REPORT TO THE PRESIDENT

BY

W. G. McADOO
DIRECTOR GENERAL OF RAILROADS

OF THE WORK OF THE UNITED STATES RAILROAD ADMINISTRATION FOR THE FIRST SEVEN MONTHS OF ITS EXISTENCE, ENDING JULY 31, 1918

WASHINGTON, SEPTEMBER 3, 1918

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REPORT OF THE DIRECTOR GENERAL OF RAILROADS.

SEPTEMBER 3, 1918.

My Dear Mr. President: On the 1st of August, 1918, seven months had elapsed since the railways and other agencies of transportation were put under Federal control in pursuance of your proclamation of December 26, 1917. The period is a comparatively short one in which to have made such progress in working out the problems connected with the transfer and coordination of the railway systems and waterways of the Nation, but I assume that you may be interested in a statement of what has been accomplished during that time. I therefore submit the following:

MILEAGE AND CAPITALIZATION, AMERICAN TRANSPORTATION SYSTEM.

On December 31, 1916, the total steam railway mileage in operation in the United States (all tracks) was 397,014 miles. This mileage was owned or controlled by 2,905 companies, employing some 1,700,814 persons. They had outstanding $10,875,206,565 of bonds and $8,755,403,517 of stock (par value).

The inland waterways system includes some 57 canals, 3,057 miles in length, some of which were owned or controlled by the railways, and many thousand miles of navigable rivers, lakes, bays, sounds, inlets, traversed by innumerable craft.

Of the 2,905 railway companies 185 operated major systems, each of which had an annual operating revenue of $1,000,000 or more; 221 were switching and terminal companies; 1,434 were "plant facility" roads, constructed primarily for the purpose of serving some particular factory or industry; and 765 were what have come to be described as "short line" railways, dependent upon one or more of the larger systems for through connections.

ORGANIZATION UNITED STATES RAILROAD ADMINISTRATION.

This briefly describes the plexus of transportation facilities which came under Federal control January 1, 1918, or shortly thereafter. Some of the "short lines" and "plant facility" corporations have since been relinquished as not essential to the purposes in view, but every effort has been and will be made to deal equitably with the relinquished properties. To administer and operate this system the United States Railroad Administration, with headquarters at Washington, was promptly organized. This organization as now developed has for its chief officers:

W. G. McAdoo, Director General.
Walker D. Hines, Assistant Director General.
Oscar A. Price, Assistant to the Director General.
John Barton Payne, General Counsel.
John Skelton Williams, Director of Division of Finance and Purchases.
Robert S. Lovett, Director of Division of Capital Expenditures.
Carl R. Gray, Director of Division of Operation.
Edward Chambers, Director of Division of Traffic.
Charles A. Prouty, Director of Division of Public Service and Accounting.

W. S. Carter, Director of Division of Labor.

M. B. Clagett, Private Secretary to the Director General.

Mr. Henry Walters was also an important member of the preliminary organization, having in charge the standardization of motive power. Although he has, at his own request and to my regret, been released from constant attendance in Washington, he continues to render highly valuable services in an advisory capacity.

The gentlemen named are, of course, supplied with the secretaries, assistants, and clerks they require in their work, but the policy is to keep the Washington organization as small as possible and avoid the creation of an unwieldy and expensive central administrative bureau.

**COMMITTEES OF UNITED STATES RAILROAD ADMINISTRATION.**

Connected with the Washington administration are several committees who have rendered or are rendering valuable services of an advisory character.

Among them I may mention the Railroad Wage Commission, composed of Franklin K. Lane, chairman; J. Harry Covington, Charles C. McChord, and William R. Willcox. Of this committee F. W. Lehman was counsel and W. A. Ryan was secretary. Its work is now completed, but I desire to make especial acknowledgment of its valuable report and recommendations on the question of wages and working conditions of railway employees in the United States.

The Advisory Committee on Finance, consisting of Franklin Q. Brown, chairman; Festus J. Wade, Frederick W. Scott, and James H. Wallace, is rendering valuable assistance to the Director of Finance and Purchases in connection with the problems that come before him.

The Board of Railroad Wages and Working Conditions, comprised of J. J. Dermody, F. P. Gaines, C. E. Lindsey, W. E. Morse, G. H. Sines, and A. O. Wharton, has been created to hear and investigate matters presented by railroad employees or their representatives affecting—

1. Inequalities as to wages and working conditions, whether as to individual employees or classes of employees.
2. Conditions arising from competition with employees in other industries.
3. Rules and working conditions for the several classes of employees, either for the country as a whole or for different parts of the country.

The board shall also hear and investigate other matters affecting wages and conditions of employment referred to it by the Director General.

This board is solely advisory and is to submit its recommendations to the Director General for his determination.
The Railway Board of Adjustment No. 1, consisting of Charles P. Neill, chairman; L. E. Sheppard, vice chairman; E. T. Whiter, John G. Walber, J. W. Higgins, F. A. Burgess, Albert Phillips, and W. N. Doak, has been formed to deal with any disputes that may arise between employees in train, engine, and yard service and the railways, and Railway Adjustment Board No. 2, consisting of E. F. Potter, chairman; F. J. McNulty, vice chairman; A. C. Adams, H. J. Carr, Otto E. Hoard, F. H. Knight, W. S. Murrian, W. H. Penrith, George W. Pring, E. A. Sweetley, R. J. Turnbull, and G. C. Van Dornes, has a similar function to perform in dealing with any dispute that may arise as between shop employees and the railroads.

REGIONAL DISTRICTS.

For the sake of public convenience and efficiency in operation, the railroad mileage of the country has been divided into seven Regional Districts, and a Regional Director has been put in general charge of railroad administration in each district. Under these Regional Directors come in turn District Directors in charge of subdivisions of the Regional Districts. Federal Managers in charge of the more important single divisions or groups of less important lines, General Managers operating smaller divisions and Terminal Managers having control of all terminals at the more important railway centers and ports.

The Regional Directors are, of course, subject to the authority of the Director General at Washington, but as they are all men of experience and distinction as railway executives the policy is to give them large discretion and thereby free the members of the central staff for a more careful study of the important questions that come before them and the essential administrative work they must perform.

The geographical boundaries of the various Regional Districts are suggested rather than defined in the accompanying map.

It is, however, impossible to map these districts accurately. Territorially they overlap each other in every instance because the railway lines under the management of each Regional Director penetrate in part the areas included in other Regional Districts. The districting has had for its purpose the assembling under the management of one Regional Director the larger portion of the mileage serving his territory. The limits of administrative authority are, therefore, determined rather by the railway lines than by geographical boundaries, for they have been fixed more with regard to the movement of traffic and the service of the public than by the conventional State boundaries or groupings.

Thus it has been deemed wise to put the Pennsylvania lines and the Baltimore & Ohio lines east of the Ohio River in the Allegheny District, and those west of the Ohio River in the Eastern District, which contains the whole of the New York Central Division. This course has been followed in pursuance of a policy that contemplates the preferential use of the more northerly trunk lines for fast through freight and passenger traffic between the Chicago District and the East, thereby releasing the lines in the Allegheny District for the distribution of the enormous traffic that originates in the Pittsburgh District where congestion of local and through freight in the past has
created some of the most costly and exasperating blockades that have
been known in the history of American railroads.

A better idea of the method followed in this regional districting
and the more important railway systems in each district may per-
haps be had from the following brief statement:

1. The Eastern District, A. H. Smith, Regional Director, New York,
comprises the lines located chiefly in the New England States, in New
York State, in the northwestern portion of Pennsylvania, and in Ohio,
Indiana, and Michigan.

Some of the more important lines included in this district are the
New York, New Haven & Hartford, the Boston & Maine, the Boston
& Albany, the New York Central, the Nickel Plate, the West Shore,
the Delaware & Hudson, the Lehigh Valley, the Delaware, Lacka-
wanna & Western, the Baltimore & Ohio west of Pittsburgh, and the
Pennsylvania west of Pittsburgh.

2. The Allegheny District, C. H. Markham, Regional Director,
Philadelphia, comprises the lines located chiefly in the State of
Pennsylvania, the northern part of West Virginia, and some of the
lines traversing Maryland and New Jersey. It also includes the
Long Island lines as an extension of the Pennsylvania road east of
Pittsburgh.

Among the more important lines in this district are the following:
The Baltimore & Ohio and the Pennsylvania lines east of the Ohio
River; the Bessemer & Lake Erie; the Central of New Jersey; the
New York, Philadelphia & Norfolk; the Philadelphia & Reading, and
the Western Maryland.

3. The Pocahontas District, N. D. Maher, Regional Director,
Roanoke, Va., contains most of the east and west lines traversing
Virginia and West Virginia and a certain portion of the mileage pen-
etrating the coal fields of Kentucky and southern Ohio.

Among the more important lines in this district are the Chesapeake
& Ohio east of Louisville, Columbus, and Cincinnati; the Norfolk &
Western, and the Virginian, including the terminals of all railways at
Norfolk, Portsmouth, and Newport News, Va., and the Norfolk &
Portsmouth Belt lines.

4. The Southern District, B. L. Winchell, Regional Director, Atlanta,
Ga., includes most of the north and south lines, traversing the
territory south of the Ohio and Potomac Rivers and east of the
Mississippi River.

Among the more important lines in this district are the Atlantic
Coast Line, the Seaboard Air Line, the Southern, the Norfolk
Southern, the Louisville & Nashville, the Florida East Coast, the
Central of Georgia, the Alabama Great Southern, and the Illinois
Central lines south of Cairo, Ill.

5. The Northwestern District, R. H. Aishton, Regional Director,
Chicago, contains most of the mileage running west and northwest of
Chicago and Kansas City to and toward the Pacific coast. Generally
this mileage traverses northern Illinois, Wisconsin, Minnesota,
northern Iowa, northern Nebraska, North and South Dakota, Wyom-
ing, Montana, Oregon, and Washington.

Among the more important lines included in the Northwestern
District are the Chicago & Northwestern; Chicago, Milwaukee & St.
Paul; the Chicago Great Western; the Great Northern; the Minne-
apolis & St. Louis; the Northern Pacific; the Minneapolis, St. Paul &

6. The Central Western District, Hale Holden, Regional Director, Chicago, comprises the lines running in a southwesterly direction from Chicago and Kansas City to and toward the Pacific coast. The mileage of this district traverses the States of Illinois, southern Iowa, northern Missouri, Kansas, Nebraska, Wyoming, southern Idaho, Colorado, New Mexico, Utah, Arizona, Nevada, and California.

Among the more important lines in the Central Western District are the Union Pacific; the Atchison, Topeka & Santa Fe; the Chicago, Rock Island & Pacific, excepting that portion of its lines that are included in the Southwestern District; the Chicago & Alton; Chicago & Eastern Illinois; the Chicago, Burlington & Quincy; Colorado & Southern; the Northwestern Pacific; the Oregon Short Line; the Southern Pacific lines west of El Paso and Ogden, except north of Ashland, Oreg.; the Western Pacific; and the El Paso & Southwestern.

7. The Southwestern District, B. F. Bush, Regional Director, St. Louis, includes most of the lines south of the Missouri River running generally southwest and traversing the States of Missouri, Arkansas, Oklahoma, Texas, and Louisiana west of the Mississippi.

Among the more important lines in this district are the International & Great Northern; the Kansas City Southern; the Missouri Pacific System; the Missouri, Kansas & Texas; a certain portion of the Rock Island lines; the St. Louis & San Francisco; the Texas & Pacific; the Wabash lines from St. Louis to Kansas City and Omaha; the Gulf, Colorado & Santa Fe; the Fort Worth & Denver City; the Southern Pacific lines east of El Paso; and the Texas & New Orleans lines.

MARINE SECTION.

A Marine Section of the Division of Transportation with headquarters at Washington has also been created, and a manager of this section has been appointed to supervise the operation of the steamship lines owned by the railroads, the object being to coordinate their services more completely with the railways, as well as with other shipping.

The steamship lines taken over constitute a very important department of the transportation system, including, as they do, the following companies:

Chesapeake Steamship Co.
Merchants & Miners Transportation Co.
Clyde Steamship Co.
Mallory Steamship Co.
Southern Steamship Co.
Ocean Steamship Co., of Savannah.
Old Dominion Steamship Co.
Southern Pacific Steamship Co.
Baltimore Steam Packet Co.
New England Steamship Co.
San Francisco & Portland Steamship Co.
Central Vermont Steamship Co.
Lehigh Valley Transportation Co.
Hartford & New York Transportation Co.
New Bedford, Martha's Vineyard & Nantucket Steamboat Co.
Montauk Steamboat Co.
INLAND WATERWAYS ORGANIZATION.

After a careful study of the inland waterways and their possibilities, made at my request by a specially appointed Inland Waterways Committee and a further investigation by Director Prouty, of the Division of Public Service and Accounting, and Interstate Commerce Commissioner Meyer, there will be appointed shortly a director of Inland Waterways to be generally in charge of their development and operation, and, following the plan pursued in the case of the railroads, they will be divided into districts. Two such districts have already been created, namely (1) the New York and New Jersey Canals District, including the Erie Canal with its connecting waterways, and the Delaware & Raritan Canal, of which G. A. Tomlinson has been made Federal Manager, and (2) the Mississippi and Warrior Rivers District, of which M. J. Sanders, of New Orleans, has been made Federal Manager.

The foregoing is an outline of the organization that has been set up and the duties assigned to its more important officials.

OPERATIVE AND CORPORATE ORGANIZATIONS DIFFERENTIATED.

Inasmuch as "no man can serve two masters" and the efficient operation of the railroads for the winning of the war and the service of the public is the purpose of Federal control, it was manifestly wise to release the presidents and other officers of the railroad companies with whose corporate interests they are properly concerned, from all responsibility for the operation of their properties, which will be in the hands of the Regional Directors, the District Directors, and the Federal and General Managers above referred to, and who will be directly responsible to the Director General. All ambiguity of obligation is thus avoided. The officers of the corporations are left free to protect the interests of their owners, stockholders, and creditors, and the regional and operating managers have a direct and undivided responsibility and allegiance to the United States Railroad Administration.

In pursuance of this policy the Regional Directors, the Federal Managers, and the General Managers have been required to sever any relations they may have had with the railroad corporations as either officers or directors, and the corporate officers have been advised that they have no function to perform with respect to Government operation.

Many of the former corporate officers have been appointed as officials of the United States Railroad Administration, whereas others have elected to remain as officers of their corporations.

It has been made clear that the fullest possible cooperation is desired between the Government officers who operate the railroads and the corporate officers who represent the stockholders.

ECONOMIES EFFECTED BY REORGANIZATION OF OFFICIAL STAFF.

The reorganization of the operating force has been made without any impairment of efficiency and with a reduction in the number of officers required and in the aggregate of the salaries paid them and
chargeable to operating expenses. An accurate computation of the saving in men and money thus effected follows. It includes all officers receiving salaries of $5,000 a year or over.

Comparative summary of officers and salaries under corporate and Federal control.

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<th>Number of officers.</th>
<th>Salaries.</th>
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<tr>
<td></td>
<td>136</td>
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<tr>
<td>Regional administration.</td>
<td>46</td>
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<tr>
<td>Central administration.</td>
<td>90</td>
</tr>
<tr>
<td>Total.</td>
<td></td>
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<tr>
<td>Eastern Region.</td>
<td>763</td>
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<tr>
<td>Allegheny Region.</td>
<td>322</td>
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<tr>
<td>Pocahontas Region.</td>
<td>239</td>
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<tr>
<td>Southern Region.</td>
<td>284</td>
</tr>
<tr>
<td>Northwestern Region.</td>
<td>524</td>
</tr>
<tr>
<td>Central Western Region.</td>
<td>383</td>
</tr>
<tr>
<td>Southwestern Region.</td>
<td>68</td>
</tr>
<tr>
<td>Total.</td>
<td>2,325</td>
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<tr>
<td>Grand total.</td>
<td>2,325</td>
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This shows that under private control of the railroads 2,325 officers drawing salaries of $5,000 a year or over were employed, with aggregate salaries of $21,320,187. Under Government control 1,925 officials (a reduction of 400) are doing the same work, and the aggregate of their salaries is $16,705,298—a saving of $4,614,889 per annum. This total includes the officers of the various regional districts as well as those of the central administration in Washington, except the Director General himself, who receives no salary.

THE SALARIES PAID.

Under private control, salaries as high as $100,000 per annum were paid officers of railroad corporations. Under Government control the highest salaries paid are to the Regional Directors (of whom there are but seven), and these salaries range from $40,000 to $50,000 per annum. This reduced compensation has been fixed for Regional Directors notwithstanding the increased responsibilities and duties of these directors as compared with those of the presidents of the larger railroad corporations.

The reduction of $4,614,889 per annum in the aggregate of the salaries paid to the more responsible officials has not been effected by forcing the experienced men appointed by the United States Railroad Administration to accept salaries incommensurate with their responsibilities, although in numerous instances these salaries are substantially less than those they had been earning as officers of the railroads or could earn in private employment. It is not only equitable but necessary that they should be justly remunerated, and that the rewards of brains, industry, and loyalty should be sufficient to continually attract able men to the service of the railroads as their life's work. It is not a question merely of operating the railroads
during the period of the war—this requires, it is true, the best talent that can be secured if the present extraordinary demands are to be met—but it is a question of the post-bellum period as well, when railroad work must continue to be sufficiently attractive to draw constantly to it men of the right quality and caliber. Unless the ranks are uninterruptedly recruited with such men, it will be impossible to maintain the efficient organizations which are essential to the successful management and operation of the railroads of the country.

The salaries paid under Government control to the higher officers should be sufficient to make the juniors realize that the promotions and rewards of a railroad career are still worth working for, and that they will be commensurate with those of private enterprise and industry.

LEGAL EXPENSES REDUCED.

The expenses of the law departments have been reduced about $1,500,000 annually. This has been accomplished by the elimination of a number of men, the reduction of salaries of many others, and the transfer of the general counsel of various roads from the operating pay roll to the pay rolls of the corporation. It is believed that efficiency has in no respect been lessened.

CONDITION OF RAILROADS WHEN TAKEN OVER.

To plan the Federal organization and select its personnel has, of course, required time. When the Government took control on the 1st of January, 1918, the railroads were in a deplorable condition. Added to an unusually severe winter, the motive power was seriously crippled, and on the eastern lines traffic was badly blockaded by the congestion of unloaded cars at the terminals and elsewhere. The approximate number of loaded cars above normal, on the eastern lines, was 180,000 when the Director General took charge of the railroads. To relieve this situation was the first concern, and the energies of the Federal organization were exclusively and successfully directed to this end. At the date of this report there are no accumulations of loaded cars on the eastern lines above the normal. That the legislation making the necessary appropriation of $500,000,000 for a revolving fund did not become law until March 31, 1918, was another cause of delay. Prior to its enactment all plans were necessarily tentative. Much, however, has been accomplished since that date toward coordinating the transportation facilities of the country for the winning of the war and the service of the public.

WHAT HAS BEEN DONE THUS FAR.

A list of what has been done would be long. Some of the more important items that it would include are the following:

THE CONTRACT WITH THE CORPORATIONS.

(1) After prolonged negotiations with counsel and committees representing the railroad corporations we are approaching a satisfactory contract between them and the Railroad Administration. The subject involved much exacting thought and discussion and
presented many difficulties, but I am glad to feel that a satisfactory solution is near at hand. The delays have been the fault neither of the railroad corporations nor of the Government. They have been inherent in a matter of such intricacy and magnitude.

THE WAGE ADVANCES.

(2) Acting upon the recommendation of the Railroad Wage Commission above referred to, an advance in the wages of railroad employees formerly earning $250 a month or less has been ordered. The report of the commission recommended various advances calculated upon the wages paid as of December 31, 1915. These advances ranged from 43 per cent in the case of employees drawing the lowest monthly wage to nothing in the case of those receiving as much as $250 a month, and the report of the commission advised that no change in working hours should be made during the continuance of the war.

Feeling that justice demanded recognition of the principle of the basic eight-hour day in railroad service, an order to this effect was issued and at the same time the recommendations of the Wage Commission as to increases in pay were generally adopted.

A minimum advance of 2½ cents per hour in the pay of common labor was ordered, and this was also a deviation from the report of the commission.

In the order authorizing the payment of these advances a Board of Railroad Wages and Working Conditions was created, to take up as presented any phases of the general problem relating to any class of employees or any part of a class of employees which may justly call for further consideration.

Upon the recommendation of this Board of Railroad Wages and Working Conditions an order for a substantial increase in the wages of the employees in the mechanical departments of the railways under Federal control has been issued. These employees, including as they do, machinists, boiler makers, blacksmiths, sheet-metal workers, electrical workers, carmen, moulders, their apprentices and helpers, compose a group estimated to contain some 500,000 men. The advance establishes a minimum basic rate of 68 cents per hour for the classes of employees named (except carmen, second-class electrical workers, and all apprentices and helpers) who have had four or more years' experience and were on January 1, 1918, receiving less than 55 cents per hour. For the other employees included in the order a minimum rate of 58 cents per hour is established. These advances average approximately 13 cents per hour higher than the wages previously paid.

A most important and far-reaching step was taken in granting to the employees in the mechanical crafts an eight-hour working day with time and a half for overtime. These great and beneficial concessions in the matter of wages and hours of service will, I am sure, be appreciated by the employees and will be requitted by their loyal and uninterrupted service to the Government, and by a determined effort to increase efficiency all along the line.
WOMEN PAID SAME AS MEN.

As the number of women employed by the railroads to perform duties formerly assigned to men is rapidly increasing, it was clearly equitable that they should be paid the same wages as men engaged in similar work.

An order has been issued with a provision that no women shall be permitted to occupy positions unsuited to their sex or allowed to work amid conditions that are unfit.

NO DISCRIMINATION AGAINST NEGRO EMPLOYEES.

It has also been ordered that all negroes employed by the railroads should be paid the same wages that white men get for similar work. This has not been the general practice in the past, but it seems clear that equal pay for equal service without respect to sex or color is demanded as an act of simple justice.

THE ADVANCE IN FREIGHT AND PASSENGER RATES.

(3) To provide for the increase in wages allowed, the higher prices that must be paid for all supplies, and the rising costs of operation generally, an average advance of 25 per cent in freight rates has been ordered and passenger rates have been raised to a minimum of 3 cents per mile where they were previously lower. In the districts where more than 3 cents a mile has been charged fares have not been changed. Commutation fares have been advanced 10 per cent. A further charge of half a cent a mile, or one-sixth of the normal fare, has been ordered for transportation in standard sleeping cars and parlor cars, and passengers traveling in tourist sleeping cars are to be charged an additional one-quarter cent per mile, or one-twelfth of the normal fare, for their transportation. This increase in fare is in addition to the charge made for the occupancy of berths in sleeping cars or seats in parlor cars.

It has also been ordered that two adult tickets for a drawing room in a sleeping car, two adult tickets for a compartment, one and one-half adult tickets for a section, and five adult tickets for exclusive occupancy of a drawing room in a parlor car shall hereafter be required, the object being to discourage the well-to-do or extravagant from using more Pullman space than they really require, thereby excluding the thrifty or less prosperous portion of the traveling public from the use of the Pullman space unnecessarily preempted.

It is assumed that these advances in freight and passenger rates will increase the net operating revenue of the railroads by an amount that is about equal to the greater cost of operation due to increased wages and increased cost of fuel and all railroad supplies, but this assumption is more or less conjectural, as it is impossible to say whether the higher rates charged will have the effect of reducing the traffic. Thus far such an effect has not been noticeable, at least in the case of the passenger traffic, which shows a substantial increase on the lines traversing the industrial districts of the country and serving the military camps. This is due to the higher wages paid to workers who have been constantly changing their places of employment as well as to the traveling of our soldiers, who have been granted
a special rate of 1 cent per mile when on furlough, and the journeys made by friends and relatives on visits to the soldiers at the various cantonments throughout the country.

RESTRICTION OF UNNECESSARY PASSENGER TRAVEL.

(3a) On August 20 I addressed the following statement to the public:

Complaints have reached me from time to time of overcrowded trains and unsatisfactory conditions prevailing in some sections of the country in passenger-train service. I feel certain that there are grounds for some of these complaints, but I am sure the public will be interested to know that the reasons are twofold:

First, the great number of troops now being handled over the various railroads between the homes and cantonments, between the different cantonments and then to the seaboard, is making extraordinary demands upon the passenger-car and sleeping-car equipment of the country. This has caused a scarcity of day coaches and sleeping cars which it is impossible to remedy immediately.

Secondly, the increased demands upon track and terminal facilities for the transportation of the tremendous amounts of coal, food, supplies, raw materials, and other things required for military and naval operations, as well as for the support of the civil population of the country, force the largest possible curtailment of passenger-train service. The movements of troops and war materials are, of course, of paramount importance and must be given at all times the right of way.

It was hoped that the increase in passenger rates recently made would have the wholesome effect of reducing the unnecessary passenger traffic throughout the country. The smaller number of passengers who travel, the greater the number of locomotives and cars and the larger the amount of track and terminal facilities that will be freed for essential troop and war-material movements. Engineers, firemen, and other skilled laborers will also be released for service on troop and necessary freight trains.

Among the many patriotic duties of the American public at this time is the duty to refrain from traveling unnecessarily. Every man, woman, and child who can avoid using the passenger trains at this time should do so. I earnestly hope that they will do so. Not only will they liberate essential transportation facilities which are necessary for war purposes, but they will save money, which they can invest in Liberty bonds and thereby help themselves as well as their country, and the fewer who travel the more ample the passenger train service will be.

I may add that consistently with the paramount demands of the war every possible effort is being made by the Railroad Administration to supply the largest possible amount of comfortable and prompt passenger-train service.

A UNIFORM FREIGHT CLASSIFICATION.

Hitherto there have been some three different freight classifications applying to interstate traffic, while many States had their own particular classifications applying to intrastate traffic. These various classifications contained some 15,000 items. The carload minimum varied, and they differed in other essential details. It often happened that a shipment moving through two or more classification territories was subjected to different rules in the course of its journey, and it was necessary for a shipper forwarding goods from an eastern point to a point west of the Mississippi River to be familiar not only with the rules and classifications applying east of the river, but those applying west of the river as well. Great confusion in rating and classification and many overcharges and claims were the result. To simplify this situation a consolidated classification has been prepared and is now being considered by the Interstate Commerce Commission and the shippers and commercial bodies who are entitled to be heard before its adoption. When it becomes effective it will be practicable
to compel a closer compliance with car-loading standards, so preventing the underloading which in the past made the intensive employment of rolling stock difficult. Under competitive conditions this was impossible, because in an effort to hold or get business each competing railroad was disposed to favor the shipper by permitting him to underload cars when it was to his interest to do so.

THE ABANDONMENT OF COMPETITION—THE CONSOLIDATION OF TICKET OFFICES AND THE RESULTANT ECONOMY.

(4) Inasmuch as there is no longer any competition for freight or passenger traffic between the various divisions of the Government railroad system, I have ordered that solicitation of traffic and special exploitation of passenger routes shall be discontinued. In pursuance of this policy the soliciting forces of the various railroads have been either relieved from duty or assigned to employment in connection with the operating departments, and the separate ticket offices formerly maintained in most of the larger cities have been consolidated. In the metropolitan cities, such as New York, Chicago, etc., several consolidated offices in widely separated but equally important districts may be established for the greater convenience of the public. The saving that will be effected as a result of this policy is estimated at $23,566,633, as per the following statement prepared by the Division of Traffic:

Estimated saving effected by the closing of unnecessary freight and passenger offices and curtailment of advertising.

Closing “off-line” offices:

<table>
<thead>
<tr>
<th>Region</th>
<th>Freight</th>
<th>Passenger</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastern</td>
<td>$3,209,170</td>
<td>496,276</td>
<td>$3,705,446</td>
</tr>
<tr>
<td>Southern</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Western</td>
<td>$2,000,000</td>
<td>500,000</td>
<td>6,500,000</td>
</tr>
</tbody>
</table>

Consolidation of “on-line” city ticket offices and saving in rent from removal of “on-line” offices:

<table>
<thead>
<tr>
<th>Region</th>
<th>Freight (estimated)</th>
<th>Passenger</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastern</td>
<td>$300,000</td>
<td>709,187</td>
<td>1,009,187</td>
</tr>
<tr>
<td>Southern</td>
<td>$10,000</td>
<td>155,000</td>
<td>165,000</td>
</tr>
<tr>
<td>Western</td>
<td></td>
<td>3,250,000</td>
<td></td>
</tr>
</tbody>
</table>

Total advertising—

General and special, present expense, $9,500,000; saving... $7,000,000

Grand total... $23,566,633
ABRIDGMENT OF TIME-TABLES.

(5) In the interest of economy railroad time-tables have been simplified and abridged, extraneous and unnecessary matter has been eliminated, and an attempt to reduce the waste in the distribution of time-tables is being made.

WOMEN TO BE TRAINED AS TICKET SELLERS.

(6) As a result of the draft law and the higher wages paid in some forms of industry the number of trained men familiar with schedules, routes, fares, etc., and competent to act as ticket sellers has been reduced and the coincident increase in the passenger traffic, due to the enlarged business and industry of the country and to the traveling of our soldiers and their relatives as well as to the constant transfer of labor, has created no little congestion and delay at the ticket offices and in the larger railroad stations in the country. Every effort has been made to remedy these conditions and they have been much improved, but greater improvement is expected when it shall be possible to utilize the services of women as ticket sellers. To this end schools for the education of female ticket sellers have already been established in several of the larger cities. In them a number of women are already in training and as soon as they are fully qualified they will be put to work in the various ticket offices of the country. For this work they will receive the same wages that are paid to men for similar services.

UNNECESSARY PASSENGER TRAINS ELIMINATED.

(7) After careful study a number of unnecessary passenger trains have been eliminated. Between many of the larger cities of the country served by competing railroads there was formerly a surplusage of elaborately equipped passenger trains. In many cases they started and arrived at the same time. Some of them were but half filled. Thus, for instance there were two 20-hour trains between New York and Chicago that left and arrived at the same hour. Between Chicago and St. Paul and Chicago and St. Louis and Chicago and Kansas City there were in each case from three to five trains leaving about the same time in the evening and arriving almost simultaneously the next morning. There was a similar duplication and in some cases a triplication or quadruplication of service between many other centers. In the wintertime there were three Florida flyers between New York and Jacksonville. One train run in two or three sections when necessary would have served the public traveling to Florida just as well.

Many of these unnecessary trains have been eliminated. In the territory west of Chicago and the Mississippi River passenger trains traversing an aggregate of 21,000,000 miles a year have been done away with. In the Eastern District unessential passenger trains that used to travel 26,420,000 miles per annum have also been eliminated. In other regional districts superfluous trains are being annulled. Through travel is being directed to the natural routes. The hauling of special trains or needless private cars has been dis-
couraged and the schedules are being revised so that connections will be closer. Railroad tickets between points reached by one or more roads are honored by any of the routes, so that the traveler is free to use the trains leaving at the most convenient hour. The duplicate train service between Chicago and the Pacific coast cities has been abandoned, the fastest service to each city being assigned to the short and direct routes. Under this plan the direct route to Los Angeles is via the Atchison, Topeka & Santa Fe; to San Francisco via the Chicago & Northwestern, the Union Pacific and Southern Pacific; to Portland via the Chicago, Burlington & Quincy and Northern Pacific; to Seattle via the Chicago, Milwaukee & St. Paul. The passengers desiring to make the shortest time to any of these points would naturally take the fast train over the appropriate route. The slower trains are designed to serve the local and way traffic.

While this has been done the purpose has been not to reduce the facilities for comfortable and convenient passenger service below the needs of the public. The effort is to give sufficient and efficient service and to eliminate waste. This is a vital consideration in the present situation when the needs of the war imperatively require that every available passenger coach, sleeping car, and locomotive shall be released for the use of troop movements, and that track and terminal facilities shall be cleared of unnecessary passenger trains, so that essential food, fuel, war supplies, and freight of all kinds may be moved expeditiously and economically. The war requirements must, of course, be given the right of way over everything else.

**THE CONSOLIDATION OF TERMINALS.**

Other reforms that are being worked out in the passenger service include the common use of the same terminals by railroads formerly in competition and using separate terminals. The most conspicuous example of the latter innovation is the use of the Pennsylvania Terminal in New York for through trains via the Baltimore & Ohio between Washington and New York. Passengers going from New York to Washington by the Baltimore & Ohio used to have to take the Twenty-third Street or Liberty Street Ferry and cross the river. This was inconvenient. The result was that the Pennsylvania got the bulk of the traffic, although the Baltimore & Ohio maintained a well-equipped and full service. Now, it really makes no difference to the traveler between Washington and New York by which road he goes. Both make practically the same time and leave and arrive from and at the same terminals.

In this case, as in many others, it has been arranged that trains shall leave at successive hours instead of at the same time, as they often did in the past. The result is that fewer trains are necessary. A ticket from Washington to New York, or vice versa, is good over either road, and as there is a train nearly every hour it is almost unnecessary to consult the time tables. Plans for a similar reform in the service between other large cities which have a multiplicity of terminals are under consideration.

The same principle is being applied as rapidly as possible in the consolidation of freight terminals. The saving of switching costs
that will result and the greater rapidity with which cars can be loaded and unloaded is obvious. The neck of the transportation bottle is the freight terminal, and if the promptness with which cars can be handled there is increased, the congestion, which has in the past so greatly reduced the carrying capacity of our entire railroad system, will be greatly relieved.

In the changes made or under contemplation the prime purpose has been the convenience and service of the public. The necessary readjustments may have caused some temporary dislocation, but the ultimate results will be increased efficiency and capacity.

THE BUREAU FOR SUGGESTIONS AND COMPLAINTS.

With the object of better serving the public, for whose accommodation the railroads of the country exist, a Bureau for Suggestions and Complaints has been organized under my personal direction at Washington. To this bureau, by notices to be posted in the stations and passenger cars throughout the country, the public will be invited to address any helpful criticisms and suggestions with regard to the service that it may have to offer. Letters commending employees who are conspicuously courteous and efficient in the performance of their duties will also be invited, and it is believed that by careful attention to the communications this bureau will receive defects in the service can be promptly ascertained and remedied, and proper recognition be given to conspicuously efficient or courteous employees.

It is expected that this Bureau for Suggestions and Complaints can be made an effective agency in bringing the railroad service up to an ideal standard. Through the cooperation of the public the officials will be able to inform themselves more thoroughly with regard to the shortcomings or disservice of their subordinates than would be possible by any other method of inspection, and the public will be sure of a patient and painstaking hearing which will be free from the influence and favoritism that might and as a matter of fact generally did make itself felt in dealing with the many abuses which existed under private control.

UNIVERSAL MILEAGE BOOK.

(8) A plan has been perfected for the adoption of a universal mileage book that will be good when presented by the bearer on any Government-controlled railroad in the country. The holder of it will not have to purchase a ticket. He can board any train without delay, allow the conductor to detach the necessary mileage coupons, and get off at destination. At their cash value the coupons will also be receivable for excess-baggage charges. These books will be sold at $30 per thousand miles plus the war tax of 8 per cent, and it is believed that their general use will greatly lessen the pressure on the ticket offices and diminish the congestion now complained of.

SHORTENING FREIGHT ROUTES.

(9) Recognizing the fact that a straight line is the shortest distance between two points, extensive studies have been made with the
purpose of developing well-graded routes for the transportation of freight that will be shorter than those previously in use. Great progress has been made in this direction, especially in the West, and many new through lines are being developed. One of them from Los Angeles to Dallas and Fort Worth is over 500 miles shorter than the routing via the Southern Pacific lines formerly much used. Another from the oil fields at Casper, Wyo., to Montana and Washington State points is 880 miles shorter than the route formerly used. Fruit from southern California to Ogden is hauled 201 miles less than by the route previously used. Still another route between Chicago and Sioux City is 110 miles shorter than the one previously used. A new route between Kansas City and Galveston has been developed which is 289 miles shorter than the 1,121 miles previously traversed. Eighty-eight miles have been saved by devising a new route between Mason City and Marshalltown, Iowa, and 103 miles by a new route between Fort Dodge, Iowa, and Chicago. The route from southern California to Kansas City has been shortened by 234 miles.

As one example of the economy that has thus been made possible it may be mentioned that recently during a period of about 60 days some 8,999 cars were rerouted in a certain western territory so as to effect a saving in the mileage traveled by each car of 195 miles, equal to a total of 1,754,805 car miles.

Instances could be multiplied, but those mentioned are sufficient to indicate the progress that is being made in this work. It means a substantial reduction in the cost and time of transportation between many given points and the more intensive employment of both rolling stock and equipment of the railroads.

STORE DOOR DELIVERY AND INTENSIFIED USE OF FREIGHT CARS.

(10) On the 1st of January, 1917, the railways of the United States owned about 2,400,000 freight cars. Delay in loading and unloading these cars and their use by both shippers and consignees as warehouses has very seriously diminished the carrying capacity of the roads. If each car makes one trip a month only and is loaded and unloaded so as to save one day a month of the time that it was formerly idle, the result would be equivalent to an addition of 80,000 cars to the aggregate equipment.

Probably there is an unnecessary delay of more than one day a month in loading and unloading cars. To diminish this delay the free time hitherto allowed for loading and unloading has been shortened and a cumulative increase in the demurrage charge hitherto made for unnecessary use has been ordered, so as to free the rolling stock for transportation more promptly than formerly. As prompt unloading of cars upon their arrival at public terminals presupposes that congestion at the terminals shall be avoided, what is known as the "store door" system of freight delivery has been introduced in Philadelphia and New York and will probably be extended to other large cities. In Philadelphia, through the cooperation between the carriers, the commercial bodies, and the truckmen, it was established on the 1st day of May and has proved itself effective in clearing the stations for inbound package freight 24 hours earlier
than usual. It has recently been inaugurated in New York, where the usual notice to consignees to come and get their freight is no longer given. In lieu thereof immediate delivery of the goods is made by drays, thus doing away with free time at terminals. A reasonable charge for this service is to be paid by the consignees to the drayage companies employed.

If the plan shall vindicate the claims of its authors the congestion of inbound freight, which has hitherto prevented the prompt unloading of cars, will be a thing of the past, and it is suggested that ultimately it may be possible to collect outgoing freight by the same trucks which deliver to stores and factories incoming freight hauled from the terminals.

STANDARDIZATION OF FREIGHT CARS AND LOCOMOTIVES.

(11) It has long been admitted that the standardization of the engines and freight cars in use on the American railroads was highly desirable, but not until governmental control became a fact has it been possible to secure an effective agreement as to which types of cars and engines should be adopted. It is said that 2,023 different styles of freight cars and almost as many different descriptions of locomotives were included in the equipment of American railroads prior to the war. The facts are not known, but nearly every important railroad had its own specifications for cars and engines. None of these was identical, and they were generally changed in some detail when new orders were placed. There were box cars of both steel and wood, gondola cars, flat cars, hopper cars, refrigerator cars, tank cars, automobile cars, furniture cars, cattle cars, and many other sorts of cars suited to the different varieties of traffic. The lack of standardization increased the difficulties of repair when these cars were off the lines of the roads which owned them. Parts were not interchangeable and often had to be telegraphed for.

In a general way the same thing was true of the locomotives in use. Complete standardization will of course be impossible until the rolling stock and engines now in use shall have been entirely replaced by standardized types. Progress has, however, been made. Some 12 standard types for freight cars have thus far been agreed upon, and it has also been decided that hereafter only six types of locomotives of two weights each shall be purchased. The parts of these various types of locomotives and freight cars will be interchangeable. Their construction will be uniform and when repairs are needed they can be made with the greatest possible promptitude.

One hundred thousand freight cars of the agreed upon types have been ordered, and it is expected that the manufacturers can commence delivering them early in September. One thousand four hundred and thirty locomotives of the new type have also been ordered, in addition to about 2,100 that had been contracted for by the railroads prior to January 1, 1918. Of the total of about 3,600 locomotives, some 1,185 had been delivered up to August 1. The equipment of all the railways December 31, 1917, included about 2,400,000 freight cars and 64,750 engines. The ratio which the newly ordered cars and engines bear to the total is not as large as is to be desired, and other orders will be placed as rapidly as the manufacturers can
accept them. Just at present, however, the War Department is taking a large number of the new engines and cars for use on our railroads in France, and these with the orders placed by the Railroad Administration will more than absorb the entire manufacturing capacity of the equipment and locomotive plants in the immediate future.

CAPITAL EXPENDITURES FOR IMPROVEMENTS AND BETTERMENTS.

(12) On February 2, 1918, all lines under Federal control were directed to prepare and send in budgets of improvements immediately required to increase capacity and efficiency and to promote safety in operations; and in the letter of instructions the following policy was prescribed:

In determining what additions and betterments, including equipment, and what road extensions should be treated as necessary, and what work already entered upon should be suspended, please be guided by the following general principles:

(a) From the financial standpoint it is highly important to avoid the necessity for raising any new capital which is not absolutely necessary for the protection and development of the required transportation facilities to meet the present and prospective needs of the country's business under war conditions. From the standpoint of the available supply of labor and material, it is likewise highly important that this supply shall not be absorbed except for the necessary purposes mentioned in the preceding sentence.

(b) Please also bear in mind that it may frequently happen that projects which might be regarded as highly meritorious and necessary when viewed from the separate standpoint of a particular company may not be equally meritorious or necessary under existing conditions, when the Government has possession and control of the railroads generally, and therefore when the facilities heretofore subject to the exclusive control of the separate companies are now available for common use whenever such common use will promote the movement of traffic.

The budgets submitted in response to this called for expenditures chargeable to capital account—that is, exclusive of large sums chargeable to maintenance—amounting in the aggregate to $1,328,493,609, which, upon careful revision by the Director of the Division of Capital Expenditures, was reduced to $975,105,416. This amount has been increased from time to time by new and unforeseen requirements, and particularly by large orders for freight cars, until the improvements definitely authorized to this date amount to $1,151,967,240. Of this amount, $441,604,460 is for additions and betterments, $666,824,180 for equipment, and $43,538,600 for construction of extensions, branches, and other lines.

The policy indicated above has been strictly adhered to by the Division of Capital Expenditures, and appropriations have been directed to work necessary to facilitate indispensable transportation, rather than those improvements which, while desirable and even necessary, are yet more for convenience and economy than for capacity and efficiency in the actual movement of traffic. This is indicated by the very large appropriations for equipment—almost wholly for engines and freight cars; and of the additions and betterments, much the largest item was for additional yards, sidings, etc.; next, shop buildings, engine houses, and appurtenances; and, third, additional main tracks. In view of the great necessity for conserving capital, materials, and labor for war purposes, it does not seem unrea-
sonable to ask our people in various communities to continue to submit, during the present emergency, to inconveniences hitherto endured for lack of facilities that might reasonably be required in normal times.

FINANCIAL ADVANCES TO THE RAILROADS.

(13) Pending an agreement upon the contracts between the carriers and the administration that have been under discussion, the Department of Finance has advanced to the railroads such sums as have been necessary for the payment of authorized dividends and the redemption of maturing obligations that could not be otherwise met or satisfactorily refinanced. Total advances up to July 31 aggregate $203,714,050, including $43,964,000 advanced to the New York, New Haven & Hartford Railroad to meet its maturing obligations in that amount. This loan was made at 6 per cent for one year, with the right of renewal for another year at the same rate. To the New York Central lines $40,000,000 has been advanced and to the Pennsylvania Railroad $30,500,000. Smaller sums have been advanced to other companies where the Division of Finance and the Advisory Committee on Finances associated with it have concluded that such advances were in the interest of the public.

Of $43,205,050 disbursed in the month of July the larger portion, or approximately $23,269,000, was advanced to the Federal Managers of certain railroads to pay up the back wages due to their employees from January 1 to May 31, in accordance with the decision based by the Director General on the report submitted in June by the Railroad Wage Commission. For other operating needs $6,328,775 was advanced to railroads on account of their standard estimated rentals, and $13,607,275 was advanced in the shape of loans, on demand, at 6 per cent per annum interest.

PURCHASES OF SUPPLIES.

(14) The material and supplies annually purchased by the railroads have hitherto cost between $1,500,000,000 and $2,000,000,000 a year. When the carriers were in competition for traffic they were also in competition for the supplies required. This competition has been for the most part eliminated and a substantial saving has been effected as a result of the supervision over all purchases exercised by the director of the division in charge of them. He is aided by an advisory committee of three composed of the General Purchasing Agents of the three leading divisions of the Federal Railroad System and acts through Regional Purchasing Committees, with headquarters in New York, Chicago, and Atlanta, to whom the larger part of the buying that is done for account of the railroads is intrusted. It is planned shortly to enlarge the Advisory Committee by including a representative from each regional district.

THE PULLMAN CAR SERVICE.

(15) The sleeping and parlor cars operated by the Pullman Co. having become an essential and indispensable part of our transporta-
tion system it was decided, after careful consideration, to put them under the control of the United States Railroad Administration and orders have been issued accordingly. This step was taken in the public interest as well as because the sleeping cars were much in demand for military purposes. Now that the Pullman Co., in so far as the operation of its cars is concerned, has been placed under the control of the Government, the operating employees will, of course, receive the same percentages of advance in their pay as were awarded to other railroad employees under the order of May 25, 1918, and while the peculiar conditions under which the sleeping-car service is operated makes it impracticable to apply the principle of the basic eight-hour day in the case of sleeping-car conductors, porters, and maids, orders have been issued that such employees shall have reasonable and proper opportunity for rest and sleep while actually on duty.

THE EXPRESS COMPANIES.

(16) The interdependence between the express companies and the Federal Railroad System became apparent almost coincidently with the establishment of Government control, and a study of the relationship made by Director Prouty of the Division of Public Service convinced me that there was an unnecessary and avoidable duplication and complication in the services rendered by the express companies. A consolidation of the four more important express companies, namely, the Adams, the American, the Wells Fargo, and the Southern, to be effective during Federal control of the railroads, has been made. The consolidated company is described as the American Railway Express Co. and will conduct the express business upon all lines of the Federal Railroad System and upon such other systems of transportation as the Director General may include during the period of Federal control.

Fifty and one-quarter per cent of the gross revenue earned on the transportation of express matter by this company is to be paid to the United States Railroad Administration as compensation to it for the transportation of express matter over the lines of the Federal system. The balance of the express company’s earnings after payment of expenses and a cumulative dividend of 5 per cent on its capital stock (if earned) is to be divided between the express company, the Railroad Administration and a guaranty fund, in accordance with a carefully worked out plan which fully protects the interest of the Government. A complete description of this plan will be found in the contract that has already been published. It is unnecessary to repeat its elaborate provisions. The present capital of the American Railway Express Co. (the consolidated company) has been fixed at $30,000,000, which sum about represents the physical value of the assets acquired.

It is believed that the consolidated express service will be much superior to that furnished in the past by the separately and independently operated companies. It is well known that this service has of late been extremely unsatisfactory and inefficient, and that there is room for radical reform and much needed improvement.

Under the reorganization of the express business that has been agreed upon designated officials will have exclusive charge of the
express business in certain well-defined districts. They will be readily accessible and complaints of nondelivery or delayed transportation will be assured of prompt attention. In the past each express company tried to carry the business originating with it as far as possible over its own lines regardless of the time employed. The coordination now effected will permit of the routing of the business by the quickest and least congested lines.

As the practice of issuing express franks to railroad officials and others had grown to be an abuse which burdened the express companies with a very large amount of "deadhead" and unremunerative business, an order was issued on the 1st of July, 1918, canceling all express franks issued under private control. The effect of this order will result in converting much free traffic into remunerative business for the new company.

THE GOVERNMENT ITS OWN INSURER.

(17) In line with the established policy of the Government to insure its own risks, the Railroad Administration will become its own insurer and meet any fire losses for which it may be liable out of its own funds; a section to be known as the Insurance and Fire Protection Section has been established in the Division of Finance and Purchases. In an effort to minimize losses an adequate and vigilant fire-inspection and fire-prevention service is being organized. This policy has been adopted after a careful study of the past experience of the railroad companies in the matter of insurance. While many of them in the past have carried a part of their liability uninsured, reports from all but five of the more important railroads show that during the three years ending June 30, 1917, the premiums paid insurance companies aggregated $16,021,369, while the total losses incurred during the same period were but $12,460,639, making an excess of premiums over losses for the three-year period of $3,560,730. The three years under consideration included the Black Tom disaster in New York Harbor, resulting in a very heavy and exceptional loss to the companies, and it is believed that a very substantial saving will be effected by the policy of noninsurance that has been adopted. It is expected that by the adoption of a rigid system of inspection and the most approved methods of fire prevention the hazards and losses can be substantially reduced. To this end the cooperation of every railroad employee is expected.

COORDINATION WITH OTHER GOVERNMENTAL DEPARTMENTS.

(18) With the object of coordinating the railroad service more completely and harmoniously with the other war agencies of the Government representatives of the Division of Traffic have been appointed to cooperate with the Fuel and Food Administrations, the War and Navy Departments, the War Industries Board, the United States Shipping Board, and the War Trade Board. As a result of their work the prompt and preferred movement of war supplies for the United States and its allies has been made possible, and solid freight trains are now being operated directly from Chicago and other
western points to meet ships at the Atlantic seaboard. This would have been impossible under private control, and is a departure which has been of inestimable value in keeping our Army and the armies of the allies supplied with food and other requirements.

(19) Other reforms and improvements that have been adopted or are under consideration, are:

**THROUGH WAY BILLING.**

(a) Through way billing from the point of origin to destination has been introduced, rendering unnecessary the rebilling by connecting or intermediate roads that was formerly the practice, and eliminating its attendant expense.

**UNIFORM ACCOUNTING SYSTEMS.**

(b) Accounting systems have been harmonized as far as possible and a clearing house has been established for the settlement of intercorporate balances as a result of which much clerical labor will be saved and the unnecessary transfer of funds will be obviated.

**SUITS AGAINST CARRIERS MUST BE BROUGHT IN CONVENIENT DISTRICTS.**

(c) An order has been issued directing that all suits against carriers while under Federal control must be brought in the county or district where the plaintiff resides or in the county or district where the cause of action arises. This will minimize the loss of the railway employees' time and the expense involved under the former practice, which permitted suits to be brought against the carriers in States and jurisdictions far remote from the places where the plaintiffs resided or the cause of action arose. Under the former practice it often happened that men operating the trains were compelled to be absent from their work for days and weeks and travel hundreds of miles in order to testify as witnesses.

**CAR MILEAGE AND PER DIEM RENTALS ABOLISHED.**

(d) The practice of paying a mileage or per diem rental for the use of freight or passenger cars of one carrier by another under Federal control has been discontinued and the railroads have been ordered to bill each other for the use of rolling stock at the rate which will represent the actual cost of maintenance, operation, taxes, and rentals.

**INTERLINE PASSENGER REVENUE ACCOUNTING SIMPLIFIED.**

(e) The apportionment of interline passenger revenue has been much simplified and will hereafter be reckoned upon a percentage basis that will represent a rateable proportion of the cost of operation rather than an arbitrary charge.
A SAFETY SECTION.

(f) A Safety Section of the Division of Transportation has been created to have supervision over the safety work on all railroads, utilizing such safety organizations as are already available, and suggesting such others as are desirable.

A UNIFORM COMPENSATION, INSURANCE AND PENSION PLAN FOR EMPLOYEES UNDER CONSIDERATION.

(20) Plans for the uniform and equitable compensation of injured employees or the dependents of employees who may be killed in the service of the railroads are being considered, and it is hoped that it may also be possible to arrange for the retirement of employees upon pension at a given age, as well as to provide for their purchase of life, health, and old-age insurance at reasonable rates. Time will, however, be required to perfect these plans, which must be reconciled with the widely varying pension and insurance systems now in existence on not a few of the railroads.

SALE OF INTOXICANTS PROHIBITED.

(21) Feeling that it was not in the public interest that the sale of intoxicants should be permitted on property under the control of the Federal Government, a general order has been issued prohibiting "the sale of liquors and intoxicants of every character in dining cars, restaurants and railroad stations" under Federal control. This order became effective upon the date of its issuance August 12, 1918.

RESULTS THUS FAR SECURED.

This comprises some of the more important reforms already applied or under immediate consideration. Their effect in increasing the efficiency of the service and enlarging the capacity of the existing facilities can not be definitely stated or approximated as yet. Many of the changes made have been effected within the last two months and under private ownership at least 60 days have been required for the compilation of informing railroad statistics. Arrangements are being made to collate and publish them more promptly, but until this can be done it is impossible to promptly and properly correlate innovations in methods with results.

Speaking generally, however, there is good ground for believing that substantial progress has been made in accelerating the movement of traffic, employing the available equipment more intensively and running trains more nearly on time.

The number of tons of revenue freight carried 1 mile, commonly known as revenue ton-miles is the ultimate measure of service in railroading. Applying this measure we find that the revenue ton-miles of 94 per cent of class 1 railroads (i.e., those having an operating income in excess of $1,000,000 per annum) was 34,250,247,814 miles in April, 1918, as against 31,464,837,365 miles in the same month in 1917. The increase is equal to 8.9 per cent. The average number of freight cars in service had increased by 5.1 per cent, being 2,387,670
in April, 1918, as compared with 2,271,359 in 1917. The number of tons hauled per train shows an increase of 6.9 per cent, being 696 tons in April, 1918, as against 651 tons in April, 1917. The percentage of increase in the carload is even greater, being 14.4 per cent, the average carload in April, 1918, being 29.4 tons as against 25.7 tons in April, 1917. The revenue ton-miles for freight locomotives shows an increase of 7.9 per cent, being 1,125,875 in April, 1918, as against 1,045,921 in April, 1917.

Other evidence that the rolling stock is now more intensively employed is to be found in the report of loaded cars arriving at Philadelphia and Pittsburgh during the first four weeks of July. This report is as follows:

Comparative statement, loaded cars and tonnage contents arriving at Philadelphia and Pittsburgh, four weeks ending July 27, 1918, and corresponding four weeks previous year.

<table>
<thead>
<tr>
<th></th>
<th>Cars</th>
<th>Tonnage.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1918</td>
<td>100,228</td>
<td>3,023,207</td>
</tr>
<tr>
<td>1917</td>
<td>107,158</td>
<td>2,732,765</td>
</tr>
</tbody>
</table>

These figures show an increase of 9 per cent in the tonnage and a decrease of 7 per cent in the cars used. The number of tons per car in July this year is 30.2 as against 25.7 tons in the same period last year. The increase of 18 per cent if it were general throughout the country would be the equivalent of an addition of about 432,000 cars to the freight-car equipment of the railroads.

THE COAL MOVEMENT.

These figures all show encouraging progress. Just at present strenuous efforts are being made to speed up the movement of coal so as to preclude the recurrence of the distressing experience of last year. In both the production and transportation of coal 1917 was a record year. Including bituminous, lignite, and anthracite the production was 650,000,000 tons. Of this some 11,563,056 cars, containing about 558,000,000 tons, were transported by the railways. The balance was either consumed or converted into coke at the mines or near by. During the bad weather in January, 1918, when the railroads were practically at a standstill, there was a reduction of 79,131 cars in the number of cars of coal loaded and moved as compared with the year 1917. Notwithstanding the continued bad weather in February, 1918, the railroads got on their feet and increased over February, 1918, 31,250 carloads of coal. In March the increase was 46,613; in April, 73,408; in May, 84,998; in June, 88,840; and for the first four weeks of July, 113,198 cars. It will be seen, therefore, that for the last six months the increase in coal carried by the railroads has been 437,976 cars of coal—equal to about 21,998,800 tons.

One of the great advantages of governmental control is that the transportation facilities of the country can be concentrated upon the quick performance of an urgent duty. The energies of the Railroad
Administration are now being largely devoted to moving the coal mined as rapidly as the Fuel Administration can deliver it.

Of late cars have frequently been supplied to the coal mines more rapidly than they have been able to load them and it is probable that adequate transportation for the fuel requirements of the Nation will be available provided the coal production during the warm weather can be maintained at a point that will fully employ the cars requisitioned. The country has been led to believe that coal production is limited entirely by transportation and that any shortage is due to the railroads. This is erroneous. The maintenance of an adequate coal supply depends in the first instance upon production which in turn is restricted by shortages of labor and other causes aside from transportation.

THE VOLUME OF TRAFFIC.

Some idea of the volume of the eastbound freight traffic is to be had from a recent report of the Pennsylvania road which shows that 250,000 freight cars moved past Columbia, Pa., during the month of June. Practically all the through east and west bound freight is routed via this point and the cars passing there in June if coupled together would make a continuous train more than 2,000 miles in length. The average daily movement was 8,544 cars or an average of about one car every 10 seconds. On June 20, 9,531 cars passed Columbia, exceeding all previously reported one-day movements on the Pennsylvania road and establishing what is believed to be the world’s record for the greatest number of freight cars that ever passed a given point in 24 hours. In weight the freight in the month exceeded 6,000,000 tons, equal to the carrying capacity of 1,200 steamships of 5,000 tons each, or approximately 40 vessel loads of freight a day.

Similar reports are being received from other districts. The reports from the Eastern District indicate that the average anthracite and bituminous coal dumped at tidewater ports per calendar day in January was 2,233 cars. By May this average had risen to 3,345 cars. The average daily movement of anthracite and bituminous coal into New England in February was 794 cars per day. By May it had risen to 1,109 cars. On January 1 there were on hand at North Atlantic ports approximately 41,000 cars of export freight at piers, and on the ground. By the 8th of May this had been reduced to approximately 28,000 cars, since which time a further reduction has been effected. The movement of coal via the Great Lakes shows an increase of 26 per cent over last year in cars dumped in vessels up to the end of May this year, but it is hoped that a still greater gain may be shortly secured.

THE TROOP MOVEMENT.

For many reasons it is not perhaps in the public interest that a complete statement of the traffic that has been handled for the Government should be published at present, but some idea of the service performed may be had from the statement that from May 1, 1917, to July 31, 1918, about 6,455,558 troops had been moved on orders from the War and Navy Departments. Of this number
4,304,520 or nearly 68 per cent were carried between January 1 and July 1, 1918. These figures do not include soldiers, sailors, and officers traveling at their own expense.

THE TRANSCONTINENTAL LUMBER MOVEMENT.

Another movement of Government traffic that it is permissible to mention is the shipment of lumber for ships, aeroplanes, and other Government requirements, excluding railways, across the continent. Some 177,000,000 feet were shipped from the Pacific coast to Atlantic or intermediate points in this way between January 1 and July 18, 1918, and when speed was essential delivery on the eastern seaboard has been frequently made within 15 days after shipment from the Pacific coast.

CONCLUSION.

I shall hope at another time to submit a more complete statement of what has been accomplished. This report is necessarily fragmentary as the reconstructive work undertaken is not entirely complete and the new machinery that has been installed requires further coordination.

A daily increase in facility and efficiency is nevertheless noticeable, and I am confident that the railroads will shortly be in a condition to meet any demands that may be made of them if needed motive power already ordered can be secured and if the necessary skilled labor is not withdrawn from the railroads for military and other purposes. These are very serious phases of the railroad problem.

Officials and employees have worked with such loyalty and zeal to accomplish what has already been done that it is a genuine pleasure to make acknowledgment of their splendid work. It is a constant satisfaction to be associated with them. You can rely upon their patriotic enthusiasm and alacrity in the work of winning the war, in which they as well as the soldiers at the front have enlisted with such laudable determination and patriotism.

On the 17th of June last I issued a statement in which I set forth the policy by which I have been and shall continue to be governed in my administration of the railroads. For your information a copy of it is appended.

Cordially yours,

[Signature]

Director General of Railroads.
DECLARATION OF POLICY.

[Issued June 17, 1918.]

The policy of the United States Railroad Administration has been informed and shaped by a desire to accomplish the following purposes which are named in what I conceive to be the order of their importance:

First. The winning of the war, which includes the prompt movement of the men and material that the Government requires. To this everything else must be subordinated.

Second. The service of the public, which is the purpose for which the railways were built and given the privileges accorded them. This implies the maintenance and improvement of the railroad properties so that adequate transportation facilities will be provided at the lowest cost, the object of the Government being to furnish service rather than to make money.

Third. The promotion of a spirit of sympathy and a better understanding as between the administration of the railways and their 2,000,000 employees, as well as their 100,000,000 patrons, which latter class includes every individual in the Nation, since transportation has become a prime and universal necessity of civilized existence.

Fourth. The application of sound economies, including—

(a) The elimination of superfluous expenditures.

(b) The payment of a fair and living wage for services rendered and a just and prompt compensation for injuries received.

(c) The purchase of material and equipment at the lowest prices consistent with a reasonable but not an excessive profit to the producer.

(d) The adoption of standardized equipment and the introduction of approved devices that will save life and labor.

(e) The routing of freight and passenger traffic with due regard to the fact that a straight line is the shortest distance between two points.

(f) The intensive employment of all equipment and a careful record and scientific study of the results obtained, with a view to determining the comparative efficiency secured.

The development of this policy will, of course, require time. The task to which the Railroad Administration has addressed itself is an immense one. It is as yet too early to judge the results obtained, but I believe that great progress has been made toward the goal of our ideals. All those who have had a share in this great work, including especially the members of my staff and the officers and employees of the railways, have shown intelligence, public spirit, loyalty, and enthusiasm in dealing with problems that have already been solved and attacking those that still await solution.

With their continued cooperation, I feel assured of a future in which the lessons of our accumulating experience will be effectively employed to humanize the science of railroading and negative the idea that corporations have no souls.

W. G. McAdoo.
ored by any route, and a_age book good in the han_an Government-control to be had. It is sold in 1,000 miles at 3 cents p_Government tax of 8 pe_pons it contains are also value for excess baggage

THE CONSOLID TERMIN

Another reform that is is the consolidation of pa_ The most conspicuous ce been applied is the use_nia Terminal in New trains via the Baltimore_ Washington and New_sulted in greatly relievi_ the Pennsylvania line, _formerly deterred from_Baltimore & Ohio becau_across the Hudson Rive_now find it just as conve_that was formerly a fav_has been a more equable_New York and Washin_is now carried in fewer_trains.

THE BUREAU FOR AND COMP]

The establishment of gestions and Complain he public are invited the Director General b_in the service to his att_latest and will probably_the most popular novel_troduced. He invites_gestions as well as le_conspicuously courteo_ployees from all patro_The establishment of t_regarded as in line w_pressed by Mr. McAdoc
operation

WASHINGTON, Sept. 2, 1919.

In a special message to Congress today, Mr. McAdoo, former chairman of the War Industries Board, asks for the approval of a series of acts which will provide for the consolidation of the railroads of the United States.

Mr. McAdoo says the proposals are not inconsistent with the provisions of the original war contracts regarding the condition of the railroads at their termination or with any agreements that may have been made with railroads.

He points out that the terms of the agreements with the railroads have been satisfied in the payment of dividends and in the reduction of rates, and that the railroads have been operated without loss or profit to the United States.

The acts proposed by Mr. McAdoo will provide for the consolidation of the railroads into a single corporation, and also for the conversion of the railroads into a government corporation.

The acts are designed to make the railroads more efficient and to reduce the cost of transportation.

Mr. McAdoo says that the consolidation of the railroads will enable the government to control the railroads more effectively and to reduce the cost of transportation.

The acts will provide for the appointment of a board of directors to control the railroads and for the establishment of a system of public accounting to give the government an accurate account of the operations of the railroads.

Mr. McAdoo says that the consolidation of the railroads will enable the government to control the railroads more effectively and to reduce the cost of transportation.
The following chapter on the operating results of the Federalized Railroads from Director General McAdoo's forthcoming report to the President for the calendar year 1918 must be held for release in the afternoon papers of Tuesday, January 7th.

EXTRACT FROM THE ANNUAL REPORT OF DIRECTOR GENERAL OF RAILROADS

WASHINGTON
GOVERNMENT PRINTING OFFICE
1919
OPERATION.

The Division of Operation, formerly known as the Division of Transportation, was established on February 9, 1918, and Mr. Carl R. Gray, an operating official of wide experience, was appointed director. This division, with the thorough and sympathetic cooperation of the various Regional Directors, Federal managers, and operating officials and employees, has proved most effective in meeting the enormous problems facing the railroads, and their work has assisted enormously in keeping in a healthy condition the transportation system of the country, essential in peace times, but doubly essential during the past year when the Nation was engaged in a war with the most powerful military autocracy ever created.

In order to understand the operating problems presented themselves with the inauguration of Federal control, it will be necessary to recount some of the potent causes producing the serious conditions of congestion which resulted in the railroads being taken over by the Federal Government, and I will enumerate the steps which were taken to overcome them.

DIFFICULTIES.

1. Accumulation of export freight at North Atlantic terminals, which was reflecting itself immediately in an inability to successfully handle domestic freight. There was no coordination of rail and overseas transportation. The accumulation was chiefly disturbing because it was stationary, and frequently comprehended unloading on the ground, to be afterwards loaded upon cars and moved to piers. The lack of coordination between rail lines and the overseas carriers was overcome by the creation of the Exports Control Committee referred to herein, and export freight was brought forward from the interior only when ocean shipping was available.

2. Shortage of motive power. As a result, engines had been kept in service under pressure of necessity which should have been thoroughly overhauled, and one of the immediate effects of the severe winter weather was to render engines of this class entirely unavailable.

3. Heavy building operations by different branches of the Government, the contractors for which ordered materials forwarded far in advance of their ability to receive and unload. There was at one time over 5,000 carloads of piling alone for the Hog Island shipyard in excess of its ability to accept.
4. On account of the feverish demand for materials of all kinds manufacturers purchased raw materials from unusual markets in excessive quantities, with the frequent result that arrivals were badly bunched and unloading was slow and difficult. This was particularly true in the heavy manufacturing districts north of the Potomac and east of Pittsburgh.

5. The necessity for giving priority to shipments of Government freight and the lack of a central control, even in a single department, to decide upon the degrees of importance in priority. This had resulted in many instances through the insistence of some energetic officer handling a single class of material in a preference movement being given to freight of minor relative importance.

6. The withdrawal for overseas service of Atlantic coastwise vessels, both of railroad and independent ownership, resulting in a call upon the rail carriers for the transportation of an enormous amount of tonnage which ordinarily moved by water.

LESSONS LEARNED.

Certain general conclusions can safely be drawn from a year's experience of operation of the railroads as one unit. Given average weather conditions, and with the exception of the Pittsburgh gateway, which merits especial treatment, there is no question of the ability of the railroads to transport to destination all of the freight offering, either domestic or for overseas, provided there are facilities for prompt disposition and unloading at destination.

The controlling factor throughout our experience has not been in the road transportation, but at the ultimate destination, and any serious conditions of congestion obtaining on any of the trunk lines en route has been the reflex of the conditions at the terminals themselves.

Practically all transportation in the United States has been based primarily upon the desires and necessities of the consignor rather than upon the abilities of the consignee to receive and digest the freight.

The winter conditions, beginning about December 1, 1917, and which were at their worst when Federal control began, continued until well into March, and were the most severe known to railroad history, and continued for a longer period of time.

The congested area was, generally speaking, in the territory north of the Ohio and Potomac Rivers and east of the Mississippi River and Chicago.

Due to the causes above enumerated, as well as to the fact that the movement itself was of unusual volume, there was in this territory, when the railroads came under Federal control, 62,247 carloads of
freight which was being delayed short of its ultimate destination, in addition to which there were held by the lines at and west of St. Louis 31,421 carloads; at and west of Chicago, 24,836 carloads; at and south of the Ohio River gateways, 14,061 carloads; and at and south of the Potomac River gateways, 15,545 carloads.

The majority of this freight was for destinations within a line drawn from Portland, Me., through Albany, Rochester, Harrisburg, and Baltimore. This congestion was practically cleared up May 1, 1918.

BITUMINOUS COAL.

The most serious situation presented itself in the case of bituminous coal. This condition was the result of three factors:

1. An actual shortage of cars at the mines on account of the number delayed under load in the congested area and the limitations upon transportation due to the extraordinarily blizzard weather;

2. The lack of systematic distribution, which the Fuel Administration was arranging to provide; and

3. The dislocation of the New England supply, which was the result of the withdrawal of coastwise steamships, and which presented, on January 1, 1918, the most serious single situation.

The bituminous coal production for the preceding year had been the largest in the history of that industry, approximating 544,000,000 tons, an increase of about 12 per cent over the preceding year. The severe weather conditions prevailing in January, 1918, resulted in a decreased production, almost entirely due to car supply, of 65,294 carloads. Immediate and drastic steps were taken to remedy this situation and, notwithstanding the fact that the weather continued to be unduly severe throughout February and part of March, the railroads got on their feet, and in February produced an increase of 24,366 cars of coal over the preceding February, and for the succeeding months increases over the respective corresponding months of the preceding year were as follows:

<table>
<thead>
<tr>
<th>Month</th>
<th>Cars</th>
</tr>
</thead>
<tbody>
<tr>
<td>March</td>
<td>38,202</td>
</tr>
<tr>
<td>April</td>
<td>64,824</td>
</tr>
<tr>
<td>May</td>
<td>87,036</td>
</tr>
<tr>
<td>June</td>
<td>92,734</td>
</tr>
<tr>
<td>July</td>
<td>150,288</td>
</tr>
<tr>
<td>August</td>
<td>130,656</td>
</tr>
<tr>
<td>September</td>
<td>128,942</td>
</tr>
<tr>
<td>October</td>
<td>89,882</td>
</tr>
</tbody>
</table>

or a net increase for the 10 months of 741,666 cars, or approximately 37,083,300 tons.

New England's necessities have been fully met and the largest tonnage of coal ever known—28,153,317 tons—has been moved to the
Lake Erie ports and transported to the northwest, compared with 26,826,000 tons in 1917; 24,692,000 tons in 1916, and 21,507,000 tons in 1915.

For the Lake season of 1917, 479,058 cars of coal were dumped into vessels at the Lake Erie docks, with an average delay of 2.3 days per car, which was the result of the first year’s effort at cooperation under a single nongovernmental control between the railroads, the coal producers, and the Lake carriers.

For the season just closed, 542,380 cars of coal were dumped into vessels at Lake Erie docks, with an average delay per car of 1.45 days. This very satisfactory result was attained through the cooperation of the coal producers, ore receivers, and the Lake carriers, with the Railroad Administration through the formation of the Cleveland Ore & Coal Exchange.

A very considerable proportion of the credit for the increase in the coal production must be attributed to the operation of the zone plan, to which special reference is made hereafter, and which overcame the cross hauling of coal and insured its provision from the nearest accessible market.

FOOD.

Another serious condition arising early in the year was the threatened shortage of foodstuffs for the allies. A program had been arranged by the Food Administration, by which approximately 1,160,000 tons of food of all kinds per month was to be forwarded to the allies. Early in February the matter was brought earnestly to the attention of the Railroad Administration by the Council of National Defense, the Food Administration, and the representatives of the allies. Approximately 750,000 tons only had been forwarded in January, and at the then rate of progress only 500,000 tons would have been forwarded in February.

The situation was represented to be of the utmost importance and was taken hold of with vigor. Empty box cars were moved in preference from all portions of the East and South into the western grain States, with the result that by March 15 the vessel capacity of the allies had been satisfied and there was available at North Atlantic ports an excess on wheels of 6,318 cars of foodstuffs, exclusive of grain on cars and in elevators.

This situation has not at any time since presented any embarrassments and has been fully and satisfactorily met.

FURNACE SITUATION.

The severe weather conditions and the resulting car shortages had produced a very serious situation with respect to the blast furnaces in the eastern territory. On January 12, 1918, out of a total of 169
furnaces 17 per cent were out of blast. This situation was accentuated during the month of January, until on February 1, 22 per cent were out of blast.

This was given special consideration and a steady improvement was made until June 1. Since then the situation has been practically normal.

**LEASE OF LOCOMOTIVES.**

At the beginning of Federal control the Baldwin Locomotive Works and the American Locomotive Co.'s plants were occupied in the construction of locomotives for the Russian Government, which, on account of the conditions prevailing in that country, it was impossible to deliver. Two hundred of these locomotives were partially constructed and practically all of the material was fabricated. These 200 locomotives were taken over by the War Department and leased to the Railroad Administration and are in service. They were constructed to a 5-foot gauge, as contrasted with our 4-foot 83-inch regulation. This difference was taken up by the use of wide tires, and these engines have been giving good service and came at a time when the need of additional motive power was very great.

A temporary lease of 135 light consolidation locomotives was made with the War Department. These locomotives were for use in France and were returned and shipped overseas during the months of August and September.

Just prior to the inauguration of Federal control the Railroads' War Board, which had been voluntarily formed by the individual railroads, had transferred to the eastern territory 92 engines from western and 15 engines from southern railroads. In addition, as they came from the manufacturers, 130 new locomotives, which had been constructed for southern, southwestern, northwestern, and central western railroads, were placed in service on eastern lines.

In addition to this transfer of power into the eastern region, there was a relocation of power inside of that region from one road to another, amounting to 215 locomotives.

**TRANSPORTATION.**

While it is not possible in a report of reasonable length to epitomize in detail the action taken under unified control to simplify and economize methods of transportation, they can be briefly stated as coming under the following general heads:

**(1) Unification of terminals.—**This has been general throughout the country at both large and small stations, but has been of the greatest importance at the larger terminals, where terminal managers have been appointed with jurisdiction over the facilities of all lines. Where unnecessary mileage was not involved, a consistent effort has
been made to route freight so as to arrive at the specific terminal where it was to be disposed of, and, so far as practicable, interchange switching in terminals has been eliminated.

In Chicago terminals, it has been the practice under private control to reconsign practically all coal after arrival. By cooperation with producers, 66 per cent of the coal arriving at Chicago, in August, was consigned direct to consumer from the mines, and cross-hauling coal between terminal lines was greatly reduced through the same cooperation, whereby coal was used wherever possible upon the rails of the individual road over which it arrived.

Single track separately owned lines between Pueblo and Denver, 118.5 miles, and between Wells, Nev., and Winnemucca, Nev., 185 miles, have been utilized as double track.

The reports of the Regional Directors, which follow, will give in detail the information as to unification of terminals and facilities. However, the following are typical examples of what has been done:

The Southern Pacific; Atchison, Topeka & Santa Fe, and Western Pacific, each maintained passenger ferry service between Oakland and San Francisco. Santa Fe and Western Pacific passenger trains have been brought into the Oakland Mole of the Southern Pacific. The latter railroad’s ferry facilities were ample for the three lines, so it was possible to dispense with the ferry service of both the Santa Fe and the Western Pacific, at an approximate saving of $315,000 per annum.

All railroad marine facilities in New York Harbor were consolidated under a marine manager, and have been used in common with very satisfactory results.

One hundred and seventeen coal-carrying barges and 18 tugs belonging to the Philadelphia & Reading, Lehigh Valley, New York, Ontario & Western, and Erie Railroads were pooled under a single management.

All passenger trains of the Baltimore & Ohio and through passenger trains of the Lehigh Valley were brought into the Pennsylvania Railroad terminal in New York City.

(2) Short haul of freight.—Instructions were issued immediately upon the inauguration of Federal control providing for the movement of freight by the shortest practicable route. This practice has been consistently followed, except where better grade conditions and less congestion were favorable factors on a somewhat longer line. Agencies were created whereby failure to observe the correct routing was detected and remedied.

It is impossible, of course, to estimate the total saving accomplished in this direction. An instance, however, is available in the case of the Northwestern region, where the correction of improper
routing, within a period of five months, on 34,941 car loads, resulted in a saving of 4,054,455 car-miles.

(3) Solid trains.—This practice was inaugurated of creating solid trains for definite destinations by building up at Chicago, Minneapolis and St. Paul, St. Louis and Missouri River crossings, which resulted in a natural decrease in intermediate terminal switching and the expedition of essential Government freight. This has been especially valuable in the transportation of export food of all kinds, meats, grain and grain products, and of munitions and steel for shipbuilding plants.

(4) Elimination of nonessential passenger trains.—The question of duplicate and unnecessary passenger-train service has been given the most careful consideration, with the result that a number of trains have been discontinued which fell in one of these classes. Between the important terminals the remaining trains have been so spaced as to actually afford greater variety and extent of service than was possible heretofore where, through competitive conditions, the trains on the several lines practically duplicated each other. The saving per year in passenger-train miles by regions is as follows:

<table>
<thead>
<tr>
<th>Region</th>
<th>Miles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastern</td>
<td>16,233,914</td>
</tr>
<tr>
<td>Allegheny</td>
<td>4,870,000</td>
</tr>
<tr>
<td>Southern</td>
<td>1,702,480</td>
</tr>
<tr>
<td>Northwestern</td>
<td>23,280,400</td>
</tr>
<tr>
<td>Central western</td>
<td>16,772,524</td>
</tr>
<tr>
<td>Southwestern</td>
<td>4,411,244</td>
</tr>
</tbody>
</table>

(5) Common use of freight cars.—This subject is dealt with in detail under the heading of “Car Service Section.”

(6) Common use of repair shops.—See reference to mechanical department.

(7) Use of New York tubes.—On account of the very serious conditions arising from the unprecedented ice troubles in New York Harbor, the Pennsylvania passenger tubes were utilized for the movement of anthracite coal from the Jersey terminals to Long Island, which afforded a very substantial relief at a most critical time. Under its franchise this could not have been done by the Pennsylvania Railroad under private operation.

(8) Pittsburgh gateway.—The extraordinary development of industrial activities in and around Pittsburgh, and the enormous tonnage which is handled locally, makes it very difficult to use this gateway for trunk-line traffic, and this is especially true when the through and local business increases coincidentally, as is usually the case. Physical conditions, which embrace a narrow gorge and a large city, render the solution of this problem exceedingly difficult of local treatment.
It is my conviction that as soon as practicable the trunk-line railroads through Pittsburgh should be relieved by the construction of an entirely new line for freight purposes, connecting them east and west of Pittsburgh but entirely avoiding the industrial area.

This presents the single notable exception to the statement made previously regarding the capacity of the railroads.

(9) Coal zone plan.—The experience of the railroads under private ownership, especially with a demand for coal far in excess of the tonnage produced, was that shippers reached out into markets far beyond the territory in which their particular coal had normally been sold in previous years. The result was a very considerable waste of transportation, in that a much greater car mileage, reasonably estimated as running into millions of car-miles, was necessary to supply the country with its normal coal requirements than would have been the case had shippers chosen to content themselves with normal markets.

To meet this situation the Railroad and Fuel Administrations jointly established what has come to be known as the bituminous coal zone plan of distribution.

Under this plan the various bituminous coal mining districts east of the Rocky Mountains were separated and each assigned a definite territory wherein it could market its coal. It was further provided that coal from any district could be shipped to destinations beyond the zone allotted to that district only upon permit of the Fuel Administration, which was recognized by the Railroad Administration as constituting exemption from the railroad embargoes which were laid down to give force and effect to the zone plan. This permitted proper distribution beyond zone lines of certain special grades of coal, coal for by-products use being a specific example.

The coal-zoning plan, however, did not merely save car-miles, and thus permit the production and transportation of several millions more tons of coal than would otherwise have been possible; it furnished, in addition, the means of utilizing coal produced in the Plains States, which would not otherwise have been produced. This was made possible by prohibiting the shipment of certain eastern coal which the war program required to be kept in the East to territory in the West.

RESULTS.

It can be said, by way of summary, that the deliberate purpose and the ultimate result of the plan was to compel the greater use of western coal and conserve, for war purposes, eastern coal, and to permit the greater production of both by avoiding useless waste of transportation.
The zone lines laid down, effective April 1, 1918, have been very closely adhered to since, slight modifications having been made from time to time as domestic and war conditions demanded.

MARINE DEPARTMENT.

The following matters have been handled:
1. General supervision of all water transportation under Federal control on the Atlantic and Pacific Oceans, Gulf of Mexico, their tributaries, and also the Great Lakes.
The following special subjects have also been handled:
2. Protection of pulp supply to insure ample supply of newsprint paper.
3. Cape Cod Canal.
5. Movement of potatoes from Maine.

This department has had direct supervision over the marine facilities of the Division of Operations. The following railroad-owned coastwise steamship companies were taken over December 28, 1917:

In addition to the above, by presidential proclamation the properties of the following steamship companies were taken over on April 13, 1918:
Mallory Steamship Co., Clyde Steamship Co., Southern Steamship Co., Merchants & Miners' Transportation Co., a total of 51 ships. The properties of the four latter companies were returned to their owners by an order issued on December 6, 1918.

The original withdrawals of ships from the coastwise service threw upon the railroads a wholly unusual and unexpected tonnage which, unfortunately, moved into and through the most congested areas. It was not possible to utilize privately owned steamship lines for this purpose, because, naturally, they were disposed to seek that class of tonnage which paid the highest rates and which they could concentrate for a single port. Under Federal control the tonnage which would most relieve the rail lines has been turned to the Coastwise Steamship Section.

In the operation of the Coastwise Steamship Section tonnage was diverted from the Southwest as well as from the entire South, and the supply of cotton for New England mills and of raw materials for eastern war industries was successfully accomplished through
South Atlantic ports, at a time when rail gateways were partially closed.

To relieve the northern trunk lines, seven cargo vessels were operated between Lake Michigan ports and Buffalo, handling a total for the season of navigation of 599,811 tons.

The cessation of war activities has lightened the burden upon coastwise railroads to such an extent that the business can now easily be handled by the railroad-owned steamships and the rail lines.

**METHODS.**

All coastwise lines were operated from April 13, 1918, to September 1, 1918, by the Coastwise Steamship Advisory Committee. On September 1 all coastwise lines under Federal control were combined under H. B. Walker, Federal manager, with headquarters at New York, making possible the transfer of vessels from one service to another regardless of ownership, enabling the greatly reduced fleet to effect prompt movement of all business. The operation of vessels was seriously interfered with by German submarine operations on the Atlantic coast, necessitating running without lights and making long detours to avoid submarines and mines. The steamship *City of Athens* was sunk by collision with the French cruiser *Le Gloire* on May 1, 1918. The steamship *Proteus* was sunk by collision with tank steamship *Cushing* off Cape Hatteras August 19. Steamship *San Saba* was sunk by a German mine off Barnegat, N. J., October 4. Steamship *Onondaga* sunk June 28 off Watch Hill, R. I., while detouring under Navy orders to avoid submarines then operating on the New England coast. Total loss of vessels resulted in each of these cases. Thirty-two ships of the coastwise fleets were in the service of the War and Navy Departments and one in the service of the Italian Government during the report period. The latter vessel—Old Dominion steamship *Tyler*—was destroyed by submarine on May 2, 1918. The steamer *Neches*, of the Mallory Steamship Co., while in War Department service was sunk by collision on May 14, 1918, in British waters.

The properties of the Clyde, Mallory, and Southern Steamship Cos. and the Merchants & Miners’ Transportation Co. were relinquished to their owners on December 6 by order of the Director General dated December 5, leaving under Federal control in coastwise service the Old Dominion Steamship Co., Ocean Steamship Co. of Savannah, and Southern Pacific Steamship Line, all of railroad ownership and integral parts of important railway systems.

Long Island Sound, Baltimore Steam Packet Co. and Chesapeake Steamship Co., operating on Chesapeake Bay, San Francisco & Portland Steamship Co., operating on the Pacific Ocean, have also been handled, through the directors of the regions where located. Five chartered steamers were operated between Buffalo and Chicago-Milwaukee on the Great Lakes during the 1918 season of navigation. The coal-carrying fleet of the Philadelphia & Reading Railroad, consisting of 67 seagoing barges and 10 tugboats, operating between Philadelphia and Boston, via Cape May, in the New England coal service, was transferred, to avoid submarine interference, to the route between Port Reading, N. J., on New York Harbor, and Boston, via Long Island Sound, and Cape Cod Canal, increasing the rail movement on coal by 70 miles and reducing the water movement 185 miles. The constructive saving is much larger, due to the protection against weather, fogs, ice, and other interference with navigation afforded by the shorter route in protected waters. No submarine interference was possible after the change. On July 21 the Lehigh Valley tug \textit{Perth Amboy} and three barges were sunk by shell fire from a German submarine off Orleans, Mass., while en route from Portland to New York via the outside route. The tug has been restored to original condition and service. Salvage work on the barges will be undertaken when the equipment is available.

To promote uniform service and efficiency in operation, the coal-handling fleets of the Philadelphia & Reading, Lehigh Valley, Erie, and Ontario & Western Railroads, comprising 117 seagoing barges and 18 powerful tugs, have been combined under the management of Marine Director Pollock, New York Harbor. By proper coordination with the coal-carrying lines reaching New York Harbor and the New England railroads this combined fleet with all the all-rail routes of the Railroad Administration has sufficient capacity to move all coal tonnage to New England required by present conditions.

\textit{Coal for New England.}—The budget for New England coal for the coal year beginning April 1, 1918, after exhaustive conferences with the Fuel Administration and its New England representatives, was decided upon as follows:

<table>
<thead>
<tr>
<th>Bituminous</th>
<th>Tons</th>
</tr>
</thead>
<tbody>
<tr>
<td>All rail</td>
<td>9,182,200</td>
</tr>
<tr>
<td>Rail and water</td>
<td>20,504,900</td>
</tr>
<tr>
<td>Total</td>
<td>29,687,100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Anthracite</th>
<th>Tons</th>
</tr>
</thead>
<tbody>
<tr>
<td>All rail</td>
<td>5,165,500</td>
</tr>
<tr>
<td>Rail and water</td>
<td>5,165,500</td>
</tr>
<tr>
<td>Total</td>
<td>10,331,000</td>
</tr>
</tbody>
</table>
Up to November 30 the following tonnage had been moved:

<table>
<thead>
<tr>
<th>Coal Type</th>
<th>All Rail</th>
<th>Rail and Water</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bituminous</td>
<td>7,502,463</td>
<td>12,228,041</td>
<td>19,730,504</td>
</tr>
<tr>
<td>Anthracite</td>
<td>3,887,981</td>
<td>3,058,304</td>
<td>6,946,285</td>
</tr>
</tbody>
</table>

It will be noted that as to anthracite the performance has exceeded the eight months' program by 58,949 tons, while the bituminous has fallen behind 60,896 tons.

**NEEDS OF NEW ENGLAND MET.**

I am especially pleased to report that with the tonnage moved and now moving the needs of New England have been fully met.

*Pulp wood for news-print paper.*—A critical situation developed in June, 1918, on account of the shortage of pulp wood for news-print mills in interior Maine. A supply of pulp wood had previously been brought by water and on tramp steamers from ports in New Brunswick and Quebec. These steamers had been withdrawn by the owners, and this emergency was taken care of by a program which provided for the movement of a considerable part of this tonnage by rail. The residue was cared for in steamers which were regularly assigned for the handling of railroad coal from Cape Breton to New England.

There was some sacrifice of efficiency through displacement of desirable coal occasioned by the carrying out of this program, but, in view of the fact that at least 100 newspapers were absolutely dependent for their print paper upon this source of supply, it was considered to be entirely justified.

At the earnest request of the American newspaper publishers the Railroad Administration undertook to protect the production of news-print paper by moving pulp wood by rail from Chatham and Dalhousie, on the Bay of Chaleur, in New Brunswick, and from many other points in Maine and the Dominion of Canada. Arrangements were made with the Canadian Government railways by the Division of Operation for the movement of United States equipment into New Brunswick and other Canadian territory for pulp-wood movement. Subsequently nine steamers were diverted from the Cape Breton-New England coal movement of the United States Railroad

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1 As compared with a program of 19,791,400 tons.
2 As compared with a program of 6,887,336 tons.
Administration to move pulp wood from Gaspe to Portland, Me. Under date November 19 the largest producer of news-print paper, the International Paper Co. of New York, announced the completion of the program requested by the newspaper publishers, concluding as follows:

The prompt aid afforded by the Division of Operation at a time when transportation was so uncertain has enabled our Otis mill, at Livermore Falls, Me., to continue its supply of news print to more than 100 publishers, whose quota could not have been replaced from any other source had this mill failed to receive its full supply of raw material.

Thanking you for the excellent work done by your division, I beg to remain,
Yours, very truly,

P. T. Dodge, President.

Four hundred and ninety-one thousand seven hundred and thirty-six cords of pulp wood were delivered at their various news-print mills in the period discussed.

CAPE COD CANAL.

The Cape Cod Canal was taken under Federal control by proclamation effective July 25, 1918. Formation of shoals in this canal had reduced its navigable depth at mean low water to 17 feet, a reduction of 8 feet from its depth when completed in 1916. The rapid increase in shoaling was rendering the canal useless as a national waterway, while the German submarines were destroying American commerce of vital character off the New England coast. It had been impossible for the canal owners to secure during the previous year the use of dredging equipment, practically all of the type needed being in Government service at the new shipyards and naval bases. The losses in the operation of the canal precluded financing the extensive dredging necessary, had equipment been available. The canal was added to the eastern region, previous management being retained, under the direction of the district director of the eastern region. An emergency appropriation of $250,000 was provided for immediate dredging, piling, bank-protection work, and other essential maintenance and betterment work. The canal was opened on October 23 for vessels drawing 20 feet 6 inches of water, and the completion of all dredging necessary to restore the original depth of 25 feet at mean low water is expected on February 15. Bank protection, by granite riprapping has been completed. A shoal near Wings Neck in Buzzards Bay, some distance from the canal entrance, is being removed by the War Department dredge General Gillespie to 25 feet depth.

Through the assistance of other departments of the Government, approaches to the canal have been improved for navigation by night and by day. A life-saving station and marine hospital are being in-
stalled. Four large tugboats and a force of competent pilots are in readiness to assist vessels through the canal. A supply of coal has been established for steam vessels requiring fuel. Traffic through the canal has greatly increased regardless of the interference of dredging operations in the narrow section. Statistics are as follows:

<table>
<thead>
<tr>
<th>Month</th>
<th>1918</th>
<th></th>
<th>1917</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number vessels</td>
<td>Vessel tonnage</td>
<td>Cargo tonnage</td>
<td>Number vessels</td>
</tr>
<tr>
<td>August</td>
<td>580</td>
<td>533,725</td>
<td>170,529</td>
<td>450</td>
</tr>
<tr>
<td>September</td>
<td>600</td>
<td>546,806</td>
<td>226,904</td>
<td>364</td>
</tr>
<tr>
<td>October</td>
<td>542</td>
<td>476,382</td>
<td>192,639</td>
<td>317</td>
</tr>
<tr>
<td>November</td>
<td>463</td>
<td>351,672</td>
<td>150,901</td>
<td>266</td>
</tr>
<tr>
<td></td>
<td>2,185</td>
<td>1,900,675</td>
<td>771,063</td>
<td>1,367</td>
</tr>
</tbody>
</table>

Increase: Vessels, 788; 56.4 per cent. Vessel tonnage, 553,754; 41.1 per cent. Cargo tonnage, 404,628; 114 per cent.

On September 25 the steamers Coastwise and Bristol, length 359 feet, beam 49 feet, drawing 18 feet of water, were successfully passed through the canal at mean low water. These are the largest boats operating in the New England coal trade, their capacity approximating 7,000 tons of coal each.

**MOVEMENT OF POTATOES FROM MAINE.**

The potato shipping interests in Maine being apprehensive of shortage of transportation for the Maine potato crop during the coming winter, the Division of Operation was requested to organize equipment supply, train, and if necessary, vessel movement. Complete provision has been made and there is no probability of weather or any other condition preventing prompt and efficient movement of this important food and seed crop. Estimate of total crop is 25,000 carloads.

**MECHANICAL DEPARTMENT.**

Reference has already been made to the serious conditions resulting from the shortage of efficient motive power, particularly in the eastern section, and the condition of the existing locomotives when Federal control began.

On February 9, 1918, Mr. Frank McManamy, chief inspector of locomotives for the Interstate Commerce Commission, was appointed manager of the Locomotive Repair Section, and authorized to coordinate the repair of locomotives. On July 1, 1918, he was promoted to Assistant Director in charge of the mechanical department and his jurisdiction extended to include car repairs, supervision of mechanical standards, and of tests for new devices. Later he was given jurisdiction over the enforcement of Federal laws for the promotion of safety for employees.
Methods adopted for improving equipment.—To utilize any of the large manufacturing plants for repairs would very seriously limit their effectiveness in the production of new locomotives, and on account of the competition of high wages paid by the shipbuilding plants and war industries generally there was a considerable shortage of skilled mechanical workers in railroad shops.

Immediate relief could only be secured by working a greater number of hours. On a large number of railroads there were in existence contracts with the mechanical crafts which limited the number of hours per day. The railway employees' department of the American Federation of Labor, which represented the mechanical crafts on such railroads, very patriotically met this situation and voluntarily agreed that they would, during the period of the war, waive their privileges in this respect.

As a result of this, railroad shops on many of the important lines were placed on a basis of 70 hours per week, and the remainder on 60 hours per week, which was approximately an average increase of 20 per cent in shop hours.

In June all shops were placed on the 60-hour-per-week basis, which continued until the signing of the armistice, when arrangements were made for readjusting the hours which were reduced on November 25 to nine, and December 9 to eight hours per day.

Coordination of locomotive repairs.—A check of the repair shops indicated that their combined capacity was ample to take care of all of the locomotives if they were properly distributed. Plans were immediately perfected to send locomotives to the nearest available repair shop, regardless of ownership and to distribute the work so that each shop could be worked to capacity.

This arrangement, in many instances, actually reduced the distance which defective locomotives were ordinarily sent for repairs, and also reduced the time such locomotives were held out of service.

Under this plan, since January 1, we have transferred 2,065 locomotives to the shops of other railroads under Federal control, where they have been given heavy classified repairs; otherwise, these locomotives could not have been kept in service.

Comparison of motive-power conditions.—Accurate comparison of motive-power conditions with one year ago are difficult, because of the varying methods of rendering reports prevalent on the different lines, the repairs on some roads being divided into three classes, while on others they were divided into more than 150 classes.

This has been standardized, and the reports of repairs and of the condition of locomotives are now rendered by all roads on the same basis.

The improvement in the condition of locomotives is perhaps best indicated by the fact that, notwithstanding the tonnage handled dur-
ing the year has been the heaviest ever known, there are now stored in good condition and ready for winter service, 1,189 locomotives, while one year ago there was not a single serviceable locomotive in storage. This improved condition is due to the coordination of shopwork which has resulted in an average increase of 20.93 per cent each week in the number of locomotives receiving classified repairs.

**Condition of freight cars.**—The general condition of freight cars has also shown a substantial improvement since the organization of the mechanical department.

The percentage of bad-order cars to revenue cars on line has decreased from 7 per cent in July to 5.3 per cent, which is a decrease of approximately 43,000 in the number of bad-order cars.

**Standardization of equipment.**—The standardization of locomotives and cars is an ideal which has long been striven for by the various organizations of railroad officials, and much has been done by them to bring about this result.

Complete accomplishment has never heretofore been possible because of an absence of authority to enforce standards which might be agreed upon. This has now been accomplished by the preparation and adoption of standard designs for different types of locomotives which are suitable for all classes of service and by standardization of freight and passenger equipment.

This will increase production by eliminating delay waiting for designs and patterns and will facilitate repairs and reduce the number of repair parts necessary to be carried in stock.

It is interesting to note that one of the large locomotive companies, working solely upon engines of individual design, turned out in a five-week period ending August 17 only 104 completed engines, while the same shops for the five weeks ending October 2 produced 163 engines of standardized design.

It would not be safe to assume so great an increase in capacity as a regular thing, but that the standardization does very greatly increase the capacity of locomotive shops is unquestioned.

**GENERAL CONDITION OF EQUIPMENT AND TERMINAL FACILITIES.**

One of the prime causes for the necessity of Government control of railroads and one of the most serious conditions the Railroad Administration was called on to correct when assuming control, was the general bad condition of locomotives and cars.

An extended period of heavy business, high prices for material, difficulty in obtaining sufficient labor, and the loss of many of their experienced mechanics through the selective draft, followed by an early and unusually severe winter, had resulted in a general defective
condition of locomotives and cars which had reached a point where repair tracks were blocked and terminals congested with bad-order cars, and shops and roundhouses were so crowded with locomotives awaiting repairs that proper facilities for maintaining the locomotives actually in service were no longer available.

Added to this the congestion due to failure of shippers to unload promptly cars consigned to them, many of which needed repairs before they could be reloaded, had made conditions at important terminals and shop points such that the mechanical departments were unable to cope with them.

It was impossible at the time the railroads were taken over to say to what extent the condition of locomotives and cars were responsible for the situation which existed, and as the Railroad Administration had at that time no mechanical department organized to check up shop practices and handling of equipment at terminals and advise relative to outlining plans for improvement, the Interstate Commerce Commission was asked to assist in obtaining accurate information relative to the general situation. The commission promptly placed at the disposal of the Railroad Administration the records and personnel of its Bureau of Locomotive Inspection and Bureau of Safety.

The records of these two bureaus contained much valuable data with respect to general conditions throughout the country and the inspection forces of the commission were assigned to various congested terminals, particularly throughout the East and Middle West, to investigate and make daily reports of the actual condition of locomotives and cars and train movements.

These reports showed that in addition to the congestion caused by failure of shippers to unload cars promptly that a serious situation existed on account of the number of bad-order cars at various terminals and also on account of the general defective, run-down condition of motive power, which, together with overcrowded and inadequate shops and roundhouses, had resulted in trains being held at terminals on account of shortage of efficient motive power, and also seriously slowed up movement on the road, often to the extent of blocking several divisions.

The immediate remedy for these conditions was not so much the building of new locomotives and cars as the proper maintenance of locomotives and cars that were in service and more prompt movement of trains.

At a time when the various war industries were clamoring for skilled mechanics at almost any rate of pay, and the supply had been substantially decreased by the selective draft, the problem of improving the condition of locomotives and cars in the midst of exceptionally severe winter weather was an extremely difficult one.
A survey of the situation indicated that shop facilities were sufficient if efficiently used; therefore, the task of nationalizing the railroad-shop facilities and assigning locomotives to shops where repairs could be made, regardless of ownership, was assigned to the chief inspector of the Bureau of Locomotive Inspection, who, in addition to his duties as chief inspector, was placed in charge of the mechanical department of the administration.

**CONDITION OF ROUNDHOUSES.**

Prompt handling of locomotives was seriously hampered by the condition of roundhouses and the lack of facilities at many points to make running repairs to large modern locomotives. Roundhouses built 20 or more years ago for locomotives in service at that time were still being used to house locomotives more than twice the size for which they were designed. Repairs had to be made either out of doors or in open roundhouses with the temperature below zero. Steam pipes, injectors, air pumps, and even cylinders froze and burst, and in many cases locomotives were actually frozen to the track in roundhouses and could not be moved.

As an illustration of the conditions confronting the Railroad Administration in this respect, investigations conducted by the Interstate Commerce Commission show at Philadelphia on the Baltimore & Ohio Railroad 133 locomotives froze up during the period from December 28, 1917, to January 5, 1918, and at Jersey City and Elizabethtown on the Central Railroad of New Jersey 43 locomotives froze during the same period.

Reports from the same source also show in a period of five days 94 locomotives in passenger service out of Harrisburg on the Pennsylvania Railroad failed for steam and both Altoona and Pittsburgh on the same railroad reported a shortage of as high as 123 locomotives in one day.

On the Chesapeake & Ohio Railroad 189 mines were shut down and locomotives in serviceable condition were not available to move a sufficient number of cars to allow them to operate.

In spite of these conditions, under the plan organized by the mechanical department of the Railroad Administration with the assistance of the railroad officials and the cooperation of the employees in working increased hours regardless of working conditions, the situation immediately began to improve and that improvement has continued up to the present time.

It is true that there were difficulties encountered on account of failure to appreciate the need of cooperation between officers and employees. This resulted in 123 instances in labor disputes which threatened to, or did temporarily, tie up certain terminals.
All of these were successfully handled, and following such adjustments there was a noticeable increase in the production of the shops and engine houses where such disputes occurred.

METHODS FOR IMPROVING CONDITIONS.

Only two methods for improving the general condition of equipment existed; namely, to increase the shop facilities and forces or to use more efficiently the facilities and forces which were available.

Increasing the facilities and forces under war conditions was clearly impossible; this left as the only practical means of improving equipment conditions the adoption of some plan whereby existing facilities and forces could be made to produce greater results.

The first step in this direction was to call on the representatives of the organized railroad employees to agree to a modification in certain particulars of their agreements and contracts with the various railroad companies relative to hours of labor and to agree to modifications, under proper safeguards of the rules governing the promotion to mechanics of apprentices and helpers.

This was agreed to by the employees’ organizations, and on February 14, 1918, a letter directing the manner in which this should be done was sent to the representatives of the employees and to the various railroad companies by the Director General and immediate steps were taken to increase the shop hours of men working in locomotive-repair shops and roundhouses to 70 per week where the condition of equipment required it.

The average increase in locomotive-shop hours for the entire country amounted to about 16 per cent, and the effect became immediately apparent by the increased number of locomotives repaired per week in comparison with the most accurate records available for the corresponding week of the preceding year.

This increase in shop hours applied to roads where locomotives were in good condition and shop facilities ample, as well as to roads which were not so favorably situated, which enabled a comprehensive program of nationalization of railroad shop facilities over the entire country to be carried out, and locomotives from roads where shop facilities were not sufficient and motive power in bad condition to be sent to shops on other lines for repairs. This distribution of locomotives was so arranged as to reduce, in many instances, distance to the repair shops; therefore, the cost of transporting locomotives to the shops was no greater and all shops under this plan were kept working to their maximum capacity with a full force.

The plan of considering the condition of equipment as a whole and taking steps to improve it by, first, uniformly increasing shop hours on all railroads in the country and utilizing to their full
capacity the facilities of all shops which could only be done under Federal control is really what improved the condition of the locomotives and cars and enabled trains to be promptly moved from terminals with reasonable assurance that the locomotives would make a successful trip.

The result of the policy of nationalizing railroad shop facilities made it possible to repair at other line shops 2,065 locomotives for railroads which lacked sufficient shop space and shop organization, thus improving the general situation without detriment to the railroads that furnished this help.

Investigation was also made of the facilities of the different locomotive builders with a view to having locomotives repaired by them, but it was found that this could not be done to any material extent without disarranging their schedule of new work both of domestic and foreign locomotives, and in view of the need for both this was not considered advisable, although both the Baldwin Locomotive Works and the American Locomotive Co. did endeavor to make use of surplus facilities to repair what locomotives they could without interfering with their output of new locomotives.

Illustrative of the improvement in motive power and the changed conditions in railroad shops is the fact that it was possible to grant the request of the Baldwin Locomotive Works, made on September 13, 1918, for assistance in machining locomotive frames, driving boxes, rods, and other parts to facilitate the construction of locomotives for the use of our Army in France, and this work was continued in various railroad shops until the armistice was signed.

The increased working hours in railroad shops under the instructions issued on February 14, 1918, were continued until after the signing of the armistice, and without this loyal support from the employees the increased number of locomotives repaired during this period and the assistance rendered locomotive builders would not have been possible. After the signing of the armistice shop hours were reduced to nine per day, effective November 25, and to eight per day, effective December 9.

STANDARDIZED LOCOMOTIVES.

In addition to the vigorous action which had been taken to improve the condition of existing equipment, the necessity of adding to the available stock was recognized and designs were worked out for standardized locomotives and orders placed for their construction.

Specifications were prepared and orders were placed for 1,430 locomotives of standardized types, divided as follows:

<table>
<thead>
<tr>
<th>Specification</th>
<th>Type</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specification 1A, light Mikado</td>
<td></td>
<td>530</td>
</tr>
<tr>
<td>Specification 2A, heavy Mikado</td>
<td></td>
<td>217</td>
</tr>
<tr>
<td>Specification 3A, light mountain</td>
<td></td>
<td>35</td>
</tr>
</tbody>
</table>
Specification 4A, heavy mountain ........................................ 5
Specification 5A, light Pacific ........................................ 43
Specification 6A, heavy Pacific ...................................... 20
Specification 7, light Santa Fe ..................................... 124
Specification 8, heavy Santa Fe ..................................... 50
Specification 9, 6-wheeled switcher ............................... 150
Specification 10, 8-wheeled switcher ............................. 150
Specification 11, light mallet ....................................... 30
Specification 12, heavy mallet ...................................... 46
Standard consolidation ................................................ 30

Total ........................................................................... 1,430

This order was placed with the American Locomotive Co., Baldwin Locomotive Works, and the Lima Locomotive Corporation. The first locomotive was turned out of the Baldwin Locomotive Works on July 4, 1918, and it is expected that this order will be completed so as to have this entire consignment of locomotives in service early in 1919.

The locomotives were built from standardized designs for various reasons, the principal of which are as follows:

First. To reduce to a minimum the time required to prepare drawings, patterns, and dies, and thus enable deliveries to begin quicker than where separate drawings and patterns would have been necessary for each lot of locomotives allocated to a particular road.

Second. To secure quantity deliveries.

This method of construction has resulted in delivery being made at a quantity rate which could not have been approached had the locomotives been ordered to individual designs.

The increase in the rate at which standardized locomotives can be turned out is clearly shown by the following comparison of two of the principal shops of the American Locomotive Co. during a portion of July and August when the locomotives built were of individual design with a similar period in September and October when they were building standardized locomotives.

During five weeks, beginning July 20, an average of 13.5 locomotives per week were turned out at the Dunkirk plant, while during five weeks, beginning September 14, an average of 19.5 locomotives per week were turned out at the same plant.

For Schenectady, during the five-week period beginning July 20, an average of 8 locomotives per week were turned out, while for the corresponding period beginning September 14 an average of 13.5 locomotives were turned out.

It will be seen that the increased production due to the standardized locomotives was about 50 per cent.

Third. It has also provided a supply of equipment, the parts of which are largely interchangeable, which is available for use anywhere in the event of congestion. This removes the necessity of car-
rying a large stock of repair parts particular to the locomotive and avoids delay which results when repair parts must be ordered from some distant owning road.

The importance of this is forcefully illustrated by an instance where a leased locomotive was held out of service until over $4,800 rental had accumulated waiting for a part which would cost not to exceed $30.

The diagrams contained in the appendix indicate the general dimensions and weights of the various types of locomotives standardized by the administration:

**STANDARDIZED CARS.**

The freight car situation was handled along the same lines as were the locomotives. After careful consideration, designs were prepared and order placed for the following cars:

- 25,000 self-clearing, steel hopper cars of 55 tons capacity.
- 25,000 single sheathed box cars of 50 tons capacity.
- 25,000 double sheathed box cars of 40 tons capacity.
- 20,000 composite gondolas, with drop doors, of 50 tons capacity.
- 5,000 low side gondolas of 70 tons capacity.

In addition to the designs for freight cars, for which orders have been placed, designs have been prepared for all steel box cars of 50 tons capacity, refrigerator cars of 30 tons capacity, general service gondola cars of 50 tons capacity, steel framed stock cars of 40 tons capacity, flat cars of 55 tons capacity, oil tank cars of 7,000 gallons capacity, oil tank cars of 8,000 gallons capacity, oil tank cars of 10,000 gallons capacity, acid tank cars of 7,000 gallons capacity, acid tank cars of 8,000 gallons capacity, and acid tank cars of 10,000 gallons capacity. While no cars have actually been built from these drawings, they are available at any time that the traffic needs show them to be desirable.

Complete plans and specifications of all steel baggage cars, in both of 60 foot and 70 foot lengths, have been prepared, and tentative plans prepared for 70 foot steel coaches, and for steel passenger and mail, passenger and baggage, passenger, baggage and mail cars.

The diagrams contained in the appendix indicate the general dimensions and weights of the various types of standardized cars ordered by the administration.

**STANDARD REPORTS.**

In the meantime other work was being vigorously pushed to improve conditions and to facilitate keeping of records. First, a system of weekly equipment-condition reports from each railroad was installed, so that the condition of power might be reported and the administration kept informed and locomotives needing repairs assigned to the nearest available shop.
Owing to the difference in classification of repairs, accurate comparisons were not possible; therefore, a standard classification of locomotive repairs was established and issued to the different railroads, under which repairs to all locomotives would be classified on the same basis, permitting comparison relative to shop output and locomotive conditions to be made.

RECLAMATION WORK.

To conserve material and avoid the possibility of usable material being sold as scrap, instructions were issued to the effect that proper facilities must be provided and every effort made to reclaim and make repairs to old material instead of using new, and under no circumstances was material to be scrapped until—

First. It was known positively that it could not be satisfactorily repaired, or
Second. That the cost of repairs would be prohibitive.

The total saving resulting from reclamation of scrap material can not be checked up at this time, but when this work is thoroughly developed and reclamation plants provided on all railroads it will amount in the aggregate to millions of dollars annually in addition to relieving manufacturing establishments and permitting them to use their facilities for war material and with the signing of peace, material that will be needed in reconstruction work.

STANDARD PRACTICES.

Standard practices have been established and circulars of instruction issued for mechanical work covering the following matter, which will result in more efficient and economical operation of locomotives and cars:

1. Repairs and betterments to freight cars.
2. Painting freight cars.
3. Installing field ranges in cars.
4. Locomotive maintenance.
5. Care of journal boxes.
6. Inspection of ash pans and spark arresters.
7. Lubrication of locomotives.
8. Repairs to refrigerator cars.

STATIONARY-BOILER INSPECTION.

Rules have also been promulgated for the inspection and testing by the inspection forces of the railroads of all stationary boilers used, which will make it possible to save the insurance premiums now paid on such boilers. These rules were issued on November 1, 1918;
therefore, it has been impossible in the time allowed to secure data to publish in this report, to show annual saving effected thereby.

**LOCOMOTIVES SHIPPED UNDER STEAM.**

Locomotives en route to or from other line shops and new locomotives being delivered by the builders were usually hauled dead in trains. Instructions were at once issued that wherever possible such locomotives should be moved under steam, hauling a train wherever practical. This order relieved the railroads from 500,000,000 ton-miles of transportation annually for material which not only should be self-propelling, but which should, in many instances, be hauling additional freight.

**CONSOLIDATION OF MECHANICAL TERMINAL FACILITIES.**

Under private operation, at many points complete organizations for the maintenance of a comparatively small number of locomotives or cars were maintained side by side, which resulted in a duplication of work, heating plants, and supervising forces. Wherever a saving could be made without adversely affecting efficiency, such useless facilities were eliminated.

Such consolidations have been made at 417 points and the annual saving effected thereby amounts to $2,363,535.95. Additional consolidations are under way and will be made as fast as complete investigations and necessary minor changes can be completed.

In connection with this work extensive investigations were conducted covering shop and engine-house operation, resulting in changes and improvements which have materially increased the output. For example, at one large shop the output of locomotives receiving classified repairs increased over 50 per cent, and increases ranging from 10 to 25 per cent were secured in many shops. It was also possible by rearranging the method of handling work in engine houses to release hundreds of employees that were sorely needed in other departments, and the saving effected in engine-house operation by such reduction in force, while not obtainable for all railroads, on one railroad alone amounted to $1,061,332.68 per annum.

It was also possible by rearranging methods of handling locomotives at terminals to secure greater efficiency from such locomotives, and thus overcome what otherwise would have been a shortage in motive power. For example, on one railroad an appeal was made for an additional assignment of 25 Mallet locomotives, but by changing the method of handling work at the important terminals on that line the delay to locomotives at such terminals was reduced to a minimum, and by thus increasing the efficiency of the locomotives in service it was found that it would not be necessary to build and fur-
nish the additional 25 Mallet locomotives, valued at $2,145,400. Instead of this they were able to release for service on other lines 9 Mallet locomotives, valued at $772,344.

The condition of motive power on all lines under Federal control has shown a gradual improvement, and the locomotives in service are in much better condition than they were one year ago, and on some lines, that last spring required extensive assistance from other line shops, the condition of power has shown such a marked improvement that they are now doing all of their own repair work, and, in addition, are repairing locomotives for other lines.

The tabulations furnished by the railroads show an average increase of 20.93 per cent each week in the number of locomotives receiving classified repairs during the period of increased shop hours.

In addition to the improved condition of power in service there are now in white lead 1,021 locomotives in the various regions, divided as follows:

<table>
<thead>
<tr>
<th>Region</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allegheny</td>
<td>57</td>
</tr>
<tr>
<td>Central western</td>
<td>198</td>
</tr>
<tr>
<td>Eastern</td>
<td>480</td>
</tr>
<tr>
<td>Northwestern</td>
<td>147</td>
</tr>
<tr>
<td>Pocahontas</td>
<td>1</td>
</tr>
<tr>
<td>Southern</td>
<td>39</td>
</tr>
<tr>
<td>Southwestern</td>
<td>99</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,021</strong></td>
</tr>
</tbody>
</table>

These locomotives have received classified repairs and are being held in reserve for winter service. There are also being placed in storage for service during the winter months 150 new standardized locomotives which were recently received from the locomotive builders.

With the surplus power in reserve and the new power to be received from the builders to be distributed where it is most needed, there is no doubt but that all lines under Federal control will be able to pass through the winter with a sufficient number of locomotives in serviceable condition to successfully handle all business offered.

**COMMITTEE ON STANDARDS FOR LOCOMOTIVES AND CARS.**

The designs for standardized locomotives and cars were prepared under the direction of a committee on standards for locomotives and cars, which is composed of representative officials from the mechanical departments of the various railroads.

In selecting this committee, consideration was given to conditions existing in all sections of the country, and the men composing the committee were drawn from different sections of the United States.
This enabled the committee to intelligently handle the standardization of locomotives and cars so that the needs of all sections would be considered and the equipment designed made suitable for all classes of service.

The work of this committee is worthy of special mention and the result of their deliberations represents a long step forward in locomotive and car design.

This committee has been continued and meetings are held once in two months for the purpose of considering improvements in design so that the standard equipment will, at all times, represent the most modern practices.

**NEW DEVICES FOR LOCOMOTIVES AND CARS.**

On account of the vast number of new devices for use on locomotives and cars which were submitted, a comprehensive plan for handling this question was necessary. Detailed instructions were issued by circular establishing rules for the submission of such devices for the consideration of the Railroad Administration and a committee on appliances was created to conduct necessary investigations and to pass upon the value of all devices or appliances thus submitted.

Up to date 692 such devices, which cover practically everything used in locomotive or car construction, have been submitted. One hundred and thirty-five of these have been examined, ten of which have been recommended for test under service conditions. These tests will proceed under the direction of the mechanical department, and a record will be kept of the results, so that the value of the devices in question may be correctly passed upon.

**ENFORCEMENT OF LAWS FOR THE PROMOTION OF SAFETY.**

As provided in General Order 8, it was the purpose to require compliance with all Federal laws for the promotion of safety, but while under Federal control it would manifestly be no punishment to impose fines; therefore other means must be provided.

By General Order 46 this work was placed under the direction of the assistant director of the Division of Operation, in charge of the mechanical department.

Since the issuing of General Order 46, 108 reports of violations of the Federal laws for the promotion of safety, totaling 682 separate counts, have been received from the Interstate Commerce Commission and referred to the mechanical department for correction. Although this work has not been completely organized, the Bureau of Safety and the Bureau of Locomotive Inspection of the Interstate Commerce Commission have advised that substantial improvements in practices have been noted at points where such violations have been handled.
It is believed, therefore, that within a reasonable time the organiza-
tions at the various local points will be such that violations of Federal
laws for the promotion of safety will be reduced to a minimum and
that all willful violations will be eliminated.

EDUCATION OF RAILROAD EMPLOYEES.

It has long been recognized that the service rendered by railroad
employees is capable of substantial improvement by proper training
of employees along industrial lines, and many railroads have in exis-
tence plans for furnishing additional training for their employees.
The Railroad Administration is in sympathy with this work and
plans are being considered for establishing a system of technical
training for railroad employees in connection with the Board for
Vocational Education.

Plans to establish such a system in cooperation with this board
are now being worked out by the mechanical department with a view
to furnishing certain training on technical subjects to apprentices in
the different branches of work.

It is also believed that this work may be profitably extended to
employees who have been injured in the service to an extent that pre-
vents them from following their usual vocation, but who with proper
training may be fitted to fill other responsible positions in railroad
service, thus not only taking care of the injured employee, but retain-
ing for the Railroad Administration the benefit of his experience and
training.

ORGANIZATION.

The work of the mechanical department, division of operation, has
been conducted with a total force of approximately 60. Of these, 28
are considered as field men whose duties are to conduct investigations
concerning shop practices and shop output and to furnish first-hand
information relative to the efficiency of the work performed and the
general condition of the equipment. They are also used to conduct
investigations and handle disputes between shop men and railroad
officials which have not reached the point where they should be re-
ferred to the Division of Labor.

The office force, in addition to handling ordinary correspondence,
receives checks and compares the reports showing the general con-
dition of equipment, the assignment of locomotives to shops for
repairs as well as the assignment of new locomotives received from
the builders. It also includes the mechanical engineering staff, which
checks up the designs for locomotives and cars, receives reports of
failures of standardized locomotives, and corrects faulty construc-
tion. The mechanical engineering staff also acts as a clearing house
for information concerning standard designs of locomotives and cars, distributes drawings and other data necessary to the proper standardization of equipment and to keep the practices up to the standard.

CONCLUSION.

Much of the work enumerated herein has only been started and it will, of course, require time for the comprehensive improvements in practices to be fully worked out and demonstrate their total value. Enough has been accomplished to show the wide scope of the work and the ultimate benefits to be derived from the improvements which have been initiated.

DEPARTMENT OF ENGINEERING AND MAINTENANCE.

Mr. C. A. Morse, assistant director of operation, in charge of engineering and maintenance, was appointed September 1, 1918, and his organization is engaged in compiling information reflecting the physical condition of the railroads under Federal control as of date December 31, 1917, and in preparing for the compilation of similar information as to conditions at the end of each year, and at the end of Federal control.

This work is being handled through a committee composed of the assistant director of operation, as chairman, with the engineering assistant of each regional director, and an organization has been built up in each region with the engineering assistant of such regional director as chairman, the committee to consist otherwise of the chief engineer or other officer handling maintenance on the various railroads in such region.

Forms are provided upon which each railroad will record essential features in connection with its maintenance, and this report supplemented by regular inspection reports.

The department is also handling matters in connection with proper standardization of practices in the maintenance of roadway and structures, studying questions of improved appliances and such engineering problems as are directly connected with maintenance and operation.

CAR SERVICE SECTION.

The Car Service Section was the first of the agencies created in the Division of Operation. Its primary duty has been the relocation of freight cars upon the railroads throughout the country, and it has been the intimate point of contact between the Railroad Administration, on the one hand, and various branches of governmental activities, on the other.
The authority given to this section has necessarily been very broad, and with Mr. W. C. Kendall as manager there have been associated seven assistant managers, whose experience as transportation officers has covered practically all of the regions.

The Eastern Railroads Coal Car Pool, with headquarters at Pittsburgh, an inheritance from independent operation, has been continued under the jurisdiction of the Car Service Section with very satisfactory results. A large part of the increased coal production referred to elsewhere in this report can be directly attributed to the operation of this pool.

Car relocation.—Since January 1, 1918, 850,000 empty freight cars have been relocated, under instructions of this section, other than the continuous relocation of refrigerator and coal cars.

Campaign for advance movement.—There has been conducted a nation-wide campaign to induce the shipment of raw materials and supplies during the summer months when transportation conditions are relatively easy.

Seventy thousand cars of pulp wood from eastern Canada, being practically the entire movement to paper mills in the United States, was cleaned up between May 21 and October 7, an average of over 500 cars per day, and the first time in several years this movement has been completed in summer period.

An advance movement of 9,960 carloads of phosphate rock has been accomplished to fertilizer plants.

One million two hundred thousand tons of sulphur for the Government was provided for before October 15.

Fir and spruce from Pacific Northwest.—A most important part of the war program was the movement of aviation fir and spruce for the War Department and ship timbers for the Shipping Board from points in the Pacific Northwest.

This movement, from April 21 to November 20, approximated 150,000 cars, of which 12,700 were for the aviation program, 5,500 for the Shipping Board, 6,700 for other Government activities, 11,000 railway material, and for general commercial use more than 115,000, an average daily movement of 813 cars.

This territory is more remote than any other from the base of supply for empty cars, and I am glad to report that the necessities of the Government were fully and promptly met, notwithstanding the unusually heavy demand for commercial lumber.

These shipments were concentrated and moved to the East in solid trainloads, under special supervision.

Car conservation.—For the 10 months January to October, inclusive, the average tons per loaded car increased 2.2 tons, or 8 per cent, over the corresponding period for 1917, the result of constant agitation and the whole-hearted cooperation of shippers.
Sailing-day plan for handling less-than-carload freight.—This, briefly, is a plan for the concentration of package shipments from a large center to a given locality on certain specified days, and the concentration of freight to an individual destination by one railroad. It has the double advantage of providing sufficient tonnage for straight carloads and enabling the movement of package freight to destination without transfer. It has proven successful wherever introduced.

It is estimated that this plan, which has already been made effective at Baltimore, Boston, Milwaukee, Norfolk, Pittsburgh, Philadelphia, Roanoke, Trenton, N. J., and Wilmington, Del., as well as several cities in the West, and which will be made effective by January 1, 1919, at New York, Chicago, and St. Louis, will eliminate at intermediate transfer points the rehandling of 3,600,000 tons of package freight annually, with its consequent elimination of loss and damage and delay.

Refrigerator and tank-car handling.—A branch of the Car Service Section was established July 1, 1918, with office at Chicago, having direct jurisdiction over the distribution and handling of refrigerator and tank cars, both railroad and privately owned.

This work has been signally successful. Perishable freight associations and shippers expressed satisfaction with both the refrigerator-car supply and the regularity of movement, and serious car shortages have been avoided.

The result of placing tank cars, the great majority of which were of private ownership, under a single control, has been one of the most conspicuous successes.

The Railroad Administration started with a heavy shortage of tank cars in the oil-producing fields and an acute oil shortage was arising in the eastern region. Urgent representations were made that the Railroad Administration should purchase a large number of tank cars.

Through placing all of these cars under one control and closely supervising their movement the shortage was entirely overcome and without the purchase of any cars.

The tank-car supply has been in excess of the demand since about May 1.

Car record office—Washington.—In order to afford prompt information to the various Government departments, relative to the location and movement of cars, a car record office has been maintained in Washington, which, from May 15, has recorded the movement of 1,026,000 cars, principally for the War Department, or an average of 5,700 daily, and through this office has been handled the special tracing covering especially important cars of Government freight.
From January to November 30, inclusive, 630,000 cars of grain have been loaded and 90,000 have been moved under preferential orders given by the Food Administration. Five hundred and sixty-thousand carloads of material have been moved to encampments, shipbuilding, and other Government projects.

DETAILS.

A report of all the activities of the Car Service Section for the period of Federal control would require more space than can well be allotted. Its work will therefore be epitomized as briefly as practicable, and only its more important efforts to meet the needs of the Government, the allies, and shippers, consignees, and railroads out of such measure of transportation as has been available will be referred to.

The Car Service Section consists of a central organization at Washington, with a Refrigerator and Tank Car Branch at Chicago and an Eastern Railroads Coal Car Pool at Pittsburgh, also a branch at Seattle, Wash., organized originally to supervise car service in the lumber districts of the Pacific Northwest in the interests of Government shipments. The central office staff embodies, geographically and otherwise, a car service and transportation experience sufficient to provide comparatively intimate knowledge of conditions likely to arise in any part of the country. The plan of organization has proved helpful in quickly determining the measure and method of assistance necessary adequately to cope with transportation difficulties presented through various sources to the Railroad Administration.

The function of the section is to provide an equitable distribution of the various classes of freight-car equipment to meet the Government and commercial requirements of the country, and to so regulate other transportation details as to meet daily emergencies and to maintain a proper balance between the Government, the public, and the railroads during the period when extraordinary demands of all kinds have been laid upon the transportation machinery of the country.

To meet the exigencies of the war, primary importance has attached to the requirements of all Government activities. Close contact has constantly been maintained with the War and Navy Departments, the Shipping Board, the War Industries Board, the War Trade Board, the Housing Commission, and the Food and Fuel Administrations, as well as with the allies' traffic representatives. Through this contact the railroads have been thoroughly and promptly advised of all Government needs, which have been met with the least possible disturbance to other industries. Like contact has also been main-
tained with the Canadian Railway War Board, and necessary car supply has thus been made available for the large volume of commerce between Canada and the United States. Without exception the great body of public servants representing these organizations have generously supported every effort to solve the transportation problem.

*Car relocation.*—Under Federal control freedom has been exercised in moving empty freight cars of various classes to meet requirements, regardless of their ownership. Within the year of Federal control fully 850,000 such movements have been made. Practically 700,000 of these have been box cars and the remainder stock cars and flat and gondola cars specifically for lumber tonnage. This does not include the emergency movements of refrigerators or the continuous relocation of coal cars under continuing instructions as required to equalize the empty supply among the various mining districts in the eastern, Allegheny, and Pocahontas regions. Through these means a comparatively easy car situation has been maintained generally throughout the United States for months past. Scattering complaints of car shortage have been met by special action directing movement of available supply to the point or territory affected.

Beginning June 15 a movement of empty box cars was directed to the grain-producing territory of the Western and Southwestern States, with the intent of establishing a supply sufficient to meet the requirements of the Food Administration. As a result, when the wheat crop was ready to move there were cars available in the territory involved in sufficient quantities to protect every requirement in better shape than ever before, and this supply was regulated by further movement with the northerly progression of the harvest. As an instance of Federal control in this respect, empties moving westbound for grain were not permitted to be stopped in the Ohio, Indiana, and Illinois grain-producing territory until those States were actually ready to load grain, at which time cars in transit west were stopped as necessary, so that the supply was maintained without waste of equipment.

To meet the situation in the Southeastern States a continuous movement of empty box cars is kept under way, mainly into the lumber-producing territory. This was maintained until about October 15 sufficiently to fully meet all Government and commercial demands. It then appeared that inbound loaded movement into that territory would be sufficient for empty requirements. Shortly thereafter a surplus developed, an altogether unprecedented situation. This section has been materially assisted in car supply by the location there of various Army encampments, the necessary movement of
supplies thereto having made available box cars for outbound loading.

It is the conviction of those familiar with the subject that only by this liquid distribution of freight cars through centralized control has it been possible to meet all requirements with reasonable promptness.

Campaign for advance movement.—Beginning in April and continuously thereafter for some months the attention of traffic organizations and shippers generally was called to the advantages possible by shipping raw materials and supplies during the summer months and prior to the anticipated period of heavy traffic normally to be expected about September 15. Full and generous response was made. This not only relieved the heavy tension customarily experienced during the fall months, but will further relieve the railroads during the severe winter months. This will be of material advantage alike to the shipping public and the railroads.

A few instances will illustrate this campaign and its results: About May 15 a movement of box cars to Canada was begun to load pulp wood to paper mills, with the result that by October the Canadian Railway War Board advised that the pulp-wood situation in Canada was cleaned up for the first time in many years. From May 21 to October 7 a total of over 70,000 cars of this commodity moved from Canadian points to United States mills, or an average of over 500 cars per day.

Much difficulty has been experienced by chemical plants during past winter seasons because of inability to obtain phosphate rock currently. This comes principally from the mines of Tennessee and Florida. Efforts directed through the chemical alliance and the fertilizer committee at Washington resulted in these plants stocking up during the summer months, and in October they had approximately 450,000 tons of phosphate rock in storage at destination, representing an advance movement of 9,960 carloads, sufficient in most instances to keep plants running for a two months' period without the receipt of a single car. Meanwhile, shipments are being made to meet current requirements.

The Government program with respect to the movement of sulphur from the producing points in Louisiana and Texas called for the movement of approximately 1,800,000 tons for the year. Of this the Shipping Board expected to be able to handle only approximately 600,000, leaving 1,200,000 tons for rail transportation, an average of approximately 100 cars per day. In prewar times the railroads were never expected to handle more than one-fourth this amount. On October 15 the program had been fully met. Not only was the all-rail portion handled, but a deficit in the water movement was made up by rail.
In April special action was necessary in connection with the movement from the Pacific Northwest of aviation fir and spruce for the War Department, ship timbers for the Shipping Board, and other lumber and miscellaneous articles on Government account, including railroads, as well as regular commercial business. These arrangements continued until November when the aviation program was discontinued. The record from April 21 to November 20 shows a total movement from this territory of approximately 150,000 cars of lumber, of which 12,700 were for the aviation program, 5,500 for the Shipping Board, 6,700 for other Government activities, 11,000 railway material, and commercial more than 115,000. This reflects an average daily movement of 813 cars of lumber from this section.

The movement of live stock, which has been extremely heavy, has been handled with far less complaint than ever before. There was some difficulty for a short time in providing transportation for the western sheep because of the abnormally high market which induced everyone to ship stock at the same time, but the extent to which the railroads met the situation is shown by reports from the markets at Chicago, Kansas City, Omaha, St. Joseph, St. Louis, Sioux City, and St. Paul, where the receipts of sheep for the period August 3 to October 19 totaled 4,486,102 head, as compared with 2,902,981 for the corresponding period in 1917, or an increase of 54.53 per cent. The heaviest week's receipts was that of September 28 when the market report shows 587,014 arrivals.

Coal and coke.—One of the heaviest tasks for the railroads during the past year has been in providing necessary transportation for fuel. This has only been accomplished by effective cooperation between the Fuel Administration and the Railroad Administration. It has been necessary to adopt extraordinary measures, and these as a rule have been cheerfully met by shippers, whose rights were at times very considerably affected. Foremost among these measures was the joint action of the two administrations in zoning the distribution of bituminous coal, the purpose being to avoid waste of transportation by prohibiting unduly long hauls to destinations which could otherwise be served and especially where such prohibition avoided the cross hauling theretofore prevailing to a considerable degree. The effect of this zoning has been to assign to each of the producing districts a certain fixed area within which to market its coal, any shipments outside of this area to be made only by permit of the Fuel Administration.

Another factor which worked advantageously in the interest of fuel production was the establishment of the Eastern Railroads Coal Car Pool for handling the coal cars owned by railroads in the eastern section of the country. This pool was created just prior to Federal control, but its administration since January 1, 1918, has been under the
direction of the car service section. This method of handling coal cars has some objections, but unquestionably has been very helpful in providing an increased car supply for the production of coal.

Two of the individual coal problems of the country are those of supplying the coal needs of New England and the Northwestern States, the latter from the upper Lake docks. The New England movement must of necessity be handled largely by ocean, and this was made difficult in the early part of the year by the lack of shipping. By cooperation with the Shipping Board this difficulty was overcome, and by the end of September the New England program, both all-rail and ocean, was so far met that the administrator for that district was unable to absorb coal as rapidly as it was being shipped, and toward the end of October requirements for the year were reduced. The coal for the Northwest must of necessity be handled during the season of open navigation on the Great Lakes, and the program of the Fuel Administration this year has been fully accomplished with less demand for equipment than ever before and practically no congestion of movement.

The foundation of successful operation in the steel industry lies in an adequate supply of coke, by-product coal, and steam coal. Every effort had been made during the year to maintain adequate supply of these fuels at such plants, and it is a matter of record at the War Industries Board that practically all of the transportation needs of coke, by-product coal, and fuel coal for the steel industries have been promptly and adequately met.

A step of much importance was taken by the establishment of uniform rules for rating of coal mines by which car supply is directed. These were made effective as of October 10, 1918. Previously roads were using different methods and with varying interpretations. On the uniform basis which now obtains a more equitable distribution of cars as between districts, railroads, and mines is possible than heretofore.

A factor which has an important bearing on the question of coal-car supply is the extent to which this type of equipment is used in handling stone, sand, and gravel for construction and road-building purposes, and curtailment of such noncoal use has been necessary. Cheerful cooperation and assistance has been received from all shippers thus adversely affected.

Car conservation.—Full credit is due the shipper for the patriotic way in which he has responded to requests for conservation of freight-car equipment by heavier loading. During the nine months January to September there was an increase per loaded car of 2.3 tons over the corresponding period for 1917. This has not been accomplished merely by the physical effort of loading more heavily. It
has involved on the part of the shipping public not merely additional labor in loading into the car, but also changes in the size of packages, changes in the manner of constructing packages, and changes also in the manner of placing goods, particularly manufactured articles, within the packages. Thus, hogshead used for the loading of tobacco have been reduced in size to permit double tiering, handles have been removed from baby carriages, grain cradles, and other agricultural implements, wagons, wheelbarrows, and other vehicles formerly shipped in large quantities set up, have been shipped knocked down. Shippers of barreled goods, such as oil, sirup, molasses, tanning extract, and the like, by using dunnage, are also making double tiering possible. In a general way the result sought by the carriers and shippers both has been "making one car do the work of two," but often greater conservation has been accomplished by the double and triple loading of small lots in one car.

All of this has been accomplished very largely as a result of appeals to the patriotism of the shippers and carriers' representatives, coupled with a showing that acquiescence in this policy would prove the most effective cure for the existing car shortage. The result has been to the mutual advantage of all concerned, but it would be unfair to let this opportunity go by without taking advantage thereof to express the administration's hearty thanks for the very effective cooperation of the shipping public and all the railroads generally in making a success of this plan of curing a car shortage. Invaluable aid has also been given to the campaign by the various departments of the Government, particularly the war administrations, with which almost daily contact has been had on the subject. The economic reports are of such importance that every effort should be made to continue this effective utilization of equipment; indeed, a reversal to former methods and practices in car loading would speedily bring about a renewal of the former unsatisfactory car-shortage conditions. The result has been to the mutual advantage of all concerned. It is hoped that efforts with the shippers to continue these methods of cooperation with the railroads may prevail.

Sailing day plan for handling less-than-carload freight.—An important feature of the activities of the Car Service Section is the development of the sailing day plan for handling less carload merchandise freight. During the past two or three years there has been an increasing tendency toward congestion at large centers and at transfer points, due to excessive accumulations of less carload freight. The sailing day plan has been inaugurated for the purpose of assembling less carload shipments to eliminate the necessity for transfer, thus insuring improved service and increased car efficiency. Regional committees have been appointed to supervise the concentration and consolidation of less carload freight from com-
mon points via one or more designated routes based on the volume of traffic and direct routing. At points common to several railroads subcommittees have been formed composed of representatives of railroads involved and in many cases including representatives of the chambers of commerce. Up to the present time this work has taken definite form at Baltimore, Boston, Milwaukee, Norfolk, Pittsburgh, Philadelphia, Roanoke, Trenton, and Wilmington, Del. As a specific instance of what can be accomplished, through cars of merchandise are now being loaded from Boston and other eastern points to San Francisco. It is expected that by January 1 next, sailing day plans will be effective at New York, Chicago, and St. Louis, with work in other sections progressing satisfactorily. While it is too early as yet to estimate results, present indications are that the handling of an average of 30 tons per day can be eliminated at each of the 400 transfer points now in operation throughout the United States. The feature of most importance is improvement in service, the expediting of freight, the reduction of loss and damage incident to rehandling, and the elimination of the necessity of embargoes.

It is not to be expected that the sailing-day plan can be universally adopted without some opposition, but it is confidently believed that causes for complaint can be cured in detail, and that the plan fundamentally is economically sound.

Embargoes and permits.—The Car Service Section is responsible for supervision of the embargoes issued by railroads. Inasmuch as such supervision has never before been attempted by a central organization methods and practices have been allowed to develop naturally and restrictions have been imposed only as a real necessity therefor appeared. The inevitable result is some lack of uniformity. An improvement in distribution was made early in the year, whereby the roads of the country were divided into 26 zones through which embargoes were simultaneously issued to each road and forwarded to the Car Service Section. Formerly a railroad originating an embargo transmitted it to each of its connections and each connection, in turn, transmitted it to its connections, with a consequent piling up of duplications and delay. These zones have since been revised and reduced in number and further simplifications to conform more closely to regional lines is in prospect.

On January 1, 1918, there were reported on all roads a total of 144,539 cars accumulated for various reasons in excess of current movement. This represents the number of cars immobile, of no immediate service to the public and a detriment to current operation of the railroads. These accumulations are followed from week to week, reports from all roads being required regularly, and attention is directed to and necessary action taken in the more flagrant cases. As of November 22 reports total less than 40,000 cars. A certain por-
tion of these figures represents a normal condition, as for instance, the number of cars under load with export at the ports awaiting delivery to vessels are included. There are certain other so-called accumulations which are inevitable, as, for instance, cars awaiting reconsignment. Altogether these deductions account cars normally accumulated should range from 20,000 to 25,000 cars.

There is a direct bearing between these figures and the embargo situation. On the 1st of January embargoes in eastern territory were more or less general in scope. As conditions improved and congestion was relieved the necessity for general embargoes gradually ceased. At present no general embargoes are outstanding, practically all now in effect being local in character, and as a rule due to the condition at individual destinations. Embargoes are still in effect governing the handling of domestic and export freight to and through the North Atlantic ports and should be maintained in the interests of control of war and postwar conditions.

Because of the increasing activities of Government departments and of the transportation conditions which prevailed last winter and early spring, individual railroads and various Government organizations were attempting to authorize special movements of Government and other important freight in violation of existing embargoes. This made necessary a uniform embargo and permit system in order to eliminate existing confusion.

This permit system proceeded upon two lines, one providing general and continuing exemption from embargoes for essential commodities, and the second providing special exemption from embargoes for individual shipments according as the needs of the individual consignee concerned and the public welfare might demand. To effect the general exemptions a list of standard exemptions to embargoes was issued under date of February 11, 1918. This gave, in the order of their importance, great freedom of movement to Government freight, fuel, food, and essential commodities and was practicable and readily adopted by all roads where a complete embargo was not necessary. It avoided the necessity for issuing permits for individual movements to a very considerable degree.

Experience soon demonstrated, however, that general exemptions could not adequately meet public needs, and recourse was ultimately had to the plan of permitting special shipments. These permits were controlled and regulated very carefully, and the final test as to whether or not they should be issued was the need of the destination community for the commodity and the ability of the consignee to accept and unload the goods without car delay. The needs of some Government departments were met by authorizing the issue of necessary permits by a representative of the Railroad Administration assigned to the departments concerned. In other cases, particularly
where the destination was for war reasons, one habitually congested without such traffic control, committees representing the administration were established to meet the situation. The Car Service Section furnished the medium for such control by permit when provision otherwise had not been made, and generally acted as a clearing house for and check upon all such traffic control representatives and committees.

The “permit system” has fully justified itself. Every effort has been made to utilize it without undue discrimination. To its successful operation is due in considerable measure the great improvement in movement which has been had during Federal control.

It is the policy of the Railroad Administration that railroad embargoes shall be issued only when operating reasons demand. Exceptions have been necessary incident only as to proper control of food, fuel, and raw materials by Government war administrations.

Among other activities of the Car Service Section are those involving the arrangements for certain important movements as requested by the War and Navy and other Government departments. This work developed with the ending of that of the priorities director, since which the Car Service Section has operated as liaison office between these Government departments and the various railroads.

Many trades bodies, usually in connection with war administrations of the Government, have maintained organizations at Washington for this general purpose, and these have provided a medium for direct interchange of information as to transportation problems of those industries. This has served as a means to give to the administration better perspective as to transportation conditions, embargoes, and other similar operating questions in so far as these industries have been affected.

Refrigerator-car department.—The refrigerator department of the Car Service Section was organized with headquarters in Chicago July 1, 1918. Under this plan an abnormally heavy movement of perishable commodities has been handled in refrigerator cars with general satisfaction. Assurances have been received from perishable-freight associations and shippers, as well as private and railroad car owners, that the car supply this season as compared with the past seasons has been much more efficient and satisfactory. Serious shortages have been avoided, and the few minor shortages which have occurred have been local and of short duration. Cooperation has been readily extended by the private refrigerator lines, and this has permitted a free interchange of equipment and more general use of seasonal surpluses to meet demands in all territories.

Tank car.—A system of reports has been required from railroads respecting tank-car movements, the purpose being to develop within the organization of the individual road information indicating the
number and causes of delays, together with the time involved. This has been salutary in effecting a much-needed improvement in the supply of equipment and the service. Large unit movements of tank-car shipments have been arranged, and without these tank-car requirements could not have been fully met. Apprehension by the oil division of the Fuel Administration that there would be a failure in tank-car supply has proved unfounded. Complaints of delayed movement have been greatly reduced in number. Average miles per tank car per day show material increases.

Car-record office.—The car-record office of the Car Service Section, established on May 15 for the purpose of affording information to the various Government departments relative to the location and movement of cars, has, from its inception to the present time, recorded movement of 1,026,000 cars, or an average of 5,700 daily, and has furnished information as required to the various departments, especially the War Department, which was interested in a far greater number of cars than any other department. Requests have been received and handled for special tracing covering the movement of about 16,000 cars. This office furnished a medium for tracing for all departments and has relieved individual railroads materially. The results of the work have been entirely satisfactory.

Miscellaneous figures.—Ninety thousand cars of grain have been moved under preferential orders given by the Food Administration.

Six hundred and thirty thousand cars grain loaded during season (to date). Figures compiled and furnished various offices.

Six thousand requests received for expedited placement and movement of cars, chiefly from War Department.

Five hundred and sixty thousand cars moved to encampments, shipbuilding, and other points, requiring in many cases close supervision.

Inspectors.—A corps of experienced and competent inspectors is maintained. These men travel throughout the country and keep the section advised concerning such matters as utilization of available capacity of freight cars, the movement and distribution of empty freight equipment, the progress of special movements (as, for example, coal for the Northwest via the Lakes, coal for New England, etc.), delays to loaded cars account lost billing, embargoes, etc., the extent to which employees are kept informed regarding requirements for handling freight cars, etc. They are also used for the prompt development of facts in serious cases of complaint made by shippers. Much valuable information is obtained through their work.

Auxiliary committees.—In the development of the work of the Railroad Administration terminal managers have been placed at various transportation centers charged with responsibility and having authority for coordinating the terminals of the various lines in
the interest of the public as a whole. This has made possible the elimination of the large number of Car Service Section committees which were taken over with the railroads at the time Federal control became effective and through which the commission on car service (the present Car Service Section) sought to bring about in part by agreement what the terminal managers now accomplish by direction.

SAFETY.

The Safety Section was created February 19, 1918, with Mr. Hiram W. Belnap, formerly Chief of the Bureau of Safety of the Interstate Commerce Commission, as manager. This section has been most effective in its work and in the creation of uniform practices for the enhancement of safety on the several railroads and has created organizations on those lines where none previously existed. The particular function of this section has been not only to emphasize and educate the employees in the matter of safety requirements provided for by existing laws, but to go much further than this and to locate unsafe practices of every character and point out the remedy.

The death of Mr. Belnap, which occurred on October 12, was a very great loss to the Railroad Administration, but the section has been continued under Mr. A. F. Duffey, assistant manager.

TROOP MOVEMENT.

The prompt, efficient, and safe movement of troops has been a first consideration throughout the period of Federal control, and nothing has been permitted to interfere with it.

From the 1st of January to the armistice there have been moved a total of 6,496,150 men, an average of 625,434 per month. The maximum was reached in July, when 1,147,013 men were moved.

Four outstanding points may be emphasized:

One million seven hundred and eighty-five thousand three hundred and forty-two drafted men were picked up at 4,500 separate points in larger or smaller units and moved on schedule to their training camps, in many cases upward of a day's journey, and in all cases were fed in transit. The amount of detail involved in routing, scheduling, moving, and feeding these men can hardly be overestimated.

Four million thirty-eight thousand nine hundred and eighteen men in 9,109 special trains moved an average distance of 855 miles, unquestionably the largest long distance troop movement in history.

One million nine hundred and four thousand and fourteen men were brought into the crowded port terminals for embarkation overseas without interference with the heavy traffic of other kinds already
being handled through these ports and in the territory adjacent thereto. During one period of 30 days more than 20 troop trains each day were brought into the port of New York.

During the period there were but 14 train accidents involving either death or injury of enlisted men.

The Troop Movement Section has had exclusive charge of this work since the beginning of Federal control and, under a different designation, handled it for the railroads prior to that time.

The report of the section attached hereto, marked "Exhibit D," gives in detail the performance during the period of Federal control and, for convenience, to cover the period of the war, the data has been expanded to include the period from May 1, 1917, to November 10, 1918.

A perfect understanding existed at all times with the General Staff of the Army.

TROOP MOVEMENT SECTION.

THE TROOP MOVEMENT.

JANUARY, 1918, TO NOVEMBER 10, 1918.

Troops moved:

(a) Drafted men from their homes 1,785,342
(b) On regular trains 671,590
(c) On special trains 4,038,918

Total 6,496,150

(d) Average per month 625,434
(e) Maximum July, 1918 1,147,013

Equipment furnished:

(a) Pullman, standard and tourist 40,282
(b) Coaches for special troop trains 54,058
   Estimated coaches for draft and regular train
   movements 63,892
   Total 167,232

(c) Baggage and express cars for special troop
   trains 8,431
   Estimated baggage and express cars for drafted
   men 3,770
   Total 12,201

(d) Freight cars for special troop trains 13,569
   Total 193,002

Special troop trains:

(a) Number run 9,109
   Estimated number required for drafted men 3,770
   Total 12,879
Averages special troop trains:

(a) Number cars per train

(b) Distance handled per train

(c) Number hours per train

(d) Number miles per hour

(e) Number men per train

Accommodations:

(a) Number men handled in Pullman cars

(b) Number men handled in coaches

(c) Percentage in Pullman cars

Accidents involving death or injury:

(a) Number

(b) Number of men killed

(c) Number of men injured

Analysis of movements to ports:

<table>
<thead>
<tr>
<th>To</th>
<th>Direct.</th>
<th>Transferred from New York to—</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Camp Merritt</td>
</tr>
<tr>
<td>Camp Merritt</td>
<td>513,357</td>
<td></td>
</tr>
<tr>
<td>Camp Mills</td>
<td>478,572</td>
<td></td>
</tr>
<tr>
<td>Camp Upton</td>
<td>249,287</td>
<td></td>
</tr>
<tr>
<td>Hoboken</td>
<td>236,393</td>
<td></td>
</tr>
<tr>
<td>Philadelphia</td>
<td>37,463</td>
<td>2,137</td>
</tr>
<tr>
<td>Newport News</td>
<td>222,884</td>
<td></td>
</tr>
<tr>
<td>Quebec</td>
<td>258</td>
<td></td>
</tr>
<tr>
<td>Montreal</td>
<td>12,414</td>
<td>1,055</td>
</tr>
<tr>
<td>Boston</td>
<td>12,424</td>
<td>7,611</td>
</tr>
<tr>
<td>Portland</td>
<td>1,072</td>
<td></td>
</tr>
<tr>
<td>Halifax</td>
<td>150</td>
<td>976</td>
</tr>
<tr>
<td>Baltimore</td>
<td>1,000</td>
<td>501</td>
</tr>
<tr>
<td>Morrison</td>
<td>13,963</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1,836,815</td>
<td>13,355</td>
</tr>
</tbody>
</table>

A statement covering the entire period from May 1, 1917, to November 10, 1918, will be found as an appendix.

Attention is directed to the comparative freedom from accident, due, in our opinion, largely to the steadfast maintenance of a low rate of speed.

**INDUSTRIAL AND CAMP MOVEMENTS.**

At the peak of the activities incident to the prosecution of the war it was necessary to provide for the daily movement to and from industrial plants and camps of 205,587 persons in each direction. To perform this work, 2,319 passenger-equipment cars were in daily use.

**LABOR MOVEMENTS.**

In September, 1918, this section was directed to undertake the handling of such labor movements as were being made under the direction of the Employment Service of the Department of Labor.

Contact was established in each State and large industrial center with representatives of that department, and the work has been car-
ried through successfully since that time. The demands made upon this section by it have not been great; our records show that we were obliged to take action in cases involving only 25,157 persons.

THE GENERAL PASSENGER-EQUIPMENT SITUATION.

On October 28 this section was directed to undertake the handling of all passenger-equipment cars. A survey made as of November 1 showed the following:

*Coaches and baggage and express cars as of Nov. 1, 1918.*

<table>
<thead>
<tr>
<th></th>
<th>Coaches.</th>
<th>Baggage and express.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assigned:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>To camp and industrial service...</td>
<td>2,628</td>
<td>10.0</td>
</tr>
<tr>
<td>To regular train service...</td>
<td>16,707</td>
<td>64.1</td>
</tr>
<tr>
<td>To protect regular trains...</td>
<td>2,060</td>
<td>7.9</td>
</tr>
<tr>
<td>Extra cars not in assigned runs...</td>
<td>2,336</td>
<td>9.0</td>
</tr>
<tr>
<td>In shop...</td>
<td>2,342</td>
<td>9.0</td>
</tr>
<tr>
<td>Total reported...</td>
<td>26,073</td>
<td>100.0</td>
</tr>
</tbody>
</table>

From these figures it is manifest that taking the country as a whole, there is a sufficient number of passenger-equipment cars to perform the service required and that the problem is primarily to make such equipment available where the necessity is greatest.

Without any specific instructions or preliminary arrangements this section has virtually placed in general use cars which were available in all sections of the country. Unless this had been done, it would have been quite impossible to handle the traffic which has moved.

THE EXPRESS SITUATION.

In line with the policy of making use of cars of any initial to meet the situation, we have not hesitated to send into the heavy express districts in the East baggage and express cars of all ownerships to meet the requirements of the holiday traffic. This, of course, is a temporary measure inasmuch as no opportunity has hitherto existed for an analysis of the express traffic as a whole.

A study of this situation should undoubtedly be made, primarily to ascertain the normal and seasonal flow of the express traffic and the relationship between the roads handling other than local traffic. This study will be undertaken with a view to accurate knowledge upon which proper recommendation and action may be based in the future.
**THE DEMOBILIZATION OF TROOPS.**

It will be noted that the creation of the Army and sending approximately 2,000,000 men to ports of embarkation involved the transportation of upwards of 8,700,000 men.

It is estimated that to demobilize these troops will involve the transportation of not less than 7,250,000. Methods for handling this to the best advantage are gradually being worked out in connection with the proper organizations of the General Staff, and while the problems are new and can not be dealt with upon any precedent it is not anticipated that any insurmountable difficulty will be encountered.

**THE COMMON USE OF PASSENGER EQUIPMENT.**

To accomplish the demobilization and to properly serve the express traffic a continuation of the policy of the common use of coaches and baggage and express cars must necessarily be continued until the occasion therefor is removed.

**PERSONNEL.**

The work of this section has been performed by the following forces:

- In the Washington office, 3 heads of departments and 27 clerks.
- In the country at large, 6 department general agents; dividing the United States between them, 54 camp general agents and the necessary force of 60 clerks.

In addition there has been on each railroad an authorized official to whom all directions as to troop and other movements were transmitted and who made himself responsible for their proper carrying out. The number of these is 204.

To deal with the draft there was placed in the office of the governor or adjutant general of each State a representative of the passenger department of some road serving the territory to deal with the innumerable questions relating to the movements of drafted men. The number of these is 49.

The work which has been performed by this section would have been impossible except for the continuous and cordial cooperation of the War Department and the Railroad Administration.

**MAY, 1917, TO NOVEMBER 19, 1918.**

Troops moved:

<table>
<thead>
<tr>
<th>Type of Movement</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drafted men from their homes</td>
<td>2,287,926</td>
</tr>
<tr>
<td>On regular trains</td>
<td>1,380,564</td>
</tr>
<tr>
<td>On special troop trains</td>
<td>5,046,092</td>
</tr>
</tbody>
</table>

Total: 8,714,582

<table>
<thead>
<tr>
<th>Type of Movement</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average per month</td>
<td>502,764</td>
</tr>
<tr>
<td>Maximum, July, 1918</td>
<td>1,147,013</td>
</tr>
</tbody>
</table>
Equipment furnished:
(a) Pullman, standard and tourist........................................ 70,413
(b) Coaches for special troop trains........................................ 63,954
Estimated coaches for draft and regular train movements.................. 60,802
(c) Baggage and express cars for special troop trains.................. 11,709
Estimated baggage and express cars for drafted men........................ 4,576
(d) Freight cars for special troops trains............................... 206,169

Total.................................................................................. 245,529

Special troop trains:
(a) Number run................................................................. 11,959
Estimated number required for drafted men.................................. 4,576

Average special troops trains:
(a) Number cars per train................................................... 12.6
(b) Distance handled per train.............................................. 875.4
(c) Number hours per train.................................................. 44.2
(d) Number miles per hour.................................................... 19.8
(e) Number men per train.................................................... 421

Accommodations:
(a) Number handled in Pullman cars................................. 2,671,074
(b) Number of men handled in coaches............................... 6,043,508
(c) Percentage in Pullman cars................................. 30.6

Accidents involving death or injury:
(a) Number................................................................. 16
(b) Number of men killed................................................. 39
(c) Number of men injured............................................... 335

Analysis of movements to ports:

<table>
<thead>
<tr>
<th>To—</th>
<th>Direct.</th>
<th>Transferred from New York to—</th>
<th>Total.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Camp Merritt</td>
<td>Camp Mills</td>
<td>Camp Upton</td>
</tr>
<tr>
<td>Camp Merritt.</td>
<td>532,754</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Camp Mills...</td>
<td>525,557</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Camp Upton...</td>
<td>251,852</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hoboken...</td>
<td>447,970</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Philadelphia.</td>
<td>47,928</td>
<td>2,137</td>
<td>10,295</td>
</tr>
<tr>
<td>Newport News.</td>
<td>215,360</td>
<td>630</td>
<td>364</td>
</tr>
<tr>
<td>Quebec...</td>
<td>258</td>
<td>2,609</td>
<td>2,301</td>
</tr>
<tr>
<td>Montreal...</td>
<td>15,342</td>
<td>1,055</td>
<td>13,813</td>
</tr>
<tr>
<td>Boston...</td>
<td>20,576</td>
<td>7,611</td>
<td>9,077</td>
</tr>
<tr>
<td>Portland...</td>
<td>150</td>
<td>2,138</td>
<td>1,956</td>
</tr>
<tr>
<td>Halifax...</td>
<td>150</td>
<td>976</td>
<td>1,557</td>
</tr>
<tr>
<td>St. Johns...</td>
<td>1,000</td>
<td>504</td>
<td>1,400</td>
</tr>
<tr>
<td>Baltimore...</td>
<td>4,981</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2,100,928</td>
<td>15,101</td>
<td>41,248</td>
</tr>
</tbody>
</table>

OPERATING STATISTICS SECTION.

This section was created May 6, 1918, and after careful consideration and report upon the subject had been made by a committee of executive and accounting officers selected from railroads in all sections of the country.
The plan for standardizing statistical practice became effective August 1, 1918. Except in two particulars—the computation of net ton-miles from the train reports and the distribution of locomotive hours—there is no material departure from the practices already established on the majority of the railroad mileage, but it was made uniform throughout. The statistics are available within a reasonable time, considering the magnitude of the figures, and are compiled individually for all Class I railroads under Federal control and separated into regions.

Because the cost of materials and labor have been steadily climbing, comparisons of transportation costs, expressed in money, are valueless, but the comparisons of physical performance afforded by these statistics are most instructive and helpful to the operating officers.

For the first 10 months of 1918 we have the following comparisons in physical performance with the same period in 1917:

<table>
<thead>
<tr>
<th></th>
<th>1918</th>
<th>1917</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ton-miles per mile of road per day</td>
<td>5,263</td>
<td>5,163</td>
</tr>
<tr>
<td>Tons per loaded car</td>
<td>29</td>
<td>26.8</td>
</tr>
<tr>
<td>Tons per freight-train mile</td>
<td>682</td>
<td>655</td>
</tr>
<tr>
<td>Total ton-miles per freight locomotive per day</td>
<td>33,162</td>
<td>37,891</td>
</tr>
<tr>
<td>Total ton-miles per freight car per day</td>
<td>495</td>
<td>502</td>
</tr>
</tbody>
</table>

1 The decrease in ton-miles per freight car per day was due entirely to the necessities for the long-distance movement of empty cars to care for emergency situations.

The creation of the Operating Statistics Section on May 6, 1918, grew out of the recommendations of the committee on operating statistics appointed April 11, to report upon what should be done to furnish operating statistics, and to bring about uniformity in statistical methods and reports.

The functions of this section are:

1. To decide upon operating statistical standards, and to make them effective;

2. To act as a clearing house for the receipt of the standardized forms, and for the analysis of the operating results, as well as for the dissemination of the figures in detail and in summarized form;

3. To make such special analyses of the results of any particular road, groups of roads, or regions, as may be required, and to report upon other specific subjects referred to it for special study.

The first was a problem of organization of ideas and the promulgation of instructions. The second and third were problems of office organization and operation, in effectively utilizing the information made available by the new reports.

The first object has been attained in that practical uniformity in operating statistical practice has been accomplished. Complete
figures are now available for all class 1 roads (those having operating revenue in excess of $1,000,000 per year), under Federal control, and the figures are compiled on uniform bases. The new plan has done for operating statistics what the classifications of the Interstate Commerce Commission have accomplished for railroad accounting. It is now possible to compare not only the accounting returns but also the operating statistical returns of the individual roads without the qualifications and the uncertainties heretofore unavoidable because of variations in statistical practice. The aim of the new plan has been to continue the best in current practice without imposing undue hardship or unnecessary expense. While believed to be scientifically comprehensive, and to give the fundamentally important information, the new plan has not been carried so far toward the ideal as to be impractical or unjustifiably burdensome. The objects of the new forms, as announced in Circular No. 15, Division of Operation, July 15, 1918, are:

(a) To furnish the Director General, the director, Division of Operation, and the regional directors with the basic data and the significant averages, ratios, and unit costs, which relate to or furnish indices of operating efficiency. In so far as it is practicable, the information on these forms will be utilized in supplying through the operating statistics section of the Division of Operation the statistical requirements of the several sections of the Division of Operation, or of other divisions.

(b) To provide uniform bases, methods, and forms which will insure uniformity in practice and avoid any question as to comparability in so far as bases and methods are concerned.

It is believed that these objectives have been reached.

As to the second purpose of the operating statistics section, substantial progress has been made in organizing the statistical material and making it available for the purposes of administrative control. The basic data and the significant averages for each road and for each region are summarized monthly, and the summaries are distributed not only to the officers of the central administration, but also to the regional directors, district directors, Federal managers, and general managers. It is now possible for the local managers to compare their operating results with those of other roads, to note wherein the comparison is favorable or unfavorable, and to apply corrective measures accordingly. While it may appear that the reports are required primarily for the use of the central administration, as a matter of fact as much importance was attached to the purpose of affording more comprehensive information to the local managers and of encouraging them to make greater use of statistics for local control. It is recognized that statistics are valuable only to the extent that they are used, and that the greatest
measure of value comes from local rather than from central use. There is gratifying evidence of a tendency to take more interest in the returns. This greater interest on the part of those directly responsible for results must inevitably be translated into terms of increased efficiency.

The third function of the operating statistics is still in the early stages of development. Many requests have been made upon this office for detailed analysis of the operating results of certain roads, or groups of roads, and for reports on specific features of operation, particularly on matters which are quasi-operating and quasi-accounting in character. It is believed that this part of the work of the section will increase, and that more frequent opportunity will be given for useful service in making special studies and of utilizing its large store of valuable operating data.

DEVELOPMENT OF ORGANIZATION.

As has already been stated, the creation of the Operating Statistics Section on May 6, 1918, grew out of the recommendations of the committee on operating statistics appointed on April 11, 1916:

(a) To make an examination of the reports and statistics sent in by the principal railroads in response to your request of April 5, through the regional directors, for copies of monthly statements "used by transportation officers to measure efficiency and cost of their operations";

(b) To suggest bases for standardizing such reports and methods; and

(c) To submit recommendations concerning the creation of an Operating Statistics Section of the Division of Operation.

The committee, in the order of appointment, consisted of Mr. George R. Martin, vice president, Great Northern Railway, representing the Northwest; Mr. J. G. Drew, vice president, Missouri Pacific Railroad, representing the Southwest; Mr. W. J. Cunningham, professor of transportation, Harvard University, representing New England; Mr. J. J. Ekin, general auditor, Baltimore & Ohio Railroad, representing trunk-line territory; and Mr. J. B. Duke, assistant comptroller, Southern Railway, representing the South and Southeast. In the early meetings of the committee, which began on April 11, Mr. F. A. Deverell, assistant general auditor, Baltimore & Ohio Railroad, represented Mr. Ekin, and Mr. A. E. Fowler, auditor of disbursements, Southern Railway, represented Mr. Duke. Later the southern region was represented by Mr. H. W. MacKenzie, comptroller, Seaboard Air Line, and the eastern lines were given further representation by the appointment of Mr. W. C. Wishart, statistician, New York Central Lines. The committee had the assistance also of Mr. George W. Lamb, accounting staff officer, southern region.
The force of the section has expanded gradually as its work has enlarged. At this date it numbers 21 employees. It will undoubtedly be necessary to add to the force as the work of the section is further enlarged in making a more complete check of the reports and in compiling additional summaries. The effective utilization of the large amount of information for the purposes of administrative control, both centrally and locally, is still in the early stages of development.

On December 1, 1918, Mr. V. P. Turnburke, statistician, Great Northern Railroad, was appointed assistant manager, succeeding Mr. J. L. White, promoted to the office of the Assistant Director General.

**Uniformity in Operating Statistics.**

The accounting classifications of the Interstate Commerce Commission have brought about practical uniformity in railroad accounting. The annual returns made by each railroad to, and published by the commission, are fairly comparable in so far as accounting methods are concerned. The commission's requirements, however, have extended but casually into the domain of operating statistics, and there has been a marked lack of uniformity in the bases and in the methods and forms used for compiling data which relates to operating efficiency from the viewpoint of physical performance.

In designing the standard forms and in prescribing standard methods, the aim has been to utilize all of the operating statistical data required by the Interstate Commerce Commission (such as train-miles, locomotive-miles, car-miles, and operating expense accounts), and to build upon that structure the additional information which is considered essential to a complete and scientific exhibit of physical performance and of unit costs of operation. It is the intention that the new forms should take the place of existing reports which relate to the same phases of operation, so as to avoid duplication. In some cases, where there is a diffusion of statistics, they should bring about a net decrease in statistical work.

There have been wide divergencies in statistical practice in different sections of the country and on different railroads. Some railroads have well-organized statistical departments and have compiled and issued complete and satisfactory monthly exhibits of operating results, for the information of their own officers. Others have had very little other than monthly figures compiled to meet the requirements of the Interstate Commerce Commission in its annual report. The new standards are designed to continue the best in current practice of roads well organized statistically and, at the same time, to avoid placing too heavy a burden on the larger number of roads which have not been as progressive in that respect.
It was considered advisable in the beginning to limit the initial requirements to the more important features of operation, the intention being to supplement these from time to time with additional requirements until a complete system is made effective.

The new forms are numbered O. S. 1 to O. S. 8, inclusive (the prefix O. S. denoting "Operating Statistics"). Each form will now be referred to in order.

**FORM O. S. 1, FREIGHT-TRAIN PERFORMANCE.**

As the freight service offers the largest opportunities for statistical control, the task of designing a standard report afforded the widest field for harmonizing differences in statistical practice and in setting scientific standards. In addition to the statistics required by the Interstate Commerce Commission's classification of train-miles, locomotive-miles, and car-miles, the form calls for the following data not heretofore generally available, viz:

**Gross ton-miles.**—The gross weight of the train (cars, contents, and caboose), multiplied by the miles the train is moved. This represents the gross transportation product of train-miles and locomotive-miles. It is the product which may be credited to the operating department and against which the direct expenses of wages of train crews, fuel, and other engine and train supplies may be charged, and, subject to the qualifications of related statistics, is the measure by which train and locomotive efficiency may be judged. Gross ton-miles have been computed by a substantial majority of railroads, particularly in the West, but the practice has not been followed so generally in the East. A check of the statistical reports of all railroads in May developed the fact that gross ton-miles were figured, either for the whole or for part of the line, on railroads comprising approximately three-quarters of the total mileage of class 1 roads in the United States. These statistics, however, were made available only to the executives and operating officials of the roads. They seldom were made public, and as between railroads the figures were exchanged only to a limited extent. Moreover, there was a lack of uniformity both as to the scope of the statistics and as to the methods of compiling and of utilizing the figures.

**Net ton-miles.**—The net weight of the freight in the train, multiplied by the miles the train is moved. This is the net transportation product of train-miles and locomotive-miles. For the purposes of train-efficiency statistics no distinction is made between revenue tons and nonrevenue tons (locomotive fuel and other railroad freight).

The only train-production statistics available generally for comparative purposes have been the net ton-miles based on waybills. These are required annually by the Interstate Commerce Commission
and are used as a basis for obtaining certain averages published in their annual reports. For reasons which will be mentioned later, the waybill net ton-miles are defective as a monthly base for measuring train, locomotive, and car efficiency. The new forms call for net ton-miles, as well as gross ton-miles, to be based on the conductors' train reports. The figures differ from the net ton-miles heretofore available, as the latter have been based on the waybills as taken into the revenue accounts. Ton-miles computed from the waybills rarely correspond with the tons actually moved in the period for which train-miles are reported, because of the delay in taking the interline waybills into account. There is always a "lap over" of interline waybill ton-miles omitted from the preceding period and a shortage of interline waybill ton-miles produced in the current period, but not taken into account until the next period. In theory the "lap over" should balance the shortage, but in actual practice the discrepancy is often so great as to invalidate waybill tonnage as a measure of train performance for any particular month. The adoption of the universal interline waybill has increased the extent of this "lap over." Moreover, the "short routing" of freight and the common use of parallelizing lines and terminals under unified governmental operation make it impracticable in many cases for the freight-auditing department accurately to credit the tonnage to the road which should receive the credit, and, furthermore, there are great difficulties in allocating waybill ton-miles to the operating divisions of any one road. Besides, the waybill computations usually are not complete until the 15th of the second month following that to which the figures apply, and the information is then too late to be of current value for operating statistical purposes.

It was decided, therefore, to require that the net ton-miles, as well as gross ton-miles, the train-miles, the locomotive-miles, and the car-miles, should be computed from the conductors' train reports. The complete figures from this source are available one month earlier than those taken from the waybills. This practice insures the comparability of all of these related data and definitely allocates the transportation product to the particular period under review.

**Rating ton-miles.**—The potential production in gross ton-miles based on the rated trainload for each freight train run; in other words, the gross ton-miles which would have been produced had every freight train been loaded to 100 per cent of the slow freight rating for normal weather conditions. This potential production when compared with the actual production in gross ton-miles affords a measure of train loading efficiency. The "Per cent of gross ton-miles to rating ton-miles" shows the degree of success of the efforts to attain maximum utilization of the tractive power of the locomotive.
Train hours.—The aggregate elapsed time of trains between the time of leaving the initial terminals and of arriving at the final terminals. This information makes it possible to take account of the time element, an important factor which has not generally been featured in operating statistical reports. It provides a base upon which conclusions may be reached as to the effect of operating policies on train speed and on the ton-mile production per train hour. The unit "Ton-miles per train hour" is obtained by dividing the ton-miles by the train hours or by multiplying the average tons per train-mile by the average train speed in miles per hour. Train efficiency may be increased by increasing the speed with the same trainload or by increasing the trainload and moving it at the same speed, or by increasing both load and speed. An increase in the trainload, if accompanied by relatively greater decrease in speed, will result in a net loss in ton-miles per train hour. The two elements, weight and speed, should be considered both separately and together. Their effect is combined in "Ton-miles per train hour."

From the basic data on the first page of the report certain averages are derived and reported on page 2. These averages show the relation between locomotive-miles and train-miles, the average cars per train, the gross tons and net tons per train-mile and per train hour, the train speed in miles per hour, the average carload, the per cent of loaded to total car-miles, the per cent of net ton-miles to gross ton-miles, and the per cent of actual gross ton-miles to potential gross ton-miles. All of the figures are compared with those of the previous year and are reported by directions, so that the extent and the effect of unbalanced traffic may be traced.

Form O. S. 2, Passenger, Mixed, and Special Train Performance.

This report calls for less detail than Form O. S. 1, as there is not the same need for passenger-train statistics, nor the same possibilities of statistical control. The report calls only for the monthly train, locomotive, and car mile statistics required annually by the Interstate Commerce Commission, but it affords a comparison of the information as to the extent of the passenger, mixed, and special train service, their ratios to total train-miles, the ratio of locomotive-miles to train-miles, and the average cars per train (separated by classes of cars), in each of the three classes of service.

Form O. S. 3, Locomotive Performance.

Form O. S. 3 calls for statistics of performance and of fuel consumption of freight, passenger, and yard switching locomotives. The averages show the locomotive load (gross ton-miles in freight service and car-miles in passenger service), the locomotive-miles per locomo-
tive-day and the pounds of coal consumed per locomotive-mile, per gross ton-mile, and per passenger car-mile in the three classes of service.

FORM O. S. 4, DISTRIBUTION OF LOCOMOTIVE HOURS.

This form requires information as to the average number of locomotives in each class of service and a complete record of the hours spent on the road between terminals, at the terminals before beginning and after completing the road run, in the engine house, and in the shop. Every hour of the day of each locomotive must be accounted for. This report furnishes information not heretofore available in comprehensive form, and it provides a valuable check on locomotive utilization. The report enables the supervising officers to form intelligent conclusions as to the adequacy of the motive power, to determine whether too much time is spent at terminals, in engine houses and in shops, and to take steps to increase the percentage of time on the road in productive service.

FORM O. S. 5, FREIGHT-CAR UTILIZATION.

Form O. S. 5 provides an exhibit which shows the average number of serviceable freight cars on the line daily and the number in un-serviceable condition. This information, in connection with other basic data relating to ton-miles and car-miles, furnishes the significant units of car performance:

(a) The tons per loaded car;
(b) The per cent of loaded to total car-miles;
(c) The average car-miles per car-day; and
(d) The ton-miles per car-day.

The unit last named is the resultant of the first three, and combines the effect of the carload, the per cent of loads, and the car miles per car day. It may be noticed that the carload and the per cent of loaded car miles are shown also on Form O. S. 1. The reason for the duplication is that Form O. S. 1 relates only to freight trains while Form O. S. 5 includes both freight and mixed trains. Mixed trains are necessarily taken into account on Form O. S. 5, as the averages are based on total freight car days, including freight cars moving part of the time in mixed trains.

The underlying theory of Forms O. S. 1 to 5, inclusive, is that the operating department is charged with a given number of locomotive days and car days, and is credited with its production in ton-miles. The production in ton-miles, in turn, is related to the operating department's expenditure in train miles, locomotive miles, and car miles, and the supplementary statistics throw light on the components of the train load and the carload, as well as upon the
effect of changes in the nature of the commodities handled, in the balance of traffic, in the proportion of preference freight trains, and in other physical, traffic, or operating features. The desiderata are that each locomotive and car should be kept employed to its capacity, and should produce the maximum of ton-miles with the minimum of train, locomotive, and car miles. The statistics show clearly the relation between the ton-mile production and the utilization of equipment, and the relation between the actual and the potential train production.

FORM O. S. 6, LOCOMOTIVE AND TRAIN COSTS.

This report deals with the direct costs of locomotive and train operation, in both freight and passenger service. The costs of locomotive repairs, engine-house expenses, wages of train and engine crews, locomotive fuel, locomotive supplies, and train supplies are related to the units of performance, i.e., train miles, locomotive miles, car miles, and gross ton-miles.

These cost statistics are confined to what are known as the "direct," or "out-of-pocket" expenses; that is to say, those which vary in a large measure with the train and locomotive miles and, therefore, are under the control of the operating department.

FORM O. S. 7, CONDENSED INCOME ACCOUNT AND OPERATING EXPENSES BY PRIMARY ACCOUNTS.

Form O. S. 7 follows exactly the condensed income account required monthly and the operating expense accounts required yearly by the Interstate Commerce Commission. With it is required a monthly explanation of the noticeable fluctuations in operating expenses, so that the changes may be analyzed and checked against the physical performance items reported on the other forms.

FORM O. S. 8, FREIGHT AND PASSENGER TRAFFIC STATISTICS.

This form is now being printed, and will be made effective with the month of November. It calls monthly for the information now required annually by the Interstate Commerce Commission with respect to tons carried and ton-miles (based on waybill computation), passengers carried, and passengers carried one mile, freight revenue and passenger revenue, and gives monthly the averages now reported yearly to the Commission and published in its annual reports.

UTILIZATION OF DATA FOR PURPOSES OF STATISTICAL CONTROL.

The reports on the new forms as they come to this section are checked and analyzed. Errors in computation, obvious misunder-
standings in the interpretation of instructions, and questionable items in the basic data, are called to the attention of the individual railroads and of the regional directors. After verification the figures are summarized by regions (with the details for each road), and the monthly summaries are printed in quantity sufficient to supply each railroad and regional director, as well as the officials of the central administration. The form and extent of these monthly summaries are still in the development stage.

When the Operating Statistics Section was organized it took over the compilation and publication of the monthly report of freight operations begun in 1917 by the Bureau of Railway Economics, acting for the American Railway Association, and the summaries have been continued monthly since April, 1918, in slightly amended form. These summaries show for each class 1 road, and for each district and region, the volume of freight traffic, the train-miles, locomotive miles, car miles, and number of locomotives and cars in service, as well as the significant averages, such as the trainload, carload, per cent of loaded cars, car miles per car day, locomotive miles per locomotive day, and net ton miles per car day, and per locomotive day. Effective with the figures for the month of October the monthly summaries have been enlarged to include additional information from the new O. S. Forms.

As now being published, there are four sets of monthly statistical summaries, which show the following information for individual roads, districts, regions, and total:

(1) FREIGHT-TRAIN PERFORMANCE (EXCLUDING MIXED AND SPECIAL TRAINS).

(Statistics in practically all items shown by directions and in comparison with the same period of previous year.)
Average miles of road operated.
Net ton-miles per mile of road per day.
Net ton-miles per train-hour.
Train speed in miles per hour.
Net ton-miles per train-mile.
Per cent of net ton-miles to gross ton-miles.
Per cent of loaded to total car-miles.
Net ton-miles per loaded car-mile.
Gross ton-miles per train-mile.
Per cent of gross ton-miles to rating ton-miles.
Per cent of locomotive-miles to train-miles.

All of the basic data from which the foregoing averages are derived are shown on pages 2 and 3 of the monthly summary.
(2) ** UTILIZATION OF FREIGHT EQUIPMENT (FREIGHT AND MIXED TRAINS). **

Average number of locomotives, (a) serviceable; (b) unserviceable; (c) total.
Average number of cars on line daily, (a) serviceable; (b) unserviceable; (c) total.
Per cent of unserviceable to total equipment, (a) locomotives; (b) freight cars.
Miles per locomotive-day, (a) serviceable locomotives; (b) total locomotives.
Net ton-miles per loaded car-mile.
Per cent loaded to total car-miles.
Car-miles per car-day.
Net ton-miles per car-day.

(3) ** NUMBER OF LOCOMOTIVES AND DISTRIBUTION OF LOCOMOTIVE HOURS. **

( Divided to show separately the data for freight, passenger, switch, other, and total.)

Average number of locomotives on line.

Distribution of locomotive-hours, showing for each class of service the hours and per cent of total hours, (a) on road; (b) at terminals; (c) in engine houses; (d) stored; and (e) total.

(4) ** CONDENSED INCOME ACCOUNT. **

A monthly statement has been prepared since August, which shows for each class 1 road and for each region the principal items of the income account—operating revenues, operating expenses, net operating revenues, net Federal income, average "standard return," and per cent of "standard return" earned, both for the month and for the cumulative period of the calendar year.

**ADDITIONAL SUMMARIES TO BE ISSUED.**

It is the intention, beginning with the month of November, to issue monthly summaries of "passenger-train performance" and "locomotive and train costs."

Effective with the returns for the month of December this section plans to begin the work of compiling monthly reports showing the number of cars of less-carload freight, as well as statistics which show the average carload for certain selected commodities moving in carloads. These statistics have recently been compiled by the Association of Transportation and Car Accounting Officers for the Car Service Section of the Railroad Administration.
In addition to the monthly statements this section has published graphic charts showing comparisons between districts and regions of gains or losses in the significant units of train and equipment efficiency. These charts are confined to the more important features of operation. They are doing much to arouse an interest in the figures and to increase the effort to improve operating efficiency. It is the intention to extend the use of charts as the other work of the section becomes better organized.

GENERAL.

When the Operating Statistics Section was created it was understood that it should be the clearing house for all statistics relating to the Division of Operation, and that its data and compilations should be available to all other divisions or sections, to the end that duplication of reports and overlapping in compilation of similar data might be avoided. The plan is working satisfactorily. The reports and summaries of this section are utilized by other sections of the Division of Operation (such as the Car Service, Mechanical, Fuel Conservation, and Maintenance Sections), and to some extent by the Division of Traffic and the personal staff of the Director General.

While the new operating-statistics plan was designed primarily to supply the central administration with necessary information applying to each road, the forms were drawn so as to be equally valuable for intrarailroad purposes. Many roads are substituting them for forms heretofore made up by divisions and districts, and it is hoped that eventually they will be universally adopted as standard for divisional statistical purposes.

The railroads in all sections of the country have cooperated cheerfully in making the new plan a success, and they are displaying an earnest effort to meet the requirements of the new forms. There is gratifying evidence that the adoption of the standard methods and the more general distribution of summaries showing the operating results for all railroads are doing much to increase the interest in operating statistics. The success of the new plan is to be measured by the use which is made locally of the reports of the individual roads and the interest which is taken in the summaries. The results thus far are encouraging.

TELEGRAPH SECTION.

The Telegraph Section was created July 1, 1918, and to this section has been assigned the work of coordinating the telegraph and telephone facilities of the railroads under Federal control. A great deal
has been accomplished in this direction, and the work is steadily progressing.

Consideration is being given to the relations between the railroads and the commercial telegraph companies now also under Federal control, and, in conjunction with a committee appointed by the Postmaster General, the subject of these relations is being thoroughly gone into.

Instructions have been issued providing for the use of symbols and a brevity code in composing telegrams, and study is being given to testing newly invented telegraph and telephone devices.

**FUEL CONSERVATION SECTION.**

This section was created May 1, 1918, with Mr. Eugene McAuliffe as manager, and representatives who had had practical experience in the use of locomotive fuel, as well as in its production, were assigned to each region.

There has been constant cooperation with the Fuel Administration, and a consistent effort has been made to improve the quality of coal purchased for locomotive use, as well as to instruct enginemen in proper and economical firing. The cost of fuel to the railroads, now aggregating about $473,000,000 annually, exclusive of road haul on users' rails, represents the largest single item of operating expense other than labor.

The response made to the work of this section on the part of both officers and men has been of the most extraordinary and gratifying character. Meetings have been held throughout the country, which were attended by railroad officials and men, producing coal operators and representatives of the Fuel Administration lending their presence and support.

The marked improvement in the measure of supervision and supervising methods established and the specific attention given to the selection and inspection of coal at mines, as well as the economical use of same on locomotives and in stationary plants, has resulted in very material fuel savings on the several railroads, and the revised methods of distribution which have been worked out will result in economy in road hauls.

Every change worked out under the advice of the Fuel Conservation Section has received the fullest approval of the regional directors and the various operating heads, with the result that methods established will be permanently maintained.

While deprived of the stimulus of war necessity, work in the Fuel Conservation Section will move along continuously broadening lines, the recent extraordinary increase in fuel costs rapidly bringing this angle of railroad-operating expense into such marked prominence as to warrant continual refinement in purchasing, operating, and maintenance methods; the question of determining the most economical
grade of coal for use on the heavier type of locomotives, the best method of obtaining the maximum return in fuel economy from use of the locomotive superheater, the possibilities of the locomotive feed-water heater, and the determination of methods that will reduce the stand-by fuel losses of large locomotives present problems worthy of the most serious consideration.

**EXPORTS CONTROL COMMITTEE.**

Mention has been made elsewhere in this report of the lack of coordination between the rail lines and the vessels handling overseas traffic. The control of all shipping, both for the United States and for the allied Governments reaching American ports, had been given to the Shipping Control Committee, of which Mr. P. A. S. Franklin is chairman.

On June 11, 1918, by agreement between the Secretary of War, the Secretary of the Navy, and yourself as Director General of Railroads, the Exports Control Committee was organized, with Mr. George D. Ogden, representing the Railroad Administration, as chairman; Maj. Gen. George W. Goethals, United States Army, representing the War Department; Rear Admiral C. J. Peoples, representing the Navy Department; Mr. P. A. S. Franklin, representing the Shipping Control Committee; and Mr. D. W. Cooke, representing the allies.

The duties and responsibilities of the Exports Control Committee were, by order, defined as follows:

1. To inform itself—
   (a) As to the probable amount of freight which must be exported for the prosecution of the war.
   (b) How this war freight can best be routed through the various ports.
   (c) How much of other essential export traffic has to be handled.
   (d) The amount of local traffic necessary for each port.

2. The committee will have authority to select the port to which specified freight will be transported for transshipment overseas for the use of the War and Navy Departments, the allied Governments, and others.

3. It shall be the responsibility of the committee to decide the distribution of the combined amount of all exports as between the various ports, so as to facilitate its handling at and avoid congestion in any one port.

It will be seen that there was represented in this committee both the rail and the ocean steamship lines and the control of all shipments of every character for overseas for the allies and for the United States.
The work of this committee has been intelligently and sympathetically directed, and there has been as a result of its activities a most satisfactory coordination between the rail and ocean lines. Freight for overseas from the interior has been allowed to come forward only on permits, and these permits were issued where there was a practical certainty, barring only the exigencies of the war, that ships would be promptly available.

IN GENERAL.

It is not unnatural that with so fundamental a change, and with the large number of officers and men involved, there should have been some uneasiness and uncertainties arise, and we have not been without in the earlier period of Federal control some evidences of demoralization in service as a result of these conditions, but the fact that there were so few is a most gratifying evidence of the patriotism and discipline of the officers and men in railroad service.

The Railroad Administration was organized in a period of unprecedented business, aggravated by weather conditions, which as to severity and duration have never been equaled.

The needs of a government at war involving the greatest variety of activities, many of them in localities heretofore relatively unimportant and with an insufficiency of facilities, had to be satisfied.

Fuel for industries and homes, as well as food for the domestic population and our Army abroad and for the allies, had to be provided concurrently with an unprecedented commercial and industrial activity.

The fact that this was done and that the railroads, emerging from the stress of weather conditions in March, were functioning normally by May 1, and have continued to do so, speaks for itself.
The following chapter on the labor results of the Federalized Railroads from Director General McAdoo's forthcoming report to the President for the calendar year 1918 must be held for release in the afternoon papers of Friday, January 17, 1919.

ANNUAL REPORT
OF
W. G. McADOO
DIRECTOR GENERAL OF RAILROADS
1918

LABOR

WASHINGTON
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1919
LABOR.

The Division of Labor of the Railroad Administration was created in Circular No. 1 issued on February 9, 1918, wherein W. S. Carter, president of the Brotherhood of Locomotive Firemen and Engine-men, was appointed Director of the Division of Labor. It has been the purpose of this division to create a better feeling between employees and officials of the railroads than existed previous to governmental control.

On January 18, 1918, General Order No. 5 was issued, creating a railroad wage commission and directing a general investigation of the compensation of persons in the railroad service, the relation of railroad wages to wages in other industries, and other matters pertaining to conditions of employment of railroad employees be made. This commission devoted several months to the work, submitting recommendations to the Director General on which General Order No. 27 was based.

General Order No. 8 was issued on February 21, 1918, and directed that safety appliance laws be observed, that excessive hours of service be avoided where possible, and that matters of controversy arising under interpretations of existing wage agreements, and other matters not relating to wages and hours of service would take their usual course.

This order also provided that "no discrimination will be made in the employment, retention, or conditions of employment of employees because of membership or nonmembership in labor organizations."

Unquestionably these initial orders did much to bring about a better feeling on the part of those employees who believed they had not been treated justly in the past.

ADJUSTMENT OF LABOR CONTROVERSIES.

One of the principal purposes of the creation of the Division of Labor was to provide means whereby the controversies that constantly arise between railroad officials and employees would be promptly and equitably adjusted. An inability to adjust these controversies under past practices resulted in strikes, threatened strikes, or a constant unrest among employees to the extent that the efficiency of the service had greatly diminished at the time that the roads were taken over under Federal control.
It is but fair to say that neither the operating officials nor the employees were entirely to blame for so undesirable a situation. While on some roads there had never been a liberal policy toward employees of certain classes, a study of past relations will reveal the fact that not so many years ago the labor policy of a railroad was developed entirely by the operating officers. At that time, committees of employees, with the knowledge that their immediate operating officers had the authority to grant wage increases, revise wage agreements, and adjust personal grievances, entered into negotiations with their respective officials with an open mind, and with the belief that if evidence and argument could be presented that would prove their contentions, the operating officials of the road would at least grant some relief from the conditions of employment against which complaint was made.

In those days wage increases were granted from time to time, wage agreements were revised so as to include rules more favorable to employees, and personal grievances arising out of the administration of discipline were disposed of usually without a strike or a threat of a strike.

It is alleged by employees that with a concentration of financial control of the railroads, either by groups or districts, operating officials lost all authority over the labor policies upon the respective railroads, with the result that it was alleged that the operating officials of a railroad were no longer permitted to exercise their own judgment in disposing of these matters.

With the creation of "general managers' associations" covering a comparatively large territory, came "district movements" by employees for the adjustment of wage matters.

During the two or three years antedating Federal control of the railroads an alarming situation was created, in that the employees' organizations as a whole and through federations, found themselves confronted with similar federations on the part of the railroads, the roads being represented by conference committees, and the conference committees being subordinate to "advisory committees." It was alleged by employees that these conference committees of all of the principal railroads in a district were not permitted to grant the demands of employees or even to make favorable compromises without the consent of the advisory committee. The advisory committee, it is alleged, was the agent of the great banking institutions that controlled the financial policy of all the railroads.

Arbitrations have been resorted to in the later years in these district movements, with the result that employees reached the conclusion that an arbitration award depended entirely upon the frame of mind of the neutral arbitrator. Persons selected to perform this function were liberal in their awards in accordance with the liberality of their minds, when appointed upon such arbitration boards.
There seems to have been a public opinion that any man, even indirectly connected with labor, would be unqualified to act as a neutral arbitrator, with the result that most estimable gentlemen who had never had any connection with, and who had little knowledge of, labor conditions were called upon to act as umpires in these great contests. It was alleged by the employees that usually these arbitrators, having no technical knowledge of wage schedules, often made awards that were difficult of interpretation, if they did not, in fact, bring about conditions the very opposite to that intended by the neutral arbitrator. It also became apparent that in the application of the arbitration award, the officials of a railroad were the sole administrators thereof, with the result that after employees had been led to believe that an arbitration award brought them much relief, it was applied in a manner that "took away from them more than had been given them."

Later, provisions were made for submitting controversies over the application of an arbitration award back to the arbitration board, or to some other umpire, but this resulted in the continuation of controversies over a period of two or three years.

It may be truthfully said that at the time the railroads passed under Federal control, because of these vexatious contentions, the morale of railway employees had sunk to a low degree. In many instances there was an entire absence of esprit de corps, so necessary for efficient operation.

It was with the knowledge of this alarming situation, and with a determination to restore harmonious relations between employees and the railroads, and thereby increase the efficiency of the railroads, that the Division of Labor of the Railroad Administration was created.

With an intimate knowledge on the part of the officers of the division of the relations between the railroads and their employees during the past years, innovations were proposed, the practicabilities of which were first questioned by some railroad officials and by some railroad employees. It was suggested that at least for all classes of employees who were working under wage agreements, bipartisan boards be created for the purpose of adjusting any differences of opinion which might arise between the employee and the official, upon which there would be equal representation of the railroads and of the employees without the presence of any "neutral" or umpire. It was believed that when partisans were equally divided, and when they realized they were occupying judicial positions, they would abandon their partisanship and earnestly and efficiently exercise the function of a judge.

In carrying out this plan three railway boards of adjustment have been created, as follows:
Railway Board of Adjustment No. 1 was created March 22, 1918, by the issuance of General Order No. 13. This order is a “Memorandum of understanding” reached between the Regional Directors and the representatives of the Brotherhood of Locomotive Engineers, Order of Railway Conductors, Brotherhood of Railroad Trainmen, and Brotherhood of Locomotive Firemen and Enginemen.

Railway Board of Adjustment No. 2 was created May 31, 1918, by the issuance of General Order No. 29. This order is a “Memorandum of understanding” reached between the Regional Directors and the representatives of the International Association of Machinists, International Brotherhood of Boilermakers, Iron Ship Builders and Helpers of America, International-Brotherhood of Blacksmiths and Helpers, Brotherhood Railway Carmen of America, Amalgamated Sheet Metal Workers’ International Alliance, and International Brotherhood of Electrical Workers.

Railway Board of Adjustment No. 3 was created November 13, 1918, by the issuance of General Order No. 53. This order is a “Memorandum of understanding” reached between the Regional Directors and the representatives of the Order of Railroad Telegraphers, Switchmen's Union of North America, Brotherhood of Railway Clerks, and United Brotherhood of Maintenance-of-Way Employees.

The “Memorandum of understanding” upon which the work of these railway boards of adjustment were based outlines the functions of these boards, but a brief description of the methods of procedure are given as follows:

All controversies growing out of the interpretation or application of the provisions of wage schedules or agreements in effect, which were not promptly adjusted by the officials or employees on any of the individual railroads under Federal control, and all personal grievances or controversies arising under interpretation of wage agreements and all other disputes arising between officials of a railroad and its employees were to be handled in the usual manner by the committees of the employees and the officials of the railroads up to the chief operating officer of the railroad (or some one officially designated by him). If, after this usual process, an amicable adjustment was not reached, then it became obligatory (by virtue of the “Memorandum of understanding”) on both the part of the railroads and officials of employees’ organizations to submit the matter in controversy to the railway board of adjustment having jurisdiction. Provisions were made for joint submission of facts and brief argument in each case submitted, and if it was deemed advisable, such railway board of adjustment could call for additional information, either oral or written, and when the matter had been entirely investigated a decision would be rendered by the board.
Here it might be said that in the beginning fears were expressed that employees would protest against unfavorable decisions, to the extent that the purpose of the creation of the boards would be defeated. A knowledge of the loyalty of employees to their organizations, and a familiarity with the strict discipline enforced by these organizations in matters of agreement, led those who had intimate knowledge of the situation to know that a decision thus reached would be faithfully observed by the employees.

Brief reports of the work of these several railway boards of adjustment are herewith attached.

Methods having been thus provided for classes of employees having agreements on a comparatively large number of railroads, there were yet perhaps a million employees for which no disposition had been made. For the purpose of providing prompt and proper methods of adjusting controversies affecting these employees, an assistant director of the Division of Labor was appointed, whose especial duty was to investigate all complaints, endeavor to bring about amicable adjustments, and practically perform for these employees the work accomplished by the railway boards of adjustment.

In the prosecution of this work, four representatives of the Division of Labor have been appointed, whose duties require them to be almost constantly in the field making personal investigations of matters referred to the Division of Labor by employees. In the selection of persons for the performance of this work regard was had for their past experience and ability in this or similar class of work, with the result that a large number of complaints have been investigated and adjusted.

"Closed Shop" v. "Nonunion Shop."

In many industries a contest has long existed between certain employers and unions of employees over rights of employees to become members of labor organizations, and over alleged discriminations against employees because of their connection therewith. It is claimed by employees, in many instances, that unless all employees in the class in the industry are members of the union, the employer discriminates against the employees who are members or else favors the employees who are not members.

In this contest, and for their own protection, employees have often demanded the "closed shop." On the other hand, certain employers have insisted on maintaining what they have called the "open shop." Theoretically, employees do not discriminate against any employee in the "closed shop" because it is alleged that any employee in the shop may become a member of the union. Theoretically, the employer does not discriminate against the union man in the open shop.
Many roads forbade the employment of employees who were members of certain organizations and had thus maintained nonunion conditions, with the result that on a considerable portion of the railroads, for certain classes of employees, committees of employees had never functioned, and wage bargaining had been prevented.

Previous to the assumption of Federal control, on these railroads and for these classes of employees, almost continuous dissensions had arisen, with the result that in many instances strikes had been precipitated, many of which were lost by the employees and nonunion conditions prevailed. For the purpose of eliminating this constant conflict, which necessarily adversely affected the efficiency of the service, and because the Government was now in control, Article V of General Order No. 8, issued under date of February 21, 1918, contained the following:

No discrimination will be made in the employment, retention, or conditions of employment of employees because of membership or nonmembership in labor organizations.

The immediate result of the foregoing order was (1) the assertion on the part of representatives of the employees that they had never contended for a closed shop except as a protection to the members of the union, and that nonunion employees would be assured the same rights and benefits and treatment under existing union wage agreements as were accorded to the union employees, and (2) the employees on the railroads where they had never been permitted to become members of the organizations were almost immediately organized into the unions.

**STANDARDIZATION OF WAGES.**

With the development of trade unions in all industries has come the demand for the same rate of wages for the same character of work, and the result has been that there is a constant and pressing demand on the part of employees for a standardization of wages.

On the other hand, each individual is of the opinion that so long as some other person is required to work, or is willing to work at a less rate of wages, it produces a dangerous competitive situation wherein there is an incentive for the employer to dismiss the higher paid man and retain the lower paid man, and thus reduce labor cost. The demand for a standard wage and working day was made apparent at the hearings of the first Federal Wage Commission, appointed early in the present year, but it was not deemed expedient by that commission to attach much importance to this demand.

On the other hand, the wage commission was imbued with the humanitarian idea that the "increased cost of living" had fallen heaviest upon the lowest paid employees, and therefore the percentage
of increase for the lower paid man should be greater than the percentage of increase for the higher paid man, and that this percentage should be based upon wages in effect in December, 1915.

It so happened that during the two years of 1916 and 1917 great progress had been made in the standardization of wages through negotiations of employees with railroad companies and consequently many differentials were eliminated. With the application of the graduated percentages of increases provided for in General Order No. 27, which order was based upon the recommendation of the first wage commission, all these differentials were reestablished.

General Order No. 27 created a Board of Railroad Wages and Working Conditions, and said:

No problem so vast and intricate as that of doing practical justice to the 2,000,000 railroad employees of the country can be regarded as completely settled and disposed of by any one decision or order; therefore the Board of Railroad Wages and Working Conditions is hereby established and will take up as presented any phases of the general problem relating to any class of employees or any part of a class of employees which may justly call for further consideration.

The duties prescribed for this Board of Railroad Wages and Working Conditions were—

To hear and investigate matters presented by railroad employees or their representatives affecting—

(1) Inequalities as to wages and working conditions whether as to individual employees or classes of employees.

(2) Conditions arising from competition with employees in other industries.

(3) Rules and working conditions for the several classes of employees, either for the country as a whole or for different parts of the country.

In the report of this board it will be shown that rapid advances toward standardization of wages of all railroad employees have been made, and but for the possible early return of the railroads to private control it could safely be said that the logical conclusion of the work of the present Board of Railroad Wages and Working Conditions would be standardized rates, standardized days, and other standardized conditions of employment for all employees on railroads under Federal control.

THE EIGHT-HOUR DAY.

The demand for an eight-hour day has been pressed by employees in all industries. While on a considerable number of railroads some classes of employees had secured the eight-hour day through negotiations, perhaps in no industry of such importance had there been so little recognition by the employer of the eight-hour day as with the railroads. The recent eight-hour movement of men engaged in engine and train service culminated in the enactment of the eight-hour law, applicable to such employees as were connected with the operation of trains.
Practically all of the representatives of employees that appeared before the first wage commission were earnest in their demands for the eight-hour day, but it did not appear to the first wage commission as being practical during the war period. Nevertheless, in the issuance of General Order No. 27, provisions were made for the "basic eight-hour day," which assigned a certain portion of the new rates of wages to the first eight hours of work and a similar portion to the usual hours in excess thereof, with a pro rata overtime rate for all hours worked in excess of those in effect for employees on January 1, 1918.

This plan for an eight-hour day was but the foundation for the real eight-hour day, which it was proposed could be put in effect when the war was ended and our soldiers returned and were seeking employment and the supply of labor was sufficient to reduce the work of employees to an eight-hour period.

Through investigations by the present Board of Railroad Wages and Working Conditions supplementary orders have been issued that have made great advances toward an ultimate eight-hour day for all railroad employees. Where classes had through negotiations, and previous to Federal control, secured the eight-hour day to a considerable extent, with time and one-half for overtime, such practice was extended to all employees in that class. Where classes have not secured the eight-hour day with time and one-half for overtime, great advances have already been made by extending to them the eight-hour day with pro rata overtime for the ninth and tenth hour and time and one-half for all hours worked in excess thereof.

**STANDARD WORKING RULES.**

Because of the increased cost of living, increased wages were of far greater concern during the present year to employees than the standardization of working rules. Nevertheless, requests have been filed for standard working rules for several classes of employees to be applicable to all railroads under Federal control. Where classes, through negotiations, had secured wage agreements, including rules, the demand was not so persistent, but for the great number of employees who had never been privileged to work under fixed regulations of employment the demand was urgent, with the result that in Supplements to General Order No. 27 rules have been established providing for the administration of discipline and the maintenance of the seniority principle for more than a million employees.

Notwithstanding the fact that on a majority of railroads employees connected with the skilled shop trades have had agreements which included working regulations, recently these employees have presented a request for a standardization of working rules on all railroads under Federal control.
EMPLOYMENT OF WOMEN.

The employment of women (and of children) has often been opposed in many industries by employees affiliated with labor organizations upon the theory that women may be more successfully exploited than men, and with the result that in many industries into which women are introduced as employees to any considerable extent the wages will not be increased and perhaps decreased, and that the working conditions will not be favorable.

A large number of women have always been employed by the railroads, but because of war conditions this number rapidly increased, and in many instances women were not paid the same wages as men. To assure women employees of the railroads of fair treatment, the following was included as Article V of General Order No. 27, issued under date of May 25, 1918:

When women are employed, their working conditions must be healthful and fitted to their needs. The laws enacted for the government of their employment must be observed and their pay, when they do the same class of work as men, shall be the same as that of men.

Under such a rule it is evident that women will be justly treated, but conditions of employment that will be suitable to men are in many instances not suitable for women. To assure the women employees of the railroads of not only fair treatment and wages, but suitable working conditions, the Women’s Service Section was created on August 28, 1918.

The work done by this section has been very thorough, considering the limited time in which it has been in operation, and a detailed report of its work is attached.

FIRST ANNUAL REPORT OF RAILWAY BOARD OF ADJUSTMENT NO. 1

This board, known as Railway Board of Adjustment No. 1, was created by virtue of an agreement entered into March 22, 1918, between the regional directors of the railroads under Government control and the chief executives of the four transportation organizations representing engineers, firemen, conductors, trainmen, and yardmen. This agreement was approved by the Director General of Railroads and made effective by General Order No. 13.

In conformity with the provisions of this agreement the regional directors, Messrs. R. H. Aishton, C. H. Markham, and A. H. Smith, selected the following as members of the board:

J. W. Higgins, executive secretary, Association of Western Railways.

Charles P. Neill, manager, Bureau of Information of the South-eastern Railways.
John G. Walber, secretary, Bureau of Information of the Eastern Railways.

E. T. Whiter, assistant general manager, Pennsylvania Lines West. The chief executives of the four transportation organizations, respectively, selected the following as members of the board:

F. A. Burgess, assistant grand chief engineer, Brotherhood of Locomotive Engineers.

W. N. Doak, vice president, Brotherhood of Railroad Trainmen.

Albert Phillips, vice president, Brotherhood of Locomotive Firemen and Enginemen.

L. E. Sheppard, senior vice president, Order of Railway Conductors.

As article 6 of the agreement between the regional directors and the executives of the four transportation organizations refers to the "Commission of Eight" and transfers the jurisdiction which that body had previously had to the new board created by the agreement in question, it seems appropriate to embody here a preliminary statement explaining the origin and jurisdiction of the Commission of Eight.

When, in March, 1917, the Committee of the Council of National Defense, at the request of the President of the United States, intervened in the controversy then existing between the railways of the country and the four transportation organizations over the demand for an eight-hour day, it was agreed by the National Conference Committee representing the railways and the executives of the four organizations to accept as a settlement of the controversy whatever award the Committee of the Council of National Defense should make. The Committee of the Council, under date of March 19, 1917, handed down an award which was formally accepted by the representatives of the parties to the controversy.

The National Conference Committee of the railways represented over 150 railways, and practically each of these roads had elaborate and complex agreements in effect with two or more of the transportation organizations. There were, therefore, in all hundreds of individual contracts, each with its own peculiar provisions, to which the award of the Committee of the Council of National Defense had to be applied, and it was fully appreciated by each side that in this process innumerable controversies would inevitably develop. Immediately upon the acceptance of the award the Conference Committee and the executives of the four organizations entered into a further agreement to create a standing commission of eight members, four to be chosen by the National Conference Committee and four by the railroad brotherhoods, to pass upon the application of the award to the agreements on the individual roads.
It was agreed that the award of the Committee of the Council of National Defense should be sent to the managements of the individual roads represented by the National Conference Committee and to the respective committees representing the organizations on each of those roads, with instructions to meet as soon as possible to revise their existing agreements to conform to the provisions of the award. Each management and committee was then to transmit to the Commission of Eight a joint statement showing what they had agreed upon as a proper revision of existing agreements to conform to the provisions of the award, and the items upon which they had been unable to reach agreement. The Commission of Eight was empowered to decide not only the controversies arising over the application of the award to the agreements, but also to pass upon whether the revisions agreed upon by the managements and committees were proper applications of the award.

The board was intentionally composed of an even number from each side, and a majority decision was to be binding.

The commission met in May, 1917, and held sessions each month until March 22, 1918, on which date it was superseded by this board. By that date it had practically completed its work, and had only a few questions before it that for want of time had not been disposed of. In every instance the action of the commission on all matters before it was unanimous.

The above review of the work of the Commission of Eight has been gone into because it is believed that the experience of this commission (composed of equal members from each side) in being able to reach unanimous agreements on all the matters growing out of the application of the award of the Committee of the Council of National Defense had a very direct influence on the action of the regional directors and the heads of the brotherhoods in making their agreement to create another similarly constituted board with enlarged jurisdiction to supersede that commission.

It was recognized at the outset by the parties to the creation of this board that mutual respect and confidence on the part of its members was a prime requisite for its successful functioning; and four of the members of the Commission of Eight were named for membership on the new board, the other four not being longer available because of press of other duties.

Starting with this advantage, the work of this board from the beginning has been marked by mutual understanding and good will and by the absence of friction or any appearance of biased partisanship. In the appended statement it will be seen that up to November 30, decisions had been rendered by the board in 292 cases, and between that date and this writing additional decisions have been rendered
bringing the total up to 331. While in accordance with the agreement creating the board a majority vote of the membership is decisive, in every one of the decisions rendered the action of the board has been unanimous. While the agreement, further, provides that in the event of a deadlock the case may be referred up to the Director General for a decision, no occasion has up to this time arisen to invoke this provision of the agreement.

Board of Adjustment No. 1 held its initial meeting at Washington, D. C., April 8, 1918, the full membership being present. It organized by the selection of Mr. Charles P. Neill as chairman and Mr. L. E. Sheppard as vice chairman for the ensuing calendar year. Later on Mr. Sheppard had to be withdrawn from the board to devote his time to duties at headquarters as senior vice president of the Order of Railway Conductors, and Mr. W. M. Clark, another vice president of that organization, was named in his place by President Garretson of the O. R. C. Mr. F. A. Burgess, Assistant G. C. E. of the Brotherhood of Locomotive Engineers, was chosen vice chairman, to fill out the unexpired term of Mr. Sheppard. With these exceptions the membership and the organization of the board has remained unchanged up to this time.

In pursuance of its adopted policy of rotating its chairmanship and vice chairmanship, Mr. F. A. Burgess, at the present session of the board, has been elected chairman and Mr. E. T. Whiter, vice chairman, for the term beginning January 1, 1918.

The board has been in session the greater part of each month since its initial session on April 8 of this year, and at the beginning of its December session had disposed of 309 cases. In most of these cases hearings have been held at the request of one or the other party to the controversy, or of both, to permit of the presentation of oral testimony and argument. There is appended hereto a statement showing the number of cases on the docket of the board at the close of November and the disposition made of these cases.

**Status of Docket of Railway Board of Adjustment No. 1.**

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of cases entered upon the docket under General Order No. 13</td>
<td>408</td>
</tr>
<tr>
<td>Number of cases in which decisions have been rendered</td>
<td>292</td>
</tr>
<tr>
<td>Number of cases disposed of locally (Nos. 6, 15, 16, 17, 19, 231, and 286)</td>
<td>7</td>
</tr>
<tr>
<td>Number of cases withdrawn at hearings (Nos. 144, 145, 150, 151, 192, 276, 310, 311, and 313)</td>
<td>9</td>
</tr>
<tr>
<td>Number of cases in which decisions were not rendered, account being without jurisdiction (Nos. 96 and 124)</td>
<td>2</td>
</tr>
<tr>
<td>Total number of cases disposed of</td>
<td>307</td>
</tr>
<tr>
<td>Number of cases on the docket as of November 30 and not yet disposed of</td>
<td>101</td>
</tr>
<tr>
<td>Number of cases for which hearings have been set for December session</td>
<td>51</td>
</tr>
<tr>
<td>Number of cases now ready for action of the board (Nos. 118 and 230)</td>
<td>2</td>
</tr>
</tbody>
</table>

98655°—19—4
Number of cases held up or covering which additional data has been requested (Nos. 194, 274, 279, 297, 312, 314, 315, 316, 317, 318, 319, 320, 322, 327, 329, and 331). ................................................... 16
Number of cases on docket under General Order No. 27 ........................................ 23
Number of cases on which recommendations have been made ................................. 2
Number of cases held to determine jurisdiction ...................................................... 21

November 30, 1918.

RAILWAY BOARD OF ADJUSTMENT NO. 2.

This board was established in accordance with the understanding reached in General Order No. 29, dated May 31, between the Regional Directors representing the railways which may have, or may hereafter have agreements with the International Association of Machinists, International Brotherhood of Boilermakers, Iron Ship Builders and Helpers of America, International Brotherhood of Blacksmiths and Helpers, Brotherhood of Railway Carmen of America, Amalgamated Sheet Metal Workers' International Alliance, and International Brotherhood of Electrical Workers, and the officers of those crafts.

The Director General of Railroads issued a circular dated June 21, 1918, on the organization of this board.

The first meeting of the board was held in Washington on June 21, with the following gentlemen present, representing the various railways and crafts:

Mr. A. C. Adams, superintendent of shops, Readville, Mass., New York, New Haven & Hartford Railroad.
Mr. H. J. Carr, member chief executive board representing International Association of Machinists
Mr. Otto E. Hoard, vice president, Amalgamated Sheet Metal Workers' International Alliance.
Mr. F. H. Knight, acting president, Brotherhood of Railway Carmen of America.
Mr. W. S. Murrian, ex-superintendent motive power, Southern Railway.
Mr. F. J. McNulty, international president, International Brotherhood of Electrical Workers, who was elected vice chairman.
Mr. W. H. Penrith, assistant general manager, Chicago & Alton Railroad.
Mr. E. F. Potter, assistant to general manager, Soo Line Railroad, who was elected chairman.
Mr. G. W. Pring, vice president, Railway Employees' Department, American Federation of Labor, representing International Brotherhood of Boilermakers, Iron Ship Builders and Helpers of America.
Mr. E. A. Sweeley, master car builder, Seaboard Air Line Railroad.
Mr. R. J. Turnbull, inspector of transportation, Atlantic Coast Line Railroad.
Mr. G. C. Van Dornes, general vice president, International Brotherhood of Blacksmiths and helpers.

Mr. McNulty on August 19 advised the board that he would be temporarily absent in Europe on Government work, and Mr. G. M. Bugniazet, vice president of the International Brotherhood of Electrical Workers, was appointed to act in his stead as a member
of the board during his absence; Mr. G. W. Pring being elected acting vice chairman in the absence of Mr. McNulty.

Regular meetings of the board began on Tuesday, July 2, 1918, and have been held practically continuously from that date.

The board to date has had 147 controversies presented to it for adjustment and has rendered 128 decisions. The board has been obliged to hold up some of the cases pending decisions of the Board of Railroad Wages and Working Conditions, and others pending further information from the parties to the controversies.

In addition to the controversies above referred to, the board has had considerable correspondence both with the railways and the crafts, endeavoring to guide them right in the presentation of matters which would properly come before this board, there seemingly having been more or less misunderstanding on the part of both the railways and the crafts as to how the controversies should be properly submitted. At this date there seems to be a better understanding on the part of both the railways and the crafts, and the controversies are reaching us in very much better shape.

The decisions of this board are based on the orders of the Director General of Railroads and agreements between the crafts and the railways, and as almost every railroad had a different agreement with the crafts on their respective lines it was necessary for this board to make a careful collection and compilation of the agreements in force on the various railroads.

While much time has been expended in considering some of these controversies, it is felt that on the whole it was well spent, and, so far as the board is aware, its decisions, taken as a whole, have met with the approval of both the railroads and the crafts.

It is further felt that the creation of this board has had a stabilizing effect as between the railway employees and railway employers.

During the first two months of the existence of this board the controversies were slow in reaching the board, owing to the fact that all concerned had not yet become familiar with the manner in which these matters should be submitted.

**RAILWAY BOARD OF ADJUSTMENT NO. 3.**

General Order No. 53 created Railway Board of Adjustment No. 2 under date of November 13, 1918. The board was organized in accordance with the order, consisting of the following members:

Mr. H. A. Kennedy (chairman), terminal manager, Twin Cities.

Mr. T. H. Gerrey (vice chairman), vice president Brotherhood of United Maintenance of Way Employees.
Mr. S. N. Harrison, receiver, Wisconsin & Michigan Railroad.
Mr. F. Hartenstien, superintendent Washington Terminal.
Mr. E. A. Gould, formerly general manager Cincinnati, Hamilton & Dayton Railroad.
Mr. G. E. Kipp, vice president, Order of Railroad Telegraphers.
Mr. W. A. Titus, vice president, Switchmen's Union.
Mr. Richard P. Dee, vice grand president, Brotherhood of Railway Clerks.

But one case has been submitted to the board, upon which no action has been taken (Dec. 1, 1918) due to additional information being required.

WOMEN'S SERVICE SECTION, SEPTEMBER 1 TO DECEMBER 1, 1918.

This section was created August 28, with Miss Pauline Goldmark as manager, to "give consideration to conditions of employment of women on railroads under Federal control."

In view of the growing importance of women in the railroad service and the diverse problems which follow their introduction in a new field of industry, it was deemed advisable to create this special agency. For the first time women were entering new occupations side by side with men, and it was important to determine whether such work was suited to their strength and aptitudes, or whether it was too heavy or performed under undesirable conditions. If this proved to be the case, then it would be necessary to discontinue their employment in certain occupations and to transfer them to other more suitable fields. Moreover, there was need of more careful provision of the comfort facilities which were often overlooked when women took the place of men. And finally, it was important to insure observance of wage orders giving women the same rate of pay as men for the same class of work.

NUMBER OF WOMEN EMPLOYED IN THE RAILROAD SERVICE.

The first statistics of the number of women employed in the railroad service were collected as of January 1, April 1, July 1, and October 1, and showed the following increases:

Table I.—Number of women employed by the railroads according to territory.

<table>
<thead>
<tr>
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<th></th>
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</thead>
<tbody>
<tr>
<td>Eastern territory</td>
<td>32,949</td>
<td>34,938</td>
<td>45,702</td>
<td>54,466</td>
</tr>
<tr>
<td>Southern territory</td>
<td>6,332</td>
<td>6,937</td>
<td>8,724</td>
<td>11,447</td>
</tr>
<tr>
<td>Western territory</td>
<td>22,174</td>
<td>23,979</td>
<td>27,944</td>
<td>35,383</td>
</tr>
<tr>
<td>Total</td>
<td>60,555</td>
<td>65,854</td>
<td>82,370</td>
<td>101,296</td>
</tr>
</tbody>
</table>
Further classification according to occupations follows:

**TABLE II** Number of women employed by the railroads according to character of occupation.

[First-class roads.]

**SUMMARY OF EASTERN, SOUTHERN, AND WESTERN TERRITORY, 1918.**

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<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Attendants</td>
<td>597</td>
<td>694</td>
<td>1,143</td>
<td>2,334</td>
</tr>
<tr>
<td>2. Bridge tenders</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>3. Car department</td>
<td>351</td>
<td>457</td>
<td>392</td>
<td>546</td>
</tr>
<tr>
<td>4. Clerical or semiclerical</td>
<td>47,192</td>
<td>41,468</td>
<td>31,320</td>
<td>73,285</td>
</tr>
<tr>
<td>5. Cleaning</td>
<td>3,492</td>
<td>3,666</td>
<td>4,632</td>
<td>5,555</td>
</tr>
<tr>
<td>6. Elevator operators</td>
<td>16</td>
<td>15</td>
<td>34</td>
<td>97</td>
</tr>
<tr>
<td>7. Messenger service</td>
<td>339</td>
<td>430</td>
<td>557</td>
<td>73</td>
</tr>
<tr>
<td>8. Personal service</td>
<td>2,387</td>
<td>2,900</td>
<td>2,430</td>
<td>2,796</td>
</tr>
<tr>
<td>9. Roundhouse work</td>
<td>354</td>
<td>397</td>
<td>923</td>
<td>1,355</td>
</tr>
<tr>
<td>10. Shopwork</td>
<td>1,392</td>
<td>1,413</td>
<td>3,175</td>
<td>5,091</td>
</tr>
<tr>
<td>11. Signal service</td>
<td>36</td>
<td>40</td>
<td>186</td>
<td>220</td>
</tr>
<tr>
<td>12. Station agents, assistants, agent-operators</td>
<td>379</td>
<td>426</td>
<td>390</td>
<td>577</td>
</tr>
<tr>
<td>13. Supervisors of women employees</td>
<td>52</td>
<td>52</td>
<td>78</td>
<td>113</td>
</tr>
<tr>
<td>14. Switch tenders and other yard work</td>
<td>10</td>
<td>18</td>
<td>17</td>
<td>30</td>
</tr>
<tr>
<td>15. Telegraph operators (train orders, blocking, etc.)</td>
<td>1,355</td>
<td>1,322</td>
<td>1,327</td>
<td>2,096</td>
</tr>
<tr>
<td>16. Telephone operators (train orders, blocking, etc.)</td>
<td>1,355</td>
<td>1,322</td>
<td>1,327</td>
<td>2,096</td>
</tr>
<tr>
<td>17. Track work</td>
<td>60</td>
<td>133</td>
<td>517</td>
<td>572</td>
</tr>
<tr>
<td>18. Train service</td>
<td>21</td>
<td>39</td>
<td>71</td>
<td>100</td>
</tr>
<tr>
<td>19. Warehouse and docks (includes trucking)</td>
<td>324</td>
<td>420</td>
<td>704</td>
<td>1,461</td>
</tr>
<tr>
<td>20. Watch women</td>
<td>204</td>
<td>222</td>
<td>293</td>
<td>518</td>
</tr>
<tr>
<td>21. Other service</td>
<td>361</td>
<td>408</td>
<td>423</td>
<td>565</td>
</tr>
<tr>
<td>Grand total</td>
<td>60,553</td>
<td>65,554</td>
<td>92,370</td>
<td>101,295</td>
</tr>
</tbody>
</table>

*Further subdivisions of this table appear as Appendix I.*

The greatest number, as might be expected, are employed in the clerical and semiclerical occupations. Of the 101,296 employed October 1, 1918, 73,285 were working as clerks of all kinds, stenographers, accountants, comptometer operators, etc. In this class are employed for the first time numerous ticket sellers and bureau of information clerks. They were found well fitted for this type of work, and special instruction agencies were opened by the Government in several cities to give them the necessary training.

The next largest group of 5,555 appears in woman's traditional occupation of cleaning. They clean stations, offices, etc., and are employed in the yards to clean coaches and Pullman cars, both inside and outside. For the first time, beginning about a year and a half ago, they were engaged to do the heavier work of wiping locomotives in the roundhouse. These engine wipers increased from 215 in January to 881 in October. Roundhouse work of all kinds employed 354 January 1 and 1,365 October 1.

In personal service, including work in dining rooms and kitchens as matrons, janitresses, laundresses, and hospital nurses, there were 2,796 employed October 1.

In railroad shops, women entered the greatest variety of new occupations. Approximately 5,000 were employed, ranging from common laborers to skilled mechanics, earning the machinist's or carmen's rate of pay.

Only 100 women were found in actual train service.
WIDE RANGE OF OCCUPATIONS.

The variety of occupations is surprising. One of the railroads reports the employment of women in 99 different positions.

The following list covers in general the occupations in which women are employed outside the clerical and semiclerical and common labor:

Turntable operators.
Packers of journal boxes.
Attendants in tool rooms and storerooms.
Telegraphers and telephoners in block-signal work (including interlocking switches).
Lever women in signal towers.
Checkers in freight houses.
Car clerks.
Operators on bolt-threading machines.
Operators on nut-tapping machines.
Operators on car-bearing machines.
Operators on turret lathes.
Operators on angle-cock grinders.
Hammer operators.
Crane operators.
Air-brake cleaners, repairers, and testers.
Electric welders.
Oxy-acetylene cutters and welders.
Core makers.

ORGANIZATION OF THE WOMEN'S SERVICE SECTION.

In order to get first-hand information as to actual conditions under which women were working, four field agents were appointed on the staff of the Women's Service Section (Miss Rose Yates, Massachusetts; Miss Edith R. Hall, New York; Miss Helen Ross, Missouri; and Miss Florence E. Clark, Indiana). They were engaged early in October and have been occupied approximately six weeks in making field inspections.

The general directions for the employment of women were given in General Order No. 27, Article V, as follows: (1) That where women are employed "their working conditions must be healthful and fitted to their needs"; (2) that "the laws enacted for the government of their employment must be observed"; and (3) "their pay, when they do the same class of work as men, shall be the same as that of men." To insure that these general directions are being observed by the railroads is the special function of the Women's Service Section. The scope of its work, therefore, includes supervision of all the factors affecting the industrial welfare of the women employees.

The field agents are reporting on the exact character of labor required, the suitability of the work, and the environment, including
dressing, wash room and toilet facilities. They are also determining whether State labor laws as to hours of work are being observed and whether the correct rates are being paid, insuring equal pay for equal work irrespective of sex.

On a number of roads a systematic survey of all the various occupations in which women are used has been carried out or is in process of being carried out. No uniform method of inspection has been adopted. For the most part, special types of work in which there is apparent need of readjustment have been selected for investigation. Special reports have accordingly been made on the employment of women as truckers, as parcel-room attendants, as block operators in signal towers, and also on certain occupations which involve exposure to weather and undue physical strain, such as loading and unloading lumber, iron, etc. Further special attention has been given to complaints of the incorrect classification of women under the wage orders. The Women's Service Section presents complaints and questions needing correction to the proper officials and in most instances has secured the necessary changes and adjustments on the presentation of the facts.

DATA FROM FIELD INSPECTIONS.

The number of field inspections made by the Women's Service Section amount to 407. This covers the employment of 3,590 women.

Inspections have been made in 11 States and the District of Columbia. Practically all the occupations in which women are employed are herein included, so that the data secured in these inspections can be considered representative of general conditions of employment.

Table III.—Employment of 3,590 women according to class and hours of work.

<table>
<thead>
<tr>
<th>Total number women</th>
<th>Hours of work per week.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>48 or less.</td>
</tr>
<tr>
<td>Attendants</td>
<td>118</td>
</tr>
<tr>
<td>Car department</td>
<td>60</td>
</tr>
<tr>
<td>Clerical workers</td>
<td>2,140</td>
</tr>
<tr>
<td>Cleaners</td>
<td>411</td>
</tr>
<tr>
<td>Personal service</td>
<td>130</td>
</tr>
<tr>
<td>Roundhouse</td>
<td>141</td>
</tr>
<tr>
<td>Shop work</td>
<td>335</td>
</tr>
<tr>
<td>Block operators</td>
<td>123</td>
</tr>
<tr>
<td>Track work</td>
<td>18</td>
</tr>
<tr>
<td>Warehouse and docks</td>
<td>51</td>
</tr>
<tr>
<td>Watch women</td>
<td>5</td>
</tr>
<tr>
<td>Other service</td>
<td>25</td>
</tr>
<tr>
<td>Total</td>
<td>3,590</td>
</tr>
<tr>
<td>Per cent</td>
<td>100</td>
</tr>
</tbody>
</table>
The 323 women here enumerated as employed at night were not employed for overtime but on regular night shifts, beginning or ending between 6 p. m. and 6 a. m. For the most part these shifts ended at midnight, 12.30, 1.30, 2, 2.30, 3, 5.30, 7, 9, or 10 a. m. Block-signal operators, coach cleaners, and scrub women, as well as clerks in roundhouses, are predominatingly represented among these night workers.

This group of 433 women is scheduled to work 365 days a year. Classified according to hours of labor, they are distributed as follows:

In connection with these statistics, it should be said that the excessive length of hours has been brought to the attention of the officials and steps are being taken to reduce them.
WOMEN REMOVED FROM UNSUITABLE OCCUPATIONS.

It became apparent several months ago that the employment of women in certain occupations was objectionable. Their use as section laborers, for instance, was judged by the Director General to be unsuitable owing to the heavy work and to the surroundings, women and young girls being employed in gangs with men along the tracks at long distances from any house or station.

Objection was also taken to the employment of women as truckers in depots and warehouses on account of the excessive physical exertion required. In view of the wages now paid it was believed possible to secure men and to transfer the women to some class of work suitable to their strength and with proper regard to their health. The railroads were accordingly asked by the Director General to discontinue their employment both as section laborers and as truckers, September 27, 1918.

Similarly, the work of calling train and engine crews was not approved for women (Nov. 7, 1918). The service requires that the caller must find the train or engine man for whom she is looking, who is often asleep at his home, hotel, or boarding house or caboose, where he must be awakened and his signature secured as acknowledging the call. For obvious reasons the railroads were requested to dismiss women from this occupation.

Under these orders, on one railroad employing more than 2,000 women, 223 employed as laborers and 193 employed as truckers were transferred to other jobs or dismissed. Another railroad which in August employed 145 truckers has now entirely given up this form of work for women. The full cooperation of the railroad officials has been secured in making these important changes.

IMPROVEMENT OF COMFORT FACILITIES.

The sudden growth in the number of women employed has not always been accompanied by proper supervision for health and comfort. It has therefore proved necessary in many places to secure better equipment and improvement of conditions of employment. One special hardship has been the inaccessible location of toilets, sometimes entailing a long walk out of doors. In one case, girls were obliged to walk 800 feet across the yards to reach the toilet; in another case there was until recently no toilet nearer the roundhouse, where women were employed, than a station an eighth of a mile away. This is reached only by crossing busy tracks or by mounting a long flight of steps to the yard bridge. Girls employed in an outlying storehouse in another yard, are obliged to walk about three city blocks to reach the nearest facilities.
In still other cases operators who are on night duty have had no toilet available at all, as the station was locked and no key was provided; or else the woman or girl feared to go alone into a deserted and unlighted station and unlock the door for herself.

These are only a few of the instances which have come to the attention of the Railroad Administration through the Women’s Service Section. Some toilets are not properly separated from the offices or workrooms; many are poorly kept, and in one case a trough closet with unscreened seats was provided, which, though intended for women and so marked, was sometimes used by men as well.

These conditions have been remedied or are in process of being remedied, but there is no doubt that women are still suffering hardships of this kind for which there is no legitimate excuse.

Less serious from the point of view of health but still harmful is the failure to provide dressing and wash rooms. After working in a roundhouse or shop, in the yards, or even after cleaning coaches, a woman should be given a place where she can wash up and change her clothes before going home. The new practice of wearing uniforms, which should be encouraged as a safety measure for all positions except the clerical, makes it indispensable to provide these accommodations. For lack of them, women have been found changing their clothes in unsuitable places and without the necessary privacy. The failure to provide accommodations has been complained of by a number of self-respecting workers, and their grievance was held to be justified.

There should be no evasion of the responsibilities of making proper provision for them if they are employed at all. The above facts make clear the advisability of employing women in groups rather than alone or in twos or threes, as is now often the case. The expense and difficulty of providing facilities for them is thus brought down to a minimum, and conditions of employment can be made decent and safe.

**STEPS TAKEN TO REDUCE DANGERS OF NIGHT WORK.**

Recently the Women’s Service Section received inquiries whether women might be employed on night shifts as watch women. Owing to seniority rights among railroad employees, the last comers are given the most undesirable hours. The position was taken that older men who may be incapacitated for more active work should be employed on these shifts and the employment of women restricted to the daytime. Where women have been found working in isolated positions at night in roundhouses or telephone offices the moral hazards have made it necessary to secure their transfer, especially when girls are employed, to daytime shifts.
A serious situation was found in one special class of work, namely, block operating in signal towers. An investigation of 198 girls and women so employed shows the following:

**Table VII.—Employment of women as block operators, according to age and day and night work.**

<table>
<thead>
<tr>
<th>Number of women.</th>
<th>Day work.</th>
<th>Night work.</th>
<th>Total.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 21 years of age...</td>
<td>15</td>
<td>63</td>
<td>78</td>
</tr>
<tr>
<td>Over 21 years of age...</td>
<td>54</td>
<td>132</td>
<td>186</td>
</tr>
<tr>
<td>Total...</td>
<td>49</td>
<td>149</td>
<td>198</td>
</tr>
</tbody>
</table>

1 Five girls 17 and 18 years of age included.

The hours of work run from 52½ per week to 70. One woman was employed 77 hours, but by far the greater number were on duty 63 hours. All work seven days a week, thus averaging 9 hours a day.

In order to understand the full significance of these figures it should be explained that most of the operators work in lonely towers and stations at a distance from towns or houses. Many have been camping out in box cars next to their towers—two or three young girls thus live alone, sometimes in very isolated surroundings. There have been two well-authenticated accounts of attacks upon girl operators at night by men marauders. This is clearly not suitable work for young women unless they are fully protected at all times. Such protection must in future be assured or women dismissed from work requiring such unsuitable living and working conditions.

Objection has been made to the employment of girls under 21 as cleaners in the yards at night as involving moral hazards which would not be tolerated.

**Opinions secured as to women’s abilities in various occupations.**

The opinions of officials as to women’s abilities in the various lines of work are important as indicating the nature place of women in the railroad service.

It appears that whenever women have been given proper instructions they have proved their value in practically all the clerical and semiclerical occupations. Old prejudices are rapidly disappearing, and they are being recognized by many officials as a permanent addition to the labor force. Many superintendents and chief clerks report that they are careful and conscientious, as well as capable of obtaining a good grasp of the scope of the work.

In the shops, too, there is evidence that women have been equal to the new jobs, not only in processes requiring little skill but in some of the trades calling for a high degree of intelligence and training. They are, for instance, doing electric welding, having advanced from
flat work to welding of all kinds. They are also doing oxy-acetylene burning and welding. In one shop 20 welders are employed. The fact that some are earning the full mechanic’s rate is proof of their proficiency.

They are also cleaning and repairing and testing air-brake equipment. In one shop three young women have full charge of all the triple-valve work in emergency repairs. They are giving satisfaction without the help of any man operator. This exceptional achievement is the result of careful training and the selection of the proper type of worker, as well as a real desire to develop women as a new source of labor. They have responded to this treatment, take pride in their work, and are doing it well. The shop foreman says that he would be willing to match the three girls in his shop against any three men in the country, and he considers the tester by all odds the most skillful in the division. Similar opinion was expressed by the superintendent of motive power, by whose order the experiment of placing women in charge of this shop was tried. The Federal manager, too, commented favorably on their performance.

Another set of workers who have done well are the box packers. Of one group the master mechanic says that he considered their work entirely satisfactory. The car-shop foreman says that he considers their work just as reliable as that of any man; in fact, more carefully done. “They take more interest and are more impressed with the harm likely to result from neglect.”

Regarding women as turntable operators, general satisfaction is expressed by the officials of several roads. One operator, for instance, is reported as keeping herself posted on the order in which the engines are scheduled to go out, and moving the table into readiness in advance of the signal. A foreman said of her that she was far superior to any man they had ever had in being always on the job, alert to any emergency, and generally intelligent in her work. The district superintendent remarked that for the first time in the history of the road the engines were going out exactly on time. Of the operator on another turntable he said, “Look at that turntable operator, for instance, she’s right on the job when she’s needed, pleasant to everybody and instead of standing in a muck of dirt and tobacco she’s got the place cleaned out trim and tidy.”

With respect to common laborers, there is wide diversity of opinion depending upon the kind of women employed. In the lighter job of cleaning the tracks, sweeping cinders, and collecting scrap, many older women who are no longer vigorous have been employed, but admittedly only as a war-time expedient, as they can not be depended on for long-continued effort. From many quarters there have been complaints of the unsatisfactory character of the work. This may
in part be due to the lack of efficient supervision, the women often slacking on their jobs and wasting time.

In certain localities, foreign women of peasant type and especially the colored women have succeeded in doing very heavy lifting and carrying. But on the whole it is true of the women laborers that their work involves too great muscular exertion. They have handled lumber, loading and unloading it in the yards, sometimes handling lengths weighing 100 to 200 pounds. They have also lifted great weights of scrap iron. Work of this kind should undoubtedly be discontinued not only because, like trucking, it involves possible physical injury, but also because women are not in the long run able to measure up to the work and carry it on effectively. The same criticism is made of women as attendants in parcel rooms on account of the great amount of lifting required. As soon as men are available for these positions women will be shifted to other work.

On the railroads, as elsewhere in industry, the women of the United States when the war began did not feel the obligation experienced in England to leave their wonted occupations and take the places of men. Though some women were undoubtedly influenced by the opportunity for patriotic service, the attraction for the most part lay in the high wages that were offered. About a year and a half ago, before the railroads were put under Federal control, women were first engaged on account of the shortage of labor and also because they could be obtained for less pay than men. The wage orders of the Railroad Administration have put an end, however, to this under-cutting of men's wages.

It may, in general, be said that a fine class of women have been secured. In most cases they have received wages higher than any previously earned by women except in positions of much responsibility or those requiring special skill. The women are eager to remain with the railroads, as they have shown by their anxiety to retain their positions and share in all the privileges of the service. They appreciate the recognition given by the Government to the labor of women, especially the equality of wages assured to them.
### Number of women employed and character of employment by subdivisions for dates of Jan. 1, Apr. 1, July 1, and Oct. 1, 1918.

#### [Class 1 Roads.]

#### EASTERN, SOUTHERN, AND WESTERN TERRITORY.

<table>
<thead>
<tr>
<th></th>
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<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Attendants:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bureau of information</td>
<td>29</td>
<td>31</td>
<td>30</td>
<td>34</td>
</tr>
<tr>
<td>Parcel room</td>
<td>31</td>
<td>30</td>
<td>68</td>
<td>81</td>
</tr>
<tr>
<td>Station</td>
<td>290</td>
<td>334</td>
<td>346</td>
<td>430</td>
</tr>
<tr>
<td>Storage</td>
<td>276</td>
<td>450</td>
<td>288</td>
<td>1,464</td>
</tr>
<tr>
<td>Tool room</td>
<td>38</td>
<td>45</td>
<td>69</td>
<td>68</td>
</tr>
<tr>
<td>Other attendants</td>
<td>43</td>
<td>44</td>
<td>122</td>
<td>203</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>807</td>
<td>934</td>
<td>1,443</td>
<td>2,390</td>
</tr>
</tbody>
</table>

#### 2. Bridge tenders:

<table>
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<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Day work</td>
<td>2</td>
<td>6</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>Night work</td>
<td></td>
<td></td>
<td></td>
<td>12</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>2</td>
<td>6</td>
<td>11</td>
<td>12</td>
</tr>
</tbody>
</table>

#### 3. Car department:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Attendants:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coach and car carpenters, helpers, and apprentices</td>
<td>35</td>
<td>51</td>
<td>46</td>
<td>65</td>
</tr>
<tr>
<td>Coach and car equipment painters</td>
<td>86</td>
<td>92</td>
<td>88</td>
<td>32</td>
</tr>
<tr>
<td>Coach and car inspectors</td>
<td>3</td>
<td>3</td>
<td>13</td>
<td>3</td>
</tr>
<tr>
<td>Coach and car repairers</td>
<td>28</td>
<td>29</td>
<td>81</td>
<td>46</td>
</tr>
<tr>
<td>Pattern makers, helpers, and apprentices</td>
<td>...</td>
<td>...</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Upholsterers and seamstresses</td>
<td>98</td>
<td>109</td>
<td>194</td>
<td>124</td>
</tr>
<tr>
<td>Other car work</td>
<td>131</td>
<td>137</td>
<td>595</td>
<td>574</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>381</td>
<td>421</td>
<td>928</td>
<td>684</td>
</tr>
</tbody>
</table>

#### 4. Clerical or semiclerical:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Attendants:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accountants</td>
<td>428</td>
<td>461</td>
<td>700</td>
<td>767</td>
</tr>
<tr>
<td>Clerks, stenographers, typists, and comptometer operators</td>
<td>41,808</td>
<td>45,356</td>
<td>53,786</td>
<td>65,265</td>
</tr>
<tr>
<td>Drafting women and assistants</td>
<td>112</td>
<td>140</td>
<td>221</td>
<td>521</td>
</tr>
<tr>
<td>Ticket sellers and clerks</td>
<td>784</td>
<td>843</td>
<td>1,234</td>
<td>1,576</td>
</tr>
<tr>
<td>Other office clerks (including telephone work but excluding telephone train operation)</td>
<td>3,994</td>
<td>4,668</td>
<td>5,379</td>
<td>5,244</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>47,192</td>
<td>51,465</td>
<td>61,320</td>
<td>73,235</td>
</tr>
</tbody>
</table>

#### 5. Cleaning:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Attendants:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Car cleaners (inside)</td>
<td>1,791</td>
<td>1,888</td>
<td>2,644</td>
<td>3,704</td>
</tr>
<tr>
<td>Car cleaners (outside)</td>
<td>430</td>
<td>449</td>
<td>599</td>
<td>...</td>
</tr>
<tr>
<td>Stations and offices</td>
<td>1,154</td>
<td>1,155</td>
<td>1,101</td>
<td>1,289</td>
</tr>
<tr>
<td>Shops</td>
<td>55</td>
<td>108</td>
<td>179</td>
<td>284</td>
</tr>
<tr>
<td>Other cleaners</td>
<td>65</td>
<td>66</td>
<td>115</td>
<td>281</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>3,492</td>
<td>3,666</td>
<td>4,632</td>
<td>5,555</td>
</tr>
</tbody>
</table>

#### 6. Elevator operators:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Attendants:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day work</td>
<td>356</td>
<td>423</td>
<td>553</td>
<td>737</td>
</tr>
<tr>
<td>Night work</td>
<td>3</td>
<td>7</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>359</td>
<td>430</td>
<td>557</td>
<td>756</td>
</tr>
</tbody>
</table>

#### 7. Messenger service:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Attendants:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cooks, dishwashers, stewardesses, waitresses</td>
<td>1,170</td>
<td>1,229</td>
<td>1,188</td>
<td>1,475</td>
</tr>
<tr>
<td>Janitors, maids, and matrons</td>
<td>829</td>
<td>915</td>
<td>1,149</td>
<td>1,128</td>
</tr>
<tr>
<td>Other service</td>
<td>158</td>
<td>156</td>
<td>143</td>
<td>190</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>2,197</td>
<td>2,300</td>
<td>2,480</td>
<td>2,796</td>
</tr>
</tbody>
</table>

#### 8. Roundhouse work:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Attendants:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calling crews</td>
<td>17</td>
<td>16</td>
<td>40</td>
<td>66</td>
</tr>
<tr>
<td>Cleaning headlight and lanterns</td>
<td>29</td>
<td>26</td>
<td>26</td>
<td>90</td>
</tr>
<tr>
<td>Roundhouse clerks</td>
<td>73</td>
<td>76</td>
<td>120</td>
<td>204</td>
</tr>
<tr>
<td>Supplying engines</td>
<td>20</td>
<td>35</td>
<td>16</td>
<td>27</td>
</tr>
<tr>
<td>Wiping engines</td>
<td>215</td>
<td>242</td>
<td>682</td>
<td>1,059</td>
</tr>
<tr>
<td>Turntable operators</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>354</td>
<td>397</td>
<td>923</td>
<td>1,365</td>
</tr>
</tbody>
</table>

---

1 Including outside.
### ANNUAL REPORT DIRECTOR GENERAL OF RAILROADS.

Number of women employed and character of employment by subdivisions for dates of Jan. 1, Apr. 1, July 1, and Oct. 1, 1918—Continued.

EASTERN, SOUTHERN, AND WESTERN TERRITORY—continued.

<table>
<thead>
<tr>
<th>Class of employees</th>
<th>Jan. 1</th>
<th>Apr. 1</th>
<th>July 1</th>
<th>Oct. 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>10. Shopwork:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blacksmiths, helpers, and apprentices</td>
<td>5</td>
<td>5</td>
<td>26</td>
<td>35</td>
</tr>
<tr>
<td>Boilermakers, helpers, and apprentices</td>
<td>4</td>
<td>1</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>COPPERSMITHS, SHEET-METAL WORKERS, PIPE FITTERS, HELPERS, AND APPRENTICES</td>
<td>9</td>
<td>9</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>Electricians, helpers, and apprentices</td>
<td>18</td>
<td>26</td>
<td>27</td>
<td>36</td>
</tr>
<tr>
<td>Laborers (outside work)</td>
<td>389</td>
<td>433</td>
<td>1,203</td>
<td>1,314</td>
</tr>
<tr>
<td>Machinists, helpers, and apprentices</td>
<td>315</td>
<td>333</td>
<td>346</td>
<td>370</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1,392</td>
<td>1,443</td>
<td>3,178</td>
<td>5,091</td>
</tr>
<tr>
<td>11. Signal service:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maintenance</td>
<td>16</td>
<td>17</td>
<td>7</td>
<td>25</td>
</tr>
<tr>
<td>Manipulation (daywork)</td>
<td>15</td>
<td>17</td>
<td>174</td>
<td>157</td>
</tr>
<tr>
<td>Manipulation (night work)</td>
<td>5</td>
<td>6</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>36</td>
<td>40</td>
<td>186</td>
<td>229</td>
</tr>
<tr>
<td>12. Station agents, assistants, and agent operators</td>
<td>379</td>
<td>426</td>
<td>300</td>
<td>377</td>
</tr>
<tr>
<td>13. Supervisors of women employees</td>
<td>52</td>
<td>52</td>
<td>78</td>
<td>113</td>
</tr>
<tr>
<td>14. Switch tenders and other yard work</td>
<td>10</td>
<td>18</td>
<td>17</td>
<td>50</td>
</tr>
<tr>
<td>15. Telegraph operators:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Daywork</td>
<td>1,152</td>
<td>1,219</td>
<td>1,591</td>
<td>1,707</td>
</tr>
<tr>
<td>Night work</td>
<td>35</td>
<td>74</td>
<td>65</td>
<td>69</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1,187</td>
<td>1,293</td>
<td>2,158</td>
<td>2,396</td>
</tr>
<tr>
<td>16. Telephone operators (train orders, blocking and reporting trains):</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Daywork</td>
<td>998</td>
<td>889</td>
<td>1,260</td>
<td>1,321</td>
</tr>
<tr>
<td>Night work</td>
<td>357</td>
<td>433</td>
<td>469</td>
<td>792</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1,355</td>
<td>1,322</td>
<td>1,729</td>
<td>2,113</td>
</tr>
<tr>
<td>17. Track work:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ballast trimmers</td>
<td>39</td>
<td>36</td>
<td>84</td>
<td></td>
</tr>
<tr>
<td>Cutting and pulling weeds and other right-of-way clearing</td>
<td>19</td>
<td>36</td>
<td>192</td>
<td>338</td>
</tr>
<tr>
<td>Repairing track</td>
<td>1</td>
<td>59</td>
<td>31</td>
<td>104</td>
</tr>
<tr>
<td>Other track work</td>
<td>1</td>
<td>2</td>
<td>490</td>
<td>430</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>60</td>
<td>133</td>
<td>817</td>
<td>872</td>
</tr>
<tr>
<td>18. Train service</td>
<td>24</td>
<td>30</td>
<td>71</td>
<td>100</td>
</tr>
<tr>
<td>19. Warehouse and docks:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Billing and report clerks</td>
<td>159</td>
<td>166</td>
<td>412</td>
<td>459</td>
</tr>
<tr>
<td>Pushing trucks and handling freight</td>
<td>96</td>
<td>189</td>
<td>319</td>
<td>381</td>
</tr>
<tr>
<td>Yard clerks (outside work)</td>
<td>78</td>
<td>65</td>
<td>61</td>
<td>71</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>321</td>
<td>420</td>
<td>792</td>
<td>1,461</td>
</tr>
<tr>
<td>20. Watch women:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crossings (daywork)</td>
<td>186</td>
<td>214</td>
<td>269</td>
<td>451</td>
</tr>
<tr>
<td>Crossings (night work)</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>14</td>
</tr>
<tr>
<td>Other watch women (daywork)</td>
<td>15</td>
<td>15</td>
<td>21</td>
<td>22</td>
</tr>
<tr>
<td>Other watch women (night work)</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>204</td>
<td>232</td>
<td>293</td>
<td>518</td>
</tr>
<tr>
<td>21. Other service:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pumpers</td>
<td>16</td>
<td>19</td>
<td>23</td>
<td>32</td>
</tr>
<tr>
<td>Mail carriers and librarians</td>
<td>15</td>
<td>18</td>
<td>18</td>
<td>21</td>
</tr>
<tr>
<td>Miscellaneous employees</td>
<td>345</td>
<td>335</td>
<td>352</td>
<td>512</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>361</td>
<td>408</td>
<td>423</td>
<td>565</td>
</tr>
<tr>
<td><strong>Grand total</strong></td>
<td>60,555</td>
<td>65,854</td>
<td>82,370</td>
<td>101,295</td>
</tr>
</tbody>
</table>


BOARD OF RAILROAD WAGES AND WORKING CONDITIONS.

Immediately after the principal railroads of the United States were placed under Federal control the matter of wages and working conditions of all railroad workers demanded immediate attention. Men were being constantly taken from the railroads to supply the growing needs of other Government activities, due in a large measure to more attractive wages and more favorable working conditions being offered.

Because of this situation, and the further fact that the compensation of all railroad employees was clearly inadequate to meet the increasing cost of living necessities, General Order No. 5 was issued on January 18, 1918, creating a railroad wage commission, composed of Hon. Franklin K. Lane, William R. Wilcox, Charles C. McChord, and J. Harry Covington, and charging it with the duty of making a general investigation of the compensation of persons in the railroad service; the relation of railroad wages to wages in other industries; the conditions respecting wages in different parts of the country; the special emergency respecting wages which existed at that time owing to war conditions and the high cost of living, as well as the relations between different classes of railroad labor.

After an exhaustive study of the subject thus delegated to it, the Railroad Wage Commission, on April 30, 1918, submitted its report to the Director General. The report established broad principles dealing with the labor situation, and recommended certain basic plans of increase affecting nearly 2,000,000 employees.

As a result of recommendations submitted by the Railroad Wage Commission General Order No. 27 was issued on May 25, 1918, the provisions of which were predicated upon broad and general principles. It was recognized, however, that certain questions would arise necessitating further investigations and adjustments; and, in order that such questions might be solved by detailed study, the Director General of Railroads, by the provisions of Article VII of General Order No. 27, created the Board of Railroad Wages and Working Conditions, consisting of J. J. Dermody, F. F. Gaines, C. E. Lindsay, W. E. Morse, G. H. Sines, and A. O. Wharton, for the purpose of
hearing and investigating matters presented by railroad employees or their representatives, affecting—

(1) Inequalities as to wages and working conditions whether as to individual employees or classes of employees.

(2) Conditions arising from competition with employees in other industries.

(3) Rules and working conditions for several classes of employees, either for the country as a whole or for different parts of the country.

The board was also charged with the duty of hearing and investigating other matters affecting wages and conditions of employment referred to it by the Director General.

This board was created as an advisory body, making recommendations to the Director General for his determination.

Pursuant to instructions contained in General Order No. 27, the board thereby created met for organization on June 1, 1918.

Numerous letters having been received by the Director General protesting the provisions of General Order No. 27, particularly from the shop crafts, in which it was alleged that the rates thereby granted were not sufficient to offset the increased cost of living, and pointing out that the leveling of wages which had been effected between the years 1915 and 1918 were eliminated by the provisions of General Order No. 27, and also the disparity in wages granted them and those paid by other governmental activities, the board decided to give first consideration to the wages and working conditions of shop crafts.

Accordingly, on June 3, 1918, hearings in the matter of complaints of employees of the shop crafts were held. These hearings were followed by hearings of maintenance of way, common labor, and clerical employees, respectively, interspersed with special investigations and recommendations in the matter of wages and working conditions of employees in other departments of lesser magnitude.

As a result of recommendations submitted by this board, the Director General of Railroads has issued the following supplements, amendments, addenda, and interpretations to General Order No. 27:

1. Supplement No. 4 to General Order No. 27, issued July 25, 1918. This supplement established a uniform classification and minimum rates of wages for various shop crafts, approximately 13 cents (13¢) higher than the wages paid previous to January 1, 1918, with the further establishment of a uniform eight-hour basic day, with time and one-half for all hours worked in excess thereof, affecting approximately 500,000 employees.

2. Amendment No. 1 to Supplement No. 4 to General Order No. 27, issued September 3, 1918. This amendment established a minimum rate of 45 cents (45¢) per hour for helpers in the basic shop trades specified in Supplement No. 4 to General Order No. 27.

3. Addendum to Supplement No. 4 to General Order No. 27, issued September 1, 1918. This addendum established a minimum hourly rate of 28 cents (28¢) per hour and a maximum hourly rate of 40 cents (40¢) for coach cleaners.
4. Addendum No. 2 to Supplement No. 4 to General Order No. 27, issued September 1, 1918. This addendum dealt with the more highly skilled employees classed as boiler makers, blacksmiths; carmen, etc.

5. By the provisions of Supplement No. 6 to General Order No. 27, issued August 30, 1918, the duties and authority of this board were extended to include investigations and recommendations to the Director General of Interpretations of General Order No. 27, its supplements, amendments, and addenda.

6. Interpretation No. 1 to Supplement No. 4 to General Order No. 27 and Addendum No. 2 thereto, issued September 16, 1918. This interpretation provided for the application of same rates established by Supplement No. 4 to General Order No. 27 and its Addendum No. 2, to employees performing similar service regardless of the department in which he works.

7. Interpretation No. 3 to General Order No. 27 and to Supplement No. 4, Addenda Nos. 1 and 2, Interpretation No. 1 and Amendment No. 1 thereto, issued September 26, 1918, deals with the application of the wage orders named.

8. Supplement No. 7 to General Order No. 27, issued September 1, 1918. This supplement established a minimum basic wage, to which was added approximately $25 per month, or 12 cents per hour, for all clerical forces in all departments, and for certain employees in stations, storage or terminal warehouses, docks, storehouses, shops, and yards.

9. Interpretation No. 1 to Supplement No. 7 to General Order No. 27, dealing with the application of the provisions of the supplement named, was issued November 23, 1918.

10. Supplement No. 8 to General Order No. 27, issued September 1, 1918. This supplement established a minimum basic wage, to which was added approximately $25 per month, or 12 cents per hour, to certain employees in the Maintenance of Way Department.

11. Interpretation No. 1 to Supplement No. 8 to General Order No. 27, dealing with the application of the provisions of the supplement named, was issued November 23, 1918.

12. By the provisions of Supplement No. 9 to General Order No. 27, which was issued October 31, 1918, the duties of this board were extended to include investigations and recommendations in the matter of wages and working conditions of employees of the American Railway Express Co.

13. Supplement No. 10 to General Order No. 27, issued November 16, 1918. This supplement granted additional increases in wages to telegraphers, telephone operators (except switchboard operators), agent-telegraphers, tower men, lever men, tower and train directors, block operators, and staffmen.

14. Supplement No. 11 to General Order No. 27, issued November 23, 1918, granted additional increases in the wages of agents whose regular assignment does not require the sending or receiving of railroad train orders or messages by telephone or telegraph.

In addition to the supplements, amendments, addenda, and interpretations to General Order No. 27, enumerated above, this board has now before it four major investigations, viz:

I. Wages and working conditions of engineers, firemen, conductors, and trainmen in road and yard service.

II. Wages and working conditions of employees engaged on sleeping, dining, and business cars.

III. Wages and working conditions of employees in the police department.

IV. Wages and working conditions of employees of the American Railway Express Co.
Hearings in all of the above cases have been conducted, and the board is now considering the merits of the claims presented; and it is hoped it will reach a conclusion in the very near future.

While very substantial increases in wages and greatly improved working conditions have been granted by recent wage orders, they have generally been less than men performing similar service for industrial concerns engaged in war work are receiving, which differentials are considered warranted on account of the permanency of employment on railroads, while the employment in other Government activities was brought about by war conditions, and is more or less transitory. The object has been kept constantly in mind of creating a wage structure which in its essentials would survive the war period.
The following chapter on the Public Service and Accounting results of the Federalized Railroads from Director General McAdoo's forthcoming report to the President for the calendar year 1918 must be held for release in the morning papers of Saturday, January 25, 1919.

ANNUAL REPORT
OF
W. G. McADOO
DIRECTOR GENERAL OF RAILROADS
1918

PUBLIC SERVICE AND ACCOUNTING

WASHINGTON
GOVERNMENT PRINTING OFFICE
1919
PUBLIC SERVICE AND ACCOUNTING.

The activities of the Division of Public Service and Accounting conducted under the supervision of Charles S. Prouty, formerly a member of the Interstate Commerce Commission, are of two distinct classes:

1) Those which relate to the service rendered the public, including the terms upon which it is rendered, and,

2) The accounts of the Director General and of the individual roads under his control.

Necessarily the railroads under Government control must be operated by men of experience in railroad affairs and these men would naturally bring to their work the views which they had formed in the past. Railroad operations under Government control are relieved to a considerable extent from the regulatory restraints which have been found necessary in the past and I felt that there should be in the Federal administration itself some department which should stand charged with the public interest. With that view this division was created.

Up to the signing of the armistice private convenience had to give way to the over-powering emergency of the war and the demands of individual shippers had to yield to the primary requirements of the Government. With the signing of the armistice and the relief from the war pressure which is gradually resulting from the termination of hostilities this condition is changed. The railroads of this country are its public servants. Their first consideration should be to give to the public an adequate service. As a second consideration that service should be rendered for the lowest possible figure.

What may be termed "public service" divides itself into three heads—the service itself, the rate under which that service is performed, and the maintenance of the property, having reference especially to those matters which are of special interest to the public, as for example, crossings, stations, and the broad consideration of safety.

RATES.

The Federal control act invests the Director General of Railroads with authority to establish rates of transportation and regulations affecting the rate upon lines under Government control. The rates and regulations so established are subject in all cases to review by
the Interstate Commerce Commission but otherwise can only be altered by the Director General himself.

Before the railroads were taken over the increase in the cost of materials and supplies had added to operating costs. Further increases in this direction and large necessary wage increases so enhanced the cost of operation that it was found necessary to make a substantial advance in rates, both freight and passenger, and such increases were made effective after six months of Federal control. In making these advances in freight rates it was endeavored to preserve existing relationships. It is impossible, however, to put into effect such an increase without producing results which require readjustment. There were also in existence previous to Government control many rate situations which were filled with inconsistency and discrimination. All this rendered it necessary to promptly devise some system for the readjustment of rates.

Under private operation carriers had created a variety of committees and associations for the purpose of dealing with this question. These were largely the outgrowth of competitive conditions which required uniformity of treatment. Upon these traffic organizations the public had no representation whatever. The proposed rate was first fixed by the carrier. If not satisfactory it could be subsequently attacked by the public either before the Interstate Commerce Commission or before a State commission. In some States intrastate rates were made by the State commission and not by the carrier, but this was not the rule.

It has been felt by this administration that any change in rates, especially any change which works an alteration in the relationship of rates, should, when possible, be submitted to the parties affected before being put into effect so that the side of the shipper or the public might be presented. To secure this result, it was decided to create traffic committees which might consider all rate changes and upon which the public should have representation, and as a result such committees have been established at various points throughout the country so located as to be conveniently accessible to the shipping public. A majority of those serving on these committees are drawn from the railroad service, but there is in every case at least one representative of the public who has in all respects coordinate authority with his associates.

There is first the local committee which consists of three members, two from the carriers and one from the public. To this committee is referred all rate questions of a local character. The committee lists subjects for hearing, gives notice of the time and place when a particular matter will be heard, and listens to whatever any interested party desires to advance. Having finished its investigation it makes a report, briefly stating the issue involved and its recommen-
dation, together with reasons upon which that recommendation is based. This secures an examination of local questions in the locality where they arise.

There are also three general committees, one in each classification territory. These consist of five members, three from the railroads and two from the public. It often happens that a change of rate in one locality may bear an immediate relation to some other rate in some remote locality. With this relationship the local committee may have no acquaintance. The general committee takes a broader view of a much wider field and is in position to determine whether the recommendation of the local committee produces an effect which that committee may not have had in contemplation.

The procedure is this. All local questions are submitted to the local committee which sends its report to the general committee. Unless the general committee finds something in the recommendation which in its opinion ought to be corrected, it transmits the report to the Division of Traffic at Washington, sending a copy to the Division of Public Service. Questions not strictly local may be submitted to and disposed of in the first instance by the general committee, which in such event would make its report directly to the Washington office. In some cases the question may be disposed of by the Washington office without the assistance of either the local or the general committee.

Every authority for a change in rates issues from the Division of Traffic at Washington and under the present arrangement no change can be made until that change has been submitted to the Division of Public Service. Every rate change must, therefore, pass under the observation of this division. If not approved it is suspended until it can be discussed and if necessary taken to the Director General for final determination.

In the past thousands of rate changes have been made each month which were worse than unnecessary. These multitudinous changes produced confusion and discrimination. What the shipping public desires above everything else is stability of rates. It is also highly desirable that these rates be published in some intelligible form so as to be capable of interpretation by the ordinary shipper. When no rate is changed except for some substantial reason the number of such changes will be enormously reduced and it will become possible to publish tariffs in a much more satisfactory way than at present.

SERVICE.

At the beginning of Federal control the railroads, because of the condition in which they were found, and because of war demands, were unable to meet all the calls upon them. Certain kinds of trans-
portation having to do especially with war activities had to be furnished and in consequence others had to be curtailed. Some passenger trains were taken off. Some cars were diverted from the express service to the movement of troops.

This war impairment of service was inevitable. General inquiries were made through the State commissions, through traffic organizations, and other channels as to the character of the service and the general attitude of the public in order to meet the situation as far as possible.

**New Conditions.**

This has been changed by the cessation of hostilities. While the Government will make heavy demands upon the railroads for some months to come, and while existing prices of materials and labor may not justify the undertaking of improvements upon a large scale, still the war pressure is being relieved and conditions will gradually become more and more normal. From now on the point of view will be different. The effort must be to ascertain what service the public properly requires and to render that service when possible. This does not mean that every prewar time facility should be revived. Competition had created many situations which were extravagant and unjustifiable. Service of that kind is generally a preference to the individual enjoying it which is paid for by the general public which does not enjoy it. But all facilities which the public can properly ask for will be supplied as speedily as possible.

**Means of Information.**

To insure adequate service information from the public as to defects in existing service and the manner in which those defects ought to be remedied, is necessary. Such information ought to come in part at least from the commissions of the various States. An attempt is being made to work out a plan of cooperation between the State commission and the Railroad Administration to give information as to defects in service accompanied by suggestions as to how those defects should be corrected. In addition to this it is highly desirable that individual shippers, and especially traffic organizations which represent shippers, should be in close working touch with the Division of Public Service.

**Accounting.**

A considerable part of the accounting work of the railroads under private control is occasioned by the statement of the accounts between different carriers. Transportation, especially of freight, seldom begins and ends on the same railroad and this necessitates a
distribution of the charge between participating carriers which often involves a consideration of mileage, arbitreries, etc. Cars, especially freight cars, pass habitually from one road to another so that the cars actually used by a given carrier are frequently and perhaps ordinarily not owned by it. An account must be kept showing where these cars are and what is due to or from particular carriers to that account. The use of joint facilities has been frequently under contracts which involve much accounting to determine the proportion to be paid by each carrier. All this has involved a very large accounting cost.

It is plain that if all railroads were owned and operated by a single corporation or by the Government, all these accounting costs would disappear. Under the Railroad Administration some of these costs have been eliminated and others to a very great extent curtailed. Car hire has been eliminated. The accounting for car repairs has been much simplified as between lines under Government control. Joint facility expenses have been distributed upon an arbitrary basis thereby reducing to a minimum accounting on this account. Many millions of dollars of accounting expense have been saved in this manner and still on the whole that saving has been nothing like what it might be and would be under permanent unified operation, for the following, among other reasons:

(a) Many railroads are not under Federal control; while the bulk of the traffic is handled by roads under Federal control, the number of such roads is very much less than those operated by their private owners. It is necessary with respect to all these latter roads to keep the same accounts as formerly.

(b) It is considered desirable that the accounting continuity of carriers should be preserved during the period of Government control. The Inter-State Commerce Commission desires information which will enable it to continue without any break its statistical information with reference to the individual carriers which are being operated by the Government.

(c) What is more to the point and indeed absolutely controlling is the fact that the terms under which the Government operates these properties and pays their owners for the use require the maintenance of their accounting identity. The Federal control act provides that these properties shall be returned at the end of Federal control in the same condition as when received, and further that the sum paid for their use shall ordinarily be determined by the result of the operation of the property for the three years ending June 30, 1917, commonly known as the test period. The contract which is being executed between the Director General and individual carriers under the Federal control act contains a proviso that the covenant to return the property in the same condition as when received shall be satisfied if the
Director General expends in the upkeep of the property, due allowance having been made for difference in prices, the same amount each year as was expended upon the average during the test period. There is another provision that if the Director General is compelled to expend more than this sum in the operation of the property, he may recover from the carrier the excess expenditure. This renders it absolutely necessary to know the amount chargeable to operating expenses upon each property by the Government; in other words, the accounting identity of each property must be preserved.

A very considerable amount of accounting work is also involved in comparing the prices of the test period with those of the current year.

(d) It was found necessary to open at the beginning of Federal control a new set of books. These books are kept according to the accounting rules of the Interstate Commerce Commission and are in general a continuation of the books kept by the carriers in the past. In the distribution of these items it was found necessary to organize an accounting force for the purpose of instructing the accountants and examining and supervising the accounts for the first few months. This has entailed a considerable amount of expense which will continue during the period of Federal control in a reduced degree.

(e) The Director General has entered into contracts involving the expenditure of more than $500,000,000 for equipment. These contracts generally state a maximum price but provide an estimate showing the distribution of that price between material, labor, and overhead with the proviso that if anything can be saved either on materials, labor, or overhead the Government shall have the benefit of the whole or a part of the saving. In case of cars the material is paid for by the Government. This has rendered necessary the building up of a cost accounting force at considerable expense.

(f) A great amount of extra accounting has been made necessary in order to determine revenue from proposed rates and the effect upon revenues of various changes which will be unnecessary when conditions have become stabilized.

The greatly increased wages which accountants are today receiving as well as the inferior quality and reduced efficiency of some of those who are employed has increased the cost in dollars of this accounting work. Just what the comparison would be if prices and efficiency were the same, it is impossible to state, but it can be affirmed with certainty that were the railroads of this country actually unified under one control there would be an enormous saving in accounting expense.
Confidential!

FOR RELEASE IN MORNING PAPERS OF MONDAY, JANUARY 27, 1919

The following chapter on the Law results of the Federalized Railroads from Director General McAdoo's forthcoming report to the President for the calendar year 1918 must be held for release in the morning papers of Monday, January 27, 1919.

ANNUAL REPORT
OF
W. G. McADOO
DIRECTOR GENERAL OF RAILROADS
1918

LAW

WASHINGTON
GOVERNMENT PRINTING OFFICE
1919
The Division of Law, with John Barton Payne, an attorney with wide experience in railroad law, as general counsel, has had general supervision over all legal activities of railroads under Federal control, over the preparation of contracts, and over work relating to claims and property protection.

The act entitled "An act to provide for the operation of transportation systems while under Federal control, for the just compensation of their owners, and for other purposes" (Public—No. 107, 65th Cong.), approved March 21, 1918, provides, paragraph 1, section 1:

That the President, having in time of war taken over the possession, use, control, and operation (called herein Federal control) of certain railroads and systems of transportation (called herein carriers), is hereby authorized to agree with and to guarantee to any such carrier making operating returns to the Interstate Commerce Commission that during the period of such Federal control it shall receive as just compensation an annual sum, payable from time to time in reasonable installments, for each year and pro rata for any fractional year of such Federal control not exceeding a sum equivalent as nearly as may be to its average annual railway operating income for the three years ended June 30, 1917.

THE CONTRACT.

Immediately following the passage of this act negotiations were commenced with representatives of the railroads for a standard form of contract clauses to be used as the basis for individual contracts with the railroads. The committee appointed by the Director General to represent the Government in these negotiations, in addition to the general counsel, the director of Public Service and Accounting, and Special Counsel Nathan Matthews, of the Division of Law, consisted of Commissioners Clark, Meyer, Hall, and Anderson of the Interstate Commerce Commission.

The Railway Executives' Advisory Committee appointed a subcommittee consisting of Mr. A. P. Thom, chairman; Messrs. Harris, Gowen, Bunn, Bledsoe, Hanson, and Blair, as representatives of the railroads.
The latter part of March a tentative draft of proposed standard contract clauses was submitted by the railroad committee, as a basis for discussion, and this was followed by a counterdraft submitted by the Government’s representatives. Then followed conferences and hearings between the two committees, and consideration of proposals and counterproposals. A number of tentative forms were successively drafted and printed during the six months of negotiations which culminated early in September with a draft designed to protect the interests of the Government and to reflect an equitable measure of protection to the railroads. On September 5, 1918, the Director General of Railroads, in announcing the form of standard contract clauses finally agreed upon, issued the following:

"The formulation of these contract provisions has been in progress since the approval of the Federal control act on March 21 last. The length of time consumed in this work has been due to the difficulties and intricacies of the subject, the absence of precedent for a contract of this nature, the great variety of railroad conditions and practices which had to be carefully considered and discussed before finally adopting a uniform plan, and the necessity of giving to the great number and variety of interests affected the fullest opportunity for hearing and discussion upon every aspect of the many sided problems.

"In order that no phase of the public interest might be unrepresented, I arranged at the outset for, and have continuously had, the benefit of the advice and assistance in this matter of a committee of the Interstate Commerce Commission, consisting of Messrs. Clark, Hall, Anderson, and Meyer.

"The railroad companies and the railroad security holders have been represented by committees as well as by counsel. In addition to the various formal hearings and discussions there have been repeated interviews at which a great many special problems affecting particular railroad companies have been fully represented.

"The draft of contract adopted is the outcome of all these hearings, discussions, and considerations and represents in my judgment a form of contract which conforms to the law, protects the public interest, and accords to railroad companies and their stockholders and bondholders the just protection which was contemplated by the Government when it took possession and control of the railroads.

" Provision is made for the numerous features of operation and accounting during Federal control, for the allocation of revenues on traffic in transit at midnight December 31, 1917, for the handling of "overlapping" items of expense, etc.

" Provision is made for the maintenance of the property during Federal control, of course at the expense of the Government, on substantially the same basis as during the three-year test period
ended June 30, 1917, and for the return of the property at the end of Federal control in substantially as complete in equipment as on January 1, 1918; it is provided in effect that if during the test period the maintenance expenses were not sufficient to put the property in condition for safe operation, the additional maintenance necessary for safe operation may be provided at the expense of the company with the limitation that the cost of maintenance shall not be increased at the expense of the company over the normal standard of maintenance of railroads of like character and business during the test period.

"Provision is made for the payment of taxes in accordance with the Federal control act.

"Provision is made for the annual compensation (which will be fixed in each case in accordance with the provisions of the Federal control act) to be paid to the company in quarterly installments. This compensation will not be subject to any deductions which would prevent the company from supporting its corporate organization, keeping up its sinking funds, paying taxes and rents, and interest heretofore regularly paid, and interest on loans issued during Federal control. These requirements of the company for corporate expenses and fixed charges being thus provided for, the Government has the right to make deductions from the remaining compensation to satisfy indebtedness which the railroad company may owe to the Government; however, the contract declares the power of deduction to be an emergency power, to be used only when no other reasonable means is provided by the company to reimburse the United States, and not to be used so as to interrupt unnecessarily the regular payment of dividends made by the company during the test period.

"Provision is made for the orderly presentation and disposition of claims on the part of the railroad company for amounts expended by the Railroad Administration for additions to its property which, in the opinion of the railroad company, are not for its advantage and for which it believes it should not be charged.

"Provisions are also made for final accounting at the end of Federal control.

"In a comparatively few instances, considering the opportunity for differences of opinion, there appear to remain some objections on the part of some of the interests which have been heard, but these objections are, in my opinion, without foundation.

"One of these objections is that the contract ought to leave open for litigation at the end of Federal control the question whether the railroad has been damaged by diversion of its business during Federal control. This claim is not tenable because the railroads have been taken over for war purposes which necessitate diversion of traffic, hence there can be no escape from the view that Congress intended
the compensation which it authorized to cover this element. This
demand of certain interests is, in effect, for an opportunity to litigate
and is a demand which need not be urged if the railroad company, in-
stead of making the contract offered, should, instead, go to the Court
of Claims to get its compensation. In this event the railroad com-
pany would get only a single compensation, covering its entire claim,
including any damages for alleged diversion, and would not be
allowed to litigate at the end of Federal control the question of diver-
sion of business. The contract ought not, in this respect, to put the
railroad company in any better position than it would occupy if it
made no contract. This demand is not only unreasonable, but the
Director General has no lawful authority to grant it, as I have been
advised by the Solicitor General of the United States, to whom I sub-
mitted the question and who has considered and approved the legal
aspects of the contract.

"Objection has also been made that the contract ought not to
require a railroad company to pay out of its compensation such ad-
ditional amount as may be necessary to bring a railroad, which at the
beginning of Federal control was in unsafe condition, up to a con-
dition of safe operation. This objection really means that the Gov-
ernment ought to accept and continue such a property in an unsafe
condition (which would be clearly contrary to the public interest
and ultimately contrary to the interest of the owners of the prop-
erty), or should itself repair at its own cost the fault of the owners
and put the property in a better condition than the owners kept it,
thus giving the owners not only compensation, but besides, at the end
of Federal control, the advantage of having, without cost, an im-
proved property, while this advantage would be denied to railroad
owners who had properly maintained their property. I have not
been able to accede to this view. I have felt that railroad owners
had no right to make any such demand, nor do I believe that rail-
road owners generally do make any such demand. Under the con-
tract, however, this right to bring the property up to a condition of
safe operation is not to be exercised so as to interfere with the rail-
road company's payment of its fixed charges, including interest
heretofore regularly paid.

"Some objection has also been made that no part of a railroad
company's compensation should be used to pay its debts to the Gov-
ernment except such part as might remain after the company's pay-
ment of its customary dividends. This objection has no bearing
where a company has paid dividends on a provident basis and has
retained, as it is recognized all well-regulated companies should re-
tain, a substantial surplus of its income to provide a margin of credit
and cover unproductive improvements. In every such case the com-
pany can, in accordance with the contract, make other reasonable pro-
vision for reimbursing the United States and there need be no interference with its dividends as regularly paid during the test period. The objection only applies where a railroad company has paid improvident dividends. As to such a case the argument is that the contract should put the company in a far better position than it would occupy if it made no contract, and in a far better position than it would occupy if it continued in private control and enjoyed an income equal to the compensation guaranteed by the Government. Without a contract, the right of deduction in such cases would be clear. Under private management, and with a corresponding income, the company would have to pay the penalty of improvident dividends through the loss of its credit and, ultimately, the breaking down of its property. The proposition is baldly that the Government shall protect the company in paying improvident dividends, and then lend it money to cover all its indebtedness arising since Federal control, and render it immune from the consequences of its own improvidence. All of these objections are unreasonable. It is not possible to believe that they express the views of the railroad companies generally, or the owners of railroad securities generally. The points are mentioned, however, because they appear to have been made the subject of very considerable publicity.

"Frequently the arguments urged in opposition to certain features of the proposed contract have suggested the idea that under any such contract the railroads would be in a much worse position than if they had remained in private management. It may be well, therefore, to look at the situation which confronted the railroads last December and to consider what would probably be their present status if still in private management.

"Last December the expenses of the railroads were increasing with great rapidity. They were hedged about in their efforts to obtain increased rates by the numerous and various restrictions imposed by the States, and also by the limitations imposed by the interstate commerce act. They were confronted by imperative demands for greatly increased wages and were without machinery to insure an amicable settlement of those demands. They were finding it almost impossible to borrow money on any terms to make the improvements which were indispensable to enable them to perform their public service. The operation results for the first four months of 1918 indicate that if the railroads had been under private control during that period they would have lost in operating income, as compared with the corresponding period of the preceding year, $136,116,533; and as compared with an average of the corresponding period for the three-year test period, $96,064,356. This takes no account of the wage increase subsequently made, which, nevertheless, was retroactive to January 1. These adverse conditions, coupled with the extreme difficulty of
borrowing money, would probably have resulted in the failure of some of the most important railroad companies in the country to meet their obligations under private management.

"Under Federal control the railroads have the opportunity to contract with the Government for a guaranteed income on a just basis, which relieves them of the formidable anxieties which confronted them in December and which would still be confronting them under private control. They are able to borrow money from the Government on reasonable terms for necessary improvements. These are fundamental things which impress the great body of railroad investors and should make them satisfied with the status as it now exists."

In disposing of the questions submitted for his personal decision in connection with the standard draft of contract, the following was issued by the Director General:

"A number of questions involved in the negotiations for a standard form of contract have been submitted for my personal decision by counsel representing the railroads and also counsel for the National Association of Owners of Railroad Securities. I have given careful consideration to the oral and printed arguments made in support of these contentions.

"(1) It is insisted that section 1 of the contract should be amended so as to give an appeal from the Interstate Commerce Commission to the Court of Claims as to all of the matters which, by the terms of the contract, are referred to the commission for decision. There are a number of matters purely administrative as to which an appeal ought not to be considered and as to which the contention of counsel can not be sustained.

"It is provided in the Federal-control act (sec. 6) that any loss claimed by reason of additions, betterments, or road extensions, or constructed pursuant to said section, may be determined by agreement between the President and such carrier; failing such agreement, the amount of such loss shall be ascertained as provided in section 3 hereof.

"As to all such matters the contention of counsel is sustained, and provision will be made in the contract providing for an appeal to the Court of Claims. As to the other matters in the contract referred to the Interstate Commerce Commission for decision, the contention is disallowed.

"(2) The contract as drawn provided that each carrier should turn over to the Director General a working capital, which had been tentatively agreed upon as representing the expenses of the carrier for one month without interest. It was insisted that this provision should be stricken out; and that no working capital as such should
be insisted upon, and that such balances as came over to the Railroad Administration from any carrier should bear interest at the average rate received by the company during the year 1917, or its daily cash balances in bank.

"There is great force in the contention that the carriers should provide a working capital; but I have decided to waive this, and sustain the contention of counsel, and the contract has been directed changed accordingly.

"(3) The acceptance clause.—

"Counsel have insisted, especially the counsel representing the Association of Security Holders, that the acceptance clause of the contract whereby it required that all loss and damage to the business or traffic by reason of the diversion thereof or otherwise, which has been or may be caused by the taking over or the possession, use, control, or operation of the carriers, was unjust to the carriers, and should be stricken out; that the carriers should have the right, now or at the end of Federal control—

"(a) To sue for the loss of good will, loss of business, diversion of traffic, or loss of corporate organization; or

"(b) That, if the road should not be returned to the carriers as now contemplated by the Federal control act, the effect of the acceptance clause as now written would be to deprive the carriers of the right to claim damages by reason of said items.

"This presents the question as to whether the compensation provided to be paid by the Federal control act is intended to be inclusive and exclusive. By the terms of the act of 1916, the President was authorized to take over the railroads for war purposes, to use the same as a unified system of transportation, to divert traffic, and to make such use of the railroads as the war situation required.

"The Federal control act not only contemplates the same use, but definitely contemplates a unified control and use of the railroads as one great system of transportation. There can, in my judgment, be no doubt but that the methods provided in said act for compensation—that is, by agreement if an agreement can be made, if not by the decision of the Court of Claims—was intended to embrace all of the damage which the owners have a right to claim. This was the view of the general counsel of the Railroad Administration and of all of my advisers; but the question was pressed upon me so strenuously that it seemed wise to refer it to the Attorney General for an opinion, and an opinion was received, written by the Solicitor General, as follows:

"The contention made by counsel for the security holders as to paragraph (a), section 3, should be rejected. They are not entitled to have the contract so framed as to leave them after the acceptance
of the agreed compensation with a right of action for further dam-
eges based upon the loss of good will and the division or diversion
of traffic.

"Unquestionably, the just compensation which the statute pro-
vides is intended to cover these as well as all other elements of loss
and damage."

"The contention, therefore, must be rejected.

"(4) It was also contended that the Director General should pay
to the carriers a sufficient sum from operating expenses during Fed-
eral control to pay the corporate expenses of the carriers. I gave
careful consideration to this subject some months ago, and reached
the conclusion to which I still adhere that this contention is unsound
and must be rejected.

"(5) It was insisted that paragraph (b), of section 5, should be
stricken out. This provides that the Director General may expend
and charge to the carriers a sufficient sum to make such deferred
maintenance as may be necessary to make the operation of the carrier
safe, assuming a use of the road similar to the use during the test
period, and not substantially enhancing the cost of maintenance over
the normal standard of maintenance of railroads of like character
and business during said period.

"It does not seem to me open to dispute that the power to make
defered maintenance is a necessary power, and is one which the
statute contemplates may be exercised; and the contention should,
therefore, be rejected.

"(6) It was contended that section 7, providing for compensation,
should be so amended that the power to deduct from the amount of
compensation provided in the contract to be paid the carrier should
not be exercised for deferred maintenance, additions, and betterments
or road extensions.

"I have given very careful consideration to the arguments and
have decided to provide in the contract that the power of deduction
will not be exercised so as to prevent the payment of interest where
interest was regularly paid during the three-year period or to pro-
vide sum sufficient to support the corporate organization, to keep up
the sinking funds of the carriers required by contracts in force
December 31, 1917, to pay taxes and other sums necessary for the
payment of rents for leased, operated, or controlled roads; nor shall
such deduction be made in respect of additions and betterments which
are for war purposes and not for the normal development of the
company; nor in respect of road extensions.

"This substantially grants the contention of the carriers and the
security holders, except to the extent that they request that such
power of deduction be not insisted upon when its exercise would
interfere with the payment of dividends regularly paid during the
three-year period. I must deny this portion of the request, because if I should accede to it the result would be that railroad companies would be permitted to pay improvident dividends when the funds so used ought to be employed in taking care of deferred maintenance and in payment of their just debts to the Government. This ruling need not operate to embarrass any company which has paid dividends on a provident basis and has retained and does retain, as it is recognized all well-regulated companies should retain, a substantial surplus of its income to provide a margin of credit and cover unproductive improvements. In every such case the company will be in position to provide for deferred maintenance, if any, and to make reasonable provision for reimbursing the Government, and there need be no interference with the company's dividends as regularly paid during the test period.

"(7) It was also insisted that in determining the amount to be added to the compensation of the carriers upon the cost of any additions and betterments, less retirements provided for by section 4 of the Federal control act, the rate of interest to be allowed should be at least sufficient to offset the cost to the carrier of money borrowed where the moneys advanced by the company had to be secured from outside loans.

"It has seemed to me that this contention should be granted to the extent of providing that the rate of interest to be allowed where the money was advanced by the Director General should be the same rate which the Director General charged the carrier for the money loaned. The contract may be changed accordingly.

"Other matters of less moment were discussed. These have been passed upon, and the contract as now drafted reflects my final view as to these several matters."

On the same day Chairman Thomas De Witt Cuyler, of the Railway Executives' Advisory Committee, submitted his report to the companies represented by the committee, recommending acceptance of the contract.

Some modifications were made in the form announced, and on October 22, 1918, a final draft was issued in two forms, namely, Form A for companies without subsidiaries, and Form B for companies with subsidiaries. For convenience copies of these are submitted in the appendix.

Directly after the adoption of these standard clauses, negotiations were undertaken with the individual roads for contracts.

The Federal control act provides, in part, as follows:

If the President shall find that the condition of any carrier was during all or a substantial portion of the period of three years ended June thirtieth, nineteen hundred and seventeen, because of nonoperation, receivership, or where recent expendi-
tures for additions or improvements or equipment were not fully reflected in the operating railway income of said three years or a substantial portion thereof, or because of any undeveloped or abnormal conditions, so exceptional as to make the basis of earnings hereinabove provided for plainly inequitable as a fair measure of just compensation, then the President may make with the carrier such agreement for such amount as just compensation as under the circumstances of the particular case he shall find just.

Under this provision the carriers submitted large numbers of claims for special compensation in addition to their standard return. To investigate and formulate recommendations respecting the merits of these claims a committee on compensation and contracts was appointed, as follows:

Mr. Eddy, Division of Law.
Mr. Carmalt, Division of Law.
Mr. Alvord, Division of Operation.
Mr. Niles, Division of Public Service and Accounting.

Judge Payne participated in the committee discussions and disposition of the more important claims, and finally they were passed upon by the Director General. The investigation and determination of the applications presented is extremely difficult and requires a great deal of time and study before the contract can be negotiated. There have been disposed of 17 claims, and 21 were pending on January 2, 1919. Twenty-five additional claims have been filed within the last 10 days.

Contract negotiations are progressing as rapidly as is consistent with the importance and the technical nature of the subject.

Thus far the following contracts have been executed with railroads:

[* Indicates class I roads.]

*Atlantic Coast Line Railroad.
*Atchison, Topeka & Santa Fe Railway.
*Buffalo, Rochester & Pittsburgh Railway.
*Chicago & North Western Railway.
*Chicago, Burlington & Quincy Railroad.
*Chicago, St. Paul, Minneapolis & Omaha Railway.
*Cincinnati Northern Railroad.
*Cleveland, Cincinnati, Chicago & St. Louis Railway.
*Colorado & Southern Railway.
*Fort Worth & Denver City Railway.
*Great Northern Railway.
*Lake Erie & Western Railroad.
*Lehigh Valley Railroad.
*Michigan Central Railroad.
*Minnesota & International Railway.
*Missouri & North Arkansas Railroad.
*New York Central Railroad.
*New York, Ontario & Western Railway.
*Norfolk & Western Railway.
*Northern Pacific Railway.
*Pittsburgh & Lake Erie Railroad.
*Richmond, Fredericksburg & Potomac Railroad.

Augusta Southern.
Detroit Terminal Railroad.
Georgia & Florida.
Gulf, Texas & Western.
Indiana Harbor Belt Railroad.
Lake Erie & Eastern.
*Pennsylvania Railroad.

*Augusta Southern.
*Grand Canyon Railroad
*Kansas & Southwestern Railroad
*Rio Grande, El Paso & Santa Fe
*Gulf, Colorado & Santa Fe Railway
*Panhandle & Santa Fe Railway

*Black Hills & Fort Pierre
*Deadwood Central Railroad
*Quincy, Omaha & Kansas City
*Missouri Valley & Blair Railway & Bridge Co.
*Pierre & Fort Pierre Bridge & Railway Co.
*Pierre, Rapid City & North Western
*Wolf River Valley
*Wyoming & North Western
*New River, Holston & Western
*Tug River & Kentucky
*Virginia-Carolina Railway
*Williamson & Pond Creek
*Big Fork & International Falls Railway
*Gilmore & Pittsburgh
*Duluth & Superior Bridge
*Duluth Terminal
*Great Falls & Teton County
*Great Northern Equipment Co.
*Great Northern Terminal
*Minneapolis Belt
*Minneapolis Western
*Montana Eastern
*Watertown & Sioux Falls

Chicago, Kalamazoo & Saginaw

Muncie Belt Railway

Kanawha & West Virginia
*Zanesville & Western
*Kanawha & Michigan Railway
*Toledo & Ohio Central Railway

*Wichita Valley Railway

The following subsidiaries are included in the contract of the parent company as separately contracting parties:

Grand Canyon Railroad
Kansas & Southwestern Railroad
Atchison, Topeka & Santa Fe subsidiaries, parties to the one contract.

*Gulf, Colorado & Santa Fe Railway
*Panhandle & Santa Fe Railway

Atchison, Topeka & Santa Fe subsidiaries, parties to the one contract.

Black Hills & Fort Pierre
Deadwood Central Railroad
Quincy, Omaha & Kansas City
Missouri Valley & Blair Railway & Bridge Co.

Chicago, Burlington & Quincy subsidiaries, parties to the one contract.

Pierre & Fort Pierre Bridge & Railway Co.
Pierre, Rapid City & North Western
Wolf River Valley
Wyoming & North Western
New River, Holston & Western
Tug River & Kentucky
Virginia-Carolina Railway
Williamson & Pond Creek
Big Fork & International Falls Railway
Gilmore & Pittsburgh
Duluth & Superior Bridge
Duluth Terminal
Great Falls & Teton County
Great Northern Equipment Co.
Great Northern Terminal
Minneapolis Belt
Minneapolis Western
Montana Eastern
Watertown & Sioux Falls

Chicago, Kalamazoo & Saginaw

Muncie Belt Railway

Kanawha & West Virginia
Zanesville & Western
*Kanawha & Michigan Railway
*Toledo & Ohio Central Railway

*Wichita Valley Railway

Atchison, Topeka & Santa Fe subsidiaries, parties to the one contract.

*Black Hills & Fort Pierre
*Deadwood Central Railroad
*Quincy, Omaha & Kansas City
*Missouri Valley & Blair Railway & Bridge Co.

Chicago, Burlington & Quincy subsidiaries, parties to the one contract.

Atchison, Topeka & Santa Fe subsidiaries, parties to the one contract.

Atchison, Topeka & Santa Fe subsidiaries, parties to the one contract.

Chicago, North Western subsidiaries, parties to the one contract.

Atchison, Topeka & Santa Fe subsidiaries, parties to the one contract.

Norfolk & Western subsidiaries, parties to the one contract.

Northern Pacific subsidiaries, parties to the one contract.

Great Northern subsidiaries, parties to the one contract.

Great Northern subsidiaries, parties to the one contract.

Great Northern subsidiaries, parties to the one contract.

Chicago, Kalamazoo & Saginaw

Muncie Belt Railway

Kanawha & West Virginia
Zanesville & Western
*Kanawha & Michigan Railway
*Toledo & Ohio Central Railway

*Wichita Valley Railway

Atchison, Topeka & Santa Fe subsidiaries, parties to the one contract.

Atchison, Topeka & Santa Fe subsidiaries, parties to the one contract.

Chicago, Burlington & Quincy subsidiaries, parties to the one contract.

*Black Hills & Fort Pierre
*Deadwood Central Railroad
*Quincy, Omaha & Kansas City
*Missouri Valley & Blair Railway & Bridge Co.

Chicago, Burlington & Quincy subsidiaries, parties to the one contract.

Atchison, Topeka & Santa Fe subsidiaries, parties to the one contract.

Chicago, North Western subsidiaries, parties to the one contract.

Atchison, Topeka & Santa Fe subsidiaries, parties to the one contract.

Norfolk & Western subsidiaries, parties to the one contract.

Northern Pacific subsidiaries, parties to the one contract.

Great Northern subsidiaries, parties to the one contract.

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Chicago, Burlington & Quincy subsidiaries, parties to the one contract.
SHORT-LINE CONTRACTS (COOPERATIVE).

Baltimore & Sparrows Point Railroad.
*The Cumberland Valley Railroad.
*New York, Philadelphia & Norfolk Railroad.
Union Railroad Co. of Baltimore.
Barnegat Railroad.
Philadelphia & Beach Haven Railroad.
Rosslyn Connecting Railroad.
Washington & Vandemere Railroad.
Tampa Southern Railroad.

Pennsylvania Railroad subsidiaries, parties to the one contract.

Atlantic Coast Line subsidiary, party to the one contract.

Cumberland & Manchester Railroad.
East Carolina Railway.
Georgia Northern Railway.
Midland Railway.
Pecos Valley Southern Railway.
South Georgia Railway Co.
Western Allegheny Railroad.

The following contracts have been circulated to the members of the Director General's staff, regional directors, and Federal managers, and will be ready for signature in the immediate future:

Birmingham & Northwestern Railway.
Central New England Railway.
Central of Georgia Railway.
Central Railroad of New Jersey.
Charleston & Western Carolina Railway.
Delaware, Lackawanna & Western.
El Paso Southwestern Co.
Fairchild & Northeastern.
Gainesville Midland Railway.
Georgia Railroad.
Lehigh & Hudson River Railway.
Maine Central Railroad Co.
Pennsylvania Lines West.
Rutland Railroad Co.
Southern Pacific.
Texas & Pacific Railway.
Trinity & Brazos Valley Railway.
Washington Southern.
Western Railway of Alabama.

In addition to the above, negotiations are in various stages of progression with a large number of railroads.

SHORT LINES.

Under the President's proclamation of December 26, 1917, only systems of transportation necessary for the war emergency were taken under Federal control. Independently owned and operated railroads serving a purely local interest, plant facility, or industrial roads and electric interurbans were excluded from the purview of the proclamation by the limitations of the basic act of August 29, 1916.
The Federal-control act placed independently owned and operated carriers competing or connecting with the roads taken over within the class of controlled roads. The act provided that roads which proved unnecessary or undesirable might be relinquished prior to July 1, 1918.

After investigation it appeared that a number of such roads should be relinquished.

On June 29 there were relinquished from Federal control 2,161 so-called short-line railroads, as follows:

637 plant facilities.
726 circular roads (roads which do not file reports with Interstate Commerce Commission, but submit information in circular form).
264 electric lines.
15 switching and terminal roads.
519 class I, II, and III roads.

Since that date 15 additional roads have been relinquished by agreement. Total, 2,176 roads relinquished.

Sixty-six roads have since been restored to Federal control, leaving 2,110 relinquished. (Jan. 2, 1919.)

At the time of relinquishment it was announced that a policy of cooperation with relinquished roads would be maintained, assuring fair divisions of joint rates, adequate car supply, and the preservation of routings so far as consistent with the national needs.

This policy finally, after hearings afforded the interested lines, ripened into a cooperative contract, which was announced on October 30, copy of which is appended. By its terms the order of relinquishment is recalled, the road is operated by its own officers, retaining its operating receipts, and paying its operating expenses, an equitable car allotment with a liberal per diem allowance is assured, the benefit of increased rates is extended to the contracting road, the preservation of routing of competitive traffic is guaranteed in the same ratio as such traffic bore to the total traffic in the three years ending December 31, 1917, fair tariff publicity is given, and the advantage of unified purchasing under Federal control extended.

Applications for this contract have been received from 90 of the relinquished roads, although a large number of the lines are satisfied with the policy voluntarily put into effect at the time of relinquishment. Seven cooperative contracts have been executed. Meanwhile joint rates and divisions are being adjusted on a fair and equitable basis with all the short lines preparatory to the execution of cooperative contracts if desired.
COMMITTEE ON COMPENSATION AND CONTRACTS.

This committee was appointed July 15. Its work is divided into two classes, i. e.—

1. Hearing petitions of relinquished short lines to be restored to Federal control on "cooperative" or "compensation" basis.


There have been petitions from 79 relinquished short lines and reports on 74 rendered.

The following is an analysis:

Cooperative contract recommended.................................................. 30
Standard return recommended.......................................................... 26
Special basis recommended.............................................................. 6
No contract recommended........................................................................ 6
Contract without compensation recommended....................................... 3
Contract on basis scrap value recommended....................................... 1
Electric lines that did not come under the proclamation.................... 2
Unreported............................................................................................. 5

With the exception of nine cases, all of the committee's recommendations were approved, five contracts having been executed, one on basis of standard return, three cooperative, and one on special basis. Of the nine recommendations disapproved, eight were for contracts on basis of standard return in lieu of which the cooperative contract was suggested for five, three no contract, and one road for which the committee recommended a contract whereby the Government would operate the road without payment of compensation, payment of "fixed charges" was suggested. Contracts are being prepared for all of these roads except three, which have declined on basis tendered.

APPLICATIONS FOR SPECIAL COMPENSATION.

Petitions for special compensation have been presented by 38 roads. Recommendations have been made in 17 cases, 10 for complete rejection and 7 for partial allowances. In 3 of the rejected cases the roads desire a rehearing which will be granted. One road has withdrawn its claim, 1 is a matter for the Interstate Commerce Commission to dispose of, leaving 19 to be reported on as soon as heard and necessary information is received. In addition to the above, 25 new claims have been filed within the past 10 days.

FINANCIAL MATTERS.

The Division of Law has passed upon all legal matters connected with advances to railroad companies on account of the standard return or by way of loan. The magnitude of this work will appear from the fact that up to November 30 the Director General had
advanced to railroad companies under Federal control the sum of $515,690,060.

REORGANIZATION OF THE LEGAL DEPARTMENTS OF RAILROADS.

The policy has been to make full use of the existing organizations, avoiding unnecessary disruption—and at the same time reduce the amount of legal expense to a minimum consistent with efficiency of service. The general plan adopted was—

(a) To separate, and assign to the appropriate accounts, expenses relating to corporate matters—and therefore chargeable to the corporations—and those incident to the ordinary operation of the properties.

(b) Appoint, as to each road, a head of the Federal legal staff, with the title of general solicitor, who, under the general counsel at Washington, acts as adviser to the Federal manager and is charged with supervision of the legal department.

(c) Dispense with the services of lawyers not actually engaged in the performance of necessary legal work.

(d) Eliminate duplication of employment, in view of unity of operation, and readjust salaries to conform with anticipated changes in the amount of litigation under Federal control.

The separation of corporate and operating expenses has been accomplished, usually, by the assignment to the corporations of one or more members of the general office force, New York counsel, and others employed primarily in corporate matters.

Where several roads are grouped under the same Federal manager, the practice has been to appoint one general solicitor, with jurisdiction coextensive with that of the Federal manager; and in determining appointments and salaries the recommendations of managers and regional directors have first been obtained and considered.

The eliminations include legislative counsel, special agents, counsel employed at Washington in departmental matters, statutory agents of individual roads for service of notices of the Commerce Commission, counsel located at points remote from the line of road, etc.—as to all of whom it was felt that their employment is unnecessary under Government operation.

With unity of operation, it has been possible in some cases to consolidate the legal work, and thus accomplish more effective results at a lower cost. Reductions in salaries were confined largely to trial counsel who engage in general practice, the belief being that the restrictions of the Federal control act and orders of the Director General relating to suits would cause some diminution of actual litigation. The "fee basis" of employment has been discouraged and definite annual salaries substituted as a rule.
SAVINGS.

The total expenditures on account of salaries in the legal departments of the various carriers approximated $7,150,000 when Federal control was assumed. Present expenditures approximate $4,985,000, a saving of approximately $2,150,000.

SUITS AGAINST RAILROADS.

On April 9, General Order No. 18 was issued, providing that "All suits against carriers while under Federal control must be brought in the county or district where the plaintiff resides or the county or district where the cause of action arose." This order was issued because suits against carriers for personal injuries, freight and damage claims were being brought in jurisdictions far remote from the place where plaintiffs resided or where the cause of action arose; the effect being that men operating trains engaged in hauling war materials, troops, etc., were required to leave their trains and attend court as witnesses, and sometimes travel for hundreds of miles from their work, seriously interfering with their duties. On April 18 this order was amended so as to read as follows:

It is therefore ordered that all suits against carriers while under Federal control must be brought in the county or district where the plaintiff resided at the time of the accrual of the cause of action or in the county or district where the cause of action arose.

It having been found that suits were being brought and judgments and decrees rendered against carrier corporations on matter based on causes of action arising during Federal control, for which the carrier corporations were not responsible, General Order No. 50 was issued on October 28, providing that actions at law, suits in equity, the proceedings in admiralty brought thereafter, "based on contract, binding upon the Director General of Railroads, claim for death or injury to person, or for loss and damage to property, arising since December 31, 1917, and growing out of the possession, use, control, or operation of any railroad or system of transportation by the Director General of Railroads, which action, suit, or proceeding, but for Federal control, might have been brought against the carrier company, shall be brought against William G. McAdoo, Director General of Railroads, and not otherwise: Provided, however, That this order shall not apply to actions, suits, or proceedings for the recovery of fines, penalties, and forfeitures."

CLAIMS AND PROPERTY PROTECTION SECTION.

Shortly after the assumption of control of the railroads by the Federal Government attention was directed toward the enormous drain
upon the railroad revenues as a result of loss, as well as damage, to freight. The abnormal conditions prevailing throughout the country as a result of the war brought about delayed transportation, congested terminals, etc. Reports of numerous thefts of large and valuable shipments, as well as excessive damage to freight in transit, injury to persons and property, necessitated an organized effort to correct these evils.

ORGANIZATION.

Under date of March 26, 1918, a section for the protection of railroad property and property of shippers in transit was established in the Division of Law to enforce rigorously the Federal law against theft from cars, stations, sidings, and wharves, and to take all necessary measures in cooperation with carriers to prevent loss from this cause.

There are approximately between 7 and 10 millions of loss and damage claims filed annually against railroads under Federal control, involving the expenditure of millions of dollars. Therefore it was deemed advisable to create a Freight Claim Section, which was established August 1, 1918, with jurisdiction over all matters pertaining to loss and damage freight claims and their prevention, for the purpose of having administrative jurisdiction over all such matters on railroads under Federal control, to study the causes and to take such remedial steps as appeared necessary to prevent such claims and conserve the food products and materials heretofore lost and wasted by reason of improper packing and loading and negligence in the handling of the various commodities.

Prior to this there had been no uniformity in the jurisdiction over the claim departments, and because of the varying practices governing them it was decided to place the jurisdiction under the legal department; therefore, coincident with the establishment of the Freight Claim Section, the loss and damage freight claims and the prevention of causes of such claims were placed in charge of freight claim agents reporting to the general solicitors of the respective railroads.

Another source of large expenditures, running into the millions of dollars, are personal injury, right of way, stock and fire claims. Therefore, it was deemed advisable to create in the Division of Law a section coordinating these three branches of the railroad service.

Effective September 1, 1918, there was created in the Division of Law a section entitled "Claims and Property Protection Section," to have jurisdiction over freight claims and prevention, property protection, and personal injury claims, of which John H. Howard was appointed manager; William J. Flynn, chief of secret service; Philip J. Doherty, counsel for property protection; and Charles F.
Patterson, counsel for claims, with a small corps of assistants, as it is not intended this section should be more than an administrative section to study causes, establish policies and coordinate with the forces of the carriers as existing when the roads were taken under control. Later the secret service was transferred to the Division of Operation.

PROPERTY PROTECTION.

The railroads' chief special agents were stimulated into activity and responded generally with hearty cooperation and effective work. To assist in this work there has been employed a corps of lawyers and inspectors stationed at different strategical points.

Reports were received from local railroad police of all arrests on felony charges of persons guilty of stealing or receiving goods stolen from carriers. Carriers also reported large losses when discovered, so that detective work could be immediately begun. Utilizing the chief special agents, whether or not the same were on the local line of the carrier employing them, surveys were made at points where conditions were worst. Large numbers of prosecutions were instituted and in many cases exemplary penalties imposed.

The crowded condition of the dockets of the Federal courts in the most important districts led the Attorney General to limit cases of the character here in question to (1) cases where value of property stolen amounted to $100; (2) cases where offender had a record of a previous conviction in a similar case; (3) cases where there was a confederation of employees in commission of the offense; and (4) cases where offender was armed with a deadly weapon while in the commission of the offense.

There are not available authentic statistics as to the volume of thefts from carriers in recent years. The principal thefts have been of four classes:

(1) Thefts of merchandise from cars and terminals;
(2) Thefts of tools, machinery, appliances, brasses, etc.;
(3) Padded pay rolls; and
(4) Embezzlements.

For 1914 carriers reported to the Interstate Commerce Commission for cases of the first class and including concealed and unlocated losses a total of $10,310,780.41.

War conditions emphasized the evil by rendering it extremely difficult to secure guards qualified for this work.

Another practical difficulty was the large proportion of new men in railroad service taking the places of railroad men in the Army.

The following statistics reflect the activities, as far as reported to the Washington office, of the police agencies of the carriers:
Period from Apr. 1 to Nov. 30, 1918.

Arrests for thefts........................................... 10,530
Convicted......................................................... 6,069
Pending........................................................... 2,075
Employees arrested........................................... 3,241
Value goods recovered....................................... $667,578.54
Sentences one year or over.................................. 1,065
Fines imposed..................................................... $150,509.63

FREIGHT CLAIMS.

Under corporate control each individual railroad had its own method of investigating and disposing of loss and damage freight claims. Therefore, in order to bring about uniformity and simplicity in the presentation, investigation, and disposition of loss and damage claims, General Order No. 41, "Regulations Governing Disposition of Interroad Freight Claims for Loss and Damage," was issued. This order became effective September 1, 1918, and provided for a uniform method of filing claims and making adjustments between interroads.

Consideration having been given to the vast amount of freight refused and unclaimed by the consignee after its arrival at the billed destination, it was deemed advisable, for the purpose of clearing the congestion and keeping the channels of commerce open, also of conserving food products and materials by preventing waste and deterioration, to provide a uniform method of disposing of this class of freight promptly.

The method of claim handling having been simplified and General Order No. 34–A issued to clear the railroads of congestion due to the freight remaining on hand, refused or unclaimed, attention was next given to the subject of claim prevention. This, perhaps, is now the most important duty of the Freight Claim Section. The enormous amount of money (running well into millions) expended annually for loss and damage freight, which in the end has no economic value, is a situation that must be corrected by taking such remedial steps as are necessary toward the prevention as well as the settlement of claims. Therefore a careful study has been given to a method of prevention, and a Nation-wide campaign is now being arranged in an effort to prevent this waste.

Promptly after the establishment of this section, numerous complaints began to arrive regarding the nonsettlement of loss and damage claims. Therefore attention was drawn to the provisions of General Order No. 41, which eliminated unnecessary interline investigation, bringing forward each month claims of greater age than four months. An inventory was made of all such claims with a view to giving them special attention.
For the purpose of studying the conditions throughout the country and to make suggestions in formulating uniform policies, district claim conferences were ordered held at New York, N. Y., Atlanta, Ga., Chicago, Ill., St. Louis, Mo., Dallas, Tex., and San Francisco, Cal., of which each freight claim agent or officer handling freight claims was to be a member and attend these meetings every three months to discuss plans and policies toward protection of freight and reducing the amount of damage to freight in transit.

One of the most important classes of claims to be met with in the claim departments is that of loss and damage to fruits and vegetables. There is a large amount of money expended annually in loss and damage claims on this commodity, besides the loss of millions of dollars' worth of food products. Therefore it is hoped to establish uniform practices in shipping and protecting these commodities and simplifying the adjustment of damages where negligence exists.

Because of conditions existing under corporate control, it was customary at most of the interchange points for each line to have inspectors for the examination of freight, making an inspection and record as to ventilation, refrigeration, etc., and many commodities were inspected as to loading, bracing, stability of packages, and general condition of the freight. This necessitated the employing of a number of men doing the same work. In order to bring about coordination of the various inspections by the different roads at such interchange points, such duplication of inspections has been discontinued.

The greatest amount paid out by railroads for losses and damages growing out of any one individual class of claims was that of grain, and there being no uniformity of practices in the preparing of cars, recording of loss, or the disposition of claims for loss and damage, General Order No. 57 was issued, setting forth "Rules governing the inspection, selection, and coopering or rejection of cars for bulk grain loading, the recording of loss of grain from car by leakage (if any) during transit, and the disposition of claims for loss and damage of grain." Because of the varying practices in the loading, shipping, recording leakage, if any, and the disposition of claims, there have been numerous controversies on this class of claims, and this order should have the effect of establishing uniform practices as to the coopering and loading of cars, as well as the disposition of claims, and should result in a substantial saving to the shipping public as well as the railroads.

**PERSONAL INJURY, RIGHT OF WAY, AND PROPERTY CLAIMS.**

In the payment of personal-injury claims the amounts paid have been influenced in the past to a large extent by the decisions of the courts and juries in the respective States where the injury occurs,
and therefore the steps toward prevention must be taken by the individual railroads in preventing the accidents or the causes of such injury in so far as possible.

In order to bring about uniform practices and economy in this regard a committee, known as the Executive Committee of the General Claim Agents’ Association, has been appointed for the purpose of studying the general situation throughout the country and to make recommendations to unify the practices on the various railroads.

There has been referred to this section complaints and controversies on 533 claims. The percentage is as follows:

<table>
<thead>
<tr>
<th>Description</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employees’ personal-injury claims</td>
<td>35</td>
</tr>
<tr>
<td>Right-of-way cattle claims</td>
<td>25</td>
</tr>
<tr>
<td>Freight claims, legal advice on</td>
<td>10</td>
</tr>
<tr>
<td>Soldiers’ personal-injury claims</td>
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</tr>
<tr>
<td>Right-of-way crossing claims</td>
<td>10</td>
</tr>
<tr>
<td>Passenger claims</td>
<td>5</td>
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<tr>
<td>Baggage claims</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

**RAILROAD TAXATION UNDER FEDERAL CONTROL.**

The handling of this complex question of railroad taxation throughout the United States devolved upon the Division of Law, in conjunction with the tax representatives of the various roads, the general counsel acting primarily in an advisory capacity.

**INTERSTATE COMMERCE COMMISSION MATTERS.**

This division is served with all “notices and processes” issued by the commission (sec. 24 of the act to regulate commerce) which may affect the Director General and any of the roads under Federal control. The information thus received is at once communicated to the general solicitors of the roads immediately involved.

Very frequent inquiries from counsel and traffic officials about matters within the cognizance of the commission call for close contact with the commission and a great deal of correspondence.

As of July 1, there were on the docket of the commission approximately 1,000 formal complaints against carriers operating roads now under Federal control, of which 481 had theretofore been heard and submitted but could not be decided because of the change of status. There were also pending 29 general investigations instituted by the commission. There were also pending more than 2,000 fourth-section applications and more than 4,000 fifteenth-section applications.

The commission amended its rules of practice so as to allow rate complaints that had been filed prior to the initiation of rates in June
to be supplemented, instead of compelling the parties to file original complaints. In that connection the commission held the Director General to be a necessary party to supplemental complaints asking any relief for the future, and not merely asking the award of reparation on account of past transactions, and further held the Director General to be a necessary party to new complaints. It likewise held that a supplemental or new complaint might properly be answered by the Director General alone without answer by any other defendant. Two hundred and sixty-seven supplemental complaints have been filed and answered, and the new complaints are being answered as filed. The data for answer is ordinarily obtained from the general freight traffic committees appointed by the Division of Traffic.

Since July 1 counsel for the Railroad Administration have participated in the hearing of 180 cases before examiners in various parts of the country, and in the oral argument of 40 cases before the commission. The commission has disposed of 130 complaints, but none of its decisions have in any material way affected the initiated rates.

There are upon the commission's docket at this time about 1,000 complaints, old and new, of which about 350 have been submitted for decision. Many of these cases cover large demands for reparation growing out of transactions that occurred prior to Federal control. Many others are important in their relation to supposed discriminations and to regulations and practices. It may be noted here that, through the committees appointed by the Division of Traffic, counsel endeavored to bring about a settlement by conference of the controversies and differences which have led to the formal complaints, and a number of cases have been disposed of in this way.

Of the 29 general investigations above mentioned, 11 have been disposed of by the commission without any detriment whatever to the Railroad Administration, and some of the others are now under hearing, the director of the Division of Traffic having informed the commission that he will, by presenting the pertinent facts, assist it in reaching conclusions, and that he will consider any recommendations it may make.

The fifteenth-section applications above mentioned have in the main been stricken from the commission's docket, as they had reference to rates which were superseded by the initiated rates.
The following chapter on the suggestions and complaints results of the Federalized Railroads from Director General McAdoo's forthcoming report to the President for the calendar year 1918 must be held for release in the afternoon papers of Tuesday, January 28, 1919.
SUGGESTIONS AND COMPLAINTS.

In June Mr. Theodore H. Price was appointed actuary to the United States Railroad Administration, serving without salary. His duties in addition to the analysis and study of the statistical record of the railways under Federal control, and the preparation of reports thereon, have included the organization and conduct of the Bureau for Suggestions and Complaints, established on the 3d of September last. The purpose of this bureau is sufficiently explained by the following announcement of its creation, which was displayed in every passenger coach and station under the jurisdiction of the United States Railroad Administration.

To the public:

I desire your assistance and cooperation in making the railroad service while under Federal control in the highest possible degree satisfactory and efficient. Of course the paramount necessities of the war must have first consideration. Our gallant sons who are fighting in France and on the high seas can not be adequately supported unless the railroads supply sufficient transportation for the movement of troops and war materials and to keep the war industries of the Nation going without interruption.

The next purpose is to serve the public convenience, comfort, and necessity to the fullest extent not incompatible with the paramount demands of the war.

In order to accomplish this, criticisms and suggestions from the public will be extremely helpful, whether they relate to the service rendered by employees and officials or impersonal details that may convenience or inconvenience patrons of the railroads. It is impossible for even the most vigilant management to keep constantly in touch with local conditions and correct them when they are not as they should be, unless the public will cooperate in pointing out deficiencies and disservice when they exist, so that the proper remedies may be applied.

BUREAU FOR SUGGESTIONS AND COMPLAINTS.

I have, therefore, established a Bureau for Suggestions and Complaints in the Director General's office at Washington, to which the public is invited to resort. Aside from letters of complaint and suggestion, the public can render a genuine service by sending letters of commendation of employees who are conspicuously courteous and efficient in the performance of their duties. Nothing promotes the esprit of a great organization more than recognition from time to time of those employees who perform their duties faithfully and commendably.

It is requested that all communications be brief and explicit and that the name and address of the writer be distinctly written.
Also give the time of day or night, the number of the train, the name of the railroad, and, if possible, the name of the employee whose conduct is complained of or whose services are commended, together with such other information as will enable me to take appropriate action.

Please address:

W. G. McAdoo,
Director General of Railroads,
Bureau for Suggestions and Complaints,
Washington, D. C.

Up to the 24th of December this bureau had been in operation some 16 weeks, during which time it had received in all 10,424 "initiatory letters" containing 11,666 suggestions, complaints, and commendations. As each of these letters has been answered, and as a thorough investigation of the things complained of and a thorough consideration of the suggestions made has involved much additional correspondence, a total of over 40,000 letters has been handled by the bureau. The aggregate of the salaries paid to the force of correspondents and employees conducting this work averages less than 4 cents a letter. In not a few cases we have been able to adopt the suggestions made and the complaints and commendations received have enabled us to correct disservice or discourtesy and recognize merit with a promptitude hitherto impossible.

A careful classification of all the "initiatory letters" has been kept, and I am proud to be able to announce that those commending employees for courtesy and loyalty exceed the complaints of discourtesy by nearly two to one.

In all some 1,328 communications have been received as against only 714 letters complaining of individual discourtesy or incompetence. This is a record of which the army of railroad men as well as the women who have recently been mustered into the service may well be proud. The commendations received have in every case been noted upon the records of the employees mentioned and will be given due consideration at the appropriate time. In addition to the 1,328 letters commending individual employees that have been received, 128 communications commending the railway service rendered by particular lines have been addressed to the bureau.

The other letters received by the Bureau for Suggestions and Complaints relate chiefly to what may be described as the organic defects of the service which were correctible under existing conditions are being remedied as rapidly as possible.

The classification that has been made of all the initiatory letters received and the number falling into each class follows:
Classification of initiatory communications received by Bureau for Suggestions and Complaints from Sept. 3 to Dec. 24, 1918 (inclusive).

**THINGS COMPLAINED OF AND SUBJECTS DISCUSSED.**

<table>
<thead>
<tr>
<th>Train service</th>
<th>417</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pullman service</td>
<td>141</td>
</tr>
<tr>
<td>Diner service</td>
<td>329</td>
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<tr>
<td>Treatment of negroes</td>
<td>137</td>
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<td>Boat and ferry service</td>
<td>6</td>
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<tr>
<td>Sanitary conditions</td>
<td>98</td>
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<tr>
<td>Freight service</td>
<td>92</td>
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<tr>
<td>Car supply</td>
<td>62</td>
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<td>Cash payment of freight charges</td>
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<td>Freight classification</td>
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<td>Embargoes</td>
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<td>Waybills</td>
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<td>Delays to baggage</td>
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<tr>
<td>Delays to live stock</td>
<td>41</td>
</tr>
<tr>
<td>Ignorance of rules</td>
<td>115</td>
</tr>
<tr>
<td>Clerical mistakes</td>
<td>20</td>
</tr>
<tr>
<td>Freight rate discrimination</td>
<td>99</td>
</tr>
<tr>
<td>Unfair passenger rates</td>
<td>45</td>
</tr>
<tr>
<td>Unfair baggage rates</td>
<td>6</td>
</tr>
<tr>
<td>Unfair Pullman rates</td>
<td>10</td>
</tr>
<tr>
<td>Special rates</td>
<td>79</td>
</tr>
<tr>
<td>Criticism of operation</td>
<td>1,092</td>
</tr>
<tr>
<td>Wages, hours, etc.</td>
<td>931</td>
</tr>
<tr>
<td>Safety</td>
<td>74</td>
</tr>
<tr>
<td>Garnishment</td>
<td>63</td>
</tr>
<tr>
<td>Boat lines, operation and schedules</td>
<td>6</td>
</tr>
<tr>
<td>Insufficient help</td>
<td>2</td>
</tr>
<tr>
<td>Train schedules</td>
<td>644</td>
</tr>
<tr>
<td>Station facilities and service</td>
<td>320</td>
</tr>
<tr>
<td>Station mail handling</td>
<td>6</td>
</tr>
<tr>
<td>Consolidation of stations</td>
<td>73</td>
</tr>
<tr>
<td>Consolidation of offices</td>
<td>14</td>
</tr>
<tr>
<td>Consolidation of lines</td>
<td>9</td>
</tr>
<tr>
<td>Recourting</td>
<td>36</td>
</tr>
</tbody>
</table>

Improvements suggested:
- Equipment 150
- Physical 62
- Industrial 119
- Service 81

Claims:
- Freight 595
- Express 60

Claims—Continued.
- Passenger 36
- Baggage 87
- Damage to property 195
- Claims, Pullman 34
- Ticket arrangements:
  - Railroad 287
  - Pullman 103
  - Parlor car 4
  - Baggage 44
  - Refund 279
- Congestion at ticket offices 52
- Overcharge:
  - For tickets 217
  - For freight 49
  - For express 8
  - For baggage 55
  - On dining cars 10
- Bills of lading 39
- Demurrage 28
- Protest against store-door delivery 1
- Commendation of service 128
- Newspaper criticism 2
- Commendations for courtesy and loyalty 1,328
- Discount and incompetence 714
- Dishonesty of employees 161
- Time-tables, folders, and guides 57
- Economy suggestions 140
- Tipping 8
- Inventions 19
- Passes for employees 101
- Abuse of official authority 47
- Discharge of employees 80
- Reinstatement of employees 16
- Refusal to honor United States transportation 9
- United States soldiers 15
- Injuries 50
- Jobs 22
- Politics by employees 6
- Pension system 101
- Miscellaneous 384
- Draft exemptions 13

Total 11,666

I am gratified to be able to report that since the signing of the armistice and the gradual reversion to or toward the normal that has followed, the number of complaints received shows a sharp decline averaging now hardly more than 100 a day as against a daily average of from 300 to 400 when the bureau was first established.
The following chapter on the Inland Waterways results of the Federalized Railroads from Director General McAdoo's forthcoming report to the President for the calendar year 1918 must be held for release in the afternoon papers of Friday, January 31, 1919.
INLAND WATERWAYS.

Hundreds of millions of dollars have been expended by the Nation, the States, and citizens for the purpose of developing our inland waterways and for the construction of canals. Thousands of miles of rivers, canals, lakes, and bays are ready to assist in moving our products. These waterways, with the exception of the Great Lakes, are not being extensively used.

With the assumption of my present task, I appointed a committee to make a prompt investigation and to suggest a definite plan for the additional use of internal waterways, for the economical and expeditious movement of the traffic of the country, so as to relieve or supplement the railways under the conditions caused by the war. This was the beginning of a program which has been constantly pursued, and while the greater urgency for raw materials in war work interfered with the construction of steamers and barges, 160 steel, wood, and concrete vessels are now building and 50 steel and wooden craft have been purchased. The total appropriation for old and new floating equipment exceeds eleven and three-quarter millions.

The increased responsibilities of this country in the family of nations will demand greater commercial activity on our part. Transportation is a major problem, for, on account of the extensive area of our country, we have a longer average haul to seaboards than other industrial commonwealths. It has seemed to me evident that by developing transportation on the waterways and coordinating and articulating them with a unified railway system, we shall bring about a correct solution of the rail-water controversy, which has been in progress for 50 years. This is possible with the railways under Federal control. I doubt if any of our rivers or canals will become active factors of transportation if the railroads are turned back to private control. The old methods of railway competition with the waterways doubtless will be revived and the waterway experiment may not be able to survive that competition.

NEW YORK BARGE CANAL.

April 22 I created the New York Barge Canal Section of the United States Railroad Administration, appointed a general manager, and authorized the construction and acquisition of equipment for use
upon the New York State Barge Canal and, as an incident thereto, for use upon the waters connecting therewith, and the operation of such equipment. Mr. H. S. Noble was later appointed manager of the New York-New Jersey canals.

May 14, in conformity with the Director General's authorization, contracts were let for the construction of 51 barges, 150 feet long, 21-foot beam, and 12-foot molded depth for service on the barge canal at a cost of $1,697,708. July 15 contracts were let for the construction of 21 concrete barges, 150 feet long, 21-foot beam, and 12-foot molded depth for the sum of $458,996.

Construction of the steel barges was delayed because of the more urgent requirement of steel for war purposes. These vessels are now being delivered and will be ready for use for storage purposes during the winter in Buffalo and New York. In order to safeguard the more or less experimental conditions attaching to the construction of concrete barges, the design and supervision were vested with the Concrete Division of the United States Shipping Board. Two of these barges have been delivered to the administration.

In addition to these contracts five tugs were purchased for a total of $56,500, and three wooden barges were purchased on the stocks for $52,650.

During the month of May the general manager had under lease 13 steamers and 118 barges; during June, 14 steamers and 140 barges; during July, 14 steamers and 168 barges; during August, 14 steamers and 175 barges; during September, 14 steamers and 180 barges; during October, 12 steamers and 188 barges; during November, 12 steamers and 180 barges. The average time these vessels were under lease was 27 days per month. All this equipment was of the type that had been in use on the New York Barge Canal for many years, the vessels being designed to draw not more than 8 feet of water. The 250-ton barges were chartered at $11 per day, including crews; the larger barges at $15 per day, including crews; the steamer and push boat at $50 per day, including crew but not including fuel and oil.

It will be noted that the fleet was gradually increased from the opening of navigation with the expectation that in July and August a heavy eastbound canal business in grain would develop, as was anticipated by the United States Food Administration Grain Corporation. As a matter of fact this grain was shipped by the owners by rail.

The additional charters were not always completed the first day of each month and the record shows that from May 10 to December 1, an average of 169 barges were in service. The period covers 203 days, so the operation covered $34,307 boat days.
Vessels of the fleet were idle on account of no cargoes as follows:

<table>
<thead>
<tr>
<th>Month</th>
<th>Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>May</td>
<td>1,130</td>
</tr>
<tr>
<td>June</td>
<td>905</td>
</tr>
<tr>
<td>July</td>
<td>448</td>
</tr>
<tr>
<td>August</td>
<td>531</td>
</tr>
<tr>
<td>September</td>
<td>118</td>
</tr>
<tr>
<td>October</td>
<td>192</td>
</tr>
<tr>
<td>November</td>
<td>43</td>
</tr>
</tbody>
</table>

Total: 3,367

The total number of serviceable boats on the New York Barge Canal is estimated at 760. The fleet not under Federal operation was engaged very largely in short-haul work, while the administration fleet was engaged exclusively in through service. The independently operated boat made its own transportation rate.

At the beginning of operation by the Railroad Administration it was found by actual experience that the minimum depth of the canal did not permit loading vessels to a draft in excess of 7 feet, and up to the close of navigation, not more than 8 ½ feet was available. The terminals at Buffalo and New York were not completed by the State and are not yet completed, so that the Railroad Administration was required to create temporary terminals. Rochester is as yet accessible only through the old canal, and Syracuse was not accessible by the new canal until September.

The inadequate equipment which on account of war conditions was all that was obtainable for the past season and the incomplete state of the canals and terminals of course made the operating conditions very different from what they will be with new equipment adapted to the new canal and with the canal facilities completed, so that the operating results for the present year are not a measure of what may reasonably be expected in the future.

The movement of freight on the New York Barge Canal by all transportation agencies this season will approximate 1,200,000 tons, about the same volume as last year. Commodities such as building materials, pulp wood, road metals, coal to Canada, etc., always constitute a considerable percentage of the total traffic. The movement in these items decreased 250,000 tons. This decrease may be attributed directly to the war. Owing to the shortage in northwestern grain crop of 1917, it was impossible during 1918 to obtain any cereal for shipment from Buffalo via the canal until late in September. Grain must always be a very large tonnage factor on the barge canal and the crop shortage of 1917 was a serious handicap to the usual activities of 1918. Imports were almost entirely cut off at the port of New York and the westbound movement of freight on the New York Barge Canal has been negligible.
The regulation by the Government of the purchase of material which was in force on account of war conditions, resulted in elimination of a considerable amount of transportation, including the movement of commodities that previous to the war were moved west and which would have moved via the canal but which during 1918 were supplied from nearer points in the West.

An effort was made to stimulate a movement of coals. Manufacturing enterprises along the waterways were solicited to arrange for the receipt of water-borne coal at their plants. Many receivers said they preferred delivery by rail. There is practically no coal unloading equipment at canal bank and receivers would not purchase the necessary machinery. It was, therefore, impracticable to construct loading tipples without some assurance they would be of value.

Because of the lack of suitable canal terminals in the port of New York the barges were compelled to await the convenience of ocean vessels and as the supply of ocean ships was intermittent, great delays were encountered in discharging cargoes. The lay time at terminals follows:

<table>
<thead>
<tr>
<th></th>
<th>Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>June</td>
<td>55</td>
</tr>
<tr>
<td>July</td>
<td>204</td>
</tr>
<tr>
<td>August</td>
<td>343</td>
</tr>
<tr>
<td>September</td>
<td>366</td>
</tr>
<tr>
<td>October</td>
<td>134</td>
</tr>
<tr>
<td>November</td>
<td>343</td>
</tr>
<tr>
<td>Total</td>
<td>1,445</td>
</tr>
</tbody>
</table>

The average running time between Buffalo and New York was 18 days towed by tugs, and 13 days for vessels towed by steamers. The average loading or unloading time was 5 days. The following displays the number of loaded boats dispatched during the season:

<table>
<thead>
<tr>
<th></th>
<th>Westbound</th>
<th>Eastbound</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>May</td>
<td>11</td>
<td>17</td>
<td>31</td>
</tr>
<tr>
<td>June</td>
<td>15</td>
<td>23</td>
<td>108</td>
</tr>
<tr>
<td>July</td>
<td>85</td>
<td>78</td>
<td>163</td>
</tr>
<tr>
<td>August</td>
<td>50</td>
<td>103</td>
<td>153</td>
</tr>
<tr>
<td>September</td>
<td>40</td>
<td>145</td>
<td>185</td>
</tr>
<tr>
<td>October</td>
<td>33</td>
<td>139</td>
<td>172</td>
</tr>
<tr>
<td>November</td>
<td>12</td>
<td>80</td>
<td>92</td>
</tr>
<tr>
<td>Season total</td>
<td>226</td>
<td>630</td>
<td>856</td>
</tr>
</tbody>
</table>

Requests come from the people of the State of New York for a packet-freight service between Buffalo and Albany, and I authorized the establishment of a packet-freight line. Agencies were established in 11 cities. In view of the fact that only small unserviceable packet-freight ships were obtainable, satisfactory financial results were not
expected or realized. The service was maintained until November 1. Most of the freight offered was extremely bulky.

When navigation opened freight rates were established all-rail basis, both for local New York State traffic and for interstate traffic.

The public was adverse to using the canal at all-rail rates. At the time all-rail rates were in effect on interstate traffic on the canal, the Canada Atlantic Line was maintaining a differential under standard all-rail rates of 10.8.6.4.4.3 on the various classes and commodities. All-rail rates continued until June 25, 1918, when on local New York State traffic a differential of 20 per cent under all-rail rates was authorized. On interstate traffic for points beyond Buffalo to which we had through rates a differential under the all-rail rates of 10.8.6.4.4.3 was promulgated.

There has been a demand for a greater differential between the canal and the rail rates. In view of the actual cost of conducting the transportation on the canal during the last season, a greater differential appeared to be unjustified. The question whether there should be any readjustment of the differential is receiving consideration.

During the season we have handled a total of 194,201 tons at total gross freight revenue of $522,883.50. These tonnage and revenue figures will be slightly changed when our season is finally completed. This tonnage represents a much larger proportion of the total traffic carried on the canal than would be indicated by a comparison with the total tons carried by all transportation agencies, because a large proportion of the Railroad Administration business is through business, whereas other transportation agencies are more largely engaged in local traffic so that the average distance is much greater on the Railroad Administration traffic.

The New York and New Jersey Canal Section has not renewed the leases of the barges under charter during the season just closed. These barges are very generally owned by the masters. It was necessary to engage the masters in chartering the barges. The arrangement was not satisfactory. All these barges are old, and as they were designed to load to not more than 8 feet they can not take advantage of the improved depth of channel. It seemed inadvisable last spring to purchase this craft because of its approaching obsolescence and the very large prices demanded.

**KEUKA LAKE.**

During the early fall the grape shippers in the territory adjacent to Lake Keuka, N. Y., made a request they be furnished transportation to market their products. The service formerly performed by the Lake Keuka Navigation Co., a subsidiary of the Erie Railroad, had been discontinued. This division operated equipment of Lake
Keuka Navigation Co. for a period of 10 weeks and thereby provided for the requirements of the grape shippers. The total revenue to November 30 was $2,540.83. The total expense as per bills received to this date is $1,884.18. There are probably a few expense items not yet received, but it is probable the operation will show a net profit, exclusive of any return on the property employed.

MISSISSIPPI-WARRIOR WATERWAYS.

July 11 there was created the Mississippi and Warrior Waterways, and Mr. M. J. Sanders was appointed Federal manager to have charge of the construction and acquisition of equipment for use upon the Mississippi River between St. Louis and New Orleans and for use upon the Warrior River between the Alabama coal fields and Mobile, and in connection therewith for use upon the Mississippi Sound and connecting waters between Mobile and New Orleans, and to operate such equipment upon these waters in the Director General's behalf.

MISSISSIPPI RIVER SECTION.

To immediately establish a water service on the lower Mississippi River was a matter of some difficulty on account of the scarcity of suitable equipment. It was finally determined to purchase the fleet of the Kansas City-Missouri River Navigation Co., consisting of 2 towboats and 9 barges, which, previous to the present season, was operated between Kansas City and St. Louis, Mo. The sum paid for this fleet was $458,500. No other suitable barges were available, with the exception of 20 steel barges in the St. Louis district, United States Engineers, that were used in revetment work and dredging. An arrangement was made whereby these barges were obtained under lease from the Engineer Department until June 1, 1919, together with 2 steel towboats. A third towboat was chartered from a civilian. There are now in service between St. Louis and New Orleans 5 towboats and 29 barges, the first sailing occurring from St. Louis September 28. A weekly service is now being performed. Necessarily there has been considerable delay in the creation of joint tariffs and joint rates with the railroads, so that the operation has been restricted to such traffic as originates on the river banks, and also, because of war conditions, considerable decrease in northbound business has resulted on account of the zoning of sugar. Southbound tonnage is largely composed of wheat and other cereals. The operation to the latter part of November, comprising five round trips, shows a total revenue of $48,500 and a total operating expense of $52,000, exclusive of overhead.

Authority has been issued for the filing of tariffs covering joint through rates between New Orleans and adjacent points taking the
same rates and points in northern Missouri, Illinois, Iowa, Wisconsin, and Minnesota in both directions. These tariffs are now being prepared and will shortly be filed. The through rates reflect the differential of 20 per cent between the rail rates and the water rates between New Orleans and St. Louis.

A terminal of considerable capacity is being erected in the city of St. Louis, and the terminal in East St. Louis has been purchased from the Kansas City-Missouri River Navigation Co. Arrangements for the use of ample terminals are being negotiated with the city of New Orleans.

The Director General has just authorized the construction of 6 large steel towboats and 40 steel barges (capacity 2,000 tons each) at an expenditure of $6,170,000 for service on this waterway. Estimated annual capacity, 850,000 tons.

**WARRIOR RIVER SECTION.**

Operation on the Warrior River previous to the present year has been irregular. Since the creation of the Mississippi-Warrior Waterways Section the administration has purchased 3 towboats, 21 wooden barges, and 6 steel self-propelled barges for service between Cordova (near Birmingham, Ala.) and Mobile, Ala., and New Orleans, La. The cost of this equipment, after reconstruction and necessary repairs are completed, will be about $700,000. These vessels are primarily coal carriers and the annual capacity is estimated to be 300,000 tons. A portion of this fleet is now in operation.

Sufficient coal is produced from mines on the river bank in the Cordova district to constantly employ the fleet. The Director General has just authorized the construction for this service of four steamers to trade between the Birmingham district on the Warrior River and Mobile, Ala., and New Orleans, La., these ships to be designed to carry merchandise as well as coal. The total cost will be about $1,000,000. Also that 3 steel towboats and 20 wooden barges be constructed for coal service on the Warrior River. The cost of this equipment is estimated at $600,000. Estimated annual capacity, 375,000 tons.

**DELAWARE & RARITAN CANAL.**

This waterway extending from Bordentown, N. J., to Raritan Bay, New York Harbor, being of limited draft and inadequate lock structures, has suffered a steady decrease in business up to 1918. It was taken under Federal control as a part of the transportation system of the Pennsylvania Railroad Co., to which it has been leased for many years past. Last year 272,734 tons were moved. It became evident early this season that there would be a very marked loss in
tonnage due to the fact that coal was being shipped via other routes. In July the Division of Inland Waterways took charge of the floating power equipment on the canal and of the toll collections, and December 1 the operation and maintenance of the canal was transferred to this division. The increase of tonnage over last year will be about 5 per cent. The gain in the transportation of merchandise and high-class freight has more than offset the shortage of the movement of coal. The Railroad Administration has operated from 3 to 15 craft between Philadelphia and New York. The season is not completed, but it is apparent the ships, which were in all cases leased, will show a very small deficit, even after charging 10 per cent of the expense of maintaining the New York office of the New York and New Jersey Canal Section to this service.

CHESAPEAKE & OHIO CANAL.

This canal has been operated at a loss for several years. With the opening of navigation season of 1918 it developed the Canal Towage Co., which operates the boats of the canal, was not attempting to engage in business. The traffic is almost confined to the transportation of coal, and, as the canal served particularly the needs of Washington and vicinity, the Railroad Administration regarded it important to preserve this utility and entered into an arrangement to pay the toll charges on the boats of the Canal Towage Co. or any other coal boats. No other boats having appeared this arrangement was later changed and a new agreement entered into whereby the Railroad Administration guaranteed the Towage Co. against any operating deficit. There was also authorized the construction of 10 barges to be used on this canal.

The tonnage moved in 1918 will be slightly less than the quantity moved in 1917, but the quantity moved to Washington and vicinity greater. There are two reasons for this: (a) A late opening and scarcity of boatmen, and (b) greater mileage per unit, resulting from the larger percentage of coal delivered to Washington and Indian Head. Although the accounting for the season's operation is not completed, it is apparent the operating deficit will be much less than the toll charges.

INTRACOASTAL WATERWAY.

An investigation was made of transportation conditions on that portion of the inland waterways between Philadelphia and Beaufort. This inquiry shows there is sufficient vessel equipment for normal seasons, and that the various barge companies have been and are building new equipment. There has been a lack of coordination between shipper and vessel owner. A number of vessels ordinarily used in this service has been under charter to the various military
and navy branches of the Government. These are being released to the owners.

The methods of handling freight on this waterway are very much out of date, and as the supply of labor promises to be somewhat improved, the efficiency of the present fleet, with modern terminal methods, should be increased 30 per cent.

**OHIO RIVER.**

In view of the fact that the projected locks and dams on the Ohio River between Pittsburgh and Cairo are not completed (the improvement has not been finished between Pittsburgh and Cincinnati) it does not seem a proper time to consider any new equipment for this route.
UNITED STATES RAILROAD ADMINISTRATION

ANNUAL REPORT

OF THE

REGIONAL DIRECTOR FOR THE

POCAHONTAS REGION

TO THE

DIRECTOR GENERAL OF RAILROADS

1918

WASHINGTON
GOVERNMENT PRINTING OFFICE
1919
POCAHONTAS REGION.

ROANOKE, VA., December 31, 1918.

Hon. W. G. McAdoo,

Director General of Railroads,

Washington, D. C.

Dear Sir: In reply to your letter of September 20, outlining certain specific points to be embodied in a complete report covering the results and annual savings which have been attained in the Pocahontas Region through unification of operation, I attach memorandum in detail, of which the following is a summary:

(a) Unification of terminals and stations $1,495,602.89
(b) Elimination of passenger service 23,400.00
(c) Reductions in organizations, as contrasted with the same under corporate control (including abolishment of fast freight lines and closing other off-line offices) 791,614.78
(d) Miscellaneous economies, the result of causes other than the above 26,328.04
(c) Recapitulation of cooperative action, the results of which are in the direction of efficiency but intangible as to economies. (See detail.)

Total visible savings in money (annually) 2,336,945.71

Satisfying as may be the money savings throughout the country resulting from unification and coordination of railroad facilities and practice, the outstanding gratification is with respect to the accomplishments for the Government and its allies by the unified railways in the successful transportation of troops, supplies, and munitions of war to the ports of transshipment overseas.

At Hampton Roads, the port served by the railways composing the Pocahontas Region, the governmental activities were of the greatest scope and importance.

Many millions were expended by the Government upon the development of the port of embarkation at Newport News, and upon the Army and Navy bases and terminals on the Norfolk side.

To these projects were extended railroad main and side tracks as needed; the internal tracks of the war facilities were provided mostly by the respective departments and are operated by them.

Through cooperation among the various war agencies and the railroads, and coordination of methods and practice, all war require-
ments for road and terminal service, so far as I am advised, have been satisfactorily met, although delays in some instances have occurred, particularly on the Newport News side, because of the congested conditions at the port, and on the peninsula westward to Richmond, incident to the concentrating there of numerous war activities for convenience of administration, but difficult of serving by the available railroad capacity without time for expansion.

The handling at Hampton Roads, by rail, of the enormous volume of supplies and materials required for the construction of governmental plants and of commercial enterprises engaged in war work, and the heavy passenger travel, including troops and workmen, coincident with the hurried movements overseas, was a stupendous undertaking and could not have been carried out but for the alternating assistance rendered overcrowded lines, at periods of stress, by other lines through the unifications effected.

From June 1 to December 20, 1918, there was loaded into vessels at Hampton Roads piers 16,500,000 tons of coal, an increase of 1,500,000 tons over the same period 1917.

During the year 1918 there were dispatched from Newport News merchandise piers by the United States Government 393 transports, carrying 262,196 troops and 1,261,187 tons of supplies and materials; also 45,000 horses and mules, and 40 ships containing 21,800 tons of grain. In addition, 16,000 horses and mules for the British and 115 ships, containing 113,540 tons of supplies and materials for other than the United States Government, were dispatched.

From the Army Engineer's depot at Norfolk (Lamberts Point) 712,000 tons and from Pinners Point and navy yard 165,000 tons of United States Government supplies and materials were shipped overseas.

It is reported that the Army and Navy bases at Norfolk, now in course of construction, will be in operation by March 1, 1919, when shipping will begin at these facilities.

As further illustrative of the results of cooperative action, the three principal roads of this region loaded during the period June 1 to December 20 of this year, and moved, 727,194 carloads of revenue coal and coke (50-ton unit basis) compared with 701,410 cars during the same period of 1917; and loaded, and received loaded, from connecting roads a total of 1,741,798 carloads of revenue freight compared with total of 1,700,235 revenue carloads loaded, and received loaded, during the same period of 1917, which was the previous record year; a large portion of the increase was composed of traffic moving opposite to the customary tide of business over these roads, for which road and yard capacity, not hitherto needed, was lacking, and which added to the operating difficulties.
One road alone was so relieved of other traffic that it was enabled to load and handle 46,000 more cars of coal than in the same period last year, which came largely from new mine development and which development otherwise could not have been encouraged or permitted. This increase overcompensated the loss of coal production in other districts of the region, where insufficiency or dilution of labor reduced the production below 1917.

Substantially a full car supply was maintained at all mines in all districts and current transportation service performed with reasonable adequacy.

Below is submitted in chronological order information requested by the Director General:

(a) UNIFICATION OF TERMINALS AND STATIONS AND USE OF TRACKS.

One million four hundred ninety-five thousand six hundred and two dollars and eighty-nine cents is the approximate annual saving to the railroads of the Pocahontas Region by the unifications of terminals and terminal work, and stations, already effected, and by arrangement for joint use of Virginian and Norfolk & Western Railroad tracks between Roanoke, Va., and Abilene, Va., a distance of 100 miles. Details are set forth in a memorandum attached to this report. It will be noted that several projects are just now maturing; economies that may later be effected thereby are not included in the above sum.

The arrangement for joint use of Virginian Railroad and Norfolk & Western tracks between Roanoke, Va., and Abilene, Va., promises much. By moving eastbound loaded through freight trains of the Norfolk & Western over the Virginian Railroad heavy mountain grades of the Norfolk & Western Railroad east of Roanoke are avoided, double-header service is escaped, and some pusher service eliminated that it is not necessary to duplicate to protect handling of Virginian Railroad westbound empty trains over the Norfolk & Western Railroad. The first Norfolk & Western train was run east over the Virginian Railroad on December 1. The present average daily movement amounts to four Norfolk & Western Railroad eastbound trains over the Virginian Railroad, and three Virginian Railroad trains westbound over Norfolk & Western. Finally, it is expected that all Norfolk & Western Railroad through tonnage freight trains eastbound between Roanoke and Crewe, Va., estimated to average from 8 to 10 such trains daily will operate over the Virginian, and that 4 to 5 westbound empty trains of the Virginian Railroad will be moved over the Norfolk & Western Railroad. The estimated annual saving shown in the detail memorandum attached is based on movement of this volume of business.
(b) Elimination of Passenger Service.

Early in the year on account of war conditions certain passenger-train mileage was discontinued by each of the roads of this region, but owing to the extraordinary growth of travel in the territory served it was later necessary to reinstate some of the train mileage dispensed with, and also to establish additional passenger-train schedules to the extent that the mileage now operated is slightly in excess of that operated prior to period of Federal control. It is our aim to operate only such passenger-train service as is required for comfortable and convenient service to the public without duplication. This has been reasonably accomplished. There was, however, the direct saving of $23,400 per annum to the Ashland Coal & Iron in withdrawing a local passenger train which has not been restored.

(c) Reduction in Organizations, as Contrasted with the Same Under Corporate Control.

Seven hundred and ninety-one thousand six hundred and fourteen dollars and seventy-eight cents is estimated as annual saving account reductions in organizations, which includes saving effected by abolishment of fast-freight lines, closing of off-line freight and passenger offices, and other traffic, executive and legal department reductions. The saving in salaries of clerical forces maintained by offices eliminating as well as the expense of maintaining the offices and the traveling expenses of officers is also included. Memorandum is attached showing detail information.

(d) Miscellaneous Economies, the Result of Causes Other Than the Above.

Twenty-six thousand three hundred and twenty-eight dollars and four cents is estimated saving annually by Pocahontas regional lines to be reported under this heading. Memorandum of details is attached.

Total estimated annual money saving, Pocahontas Region, account paragraphs (a), (b), (c), and (d) equals $2,336,945.71.

(e) Recapitulation of Cooperative Action, the Results of Which Are in the Direction of Efficiency but Intangible as to Economies.

1. To the common use or pooling of coal carrying equipment and its distribution by central control and the pooling of coal at tidewater and at Lake Erie ports is attributed a practically uniformly sufficient car supply at coal mines, resulting in increased production.

2. Consolidation of coal-dumping facilities of the Norfolk & Western, Chesapeake & Ohio, and Virginian Railroads at Hampton.
Roads, Va., together with pooling of coal by interested shippers under direction of the United States Fuel Administration, and shifting of vessels from one pier to another for loading under direction of the United States Shipping Board, made possible handling of a greatly increased coal tonnage for transhipment by water to New England, for bunker purposes, and for the Army and Navy and overseas, and materially lessened the delay to railroad cars awaiting dumping and delay to vessels awaiting berths at piers, under adverse shipping conditions.

3. During the last six months of this year nearly 400,000 tons of coal was transferred in cars from the rails of the Virginian Railroad after arrival at Norfolk, Va., to the rails of the Norfolk & Western Railroad, and dumped over the Norfolk & Western piers, at a time when the facilities of the Virginian were inadequate to dump the coal as fast as it could be transported. This shifting of cars for dumping resulted in accelerated dispatch and was a factor in maintaining a free working supply of cars at the mines for reloading.

4. By arrangement with the United States Fuel Administration, certain tonnages of low volatile coal needed in the West were drawn more particularly from the Norfolk & Western Railroad, and like tonnage turned east from Chesapeake & Ohio Railroad, reducing crosshauling on the Chesapeake & Ohio Railroad through yards where the movement was forcing in excess of facilities for handling.

5. The Norfolk & Western Railroad, Columbus line; Chesapeake & Ohio Railroad, Cincinnati line; and Chesapeake & Ohio Railroad, Columbus line, were used in common in moving western coal through Columbus and Cincinnati, Ohio, gateways from the mines of the Norfolk & Western and Chesapeake & Ohio, and in handling empties returning to mines through those gateways. This common use, together with the prompt receipt of loads by connections at Columbus and Cincinnati, which, being also operated in common, alternated in moving loads from the Chesapeake & Ohio and Norfolk & Western when offered and as necessary to keep traffic going forward currently, resulted in extraordinarily free movement of western coal traffic in very heavy volume.

6. Pending improvements on Virginian Railroad, to enable it to handle maximum tonnage of coal from mines for which it served as outlet, that road was relieved of handling traffic moving over its line overhead from connecting roads for destinations beyond the Virginian Railroad and such traffic taken over by the Norfolk & Western and Chesapeake & Ohio Railroads.

7. Double service performed by Chesapeake & Ohio and Virginian Railroads to coal mines served jointly by them was discon-
tinued, and individual joint mines assigned to the Virginian or Chesapeake & Ohio, respectively, for single service, resulting in saving in fuel for engines, time of train and engine crews, and more efficient service.

8. The assignment to roads of this region, under rental, of locomotives built for other roads, which was arranged by the administration, has enabled these roads to move a largely increased volume of business which they could not have moved with the locomotives owned by them. Also material aid in the movement of traffic has been given by the transfer of freight engines from one line to another of the region to meet changing situations or conditions.

9. Considerable car mileage has been saved by direct routing of freight, although no complete figures are available as to the saving. The movement of freight through the principal gateways under direction of committees of freight-traffic control was accelerated by dispatching the freight over lines least congested and by short routes. The necessity for forwarding over lines not overcrowded with traffic was controlling in a great many instances and for this reason the saving in movement over short routes was not as great as would result under different conditions as to traffic density.

10. Owing to tremendous activities in Hampton Roads district and harbor, and inadequacy of Chesapeake & Ohio car-float facilities for handling cars between Norfolk and Newport News, Va., it was arranged to handle all traffic into Norfolk from the West over the Norfolk & Western preferentially, relieving the Chesapeake & Ohio except as to freight originating at or destined to points on Peninsula district of the latter line, Richmond to Newport News, Va. Similarly, traffic for Newport News was guided over the Chesapeake & Ohio, avoiding float movement from Norfolk. This has resulted in materially improved service in delivery of freight at these important seaboard points.

11. To enable movement of the necessary coal tonnage eastbound from the Chesapeake & Ohio Railroad mines, arrangements were made from time to time for diversion of miscellaneous eastbound traffic over the Norfolk & Western from the West to Virginia and for the Carolinas; also, at times, traffic for export via Newport News was taken by the Norfolk & Western from the Chesapeake & Ohio at Kenova, W. Va., and turned back to the Chesapeake & Ohio at Lynchburg, Va., thus avoiding the more congested portions of the Chesapeake & Ohio.

12. To care for extraordinarily heavy passenger and passenger train business on the Chesapeake & Ohio Railroad, incident to the establishment of various camps, ammunition plants, shipbuilding activities, etc., on that line, in the best manner possible, 20 passenger cars and 13 express cars were withdrawn from the Norfolk & Western.
Railroad and assigned to service on the Chesapeake & Ohio Railroad, along with two passenger locomotives. In addition, passenger train service on the Chesapeake & Ohio Railroad was aided by assignment of 10 coaches from lines of other regions. Similarly, two dining cars of Chesapeake & Ohio Railroad were assigned to Norfolk & Western Railroad service to fill the quota of cars required.

13. In cooperation with the Southern Region, through passenger train coaches were instituted between Washington and Norfolk-Newport News, Va., without establishing additional train service.

14. Many adjustments of schedules to provide more convenient dependable connections at junction points have been arranged and reasonable holding orders put into effect to protect such connections. Additional connections are under investigation and will be made if possible.

15. Arrangement was made for Chesapeake & Ohio train No. 19 to proceed from Chesapeake & Ohio station at Charlottesville, Va., to the Union Station, Charlottesville, to make connection with Southern Railroad No. 43, thereby serving the public convenience considerably.

16. To relieve overcrowded Norfolk (Va.) district, freight for the ordnance depot at Pig Point, Va., formerly carried into Norfolk by the Norfolk & Western, Seaboard Air Line, Southern Railroad, and other Hampton Roads lines, was turned through Suffolk, Va., and Atlantic Coast Line for handling direct to destination.

17. Carload freight destined Norfolk, Va., for team track delivery arriving over the Virginian Railroad, under arrangement effected, is now delivered the Norfolk & Western Railroad at Portlock Junction and carried into Norfolk and delivered on Norfolk & Western tracks, along with other cars arriving over the Norfolk & Western Railroad. This avoids the necessity of the Virginian switch engines coming into Norfolk yard and increases efficiency of Virginian Railroad yard operation.

18. Formerly the Chesapeake & Ohio, Norfolk & Western, and Virginian Railroads barged coal to various points in Hampton Roads and Norfolk Harbor. All coal for barge delivery at Newport News, Hampton, Old Point, and other points on the Newport News side of Hampton Roads, under arrangement effected, is now handled by Chesapeake & Ohio from Newport News and coal for points in Norfolk Harbor handled by the Norfolk & Western from its city pier, Norfolk, and no coal is being barged by the Virginian from its Sewalls Point piers. This results in saving of from 7 to 8 miles barge distance to points in Norfolk Harbor. Minimum barge load to points in Norfolk Harbor has been increased from 50 to 100 tons, resulting in considerable conservation of barge and tug service.
19. Under arrangement recently effected, all lines entering Columbus, Ohio, will deliver to C. & O. N. R. R. at that point all freight destined to local points on Chesapeake & Ohio Railroad, and discontinue delivery of any such freight to Norfolk & Western Railroad, at Columbus, Ohio, for handling as intermediate line to Chesapeake & Ohio Railroad. All such traffic can be handled by C. & O. N. with present facilities and to load trains east, and one interchange of trains will be eliminated; and more prompt movement should be obtained.

I assume the members of the Washington organization will report to you in detail covering matters originated by the central administration, or put into effect by their direction. I simply take the occasion to mention here, however, a few such items which we all know have been of material benefit in the operation of the roads:

(a) Establishment of universal interline billing.

(b) Elimination of unnecessary checking of accounts between carriers.

(c) Uniform methods making for simplicity, economy, and promptness in the handling of freight claims.

(d) Progress toward general simplification of freight tariffs.

(e) Progress in establishing connections and extending use of railroad owned telegraph wires, which resulted in saving in money and handling of messages more expeditiously.

(f) Progress made toward uniform practice of retiring obsolete equipment; also benefits derived from sending locomotives to other lines' shops for repairs.

(g) The joint purchasing system has undoubtedly resulted in great savings by preventing excessive and profiteering prices.

(h) Direct movement of empty cars under orders of the central administration has provided a practically full car supply, and saved much expense formerly entailed in crosshauling cars.

(i) The extending of financial aid to lines of this region in need of it enabled work to proceed on absolutely essential improvements.

(j) The sailing-day plan for less than carload freight in the course of development has shown where now working a saving of about 15 per cent. Greatest accomplishments in car saving have been in the consolidation and loading of destination cars to more distant points than formerly, resulting in the reduction of approximately 20 per cent in cars employed. Expedited service for merchandise shipments has resulted in many instances of rearranged long-distance overhead loading, although the number of cars employed may have not been changed.

Supervision of daily operation, together with general and specific cooperative measures, as outlined above, made possible the results attained in volume of business handled and the rendering of service to meet essential needs.
Memoranda covering detail of items (a), (b), (c), and (d), by railroads, attached.

(A) UNIFICATION OF TERMINALS AND STATIONS AND USE OF TRACKS—
NORFOLK & WESTERN RAILROAD.

1. Suffolk, Va.—Joint inspection of cars interchanged arranged between the Norfolk Southern, Seaboard Air Line, Atlantic Coast Line, Virginian, Southern, and Norfolk & Western Railroads; also arrangement effected whereby Norfolk Southern Railroad will take over care of Norfolk & Western yard engine. The latter arrangement enables Norfolk & Western Railroad to dispense with hostler and eliminates necessity for sending this engine to Lambert Point for boiler washing, repairs, etc.

Estimated annual saving, Norfolk & Western Railroad account $3,250

2. Petersburg, Va.—Joint inspection of cars interchanged arranged between Seaboard Air Line Railroad and Norfolk & Western Railroad, enabling Norfolk & Western Railroad to release one man and effect saving of $2,100 per annum.

Arrangement effected whereby Norfolk & Western Railroad will turn engines of Atlantic Coast Line Railroad and which eliminated necessity of Atlantic Coast Line Railroad having to run their trains to Washington Street, and their engines from Washington Street to turntable to be turned and returned with trains to Appomattox Street Station, all of which consumed approximately one hour per engine. Estimated number of engines to be handled per annum, 1,887.

Estimated annual saving to Atlantic Coast Line Railroad $4,300

Arrangement effected whereby Atlantic Coast Line Railroad engines and train crews in charge of troop trains arriving at Petersburg, Va., used to complete movement from Petersburg to Camp Lee and return. Saving in wages amounts to approximately $3 per train for each train so handled; this based on total of 50 trains that have been handled in this way. On account of cessation of war making it impossible to estimate future movement of troop trains between Petersburg and Camp Lee, no figures as to saving beyond that already accomplished are included in summary.

Estimated annual saving to Norfolk & Western Railroad $2,340

Estimated annual saving to Atlantic Coast Line (not included in summary) $4,300

3. Lynchburg, Va.—Arrangement effected whereby Norfolk & Western Railroad shop facilities utilized to care for Southern Railroad yard engines, and Norfolk & Western Railroad performs all necessary repairs, boiler washing, etc., thereby eliminating necessity of Southern Railroad running their engines from Lynchburg to Monroe, Va. This effects a saving of 1,920 engine miles, also saving
in coal consumption, etc., which it is estimated will amount to approximately $2,000 per annum.

Above-mentioned saving not included in Norfolk & Western summary because saving accrued to Southern Region.

4. Madison, N. C.—Southern Railroad and Norfolk & Western Railroad passenger and freight business consolidated and put under supervision of Norfolk & Western Railroad. This results in saving in salaries and eliminates expense of heating and lighting Southern Railroad station.

Estimated annual saving, Norfolk & Western Railroad account........ $240

5. Walnut Cove, N. C.—Southern Railroad and Norfolk & Western Railroad passenger and freight business consolidated and put under supervision of Norfolk & Western Railroad. This results in saving in salaries and eliminates expense of heating and lighting the Southern Railroad station; also the traveling public benefited by doing away with necessity for transfer of baggage from one station to the other.

Estimated annual saving, Norfolk & Western Railroad account........ $270

6. Buena Vista, Va.—Chesapeake & Ohio Railroad and Norfolk & Western Railroad passenger and freight business consolidated and put under supervision of Norfolk & Western Railroad. To accomplish this it was necessary to put in a short connection track costing approximately $3,250.

This unification will result in saving of approximately $2,138.40 per annum in salaries, and eliminates expense of heating and lighting Chesapeake & Ohio Railroad station—approximately $120 per annum. Also the convenience of the public is served and there is noticeable increased efficiency, especially in the switching service.

Estimated annual saving, Norfolk & Western and Chesapeake & Ohio ........................................... $2,258.40

7. Basic, Va.—Chesapeake & Ohio Railroad and Norfolk & Western Railroad freight agencies and freight-house facilities consolidated, and put under supervision of the Norfolk & Western Railroad. This unification will result in saving of approximately $3,240 per annum in salaries, and eliminates expense of heating and lighting Chesapeake & Ohio Railroad station—estimated at $75 per annum. Also considerable less-than-carload freight formerly handled twice will be interchanged and go forward with saving of one day’s delay.

Unification of inspection and repairs to cars, and watching and coaling engines. Saving in wages of $1,729 per annum.

Estimated annual saving, Norfolk & Western and Chesapeake & Ohio..... $5,044

8. Winston-Salem, N. C.—Southern Railway, Winston-Salem Southbound Railway, and Norfolk & Western Railway freight business, freight stations and agencies, and terminal yards unified, and put
under supervision of Southern Railway. It is estimated that this unification will save approximately $48,000 per annum for the interested roads as a total. The handling of cars, inbound and outbound, and in interchange between the interested roads has improved about 50 per cent over the old arrangement.

Southern Railway freight station is utilized as receiving station for all less than carload freight and Norfolk & Western Railway freight station utilized as forwarding station for all outbound less than carload freight; many patrons have expressed satisfaction at the greater convenience.

Southern Railway and Norfolk & Western Railway mechanical forces and facilities have also been unified at this point, with estimated annual saving to interested lines of approximately $6,000 per annum.

Estimated annual saving, as above, Norfolk & Western Railway account ........................................ $22,800

9. Hagerstown, Md.—In lieu of additional facilities for handling of freight through this point, proposal has been made and is now being considered by roads of the Allegheny Region, to construct a new cut-off line from Williamsport, Md., on the Potomac River, passing about 6 miles west of Hagerstown, connecting with the Cumberland Valley Railroad at a point near the Maryland-Pennsylvania State line; and when done to construct a joint yard near Williamsport, where all freight would be interchanged among the Baltimore & Ohio, Cumberland Valley, Western Maryland, and Norfolk & Western Railroads. Pending this development a temporary yard was constructed by the Norfolk & Western Railway near Shomo, Md., and which is being used jointly by the Western Maryland, Cumberland Valley, and Norfolk & Western.

No saving Norfolk & Western Railway account under present plan. If proposed plan carried out, there will be saving on account of charge to capital account as compared with expense of providing additional facilities at Hagerstown.

10. Bristol, Va.—Southern Railway, Knoxville division, Southern Railway, Appalachia division, and Norfolk & Western Railway freight business and station facilities unified and put under supervision of Norfolk & Western Railway. All freight business at this point is now handled by one organization in Norfolk & Western Railway freight station. The total annual saving for all roads at interest on account of reduction in salaries, elimination of transfer between stations, and elimination expense of heating and lighting Southern Railway, Appalachia division freight station, estimated to be $14,670. Also transit of local and through freight shipments is accelerated, and convenience of public is served by enabling them to deliver and receive all freight through the one station. Engine
house, yard, and passenger station facilities at this point have been used in common for number of years.

Estimated annual saving, Norfolk & Western Railway account. $5,358

11. Roanoke, Va.—Arrangement effected consolidating freight business of Virginian and Norfolk & Western Railway and handling in Norfolk & Western Railway freight station. This is not expected to result in any money saving. It is, however, a most convenient arrangement for the public, for the reason that the Norfolk & Western Railway freight station is located within easy access to a large majority of industries and wholesale center, etc., while Virginian Railway station is located on opposite side of city about 1 mile distant from business center. Patrons of the two roads are pleased with the arrangement.

Terminal facilities of Virginian Railway and Norfolk & Western Railway have been placed under jurisdiction of recently appointed superintendent of terminals as to operation. Impracticable to estimate whether it will be possible to accomplish any money saving on this account. Yard and engine houses of the two roads are widely separated.

12. Kenova, W. Va.—Proposed consolidation of freight-house facilities of Norfolk & Western Railway and Baltimore & Ohio Railroad held in abeyance pending decision of Baltimore & Ohio Railroad as to withdrawal of that line from Kenova. Chesapeake & Ohio Railway and Norfolk & Western Railway passenger and freight business at this point has been conducted in joint stations for many years; also the passenger station has long been used by the Baltimore & Ohio Railroad.

13. Ironton, Ohio.—Joint car inspection arranged between Detroit, Toledo & Ironton Railway and Norfolk & Western Railway. Total estimated saving $2,100 per annum. After careful consideration it was determined nothing could be accomplished by unification of Detroit, Toledo & Ironton and Norfolk & Western freight, passenger, and yard facilities.

Estimated annual saving, Norfolk & Western Railway account. $1,050

14. Ashland, Ky.—Arrangement effected whereby Norfolk & Western Railway withdrew from Ashland, Ky. All traffic formerly handled to and from this point by Norfolk & Western river barge from Coal Grove, Ohio, is now handled by Chesapeake & Ohio Railway—that moving over Norfolk & Western Railway being interchanged by rail with Chesapeake & Ohio at Kenova, W. Va. The saving in expenses at Ashland approximates $13,060 per annum, and elimination of river barge service released five men and one yard engine as well as barge and saves approximately $36,500 per annum.

Estimated annual saving, Norfolk & Western Railway account. $49,560
15. Portsmouth, Ohio.—Arrangement effected whereby the Norfolk & Western Railway handles all freight and passenger business and engine-house and yard work of the Baltimore & Ohio Railroad. The consolidation of stations provided room for clerks formerly occupying leased office space, eliminating rental charge of $84 per annum and reduced expenses for telephone service, electric lights, etc.

Also this consolidation eliminates movement of approximately 15 trains daily over 15 street crossings and 2 railroad crossings and eliminates interference with movement of approximately 75 other trains and engines per day. Interchange of business is conducted with much greater dispatch than formerly.

Estimated annual saving account roads at interest $17,246, which takes into consideration car days saved in connection with more efficient interchange.

Estimated saving Norfolk & Western Railway account $9,264

16. Chillicothe, Ohio.—Joint car inspection arranged between Norfolk & Western Railway and Baltimore & Ohio Railroad, with estimated annual saving of $6,400.

Estimated annual saving Norfolk & Western Railway account $4,200

17. Circleville, Ohio.—Joint car inspection arranged between Norfolk & Western Railway and Pennsylvania Lines West, with estimated annual saving of $2,100.

Estimated annual saving Norfolk & Western Railway account $1,050

18. Valley Crossing, Ohio.—Joint car inspection arranged between Norfolk & Western Railroad and Hocking Valley Railroad, with estimated annual saving of $7,500.

Estimated annual saving Norfolk & Western Railroad account $3,750

19. Hillsboro, Ohio.—Freight and passenger business of Norfolk & Western Railroad and Baltimore & Ohio Railroad consolidated and put under supervision of Baltimore & Ohio Railroad, business being handled in Baltimore & Ohio Railroad station. This estimated to result in saving to lines at interest of $2,560 per annum.

Estimated saving Norfolk & Western Railroad account $1,280

20. Clare, Ohio.—Joint car inspection arranged between Norfolk & Western Railroad and Pittsburgh, Cincinnati, Chicago & St. Louis Railroad, with estimated annual saving of $2,100.

Estimated annual saving Norfolk & Western Railroad account $1,050

21. Front Royal, Va.—Norfolk & Western Railroad uptown warehouse closed on account of Southern Railroad freight house being of sufficient capacity to handle all business at this point. This is estimated to result in annual saving of $1,124 in salaries, $180 rental, and $1,200 in drayage costs.

Estimated annual saving Norfolk & Western Railroad account $2,504

22. Joint use of tracks—Norfolk & Western Railroad and Virginian Railroad.—Arrangement effected whereby Norfolk & Western
Railroad eastbound (loaded) through freight trains are run over Virginian Railroad tracks from Roanoke to Abilene, Va., 100 miles, where returned to Norfolk & Western rails and continued through to division terminal at Crewe, Va.; also for Virginian Railroad westbound (empty) through freight trains to move over Norfolk & Western from Abilene to Roanoke, Va. This arrangement avoids heavy grade of Norfolk & Western Railroad over Blue Ridge Mountain (summit 14 miles east of Roanoke, Va.) in the handling of heavy tonnage eastbound coal trains of the Norfolk & Western Railroad. As result of the arrangement it is expected to release for other service 22 Norfolk & Western Railroad locomotives of total tractive power equivalent to about 10 Mallet locomotives of United States Railroad Administration 2-8-8-2 type, and estimate annual saving to Norfolk & Western in cost of handling this traffic approximates $1,195,000, based on present volume of business. From this estimate of saving to Norfolk & Western Railroad it is necessary to deduct $137,238 account additional expenses necessary to be incurred by the Virginian Railroad.

Estimated annual net saving Pocahontas Region account. $1,057,762.00
Total estimated annual saving Pocahontas regional roads, for all items shown on sheets headed “Norfolk & Western Railroad.” 1,168,066.84

(A) UNIFICATION OF TERMINALS AND STATIONS AND USE OF TRACKS—CHESAPEAKE & OHIO RAILROAD.

1. Charlottesville, Va.—Southern Railroad and Chesapeake & Ohio freight-station work consolidated and put under supervision of Chesapeake & Ohio Railroad.

Estimated annual saving Chesapeake & Ohio Railroad account. $1,287.60

2. Charleston, W. Va.—Joint car inspection arranged between the Kanawha & Michigan and Chesapeake & Ohio Railroads; also annual saving of $10,440 estimated to result from better arrangement made for interchange of freight between these roads.

Estimated annual saving Chesapeake & Ohio Railroad account. $11,263.20

Also at this point it is proposed to arrange for handling of all Kanawha & Michigan Railroad and Chesapeake & Ohio Railroad locomotives at engine house now being erected by the Coal & Coke Railroad. Until new facilities have been completed consolidation of locomotive roundhouse work can not be arranged.

3. Huntington, W. Va.—Joint car inspection arranged between the Baltimore & Ohio Railroad and Chesapeake & Ohio Railroad.

Estimated annual saving Chesapeake & Ohio Railroad account. $2,227.20

At this point general unification of Baltimore & Ohio Railroad and Chesapeake & Ohio Railroad facilities is being considered. A considerable amount of money will have to be expended to accom-
plish this if finally decided upon, and just what saving would result
not definitely developed.
4. Kenova, W. Va.—Joint car inspection arranged between Nor-
folk & Western Railroad and Chesapeake & Ohio Railroad.
Estimated annual saving Chesapeake & Ohio Railroad and Norfolk &
Western Railroad account------------------------------------- $2,227
5. Ashland, Ky.—Chesapeake & Ohio Railroad and Ashland Coal &
Iron Railroad yards unified, and joint inspection of cars inter-
changed between these roads arranged.
Estimated annual saving Chesapeake & Ohio Railroad and Ashland
Coal & Iron Railroad account------------------------------------- $16,455
6. Lexington, Ky.—Joint car inspection arranged between L. & N.
Railroad and Chesapeake & Ohio Railroad; also ticket and freight
offices consolidated with total estimated annual saving of $11,070.
Unification of inspection and repairs to cars and engines arranged
between Southern Railroad and Chesapeake & Ohio Railroad, esti-
mated to result in annual saving of $1,816. Also at this point ar-
rangement effected between Louisville & Nashville Railroad and
Chesapeake & Ohio Railway, whereby all switching in one part of
yard is performed by Louisville & Nashville Railroad, and switch-
ing of all other tracks performed by Chesapeake & Ohio Railroad,
eliminating duplicate service and estimated to result in annual saving
of $7,200.
Estimated annual saving Chesapeake & Ohio Railroad account------- $16,448
7. Cincinnati, Ohio.—Terminal facilities of all lines placed under
jurisdiction of terminal manager reporting to regional director of
Eastern Region. Chesapeake & Ohio Railroad enabled to release one
switch engine from yard service.
Estimated annual saving Chesapeake & Ohio Railroad account------- $12,000
8. Richmond, Va.—Joint inspection of cars interchanged arranged
between Seacoast Air Line Railroad and Chesapeake & Ohio Rail-
road.
Estimated annual saving Chesapeake & Ohio Railroad account------- $2,673
9. Ironton, Ohio.—Chesapeake & Ohio Railroad closed freight sta-
tion and discontinued service to this point, business being turned over
to Norfolk & Western Railroad. Norfolk & Western Railroad freight
business at Ashland, Ky., turned over to Chesapeake & Ohio Rail-
road.
Estimated annual saving Chesapeake & Ohio Railroad account------- $5,237
10. Basic, Va.—(See sheet headed “Norfolk & Western Railroad.”)
11. Buena Vista, Va.—(See sheet headed “Norfolk & Western
Railroad.”)
Total estimated annual saving Pocahontas regional account shown
on sheet headed “Chesapeake & Ohio Railroad”------------------- $69,818
(A) UNIFICATION OF TERMINALS AND USE OF TRACKS—VIRGINIAN RAILROAD.

1. Norfolk, Va.—Freight station consolidation. (See sheet headed "Hampton Roads terminals.")

2. Roanoke, Va.—Freight station consolidation. (See sheet headed "Norfolk & Western Railroad.")

3. Joint use of tracks—Virginian Railroad and Norfolk & Western Railroad.—(See sheet headed "Norfolk & Western Railroad.")

(A) UNIFICATION OF TERMINALS AND STATIONS AND USE OF TRACKS—HAMPTON ROADS TERMINALS.

1. Unification of Atlantic Coast Line, Seaboard Air Line Railroad, and Southern Railroad stations at Norfolk, Va., and Southgate Terminal receiving station at Norfolk, Va., effected with reduction in clerical and labor forces, effective October 1, 1918.

   Estimated annual saving Hampton Roads terminals account........... $25,698.36

2. Unification of Atlantic Coast Line Railroad and Southern Railroad terminals at Pinners Point, Va., effected October 1, 1918. Estimated annual saving account reduction in clerical and labor forces, $15,240; and account reduction in outside tug hire, $6,000.

   Estimated annual saving Hampton Roads terminals account........... $21,240

3. Unification of Atlantic Coast Line Railroad and Southern Railroad yards at Pinners Point, Va., effected September 1, 1918. Estimated annual saving on account of reduction in cost of handling cars (average number handled per month 33,871) from 84.9 cents to 59.7 cents, $102,425.90; and saving on account of furnishing electricity from Southern Railroad power plant to Atlantic Coast Line Railroad yard tower, which was formerly purchased from outside source, $156. Also unification of Atlantic Coast Line Railroad and Southern Railroad mechanical departments at this point effective November 1, 1918, resulted in reduction in working hours of car inspectors and shop forces, estimated to produce annual saving of $32,400.

   Estimated annual saving Hampton Roads terminals account......... $134,981.90

4. Norfolk Southern Railroad and Virginian Railroad freight station work consolidated and now handled in Norfolk Southern Railroad station, effective August 20, 1918. This estimated to result in saving account reduction in labor and clerical forces of $15,156 annually; account reduction in transfer charges of $2,314 annually; also Virginian Railroad freight station leased to American Railway Express Co. at rate of $4,060 per annum.

   Estimated annual saving Hampton Roads terminals account....... $21,530.36

5. Atlantic Coast Line Railroad, Chesapeake & Ohio Railroad, New York, Philadelphia & Norfolk Railroad, and Southern Railroad freight agencies at Portsmouth, Va., consolidated and placed
under supervision of Seaboard Air Line Railroad. This unification estimated to result in saving account reduction in clerical and labor forces of $6,231.12 per annum; account reduction in rent, $1,710 per annum; and account reduction in heating and lighting expense of $300 per annum.

Estimated annual saving Hampton Roads terminals account. $8,241.12

6. Chesapeake & Ohio Railroad and New York, Philadelphia & Norfolk Railroad yards at Norfolk, Va., unified effective October 1, 1918. Formerly freight arriving Norfolk over New York, Philadelphia & Norfolk was unloaded by that line into warehouse for delivery to consignee. Under unification plan such freight is delivered to consignees from Chesapeake & Ohio Railroad yard.

Estimated annual saving Hampton Roads terminals account. $22,326.31

7. Atlantic Coast Line Railroad and Southern Railroad passenger stations at York Street, Norfolk, Va., will be unified effective January 1, 1919. This will release from passenger service one tug and barge.

Estimated annual saving Hampton Roads terminals account. $23,700.00

Total estimated annual saving Pocahontas Region, Hampton Roads terminals account, amounts to. $257,718.05

(b) ELIMINATION OF PASSENGER TRAIN SERVICE—POCAHONTAS REGION.

1. Ashland Coal & Iron Railroad.—One passenger train formerly operated between Ashland and Denton, Ky., discontinued.

Estimated annual saving. $23,400

2. Chesapeake & Ohio Railroad.—On account of heavy increase in passenger train traffic 745 train miles were added to schedule during the year 1918; 171.2 miles were eliminated; making a net addition of 573.8 passenger train miles daily.

3. Norfolk & Western Railroad.—In the month of January, 1918, a total of 1,300 passenger train miles was eliminated from schedules. On account of very heavy increase in passenger train traffic, however, many trains were operated in two sections all along during the year, and on December 8, additional passenger train miles, totaling 1,600 miles, were added to schedules. The net addition to the schedule, therefore, equals 300 passenger train miles per day.

4. Virginian Railroad.—No reduction was made in passenger train mileage operated by this line; only a very limited service was performed prior to period of Federal control.

(c) REDUCTION IN ORGANIZATIONS, AS CONTRASTED WITH THE SAME UNDER CORPORATE CONTROL.

1. Norfolk & Western Railroad.—Reduction in organization, executive and legal, with reduction in office rents and clerical forces, resulted in annual saving for administration of $201,773.16; credit account officers relieved from duty and transferred to regional pay
roll, $20,800; reduction in passenger and freight traffic organization resulted in annual saving for administration of $258,801.32, made up as follows:

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Total annual saving Norfolk & Western Railway account........ 476,374.48

2. Virginian Railroad.—Reduction in corporate official organization, after deducting expense of additional general officers necessary to put on, estimated to yield annual saving of $30,020; reduction in passenger and freight traffic organization by closing of "off-line" offices estimated to yield, $11,733.30; total annual saving Virginian Railroad account, $41,753.30.

3. Chesapeake & Ohio Railroad.—Reduction in organization, executive and legal, with reduction in office rents and clerical forces, resulted in annual saving for administration of $142,536; reduction in organization valuation and real estate departments resulted in annual saving in salaries of $42,777; reduction in passenger and freight traffic organization resulted in annual saving for administration of $210,610, made up as follows:

<table>
<thead>
<tr>
<th>Department</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freight department: Salaries and expenses</td>
<td>$170,321.00</td>
</tr>
<tr>
<td>Passenger department: Salaries</td>
<td>20,448.00</td>
</tr>
<tr>
<td>Rentals, account offices closed and consolidated</td>
<td>19,841.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>210,610.00</strong></td>
</tr>
</tbody>
</table>

Credit account officer relieved from duty and transferred to regional pay roll........ 4,800.00

Total annual saving Chesapeake & Ohio Railroad account........ 400,713.00

Total annual saving Chesapeake & Ohio Railroad, Norfolk & Western Railroad, and Virginian Railroad account........ 918,840.78

Total annual expenses regional organization, including salaries of officers and clerks, and traveling expenses........ 127,226.00

Total net annual saving Pocahontas regional account........ 791,614.78

(D) MISCELLANEOUS ECONOMIES.

Net annual saving resulting from reduction in advertising and abridgment of time-tables:

<table>
<thead>
<tr>
<th>Railroad</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chesapeake &amp; Ohio Railroad</td>
<td>$15,819.65</td>
</tr>
<tr>
<td>Norfolk &amp; Western Railroad</td>
<td>9,297.00</td>
</tr>
<tr>
<td>Virginian Railroad</td>
<td>1,211.39</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>26,328.04</strong></td>
</tr>
</tbody>
</table>

N. D. MAHER.

Regional Director.
UNITED STATES RAILROAD ADMINISTRATION

ANNUAL REPORT

OF THE

REGIONAL DIRECTOR FOR THE

EASTERN REGION

TO THE

DIRECTOR GENERAL OF RAILROADS

1918
EASTERN REGION.

NEW YORK, December 28, 1918.

Hon. W. G. McAdoo,
Director General of Railroads,
Washington, D. C.

DEAR SIR: Answering your questions of September 20, I give you below report covering the Eastern Region, of the results which have been attained through unification of operation; covering separately the following points:


(a) Unification of terminals and stations $4,172,000
(b) Elimination of passenger service 12,190,000
(c) Reductions in organization, as contrasted with the same under corporate control 3,677,000
(d) Miscellaneous economies, the result of causes other than above. 3,209,000
(e) Recapitulation of cooperative action, the results of which are in the direction of efficiency but intangible as to economies.

Total 23,248,000

A marked change has taken place in the character of traffic handled, there having been a noticeable increase in eastbound traffic with a corresponding decrease in westbound, resulting in an increase in the westbound empty-car movement, the percentage of empty car miles to the total car miles for the 10 months showing an increase of 2.6 per cent as compared with the same period in 1917.

This increase in unbalanced traffic with the increase in empty-car movement has materially affected operating expenses and with the severe weather conditions early in the year, the increases in wages, high cost of materials and supplies, and requirements for expedited service for war traffic, has resulted in increasing the operating ratio, notwithstanding the increases in rates (the benefits from which had not begun to be felt until about the 1st of July, whereas the increases in expenses have been operative during the entire year), and the results obtained as herein recited through arrangements placed in effect for the purpose of promoting efficiency and economy in the movement of traffic.

1 Does not include Allegheny or Pocahontas Region roads part of the eastern territory prior to June 1. Includes Baltimore & Ohio and Pennsylvania Lines West to Dec. 1.

98817—10 (2)
Maintenance of way, maintenance of equipment, and transportation expenses have been largely affected by the abnormal prices of material and labor as influenced by war conditions.

The heaviest eastbound movement of the year was in June, the traffic falling off somewhat in July, August, and September. October showed a considerable increase and following the signing of the armistice there was a falling off during the last half of November and the first week of December. However, the second 10 days of December have shown a considerable increase, with “peak” days on which the movement has exceeded any previous day’s movement during the year.

On February 6, 1918, there were a total of 161,000 cars above normal for movement in the eastern territory; which was reduced to 76,000 on March 1; 50,000 on April 1; 41,000 on May 1; and to practically normal on June 1, since which time all traffic has been moved currently, with the exception of local accumulations on individual lines, which have been promptly disposed of through diversions and rerouting and the concentration of motive power in the congested districts.

In general, it may be stated that railroad operations throughout the year have been conducted under most disadvantageous circumstances, with a heavy volume of traffic, due to the war demands; the severe weather of January and February; labor shortages and a shortage of motive power, due to failure of the roads to receive locomotives ordered in 1916 and 1917 for use during the winter, the necessity for which was anticipated and orders placed with builders, but which it was impossible to secure delivery of, owing to the priority which it was necessary for the Government to exercise in building locomotives for service abroad. War industries and the drafts crippled the forces in all departments throughout the continuance of the war, and operations were handicapped on account of the necessity of employing inexperienced and inefficient help. The serious labor situation was accentuated by the widespread epidemic of Spanish influenza during the late summer and autumn.

During January and the early part of February the weather conditions in the eastern territory were the most severe ever recorded. With abnormally low temperatures, ranging from 5° to 30° below zero, accompanied by high winds, reaching a velocity of 70 miles per hour, blizzards of snow and sleet following one another with such frequency that recovery from one was not possible before another was upon us, with yards buried deep in snow and ice, main tracks blocked, passenger trains abandoned and freight traffic practically paralyzed, the railroad forces struggled to keep going the flow of food, munitions, and fuel so vitally essential to the successful conduct of the war and to the communities in the eastern territory dependent thereon.
Men had their hands, feet, and faces frozen digging out trains stalled on the line or endeavoring to get trains over the road; office, shop, and other forces turned out voluntarily to help shovel snow and ice from yards and switches, and officers and employees remained on duty for long periods under the most trying conditions without question, reflecting a spirit of self-sacrifice in the common cause and a determination to contribute as fully as possible in bringing the war to its successful conclusion. There were many anxious hours when it appeared that an indefinite freezing up and suspension of operation would be the outcome, but with each recurring storm the problem of keeping the through lines open was immediately attacked and while at times it was necessary temporarily to abandon all train operation, the essential food, fuel, and munitions were moved in the necessary quantities to supply domestic requirements as well as to cargo and bunker the large number of steamships which were carrying our Army overseas and supply them and our allies with the things necessary for carrying on the war.

Referring seriatim to your questions on which you wish specific information:

(A) UNIFICATION OF TERMINALS AND STATIONS.

Wherever economies in operation and maintenance would result, consolidations of the operations and facilities of the railroads at common points have been effected at stations, terminals, yards, engine houses, and inspection points, resulting in an annual saving of approximately $4,172,000. At other common points, consolidations of facilities had been made prior to the inauguration of Federal control or the study made has failed to develop that a saving could be accomplished with due regard to the convenience and proper service to the public.

(B) PASSENGER SERVICE.

Passenger train schedules on all roads had been analyzed prior to the first of the year and reductions made wherever possible to eliminate unnecessary or duplicate service. A further reduction was made in the schedules subsequent to the inauguration of Federal control, for the purpose of curtailing service and equipment wherever practicable under the stress of the war emergency. These reductions have resulted in a decrease in the year 1918, as compared with 1917, of 16,253,914 passenger train miles, resulting in a saving in expenses for wages, fuel, and repairs amounting to approximately $12,190,000.

Pullman car miles on the Eastern Region roads for the year (December estimated) show a decrease as compared with the previous year of 41,329,702 miles.

Passengers carried one mile show an increase of 403,810,471, or 4.7 per cent.
In addition to the regular passenger travel, a large troop movement had to be accommodated, owing to the fact that the bulk of the overseas forces embarked from ports served by roads in this region. During the year there were 7,567 troop trains handled, a total of approximately 2,000,000 train miles, and carrying 3,308,496 officers and men; in addition to which the floating equipment of the roads in New York Harbor was largely used for transporting troops between New York and New Jersey and Long Island and from shore to the transports; a total of 1,885,000 men having been so carried.

(c) REDUCTION IN ORGANIZATION AS CONTRASTED WITH THE SAME UNDER CORPORATE CONTROL.

Due to the separation of the corporate from the operating organization and rearrangement of the Federal operating organization there has been a reduction in expense of $83,677,000.

Purchasing.

Through the eastern regional purchasing committee the purchasing agents of all roads are kept in close touch with conditions throughout the region, as to prices, market conditions, etc. Standardization of materials and blanks is progressing satisfactorily, and a uniform organization of the stores department has been effected.

With the ending of hostilities and the changed conditions of the material markets, efforts were immediately undertaken to decrease stocks of material on hand by cancellation or reduction of old orders where it can be done to advantage, also cutting down current requisitions and purchasing on the market instead of contracting ahead, in anticipation of a lowering of prices and return of delivery schedules to normal.

(d) MISCELLANEOUS ECONOMIES.

Rerouting of Traffic.—A thorough study has been made in respect to the rerouting of carload traffic and elimination of circuitous routes, at the same time preserving the terminal delivery designated by the shipper. The figures available indicate that approximately 100,000 cars have been so diverted during the year, resulting in a saving of approximately 7,800,000 car miles, or an economy estimated at $470,000. This saving has been to a considerable extent offset, however, by the rerouting of traffic to avoid accumulations and congestions, increasing the length of haul of such traffic.

Less carload freight.—A comprehensive "shipping-day" campaign to improve and facilitate the handling of less carload freight by consolidation in solid cars without transfer, for movement direct from originating station to destination, is under way.

One thousand two hundred and thirty-two additional through cars have been scheduled weekly, and there will be a reduction in the total

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number of cars used, due to substituting "sailing days" instead of regular daily service to specific destinations and heavier loading per car.

It is estimated that on the basis of what has been thus far accomplished 1,780,000 tons of freight, formerly loaded on transfers, will be loaded through from origin to destination without transfer, resulting in an annual saving of approximately $700,000.

Increased loading per car.—The average load per car in the Eastern Region shows an increase for the first 10 months of 2.8 tons per car; as a result of which it is estimated on the business handled in the Eastern Region during the year there has been a saving of 787,000,000 car miles, with attendant economies in the use of equipment and operation.

Tons per train show an increase of 43 tons, or about 6 per cent.

Telegraph and telephone facilities.—Telegraph and telephone wires of all roads have been connected so as to form a general inter-communicating system, in connection with which, through the extension of the practice of superimposing "Morse" upon existing telephone circuits without additional cost, 3,200 miles of additional telegraph circuits have under this arrangement been made available, avoiding the expenditure of approximately $160,000 had new wire lines been built, and saving annual interest and maintenance charges of $24,000.

TRAFFIC.

Effective in July the freight and passenger associations, including the various bureaus, were discontinued and their functions assumed by the freight-traffic committee, the passenger-traffic committee, and their various subcommittees.

Freight committee.—The freight committee has in hand, among other things, the establishing of car-capacity loadings as the minimum in fixing new rates on low-class commodities, standardization of discriminating rate adjustments, and the publication of tariffs in consolidated and simplified form. The results of these various measures it is difficult to estimate at this time. However, the joint tariff bureau will, it is estimated, save to the Eastern Region roads approximately $1,000,000, as compared with the present method of publishing and distributing individual roads freight tariffs.

Passenger committee.—The revision and curtailment of passenger time-tables and folders and new methods of distributing same, together with the curtailment of general advertising, will result in an estimated saving per annum of $351,344.

Various.—Other specific economies, including consolidation of freight service, combining single-track roads into double-track operation, adoption of alternate day and reduction in local train service, etc., show savings per annum of $664,000.
(e) Recapitulation of Cooperative Action, the results of which are in the direction of efficiency, but intangible as to economies.

*Diversion of traffic.*—To relieve or avoid congested routes and terminals there have been diverted via open routes a total of approximately 75,000 cars.

*Pittsburgh gateway.*—Due to the large volume of traffic originating in the Pittsburgh territory for movement East via the Baltimore & Ohio and Pennsylvania Railroads, a new route was opened up via the Buffalo, Rochester & Pittsburgh Railroad from Newcastle, Pa., in connection with the New York Central and Philadelphia & Reading Railroad to take care of the excess traffic from the Baltimore & Ohio and the Pennsylvania Lines West. New routes were also opened up for handling Pennsylvania traffic via Buffalo in connection with the Lehigh Valley and Lackawanna for reaching the Pennsylvania and Baltimore & Ohio deliveries on the Jersey side and in New York, in order to use those port facilities to the greatest extent; also via Buffalo, in connection with the New York Central and Philadelphia & Reading to Philadelphia & Reading and Pennsylvania common points.

*Traffic routed through the Niagara frontier.*—The Chicago, Buffalo, and New York trunk lines are being used to a greater extent for through traffic, and the short lines operating through St. Louis, Peoria, Chicago, and intermediate junctions to Toledo, Detroit, and other Michigan points for the short-haul traffic. This plan also provides that business moving through the Buffalo gateway for New England points on the Boston & Maine and north thereof will move via Albany and Mechanicville gateways and avoid the Maybrook and Harlem River gateways, which will keep the freight out of the congested New York district; and that traffic from and through the State of Pennsylvania will move to a greater extent via the Delaware & Hudson through Albany and Mechanicville gateways.

*From the West and Chicago to Michigan points.*—Carload traffic from the West and Chicago proper to Michigan points is being diverted from the busier through lines, such as the Michigan Central and Grand Trunk to the Pere Marquette, with due regard to shorter hauls and prompt service.

*Diverting freight to Lake lines at Buffalo.*—From July 27 to the close of Lake navigation, all lines into Buffalo from the East have diverted a total of 68,947 tons of westbound freight to the Great Lakes transportation lines, in order to utilize the Lake route with a view of relieving the rail lines.

*Lake Michigan car ferries.*—With the cooperation of the Northwestern Region, the Lake Michigan car ferries have been used to keep eastbound traffic from the Northwest away from the Chicago
terminals, effecting a considerable saving in car miles, the various ferries—Pere Marquette, Ann Arbor, and Grand Trunk—having been consolidated and operated under one management. It was also arranged to forward via car ferries such westbound as could be properly routed that way, including empty cars moving to the Northwest for return loads of grain and flour.

Routing of coal to Canada via water.—To eliminate long rail haul of coal from the mines to Quebec, Canada, coal has been routed to Whitehall, N. Y., where it is transferred to boats and shipped to Quebec, via Lake Champlain, the Champlain Canal, and the St. Lawrence River.

Diversion and distribution of traffic.—To handle the question of diversions in the future there have been appointed at Chicago and Buffalo committees of traffic officers on which each interested road is represented for the purpose of regulating east and west bound traffic and distributing it evenly among the available open routes.

Special movement of empty open-top cars to take care of Lake ore traffic.—During the season of Lake navigation the New York Central and Erie hauled empty coal cars released in New England to the ore docks on the Great Lakes to the extent necessary to take care of ore loading in excess of cars released from Lake coal. The Nickel Plate assisted in this movement by hauling cars from Buffalo to Cleveland. This eliminated the cross haul of empty coal cars to a material extent. In former years it was customary for such roads as the Lehigh Valley, Pennsylvania, Bessener & Lake Erie, and Baltimore & Ohio to move empty coal cars north to the ore docks to protect ore loading.

HANDLING SPECIAL COMMODITIES IN SOLID TRAINS.

Export freight.—Arrangements were effected early in the year for the forwarding of solid trains (or solid lots when a full trainload was not available) of export freight, principally war supplies of food, grain, munitions, etc. Under this arrangement a total of 5,090 special export trains have been handled from western terminals, containing 124,198 cars of export freight, the cars being filled out with other freight to make full trainload as necessary.

Live stock, meat, poultry, and perishables.—Arrangements were inaugurated in June, with the concurrence and cooperation of the shippers, for assembling live stock, fresh meat, live and dressed poultry, and perishable freight in solid trains and forwarding from Chicago, St. Louis, Cincinnati, Buffalo, and other western points on specific days of the week, via roads best fitted to handle them; resulting in a reduction in the feeding requirements for live stock, and in the number of fast freight trains required to handle. The decrease from Chicago alone has been 11 trains per day, and the average cars per train of high class and perishable freight has increased from 23 to 36.
Grain, oil, and cotton.—Grain, oil, and cotton are being consolidated and forwarded in trainload lots from western points, resulting in a large saving in labor and switching, eliminating crosshauls, and facilitating movement. A total of 981 special oil trains have been run since June 1, containing a total of 23,034 cars.

Cranberries.—During the cranberry season the Cape Cod cranberry crop was hauled in train lots on Tuesdays and Fridays, saving considerable freight-train mileage.

Numerous arrangements were also made for the movement of coal and other traffic to avoid crosshauls, circuitous routes, heavy grades, etc., utilize to the best advantage light traffic routes, and relieve congested routes. The detail of these various arrangements is on file here. It is not included in this communication, owing to the number of such items and large amount of space that would be required to recite them in detail.

General.

Among the features of interest that may be mentioned in reviewing the operations of the year and which have not been touched upon in the foregoing, are:

(a) The close working relations established with the shipping representatives of the allied Governments and with the departments of the United States Government, and the cooperation received from these agencies, which facilitated in many ways the regulation and prompt handling of traffic.

(b) The Lake coal and ore movement was followed vigorously throughout the year, and the volume of shipments offering were handled currently, with the result that there was a total of 29,388,242 tons of coal dumped at Lake ports prior to the close of navigation on the Great Lakes, or 917,963 tons in excess of 1917. The ore movement from the Lake ports for the season totaled 33,726,380 tons, which was 368,000 tons less than 1917; 1,622,000 tons less than 1916, and 6,343,000 tons in excess of 1915. The coal program was completed on November 30 this year, as compared with December 12 last year, and the tonnage handled was the largest on record.

(c) To provide care for the grain movement from the West, arrangements were made in the early spring to move empty box cars in trainload lots via the most direct and economical routes to the grain territory west of the Mississippi River. On May 1 the lines in the Eastern Region were carrying 115 per cent ownership of box cars, which on August 1 was reduced to 104.8 per cent and is now less than 100 per cent. The interchange reports at Chicago show an increase of 122,773 empty cars delivered to connections at that point by Eastern Region roads during the year. This movement of empties west has facilitated the movement of grain eastbound during the last several months.
Grain-control committees have been established at Buffalo, Detroit, Cincinnati, Cleveland, Toledo, and Indianapolis to regulate the movement of wheat to those markets by permit system so as to avoid congestion and tying up of equipment.

(d) Arrangements at the port of New York for handling the great volume of export traffic required in the prosecution of the war have involved the use of the piers of all roads regardless of ownership; a coordination of the marine departments of the several roads under a marine director, which has resulted in unified operation of all railroad owned floating equipment in the harbor; the discontinuance of delivery of domestic lighterage freight to other than railway stations and piers; the regulation by permits of all traffic, both domestic and export, destined to New York; the direct loading of a large number of steamers alongside railroad piers, eliminating lighterage; and a heavier loading per car received at the port, due to the requirement of maximum loading as a condition of the issuance of permits, with the result that all export traffic for which shipping could be provided has been handled currently by the railroads and there has been a reduction in the total export freight on hand at North Atlantic ports from 44,320 cars at the beginning of the year to approximately 26,000 cars, or 41.3 per cent.

(e) Consolidated ticket offices.—Competitive solicitation of traffic was discontinued early in the year, off-line agencies abolished, and consolidated ticket offices established in the more important industrial centers. The service is reported uniformly satisfactory to the public and no complaints are coming to our attention as to the accommodations afforded.

(f) Passing reports, reconsignment, etc.—With the elimination of the off-line agencies complaints were received from shippers of perishable traffic of inability to obtain passing reports and information as to shipments. A “reconsigning and diversion bureau” was established at Chicago with branch offices at St. Louis, Detroit, Cleveland, Pittsburgh, Cincinnati, Boston, New York, and Buffalo, to furnish shippers forwarding and passing records and enable them to divert or reconsign shipments as market conditions necessitate. The plan is working successfully.

**LOCOMOTIVE SITUATION.**

<table>
<thead>
<tr>
<th>Description</th>
<th>Nov. 1</th>
<th>July 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passenger locomotives in service</td>
<td>3,285</td>
<td>2,538</td>
</tr>
<tr>
<td>Freight locomotives in service</td>
<td>7,061</td>
<td>5,711</td>
</tr>
<tr>
<td>Stored locomotives in serviceable condition</td>
<td>634</td>
<td>635</td>
</tr>
<tr>
<td>Loaned and in service of Allegheny Region, Dec.</td>
<td>78</td>
<td>78</td>
</tr>
</tbody>
</table>

Increase or decrease compared with 1917.

1 Not available.
LOCOMOTIVES LOANED EASTERN REGION ROADS IN 1918.

<table>
<thead>
<tr>
<th>Description</th>
<th>Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States War Department locomotives</td>
<td>35,191</td>
</tr>
<tr>
<td>Western and Southern roads locomotives</td>
<td>37,050</td>
</tr>
<tr>
<td>From other Eastern Region roads</td>
<td>26,220</td>
</tr>
<tr>
<td>Locomotives loaned by Eastern Region roads to roads in other regions</td>
<td>1,993</td>
</tr>
</tbody>
</table>

EASTERN REGION ROADS LOCOMOTIVES REPAIRED BY OTHER THAN OWNING ROAD IN 1918.

<table>
<thead>
<tr>
<th>Description</th>
<th>Number of Locomotives</th>
</tr>
</thead>
<tbody>
<tr>
<td>By manufacturers</td>
<td>76</td>
</tr>
<tr>
<td>By Western roads</td>
<td>176</td>
</tr>
<tr>
<td>By Southern roads</td>
<td>8</td>
</tr>
<tr>
<td>By Eastern Region roads</td>
<td>400</td>
</tr>
<tr>
<td>Total</td>
<td>600</td>
</tr>
</tbody>
</table>

NEW LOCOMOTIVES RECEIVED.

<table>
<thead>
<tr>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>On corporate orders placed prior to Jan. 1</td>
<td>532</td>
</tr>
<tr>
<td>United States Railroad Administration locomotives</td>
<td>334</td>
</tr>
<tr>
<td>Built by Pennsylvania Railroad for lines west</td>
<td>30</td>
</tr>
<tr>
<td>Total</td>
<td>896</td>
</tr>
</tbody>
</table>

Of which 96 were passenger, 602 freight (56 placed in reserve pools at Albany, Buffalo, and Cleveland), and 198 switch.

On November 30 there were 86,131 men employed in the locomotive departments, or 8,597 more than on the same date last year, an increase of 11 per cent.

FREIGHT-CAR SITUATION.

On November 30 Eastern Region roads ownership of freight cars was 720,000; cars in service were 748,304; percentage of bad-order cars to cars in service, 6.1 per cent.

Three thousand six hundred and nine bad-order cars requiring heavy repairs have been transferred to roads having excess facilities, repaired, and put in service.

On January 1, 1918, there were approximately 36,000 employees in the freight-car departments. On November 23 the number was 42,500.

Immediately following the signing of the armistice material changes were made in the overseas shipping program and we have been closely in touch with all interests, making prompt arrangements for the transportation to the seaboard of the things that are most needed abroad and cooperating in arranging storage at points near the port or in the interior of airplane lumber, empty projectiles or shells, barbed wire, motor trucks, and other material not now needed overseas.
The transportation situation generally is normal at the present time on all railroads in the Eastern Region, and traffic is being handled currently. A canvass of the business situation that has just been made indicates that there may be expected some decrease in traffic, due to the discontinuance of the war demands and buyers waiting for lower prices; with the probability that gross earnings will be somewhat lower for the first six months of the year than for the first six months of 1918, notwithstanding the increased rates.

In closing, I wish to particularly mention and commend the officers and employees of these railroads for their tireless efforts and extreme loyalty during a year of unusual circumstances and tense situations. By such were we able to accomplish what was done, and I take great pleasure in having this opportunity to mention their patriotism.

Very truly, yours,

A. H. Smith,
Regional Director.
The following chapter on the Capital Expenditures results of the Federalized Railroads from Director General McAdoo's forthcoming report to the President for the calendar year 1918 must be held for release in the afternoon papers of Tuesday, February 4, 1919.
CAPITAL EXPENDITURES.

The work of providing for necessary capital expenditures has been one of the most important facing the railroads under Federal control, because of the war necessities, because of the condition of the carriers when taken over, and because of the obligations resting upon the Government under the Federal control act. This work has been under the immediate direction of the Division of Capital Expenditures, with Judge Robert S. Lovett, former chairman of the board of directors of the Union Pacific, as director.

On February 2, 1918, all lines under Federal control were directed to prepare and send in budgets of improvements immediately required to increase capacity and efficiency and to promote safety in operations; and in the letter of instructions the following policy was prescribed:

In determining what additions and betterments, including equipment, and what road extensions should be treated as necessary, and what work already entered upon should be suspended, please be guided by the following general principles:

(a) From the financial standpoint it is highly important to avoid the necessity for raising any new capital which is not absolutely necessary for the protection and development of the required transportation facilities to meet the present and prospective needs of the country's business under war conditions. From the standpoint of the available supply of labor and material, it is likewise highly important that this supply shall not be absorbed except for the necessary purposes mentioned in the preceding sentence.

(b) Please also bear in mind that it may frequently happen that projects which might be regarded as highly meritorious and necessary when viewed from the separate standpoint of a particular company may not be equally meritorious or necessary under existing conditions, when the Government has possession and control of the railroads generally, and therefore when the facilities heretofore subject to the exclusive control of the separate companies are now available for common use whenever such common use will promote the movement of traffic.

The budgets submitted in response to this called for expenditures chargeable to capital account—that is, exclusive of large sums chargeable to maintenance—amounting in the aggregate to $1,329,000,000.
which, upon careful revision was reduced to $975,000,000. This amount has been increased from time to time by new and unforeseen requirements, and particularly by large orders for locomotives and freight cars, until the improvements definitely authorized to December 31, 1918, amounted to $1,278,814,998. Of this amount $573,150,159 is for additions and betterments; $658,893,761 for equipment, and $46,771,078 for construction of extensions, branches and other lines.

The expenditures thus authorized were for improvements classified as follows:

<table>
<thead>
<tr>
<th>Class of work</th>
<th>Improvements authorized to Dec. 31, 1918</th>
<th>Capital expenditures, January to Nov. 30, 1918</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADDITIONS AND BETTERMENTS.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Widening cuts and fills, etc.</td>
<td>$7,925,504</td>
<td>$1,231,494</td>
</tr>
<tr>
<td>2. Ballasting</td>
<td>10,310,279</td>
<td>4,588,293</td>
</tr>
<tr>
<td>3. Rails and other track material</td>
<td>19,313,764</td>
<td>4,574,573</td>
</tr>
<tr>
<td>4. Bridges, trestles, and culverts</td>
<td>22,373,659</td>
<td>22,584,798</td>
</tr>
<tr>
<td>5. Tunnel and subway improvements</td>
<td>4,131,430</td>
<td>1,014,839</td>
</tr>
<tr>
<td>6. Track elevations or depressions</td>
<td>10,923,067</td>
<td>8,249,003</td>
</tr>
<tr>
<td>7. Elimination of grade crossings</td>
<td>14,420,570</td>
<td>4,263,287</td>
</tr>
<tr>
<td>8. Grade crossings and crossing signals</td>
<td>1,609,204</td>
<td>972,406</td>
</tr>
<tr>
<td>9. Additional main tracks</td>
<td>67,034,670</td>
<td>28,978,838</td>
</tr>
<tr>
<td>10. Additional yard tracks, sidings, etc.</td>
<td>129,875,777</td>
<td>35,233,353</td>
</tr>
<tr>
<td>11. Changes of grade or alignment</td>
<td>9,124,875</td>
<td>3,931,528</td>
</tr>
<tr>
<td>12. Signals and interlocking plants</td>
<td>17,318,059</td>
<td>6,033,976</td>
</tr>
<tr>
<td>13. Telegraph and telephone lines</td>
<td>5,836,160</td>
<td>2,683,702</td>
</tr>
<tr>
<td>14. Roadway machinery and tools</td>
<td>2,106,300</td>
<td>1,222,105</td>
</tr>
<tr>
<td>15. Suction houses and other roadway buildings</td>
<td>2,319,340</td>
<td>2,283,438</td>
</tr>
<tr>
<td>16. Fences and snowsheds</td>
<td>2,246,339</td>
<td>945,336</td>
</tr>
<tr>
<td>17. Freight and passenger stations, etc.</td>
<td>49,228,709</td>
<td>17,633,886</td>
</tr>
<tr>
<td>18. Hotels and restaurants</td>
<td>936,110</td>
<td>906,813</td>
</tr>
<tr>
<td>19. Fuel stations and appurtenances</td>
<td>8,484,555</td>
<td>3,985,653</td>
</tr>
<tr>
<td>20. Water stations and appurtenances</td>
<td>12,386,140</td>
<td>5,976,649</td>
</tr>
<tr>
<td>21. Shop buildings, engine houses, etc.</td>
<td>56,356,521</td>
<td>28,536,220</td>
</tr>
<tr>
<td>22. Shop machinery and tools</td>
<td>22,281,352</td>
<td>7,841,307</td>
</tr>
<tr>
<td>23. Electric power plants, substations, etc.</td>
<td>22,673,463</td>
<td>6,444,355</td>
</tr>
<tr>
<td>24. Wharves and docks</td>
<td>5,943,264</td>
<td>1,692,916</td>
</tr>
<tr>
<td>25. Coal and ore wharves</td>
<td>5,557,514</td>
<td>3,928,755</td>
</tr>
<tr>
<td>26. Grain elevators and storage warehouses</td>
<td>2,704,566</td>
<td>1,525,414</td>
</tr>
<tr>
<td>27. Real estate</td>
<td>4,295,613</td>
<td>1,029,124</td>
</tr>
<tr>
<td>28. Assessments for public improvements</td>
<td>5,196,077</td>
<td>1,413,755</td>
</tr>
<tr>
<td>34. All other improvements</td>
<td>7,618,394</td>
<td>5,175,459</td>
</tr>
<tr>
<td>Total (excluding equipment)</td>
<td>573,150,159</td>
<td>242,260,135</td>
</tr>
</tbody>
</table>

EQUIPMENT.

<table>
<thead>
<tr>
<th>Class of work</th>
<th>Capital expenditures, Jan. to Nov. 30, 1918</th>
</tr>
</thead>
<tbody>
<tr>
<td>35. Locomotives (steam)</td>
<td>199,929,456</td>
</tr>
<tr>
<td>36. Locomotives (steam) ordered by Railroad Administration</td>
<td>79,641,175</td>
</tr>
<tr>
<td>37. Locomotives (other)</td>
<td>2,356,230</td>
</tr>
<tr>
<td>38. Passenger-train cars</td>
<td>97,399,329</td>
</tr>
<tr>
<td>39. Work equipment</td>
<td>230,400,000</td>
</tr>
<tr>
<td>40. Motor car and trailers</td>
<td>15,941,649</td>
</tr>
<tr>
<td>41. Floating equipment</td>
<td>7,870,182</td>
</tr>
<tr>
<td>42. Miscellaneous equipment</td>
<td>5,587,358</td>
</tr>
<tr>
<td>43. Improvements to existing equipment</td>
<td>1,823,065</td>
</tr>
<tr>
<td>Total equipment</td>
<td>658,893,761</td>
</tr>
<tr>
<td>Total, all work</td>
<td>1,278,814,998</td>
</tr>
</tbody>
</table>

In planning improvements chargeable to capital account other than for war purposes, the rule adopted was that the first consideration should be safety in operations; and secondly, increased capacity
where that was needed; and that any improvement not required for these purposes should be deferred until after the war unless exceptional circumstances should make it necessary earlier. Improvements designed to effect permanent economies have been left for the favoring times and conditions of peace, unless the economy was so great that substantially the entire cost could probably be saved during Federal control.

That effect of the foregoing policy is shown by the above statement, from which it appears that much the largest item was for additional yard tracks, sidings, etc. The second largest item was for shop buildings, engine houses, and appurtenances; and the third for additional main tracks; and by the large orders for equipment almost wholly for locomotives and freight cars.

In addition to the locomotives and freight cars under order by the railroad companies at the time the Government assumed control, additional orders were placed for 1,430 locomotives for 1918 delivery, at an estimated cost of $78,193,200, of which 743 have been delivered by the builders; and also an order for 100,000 freight cars for 1918 delivery at an estimated cost of $289,460,000, of which there has been completed and delivered to date 17,027 cars. An additional order for 600 locomotives for 1919 delivery has also been placed, involving an expenditure of approximately $37,842,268. At the time these orders were placed it was supposed that the war might last much longer than the year 1918. Practically all of this equipment has been assigned to those railroads whose need for additional power and equipment appeared to be the greatest.
UNITED STATES RAILROAD ADMINISTRATION

ANNUAL REPORT

OF THE

REGIONAL DIRECTOR FOR THE

SOUTHWESTERN REGION

TO THE

DIRECTOR GENERAL OF RAILROADS

1918

WASHINGTON
GOVERNMENT PRINTING OFFICE
1919
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1989
SOUTHWESTERN REGION.

St. Louis, Mo., December 30, 1918.

Hon. W. G. McAdoo,
Director General of Railroads,
Washington, D. C.

Dear Sir: In compliance with your recent request, I take pleasure in submitting a résumé of what has been accomplished in the Southwestern Region during the period of Federal control of railroads.

The features set forth hereunder are of first importance in that their accomplishment enables us to mention the savings which have resulted therefrom.

-UNIFICATION OF TERMINALS AND STATIONS.

One hundred and sixty-eight terminals (including shops, train yards, etc.) and stations have been unified, resulting in better service and an annual saving of approximately $1,434,000.

There is still under consideration a number of unifications which will be made if investigation develops the results to be obtained justify such action.

ENGINE-HOUSE AND CAR-REPAIR FACILITIES AND CAR INSPECTION.

The consolidation of engine-house and car-repair facilities (outside of large terminal points), by a general pooling arrangement, has been attained at 54 points, with greater efficiency of service.

Under Federal control, terminal car inspection at points of interchange has been divided into zones, with inspectors assigned to each zone under the general supervision of chief inspectors; arrangements made whereby the receiving lines accept inspection of the delivering lines, eliminating duplicate inspection and correspondingly reducing number of men employed.

The saving accomplished by reason thereof approximated $577,000 per annum.

JOINT INDUSTRY AND INTERCHANGE SWITCHING.

Joint industry and interchange switching, by establishment of zones and reciprocal arrangements among railroads, was attained at 47 points. Heretofore 109 roads switched the same industries, while under the present plan the switching is done by 54 roads, at a saving...
of approximately $228,000 per annum; in addition numerous locomotives were released for other service.

**Passenger-Train Conservation.**

War requirements demanded careful scrutiny of passenger-train service, as it was obvious that successful movement of Army and Navy forces to camps and thence overseas depended largely upon the conservation of passenger-train power and equipment. Incidental fuel conservation would, of course, materially aid essential war industries.

The Southwestern Region with its many cantonments and camps was called upon to meet unusual passenger-train conditions.

Competitive passenger trains were eliminated in some instances and consolidated in others; schedules of through trains were lengthened in other cases and local work added in order to eliminate local trains; some with extremely light earnings operated at a heavy loss, and others which had been incidental to freight competition were discontinued, at the same time what is regarded as reasonable service to the traveling public is maintained.

The total saving from January 1, 1918, in the principal items were as follows:

- Passenger-train service conserved, miles per annum: 4,411,244
- Passenger engines conserved: 57
- Passenger-car equipment conserved, cars: 203
- Fuel:
  - Tons per annum: 239,000
  - Gallons per annum: 2,680,000
- Annual reduction in expense, approximately $3,061,333.

Competition also forced upon some lines faster schedules than could be maintained, and Federal managers were directed to lengthen them under new schedules throughout the region, adopted November 17, in an attempt to give more regular performance, and effort was also made to provide for more assurance of gateway connections.

A practice was inaugurated to give the public advance notice of impending time-table changes 10 days before date of effect through bulletins posted and information available at every station, and publication in newspapers in businesslike standard forms of outline of the schedule.

**Elimination of Unnecessary Freight-Train Mileage.**

The reduction of freight-train mileage is governed largely by the business to be handled. However, with the discontinuance of solicitation, carload traffic naturally sought and followed the more direct routes between junction points.

Solicitation was, to a large extent, responsible for movement of freight via circuitous routes, frequently necessitating hauls via sev-
eral lines, while under existing conditions traffic is routed via shorter distances and single lines, thereby naturally effecting a saving in car miles, consequently reducing duplicate and other unnecessary service. This condition has made possible the elimination of regularly scheduled trains, and the establishment of alternate for daily service, the saving from which, while substantial, is intangible.

**FEDERAL VERSUS CORPORATE ORGANIZATION.**

A comparison of the officer forces involving salaries of $3,000 per annum or more shows that under corporate control 907 officers were employed at an aggregate salary of $4,923,000, while under Federal control the same administration is obtained by 758 officers at a cost of $3,769,000, or a reduction of 149 men and approximately $1,155,000 per annum.

**FREIGHT AND PASSENGER TRAFFIC OFFICES.**

Under Federal control, with competitive conditions eliminated, the saving in traffic department expense incident to closing of offices and reductions in force, amounted to approximately $2,600,000 per annum.

**CONSOLIDATED TICKET OFFICES.**

Consolidated ticket offices have been established at the following points:

- Dallas, Tex.
- Fort Worth, Tex.
- Houston, Tex.
- San Antonio, Tex.
- Waco, Tex.
- Shreveport, La.
- Little Rock, Ark.

Comparison with expense of individual city ticket offices during 1917 shows net saving of $71,000.

The service rendered at these offices is excellent and entirely satisfactory to the traveling public.

**ADVERTISING AND ABRIDGMENT OF TIME-TABLES.**

Advertising, for competitive reasons, was discontinued, and, in connection with abridgment of time-tables, has resulted in saving of $500,000 per annum.

Advertising has been continued to extent of keeping the public informed of changes in passenger-train service and any other matters on which they should be advised by the Railroad Administration.

**STOCKYARD AND LIVE-STOCK AGENCIES.**

Separate agencies and yards at four points have been consolidated into joint agencies under the supervision of one head or committee (with chairman) composed of the respective local representative of the railroads involved, resulting in a saving of approximately $1,500 per annum.
RECAPITULATION.

The following is a recapitulation of cooperative activities in the direction of efficiency, the results of which are intangible as to economies. Included, also, is the mention of general items which have had the unremitting attention of all officers and departments on the railroads in the region.

LABOR SHORTAGE.

An acute shortage of labor existed during the year in all branches of railroad service; maintenance of track, structures and equipment, transportation and office forces. This was due, principally, to the mobilization of the Army and Navy and of war industries.

During October, 1918, when weather conditions were most favorable, there was a shortage of approximately 12,000 men, or 7 per cent of our total organization. Of this shortage, 8,000 were track laborers, 900 skilled mechanics, 150 trainmen, and 120 clerks.

The shortage of men has not hurt us seriously, however. With the demobilization of the Army and curtailment of war-industry activities it is anticipated that normal conditions will very shortly be restored and our men will come back to us.

SPANISH INFLUENZA.

During the months of October, November, and December, 1918, railroad forces were materially reduced by the number of employees afflicted with Spanish influenza. The epidemic extended over the entire region and appears to have been at its worst about October 31, when approximately 18,000 employees, or 10½ per cent of the entire organization, were absent from duty on that account. From that date the number of cases gradually decreased until December 24, when 3,592 cases, or 2 per cent, were reported.

GENERAL TRANSPORTATION SITUATION.

A generally good transportation condition has prevailed since last spring, except occasionally several lines had temporary accumulations, principally on account of influenza handicap.

At this time last year our principal gateways North and East were seriously congested, and there was also considerable business held back on lines, which northern and eastern connections could not accept.

EMBARGOES.

Only embargo placed by this region is against Ranger and Burburnett, Tex., in newly developed oil fields, to which points freight had been shipped in greater quantity than could be unloaded currently.

Other general embargoes placed by Car Service Section against grain shipment to primary markets, except by special permit, and lumber for Camp Pike, Ark., have been in effect since September.
Recently temporary embargoes against hog shipments to various markets have been necessary to keep from congesting markets.

**Freight Train Car Supply.**

Generally throughout the year we have had sufficient car supply, and in some cases equipment was stored in preparation for heavy movements. Temporary shortages here and there were result of distribution, rather than actual shortage.

**Local Loading.**

Our records cover the five months July to November, 1918, inclusive, and show the following decreases compared with last year:

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Cars</th>
<th>Per cent.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grain and grain products</td>
<td>2,191</td>
<td>2</td>
</tr>
<tr>
<td>Live stock</td>
<td>10,104</td>
<td>11</td>
</tr>
<tr>
<td>Lumber and forest products</td>
<td>6,118</td>
<td>4</td>
</tr>
<tr>
<td>Ores</td>
<td>1,303</td>
<td>13</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>97,443</td>
<td>11</td>
</tr>
</tbody>
</table>

Coal and coke increased 17,175 cars, or 12 per cent.

Loading of lumber and forest products is expected to grow heavier from now on.

In grain—wheat and oats—record increases, which were offset, however, by decreases in corn and other grain, due to drought and other conditions.

Flour is now moving in volume.

**Train-Lot Movement of Freight.**

With a view to saving switching en route, congestion at large terminals, and to expedite movement, it is our practice to handle individual commodities in train lots of 20 cars or more. This arrangement is particularly applicable to export traffic or long-haul business.

Among the principal commodities handled in this manner were grain, cotton, linters for ammunition factories, billets, sulphur, Government lumber, fruits, vegetables, packing-house products, and oil.

**Rerouting of Carload Freight.**

Necessity for rerouting was not felt as keenly in this region as in more congested territory east of the Mississippi River.

With discontinuance of solicitation—which was largely responsible for movement via circuitous routes—carload traffic naturally sought and followed more direct routes between junction points.

However, routing instructions covering all principal commodities moving in this region have been issued on northbound carload business via practically all lines, and rerouting of southbound business is now receiving attention.
Much has already been accomplished in proper routing of freight through instructions to agents in advance of any regional routing scheme. For example, routing of lumber from territory reached by the Gulf, Colorado & Santa Fe Railroad was rearranged, effecting saving of approximately 2,660,000 car miles per annum.

Fully 90 per cent of all traffic originating in this region is covered by specific routing instructions.

**SAILING-DAY PLAN OF HANDLING L. C. L. FREIGHT.**

The sailing-day plan of handling l. c. l. freight—which class of traffic requires the service of substantially one-fifth of all box-car equipment—has received special attention.

This plan is in effect between cities having a population of 10,000 or more (of which there are 58 in this region). While statistics are not now available, substantial saving undoubtedly results from—

1. Moving l. c. l. traffic via given short routes on specified days.
2. Heavier loading of cars.
3. Diminished claim payments incident to minimized handling with less damage at transfer points.
4. Less cost in handling and trucking.
5. Reduction in number of cars required.
6. Saving in track room at large terminals.
7. Less switching service at origin and destination.
8. Fact that local freight trains are enabled to better observe schedules by having less number of cars peddling to way stations.

The plan providing for l. c. l. movement in like manner between these 58 larger cities and other common points, also between common points and small local stations, is well under way of accomplishment.

The "sailing-day plan" is proving satisfactory to consignees, particularly at small points, as it affords more regular and dependable service and requires less expense for drayage at destination. The same satisfaction, however, is not general among shippers and chambers of commerce, but we believe that as they become accustomed to the plan it will be popular with them.

**4 O’CLOCK CLOSING—FREIGHT HOUSES.**

Earlier closing of freight houses—4 p. m. instead of 4.30 p. m., as at present—is under consideration. If change is finally decided upon, the results would be—

1. Forwarding of freight the day it is received at freight houses.
2. Elimination of congestion.
3. Reduction in expense for rehandling of freight.
4. More regular departure of fast-freight trains from large terminals in the evening, saving terminal time.
5. Placing freight houses in better position to observe the basic eight-hour workday.
COAL LOADING.

For the five months July to November, 1918, inclusive, 10,094,000 tons bituminous coal were loaded, an increase of over 1,500,000 tons, or 18 per cent. Semianthracite loading totaled 124,000 tons, increase over 12,000, or 9 per cent.

Three hundred and thirteen thousand tons of lignite were loaded, an increase of 4,900, or 2 per cent.

The zone plan helped materially in affording ample coal-car supply at all times.

OIL—MID-CONTINENT FIELD.

Two hundred and eighty thousand two hundred and ninety-two tank cars of oil were loaded from the Mid-Continent Field during 11 months ended November 30, 1918, an increase over last year of 55,479 cars, or 24 per cent. Eighty per cent originated on lines in this region and generally was handled in train lots through to destination.

Empty tanks returning to oil fields were concentrated at large terminals and moved in train lots. Average miles per tank car per day increased from 26.19 in January to 58.4 in November, 1918, resulting in tank-car supply being increased 100 per cent.

Oil interests have estimated that refineries in Mid-Continent Field saved approximately $110,000 per month, attributable to the splendid transportation service.

LIVE STOCK.

The maintenance of live-stock train schedules has been closely supervised and a general improvement effected, notwithstanding the principal live-stock-market points in this region (Kansas City, St. Louis, and Fort Worth) have enjoyed very substantial increases in receipts, ranging from 7 per cent to 62 per cent monthly.

COTTON.

Cotton movement from compresses was substantially less than last year, due principally to market conditions and insufficient ocean tonnage to protect export. As a result the compresses quickly reached their limit, necessitating holding at country points more cotton than is generally held during the cotton season.

The detention to equipment awaiting unloading at cotton compresses, however, was practically eliminated this year through an arrangement whereby a thorough check was had on movement into, and the space left at each compress, permitting the shutting off of further movement when compresses were no longer able to take promptly.

Shippers have experienced very little, if any, delay in movement by failure to promptly furnish cars.
SULPHUR.

The production of sulphur at Louisiana and Texas points continued to increase during the war period. The maximum output was in October, 1918, when the average daily loading reached 135 cars.

This traffic was handled largely in solid trains and was so delivered to neighboring regions for movement, principally to eastern munition plants.

GRAIN STORAGE.

At the present time there are stored in the principal elevators located on lines in this region approximately 35,226,000 bushels of grain, representing 71 per cent of the working capacity of the elevators.

There has recently been a heavy movement of wheat from the Middle West to Texas ports and to New Orleans via our lines, and at present there are 6,800,000 bushels of grain stored in Gulf port elevators, which is about 69 per cent of their capacity.

TROOP MOVEMENT.

The troop movement was heavy until August, 1918, and taxed the principal lines of this region.

During August there were 342 special trains handled, making 149,494 train miles. Since that time the movement has been diminished to 103 trains in November, making 38,637 train miles.

It is not anticipated that the demobilization will require much special train service. It will be cared for largely by additional cars on regular trains.

EXPRESS SERVICE.

Effort is being made to give improved express service with view to saving mileage by distribution of cars on regular trains and consolidated loading.

During the holiday period a consolidated mail and express train (combining express heretofore competitive) resulted in most satisfactory service, as there was neither congestion nor delay.

COMPANY MATERIAL UNDER LOAD.

Notwithstanding the general shortage of labor and the influenza epidemic, roads in this region were successful in storing sufficient materials of all kinds (including coal) to carry them through the winter season, with a minimum number of cars held under load. The average detention to such loaded cars has not been excessive at any time.

COAL STORED.

During the summer months 952,000 tons of coal were stored to protect the winter requirements.
The consumption of this fuel commenced November 1, 1918, and it will be used uniformly with a view to exhausting the supply by March 1, 1919.

CONDITION OF LOCOMOTIVES.

The general condition of locomotives in this region is good; 84 per cent are available for service, and of the balance many are in or awaiting shops for light and running repairs.

CONDITION OF FREIGHT-CAR EQUIPMENT.

Roads in this region have at present 5,800 revenue freight cars in bad order (heavy and light), or 2.8 per cent of the total revenue equipment on line.

Special supervision has been given to careful handling of equipment in trains and yards, with view to elimination of rough usage and consequent damage; and substantial results have been reflected.

CONDITION OF PASSENGER TRAIN CAR EQUIPMENT.

Passenger train car equipment is in fair condition, considering its heavy usage for movement of troops, with little opportunity for shopping during the past year.

On December 1, 8 per cent of equipment was out of service, awaiting repairs.

As traffic conditions permit, cars will be put through shops and deferred maintenance recovered.

NEW LOCOMOTIVES.

In 1918 our lines received from builders the following new locomotives: Santa Fe, 26; Mikado, 31; mallet, 7; consolidation, 1; switch, 32; total, 97.

In addition, 26 other new locomotives were built for our lines, but are at present in operation on the Virginian, Pennsylvania, and Chesapeake & Ohio roads.

NEW FREIGHT AND PASSENGER TRAIN CARS.

In 1918 our lines received from contract shops on old orders the following cars: Tank, 300; gondolas, 125; diners, 10; baggage, 15; coach, 16; coach and baggage, 2; baggage and mail, 6.

In addition there were built in roads' own shops, 2 passenger-train cars and 800 freight-train cars.

LOCOMOTIVES LOANED AND BORROWED.

At present this region has no locomotives which belong to other regions.

Engines assigned to this region have at various times been loaned to other regions, but with exception of 10 new Frisco engines, which were sent direct to the Virginian Railroad by the builders in May,
1918, 15 new Missouri, Kansas & Texas engines, which were sent direct to the Chesapeake & Ohio of Indiana in September, 1918, and one Rock Island engine on the Pennsylvania. They have all been returned.

**FUEL CONSERVATION.**

Fuel conditions as experienced during winter of 1917-18 impressed everyone with the importance—from standpoint of supply and demand—of saving coal, and careful thought was given to practices of economy as well as anticipating requirements, with view to avoiding shortages this winter.

As illustrative of the campaign conducted, several of the more important economical practices are noted below:

1. Improvement of stationary boiler plants.
2. Covering live steam lines, with consequent saving in fuel and reduction in condensation losses.
3. Extension of use of exhaust steam for feed water heating, and heating offices and stations.
4. Use of scrap wood and shavings in power plants, where supply was available.
5. Extending and encouraging use of lignite coal, principally in Texas, for stationary plants and station heating, saving long haul on more expensive fuel.
6. Use of old ties and scrap bridge material, where feasible, as fuel for section houses, extra gangs, and bridge men, saving long haul and waste of fuel.
7. Stoppage of steam and air leaks in pipe lines around shops, repair tracks, and yards.
8. Use of the more improved roundhouses and shops for housing of locomotives at points where terminals have been unified.
9. Extension of use of natural gas at points adjacent to gas fields.

The use of fuel on locomotives and for other purposes is closely supervised by traveling firemen and fuel supervisors, and the cooperation of all concerned has undoubtedly saved a large quantity of fuel and correspondingly reduced operating expenses.

**PURCHASING AND STORES DEPARTMENTS.**

A purchasing agent, with jurisdiction over all lines of each Federal manager's group, also exercises supervision over the stores department.

The purchasing and stores departments have been uniformly organized and, under the direction of the regional supervisor of stores, economies will undoubtedly obtain through the transfer of materials from one road to another, as supply and demand necessitates.

**MATERIAL SUPPLY.**

The large demand upon manufacturers and transportation systems this year created a shortage of certain materials, but not to an extent as to interfere with railroad operations. This situation has changed
during the past month and deliveries are now easier. The reason slow delivery of materials by manufacturers did not interfere with railroad operation was that necessities were anticipated and large stocks were accumulated. A canvass is now being made of these stocks, with view to transferring from one road to another, or, if deemed advisable, from one region to another. Further, an examination is being made of all unfilled orders and contracts, with idea of cancellation, when advisable and possible.

Hardwood ties were particularly difficult to secure, and for maintenance purposes it became necessary to substitute softer woods, with application of tie-plates. The tie situation is improving and from now on the supply should be more abundant, attributable to increased prices authorized to stimulate production.

TELEGRAPH DEPARTMENT.

The telegraph departments have been uniformly reorganized by the appointment of a superintendent of telegraph, with jurisdiction over each Federal manager's group, and where the territory and conditions justified one or more assistant superintendents of telegraph have also been appointed.

A review of the situation showed that the best results were not being obtained from wire facilities. With this reorganization the standardization of service under direction of the regional superintendent of telegraph will prove more efficient and economical.

SAFETY ORGANIZATION.

With view to eliminating hazard of personal injury to employees as well as to the traveling public, safety organizations have been uniformly adopted on all lines.

On each Federal manager's territory there has been appointed a superintendent of safety, who has direct supervision over safety matters and cooperates with the regional supervisor of safety in making effective on all lines safety measures as they are developed on individual roads.

Each operating division has a safety committee comprising officers and employees representing each branch of the service. These committees meet periodically to report hazardous conditions which have come to their attention or which have been reported to them by other employees, and such action as seems proper is taken.

The safety work has been effective, and appreciable results, while intangible, are being obtained from its administration.

FIRE PREVENTION.

Elimination of fire hazards is receiving close attention, and for the purpose of obtaining uniformity and efficient results fire preven-
tion work has been organized so that each Federal manager’s territory is under the direct supervision of a general fire prevention inspector, who has as many subordinate inspectors as are required for frequent systematic inspections of the properties to correct existing fire hazards.

A uniform set of rules has been adopted by all our roads, outlining regulations which must be observed for the protection of all property against fire losses.

**CONSERVATION OF LIVE STOCK.**

An active campaign to reduce the number of live stock killed on railroad right of way has been prompted by four reasons:

1. Conservation of food supply.
2. The enormity of losses from this source.
3. The saving in operating expenses resultant from reducing number of stock killed.
4. The hope that at the proper time State-wide stock laws would be passed by our legislatures.

Railroad officers, employees, and stock owners have been interested in the campaign and substantial support in the work has been given by the State councils of defense and the Food Administration. In addition, cities and towns have manifested interest by passage of laws forbidding stock from running at large; also requiring observance of old ordinances already in existence. The work is well under way and the active campaign should produce substantial results.

**GENERAL ORDER NO. 28—INCREASED FREIGHT AND PASSENGER RATES.**

Generally speaking, the public has accepted this order as a war measure, without undue complaint.

Prompt steps have been taken to adjust any inequalities resulting from the general nature of the order. Some complaints have been received of the lack of uniformity in rules governing through rates built up of separate locals which have had specific advances, and a few outstanding cases are pending adjustment.

**SIMPLIFICATION OF FREIGHT AND PASSENGER TARIFFS.**

In publishing new rates, care is taken to restrict application to short and reasonably direct routes.

Special committees are working on tariff simplification and consolidation. Tariffs of individual lines are being reissued in substantial volume for purpose of simplification and elimination of “blanket supplements,” which have been, more or less, a source of annoyance to agents and shippers.
All carriers in western territory have been represented at a rate meeting in session in Chicago since August 21 last, for purpose of making complete revision of passenger fares in western territory. Local and interdivision passenger tariffs of the individual lines have been to a large extent refigured.

WOMEN TICKET SELLERS.

The draft of man power for military service necessitated consideration of employment of women in suitable railroad positions. Ticket selling was thought to be a pursuit in which they could be advantageously used, after taking a course of instruction.

This plan has not been in effect a sufficient time to determine results to be obtained. Thirty women were employed as ticket sellers in this region. The consensus of opinion is that the fatiguing nature of the work will not admit of women attaining the same degree of efficiency as men.

The necessity for using women in this and other railroad work will largely disappear with return of men from military service.

MAINTENANCE OF TRACK, BRIDGES, AND BUILDINGS.

Tracks, bridges, and other structures have been safely and adequately maintained, although, due to shortage of material and labor, some of the branch lines have not been maintained to the full standard which is desirable. The main lines of railroad, however, are in condition equal to that prevailing at close of calendar year 1917.

Buildings generally on all of the roads have been maintained to proper standard, and the usual program of repairs and painting has been to a large extent carried out. Practically all of the right-of-way on main lines, and for the most part on branch lines, has been trimmed, and fences and cattle guards maintained to a proper state of efficiency.

CROPS.

Following a summer of unprecedented drouth over most of the territory embraced by Missouri, Kansas, Oklahoma, and Texas there has been a complete reversal of conditions. Commencing late in September, rains began falling throughout this area, and the weather since has been ideal.

In Oklahoma and Texas late grain, sorghum, and feed crops, that promised a total loss in August, developed into good crops, and absence of frost until an unusually late date permitted their harvest with small loss.

Conditions generally for wheat sowing have been very favorable. Acreage sown is probably 20 per cent greater than ever before.
Continuous rains and warm weather brought wheat to a fine stand, furnishing excellent pasturage.

There was universal shortage of farm labor, but due to favorable weather conditions and use of tractors and other labor-saving machinery, the wheat crop went into the ground in good time. The abandoned acreage should be extremely light.

In extreme western Oklahoma and Texas wheat has not grown sufficiently to give any pasturage, but it is in excellent condition, and with good luck the crop will be unprecedented.

All things considered, the agricultural outlook is good. Inquiries for land are increasing in volume and many farms are changing hands at advanced prices.

Within the past week heavy snows have fallen throughout Kansas, Colorado, Oklahoma, and Texas, affording excellent protection of wheat and practically insuring good conditions during the winter; also making certain of soil moisture sufficient to start early spring crops.

Trusting that the foregoing review of our stewardship throughout the year meets with your approval, I am,

Very truly, yours,

B. F. Bush,
Regional Director.
CONFIDENTIAL
FOR RELEASE IN AFTERNOON PAPERS OF MONDAY, FEBRUARY 10, 1919

UNITED STATES RAILROAD ADMINISTRATION

ANNUAL REPORT
OF THE
REGIONAL DIRECTOR FOR THE NORTHWESTERN REGION
TO THE
DIRECTOR GENERAL OF RAILROADS

1918

WASHINGTON
GOVERNMENT PRINTING OFFICE
1919
Résumé of Activities, Northwestern Region, Year of 1918.

Hon. W. G. McAdoo,
Director General of Railroads,
Washington, D. C.

Chicago, Ill., December 20, 1918.

My dear Sir: As requested by you, there is inclosed a detailed report of the activities undertaken in this region since its inauguration. To avoid possibility of confusion, this report has been prepared to cover two periods:

(a) That covering the period during the existence of the entire Western Region, or until it was separated into three regions June 30.
(b) That period after June 30, to the close of the year.

The report above mentioned includes:

Statements.

1. Recapitulation statement first attached showing the estimated economies effected in connection with various activities, where it was possible to determine what the economies amounted to. Our estimate of these economies are on the conservative side.

2. Statement second attached gives reference to the location in the report of the details from which the recapitulation is compiled.

The following are my comments in connection with these various activities:

Operation.

1. Unification of terminals—Details, Section 1 of Parts II and III, Tables I, II, III, and VI.

Terminal managers were appointed at the more important traffic centers, and their work has been largely along the lines of coordinating the work of the various railroads interested in such terminals, resulting in the economies shown in the statements.

In only one of the large terminals have we discontinued the supervision of the owning railroads and placed the jurisdiction under one supervision, and that is at Seattle, Wash.

This is a very radical departure from all methods followed here-tofore in connection with such unifications, and involved a very considerable rearrangement to bring about the complete unification.

This plan has not been in existence long enough to determine as to its complete success in its present form, but is being worked out, and we believe will finally prove entirely satisfactory.

The unification of terminals also includes the unification and abandonment of some stations. Ninety passenger and 136 freight stations have been closed by reason of this action.
In connection with the unification of terminals, and particularly as applied to Chicago, one of the largest terminals in the country, we have put in effect a great many arrangements that not only result in economy, but efficiency in the movement of traffic, by using, to a greater extent than heretofore, the outer belt lines, namely, the Elgin, Joliet & Eastern, and the Indiana Harbor Belt Railroads.

This arrangement is working out very satisfactorily, and enables the better handling of the local business in the down-town districts.

We found a great many industries were served by two or more railroads; in some cases as many as 19 different railroads serving one plant or district, solely for competitive reasons, and with a very great waste. Wherever it has been possible or practicable to do so this has been eliminated and the switching at a single industry confined to one line; traffic or competitive reasons being, therefore, totally disregarded.

The report also includes a number of points where such action has not been taken for the reason that no increase in efficiency or economy in operation could be shown.

2. Sailing-day plan for movement of merchandise—Details, Section I of Part II, Table A.

The sailing-day plan for the movement of merchandise to specified points on designated days, as introduced in the Northwestern Region, has resulted in greater regularity and promptness in transportation service, as well as economy in the use of cars. At the present time practically every principal station in the region is included in the plan. Through cars have been inaugurated, excluding transfer of freight wherever possible from Illinois, Minnesota, Wisconsin, North and South Dakota, and Iowa, including cars for San Francisco, Seattle, Portland, and other coast points.

The operation of "pick-up" cars on certain days at division points has been inaugurated, and, on two of the railroads, resulted in a saving of 652 cars for the month of November.

The saving of cars in the entire region at present amounts to approximately 15,000 per month, an economy which is reflected in a larger available supply of equipment for other purposes.

At Chicago, the largest terminal in the region, with a large number of receiving and transfer stations, the development of this plan is under the immediate supervision of the terminal manager.

3. Reduction of passenger-train mileage—Details, Section I, Table IV of Parts II and III.

This has amounted to 23,280,400 miles per annum; estimated saving of $1 per train-mile.

In the Western Region this has largely been brought about by the elimination of duplicate service via various lines by the lengthening out of some of the through schedules, enabling through trains to perform local service, and thereby reduce the local train mileage.
It was attempted, prior to Government control, to bring this same thing about, but competitive reasons prevented carrying out the complete plans.

4. Reduction of freight-train mileage—Details, Section 1, Table V of Parts II and III.

This shows an economy of $2,270,552, and is made up entirely of duplicate service on two or more railroads in the same territory, and includes local as well as time freight service. The estimate is based upon $2 per train-mile.

5. Salary reductions, general office forces—Details, Part II, Section 3, Table VII.

This is principally made up by the transferring of salaries from the Railroad Administration to the corporation pay rolls, and represents a saving of $781,439.

TRAFFIC.

6. Traffic offices—Details, Part II, Section 4, Table I.

The closing of off-line passenger and freight offices and the rearrangement of their forces has resulted in a saving to the Railroad Administration of $1,744,355 per annum. This has possibly caused some inconvenience to the public, but through the methods adopted of requiring local railroads to be in position to furnish information heretofore furnished by off-line officers, while possibly not as complete in its form as yet as the off-line organization, in my opinion it will finally prove just as satisfactory as under the old method. It requires a considerable period to not only educate the local forces but to also acquaint shippers with the arrangement in effect for taking care of the former activities of off-line forces.

7. Consolidated ticket offices—Details, Part II, Section 4, Table II.

This is shown for the Northwestern Region only, and is estimated to save $310,730 per annum. This unification will prove of inestimable benefit to the public, and am entirely satisfied that it will never be changed.

COOPERATIVE ACTION.

8. Movement of oil traffic—Details, Part III, Section 1, Tables VIII, IX, and X.

Early in the year we were confronted with the shortage of oil in the eastern territory for munition plants, and for export. After a conference with the oil shippers, an organization was installed at Kansas City to cooperate with the oil interests in the handling of the oil out of the so-called "Mid-continent field" in Kansas and Oklahoma.

As an indication of the success of the plan, the figures indicate that there was an increase in tank-car mileage per day of from 57 to 117.

This statement shows an increase in loading from January 1 to June 30, 1918, to be 28,569 cars, but of this 19,500 was in the period April 30, to June 30. These figures of increased loading are only
shown to June 30, at the time of the splitting of the Western Region, but the figures for the first nine months of 1918 show an increase of 50,000 cars, as compared with the same period of the previous year, and our information from the oil interests is that this was accomplished without any additional tank cars. This was brought about entirely by the movement in solid trains of 25 cars or more to distributing centers, and the return of the tank cars in like manner, and could not have been accomplished under competitive conditions, it being necessary, in the consolidation of trains, to totally disregard the routing.

The comments of the oil interests, without any exception, have been very flattering in connection with this operation.

9. Solid trainload movements—Government, export, and other traffic—Details, Part II, Section 1, Table VIII; Part III, Section 1, Table VII.

During the period of extremely severe weather conditions, in connection with the very heavy snow in the early part of this year, serious congestion of export traffic resulted in various yards and terminals.

Very urgent demand for export foodstuffs made it necessary that a plan be adopted that would eliminate the necessity for the switching of these cars in classification yards.

The solid-train-movement plan was instituted in connection with the movement of this traffic out of the Twin Cities, and provided that all of the cars in any one train must go to only one destination. As an example, a train of 60 cars of flour at Minneapolis for export through Baltimore would be moved via a simple route and no cars would be in the train for New York, Philadelphia, or any other export terminal.

This proved very satisfactory in the movement of this traffic, resulting in very great efficiency and economy in operation.

Train tonnage was in no case sacrificed, and the economy from this, of course, can not be determined, but must have resulted in a very considerable reduction in yard service expense, but principally it expedited the traffic.

This plan proved so very beneficial that it was extended to include shipbuilding lumber and steel, fruit, meat and packing-house products, stock, etc., and a record of the movement of 70,572 cars in this manner shows an average movement of 240 miles per day of 24 hours, including all time at terminals.

The plan was not possible under competitive conditions, it being necessary to entirely disregard the routing to make the plan effective. This was concurred in and approved in every particular by the shippers.

The time on fruit from Pacific Coast States points was extended 24 to 32 hours. By reason of this added time it was possible to establish such a regularity of the movement that we have been informed
by the shippers that they received the best service ever given them on fruit in the history of their business. In this it was necessary to disregard the routing and say to the shippers that we wanted the fruit consolidated on certain lines in solid trains, rather than move over various lines in small lots, which was a very expensive and wasteful method of transportation followed under competitive conditions.

10. Car service—Details in Part II, Section 2, Table I, and Part III, Section 2.

As you well know, at the time of the taking over of the control of the railroads by the Government, there was an extreme shortage of equipment in the entire western territory, which steadily improved since the time of the taking over of the railroads by the Government, until at present we are enabled to furnish a car for every load offered.

To my personal knowledge the supply of equipment in the northwestern territory has not been equaled for the past three or four years. The work of the car service section in the transferring of equipment as between regions has been carried out in a most satisfactory manner, and enabled the handling of the largest traffic of our experience to the satisfaction of the shippers.

11. Rerouting of freight—Details in Part II, Section 3, Table I, and Part III, Section 3, Table I.

The rerouting of traffic was taken actively in hand and the elimination of the circuitous and expensive routes has been effected. Of such of this traffic as we have a record and which was routed in error is included 121,768 cars, resulting in a reduction in car miles of 9,963,633.

12. Consolidated purchasing department—Details in Part II, Section 5, Table I, and Part III, Section 5.

The details of this are shown in section No. 5, as indicated above. This plan has not been in operation a sufficient length of time to determine as to its ultimate success, but a great many uniform practices have been put in effect, which no doubt will in the future show a great many economies.

13. Intensive loading—Details in Parts II and III, Section 8, Tables I to V, inclusive.

While this shows some decrease in the number of cars loaded, it has been more than made up in the increased loading per car.

There has been a very active campaign on the part of all of the railroads thoroughly cooperating with the shippers to bring this about. The regulations of the Food Administration have resulted in a very great increase in the loading per car. This is one of the controlling features and should, if possible, be continued, either by increasing the tariff minimums, or by some such regulation as was put in effect by the Food Administration. As you probably know, the Food
Administration have now ceased their activities in this direction, and I fear it will result in a decrease in the loading per car in connection with foodstuffs.

14. Ore traffic—Details in Part II, Section 1, Tables XI, XII, and XIII.

The demands for ore, particularly for war purposes, was so urgent that it was considered advisable to appoint a manager in charge of the Upper Lake Michigan and Lake Superior ports, for the coordination of the handling of the ore, grain, and coal business. To cooperate with this Duluth office a committee in charge of the vessel and ore interests was also appointed.

The wisdom of this plan has been fully justified by the results, and all concerned have indicated their very hearty approval of the arrangement and expressly hope that it may continue.

There was diverted to the short and economical routes by our ore organization 2,902,940 tons of ore, with a saving in car-miles of 3,577,434. While the details shown in the report give such figures as are available, of the economies effected by this arrangement, it does not fully set forth the benefits resulting to all interested and the country as a whole.

Heretofore it has been found necessary, late in the season, to spend a great deal of money in steaming ore. By a plan worked out by our organization and the ore interests this year the steaming of ore was almost entirely eliminated, and the best figures we have available indicate that it cost the railroads $197,000 less than last year.

IMPROVEMENT BUDGETS.

15. Capital expenditures—Details in Part II, Section 6, Tables I and II, and Part III, Section 6, Tables I, II, and III.

Budgets were submitted by the railroads in the Northwestern Region for the year 1918 amounting to $24,180,740. This included a great many items that were not absolutely necessary under war conditions, for the reason that they would not have the effect of either adding to or maintaining the capacity of the railroads, and a reduction was, therefore, made in the figures of $19,658,887.

The labor shortage, together with the influenza epidemic, has seriously interfered with the carrying out of all of the improvements authorized, but the records show, of the improvements authorized for the Northwestern Region, 70 per cent were completed on December 15.

In connection with the plans for spending money only for necessities in connection with the successful prosecution of the war, we have prevailed upon municipalities to postpone public improvements. The work that was postponed by cooperation with the municipalities amounted to $19,332,593. In connection with the postponement of expenditures recommended was included $924,195, which was made unnecessary by the unification of terminals.
16. Condition of equipment—Details in Part II, Section 7, Tables II and III.

I assume you will have from Mr. Gray a consolidated report of this for the entire United States. The conditions in connection with the labor shortage and the influenza epidemic have worked directly against us in the maintenance of equipment, but there has been a rapid improvement since the last wage award and repairs to equipment will soon be brought up to as high, or higher, standard than ever existed.

A great many difficulties were encountered in the repairing of freight-car equipment, due to the lack of standard equipment on the various lines, making it necessary to carry large quantities of material required for cars of various ownership. This difficulty will be greatly eliminated with the continuation of the plan for the construction of standard equipment.

A very careful analysis and study of the entire railroad situation and efficiency and economy in operation under unified control, has shown there are many wasteful practices in effect under separate operation. Considerable traffic moving over the extremely long routes must have been handled with a loss when figured in the total.

All of these various plans have not been in effect a sufficient length of time to determine as to their ultimate economies and the determination of future progress in that direction.

In concluding this report I want to testify as to the loyal and effective support given at all times by officers and employees, both Federal and corporate, in carrying out the policies of the Railroad Administration in the Northwestern Region, and to acknowledge the many very helpful suggestions received from them during this period.

Yours very truly,

R. H. Ashton,
Regional Director.


<table>
<thead>
<tr>
<th>Savings per annum.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>to June 30.</td>
</tr>
<tr>
<td>Unification of terminals and stations:</td>
</tr>
<tr>
<td>Consolidations</td>
</tr>
<tr>
<td>Joint switching</td>
</tr>
<tr>
<td>Miscellaneous economies</td>
</tr>
<tr>
<td>Reduction passenger-train mileage.</td>
</tr>
<tr>
<td>Reduction duplicate freight-train mileage.</td>
</tr>
<tr>
<td>Estimated savings, salaries general office forces</td>
</tr>
<tr>
<td>Closing off-line freight and passenger traffic offices</td>
</tr>
<tr>
<td>Consolidation, city ticket offices</td>
</tr>
<tr>
<td>Estimated saving in advertising (except newspaper)</td>
</tr>
<tr>
<td>Estimated saving in newspaper advertising.</td>
</tr>
</tbody>
</table>

Exhibits will appear in complete report of Director General.
UNITED STATES RAILROAD ADMINISTRATION

ANNUAL REPORT
OF THE
REGIONAL DIRECTOR FOR THE CENTRAL WESTERN REGION
TO THE
DIRECTOR GENERAL OF RAILROADS

1918

WASHINGTON
GOVERNMENT PRINTING OFFICE
1919
Hon, W. G. McAdoo,

Director General of Railroads, Washington, D. C.

My Dear Mr. McAdoo: I transmit herewith a report of the results accomplished in the Central Western Region during the year 1918, subdivided and summarized in sections, as below, with sundry exhibits as referred to in the appropriate paragraphs:

(A) UNIFICATION OF Terminals AND STATIONS.

(Exhibit A, statement A.)

<table>
<thead>
<tr>
<th>Description</th>
<th>Estimated saving per annum</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Stations consolidated, passenger</td>
<td>$284,018.22</td>
</tr>
<tr>
<td>1A. Ticket offices consolidated</td>
<td>$507,421.01</td>
</tr>
<tr>
<td>2. Stations consolidated, freight</td>
<td>$447,653.00</td>
</tr>
<tr>
<td>3. Stations consolidated, joint passenger and freight</td>
<td>$228,484.94</td>
</tr>
<tr>
<td>4. Rearrangement of service into terminals</td>
<td>$435,937.71</td>
</tr>
<tr>
<td>5. Consolidation of car-inspection forces</td>
<td>$1,360,196.74</td>
</tr>
<tr>
<td>6. Consolidation of switching</td>
<td>$1,586,002.77</td>
</tr>
<tr>
<td>7. Consolidation of mechanical forces and facilities</td>
<td>$174,606.06</td>
</tr>
<tr>
<td>8. Discontinuance or rearrangement of former freight-train service</td>
<td>$272,151.00</td>
</tr>
<tr>
<td>9. Consolidation and abandonment of railroads</td>
<td>$291,900.36</td>
</tr>
<tr>
<td>10. Sailing days on less-than-carload freight</td>
<td>(1)</td>
</tr>
<tr>
<td>11. Telegraph department consolidations</td>
<td>$29,171.80</td>
</tr>
<tr>
<td>12. Rerouting of freight trains</td>
<td>$198,182.00</td>
</tr>
<tr>
<td>13. Consolidation of general office forces and miscellaneous facilities, not otherwise specified</td>
<td>$326,204.23</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$6,442,619.84</strong></td>
</tr>
</tbody>
</table>

(B) ELIMINATION OF PASSENGER-TRAIN SERVICE.

(Exhibit A, statement B.)

A total of 389 passenger trains were eliminated throughout the region, accomplishing reduction of 15,500,784 passenger-train-miles per annum, resulting in an estimated annual saving of $11,231,317.62

In addition there was a reduction in passenger-car-miles by reason of discontinuance of parlor and observation cars and re-

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1 Note.—Sailing-day plan now results in average saving of 4,072 cars per week in handling less-than-carload freight.
duction in Pullman-car service of 38,703,614 passenger-car-miles, the saving resulting from which has not been translated into terms of money, because of the difference in approximate cost conditions on different lines and in different parts of the territory and the recognized difficulty in consequence of computing cost figures of this type.

(C) REDUCTION IN ORGANIZATION AS CONTRASTED WITH THE SAME UNDER CORPORATE CONTROL.

1. General officers (Exhibit A, statement C).  
   Estimated saving per annum.  
   Under corporate control, 1,466 officers. $7,714,120.25  
   Under Federal control, 1,174 officers. 5,415,081.29  
   Saving. 2,298,138.96

2. Elimination of off-line offices (Exhibit A, statement C-1), saving. 2,674,256.87

3. Reduction in valuation expenses chargeable to operating-expense accounts (statement C-1), amount. 100,449.04

4. Discontinuance certain New York executive offices (statement C-1), amount. 800,000.00

Total. 5,932,844.87

(D) MISCELLANEOUS ECONOMIES.

1. Result of causes other than the above (Exhibit A, statement D).  
   Folders. $119,376.25  
   General advertising. 1,345,842.99  
   Discontinuance of membership in various associations. 111,661.53  
   Increased use of railroad wires for telegraph messages. 45,523.08  
   Miscellaneous. 107,208.15  
   Total. 1,729,612.09

2. Saving through economies by reason of simplified accounting between Federal-controlled lines (Exhibit A, statement D-1) under General Orders 11, 20, 21, 28, 30, 31, 32, and 41. 475,118.60

Total. 2,204,730.60  
Grand total, A, B, C, and D. 25,811,512.93

RECAPITULATION OF COOPERATIVE ACTION, THE RESULTS OF WHICH ARE IN THE DIRECTION OF EFFICIENCY BUT INTANGIBLE AS TO ECONOMIES.

1. Cooperation and joint use of locomotive shops and car-repair facilities.—Since April, 1918, railroads in this region have taken into their locomotive shops, as required, locomotives from other lines in the region for repairs, but this class of cooperative work has been chiefly devoted to the repairs of engines from other regions. During this period 124 Baltimore & Ohio locomotives have been received
for general repairs, 95 of which have been repaired and returned, and 29 are now in shops undergoing repairs. Whenever necessary and helpful similar action has been followed in car repairs.

2. Cooperative action in loaning power.—In addition to occasional loan of engines between roads as traffic conditions from time to time have required, roads in this region have, during the past six months, had 95 of their locomotives in service on eastern lines divided between road and switching service. Of these locomotives so loaned, 56 have been returned and 39 are still on foreign lines, as follows:

<table>
<thead>
<tr>
<th>Railroad</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pennsylvania</td>
<td>18</td>
</tr>
<tr>
<td>Baltimore &amp; Ohio</td>
<td>18</td>
</tr>
<tr>
<td>Louisville &amp; Nashville</td>
<td>3</td>
</tr>
</tbody>
</table>

Total                                           39

3. Rerouting of traffic by shortest and most economical routes.—It has not been possible to estimate in money the saving accomplished by this means, (1)—because of the recognized difficulty under varying conditions of railroad and territory of computing approximate freight-car mile cost figures, and (2) because, as a consequence of the policy of the administration widely circulated, of direct routing, many shippers, particularly in the absence of solicitation, have adopted direct routing of traffic as a policy of their own, thereby without pressure from the administration nor record of the innumerable instances of voluntary direct routing, cooperating in accomplishing the large saving in transportation effort resulting from the use of direct routes.

As indicated above, an average of 4,672 cars per week are now saved in handling less-than-carload freight by means of the sailing-day plan. It has not been possible yet to compute the saving in money resulting from this improved method of handling less-than-carload business, but the amount is doubtless substantial.

Statement E reflects the more important rerouting practices of lines in this region. Especial attention has been given to the most economical and direct routes in the handling of traffic between San Francisco territory, southern California points on the one hand and northwestern territory on the other, and middle west terminals and junctions. In consequence, as an important illustration, the movement of California deciduous and citrous fruits has been handled with better general satisfaction than ever before.

For the period from September 1 to December 21, reports from lines in this region show a total of 29,137 cars rerouted by railroad direction, with an aggregate saving of 3,977,844 car miles, or an average of 137 miles per car. As much of this rerouting as possible has been accomplished at the point of origin instead of at interme-
diate gateways and reports of action taken in December of this character show that of the total, 47 per cent of the cars were rerouted at point of origin, but that the car miles saved by rerouting at point of origin was 66 per cent of the total car miles saved.

It is certain that the voluntary action of shippers under the policy of selecting direct routes has resulted in a larger saving of car miles in the aggregate than that accomplished by the railroads through direct action on their part.

On the other hand, all traffic has not been forwarded by the shortest route, because at times such action would congest the short line and throw upon it more traffic than it could economically and efficiently handle. In order, therefore, to maintain these conditions in proper balance, constant supervision has been exercised by day-to-day reports and information and appropriate action taken in consequence, as conditions permitted.

FINANCIAL RESULTS FOR 10 MONTHS ENDED OCTOBER 31, 1918.

In the 10-month period (results for November and December not yet being available) operating revenues of railroads in the central western region increased 17.3 per cent. Operating expenses increased 34.1 per cent, resulting in a decrease of 12.7 per cent in net operating revenue. It is well understood, however, that operating expenses for the 10-month period have included substantially all wage increases effective since January 1, 1918, and increased cost of materials and supplies, whereas operating revenues only reflect the increased freight and passenger rates for substantially the last four months of the period indicated.

FREIGHT TRAFFIC MOVEMENT AND CAR PERFORMANCE.

Official statistics available for the 10 months ended October 31, 1918, show gratifying increase in efficiency of operation in this region. A total of 61,963,654,000 net ton-miles were handled, as compared with 59,475,175,000 net ton-miles for corresponding period last year, or an increase of 4.2 per cent. Per mile of road per day, net ton-miles for the period in question, this year, were 3,967, compared to 3,817 for the same period in 1917.

This increase in business was handled this year with less train-mile effort to accomplish it. For the period this year the business was handled with 99,903,000 train-miles, as compared to 102,943,000 train-miles for the same period a year ago, or decrease in transportation effort of 3 per cent.

For the period referred to, this year, the net ton-miles per train-mile were 620, compared to 578 last year, or an increase of 7.3 per cent.
In similar manner there was a decrease in loaded freight car-miles of 5.9 per cent, and in the total freight car-miles, 2.6 per cent.

A better car supply in the Central Western Region has been maintained throughout the 10 months' period, as shown by an increase in average number of freight cars on line daily from 319,425 last year to 335,468 this year, or an increase of 5 per cent.

Net ton-miles per loaded car-mile increased from 24.4 tons last year to 27 tons this year, or an increase of 10.6 per cent.

Further evidence of increased efficiency in the use of equipment is shown in the gratifying increase in average pounds per car in the handling of less-than-carload freight for the months of September and October, 1918. While no annual figures are yet available, figures shown below for the months referred to indicate the results which have now been accomplished:

<table>
<thead>
<tr>
<th></th>
<th>September, 1918</th>
<th>October, 1918</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total pounds loaded</td>
<td>1,473,219,929</td>
<td>1,509,434,673</td>
</tr>
<tr>
<td></td>
<td>September</td>
<td>October</td>
</tr>
<tr>
<td>1918</td>
<td>14,811</td>
<td>11,637</td>
</tr>
<tr>
<td>1917</td>
<td>14,677</td>
<td>12,308</td>
</tr>
<tr>
<td>Average pounds per car</td>
<td>14,742</td>
<td>11,993</td>
</tr>
<tr>
<td>Increase, per cent</td>
<td>27.3</td>
<td>18.4</td>
</tr>
</tbody>
</table>

No other regional operating statistics for the 10 months' period are yet available, but it is certain that the results for the year when compiled by the operating statistics section will show further evidence of increased operating efficiency.

**Movement of Business.**

Net at any time has there been a congestion or accumulation of freight traffic of consequence, because the loading and movement were closely policed and when necessary the proper regulating measures were enforced, as evidenced by the grain permit system adopted and in effect since September 18, which action was necessary on account of the unprecedented heavy grain movement during the months of July and August, resulting in all available storage facilities at primary markets being rapidly filled. With the assistance of the Food Administration, Grain Corporation, and the various grain interests this permit system has been generally satisfactory.

The influenza epidemic, so prevalent throughout the entire West during the months of September and October, incapacitating a very large number of operating and mechanical department employees,
interfered to a certain extent with the free movement of traffic on certain lines, but no serious congestions or delays resulted.

The car supply generally was ample to meet requirements, with the exception of short periods during the peak movement of seasonable commodities.

The following reflects the total car loading, period July 1 to December 31:

**Total cars revenue freight loaded.**

<table>
<thead>
<tr>
<th>Year</th>
<th>Cars (thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1918</td>
<td>3,337.756</td>
</tr>
<tr>
<td>1917</td>
<td>3,434.501</td>
</tr>
<tr>
<td>Decrease</td>
<td>96.745</td>
</tr>
<tr>
<td>Per cent of decrease</td>
<td>2.8</td>
</tr>
</tbody>
</table>

**Total cars revenue freight received from connections.**

<table>
<thead>
<tr>
<th>Year</th>
<th>Cars (thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1918</td>
<td>1,735.698</td>
</tr>
<tr>
<td>1917</td>
<td>1,755.423</td>
</tr>
<tr>
<td>Decrease</td>
<td>19.725</td>
</tr>
<tr>
<td>Per cent of decrease</td>
<td>1.1</td>
</tr>
</tbody>
</table>

The campaign which resulted in the more intensive car loading, together with the general decline in business during the past two months, since the termination of the war, is responsible for the slight decrease of 2.8 per cent in the total cars loaded.

**COAL TRAFFIC.**

**Total cars coal loaded July 1 to December 31.**

<table>
<thead>
<tr>
<th>Year</th>
<th>Cars (thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1918</td>
<td>944.870</td>
</tr>
<tr>
<td>1917</td>
<td>913.852</td>
</tr>
<tr>
<td>Increase</td>
<td>30.888</td>
</tr>
<tr>
<td>Per cent of increase</td>
<td>3.4</td>
</tr>
</tbody>
</table>

During the first four months of the period splendid loading obtained and substantial increases over last year were recorded, but owing to the termination of the war and the large amount of fuel placed in storage during the earlier months the loading for November decreased 16.3 per cent and in December, 18.6 per cent.

**GRAIN TRAFFIC.**

**Total cars grain loaded July 1 to December 31.**

<table>
<thead>
<tr>
<th>Year</th>
<th>Cars (thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1918</td>
<td>270.175</td>
</tr>
<tr>
<td>1917</td>
<td>160.155</td>
</tr>
<tr>
<td>Increase</td>
<td>110.020</td>
</tr>
<tr>
<td>Per cent of increase</td>
<td>68.8</td>
</tr>
</tbody>
</table>

Wheat was harvested and moved much earlier than usual, the loading during the month of July showing an increase, compared with the same month last year, of 73.4 per cent, while in August the increase amounted to 46.9 per cent.
The permit system adopted to control the movement to primary markets has been previously explained.

**LIVE STOCK.**

*Total loading July 1 to December 31.*

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Loading</th>
<th>Increase</th>
<th>Per cent of Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>1918</td>
<td>372,685</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1917</td>
<td>296,847</td>
<td>75,838</td>
<td>25.5</td>
</tr>
</tbody>
</table>

Some difficulty was experienced in fully meeting the car requirements for early movement of range cattle and sheep, due primarily to the desire of all shippers to move at the same time. The volume and long haul involved made it impossible to protect all loading upon demand, but the business was moved with general satisfaction and consistent with facilities at primary markets to receive. During the past 60 days the offerings of hogs for shipment have been greatly in excess of capacity of markets to absorb, which has made necessary the adoption of the permit plan, which has the approval of the stabilization committee of the Food Administration and the Bureau of Markets.

**FRUIT TRAFFIC.**

During the six months' period have handled 581 solid trains of California fruit to the Missouri River and Chicago, with a total of 22,561 cars, an average of 38 cars per train. Also moved 147 special trains from Colorado, containing 4,514 cars, an average of 31 cars per train. All special trains have been operated upon conservative schedules and the trains filled to reasonable tonnage with dead freight. The growers and distributors have expressed general satisfaction with the service rendered.

**OIL TRAFFIC.**

So far as practicable the oil has been segregated in special train lots for certain destinations. Since July 1, 1,037 special trains have moved over roads within this region from the mid-continent field, with a total of 30,821 cars, an average of 29 cars per train. In addition to this, 124 special trains were operated from Wyoming and California, with a total of 3,983 cars, or an average of 33 cars per train.

It is gratifying to record the fact that shippers of oil have expressed commendation of the methods adopted in handling this important commodity. Without appreciable increase in the available supply of tank cars the continued shortage of equipment last year has been translated this year into an ample and reasonable supply at all times.
TROOP MOVEMENTS.

Handled out of California from Camps Kearney and Fremont to the Atlantic seaboard a total of 134 special trains with 62,077 men. From other cantonments within the Central Western Region, moved 548 special trains with 239,792 men, a grand total from all camps of 682 trains, 301,869 men, averaging 443 men per train. With but few exceptions, all trains were operated upon schedule and without any serious accidents.

CONSOLIDATED TRAINLOAD MOVEMENTS.

It has been the practice, wherever possible, to handle under special train-movement notices all commodities moving in volume for certain destinations. To a very great extent such commodities as fruit, oil, grain, etc., are moved in this manner, which enables us to closely supervise the performance and route the trains so as to avoid congested terminals and expedite the movement. A total of 1,969 trains, with 63,939 cars, an average of 32 cars per train, have been so handled.

SAILING-DAY PLAN.

The sailing-day plan of handling less carload merchandise has been made effective at 106 points in this region, resulting in a saving of 261,508 cars per year. Schedules at 57 other points are now under consideration for adoption at the earliest practicable date.

More or less complaint has been made by the shipping public in connection with the sailing-day plan, due to alleged discrimination from a competitive standpoint. I feel that these complaints will be eliminated when the plan is more generally adopted in the other regions and is put into effect as between the eastern producing centers and the western consuming points.

Arbitrary schedules are not being adopted, but in all instances we are soliciting the cooperation of the shipping public, usually through the chamber of commerce.

POWER AND EQUIPMENT CONDITIONS.

LOCOMOTIVES.

The number of locomotives on lines in this region July 13, nearest date after inauguration of the region for which information is available, was 12,364, and the number of locomotives out of service on that date for repairs requiring over 24 hours—which includes engines in shop and awaiting shop for classified repairs as well as minor running repairs—was 1,997, or 16.15 per cent of power. The number of locomotives on line December 14 was 12,454, with 2,150 out of
service for repairs requiring over 24 hours, or 17.2 per cent of power. The number of locomotives turned out of shops during the week of July 13 was 856, against 811 December 14. This decrease of 45 engines was due to shops going on eight hours December 9, but shows an increase of 137 locomotives repaired over December 14 last year. Total men employed in locomotive department July 13 was 61,870, and on December 14, 65,867, an increase of 3,997 men. In July all locomotive men were working 10 hours or more, while effective December 9 shops and roundhouses were reduced to 8 hours.

Roads in this region received 227 new locomotives from builders; however, during the greater part of past six months roads in this region have had 95 of their locomotives in service on Eastern lines.

**Freight Cars.**

The number of revenue cars on lines in this region June 22, nearest date to inauguration of this region for which information is available, was 352,484. Of these cars, 19,376, or 5.5 per cent, were on shop tracks for light and heavy repairs. Comparing June 22 with December 14, shows that while there were 16,179 more revenue cars on the region there were 1,248 less bad orders and that the percentage of total bad orders to revenue cars on lines was 4.9 per cent. On June 22 there were 25,220 men employed in freight-car departments of all roads, and on December 14 the forces had decreased to 24,506, a decrease of 714 men, or 2.8 per cent.

**Maintenance and Construction Work.**

Railroads in the Central Western Region have been well maintained, although the full quota of rail and ties, because of war conditions, has not been received by all lines. Labor supply likewise has, for the same reasons, been subnormal during most of the year, but by reason of the favorable climatic conditions during the fall and the late arrival of winter weather in the territory east of the Rocky Mountains, it has been possible to overcome during the last 60 days a great deal of the delay due to labor and material shortage which existed in the earlier part of the season.

All lines have reported that their general maintenance conditions compare favorably with a year ago, particularly as far as track and roadbed are concerned. Marked progress has been made in specially authorized work during the last 60 days. Although reports for the region, as a whole, indicate that approximately 60 per cent of the total authorized improvement work will be completed by the end of the year, some of the important lines show very much larger percentage of projects completed and placed in use. A considerable amount of the important mileage in this region is in southwestern territory.
where work is carried on throughout the winter under favorable climatic conditions, and with an improved supply and delivery of rail, ties, and other material, which is now anticipated, it may be confidently predicted that before the year 1919 is far advanced such maintenance work as has been delayed will be fully completed and all new work authorized, excepting where delayed or deferred for special reasons, will be well on toward completion.

By cooperation with the assistant director engineering and maintenance department, Division of Operation, there is under development a system of uniform methods for preparing and recording data relating to the degree of maintenance and work of upkeep of the railroads during the period of Federal control. In this manner it is anticipated that a definite record will be available in due time which will reflect actual results, and there is no reason to doubt but that all the railroads in this region will be efficiently maintained with due regard not only to safety but to the degree of maintenance appropriate in each instance.

CONSOLIDATED TICKET OFFICES.

Consolidated ticket offices have been established at the following points in this region:

Chicago, Ill.  Omaha, Nebr.
Colorado Springs, Colo.  Peoria, Ill.
Denver, Colo.  Phoenix, Ariz.
Des Moines, Iowa.  Pueblo, Colo.
Fresno, Cal.  Sacramento, Cal.
Kansas City, Mo.  Salt Lake City, Utah.
Lincoln, Nebr.  San Diego, Cal.
Long Beach, Cal.  San Francisco, Cal.
Los Angeles, Cal.  San Jose, Cal.
Oakland, Cal.  Sioux City, Iowa.
Ocean Park, Cal.  Whittier, Cal.
Oklahoma City, Okla.

Under previous methods a total of 613 employees were required as contrasted with a total of 448 employees serving the consolidated ticket offices. The total cost of ticket offices at the points shown in list above prior to Federal control and including rental, salaries, and miscellaneous expenses was $1,369,588.01. The total annual cost of the consolidated offices is $862,167, or an annual saving of $507,421.01.

REGIONAL PURCHASING COMMITTEE.

A regional purchasing committee has been organized under the jurisdiction of the Central Advisory Purchasing Committee, which is located at Washington, and in spite of difficult conditions relating
to supply of materials resulting from war conditions valuable results have been accomplished.

The principal task of this committee since organization has been in connection with the distribution of ties reaching this region on the north bank of the Ohio River, and in addition to the distribution of ties to railroads in this region there was shipped between August 15 and December 15 to railroads outside of this region approximately 1,000,000 ties.

The tie-treating department has been productive of much benefit and the quality of tie treatment has been improved. Investigations have been made under the direction of the committee toward the location of one or more tie-treating plants in the Rocky Mountain territory so as to utilize vast supplies of native timber available for tie manufacture in that general territory. Recommendations, as result of these investigations, have been made which, if carried out, will make available treated ties from that territory and thereby shorten the haul of ties from other producing districts.

A supply of car oak has been difficult to secure and the supply within this region limited. With the formation of the inspection department contact with a number of mills has been constantly maintained and plans are under way for increase in the supply.

Accumulation, sorting of scrap, and reclamation of usable material has been given much attention, and with the organization of the stores department, under the direction of a supervisor of stores, many additional economies are anticipated.

The organization of the stores department is further expected to develop material saving in the handling of stores and reduction in the amount of stock necessary to be carried by railroads in this region.

**FUEL CONSERVATION SECTION.**

Under the direction of the Fuel Conservation Section, a part of the Division of Operation, a supervisor of fuel conservation in this region has been appointed and good results are already in evidence. The supervisor has visited practically all the coal-burning railroads in this region, returning to some of them frequently to follow up conditions needing attention. After inspection of conditions the supervisor has cooperated with the Federal manager, superintendent of motive power, and other officials directly concerned in developing action to increase the saving of fuel. The fuel practices of each line have been examined; locomotives in service are ridden and aid given to firemen in improving firing practice, and with suggestions to engineers for better methods of operation and fuel economy.

Inspections have covered roundhouses, shops, and stationary plants. Superintendents' offices are currently visited and delays to
trains investigated, and locomotive failures and engine-work reports studied.

In roundhouse inspections fireboxes, grates, flues, and brick arches are examined; steam piping through roundhouse examined to see that it is properly insulated; steam and air leaks around shops and roundhouses and repair tracks have received special attention; and stationary boilers and firing practice around same have been studied and mechanical defects pointed out.

Staff meetings on each line have been held, attended by all officials concerned in the problem of fuel conservation, and enthusiasm to accomplish results has thereby been aroused. On all roads fuel departments have been organized with a man in charge, with necessary assistants to ride locomotives instructing engineers and firemen in the proper method of operation and firing.

It is difficult to translate the results of this work into money, but it is certain that with the ample beginning made since the department was organized large savings are to be expected.

**SAFETY SECTION.**

A regional supervisor of safety has been appointed, and active work has been carried on throughout the region. All Federal and general managers in the region have been visited and improved organizations on each line have been established. Safety supervisors, as required on each line, are now employed, devoting practically all their time to intensifying safety work.

A general meeting was called at headquarters of the region of all representatives of the different lines, attended by the acting manager of the Safety Section in Washington. Meetings of this kind will be held as often as experience indicates the same will be helpful for the interchange of opinions and experience.

The regional supervisor of safety is constantly traveling over the lines in the region improving organization methods and attending conferences and meetings. As a result of this work there has been an appreciable decrease in accidents during the past four months and further improvement in results is certain to occur from the ample support which the movement is securing from all lines in the region.

Divided between general, division, shop, terminal, and local committees engaged in safety work, there is a grand total of 362 such committees, representing a total of approximately 6,800 committeemen, including officer and employee members.

**FIRE LOSS AND PROTECTION SECTION.**

Immediately following the establishment of this department at Washington, under the direction of Mr. Charles N. Ramo, manager, organization of this work throughout this region was undertaken by
the appointment of Mr. H. G. Jordan general inspector. Complete instructions have been prepared and furnished to all lines for the guidance of inspectors. Under the direction of the general inspector in this region, fire loss and protection organizations are being rapidly established on all lines through the appointment of a competent inspector and such assistants as are necessary to fully cover conditions and inspect risks. Since his appointment the general inspector has been engaged in making personal inspections of the large properties where special fire hazards are involved and advising with chief inspectors as to improvement in conditions and methods of better protection against fire loss. It is expected that results of this work will in due time show a distinct improvement in conditions and in consequence a corresponding reduction in fire losses.

A meeting of the Railroad Fire Protection Association was held in Chicago, December 3-5, attended by a large number of railroad officers especially assigned or engaged in work of this character, which afforded a means of interchange of views and experience between the manager and discussion of the plans of the section in connection with this important work.

**LOSS AND DAMAGE—FREIGHT CLAIM PREVENTION.**

A supervisor of loss and damage has been appointed in the region. Under the direction of the supervisor the methods upon each line, of handling loss and damage to freight, have been examined and conferences held with officials in charge of this work at various points throughout the region for the purpose of improving the organization and methods of this work. A number of the large systems have already cause and prevention departments, and others are in process of formation.

Rapid progress is being made toward uniform methods of handling claims and for prevention work. Meetings are being held at local points with officers and employees connected with the handling of freight of all kinds for the purpose of discussion of cause and prevention matters.

There is a large field for results to be secured in the vigorous and intelligent prosecution of this work, and after sufficient time has elapsed for comparative results to be studied, it is anticipated that a substantial saving in expense on account of claim payments will be shown, as well as a general improvement in methods and in the relations with shippers in connection with this troublesome subject.

**WOMEN EMPLOYEES.**

The large increase in the number of women employees incident to the withdrawal of men for national service, immediately led to careful inspection of working conditions surrounding women labor both
in general offices and terminals, as well as points along the line. Helpful reports from field agents of the Women's Service Section have been received and steps taken to correct conditions pointed out as requiring attention. Federal managers of all lines have been required to give special attention through competent inspectors to these conditions of service. Where women have been found engaged in work unsuitable for their strength, they have been transferred to less arduous work.

It is proper to record that the induction of women into railroad service during the past year has been of enormous aid in the operation of the roads, and that with the withdrawal of large numbers of men for service in the Army or war industrial work it would have been exceedingly difficult to accomplish the results on the railroads in this region without the assistance of the women that were employed to fill the ranks of railroad employees in a number of different classes of service.

FOURTH LIBERTY-LOAN CAMPAIGN.

The railroads of the region made an immediate and enthusiastic response to the call for subscriptions to the fourth liberty loan, and reports of results accomplished were furnished during and at the conclusion of the campaign.

Final returns of subscriptions by officers and employees of the several roads comprising the region show 307,460 employees, or 96.7 per cent of the total, subscribed $36,016,550, an average of $117.14. The officers and clerks of the regional director's staff subscribed $66,300 additional, 100 per cent subscriptions, with an average of $771 per subscriber. Twenty-one of the roads in the region returned 100 per cent subscriptions of all officers and employees; in addition 17 roads returned between 90 and 100 per cent of all officers and employees as subscribers.

Yours, very truly,

Hale Holden,
Regional Director.

Exhibits will appear in complete report of Director General.
UNITED STATES RAILROAD ADMINISTRATION

ANNUAL REPORT
OF THE
REGIONAL DIRECTOR FOR THE
SOUTHERN REGION
TO THE
DIRECTOR GENERAL OF RAILROADS

1918

WASHINGTON
GOVERNMENT PRINTING OFFICE
1919
SOUTHERN REGION.

ATLANTA, GA., December 31, 1918.

Hon. W. G. McAdoo,
Director General of Railroads,
Washington, D. C.

My Dear Sir: In the accompanying statements you will find the results of operation of the Southern Region lines under Federal control during the year 1918.

The date of the appointment of the first regional director at Atlanta, Mr. Chas. H. Markham, was January 18. Prior to that date the officers of the various railroads were in direct communication in all matters with Washington headquarters, and in some respects the records of this office are therefore not complete for the year. Some of the vital statistics were not prepared prior to April 1.

My appointment to succeed Mr. Markham (transferred to the Allegheny Region) was effective June 1.

The financial outcome of the regional operation for the year (December estimated) was as follows:

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Railway operating revenues</td>
<td>$547,777,171</td>
</tr>
<tr>
<td>Railway operating expenses</td>
<td>423,276,752</td>
</tr>
<tr>
<td>Net revenue from railway operation</td>
<td>124,500,419</td>
</tr>
<tr>
<td>Railway tax accruals, less war taxes</td>
<td>19,270,592</td>
</tr>
<tr>
<td>Uncollectible railway revenues</td>
<td>100,990</td>
</tr>
<tr>
<td>Railway operating income</td>
<td>105,128,837</td>
</tr>
<tr>
<td>Equipment rents, net (Cr.)</td>
<td>665,804</td>
</tr>
<tr>
<td>Joint facility rent, net (Dr.)</td>
<td>1,286,101</td>
</tr>
<tr>
<td>Net railway operating income</td>
<td>104,508,540</td>
</tr>
<tr>
<td>Estimated average annual standard return</td>
<td>92,183,911</td>
</tr>
<tr>
<td>Excess above standard return</td>
<td>12,324,629</td>
</tr>
<tr>
<td>Percentage relation of net railway operating income to standard return</td>
<td>113.4</td>
</tr>
</tbody>
</table>

Summary of certain savings.

Unification of terminals and stations (see Exhibit No. 2)........... $2,182,260
Elimination of passenger trains (see Exhibit No. 3)............... 1,625,911
Reduction in organizations as contrasted with the same under corporate control (see Exhibit No. 4)............ 2,925,073
Miscellaneous economies the result of causes other than above:

1. Saving in advertising expenses ................................ $402,938
2. Reduction in freight-train service .............................. 312,309
3. Consolidation of general office forces and elimination of special departments, etc. ........................................ 253,728
4. Telegraph and telephone unification (see Exhibit No. 5) .......................................................... 70,260
5. Sundries .................................................................. 197,406

Total of above ................................................................ $1,242,641

Recapitulation of Cooperative Action, the Results of Which Are in the Direction of Efficiency, but Intangible as to Savings.

General Order No. 32.

Simplified basis for apportioning interline passenger, excess baggage. Effective June, 1918.

General Order No. 31.

Discontinuance of the recording, computing, and paying per diem, mileage or rental of freight and passenger train (equipment) cars, between carriers under Federal control, effective July 1, 1918. Settlements between carriers under Federal control for the joint use of facilities. Effective July 1, 1918.

General Order No. 30.

Settlement of interroad bills, statements, and accounts as between carriers under Federal control.

General Order No. 20.

Discontinuance of technical and arithmetical examination and checking of all bills. Effective April 22, 1918.

General Order No. 15.

Construction, maintenance, and operation of new industry tracks. Industry to pay for and maintain that part of track from clearance point to right-of-way line, which is to be the property of the railroad, and pay for and maintain that part beyond the right of way of the carrier, which is to be the property of the industry.

General Order No. 21.

Simplified basis for apportioning interroad freight revenues between carriers under Federal control. Effective May, 1918.
Adoption of universal interline waybills and standard forms.

O. S. FORMS 1 TO 7.

There will be produced in this connection substantial savings due to the elimination of statistics formerly kept by individual lines. The data called for on these forms, together with data drawn therefrom, by the Operating Statistics Section of the Division of Operation, should enable each officer in charge of the various railroads to keep in close touch with the operation and permit him to be fully informed as to the operating results obtained; that he may be in a better position to pick out items in which there should be improvement.

ECONOMIES AND EFFICIENCY OBTAINED IN CONNECTION WITH TELEGRAPH AND TELEPHONE SERVICE.

While, as a matter of fact, considerable actual monetary savings have been effected along many lines, it is somewhat difficult to express these savings in dollars and cents. For example, by the coordination and connecting up of the telegraph and telephone service of the various roads, the use of the commercial telegraph companies' wires for railroad messages has been greatly reduced. Some of the roads who were exceeding their so-called "free allowance" are now using approximately only half of it, and telegraph bills of those roads that were on a cash basis have been materially reduced. Somewhat similar economies have also been effected with the telephone companies' toll bills.

Considerable improvement in the telegraph and telephone service of the various roads, especially the smaller ones, is noticeable, and still greater improvements will be effected in the near future due to standardization of telegraph and telephone construction and equipment, and the adoption of the most modern telegraph practices along many lines. This also has a tendency to reduce maintenance and operating costs.

SAVING IN CAR-MILES RESULTING FROM SHORT ROUTING OF CARLOAD FREIGHT TRAFFIC.

Based on the actual rerouting of freight handled during one week, it is estimated that by using the revised routes instead of the route via which the car was billed, there is an annual saving of approximately 41,452,216 car-miles. Assuming the average distance a car moves per day is 28 miles, for the year the saving in car-miles effected would be equivalent to adding 40,560 cars for use in handling traffic; and using as the average cost per unit $2,000, the saving of 40,560 cars would be equivalent to saving the investment of
$81,120,000: The effect of the saving in car-miles likewise produces a material saving in the cost of operation. If estimated at 5 cents per car-mile the saving was $2,072,610.

**MISCELLANEOUS.**

Efforts put forth in connection with the conservation of fuel to effect efficiency and economy.

Activities in connection with the loading of freight cars to more nearly their capacity has had a tendency to utilize the car equipment and obtain better results, increasing the productivity of tons per car and ton-miles per car per day.

For the nine-month period to August, 1918, inclusive, there was an increase in car-loading of 1.7 tons, or 7.1 per cent over 1917, the loading for 1918 being 25.5 tons as compared with 23.8 tons for the corresponding period of 1917.

Safety departments and committees have been formed on each railroad, and the "safety" work is being pressed with vigor.

In this connection the following tabulation of accidents to employee is illustrative of the results and progress:

*Number of accidents to employees of railroads in the Southern Region during the months of August, September, October, and November, 1918.*

<table>
<thead>
<tr>
<th></th>
<th>Killed</th>
<th>Injured</th>
</tr>
</thead>
<tbody>
<tr>
<td>August</td>
<td>43</td>
<td>2,067</td>
</tr>
<tr>
<td>September</td>
<td>35</td>
<td>1,757</td>
</tr>
<tr>
<td>October</td>
<td>26</td>
<td>1,441</td>
</tr>
<tr>
<td>November</td>
<td>31</td>
<td>1,209</td>
</tr>
</tbody>
</table>

This shows a reduction of 27 per cent in fatalities and 38 per cent reduction in injuries, November compared with August.

The safety organization was established by the director, division of operation, on August 1.

The campaign for the prevention of killing of live stock is likewise producing beneficial results.

The statement on page 2 of the attached memorandum under the heading of "Elimination of passenger trains" reflects a considerable variation in the cost per train-mile as reported by the various carriers. The saving should only include figures representing substantially out-of-pocket costs, and from an analysis of operating statistics, Form 6, of the principal carriers in the Southern Region, it is developed that a fair average cost per train-mile is $1. The total passenger-train miles eliminated were 1,618,107, which, multiplied by $1, would produce substantially the same annual saving as indicated on the statement referred to ($1,625,941).
INCREASE IN LOADING OF TRAINS.

Greater efficiency has been obtained in the loading of trains in the Southern Region, the full effect of which was not reflected until July. Statistics for the first three months of the year are not available, but the percentage of increase or decrease in the average number of tons per train for the months of April to October, 1918, inclusive, as compared with the corresponding months of the previous year is shown by the following statement:

<table>
<thead>
<tr>
<th></th>
<th>Increase</th>
<th>Decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td>April</td>
<td>0.8</td>
<td></td>
</tr>
<tr>
<td>May</td>
<td></td>
<td>7.2</td>
</tr>
<tr>
<td>June</td>
<td></td>
<td>5.7</td>
</tr>
<tr>
<td>July</td>
<td></td>
<td>2.1</td>
</tr>
<tr>
<td>August</td>
<td></td>
<td>5.4</td>
</tr>
<tr>
<td>September</td>
<td></td>
<td>4.0</td>
</tr>
<tr>
<td>October</td>
<td></td>
<td>6.7</td>
</tr>
</tbody>
</table>

INCREASE IN NUMBER OF REVENUE CARS LOADED AND RECEIVED FROM CONNECTIONS.

The following tabulation shows for the 10 months ended December 31 that there was a total increase of 135,682 cars loaded and received from connections:

<table>
<thead>
<tr>
<th></th>
<th>1913</th>
<th>1917</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cars loaded</td>
<td>4,793,833</td>
<td>4,855,096</td>
</tr>
<tr>
<td>Received from connections</td>
<td>2,739,829</td>
<td>2,602,968</td>
</tr>
<tr>
<td>Total</td>
<td>7,533,659</td>
<td>7,457,974</td>
</tr>
<tr>
<td>Increase</td>
<td>135,682</td>
<td></td>
</tr>
</tbody>
</table>

CONSOLIDATION OF CITY TICKET OFFICES.

In the Southern Region 23 consolidated ticket offices have been placed in operation by which individual offices to the number of 75 were eliminated, or a decrease of 52 in the number of ticket offices in the Southern Region.

For the consolidated ticket offices in operation in 1918 the total expenses were \( \$200,167 \) as compared with the expenses of individual offices for the corresponding period of 1917 of \( \$197,667 \) or an increase in total expenses of \( \$2,500 \).

During the same period the total sale of tickets in the consolidated ticket offices was \( 10,375,872 \) as compared with sales in individual offices for the corresponding period of 1917 of \( 9,533,969 \) or an increase of \( 1,041,903 \) or 10.93 per cent.
At depot ticket offices for the year 1918 the expenses were $338,474.
As compared with 1917, 208,885
An increase of 129,589.
For the same period the total sales for 1918 were 41,725,898.
And for 1917, 26,898,615
An increase of 14,827,283.
Or 55.12 per cent.

While an increase in expenses is noted, this is occasioned by the volume of business and increase in salaries paid under General Order No. 27 and supplements thereto.

During the 10 months ended October 31, the roads in the Southern Region transported passengers the equivalent of 4,847,029,611 miles, an increase over the passengers carried 1 mile for the corresponding 10 months of the previous year of 1,402,351,278, or 40 per cent.

The remarkable feature of this performance is that this largely increased volume of traffic was handled with approximately the same number of passenger-train miles, including special "troop trains."

Statement showing for Class I roads in Southern Region the increase in freight and passenger revenues (accounts 101 and 102) by six months' periods, January to June and July to December, inclusive, 1918, over 1917 (December estimated).

<table>
<thead>
<tr>
<th></th>
<th>This year.</th>
<th>Last year.</th>
<th>Increase.</th>
<th>Per cent.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freight:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First period</td>
<td>$155,552,228</td>
<td>$138,703,792</td>
<td>$16,848,436</td>
<td>12.1</td>
</tr>
<tr>
<td>Second period</td>
<td>203,577,961</td>
<td>117,893,322</td>
<td>85,684,639</td>
<td>72.5</td>
</tr>
<tr>
<td>Total</td>
<td>359,130,190</td>
<td>256,597,114</td>
<td>102,533,076</td>
<td>28.6</td>
</tr>
<tr>
<td>Passenger:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>First period</td>
<td>66,081,603</td>
<td>42,902,295</td>
<td>23,179,308</td>
<td>54.4</td>
</tr>
<tr>
<td>Second period</td>
<td>82,022,350</td>
<td>57,922,426</td>
<td>24,099,924</td>
<td>41.6</td>
</tr>
<tr>
<td>Total</td>
<td>148,103,953</td>
<td>100,824,721</td>
<td>47,279,232</td>
<td>47.4</td>
</tr>
</tbody>
</table>

Few of the public, except large employers of labor, can have any fair conception of the difficulty of railroad operation during the past year with such a considerable proportion of untrained men in the service, replacing those skilled operatives who responded so loyally and so freely to the call to arms.

Now that the war pressure is somewhat relieved, the feeling will be more or less generally and naturally held that the transportation troubles of the roads are over. It should be made plain to everyone that but few of the many train and engine men, shop, bridge, track and station forces, superintendents and trainmasters, general managers, general superintendents, and other skilled and valuable factors in the successful operation of our railroads have as yet been released from the colors and actually back in our service.

We need them to "carry on" in our best manner.

Yours, very sincerely,

B. L. Winchell, Regional Director.
### EXHIBIT NO. 2.

Recapitulation of saving by unification of stations and terminals, Southern Region.

<table>
<thead>
<tr>
<th>City</th>
<th>Saving (dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atlanta, Ga</td>
<td>$141,040.19</td>
</tr>
<tr>
<td>Athens, Ga</td>
<td>25,554.03</td>
</tr>
<tr>
<td>Augusta, Ga</td>
<td>141,013.89</td>
</tr>
<tr>
<td>Albany, Ga</td>
<td>21,916.58</td>
</tr>
<tr>
<td>Brunswick, Ga</td>
<td>28,609.70</td>
</tr>
<tr>
<td>Birmingham, Al</td>
<td>58,904.56</td>
</tr>
<tr>
<td>Cairo, Ill</td>
<td>12,715.56</td>
</tr>
<tr>
<td>Charleston, S. C</td>
<td>87,852.72</td>
</tr>
<tr>
<td>Chattanooga, Tenn</td>
<td>43,516.61</td>
</tr>
<tr>
<td>Columbus, Ga</td>
<td>32,683.02</td>
</tr>
<tr>
<td>Charlotte, N. C</td>
<td>16,650.00</td>
</tr>
<tr>
<td>Columbia, S. C</td>
<td>34,979.33</td>
</tr>
<tr>
<td>Columbus, Miss</td>
<td>10,032.00</td>
</tr>
<tr>
<td>Cordele, Ga</td>
<td>28,543.20</td>
</tr>
<tr>
<td>Dalton, Ga</td>
<td>25,276.27</td>
</tr>
<tr>
<td>Dublin, Ga</td>
<td>9,000.00</td>
</tr>
<tr>
<td>East Point, Ga</td>
<td>25,140.00</td>
</tr>
<tr>
<td>Goldsboro, N. C</td>
<td>25,900.39</td>
</tr>
<tr>
<td>Henderson, Ky</td>
<td>23,241.60</td>
</tr>
<tr>
<td>Hattiesburg, Miss</td>
<td>12,284.84</td>
</tr>
<tr>
<td>Hermitage, Va</td>
<td>14,771.40</td>
</tr>
<tr>
<td>Jacksonville, Fla</td>
<td>116,007.75</td>
</tr>
<tr>
<td>Junta, Ga</td>
<td>9,948.00</td>
</tr>
<tr>
<td>Lagrange, Ga</td>
<td>25,638.00</td>
</tr>
<tr>
<td>Louisville, Ky</td>
<td>119,721.85</td>
</tr>
<tr>
<td>Lexington, Ky</td>
<td>14,553.00</td>
</tr>
<tr>
<td>Memphis, Tenn</td>
<td>108,865.32</td>
</tr>
<tr>
<td>Meridian, Miss</td>
<td>33,518.73</td>
</tr>
<tr>
<td>Middlesboro, Ky</td>
<td>15,666.00</td>
</tr>
<tr>
<td>Mobile, Ala</td>
<td>96,133.10</td>
</tr>
<tr>
<td>Montgomery, Ala</td>
<td>82,121.91</td>
</tr>
<tr>
<td>Macon, Ga</td>
<td>49,762.57</td>
</tr>
<tr>
<td>Martin, Tenn</td>
<td>10,420.00</td>
</tr>
<tr>
<td>Nashville, Tenn</td>
<td>16,531.92</td>
</tr>
<tr>
<td>New Orleans, La</td>
<td>146,885.83</td>
</tr>
<tr>
<td>Norfolk, Va., and Pinner's Point</td>
<td>17,493.36</td>
</tr>
<tr>
<td>Owensboro, Ky</td>
<td>27,319.40</td>
</tr>
<tr>
<td>Paducah, Ky</td>
<td>23,233.00</td>
</tr>
<tr>
<td>Richmond, Va.</td>
<td>25,601.59</td>
</tr>
<tr>
<td>Rome, Ga</td>
<td>21,887.57</td>
</tr>
<tr>
<td>Spartanburg, S. C</td>
<td>11,109.25</td>
</tr>
<tr>
<td>Selma, Ala</td>
<td>35,134.78</td>
</tr>
<tr>
<td>Savannah, Ga</td>
<td>77,422.47</td>
</tr>
<tr>
<td>Tampa, Fla</td>
<td>8,272.08</td>
</tr>
<tr>
<td>Tifton, Ga</td>
<td>16,106.69</td>
</tr>
<tr>
<td>Tuscaloosa, Ala</td>
<td>9,570.00</td>
</tr>
<tr>
<td>Winston-Salem, N. C</td>
<td>30,537.60</td>
</tr>
<tr>
<td>Wilmington, N. C</td>
<td>43,824.43</td>
</tr>
<tr>
<td>Waycross, Ga</td>
<td>28,667.37</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1,992,218.66</td>
</tr>
<tr>
<td><strong>Total saving by unification at 90 smaller stations</strong></td>
<td>190,041.53</td>
</tr>
<tr>
<td><strong>Grand total</strong></td>
<td>2,182,260.19</td>
</tr>
</tbody>
</table>
Savings effected through unification of stations and terminals during 1918.

Atlanta, Ga.:
Mar. 11. Single inspection by all lines. C. of Ga., N. C. & St. L. Effective May 28 on S. A. L. and June 1 on Southern. 16,811.08
Apr. 27. L. & N. commenced running solid trains direct into C. of Ga. industry yard, saving handling in Atlanta joint terminals. 18,610.56
June 1. Howell Stock Yard Agencies, all lines consolidated, saving. 1,482.48
June 9. N. C. & St. L. took over handling of C. of Ga. passenger engines and coaches; care of same taken over by Atlanta joint terminals. On June 15 N. C. & St. L. took over handling A. B. & A. passenger engines and cleaning of passenger equipment.. 26,566.52
N. C. & St. L. and S. A. L. Consolidation freight stations on Aug. 1, 1918. ................................................ 7,128.00
A. B. & A., C. of Ga., A. & W. P. Consolidation of equipment. 27,888.56
S. A. L. and C. of Ga. Freight stations consolidated. 9,738.00
N. C. & St. L. Consolidation of Hills Park transfer and Spring Street freight station. 4,182.00
Southern R. R. and Atlanta Joint Terminal Co. Consolidation of telephone. 708.00
A. & W. P. and C. of Ga. Consolidation agencies at East Point. 2,400.00
Total ........................................................................... 141,040.19

Athens, Ga.:
Total ........................................................................... 25,558.03

Augusta, Ga.:
Apr. 17. Unified industrial switching, saving 20 switch-engine hours per day—
Wages ..................................................................... 15,966.72
Fuel ........................................................................ 26,568.00
Arrangement made for various lines to deliver interchange direct into each other’s yard, saving—
Wages ..................................................................... 6,386.69
Fuel ........................................................................ 10,627.20
Georgia took over passenger switching of A. C. L. and C. of Ga., resulting in saving of—
Wages ..................................................................... 2,794.18
Fuel ........................................................................ 4,605.12
C. & W. C. took over coaling C. of Ga. engines, resulting in a saving of labor amounting to ........................................... 3,736.80
May 1. All lines established joint car record and embargo office, saving. 6,177.60
May 12. C. of Ga. took over Ga. & Fla. yard and telegraph works, saving—
Wages ..................................................................... 5,745.60
Fuel ........................................................................ 12,771.34
 Yard clerks and others wages ........................................... 9,284.64
C. & W. C. and Ga. R. R. Consolidation freight agencies. 3,750.00
Total ........................................................................... 141,013.89

103469?—19——3
Albany, Ga.:  
Apr. 22. Consolidation yard and mechanical facilities, C. of Ga. supervision, saving. .................................................. $21,916.58

Brunswick, Ga.:  
Apr. 1. Freight work all lines consolidated ........................................... 453.60  
Passenger trains all lines use A. C. L. station ........................................ 7,082.50  
Mechanical work all lines consolidated .......................................................... 20,473.60  

Total ................................................................................................................. 28,069.70

Birmingham, Ala.:  
Mar. 11. Single inspection adopted, saving ..................................................... 16,300.90  
Wages ............................................................................................................... 1,869.84  
Fuel .................................................................................................................. 2,656.80  

June 1. A. G. S. took over L. & N. agency and switching at Grasselli chemical plant, saving—  
Wages ............................................................................................................... 1,209.60  
Fuel .................................................................................................................. 1,729.73  

Southern took over cleaning and inspection C. of Ga. passenger equipment, one I. C. mail car, and outside cleaning Pullman car cleaning of Frisco, saving ...................................................... 3,892.80  
Birmingham Terminal Co. took over watering and icing of all passenger trains ................................................................. 840.00  
June 1. I. C. took over handling Frisco cars at East Thomas shop, saving .......................... 1,693.60  
July 6. Interchange. S. A. L. to B. S. Road ..................................................... 1,682.65  

Total ................................................................................................................. 58,904.56

Cairo, Ill.:  
May 15. Single freight inspection adopted by all lines ...................................... 8,682.96  
I. C. took over M. & O. passenger train inspection ........................................... 1,716.00  
June 1. Joint car association abolished ............................................................... 2,316.00  

Total ................................................................................................................. 12,715.56

Charleston, S. C.:  
Increase due to industrial switching ................................................................. 175.00  
Mar. 1. Consolidation of switching, saving 6 engine-switching hours per day—  
Wages ............................................................................................................... 5,189.18  
Fuel .................................................................................................................. 7,970.40  
Mar. 11. Single inspection adopted by all lines .................................................. 6,120.97  
Apr. 1. Transfer L.C.L. freight between freight hours by dray effected, saving .... 953.17  
North Charleston terminal .......................................................... 23,400.00  
Single inspection .......................................................... 6,351.00  
Pooling of equipment .......................................................... 18,250.00  
4 p.m. freight closing hour .......................................................... 7,260.00  
Joint car-record office .......................................................... 318.00  
Repairs to engines .......................................................... 1,800.00  

Total ................................................................................................................. 26,928.24
Apr. 1. Transfer LCL freight between freight hours by dray
1,1
Hostling of passenger engines ........................................... $1,275.00
Consolidation shuttle train operated in terminal ............... 7,300.00
Consolidation clerks, industrial territory ....................... 1,840.00
Total 1 ........................................................................... 87,852.72

Chattanooga, Tenn.:
Mar. 13. Single inspection adopted by all lines .................. 7,186.61
Mar. 25. Consolidation of switching, saving 11 switch-engine hours per day .
10,593.07
Fuel ................................................................................. 14,612.40
Mar. 13. C. of Ga. takes its interchange direct to Southern Citico yard, saving 1 switch-engine hour per day, saving—
Wages ............................................................................. 997.92
Fuel ................................................................................. 1,239.84
Mar. 27. N. C. & St. L. places perishable Southern Ry. cars direct at ice plant, saving—
Wages ............................................................................. 1,993.84
Fuel ................................................................................. 2,656.80
Apr. 25. Southern took over care 2 C. of Ga. passenger engines, saving—
Savings resulting from consolidation .................................. 3,274.13
990.00
Total ........................................................................... 48,516.61

Columbus, Ga.:
Mar. 27. C. of Ga. took over handling of passenger trains and care of passenger cars of S. A. L. and Southern ........... 8,829.06
Apr. 2. Adoption single inspection ....................................... 15,015.00
Wages ............................................................................. 997.92
Fuel ................................................................................. 1,328.40
May 1. Southern and S. A. L. freight agencies consolidated, saving—
Wages ............................................................................. 2,947.56
Fuel ................................................................................. 1,992.00
Total ........................................................................... 32,683.02

Charlotte, N. C.:
Aug. 1. Norfolk Southern, S. A. L., and Southern. Consolidation of freight agencies ................................... 13,143.00
Sept. 1. Norfolk Southern, S. A. L., Southern, and Piedmont & Northern Railroads. Consolidation of freight agencies ....... 3,516.00
Total ........................................................................... 16,659.00

Columbia, S. C.:
Mar. 10. Single switching at one industry arranged, saving 3 switch-engine hours per day (wages) ....................... 2,594.59
A. C. L. took over all switching to and from Camp Jackson, resulting in saving of—
Wages ............................................................................. 7,634.09
Fuel ................................................................................. 16,627.20
Saving in fuel resulting from item first mentioned under Columbia, S. C. ......................................................... 3,453.84
Southern took over A. C. L. passenger-car cleaning ............ 1,613.52
Mar. 14. Single inspection adopted by all lines ........................... 4,684.68
Mar. 29. Southern took over A. C. L. passenger switching at Union Station—
Wages ............................................................................. 1,714.61
Fuel ................................................................................. 2,556.80
Total ........................................................................... 34,979.33

1 After deducting $175 increase.
<table>
<thead>
<tr>
<th>Location</th>
<th>Date</th>
<th>Details</th>
<th>Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Columbus, Miss.</td>
<td>Mar. 11</td>
<td>Single inspection adopted by all lines</td>
<td>$4,032.60</td>
</tr>
<tr>
<td></td>
<td></td>
<td>M. &amp; O. and Sou. R. R. in Mississippi. Consolidation of switching, saving</td>
<td>$6,000.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Total</strong></td>
<td><strong>$10,032.60</strong></td>
</tr>
<tr>
<td>Cordele, Ga.</td>
<td>Mar. 1</td>
<td>Yard work, all lines, consolidated, saving 1 S. A. L. switch engine and 12-hour service</td>
<td>$10,886.40, $15,410.80</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Total</strong></td>
<td><strong>$26,827.20</strong></td>
</tr>
<tr>
<td></td>
<td>Mar. 1</td>
<td>Single inspection all lines</td>
<td>$1,716.00</td>
</tr>
<tr>
<td>Dalton, Ga.</td>
<td>Mar. 11</td>
<td>Single inspection adopted</td>
<td>$1,003.86</td>
</tr>
<tr>
<td></td>
<td>Apr. 22</td>
<td>Yard work Southern and N. C. &amp; St. L. consolidated, saving 1 N. C. &amp; St. L. switch engine and crew, saving</td>
<td>$5,933.09, $7,439.04</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Total</strong></td>
<td><strong>$25,276.27</strong></td>
</tr>
<tr>
<td>Dublin, Ga.</td>
<td>Mar. 11</td>
<td>Single inspection adopted</td>
<td>$1,003.86</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Total</strong></td>
<td><strong>$9,000.00</strong></td>
</tr>
<tr>
<td>East Point, Ga.</td>
<td>May 28</td>
<td>C. of Ga. took over A. &amp; W. P. agency work</td>
<td>$2,784.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>C. of Ga. took over A. &amp; W. P. switching, saving</td>
<td>$9,072.00, $13,284.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Total</strong></td>
<td><strong>$25,140.00</strong></td>
</tr>
<tr>
<td>Goldsboro, N. C.</td>
<td>Mar. 16</td>
<td>N. S. and Southern mechanical forces consolidated, saving</td>
<td>$1,338.48</td>
</tr>
<tr>
<td></td>
<td>Mar. 21</td>
<td>Single inspection adopted</td>
<td>$1,287.00</td>
</tr>
<tr>
<td></td>
<td>June 10</td>
<td>N. S. yard and agency work taken over by Southern, saving 8 switch-engine hours, and agency clerks, saving</td>
<td>$3,878.11, $8,769.60</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Total</strong></td>
<td><strong>$25,900.39</strong></td>
</tr>
<tr>
<td>Henderson, Ky.</td>
<td>Apr. 21</td>
<td>L. &amp; N. took over switching for all lines, saving I. C. 1 switch engine, saving</td>
<td>$9,525.60, $10,627.20</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Consolidation inspection and mechanical watching</td>
<td>$3,088.80</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Total</strong></td>
<td><strong>$23,241.60</strong></td>
</tr>
<tr>
<td>Hattiesburg, Miss.</td>
<td>Apr. 25</td>
<td>Consolidation inspection and repair forces, all lines, saving</td>
<td>$5,559.84, $6,500.00, $225.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Total</strong></td>
<td><strong>$12,284.84</strong></td>
</tr>
</tbody>
</table>
**Hermitage, Va.:**

**Jacksonville, Fla.:**
Mar. 8. Single switching all industries arranged.
Savings occasioned above consolidations—
<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wages</td>
<td>5,134.75</td>
</tr>
<tr>
<td>Fuel</td>
<td>7,970.40</td>
</tr>
<tr>
<td>Apr. 1. Single inspection of freight and passenger equipment adopted, saving.</td>
<td>23,166.00</td>
</tr>
<tr>
<td>A. C. L. substation in viaduct yard discontinued, saving in wages.</td>
<td>1,520.16</td>
</tr>
<tr>
<td>S. A. L. Talleyrand station consolidated with A. C. L. export station, saving—</td>
<td></td>
</tr>
<tr>
<td>Clerical</td>
<td>392.50</td>
</tr>
<tr>
<td>Labor</td>
<td>572.88</td>
</tr>
<tr>
<td>Forsythe Street station with Fla, East Coast Bay Street station, June 10, saving—</td>
<td></td>
</tr>
<tr>
<td>Clerical</td>
<td>15,082.52</td>
</tr>
<tr>
<td>Labor</td>
<td>10,160.28</td>
</tr>
</tbody>
</table>

Consolidation of yards—
<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>11 car inspectors</td>
<td>23,307.20</td>
</tr>
<tr>
<td>1 car inspector’s clerk</td>
<td>1,530.00</td>
</tr>
<tr>
<td>3 yard clerks</td>
<td>3,960.00</td>
</tr>
<tr>
<td>1,122 engine-hours at $2.73 per hour</td>
<td>3,063.06</td>
</tr>
<tr>
<td>Less increase caused by employment of 2 yardmasters.</td>
<td>6,120.00</td>
</tr>
<tr>
<td>Discontinuing of two inspectors at passenger station</td>
<td>5,400.00</td>
</tr>
</tbody>
</table>

Handling of passenger engines for A. C. L. by Jacksonville Terminal Co., caused the following savings:
<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mechanical forces</td>
<td>11,148.00</td>
</tr>
<tr>
<td>Coal, 1,620 tons at $6 per ton</td>
<td>9,720.00</td>
</tr>
</tbody>
</table>

Total: 116,007.75

**Junta, Ga.:**
June 10. Transfer station discontinued, saving. 9,948.00

**Louisville, Ky.:**
Mar. 24. L. & N. took over mechanical and inspection work of L. H. & St. L., saving in labor. 9,194.33
May 20. Single inspection adopted by all lines, saving in labor. 23,513.52
Feb. 2. C. & O., Big Four, B. & O., Monon, and I. C. Railroads. K. & I. T. Co. and L. J. B. Co. make direct deliveries over short route tracks between Big Four and C. & O. on east end, and Sou. and Monon, on west end. 2,580.00
Jan. 15. B. & O., Monon, Sou., Pa. Roads. First Street joint freight station closed. Tonnage handled through main freight houses of various lines. 7,920.00
July 1. Freight station facilities of L. & N. and L. H. & St. L. R. R. combined, saving. 41,430.00
Nov. 1. Calling of L. H. & St. L. train and engine crews with those of L. & N., combined this date, saving. 35,054.00

Total: 119,721.85

**Lagrange, Ga.:**
May 1. A. B. & A. and A. & W. P. yard and agency work consolidated, saving 4 switch-engine hours, clerks, and labor—
<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wages</td>
<td>6,032.88</td>
</tr>
<tr>
<td>Fuel</td>
<td>4,605.12</td>
</tr>
</tbody>
</table>

Total: 10,638.00

1 Less $9,121, increase.
Lexington, Ky.:
Sept. 23. Freight station facilities, L. & N. and Southern R. R.; consolidated, saving .................................................. $14,553.00

Memphis, Tenn.:
Apr. 1. Single inspection adopted by all lines .......................... 30,000.00
Apr. 15. Alternate monthly handling of interchange between respective yards arranged between Sou.-Frisco., I. C.-Sou., L. C.-Frisco. Hulings substation closed on Apr. 29 .................. 2,784.00
May 1. M. & O, and Southern agency forces consolidated ............... 2,853.60
Single switching of industrial tracks arranged by all lines, so only one line will do switching at each plant, saving 25 hours, switch engine, per day—
Wages ........................................... 24,282.72
Fuel ............................................ 33,210.00
Oct. 1. St. Louis South Western and Missouri Pacific freight agencies consolidated ........................................... 15,735.00

Total .................................................................... 108,865.32

Meridian, Miss.:
Mar. 15. Single inspection adopted by all lines ................................ 2,359.50
Southern took over care M. & O passenger-car cleaning .................. 4,587.84
Arranged for switching at union station to be done by most available engine at time needed.
June 1. Further saving by unified inspection ................................ 13,864.59
June 5. M. & O. took over all industrial switching north of Twenty-second Avenue, saving 3 switch-engine hours per day—
Wages ........................................... 2,721.60
Fuel ............................................ 3,985.20

M. & O. and M. & M. Locomotive and car department consolidation, saving ........................................... 27,518.73

Total ..................................................................... 33,518.73

Middlesboro, Ky.:
Apr. 8. Reciprocal switching agreed on; L. & N. does all switching on Stony Fork Branch and Southern on Bennetts Fork Branch, saving........................................... 15,066.60

Mobile, Ala.:
Apr. 1. Single inspection adopted, all lines; checking vegetable cars by rail lines discontinued; M. & O. and Southern yard work consolidated, saving ........................................... 52,352.22
May 6. M. & O. and Southern freight houses consolidated ............... 4,941.60
May 20. M. & O. took over Southern Ry. mechanical work ............... 5,611.32
May 1. Southern and M. & O. telephones consolidated .................. 354.96
Apr. 15. Took off 4 vegetable agents; service performed by Southern weighing and inspection bureau ....................... 743.00

Total ..................................................................... 64,033.10

Montgomery, Ala.:
Apr. 12. Single inspection adopted by all lines .......................... 12,218.78
L. & N. took over all passenger-train inspection .......................... 2,913.77
Apr. 17. Switching at union passenger station unified so W. of A. and L. & N. do it all, working at opposite ends, saving A. C. L. ........................................... 907.20
May 1. All service and facilities of S. A. L. taken over by W. of A.- C. of Ga. S. A. L. freight station closed, saving 5 switch-engine hours per day ........................................... 26,759.16
June 1. Further saving in A. C. L.-M. & O. work by closing telegraph office and reorganization of inspection work ............... 6,936.19

Total ..................................................................... 49,735.10
Montgomery, Ala.—Continued.

May 1. All service and facilities of M. & O. and A. C. L. combined, saving $31,912.47
Apr. 22. L. & N. took over W. of A. electrical work at union station, saving 474.34

| Total | 82,121.91 |

Macon, Ga.:

Mar. 25. C. of Ga. took over switching at passenger station, saving 7,678.80
C. of Ga. took over inspection and cleaning of passenger equipment at union station 11,819.81
Mar. 11. Single inspection adopted by all lines 3,294.72
Alternate monthly handling of interchange between joint Sou.-G. S. & F. and C. of Ga., saving 1 switch-engine hour per day—
Wages 5,443.20
Fuel 7,970.04
Apr. 2. Single switching by one line for all arranged at 4 industry tracks, saving 1 switch-engine hour per day—
Wages 907.20
Fuel 1,328.40
May 1. Union station telegraph station closed and work taken over by C. of Ga. and G. S. & F. office already established in same building 3,758.40
Oct. 1. M. D. & S. and C. of Ga. passenger switching and cleaning equipment consolidated 7,272.00

Total 49,472.57

Martin, Tenn.:

Apr. 16. N. C. & St. L. and I. C. R. R. Consolidation of car-inspection forces 8,700.00
Aug. 15. N. C. & St. L. and I. C. telegraph agencies consolidated 1,920.00

Total 10,620.00

Nashville, Tenn.:

Apr. 10. Single inspection adopted 2,574.00
Nashville terminal engine does Tenn. Central switching on Front Street, saving 4 switch-engine hours per day—
Wages 3,991.68
Fuel 5,313.60
Alternate monthly handling of interchange between Tenn. Central and joint N. C. & St. L.—L. & N., saving 2 switch-engine hours per day—
Wages 1,995.84
Fuel 2,056.80

Total 16,531.92

New Orleans, La.:

Apr. 1. Single inspection adopted by all lines 25,037.30
N. O. G. N. freight-house work transferred from Press Street to Southern, Basin Street freight house 5,800.00
Apr. 8. Consolidation L. & N. in and outbound agency organizations 2,505.60
Apr. 1. Southern Ry. took over I. C. switching on N. O. T. Co.'s tracks, saving—
Wages 5,624.64
Fuel 8,236.08
Apr. 20. L. R. & N. entire service and facilities taken over by I. C., saving clerks, mechanics, labor, and 8 switch-engine hours—
Wages 64,734.31
Fuel 10,627.20
June 16. Interchange clerical work consolidated between lines 3,240.00
New Orleans, La.—Continued.

July 1. Villere Front agency and yard work taken over by Southern for all lines
Joint agency American Sugar Refinery discontinued and this work turned over to Southern Road. $5,915.70
Consolidation of outbound and inbound freight offices, saving 2 clerks. One L. & N. and 1 Southern inspector taken off, 1 L. & N. interchange clerk taken off, 1 telegraph operator taken off, saving 11,580.00
Total........................................ 146,885.83

Norfolk, Va., and Pinners Point:
Oct. 1. Southern and A. C. L. freight agencies consolidated, saving 5,580.00
A. C. L. and Southern yard and switching forces consolidated, saving 11,913.36
Total........................................ 17,493.36

Owensboro, Ky.:
May 1. L. H. & St. L. took over all inspection and repair work, saving 3,244.96
L. H. & St. L. took over I. C. switching, saving 8 switching hours and—
Wages........................................ 5,358.07
Fuel.......................................... 5,535.00
May 1. Telegraph work consolidated, saving 1,052.77
June 26. Joint agency for all three lines established, saving 4,941.60
Unification of L. H. & St. L. and I. C. inspection and repairs to cars, saving 9,151.00
From which subtract an increase of $1,964.00
Total........................................ 27,319.40

Paducah, Ky.:
Apr. 3. I. C. commenced using P. & I. Bridge for Carbondale, Paducah business, discontinuing ferry service, saving 13,488.00
May 1. C. B. Q., N. C. & St. L., and I. C. railroads consolidated passenger facilities 1,250.00
N. C. & St. L., C. B. & Q., and I. C. consolidation of mechanical facilities, saving 8,500.00
Total........................................ 23,238.00

Richmond, Va.:
Mar. 5. Single switching five industry tracks, saving 3 switch-engine hours per day—
Wages........................................ 2,594.59
Fuel.......................................... 3,985.20
July 1. Closed S. A. L. Hermitage substation 2,404.80
Southern and S. A. L. agencies and switching consolidated, saving 16,617.00
Total........................................ 25,601.59

Rome, Ga.:
May 1. N. C. & St. L. and C. of G. yard work and agencies consolidated, saving 6,744.24
Wages........................................ 5,933.09
Fuel.......................................... 9,210.24
Total........................................ 21,887.57

Spartanburg, S. C.:
Mar. 12. Single inspection adopted, saving 2,826.25
July 1. Southern handles C. C. & O. engines and equipment, saving 4,800.00
Total........................................ 7,626.25
Spartanburg, S. C.—Continued.
Nov. 1. Southern and P. & N. freight agencies consolidated, saving ................ $3,483.00

Total .................................................. 11,109.25

Selma, Ala.:  

<table>
<thead>
<tr>
<th>Wages</th>
<th>Fuel</th>
</tr>
</thead>
<tbody>
<tr>
<td>23,621.98</td>
<td>11,512.80</td>
</tr>
</tbody>
</table>

Total .................................................. 35,134.78

Savannah, Ga.:  

<table>
<thead>
<tr>
<th>Wages</th>
<th>Fuel</th>
</tr>
</thead>
<tbody>
<tr>
<td>798.34</td>
<td>1,328.40</td>
</tr>
</tbody>
</table>

Mar. 1. Single inspection adopted by all lines.  5,825.09
Mar. 10. S. A. L. takes over care of Southern passenger engines, saving 2,611.18

Mar. 2 and Apr. 8. Single switching at various industrial plants arranged, saving 4 switch-engine hours per day, saving—

<table>
<thead>
<tr>
<th>Wages</th>
<th>Fuel</th>
</tr>
</thead>
<tbody>
<tr>
<td>3,326.40</td>
<td>4,959.36</td>
</tr>
</tbody>
</table>

Mar. 15. Platform weighing of hay and unloading CL shipments autos discontinued by all lines, saving labor 6,877.10
May 1. Southern telegraph work taken over by C. of Ga., saving operator's salary 1,113.60
Dec. 1. S. A. L. and C. of Ga. consolidation all freight except export, saving 51,083.00

Total .................................................. 77,422.47

Tampa, Fla.:  
Apr. 25. Unified handling of interchange work saves 5 switch-engine hours per day—

<table>
<thead>
<tr>
<th>Wages</th>
<th>Fuel</th>
</tr>
</thead>
<tbody>
<tr>
<td>3,991.68</td>
<td>4,280.40</td>
</tr>
</tbody>
</table>

Total .................................................. 8,272.08

Tifton, Ga.:  
Apr. 1. Single inspection adopted 3,088.80

G. S. & F. and A. C. L. yard work consolidated, saving 1 switch engine (A. C. L.) 4 hours per day—

<table>
<thead>
<tr>
<th>Wages</th>
<th>Fuel</th>
</tr>
</thead>
<tbody>
<tr>
<td>5,443.20</td>
<td>3,542.40</td>
</tr>
</tbody>
</table>


Total .................................................. 16,106.69

Tuscaloosa, Ala.:  
July 1. M. & O.-Southern uptown agency closed 9,570.00

Winston-Salem, N. C.:  
Aug. 1. Southern, Norfolk & Western, and Winston-Salem southbound freight agencies and yard operation consolidated, saving—

<table>
<thead>
<tr>
<th>Agency</th>
<th>Yard office</th>
<th>Switching</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,847.64</td>
<td>1,473.96</td>
<td>27,216.00</td>
</tr>
</tbody>
</table>

Total .................................................. 30,537.60
Wilmington, N. C.:  
May 1. Single switching industrial plants arranged, saving 8 switch-engine hours per day and—

<table>
<thead>
<tr>
<th></th>
<th>Wages</th>
<th>Fuel</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$6,918.91</td>
<td>9,210.24</td>
</tr>
</tbody>
</table>

July 1. A. C. L. took over entire S. A. L. work, consolidation of freight agency, yard, and mechanical forces.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>43,824.43</td>
</tr>
</tbody>
</table>

Waycross, Ga.:  
Apr. 1. A. C. L. took over entire work of A. B. & A., saving 1 switch engine and—

<table>
<thead>
<tr>
<th></th>
<th>Wages</th>
<th>Fuel</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>18,020.17</td>
<td>10,647.20</td>
</tr>
</tbody>
</table>

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>28,667.37</td>
</tr>
</tbody>
</table>

Total savings accounted for through unification of stations and terminals. 1,992,218.66

Total savings by unification at 90 smaller stations. 190,041.53

Grand total. 2,182,260.19

EXHIBIT NO. 3.

Elimination of passenger trains.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A. C. L.</td>
<td>Various (See statement).</td>
<td>231,820</td>
<td>$0.743</td>
<td>$172,212.26</td>
</tr>
<tr>
<td>A. &amp; W. P. and W. of Ala.</td>
<td>Nos. 19 and 20</td>
<td>28,320</td>
<td>$0.734</td>
<td>18,554.00</td>
</tr>
<tr>
<td>Cent. of Ga.</td>
<td>Seashore trains, Nos. 32 and 33</td>
<td>26,347</td>
<td>4,500.00</td>
<td></td>
</tr>
<tr>
<td>Ga. Road</td>
<td>1 train</td>
<td>9,265</td>
<td>$0.422</td>
<td>425,881.14</td>
</tr>
<tr>
<td>III. Central</td>
<td>Nos. 33 and 34</td>
<td>8,030</td>
<td>3,588.66</td>
<td></td>
</tr>
<tr>
<td>L. &amp; N. R. R.</td>
<td>Various (See report)</td>
<td>245,018</td>
<td>1.73</td>
<td>425,881.14</td>
</tr>
<tr>
<td>Misc. Cent. &amp; G. &amp; S. I. Roads</td>
<td>Various 1</td>
<td>4,957</td>
<td>1.979.84</td>
<td></td>
</tr>
<tr>
<td>Norfolk Sou</td>
<td>Various</td>
<td>46,274</td>
<td>51,371.95</td>
<td></td>
</tr>
<tr>
<td>R. P. P. &amp; Wash. Southern Rds.</td>
<td>105,000 (c)</td>
<td></td>
<td>121,354.00</td>
<td></td>
</tr>
<tr>
<td>S. A. L.</td>
<td>Various</td>
<td>447,079</td>
<td>390,388.51</td>
<td></td>
</tr>
<tr>
<td>Southern R. R.</td>
<td>Various, 105 miles per day</td>
<td>71,175</td>
<td>48,537.89</td>
<td></td>
</tr>
<tr>
<td>N. C. &amp; St. L.</td>
<td>Various (See report)</td>
<td>396,392</td>
<td>337,346.88</td>
<td></td>
</tr>
<tr>
<td>Grand total</td>
<td>1,618,109</td>
<td>1,625,941.40</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1 Discontinuing shuttle train between Hattiesburg and Camp Shelby.

EXHIBIT NO. 4.

Reductions in organizations as compared with the same under corporate control.

MISCELLANEOUS ECONOMIES.

<table>
<thead>
<tr>
<th>Savings due to elimination of corporate officials receiving $5,000 per annum and above. The names given indicate the Federal managers of roads or groups of roads.</th>
</tr>
</thead>
<tbody>
<tr>
<td>J. P. Beckwith:</td>
</tr>
<tr>
<td>Florida East Coast R. R.</td>
</tr>
<tr>
<td>E. H. Coapman:</td>
</tr>
<tr>
<td>Southern R. R.</td>
</tr>
<tr>
<td>G. S. &amp; I. R. R.</td>
</tr>
<tr>
<td>C. N. O. &amp; T. P. R.</td>
</tr>
<tr>
<td>C. C. &amp; O. R. R.</td>
</tr>
<tr>
<td>A. &amp; V. R. R.</td>
</tr>
<tr>
<td>Deduct salary of assistant Federal manager</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
### Lyman Delano:
- A. C. L. R. R. .......................................................... $40,000

### W. J. Harahan:
- S. A. L. R. R. .......................................................... $32,560
- **Rearrangement of auditing methods** ............................ 2,580
- S. A. L. R. R. .......................................................... 107,100
- G. F. & A. R. R ....................................................... 9,000
- Durham Southern R. R. ............................................... 3,120

**Total** ......................................................................... 160,360

### C. M. Kittle:
- Ill. Cent. and Y. & M. V. R. R ....................................... 111,470
- G. S. & I. R. R ............................................................ 37,000
- N. O. G. N. R. R .......................................................... 21,000
- Miss. Central R. R ...................................................... 5,000

**Total** ......................................................................... 174,470

### E. T. Lamb:
- Wickersham ................................................................. 3,000
- Hudson ................................................................. 9,000
- Aug. & Summerville R. R ........................................... 3,000

**Total** ......................................................................... 14,856

### W. L. Mapother:
- L. & N. R. R ............................................................... 54,900
- Tenn. Cent. R. R .......................................................... 19,000
- N. C. & St. L. R. R ....................................................... 17,700
- B. & N. W. R. R ............................................................ 5,200

**Total** ......................................................................... 96,800

### R. V. Taylor:
- M. & O. and Sou. in Mississippi ..................................... 4,300
- G. M. & N. R. R ............................................................ 11,000

**Total** ......................................................................... 15,300

### W. A. Winburn:
- C. of Ga. and Wadley Sou ............................................ 13,900
- Additional ................................................................. 15,000

**Total** ......................................................................... 28,900

### J. H. Young:
- Norfolk Southern R. R .................................................. 4,200
- Additional ................................................................. 21,000

**Total** ......................................................................... 25,200

### W. D. Duke:
- R. F. & P. & Wash. Sou ................................................ 18,000

**Total** ......................................................................... $884,138

---

**Less—**

- **Salaries of terminal managers:**
  - Louisville ................................................................. 5,000
  - Birmingham ............................................................... 6,000
  - New Orleans .............................................................. 5,000
  - Atlanta ................................................................. 6,000
  - Jacksonville ............................................................. 5,000
  - Charleston ............................................................... 5,000

**Total** ......................................................................... 32,000

- **Salaries of general superintendents:**
  - Louisville ................................................................. 4,200
  - Memphis ................................................................. 5,000

**Total** ......................................................................... 9,200

---

**Total** ......................................................................... 842,938

**Savings in expenses of traffic departments, in Southern Region. (See detailed statements attached.)** ................................................................. 2,082,135

**Grand total** ................................................................... 2,925,073
Recapitulation of saving in expenses of traffic departments of lines in Southern Region.

<table>
<thead>
<tr>
<th>Statement No.</th>
<th>Increase</th>
<th>Decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office No. 1</td>
<td>$272,606.69</td>
<td>$1,445,992.95</td>
</tr>
<tr>
<td>Office No. 2</td>
<td>321,410.30</td>
<td>115,146.87</td>
</tr>
<tr>
<td>Office No. 3</td>
<td>1,885,550.15</td>
<td>272,000.69</td>
</tr>
<tr>
<td>Total</td>
<td>2,278,357.06</td>
<td>2,968,149.53</td>
</tr>
</tbody>
</table>

Adding the amount of the increase under General Order No. 27 and Supplement 7 to the salaries of the positions abolished, less the increased expense of positions created...

Net saving... 2,082,183.57

Statement No. 1.

[Comparative statement of totals of salaries paid officers and employees of freight and passenger traffic general offices of lines in Southern Region for the years 1917 and 1918.]

<table>
<thead>
<tr>
<th>Year</th>
<th>Increase</th>
<th>Decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td>1917</td>
<td>155,784.72</td>
<td>116,841.97</td>
</tr>
</tbody>
</table>

Statement No. 2 (A).

[Comparative statement of totals of salaries paid and expenses of all outside agencies of the freight-traffic departments of lines in Southern Region for the years 1917 and 1918.]

<table>
<thead>
<tr>
<th>Year</th>
<th>Increase</th>
<th>Decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td>1918</td>
<td>507,337.46</td>
<td>257,033.11</td>
</tr>
</tbody>
</table>

1. Off-line offices without Southern Region:

<table>
<thead>
<tr>
<th>Item</th>
<th>1918</th>
<th>1917</th>
<th>Increase</th>
<th>Decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Salaries</td>
<td>$184,450.53</td>
<td>$701,790.99</td>
<td>$517,337.46</td>
<td>257,033.11</td>
</tr>
<tr>
<td>(b) Traveling expenses</td>
<td>29,495.04</td>
<td>289,528.15</td>
<td>257,033.11</td>
<td>257,033.11</td>
</tr>
<tr>
<td>(c) Street and incidental expenses</td>
<td>1,630.24</td>
<td>21,264.37</td>
<td>19,634.13</td>
<td>19,634.13</td>
</tr>
<tr>
<td>(d) Office rent</td>
<td>70,493.55</td>
<td>114,348.92</td>
<td>43,855.36</td>
<td>43,855.36</td>
</tr>
<tr>
<td>(e) Office expenses</td>
<td>24,794.88</td>
<td>70,273.12</td>
<td>45,478.24</td>
<td>45,478.24</td>
</tr>
<tr>
<td>Total</td>
<td>320,881.42</td>
<td>1,194,211.95</td>
<td>873,330.53</td>
<td>873,330.53</td>
</tr>
</tbody>
</table>

2. Off-line offices within Southern Region:

<table>
<thead>
<tr>
<th>Item</th>
<th>1918</th>
<th>1917</th>
<th>Increase</th>
<th>Decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Salaries</td>
<td>112,463.05</td>
<td>322,854.06</td>
<td>210,390.01</td>
<td>193,390.01</td>
</tr>
<tr>
<td>(b) Traveling expenses</td>
<td>24,630.74</td>
<td>144,347.75</td>
<td>119,717.01</td>
<td>112,717.01</td>
</tr>
<tr>
<td>(c) Street and incidental expenses</td>
<td>1,882.83</td>
<td>17,624.44</td>
<td>15,741.61</td>
<td>15,741.61</td>
</tr>
<tr>
<td>(d) Office rent</td>
<td>16,706.01</td>
<td>35,708.55</td>
<td>19,002.54</td>
<td>18,002.54</td>
</tr>
<tr>
<td>(e) Office expenses</td>
<td>7,596.14</td>
<td>27,149.42</td>
<td>19,553.28</td>
<td>19,553.28</td>
</tr>
<tr>
<td>Total</td>
<td>163,358.20</td>
<td>545,778.84</td>
<td>382,420.64</td>
<td>382,420.64</td>
</tr>
</tbody>
</table>

3. On-line offices within Southern Region:

<table>
<thead>
<tr>
<th>Item</th>
<th>1918</th>
<th>1917</th>
<th>Increase</th>
<th>Decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Salaries</td>
<td>995,882.08</td>
<td>896,480.47</td>
<td>99,401.61</td>
<td>103,401.61</td>
</tr>
<tr>
<td>(b) Traveling expenses</td>
<td>97,907.40</td>
<td>227,353.16</td>
<td>129,445.76</td>
<td>129,445.76</td>
</tr>
<tr>
<td>(c) Street and incidental expenses</td>
<td>5,344.04</td>
<td>27,122.40</td>
<td>21,778.36</td>
<td>21,778.36</td>
</tr>
<tr>
<td>(d) Office rent</td>
<td>79,653.55</td>
<td>111,825.46</td>
<td>32,171.91</td>
<td>32,171.91</td>
</tr>
<tr>
<td>(e) Office expenses</td>
<td>32,292.75</td>
<td>51,608.98</td>
<td>19,316.23</td>
<td>19,316.23</td>
</tr>
<tr>
<td>Total</td>
<td>1,211,144.70</td>
<td>1,404,390.51</td>
<td>193,245.81</td>
<td>193,245.81</td>
</tr>
</tbody>
</table>

4. Average total number of employees, off-line offices without Southern Region...

5. Average total number of employees, off-line offices within Southern Region...

6. Average total number of employees, on-line offices within Southern Region...

Grand total:

<table>
<thead>
<tr>
<th>Expenses</th>
<th>1,595,254.32</th>
<th>1,448,892.98</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employees</td>
<td>684</td>
<td>1,615</td>
</tr>
</tbody>
</table>
### Statement No. 2 (B).

[Comparative statement of total salaries paid and expenses of all outside agencies of the passenger traffic departments of lines in Southern Region for years 1917-18.]

<table>
<thead>
<tr>
<th></th>
<th>1918</th>
<th>1917</th>
<th>Increase.</th>
<th>Decrease.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Off-line offices without Southern Region:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(a) Salaries</td>
<td>$850,464.35</td>
<td>$161,478.69</td>
<td>$688,985.66</td>
<td>$105,600.34</td>
</tr>
<tr>
<td>(b) Traveling expenses</td>
<td>10,871.74</td>
<td>72,244.89</td>
<td>61,373.15</td>
<td>0</td>
</tr>
<tr>
<td>(c) Street and incidental expenses</td>
<td>678.95</td>
<td>5,076.53</td>
<td>4,397.58</td>
<td>0</td>
</tr>
<tr>
<td>(d) Office rent</td>
<td>38,657.18</td>
<td>50,060.69</td>
<td>11,403.51</td>
<td>0</td>
</tr>
<tr>
<td>(e) Office expenses</td>
<td>5,950.05</td>
<td>23,422.85</td>
<td>17,472.80</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>112,631.27</td>
<td>321,885.47</td>
<td>209,254.20</td>
<td>0</td>
</tr>
<tr>
<td>2. Off-line offices within Southern Region:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(a) Salaries</td>
<td>12,163.92</td>
<td>31,930.76</td>
<td>19,766.84</td>
<td>0</td>
</tr>
<tr>
<td>(b) Traveling expenses</td>
<td>3,271.00</td>
<td>21,866.63</td>
<td>18,595.63</td>
<td>0</td>
</tr>
<tr>
<td>(c) Street and incidental expenses</td>
<td>112.30</td>
<td>924.00</td>
<td>811.70</td>
<td>0</td>
</tr>
<tr>
<td>(d) Office rent</td>
<td>5,696.68</td>
<td>8,272.21</td>
<td>2,575.53</td>
<td>0</td>
</tr>
<tr>
<td>(e) Office expenses</td>
<td>1,133.25</td>
<td>3,169.00</td>
<td>2,035.75</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>22,375.85</td>
<td>78,172.60</td>
<td>55,796.75</td>
<td>0</td>
</tr>
<tr>
<td>3. On-line offices within Southern Region:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(a) Salaries</td>
<td>401,474.38</td>
<td>375,756.25</td>
<td>25,718.13</td>
<td>$25,718.13</td>
</tr>
<tr>
<td>(b) Traveling expenses</td>
<td>70,785.11</td>
<td>97,534.14</td>
<td>26,749.03</td>
<td>0</td>
</tr>
<tr>
<td>(c) Street and incidental expenses</td>
<td>2,672.61</td>
<td>14,733.06</td>
<td>12,060.45</td>
<td>0</td>
</tr>
<tr>
<td>(d) Office rent</td>
<td>75,916.60</td>
<td>135,949.57</td>
<td>59,032.97</td>
<td>0</td>
</tr>
<tr>
<td>(e) Office expenses</td>
<td>41,745.83</td>
<td>32,961.16</td>
<td>8,784.37</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>593,584.23</td>
<td>654,934.58</td>
<td>61,350.35</td>
<td>0</td>
</tr>
<tr>
<td>4. Average total number of employees, off-line offices without Southern Region...</td>
<td>151</td>
<td>151</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5. Average total number of employees, off-line offices within Southern Region...</td>
<td>46</td>
<td>46</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>6. Average total number of employees, on-line offices in Southern Region...</td>
<td>250</td>
<td>331</td>
<td>81</td>
<td>81</td>
</tr>
<tr>
<td><strong>Grand total:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expenses</td>
<td>$728,602.35</td>
<td>$1,050,012.65</td>
<td>$321,410.30</td>
<td>$388,408.30</td>
</tr>
<tr>
<td>Employees</td>
<td>250</td>
<td>588</td>
<td>338</td>
<td>338</td>
</tr>
</tbody>
</table>

### Statement No. 3.

[Comparative statement of total salaries paid and expenses of officers and employees of agricultural and industrial departments of lines in Southern Region for years 1917-18.]

<table>
<thead>
<tr>
<th></th>
<th>1918</th>
<th>1917</th>
<th>Increase.</th>
<th>Decrease.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Off-line offices without Southern Region:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(a) Salaries</td>
<td>$15,305.62</td>
<td>$18,928.63</td>
<td>$3,623.01</td>
<td>0</td>
</tr>
<tr>
<td>(b) Traveling expenses</td>
<td>6,465.92</td>
<td>13,768.90</td>
<td>7,302.98</td>
<td>0</td>
</tr>
<tr>
<td>(c) Street and incidental expenses</td>
<td>779.07</td>
<td>1,468.52</td>
<td>689.45</td>
<td>0</td>
</tr>
<tr>
<td>(d) Office rent</td>
<td>501.36</td>
<td>1,360.73</td>
<td>859.37</td>
<td>0</td>
</tr>
<tr>
<td>(e) Office expenses</td>
<td>21,051.97</td>
<td>35,526.79</td>
<td>14,474.82</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>21,051.97</td>
<td>35,526.79</td>
<td>14,474.82</td>
<td>0</td>
</tr>
<tr>
<td>2. Off-line offices within Southern Region:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(a) Salaries</td>
<td>4,015.93</td>
<td>6,683.37</td>
<td>2,667.44</td>
<td>0</td>
</tr>
<tr>
<td>(b) Traveling expenses</td>
<td>1,053.33</td>
<td>2,870.70</td>
<td>1,817.37</td>
<td>0</td>
</tr>
<tr>
<td>(c) Street and incidental expenses</td>
<td>3,742.28</td>
<td>6,734.92</td>
<td>2,992.64</td>
<td>0</td>
</tr>
<tr>
<td>(d) Office rent</td>
<td>7.13</td>
<td>11.94</td>
<td>4.81</td>
<td>0</td>
</tr>
<tr>
<td>(e) Office expenses</td>
<td>5,115.98</td>
<td>10,123.68</td>
<td>5,007.70</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>5,115.98</td>
<td>10,123.68</td>
<td>5,007.70</td>
<td>0</td>
</tr>
<tr>
<td>3. On-line offices within Southern Region:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(a) Salaries</td>
<td>200,531.06</td>
<td>230,742.94</td>
<td>30,211.88</td>
<td>0</td>
</tr>
<tr>
<td>(b) Traveling expenses</td>
<td>48,074.48</td>
<td>60,524.19</td>
<td>12,449.71</td>
<td>0</td>
</tr>
<tr>
<td>(c) Street and incidental expenses</td>
<td>1,025.00</td>
<td>3,163.05</td>
<td>2,138.05</td>
<td>0</td>
</tr>
<tr>
<td>(d) Office rent</td>
<td>3,742.28</td>
<td>6,734.92</td>
<td>2,992.64</td>
<td>0</td>
</tr>
<tr>
<td>(e) Office expenses</td>
<td>12,031.92</td>
<td>21,956.56</td>
<td>9,924.64</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>263,458.31</td>
<td>361,122.66</td>
<td>97,664.35</td>
<td>0</td>
</tr>
<tr>
<td>4. Average total number of employees, off-line offices without Southern Region...</td>
<td>23</td>
<td>23</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5. Average total number of employees, off-line offices within Southern Region...</td>
<td>7</td>
<td>7</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>6. Average total number of employees, on-line offices within Southern Region...</td>
<td>111</td>
<td>300</td>
<td>189</td>
<td>0</td>
</tr>
<tr>
<td><strong>Grand total:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expenses</td>
<td>$829,626.26</td>
<td>$466,773.13</td>
<td>$362,853.13</td>
<td>$362,853.13</td>
</tr>
<tr>
<td>Employees</td>
<td>111</td>
<td>300</td>
<td>189</td>
<td>0</td>
</tr>
</tbody>
</table>
Statement No. 4.

[Comparative statement of totals of fixed items of expenses of traffic departments of lines in Southern Region per month for the months of December, 1917 and 1918.]

<table>
<thead>
<tr>
<th>Description</th>
<th>1918</th>
<th>1917</th>
<th>Increase</th>
<th>Decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. General offices:</td>
<td></td>
<td></td>
<td>--------------</td>
<td>--------------</td>
</tr>
<tr>
<td>(a) Salaries, freight</td>
<td>$186,992.40</td>
<td>$164,555.87</td>
<td>$22,436.53</td>
<td>$3,641.04</td>
</tr>
<tr>
<td>(b) Salaries, passenger</td>
<td>76,297.32</td>
<td>79,933.36</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>263,289.72</td>
<td>244,494.23</td>
<td>18,795.49</td>
<td></td>
</tr>
<tr>
<td>2. Outside agencies off-line without Southern Region:</td>
<td></td>
<td></td>
<td>--------------</td>
<td>--------------</td>
</tr>
<tr>
<td>(a) Salaries</td>
<td>99.31</td>
<td>51,822.33</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(b) Office rents</td>
<td>5,580.93</td>
<td>15,614.35</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>5,680.24</td>
<td>97,436.88</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Outside agencies off-line within Southern Region:</td>
<td></td>
<td></td>
<td>--------------</td>
<td>--------------</td>
</tr>
<tr>
<td>(a) Salaries</td>
<td>53.15</td>
<td>31,090.31</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(b) Office rents</td>
<td>133.00</td>
<td>3,762.74</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>988.15</td>
<td>34,853.05</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Outside agencies on-line within Southern Region:</td>
<td></td>
<td></td>
<td>--------------</td>
<td>--------------</td>
</tr>
<tr>
<td>(a) Salaries</td>
<td>116,247.28</td>
<td>127,169.17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(b) Office rents</td>
<td>12,033.72</td>
<td>19,044.90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>128,281.00</td>
<td>146,214.07</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total (outside agencies)</td>
<td>134,974.39</td>
<td>278,504.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grand total</td>
<td>398,264.11</td>
<td>522,998.23</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Statement No. 5.

[Comparative statement of official and clerical positions abolished and created since Dec. 31, 1917, traffic departments of lines in Southern Region.]

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of positions.</td>
<td>Number of positions.</td>
<td>Net decrease</td>
</tr>
<tr>
<td></td>
<td>(a) Total salary pay roll.</td>
<td>(a) Total salary pay roll.</td>
<td>(a)</td>
</tr>
<tr>
<td>General offices:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(a) Freight</td>
<td>272 $363,762.25</td>
<td>418,224.19</td>
<td></td>
</tr>
<tr>
<td>(b) Passenger</td>
<td>54 46,052.76</td>
<td>50,999.29</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>326 409,814.98</td>
<td>475,163.48</td>
<td></td>
</tr>
<tr>
<td>Outside agencies off-line without Southern Region:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(a) Salaries</td>
<td>688 900,577.38</td>
<td>1,075,608.44</td>
<td></td>
</tr>
<tr>
<td>(b) Office rents</td>
<td>18 1,363.50</td>
<td>1,364.90</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>706 902,940.88</td>
<td>1,077,273.34</td>
<td></td>
</tr>
<tr>
<td>Outside agencies off-line within Southern Region:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(a) Salaries</td>
<td>274 336,858.85</td>
<td>418,025.92</td>
<td></td>
</tr>
<tr>
<td>(b) Office rents</td>
<td>18 10,643.90</td>
<td>10,644.90</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>292 347,502.75</td>
<td>428,669.82</td>
<td></td>
</tr>
<tr>
<td>Outside agencies on-line within Southern Region:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(a) Salaries</td>
<td>494 496,190.28</td>
<td>643,808.09</td>
<td></td>
</tr>
<tr>
<td>(b) Office rents</td>
<td>18 165,617.68</td>
<td>165,619.90</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>512 661,807.96</td>
<td>809,427.99</td>
<td></td>
</tr>
<tr>
<td>Grand total</td>
<td>1,782,214,340.49</td>
<td>2,162,632.90</td>
<td></td>
</tr>
</tbody>
</table>

(*a) Total salary pay roll for calendar year 1917, at salaries actually in effect during 1917.

(*b) Total salary pay roll for calendar year 1917, at salaries which would have been paid under General Order No. 37 and Supplement No. 7 therefor.
Statement No. 6.

[Comparative statement of official and clerical positions abolished and created since Dec. 31, 1917, agricultural and industrial departments of lines in Southern Region.]

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of positions.</td>
<td>Total salary pay roll.</td>
</tr>
<tr>
<td></td>
<td>(a)</td>
<td>(b)</td>
</tr>
<tr>
<td>1. General offices</td>
<td>41</td>
<td>$36,250.18</td>
</tr>
<tr>
<td>2. Outside agencies off-line without Southern Region</td>
<td>7</td>
<td>10,295.00</td>
</tr>
<tr>
<td>3. Outside agencies off-line within Southern Region</td>
<td>39</td>
<td>44,872.00</td>
</tr>
<tr>
<td>4. Outside agencies on-line within Southern Region</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>46</td>
<td>55,107.00</td>
</tr>
<tr>
<td>Grand total</td>
<td>87</td>
<td>111,423.18</td>
</tr>
</tbody>
</table>

(*) Total salary pay roll for calendar year 1917 at salaries actually in effect during 1917.

(**) Total salary pay roll for calendar year 1917 at salary which would have been paid under General Order No. 27 and Supplement No. 7 thereto.

Miscellaneous economies.

REDUCTION IN FREIGHT-TRAIN SERVICE.

M. & O. R. R.:  
Freight-train service between Corinth, Miss., and Birmingham, Ala.; discontinued, same now being handled by the III. Cent. R. R. between Jackson, Tenn., and Birmingham, Ala.; effective Aug. 15, 1918.  
Sou. Rd. in Mississippi:  
Local freight service on Napanee Branch reduced from 2 to 1 trip per week.  
Norfolk Sou. R. R.:  
Freight-train schedules being rearranged, thereby eliminating certain through trains, putting local freight trains on a triweekly basis, etc., which reduced constructive mileage, thereby causing a total estimated saving of.  
Estimated saving in freight-train service by running “shuttle” trains between Hattiesburg and Camp Shelby as mixed trains...  
Elimination of local freight train each day between Brookhaven and Natchez.  
L. & N. R. R. and Southern R. R.:  
June 1. L. & N. R. R. withdrew from joint use of Woodstock & Blocton Ry., the A. G. S. handling business for both lines...  
Southern R. R.:  
Due to conversion of freight between common points in the Carolinas from the P. & N. R. R. to Sou. Rd., a stagger plan of local freight operation between Sou. and P. & N. was made effective, which reduced train operations of both roads...  
S. A. L. R. R.:  
By putting on triweekly service in place of daily service and eliminating extras, local freight-train mileage has been reduced, resulting in a saving of.  

Total.  

$71,632.00  
1,106.04  
74,112.00  
10,050.00  
12,000.00  
10,000.00  
10,000.00  
123,409.00  
312,309.04
CONSOLIDATION OF GENERAL OFFICE FORCES AND ELIMINATION OF SPECIAL DEPARTMENTS, ETC.

Claim departments handling all classes of claims, taxes, fire prevention, and safety first.................................................. $6,000.00
L. & N. R. R. and L. H. & St. L. R. R.:
Car record and purchasing departments of the L. H. & St. L. consolidated with L. & N. R. R........................................... 7,140.00
N. C. & St. L. R. R.:
Discontinuance of special research department........................................... 24,000.00
Elmination of publicity agent, employees' magazine, etc......................... 4,746.00
Consolidation certain supply departments with purchasing department........ 20,000.00
Tenn. Central R. R.:
Reduction in expenses of law, claim, and accounting departments and rent 17,743.00
Central of Ga. R. R.:
Elimination of men and reduction of salaries in legal department............. 6,800.00
Miss. Cent. R. R., G. & S. I. R. R.:
Consolidation of general offices.................................................. 54,175.00
L. & N. R. R.:
Reduction in law department, salaries, and expenses................................ 46,282.00
Ill. Central R. R.:
Estimated saving on account of general orders pertaining to accounts, etc. 10,485.00
Durham & Sou. R. R.:
Reduction in salary of general manager............................................ 2,400.00
Southern Railroad:
Saving in accounting department due to auditing interroad bills and accounts, separation of loss and damage from overcharge investigation, distribution of claims paid, etc........................................... 20,000.00
Reorganization of accounting forces after separation of corporate and Federal transactions.................................................. 13,957.00
Seaboard Air Line R. R.:
By establishing universal interline billing it is estimated that clerical expense for billing has been reduced 20,000.00
Total........................................................................................................ 253,728.00

DISCONTINUANCE OF INSURANCE POLICIES.

C. of Ga. R. R................................................................. 11,308.00
Ill. Central R. R............................................................... 12,050.00
Total........................................................................................................ 23,358.00

JOINT OPERATION OF THROUGH TRAINS.

Ill. Central R. R., Tenn. Central R. R.:
On June 2, 1918, operation of through trains between Princeton, Ky., and Nashville, Tenn., was begun. Ill. Central from Princeton, Ky., to Hopkinsville, Ky., and Tenn. Central from Hopkinsville, Ky., to Nashville, Tenn.................................................. 19,380.00
Southern R. R., L. & N. R. R.:
On June 1 the L. & N. R. R. withdrew from joint use of Woodstock & Blocton Rd., the A. G. S. handling business for both lines .................................................. 10,000.00
Total........................................................................................................ 29,380.00

TERMINALS.

L. & N. R. R.:
By a discontinuance of Paris, Ky., as a terminal for slow freight trains, there was a reduction in yard and shop forces, resulting in a saving of.................................................. 130,194.00

TELEGRAPH AND TELEPHONE UNIFICATION.

Saving in salaries (see file 142; letter of J. A. J., Jan. 7, 1919).............. 76,260.00
SUNDRIES.

N. C. & St. L. R. R. (various) ......................................................................................................................... 5,332.00
L. & N. R. R. (various) ........................................................................................................................................ 8,447.00

14,474.28

Saving in advertising expenses ......................................................................................................................... 402,938.00

Grand total...................................................................................................................................................... 1,242,641.28

EXHIBIT NO. 5.

Statement of economies and efficiency obtained, telegraph and telephone department, Southern Region, during year 1918.

Number of offices at which wires of one road have been extended into the office of another road .......................................................... 105
Number of telegraph offices closed account of unification ............................................................ 40
Number of telegraph employees released account of unification ......................................................... 75
Regional interchange telegraphic efficiency obtained by coordination and connecting up wires, etc. (estimated per cent) ........................................... 55
Increased efficiency in telegraph service of individual roads, secured by general improvement of wire facilities (estimated per cent) .................. 30
By simplexing existing telephone circuits 1,605 additional telegraph wire miles have been obtained. This work of simplexing cost approximately $1,500. The construction of this 1,605 additional wire-miles would have cost approximately $80,250. Estimated increased regional efficiency obtained by this work was about (per cent) .................. 30
Telegraphers' wage: Annual saving, account of unifications ........................................................................... $76,260

Statement showing estimated saving in car-miles resulting from short routing of carload freight traffic.

[Number of gateways, 19.]

[Week selected Nov. 11 to 17, 1917, inclusive, and all carloads billed from or rebilled from these points taken.]

ALL CARS, WEEK NOV. 11 TO 17, 1917.

<table>
<thead>
<tr>
<th>Number of cars</th>
<th>Total car-miles as billed</th>
<th>Revised routes (route 1)</th>
<th>Saving in car-miles</th>
</tr>
</thead>
<tbody>
<tr>
<td>24,166</td>
<td>10,272,334</td>
<td>9,475,176</td>
<td>797,158</td>
</tr>
</tbody>
</table>

Percentage of saving on all cars handled ........................................................................................................... 7.76
Average saving per car on all cars (miles) ........................................................................................................... 32.9
Average haul per car, as billed (miles) ................................................................................................................ 691

Based on 59 weeks. Based on 52 weeks.

<table>
<thead>
<tr>
<th>Number of cars</th>
<th>Total car-miles as billed</th>
<th>Revised routes (route 1)</th>
<th>Saving in car-miles</th>
<th>Number of cars</th>
<th>Total car-miles as billed</th>
<th>Revised routes (route 1)</th>
<th>Saving in car-miles</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,208,300</td>
<td>513,616,700</td>
<td>473,758,800</td>
<td>39,857,900</td>
<td>1,256,632</td>
<td>534,161,308</td>
<td>492,709,152</td>
<td>41,452,216</td>
</tr>
</tbody>
</table>

MISROUTED CARS ONLY, WEEK NOV. 11 TO 17, 1917.

<table>
<thead>
<tr>
<th>Number of cars</th>
<th>Total car-miles as billed</th>
<th>Revised routes (route 1)</th>
<th>Saving in car-miles</th>
</tr>
</thead>
<tbody>
<tr>
<td>7,283</td>
<td>5,039,181</td>
<td>4,212,023</td>
<td>797,158</td>
</tr>
</tbody>
</table>

Percentage of saving on all misrouted cars handled ....................................................................................... 15.8
Average saving per car on all misrouted cars handled (miles) ........................................................................ 109.5
Average haul per car as billed (miles) ............................................................................................................ 691
Statement showing estimated saving in car-miles resulting from short routing of carload freight traffic—Continued.

MISROUTED CARS ONLY, WEEK NOV. 11 TO 17, 1917—Continued.

<table>
<thead>
<tr>
<th>Number of cars</th>
<th>Total car-miles as billed (route 1)</th>
<th>Revised routes (route 1)</th>
<th>Saving in car-miles</th>
<th>Number of cars</th>
<th>Total car-miles as billed (route 1)</th>
<th>Revised routes (route 1)</th>
<th>Saving in car-miles</th>
</tr>
</thead>
<tbody>
<tr>
<td>364,150</td>
<td>251,959,050</td>
<td>212,101,150</td>
<td>39,857,900</td>
<td>378,716</td>
<td>292,037,112</td>
<td>220,585,196</td>
<td>41,452,216</td>
</tr>
</tbody>
</table>

Statement showing for Southern Region the percentage of increase or decrease in the average number of tons per train for the months of April to October, 1918, inclusive, as compared with the corresponding months of previous year.

<table>
<thead>
<tr>
<th>Month</th>
<th>Increase</th>
<th>Decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td>April</td>
<td>0.8</td>
<td></td>
</tr>
<tr>
<td>May</td>
<td></td>
<td>7.2</td>
</tr>
<tr>
<td>June</td>
<td></td>
<td>-5.7</td>
</tr>
<tr>
<td>July</td>
<td>2.1</td>
<td></td>
</tr>
<tr>
<td>August</td>
<td>5.4</td>
<td></td>
</tr>
<tr>
<td>September</td>
<td>4.0</td>
<td></td>
</tr>
<tr>
<td>October</td>
<td>6.7</td>
<td></td>
</tr>
</tbody>
</table>

Figures not available for January, February, and March.

Comparative statement of revenue cars loaded and received from connections by railroads in Southern Region, Mar. 1 to Dec. 31, 1918.

<table>
<thead>
<tr>
<th>Month</th>
<th>Cars loaded</th>
<th>Received from connections</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1918</td>
<td>1917</td>
<td>1918</td>
</tr>
<tr>
<td>March</td>
<td>513,774</td>
<td>514,770</td>
<td>784,824</td>
</tr>
<tr>
<td>April</td>
<td>537,392</td>
<td>542,611</td>
<td>888,473</td>
</tr>
<tr>
<td>May</td>
<td>539,789</td>
<td>555,065</td>
<td>864,854</td>
</tr>
<tr>
<td>June</td>
<td>507,065</td>
<td>511,865</td>
<td>798,930</td>
</tr>
<tr>
<td>July</td>
<td>440,745</td>
<td>440,779</td>
<td>884,524</td>
</tr>
<tr>
<td>August</td>
<td>485,199</td>
<td>483,574</td>
<td>968,773</td>
</tr>
<tr>
<td>September</td>
<td>461,119</td>
<td>463,705</td>
<td>924,824</td>
</tr>
<tr>
<td>October</td>
<td>473,071</td>
<td>473,319</td>
<td>946,390</td>
</tr>
<tr>
<td>November</td>
<td>438,231</td>
<td>465,418</td>
<td>903,649</td>
</tr>
<tr>
<td>December</td>
<td>400,268</td>
<td>403,897</td>
<td>794,165</td>
</tr>
<tr>
<td>Total</td>
<td>4,796,833</td>
<td>4,855,006</td>
<td>7,651,839</td>
</tr>
<tr>
<td>Increase</td>
<td>58,173</td>
<td>133,585</td>
<td>191,758</td>
</tr>
<tr>
<td>Decrease</td>
<td></td>
<td></td>
<td>35,682</td>
</tr>
</tbody>
</table>
Recapitulation.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Salaries</td>
<td>$142,956.28</td>
<td>$106,517.43</td>
<td>$36,438.85</td>
</tr>
<tr>
<td>Rent</td>
<td>33,794.76</td>
<td>76,979.42</td>
<td>43,184.66</td>
</tr>
<tr>
<td>Office expenses</td>
<td>20,415.33</td>
<td>18,169.97</td>
<td>2,245.36</td>
</tr>
<tr>
<td>Total expenses</td>
<td>200,166.67</td>
<td>197,666.52</td>
<td>2,499.75</td>
</tr>
<tr>
<td>Total sales, exclusive of Pullman sales.</td>
<td>$9,545,645.36</td>
<td>$8,539,432.06</td>
<td>1,006,133.30</td>
</tr>
<tr>
<td>Pullman sales</td>
<td>1,030,226.72</td>
<td>994,487.36</td>
<td>35,739.36</td>
</tr>
<tr>
<td>Value of Government requests (included in total ticket sales).</td>
<td>10,575,872.08</td>
<td>9,533,999.42</td>
<td>1,041,872.66</td>
</tr>
<tr>
<td></td>
<td>2,157,584.39</td>
<td>1,068,306.82</td>
<td>1,044,277.57</td>
</tr>
</tbody>
</table>

Depot ticket offices.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Salaries</td>
<td>$338,473.62</td>
<td>$308,655.21</td>
<td>$129,818.41</td>
</tr>
<tr>
<td>Total ticket sales, exclusive of Pullman sales.</td>
<td>40,347,375.98</td>
<td>25,609,092.88</td>
<td>14,738,283.10</td>
</tr>
<tr>
<td>Pullman sales</td>
<td>1,378,521.64</td>
<td>1,299,521.65</td>
<td>79,999.99</td>
</tr>
<tr>
<td>Total sales</td>
<td>41,725,897.62</td>
<td>26,898,614.53</td>
<td>14,827,283.09</td>
</tr>
<tr>
<td>Value of Government requests (included in total ticket sales).</td>
<td>3,880,546.32</td>
<td>557,356.84</td>
<td>3,323,189.78</td>
</tr>
</tbody>
</table>

1 Number of transactions, 942,107.  
2 Number of transactions, 775,840.  

(Exhibits will appear in complete report of Director General.)
UNITED STATES RAILROAD ADMINISTRATION

ANNUAL REPORT
OF THE
REGIONAL DIRECTOR FOR THE
ALLEGHENY REGION

TO THE
DIRECTOR GENERAL OF RAILROADS

1918

WASHINGTON
GOVERNMENT PRINTING OFFICE
1919
Hon. W. G. McAdoo,

Director General of Railroads, Washington, D. C.

My Dear Mr. McAdoo: In response to your request of September 20, I beg to submit the following report on the unification of operation in the Allegheny Region:

<table>
<thead>
<tr>
<th></th>
<th>Men released for other service.</th>
<th>Saving per annum.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Unification of terminals and stations, 875.</td>
<td>1,552</td>
<td>$4,037,526</td>
</tr>
<tr>
<td>(b) Elimination of passenger service, saving train miles per annum, 7,683,492.</td>
<td>658</td>
<td>5,914,203</td>
</tr>
<tr>
<td>(c) Reduction in organizations contrasted with same under corporate control: Saving due to the elimination of corporate organizations.</td>
<td>692</td>
<td>1,828,071</td>
</tr>
<tr>
<td>Unifications and discontinuance of operating and traffic offices.</td>
<td></td>
<td>1,168,856</td>
</tr>
<tr>
<td>(d) Miscellaneous economies, the result of causes other than the above: Advertising discontinued.</td>
<td></td>
<td>450,640</td>
</tr>
<tr>
<td>Road unifications.</td>
<td>290</td>
<td>1,710,954</td>
</tr>
<tr>
<td>Grand total (a), (b), (c), (d).</td>
<td>3,192</td>
<td>15,110,260</td>
</tr>
<tr>
<td>(e) Recapitulation of cooperative action, the results of which are in the direction of efficiency but intangible as to economies: Freight traffic diversions.</td>
<td>Number: 251</td>
<td>Cars diverted: 317,604</td>
</tr>
</tbody>
</table>

The adoption of the Sailing Day Plan for handling L. C. L. freight, the making effective shipping guides, and the zoning of traffic at Philadelphia, Baltimore, and other large cities, the short routing of car-load freight by billing at the source, all have a marked influence in simplifying terminal and road operation, reducing freight-car miles, and releasing equipment for other uses. The fullest interchange between railroads of tugs, floats, barges, and other floating equipment at New York, Philadelphia, Baltimore, and Norfolk has enabled the maximum efficiency of railroad-owned equipment to be obtained and has reduced to a minimum the hiring of outside equipment, which was thus made available for other urgent requirements.

It is impossible to approximate the savings effected by the freight traffic diversions and the miscellaneous coordinative activities.

The figures embrace the unifications made on Allegheny Region roads prior to being placed in this region, as well as those effected since the Allegheny Region was formed. Statements giving the unifications prior to and subsequent to the placing of the roads in the Allegheny Region are attached.

This region was formed June 1, 1918, and comprised the Pennsylvania Railroad lines east of Pittsburgh, Baltimore & Ohio Railroad.

133669*—19
lines east of Parkersburg and Pittsburgh, Pittsburgh & Lake Erie and other lines serving the Pittsburgh district, Philadelphia & Reading Railway system and Central Railroad of New Jersey. On December 1, Pennsylvania lines west of Pittsburgh and Baltimore & Ohio Railroad lines west of Parkersburg and Pittsburgh were added.

In addition to their usual business, the lines in the original region handled a heavy tonnage of coal, coke, ore, and miscellaneous supplies to the steel plants and blast furnaces in the Pittsburgh district and miscellaneous supplies to over 40 munition and shipbuilding plants on the eastern seaboard. They also transported troops to and from camps Upton, Mills, Dix, and 16 other camps located on or served by the region lines, in addition to handling troops to point of embarkation.

As the Allegheny Region was a center of most intensive activity in war work, it was necessary to move traffic over lines of least resistance, route freight so as to avoid congested districts, and eliminate all possible duplication of passenger service in order to transport the large number of employees of munition and shipbuilding plants to and from work, furnish those plants needed supplies, and take care of the heavy troop movements.

The most important consolidations of facilities were the routing of Baltimore & Ohio freight trains between McKeansport and New Castle over the Pittsburgh & Lake Erie Railroad, where one engine will handle the tonnage of five engines between the same points on the Baltimore & Ohio lines; handling westbound coal from Fairmont district and coke from lower Connellsville region on Baltimore & Ohio over the Monongahela, Pittsburgh & Lake Erie and Pennsylvania Railroads to Pittsburgh district, thus releasing the Baltimore & Ohio lines for movement of additional eastbound business, principally coal from Fairmont district to seaboard; routing Baltimore & Ohio business from West Virginia coal regions and Pittsburgh district by way of Rutherford Gateway and Philadelphia & Reading Railroad instead of handling it via Baltimore and Philadelphia, taking advantage of a shorter line and more favorable grades, and in addition, keeping the business out of the congested districts at Baltimore and Philadelphia. Anthracite coal from Pottsville and Shamokin regions to Baltimore, Washington, and other points was moved via Harrisburg instead of Philadelphia, helping to avoid congestion in the latter district.

Western Maryland and Baltimore & Ohio lines between Cumberland and Connellsville were operated as one division, as were also Cumberland Valley, Western Maryland, and Philadelphia & Reading lines between Cherry Run and Harrisburg. Huntingdon & Broad Top Mountain Railroad was operated as part of the Juanita division of Pennsylvania Railroad. Philadelphia & Reading, New England
Coal Fleet was operated from Port Reading instead of Port Richmond to New England points with a reduction in the water movement of approximately 185 miles and an increase in road haul of only 70 miles.

Appointment of terminal managers in charge of operations of all lines at Baltimore, Philadelphia, and New York, and the Permit System regulating the flow of traffic in accordance with ability to handle at seaboard destination, have been of great value.

From June to October there were over 900 passenger cars exclusively assigned to the transportation of war workers, and during the same period nearly 9,000 troop trains were moved in the region. During the period there were many unifications of terminals and stations made, among the most important of which to the traveling public was the use of the Pennsylvania Railroad terminal at New York by Baltimore & Ohio Railroad and Lehigh Valley Railroad for its through trains.

As illustrating the density of freight traffic, in October, 1918, the region had 5.6 per cent of the average mileage of Federal controlled railroads in the United States while it transported 14 per cent of the total net ton-miles of all such railroads. The results of operation are not available for November and December but for the period from June to October, inclusive, the region handled 1,233,396,959, or 4.4 per cent more tons one mile and transported 447,002,496, or 14.7 per cent more passengers one mile than in the corresponding period the previous year.

Considering the large increase in business and the fact that many experienced employees entered the military and naval service or were engaged at munition plants or other lines of war work, their places being taken by less experienced employees, both passenger and freight business was well handled. I am pleased to say that we have had the hearty cooperation of all the officers and employees of railroads in the region, and to this I attribute in a large measure the success in handling the business.

During December, 1918, weather conditions in Allegheny Region were favorable to operation, and the railroads were able to furnish ample transportation to handle an increase in both freight and passenger traffic compared with December, 1917.

Anthracite coal loading increased 1,456 cars, or 2.9 per cent; bituminous loading increased 35,944 cars, or 17.7 per cent; all coal loading increased 37,400 cars, or 14.8 per cent, compared with December, 1917. Total revenue freight loaded increased 64,803 cars, or 8.9 per cent; and total revenue freight received from connections increased 108,913 cars, or 17.2 per cent, compared with same month last year.
Tidewater coal dumped was 2,158,491 tons, increase of 471,117 tons, or 21.8 per cent, compared with December, 1917.

At close of month there were stored 12,000 open-top and 10,000 closed cars for which there was no demand. Including this surplus, cars in Allegheny Region equaled 99 per cent of ownership, compared with 115 per cent June 1, 1918.

With the exception of movement controlled by permits, the region continued clear of embargoes on carload freight, and no embargoes at transfer platforms against L. C. L. freight.

Report of blast-furnace operations December 31 shows no furnaces out due to transportation deficiencies.

Passenger travel was heavy, due to holidays and the large number of soldiers and sailors on furlough and discharged. Generally speaking, the travel was satisfactorily handled. Extra coaches and parlor cars, and in many cases extra sections of passenger trains, were operated to handle the holiday travel. Passenger-train schedules were maintained with reasonable regularity, considering the volume of traffic handled. United States mail and express were satisfactorily handled. Troop movements continued light. Due to cessation of hostilities, 24 trains serving war industries were withdrawn during the month.

The bad-order car situation compares favorably with November, 1918, although repairs were retarded, due to a week of rainy weather in early part of the month. Locomotive output also compares favorably with previous month. Railroads received 14 locomotives built in their own shops and 19 from locomotive builders, leaving 383 locomotives (including Pennsylvania lines west) to be received to complete 1918 program.

Thirty-four unifications of facilities were effected during the month, resulting in an annual saving of $326,243.

Ability to recruit labor forces, along with open weather, enabled satisfactory progress being made on addition and betterment work. Completion of engine-house and yard improvements is being pushed, and a large portion of these facilities are already completed.

Yours, very truly,

C. H. Markham,
Regional Director.
**Allegheny Region. — Summary of unification, June 1, 1918, to Jan. 1, 1919.**

*(a) Unification of Terminals and Stations.*

<table>
<thead>
<tr>
<th>Unification</th>
<th>Employees released for other service</th>
<th>Saving per annum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stations</td>
<td>246</td>
<td>759</td>
</tr>
<tr>
<td>Telegraph offices</td>
<td>9</td>
<td>12</td>
</tr>
<tr>
<td>Switching</td>
<td>87</td>
<td>185</td>
</tr>
<tr>
<td>Engine-house facilities</td>
<td>51</td>
<td>216</td>
</tr>
<tr>
<td>Car repair and inspection</td>
<td>165</td>
<td>237</td>
</tr>
<tr>
<td></td>
<td></td>
<td>558</td>
</tr>
</tbody>
</table>

*(b) Elimination of Passenger Service.*

<table>
<thead>
<tr>
<th>Locomotives</th>
<th>Cars</th>
<th>Employees released for other service</th>
<th>Train-mi.</th>
<th>Saving per annum</th>
</tr>
</thead>
<tbody>
<tr>
<td>To increase capacity of road for freight</td>
<td>10</td>
<td>19</td>
<td>40</td>
<td>367,776</td>
</tr>
<tr>
<td>On account of elimination of competitive conditions</td>
<td>10</td>
<td>61</td>
<td>93</td>
<td>672,072</td>
</tr>
<tr>
<td></td>
<td>23</td>
<td>80</td>
<td>133</td>
<td>1,039,348</td>
</tr>
</tbody>
</table>

*(c) Reduction in Organization as Contrasted with the Same Under Corporate Control.*

<table>
<thead>
<tr>
<th>Employees released for other service</th>
<th>Saving per annum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corporate organization not required</td>
<td>1,828,071</td>
</tr>
<tr>
<td>Unification of general and division offices</td>
<td>195</td>
</tr>
</tbody>
</table>

*(d) Miscellaneous Economies, the Result of Causes Other Than the Above.*

| Reduction in freight train service and unification of road facilities | 275 | 81,518,107 |
| Unification of floating equipment | 15  | 148,407    |
| Total (a), (b), (c), and (d) | 290 | 1,666,514  |

*(e) Recapitulation of Cooperative Action.*

| Freight traffic diversions (road) | 107  | 205,531 |
| Freight traffic diversions (yard) | 61   | 29,546  |
| Total                           | 168  | 235,377 |

6
Summary of unifications.—B. & O. western lines and Pennsylvania lines west, Jan. 1 to Dec. 1, 1918; other lines Jan. 1 to June 1, 1918.

(a) UNIFICATION OF STATIONS AND TERMINALS.

<table>
<thead>
<tr>
<th></th>
<th>Unifications</th>
<th>Employees released for other service</th>
<th>Saving per annum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stations</td>
<td>90</td>
<td>49</td>
<td>$412,253</td>
</tr>
<tr>
<td>Switching</td>
<td>50</td>
<td>92</td>
<td>$593,801</td>
</tr>
<tr>
<td>Engine house</td>
<td>12</td>
<td>2</td>
<td>21,134</td>
</tr>
<tr>
<td>Car repair and inspection</td>
<td>165</td>
<td></td>
<td>234,146</td>
</tr>
<tr>
<td></td>
<td>317</td>
<td>143</td>
<td>1,261,334</td>
</tr>
</tbody>
</table>

(b) ELIMINATION OF PASSENGER SERVICE.

<table>
<thead>
<tr>
<th></th>
<th>Released for other service</th>
<th>Train-miles</th>
<th>Expense</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Locomotives</td>
<td>Cars</td>
<td>Men</td>
</tr>
<tr>
<td>(1) To increase capacity of roads for freight.</td>
<td>72</td>
<td>407</td>
<td>425</td>
</tr>
<tr>
<td>(2) On account of elimination of competitive conditions.</td>
<td>18</td>
<td>53</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>90</td>
<td>460</td>
<td>525</td>
</tr>
</tbody>
</table>

(c) REDUCTIONS IN ORGANIZATION AS CONTRASTED WITH THE SAME UNDER CORPORATE CONTROL.

<table>
<thead>
<tr>
<th></th>
<th>Employees released for other service</th>
<th>Saving per annum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freight-traffic line agencies discontinued</td>
<td>368</td>
<td>$677,174</td>
</tr>
<tr>
<td>Off-line traffic agencies discontinued</td>
<td>129</td>
<td>146,578</td>
</tr>
<tr>
<td></td>
<td>497</td>
<td>823,752</td>
</tr>
</tbody>
</table>

(d) MISCELLANEOUS ECONOMIES. THE RESULT OF CAUSES OTHER THAN THE ABOVE.

<table>
<thead>
<tr>
<th></th>
<th>Employees released for other service</th>
<th>Saving per annum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discontinuance of competitive advertising</td>
<td></td>
<td>$450,640</td>
</tr>
<tr>
<td>Unification of road facilities</td>
<td></td>
<td>44,440</td>
</tr>
<tr>
<td></td>
<td>495,080</td>
<td>7,667,953</td>
</tr>
</tbody>
</table>

(e) RECAPITULATION OF COOPERATIVE ACTION

|                      | Cars | |
| Freight traffic diversions (road) | 51 | 77,283 |
| Freight traffic diversions (terminals) | 32 | 4,961 |
|                      | 83 | 83,224 |

Exhibits will appear in complete report of Director General.
REPORT TO THE PRESIDENT

BY

WALKER D. HINES
DIRECTOR GENERAL OF RAILROADS

FOR FOURTEEN MONTHS
ENDED MARCH 1
1920

Revised Edition

WASHINGTON
GOVERNMENT PRINTING OFFICE
1920
REPORT OF WALKER D. HINES, DIRECTOR GENERAL OF RAILROADS.

February 28, 1920.

Sir: I submit the following as my report of my administration as Director General of Railroads from my appointment, as successor to Hon. W. G. McAdoo, on January 11, 1919, until the expiration of Federal operation at the end of the present month.

The Federal control of the railroads has been, in point of the magnitude and scope of the industry involved, probably the greatest transfer from private management to public management that has ever taken place. It therefore seems to deserve a detailed statement of what has been done as it affects the public service, labor, the owners of the railroads, and the financial results; as to the conditions which will exist upon the return of the properties to private management; and as to the features of unified control which ought to continue, even under private control.

This report necessarily refers to a considerable extent to policies established by my predecessor. Many of the additional steps taken during 1919 were then taken because the radical change in conditions brought about by the armistice called for changes in method which would have been inadmissible during the period of hostilities.

THE PUBLIC SERVICE.

PASSENGER SERVICE.

The passenger service performed in 1919 exceeded all former records. The number of passengers carried one mile on Class I railroads (operating approximately 230,000 miles of road) for the past five years compared with 1919 was as follows:

Year ended June 30:

<table>
<thead>
<tr>
<th>Year</th>
<th>Passengers Carried</th>
</tr>
</thead>
<tbody>
<tr>
<td>1914</td>
<td>34,496,782,289</td>
</tr>
<tr>
<td>1915</td>
<td>31,789,928,187</td>
</tr>
</tbody>
</table>

Calendar year:

<table>
<thead>
<tr>
<th>Year</th>
<th>Passengers Carried</th>
</tr>
</thead>
<tbody>
<tr>
<td>1916</td>
<td>34,583,952,026</td>
</tr>
<tr>
<td>1917</td>
<td>39,361,369,062</td>
</tr>
<tr>
<td>1918</td>
<td>42,498,248,256</td>
</tr>
<tr>
<td>1919 (partly estimated)</td>
<td>46,200,000,000</td>
</tr>
</tbody>
</table>

During the first eight months of the year an important part of the passenger transportation was the movement of troops in process of demobilization. The troop movement had largely disappeared in the last four months of the year, and by January 1, 1920, practically all of
the four million men called to the colors to serve in the World War had been released from service and returned to their homes, but the passenger travel continued in unprecedented volume. There have been virtually no additions to the passenger or sleeping car equipment in the last two years, so that the trains were frequently more crowded and less comfortable than if the volume of traffic had had a more normal relation to the amount of equipment.

Earnest efforts were made to reduce the proportion of delayed trains and despite the fact that heavier trains had to be hauled in order to accommodate the travel the records indicate that on the average the percentage of trains on time and making up time was as good as in the past when travel was more normal, and as to numerous important lines was considerably better.

During the war numerous passenger trains were removed, largely because of the necessity for making passenger train equipment available for the movement of troops, but promptly on the signing of the armistice and throughout the year 1919 much of the passenger service so curtailed has been reestablished. Some passenger trains were reinstated even though it was reasonably certain that they would be operated at a loss, for the reason it was clear the existing service did not reach the minimum to which the public was reasonably entitled. In the western part of the country passenger train mileage added has been in excess of the passenger train mileage canceled during the war. In addition, some of the limited trains have been restored to their former schedules, a number of observation cars which were canceled during the war put back into service and some new sleeping-car lines inaugurated. A constant and successful effort has also been made throughout the year to improve connections between passenger trains at interior junctions.

Early in the year the war plan of table d'hôte meals in the dining cars was discontinued and à la carte service was reestablished in response to urgent popular demand. The à la carte service reduced the number of passengers who could be served per hour, and this fact, together with the enormous increase in travel without any increase in the number of dining cars, made it exceedingly difficult to meet the demands. But the persistent effort has been to give the best dining-car service possible under the conditions. In recent months the number of complaints as to this service has been reduced to a minimum. It was also the policy to maintain moderate dining-car prices, and it is believed that this policy was successful in comparison with hotel and restaurant prices generally.

Freight Service.

The year 1919 presented unprecedented fluctuations in the demand for freight service. At the beginning of the year the relapse
in industrial activity following the armistice had fully set in and for the first six months the slump in freight business was most pronounced. During February, 1919, the average daily surplus of freight cars was 451,026, the highest number on record. The demand for coal in the first six months was extraordinarily small, due to the large stocks on hand at the signing of the armistice and to the subsequent slowing down of industry. The average daily surplus of coal cars in February, 1919, was 181,755, and increased in March to 183,993, which was the largest number of surplus coal cars on record with one exception. Building activity, including road building, had been almost suspended during the war and had not been substantially resumed, with a consequent low demand for lumber, structural steel, cement, crushed rock, and other building materials. Export business was also extremely low.

By July and August all these arrested activities began to reassert themselves and all the more intensely by reason of the period of inactivity. The less than carload movement of merchandise had been steadily mounting in response to the enormous retail demand, and became an exceedingly difficult factor in the car supply. Practically at the same time the crops began to move. The demand for every sort of equipment for virtually every form of traffic became insistent.

Exceptionally difficult conditions existed in Texas, largely by reason of an extraordinarily large oil development on railroads of exceedingly limited facilities, a wheat crop three times the usual crop of the State, difficulty growing out of policies of foreign countries in getting shipping to Galveston to take the wheat, an unparalleled rainy season which kept the unballasted railroads in poor condition and which frequently made the wagon roads so nearly impassable as to prevent consignees taking their freight. An interesting and difficult incident in California was the fact that by reason of prohibition a large part of the wine grape crop was offered for shipment and refrigerator cars were demanded therefor, although the normal fruit traffic was enough to absorb all the refrigerator cars available, since practically no refrigerators had been built for several years.

In August the situation throughout the country was greatly complicated by a series of unauthorized strikes on the part of about 200,000 shopmen and enginehouse laborers, with the result that for over two weeks the maintenance of equipment and also the handling of engines and consequently the movement of trains was seriously interfered with, and on some roads freight traffic was almost suspended. This still further accentuated the acuteness of the demand for transportation.

By October the momentum of business revival had gained still further headway and the demand for the immediate furnishing of
an abnormal quantity of transportation had become even more insistently. The coal strike (which began November 1) then came in prospect and by the middle of October the railroads on that account had to begin giving preference to coal movement.

Beginning with November the railroads had to interfere still further with the handling of the tremendous general business in order to haul coal from the 40 per cent of the mining capacity which still remained in operation, and which was located almost wholly in Pennsylvania and West Virginia (with a considerable amount in Kentucky and Alabama) to practically all the rest of the country. The railroads thus had to move coal for hauls of 500 to 1,000 and 1,500 miles to meet the emergency demands which normally were supplied by hauls of 100 to 200 miles, or frequently less. Other traffic had to be discontinued to whatever extent was necessary to handle the emergency coal movement. Railroad operation was seriously hampered because to a large extent the railroads had to use sorts of coal to which the engines were not adapted and with which the firemen were not acquainted.

This coal strike, the first nation-wide strike of bituminous miners that had ever been experienced, was perhaps the most destructive episode in the industrial history of the country, and it will probably never be possible to approximate the needless loss to which the country was subjected.

On Sunday, November 9, a storm of extraordinary intensity struck the Northwest, with a 50-mile wind blowing and a heavy snowfall. Early in November the weather became extremely cold in the Central West, the temperature in some instances falling to 36 degrees below zero. This extraordinary winter weather at this early date in the midst of the difficulties of the coal strike almost tied up for several days the principal trunk lines between points on and west of the Missouri River and Chicago. About the same time bad weather began to manifest itself in the Southwest, being marked by excessive rains and washouts on the railroads. During the last week in November extremely heavy rains began in Ohio and Indiana and rains resulted in high water and landslides in Kentucky and Tennessee. About the middle of December unusually heavy rainstorms caused numerous washouts in the Southern and Pocahontas Region, and the blizzard weather also continued throughout the Northwest. During December low temperatures prevailed throughout most of the Eastern Region, zero weather registering around Cleveland, and the temperature falling below zero in the Chicago district. In December also there was exceptionally severe weather along the Great Lakes and in the Central States. In January, 1920, the severe weather continued in the Eastern Region and became manifest in the Allegheny Region, and heavy rains, snow, and sleet storms were marked
throughout the Southwest Region. During the third week in January New York Harbor was reported blocked with ice and extremely low temperatures prevailed throughout the Eastern and Allegheny Regions. Early in February, 1920, there were severe storms along the entire North Atlantic coast, seriously interfering with the shipping operations at Hampton Roads, New York Harbor, and in New England. Throughout New England and at some points on the Great Lakes, including Buffalo, these February storms were the most severe on record. These unusually unfavorable weather conditions seriously interfered with railroad operations.

In such conditions the railroads had to begin, at the end of the coal strike, to relocate the coal equipment, which had become widely scattered, a great deal of Eastern equipment being west of Chicago and the Mississippi River and loaded with coal frozen in the cars, and again endeavor to the best of their ability to meet the demands of general business which had become more insistent than ever by reason of the conditions referred to.

The railroads in October, 1919, performed a greater volume of transportation service than in October, 1918, 1917, or 1916. In October, 1918, the situation was aided by the war spirit, by the resulting heavier loading of equipment, by the zoning of coal distribution, and by compulsory pools of coal tonnage at tidewater and the lower lake ports, which war measures greatly increased the efficiency of coal cars.

The freight movement, measured in ton-miles per mile of road per day for the months of September and October in 1916, 1917, 1918, and 1919, was as follows:

<table>
<thead>
<tr>
<th></th>
<th>1916</th>
<th>1917</th>
<th>1918</th>
<th>1919</th>
</tr>
</thead>
<tbody>
<tr>
<td>September</td>
<td>5,166</td>
<td>5,217</td>
<td>5,731</td>
<td>5,625</td>
</tr>
<tr>
<td>October</td>
<td>5,148</td>
<td>6,533</td>
<td>5,684</td>
<td>6,651</td>
</tr>
</tbody>
</table>

The freight service performed in October, 1919, was materially in excess of that performed in October, 1917. The average car shortage during the month of October, 1919, was 59,510 cars as compared with an average car shortage of 141,466 cars during the month of October, 1917.

In September it became apparent to the Railroad Administration as the result of a survey made by it that the greatly delayed purchasing of coal combined with interruptions to coal transportation on account of the August strikes of shopmen and enginehouse labor, made it advisable to set a minimum of 11,000,000 tons of bituminous coal per week as the amount to be moved during the remainder of the year. This mark was consistently exceeded every week until the strike on November 1. The record for the entire history of the
country was reached in the week of October 25, 1919, when 13,200,000 tons were transported. In the month of October, 1919, the movement approximated 56,243,000 tons, as compared with 51,000,000 tons in the war month of October, 1918, and 45,000,000 tons in October, 1917. The next highest movement was in the war month of August, 1918, when 55,114,000 tons were moved.

Ton-miles per mile of road per day by monthly averages are here given for the only entire years for which they are available:

<table>
<thead>
<tr>
<th></th>
<th>1919</th>
<th>1918</th>
<th>1917</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>4,275</td>
<td>3,878</td>
<td>4,770</td>
</tr>
<tr>
<td>February</td>
<td>4,692</td>
<td>4,391</td>
<td>4,511</td>
</tr>
<tr>
<td>March</td>
<td>4,626</td>
<td>5,273</td>
<td>5,102</td>
</tr>
<tr>
<td>April</td>
<td>4,124</td>
<td>5,471</td>
<td>5,237</td>
</tr>
<tr>
<td>May</td>
<td>4,524</td>
<td>5,226</td>
<td>5,617</td>
</tr>
<tr>
<td>June</td>
<td>4,615</td>
<td>5,381</td>
<td>5,504</td>
</tr>
<tr>
<td>July</td>
<td>4,578</td>
<td>5,387</td>
<td>5,441</td>
</tr>
<tr>
<td>August</td>
<td>5,075</td>
<td>5,601</td>
<td>5,331</td>
</tr>
<tr>
<td>September</td>
<td>5,529</td>
<td>5,731</td>
<td>5,917</td>
</tr>
<tr>
<td>October</td>
<td>5,651</td>
<td>5,884</td>
<td>5,883</td>
</tr>
<tr>
<td>November</td>
<td>4,711</td>
<td>5,155</td>
<td>5,288</td>
</tr>
<tr>
<td>December</td>
<td>4,688</td>
<td>5,181</td>
<td>5,121</td>
</tr>
</tbody>
</table>

The average trainload, carload, and percentage of loaded to total car-miles during the 12-month period of the three years 1919, 1918, and 1917, were as follows:

<table>
<thead>
<tr>
<th></th>
<th>1919</th>
<th>1918</th>
<th>1917</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average trainload, in tons, of revenue and nonrevenue freight</td>
<td>668</td>
<td>681</td>
<td>653</td>
</tr>
<tr>
<td>Average carload, in tons, of revenue and nonrevenue freight</td>
<td>27.8</td>
<td>29.2</td>
<td>27.0</td>
</tr>
<tr>
<td>Percent of loaded to total car miles</td>
<td>68.7</td>
<td>67.8</td>
<td>70.2</td>
</tr>
</tbody>
</table>
The ability of the Railroad Administration to perform so large a public service in the transportation of freight in the busy months of 1919, in spite of the extraordinary difficulties, was due to its ability to unify the control of locomotives and cars and to avoid congestion in terminals and on railroads by diverting freight and by pursuing a policy in the common interest in the matter of embargoing freight in time to prevent congestion and in the matter of establishing and enforcing the permit system as to traffic requiring that method. The permit system is designed to prevent the use of cars for the loading of traffic when it is known that either through lack of ships, crowded terminals, or other conditions the consignees will not be able to release the cars promptly on arrival at destination. The application of this system results in keeping cars from being absorbed in traffic from which they can not be released promptly and in leaving the cars to be used in traffic which can use them and release them promptly. It is one of the most important methods of avoiding or minimizing congestion in times of heavy business.

The conditions under which traffic must be handled in the autumn months tend to cause congestion in the large terminals, especially at the North Atlantic seaboard and extending west as far as Chicago and St. Louis. At times prior to Federal control this congestion was so serious that much traffic destined for the East had to be held on tracks west of Chicago and St. Louis. The unified control, the power to divert freight, and particularly the use of the permit system made it practicable to eliminate nearly all of this congestion during the fall months both in 1918 and 1919.

As indicating what was accomplished in unified control of terminals the Chicago terminal district embracing approximately 2,500 square miles and served by 32 railroads under the jurisdiction of six regional directors was placed under the immediate supervision of one regional director and the results were a marked example of successful terminal unification. In the larger terminals terminal managers were appointed with jurisdiction over the facilities of all lines.

The Railroad Administration established a Refrigerator Car Department with headquarters at Chicago through which a unified control was maintained of all refrigerator cars controlled by the railroads and a close coordination was obtained with the privately owned refrigerator cars, with the result that an extraordinarily large volume of perishable traffic was moved, although there had been no increase in refrigerator car equipment for several years. One of the most pressing needs of the country is the construction of a large additional number of refrigerator cars.
The following table shows the number of refrigerator cars loaded with fruits and vegetables during the loading season of 1919 and the preceding year.

**Recapitulation.**

<table>
<thead>
<tr>
<th></th>
<th>1919</th>
<th>1918</th>
<th>Increase</th>
<th>Decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pacific fruit express territory</td>
<td>108,081</td>
<td>50,123</td>
<td>56,958</td>
<td></td>
</tr>
<tr>
<td>Fruit growers express territory</td>
<td>47,199</td>
<td>44,400</td>
<td>2,799</td>
<td></td>
</tr>
<tr>
<td>Santa Fe refriger. dispatch territory</td>
<td>58,627</td>
<td>45,361</td>
<td>13,266</td>
<td></td>
</tr>
<tr>
<td>New Orleans banana loading</td>
<td>31,839</td>
<td>53,947</td>
<td>22,108</td>
<td></td>
</tr>
<tr>
<td>Mobile banana loading</td>
<td>4,919</td>
<td>5,709</td>
<td>2,068</td>
<td></td>
</tr>
<tr>
<td>Northern Pacific Railroad</td>
<td>12,928</td>
<td>12,320</td>
<td>1,208</td>
<td></td>
</tr>
<tr>
<td>Great Northern railroad</td>
<td>24,171</td>
<td>22,971</td>
<td>364</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>297,660</td>
<td>246,664</td>
<td>1,509,996</td>
<td></td>
</tr>
</tbody>
</table>

1 Or 20.77 per cent.

A like policy was pursued in the control of tank cars and a correspondingly successful result was obtained.

Earnest consideration has been given through 1919 to the speeding up of the movement of freight in the terminals. It is believed that the greatest opportunity for increasing the efficiency of the cars lies in the avoidance of terminal delays. Special terminal committees were appointed at 73 of the larger terminals with instructions to make a careful study of the situation at these terminals and to do everything practicable to improve the movement of freight in and through them. The result of the work of these committees has been highly satisfactory.

One of the greatest losses in railroad efficiency is the insufficient loading of freight cars. When a car which could be loaded to its capacity is loaded to only half its capacity, the efficiency of the railroad in respect of that movement is cut practically in half. During the war the Food Administration's rules and regulations required grain and other foodstuffs to be moved in the maximum carload units and heavy car loading was greatly promoted thereby. In addition the spirit of patriotism was invoked in all lines of business to aid transportation by heavy loading. These influences were largely lacking in 1919, and the loading was by no means as good, and the ability to perform the transportation service was correspondingly reduced. Continuous efforts have been made throughout the year, however, to counteract these conditions and maintain the heavy car-loading of the war period. For example, in October, 1919, the tariff minimum weights on grain and grain products were increased to the trade units formerly effective under Food Administration rules and this has resulted in improvement on that particular traffic. Important progress has been made toward securing a heavier loading of tobacco by obtaining the cooperation of the Tobacco Association.
looking to a standard tobacco hogshead 46 by 48 inches, which will admit of double-deck loading, where the former standard hogshead admitted only a floor-space loading. By efforts of the Railroad Administration and cooperation of shippers the loading of paper from the largest shipping territory in the United States has been substantially increased, i. e., from 40,000 pounds to 55,000 pounds per car; improvement has also been made in the loading of automobiles, trucks and trailers, and also in the loading of watermelons as well as steel products, fruits, lumber, and other commodities. There are great opportunities and great need for additional improvement in these matters.

**Handling of Claims for Overcharge and for Loss and Damage.**

The Director General has felt that one highly important service to be rendered to the public was to secure substantial improvement in the prevention of overcharge and loss and damage claims and the prompt and fair disposition of such claims. Early in 1919, the relief from the stress of war conditions making the step then practicable, a committee under the chairmanship of the Director of the Division of Public Service was appointed to deal with this matter. The regional directors also took an active interest in the subject.

The results of the efforts thus made have been most gratifying. The total number of loss and damage claims on hand unsettled was reduced from 888,197 on March 1 to 465,722 on November 1, being a reduction of 48 per cent. The number of loss and damage claims on hand unsettled over four months fell from 366,476 on April 1 to 148,683 on November 1, a reduction of 59 per cent. The number of unsettled overcharge claims more than 90 days old fell from 72,043 on January 31 to 11,102 on September 30, a reduction of 85 per cent.

**Relations with the Public.**

It has been the policy of the Railroad Administration to obtain and as far as reasonably practicable comply with the views of the public in the matters of rates and service. To this end at the beginning of the Railroad Administration this aspect of the subject was put in charge of the Division of Public Service and Accounts. In January, 1919, it was deemed advisable to create a separate division devoted exclusively to this work, and the Division of Public Service was created for that purpose. It has endeavored to keep in the closest practicable touch with the State railroad commissions, shipping organizations, and individual shippers and producers, and has cooperated with the Divisions of Operations and of Traffic.

Early in 1919, with a view to securing the closest cooperation with the State railroad commissions, the Director General and the Director
of the Division of Public Service held a conference with a large committee of the National Association of Railway and Public Utility Commissioners, and invited, and were fortunate enough to secure, the cordial cooperation of the State commissioners generally.

Another policy established during 1918 was to have a minority representation of shippers upon the 33 freight traffic committees established by the Railroad Administration to handle rate problems. Early in 1919 this minority representation of shippers was increased to an equal representation with that of the railroad managements. The result of this policy has been exceedingly satisfactory and it is earnestly hoped that for the future the public will thus be given an opportunity to participate at the outset in the consideration of these rate problems. It is believed that the common understanding which will thus be secured will be highly beneficial both to the public and to the carriers.

Another instance of this same policy has been to put a representative of the shipping public upon each of the 73 terminal committees created by the Railroad Administration, so that in studying the practices and conditions in each terminal as to the handling of equipment, the Railroad Administration could have the point of view and active assistance of the shippers as well as of the railroad operating officials. Here also (as is true in practically every human activity) the increased opportunity for a common understanding has been productive of favorable results.

THE PUBLIC ASPECT OF RATE MATTERS.

In June, 1918, general increases were made in freight and passenger rates averaging about 15 per cent as to passenger fares, excluding the extra charge in Pullman cars which was discontinued in December, 1918, and about 28 per cent as to freight rates.

The average rate per passenger-mile as reported by the Interstate Commerce Commission for Class I roads for the year ended June 30, 1914, was 1.976 cents, and it is estimated that the average rate per passenger-mile for the year 1919 was 2.538 cents, an increase of 28.4 per cent over 1914.

The average rate per ton-mile as reported by the Interstate Commerce Commission for Class I roads for the year ended June 30, 1914, was 0.723 cents, and it is estimated that the average rate per ton-mile for the calendar year 1919 was 0.972 cents, which comparison indicates that the result of all the increases made in freight rates between 1914 and 1919 averaged for the country as a whole an increase of 34.4 per cent. It is appreciated that this comparison is not conclusive, because it would be affected by any changes in the character of the traffic or the length of haul, but no other data are available for a
general comparison, and it is believed to be fairly suggestive of the extent of the increase in all freight rates on the average since the beginning of the war in 1914.

During 1919 every effort was made by the Directors of Traffic and Public Service to eliminate delays in the procedure of the freight traffic committees. As a result there has been a substantial reduction in the length of time intervening between the date of docketing the request for a rate change and the issue of the freight rate authority. Analysis of the freight rate authorities issued during July to November, inclusive, 1919, shows that the average length of time between the date of docketing the request and the issue of the freight rate authority has been two months or less in 71 per cent of the cases, between two and three months in 14 per cent of the cases, with somewhat longer time as to the remaining 15 per cent; only 6 per cent, however, being in excess of five months.

It has been the policy of the Railroad Administration to have these matters considered both by the Division of Public Service and the Division of Traffic.

The Railroad Administration has sought the advice of the Interstate Commerce Commission with reference to proposed changes in rates and fares of substantial importance and has also sought the advice of the State railroad commissions in a large number of cases of proposed rate adjustments of substantial local importance since February 20, 1919.

CONTROL OF COAL DISTRIBUTION.

The Railroad Administration was suddenly called upon to render an important and difficult public service growing out of the coal strike and entirely apart from any service which the Railroad Administration would perform as a common carrier. This was the service of carrying out the distribution of coal under a delegation of power from the Fuel Administrator. The coal strike threatened the country with a disastrous scarcity of coal. It was necessary to protect the public against exorbitant prices by the restoration of the Government maximum prices for coal, and it was also necessary to distribute the limited amount of coal available to those consumers and industries whose needs were most urgent from the standpoint of the general public interest. The Fuel Administration had disbanded its organization and therefore had no machinery with which to carry out this difficult work of distribution. The Railroad Administration had an organization throughout the country and also had physical possession of all coal in transit. Hence there was devolved upon the Railroad Administration the work of making this distribution. Coal committees were organized and ready to function on November 1,
1919. Throughout the strike period and the subsequent period of coal scarcity (continuing in some parts of the country up to the present time), these coal committees have handled the coal distribution when there was not enough for all consumers. The coal strike came so suddenly and the needs for diversion of coal to users other than the consignees were so imperative that the emergency had to be met by making the necessary allocations and subsequent arrangements had to be made for payment of the coal. In various instances substantial delays in payment arose which caused inconvenience to coal operators and dealers. The constant effort, however, has been to clear up these problems and deal with them as expeditiously as practicable. The coal committees of the Railroad Administration, with the hearty cooperation of the Fuel Administration, the United States Shipping Board and the other divisions of the Railroad Administration performed an indispensable and highly valuable public service in this critical period.

RELATIONS WITH LABOR.

The Director General has felt a keen sense of responsibility to railroad employees. He has felt that the employee is entitled to be safeguarded from favoritism and arbitrary action in the matter of discipline and working conditions and to have a reasonable wage. He believes that those who do not earn their living by their daily labor generally fail to appreciate adequately the importance which the laboring man justly attaches to protection from favoritism and arbitrary action, so that he may reasonably be assured a self-respecting career in the work in which his lot has fallen. The rights of property seem to be susceptible of much more clear-cut definition and protection than the rights of labor and yet the former, though highly important, certainly can not exceed the importance of the latter.

The policy of the Railroad Administration has been to secure the participation of the representatives of labor in matters affecting its interests, and to endeavor to act with justice toward labor and with appreciation of the perfectly natural and proper point of view of labor.

At the beginning of the Railroad Administration in 1918 the Division of Labor was created as a division coordinate with the other divisions in the Railroad Administration and Mr. W. S. Carter, president of the Brotherhood of Locomotive Firemen and Engineers, was appointed to the position of director of that division and has held it through the life of the Railroad Administration.

One of the early steps taken and an exceedingly important step, was the creation of certain bipartisan boards of adjustment to deal
with grievances of employees which could not be settled on the railroad between the local managements and the representatives of the employees. The principle of collective bargaining was frankly recognized in the creation of these boards because they were created by agreement between the representatives of the railroad labor organizations on the one hand and the regional directors of the United States Railroad Administration on the other hand. The work of these boards of adjustment has been eminently satisfactory. Each board has been composed of an equal number of expert representatives of the management and expert representatives of the employees. With a full practical knowledge of the problems the members of these boards have approached their work with the desire to do justice and with the recognition of the importance of reaching an agreement. The result is that in the several thousand cases which have come before the three boards which have been created there has been an agreement in practically every case.

Various orders of the Director General have established reasonable rules and working conditions, which were applicable in the very numerous cases where no rules and working conditions had been established prior to Federal control, and in some cases the rules and working conditions established by the Director General have, by agreement, become a substitute for those which prevailed by agreement prior to Federal control.

As a result of these defined working conditions and these boards of adjustment, the employees generally have felt that they were much better protected than formerly against arbitrary action.

Naturally such a system requires time for it to be fully understood and successfully carried out by the vast number of local officials who are responsible for discipline and by the local labor representatives who with the local officials deal with grievances. Inevitably at first the new system had the effect in many instances of raising a question as to the authority of the local officials and caused some discouragement on the part of some of them and some misconception of the situation on the part of some employees. Nevertheless, the system has fully justified itself, and it is only a question of time and mutual understanding when local incidents of a discouraging character will disappear.

It is an interesting commentary that on some of the largest railroads in the country, with the strongest and most effective managements, not a single case has come to one or more of these boards of adjustment. The local managements have dealt with the classes of employees represented on such board or boards so reasonably as to obviate the necessity for appealing thereto any grievances at all, and the committees representing the employees have adopted a
reasonable attitude and avoided appeals to the Boards of Adjustment. Eventually this same successful treatment should be manifest on all the railroads and as to all classes of employees, if the system shall be maintained in some proper form.

The Director General has sought to encourage the development of local consultation and cooperation between the local managements and the local representatives of the employees, but has not undertaken to issue positive orders in a matter so dependent upon local personal conditions. He specifically advised that wherever the local conditions were reasonably favorable to such a course efforts be made to establish a regular method of conference and cooperation between the shop committees of the employees and the local shop managements. Naturally the progress of efforts of this character has been affected by the early prospect of a return to private control because a matter of such fundamental policy could not be adopted with confidence by a management having only a few months to live. Nevertheless, decided interest has been manifested in these policies by numerous Federal managers.

The principle of collective bargaining has been further recognized in the making of national agreements between the Director General and certain organizations of railroad employees, such agreements to remain operative during Federal control, subject to modification as provided in the agreements. These agreements have defined the working conditions with more particularity than the general orders did, have provided against strikes or lockouts except after resorting to the machinery prescribed in the agreements, and generally have sought to have a definiteness and stability to the status of the employees to which they seem properly entitled.

Early in the Railroad Administration it was declared by General Order No. 8 that "no discrimination will be made in the employment, retention, or conditions of employment of employees because of membership or nonmembership in labor organizations." This policy has been consistently adhered to. No employee is required to join an organization or is prohibited from joining an organization. The employees who are not members of organizations have the benefit of the same working conditions as those who are members. Nonmembers have the right to representation by the officers of the organizations just as members have in matters before the Boards of Adjustment.

The policy thus carried out has been in accordance with the policy which the railroads generally adhered to long prior to Federal control with respect to the trainmen and enginemen and yardmen. Practically every railroad had agreements with the four organizations of trainmen and enginemen or "brotherhoods." These agreements did not establish the "closed shop," and the companies were
free to and did employ new men without any reference to membership in the organizations. Some men never joined the organizations and others did, but all were entitled to the benefit of the working conditions established by the agreements between the organizations and the railroad companies.

The Railroad Administration has pursued the policy of endeavoring to explain to the chief executives of the labor organizations any important general developments affecting the employees, such for example as the discontinuance in a general way of overtime, or the reestablishment in a general way of overtime. In this matter the Railroad Administration has proceeded upon the view that when the employees understood the reasons for a policy they would cooperate much more fully in carrying out the policy than if they were ignorant of the reasons therefor, and were therefore left free to assign erroneous motives for the action. This method has been eminently satisfactory and it is the same method which the Director General hopes will be applied with more frequency in local as well as general matters.

Plans for vocational training of railroad employees in connection with the Federal Board of Vocational Education have been completed and all railroads have been authorized to cooperate with the Federal Board of Vocational Education in the establishment of schools for apprentices. The railroads have also been granted authority to require the attendance of apprentices at these schools not less than 208 hours per year and to incur necessary expenses to fit up suitable class rooms in which such classes may be held. The Railroad Administration has also cooperated with the Board of Vocational Education in the matter of training disabled soldiers and sailors for such work in the railroad service as their physical condition will permit them to undertake.

When the Railroad Administration began in 1918, railroad wages were admittedly below those paid in other lines of industry and a great many skilled railroad employees were being lost on this account to other industries. The Railroad Administration promptly created a Railway Wage Commission, consisting of Franklin K. Lane, C. C. McChord, J. H. Covington, and W. R. Wilcox, which made a report upon the basis of which General Order No. 27 was issued in May, 1918. This order was made retroactive to January 1, 1918, because at the beginning of Federal control the widespread unrest on account of the obvious underpayment of railroad employees was met by the assurance that the action taken on the basis of the report of the commission would be made retroactive to January 1.

It was evident that the work of the commission would not fully dispose of the wage problems because of their complicated character.
and because the proposals of the commission dealt principally with the cost of living and did not undertake to meet the competition of other industries which were paying higher wages. Therefore a Board of Railroad Wages and Working Conditions was created composed of three representatives of railroad labor and three representatives of the railroad managements. This board then took up the special claims of the various classes of railroad employees and made recommendations, upon the basis of which supplements were issued to General Order No. 27, these supplements making various increases in wages and various changes in working conditions.

Early in 1919 the last of these general recommendations of the Board of Wages and Working Conditions by way of supplement to General Order No. 27 was made and acted upon, and it was then announced that this action completed the "war cycle" of wage increases and that any further increases would have to be considered in the light of the new conditions.

The employees in many instances felt that the adjustments which had been made fell seriously short of putting them on a parity with employees in other lines of industry or of giving them an increase in wage reasonably proportionate to the increase in the cost of living. Therefore practically all classes of employees urged additional increases in wages. This matter came first to a head with respect to the demands of the shopmen in the month of August, 1919. In this connection there were various strikes unauthorized by the organizations of which the employees were members, and the shopmen were notified that their demands would not be considered until these strikes were terminated. Upon the termination of the strikes the demands were taken under consideration with the result that the President, being advised that the demands were general in character and that similar demands were pending for practically all classes of railroad employees, and that all the demands contemplated permanent increases in wages, took the position that such demands ought not to be granted pending an opportunity to form a more reliable conclusion as to whether the then level of the cost of living could be regarded as reasonably permanent. Some readjustments, however, were made for the shopmen in order to correct certain inequalities of treatment. Other readjustments were subsequently made, particularly with respect to the matter of the rate of payment for overtime in order to correct inequalities of treatment for certain other classes of employees and for certain parts of the classes of trainmen and enginemen.

The employees have recently strongly urged that sufficient time has elapsed to result in the conclusion that the level of the cost of living is not of a temporary character and hence that their general demands
for increases in wages should be promptly granted. The President has taken the position that the matters can not possibly be completed in the brief remaining period of Federal control, but that in accordance with the assurance he gave in August, 1919, in contemplation of such a contingency, he will use his influence to expedite their consideration as much as possible immediately after the expiration of Federal control.

There has been a great deal of misconception and some misrepresentation as to the extent of the wage increases made by the Railroad Administration. The fact is that the average of the increases made, when measured by the increases in the rate per hour, is about 100 per cent or slightly over, as compared with the years 1913 and 1914. It is believed that this is by no means out of line with the increases made in other industries. In fact the reports of the Department of Labor show that the increases in the steel and iron industry in the pay per hour have been about 120 per cent in the same period. Of course the employees have not received an average increase of 100 per cent in earnings, because their workday has been shortened, generally speaking, to eight hours; so manifestly an increase of 100 per cent per hour in pay is partly offset when the hours are reduced from 10 to 8.

While the Government was operating all the railroads, it was natural that there should be a considerable extension of the policy of standardizing wages, this being the policy which has made important and in recent years rapid progress on many of the railroads under private control, particularly as to trainmen and enginemen. Such standardization has inevitably produced numerous individual cases of especially large increases much in excess of the average. These exceptional and abnormal cases have been seized upon for criticism and have been the source of much misconception as to the general situation. One extraordinary case of utterly irresponsible criticism has been the wholly untruthful charge that on one railroad a man working a few minutes a day before Federal control and receiving $20 per month therefor, had been paid $300 per month for the same service during Federal control together with large payments for back time. This statement was not only untrue literally but there was nothing resembling it and nothing of the sort possible under the orders of the Railroad Administration. Nevertheless, the statement has been widely copied and perhaps has been quite generally believed. Standardization also resulted in some employees receiving inconsiderable increases.

**THE NUMBER OF EMPLOYEES.**

Perhaps the most persistent misconception as to the Railroad Administration's policy toward labor has been the idea that there have
been anywhere from 100,000 to 300,000 unnecessary employees put on the railroads simply because of an assumed political policy on the part of any governmental agency to multiply "jobs." The apparent predisposition on the part of a large portion of the public to attribute this policy to a governmental agency has led various speakers and newspapers into a wholly incorrect estimate of the situation.

Before pointing out the detailed facts as to the number of employees, it is important to emphasize that in the formation of the Railroad Administration and throughout its life, there has been consistent adherence to the policy of making appointments to office without regard to political considerations. The Railroad Administration is an interesting illustration of an organization which has never contained any officials who sought their positions. "The office has sought the man," and the purpose has been to get the best available officers regardless of and without any inquiry concerning their political affiliations. The selection of employees on the railroads has been in charge of local railroad officers who, generally speaking, are the same who operated the railroads prior to Federal control and will continue to operate them after Federal control. No such officer was under any compulsion or influence to employ or retain any employee unless that employee was necessary to the performance of the work to be done. And the Central Administration has steadily used its authority and influence to prevent the employment of unnecessary labor.

The controlling fact in this matter of the number of employees is that the number is determined by the number of hours they work per day. Eighty hours of work can be done in a day by 8 employees if they work 10 hours each, while it would take 10 employees working 8 hours each to do the same amount of work. The 8-hour day has been established as a general policy of the Railroad Administration. It was in effect only as to some classes of employees on some railroads prior to Federal control and the average workday prior to Federal control was considerably in excess of 8 hours. This change in policy has undoubtedly brought about an increase in the number of employees, but it has not brought about an increase in the number of hours of work paid for. It is the number of hours of work paid for, and not the number of employees, which is the significant thing with respect to operating expenses.

The fact is that the number of hours of work paid for by the Railroad Administration in 1919 was less than in 1916 (the first year the statistics are reasonably complete), 1917, or 1918.

The figures are as follows:
The time worked for about 11 per cent of the employees is reported on a daily basis and in order to equate these days to hours, it has been estimated that these employees have worked on the average 10 hours per day for each of the years covered by the table. As a matter of fact the hours per day of some of these employees reported on a daily basis were less in 1919 than in previous years on account of the establishment of the 8-hour day, but in the absence of accurate statistics, all have been assumed to work 10 hours per day in 1919 as well as in the previous years, thus making the showing slightly less favorable to 1919 than it would be if the exact hours worked by daily employees were available.

Thus, despite the extraordinary difficulties of 1919, the hours of work paid for are actually less than in 1916 and are also less in proportion to the business done.

This is true notwithstanding the further fact that it is recognized in every line of industry, and is the subject of frequent comment by business men, that by reason of the far-reaching changes and the widespread unrest which are the results of the war, labor is often less experienced, attentive, and effective than it was before the war.

Notwithstanding this exceedingly favorable showing on the basis of the hours of work, it is of course true that there has been an increase in the number of employees which is explained by the simple fact that in 1916 the employees worked much longer hours than the employees working at present on the basis of the eight-hour day.

**WOMEN'S SERVICE SECTION.**

Especial attention has been paid to the working conditions of women employees on the railroads. These employees increased rapidly on account of war conditions. The number rose from 31,400 January 1, 1918, to 101,785 October 1, 1918, and then fell to 81,803 October 1, 1919. To some extent during the war, women were employed in occupations calling for labor of a heavy and unsuitable character; but special attention has been paid to this matter and these conditions have, generally speaking, been corrected. Substantial progress has been made in providing health and comfort facilities. The labor laws regulating the employment of women have been observed almost without exception. The Railroad Administration took, in 1918, the important step of providing that women's pay,
when they do the same class of work as men, shall be the same as that of men. Undoubtedly these policies, connected with recognition of seniority rights, have done much to give women a better position and a better outlook in railroad work than they have ever had before.

**STRIKES.**

There has not been an authorized strike of railroad employees during Federal control, although there have been a few authorized strikes of organizations of longshoremen, dock laborers, etc., whose work is not primarily railroad work and whose policies have been largely influenced by conditions outside of railroad employment. There have been various unauthorized strikes, the three principal ones being the clerks' strike on several railroads in the Southeast in March, 1919, and, in the following August, the strikes of shopmen and enginehouse laborers on numerous railroads, and the strike of the train and engine men in California, Arizona, and Nevada. In each of these cases, as well as in various minor unauthorized strikes, the trouble has been due to the failure on the part of the employees to pursue the agreed-upon methods of dealing with disputes. This was due in part to the failure of the employees to understand the methods which had been adopted for the orderly handling of these matters, but it is believed the strikes were also largely due to the efforts of agitators who were endeavoring to make capital out of the general spirit of unrest and who were hoping to "start trouble." In all these cases the Railroad Administration has taken the position that it would not deal with the strikers at all while on strike and that they must first return to work before their grievances would be considered and this position has been maintained. The strike of the train and engine men in California was due to strained relations between the employees of the Railroad Administration and strike breakers on another railroad resulting from the Railroad Administration continuing to interchange freight with a carrier not under Federal control whose employees had gone on strike. The Railroad Administration took the position that its duties as a common carrier required it to continue this interchange of freight and that it would carry out those duties. In this instance the Director General, after making full explanation of the misconception under which the employees were laboring and after giving reasonable opportunity to the leaders of the organizations to get their men back to work (and the leaders labored earnestly to this end), served notice that unless the men returned at a specified time their places would be filled. They returned at the time specified. In all these cases the Railroad Administration has had the support of the general officers of the railroad labor organizations.
When it is considered how widespread has been the spirit of unrest, how burdensome the cost of living has been, and how active have been some agitators desiring to make trouble and to develop conditions favorable to disorder, the railroad employees as a whole are entitled to be highly commended for the steadiness and loyalty with which they have stuck to their work in the face of all sorts of misrepresentations and appeals to strike.

**THE COST TO THE PUBLIC OF CONDUCTING OPERATIONS DURING FEDERAL CONTROL.**

**THE COST OF FEDERAL CONTROL.**

There is a popular and misleading catch phrase to the effect that "Federal control has cost" anywhere from $700,000,000 to $1,900,000,000, according to the bent and fervor of the person making the statement.

As the result of my continuous contact with this subject and repeated discussions concerning it with railroad operating people throughout the country, my deliberate judgment is that Federal control has not cost a cent more than private control would have cost in the same difficult period, but on the contrary has cost considerably less. I believe that the private control which existed in December, 1917, if it had continued during the increasing war stress of 1918, till the armistice, and during the even more difficult period of reconstruction since that time, would have encountered in the aggregate substantially as great increases in cost as the Government has encountered and would have been wholly unable to realize many important economies which have been accomplished through unification and which have helped to offset partly the aggregate increases in cost.

The easy allegation of heavy loss of Federal control, as distinguished from private control, has rested upon the fallacious notion that "there is no loss unless you see it," i. e., that there would have been no loss to the public if the public had paid rates high enough to cover the cost, including the rental, and that there is a loss to the public to whatever extent the public has not paid high enough rates to pay such entire cost.

The fact is that the cost which is paid by the public would certainly not be diminished through increasing the rates. This cost may be paid in full by transportation rates which are in substance a form of special taxation, or may be paid in part out of general taxation; but the public should realize that it does not escape paying the full cost merely because the cost is made less obtrusive through rates being high enough to avoid a deficit to be made good through general taxation. The public has to pay the cost in full in either event.
Railroad rates are perhaps as all pervasive in their incidence as general taxes themselves, so the general public would have paid just as fully for the operating costs if rates had been raised so as to avoid the deficit as under the policy which was adopted. Indeed, an additional general readjustment in railroad rates during Federal control would have brought about, in view of the strong general upward trend of prices, so many disproportionate increases in prices that the public would have paid much more on account of railroad costs than it did in fact pay. The methods of raising moneys for the Treasury were not fundamentally changed on account of meeting the railroad deficit, and hence did not involve the innumerable special readjustments of prices which would have been made on the pretext of an additional general readjustment of transportation rates.

PRIVATE CONTROL WOULD HAVE COST MORE.

Therefore the question "what Federal control has cost" as compared with what private control would have cost is dependent not upon the methods used for raising the money to pay the cost, not upon the question whether the cost is obtrusive as a deficit or unobtrusive because covered by increased rates, but is dependent upon the cost itself.

As to actual costs the railroads under Government control have been subjected to the same character of influences which have greatly increased costs in all other industries during the war. Simply as a suggestive illustration that the increased costs which have affected the railroads have also affected other industries it is interesting to note that as to the greatest private enterprise in the country (the United States Steel Corporation), its total operating costs increased more between 1914 and 1918 than did the operating costs of the railroads between 1914 and 1919 and similarly its operating costs per unit of finished product increased more between 1914 and 1918 than did the increased cost per unit of service on the railroads between 1914 and 1919. The total operating costs of the Steel Corporation were 150 per cent more in 1918 than they were in 1914, whereas the operating costs of the Class I railroads were 102 per cent more in 1919 than in 1914. The increased cost per ton of finished product of the Steel Corporation in 1918 was 61 per cent as compared with 1914, whereas the increased cost per unit of service on the railroads in 1919 was not more than 60 per cent as compared with 1914. The figures of the Steel Corporation for 1918 are taken because they are the latest available, and thus the comparison made is unfavorable to the Railroad Administration if, as is believed, the unit costs of the Steel Corporation were higher in 1919 than they were in 1918.

It would be surprising if complete analysis did not indicate a more favorable showing as to operating costs by this large private enter-
prise with unbroken continuity of management and policy extending over a period of nearly 20 years and its ability to plan with confidence for the future, than by the Railroad Administration. The latter was created almost overnight as a war emergency and avowedly as a purely temporary expedient; was unable to create a really permanent organization or to hold throughout even its temporary life some of its experienced members; and was without opportunity to carry out comprehensive policies of a reasonably permanent character either as to capital expenditures or as to operation.

This illustration of the largest private enterprise is made simply to emphasize the fact that the railroads like other industries were subject to the conditions growing out of the war and the purchasing power of the dollars expended by the railroads for operating expenses was affected as in other industries. Undoubtedly the same condition would have been experienced if the railroads had been in private control. They would have had to pay the increased cost for materials and supplies and, as is indicated by the above discussion respecting the relations with labor, the average increases in wages by the Railroad Administration were in line with those in private industry and there is no reason to believe that the railroads under private control would have avoided corresponding aggregate increases. It is also pointed out above that the much discussed increase in the number of employees during Federal control is explained by the reduction in the hours of labor and since the pay is based on the hours of labor and not upon the number of employees, the increase in the number of employees has not, broadly speaking, increased the cost.

The resulting favorable showing made by the Railroad Administration has been influenced in part by the economies which have been possible as a result of the unification of terminals and ticket offices, elimination of circuitous routes, pooling of repair facilities, common use of parallel main tracks, etc.

A further element of cost which would have been incurred under private control and which was saved under Federal control would have been the heavy cost either (a) of giving the railroads high enough rates to enable them to maintain their independent credit during a period of great financial difficulty, so as to borrow the money necessary to make about $1,200,000,000 of indispensable improvements made during Government control, or (b) the heavy cost of not having that credit and hence of not having the improvements. This item of the greatest public importance was saved through Federal control because without any such abnormal increase in rates the Government through its own credit temporarily provided the necessary funds for the indispensable improvements.
RESULTS OF AND REASONS FOR POLICY OF NOT MAKING RATE INCREASES SUFFICIENT TO COVER ENTIRE COST.

Since the cost of railroad operations during Federal control was in no sense out of line with the necessities, and since those necessities would have produced even more unfavorable results under private control, it is appropriate to explain why rates were not increased enough to pay these costs.

To begin with, the increases in operating costs took effect to a large extent on January 1, 1918, and yet it was impracticable to make the general rate increases effective until a late average date in June, 1918. If these increased rates could, instead, have been made effective January 1, 1918, there would have been no deficit or "loss" whatever up to and including the end of October, 1919. The entire "loss" on the Class I railroads and large terminal companies for that period of 22 months of Federal control of $180,200,000 would have been more than wiped out if the rate increases had been effective January 1, 1918. The "loss" for the two months of November and December, 1919, was due almost entirely to the effects of the coal strike.

During the first six months of 1919 the operating results were so unfavorable as to cause many suggestions in favor of then making a substantial general increase in freight rates, but it was apparent that the results for those months were to a very large extent due to the abnormal slump in business. Hence it was believed that the showing of inadequacy of the revenues was too fragmentary and unreliable to justify the serious consequences incident to an additional reconstruction of rates.

The following four months of 1919, July to October, showed considerably more favorable results and indicated, even after allowing for the naturally more favorable results for that season of the year, that a very slight rate increase would be required under unified control in order to cover the operating expenses and rental. These months clearly showed that it would have been incorrect to predicate a general rate advance upon the results from the exceedingly small freight business in the first six months of the year. The months of November and December were exceedingly unfavorable on account of the coal strike, but again no general rate increase could properly have been predicated upon such abnormal results even if there had been time.

There is a very natural inability on the part of the general public to appreciate the complexity of the rate structures of the country. Therefore many people have assumed that it is a simple and a desirable matter to make general rate readjustments from time to time to conform promptly to the increasing operating expenses which the
Railroad Administration has been no more able to escape than have other lines of business. When the increases in freight rates were made in 1918 earnest efforts were made to avoid as far as possible disturbance of existing rate and business relationships. It is obvious that no general increase in rates can entirely escape such disturbance. If the increase is on a percentage basis it makes a greater change in the number of cents per ton or 100 pounds in one case than it does in the case of some competitive traffic. If the increase is a number of cents per 100 pounds it correspondingly varies the percentage relationships. No method, no matter how carefully planned, can do more than minimize such disturbances; it can not eliminate them. As illustrating the magnitude and difficulty of the problem, the result of the general increase in freight rates made in 1918, despite the careful effort to minimize disturbance of prior relationships, brought about so many requests for revisions that 33 traffic committees sitting in various parts of the country have been occupied nearly all the time for about a year and a half dealing with these matters, and over 20,000 freight-rate authorities have been issued to make changes to eliminate or improve unsatisfactory adjustments. About 79 per cent of these changes in rates have been reductions. In addition to this work these traffic committees were engaged simultaneously in handling the general freight-rate problems of the country.

Considering the wholly abnormal character of results during most of 1919, the consequent unreliability of these results as a basis for the general rate increase, and the great business embarrassments which would result from an unnecessary additional general rate adjustment, it was clearly in the public interest to avoid such a disturbing influence in a period already filled with disturbing influences, even though it was necessary in consequence to draw temporarily on the Treasury for a portion of the cost of operation. This course was adopted because clearly in the public interest and notwithstanding the fact it was appreciated that the resulting deficit in railroad operations would be mistakenly regarded as a "loss" to a much greater extent than if exactly the same total cost had been paid for through increased rates instead of through appropriations from the Treasury.

At one time the railroad corporations urged that these general rate increases ought to be made so that the properties would be self-sustaining at the time they were turned back to private control. The reasons above stated constituted sufficient reasons against rate increases during the rapidly changed period of readjustment in 1919. But an additional reason of great importance was that the Federal Control Act contemplated the initiation of increased rates by the President for the purpose of paying the expenses and rental of the
railroads "under a unified and coordinated national control and not in competition." It was believed by the Director General that any increase necessary to meet the expenses and rental during unified control would have been much less than would be necessary to give adequate earning capacity to the various railroads and the necessary credit to the various railroad companies when operating on their own responsibility and in competition. Hence if increases in rates had been made during 1919 in an effort to cover the rental and the entire operating expenses, this would not have obviated the necessity for a still further general rate adjustment upon the expiration of Federal control. Clearly it was much more in the public interest to have one general rate adjustment for the purposes of private control than to have, in addition, an intermediate one for the purposes of Federal control.

The foregoing reasons caused the Railroad Administration to adhere to the view that there ought not to be a second increase in rates during the brief period of Federal control and the failure to make this second increase in rates is the reason for what has been so generally described as the "loss" and as the cost of Federal control as compared with private control. The policy adopted, of course, gave additional emphasis to the cost, because that policy did not cover up the cost as an increase in rates would have done, but the cost to the public was the same in either case (except to the extent that the public would have paid more as the indirect result of another increase in rates and consequent multiplied increase in prices) and as has been shown above, that cost was less, rather than more, than would have been incurred under private control during the same period of extraordinary difficulty.

FINANCIAL SITUATION.

There is attached as Appendix I, a financial statement which shows the estimated net disbursements made for capital expenditures and other advances by the Government and for operations during the 26 months' period (January 1, 1918–March 1, 1920) of Federal control of Class I railroads and other properties, including the express companies, and appropriations made and required. Such exhibits also shows the excess of operating expenses and rentals over operating revenues for the different properties operated.

It will be observed that this excess of operating expenses and rentals over operating revenues for Class I railroads for the 26 months' period was $715,500,000. In considering this figure the following analysis is worthy of attention:

If the general rate increase had been effective January 1, 1918, instead of in June, 1918, this amount would have been reduced by $494,000,000.
If for the months of January and February, 1920, the railroads could be paid a rental proportionate to the normal earning capacity of January and February as shown by the test period, instead of receiving the full two-twelfths of a year's rental, this amount would have been further reduced by approximately $49,000,000.

If the coal strike had not taken place, this amount would have been further reduced by most, if not all, of the actual deficit shown in these two months, aggregating 114,000,000.

Undoubtedly a very large part of the deficit in the first six months of 1919 was due to the extraordinary slump in freight business in those months. The total deficit in these months (included in the $715,500,000) was 292,500,000.

These considerations emphasize that the figure which is taken as representing "loss due to Federal control" is in no sense chargeable to Federal control as against private control.

The explanation of the above item of $49,000,000 is that if under the Federal control act the railroad companies could have been paid a rental for the months of January and February, 1920, proportionate to the normal earning capacity of those two months (which are always unfavorable), as tested by the average results in those two months of the three-year test period, the rental pay for Class I railroads and large terminal companies would have been $101,000,000 instead of $150,000,000, which is two-twelfths of the annual rental, and which the Railroad Administration in fact has to pay for those two months. This comes about by reason of the fact that the Federal control act provides that the rental shall be paid "pro rata for each fractional part of a year of Federal control;" and this principal was, of course, incorporated in the standard contract.

It will be observed that the grand total for which appropriations have been made and will have to be made will approximate $1,886,822,885; that of this amount $1,031,899,451 represents items of indebtedness and investment which will eventually be repaid to the Government, with the possible exception of relatively small amounts of "bad debts" or investments which may not be realized upon.

Of course, it is not possible at this time to state with completeness the final result, because the Government will have various claims against the railroad companies and the railroad companies will have various claims against the Government, and these matters will not be liquidated for a considerable period, and, indeed, the claims have not yet taken definite shape on either side to any considerable extent.

There have been various suggestions to the effect that there would be valid claims against the Government that would increase the amounts above indicated by several hundred million dollars on account of undermaintenance of the properties. But as will be pointed out below, the Government will be able to show that it has approximately maintained the properties in accordance with the re-
quirements of the contracts, although undoubtedly there will be substantial readjustments that will have to be made in the case of particular companies both for overmaintenance and for undermaintenance. While the net result can not now be forecast, it is reasonably clear that any balance against the Government will be a relatively small amount and will fall far short of the assumptions which have been indulged in.

**CONTRACT AND COMPENSATION FEATURES.**

The making of standard contracts with railroad corporations has progressed steadily throughout the year and up to the present time. At present 147 contracts have been executed and 83 are still under consideration. Of these 49 have agreed with the Director General as to compensation, while 15 have declined to accept compensation offered and have filed applications with referee boards to fix compensation. Six roads have declined to make contracts and seven have never made application therefor. These 13 roads, with 2 others, making a total of 15, probably will not make a standard contract.

The Federal control act contemplates that in cases where the "standard return," that is, the average annual net operating income as defined in the statute for the three-year test period ending June 30, 1917, is plainly inequitable, an agreement may be made for such amount of compensation as may be found to be just. Under this provision applications for additional allowance of compensation aggregating $92,318,789.39 have been made and additional compensation to the amount of $7,493,618.53 has been allowed and agreed upon. The claims of several carriers upon which no agreement could be reached are pending before referees appointed by the Interstate Commerce Commission as provided in the act.

In addition to the railroad systems of the country, there were various shorter railroads generally spoken of as "short lines." The Railroad Administration took the position that these were not included in the President's proclamation taking possession and control of the railroads, because such short lines were not regarded as "systems of transportation." The Federal control act, which became effective March 21, 1918, announced that certain classes of these "short lines" were to be deemed in Federal control, but gave the President the right to relinquish any railroads under Federal control prior to July 1, 1918. In pursuance of this power, the President relinquished the "short lines" whose further Federal control was not deemed needful or desirable. Generally speaking, no actual control was asserted over these "short lines" in the period between March 21, 1918, and July 1, 1918.

Subsequently a form of "cooperative contract" was agreed upon with the representatives of these relinquished "short lines" whereby
they might be taken back into Federal control so as to be under the jurisdiction of the President to whatever extent might appear to be expedient, but at the same time to be operated at the sole risk and expense of the short-line companies themselves, the Railroad Administration, however, agreeing to accord them certain protection in the matter of a proportion of competitive traffic, and certain advantages in the matter of free per diem allowance for cars of the Railroad Administration while on the “short lines.” In pursuance of this policy 132 “cooperative contracts” have been executed. The Railroad Administration also indicated that it would accord similar advantages to short-line companies not making the “cooperative contracts” provided such companies executed waivers of any claims against the Government, and such arrangements have been made with 64 companies.

EXPENDITURES FOR ADDITIONS AND BETTERMENTS AND EQUIPMENT AND LIMITATIONS PREVENTING LARGER EXPENDITURES FOR THESE PURPOSES.

One of the important reasons for assumption of control of the railroads by the Government was that the Government might make the improvements to these properties essential to the handling of the traffic and therefore which were indispensable for war purposes, and which the railroad corporations appeared to be without funds to make. Approximately $1,200,000,000 has been expended in the period of Federal control by the Government for improvements of this character. Of this amount about $140,000,000 has been paid through funds raised by the corporations and about $180,000,000 has been or will be paid through application by the Government to that purpose of portions of the compensation due the corporations for the use of their properties but available for application for this purpose.

During the year 1918 the policy of the Railroad Administration was to limit improvements to war necessities because the demand for materials and labor for other war purposes was so imperative that no material or labor was available for railroad expenditures except when they themselves could be regarded as urgent war needs.

The Railroad Administration gave careful consideration to the question as to the amount of equipment for which materials and supplies could be obtained. As a result there were ordered 1,930 locomotives and 100,000 freight cars of the types believed to be the most urgently needed for war purposes. These freight cars consisted of various types of box cars and open-top cars, but did not embrace any refrigerator cars, tank cars, stock cars, or flat cars. No passenger-train cars of any sort were purchased by the Railroad Administration. The total deliveries of equipment during the period of Federal
control, including equipment purchased directly by the railroads or constructed in railroad shops, were as follows:

<table>
<thead>
<tr>
<th></th>
<th>Purchased by railroads</th>
<th>Constructed in railroad shops</th>
<th>Purchased by Railroad Administration</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Locomotives</td>
<td>1,910</td>
<td>323</td>
<td>12,114</td>
<td>4,417</td>
</tr>
<tr>
<td>Freight cars</td>
<td>25,900</td>
<td>12,909</td>
<td>95,704</td>
<td>134,213</td>
</tr>
<tr>
<td>Passenger-train cars</td>
<td>700</td>
<td>107</td>
<td>807</td>
<td>897</td>
</tr>
</tbody>
</table>

*Includes 200 Russian locomotives leased from the War Department.

The equipment ordered by the Railroad Administration was allocated to the various railroads according to its judgment as to their needs. The locomotives were accepted as a rule and without much protest. The allocation of the cars, however, raised great protest. Emphatic claim was made that the cars ought to be regarded as a war burden and paid for by the Government, also claims were made that the cars were not needed in the number or of the character allocated. Upon receipt of any such protest each case was considered on its merits and such modifications made in the allocation as seemed to be just. When it became clear that the prices of equipment at the end of Federal control promised to be higher than the Government paid for the equipment in question, the objections to the allocations disappeared in many cases, and, in fact, some companies which had objected to the allocations because too large sought and received additional equipment out of amounts not allocated.

In 1919 it had become apparent that Congress was anxious to see the railroads returned to private control at the earliest practicable date and was not favorably inclined toward making any appropriations for any expenditures by the Railroad Administration which could be avoided. It therefore became necessary to cut down authorizations for expenditures in 1919 to those which were regarded as unavoidable. As a result of this policy, no new equipment was ordered by the Railroad Administration (although about $40,000,000 was authorized for betterments to existing equipment and for a small amount of new equipment which was ordered directly by some of the companies), and the expenditures for additions and betterments to way and structures were restricted to those which were regarded as imperative. This policy was accentuated and had to be followed with the greatest possible strictness because of the adjournment of Congress on March 4, 1919, without the passage by the Senate of the $750,000,000 appropriation for the Railroad Administration which had been passed by the House.
The capital expenditures during Federal control were as follows:

<table>
<thead>
<tr>
<th>Description</th>
<th>Calendar year</th>
<th>Total, 2 years</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1918</td>
<td>1919</td>
</tr>
<tr>
<td>Roadway and track</td>
<td>$204,000,000</td>
<td>$247,000,000</td>
</tr>
<tr>
<td>Improvements to existing equipment</td>
<td>$19,000,000</td>
<td>$21,000,000</td>
</tr>
<tr>
<td>New equipment purchased by railroads</td>
<td>$161,000,000</td>
<td>$64,000,000</td>
</tr>
<tr>
<td>New equipment purchased by Railroad Administration</td>
<td>$118,000,000</td>
<td>$239,000,000</td>
</tr>
<tr>
<td>Total</td>
<td>$592,000,000</td>
<td>$571,000,000</td>
</tr>
<tr>
<td>Estimated expenditures in January and February, 1920</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total for period of Federal control</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

During a considerable period immediately preceding Federal control, the railroad companies had cut down the amount of their expenditures for additions and betterments and equipment because of the high prices, difficulty in obtaining deliveries, absence of funds, etc. The Railroad Administration was, of course, not able to make any plans whatever with respect to a program of capital expenditures for either way and structures or equipment for the calendar year 1920, and it is understood that comparatively little has been done in that direction up to the present time by the railroad companies.

The result is that at this time very large expenditures are called for on the railroads in the public interest to increase their efficiency and enable them to meet the growing demands for transportation. Unless the railroad companies shall be able to adopt and enforce the important unifications of facilities and equipment and control in the common interest of the handling of business in times of stress, the available facilities and equipment will turn out to be wholly unequal to the requirements of the public. Even with substantial continuance of all the important methods of unification and common control, the necessity for very large capital expenditures, both of way and structures and for new equipment, will be very great.

INLAND WATERWAYS.

Pursuant to the general policy and authority established by the Federal control act, the Director General has acquired and operated towboats and barges on the lower Mississippi River between St. Louis and New Orleans and on the Warrior River between the Alabama coal fields and Mobile and upon the Mississippi Sound and connecting waters between Mobile and New Orleans, and has operated towboats and barges on the New York Barge Canal. All of these waterways are public highways and have in no sense been in possession or control of the Director General of Railroads. This statement is made particularly because a confused notion seems to have existed to some ex-
tent in the State of New York that the Director General of Railroads had assumed possession and control of the New York Barge Canal. That canal is a public highway, owned and maintained by the State of New York, and is equally free to all. The Director General has simply operated boats on that canal as all other persons have continued to have the right to do.

The Director General has also had possession and control over the Delaware & Raritan Canal (connecting the Delaware River with the Raritan River) as an incident to his possession and control of the Pennsylvania Railroad system.

All of these operations on the New York Barge Canal, the Lower Mississippi and Warrior River and connecting waters represented mere beginnings; suitable equipment was not in existence, and the construction of suitable equipment was greatly hampered by the demand for materials for other purposes during the war. The result has been that these operations have not yet proceeded beyond the incipient stage, which is inevitable in the development of new enterprises. Consequently the operations so far have resulted in deficits. But these deficits should not be regarded in any sense as tending to show that such operations are not economically justifiable. The operations represent important experiments which in the public interest ought to be made, and they should be carried forward in an effective and sympathetic spirit.

During the year 1919 the construction of the necessary equipment for use on these waterways has progressed as rapidly as was practicable, and it is expected that by midsummer, 1920, all this equipment will be completed and each of these operations will then be in a position to function effectively and economically. Very important progress has been made during Federal control in developing rail and water rates which would offer inducements to the utilization of these waterways.

I am a firm believer in the policy of continuing these operations under Government control for at least a reasonable period to give an adequate opportunity for their proper development in order that a satisfactory test may be made of the practicability of utilizing the inland waterways of the United States. I anticipate that that test will demonstrate that for at least certain classes of traffic the water transportation is practicable and economical and highly in the public interest.

THE WORK OF THE VARIOUS DIVISIONS AND OF THE REGIONAL OFFICES.

Earnest and effective work has been done by the various divisions of the Central Administration and also by the regional directors and their associates. The annual reports of the directors of the divisions
and of the regional directors give a most enlightening account of the varied and useful activities of these officers.

The Division of Operation has had the largest task. It has had to supervise the maintenance of equipment, the maintenance of way and structures, and transportation. It has thus had to deal from the managerial standpoint with all the labor problems of the Railroad Administration, acting in conjunction with the Division of Labor, which dealt with these problems from the labor point of view.

The Division of Operation has given persistent attention to the subject of securing the greatest possible use of locomotives with the least delay in terminals, the elimination of unnecessary forces of employees in roundhouses and shops, and the consolidation of terminals.

The car-service section of the Division of Operation has had charge of the highly important matter of car distribution and has also had charge of the administration of the permit system and the placing of embargoes, all these matters being handled largely through the regional directors' organizations.

The Division of Operation has also maintained a safety section which has made a wonderful record, a fuel conservation section, which has brought about marked economies through the use of more suitable qualities of coal in more efficient methods, and an operating statistics section which has collected and compiled monthly statistics of the operations of the Class I Railroads on standard forms prescribed by it.

The Division of Operation has also had charge of the coastwise steamship lines which were under Federal control and also of the Pullman lines.

The activities of the Division of Labor and the Division of Public Service have already been sufficiently indicated.

The Division of Traffic has had charge, from the railroad management standpoint, of all rate adjustments, acting concurrently with the Division of Public Service, has had charge of the issuing of tariffs and has greatly simplified that work, has had charge of the supervision of inspection bureaus to detect and prevent the misdescription of shipments, improper packing, marking, and stowing, securing accurate weights and the elimination of unnecessary weighing, and has established an inspection bureau in official classification territory similar to those in southern and western territories. The Traffic Division, in connection with the Division of Public Service, has supervised the freight traffic committees. The Traffic Division has had charge of rerouting of traffic so as to avoid circuitous hauls and has also had charge, with the active assistance of the Division of Public Service, of the campaign for heavier loading, and has also had charge of the dining-car service.
The Division of Law has had charge of the claims for special compensation, the making of special contracts, the making of short-line cooperative contracts, the supervision of matters of legislation affecting railroad operation, matters of taxation, has advised the Division of Capital Expenditures in connection with the allocation of equipment and the Division of Purchases in connection with questions arising under the contracts for the construction of equipment. The Division of Law has handled formal matters before the Interstate Commerce Commission and the State commissions and has had charge of the claims property protection section, designed to prevent loss and damage to freight and to promote more prompt settlement of claims.

The Division of Purchases has left to the purchasing agents of the various railroads the purchase of ordinary supplies, but has handled, in part through central committees and in part through regional purchasing committees, the purchases of coal and crossties and has directly handled the purchases of steel rail. The Division of Purchases has had charge of the stores organizations on the railroads and of the materials and supplies in general. It was through the Division of Purchases that the coal committees were organized, which handled the distribution of coal during and since the coal strike.

The Division of Accounts has had the highly important problem of bringing about the statement of accounts so as to show the relation between the Government and the railroad companies. The Railroad Administration in this respect has had to perform a dual function; one was to operate the railroads and record the current transactions so as to bring out the facts as to the results of operations, and the other was to keep proper records and accounts to bring out the result of the mutual obligations of the Government and the railroad companies growing out of the possession and control of railroad property.

The Division of Finance has had charge of the payments of money to the railroad companies on account of compensation and on account of advances, and also the furnishing of money to the Federal treasurers on the various railroads when needed for current operations. The Division of Finance has also had to concern itself with the question of character of securities which railroad companies could give for advances made, both for equipment and for other capital expenditures as well as for other purposes, as to the extent to which deductions could properly be made from compensation on account of advances made, as to the methods to be adopted to reimburse the Government for advances not yet reimbursed, etc.

The work of the Division of Capital Expenditures has already been sufficiently indicated.
THE FURTHER DUTIES OF THE RAILROAD ADMINISTRATION.

The Railroad Administration has been charged with two distinct functions. The first has been the rendition of the public transportation service and the administration of the duties connected therewith related to transportation and maintenance, labor problems, rate and other traffic and public-service problems, control of current capital expenditures, etc. This function ends with the return of the railroads to private control.

The second function has been to fix and administer the contract relations between the Government and the railroad companies and to settle the innumerable questions that grow out of these contract relations. This function will continue until final settlement shall be completed or until other provisions shall be made for winding up such settlements.

This function, connected with the contract relationships and the settlements involved therein, constitutes in itself an exceptionally important responsibility and administrative task. There probably has never been a time in history where so large an enterprise, privately owned and managed, has been taken over and carried forward by the Government on a rental basis for a period of years and then turned back to the private managements. Involved in this unprecedented transaction are 240,000 miles of main line of railroad, which with its equipment is variously estimated as being worth from $15,000,000,000 to $20,000,000,000, for which an annual rental of about $917,000,000 is paid.

Agreement upon a standard form of contract to be made with each railroad company, the adaptation of that form to the particular conditions of each company, agreement upon the rental, consideration of the materials and supplies received and of the corresponding amounts to be returned at the end of Federal control, attention to the payments by the Government on bills due by the corporations and collections by the Government on bills due the corporations, determination of the extent to which the corporations would be charged for capital expenditures made for additions and betterments and equipment and the manner in which payment therefor should be made, determination of the mutual rights of the parties as to over-maintenance or under-maintenance of the properties, and consideration of countless other problems of which the foregoing are mere suggestive illustrations have presented a task of stupendous proportions, entirely apart from all the problems of public service, operation, labor relations, etc.

The final adjustment of all these matters will call for attention for a considerable period in the future. While all the activities incident to the public service and operation side of the Railroad Administration will be discontinued as of March 1, except as to small forces
temporarily retained to receive the final reports and consolidate the records and dispose of the incidental matters which can not be completed by the end of this month, it will be necessary, on the other hand, to continue and in some instances temporarily enlarge the branches of the organization dealing with these matters related to settlement with the corporations. The accounting branch of the organization will, of course, continue to be of the highest importance. The newly organized Division of Liquidation Claims is developing its organization to consider and dispose of claims which may be presented on account of alleged undermaintenance of way and structures and equipment and also claims to the effect that corporations ought not to be charged with improvements alleged to have been merely for war purposes and not for the traffic of the railroads in question. This Division will handle claims of other sorts, including supervision of claims presented to the Interstate Commerce Commission for reparation on account of alleged excessive rates.

The Division of Finance will, of course, have to function actively for a considerable period, and the Division of Law will necessarily have to continue until final settlement or until the eventual transfer of the remaining legal problems to some other governmental agency.

In carrying forward the administrative work incident to these heavy responsibilities, the Railroad Administration is being confronted and will continue to be confronted with the great difficulty of securing and keeping the highly trained experts who ought to deal with this work. The temporary character of the work and the urgent bidding of other enterprises for experts in these matters will make it especially difficult for the Railroad Administration to retain the necessary forces.

METHODS DEVELOPED UNDER FEDERAL CONTROL WHICH ARE WORTHY OF CONTINUANCE UNDER PRIVATE CONTROL.

The railroads of this country are by necessity a single great system for many purposes and in the common interest ought to be, and I believe by force of circumstances will continue to be, developed more and more to that end.

The rate structures already apply equally to the different railroads; freight cars are already universally interchangeable; railroad labor is largely organized on a nation-wide basis and to a substantial extent working conditions are standardized throughout the country. I believe all these elements of national scope must be accepted, and others must be developed, in order to promote the greatest degree of public convenience.

The methods developed during Federal control to regulate the flow of traffic in times of heavy business through diversions of traffic and by means of the application of the permit system, and to regulate the distribution of cars so as to meet the general public need to the
best advantage, ought, it seems to me, to be continued. The consolidation of terminals in the common interest is likewise an important element of public convenience and economy which ought to be maintained. I believe the consolidated ticket offices also have not only been economical but have in the main been in the public interest. The transfer of locomotives from one road to another in emergencies, and the use of the shops on one road when available for the work of another road are also measures in the common interest.

The work of establishing uniformity in rules governing car distribution for the various important commodities, such as coal and grain, to avoid unjust discrimination as between shippers has been greatly developed during Federal control, and I believe should be continued by the railroads in the public interest. It also seems highly important that every effort be made to continue and extend the pooling of lake and tidewater coal. As to export traffic, it is believed to be highly important that the machinery be available to control this movement to and via ports when conditions make such control necessary through the placing of embargoes and issuing of permits. There are many cases in which it is believed even under private control the use of single-track parallel lines as double-track roads which have been developed during Federal control can, and properly should, be continued. It also would be distinctly in the public interest if the roads would continue the use of the common timetables between the important centers, and avoid the "bunching" of trains between important centers.

In the Mechanical Departments of the railroads numerous important practices have been inaugurated during Federal control which should be continued after Federal control. This is particularly true of the standard classification of repairs to locomotives and tenders set up during Federal control, because it affords a reasonably accurate basis of comparison of the work of the different shops and the cost of locomotive maintenance and thereby promotes efficiency.

Naturally the consolidated freight classifications adopted during Federal control, many of the simplifications of tariffs, and other changes of similar character will be of permanent benefit to the country.

I believe it highly desirable to continue to give the shipping public a participation at the outset in the consideration of rate matters, as is now done on the rate committees, and a participation in the consideration of local operating problems, at least in times of congestion, as is now done on the terminal committees.

I believe it highly important to continue to provide in a systematic way for bipartisan boards of equal representation of the managements and employees to consider grievances of the employees. I
earnestly hope for a rapid development of the plan of participation by the employees in the consideration of matters both general and local affecting labor.

RESULTS OF FEDERAL CONTROL TO RAILROAD CORPORATIONS AND THEIR STATUS ON RESUMING CONTROL.

The railroad companies have derived important advantages from Federal control. In a period when it was difficult in the highest degree to raise money for capital expenditures the companies have been relieved to a very large extent of the necessity for raising any money by reason of the fact that during Federal control the Government itself employed its own money for capital expenditures on the railroads and advanced funds to the railroad companies to an aggregate amount in excess of $900,000,000.

During a period when the operating costs of all public utilities were going up much more rapidly than rates were permitted to go up and therefore when all other public utilities were in a state of extreme uncertainty as to their ability to pay established dividends or in many cases pay their regular fixed charges the railroad companies have been protected by the Government's guaranty and, generally speaking, have been able to meet their fixed charges and also their dividends, at least to the full extent that they did so during the three-year test period ending June 30, 1917. In a few cases, railroad companies have suspended or reduced their dividends, but this has been by reason of other conditions than Federal control and has been in spite of, rather than on account of, the fact that they were guaranteed their income by the Government.

As to additions and betterments, including equipment, the situation is that more has been done than would have been practicable under private control in the period of financial difficulty existing during and since the war, and as much has been done as could have been done with the capital available. About $1,200,000,000 has been expended for these purposes.

Congress was unwilling to supply any further capital for these purposes pending decision as to railroad legislation. The railroad companies supplied only about $140,000,000 through funds raised by them and about $180,000,000 through deductions from their compensation. As above pointed out, a most serious need from the standpoint of the public and of the railroad corporations is the expenditure of very large amounts of additional capital for new equipment and additions and betterments to roadway and structures, and especially to shops and terminals.

There has been a somewhat general impression that the railroads during Government control have been "scrambled" to such an extent that the resumption of private operation would be difficult. This is
not the case. During Government control, generally speaking, each railroad has been under separate management and under the immediate direction of a manager identified with its management prior to Government control, and from an operating standpoint it will be a simple process on March 1 for such managers to begin reporting to the corporate executives who will then resume active direction. These managers have heretofore reported to the regional directors.

During 1918 there were some instances where different railroads were grouped under a single management, but from time to time during 1919 these railroads have, generally speaking, been segregated by way of preparation for return to private control. Likewise in some instances in 1918 different parts of the same system were put in different regions, but in 1919 most of these cases have been dealt with by putting the entire system under a single regional director. For example, during 1918 the Pennsylvania Lines West and the Baltimore & Ohio Lines West were kept in the Eastern Region with headquarters in New York, but in December, 1918, these lines were put under the jurisdiction of the Allegheny Region with headquarters at Philadelphia, whose jurisdiction also covered the Pennsylvania Lines East. For more than a year, therefore, practically the entire Pennsylvania and Baltimore & Ohio systems respectively have been operating as a whole about as they were prior to Federal control.

The corporations have had adequate notice of the return of their railroads on March 1, and as a result most of them have been at work for several months making plans, deciding on the positions to be filled by the various officers, perfecting their soliciting forces, etc. The Railroad Administration has actively cooperated in getting the corporation officers in touch with the conditions on the properties and with the men who are to be employees of the corporations after March 1, and has permitted officers on the Federal payrolls to cooperate in building up the organizations to be effective March 1.

In regard to the condition of existing equipment, the locomotives are in relatively good condition considering that they have just gone through from three to four months of winter weather, much of it severe.

As of February 7, 1920, 11,359 locomotives, or 17.4 per cent, of the total of 65,081 locomotives on the line were in or awaiting shop, and of this number 6,929, or 10.6 per cent, of the total locomotives on the line were in or awaiting shop for classified repairs. Strictly comparable figures of the condition of all the locomotives at the beginning of Federal control are not available, but as of January 4, 1918, four days after Federal control began, reports covering 49,204 locomotives indicate that 9,105, or 18.5 per cent, were in or awaiting shop. Figures as to the number in or awaiting shop for classified repairs on that date are not available.
Passenger cars are in good and safe condition, although the inability to obtain new equipment for the reasons above explained results in the equipment being on an average practically two years older than at the beginning of Federal control, and there has perhaps been some loss in appearance.

The condition of the freight equipment will compare favorably with the condition at the beginning of Federal control. As of February 21, 1920, the total number of bad-order cars was 156,150, or 6.1 per cent of the total cars on the line. Included in this number of bad-order cars, however, are 14,275 cars which are held out of service awaiting authority from the corporation to retire, as the Railroad Administration does not consider these cars worth repairing. Excluding these cars, the percentage of bad-order cars to total cars on the line is 5.6 per cent, which compares favorably with the number of bad-order cars on hand January 4, 1918, viz, 127,081, or 5.2 per cent of the number of cars on the line.

As to maintenance of way and structures it is believed that, on the general average, the Government has closely approximated compliance with its contract obligation to return the properties in substantially as good condition as when received. On some railroads there has been, especially in 1918, a shortage in the amount of rail, ties, or ballast applied in maintenance of the property, this being due to shortage of material and labor, and in various instances it was not practicable in 1919 to make up entirely the shortage which occurred in 1918. But when the proposition is viewed as a whole and consideration is given to the amounts of other kinds of maintenance it is believed the general statement of approximate compliance with the contracts of the railroads as a whole is correct. Undoubtedly there will be cases where claims for undermaintenance will be allowed and in other cases claims for overmaintenance can be sustained.

From the standpoint of the condition for current operation the roadway and structures are in good working condition, have carried a large traffic for many months, and are capable of continuing to do so.

As to the labor situation, railroad employees have become organized to a much greater extent during Federal control than prior thereto, although the movement in the direction of additional organization was steadily progressing prior to that time. The train and engine men were organized on practically all railroads for many years prior to Federal control. The shopmen and telegraphers were organized on many railroads, the clerks and station agents on several, and the maintenance of way men on a few. The movement was steadily in the direction of additional organization. I believe the way is open, through frank cooperation with the organizations and the develop-
ment of appropriate boards of adjustment, for dealing with grievances and the development of increased contact between the management and the employees in other matters of common interest, for establishing better relations between the corporations and the employees than existed between them prior to Federal control.

The railroads will go back to private control on March 1 with important wage demands pending. A similar condition, however, existed when the railroads came under Government control on January 1, 1918. Formidable demands were then being urged by the principal classes of railroad employees. Moreover it was generally recognized that wages of many classes of railroad employees at that time were so low that the efficient employees were being lost to a large extent to other industries paying higher wages. The railroad corporations claimed that under the rates then being charged they were not able to pay the necessary wages. It is, of course, understood at present that the entire question of rates is to be shortly reviewed in the light of existing conditions, including the just needs of the railroad employees.

The claims that have been made to the effect that the railroads will be turned back in a broken-down condition are wholly without foundation. As already pointed out, the physical condition of the railroads is good. The fact that some railroads may be able to show a shortage as above mentioned in some of the principal maintenance materials does not keep the railroads from being in effective operating condition. The railroads have been functioning successfully during the present winter, despite its abnormally severe character, and despite the persisting disadvantages growing out of the coal strike.

Complete figures of freight traffic movement for all Class I railroads in January, 1920, are not yet available. However, reports already received from roads which in December, 1919, moved 92 per cent of the total ton-miles indicate that these roads in January, 1920, moved 13.8 per cent more ton-miles than in January, 1919, 26.6 per cent more than in January, 1918, and 7.8 per cent more than in January, 1917.

The figures for the roads indicated follow:

<table>
<thead>
<tr>
<th></th>
<th>Net ton-miles (thousands)</th>
<th>Freight and mixed train-miles (thousands)</th>
<th>Average tons per train-mile</th>
</tr>
</thead>
<tbody>
<tr>
<td>January, 1920</td>
<td>31,806,033</td>
<td>47,970</td>
<td>663</td>
</tr>
<tr>
<td>January, 1919</td>
<td>27,934,784</td>
<td>43,410</td>
<td>643</td>
</tr>
<tr>
<td>January, 1918</td>
<td>25,124,113</td>
<td>43,018</td>
<td>584</td>
</tr>
<tr>
<td>January, 1917</td>
<td>29,517,015</td>
<td>45,196</td>
<td>613</td>
</tr>
</tbody>
</table>
While complete figures are not available of freight traffic movement in February, 1920, the number of revenue cars loaded on all Class I railroads for the first two weeks of February, 1920, 1919, and 1918, follow:

<table>
<thead>
<tr>
<th></th>
<th>1920</th>
<th>1919</th>
<th>1918</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue cars loaded</td>
<td>1,590,123</td>
<td>1,392,476</td>
<td>1,450,115</td>
</tr>
<tr>
<td>Per cent of increase 1920 compared with 1919 and 1918</td>
<td>14.27</td>
<td>9.77</td>
<td></td>
</tr>
</tbody>
</table>

In spite of the bad weather conditions the average trainload was 663 tons, which was 3.1 per cent higher than last January (when unusually favorable weather conditions prevailed), 13.5 per cent higher than in January, 1918, and 8.2 per cent higher than in January, 1917. These preliminary figures indicate that the transportation machine has been functioning in satisfactory manner under unfavorable conditions.

As indicating how the coal has been moved recently, the report of the Geological Survey, Department of the Interior, for the week ended February 21, said:

The week's output was smaller than that of the corresponding week of 1918 (11,497,000 tons), but exceeded both 1917 (10,130,000 tons), and 1919 (7,770,000 tons). Moreover, the total production since the beginning of 1920 is greater than any one of the three years preceding.

<table>
<thead>
<tr>
<th>Year</th>
<th>Production first 38 working days (net tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1917</td>
<td>67,636,000</td>
</tr>
<tr>
<td>1918</td>
<td>63,888,000</td>
</tr>
<tr>
<td>1919</td>
<td>57,183,000</td>
</tr>
<tr>
<td>1920</td>
<td>68,996,000</td>
</tr>
</tbody>
</table>

The year 1920 has thus far exceeded its nearest competitor, 1917, by one and a third million tons.

This record is the more encouraging when the difficult weather conditions under which it was achieved are kept in mind.

Since the railroads have been able to function in such a favorable way during the difficult period of January and February, 1920, there is no reason why they should not rapidly make a progressively better showing with improving weather and generally more favorable conditions which are in prospect.

The railroad corporations will resume control at a time when conditions are working distinctly in favor of satisfactory operation. The war resulted in the loss of many experienced employees to other industries, to the general military service, and to the railway military service in France. The unrest during and since the war, coupled with changing industrial conditions, led to an abnormal "turnover" of railroad labor and resulted in the same sort of interferences with
normal efficiency which have existed and have been commented on in practically every line of industry. The Railroad Administration has felt that these unfavorable influences were gradually disappearing and there ought to be a gradual continuance of improvement in these respects. The railroad corporations will take the railroads at a time of the year when adverse winter conditions are disappearing and when the physical conditions of operation will rapidly become far more satisfactory, when much heavier trainloads can be moved by the same power, and when difficulties due to ice and snow will be disappearing. The railroads are just emerging from an extraordinarily difficult winter, with a larger aggregate demand for transportation than was ever before experienced in the winter, and during this period they have had to recover as far as possible from the far-reaching dislocations of equipment and also of railroad fuel caused by the coal strike.

A highly important advantage which the railroad corporations will have will be that they are able to plan and put into effect permanent organizations and to make plans accordingly for the future. This is an advantage which the Railroad Administration has not had at any time and the lack of which has been conspicuously and progressively embarrassing as the end of Federal control has approached.

The railroad corporations will also start upon their work with a highly important psychological asset. The public holds to a rigid responsibility any agency performing a public service, regardless of the difficulties of the situation. This responsibility has had to be met during the unparallel difficulties since January 1, 1918, exclusively by the Railroad Administration, and the railroad corporations have been entirely free from it. They will therefore resume control under the most favorable possible conditions of public sentiment.

CONCLUSION.

These I regard as the results of Federal control:

It made practicable a war transportation service that could not have been otherwise obtained; its unification practices have increased the utilization of the inadequate supply of equipment so that an exceptionally large transportation service has been performed in the busy periods of 1919 with a minimum of congestion; it met the emergency of the unprecedented coal strike in a way which private control could not have done and absorbed a heavy financial loss on that account which would have proved highly disturbing to private control; it provided more additions and betterments and equipment than private control could have provided during the difficult financial period of 1918 and 1919; it dealt fairly with labor and gave it the
benefit of improved and stabilized working conditions which were clearly right; it not only did not cost more than private control would have cost during the same period but cost considerably less on account of the economies growing out of unifications, and the total burden put upon the public (through rates and taxes) on account of railroad costs was substantially less than would have been necessary if the railroads had remained in private control and rates had been raised enough to preserve their credit; it protected the investment in railroad properties, whereas without Federal control those investments would have been endangered; and it turns the railroads back to private control functioning effectively, with a record of exceptional performance in an exceptionally difficult winter, despite the disruption caused by the coal strike, and in condition to function still more effectively with the normal improvement to be expected in the weather and in other conditions.

A final word of appreciation is due to the loyal and steady support of the officers and the great bulk of the employees and their organizations. The times have been exceedingly difficult for officers and employees, and these difficulties have been faced and dealt with in admirable spirit and admirable temper.

Walker D. Hines,
Director General of Railroads.
APPENDIX.

Statement showing estimated net disbursements made for capital expenditures and other advances by the Government and for operations during the 26 months' period (Jan. 1, 1918–Mar. 1, 1920) of Federal control of Class I railroads and other properties, including American Railway Express Co., and appropriations made and required.

1. Total advances by the Government for additions and betterments to roadway and structures and equipment (except allocated equipment) $780,405,512
2. Amount that may be deducted therefrom on account of compensation, depreciation, open account, etc., due companies 461,480,839
3. Net amount of additions and betterments to roadway and structures and equipment (except allocated equipment) to be funded for 10 years (see note 1) $318,924,673
4. Allocated equipment funded through equipment trusts, principally payable in 15 annual installments 357,011,454
5. Other indebtedness due Government to be evidenced by one-year notes (see note 1) 194,680,562
6. Long-term notes payable to Government 44,483,664
7. Stocks, bonds, and receivers' certificates of railroad companies owned by Government 23,565,198
8. Total representing indebtedness of railroads and other properties, including express companies 938,615,551
9. Other investments of Railroad Administration:
   Additions and betterments to inland waterways $10,029,496
   Miscellaneous investments (chiefly Liberty bonds) 83,254,404
   Total of items of indebtedness and investment 93,283,900
10. Estimated excess of operating expenses and rentals over operating revenues:
    Class I railroads 715,500,000
    Other privately owned properties (smaller railroads, sleeping and refrigerator car lines, and steamship lines) 29,170,000
    Inland waterways 2,570,000
    Expense of central and regional organizations 14,080,000
    American Railway Express Co 37,000,000
    Adjustment of materials and supplies in settlement with railroad companies on account of increasing prices 74,003,434
    Total 872,323,434

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Less net credits on account of interest on (a) open accounts, (b) compensation, and (c) expenditures for additions and betterments $17,900,000

$318,924,673

11. Grand total $854,423,434

Original appropriation, Federal control act 500,000,000
Deficiency appropriation 750,000,000
Appropriation carried in pending railroad bill 200,000,000

1,886,322,885

Additional appropriation that will be required 436,322,885

Note.—The net amount of $318,924,673, representing cost of additions and betterments to roadway and structures to be funded for 10 years, is reached by making such offsets as are permissible under the terms of pending railroad bill, in the first instance, against indebtedness growing out of additions and betterments. It is quite likely that in the actual settlement with many roads offsets will be used in the first instance to wipe out indebtedness represented by demand notes or by open account instead of against additions and betterments to roadway and structures. The result of this would be to increase the net amount of additions and betterments to roadway and structures to be funded and correspondingly to decrease the amount stated in item No. 5, of $194,680,562, as representing other indebtedness due the Government to be evidenced by one-year notes. The total of indebtedness to the Government would, of course, not be affected.