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Railway Trainmen's Earnings 1916

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1917

BULLETINS OF THE BUREAU OF RAILWAY ECONOMICS

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Following is the list of Bulletins for the last twelve months:

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Insert with Bulletin 97—Operating Returns: Fiscal Years Ending June 30, 1915 and 1916.

The following issues are out of print and no copies are available:

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| 13. | 10. | March, 1911. |
| 19. | 13. | June, 1911. |
| 22. | 15. | August, 1911. |
| 51, | 37. | June, 1913. |

Railway Trainmen's Earnings

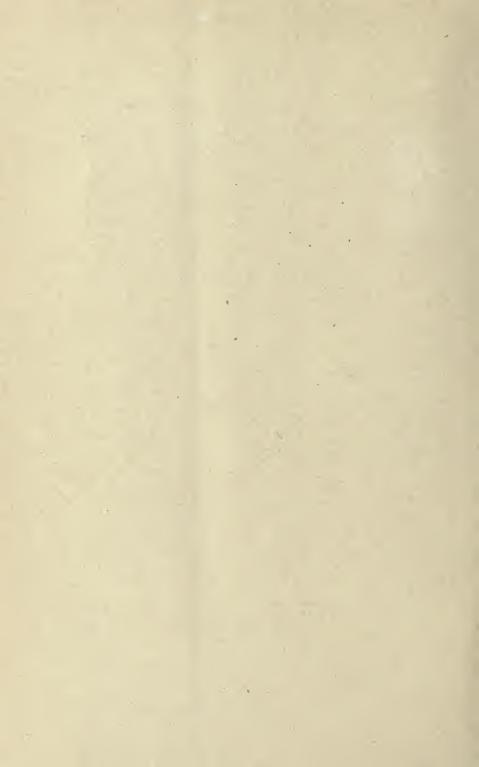
1916

(Compiled from Reports to the Interstate Commerce Commission.)

Bureau of Railway Economics Washington, D. C. March, 1917 Digitized by the Internet Archive in 2007 with funding from Microsoft Corporation

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RAILWAY TRAINMEN'S EARNINGS

1916

Introductory.—Effective July 1, 1915, the Interstate Commerce Commission issued a set of rules governing the classification of steam-railway employees and their compensation. The returns made by railways to the Commission for the fiscal year ended June 30, 1916, therefore, offer the first opportunity for tabulations based on a uniform classification of their employees. They also afford the opportunity to tabulate average number in service, aggregate compensation, and average annual and hourly earnings of railway employees.

This bulletin presents statistics of this nature for the fiscal year 1916, covering the different classes of railway trainmen. It covers only the returns of roads of Class I—that is, those with annual operating revenues above \$1,000,000. There were 178 of these roads in 1916, with an operated mileage of 231,245 miles. These roads handled more than 95 per cent of the freight and passenger traffic of the railways in 1916, so that statistics covering the number and compensation of their trainmen may be regarded as representative of the general conditions under which railway trainmen work.

Five tables follow, with accompanying text, which present statistics of number and compensation of railway trainmen in 1916. The remainder of the bulletin is devoted to definitions of the terms utilized in the bulletin; also a description of the classification of trainmen prescribed by the Commission.

Table I.—This table gives the average number of trainmen in service during 1916, distributed among the fourteen classes of road and yard trainmen. In common with the other tables in the bulletin, Table I presents statistics for the United States as a whole, and also for the Eastern, Southern, and Western districts separately. The number of trainmen shown in Table I is in each case the average of the counts made on the 16th days of July, October, January, and April, as described on page 16.

AVERAGE NUMBER OF TRAINMEN IN SERVICE: FOURTEEN CLASSES OF TRAINMEN, FISCAL YEAR 1916. (Railways having annual operating revenues above \$1,000,000.) TABLE I.

| Class of trainmen. | United States. | Eastern District. | Southern District. | Western District. |
|---|---|---|---|---|
| Road Trainmen: Passenger engineers and motormen | 13,153 | 5,976 | 862,1 | 5,379 |
| Freignt engineers and motormen. Passenger and freight engineers and motormen. | 29,305 42,458 | 13,948 19,924 | 4,857 6,655 | 10,500 |
| Passenger fremen and helpersFreight fremen and helpersPassenger and freight fremen and helpers | 12,914 31,127 44,041 | 5,846 14,795 20,641 | 1,819 5,266 7,085 | 5,249 11,066 |
| Passenger conductors Freight conductors Passenger and freight conductors | 10,555 23,789 34,344 | 4,706 10,573 15,279 | 1,554 4,097 5,651 | 4,295 -9,119 13,414 |
| Passenger baggagemen. Passenger brakemen and flagmen. Freight brakemen and flagmen. Other road train employees. Other road trainmen. | 5, 622 14, 735 59, 268 3, 205 82, 830 | 3,388 7,085 29,586 604 40,663 | 983 1,678 9,845 860 13,366 | 1,251 5,972 19,837 1,741 |
| All road trainmen | 203,673 | 96,507 | 32,757 | 74,409 |
| Yard Trainmen: Engineers and motormen. Firemen and helpers. Conductors (or foremen). Brakemen (switchmen or helpers) All yard trainmen. | 14,749 15,027 14,227 37,091 81,094 | 8,353 8,532 7,900 21,734 46,519 | 2,060 2,102 2,006 2,006 5,198 11,366 | 4,336 4,393 4,321 10,159 23,209 |
| All classes of trainmen | 284,767 | 143,026 | 44,123 | 819,76 |

Trainmen in the service of roads of Class I averaged 284,767 during 1916, of whom 203,673, or nearly three-fourths, were assigned to road service and 81,094 to yard service. Taking road and yard trainmen together, they are distributed among the four principal classes of engineers, firemen, conductors, and other trainmen, as follows:

| Class. | Number. | Per cent. |
|----------------|---------|-----------|
| trainmen | 284,767 | 100.0 |
| Engineers | 57,207 | 20. I |
| Firemen | 59,068 | 20.7 |
| Conductors | 48,571 | 17.1 |
| Other trainmen | 119,921 | 42.I |

Taking road trainmen separately, they are distributed among the same four principal classes as follows:

| Class. | Number. | Per cent. |
|---------------------|---------|-----------|
| Road trainmen | 203,673 | 100.0 |
| Engineers | 42,458 | 20.8 |
| Firemen | 44,041 | 21.6 |
| Conductors | 34,344 | 16.9 |
| Other road trainmen | 82,830 | 40.7 |

With the exception of the very small class of "other road train employees," the returns permit the separation of road trainmen as between the passenger and the freight service. This separation, so far as the returns make it possible, is as follows:

| Class of service. | Number. | Per cent. |
|----------------------|---------|-----------|
| Road trainmen | 203,673 | 100.0 |
| In passenger service | 56,979 | 28.0 |
| In freight service | 143,489 | 70.4 |
| Not separated | 3,205 | 1.6 |

That is, nearly five-sevenths of the road trainmen are assigned to the freight service, while about two-sevenths are assigned to the passenger service.

As among the three territorial districts into which the United States is divided by the Interstate Commerce Commission, the road and yard trainmen are distributed as shown below:

| District. | Road trainmen. | Yard trainmen. | All trainmen. |
|-------------------|----------------|----------------|---------------|
| United States | . 203,673 | 81,094 | 284,767 |
| Eastern district | 2 '0 ' | 46,519 | 143,026 |
| Southern district | 0 7/ 0/ | 11,366 | 44,123 |
| Western district | . 74,409 | 23,209 | 97,618 |

This distribution according to districts is reduced to a percentage basis in the following table:

| District. | Road trainmen. | Yard trainmen. | All trainmen. |
|-------------------|----------------|----------------|---------------|
| United States | | 100.0 | 100.0 |
| Eastern district | | 57 · 4 | 50.2 |
| Southern district | | 14.0 | 15.5 |
| Western district | . 36.5 | 2 8.6 | 34.3 |

One-half of the trainmen are in the East, about one-third in the West, and the remaining sixth in the South. The number of yard trainmen is proportionately high in the East and proportionately low in the West.

TABLE II.—This table covers the same railways, the same operated mileage, and the same number of trainmen as Table I. It gives the aggregate compensation of the fourteen classes of road and yard trainmen during the fiscal year 1916, distributed according to class and according to territorial district.

AGGREGATE COMPENSATION OF TRAINMEN: FOURTEEN CLASSES OF TRAINMEN, FISCAL YEAR 1916. (Railways having annual operating revenues above \$1,000,000.) TABLE II.

| Class of trainmen. | United States. | Eastern District. | Southern District. | Western District, |
|--|-----------------|-------------------|--------------------|-------------------|
| Road Trainmen: Passenger engineers and motormen Freight engineers and motormen | \$28,033,017.40 | \$11,886,257.37 | \$4,130,763.67 | \$12,015,996.36 |
| | 55,009,769.93 | 24,676,998.64 | 9,031,089.53 | 21,301,681.76 |
| | 83,042,787.33 | 36,563,256.01 | 13,161,853.20 | 33,317,678.12 |
| Passenger firemen and helpers | 16,813,637.84 | 7,101,928.97 | 2,212,112.73 | 7,499,596.14 |
| | 35,524,877.33 | 16,279,930.72 | 5,259,817.70 | 13,985,128.91 |
| | 52,338,515.17 | 23,381,859.69 | 7,471,930.43 | 21,484,725.05 |
| Passenger conductors | 19,682,392.49 | 8,691,252.56 | 2,821,092.24 | 8,170,047.69 |
| | 38,601,890.03 | 16,505,222.60 | 6,320,876.38 | 15,775,791.05 |
| | 58,284,282.52 | 25,196,475.16 | 9,141,968.62 | 23,945,838.74 |
| Passenger baggagemen. Passenger brakemen and flagmen. Freight brakemen and flagmen. Other road train employees. Other road trainmen. | 6,009,310.60 | 3,793,139.51 | 1,054,189,40 | 1, 161, 981. 69 |
| | 15,027,141.25 | 7,433,205.63 | 1,566,203,29 | 6, 027, 732. 33 |
| | 62,602,315.60 | 30,221,833.11 | 8,965,484.91 | 23, 414, 997. 58 |
| | 2,592,348.06 | 609,564.34 | 575,437.38 | 1, 407, 346. 34 |
| | 86,231,115.51 | 42,057,742.59 | 12,161,314.98 | 32, 012, 057. 94 |
| All road trainmen | 279,896,700.53 | 127, 199, 333.45 | 41,937,067.23 | 110,760,299.85 |
| Yard Trainmen: Engineers and motormen. Firemen and helpers. Conductors (or foremen) Brakemen (switchmen or helpers) All yard trainmen. | 23,642,002.41 | 13,275,932.14 | 3,177,207.49 | 7,188,862.78 |
| | 14,767,756.89 | 8,391,235.75 | 1,810,068.44 | 4,566,452.70 |
| | 20,169,731.24 | 11,229,890.87 | 2,628,270.42 | 6,311,569.95 |
| | 44,372.802.70 | 26,266,269.00 | 5,381,002.34 | 12,725,531.36 |
| | 102,952.293.24 | 59,163,327.76 | 12,996,548.69 | 30,792,416.79 |
| All classes of trainmen | 382,848,993.77 | 186,362,661.21 | 54,933,615.92 | 141,552,716.64 |

The aggregate compensation of railway trainmen in the service of roads of Class I during 1916 was \$382,848,993. This was distributed among the four principal groups or classes of trainmen as follows:

| Class. | Aggregate compensation. | Per cent. |
|----------------|-------------------------|-----------|
| All trainmen | | 100.0 |
| Engineers | | 27.9 |
| Firemen | | 17.5 |
| Conductors | | 20.5 |
| Other trainmen | 130,603,918 | 34.1 |

Limiting this same distribution by classes to road trainmen alone, the amounts and percentage distribution are as follows:

| Class. | Aggregate compensation. | Per cent. |
|---------------------|-------------------------|-----------|
| Road trainmen | | 100.0 |
| Engineers | | 29.7 |
| Firemen | 52,338,515 | 18.7 |
| Conductors | | 20.8 |
| Other road trainmen | 86,231,116 | 30.8 |

TABLE III.—This table is derived from Tables I and II, covering the same roads and the same number of trainmen. It gives the average annual earnings per trainman in 1916, statistics being presented for each of the fourteen classes of road and yard trainmen, for the United States as a whole, and by districts. The average in the case of each class is computed by dividing the aggregate compensation of that class (as shown in Table II) by the average number of that class in service during 1916 (as shown in Table I).

ANNUAL EARNINGS PER TRAINMAN: FOURTEEN CLASSES OF TRAINMEN, FISCAL YEAR 1916. (Railways having annual operating revenues above \$1,000,000.) TABLE III.

| . Class of trainmen. | United States. | Eastern District. | Southern District. | Western District. |
|---|----------------|-------------------|--------------------|-------------------|
| Road Trainmen: Passenger engineers and motormen Freight engineers and motormen Passenger and freight engineers and motormen. | \$2,131 | \$1,989 | \$2,297 | \$2,234 |
| | 1,877 | 1,769 | 1,859 | 2,029 |
| | 1,956 | 1,835 | 1,978 | 2,098 |
| Passenger firemen and helpers. Freight firemen and helpers. Passenger and freight firemen and helpers | 1,302 | 1,215 | 1,216 | 1,429 |
| | 1,141 | 1,100 | 999 | 1,264 |
| | 1,188 | 1,133 | 1,055 | 1,317 |
| Passenger conductors. Freight conductors. Passenger and freight conductors. | 1,865 | 1,847 | 1,815 | 1,902 |
| | 1,623 | 1,561 | 1,543 | 1,730 |
| | 1,697 | 1,649 | 1,618 | 1,785 |
| Passenger baggagemen Passenger brakemen and flagmen. Freight brakemen and flagmen. Other road train employees. | 1,069 | 1,120 | 1,072 | 929 |
| | 1,020 | 1,049 | 933 | 1,009 |
| | 1,056 | 1,021 | 911 | 1,180 |
| | 809 | 1,009 | 669 | 808 |
| | 1,041 | 1,034 | 010 . | 1,111 |
| All road trainmen | 1,374 | 1,318 | 1,280 | . 1,489 |
| Yard Trainmen: Engineers and motormen. Firemen and helpers. Conductors (or foremen). Brakemen (switchmen or helpers) All yard trainmen. | 1,603 | 1,589 | 1,542 | 1,658 |
| | 983 | 984 | 861 | 1,039 |
| | 1,418 | 1,422 | 1,310 | 1,461 |
| | 1,196 | 1,209 | 1,035 | 1,253 |
| | 1,270 | 1,272 | 1,143 | 1,327 |
| All classes of trainmen | I,344 | I,303 | 1,245 | 1,450 |

The annual earnings of all trainmen in the service of roads of Class I in 1916 averaged \$1,344 per man. The average was highest in the Western district, \$1,450; next highest in the Eastern district, \$1,303; and lowest in the Southern district, \$1,245. This relationship between the districts did not hold for all the individual classes. Thus for road passenger engineers the average was highest in the Southern district and lowest in the Eastern district; for road passenger firemen the averages are almost the same for South and East, while both are lower than in the West; for road freight engineers the average was highest in the West and lowest in the East.

The average earnings of the four principal classes of trainmen in 1916 were as follows:

| Class. | Road trainmen. | Yard trainmen. | All trainmen. |
|----------------|----------------|----------------|---------------|
| All classes | \$1,374 | \$1,270 | \$1,344 |
| Engineers | . 1,956 | 1,603 | 1,865 |
| Firemen | | 983 | 1,136 |
| Conductors | | 1,418 | 1,615 |
| Other trainmen | 1,041 | - 1,196 | 1,089 |

TABLE IV.—This table also covers the same roads and the same classes of trainmen as the preceding tables. It gives the total number of hours on duty, including hours held for duty, of each of the fourteen classes of road and yard trainmen. As in the other tables, the statistics are shown for the United States as a whole and for the three districts separately. Table IV appears on page 14.

Table V.—This table is derived from Tables II and IV. For each class of road and yard trainmen the average earnings per hour have been computed by dividing the aggregate compensation (Table II) by the total number of hours on duty (Table IV). Table V appears on page 15.

TABLE IV.

TOTAL NUMBER OF HOURS ON DUTY: FOURTEEN CLASSES OF TRAINMEN, FISCAL YEAR 1916. (Railways having annual operating revenues above \$1,000,000.)

| Class of trainmen. | United States. | Eastern District. | Southern District. | Western District |
|--|----------------|-------------------|--------------------|------------------|
| Road Trainmen: Passenger engineers and motormen. Freight engineers and motormen. Passenger and freight engineers and motormen. | 30,983,855 | 14,876,919 | 4,194,309 | 11,912,627 |
| | 90,550,660 | 44,852,053 | 13,541,363 | 32,157,244 |
| | 121,534,515 | 59,728,972 | 17,735,672 | 44,069,871 |
| Passenger firemen and helpersFreight firemen and helpers | 29,780,869 | 14,400,380 | 4,136,735 | 11,243,754 |
| | 91,157,700 | 45,076,584 | 13,715,517 | 32,365,599 |
| | 120,938,569 | 59,476,964 | 17,852,252 | 43,609,353 |
| Passenger conductors | 27,527,558 | 12,792,537 | 4,016,757 | 10,718,264 |
| Freight conductors | 76,970,009 | 35,468,855 | 12,355,825 | 29,145,329 |
| Passenger and freight conductors. | 104,497,567 | 48,261,392 | 16,372,582 | 39,863,593 |
| Passenger baggagemen. Passenger brakemen and flagmen. Freight brakemen and flagmen. Other road train employees. Other road trainmen. | 14,897,167 | 9,417,507 | 2,487,333 | 2,992,327 |
| | 37,126,261 | 18,499,935 | 4,284,804 | 14,341,522 |
| | 185,637,210 | 94,308,195 | 28,115,399 | 63,213,616 |
| | 8,989,323 | 1,829,505 | 2,488,648 | 4,671,170 |
| | 246,649,961 | 124,055,142 | 37,376,184 | 85,218,635 |
| All road trainmen | 593,620,612 | 291,522,470 | 89,336,690 | 212,761,452 |
| Yard Trainmen: Engineers and motormen. Firemen and helpers. Conductors (or foremen). Brakemen (switchmen or helpers). All yard trainmen. | 54,764,700 | 31, 275, 026 | 7,222,169 | 16,267,505 |
| | 54,659,600 | 31, 103,720 | 7,231,773 | 16,324,107 |
| | 52,030,638 | 29, 194,461 | 6,880,946 | 15,955,231 |
| | 126,189,694 | 74,254,376 | 16,825,221 | 35,110,097 |
| | 287,644,632 | 165,827,583 | 38,160,109 | 83,656,940 |
| All classes of trainmen | 881,265,244 | 457,350,053 | 127,496,799 | 296,418,392 |

TABLE V.

AVERAGE COMPENSATION PER HOUR: FOURTEEN CLASSES OF TRAINMEN, FISCAL YEAR 1916. (Railways having annual operating revenues above \$1,000,000.)

| Western District. | (Cents.) 100.87 66.24 75.60 | 66.69 43.21 49.27 | 76.23 54.13 60.07 | 38.83 42.03 37.04 30.13 37.56 | 52.06 | .44.19 27.97 39.56 36.24 36.81 | 47.75 |
|--------------------|--|------------------------------|---|---|-------------------|--|-------------------------|
| Southern District. | (Cents.) 98.48 66.69 74.21 | 53.47 38.35 41.85 | 70.23 51.16 55.84 | 42.38 36.55 31.89 32.12 32.54 | 46.94 | 45.03 3.88.03 4.098 3.098 3.098 | 43.09 |
| Eastern District. | (Cents.) 79.90 55.02 61.21 | 49.31 36.12 39.31 | 67.94 46.53 52.21 | 40.28 40.18 32.05 33.32 33.90 | 43.63 | 26.28 38.24 33.33 5.08 | 40.75 |
| United States. | (Cents.) 90.48 60.75 68.33 | 56.46 38.97 43.28 | 71.50 50.15 55.78 | 40.34 40.48 33.72 28.84 34.96 | 47.15 | 43.17 27.02 38.77 · 35.16 35.79 | 43.44 |
| Class of trainmen. | Road Trainmen: Passenger engineers and motormen. Freight engineers and motormen. Passenger and freight engineers and motormen. | Passenger fremen and helpers | Passenger conductors. Freight conductors. Passenger and freight conductors. | Passenger baggagemen. Passenger brakemen and flagmen. Freight brakemen and flagmen. Other road train employees. | All road trainmen | Yard Trainmen: Engineers and motormen. Firemen and helpers. Conductors (or foremen) Brakemen (switchmen or helpers) All yard trainmen. | All classes of trainmen |

Table V shows the average hourly compensation of the fourteen classes of road and yard trainmen for 1916. The average for the United States was 43.4 cents; was 40.8 cents for the East, 43.1 cents for the South, and 47.8 cents for the West.

The compensation of the four principal classes of road trainmen average per hour on duty or held for duty was as follows:

| Cents | per | hour | : | 1916. |
|-------|-----|------|---|-------|
|-------|-----|------|---|-------|

| Class. | Passenger service. | Freight service. | Total. |
|---------------------|--------------------|------------------|--------|
| Engineers | 90.5 | 60.8 | 68.3 |
| Firemen | 56.5 | 39.0 | 43.3 |
| Conductors | | 50.2 | 55.8 |
| Other road trainmen | | | 35.0 |

These averages are of actual earnings per hour, and do not represent hourly rates of pay.

DEFINITIONS.

Railway employees defined.—The rules of the Interstate Commerce Commission define the term "railway employee" as follows: "The word employee is intended to include every person in the service of the reporting carrier subject to its continuing authority to supervise and direct the manner of rendition of his service."

Number of employees.—Carriers are required to classify and count the employees in their service at four different times each year: as nearly as possible the 16th day of July, October, January, and April. Under the rules of the Commission, this count includes "every person sustaining to the carrier the relation of employee and actually in service or available for duty on the day of the count." Employees specifically excluded from the count are those absent on definite leave, those under suspension, and pensioners not bound to render service.

Hours on duty.—Under the rules of the Commission, time spent while actually at work or while subject to orders is included by the carriers in their report of hours on duty. Time allowed for meals, for half holidays, holidays, absence on leave, and vacations is not included. The hours of the several classes of road and yard trainmen are governed by these rules regarding time on duty or held for duty.

Classification of trainmen.—The Interstate Commerce Commission classifies railway employees into 68 separate classes or groups, the classification being based upon the respective occupation of each group of employees. Fourteen of these classes comprise the general group known as railway trainmen. They are distinguished between road trainmen and yard trainmen as follows:

Road trainmen:

- 1. Road freight engineers and motormen.
- 2. Road freight firemen and helpers.
- 3. Road freight conductors.
- 4. Road freight brakemen and flagmen.
- 5. Road passenger engineers and motormen.
- 6. Road passenger firemen and helpers.
- 7. Road passenger conductors.
- 8. Road passenger baggagemen.
- 9. Road passenger brakemen and flagmen.
- 10. Other road train employees.

Yard trainmen:

- 11. Yard engineers and motormen.
- 12. Yard firemen and helpers.
- 13. Yard conductors (or foremen).
- 14. Yard brakemen (switchmen or helpers).

These fourteen classes of trainmen are defined by the Interstate Commerce Commission regulations as follows:

Road Trainmen.

- 1. Road freight engineers and motormen.—Employees engaged in operating steam or electric locomotives in freight-train, mixed-train, road work-train, and wreck-train service.
- 2. Road freight firemen and helpers.—Employees engaged in firing steam locomotives and in helping on electric locomotives in freight-train, mixed-train, road work-train, and wreck-train service.
- 3. Road freight conductors.—Employees in charge of trains and train crews in freight-train, mixed-train, road work-train, and wreck-train service.

4. Road freight brakemen and flagmen.—Employees in freighttrain, mixed-train, road work-train, and wreck-train service, who assist in the handling of the train.

5. Road passenger engineers and motormen.—Employees engaged in operating locomotives and motor cars in passenger-train service.

- 6. Road passenger firemen and helpers.—Employees engaged in firing locomotives and helping motormen in passenger-train service.
- 7. Road passenger conductors.—Employees in charge of passenger trains and train crews.
- 8. Road passenger baggagemen.—Employees in charge of baggage and pouch mail service on passenger trains.
- 9. Road passenger brakemen and flagmen.—Employees in passenger-train service who assist in the handling of the train.
- 10. Other road train employees.—Train employees not provided for in the foregoing nine classes, such as: train ticket collectors, train auditors, train electricians, train stenographers, train porters, train matrons, etc.

Yard Trainmen.

- 11. Yard engineers and motormen.—Employees engaged in operating steam or electric locomotives in yard switching and work service.
- 12. Yard firemen and helpers.—Employees engaged in firing steam locomotives and helping on electric locomotives in yard switching and work service.
- 13. Yard conductors (or foremen).—Employees who have direct charge of engines and crews engaged in yard switching and work service.
- 14. Yard brakemen (switchmen or helpers).—Employees who couple and uncouple or ride cars in breaking up or making up trains, such as yard brakemen, car riders, yard switchmen (brakemen), and other employees performing similar service; also brakemen on yard work trains.

BULLETINS OF THE BUREAU OF RAILWAY ECONOMICS

MISCELLANEOUS PUBLICATIONS

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| 39. | 13. | Comparison of Capital Values—Agriculture, Manufactures, and the Railways. |
| 45. | 14. | Railways and Agriculture, 1900-1910. |
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| 88. | 22. | Summary of Railway Returns for the Fiscal Year Ending June 30, 1915. |
| 92. | | Arguments For and Against Limitation of Length of Freight Trains. |
| 94. | 24. | Railway Stockholders, June 30, 1915. |
| 100. | 25. | Comparative Railway Statistics, United States and Foreign Countries, 1913. |
| 103. | 26. | Statistics of Railways, 1905–1915, United States. |
| 105. | | Summary of Railway Returns for the Fiscal Year Ending June 30, 1916. |
| 107. | 28. | Railway Trainmen's Earnings, 1916. |

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| nsecutive umber. | Miscellaneous Series Number. | Consecutive Number. | Miscellaneous Series Number |
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