elevated track in New York.

As of the end of the year 1944 there were 16,860 miles of surface railway track down from 25,470 in 1935, 1,252 miles of subway and elevated track, up from 1,230 in 1935, 2,390 miles of negative overhead trolley coach wire, up from 548 in 1935, and 87,700 miles of round-trip bus route, up from 58,100 in 1935. Subway and elevated track increased from 1,230 in 1935 to 1,300 in 1938 and 1939 but the subsequent razing of elevated roads in New York and Boston produced the decrease to the 1944 figure.

In Table 15 the 1944 track and route mileage is distributed according to the population group it serves.

Approximately half of the electric railway track mileage is lo-

TABLE NO. 15

Total Miles of Electric Railway Track, Motor Bus Route and Trolley
Coach Route in the United States, 1944,
Distributed by Population Groups

	RAILWAY	TROLLEY COACH	MOTOR BUS
Subway and Elevated	1,252	_	-
Surface Lines: Population Group	•	_	1
Over 1,000,000 500,000 - 1,000,000 250,000 - 500,000 100,000 - 250,000 50,000 - 100,000 Less Than 50,000 Suburban and Other	3,170 2,360 2,180 1,330 1,120 450 6,250	91 161 1,039 605 292 202	5,600 3,300 8,900 10,900 7,700 4,800 46,500
TOTAL	18,112	2,390	87,700

cated in the larger cities with populations over 250,000. Cities over 1,000,000 have the largest amount of track of any of the city groups and the amount becomes progressively smaller as the cities descend in the population scale. All of the subway and elevated track, 1,260 miles, is located in the cities over 1,000,000 and added to the 3,180 miles of surface track, it makes a total of 4,440 miles of track in this group. In the group under 50,000 there are only 450 miles of track. There are 6,250 miles of suburban and interurban track which is the largest amount in any of the groups.

Trolley coach mileage is pretty heavily concentrated in the cities between 250,000 and 500,000 with 1,039 out of a total of 2,390 miles of negative overhead trolley coach wire being located in this group of cities. Next in importance in the trolley coach field is the group of cities between 100,000 and 250,000 in which are located 605 miles of trolley coach negative wire. On the other hand there are only 91 miles of negative trolley coach wire in the cities over 1,000,000 population and there is none in the suburban areas. In cities between 50,000 and 100,000 there are 290 miles and in cities less than 50,000 there are 202 miles.

More than half of the 87,700 round-trip miles of transit motor bus route is in suburban and local intercity service. In city service there are approximately 41,000 round-trip miles. Of these, 32,000 are located in cities less than 500,000 with the greatest single amount, 10,900 miles, being located in cities between 100,000 and 250,000. This is more than the total of 8,900 round-trip miles, serving the two largest groups, 500,000 to 1,000,000 and over 1,000,000. In cities less than 50,000 motor buses predominate heavily with 4,800 round-trip miles as compared with 450 miles of street railway track and 202 miles of trolley coach route.

TABLE NO. 16

Ten Year Record of Electric Railway Track, Motor Bus Route and
Trolley Coach Route of the Transit Industry in the
United States, 1935-1944

	TOTAL MIL	ES OF RAILW	AY TRACK	TROLLEY	MOTOR	
AS OF DECEMBER 31ST	SURFACE	SUBWAY AND ELEVATED	TOTAL	COACH MILES OF NEGATIVE OVERHEAD WIRE	BUS MILES OF ROUTE ROUND-TRIP	
1935	25,470 24,040 22,460 20,500 19,300 18,360 17,100 16,950 16,950 16,860	1,230 1,260 1,310 1,300 1,300 1,240 1,250 1,250 1,260 1,252	26,700 25,300 23,770 21,800 20,600 19,600 18,350 18,200 18,210 18,112	548 859 1,166 1,398 1,543 1,925 2,098 2,410 2,390 2,390	58,100 62,200 67,000 70,400 74,300 78,000 82,100 85,500 87,000 87,700	

EMPLOYEES AND PAYROLL

RECORD of the total number of transit employees during the 10-year period ended in 1944 is given in Table 17 together with the total transit payroll and the average annual earnings per employee in each of the years covered.

The moderate increase to 242,000 in the number of employees in 1944 from 239,000 in 1943 is partly a reflection of the manpower shortage and the difficulty of getting additional employees and partly a reflection of the fact that transit traffic was practically stabilized in 1944 after the long, steep rise in 1942 and 1943. But while the number of employees increased, only 3,000 between 1943 and 1944, the payroll increased by \$45,000,000, from \$554,000,000 to \$599,000,000 and the average earnings per employee rose from \$2,318 to \$2,475. Although wages in the transit industry are supposed to be stabilized, this somehow did not prevent numerous rate increases from coming into effect during the year and these together with more liberal allowances, a shorter work day or work week with tighter overtime provisions were responsible for the rather substantial increase in both the average earnings per employee and in the total payroll.

Since 1940 there has been a steady increase in employees, payroll and average earnings, but prior to 1940 there was a considerable amount of fluctuation in the number of employees.

First there were the fluctuations in business conditions which directly affected the demand for transportation.

TABLE NO. 17

Ten Year Record of Number of Employees, Annual Payroll and Average Annual Earnings per Employee in the Transit Industry of the United States—1935 to 1944

YEAR	AVERAGE NUMBER OF EMPLOYEES	PAYROLL	AVERAGE ANNUAL EARNINGS PER EMPLOYEE
1935		\$321,000,000	\$1,536
1936	212,000	338,000,000	1,594
1937	. 215,000	356,000,000	1,656
1938	207,000	351,000,000	1,696
1939	204,000	356,000,000	1,745
1940	203,000	360,000,000	1,773
1941	205,000	386,000,000	1,882
1942	219,000	462,000,000	2,110
1943	239,000	554,000,000	2,318
1944	242,000	599,000,000	2,475

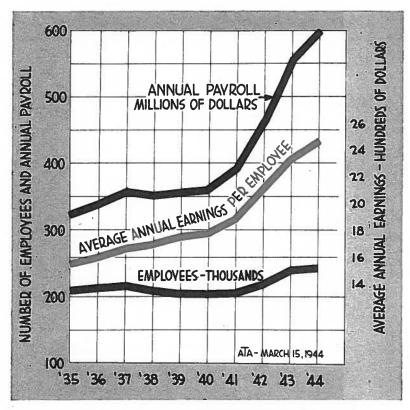


CHART XX NUMBER OF EMPLOYES, ANNUAL PAYROLL AND AVERAGE ANNUAL EARNINGS PER EMPLOYE 1935-1944.

Second, there was intensified competition from private automobiles which produced a steady drain on transit companies.

Third was the program of conversion, first to one-man cars of the big city systems and second to motor buses on the part of smaller systems and on many lines of the large systems.

These three causes account for the fluctuation of employment in the years prior to the war. During the entire period from 1935 to 1944 the average earnings per employee rose steadily from \$1,536 to \$2,475. This increase in the earnings of individual employees also had the effect of steadying the trend of the total payroll. There was only one interruption to its upward course. That was in 1938 when the business recession already referred to produced a sharp drop in number of employees and, in consequence, the total payroll declined from \$356,000,000 to \$351,000,000. Even under those conditions the average earnings per employee increased, rising from \$1,656 to \$1,696.

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