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Transit Fact Book

1944

AMERICAN

Transit

ASSOCIATION

292 MADISON AVE.



NEW YORK 17, N. Y.

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

TRANSIT FACT BOOK

Annual Summary of Basic Data and Trends

in the Transit Industry

of the United States

1 9 4 4



Prepared by

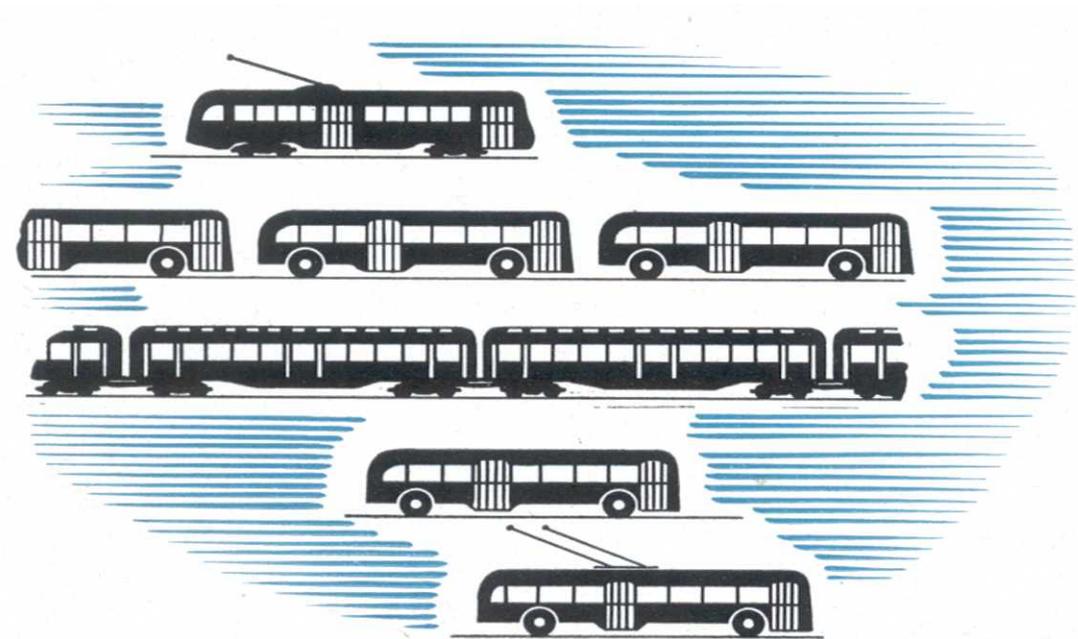
AMERICAN TRANSIT ASSOCIATION

292 MADISON AVE., NEW YORK 17, N. Y.

THE factual data and statistical tables presented in this Fact Book were compiled by the statistical department of the American Transit Association. The figures given are in all cases totals for the whole transit industry of the United States.

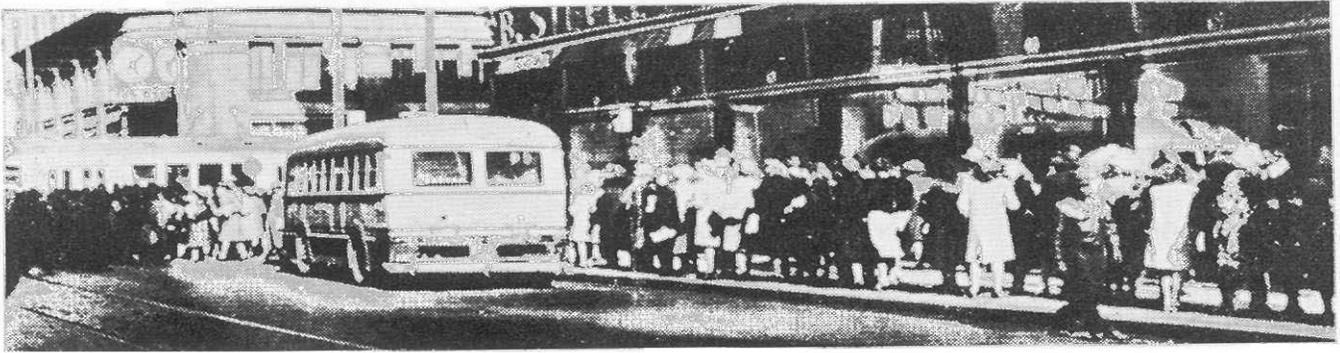
The transit industry herein represented comprises all organized local passenger transportation agencies except taxicabs and suburban railroads. Included are (1) electric street railways, (2) elevated and subway lines, (3) inter-urban electric railways, (4) local motor bus lines and (5) trolley coach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



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THE TRANSIT INDUSTRY

| | | |
|---|---|-----|
| 1. Number of Operating Companies | (Dec. 31, 1943) : Total | 845 |
| | (a) Electric Railway Companies (Total) | 179 |
| | Urban Surface Railway | 98 |
| | Subway and Elevated Railway | 5 |
| | Interurban Railway | 76 |
| | Railway Exclusively | 85 |
| | *Railway and Motor Bus Combined | 64 |
| | Railway and Trolley Coach Combined | 1 |
| | *Railway, Motor Bus and Trolley Coach Combined | 29 |
| | (b) Trolley Coach Companies (Total) | 46 |
| | (All Urban) | |
| | Trolley Coach Exclusively | 4 |
| | *Trolley Coach and Motor Bus Combined | 12 |
| | (c) Motor Bus Companies (Total) | 755 |
| | Urban Motor Bus | 476 |
| | Suburban Motor Bus | 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) | TROLLEY COACH AND MOTOR BUS OPERATIONS COMBINED | TROLLEY COACH EXCLUSIVELY | MOTOR BUS EXCLUSIVELY | GRAND TOTAL |
|-----------------------------|---|---|---------------------------|-----------------------|-------------|
| Over 1,000,000 | 12 | — | — | 21 | 33 |
| 500,000 - 1,000,000 . . . | 11 | — | — | 2 | 13 |
| 250,000 - 500,000 | 18 | 1 | — | 15 | 34 |
| 100,000 - 250,000 | 23 | 6 | 3 | 32 | 64 |
| 50,000 - 100,000 | 22 | 3 | 1 | 70 | 96 |
| Less Than 50,000 | 17 | 2 | — | 239 | 258 |
| Suburban and Other | 76 | — | — | 271 | 347 |
| TOTAL | 179 | 12 | 4 | 650 | 845 |

2. Miles of Line and Miles of Route Operated (Dec. 31, 1943)



| | |
|--|--------|
| (a) Electric Railway Line Mileage | 9,462 |
| Surface Railway Line Mileage | 9,080 |
| Subway and Elevated Line Mileage | 382 |
| (b) Trolley Coach Line Mileage | 1,209 |
| (c) Motor Bus Line Mileage | 38,000 |
| Total Line Mileage | 48,671 |
| (d) Electric Railway—Miles if Single Track | 18,210 |
| Surface Railway—Miles of Single Track | 16,950 |
| Subway and Elevated—Miles of Single Track | 1,260 |
| (e) Trolley Coach—Miles of Negative Over-head Wire | 2,410 |
| (f) Motor Bus—Miles of Route Round Trip | 87,000 |

3. Passenger Vehicles Owned (Dec. 31, 1943): Total 88,107



| | |
|-------------------------------------|--------|
| (a) Electric Railway Cars | 37,505 |
| Surface Railway Cars | 27,250 |
| Subway and Elevated Cars | 10,255 |
| (b) Trolley Coaches | 3,502 |
| (c) Motor Buses | 47,100 |

4. Investment (Dec. 31, 1943) : Total \$4,259,000,000



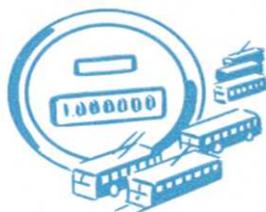
| | |
|----------------------|---------------|
| (a) Electric Railway | 3,650,000,000 |
| Surface Railway | 1,600,000,000 |
| Subway and Elevated | 2,050,000,000 |
| (b) Trolley Coach | 72,000,000 |
| (c) Motor Bus | 537,000,000 |

5. Operating Revenues—1943—Total \$1,294,000,000



| | |
|----------------------|-------------|
| (a) Electric Railway | 686,000,000 |
| Surface Railway | 537,000,000 |
| Subway and Elevated | 149,000,000 |
| (b) Trolley Coach | 63,700,000 |
| (c) Motor Bus | 544,300,000 |

6. Vehicle Miles Operated—1943—Total 3,262,400,000



| | |
|--------------------------------|---------------|
| (a) Electric Railway Car Miles | 1,439,700,000 |
| Surface Railway Car Miles | 978,000,000 |
| Subway and Elevated Car Miles | 461,700,000 |
| (b) Trolley Coach Miles | 129,700,000 |
| (c) Motor Bus Miles | 1,693,000,000 |

7. Total Passengers Carried—1943—Total 22,000,000,000



| | |
|----------------------|----------------|
| (a) Electric Railway | 11,806,000,000 |
| Surface Railway | 9,150,000,000 |
| Subway and Elevated | 2,656,000,000 |
| (b) Trolley Coach | 1,175,000,000 |
| (c) Motor Bus | 9,019,000,000 |

8. Revenue Passengers Carried—1943—Total 17,918,000,000



| | |
|----------------------|---------------|
| (a) Electric Railway | 9,410,000,000 |
| Surface Railway | 6,832,000,000 |
| Subway and Elevated | 2,578,000,000 |
| (b) Trolley Coach | 938,000,000 |
| (c) Motor Bus | 7,570,000,000 |

9. Number of Employees (Average 1943)—Total 238,000



| | |
|----------------------|---------|
| (a) Electric Railway | 136,000 |
| Surface Railway | 98,000 |
| Subway and Elevated | 38,000 |
| (b) Trolley Coach | 8,000 |
| (c) Motor Bus | 94,000 |

10. Payroll—1943—Total \$550,000,000



| | |
|----------------------|-------------|
| (a) Electric Railway | 314,000,000 |
| Surface Railway | 226,000,000 |
| Subway and Elevated | 88,000,000 |
| (b) Trolley Coach | 18,000,000 |
| (c) Motor Bus | 218,000,000 |

11. Expenditures for Materials—1943—Total \$174,100,000



| | |
|-------------------------------|------------|
| (a) Maintenance Materials | 77,300,000 |
| (b) Operating Materials | 96,800,000 |
| I. Coal | 11,100,000 |
| II. Gasoline | 40,000,000 |
| III. Diesel Oil | 1,600,000 |
| IV. Lubricants | 3,100,000 |
| V. Electric Power (Purchased) | 41,000,000 |

12. Electrical Energy Consumed (Kw-hr.)—1943 7,000,000,000

13. Ratio of Daily Transit Rides to Urban Population
—1943 (Ratio Expressed as a Percentage)



| | |
|-------------------------------------|------|
| Cities over 1,000,000 Population | 152% |
| Cities 500,000-1,000,000 Population | 145 |
| Cities 250,000-500,000 Population | 137 |
| Cities 100,000-250,000 Population | 105 |
| Cities 50,000-100,000 Population | 78 |
| Cities 25,000-50,000 Population | 34 |

THE YEAR 1943

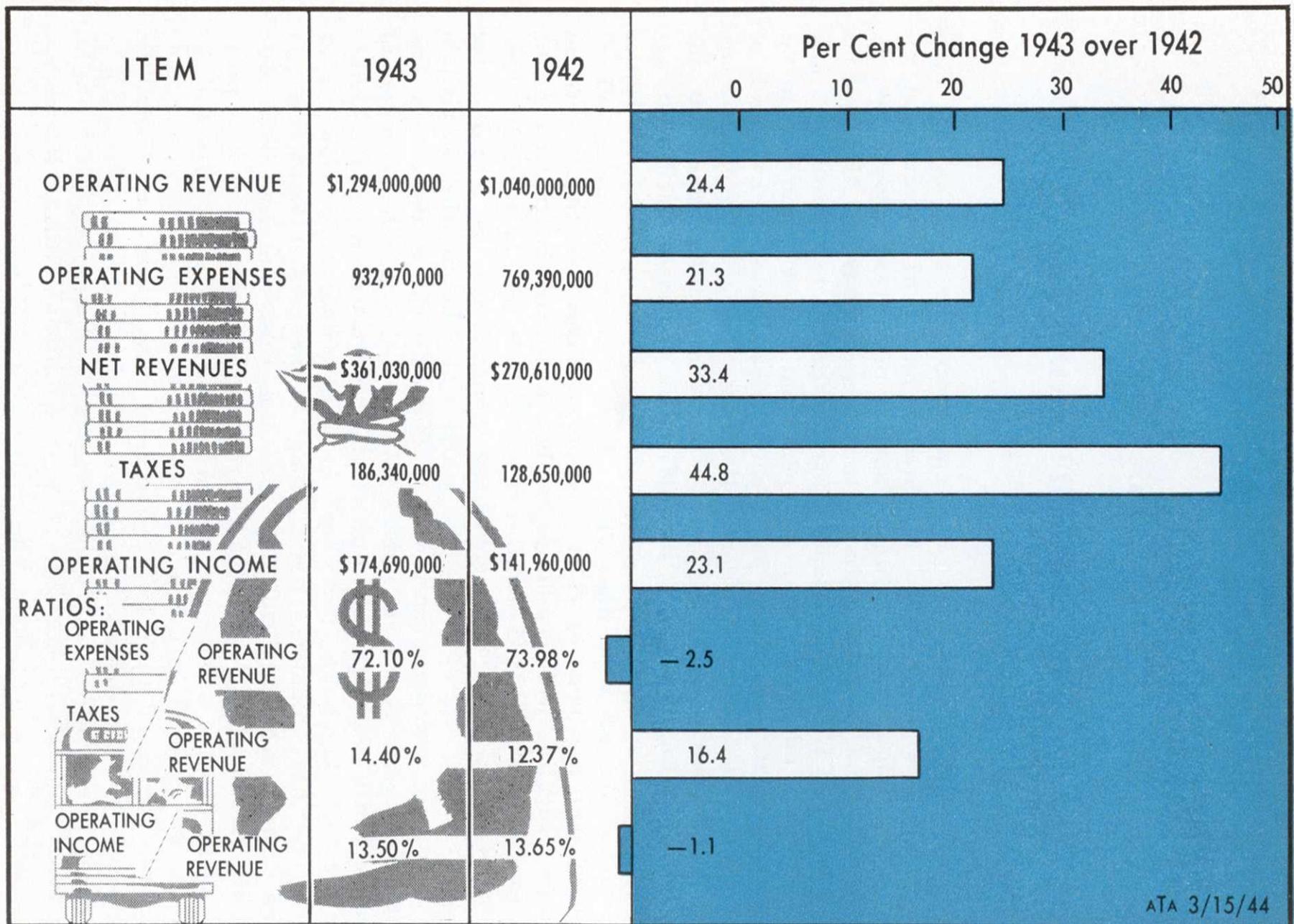
IN THE TRANSIT INDUSTRY

THE year 1943 in the transit industry was characterized by capacity operation. The high level of traffic and earnings reached at the end of 1942 was maintained throughout the following year. In December 1942 the number of passengers carried indicated an annual rate of 22 billion passengers. The complete record for 1943 shows that the total number of passengers carried reached the all time high of 22,000,000,000, a volume of riding, operators struggling with conditions prevailing in the 1933-1935 depression years would have considered preposterous.

Of even more vital significance to transit managements than the achievement of a new high record of traffic was the suggestion that the peak of the war stimulated traffic may have been reached in 1943. This possibility is implicit in the fact stated above that the annual rate of 22 billion was reached in December 1942 while the actual total for the whole year 1943 did not exceed it. The rapid climb which featured the year 1942 with each succeeding month registering a new high, was

not repeated in 1943. Instead there was a period of hesitation at the opening of the year followed by a resumption of the rise in March which carried through to August and a new peak, and then a leveling off to the end of the year with the month of December showing a decided slump.

The slump in December was due primarily to the completion of war contracts in many industrial centers and the consequent laying off of many workers. It may represent only a temporary interruption of the trend rather than a reversal. New war contracts may be placed or the workers may be absorbed in civilian production. The settlement of this point will, of course, be an important factor in determining the future course of transit traffic. However, as long as the present restrictions on gasoline, tires and new automobile production are continued it is probable that transit companies will be called upon to continue to carry their present heavy loads. And if gasoline consumption is further restricted as it may very well be, particularly in the west, additional demand for transit service may result.



ATA 3/15/44

RESULTS OF TRANSIT OPERATIONS IN 1943 COMPARED WITH 1942

CHART NO. I

RESULTS OF OPERATIONS IN 1943

THE financial results of transit operations in 1943 are presented in Chart I where comparison is made with the results in 1942. Revenues in 1943 were \$1,294,000,000 a new high for the industry and an increase of 24.4 per cent over 1942. Operating expenses, however, increased only 21.3 per cent. The fact that this increase was less than the increase in revenues resulted in a quite substantial increase in net operating revenue, from \$270,610,000 to \$361,030,000 or 33.4 per cent.

It is interesting to note that while the increase in revenues in 1943 over 1942 was less than the increase in 1942 over 1941,—24.4 per cent compared with 29.9 per cent, operating expenses continued to increase at about the same rate as in the previous year. This was undoubtedly due to the steadily increasing cost of labor in 1943 resulting both from higher wage rates and the greater amount of necessary overtime at premium rates because of the increasing manpower shortage. Another contributory cause of the higher expenditures in 1943 was the fact that the industry was able to secure a larger proportion of its maintenance materials requirements than in 1942 when expendi-

tures for maintenance had been sharply curtailed by inability to get critical materials.

Taxes again showed the largest increase of any item in the industry's operating statement, rising from \$128,650,000 in 1942 to \$186,340,000 in 1943 or 44.8 per cent. This was on top of an increase of 97.1 per cent in 1942. This jump of \$58,000,000 in the industry's tax bill substantially reduced the amount available for return on the investment. After paying the \$186,340,000 tax bill in 1943 there was left an operating income of \$174,690,000 which was 23.1 per cent more than in 1942. Out of this amount, must come rents, interest charges, dividends, if any, and various reserves. While it was larger than last year, as already indicated, it represented a slightly smaller percentage of the gross than in 1942—13.50 per cent as against 13.65 per cent.

The reduction in the share of the gross available to capital was due entirely to the increase in taxes which absorbed 14.40 per cent of the operating revenues in 1943 compared with 12.37 per cent in 1942. Operating expenses, the only other factor involved, took a smaller share, the operating ratio, dropping from 73.98 per cent to 72.10 per cent.

PASSENGER TRAFFIC IN 1943

IN Table 1 the 22,000,000,000 passengers carried in 1943 is broken down, first according to the type of service and second according to the size of the communities in which the riding occurred. It will be noted that more than half of all of the riding in 1943 was in cities of 500,000 population and over, and further, that about 37 per cent of all the rides taken were in cities of more than 1,000,000 population.

Another interesting fact brought out in this table is that the number of passengers carried on motor buses was about the same as the number

carried on the surface street railways, the figures being 9,019,000,000 carried by the buses and 9,150,000,000 carried by the street railways.

The 1943 total of bus passengers reflects a slowing down in the rate of progress heretofore maintained by the bus. It was the restrictions placed upon the operation of buses by the government in the interest of gasoline and rubber conservation which definitely retarded the rate of increase in bus traffic and deflected some motor bus passengers to the street railways.

Surface railway and motor bus traf-

TABLE NO. 1

**TOTAL PASSENGERS CARRIED ON TRANSIT LINES OF UNITED STATES IN 1943
DISTRIBUTED BY TYPE OF SERVICE AND POPULATION GROUPS**

| POPULATION GROUP | RAILWAY | | | TROLLEY COACHES <i>(millions)</i> | MOTOR BUSES <i>(millions)</i> | GRAND TOTAL <i>(millions)</i> |
|----------------------------|------------------------------|--|----------------------------|---|-------------------------------------|-------------------------------------|
| | SURFACE <i>(millions)</i> | SUBWAY AND ELEVATED <i>(millions)</i> | TOTAL <i>(millions)</i> | | | |
| Over 1,000,000 | 3,851 | 2,656 | 6,507 | 77 | 1,626 | 8,210 |
| 500,000 - 1,000,000 . . . | 2,365 | — | 2,365 | 190 | 827 | 3,382 |
| 250,000 - 500,000 | 1,360 | — | 1,360 | 473 | 1,751 | 3,584 |
| 100,000 - 250,000 | 651 | — | 651 | 231 | 1,893 | 2,775 |
| 50,000 - 100,000 | 392 | — | 392 | 120 | 1,432 | 1,944 |
| Less Than 50,000 | 206 | — | 206 | 84 | 564 | 854 |
| Suburban and Other | 325 | — | 325 | — | 926 | 1,251 |
| TOTAL | 9,150 | 2,656 | 11,806 | 1,175 | 9,019 | 22,000 |

DISTRIBUTION OF TRANSIT TRAFFIC IN THE UNITED STATES BY TYPE OF SERVICE AND POPULATION GROUPS 1943

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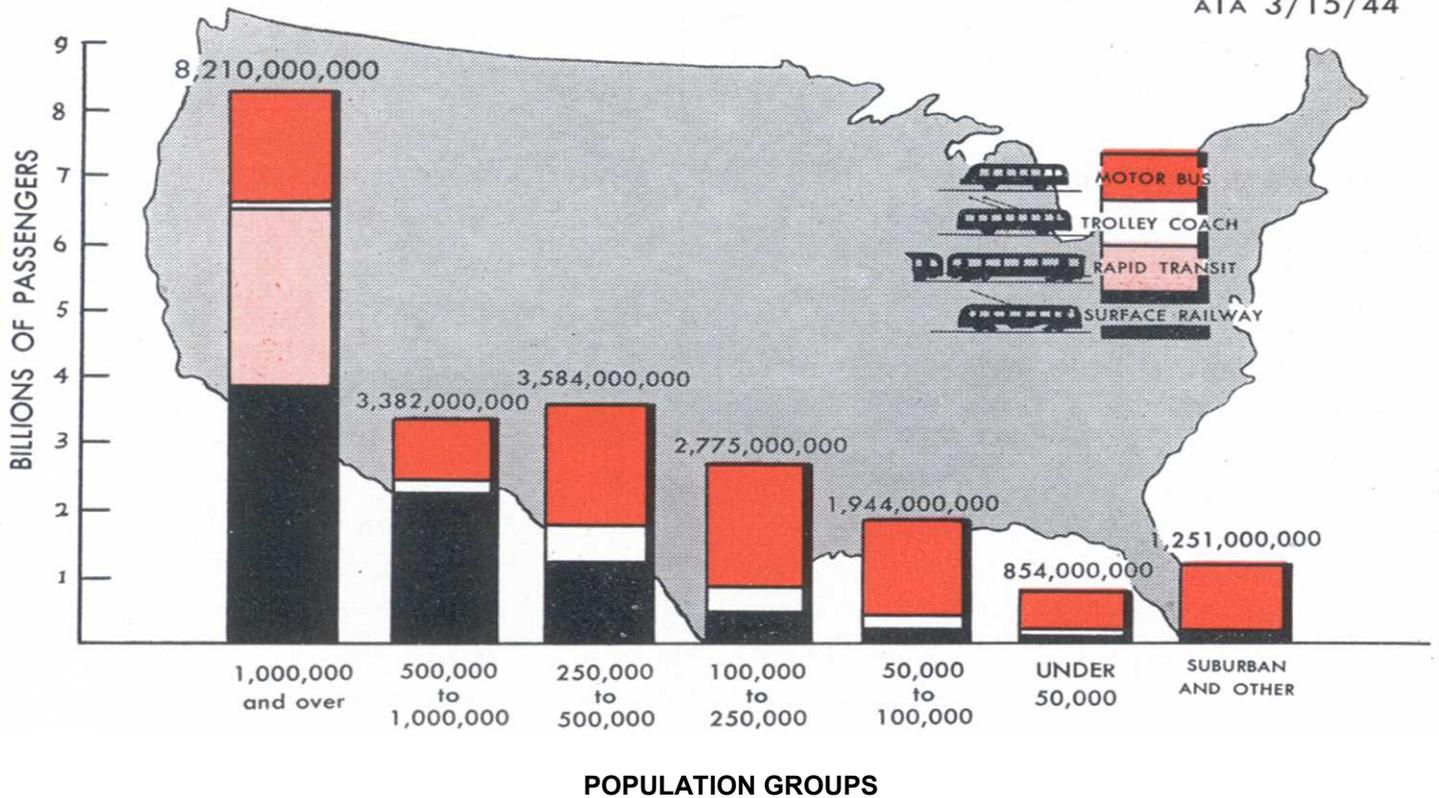


CHART NO. II

fic account for more than 80 per cent of the total transit traffic. The balance is made up of rapid transit passengers and trolley coach passengers. The rapid transit passengers are confined to the cities over 1,000,000 population, but the trolley coach passengers are scattered in all of the groups, and are rather heavily concentrated in the cities between 250,000 and 500,000 population. There were 473,000,000 in those cities out of a total of 1,175,000,000 trolley coach passengers or about 40 per cent. On the other hand, they comprised only

about 13 per cent of the total passengers (3,584,000,000) in the 250,000-500,000 population group. The great bulk of the passengers in this group was carried by the surface railways and motor buses with the latter predominating.

Table 1 brings out clearly the fact that in cities over 500,000 population the street railway is still the dominant factor in local transportation augmented in cities above 1,000,000 population by the rapid transit lines, while in cities of less than 500,000 the motor bus predominates and its pre-

TABLE NO. 2

**REVENUE PASSENGERS CARRIED ON TRANSIT LINES OF UNITED STATES IN 1943
DISTRIBUTED BY TYPE OF SERVICE AND POPULATION GROUPS**

| POPULATION GROUP | RAILWAY | | | TROLLEY COACHES <i>(millions)</i> | MOTOR BUSES <i>(millions)</i> | GRAND TOTAL <i>(millions)</i> |
|------------------------|------------------------------|--|----------------------------|---|-------------------------------------|-------------------------------------|
| | SURFACE <i>(millions)</i> | SUBWAY AND ELEVATED <i>(millions)</i> | TOTAL <i>(millions)</i> | | | |
| Over 1,000,000 | 2,782 | 2,578 | 5,360 | 44 | 1,436 | 6,840 |
| 500,000 - 1,000,000 . | 1,709 | — | 1,709 | 138 | 579 | 2,426 |
| 250,000 - 500,000 .. | 971 | — | 971 | 376 | 1,347 | 2,694 |
| 100,000 - 250,000 .. | 528 | — | 528 | 203 | 1,578 | 2,309 |
| 50,000 - 100,000 ... | 348 | — | 348 | 104 | 1,245 | 1,697 |
| Less Than 50,000 ... | 191 | — | 191 | 73 | 528 | 792 |
| Suburban and Other . | 303 | — | 303 | — | 857 | 1,160 |
| TOTAL | 6,832 | 2,578 | 9,410 | 938 | 7,570 | 17,918 |

dominance increases as the cities descend in the scale of population. In cities below 100,000 more than two-thirds of the passengers are carried in buses. Finally in the suburban areas more than three-fourths of the traffic is accounted for by the bus.

Table 2 presents the revenue passengers classified in the same manner as the total passengers in Table 1.

An interesting point brought out in Table 2 is that the number of revenue passengers carried by the motor buses exceeded the number carried by the surface railways although on the basis of total passengers the reverse was the case. The explanation is to be found in the greater proportion of transfer passengers carried on the railways.

COMPARISON WITH 1942

TRANSIT traffic in 1943 was 22.2 per cent greater than in 1942.

This is the over-all increase for the country as a whole. However, there was a wide range in the rate of increase among the several population groups,—from 9.8 per cent in the largest cities to 43.5 per cent in the smallest cities as shown in Chart

III. In the two middle groups with populations from 100,000 to 250,000 and from 250,000 to 500,000 the average increase was 30 per cent. These are the groups in which a very large part of the industrial war production is concentrated.

That the highest percentage increases in transit traffic should occur

TRANSIT TRAFFIC IN 1943
 SHOWING PERCENT INCREASE OVER 1942 FOR EACH OF
 THE POPULATION GROUPS AND FOR THE UNITED STATES

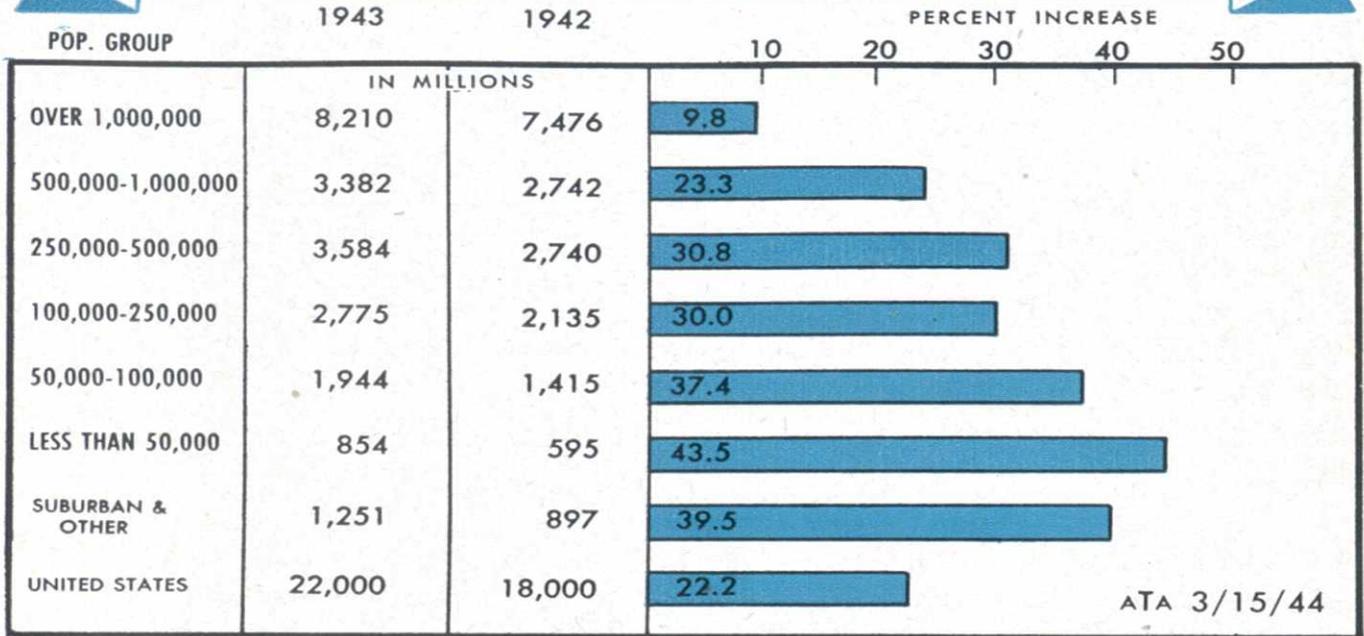


CHART NO. III

in the smallest cities and the smallest increases in the largest cities, is readily explainable. There are two principal reasons for it. In peacetime the proportion of the total riding in American cities that went to the transit vehicles tended to become progressively smaller as the size of the city decreased. When the war began the division of traffic between public and private transportation in some small cities was in favor of private transportation in ratios as high as 80-20, that is, 80 per cent of the riding was in private vehicles and 20 per cent in transit vehicles. When the use of private automobiles was curtailed by the rubber shortage and gasoline ra-

tioning it meant that a large portion of the 80 per cent had to ride on facilities geared to handle only 20 per cent and the effect was overwhelming. The added riding on transit vehicles in many instances was several times as large as the normal riding. In the largest cities on the other hand conditions were reversed. In these cities the number of people using their private cars daily was so small in comparison with the number using the public transit facilities that when they had to put up their cars and shift to the public facilities the effect on the volume of traffic carried on the latter was relatively small. Very little expansion of transit facilities would have been

TREND OF TRANSIT TRAFFIC, 1939-1943

TO DECEMBER 31, 1943

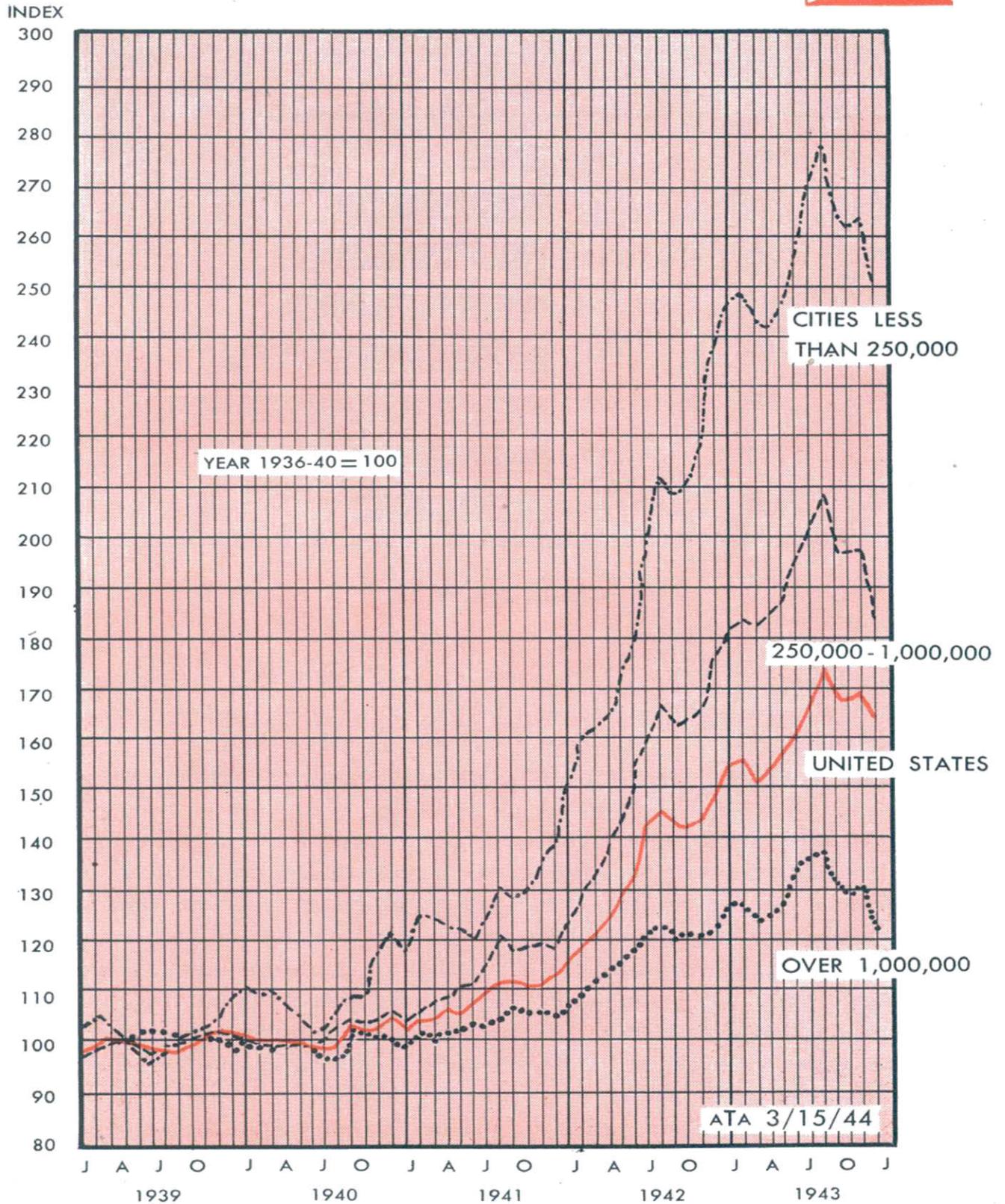


CHART NO. IV

required to carry all of the private car users in the larger cities if that had been necessary.

The second reason why the per cent increases in traffic in the small cities are much greater than in the large cities is that when a large new industrial plant is started in a small city, or when an established plant in such a city changes from slack to boom operations, the number of employees affected represents a substantial proportion of the city's population. In the larger cities the establishment of one new industrial plant hardly makes a dent in the community's consciousness and the effect on transit traffic is negligible. It would take a number of such plants located in all sections of the city to exert an effect comparable to that of a single large industry in the small city.

The simultaneous occurrence of these two conditions during the present war period has had an effect on public transportation in our small cities that is without precedent in the whole previous history of the transit industry. Large new industrial plants with employees attracted from all quarters and equivalent in number to or exceeding the normal population of the city started up almost overnight in many of these small cities. Workers and workers' families flocked in without warning and before adequate facilities could be prepared for them. Coincidentally automobile usage was curtailed. The local transit line became the sole means of trans-

portation for large numbers of private car owners who could not get gasoline or tires, as well as for those that did not own cars. As a result the transit companies in these smaller cities have been called upon to handle several times their normal peacetime traffic loads.

Some indication of the relative effect of war conditions on the transit traffic in the small cities and the large cities is given in Chart IV. It shows the course of traffic since 1939 in the United States as a whole, in cities over 1,000,000 population, in cities 250,000 to 1,000,000 population and in cities less than 250,000. A separate index is shown for each group based upon average traffic for the five years 1936-40 in each group as 100. The indexes have been corrected for seasonal variation and for the varying number of days and holidays in the months. Only changes resulting from actual variations in traffic therefore, are reflected in this chart.

It will be noted that at the peak of traffic in August, 1943 the index for the United States as a whole was about 73 per cent above the 1936-40 average. In cities over 1,000,000 population, however, traffic had risen only about 36 per cent above the 1936-40 level. In cities between 250,000 and 1,000,000 traffic had risen 108 per cent, while in cities less than 250,000 the increase was 177 per cent. This was the average increase for all cities less than 250,000, but in some individual cities in this group

the increase was as much as 600 per cent over their 1936-40 average traffic.

After August 1943 traffic turned down in the United States as a whole and in all of the three population groups. This downward trend continued to the end of the year. As yet the decline is very slight and the traffic of many companies is still holding up and in some instances continuing to forge ahead. In all of the groups and in the country as a whole the level of traffic in December 1943 was still above the level of the corresponding month of 1942. It is interesting to note, however, that in the decline since August the traffic in the smaller cities has a tendency to go off faster than in the larger cities.

This is just the reverse of what the tendency was when the traffic was increasing. Then the small cities tended to outstrip the large cities in the rate of increase for reasons which here have been pointed out. Those factors which produced the more rapid increase in the small cities on the way up, however, also work in reverse on the way down. When the working plants in a small, one-industry city shut down or even when they merely curtail production the effect on transit traffic in the city is apt to be substantial. It may be expected, too, that when and as private automobile construction is resumed and gasoline and tire restrictions removed passenger traffic on the public transit vehicles in small cities will decrease abruptly.

LONG TERM TREND

OF TRAFFIC

CHART V 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 last 10 years, 1934 to 1943, while in table 4 the revenue vehicle miles operated are shown in the same way.

Prior to the present war the peak year of transit traffic was 1926 when something more than 17 billion passengers were carried. 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 set-back. 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 these 10 years was the expansion of the bus and to a lesser degree that of the trolley coach. From only slightly more than 2 billions in 1934, the number of bus passengers has increased to over 9 billions in 1943. Similarly trolley coach traffic has increased from 68 millions to nearly 1.2 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 spectacular than that of its automotive counterpart.

PASSENGERS CARRIED BY TRANSIT COMPANIES IN THE UNITED STATES, 1922-1943

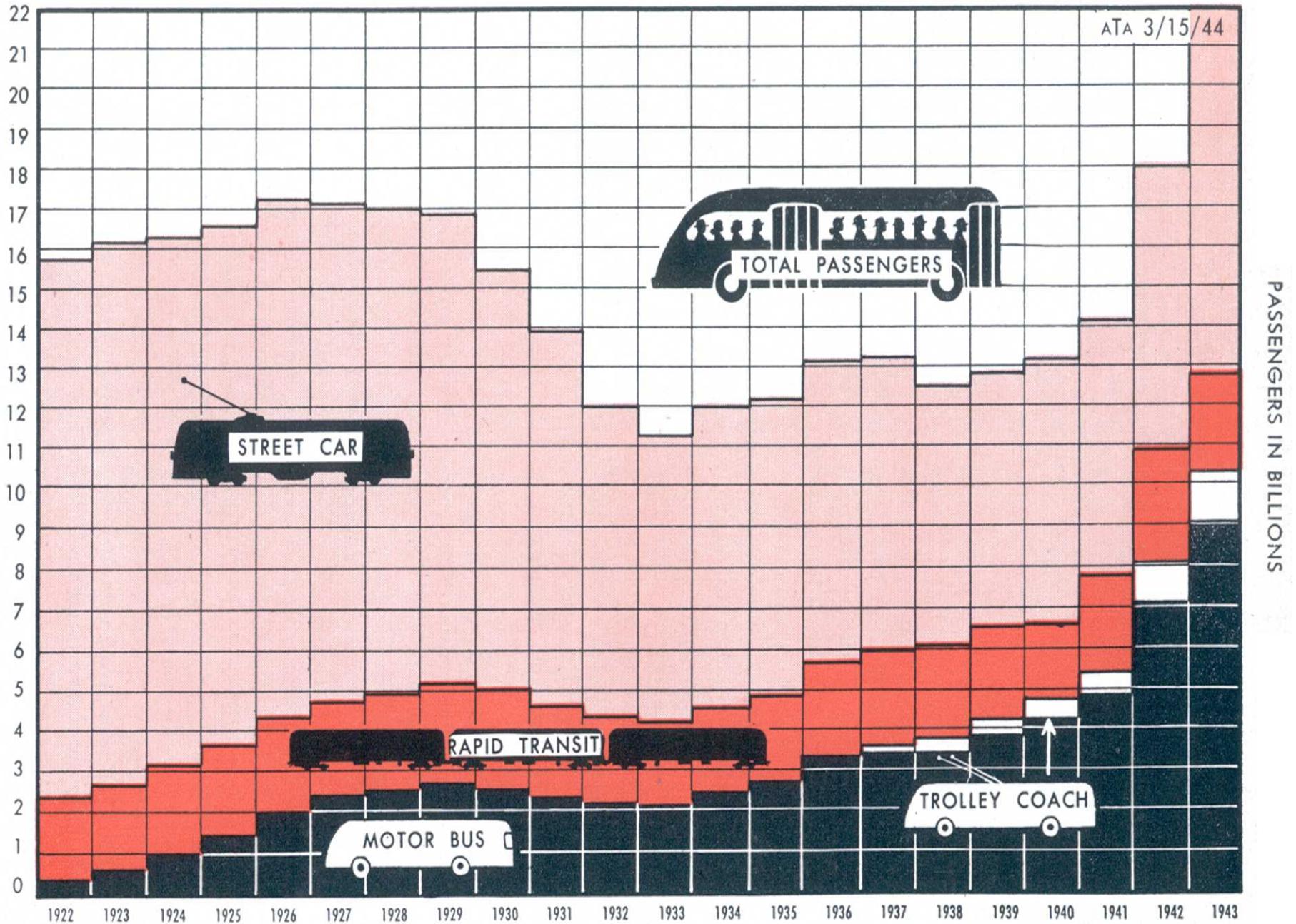


CHART NO. V

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 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 13 on page 41 will show that the amount of street railway track in service was reduced by more than 10,000 miles during this period.

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. This was in spite of the fact that the track mileage operated in 1943 was twelve thousand miles less than in 1931.

Traffic on the subway and elevated lines had a slow but steady growth over the last 10 years. There were small decreases in 1937 and 1938, in spite of the opening of new lines in New York, but in 1940 traffic turned up again. Though not affected by the war to anything like the extent of the other services the rapid transit lines nonetheless achieved a new high in 1943 when they carried 2,656 million passengers.

TABLE NO. 3
TEN YEAR RECORD OF TOTAL TRANSIT PASSENGERS IN THE UNITED STATES
BY TYPES OF SERVICE—1934 TO 1943

| CALENDAR YEAR | RAILWAY | | | TROLLEY COACHES (millions) | MOTOR BUSES (millions) | GRAND TOTAL (millions) |
|---------------|-----------------------|-----------------------------------|---------------------|-------------------------------|---------------------------|---------------------------|
| | SURFACE (millions) | SUBWAY AND ELEVATED (millions) | TOTAL (millions) | | | |
| 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 |

INDEXES OF TOTAL PASSENGERS, URBAN POPULATION AND RIDES PER CAPITA (1924 = 100)

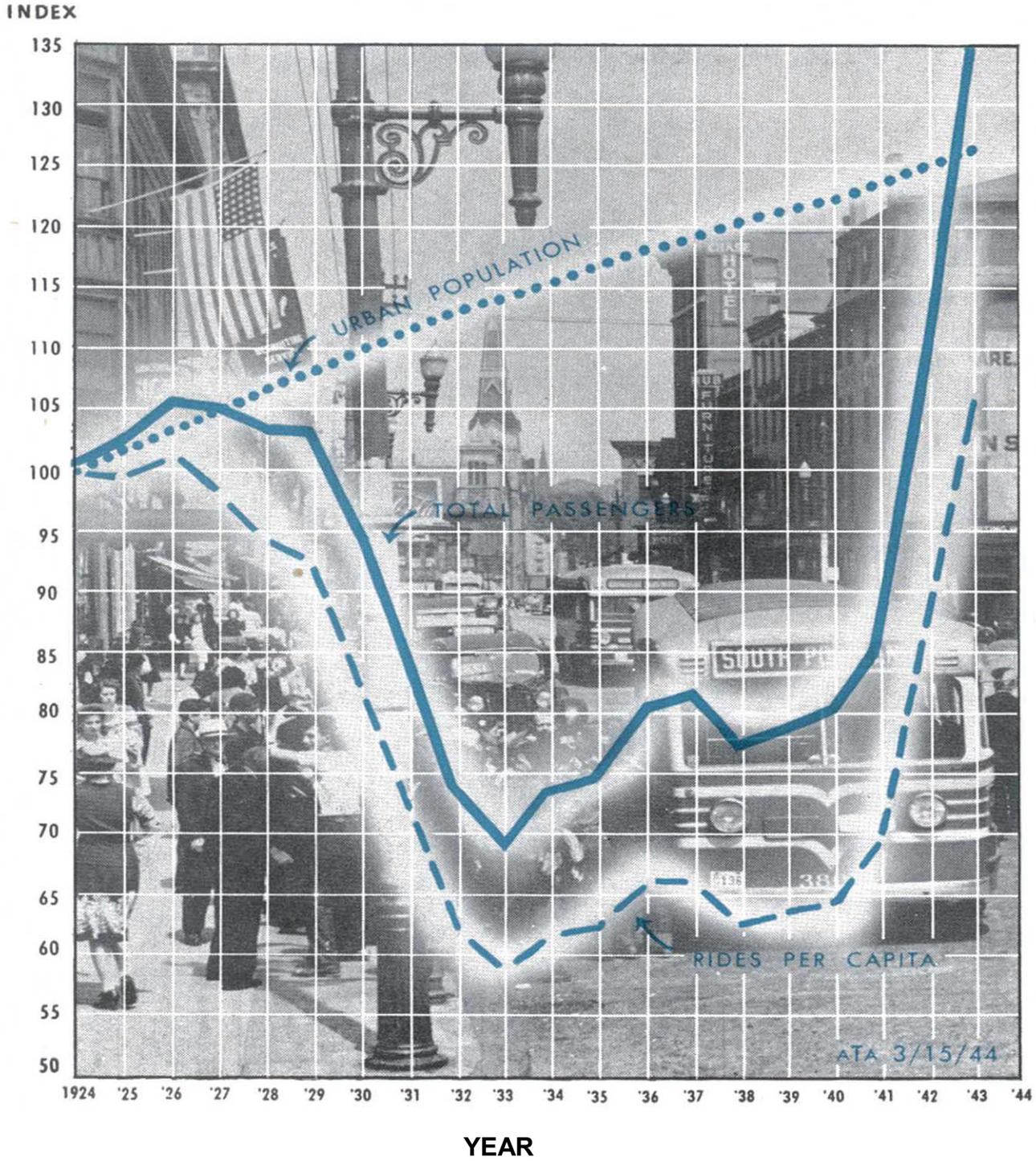


CHART NO. VI

RIDES PER CAPITA

THE comparative trends of urban population, total rides on transit lines and total rides per capita of urban population are presented in Chart VI on an index basis. The urban population is that defined by the United States Bureau of the Census and includes all cities and towns of 2,500 population and over.

Starting together at 100 in 1924 the indexes of total transit rides and rides per capita reached a low point in 1933 at 69.5 and 59.0 respectively. The index of urban population in the same period had risen without interruption from 100 to 117.5.

Despite the fact that the population continued to rise in the subsequent years the number of transit rides increased faster. By 1940, just before the effects of the national defense program began to be felt, the index, of transit riding stood at 80.4, and that of rides per capita at 64.9, while the index of urban population had climbed to 123.8.

By 1943, with war activities and restrictions on the use of automobiles boosting the traffic index to 135.0, the index of rides per capita reached 106.6 thus for the first time topping the old high of 101.1 reached back in 1926.

TABLE NO. 4

**TEN YEAR RECORD OF REVENUE MILES OPERATED BY TRANSIT VEHICLES
IN THE UNITED STATES BY TYPES OF SERVICE—1934 TO 1943**

| CALENDAR YEAR | RAILWAY | | | TROLLEY COACHES | MOTOR BUSES | GRAND TOTAL |
|---------------|--------------------|---------------------------|--------------------|--------------------|--------------------|--------------------|
| | SURFACE | SUBWAY AND ELEVATED | TOTAL | | | |
| | <i>(thousands)</i> | <i>(thousands)</i> | <i>(thousands)</i> | <i>(thousands)</i> | <i>(thousands)</i> | <i>(thousands)</i> |
| 1934 | 1,147,700 | 438,600 | 1,586,300 | 14,600 | 711,100 | 2,312,000 |
| 1935 | 1,096,600 | 447,400 | 1,544,000 | 19,000 | 764,000 | 2,327,000 |
| 1936 | 1,080,900 | 461,600 | 1,542,500 | 26,300 | 864,200 | 2,433,000 |
| 1937 | 1,029,200 | 469,100 | 1,498,300 | 49,700 | 957,000 | 2,505,000 |
| 1938 | 922,300 | 457,400 | 1,379,700 | 67,900 | 986,400 | 2,434,000 |
| 1939 | 878,300 | 469,400 | 1,347,700 | 74,900 | 1,047,400 | 2,470,000 |
| 1940 | 844,700 | 470,800 | 1,315,500 | 86,000 | 1,194,500 | 2,596,000 |
| 1941 | 792,200 | 472,800 | 1,265,000 | 98,400 | 1,313,000 | 2,676,400 |
| 1942 | 850,400 | 469,600 | 1,320,000 | 115,700 | 1,612,000 | 3,047,700 |
| 1943 | 978,000 | 461,700 | 1,439,700 | 129,700 | 1,693,000 | 3,262,400 |

ANNUAL RATE OF TRANSIT PASSENGER TRAFFIC
MONTHLY FOR 1938, 1941, 1942 AND 1943

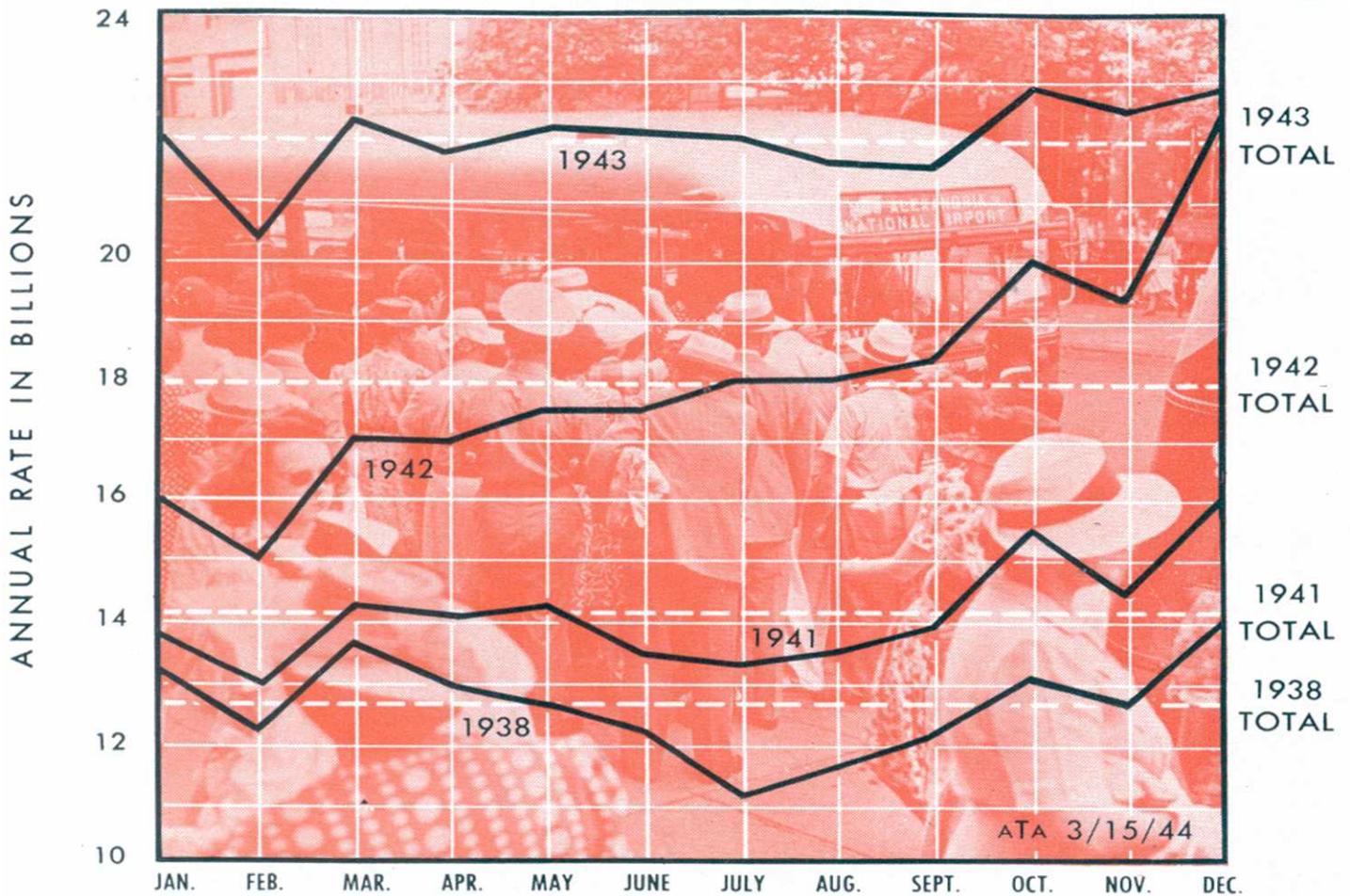


CHART NO. VII

ANNUAL RATE OF TRAFFIC

IN Chart VII is shown the annual rate at which passengers were being carried during each month of the years 1938, 1941, 1942 and 1943. The annual rate is the number of passengers carried during the month multiplied by twelve.

The most interesting feature of this chart is the rapid increase in the annual rate which occurred in 1942. From 16 billion in January it topped

22 billion in December. Traffic was climbing so fast during the year that the normal seasonal drop that comes in the summer months was completely obscured. From May right through September the upward trend continued without any set back.

The beginning of this tendency is shown in the 1941 curve. Although the usual summer decline in traffic occurred in that year, when compari-

son is made with 1938 it is seen that the 1941 seasonal recession was not

nearly so sharp as in 1938 which approximates the normal pattern.

REVENUES IN 1943

IN Table 5 the 1943 revenues of transit companies are distributed by type of service and population groups in a manner similar to the distribution of the total and revenue passengers in Tables 1 and 2.

Slightly more than half of the total revenue was derived from railway service—surface railways, elevated and subway lines. The largest single amount in this total, 188 million dollars, was contributed by the surface railways operating in cities over 1,000,000 population. The next largest amount, 149 million dollars, was contributed by the subway and elevated lines, also operating exclusively in

cities over 1,000,000, and making a total of 337 million dollars derived from railway service in our largest cities. It represents substantially more than a quarter of the total transit revenues for the year.

Transit revenue derived from cities over 1,000,000 represents slightly more than one-third of the total of all transit revenue. This proportion is somewhat less than the proportion of the total traffic traveling in these cities, however, due to the low fare prevailing in New York City.

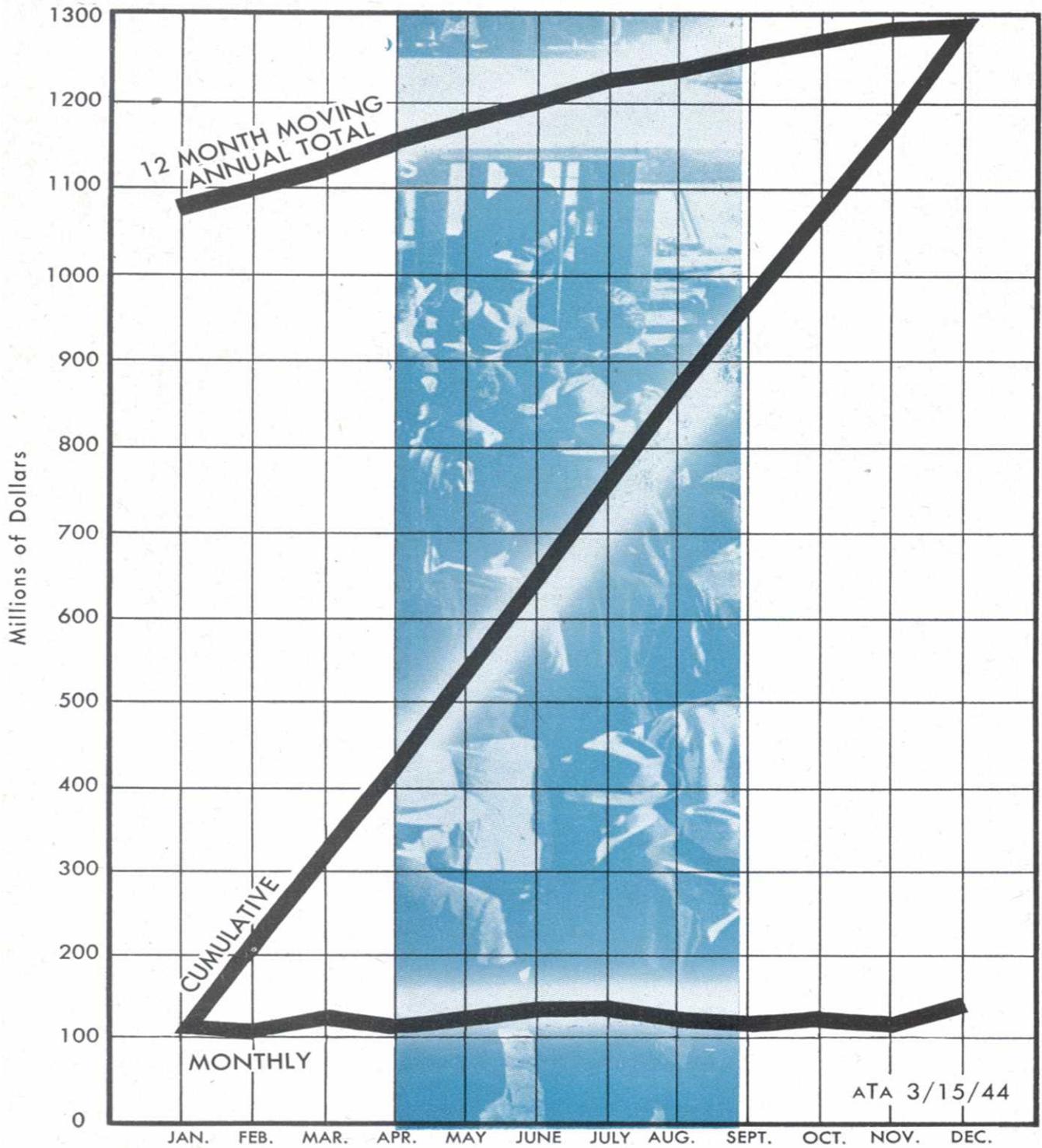
After the cities over 1,000,000 population the largest amount of revenue is found in the group of 250,000 to

TABLE NO. 5
TRANSIT REVENUES IN 1943 CLASSIFIED BY TYPES OF SERVICE
AND POPULATION GROUPS

| POPULATION GROUP | RAILWAY | | | TROLLEY COACHES | MOTOR BUSES | GRAND TOTAL |
|------------------------|------------------------------|--|----------------------------|--------------------|----------------|----------------|
| | SURFACE <i>(millions)</i> | SUBWAY AND ELEVATED <i>(millions)</i> | TOTAL <i>(millions)</i> | | | |
| Over 1,000,000 | \$188 | \$149 | \$337 | \$3.3 | \$96.1 | \$ 436.4 |
| 500,000 - 1,000,000 . | 122 | — | 122 | 8.9 | 42.5 | 173.4 |
| 250,000 - 500,000 .. | 76 | — | 76 | 26.9 | 98.8 | 201.7 |
| 100,000 - 250,000 .. | 38 | — | 38 | 12.1 | 122.1 | 172.2 |
| 50,000 - 100,000 ... | 25 | — | 25 | 7.1 | 80.6 | 112.7 |
| Less Than 50,000 ... | 11 | — | 11 | 5.4 | 32.9 | 49.3 |
| Suburban and Other . | 77 | — | 77 | — | 71.3 | 148.3 |
| TOTAL | \$537 | \$149 | \$686 | \$63.7 | \$544.3 | \$1,294.0 |

TREND OF TRANSIT REVENUE IN 1943

Showing the monthly trend, the cumulative monthly trend and the trend of the 12-month moving total



ATA 3/15/44

1943

CHART NO. VIII

500,000 population and in this group transit earning power is distributed more evenly among the three types of service than in any other group. Co-ordination of service has been developed to a high degree in this group. Bus service predominates contributing 98.8 million dollars of the total of 201.7 millions, but if the trolley coach total of 26.9 millions is added to the 76 millions of the surface railways it appears that the revenue produced by the electrically propelled vehicles in this group still exceeds that of the bus. In the cities below 250,000, however, the bus accounts for the greater part of the revenue.

Of the total transit revenue of 1294 million dollars in 1943 the surface, subway and elevated railways contributed 686 million or substantially more than half. The motor buses contributed 544.3 millions, slightly more

than the 537 million contributed by the surface railways and the trolley coaches accounted for the remaining 63.7 millions.

Table 6 shows the monthly record of transit revenues in 1943 and 1942. In Chart VIII they are plotted in the form of a "Z" chart. In addition to the monthly totals, the cumulative totals for the year at the end of each month and the twelve month totals at the end of each month, are also plotted. This last curve, the 12-month moving total, rises from approximately 1070 million dollars in January to 1294 millions in December, and reflects the steady climb in revenues in 1943. In contrast the curve at the bottom of the chart, the monthly revenues in 1943 fluctuate only slightly, but tends to maintain a constant level slightly above 100 million dollars.

TABLE NO. 6
MONTHLY DISTRIBUTION OF TRANSIT REVENUES—1943 AND 1942

| | 1943 | 1942 |
|-----------------|-----------------|-----------------|
| January | \$108,100,000 | \$76,700,000 |
| February | 100,200,000 | 72,000,000 |
| March | 108,800,000 | 81,300,000 |
| April | 106,100,000 | 81,700,000 |
| May | 109,000,000 | 84,800,000 |
| June | 109,200,000 | 85,100,000 |
| July | 108,000,000 | 86,800,000 |
| August | 107,300,000 | 88,000,000 |
| September | 105,300,000 | 89,100,000 |
| October | 110,600,000 | 96,100,000 |
| November | 108,400,000 | 91,600,000 |
| December | 113,000,000 | 106,800,000 |
| TOTAL | \$1,294,000,000 | \$1,040,000,000 |

CAPITAL AND MAINTENANCE EXPENDITURES OF TRANSIT COMPANIES IN THE UNITED STATES IN 1942 AND 1943 AND FORECAST FOR 1944

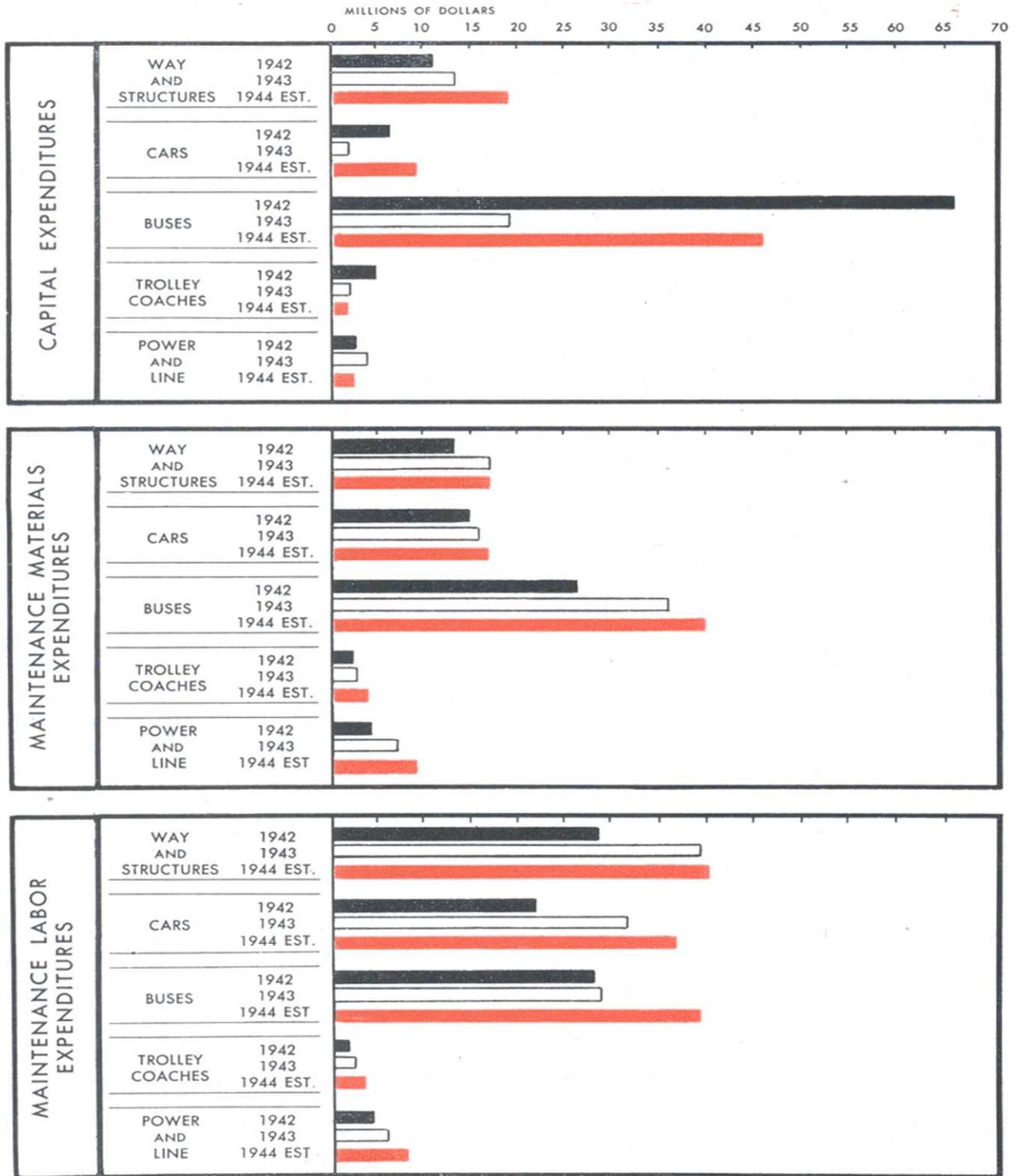


CHART NO. IX

CAPITAL AND MAINTENANCE

EXPENDITURES

IN Table 7 and Chart IX there is given a summary of capital and maintenance expenditures in 1943 in comparison with 1942 and with a forecast of such expenditures in 1944.

Capital expenditures in 1943 were sharply under the corresponding expenditures in 1942. This was anticipated in the forecasts for 1943 made last year, but the actual expenditures were even less than the forecasts. Government war restrictions were such that only absolutely essential projects could get clearance and obtain the necessary materials.

As a result total capital expenditures in 1943 amounted to only \$39,300,000 compared with \$90,990,000 in 1942, a year in which the effects of government restraints on private capital expenditures also had been experienced.

Nearly half of the total capital expenditures in 1943 went for new buses, but the total amount spent for buses, \$19,000,000, was less than a third of the \$66,900,000 spent for these vehicles in 1942. There was widespread demand for new buses in 1943 but severe restrictions on the

materials which go into their manufacture kept production down. Even the quotas originally authorized by WPB were not produced due in part to lack of readily available manufacturing facilities.

After buses the largest item of capital expenditure in 1943 was for way and structures. The amount was \$13,600,000 which was slightly above the \$11,850,000 expended in 1942. This item had been cut to the bone in 1942 and some expansion of the amount in 1943 was absolutely essential.

Expenditures for street cars and trolley coaches were about on a par in 1943 with \$1,800,000 going for the former and \$1,600,000 for the latter. In 1942 expenditures for street cars had been \$5,680,000 and for trolley coaches \$4,600,000. Again the 1943 figures represented not what the industry wanted or could absorb, but what it could obtain under the existing war conditions.

Expenditures for new power and line equipment in 1943 amounted to \$3,300,000, a substantial increase over the \$1,960,000 spent for this item in 1942. As in the case of way

TABLE NO. 7

CAPITAL AND MAINTENANCE EXPENDITURES OF TRANSIT COMPANIES IN THE UNITED STATES IN 1942 AND 1943 AND FORECAST FOR 1944

| | 1942 <i>(thousands)</i> | 1943 <i>(thousands)</i> | 1944 FORECAST <i>(thousands)</i> |
|---|----------------------------|----------------------------|--|
| CAPITAL EXPENDITURES | | | |
| Way and Structures | \$11,850 | \$13,600 | \$18,600 |
| Cars | 5,680 | 1,800 | 9,000 |
| Buses | 66,900 | 19,000 | 45,300 |
| Trolley Coaches | 4,600 | 1,600 | 750 |
| Power and Line | 1,960 | 3,300 | 1,500 |
| TOTAL CAPITAL EXPENDITURES | \$90,990 | \$39,300 | \$75,150 |
| MAINTENANCE EXPENDITURES—MATERIALS | | | |
| Way and Structures | \$13,100 | \$17,100 | \$17,050 |
| Cars | 15,000 | 15,300 | 16,000 |
| Buses | 26,500 | 35,400 | 39,600 |
| Trolley Coaches | 2,120 | 2,300 | 2,500 |
| Power and Line | 4,100 | 7,200 | 8,400 |
| TOTAL MAINTENANCE—MATERIALS | \$60,820 | \$77,300 | \$83,550 |
| MAINTENANCE EXPENDITURES—LABOR | | | |
| Way and Structures | \$28,400 | \$39,300 | \$40,000 |
| Cars | 22,300 | 31,900 | 36,300 |
| Buses | 28,000 | 29,000 | 38,500 |
| Trolley Coaches | 1,290 | 1,700 | 2,000 |
| Power and Line | 4,700 | 6,100 | 7,800 |
| TOTAL MAINTENANCE—LABOR | \$84,690 | \$108,000 | \$124,600 |
| TOTAL MAINTENANCE—MATERIALS & LABOR | \$145,510 | \$185,300 | \$208,150 |
| GRAND TOTAL—CAPITAL & MAINT. EXPENDITURES | \$236,500 | \$224,600 | \$283,300 |
| Fuel and Lubricants | \$50,500 | \$55,800 | \$57,800 |

and structures expenditures for power and line equipment had been severely curtailed in 1942 and some expansion in 1943 was essential to avoid breakdowns.

Maintenance expenditures are broken down between materials and labor. In both divisions 1943 expenditures show substantial increases over 1942. Materials expenditures in 1943 were \$77,300,000 compared with \$60,820,000 in 1942; expenditures for maintenance labor came to \$108,000,000 in 1943 as against \$84,690,000 in 1942. These increases are in sharp contrast to the reduction in capital expenditures. The reason is that labor costs were substantially higher and that maintenance materials were obtainable in greater quantities in 1943 than in 1942 whereas capital expenditures were more drastically curtailed. A heavier maintenance program in 1943 was necessary in order to keep existing plant operating even though renewals or improvements were postponed.

Maintenance of motor buses accounted for larger expenditures than any other item of maintenance with \$35,400,000 being spent for materials and \$29,000,000 for labor. Next

highest expenditures and not far behind were for maintenance of way and structures by the street railway lines. For way and structure materials \$17,100,000 was spent and \$39,300,000 for labor. Expenditures for maintenance of cars, that is street railway cars, were also relatively heavy amounting to \$15,300,000 for car materials and \$31,900,000 for labor. Power and line maintenance required an outlay of \$7,200,000 for materials and \$6,100,000 for labor. Trolley coach maintenance expenditures were the smallest, there being relatively few of these vehicles and most of them being comparatively new. For maintenance materials the trolley coaches required the expenditure of only \$2,300,000 and for labor \$1,700,000.

Total expenditures for maintenance, including both materials and labor, amounted to \$185,300,000 in 1943 which was \$40,000,000 more than was expended for maintenance in 1942. In addition the industry spent \$55,800,000 for operating materials, fuel and lubricants, or \$5,300,000 more than was spent for these items in 1942. Electric power purchased in 1943 cost \$41,000,000.

FORECAST OF EXPENDITURES

IN 1944

IT is evident from their forecasts of expenditures in 1944 that transit companies anticipate they will continue to get most of their maintenance materials requirements and that restrictions on plant improvements, extensions and renewals will be eased somewhat. The overall estimate of the industry's expenditures in 1944 for new plant and for maintenance, based on the companies' own forecasts for next year, is \$283,300,000 which is approximately 59 million dollars more than they spent in 1943.

Of the 1944 expenditures \$75,150,000 is expected to be spent on capital improvements, \$83,550,000 for maintenance materials and \$124,600,000 on maintenance labor. Thus the total for maintenance, materials and labor, is expected to reach \$208,150,000. In 1943 maintenance expenditures totalled \$185,300,000 while capital expenditures were only \$39,300,000.

Estimates on new equipment are based on the authorizations for the year released by WPB as well as the

companies' own estimates of what they will require. The WPB has indicated a more liberal policy this year and it is probable that the companies' estimate of \$45,300,000 for new buses will be realized.

It is anticipated that after motor buses, way and structures will attract the greatest amount of capital expenditures. The forecast is \$18,600,000 compared with \$13,600,000 in 1943. Track and roadway rehabilitation is an indicated necessity after the heavy wear and tear of 1942 and 1943.

New street cars are expected to appear in more liberal numbers in 1944. Expenditures for new cars, which in 1943 amounted to only \$1,800,000, are expected to reach \$9,000,000. On the other hand no new trolley coaches have been authorized and only the carryover of new vehicles authorized in 1943 are likely to be constructed in 1944. These account for the \$750,000 which is all that is estimated will be spent for trolley coaches this year.

NEW MOTOR BUSES DELIVERED TO TRANSIT COMPANIES OF THE UNITED STATES IN 1943

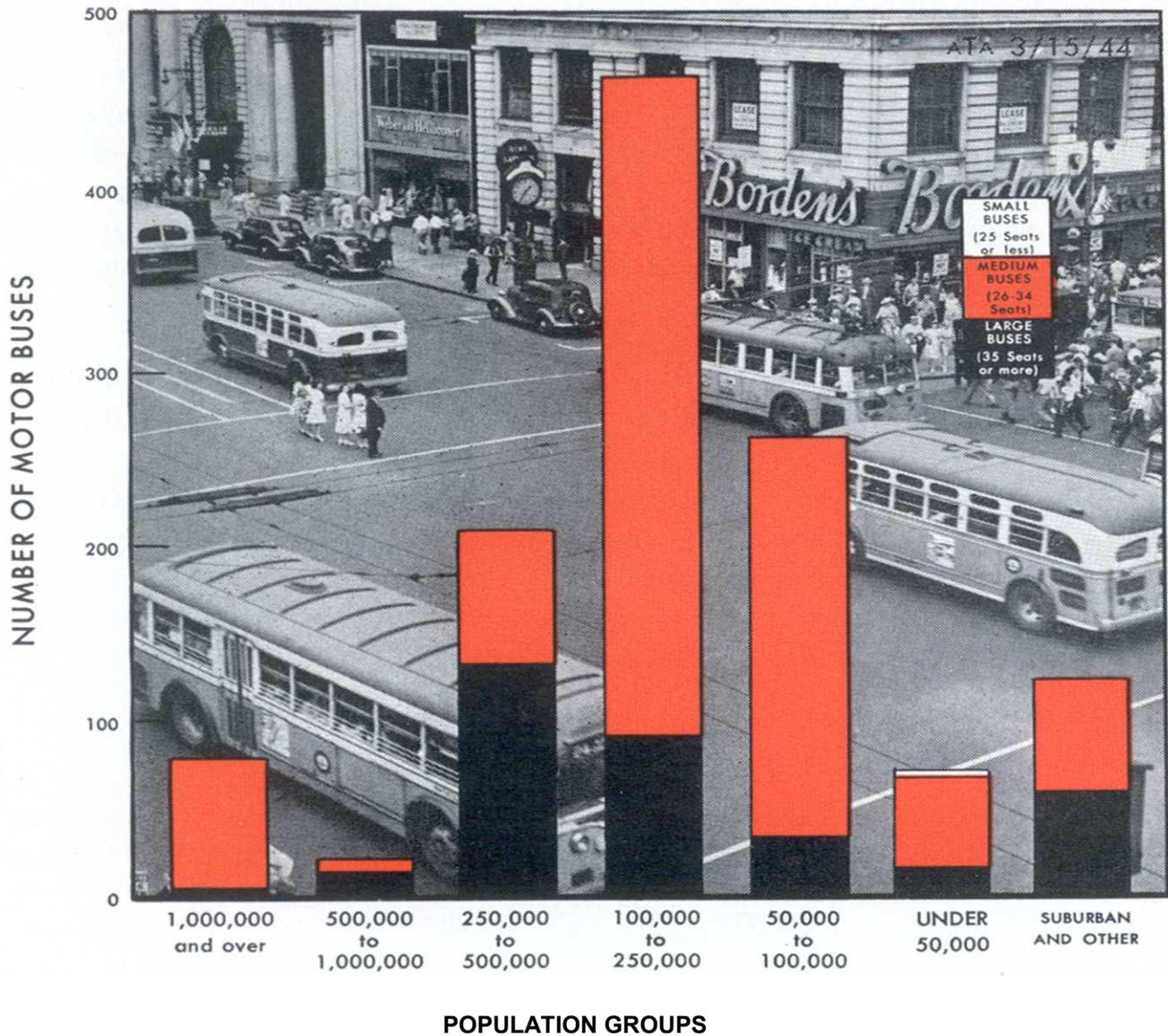


CHART NO. X

NEW EQUIPMENT DELIVERED IN 1943

IN Table 8 is shown the number of new transit vehicles delivered in 1943 and the motor bus figures are presented graphically in Chart X.

Only vehicles delivered to companies in continental United States are included in this summary.

There was a sharp reduction in the

production of transit equipment in 1943 as is shown by reference to Table 9 giving the number of vehicles produced in the past 10 years. This, of course, was due to the restrictions on production imposed by WPB in the interest of conserving material. Only 32 street cars and 117 trolley coaches were delivered during the year. In addition there were 17 street cars delivered to Canada.

At the beginning of 1943 the construction of 3,000 integral buses was authorized by WPB. These were all city type buses. No intercity integral buses were authorized. In addition, the construction of 7500 adult bus bodies to be mounted on truck chassis was also authorized. Actual deliveries to purchasers in the United States during 1943 were 1704 integral buses and 4950 bodies on truck chassis. Very few of the bus bodies on truck

chassis went to transit companies. Most of them were delivered to government services and to intercity and contract carriers. Included in them were 225 school buses, delivered for service as such. Of the integral buses delivered 1541 were city type and the remainder, 163, were intercity type, authorized in 1942. Presumably because new intercity type buses were not available to them in 1943, a number of intercity lines purchased city type buses. Reports from manufacturers indicate that the number of city type buses sold to intercity companies totaled 290. This left a total of 1251 city type buses delivered to local city transit companies.

In Table 8 the buses delivered are classified according to seating capacity and also according to the size of the community to which they were delivered. From this it appears that

TABLE NO. 8

SUMMARY OF NEW TRANSIT VEHICLES DELIVERED IN 1943 SHOWING DISTRIBUTION OF DIFFERENT SIZES OF VEHICLES BY POPULATION GROUPS

| POPULATION GROUP | STREET CARS | TROLLEY COACHES | MOTOR BUSES (INTEGRAL ONLY) | | | | GRAND TOTAL ALL VEHICLES |
|----------------------------|-------------|-----------------|-----------------------------|-------------|------------------|--------------|--------------------------|
| | 52-61 SEATS | 40-44 SEATS | 25 SEATS OR LESS | 26-34 SEATS | 35 SEATS OR MORE | TOTAL | |
| Over 1,000,000 | 30 | — | — | 77 | 5 | 82 | 112 |
| 500,000 - 1,000,000 . . . | 2 | 30 | — | 6 | 18 | 24 | 56 |
| 250,000 - 500,000 | — | 83 | — | 84 | 129 | 213 | 296 |
| 100,000 - 250,000 | — | — | — | 376 | 91 | 467 | 467 |
| 50,000 - 100,000 | — | 4 | — | 234 | 33 | 267 | 271 |
| Less Than 50,000 | — | — | 3 | 55 | 13 | 71 | 71 |
| Suburban and Other | — | — | — | 67 | 60 | 127 | 127 |
| TOTAL | 32 | 117 | 3 | 899 | 349 | 1,251 | 1,400 |

899 buses or more than two-thirds of the total were in the 26-34 seating capacity class. In the class of 35 seats or more there were 349 and only 3 in the class with 25 seats or less. The great predominance of the large-size bus which characterized the 1942 production was not present in 1943. This undoubtedly is a reflection of the government restrictions rather than of any change in the predilections of bus purchasers. Certainly until those restrictions are removed it would not be safe to venture any statement regarding a change in the trend of bus purchases.

More than a third of the buses were delivered to companies serving cities between 100,000 and 250,000 population. Cities between 50,000 and 100,000 were next with the cities be-

tween 250,000 and 500,000 following close behind. This allocation is not surprising because it is in these cities that the sudden expansion of war industries and the curtailment of automobile usage has thrown the greatest burden on the local public transportation facilities. In cities of 500,000 and over the increases in transit traffic were not as drastic and furthermore, these cities have large street railway or rapid transit systems to fall back upon. It was in these large cities that all of the 32 street cars built in 1943 were delivered.

The total of all vehicles, street cars, motor buses and trolley coaches, delivered to transit companies in 1943 was 1400. This is the smallest number of such deliveries in any year since 1932 at the bottom of the de-

TABLE NO. 9

TEN YEAR RECORD OF NEW PASSENGER EQUIPMENT DELIVERED TO TRANSIT COMPANIES IN THE UNITED STATES—1934 TO 1943

| CALENDAR YEAR | RAILWAY CARS | | | TROLLEY COACHES | MOTOR BUSES | GRAND TOTAL |
|---------------|--------------|---------------------|-------|-----------------|-------------|-------------|
| | SURFACE | SUBWAY AND ELEVATED | TOTAL | | | |
| 1934 | 35 | 5 | 40 | 58 | 2,013 | 2,111 |
| 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 |

pression. Only the direst necessity of the government in war time could have held production down to the 1943 total with traffic conditions what they were.

In Table 9 the yearly record of new equipment delivered to transit companies since 1933 is given. The peak year for purchases was 1942 with a total of 7820 vehicles delivered and the year 1941 was the next highest with 6473. These are the years when the great war production program was getting under way and transit traffic was increasing by leaps and bounds. The largest number of transit buses ever produced were delivered in those years, 5600 in 1941 and 7200 in 1942.

In the prewar period the peak year of production for all transit vehicles was 1936 when 5683 were delivered. More street cars were delivered in that year than in any year since, and more than in any previous year back to 1930. The number of motor buses produced in 1936, 4572, was the largest of any year up to that time and was not exceeded again until the war-

expansion year 1941 already referred to. There were 538 trolley coaches delivered in 1936 and this also was the largest number of such vehicles produced up to that time. However, this number was exceeded in 1939 when 587 were produced and this remains the all-time peak year of production. Due undoubtedly to war restrictions it has not been reached in any subsequent year through 1943.

There were no rapid transit cars purchased in the peak year 1936 but in the previous year 1935 there were 651 such cars delivered and this was the largest number of rapid transit cars delivered throughout the period covered by Table 9. Another 300 were delivered in 1937 and 150 in 1939. This was the period when the City of New York was equipping its expanding subway system and all of these cars were delivered to it. There have been no deliveries of rapid transit cars since 1940. Due to war restrictions the City of Chicago has been unable to obtain cars for its new subway and has been using "elevated" cars since it opened.

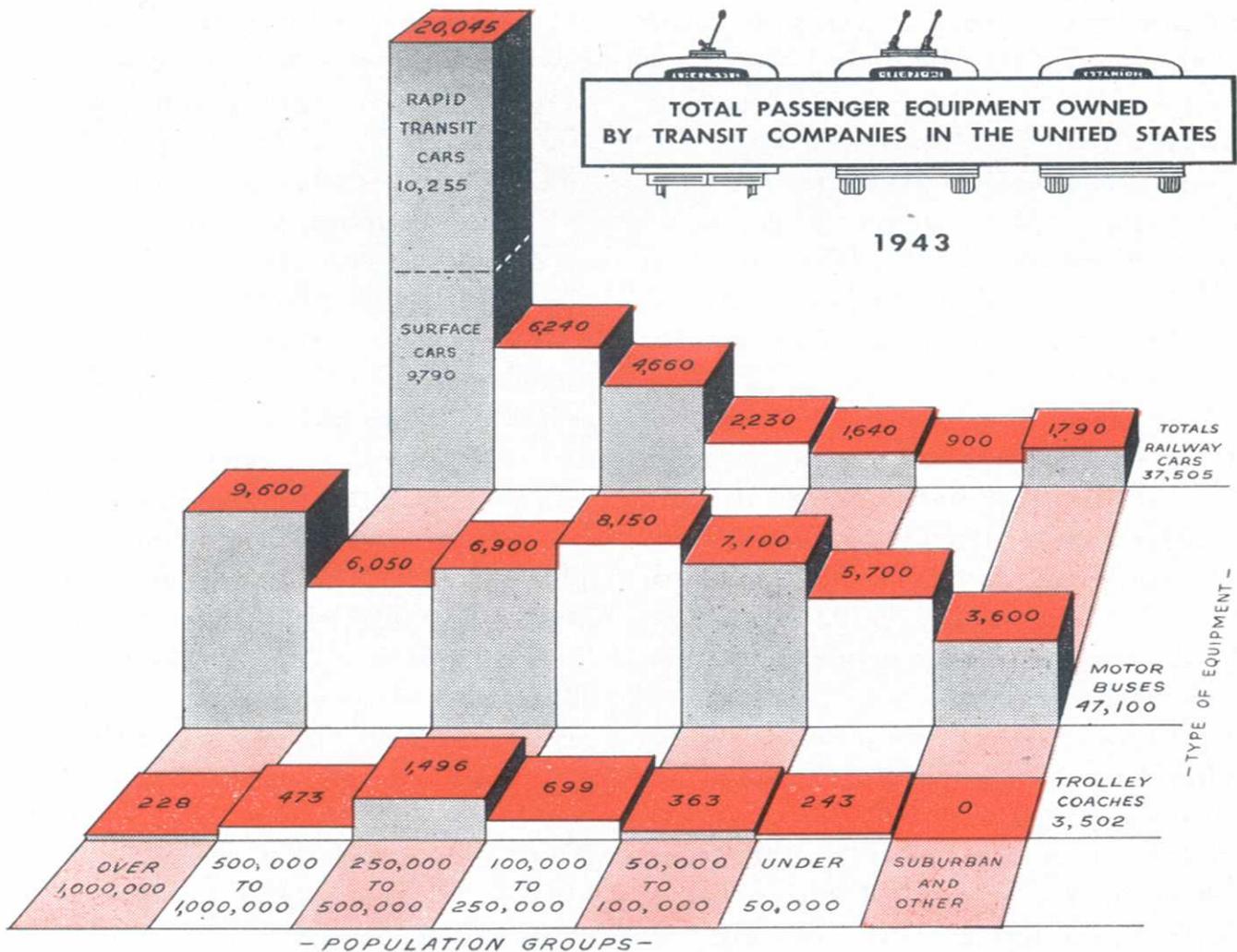


CHART NO. XI

DISTRIBUTION OF EQUIPMENT

AS OF December 31, 1943, the total number of units of transit equipment owned in the United States was 88,107. The number was made up of 47,100 buses, 27,250 surface street cars, 10,255 rapid transit cars, and 3,502 trolley coaches. The distribution of these several types of equipment by population groups is given in Table 10 and represented graphically in Chart XI.

The greatest concentration of

equipment, roughly about a third of all of the units, is in the cities over 1,000,000 population. This group also has a preponderance of the units of greatest carrying capacity. Approximately two-thirds of the units in this class are rail cars and the other third is made up of motor buses and trolley coaches. However, the number of trolley coaches in the group is negligible so that it may be said that motor buses comprise about one-third

of the units. Moreover, slightly more than one-half of the rail cars are rapid transit cars, the unit having the largest capacity of any transit vehicle. It is apparent, therefore, that the concentration of carrying capacity in cities over 1,000,000 population is even greater than the concentration of the number of units of equipment operated.

Further study of Table 10 shows that in cities over 500,000 the car on rails is still the dominant factor in local transportation. Below this in the population scale, that is in all the population groups below 500,000, motor buses are more numerous and their numerical predominance increases as we descend in the population scale. Thus in the population group between 250,000 and 500,000 there are 4,660 street cars and 6,900 buses while in the group of cities below 50,000 population there are only 900 street cars and 5,700 buses. How-

ever, the largest number of buses, 8150, in any of the groups below 500,000, is in the group between 100,000 and 250,000 population where there are also 2,230 street cars.

Trolley coaches, it is interesting to note, tend to concentrate in the middle population groups, where their role is fairly substantial. This is especially true in the group of 250,000 to 500,000 population in which there are 1496 trolley coaches. This is more than double the number in any of the other population groups. There are 699 in the group of 100,000 to 250,000 which has the second largest number of these vehicles. Thus in these two middle population groups is concentrated more than 60 per cent of all the 3502 trolley coaches. This figure 3502 includes the 580 so-called "all-service" vehicles operated by Public Service Coordinated Transport and Public Service Interstate Transportation Co.

TABLE NO. 10

TOTAL TRANSIT PASSENGER EQUIPMENT OWNED IN 1943 SHOWING TYPES OF VEHICLES AND THEIR DISTRIBUTION BY POPULATION GROUPS

| POPULATION GROUP | RAILWAY CARS | | | TROLLEY COACHES | MOTOR BUSES | GRAND TOTAL |
|------------------------|--------------|---------------------|--------|-----------------|-------------|-------------|
| | SURFACE | SUBWAY AND ELEVATED | TOTAL | | | |
| Over 1,000,000 | 9,790 | 10,255 | 20,045 | 228 | 9,600 | 29,873 |
| 500,000 - 1,000,000 . | 6,240 | — | 6,240 | 473 | 6,050 | 12,763 |
| 250,000 - 500,000 .. | 4,660 | — | 4,660 | 1,496 | 6,900 | 13,056 |
| 100,000 - 250,000 .. | 2,230 | — | 2,230 | 699 | 8,150 | 11,079 |
| 50,000 - 100,000 ... | 1,640 | — | 1,640 | 363 | 7,100 | 9,103 |
| Less Than 50,000 ... | 900 | — | 900 | 243 | 5,700 | 6,843 |
| Suburban and Other . | 1,790 | — | 1,790 | — | 3,600 | 5,390 |
| TOTAL | 27,250 | 10,255 | 37,505 | 3,502 | 47,100 | 88,107 |

TREND OF EQUIPMENT OWNED

THE number of vehicles owned by the transit industry in the United States has been increasing steadily since 1935 except for the year 1938 when there was an interruption of the increase. In Table 11 the record since 1933 is shown and it is presented graphically in Chart XII. The 88,107 vehicles owned at the end of 1943 represent the high-water mark to date. In 1935 there were 71,744 units of equipment and that was the low point in the modern history of the industry. The previous decline represents an adjustment to the declining traffic caused by the

advent of the private automobile and the 1929-33 depression. The low point in traffic was reached in 1933 but the adjustment of equipment to the reduced traffic lagged behind and was not completed until 1935.

When the upturn in the number of vehicles occurred in 1936, it was the purchase of new buses, a smaller unit, that produced the increase. The number of surface street cars continued to decline as the program of bus substitution proceeded. In 1935 there was 40,050 surface street cars and 20,700 buses. By 1939 the number of street cars had declined to

TABLE NO. 11

TEN YEAR RECORD OF TRANSIT PASSENGER EQUIPMENT OWNED IN THE UNITED STATES—1934 TO 1943

| AS OF DEC. 31ST | RAILWAY CARS | | | TROLLEY COACHES | MOTOR BUSES | GRAND TOTAL |
|-----------------|--------------|---------------------|--------|-----------------|-------------|-------------|
| | SURFACE | SUBWAY AND ELEVATED | TOTAL | | | |
| 1934 | 43,700 | 10,418 | 54,118 | 441 | 18,700 | 73,259 |
| 1935 | 40,050 | 10,416 | 50,466 | 578 | 20,700 | 71,744 |
| 1936 | 37,180 | 10,923 | 48,103 | 1,136 | 23,900 | 73,139 |
| 1937 | 34,180 | 11,032 | 45,212 | 1,655 | 27,500 | 74,367 |
| 1938 | 31,400 | 11,205 | 42,605 | 2,032 | 28,500 | 73,137 |
| 1939 | 29,320 | 11,052 | 40,372 | 2,184 | 32,600 | 75,156 |
| 1940 | 26,630 | 11,032 | 37,662 | 2,802 | 35,000 | 75,464 |
| 1941 | 27,092 | 10,578 | 37,670 | 3,029 | 39,300 | 79,999 |
| 1942 | 27,230 | 10,278 | 37,508 | 3,385 | 46,000 | 86,893 |
| 1943 | 27,250 | 10,255 | 37,505 | 3,502 | 47,100 | 88,107 |

**10 YEAR RECORD OF TRANSIT EQUIPMENT OWNED IN THE UNITED STATES
1934 to 1943**

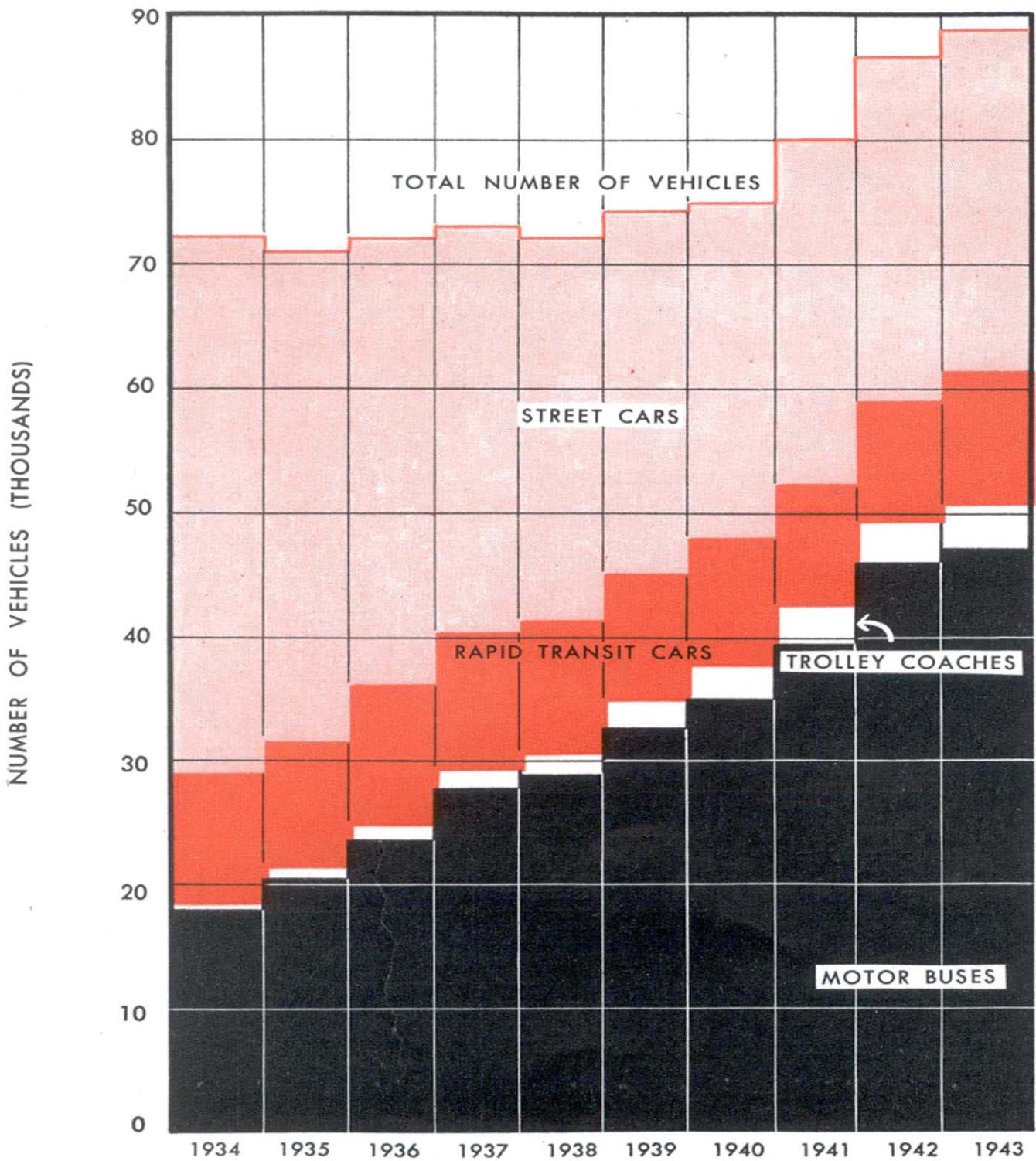


CHART NO. XII

29,320 while the number of buses had increased to 32,600 thus going ahead of the street cars in that year for the first time. However, in 1939 there were 11,052 rapid transit cars and these added to the street cars made 40,372 units of rail equipment. Thus the number of rail units still exceeded the number of buses in service in that year. Between 1939 and 1941 both the number of surface street cars and rapid transit cars de-

clined, their combined total in that year being 37,670 while the number of buses had increased to 39,300 thus exceeding the total of rail units. The decrease in the number of rapid transit cars was due to the demolition of a large part of the elevated railway system in New York City. The decrease in the number of surface street cars was, of course, due to the continuing substitution of buses during this period.

CAPACITY OF TRANSIT VEHICLES

IN Chart XIII the total passenger-carrying capacity of all transit vehicles is graphically represented for the years 1922 to 1943 inclusive.

The substitution of motor buses for street cars had the effect of reducing the total available passenger capacity. In the years between 1929 and 1940 for instance, the total number of vehicles continued unchanged at about 75,000, but the available carrying capacity dropped from 8.5 millions to 6.7 millions. This was the

period when street cars were being rapidly replaced by buses in the smaller cities. Street car capacity in 1929 was more than 6 million, but by 1940 it had declined to 2.9 millions. Motor bus capacity, however, had increased only from 0.9 million in 1929 to 1.8 millions in 1940.

One effect of this was that the industry entered the war period with a smaller passenger carrying capacity than in any year since the completion of its initial period of expansion. From a peak capacity of 8.8 millions

**PASSENGER CARRYING CAPACITY OF TRANSIT EQUIPMENT
IN THE UNITED STATES, 1922—1943**

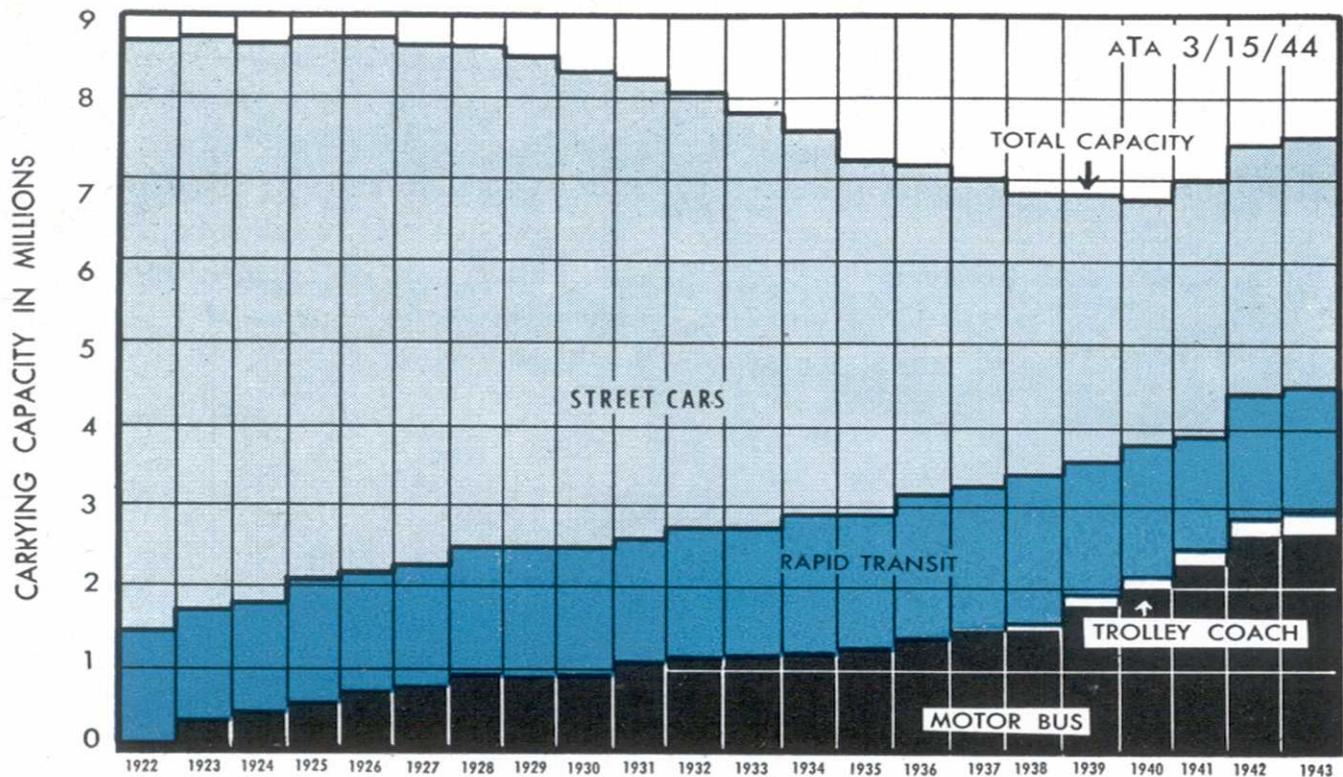


CHART NO. XIII

in 1926 its total capacity had dropped to 6.7 millions in 1940. This included surface street cars, subway and elevated cars, motor buses and trolley coaches.

In Chart XIV the trend of the industry's total passenger carrying capacity in relation to traffic is shown for the years 1922 to 1943. Here it appears that when traffic began to go off sharply during the depression the industry began to adjust its carrying capacity to the new traffic levels. It was necessarily a slower process, however, and while the traffic had

reached its low point in the year 1933 and turned upward in 1934 the adjustment of carrying capacity was still going on in 1940 and apparently only the impact of the war arrested it in 1941.

In 1941 and 1942 capacity was increased substantially, from 6.7 millions to 7.4 millions, but it lagged definitely behind the increase in traffic, and in 1943 its expansion was practically stopped by government regulations and lack of available manufacturing facilities. As Chart XIV shows, between 1940 and 1943

TRENDS IN TRANSIT TRAFFIC AND CARRYING CAPACITY, 1922—1943

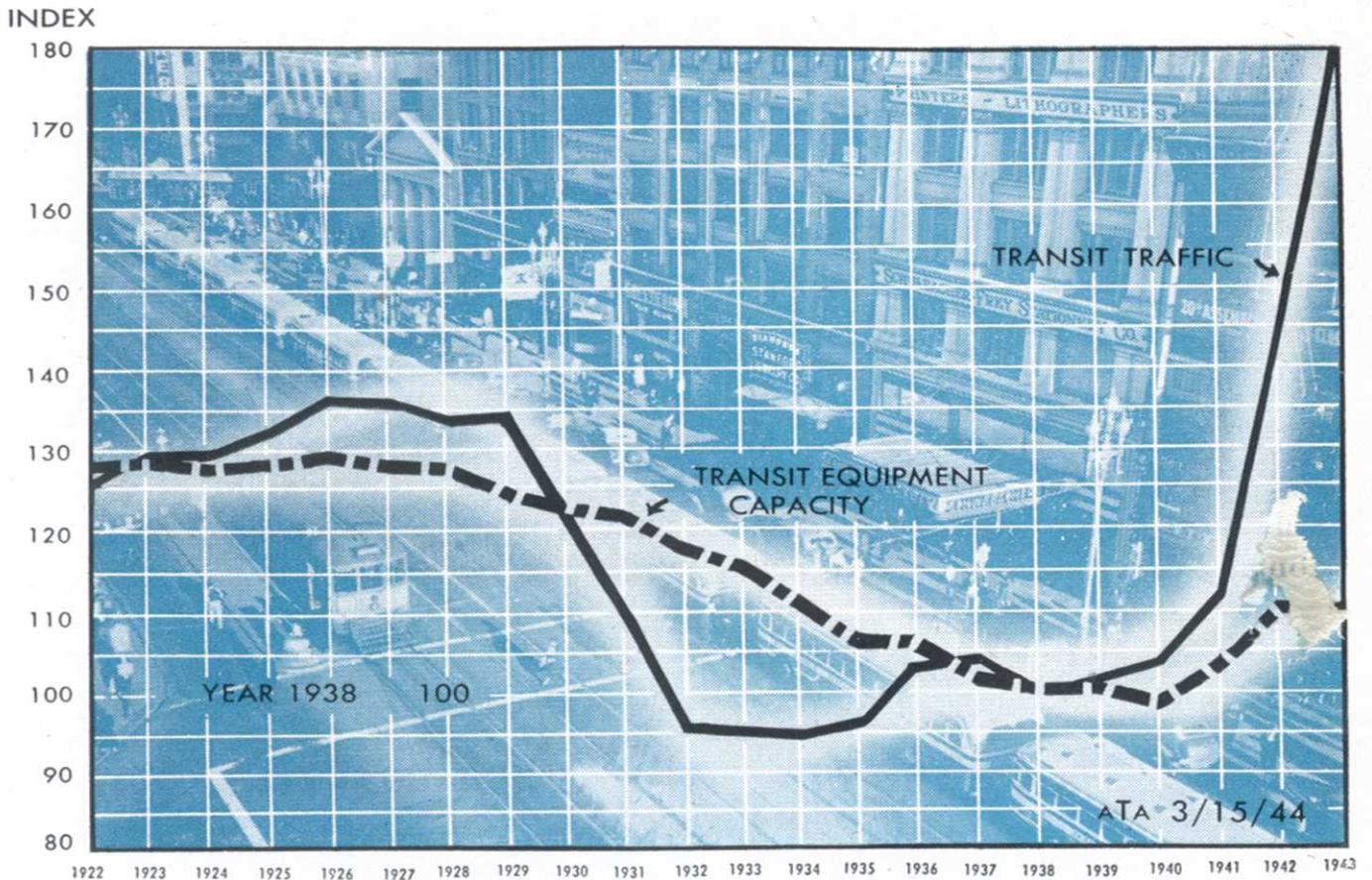


CHART NO. XIV

the index of traffic climbed more than 70 points while the index of capacity rose only 11 points. In the construction of these indexes the year 1938 is used as the base of 100 for both items.

The really significant point brought out in this chart is that in 1943 when the industry' passenger carrying capacity was 14 per cent less than in the prewar peak year of 1926 it was called upon to carry and did carry

28 per cent more passengers than in 1926. It was an outstanding accomplishment—one of those accomplishments which in ordinary times would be said to be impossible but which in war time have a way of getting done. It might also be suggested after observing the conditions under which patrons traveled on some of the transit vehicles last year that the desirability of doing it under other than war-time conditions is open to question.

TRACK AND ROUTE MILEAGE

IN Table 12 is shown the total number of miles of electric railway track, the total miles of trolley coach negative overhead wire which is equivalent to the round-trip length of the lines, and the total miles of round-trip motor bus route. The mileage of each of these groups is further distributed according to the population group it serves.

Approximately half of the electric railway track mileage is located in the larger cities, those with a population 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 of cities. At the other extreme is the group of cities with less than 50,000 population in which there are only 450 miles of track. There are 6,290 miles

TABLE NO. 12

**TOTAL MILES OF ELECTRIC RAILWAY TRACK AND TOTAL MILES OF MOTOR BUS AND TROLLEY COACH ROUTE IN UNITED STATES—DECEMBER 31, 1943
DISTRIBUTED BY POPULATION GROUPS**

| POPULATION GROUP | TOTAL MILES OF RAILWAY TRACK | | | TROLLEY COACH MILES OF NEGATIVE OVERHEAD WIRE | MOTOR BUS MILES OF ROUTE ROUND TRIP |
|----------------------------|------------------------------|---------------------------|---------------|---|---|
| | SURFACE | SUBWAY AND ELEVATED | TOTAL | | |
| Over 1,000,000 | 3,180 | 1,260 | 4,440 | 90 | 5,600 |
| 500,000 - 1,000,000 . . . | 2,390 | — | 2,390 | 160 | 3,200 |
| 250,000 - 500,000 | 2,190 | — | 2,190 | 1,070 | 8,900 |
| 100,000 - 250,000 | 1,330 | — | 1,330 | 600 | 10,800 |
| 50,000 - 100,000 | 1,120 | — | 1,120 | 290 | 7,600 |
| Less Than 50,000 | 450 | — | 450 | 200 | 4,700 |
| Suburban and Other . . . | 6,290 | — | 6,290 | — | 46,200 |
| TOTAL | 16,950 | 1,260 | 18,210 | 2,410 | 87,000 |

of suburban and interurban track which is the largest amount of track in any of the classified groups.

Trolley coach mileage is pretty heavily concentrated in the cities between 250,000 and 500,000 with 1,070 out of a total of 2,410 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 600 miles of trolley coach negative wire. On the other hand there are only 90 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 200 miles.

There are 87,000 round-trip miles of transit motor bus route of which more than half are 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, 10,800 miles, being located in cities between 100,000 and 250,000. This is more than the total of 8,800 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 4,700 round-trip miles as compared with 450 miles of street railway track and 200 miles of trolley coach route.

TABLE NO. 13

TEN YEAR RECORD OF ELECTRIC RAILWAY TRACK AND TOTAL MILES OF MOTOR BUS AND TROLLEY COACH ROUTE OF THE TRANSIT INDUSTRY IN THE UNITED STATES—1934 TO 1943

| AS OF DECEMBER 31ST. | TOTAL MILES OF RAILWAY TRACK | | | TROLLEY COACH MILES OF NEGATIVE OVERHEAD WIRE | MOTOR BUS MILES OF ROUTE ROUND-TRIP |
|-------------------------|------------------------------|---------------------------|--------|---|---|
| | SURFACE | SUBWAY AND ELEVATED | TOTAL | | |
| 1934 | 27,270 | 1,230 | 28,500 | 423 | 54,700 |
| 1935 | 25,470 | 1,230 | 26,700 | 548 | 58,100 |
| 1936 | 24,040 | 1,260 | 25,300 | 859 | 62,200 |
| 1937 | 22,460 | 1,310 | 23,770 | 1,166 | 67,000 |
| 1938 | 20,500 | 1,300 | 21,800 | 1,398 | 70,400 |
| 1939 | 19,300 | 1,300 | 20,600 | 1,543 | 74,300 |
| 1940 | 18,360 | 1,240 | 19,600 | 1,925 | 78,000 |
| 1941 | 17,100 | 1,250 | 18,350 | 2,098 | 82,100 |
| 1942 | 16,950 | 1,250 | 18,200 | 2,410 | 85,500 |
| 1943 | 16,950 | 1,260 | 18,210 | 2,410 | 87,000 |

NUMBER OF EMPLOYEES, ANNUAL PAYROLL AND AVERAGE ANNUAL EARNINGS PER EMPLOYEE 1934—1943

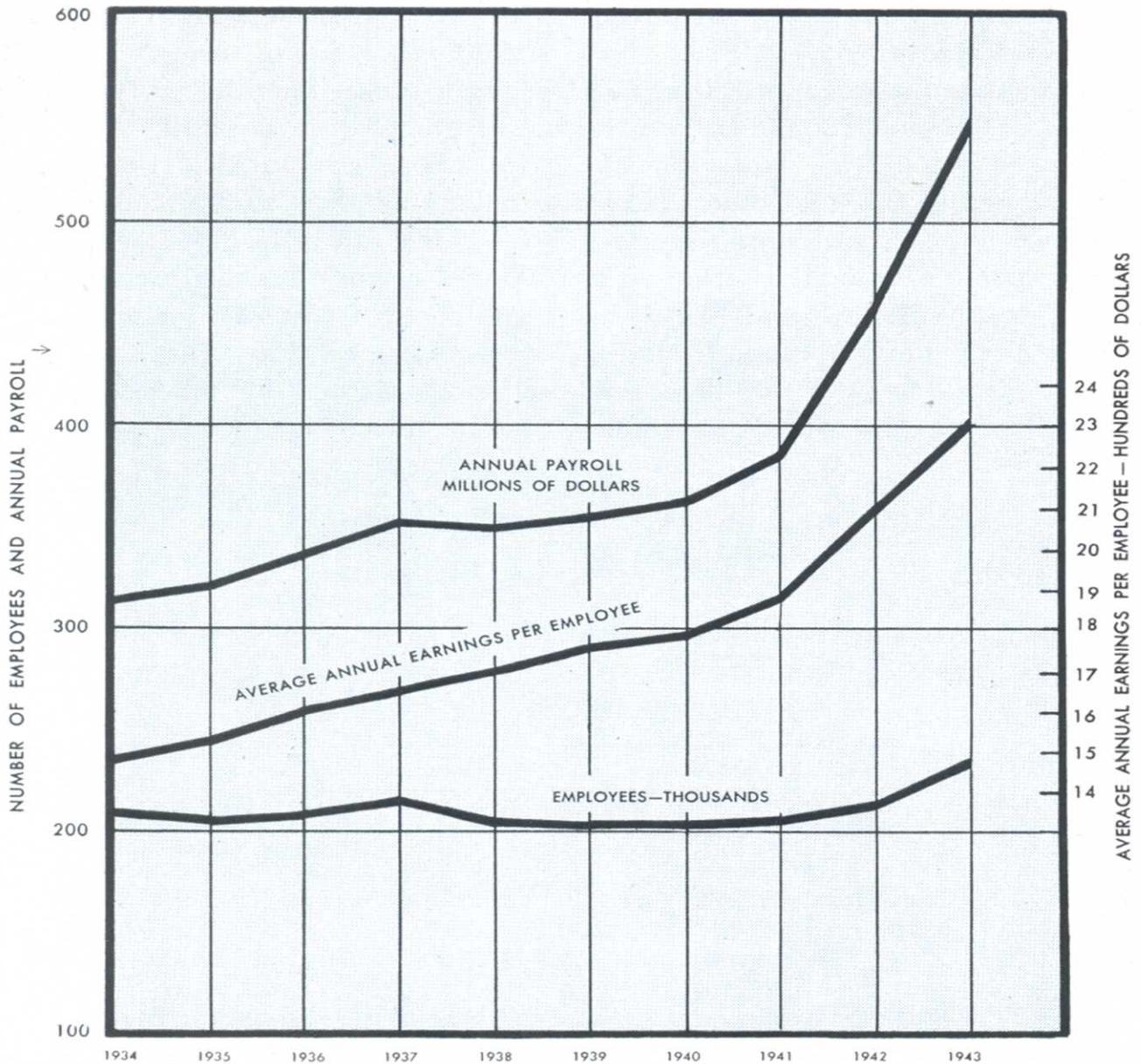


CHART NO. XV

EMPLOYEES AND PAYROLL

TABLE 14 presents a record of the number of transit employees and their total compensation over the ten-year period 1934 to 1943 inclusive. Chart XV presents the same record graphically.

The industry's 1943 payroll was the largest in its history and the average earnings per employee at \$2309 also reached a new high. The number of people employed, however, is substantially below the industry's peak which was reached back in 1920. In that year more than 310,000 employees were on the payroll.

Since 1940 there has been a steady increase in all three items, employees, payroll and average earnings, but prior to 1940 there was a considerable amount of fluctuation in the number of employees from year to year due to several very potent reasons.

First there were the fluctuations in business conditions which directly affect the demand for transportation. During the early part of the period covered by the record, the industry was making its slow uncertain recovery from the great depression. This

TABLE NO. 14

TEN YEAR RECORD OF NUMBER OF EMPLOYEES, ANNUAL PAYROLL AND AVERAGE ANNUAL EARNINGS PER EMPLOYEE IN THE TRANSIT INDUSTRY OF UNITED STATES—1934 TO 1943

| YEAR | AVERAGE NUMBER OF EMPLOYEES | PAYROLL | AVERAGE ANNUAL EARNINGS PER EMPLOYEE |
|------------|-----------------------------------|---------------|--|
| 1934 | 211,000 | \$314,000,000 | \$1487 |
| 1935 | 209,000 | 321,000,000 | 1537 |
| 1936 | 212,000 | 338,000,000 | 1596 |
| 1937 | 215,000 | 356,000,000 | 1659 |
| 1938 | 207,000 | 351,000,000 | 1696 |
| 1939 | 204,000 | 356,000,000 | 1743 |
| 1940 | 203,000 | 360,000,000 | 1776 |
| 1941 | 205,000 | 386,000,000 | 1882 |
| 1942 | 219,000 | 462,000,000 | 2108 |
| 1943 | 238,000 | 550,000,000 | 2309 |

was interrupted by the so-called business recession in 1938. A period of hesitation followed and this was ended only by the impact of defense and war activities in 1941.

Second, there was intensified competition from private automobiles. During this period the number of private cars registered reached new highs and their growing use as a means of traveling to and from work produced a steady drain on the business of transit companies.

Third there was the program of conversion, first to one-man cars on the part 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. It is interesting to note, however, that during the entire period from 1934 to 1943 the average earnings per employee rose steadily from \$1487 to \$2309. 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 the number of employees and, in consequence, the total payroll declined from \$356,000,000 to \$351,000,000. Even under those conditions, however, the average earnings per employee continued to increase, rising from \$1659 to \$1696.

