



ECONOMIC ANALYSIS  
*of the*  
STATE OF MINNESOTA

*Report to*  
THE MINNESOTA RESOURCES COMMISSION  
*1945*

EXHIBITS



THE J. G. WHITE ENGINEERING CORPORATION  
NEW YORK

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## FOREWORD

In order the better to study the direction of many economic and other trends, the engineers of The J. G. White Engineering Corporation considered it desirable to illustrate them in graphic form for their own use.

In the following pages many of these illustrations have been reproduced, although many more have not been deemed of sufficient importance for inclusion.

In addition to the illustrations of trends, the following pages contain certain charts and tabulations that are adaptations from various compilations of statistics to which references are made in the Report. This obviates the necessity of reference to the original records which are not readily accessible.

Certain other of the charts are graphical explanations of the procedure employed in working out portions of the Report.

It is believed that the submission of these exhibits will be of material aid in reading the Report.



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The missing consecutive Arabic numbers refer to charts, graphs and tabulations excluded from this Report.





## EXHIBITS

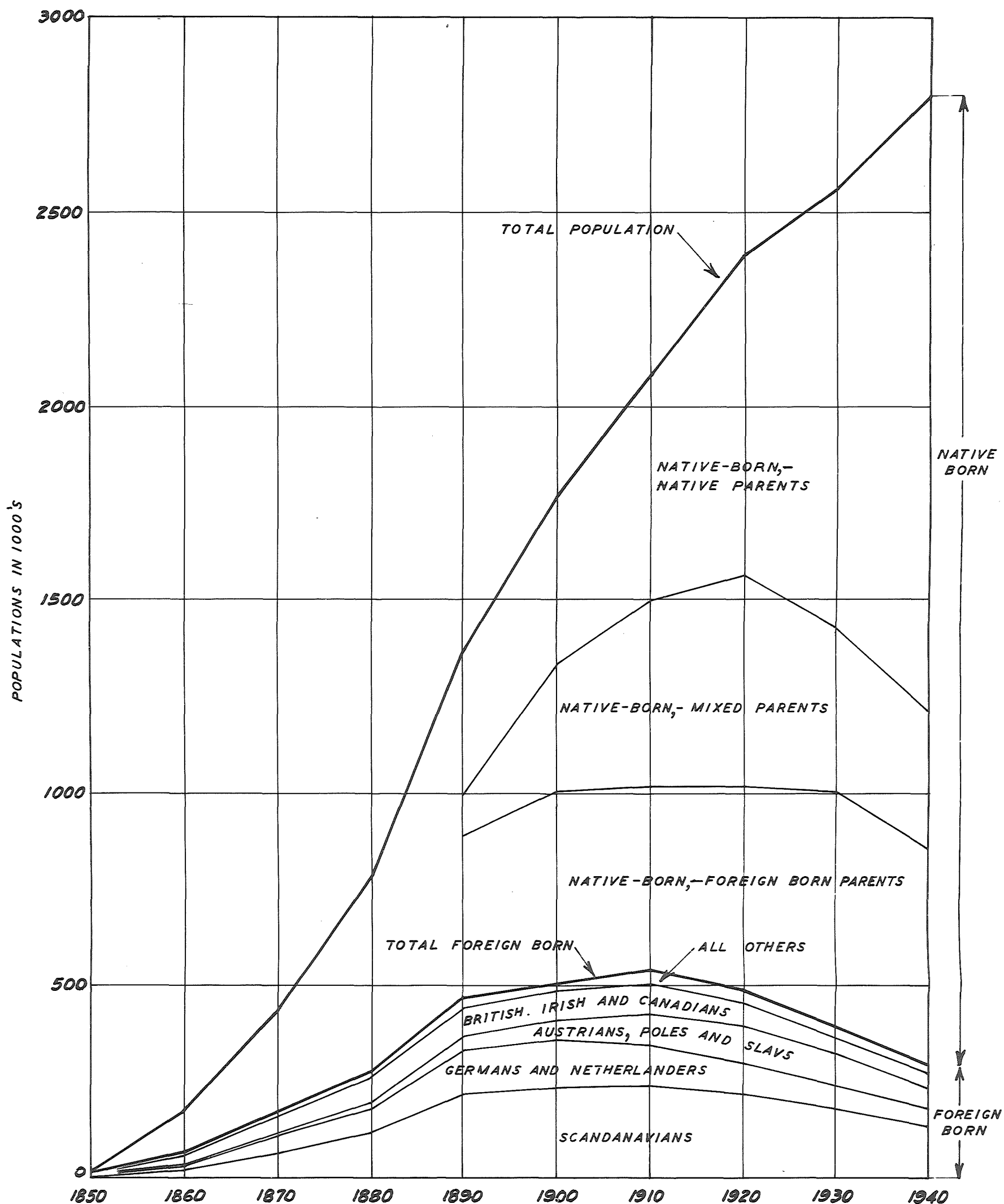


POPULATION OF THE STATE OF MINNESOTA 1850 - 1940  
 TABULATION SHOWING NATIVE-BORN BY PERCENTAGE AND FOREIGN-BORN  
 BY MAJOR COUNTRIES OF BIRTH

|                           | POPULATION IN 1,000's |              |              |              |              |                |                |                |                |                |
|---------------------------|-----------------------|--------------|--------------|--------------|--------------|----------------|----------------|----------------|----------------|----------------|
|                           | 1850                  | 1860         | 1870         | 1880         | 1890         | 1900           | 1910           | 1920           | 1930           | 1940           |
| <u>Total Population</u>   | 6.1                   | 172.0        | 439.7        | 780.8        | 1,310.3      | 1,751.4        | 2,075.7        | 2,387.1        | 2,564.0        | 2,792.3        |
| <u>Native Born</u>        |                       |              |              |              |              |                |                |                |                |                |
| Native Parentage          | -                     | -            | -            | -            | 316.2        | 430.6          | 581.1          | 835.3          | 1,125.7        | 1,583.1        |
| Foreign Parentage         | -                     | -            | -            | -            | 413.5        | 604.7          | 674.4          | 714.7          | 663.3          | 558.5          |
| Mixed Parentage           | -                     | -            | -            | -            | 113.2        | 210.8          | 276.6          | 350.3          | 384.2          | 355.3          |
| <u>Total Native Born</u>  | <u>4.1</u>            | <u>113.3</u> | <u>279.0</u> | <u>513.1</u> | <u>842.9</u> | <u>1,246.1</u> | <u>1,532.1</u> | <u>1,900.3</u> | <u>2,173.2</u> | <u>2,496.9</u> |
| <u>Foreign Born</u>       |                       |              |              |              |              |                |                |                |                |                |
| Sweden                    | -                     | 3.2          | 21.0         | 39.2         | 99.9         | 115.5          | 122.4          | 112.1          | 90.6           | 67.2           |
| Norway                    | -                     | 8.4          | 35.9         | 62.5         | 101.2        | 104.9          | 105.3          | 90.2           | 71.6           | 52.0           |
| Denmark                   | -                     | .2           | 1.9          | 6.1          | 14.1         | 16.3           | 16.1           | 16.9           | 13.8           | 10.7           |
| Germany                   | .1                    | 17.5         | 41.4         | 66.6         | 117.0        | 117.0          | 99.6           | 74.6           | 60.0           | 42.0           |
| Netherlands               | -                     | .4           | 1.9          | 1.6          | 1.8          | 2.7            | 3.5            | 5.4            | 4.8            | 4.2            |
| Austria                   | -                     | .9           | 4.8          | 10.4         | 14.8         | 20.0           | 31.4           | 11.6           | 7.3            | 7.2            |
| Poland                    | -                     | .1           | .2           | 2.2          | 7.5          | 11.4           | 20.0           | 18.5           | 15.0           | 10.8           |
| Russia                    | -                     | .1           | .1           | 2.3          | 7.2          | 5.9            | 13.2           | 16.1           | 11.9           | 10.7           |
| Finland                   | -                     | -            | -            | -            | -            | 10.7           | 26.6           | 29.1           | 24.4           | 20.2           |
| Czechoslovakia            | -                     | -            | -            | -            | -            | -              | -              | 12.6           | 11.4           | 7.2            |
| Yugoslavia                | -                     | -            | -            | -            | -            | -              | -              | 10.7           | 8.9            | 7.4            |
| Canadians - French        | -                     | -            | -            | -            | 10.9         | 12.1           | 11.1           | 6.8            | 6.5            | 4.3            |
| Canadians - Other         | 1.4                   | 8.0          | 16.7         | 29.6         | 32.7         | 35.5           | 29.9           | 26.9           | 20.6           | 17.7           |
| Great Britain             | .1                    | 3.5          | 5.7          | 8.5          | 14.7         | 12.0           | 12.1           | 11.0           | 8.4            | 6.4            |
| Ireland                   | .2                    | 12.8         | 21.7         | 25.9         | 28.0         | 22.4           | 15.9           | 10.3           | 5.1            | 3.5            |
| Italy                     | -                     | -            | -            | .1           | .8           | 2.2            | 9.7            | 7.4            | 6.4            | 5.6            |
| All Other                 | .2                    | 3.6          | 9.4          | 12.7         | 16.8         | 16.7           | 26.8           | 26.6           | 24.1           | 18.3           |
| <u>Total Foreign Born</u> | <u>2.0</u>            | <u>58.7</u>  | <u>160.7</u> | <u>267.7</u> | <u>467.4</u> | <u>505.3</u>   | <u>543.6</u>   | <u>486.8</u>   | <u>390.8</u>   | <u>295.4</u>   |

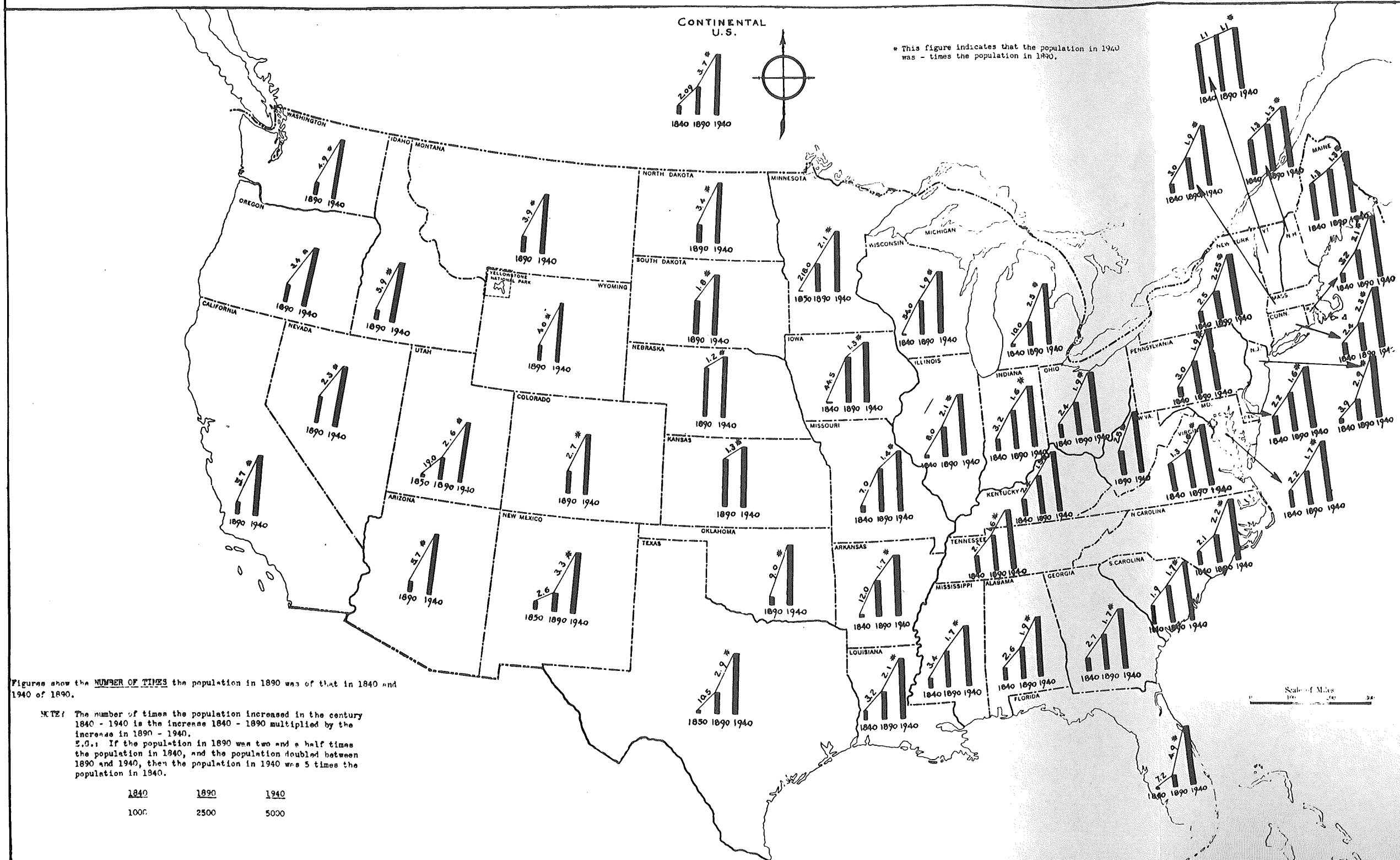
Source: U. S. Census.

POPULATION OF THE STATE OF MINNESOTA, 1850-1940.  
 GRAPH SHOWING NATIVE BORN BY PARENTAGE AND FOREIGN-  
 BORN BY MAJOR LOCATIONS OF BIRTH





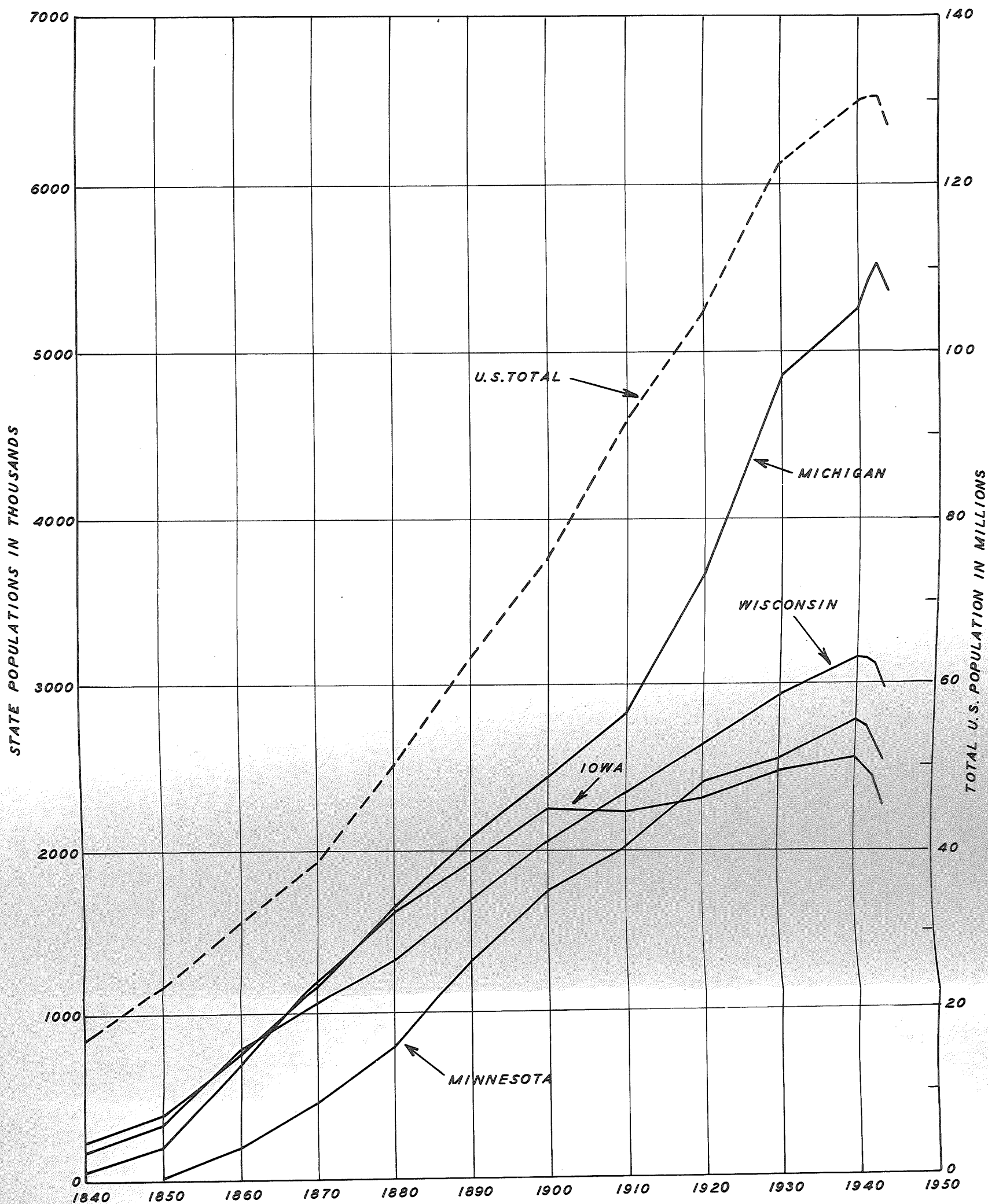
# COMPARISON OF MULTIPLE INCREASES IN POPULATION OF THE STATES IN THE TWO 50 YEAR PERIODS 1840-1890 AND 1890-1940



Sources: Calculated by The J. G. White Engineering Corporation from U. S. Census Data

The J. G. White Engineering Corp., New York

# POPULATION OF THE UNITED STATES AND OF THE STATES OF MINNESOTA IOWA MICHIGAN AND WISCONSIN 1840-1943



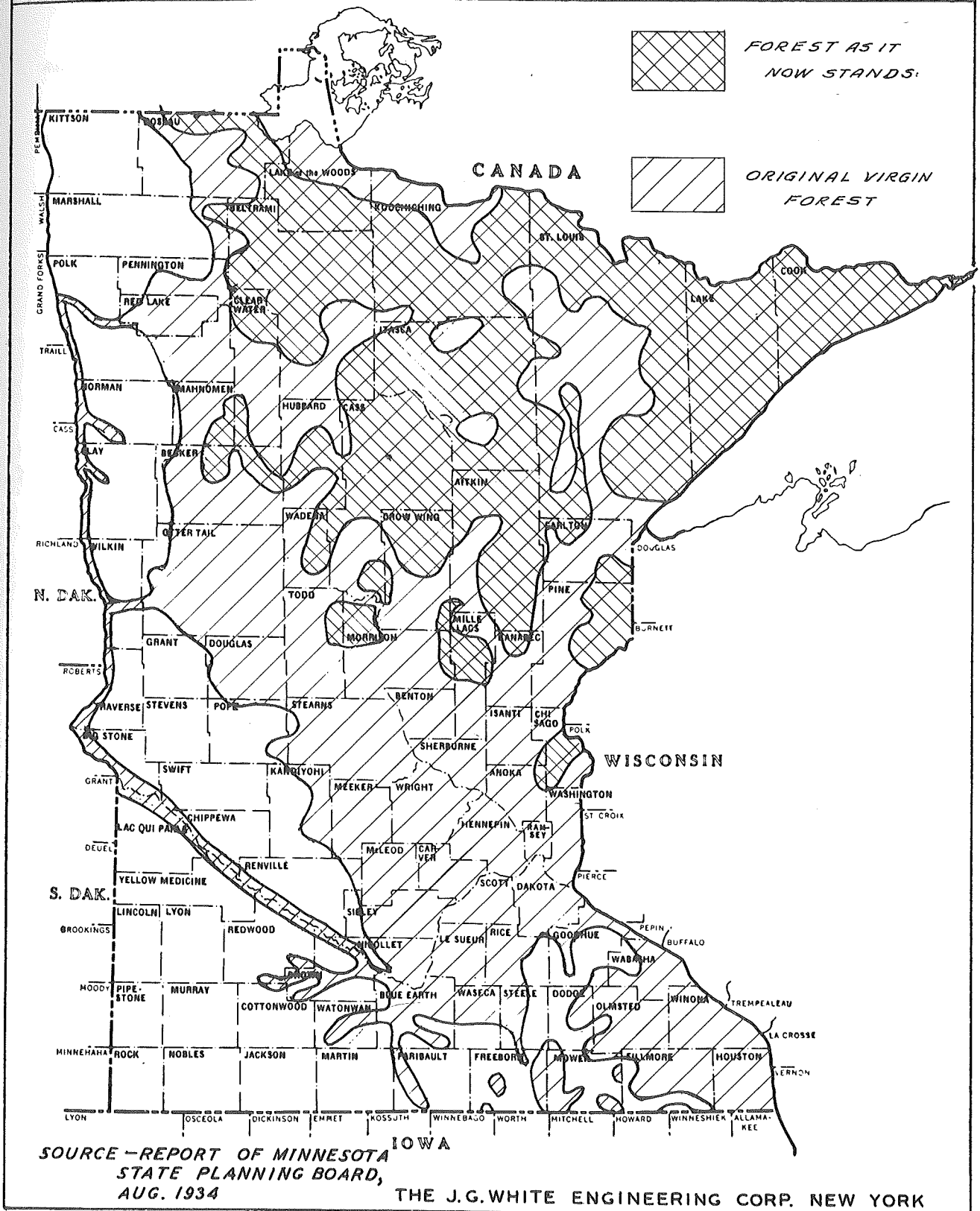
NOTE: FIGURES FOR 1941, 1942 ARE CENSUS DEPARTMENT  
ESTIMATES OF TOTAL POPULATIONS AS OF JULY 1ST.  
FIGURES FOR 1943 ARE CENSUS DEPARTMENT  
ESTIMATES OF CIVILIAN POPULATIONS ONLY AS  
OF NOVEMBER 1, 1943.

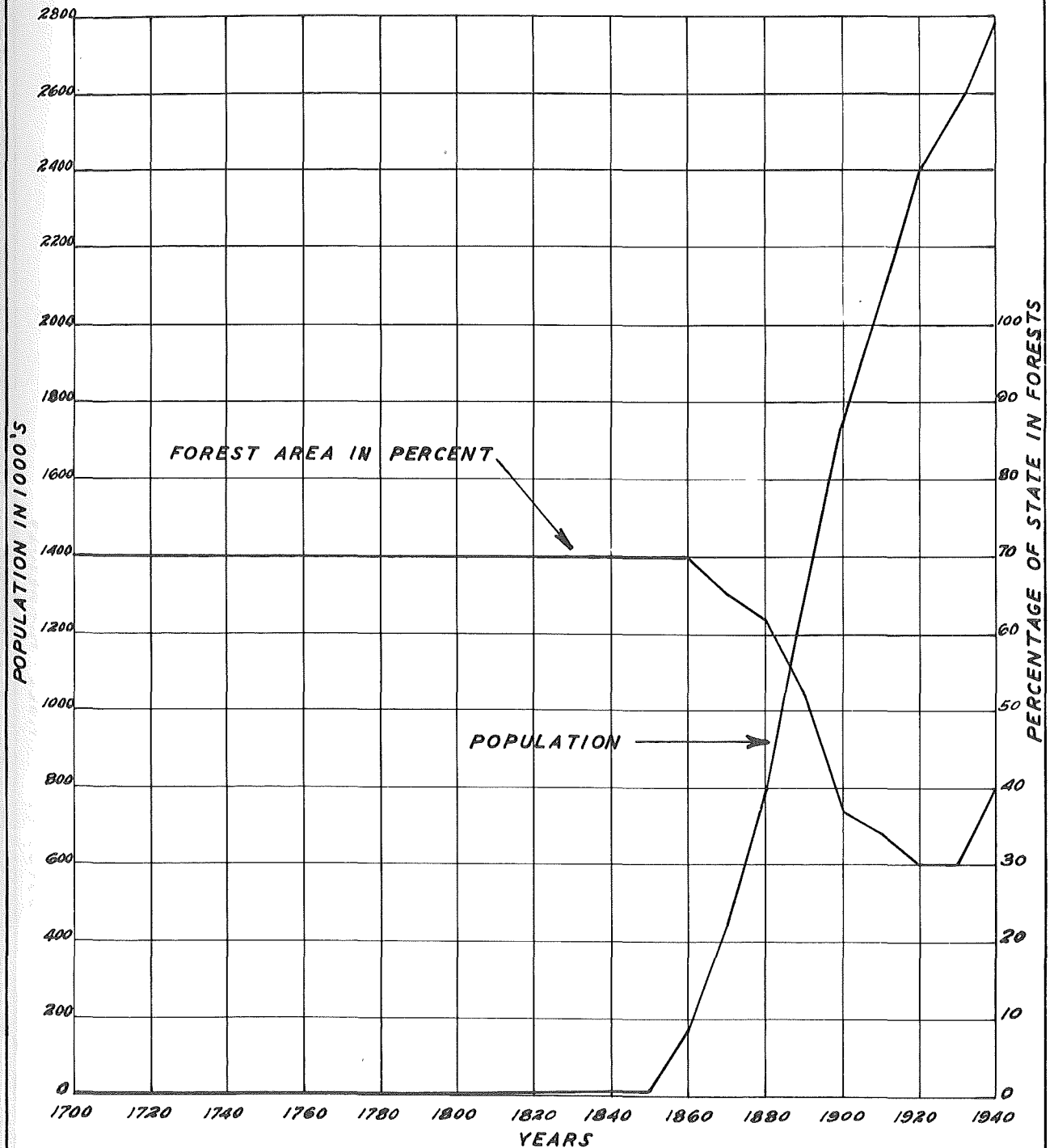
SOURCE:— U. S. CENSUS

THE J. G. WHITE ENGINEERING CORP. NEW YORK

EXHIBIT NO. II-B-4

# ORIGINAL AND PRESENT FOREST AREAS IN MINNESOTA

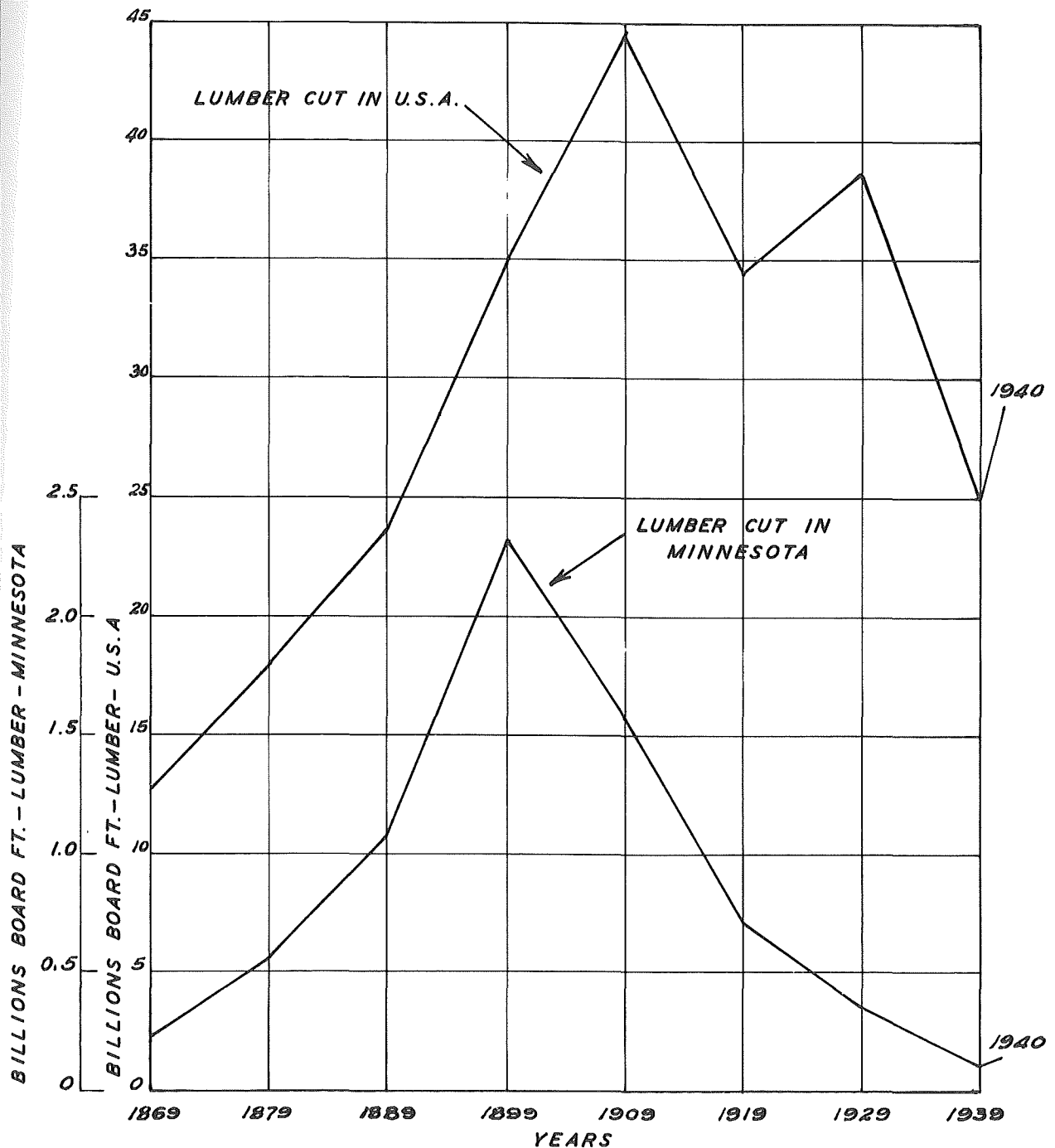


CHANGES IN POPULATION AND FOREST AREA  
IN MINNESOTA, 1700-1940

SOURCE: U.S. CENSUS 1940

THE J.G. WHITE ENGINEERING CORP. NEW YORK

# LUMBER CUTS IN MINNESOTA AND IN THE UNITED STATES 1869-1940

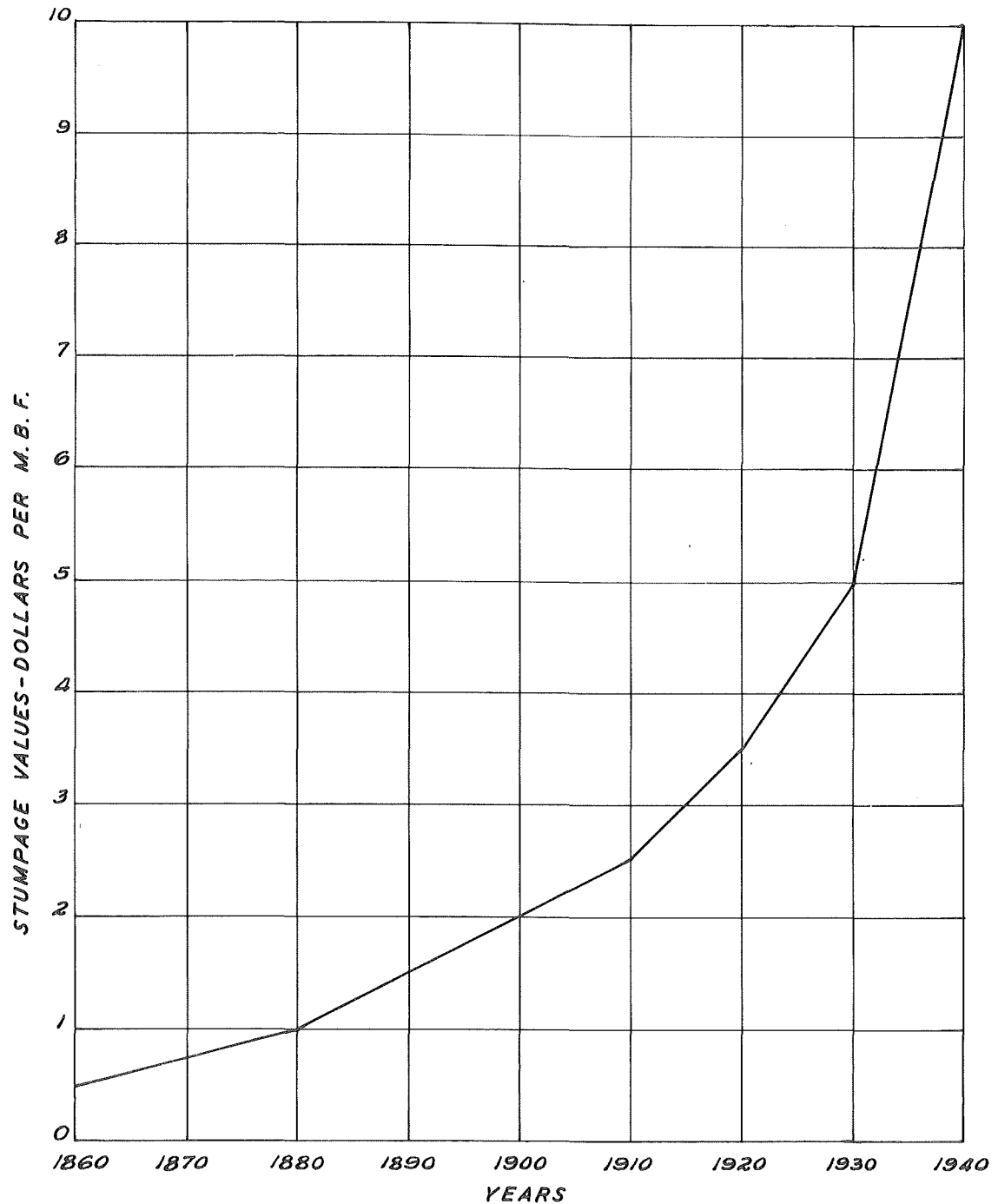


SOURCE - U. S. CENSUS 1940

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# STUMPAGE VALUES PER M.B.F. FOR WHITE PINE IN MINNESOTA, 1860-1940

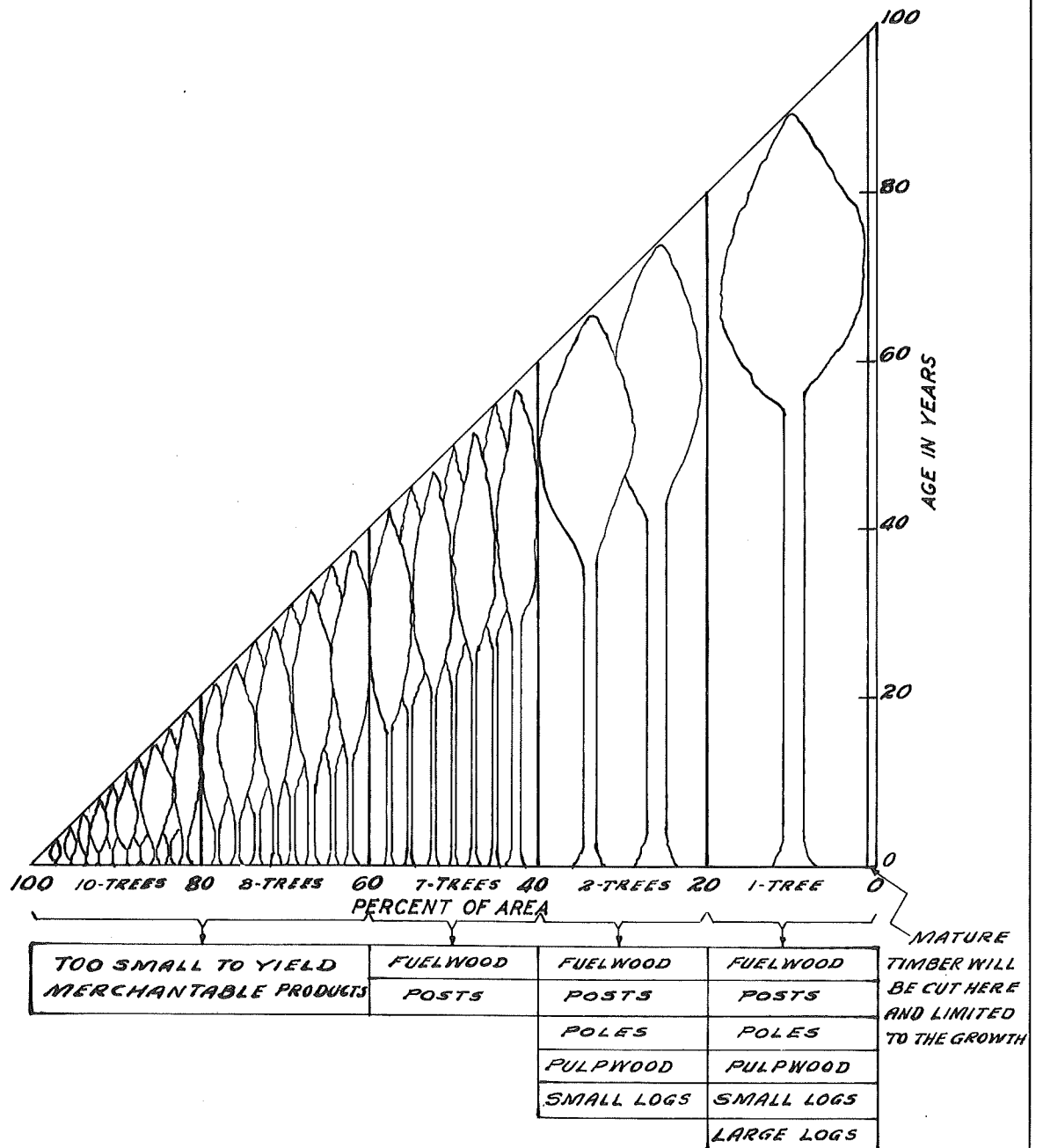


SOURCE-U.S. CENSUS 1940

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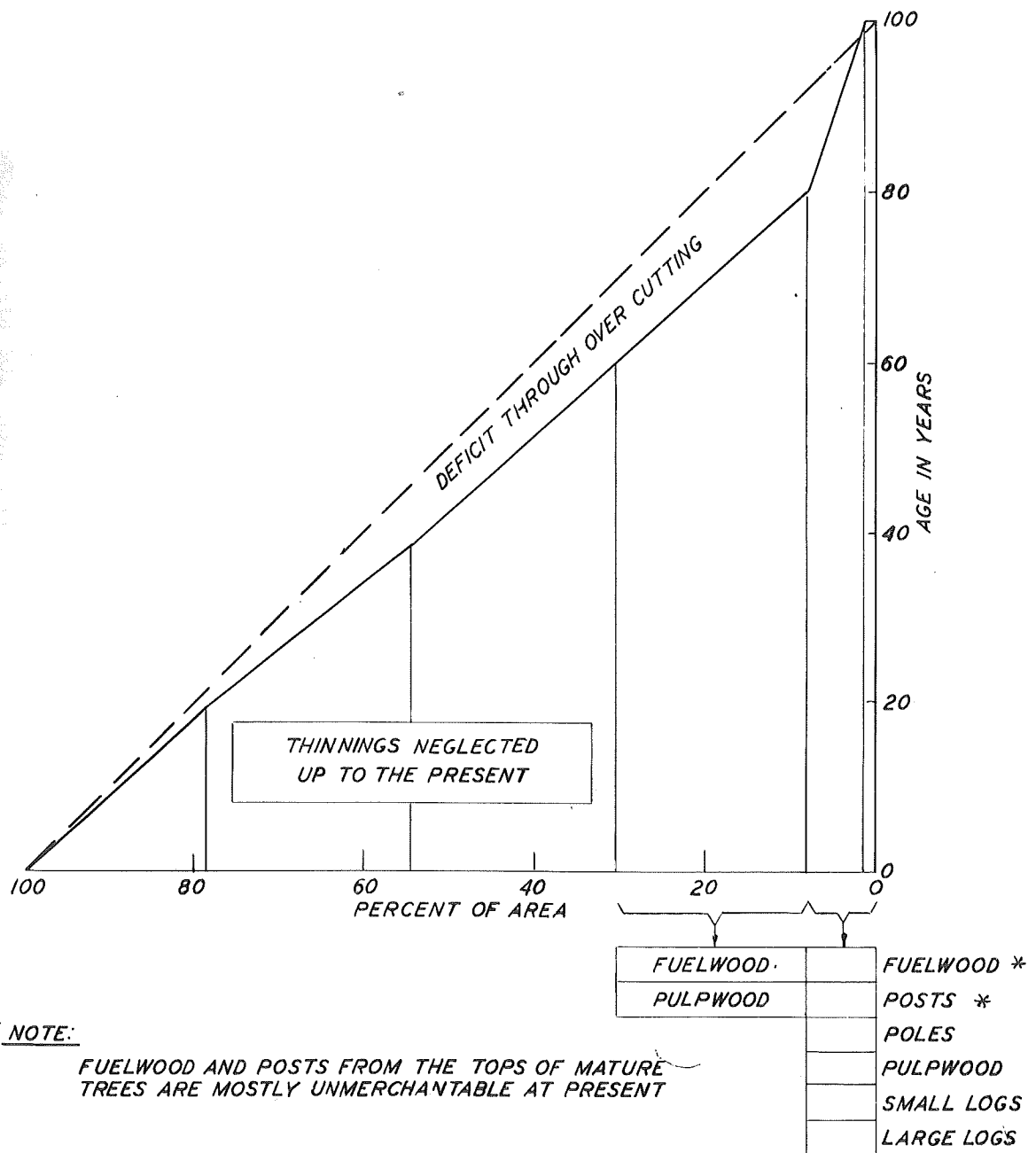
## NORMAL FOREST CONDITIONS



AREAS TO BE THINNED AND THE PRODUCTS  
WHICH SHOULD BE CUT.

# PRESENT FOREST CONDITION IN MINNESOTA

( A DIAGRAMMATIC APPROXIMATION )



**\* NOTE:**

FUELWOOD AND POSTS FROM THE TOPS OF MATURE TREES ARE MOSTLY UNMERCHANTABLE AT PRESENT

ANNUAL CASH FARM EXPENDITURES FOR VARIOUS ITEMS  
BY MINNESOTA FARMERS  
FIVE YEAR AVERAGES, 1910-1939. ANNUAL 1940-1941

|                                                | 1910-14         | 1915-19 | 1920-24 | 1925-29 | 1930-34 | 1935-39 | 1940  | 1941  |
|------------------------------------------------|-----------------|---------|---------|---------|---------|---------|-------|-------|
|                                                | Million Dollars |         |         |         |         |         |       |       |
| Total                                          | 64.7            | 115.6   | 152.3   | 153.0   | 113.9   | 121.1   | 132.0 | 146.0 |
| Fixed                                          | 19.6            | 35.4    | 58.1    | 54.1    | 46.8    | 37.9    | 37.5  | 36.8  |
| Taxes                                          | 8.7             | 15.4    | 27.4    | 27.9    | 26.0    | 22.0    | 23.7  | 23.2  |
| Real estate                                    | 7.4             | 12.7    | 22.2    | 22.9    | 22.0    | 19.1    | 20.8  | 20.3  |
| Special assessment                             | .5              | 1.1     | 2.2     | 2.8     | 2.1     | 1.1     | .7    | .7    |
| Personal property                              | .8              | 1.6     | 3.0     | 2.2     | 1.9     | 1.8     | 2.2   | 2.2   |
| Interest payable on farm real estate mortgages | 10.9            | 20.0    | 30.7    | 26.2    | 20.8    | 15.9    | 13.8  | 13.6  |
| Current operating                              | 45.1            | 80.2    | 94.2    | 98.9    | 67.1    | 83.2    | 94.5  | 109.2 |
| Interest payable on short-term loans           | 6.5             | 11.5    | 16.7    | 12.6    | 6.0     | 2.4     | 4.1   | 4.5   |
| Labor                                          | 17.1            | 26.7    | 30.2    | 29.5    | 15.7    | 19.3    | 22.0  | 27.0  |
| Feed                                           | 6.8             | 15.9    | 15.5    | 19.1    | 12.7    | 21.1    | 20.0  | 26.0  |
| Automotive                                     | .7              | 4.7     | 10.9    | 17.5    | 16.0    | 22.8    | 27.8  | 29.3  |
| Automobiles                                    | .6              | 3.3     | 5.8     | 8.3     | 6.5     | 7.6     | 8.3   | 8.6   |
| Trucks                                         | *               | .3      | 2.2     | 4.4     | 3.3     | 3.8     | 4.0   | 4.3   |
| Tractors                                       | .1              | 1.1     | 2.9     | 4.8     | 6.2     | 11.4    | 15.5  | 16.4  |
| Building repair                                | 5.0             | 6.9     | 5.8     | 4.7     | 2.4     | 4.0     | 5.2   | 6.3   |
| Machinery repair                               | 2.5             | 4.0     | 4.0     | 3.8     | 3.7     | 3.5     | 3.8   | 3.9   |
| Other production items                         | 3.0             | 5.4     | 4.8     | 5.2     | 3.6     | 3.2     | 3.7   | 3.7   |
| Binder twine                                   | 2.2             | 4.2     | 3.4     | 3.7     | 2.3     | 2.1     | 2.3   | 2.1   |
| Sprays and seed treatment materials            | .5              | .5      | .6      | .5      | .6      | .5      | .5    | .5    |
| Fertilizer and lime                            | .1              | .3      | .5      | .7      | .6      | .5      | .8    | 1.0   |
| Sacks                                          | .2              | .4      | .3      | .3      | .1      | .1      | .1    | .1    |
| Miscellaneous items                            | 3.5             | 5.1     | 6.3     | 6.5     | 7.0     | 6.9     | 7.9   | 8.5   |
| Veterinary                                     | 1.8             | 2.1     | 2.3     | 2.2     | 2.5     | 2.3     | 2.5   | 2.5   |
| Insurance                                      | 1.2             | 2.3     | 2.9     | 2.9     | 2.9     | 2.7     | 2.6   | 2.6   |
| Electricity                                    | .1              | .2      | .4      | .6      | .9      | 1.4     | 2.3   | 2.8   |
| Telephone                                      | .4              | .5      | .7      | .8      | .7      | .5      | .5    | .6    |

\* Less than \$50,000

Source: University of Minnesota Agricultural Bulletin, No. 366 - 1943 The J. G. White Engineering Corp., New York

| State        | 1850  | 1930   | 1935  | 1940  |
|--------------|-------|--------|-------|-------|
| Minnesota    | 5.63  | 68.74  | 42.14 | 44.26 |
| Wisconsin    | 9.58  | 79.16  | 53.15 | 51.96 |
| Iowa         | 6.09  | 124.18 | 71.66 | 78.79 |
| North Dakota | -     | 24.61  | 18.08 | 12.92 |
| South Dakota | -     | 35.24  | 18.65 | 12.80 |
| Nebraska     | -     | 55.81  | 33.53 | 24.03 |
| Kansas       | -     | 48.56  | 30.80 | 29.51 |
| Michigan     | 11.83 | 67.80  | 44.76 | 50.59 |
| Indiana      | 10.66 | 71.90  | 50.70 | 63.20 |
| Illinois     | 7.99  | 108.68 | 69.67 | 81.76 |
| Missouri     | 6.50  | 53.23  | 31.36 | 31.87 |
| Ohio         | 19.93 | 78.69  | 55.89 | 65.91 |

area.  
area.

## VALUE OF FARMS (LAND AND BUILDINGS)

## NORTH CENTRAL STATES

## AVERAGE PER ACRE (DOLLARS)

| State        | 1850  | 1860     | 1870     | 1880     | 1890  | 1900  | 1910   | 1920   | 1925   | 1930   | 1935  | 1940  |
|--------------|-------|----------|----------|----------|-------|-------|--------|--------|--------|--------|-------|-------|
| Minnesota    | 5.61  | 10.14    | 12.07    | 14.45    | 18.22 | 25.51 | 45.62  | 109.23 | 79.63  | 68.74  | 42.14 | 44.26 |
| Wisconsin    | 9.58  | 16.61    | 20.51    | 23.30    | 28.44 | 34.54 | 57.06  | 98.78  | 86.90  | 79.16  | 53.15 | 51.96 |
| Iowa         | 6.09  | 11.91    | 20.21    | 22.92    | 28.13 | 43.31 | 96.00  | 227.09 | 148.87 | 124.18 | 71.66 | 78.79 |
| North Dakota | -     | 3.65 (A) | 5.52 (A) | 8.34 (B) | 9.83  | 12.79 | 28.94  | 41.10  | 29.72  | 24.61  | 18.08 | 12.92 |
| South Dakota | -     | -        | -        | 4.99 (C) | 9.43  | 11.54 | 38.63  | 71.40  | 44.89  | 35.24  | 18.65 | 12.80 |
| Nebraska     | -     | 6.14     | 11.67    | 10.65    | 18.63 | 19.31 | 46.95  | 87.91  | 60.06  | 55.81  | 33.53 | 24.03 |
| Kansas       | -     | 6.89     | 12.77    | 10.98    | 18.53 | 15.45 | 40.05  | 62.30  | 50.26  | 48.56  | 30.80 | 29.51 |
| Michigan     | 11.83 | 22.88    | 31.80    | 36.15    | 37.62 | 33.17 | 47.58  | 75.48  | 71.20  | 67.80  | 44.76 | 50.59 |
| Indiana      | 10.66 | 21.77    | 28.03    | 31.11    | 37.07 | 38.93 | 74.85  | 125.98 | 85.15  | 71.90  | 50.70 | 63.20 |
| Illinois     | 7.99  | 19.56    | 28.45    | 31.87    | 41.41 | 53.84 | 108.32 | 187.59 | 136.65 | 108.68 | 69.67 | 81.76 |
| Missouri     | 6.50  | 11.54    | 14.48    | 13.47    | 20.33 | 24.82 | 49.61  | 88.08  | 61.37  | 53.23  | 31.36 | 31.87 |
| Ohio         | 19.93 | 33.12    | 38.85    | 45.97    | 44.96 | 42.31 | 68.62  | 113.18 | 87.57  | 78.69  | 55.89 | 65.91 |

Source: Sixteenth Census of the United States, 1940 - Agriculture, General Report.

(A) The figures are for Dakota territory.

(B) North Dakota became a State in 1889 - Figures cover counties of territory in present state area.

(C) South Dakota became a State in 1889 - Figures cover counties of territory in present state area.

ANNUAL GROSS CASH INCOME  
FROM SALES OF VARIOUS AGRICULTURAL PRODUCTS  
BY MINNESOTA FARMERS  
FIVE AVERAGES, 1910-1937, ANNUAL, 1940 AND 1941

|                          | 1910-14 | 1915-19 | 1920-24 | 1925-29 | 1930-34 | 1935-39 | 1940  | 1941  |
|--------------------------|---------|---------|---------|---------|---------|---------|-------|-------|
| State Total              | 180.4   | 330.4   | 313.0   | 408.1   | 232.3   | 310.9   | 361.3 | 467.7 |
| Crops                    | 85.7    | 138.9   | 100.0   | 94.3    | 40.5    | 63.0    | 87.9  | 92.0  |
| Wheat (all kinds)        | 39.9    | 70.6    | 28.8    | 25.2    | 8.3     | 16.4    | 15.8  | 17.1  |
| Corn                     | 6.0     | 10.5    | 12.7    | 10.9    | 6.8     | 11.1    | 30.2  | 22.4  |
| Oats                     | 7.7     | 15.1    | 14.8    | 12.2    | 4.4     | 6.1     | 7.5   | 7.3   |
| Barley                   | 9.6     | 11.5    | 5.0     | 7.2     | 3.7     | 9.9     | 8.4   | 11.6  |
| Rye                      | 3.0     | 7.0     | 10.1    | 4.5     | 1.2     | 2.8     | 1.5   | 1.5   |
| Flax                     | 4.7     | 5.5     | 9.5     | 14.1    | 7.4     | 9.1     | 17.4  | 25.3  |
| Potatoes                 | 9.2     | 15.6    | 15.3    | 15.7    | 6.8     | 5.7     | 5.8   | 5.3   |
| Hay (tame and wild)      | 5.6     | 3.1     | 3.9     | 4.5     | 1.9     | 1.9     | 1.3   | 1.5   |
| Livestock                | 45.7    | 110.8   | 103.1   | 159.2   | 92.4    | 125.8   | 141.8 | 203.1 |
| Hogs                     | 25.8    | 63.0    | 66.0    | 99.2    | 52.2    | 65.5    | 69.2  | 108.7 |
| Cattle and Calves        | 19.0    | 46.3    | 35.1    | 56.1    | 36.2    | 52.9    | 65.8  | 85.3  |
| Sheep and Lambs          | 0.9     | 1.5     | 2.0     | 3.9     | 4.0     | 7.4     | 6.8   | 9.1   |
| Dairy Products           | 37.9    | 59.1    | 79.4    | 111.9   | 71.6    | 86.1    | 91.4  | 114.8 |
| Butterfat                | 25.0    | 42.4    | 61.3    | 89.8    | 53.7    | 64.5    | 67.0  | 83.3  |
| Milk and Farm Butter     | 12.9    | 16.7    | 18.1    | 22.1    | 17.9    | 21.6    | 24.4  | 31.5  |
| Other Livestock Products | 11.1    | 21.6    | 30.4    | 42.7    | 27.8    | 36.0    | 40.2  | 57.8  |
| Chickens                 | 2.3     | 4.1     | 7.4     | 13.2    | 9.8     | 10.6    | 9.2   | 12.2  |
| Eggs                     | 7.3     | 14.8    | 19.5    | 24.1    | 14.0    | 18.4    | 21.6  | 33.4  |
| Turkeys                  | 1.0     | 1.7     | 2.7     | 4.0     | 3.0     | 5.2     | 7.2   | 9.0   |
| Wool                     | 0.5     | 1.0     | 0.8     | 1.4     | 1.0     | 1.8     | 2.2   | 3.2   |

Source: University of Minnesota Agricultural Bulletin No. 366-1943.



AREA, POPULATION, DENSITY AND FAMILIES - "A"

NORTH CENTRAL STATES

| State        | Land Area<br>Square Miles<br>1940 | Total<br>Population<br>1940 | Density of<br>Population<br>Number Per<br>Square Mile<br>1940 | FARM POPULATION |            |            |            |                                 |      |      |      | FAMILIES - 1940 - "C" |                   |               |
|--------------|-----------------------------------|-----------------------------|---------------------------------------------------------------|-----------------|------------|------------|------------|---------------------------------|------|------|------|-----------------------|-------------------|---------------|
|              |                                   |                             |                                                               | Total - "B"     |            |            |            | Per Cent of<br>Total Population |      |      |      | Urban                 | Rural<br>Non Farm | Rural<br>Farm |
|              |                                   |                             |                                                               | 1910            | 1920       | 1930       | 1940       | 1910                            | 1920 | 1930 | 1940 |                       |                   |               |
| Minnesota    | 80,009                            | 2,792,300                   | 34.9                                                          | 833,131         | 897,181    | 895,349    | 914,609    | 40.1                            | 36.8 | 34.9 | 32.8 | 387,780               | 136,220           | 211,980       |
| Wisconsin    | 54,715                            | 3,137,587                   | 57.3                                                          | 902,303         | 920,037    | 881,054    | 882,938    | 38.8                            | 34.4 | 30.0 | 28.1 | 459,620               | 166,140           | 201,180       |
| Iowa         | 55,986                            | 2,538,268                   | 45.3                                                          | 1,050,050       | 948,334    | 977,906    | 930,810    | 47.4                            | 39.3 | 39.6 | 36.7 | 316,420               | 158,980           | 229,120       |
| North Dakota | 70,054                            | 641,935                     | 9.2                                                           | 369,212         | 394,500    | 397,294    | 327,943    | 63.9                            | 60.5 | 58.4 | 51.1 | 34,700                | 47,940            | 72,460        |
| South Dakota | 76,536                            | 642,961                     | 8.4                                                           | 370,820         | 362,221    | 390,205    | 307,318    | 62.8                            | 57.1 | 56.3 | 47.8 | 42,700                | 49,560            | 71,320        |
| Nebraska     | 76,653                            | 1,315,834                   | 17.2                                                          | 631,467         | 584,172    | 585,701    | 498,220    | 52.9                            | 45.1 | 42.5 | 37.9 | 144,620               | 90,940            | 124,620       |
| Kansas       | 82,113                            | 1,801,028                   | 21.9                                                          | 830,197         | 737,377    | 707,196    | 606,944    | 49.1                            | 40.5 | 37.6 | 33.7 | 228,040               | 127,500           | 158,960       |
| Michigan     | 57,022                            | 5,256,106                   | 92.2                                                          | 911,555         | 848,710    | 782,394    | 870,832    | 32.4                            | 23.2 | 16.2 | 16.6 | 927,020               | 255,000           | 223,460       |
| Indiana      | 36,205                            | 3,427,796                   | 94.7                                                          | 997,243         | 907,295    | 813,007    | 816,408    | 36.8                            | 30.9 | 25.1 | 23.8 | 542,500               | 203,880           | 215,960       |
| Illinois     | 55,947                            | 7,897,241                   | 141.2                                                         | 1,219,237       | 1,098,262  | 999,249    | 978,907    | 22.9                            | 16.8 | 13.1 | 12.4 | 1,648,620             | 316,940           | 251,020       |
| Missouri     | 69,270                            | 3,784,664                   | 54.6                                                          | 1,351,509       | 1,211,346  | 1,114,484  | 1,125,413  | 41.1                            | 37.4 | 30.7 | 29.7 | 578,460               | 202,940           | 291,180       |
| Ohio         | 41,122                            | 6,907,612                   | 168.0                                                         | 1,244,769       | 1,139,329  | 1,013,229  | 1,088,655  | 26.2                            | 19.8 | 15.2 | 15.8 | 1,297,240             | 338,300           | 270,160       |
| U. S. A.     | 2,977,128                         | 131,669,275                 | 44.2                                                          | 32,076,960      | 31,614,269 | 30,445,350 | 30,546,911 | 35.1                            | 29.9 | 24.8 | 23.2 | 20,735,200            | 7,211,120         | 7,142,520     |

Source: "A" - Statistical Abstract of the United States - 1943.  
 "B" - Includes Rural Farms and Urban Farms.  
 "C" - Special Report of the 16th United States Census, Families - "General Characteristics."

AVERAGE ANNUAL FARMERS GROSS CASH INCOME  
BY CLASS OF FARM AND SOURCE  
MINNESOTA AND SELECTED STATES  
(DOLLARS PER FARM)

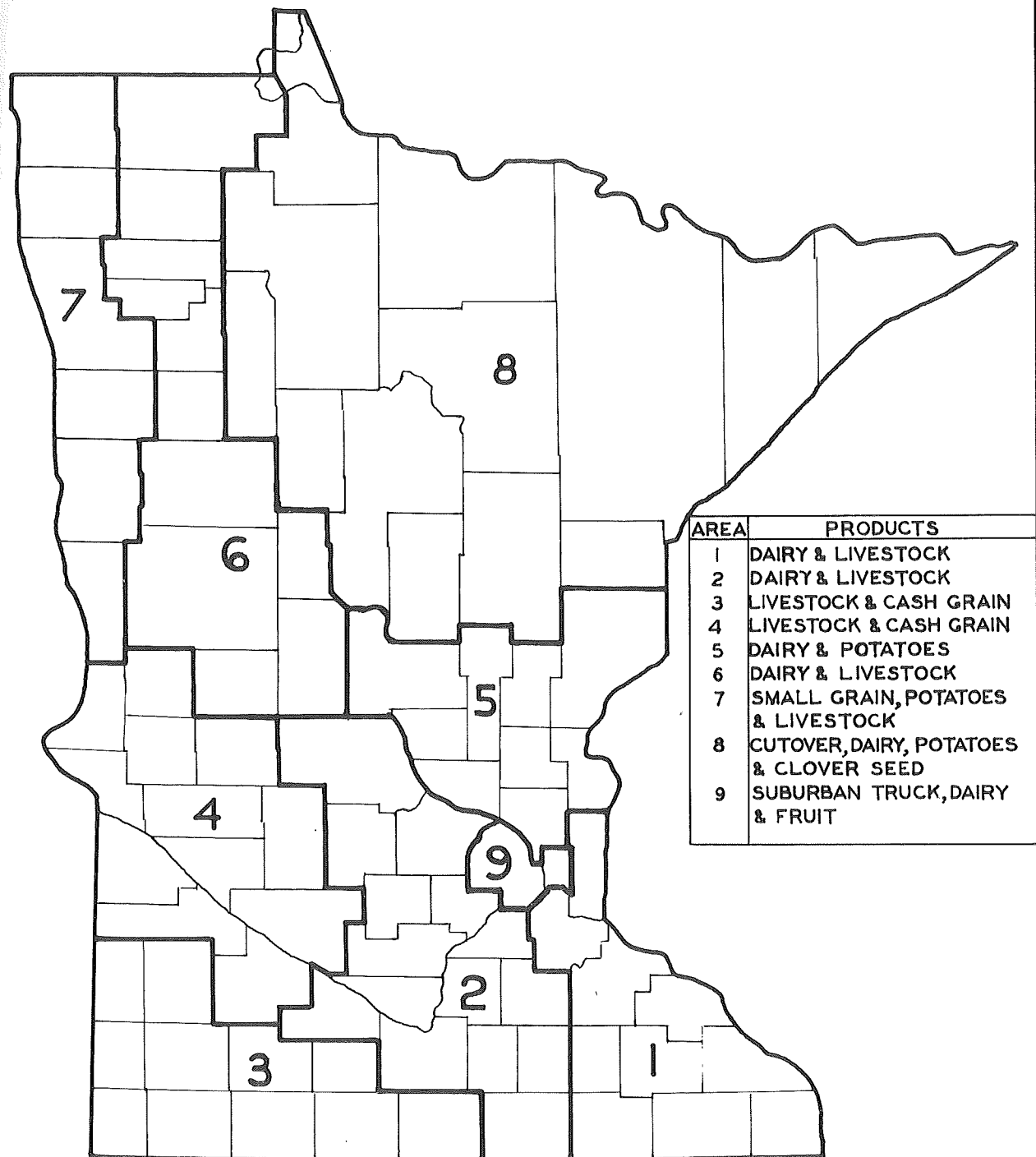
| Classification                 | Income Source                                | Minnesota | Wisconsin | Iowa     | U.S.A.  |
|--------------------------------|----------------------------------------------|-----------|-----------|----------|---------|
| All Classified Farms           | All Farm Products                            | \$1,773   | \$1,515   | \$ 2,683 | \$1,309 |
| Livestock Farms                | All Farm Products                            | \$2,343   | \$2,225   | \$ 3,214 | \$2,529 |
|                                | Livestock sold or traded.                    | \$1,191   | \$1,178   | \$ 2,127 | \$1,685 |
| Dairy Farms                    | All Farm Products                            | \$1,411   | \$1,606   | \$ 1,776 | \$1,962 |
|                                | Dairy products sold or traded.               | \$ 675    | \$ 906    | \$ 899   | \$1,230 |
| Poultry Farms                  | All Farm Products                            | \$2,183   | \$1,442   | \$ 1,951 | \$1,650 |
|                                | Poultry and poultry products sold or traded. | \$1,430   | \$ 909    | \$ 1,380 | \$1,194 |
| Other Livestock Products Farms | All Farm Products                            | \$1,872   | \$5,372   | \$ 1,878 | \$2,488 |
|                                | Other Livestock products sold or traded.     | \$1,526   | \$4,980   | \$ 1,475 | \$1,644 |
| Field Crop Farms               | All Farm Products                            | \$2,423   | \$1,475   | \$ 2,801 | \$1,379 |
|                                | Field Crops sold or traded.                  | \$1,355   | \$ 724    | \$ 1,628 | \$ 933  |
| Vegetable Farms                | All Farm Products                            | \$1,754   | \$1,623   | \$ 1,299 | \$2,241 |
|                                | Vegetables harvested for sale.               | \$1,149   | \$1,030   | \$ 784   | \$1,649 |
| Fruit and Nut Farms            | All Farm Products                            | \$ 916    | \$2,170   | \$ 936   | \$2,251 |
|                                | Fruits and Nuts sold or traded.              | \$ 588    | \$1,820   | \$ 624   | \$1,889 |
| Horticultural Specialty Farms  | All Farm Products                            | \$9,691   | \$6,701   | \$12,630 | \$6,924 |
|                                | Horticultural specialties sold.              | \$9,005   | \$6,464   | \$12,322 | \$6,601 |
| Forest Products Farms          | All Farm Products                            | \$ 614    | \$ 873    | \$ 616   | \$1,113 |
|                                | Forest products sold.                        | \$ 385    | \$ 470    | \$ 344   | \$ 673  |
| Subsistence Farms              | All Farm Products                            | \$ 451    | \$ 396    | \$ 458   | \$ 360  |
|                                | Farm products used by farm households        | \$ 219    | \$ 205    | \$ 223   | \$ 214  |

Source: Sixteenth Census of the United States. Agriculture - 1940.

The J. G. White Engineering Corp., New York

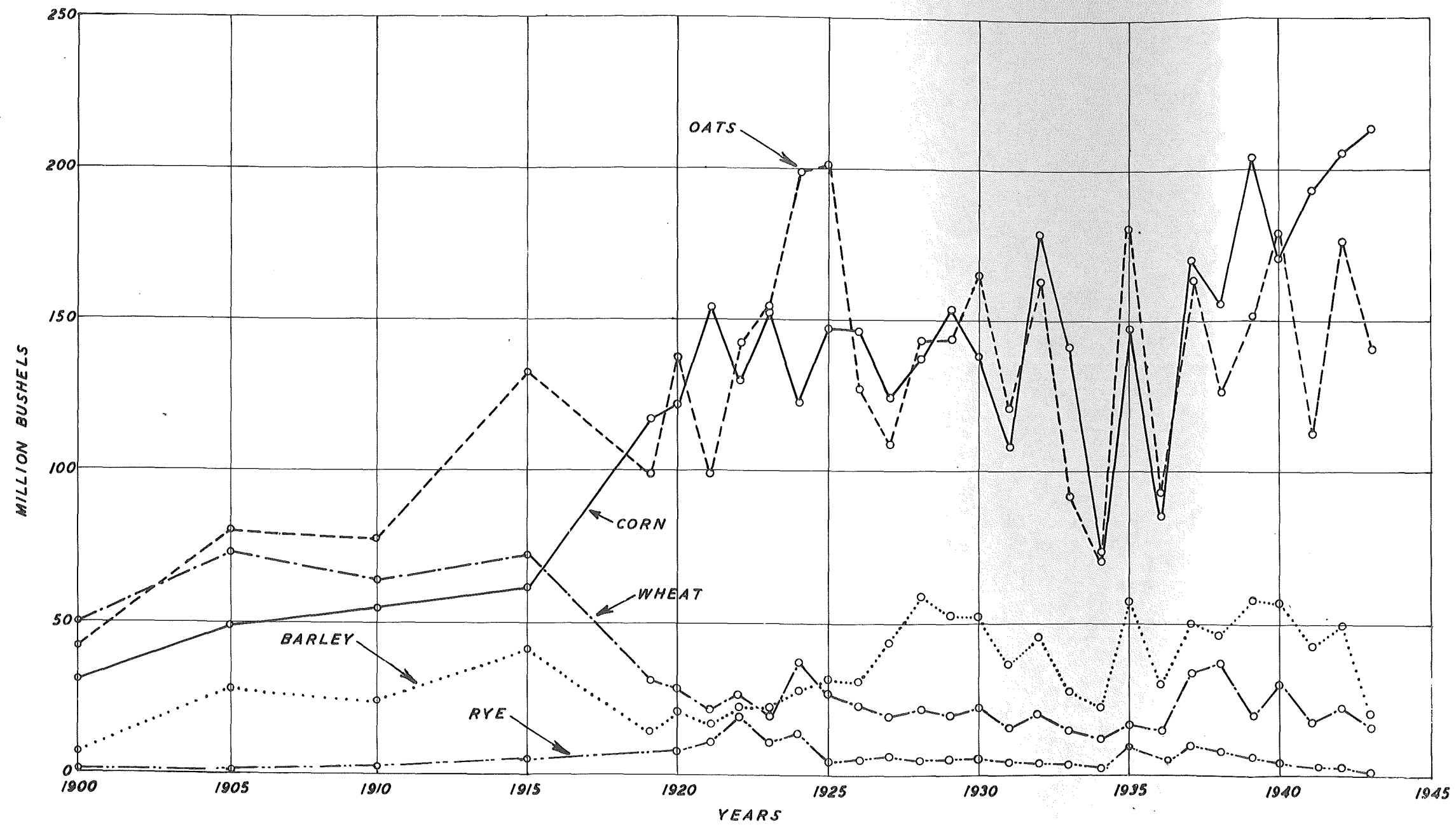
Exhibit No. III-B-5

# TYPE OF FARMING AREAS IN MINNESOTA OUTLINED BY COUNTY BOUNDARIES



SOURCE: AGRICULTURAL PRODUCTION  
AND TYPES OF FARMING IN MINNESOTA  
ENGEL AND POND. UNIVERSITY OF  
MINNESOTA BULLETIN 347-1940

# PRODUCTION OF PRINCIPAL GRAINS IN MINNESOTA 1900-1943



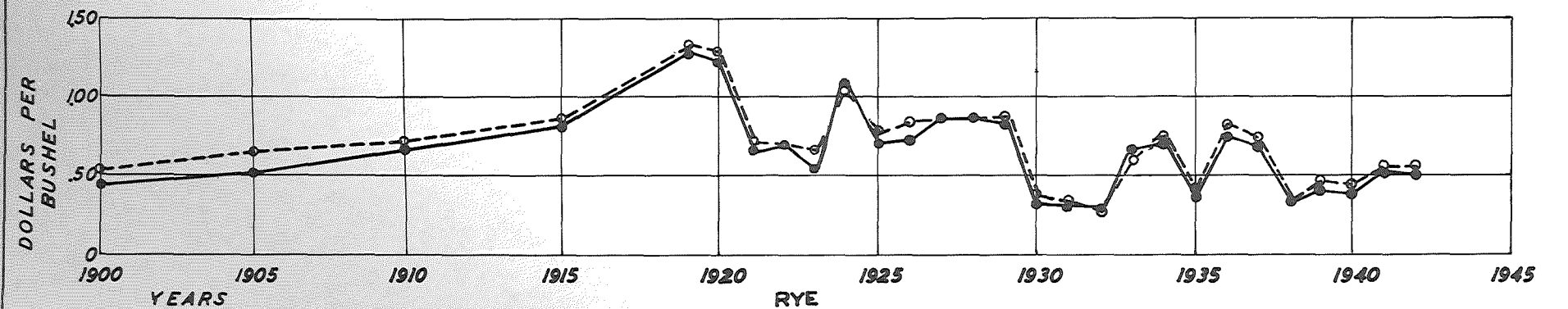
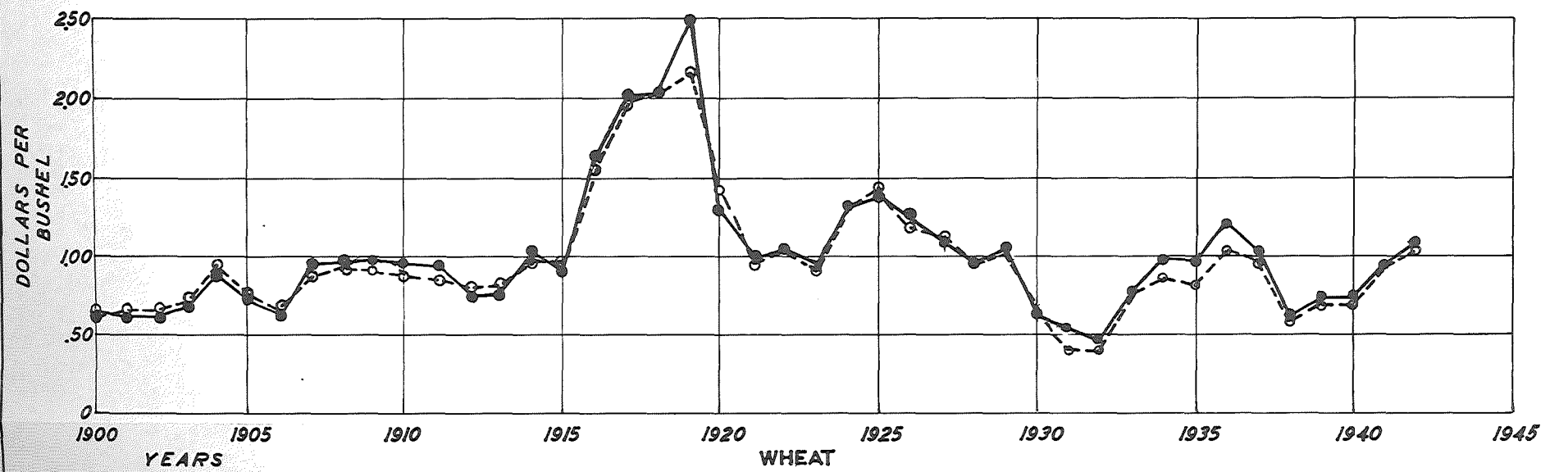
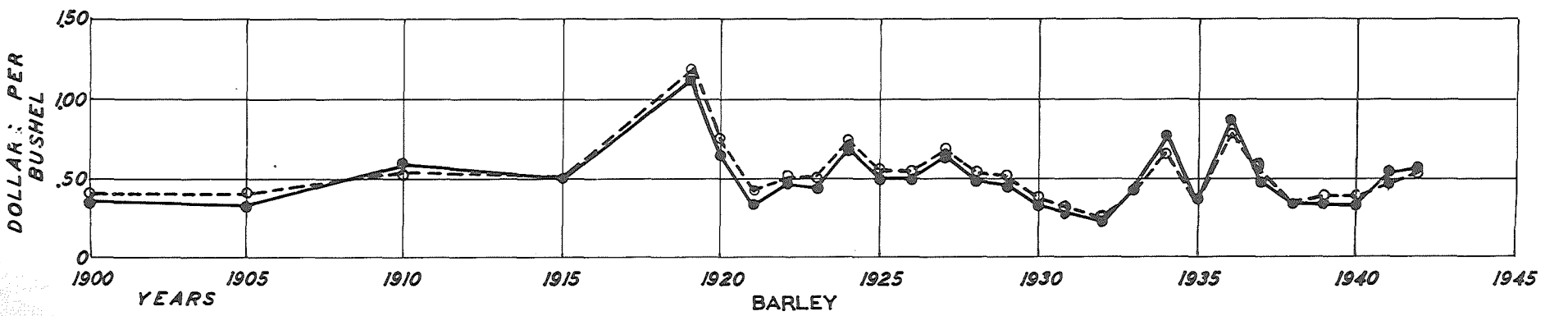
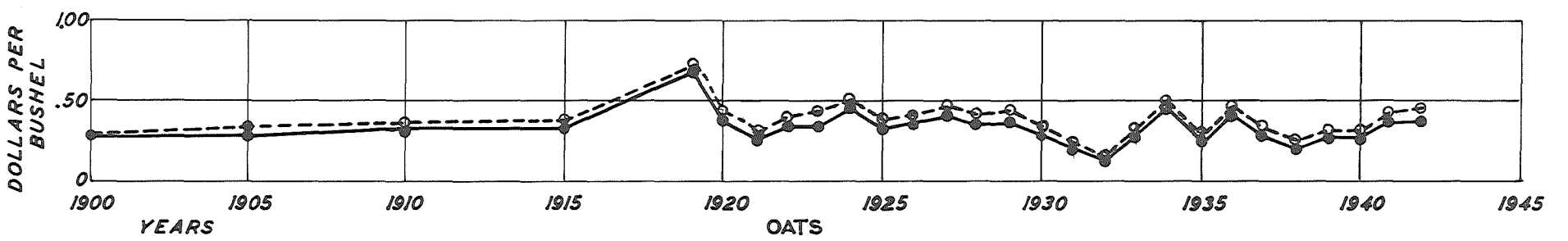
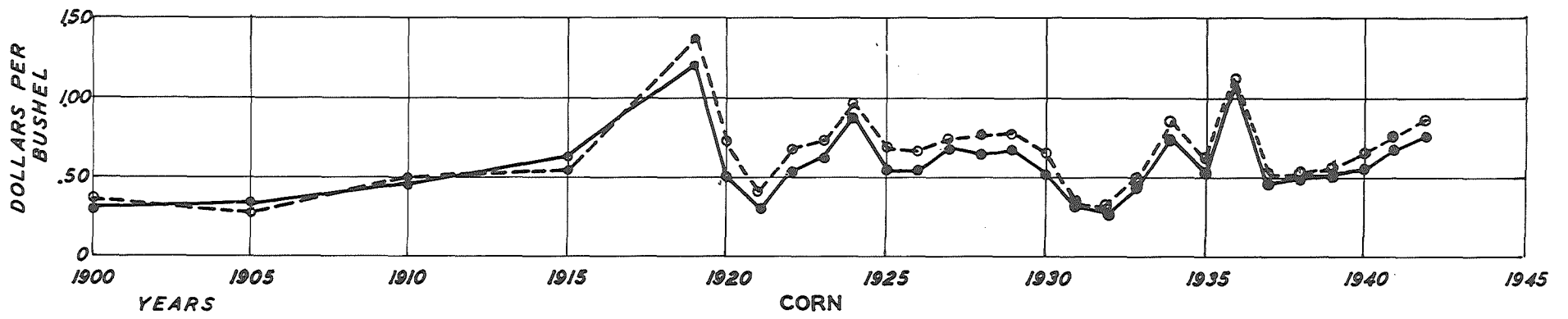
**LEGEND**

- CORN
- - - OATS
- ..... BARLEY
- . - . WHEAT
- - - - RYE

SOURCE - U.S. DEPT. OF AGRICULTURE - AGRICULTURAL STATISTICS



# AVERAGE ANNUAL SELLING PRICE-GRAINS MINNESOTA AND U.S.A. 1900-1943



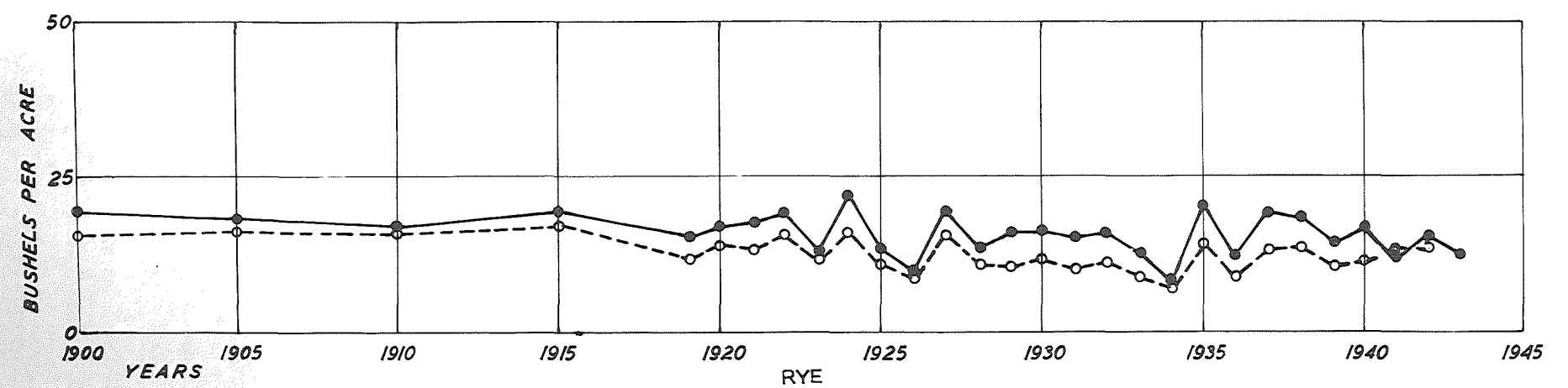
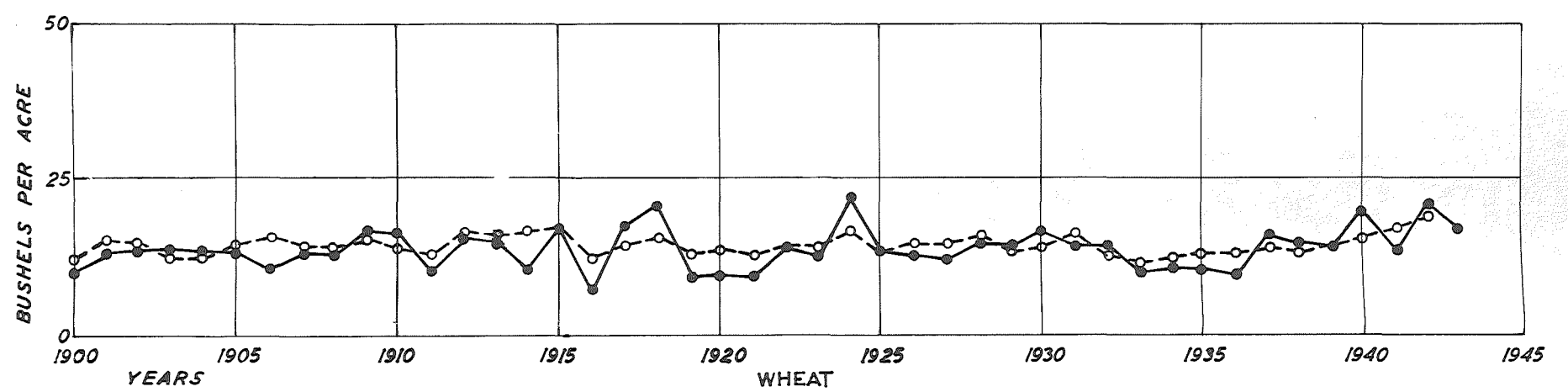
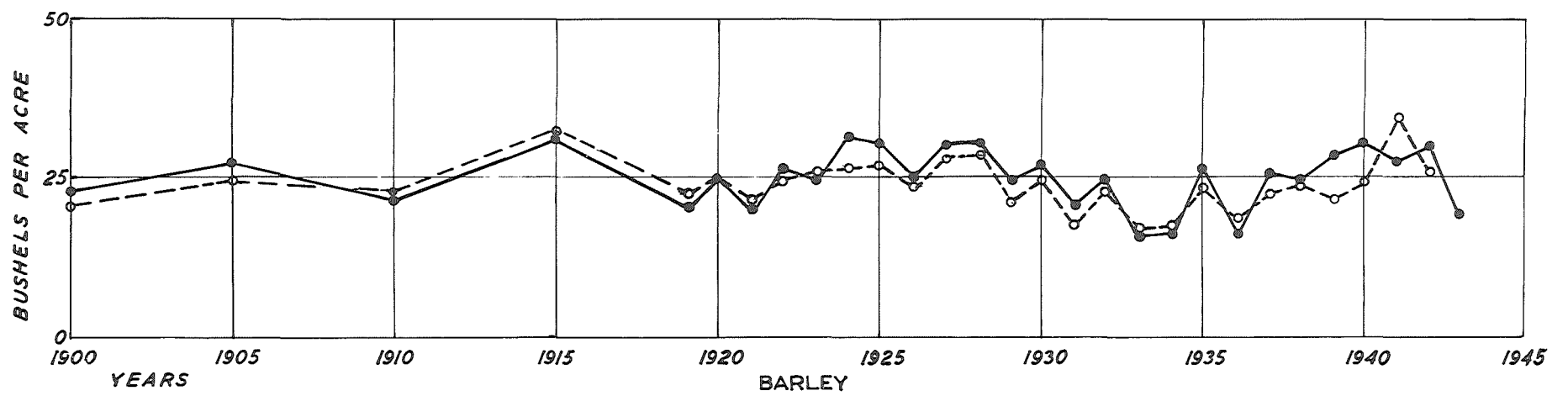
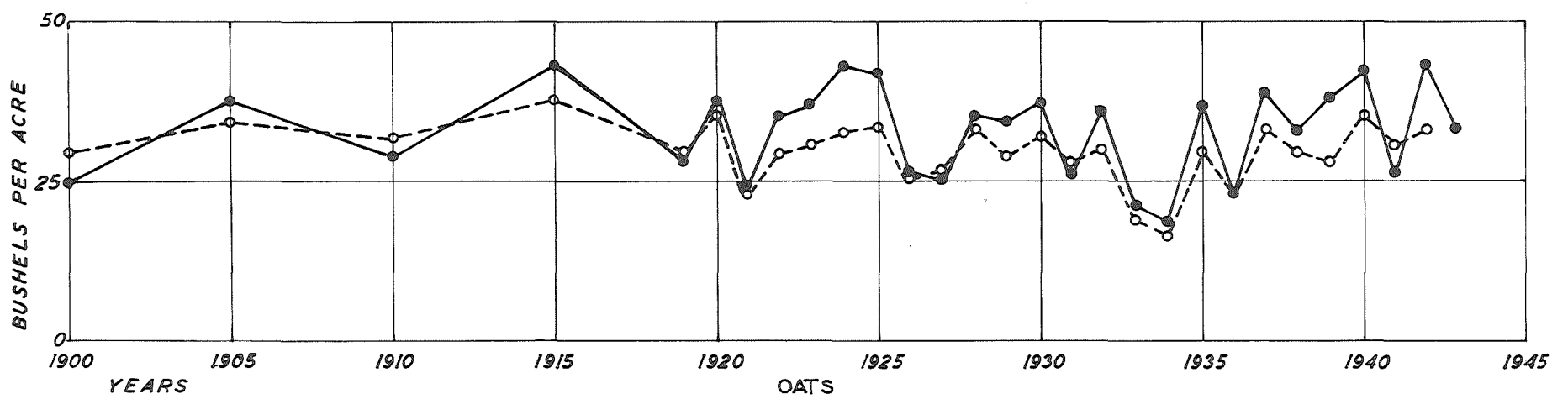
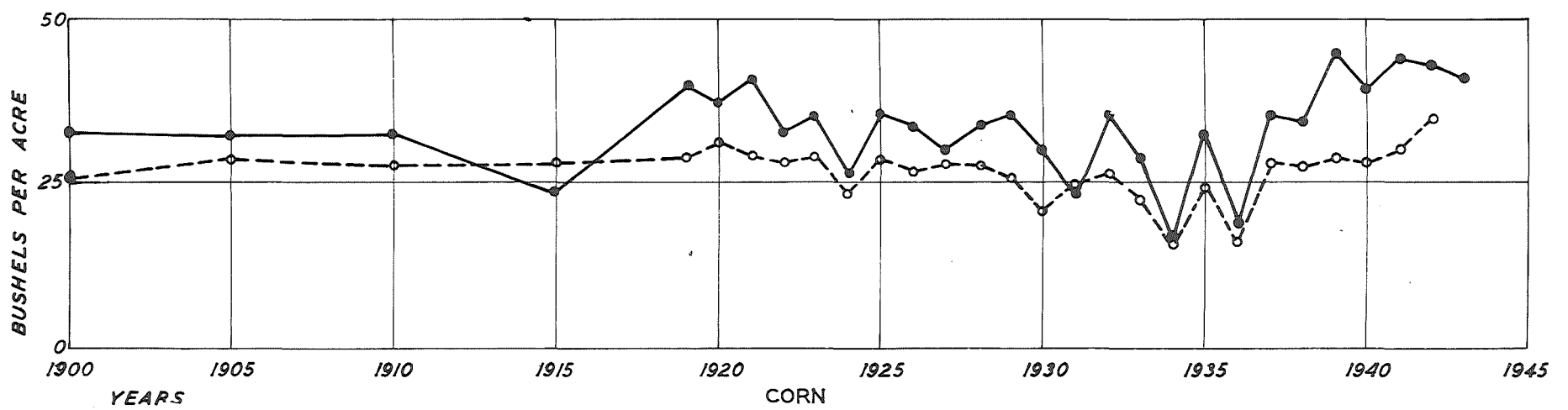
## LEGEND

— MINNESOTA  
- - - U.S.A.

SOURCE - U.S. DEPT. OF AGRICULTURE.  
AGRICULTURAL STATISTICS

THE J. G. WHITE ENGINEERING CORP. NEW YORK

# AVERAGE ANNUAL YIELD OF GRAINS MINNESOTA AND U.S.A. 1900-1943



## LEGEND

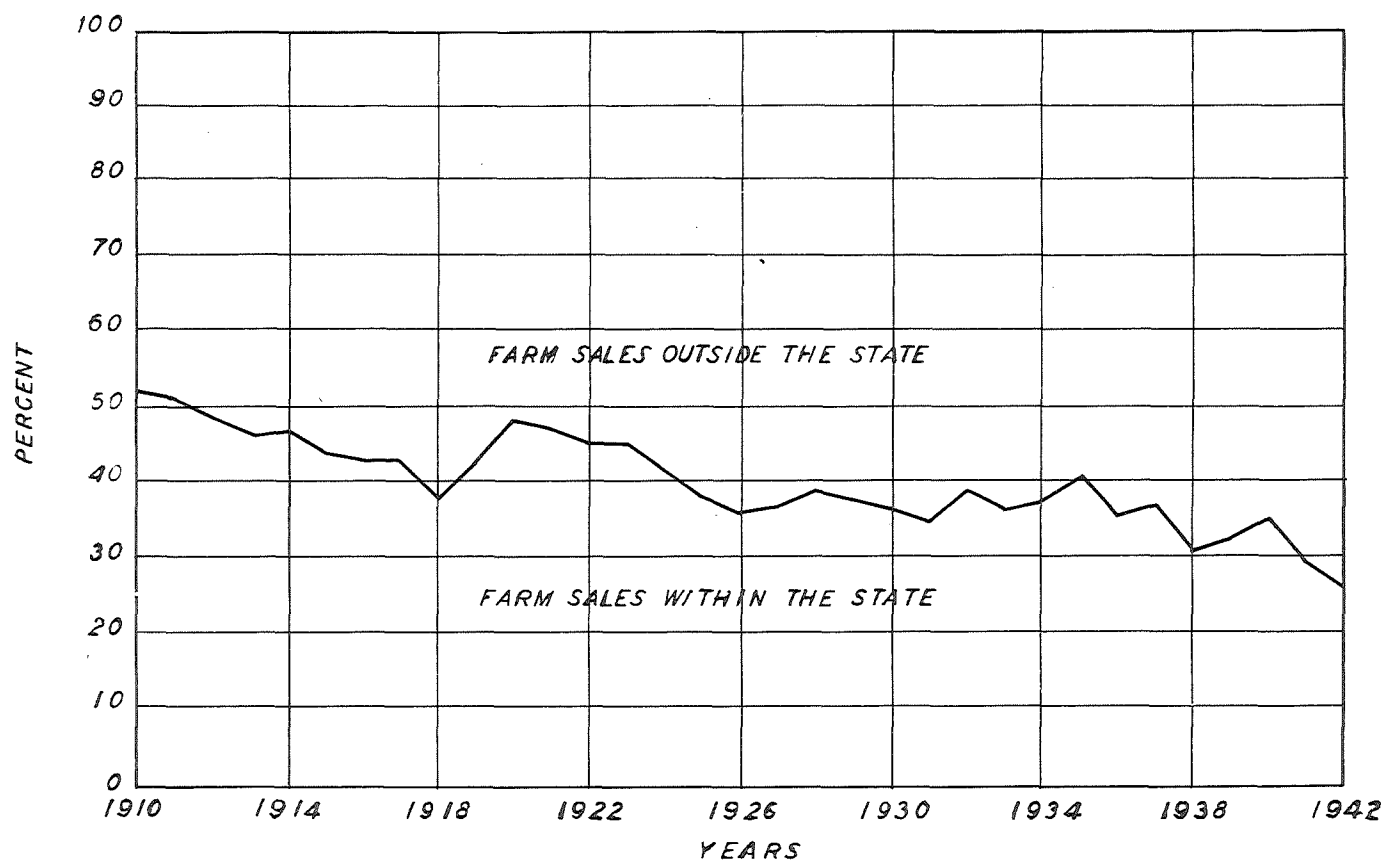
— MINNESOTA  
- - - U.S.A.

SOURCE — U.S. DEPT. OF AGRICULTURE.  
AGRICULTURAL STATISTICS

THE J. G. WHITE ENGINEERING CORP. NEW YORK



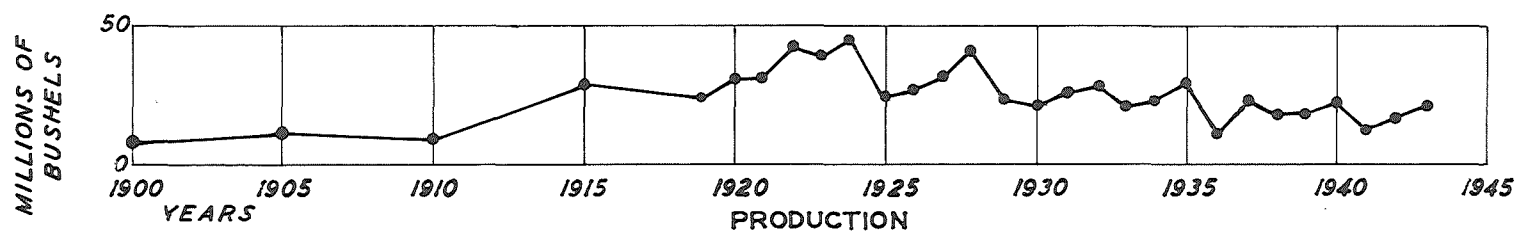
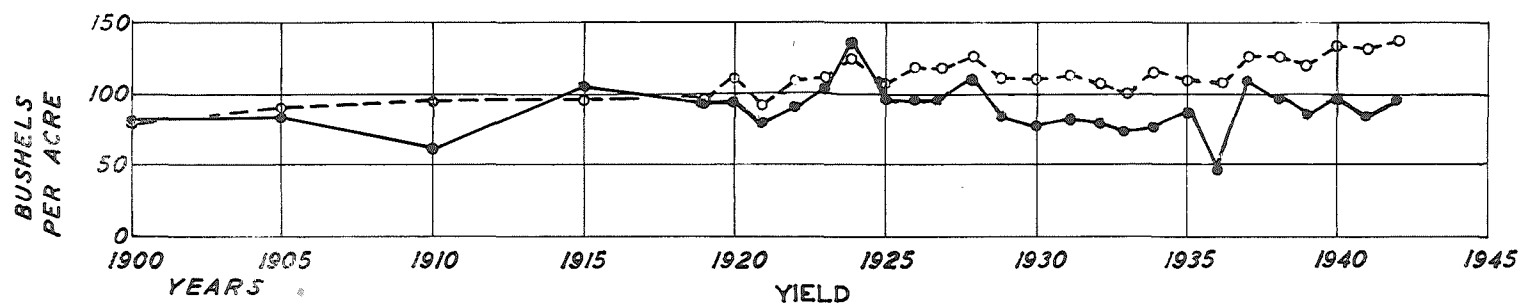
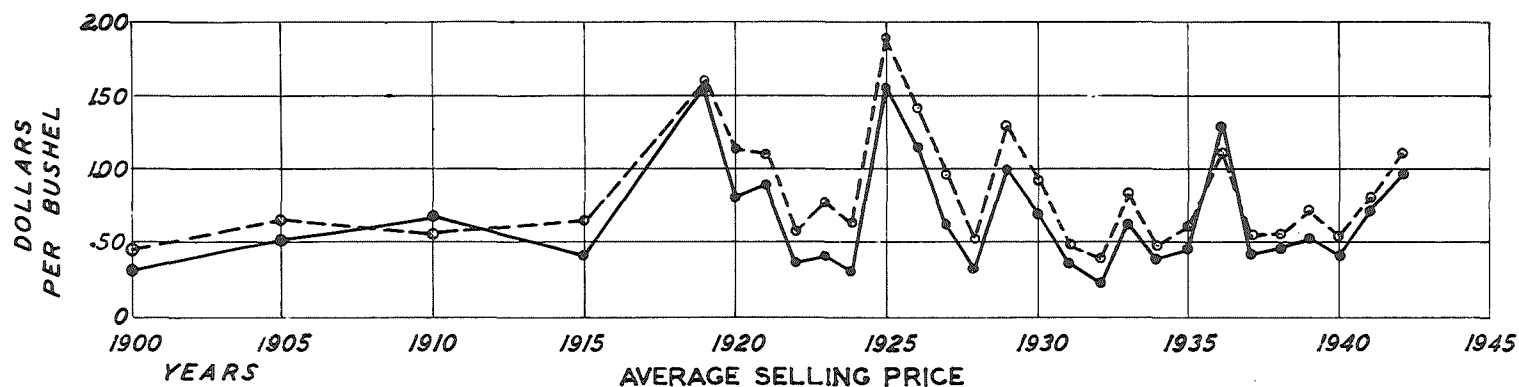
# PERCENTAGE OF TOTAL FARM SALES WITHIN THE STATE OF MINNESOTA 1910 - 1942



SOURCE: DIVISION OF AGRICULTURAL ECONOMICS  
UNIVERSITY OF MINNESOTA

THE J.G.WHITE ENGINEERING CORP. NEW YORK

# POTATOES AVERAGE ANNUAL FARM PRICE, YIELD AND PRODUCTION MINNESOTA AND U.S.A. 1900-1943



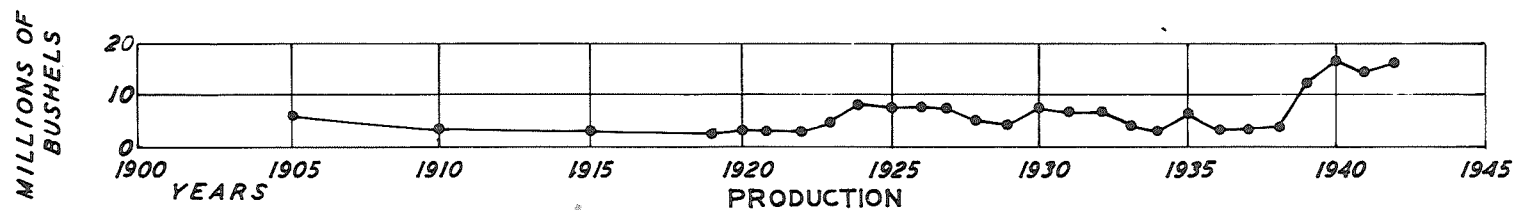
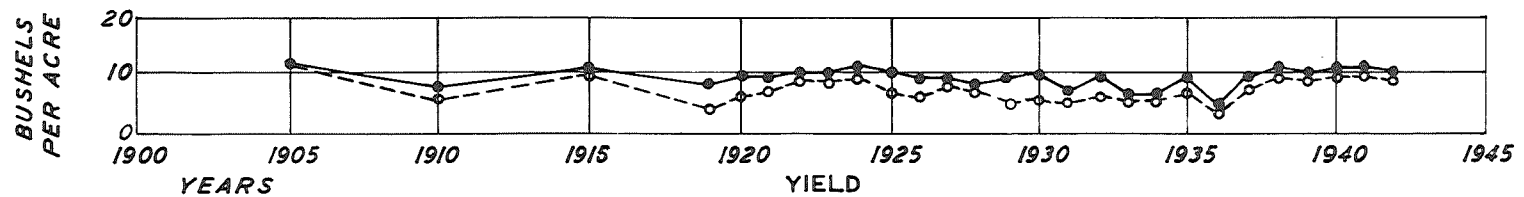
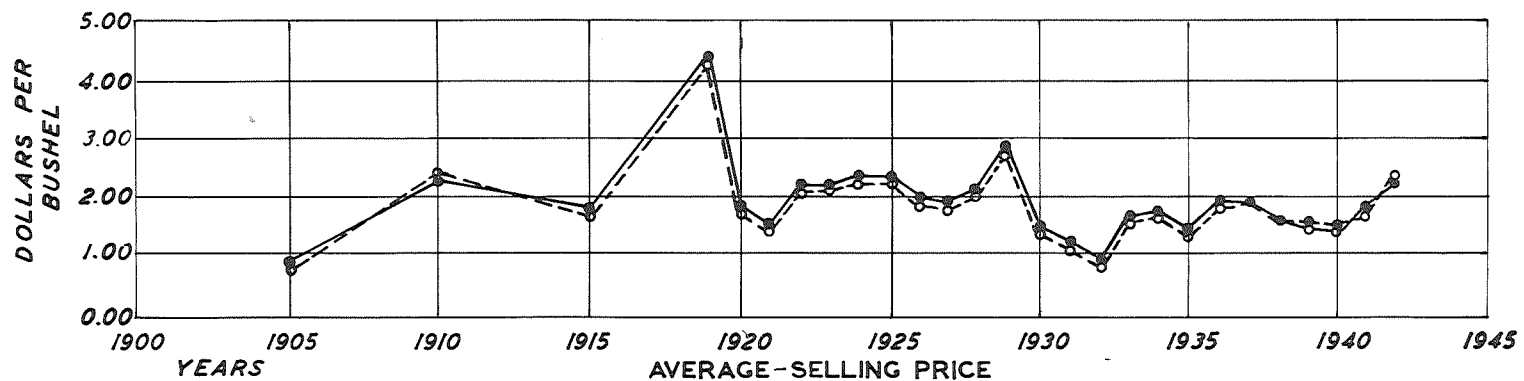
**LEGEND**

———— MINNESOTA  
----- U.S.A.

SOURCE - U.S. DEPT. OF AGRICULTURE.  
AGRICULTURAL STATISTICS

THE J. G. WHITE ENGINEERING CORP. NEW YORK

# FLAX AVERAGE ANNUAL FARM PRICE, YIELD AND PRODUCTION MINNESOTA AND U.S.A. 1900-1943



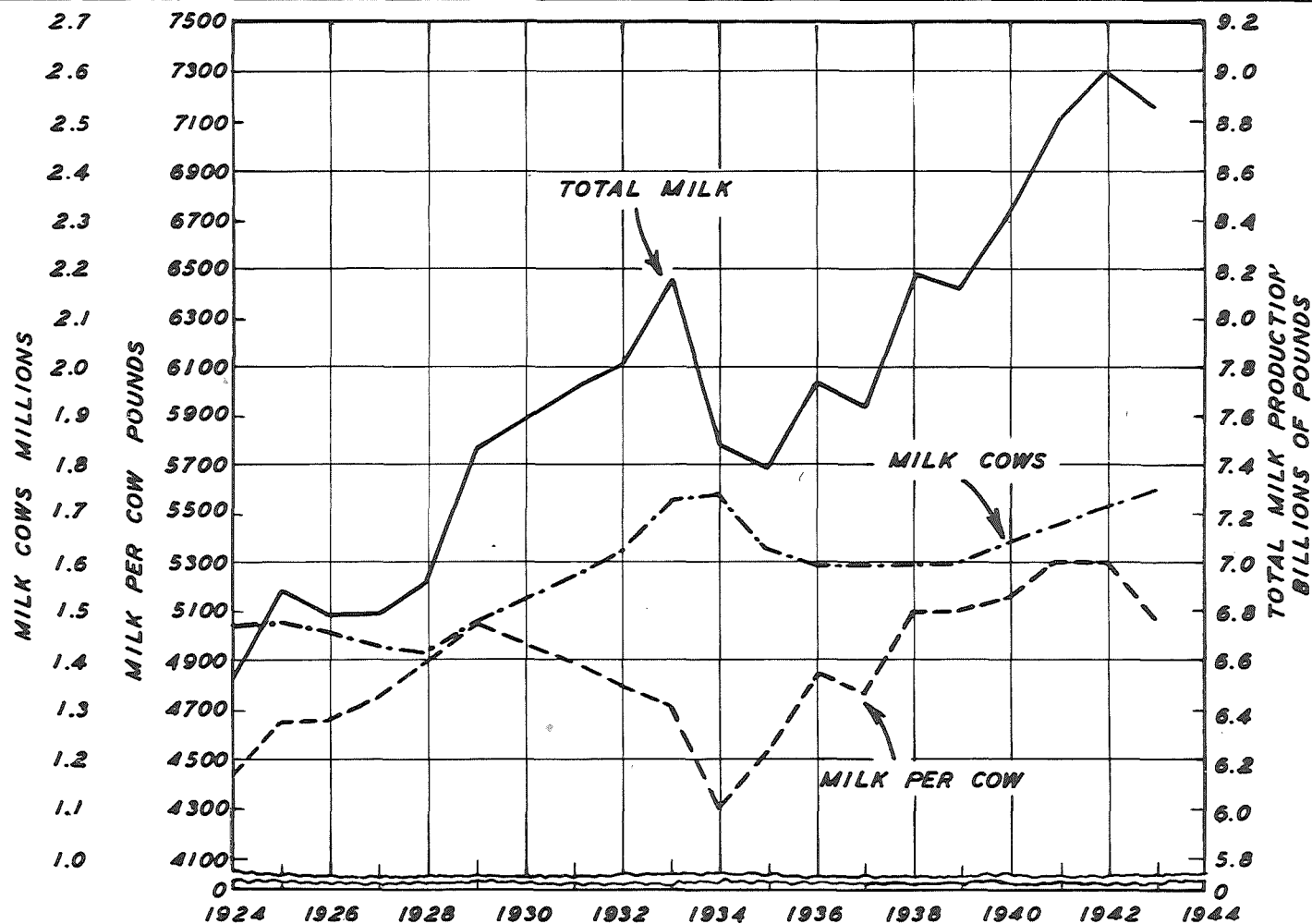
## LEGEND

———— MINNESOTA  
----- U.S.A.

SOURCE — U.S. DEPT. OF AGRICULTURE  
AND AGRICULTURAL  
STATISTICS

THE J.G. WHITE ENGINEERING CORP. NEW YORK

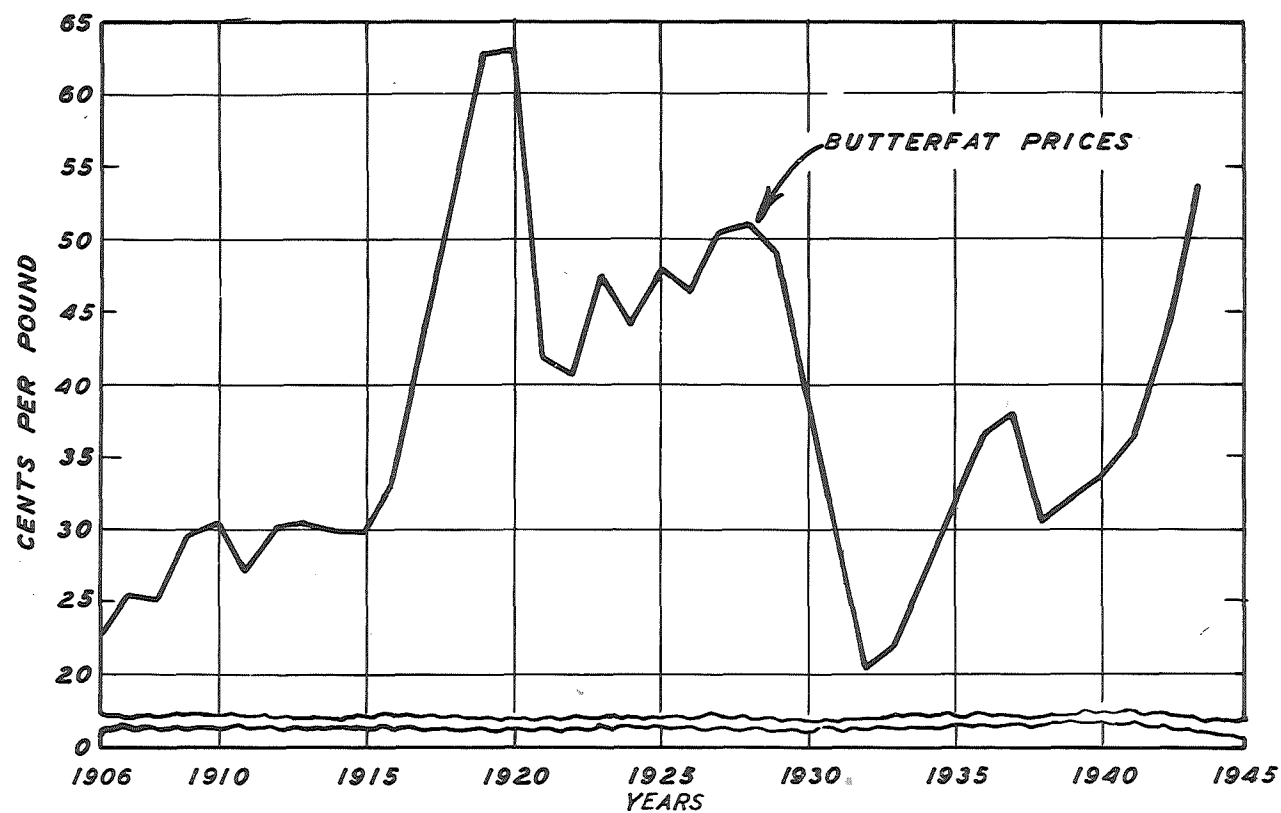
# MILK COWS, MILK PRODUCTION PER COW, TOTAL MILK PRODUCTION MINNESOTA-1924-1943



SOURCE:- TRENDS IN THE MINNESOTA DAIRY INDUSTRY, KOLLER & JESNESS, 1940. UNIVERSITY OF MINNESOTA AGRICULTURAL BULLETIN NO. 346 (1924-38) AND AGRICULTURAL STATISTICS (1939-1943 INCL.)

THE J.G. WHITE ENGINEERING CORP. NEW YORK

# PRICES PAID FOR BUTTER FAT BY CREAMERIES IN MINNESOTA, 1906-1943



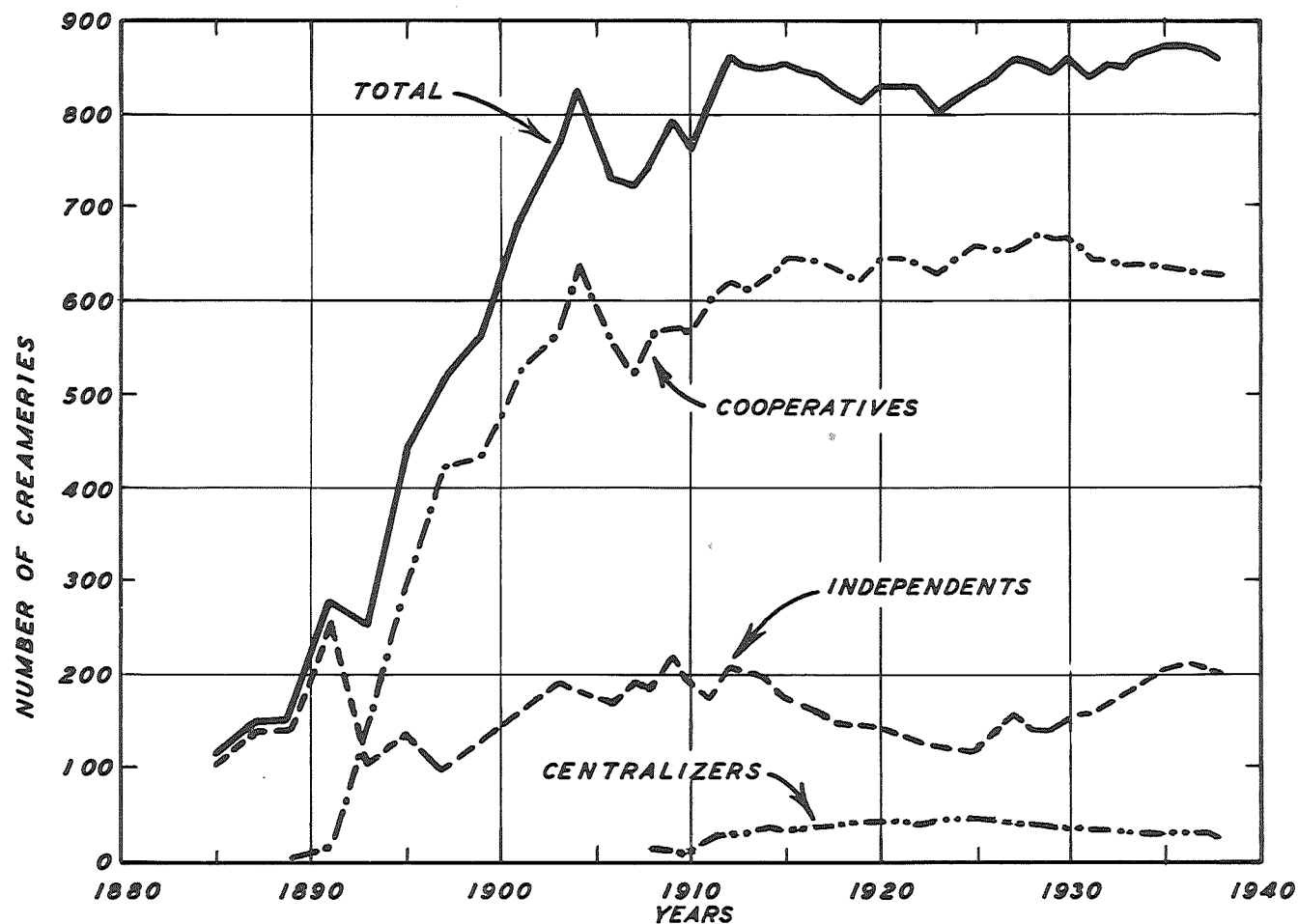
SOURCE: UNIVERSITY OF MINNESOTA AGRICULTURAL  
BULLETIN NO. 346

THE J.G. WHITE ENGINEERING CORP. NEW YORK

EXHIBIT NO. III-B-15



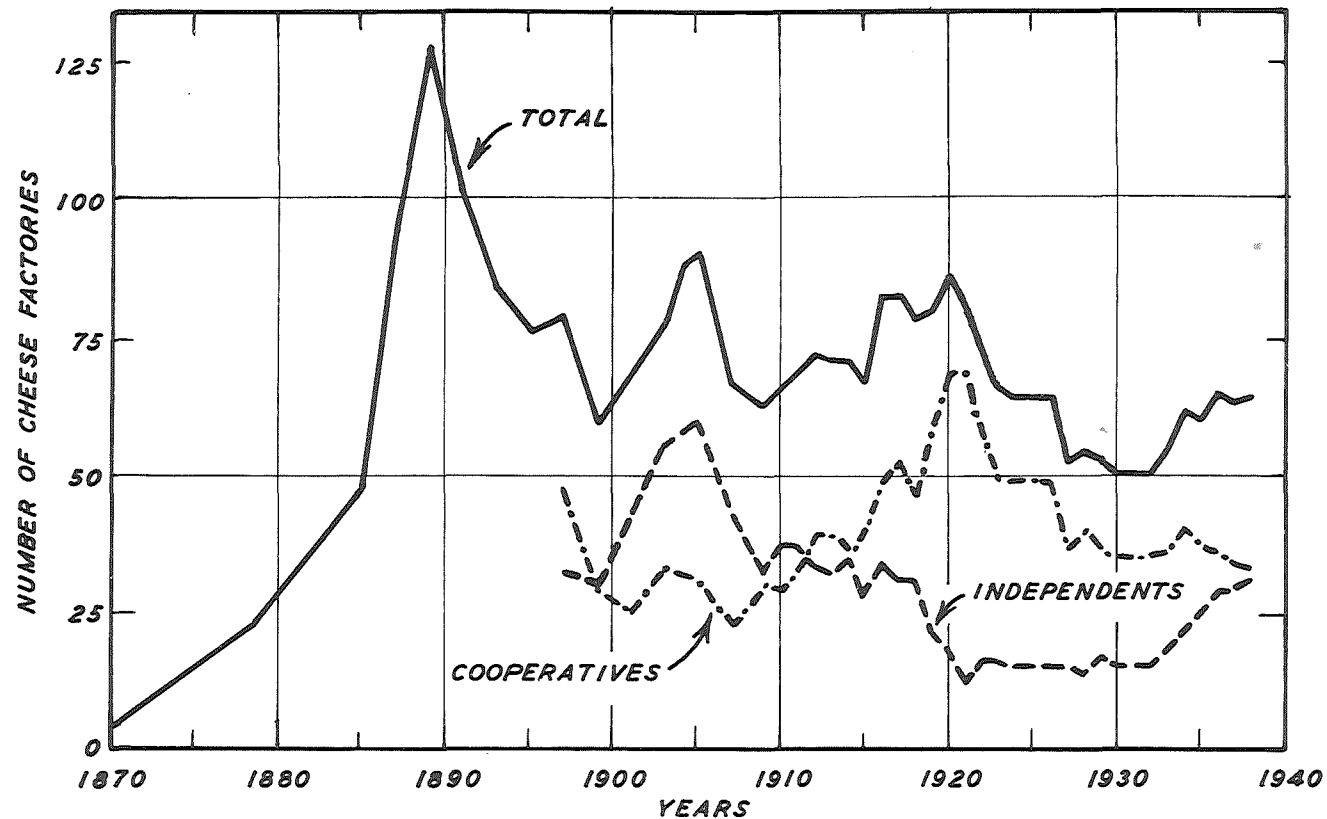
## NUMBER OF CREAMERIES IN MINNESOTA 1885-1938



SOURCE:- TRENDS IN THE MINNESOTA DAIRY INDUSTRY,  
KOLLER AND JESNESS, 1940. UNIVERSITY OF MINNESOTA  
AGRICULTURAL BULLETIN NO. 346

THE J.G.WHITE ENGINEERING CORP. NEW YORK

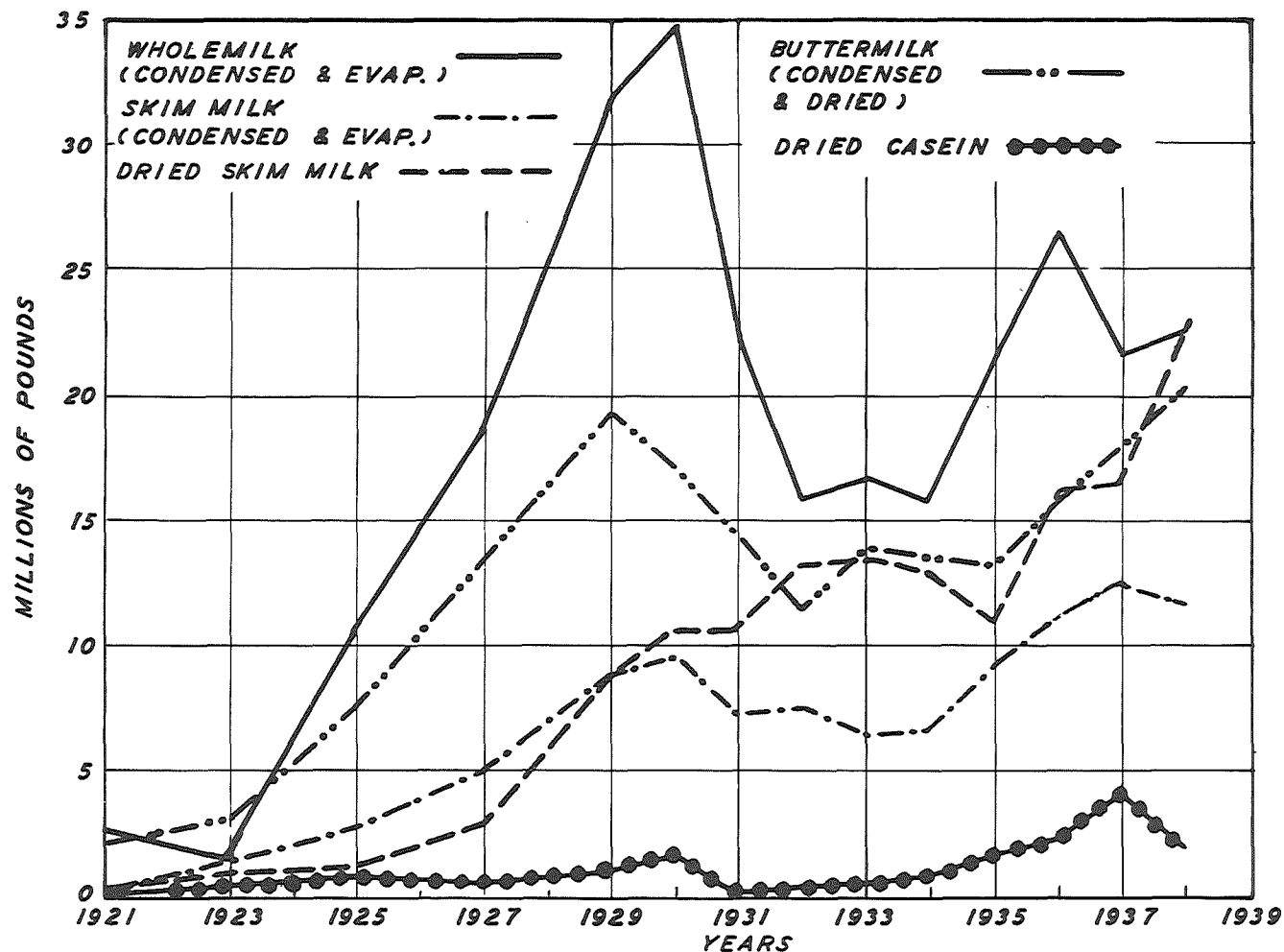
# NUMBER OF CHEESE FACTORIES IN MINNESOTA 1870-1938



SOURCE:- TRENDS IN THE MINNESOTA DAIRY INDUSTRY,  
KOLLER AND JESNESS, 1940. UNIVERSITY OF MINNESOTA  
AGRICULTURAL BULLETIN NO. 346

THE J.G. WHITE ENGINEERING CORP. NEW YORK

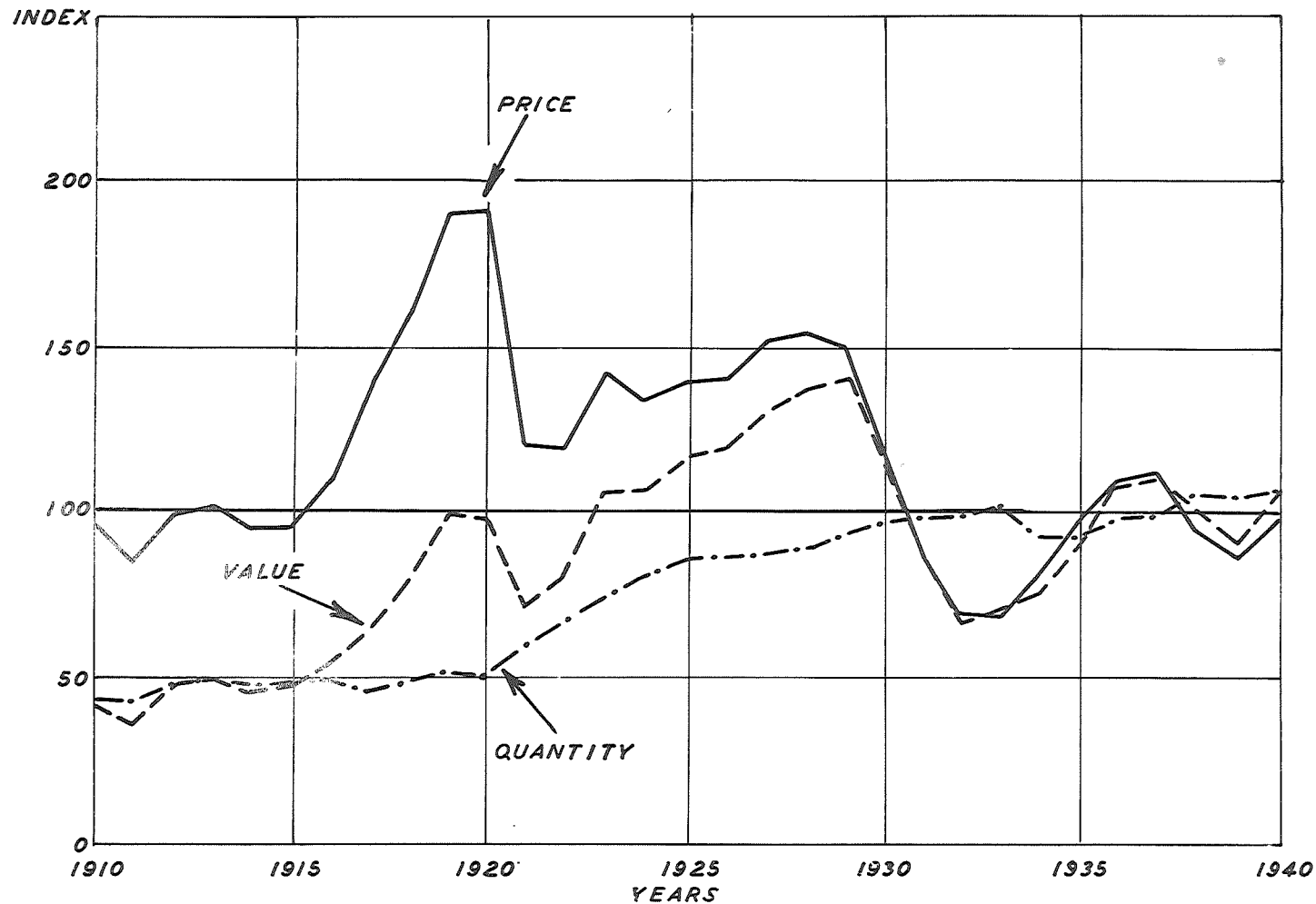
# DRIED, EVAPORATED, AND CONDENSED DAIRY PRODUCTS MANUFACTURED IN MINNESOTA, 1921-1938



**SOURCE:**— TRENDS IN THE MINNESOTA DAIRY INDUSTRY,  
KOLLER AND JESNESS, 1940. UNIVERSITY OF MINNESOTA  
AGRICULTURAL BULLETIN NO. 346

THE J.G. WHITE ENGINEERING CORP. N.Y.

# DAIRY PRODUCTS INDEXES OF PRICE, QUANTITY AND VALUE OF SALES IN MINNESOTA 1910 - 1940

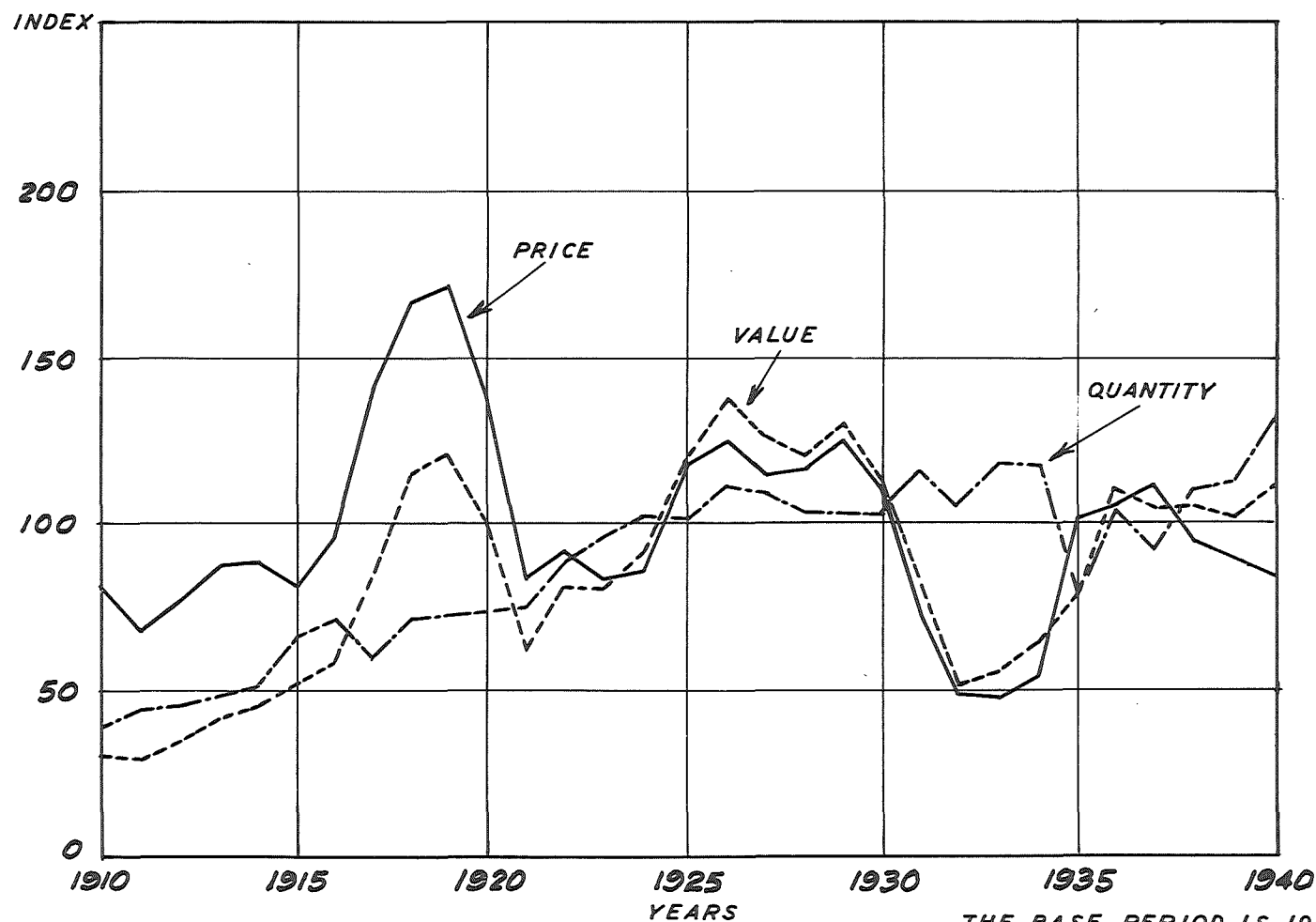


SOURCE: - UNIVERSITY OF MINNESOTA AGRICULTURAL  
BULLETIN NO. 366-1943

THE BASE PERIOD IS 1935-39=100

THE J.G. WHITE ENGINEERING CORP. NEW YORK

# LIVE STOCK INDEXES OF PRICE, QUANTITY AND VALUE OF SALES IN MINNESOTA 1910-1940



SOURCE:— UNIVERSITY OF MINNESOTA AGRICULTURAL  
BULLETIN NO. 366-1943

THE BASE PERIOD IS 1935-39=100

THE J.G. WHITE ENGINEERING CORP. NEW YORK

SWINE  
NUMBER ON FARMS AND AVERAGE FARM VALUE PER HEAD  
MINNESOTA AND SELECTED STATES  
1910-1943

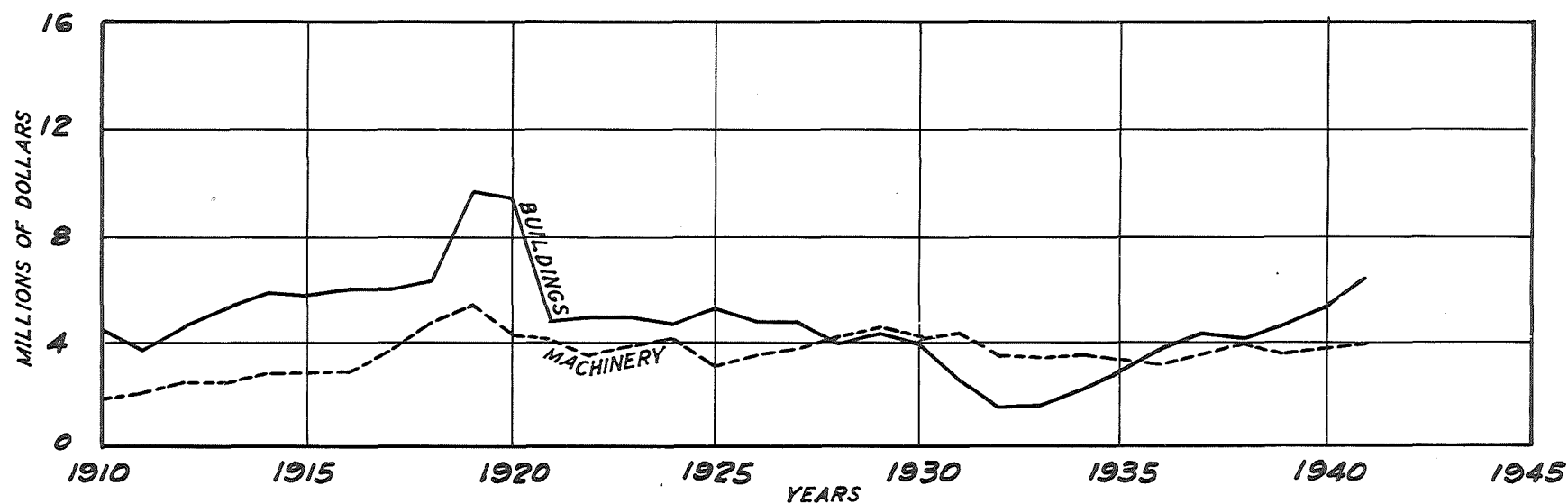
| State  |           | 1910    | 1915    | 1920    | 1925    | 1930    | 1935   | 1940   | 1942    | 1943*   |
|--------|-----------|---------|---------|---------|---------|---------|--------|--------|---------|---------|
| Iowa   | No.(1000) | 6,485   | 8,720   | 10,010  | 9,633   | 10,200  | 6,250  | 10,714 | 10,948  | 13,028  |
|        | Value     | \$11.30 | \$11.00 | \$21.80 | \$17.00 | \$16.00 | \$7.80 | \$9.00 | \$20.00 | \$28.70 |
| Ill.   | No.(1000) | 3,772   | 4,358   | 5,152   | 4,725   | 4,415   | 3,510  | 5,750  | 5,912   | 6,858   |
|        | Value     | \$10.90 | \$10.30 | \$20.50 | \$15.10 | \$14.80 | \$7.90 | \$9.30 | \$17.60 | \$25.10 |
| Minn.  | No.(1000) | 1,003   | 1,716   | 2,951   | 3,600   | 3,494   | 1,900  | 3,823  | 4,082   | 5,102   |
|        | Value     | \$11.50 | \$12.50 | \$24.00 | \$15.50 | \$16.30 | \$7.50 | \$9.30 | \$18.90 | \$27.70 |
| Mo.    | No.(1000) | 2,714   | 4,250   | 4,305   | 3,864   | 3,750   | 2,400  | 3,775  | 3,931   | 4,914   |
|        | Value     | \$ 7.90 | \$8.10  | \$16.50 | \$10.00 | \$11.40 | \$4.50 | \$7.20 | \$14.40 | \$20.70 |
| Neb.   | No.(1000) | 3,201   | 3,809   | 3,366   | 4,818   | 5,010   | 2,034  | 2,498  | 2,375   | 3,491   |
|        | Value     | \$11.00 | \$10.90 | \$20.90 | \$14.50 | \$15.60 | \$6.10 | \$8.70 | \$19.30 | \$27.80 |
| Wis.   | No.(1000) | 1,651   | 2,255   | 2,236   | 1,580   | 1,422   | 1,064  | 1,759  | 1,954   | 2,188   |
|        | Value     | \$11.80 | \$12.00 | \$23.50 | \$12.90 | \$14.30 | \$7.40 | \$8.70 | \$15.80 | \$22.50 |
| U.S.A. | No.(1000) | 47,782  | 64,618  | 71,727  | 55,568  | 55,705  | 39,004 | 60,207 | 60,337  | 73,660  |
|        | Value     | \$ 9.14 | \$ 9.87 | \$19.01 | \$13.20 | \$13.45 | \$6.31 | 7.81   | 15.62   | 22.54   |

Source: U.S. Department of Agriculture - Agricultural Statistics

\* Preliminary Figures.



# FARM EXPENDITURES FOR BUILDING AND MACHINERY REPAIRS IN MINNESOTA, 1910-1941

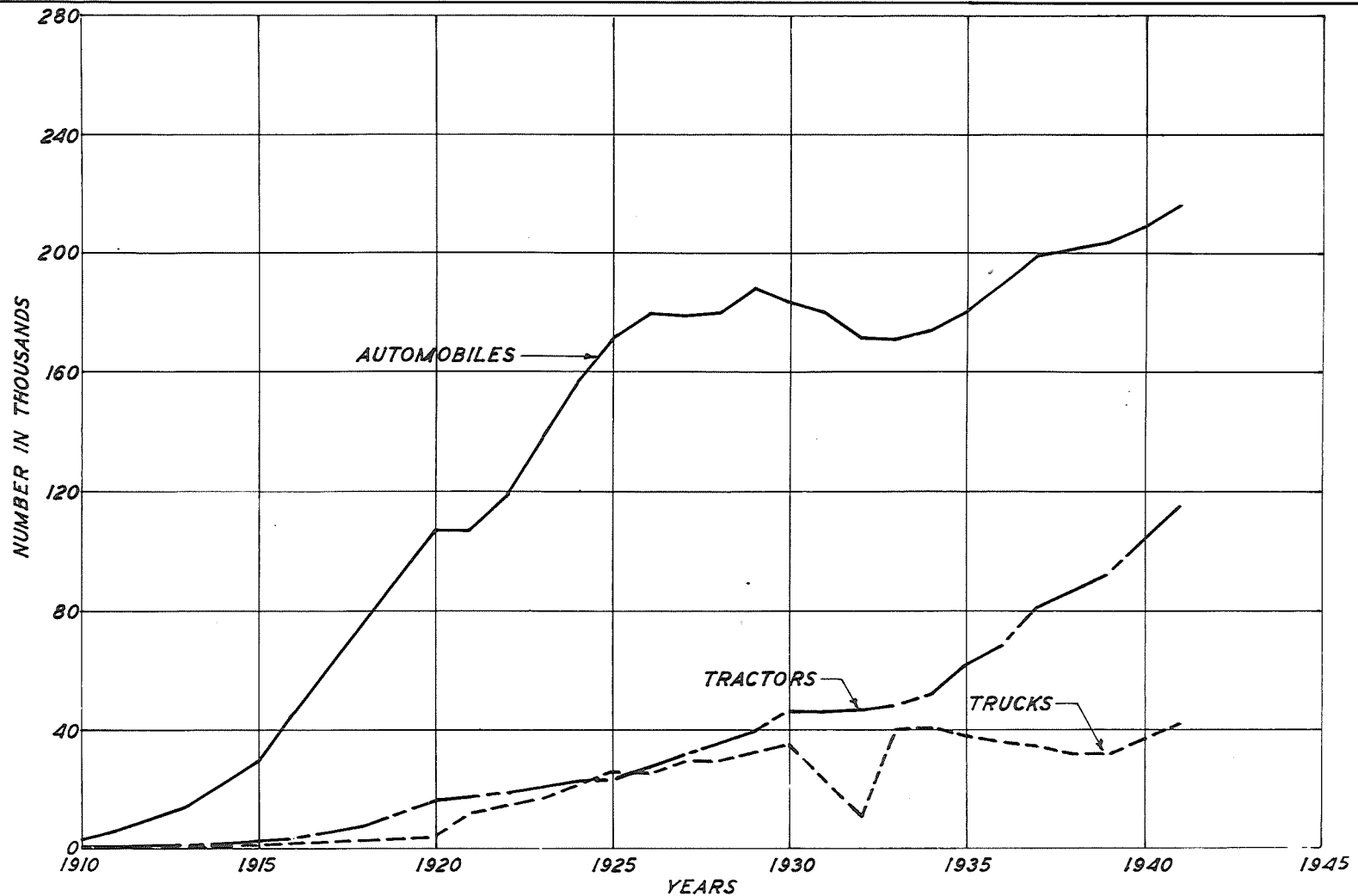


SOURCE: UNIVERSITY OF MINNESOTA AGRICULTURAL  
BULLETIN NO. 366-1943

THE J.G.WHITE ENGINEERING CORP. NEW YORK

EXHIBIT NO. III-B-23

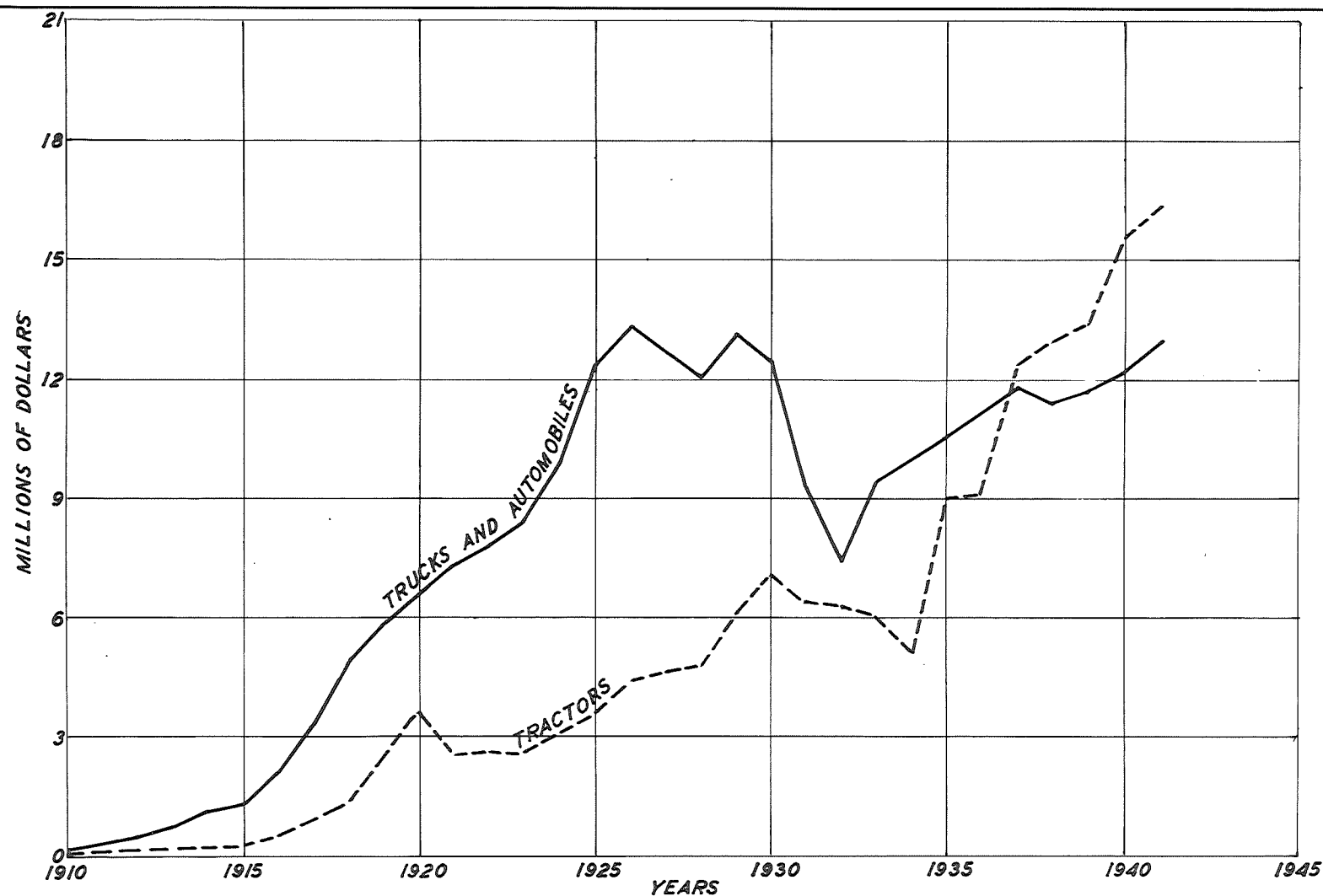
# NUMBER OF AUTOMOBILES, TRUCKS AND TRACTORS IN USE ON FARMS IN MINNESOTA 1910-1941



**SOURCE:** UNIVERSITY OF MINNESOTA AGRICULTURAL  
BULLETIN NO. 366-1943

THE J. G. WHITE ENGINEERING CORP. NEW YORK

# EXPENDITURES FOR OPERATION OF AUTOMOBILES AND TRUCKS, AND TRACTORS ON FARMS IN MINNESOTA 1910-1941



SOURCE: UNIVERSITY OF MINNESOTA AGRICULTURAL  
BULLETIN NO. 366-1943

THE J.G.WHITE ENGINEERING CORP. NEW YORK

# CUSTOM RATES FOR FARM OPERATIONS

| 1942 Rates Reported                   |                       |                         |                        |                                 |                                |                                    | 1943 |
|---------------------------------------|-----------------------|-------------------------|------------------------|---------------------------------|--------------------------------|------------------------------------|------|
|                                       | Basis<br>of<br>Charge | Number<br>of<br>Reports | Most<br>Common<br>Rate | Second<br>Most Com-<br>mon Rate | Third<br>Most Com-<br>mon Rate | Estimated<br>Rate (most<br>common) |      |
| Seedbed preparation                   |                       |                         |                        |                                 |                                |                                    |      |
| Plowing.....                          | Acre                  | 125                     | \$1.50                 | \$1.25                          | \$2.00                         | \$1.80                             |      |
| Plowing (2 bottom plows).....         | Hour                  | 32                      | 1.25                   | 1.50                            | 1.75                           | 1.50                               |      |
| Disking, single.....                  | Acre                  | 48                      | .50                    | .40                             | .25                            | .60                                |      |
| Disking tandem.....                   | Acre                  | 40                      | .75                    | .50                             | 1.00                           | .90                                |      |
| Spring-tooth harrowing.....           | Acre                  | 34                      | .50                    | 1.00                            | .75                            | .60                                |      |
| Duckfoot harrowing.....               | Acre                  | 17                      | .75                    | .60                             | .50                            | .90                                |      |
| Cultipacking.....                     | Acre                  | 11                      | .25                    | .30                             | .40                            | .30                                |      |
| Planting                              |                       |                         |                        |                                 |                                |                                    |      |
| Seeding grain, drill.....             | Acre                  | 49                      | .50                    | 1.00                            | .75                            | .60                                |      |
| Planting corn.....                    | Acre                  | 45                      | .50                    | .75                             | 1.00                           | .60                                |      |
| Cultivating                           |                       |                         |                        |                                 |                                |                                    |      |
| Cultivating corn.....                 | Acre                  | 40                      | .50                    | .75                             | .40                            | .60                                |      |
| Harvesting and threshing grain        |                       |                         |                        |                                 |                                |                                    |      |
| Harvesting grain, binder.....         | Acre                  | 94                      | 1.00                   | .75                             | 1.25                           | 1.20                               |      |
| Windrowing grain.....                 | Acre                  | 36                      | .50                    | .75                             | 1.00                           | .60                                |      |
| Combining grain.....                  | Acre                  | 105                     | 2.50                   | 3.00                            | 2.00                           | 3.00                               |      |
| Combining soybeans.....               | Acre                  | 57                      | 3.00                   | 2.50                            | 2.00                           | 3.60                               |      |
| Threshing oats.....                   | Bu.                   | 153                     | .03                    | .025                            | .04                            | .035                               |      |
| Threshing barley.....                 | Bu.                   | 131                     | .04                    | .03                             | .035                           | .045                               |      |
| Threshing wheat and rye.....          | Bu.                   | 121                     | .06                    | .05                             | .08                            | .07                                |      |
| Threshing flax.....                   | Bu.                   | 114                     | .10                    | .12                             | .11                            | .11                                |      |
| Threshing small grain.....            | Hour                  | 17                      | 4.00                   | 3.50                            | 3.00                           | 4.50                               |      |
| Harvesting corn                       |                       |                         |                        |                                 |                                |                                    |      |
| Cutting corn, binder.....             | Acre                  | 85                      | 1.50                   | 2.00                            | 1.75                           | 1.80                               |      |
| Picking corn, mechanical picker.....  | Acre                  | 107                     | 3.00                   | 2.50                            | 2.00                           | 3.60                               |      |
| Filling silo, stationary cutter.....  | Hour                  | 50                      | 2.50                   | 3.00                            | 3.50                           | 2.75                               |      |
| Filling silo, stationary cutter.....  | Feet                  | 22                      | .75                    | .50                             | 1.00                           | .85                                |      |
| Husking and shredding.....            | Hour                  | 35                      | 1.50                   | 1.25                            | 1.00                           | 1.65                               |      |
| Shelling.....                         | Bu.                   | 66                      | .025                   | .02                             | .03                            | .03                                |      |
| Harvesting hay and seed crops         |                       |                         |                        |                                 |                                |                                    |      |
| Mowing.....                           | Acre                  | 29                      | .50                    | .75                             | 1.00                           | .60                                |      |
| Raking (dump rake).....               | Acre                  | 10                      | .25                    | .40                             | .50                            | .30                                |      |
| Stacking (sweep rake and stacker).... | Hour                  | 12                      | 2.00                   | 2.50                            | 1.50                           | 2.40                               |      |
| Baling (stationary baler).....        | Bale                  | 21                      | .10                    | .12                             | .07                            | .11                                |      |
| Baling (stationary baler).....        | Ton                   | 17                      | 3.00                   | 2.50                            | 2.00                           | 3.30                               |      |
| Baling (pickup baler).....            | Bale                  | 33                      | .10                    | .12                             | .09                            | .12                                |      |
| Combining clover and alfalfa.....     | Acre                  | 27                      | 3.00                   | 2.50                            | 2.00                           | 3.60                               |      |
| Hulling clover and alfalfa.....       | Hour                  | 12                      | 3.00                   | 4.00                            | 5.00                           | 3.30                               |      |
| Hulling clover and alfalfa.....       | Lb.                   | 12                      | .03                    | .05                             | .025                           | .035                               |      |

Source: University of Minnesota Agricultural Extension Pamphlet 134-1944.

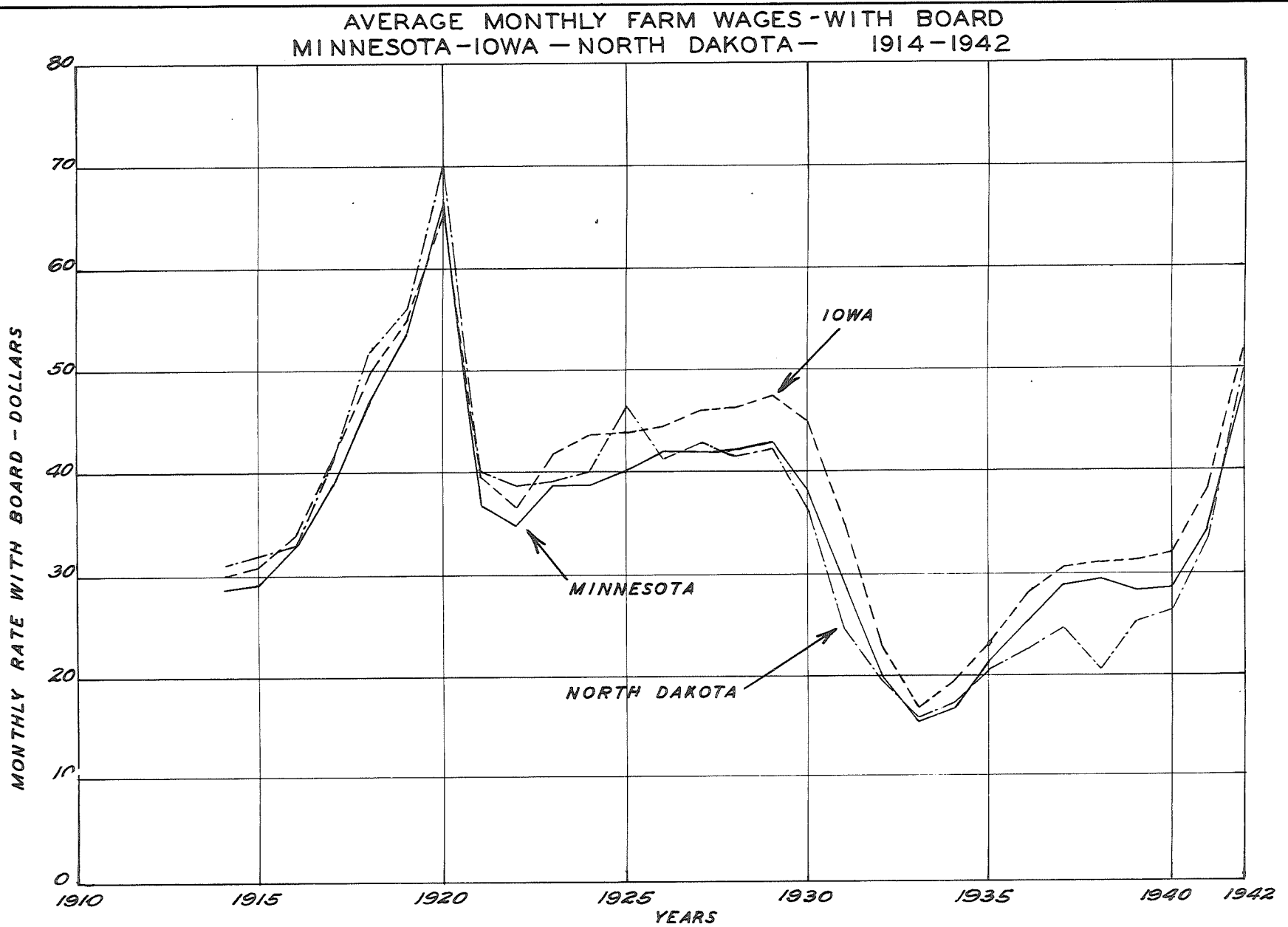
AVERAGE FARM WAGES  
RATE PER MONTH WITH BOARD  
MINNESOTA AND NEIGHBORING STATES  
BY YEARS, 1914-1942

| <u>Year</u> | <u>Minnesota</u> | <u>Iowa</u> | <u>N. Dakota</u> | <u>S. Dakota</u> | <u>Wisconsin</u> |
|-------------|------------------|-------------|------------------|------------------|------------------|
| 1914        | \$28.70          | \$30.10     | \$31.20          | \$30.10          | \$28.00          |
| 1915        | 28.80            | 31.10       | 32.00            | 31.20            | 28.50            |
| 1916        | 33.00            | 34.10       | 33.20            | 33.70            | 31.00            |
| 1917        | 39.00            | 41.00       | 41.00            | 42.00            | 36.00            |
| 1918        | 47.10            | 50.00       | 52.00            | 55.70            | 43.50            |
| 1919        | 53.70            | 55.00       | 56.00            | 65.00            | 48.70            |
| 1920        | 67.00            | 66.40       | 70.00            | 76.00            | 62.00            |
| 1921        | 37.00            | 39.60       | 40.00            | 36.50            | 39.20            |
| 1922        | 35.00            | 36.80       | 38.70            | 36.40            | 37.00            |
| 1923        | 38.98            | 41.93       | 39.10            | 42.10            | 43.03            |
| 1924        | 38.75            | 43.85       | 39.95            | 41.36            | 43.65            |
| 1925        | 40.25            | 43.94       | 46.56            | 43.31            | 42.63            |
| 1926        | 42.19            | 44.53       | 41.38            | 43.06            | 45.31            |
| 1927        | 42.06            | 46.20       | 42.44            | 43.69            | 46.75            |
| 1928        | 42.19            | 46.31       | 41.94            | 44.94            | 45.50            |
| 1929        | 42.94            | 47.69       | 42.38            | 44.38            | 46.94            |
| 1930        | 38.94            | 44.94       | 36.13            | 43.13            | 41.38            |
| 1931        | 28.98            | 34.94       | 24.56            | 29.88            | 29.69            |
| 1932        | 20.13            | 23.13       | 19.75            | 21.13            | 20.00            |
| 1933        | 15.63            | 17.19       | 15.88            | 15.13            | 15.61            |
| 1934        | 17.00            | 19.69       | 17.75            | 16.31            | 17.31            |
| 1935        | 21.50            | 23.81       | 21.00            | 20.94            | 21.38            |
| 1936        | 25.63            | 27.31       | 22.63            | 22.38            | 26.00            |
| 1937        | 29.19            | 30.88       | 25.06            | 25.56            | 30.69            |
| 1938        | 29.56            | 31.31       | 21.00            | 26.06            | 29.94            |
| 1939        | 28.56            | 31.69       | 25.75            | 26.69            | 28.06            |
| 1940        | 28.63            | 32.13       | 26.44            | 27.13            | 28.63            |
| 1941        | 34.94            | 38.31       | 34.00            | 33.25            | 36.69            |
| 1942        | 48.50            | 52.13       | 50.50            | 48.19            | 48.94            |

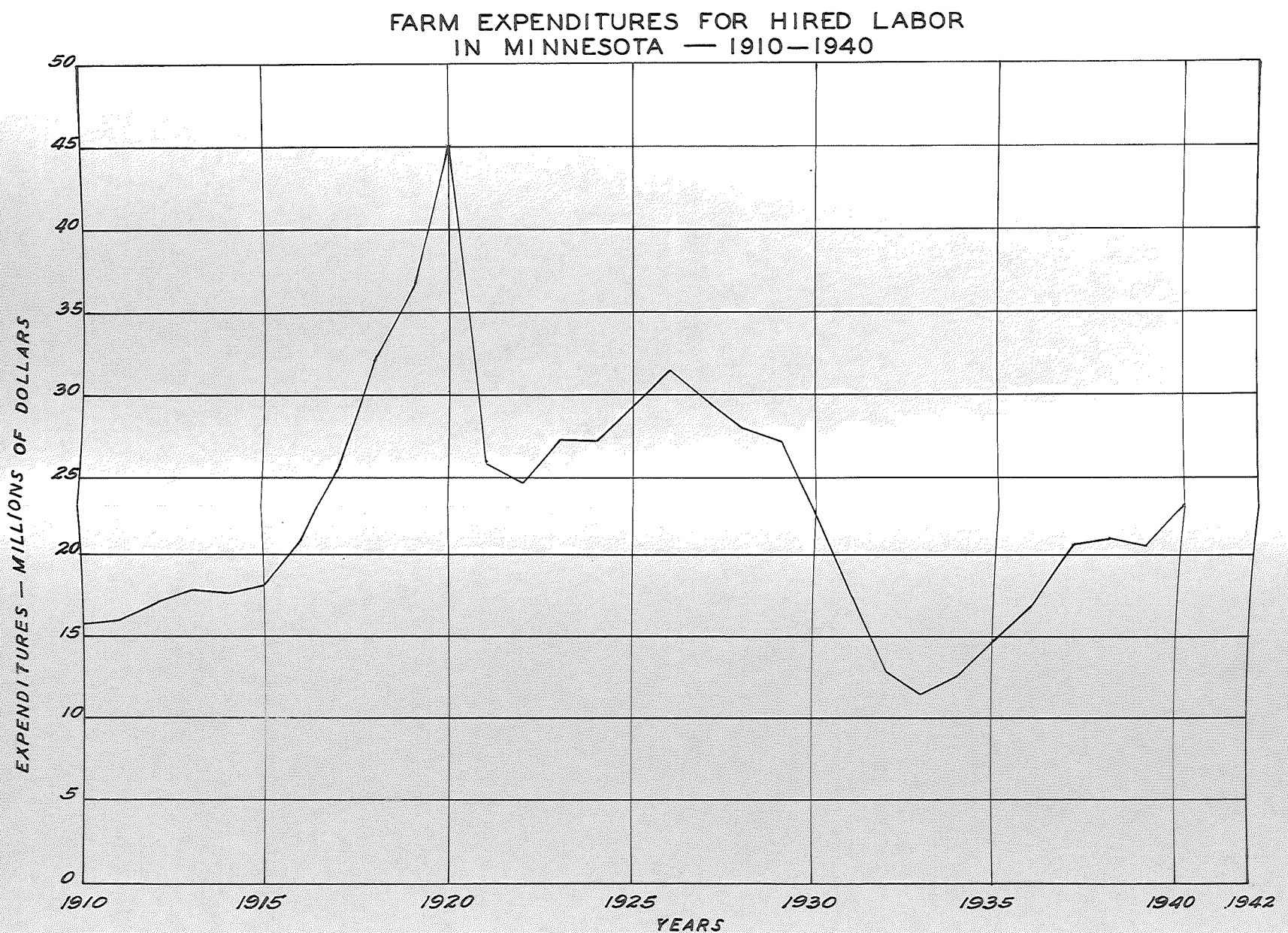
Source: United States Department of Agriculture, Bureau of Agricultural Economics, Farm Wage Rates, Farm Employment and Related Data - January 1943. Pages 14-19, 59-76.



# AVERAGE FARM WAGE RATES PER MONTH WITH BOARD AND TOTAL EXPENDITURES FOR HIRED FARM LABOR PER YEAR IN MINNESOTA



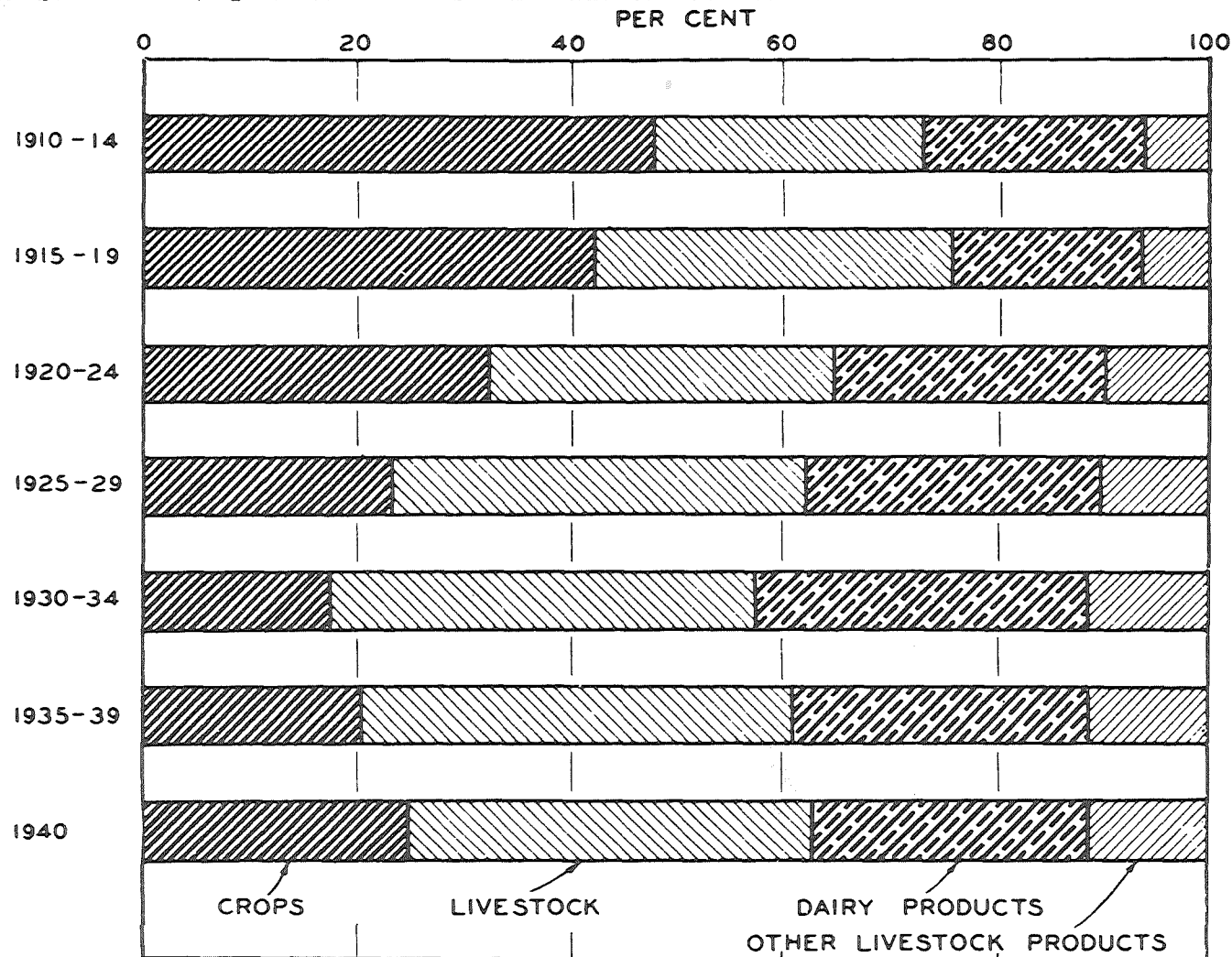
SOURCE:- U.S. DEPT. OF AGRICULTURE  
BUREAU OF AGRICULTURAL ECONOMICS



SOURCE:- UNIVERSITY OF MINNESOTA AGRICULTURAL  
BULLETIN NO. 366-1943



# DISTRIBUTION OF MINNESOTA FARM INCOME ACCORDING TO SOURCE 1910-1941



SOURCE:

UNIVERSITY OF MINNESOTA AGRICULTURAL BULLETIN NO. 366-1943

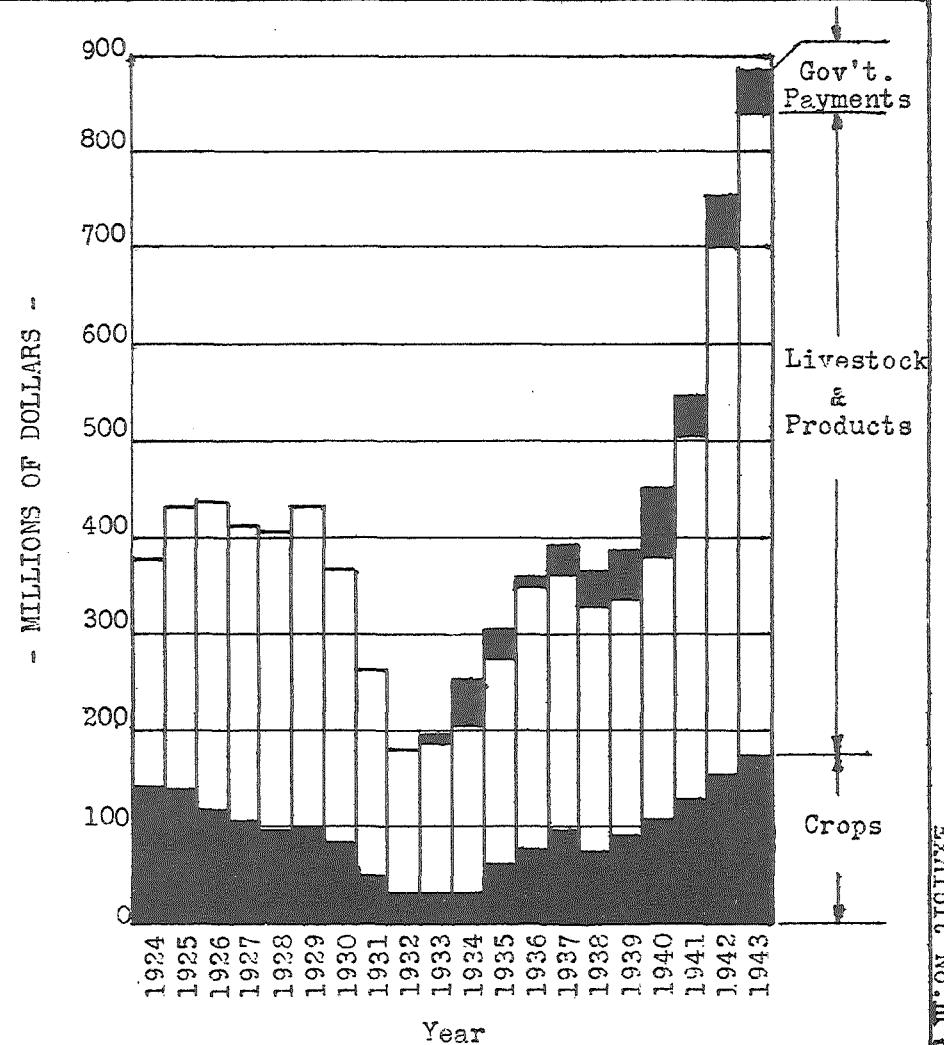
THE J. G. WHITE ENGINEERING CORP. NEW YORK

EXHIBIT NO. III-B-29

MINNESOTA FARMERS'  
GROSS CASH INCOME. 1924-1943

MINNESOTA FARMERS'  
GROSS CASH INCOME IN MILLIONS OF DOLLARS

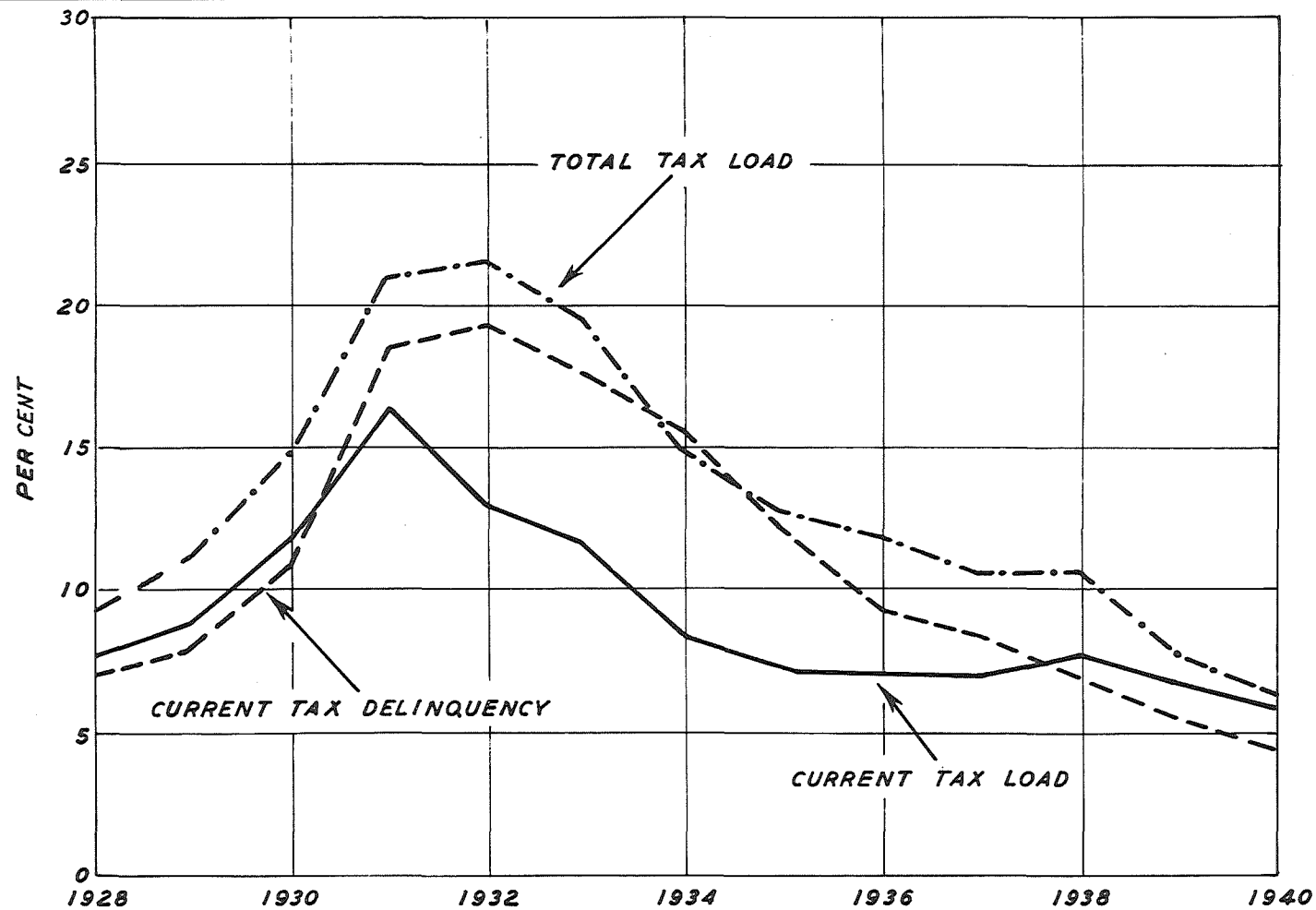
| Cal.<br>Year | Crops   | Livestock<br>&<br>Products | Gov't<br>Payments | Total   |
|--------------|---------|----------------------------|-------------------|---------|
| 1924         | 138.544 | 238.844                    | None              | 377.388 |
| 1925         | 138.640 | 293.539                    | None              | 432.179 |
| 1926         | 114.579 | 321.483                    | None              | 436.062 |
| 1927         | 103.361 | 308.945                    | None              | 412.306 |
| 1928         | 94.579  | 313.373                    | None              | 407.952 |
| 1929         | 97.794  | 333.725                    | None              | 431.519 |
| 1930         | 81.441  | 282.454                    | None              | 363.895 |
| 1931         | 47.359  | 212.628                    | None              | 259.987 |
| 1932         | 31.378  | 145.535                    | None              | 176.913 |
| 1933         | 32.865  | 151.205                    | 1.882             | 185.465 |
| 1934         | 32.203  | 172.091                    | 23.437            | 227.731 |
| 1935         | 61.648  | 213.070                    | 14.713            | 289.431 |
| 1936         | 78.689  | 268.732                    | 9.204             | 356.625 |
| 1937         | 95.901  | 264.324                    | 17.497            | 377.722 |
| 1938         | 70.648  | 257.101                    | 15.301            | 343.050 |
| 1939         | 91.780  | 244.105                    | 26.596            | 362.481 |
| 1940         | 105.506 | 274.869                    | 40.552            | 420.927 |
| 1941         | 127.511 | 377.849                    | 19.619            | 524.979 |
| 1942         | 152.695 | 548.089                    | 32.044            | 732.828 |
| 1943         | 172.829 | 669.283                    | 22.265            | 864.377 |



Source: Federal Reserve Bank, Minneapolis, 1944

The J. G. White Engineering Corp., New York

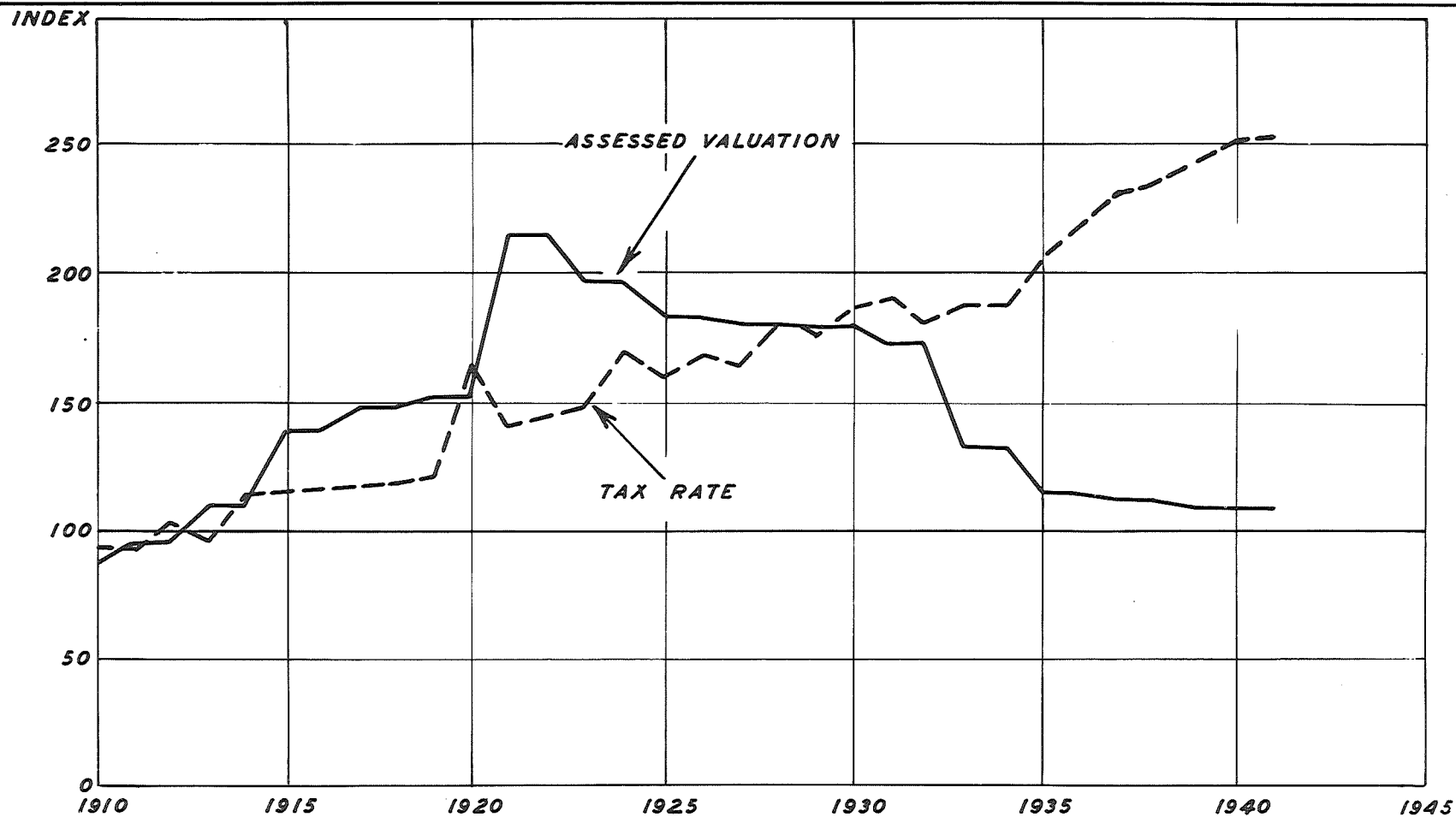
# MINNESOTA FARM CURRENT TAX DELINQUENCY CURRENT AND TOTAL TAX LOAD 1910-1940



SOURCE:— UNIVERSITY OF MINNESOTA AGRICULTURAL  
BULLETIN NO. 366-1943

THE J.G. WHITE ENGINEERING CORP. NEW YORK

# INDEXES OF MINNESOTA FARM ASSESSED VALUATION AND FARM TAX RATE PER \$1000 OF ASSESSED VALUATION 1910-1941

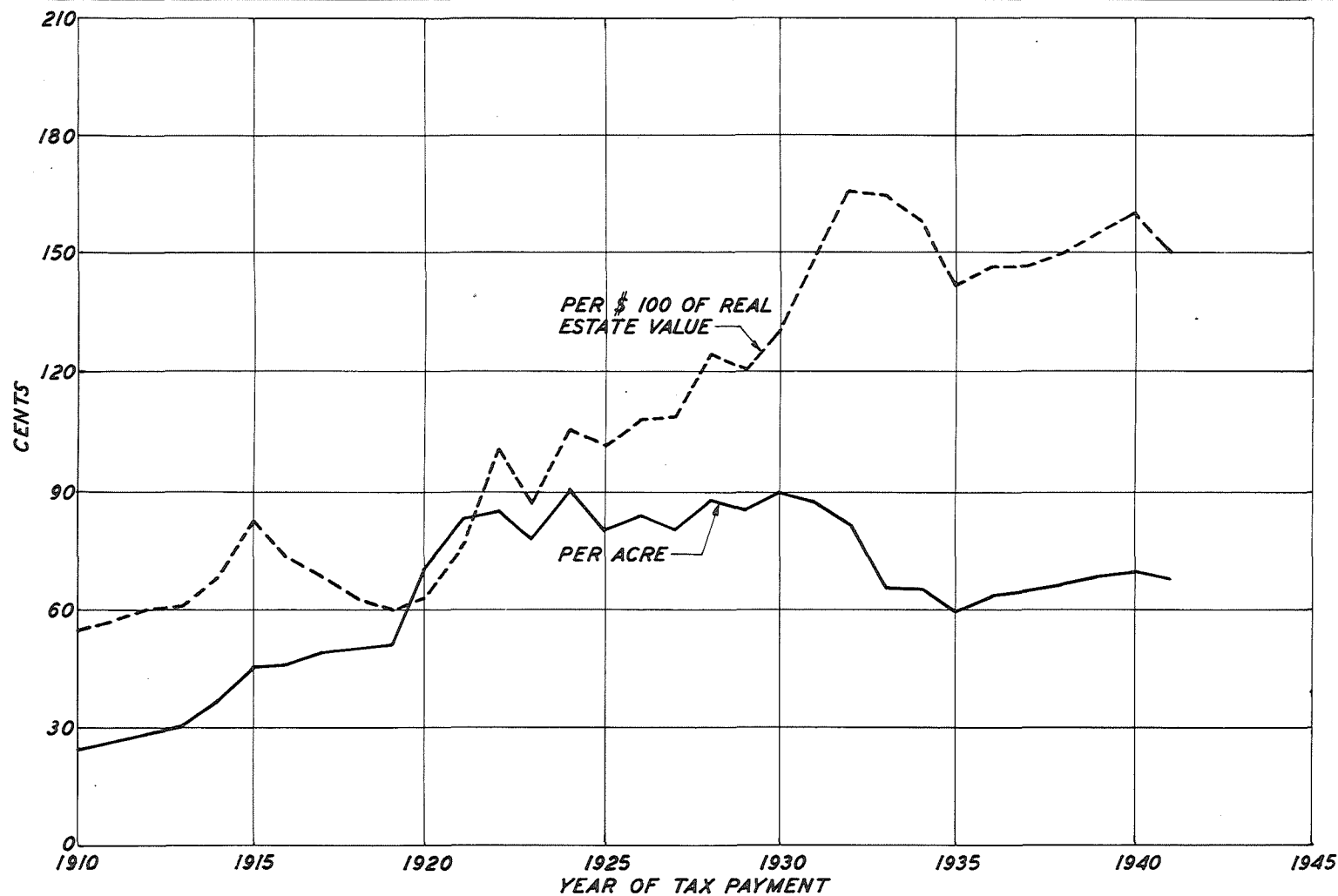


SOURCE:- UNIVERSITY OF MINNESOTA AGRICULTURAL  
BULLETIN NO. 366-1943

NOTE:  
THE BASE PERIOD IS 1910-1914=100

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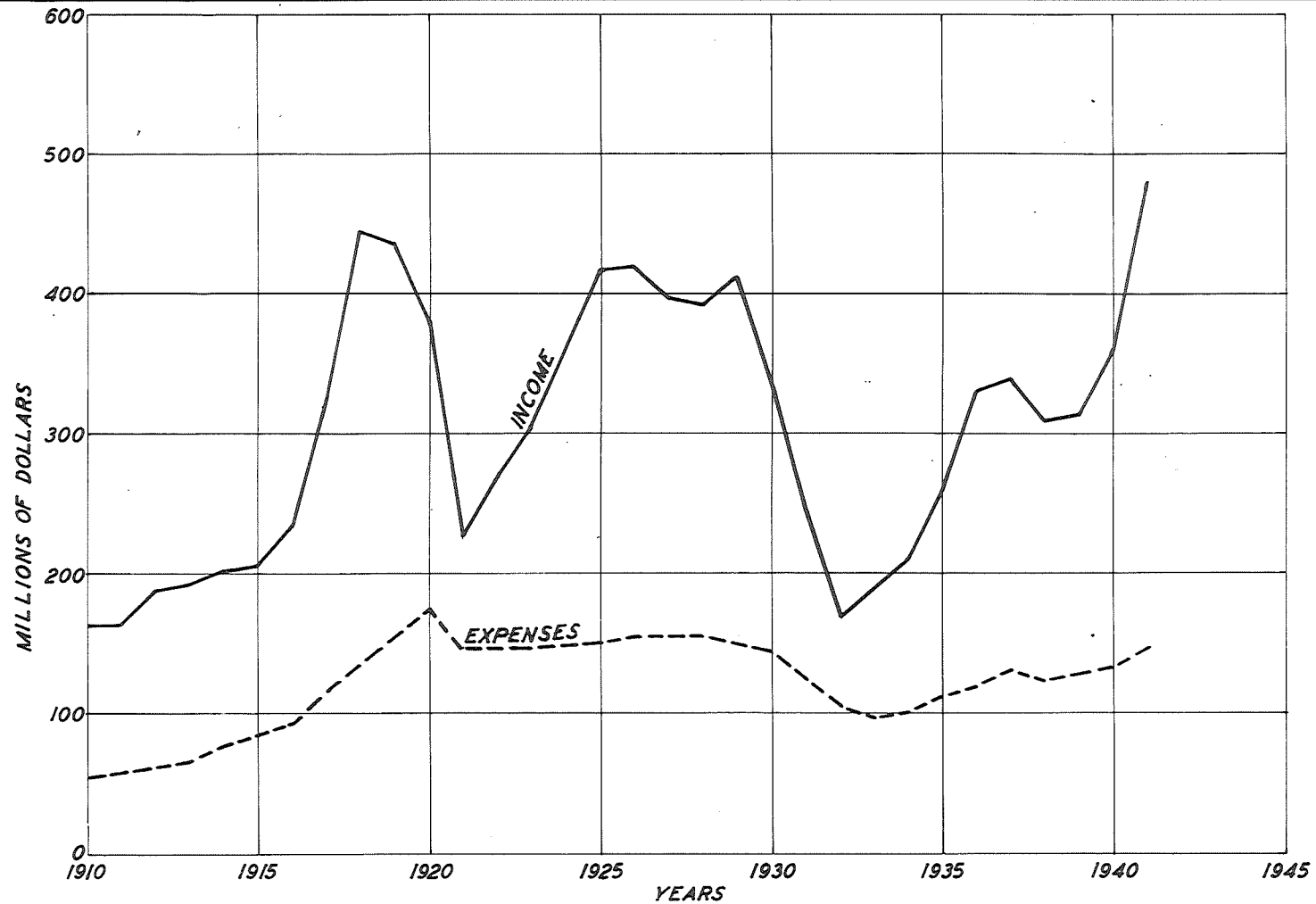
# TAX LEVY ON MINNESOTA FARM REAL ESTATE AMOUNT PER ACRE AND PER \$ 100 OF REAL ESTATE VALUE 1910-1941



SOURCE: UNIVERSITY OF MINNESOTA AGRICULTURAL  
BULLETIN NO. 366-1943

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## MINNESOTA CASH FARM INCOME AND EXPENDITURES 1910-1941



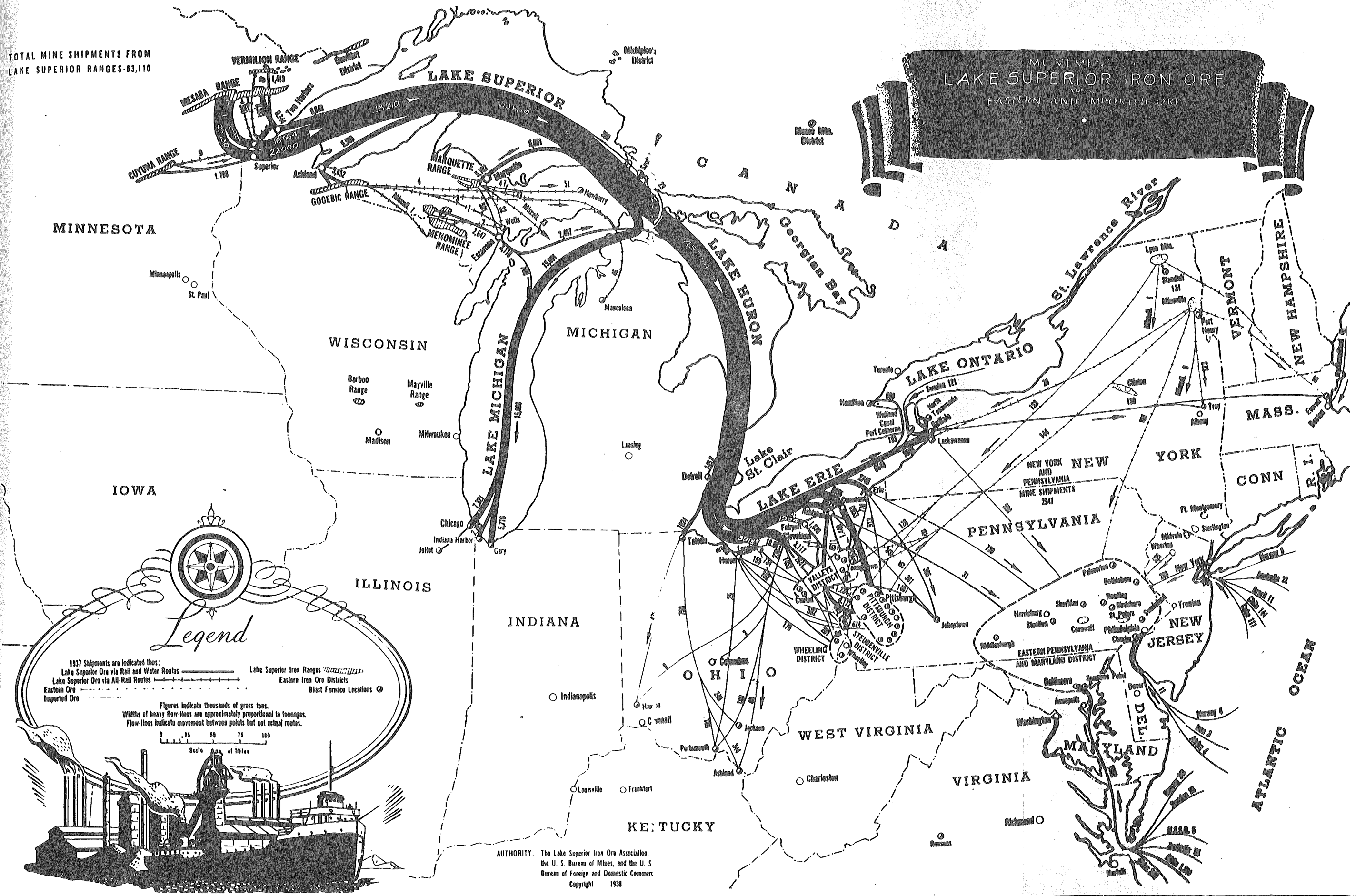
**SOURCE:** UNIVERSITY OF MINNESOTA AGRICULTURAL  
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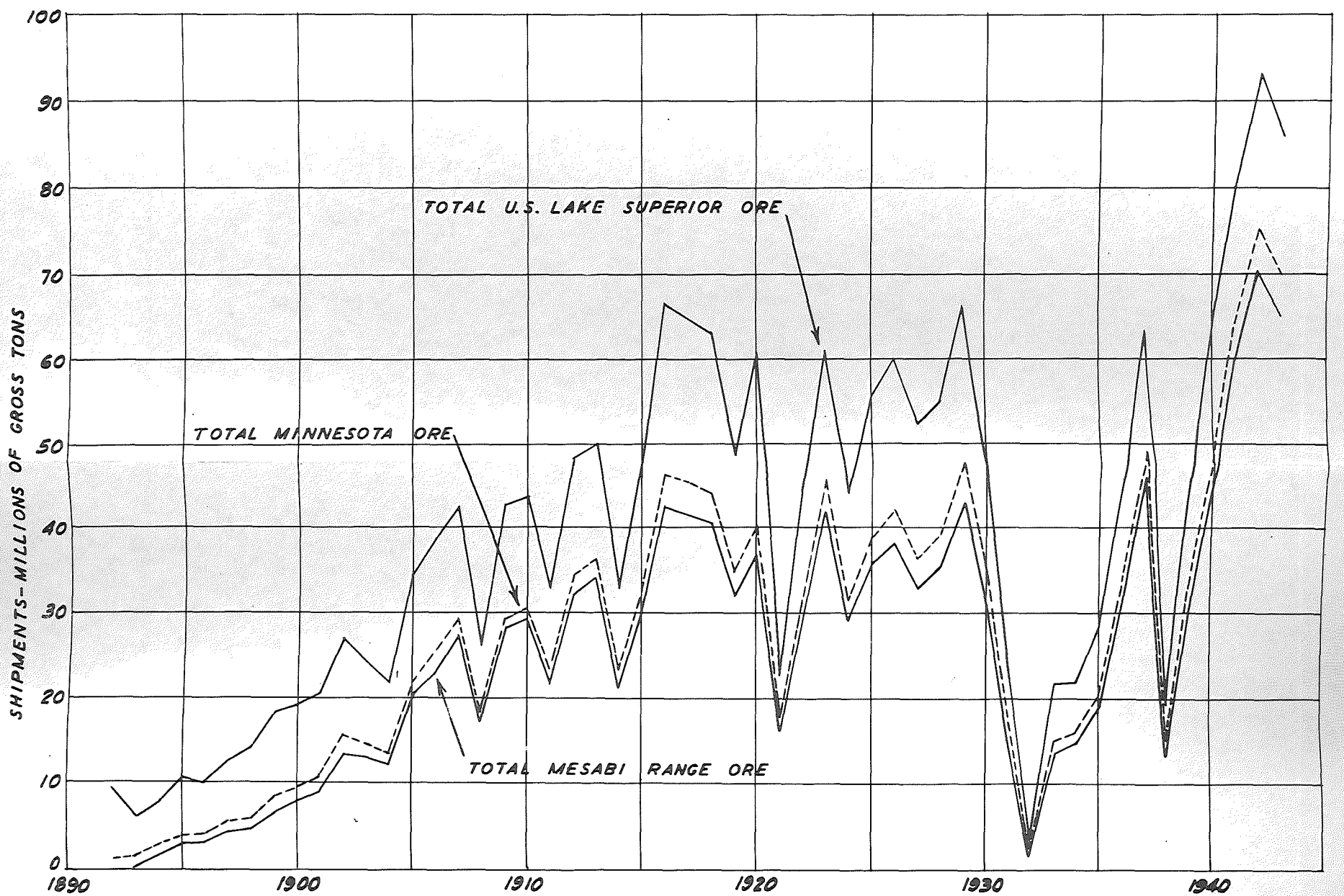
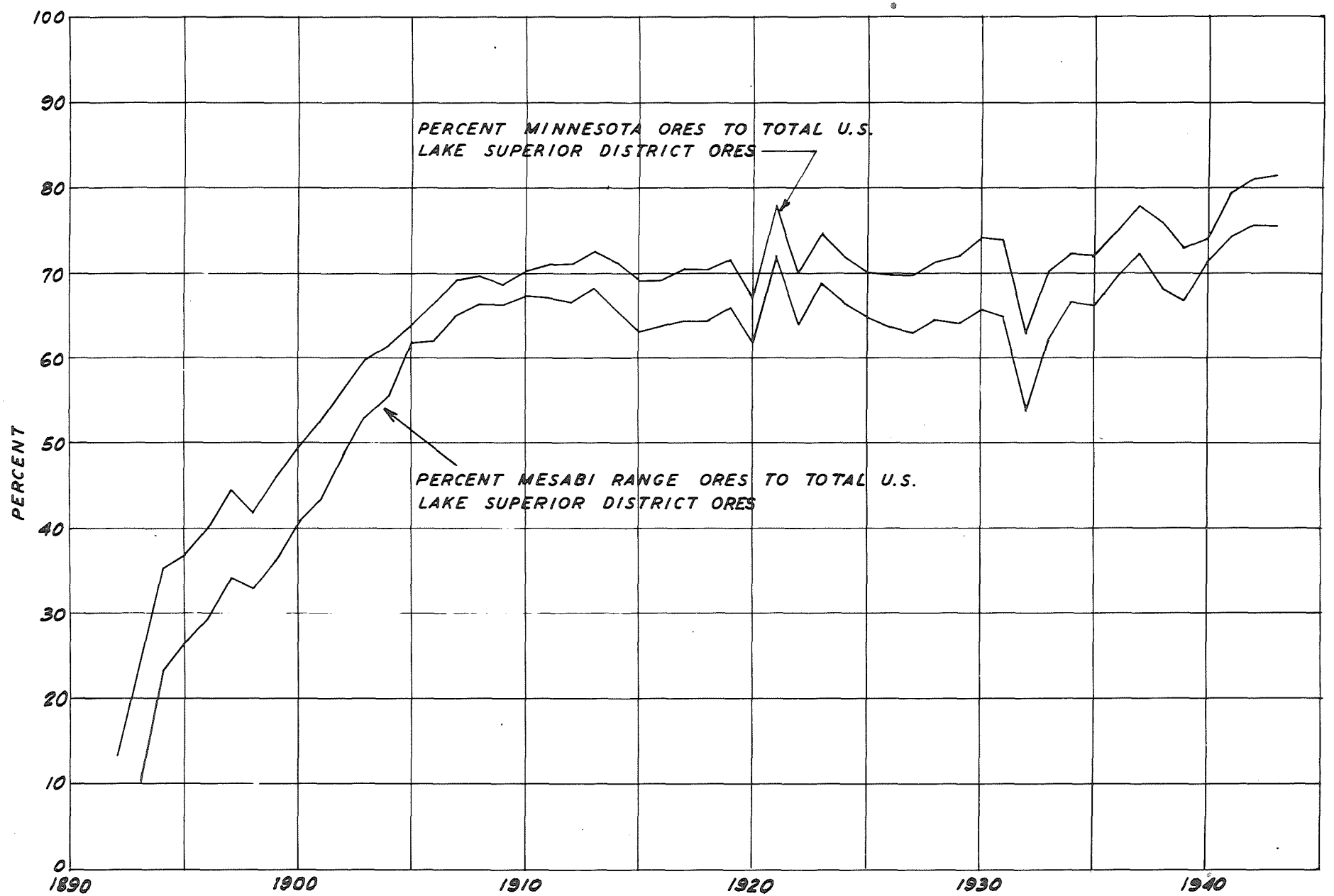


TOTAL MINE SHIPMENTS FROM  
LAKE SUPERIOR RANGES-83,110

MOVEMENT  
LAKE SUPERIOR IRON ORE  
AND  
EASTERN AND IMPORTED ORE



# ANNUAL SHIPMENTS OF IRON ORE FROM U. S. LAKE SUPERIOR DISTRICT 1892-1943



SOURCE:- MINES EXPERIMENT STATION, INFORMATION CIRCULAR NO.2,  
AND MINNESOTA MINING DIRECTORY

THE J.G.WHITE ENGINEERING CORP. NEW YORK

TONNAGE OF ORE MINED FROM ALL RANGES IN MINNESOTA,  
AND AVERAGE COSTS PER TON FOR DEVELOPMENT,  
MINING LABOR AND SUPPLIES, ROYALTY  
AND ALL TAXES LEVIED. 1921-1941

| Year | Total<br>Tonnage<br>Mined | Average<br>Cost Per<br>Ton<br>of<br>Develop-<br>ment | AVERAGE COST PER TON OF MINING |          |                |         | Average<br>Cost<br>Per Ton<br>of<br>Royalty<br>Paid | Total<br>Cost Per<br>Ton of<br>All Pre-<br>ceding<br>Items | Average<br>Cost<br>Per Ton<br>of All<br>Taxes<br>Levied | Per Cent<br>of Total<br>Taxes<br>to<br>Other<br>Costs |
|------|---------------------------|------------------------------------------------------|--------------------------------|----------|----------------|---------|-----------------------------------------------------|------------------------------------------------------------|---------------------------------------------------------|-------------------------------------------------------|
|      |                           |                                                      | Labor                          | Supplies | Other<br>Items | Total   |                                                     |                                                            |                                                         |                                                       |
| 1921 | 17,495,578                | \$0.205                                              | -                              | -        | \$0.210        | \$1.031 | \$0.474                                             | \$1.710                                                    | \$1.167                                                 | 40.6                                                  |
| 1922 | 28,770,120                | .246                                                 | -                              | -        | .180           | .786    | .477                                                | 1.509                                                      | .760                                                    | 33.5                                                  |
| 1923 | 44,843,457                | .247                                                 | \$0.362                        | \$0.256  | .141           | .759    | .436                                                | 1.442                                                      | .598                                                    | 29.3                                                  |
| 1924 | 32,401,584                | .240                                                 | .471*                          | .268     | .153           | .892    | .461                                                | 1.593                                                      | .694                                                    | 30.4                                                  |
| 1925 | 37,580,850                | .236                                                 | .392                           | .241     | .181           | .814    | .447                                                | 1.497                                                      | .578                                                    | 27.9                                                  |
| 1926 | 41,662,490                | .239                                                 | .335                           | .209     | .154           | .698    | .437                                                | 1.374                                                      | .502                                                    | 26.7                                                  |
| 1927 | 36,474,549                | .251                                                 | .345                           | .217     | .178           | .740    | .450                                                | 1.441                                                      | .567                                                    | 28.2                                                  |
| 1928 | 38,532,003                | .228                                                 | .299                           | .195     | .147           | .641    | .454                                                | 1.323                                                      | .524                                                    | 28.4                                                  |
| 1929 | 46,922,911                | .220                                                 | .257                           | .181     | .128           | .566    | .454                                                | 1.240                                                      | .471                                                    | 27.5                                                  |
| 1930 | 36,239,106                | .217                                                 | .297                           | .198     | .166           | .661    | .457                                                | 1.335                                                      | .573                                                    | 30.0                                                  |
| 1931 | 18,370,526                | .191                                                 | .307                           | .210     | .246           | .763    | .438                                                | 1.392                                                      | 1.015                                                   | 42.2                                                  |
| 1932 | 5,496,070                 | .258                                                 | .337                           | .269     | .444           | 1.050   | .547                                                | 1.855                                                      | 3.007                                                   | 61.8                                                  |
| 1933 | 12,597,805                | .241                                                 | .187                           | .168     | .245           | .600    | .420                                                | 1.261                                                      | 1.419                                                   | 52.9                                                  |
| 1934 | 16,206,453                | .197                                                 | .276                           | .181     | .194           | .651    | .405                                                | 1.253                                                      | 1.188                                                   | 48.7                                                  |
| 1935 | 19,937,282                | .208                                                 | .279                           | .159     | .164           | .602    | .435                                                | 1.245                                                      | .962                                                    | 43.6                                                  |
| 1936 | 32,501,729                | .206                                                 | .230                           | .176     | .207           | .613    | .403                                                | 1.222                                                      | .653                                                    | 34.8                                                  |
| 1937 | 49,619,930                | .220                                                 | .264                           | .186     | .166           | .616    | .379                                                | 1.215                                                      | .556                                                    | 31.4                                                  |
| 1938 | 14,728,556                | .186                                                 | .409                           | .254     | .407           | 1.070   | .387                                                | 1.643                                                      | 1.255                                                   | 43.3                                                  |
| 1939 | 31,789,650                | .215                                                 | .241                           | .168     | .258           | .667    | .432                                                | 1.314                                                      | .698                                                    | 34.7                                                  |
| 1940 | 48,304,658                | .201                                                 | .183                           | .142     | .212           | .537    | .395                                                | 1.133                                                      | .478                                                    | 29.7                                                  |
| 1941 | 63,736,347                | .206                                                 | .207                           | .140     | .162           | .509    | .415                                                | 1.130                                                      | .389                                                    | 25.6                                                  |

\* Includes costs on 1,745,000 tons of high cost ore not subject to tax.

Source: Minnesota Tax Commission Reports.

The J. G. White Engineering Corp., New York



TONNAGE OF ORE MINED FROM ALL RANGES IN MINNESOTA  
SEGREGATED BY OPEN PIT OPERATIONS AND UNDERGROUND OR  
MIXED OPERATIONS WITH CORRESPONDING AVERAGE COSTS PER TON  
FOR DEVELOPMENT, MINING LABOR AND SUPPLIES AND ROYALTY

1926-1941

|                                          |                           | Average<br>Cost Per<br>Ton<br>of<br>Develop-<br>ment | AVERAGE COST PER TON OF MINING |          |                |         | Average<br>Cost Per<br>Ton<br>of<br>Royalty<br>Paid | Average<br>Cost Per<br>Ton of<br>All Pre-<br>ceding<br>Items |
|------------------------------------------|---------------------------|------------------------------------------------------|--------------------------------|----------|----------------|---------|-----------------------------------------------------|--------------------------------------------------------------|
|                                          | Total<br>Tonnage<br>Mined |                                                      | Labor                          | Supplies | Other<br>Items | Total   |                                                     |                                                              |
| <u>Open Pit Operations -</u>             |                           |                                                      |                                |          |                |         |                                                     |                                                              |
| 1926 .....                               | 31,535,909                | \$0.288                                              | \$0.137                        | \$0.138  | \$0.139        | \$0.414 | \$0.435                                             | \$1.137                                                      |
| 1927 .....                               | 27,383,370                | .305                                                 | .146                           | .148     | .165           | .459    | .438                                                | 1.202                                                        |
| 1928 .....                               | 29,696,918                | .276                                                 | .121                           | .126     | .135           | .382    | .456                                                | 1.114                                                        |
| 1929 .....                               | 37,862,622                | .260                                                 | .112                           | .124     | .113           | .349    | .456                                                | 1.065                                                        |
| 1930 .....                               | 27,192,005                | .270                                                 | .113                           | .122     | .154           | .389    | .459                                                | 1.118                                                        |
| 1931 .....                               | 12,693,960                | .254                                                 | .111                           | .121     | .221           | .453    | .428                                                | 1.135                                                        |
| 1932 .....                               | 3,334,946                 | .392                                                 | .087                           | .118     | .401           | .606    | .647                                                | 1.645                                                        |
| 1933 .....                               | 10,721,393                | .259                                                 | .098                           | .116     | .226           | .440    | .419                                                | 1.118                                                        |
| 1934 .....                               | 12,964,328                | .248                                                 | .135                           | .127     | .205           | .467    | .405                                                | 1.120                                                        |
| 1935 .....                               | 16,144,548                | .253                                                 | .137                           | .122     | .172           | .431    | .457                                                | 1.141                                                        |
| 1936 .....                               | 28,316,112                | .230                                                 | .149                           | .134     | .197           | .480    | .396                                                | 1.106                                                        |
| 1937 .....                               | 43,751,264                | .242                                                 | .169                           | .142     | .151           | .462    | .375                                                | 1.079                                                        |
| 1938 .....                               | 11,535,101                | .225                                                 | .238                           | .174     | .358           | .770    | .389                                                | 1.384                                                        |
| 1939 .....                               | 28,033,250                | .238                                                 | .141                           | .125     | .231           | .497    | .440                                                | 1.175                                                        |
| 1940 .....                               | 44,008,093                | .217                                                 | .108                           | .109     | .184           | .401    | .397                                                | 1.015                                                        |
| 1941 .....                               | 58,771,355                | .218                                                 | .138                           | .109     | .149           | .396    | .418                                                | 1.032                                                        |
| <u>Underground or Mixed Operations -</u> |                           |                                                      |                                |          |                |         |                                                     |                                                              |
| 1926 .....                               | 10,126,581                | .088                                                 | .953                           | .430     | .204           | 1.587   | .445                                                | 2.120                                                        |
| 1927 .....                               | 9,091,179                 | .089                                                 | .947                           | .428     | .220           | 1.595   | .466                                                | 2.150                                                        |
| 1928 .....                               | 8,835,085                 | .068                                                 | .896                           | .424     | .190           | 1.510   | .447                                                | 2.025                                                        |
| 1929 .....                               | 9,060,289                 | .055                                                 | .862                           | .416     | .189           | 1.467   | .447                                                | 1.969                                                        |
| 1930 .....                               | 9,047,101                 | .056                                                 | .852                           | .429     | .201           | 1.482   | .452                                                | 1.990                                                        |
| 1931 .....                               | 5,676,566                 | .051                                                 | .747                           | .410     | .303           | 1.460   | .460                                                | 1.971                                                        |
| 1932 .....                               | 2,161,124                 | .051                                                 | .722                           | .502     | .511           | 1.735   | .418                                                | 2.204                                                        |
| 1933 .....                               | 1,876,412                 | .138                                                 | .700                           | .466     | .352           | 1.518   | .421                                                | 2.077                                                        |
| 1934 .....                               | 3,242,125                 | .060                                                 | .809                           | .427     | .303           | 1.539   | .403                                                | 2.002                                                        |
| 1935 .....                               | 3,792,734                 | .065                                                 | .764                           | .428     | .249           | 1.441   | .389                                                | 1.830                                                        |
| 1936 .....                               | 4,185,617                 | .048                                                 | .774                           | .456     | .275           | 1.505   | .446                                                | 1.999                                                        |
| 1937 .....                               | 5,868,666                 | .055                                                 | .973                           | .517     | .283           | 1.772   | .410                                                | 2.238                                                        |
| 1938 .....                               | 3,193,455                 | .048                                                 | 1.027                          | .544     | .585           | 2.156   | .374                                                | 2.578                                                        |
| 1939 .....                               | 3,756,400                 | .042                                                 | .997                           | .494     | .466           | 1.957   | .378                                                | 2.377                                                        |
| 1940 .....                               | **4,296,565               | .040                                                 | .947                           | .487     | .507           | 1.941   | .381                                                | 2.362                                                        |
| 1941 .....                               | #4,964,992                | .060                                                 | 1.033                          | .501     | .335           | 1.869   | .380                                                | 2.309                                                        |

\* Based on total tonnage mined, exclusive of fee ore.

\*\* 8.89% of 1940 total.

# 7.7% of 1941 total.

Note: With the exception of certain tonnages mined in part by milling or mixed methods, all of the data above shown relates either to open pit or underground mining.

The high cost of development shown under underground or mixed operations for the year 1933, is due largely to low production and in part to high stripping costs on certain milling ore, the exclusion of which would reduce these average costs approximately five cents per ton.

Source: Minnesota Tax Commission Reports.

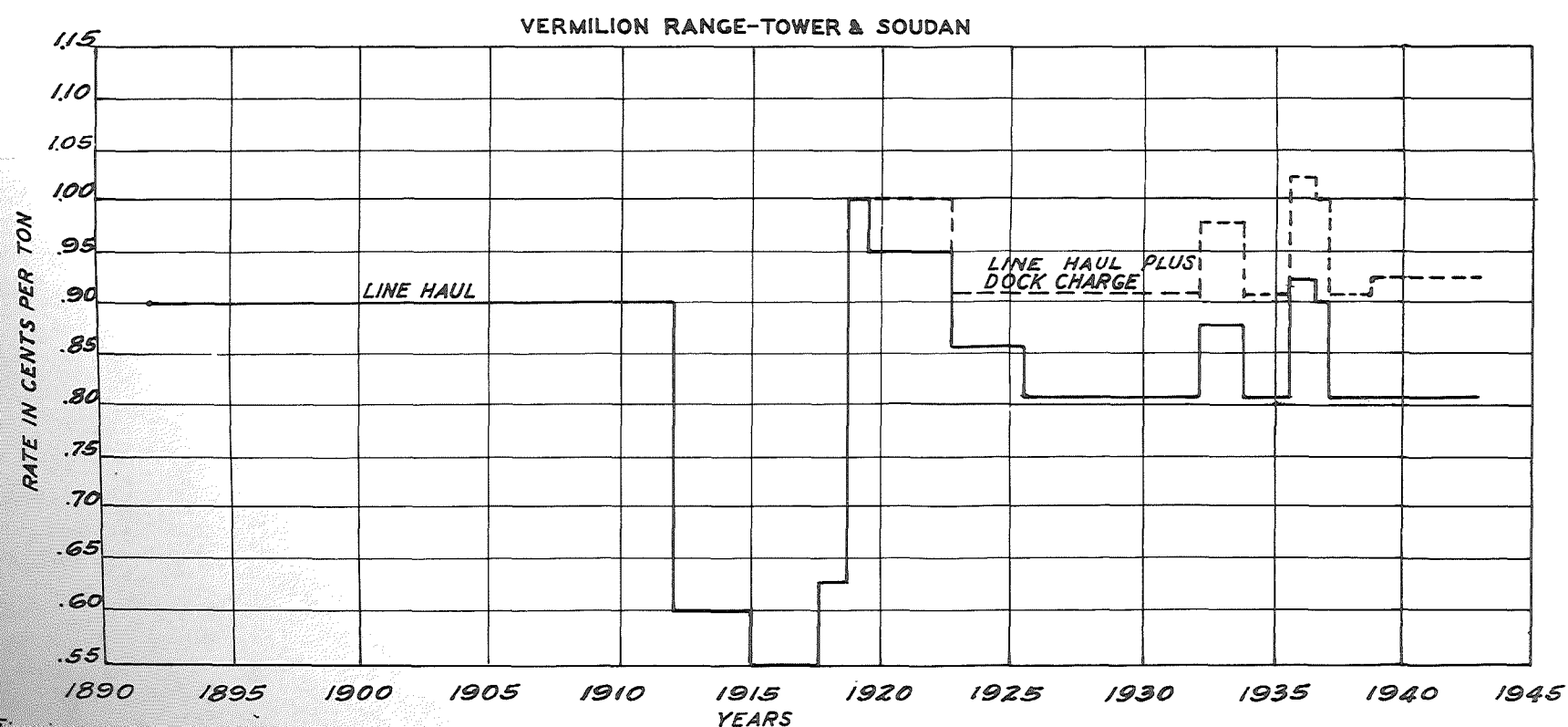
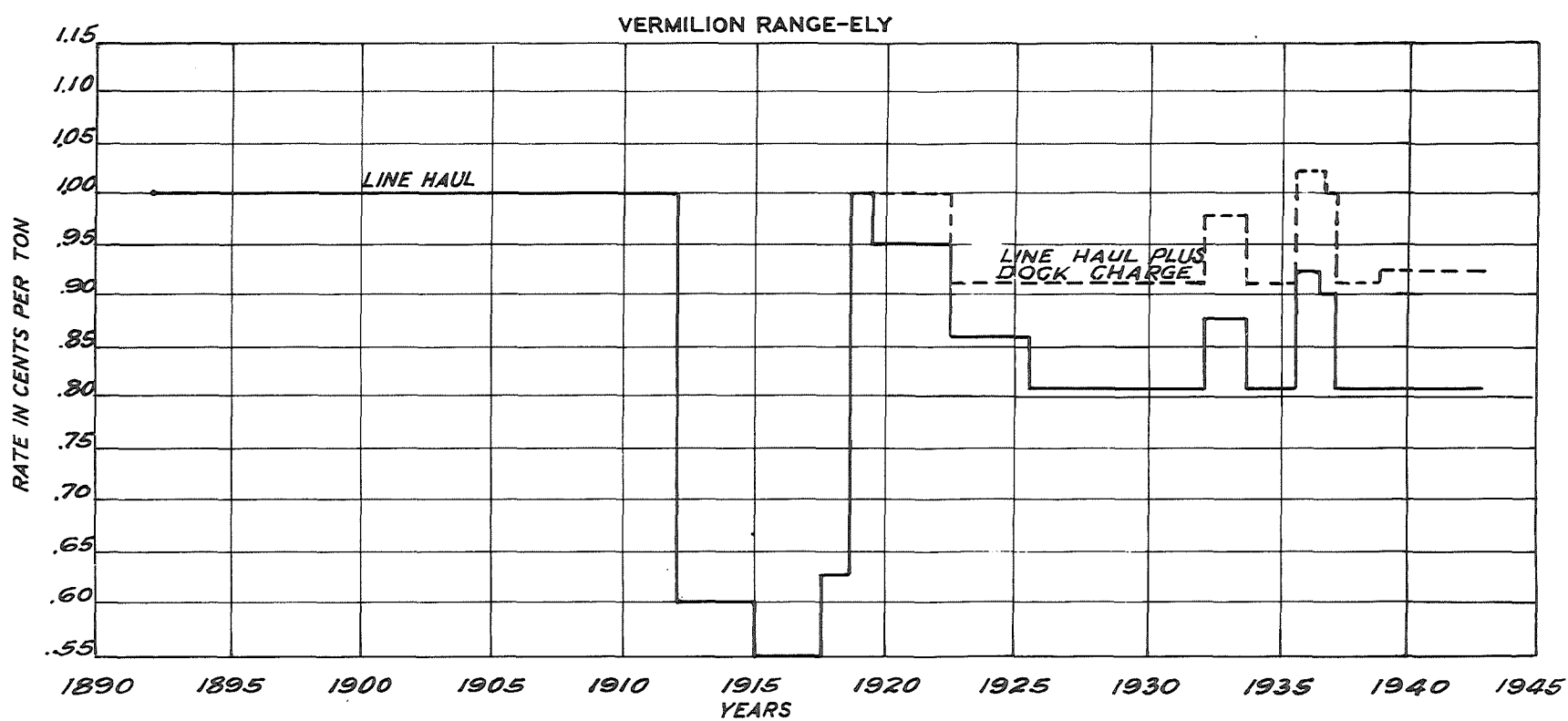
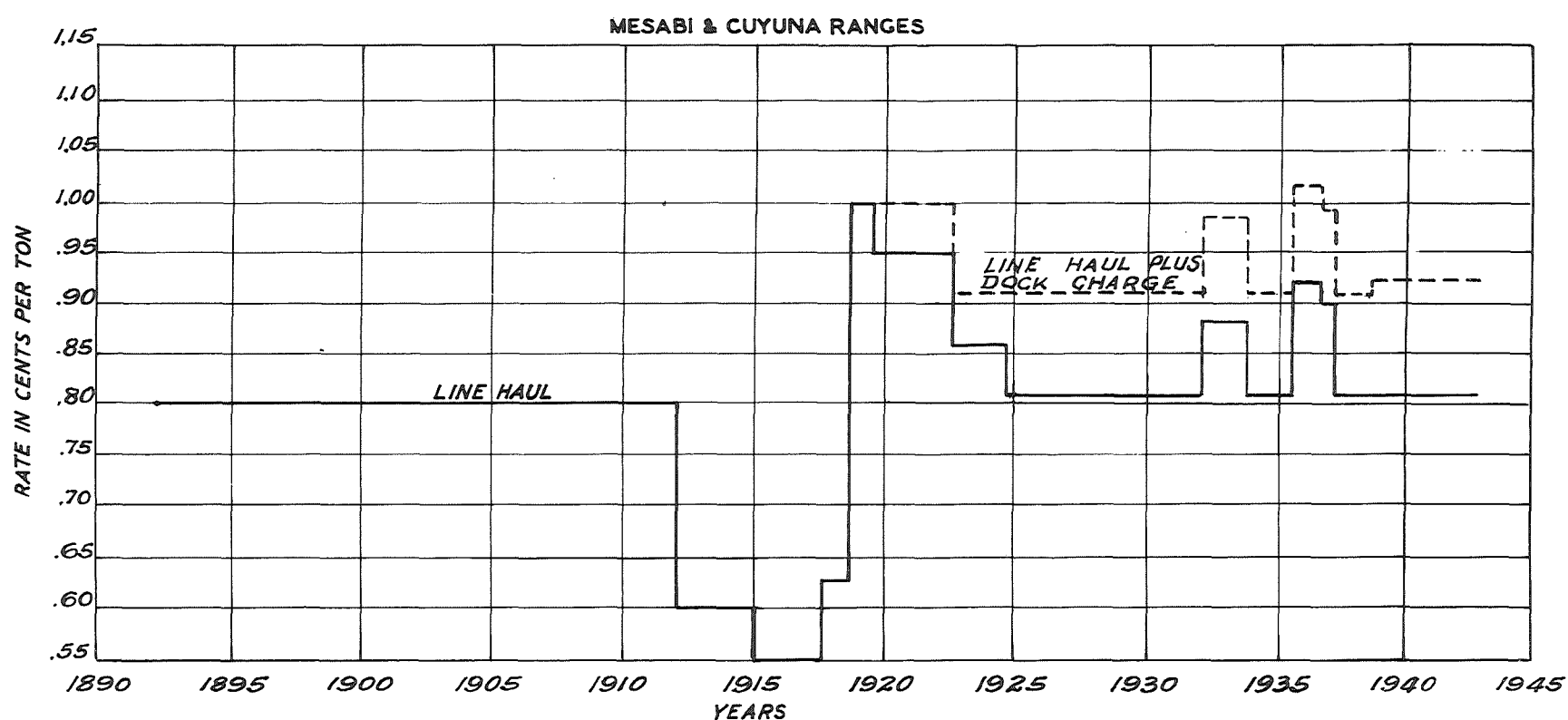
RANGE OF MAXIMUM AND MINIMUM UNIT COSTS PER TON  
FOR THE IRON MINING INDUSTRY IN MINNESOTA  
FOR THE YEAR 1943

|                                | 32 Open Pit Mines   |                     | 4 Open Pit and Underground<br>1 Milling Mine |                     | 11 Underground Mines |                     |
|--------------------------------|---------------------|---------------------|----------------------------------------------|---------------------|----------------------|---------------------|
|                                | <u>Minimum Cost</u> | <u>Maximum Cost</u> | <u>Minimum Cost</u>                          | <u>Maximum Cost</u> | <u>Minimum Cost</u>  | <u>Maximum Cost</u> |
| <u>MINING</u>                  |                     |                     |                                              |                     |                      |                     |
| Development                    | \$0.00              | \$1.66              | \$0.00                                       | \$0.426             | \$ 0.00              | \$ 0.426            |
| Labor                          | 0.0009              | 1.35                | 0.008                                        | 0.50 (est.)         | 0.0008               | 3.722               |
| Supplies                       | 0.0780              | 2.04                | 0.35 (est.)                                  | 0.7791              | 0.3999               | 1.2552              |
| Crushing                       | 0.00                | 0.3749              | 0.00                                         | 0.118               | 0.00                 | 0.00                |
| Total Mining Costs             | \$0.3313            | \$3.791             | \$0.4771                                     | \$4.878             | \$ 0.6811            | \$ 4.878            |
| <u>DEPRECIATION</u>            | \$0.00              | \$0.33              | \$0.00                                       | \$0.137             | \$ 0.0002            | \$ 6.186            |
| <u>FIXED CHARGES</u>           |                     |                     |                                              |                     |                      |                     |
| Administration                 | \$0.00              | \$0.281             | \$0.00                                       | \$0.135             | \$ 0.0002            | \$ 0.375            |
| Miscellaneous                  | 0.00                | 0.2419              | 0.00                                         | 0.060               | 0.004                | 0.0743              |
| Royalty                        | 0.00                | 1.3870              | 0.00                                         | 0.5247              | 0.00                 | 1.009               |
| Shrinkage                      | 0.0138              | 0.0517              | 0.00                                         | 0.0447              | 0.0193               | 0.0587              |
| Royalty Tax                    | 0.00                | 0.0595              | 0.00                                         | 0.0551              | 0.00                 | 0.1059              |
| Occupation Tax                 | 0.00                | 0.2000              | 0.0271                                       | 0.1690              | 0.00                 | 0.0683              |
| Real and Personal Tax          | 0.012               | 1.209               | 0.023                                        | 0.4062              | 0.0546               | 2.6965              |
| Total Fixed Charges            | \$0.264             | \$1.6656            | \$0.5619                                     | \$0.8256            | \$ 0.4410            | \$ 5.7602           |
| Total Cost at Mine             | \$0.7609            | \$4.8512            | \$1.2203                                     | \$1.849             | \$ 1.3375            | \$16.8242           |
| <u>FREIGHT</u>                 | \$1.915             | \$1.915             | \$1.915                                      | \$1.915             | \$ 1.915             | \$ 1.915            |
| Total Cost Lake Erie Ports     | \$2.6759            | \$6.7662            | \$3.1353                                     | \$3.764             | \$ 3.2525            | \$18.7392           |
| <u>MARKET VALUE</u>            | \$2.75097           | \$4.8460            | \$3.7585                                     | \$4.6941            | \$ 2.98              | \$ 5.9403           |
| Profit or Loss on Market Value | \$2.8596 Loss       | \$1.8901 Profit     | \$0.289 Profit                               | \$1.2167 Profit     | \$15.7592 Loss       | \$ 0.6622 Profit    |

Note: The figures given show minimum and maximum for each item listed. Totals are not totals of figures shown but minimum and maximum totals of individual mines. This chart shows the range only of cost items listed.

Source: Compiled from 1943 Occupation Tax Returns by Mining Companies.

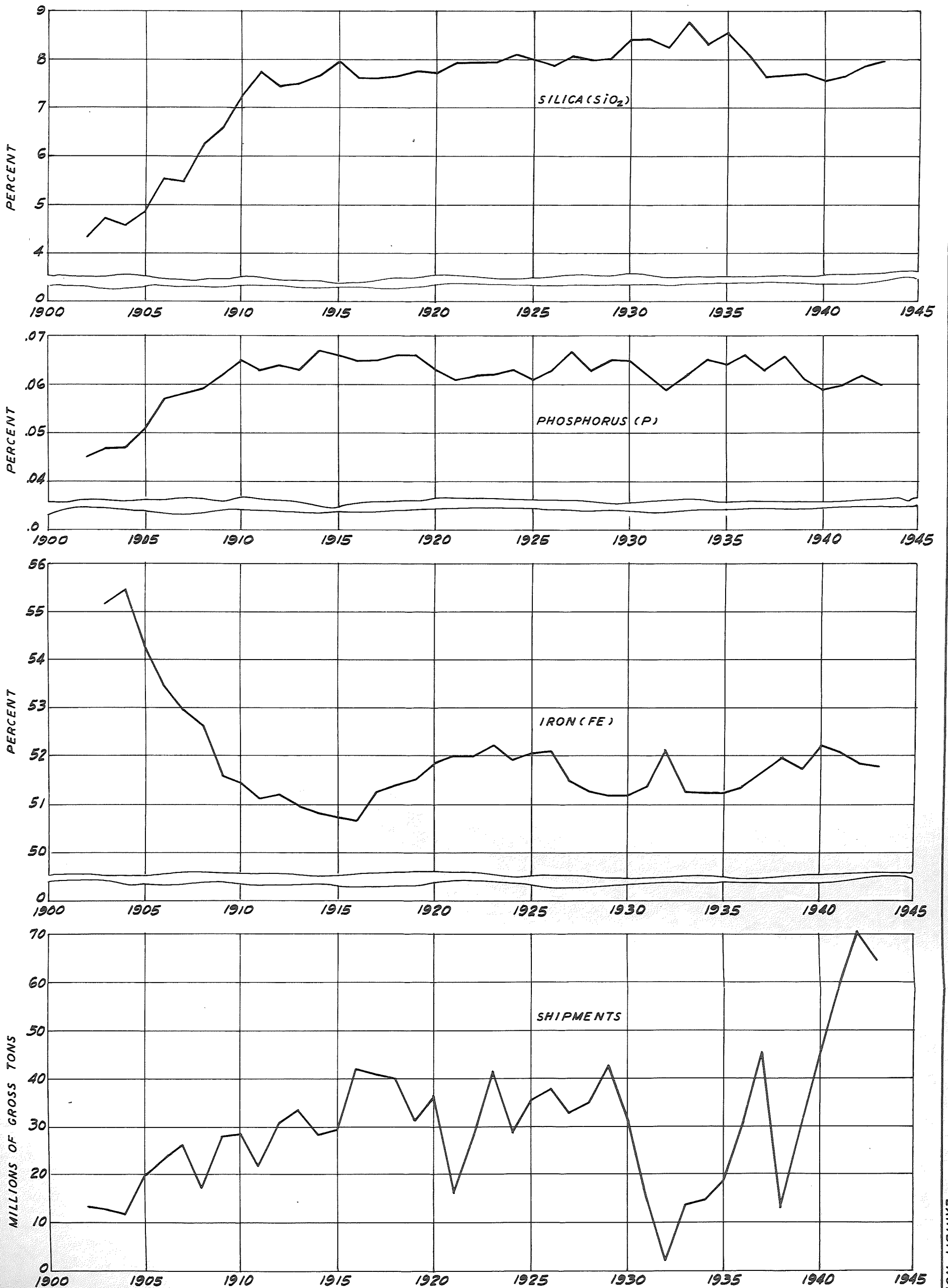
# RAILROAD FREIGHT RATES TO LAKE SUPERIOR PORTS FROM MESABI,VERMILION AND CUYUNA RANGES,MINNESOTA 1892-1943



SOURCE:  
LAKE SUPERIOR IRON ORES  
1938 AND SUPPLEMENT 1944



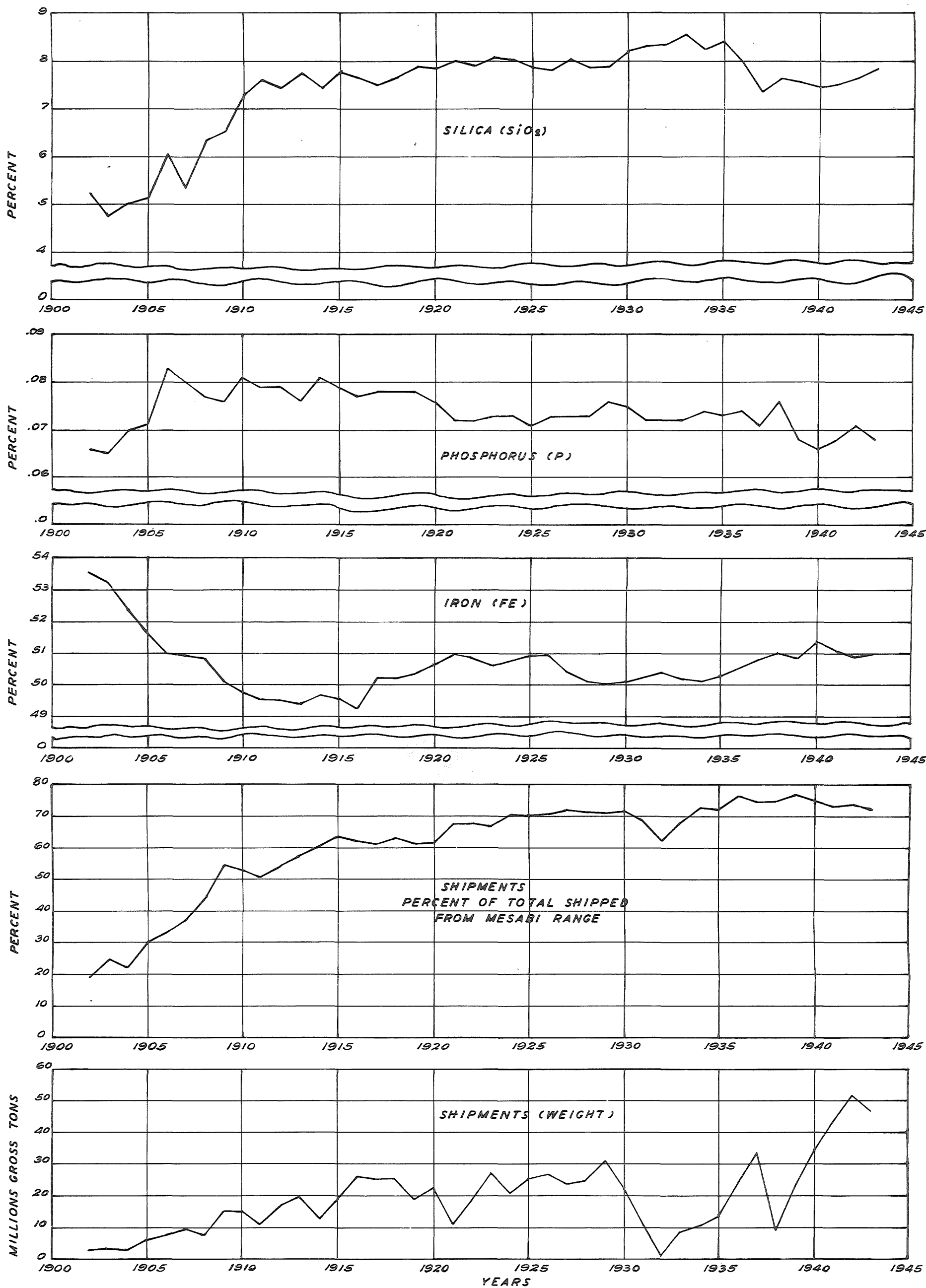
AVERAGE ANNUAL ANALYSIS  
ALL GRADES OF IRON ORE, MESABI RANGE  
WITH TOTAL ANNUAL SHIPMENTS, 1902 - 1943



SOURCE:— LAKE SUPERIOR IRON ORES, 1938  
AND SUPPLEMENT 1944

THE J.G. WHITE ENGINEERING CORP. NEW YORK

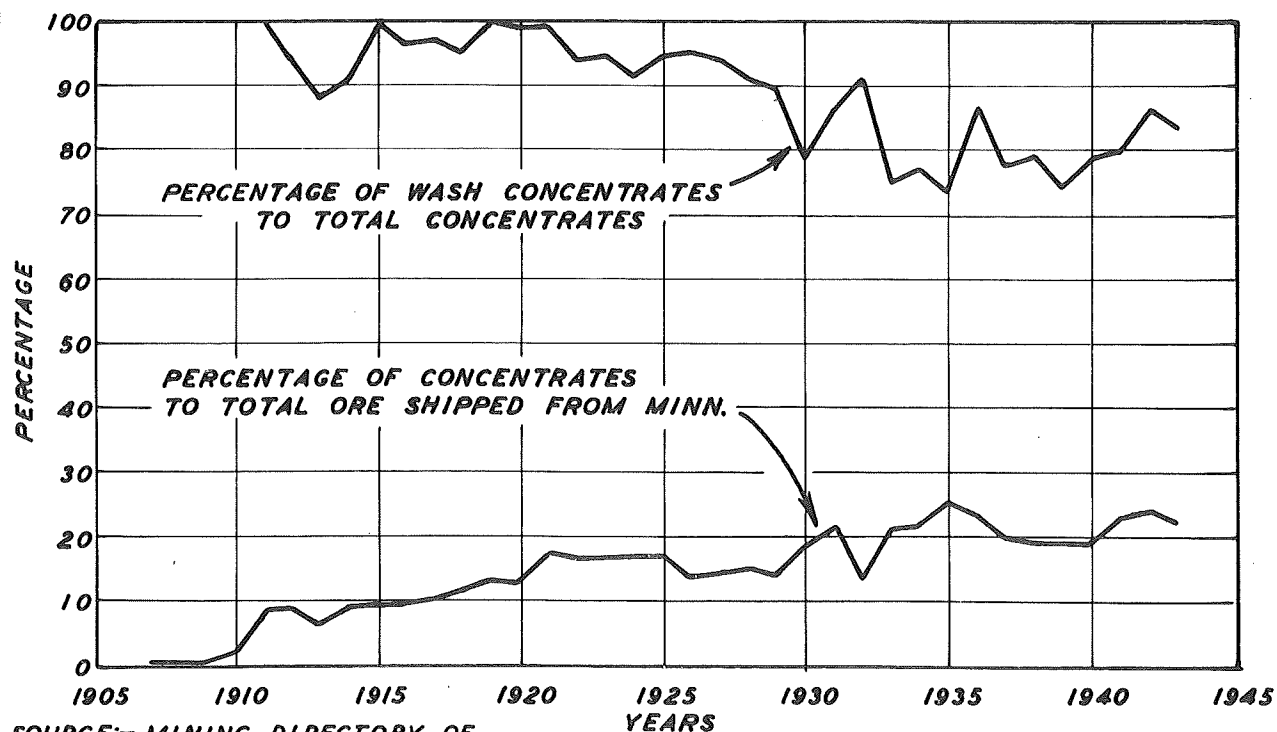
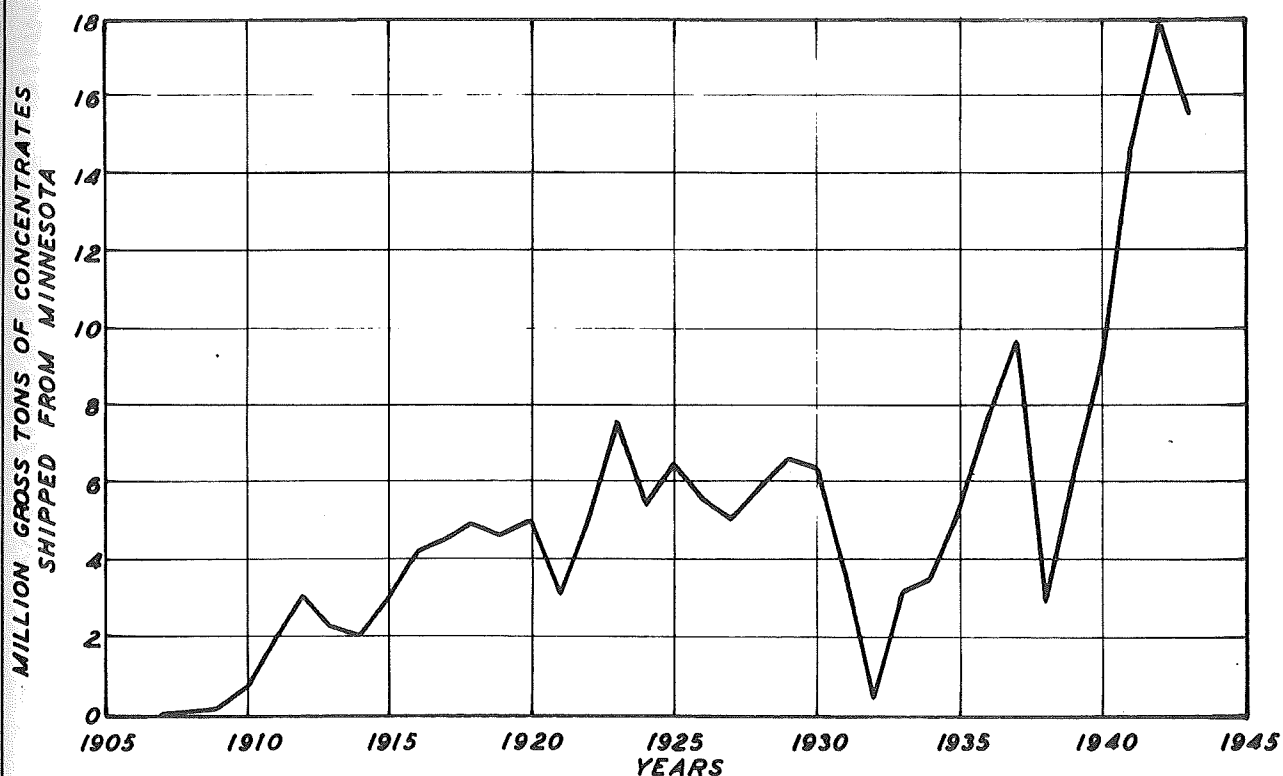
**AVERAGE ANNUAL ANALYSIS-NON BESSEMER ORE,  
MESABI RANGE, WITH ANNUAL SHIPMENTS AND PERCENT  
OF SHIPMENTS OF ALL GRADES OF ORE, 1902-1943**



SOURCE:- LAKE SUPERIOR IRON ORES 1938  
AND SUPPLEMENT 1944

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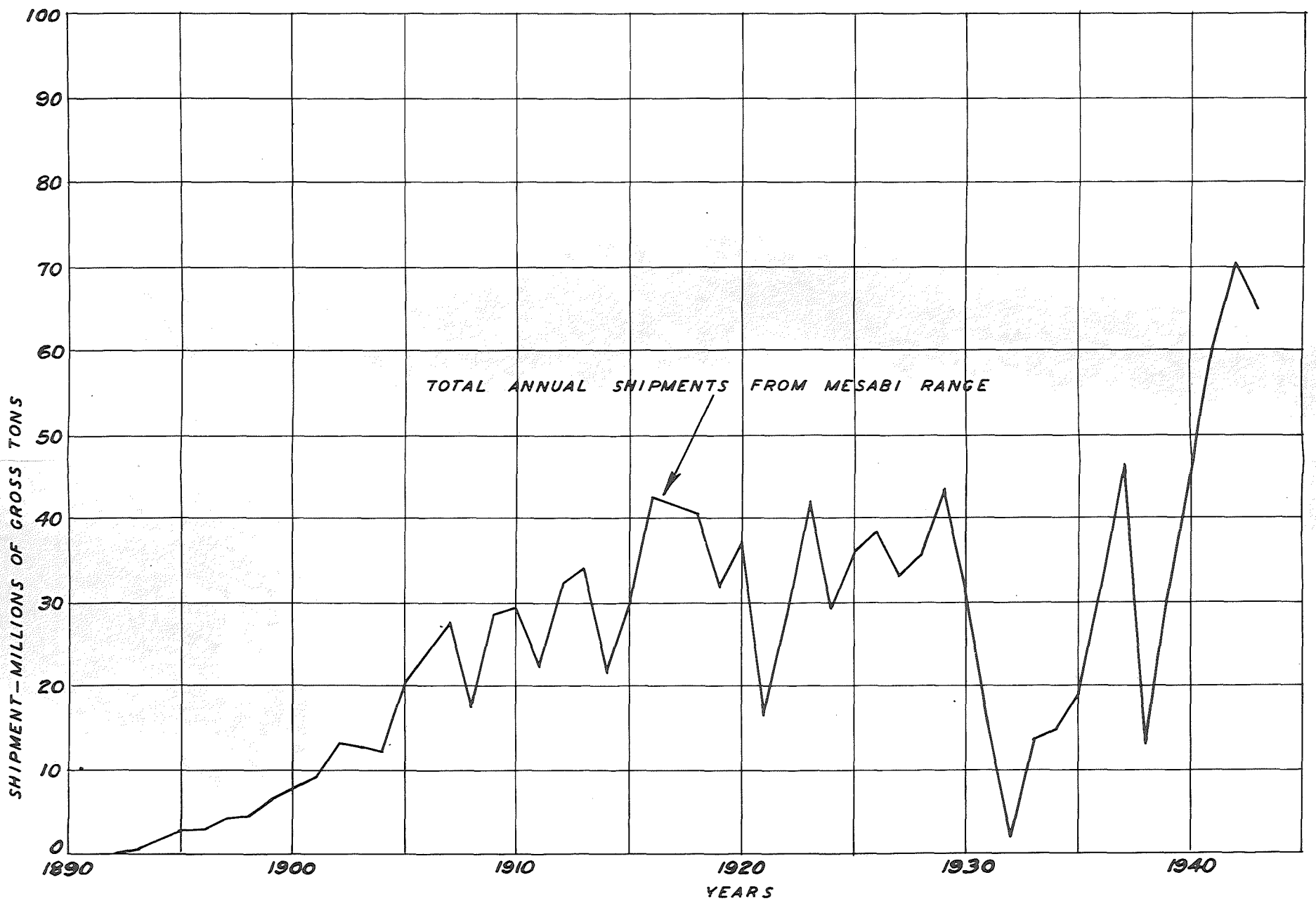
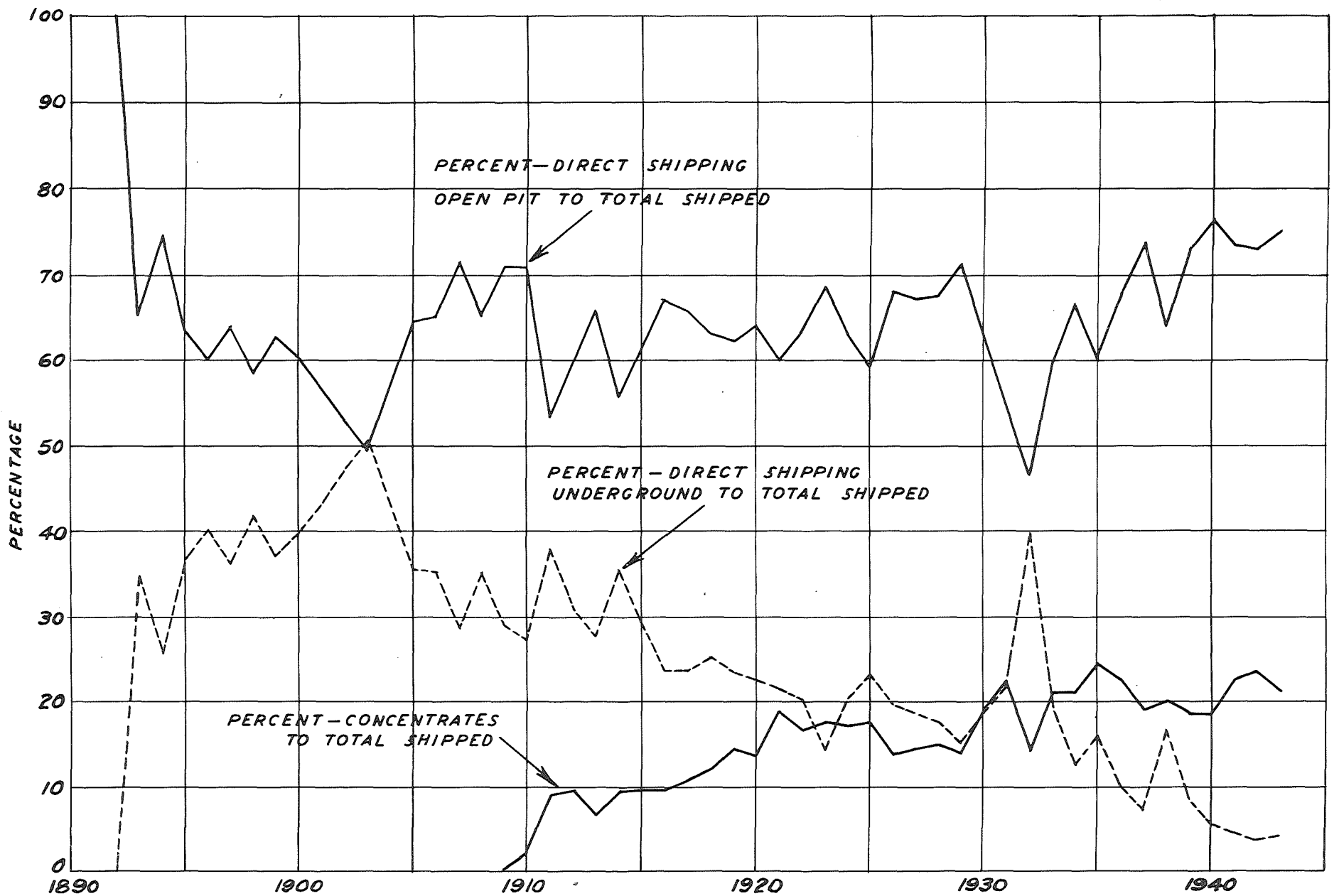
**TONNAGE OF CONCENTRATES SHIPPED FROM MINNESOTA.  
WITH PERCENTAGE OF WASH CONCENTRATES  
AND PERCENTAGE OF TOTAL ORE SHIPPED  
1907-1943**



SOURCE:- MINING DIRECTORY OF  
MINNESOTA 1944

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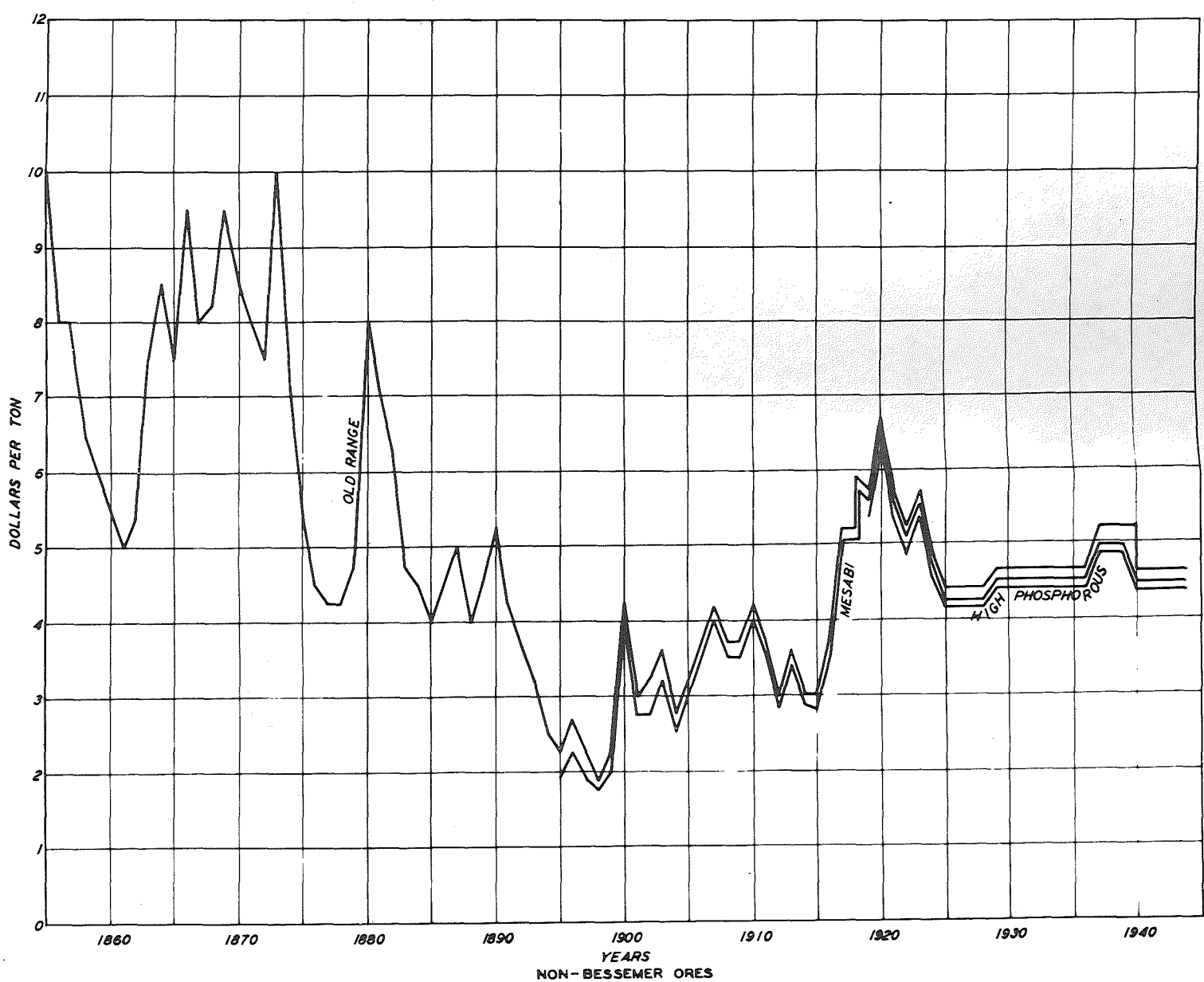
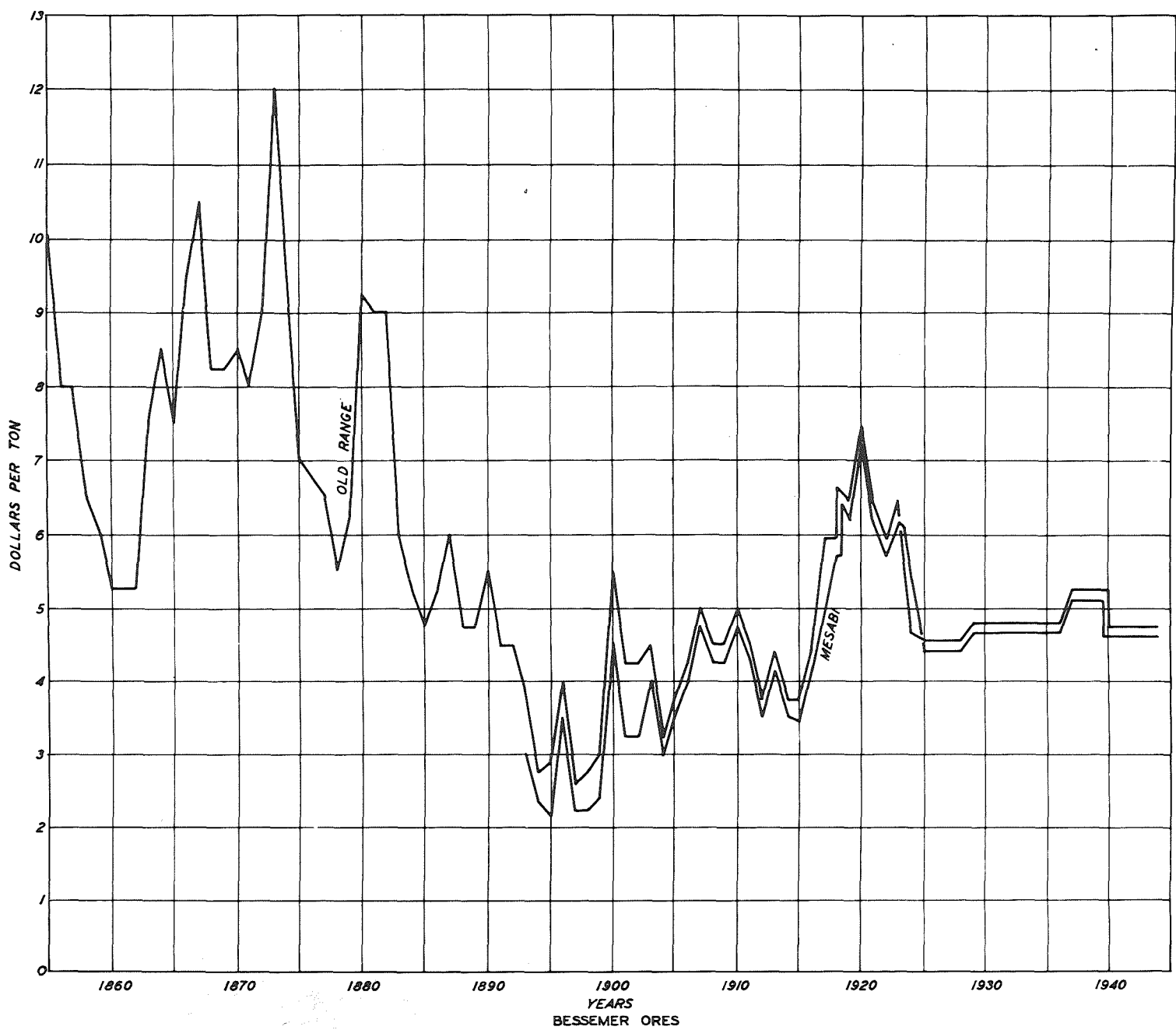
**TONNAGE OF IRON ORE SHIPPED FROM MESABI RANGE, MINNESOTA  
WITH PERCENTAGES OF DIRECT SHIPPING OPEN PIT ORE,  
DIRECT SHIPPING UNDERGROUND ORE, AND CONCENTRATES  
1892-1943**



SOURCE:- MINES EXPERIMENT STATION INFORMATION  
CIRCULAR NO. 2 AND MINNESOTA MINING  
DIRECTORY 1944

THE J.G. WHITE ENGINEERING CORP. NEW YORK

# BASE ( LAKE ERIE ) PRICES OF LAKE SUPERIOR IRON ORES AT LAKE ERIE PORTS, 1855-1944



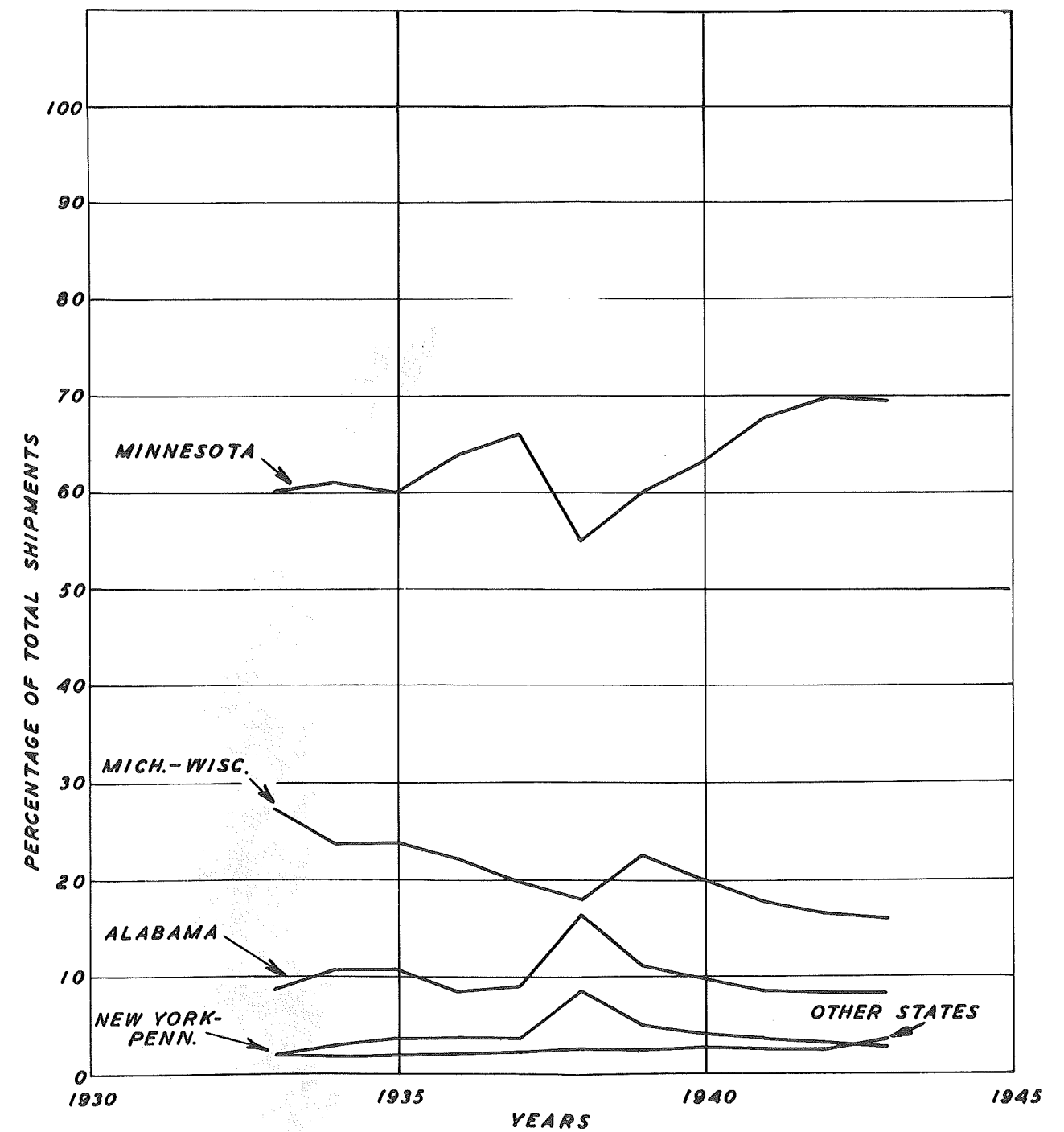
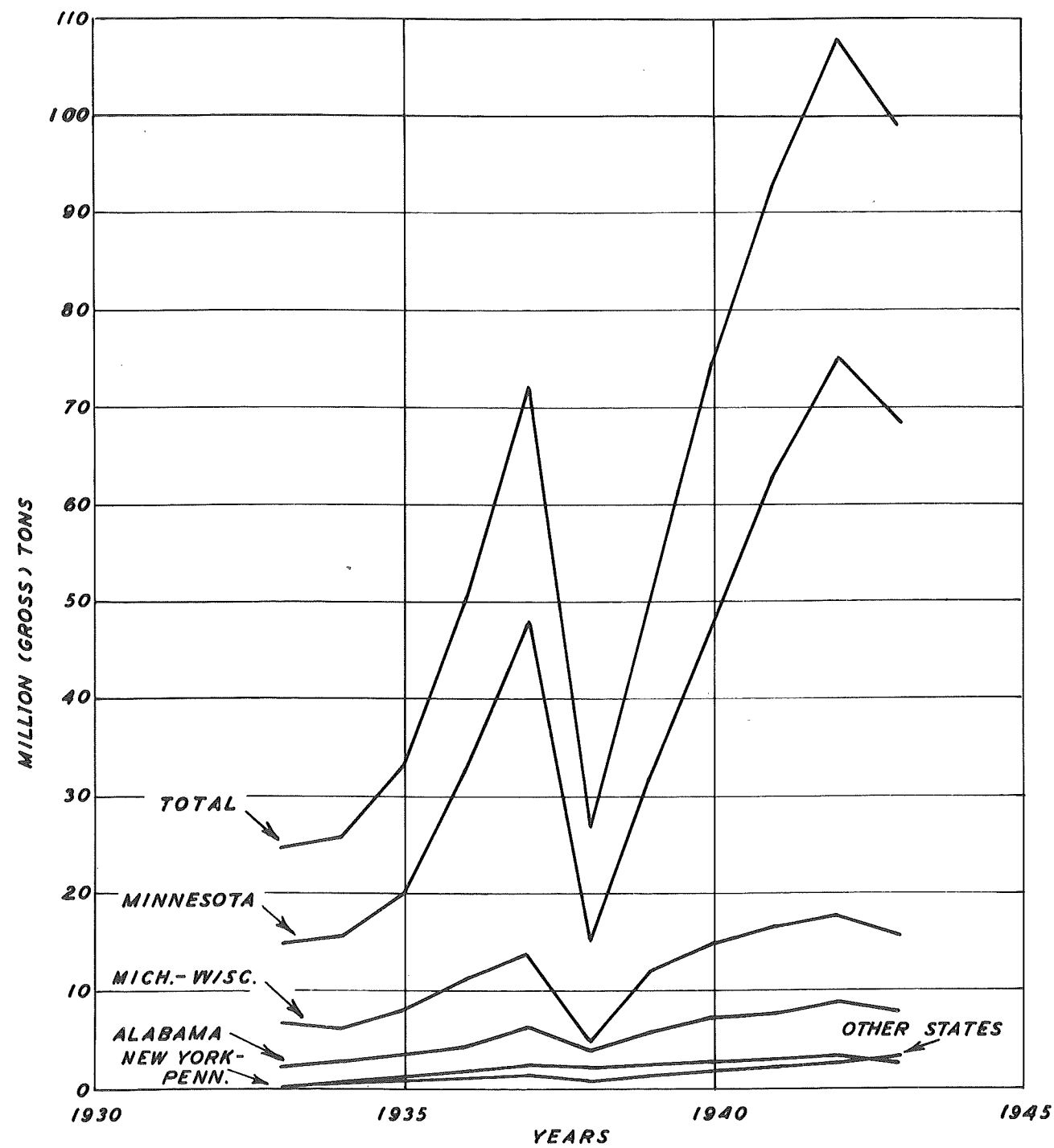
SOURCE: LAKE SUPERIOR IRON ORES 1938  
AND SUPPLEMENT 1944

THE J. G. WHITE ENGINEERING CORP. NEW YORK

EXHIBIT NO. III-C-11



TONNAGE OF IRON ORE SHIPPED FROM MINES IN THE UNITED STATES  
WITH PERCENTAGES SHIPPED FROM VARIOUS DISTRICTS  
1933-1943



SOURCE:- MINING DIRECTORY OF MINNESOTA 1944

THE J.G. WHITE ENGINEERING CORP. NEW YORK

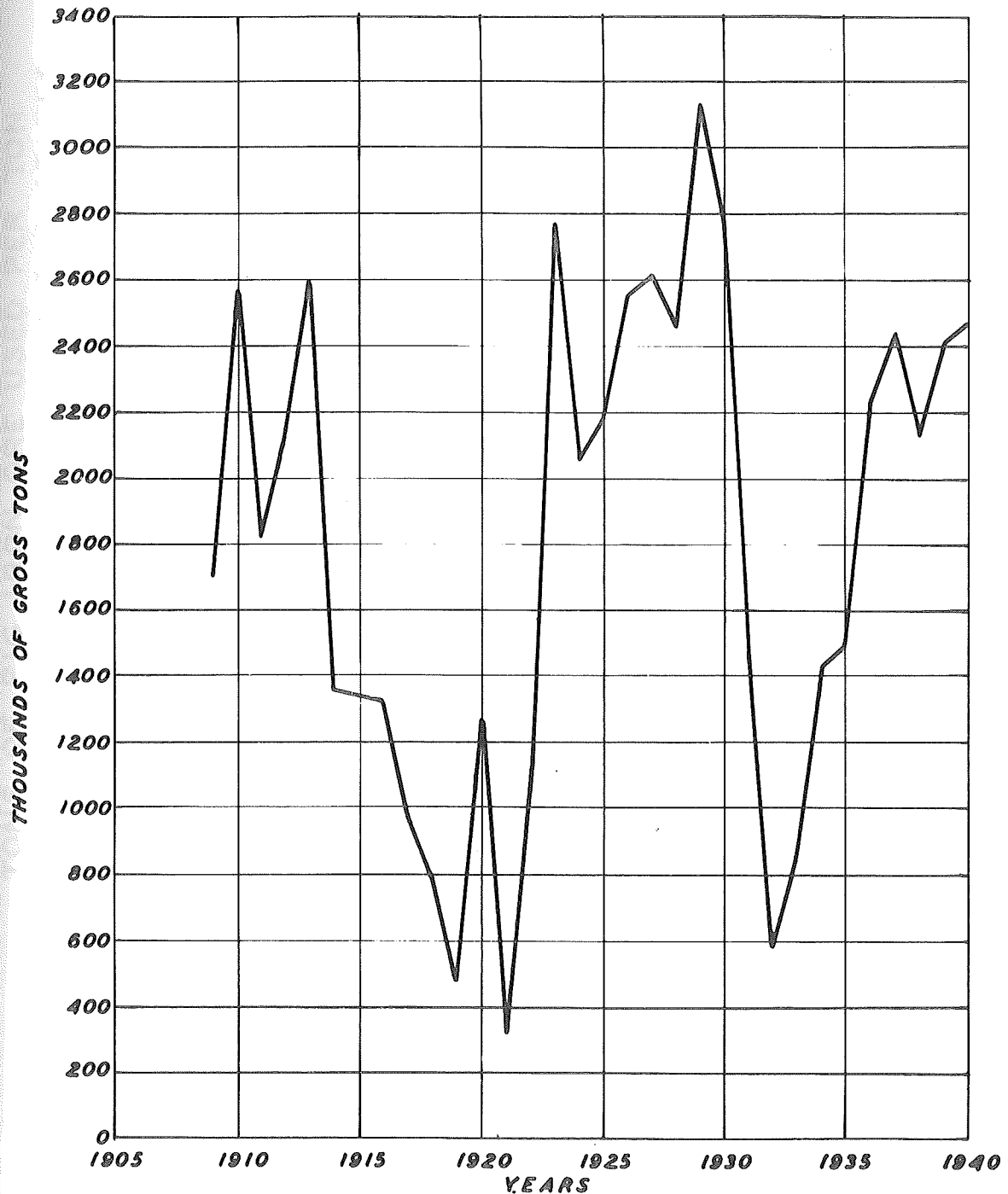


AVERAGE PRICES OF NUMBER 2 FOUNDRY  
PIG IRON AT VARIOUS LOCATIONS  
1929-1944

| Year | Buffalo, N. Y. | Mahoning<br>or<br>Shenango<br>Valley | Chicago, Ill. | Granite City,<br>Ill. | Birmingham,<br>Ala. |
|------|----------------|--------------------------------------|---------------|-----------------------|---------------------|
| 1929 | 18.97          | 18.23                                | 20.00         | 20.66                 | 15.13               |
| 1930 | 18.29          | 18.00                                | 18.47         | 19.39                 | 14.14               |
| 1931 | 17.16          | 16.72                                | 17.35         | 18.25                 | 12.27               |
| 1932 | 16.00          | 14.73                                | 15.87         | 18.33                 | 11.04               |
| 1933 | 16.63          | 15.91                                | 16.47         | 17.58                 | 12.32               |
| 1934 | 18.17          | 18.19                                | 18.19         | 18.19                 | 14.15               |
| 1935 | 18.67          | 18.67                                | 18.68         | 18.68                 | 14.60               |
| 1936 | 19.60          | 19.60                                | 19.60         | 19.60                 | 15.76               |
| 1937 | 23.49          | 23.49                                | 23.49         | 23.49                 | 19.87               |
| 1938 | 22.18          | 22.20                                | 22.20         | 22.20                 | 18.58               |
| 1939 | 21.59          | 21.59                                | 21.59         | 21.59                 | 17.96               |
| 1940 | 23.03          | 23.03                                | 23.03         | 23.04                 | 19.38               |
| 1941 | 24.00          | 24.00                                | 24.00         | 24.00                 | 20.17               |
| 1942 | 24.00          | 24.00                                | 24.00         | 24.00                 | 20.38               |
| 1943 | 24.00          | 24.00                                | 24.00         | 24.00                 | 20.38               |
| 1944 | 24.00          | 24.00                                | 24.00         | 24.00                 | 20.38               |

Source: Iron Age Magazine.

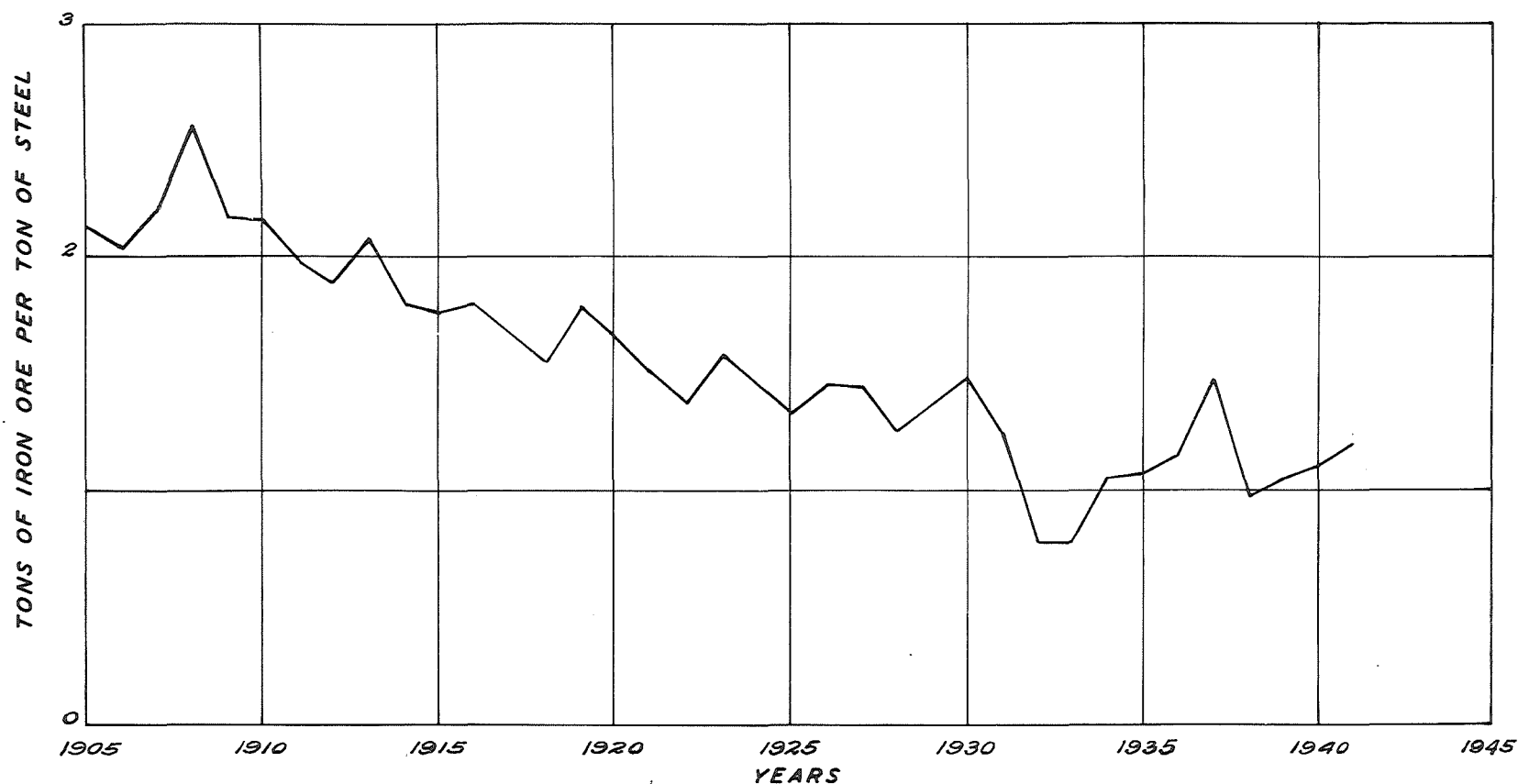
# IRON ORE IMPORTS INTO THE UNITED STATES 1909-1940



SOURCE:- LAKE SUPERIOR IRON ORES  
1938 AND SUPPLEMENT 1944

THE J.G. WHITE ENGINEERING CORP. NEW YORK

TONS OF PIG IRON ORE USED PER TON  
OF STEEL PRODUCED IN THE UNITED STATES  
1905-1941

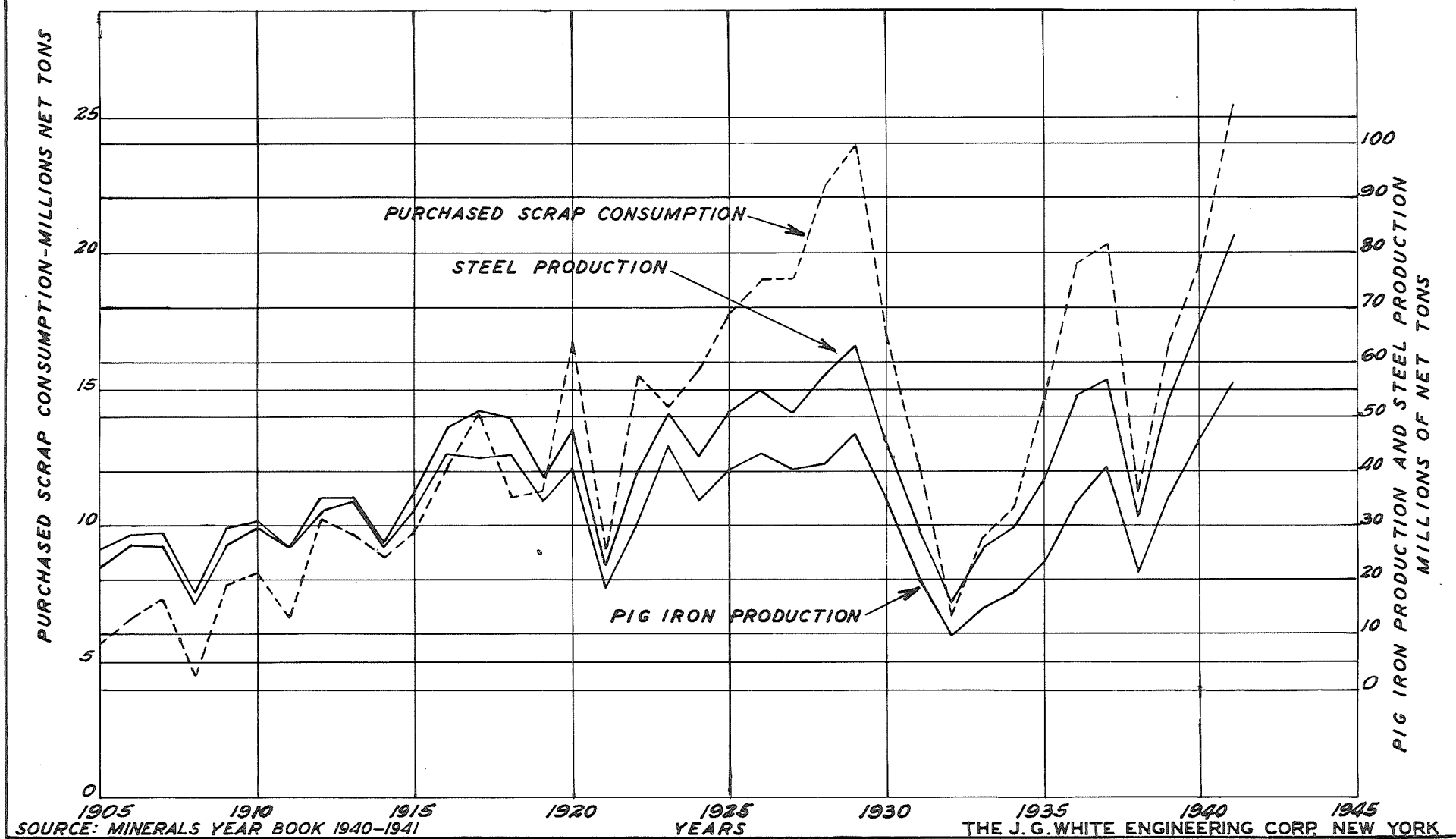


SOURCE:- MINNESOTA INTERIM COMMISSION REPORT  
ON IRON ORE TAXATION

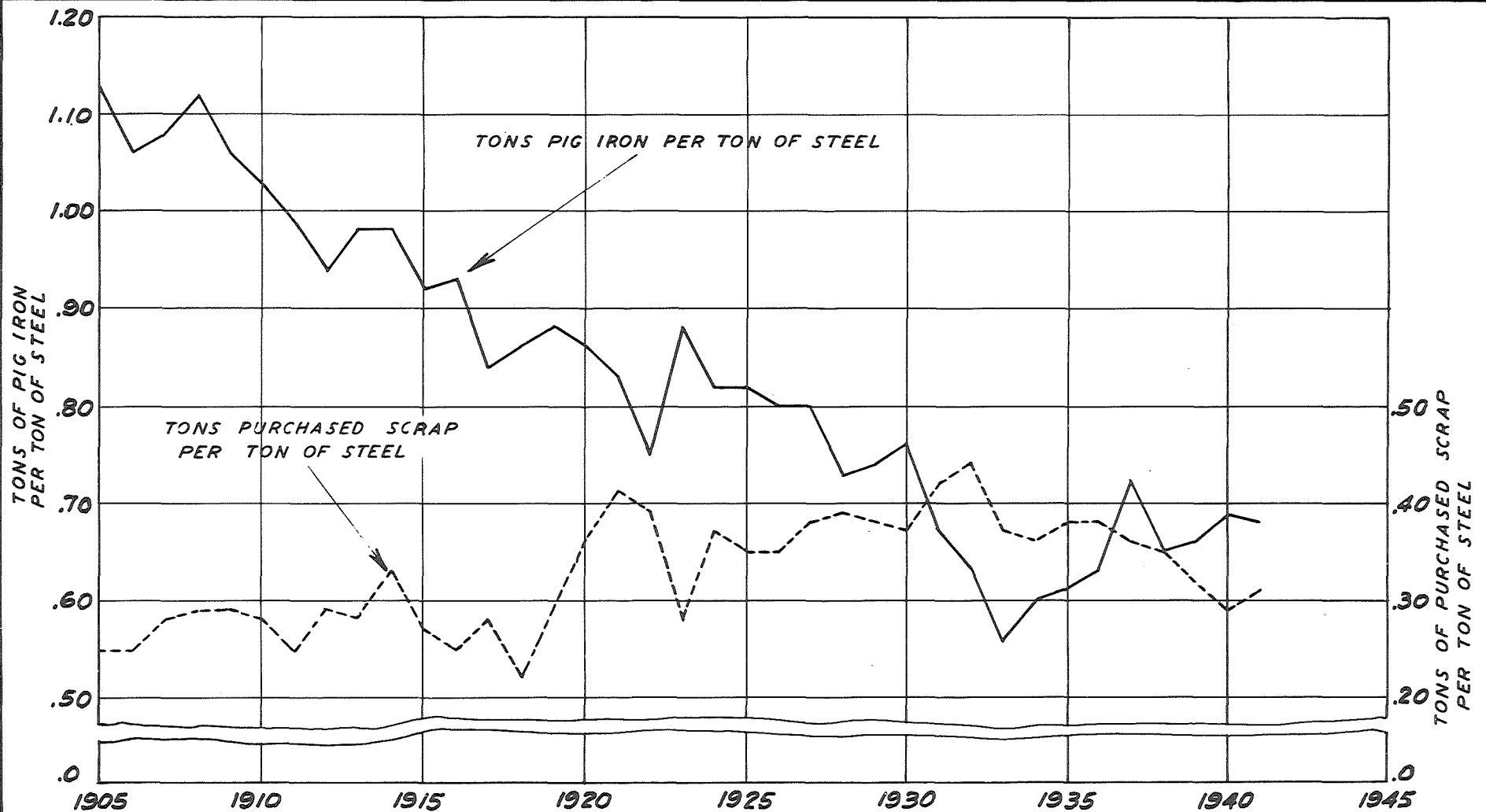
THE J.G. WHITE ENGINEERING CORP. NEW YORK

EXHIBIT NO. III-C-15

# UNITED STATES TONNAGE OF STEEL AND PIG IRON PRODUCTION AND PURCHASED SCRAP CONSUMPTION 1905-1941



# TONNAGES OF PIG IRON AND OF PURCHASED SCRAP USED PER TON OF STEEL PRODUCED 1905-1941



SOURCE:- DERIVED FROM MINERALS YEAR BOOK  
1940-1941

THE J.G.WHITE ENGINEERING CORP. NEW YORK

TOTAL TAXES AND TOTAL AD VALOREM TAXES  
LEVIED ON THE MINING INDUSTRY IN MINNESOTA  
1914-1943

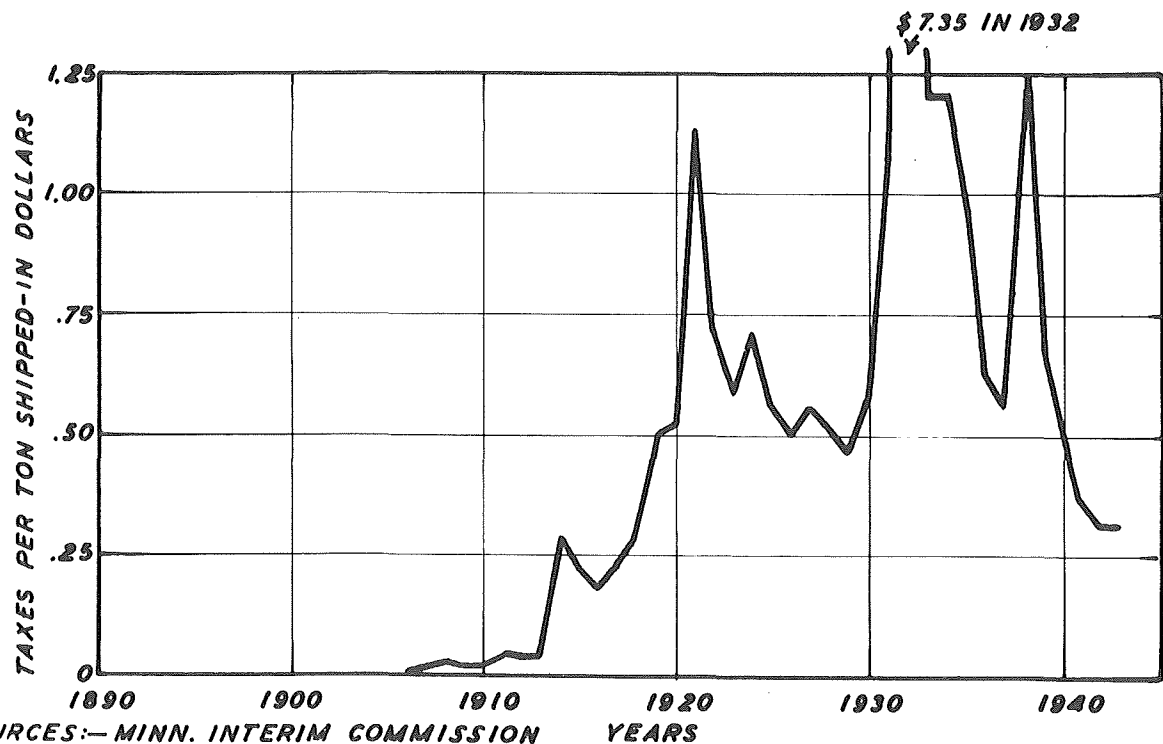
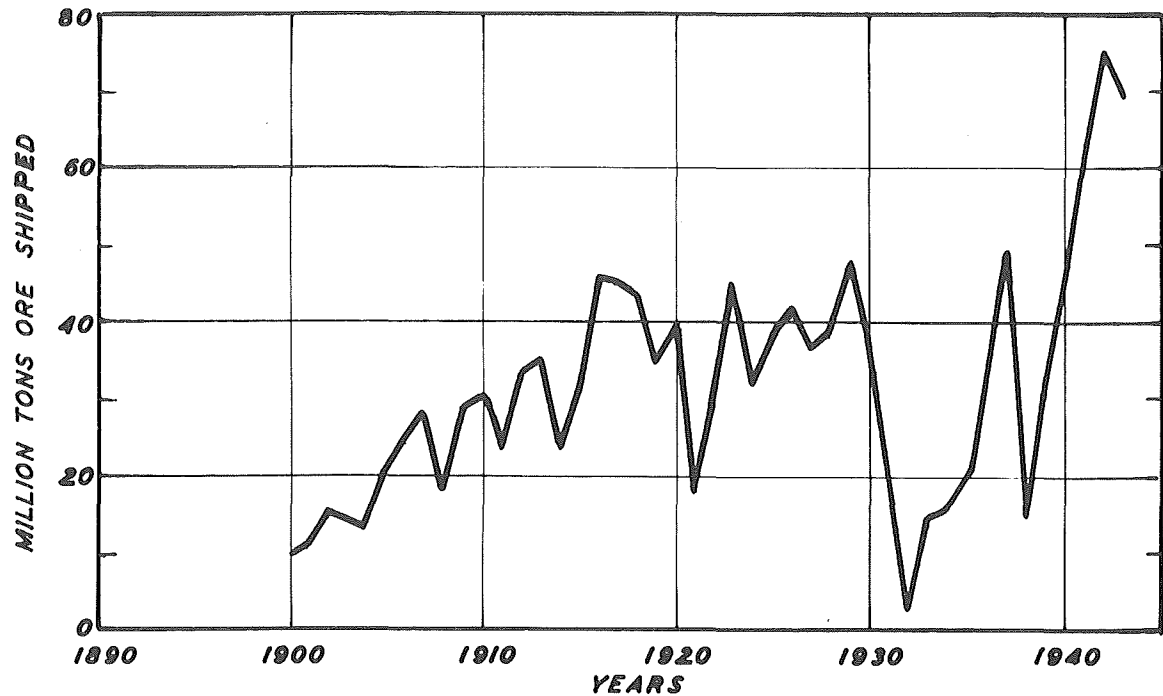
| <u>Year</u> | <u>Total<br/>Ad Valorem<br/>Taxes</u> | <u>Total<br/>Taxes</u> |
|-------------|---------------------------------------|------------------------|
| 1914        | \$ 6,724,477                          | \$ 6,724,477           |
| 1915        | 7,210,725                             | 7,210,725              |
| 1916        | 8,260,260                             | 8,260,260              |
| 1917        | 10,389,107                            | 10,389,107             |
| 1918        | 13,102,493                            | 13,102,493             |
| 1919        | 17,576,047                            | 17,576,047             |
| 1920        | 20,840,227                            | 20,840,227             |
| 1921        | 18,185,156                            | 20,423,484             |
| 1922        | 18,411,500                            | 21,852,097             |
| 1923        | 19,655,268                            | 26,809,558             |
| 1924        | 18,736,356                            | 22,491,916             |
| 1925        | 18,570,829                            | 21,732,333             |
| 1926        | 17,267,679                            | 20,903,627             |
| 1927        | 17,342,382                            | 20,442,515             |
| 1928        | 16,844,349                            | 20,190,126             |
| 1929        | 17,251,700                            | 22,082,748             |
| 1930        | 17,085,645                            | 20,789,173             |
| 1931        | 16,617,217                            | 18,650,166             |
| 1932        | 15,857,490                            | 16,533,887             |
| 1933        | 16,582,129                            | 17,876,117             |
| 1934        | 17,666,132                            | 19,258,887             |
| 1935        | 17,323,829                            | 19,171,326             |
| 1936        | 18,012,178                            | 21,197,203             |
| 1937        | 17,269,566                            | 27,608,881             |
| 1938        | 16,255,212                            | 18,481,639             |
| 1939        | 16,431,322                            | 22,186,212             |
| 1940        | 15,579,856                            | 23,075,482             |
| 1941        | 14,564,253                            | 24,787,232             |
| 1942        | 13,244,037                            | 23,639,742             |
| 1943        | 13,300,103                            | 21,939,786*            |
| Total       | <u>\$472,157,524</u>                  | <u>\$576,227,473*</u>  |

\*Estimate

Source: Minnesota Department of Taxation



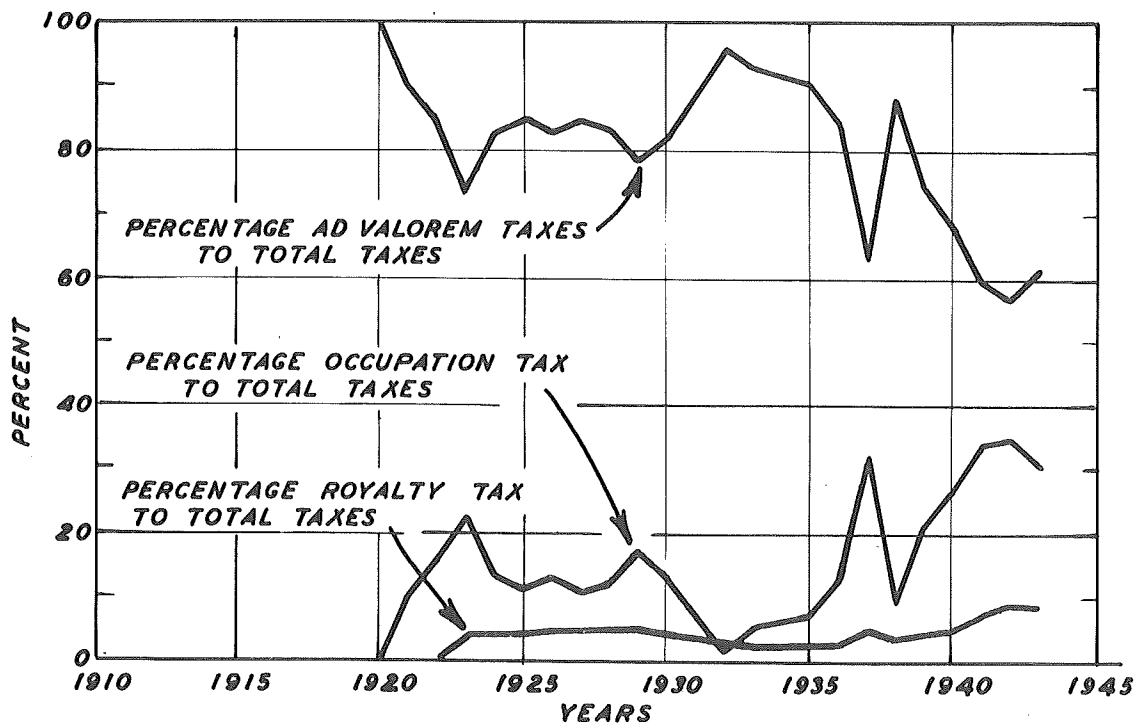
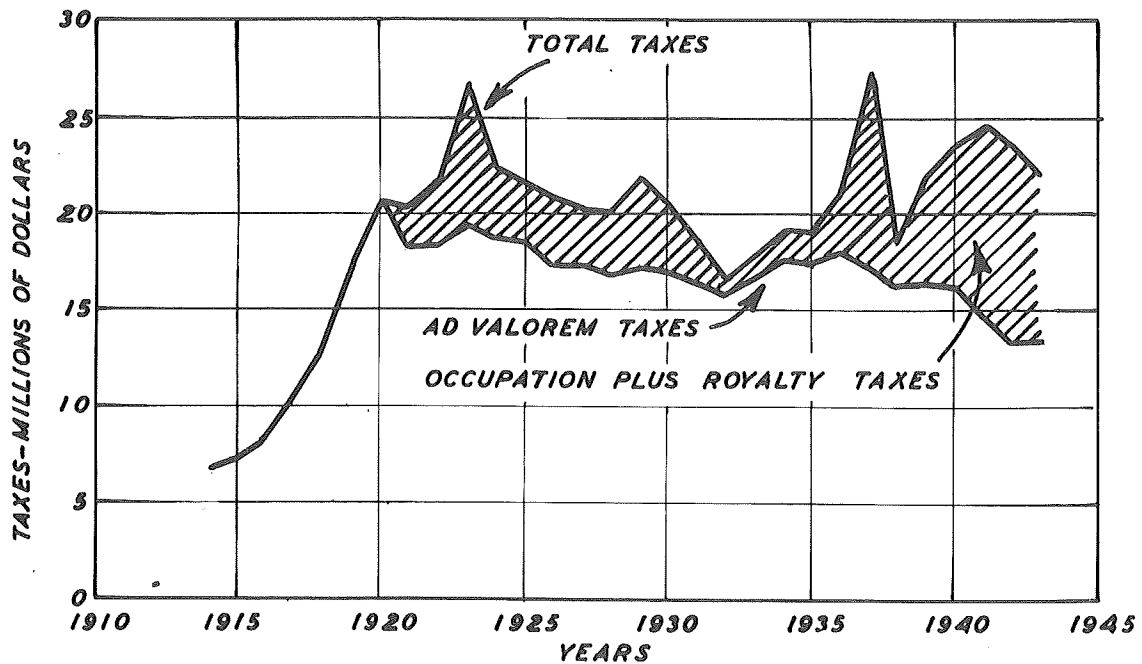
**TOTAL MINNESOTA TAXES PER TON OF IRON ORE SHIPPED, INCLUDES OCCUPATION AND ROYALTY TAXES AND STATE, COUNTY AND LOCAL AD VALOREM TAXES. 1906-1943, WITH COMPARISON WITH TONNAGE SHIPPED.**



SOURCES:—MINN. INTERIM COMMISSION REPORT ON IRON ORE TAXATION.—MINN. TAX COMMISSION REPORTS.—MINING DIRECTORY OF MINN. 1944.

THE J.G. WHITE ENGINEERING CORP. NEW YORK

# DISTRIBUTION OF TAXES PAID BY THE MINING INDUSTRY IN MINNESOTA, WITH PERCENTAGE DISTRIBUTION, 1920-1943



SOURCE:—MINNESOTA TAX COMMISSION REPORTS  
& MINING DIRECTORY OF MINNESOTA, 1944

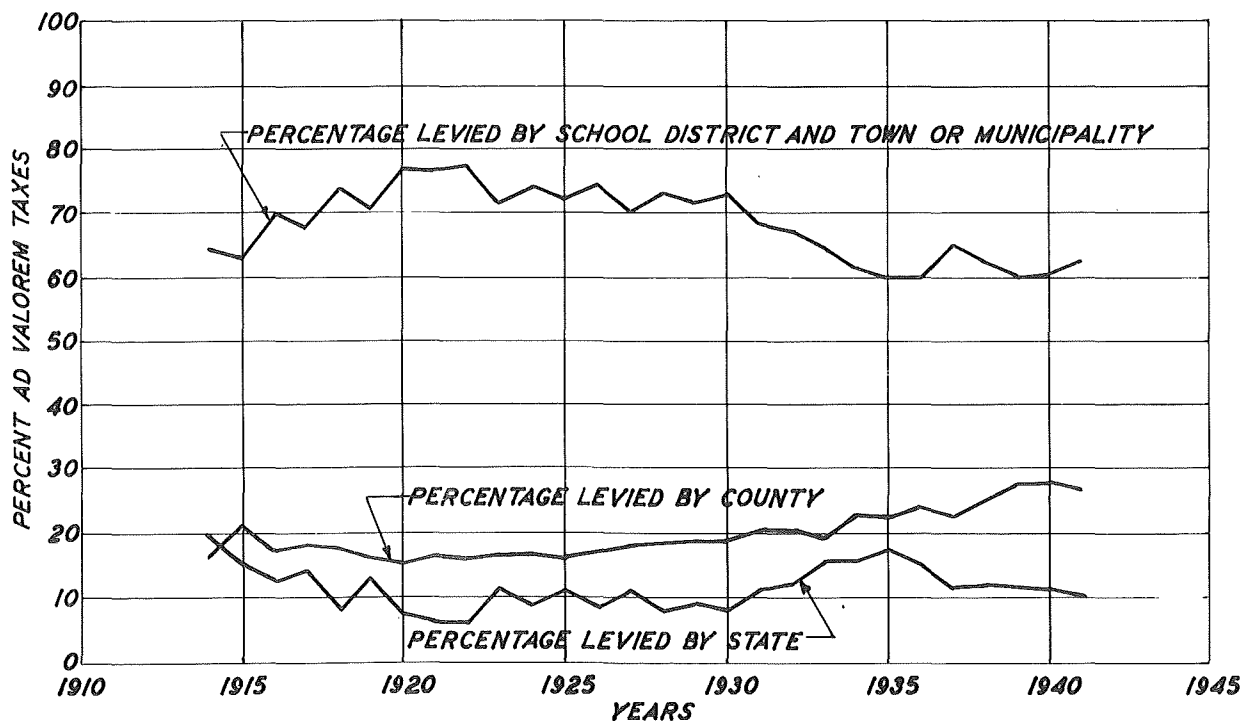
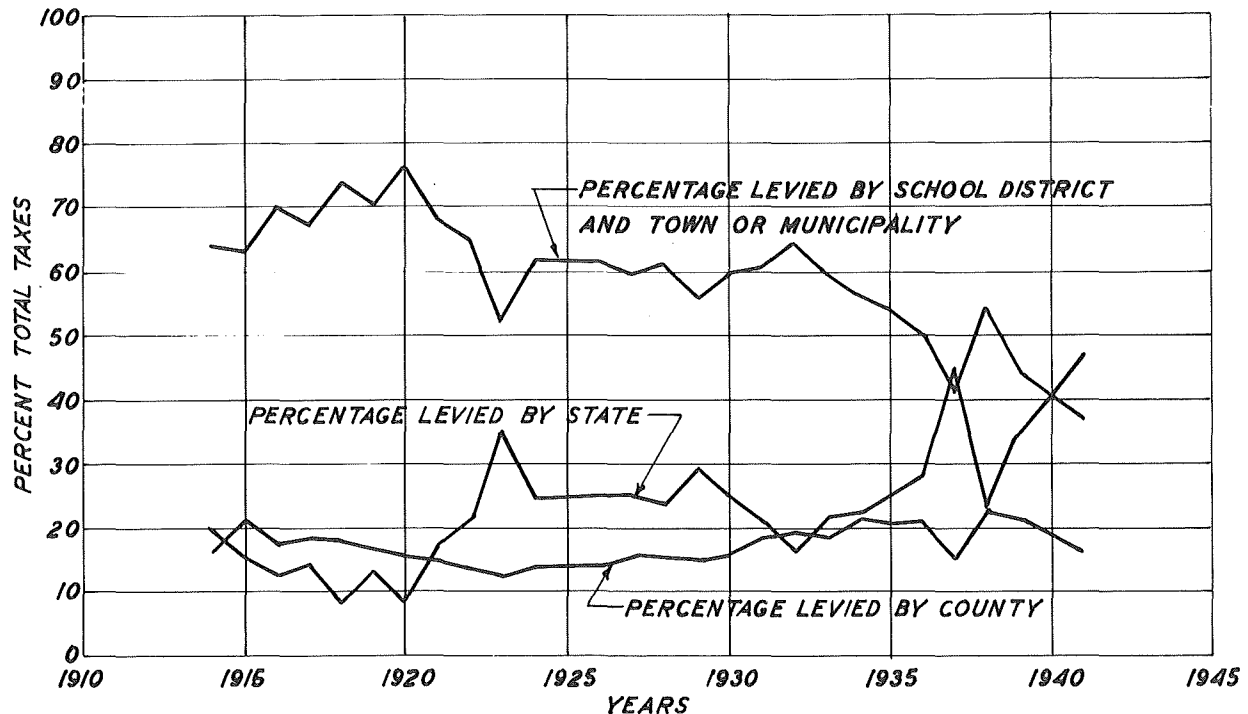
THE J.G. WHITE ENGINEERING CORP. NEW YORK

ASSESSED VALUATIONS AND TONNAGES OF IRON ORE RESERVES IN  
THE MESABI AND VERMILION RANGES IN MINNESOTA  
1907-1938

| <u>Year</u> | <u>Remaining<br/>Tonnage</u> | <u>Assessed<br/>Value<br/>Class 1,<br/>Unmined<br/>Iron Ore</u> |
|-------------|------------------------------|-----------------------------------------------------------------|
| 1907        | 1,191,969,757                | \$186,085,290                                                   |
| 1908        | 1,193,188,959                | 174,263,632                                                     |
| 1909        | 1,310,190,194                | 199,008,838                                                     |
| 1910        | 1,347,596,291                | 220,423,038                                                     |
| 1911        | 1,367,457,803                | 231,617,049                                                     |
| 1912        | 1,401,340,743                | 254,002,774                                                     |
| 1913        | 1,406,499,614                | 254,581,598                                                     |
| 1914        | 1,397,717,105                | 263,040,232                                                     |
| 1915        | 1,392,969,927                | 261,456,295                                                     |
| 1916        | 1,388,762,461                | 267,855,425                                                     |
| 1917        | 1,386,291,353                | 284,510,127                                                     |
| 1918        | 1,368,196,337                | 286,523,372                                                     |
| 1919        | 1,336,094,811                | 276,546,189                                                     |
| 1920        | 1,310,927,426                | 281,512,735                                                     |
| 1921        | 1,281,084,763                | 273,632,944                                                     |
| 1922        | 1,262,289,321                | 269,309,604                                                     |
| 1923        | 1,264,302,228                | 273,171,117                                                     |
| 1924        | 1,284,081,081                | 278,857,139                                                     |
| 1925        | 1,258,896,604                | 267,739,871                                                     |
| 1926        | 1,241,807,067                | 258,564,549                                                     |
| 1927        | 1,209,528,099                | 245,989,566                                                     |
| 1928        | 1,201,006,738                | 241,945,971                                                     |
| 1929        | 1,188,446,649                | 237,439,267                                                     |
| 1930        | 1,161,908,611                | 228,798,977                                                     |
| 1931        | 1,170,063,319                | 225,761,936                                                     |
| 1932        | 1,197,737,550                | 225,755,971                                                     |
| 1933        | 1,209,908,802                | 226,334,921                                                     |
| 1934        | 1,197,704,313                | 221,293,698                                                     |
| 1935        | 1,176,394,488                | 214,865,318                                                     |
| 1936        | 1,177,877,456                | 213,864,761                                                     |
| 1937        | 1,187,051,701                | 211,750,368                                                     |
| 1938        | 1,165,091,793                | 188,691,778                                                     |
| 1939        | 1,146,144,832                | 185,505,422                                                     |

Source: Report of the Department of Taxation - 1940.

PERCENTAGES OF TOTAL TAXES AND OF AD VALOREM  
TAXES LEVIED ON THE MINING INDUSTRY  
IN MINNESOTA BY THE STATE, COUNTIES AND  
LOCAL SUB-DIVISIONS  
1914-1941



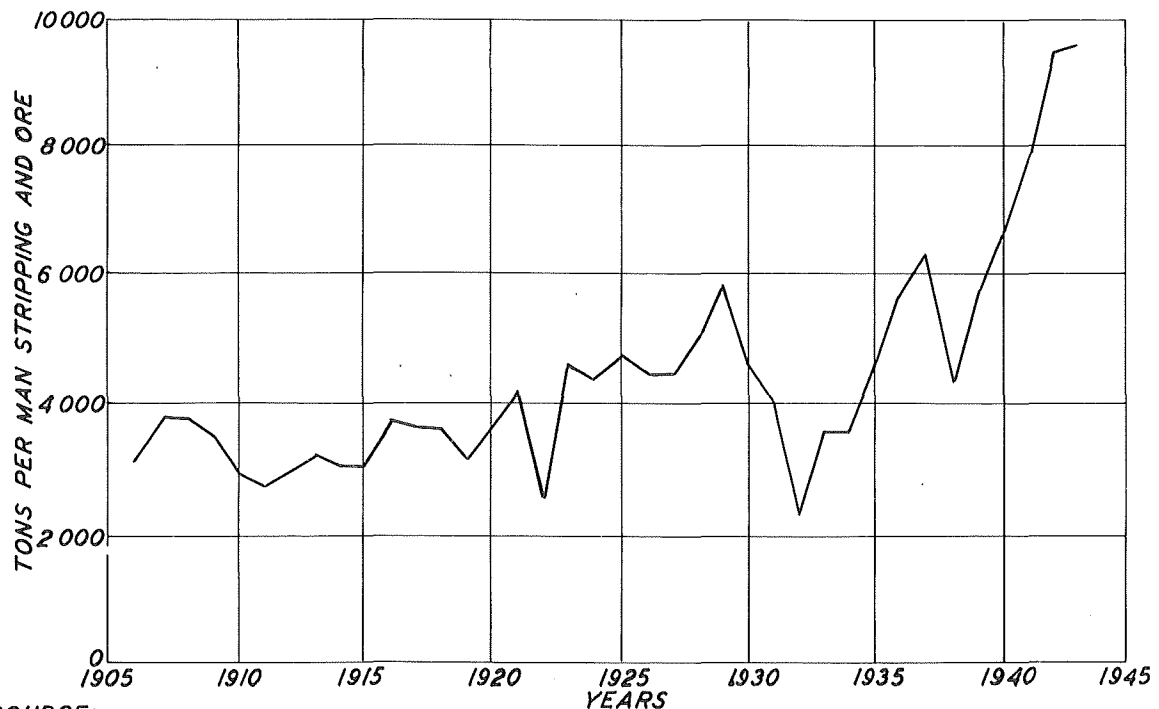
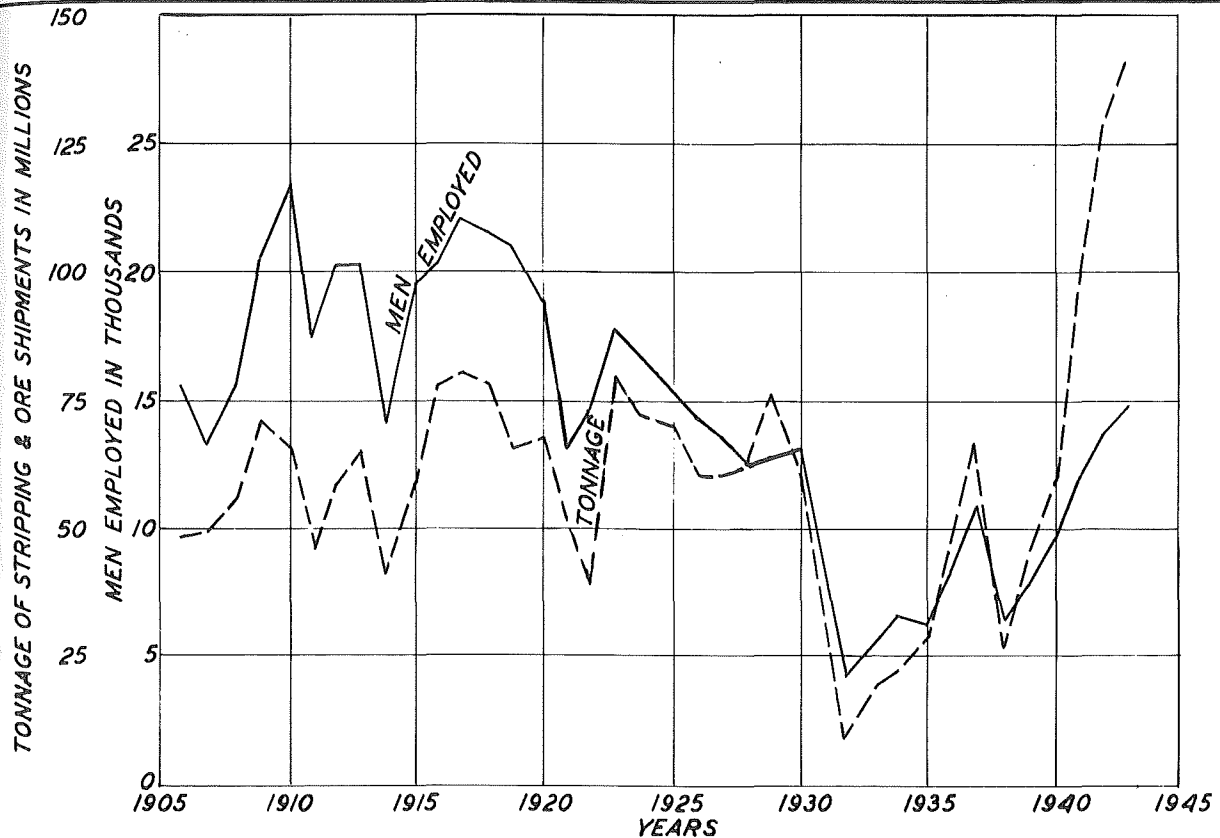
SOURCE: STATE TAX COMMISSION REPORTS

THE J.G. WHITE ENGINEERING CORP. NEW YORK

TAX HISTORY - CITY OF EVELETH  
(SCHOOL DISTRICT NO. 39)  
1934-1943

| Year | Value        | City<br>Taxes | Mills | School<br>Taxes | Mills | County<br>Taxes | Mills | State<br>Taxes | Mills | Total       | Mill<br>Rate |
|------|--------------|---------------|-------|-----------------|-------|-----------------|-------|----------------|-------|-------------|--------------|
| 1934 | \$12,431,590 | \$538,287     | 43.3  | \$464,941       | 37.4  | \$213,201       | 17.15 | \$148,557      | 11.95 | \$1,364,988 | 109.8        |
| 1935 | \$11,768,341 | \$533,105     |       | \$418,952       |       | \$199,238       |       | \$159,696      |       | \$1,310,993 | 111.4        |
| 1936 | \$11,512,214 | \$527,259     |       | \$463,942       |       | \$218,156       |       | \$143,327      |       | \$1,352,685 | 117.5        |
| 1937 | \$10,587,621 | \$524,087     |       | \$460,561       |       | \$200,106       |       | \$105,531      |       | \$1,290,286 | 121.9        |
| 1938 | \$ 9,706,853 | \$523,199     |       | \$457,192       |       | \$186,371       |       | \$ 95,938      |       | \$1,262,701 | 130.2        |
| 1939 | \$ 9,311,414 | \$523,301     |       | \$458,121       |       | \$208,575       |       | \$ 91,857      |       | \$1,281,856 | 137.8        |
| 1940 | \$ 8,610,556 | \$528,688     |       | \$443,443       |       | \$192,876       |       | \$ 84,104      |       | \$1,249,112 | 145          |
| 1941 | \$ 8,105,830 | \$481,486     |       | \$375,299       |       | \$181,570       |       | \$ 70,949      |       | \$1,109,306 | 137          |
| 1942 | \$ 7,247,990 | \$481,483     |       | \$355,151       |       | \$149,091       |       | \$ 63,412      |       | \$1,049,139 | 145          |
| 1943 | \$ 6,238,330 | \$484,406     | 77.65 | \$331,255       | 53.1  | \$135,059       | 21.65 | \$ 32,642      | 5.40  | \$ 983,364  | 157.8        |

COMBINED ANNUAL TONNAGES OF STRIPPING AND ORE SHIPMENTS,  
NUMBER OF MEN EMPLOYED AND COMBINED TONNAGE PER MAN PER  
YEAR IN MINNESOTA'S IRON MINING INDUSTRY, 1906-1943

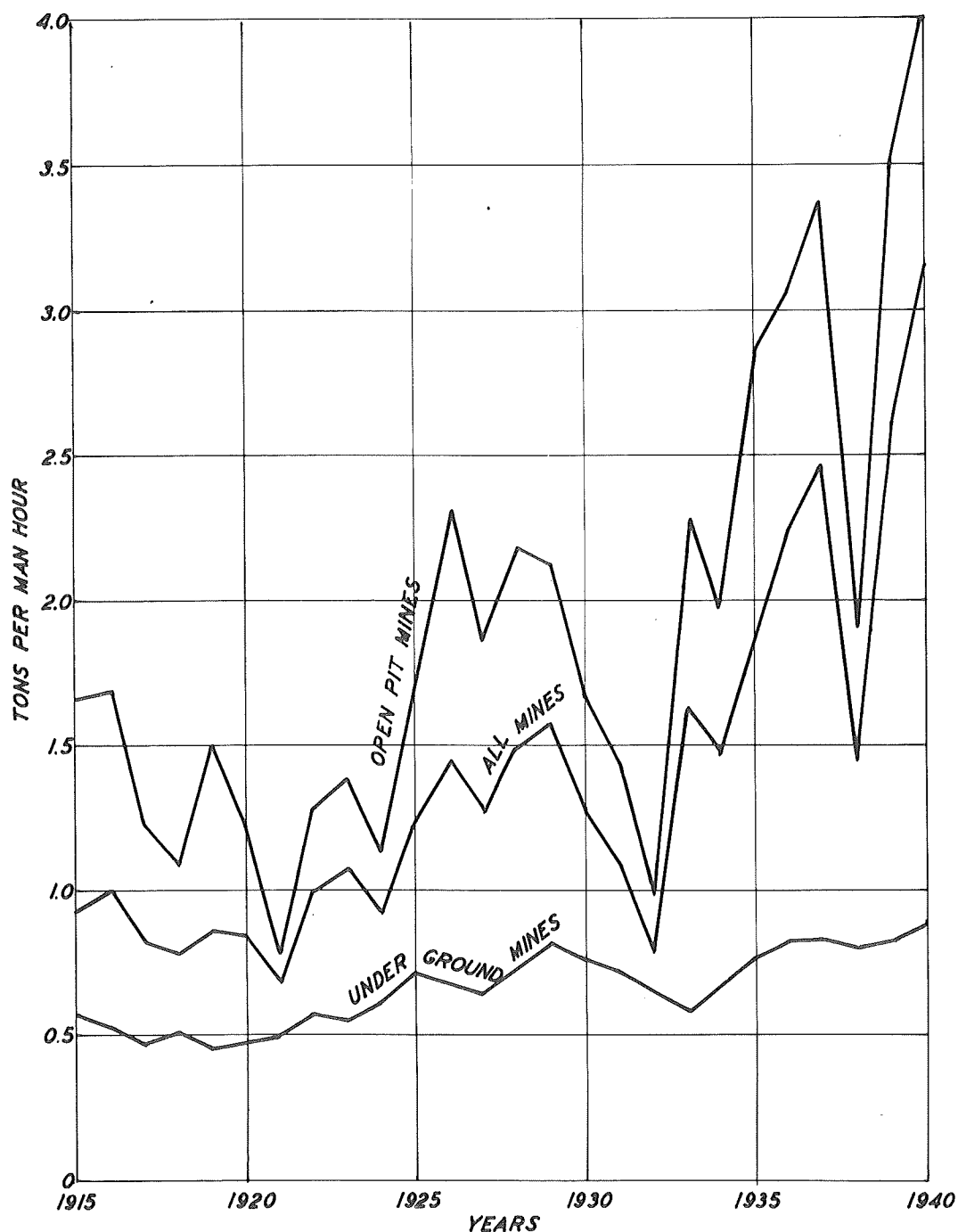


SOURCE: MINNESOTA INDUSTRIAL COMMISSION  
11TH BIENNIAL REPORT

THE J.G. WHITE ENGINEERING CORP. NEW YORK



# EMPLOYMENT IN MINNESOTA IRON MINES TONS PER MAN-HOUR FOR ALL MINES, OPEN PIT MINES AND UNDERGROUND MINES, 1915 - 1940



SOURCE:— MINERALS YEAR BOOK 1941 AND  
"TECHNOLOGY, EMPLOYMENT AND  
OUTPUT PER MAN IN IRON MINING."

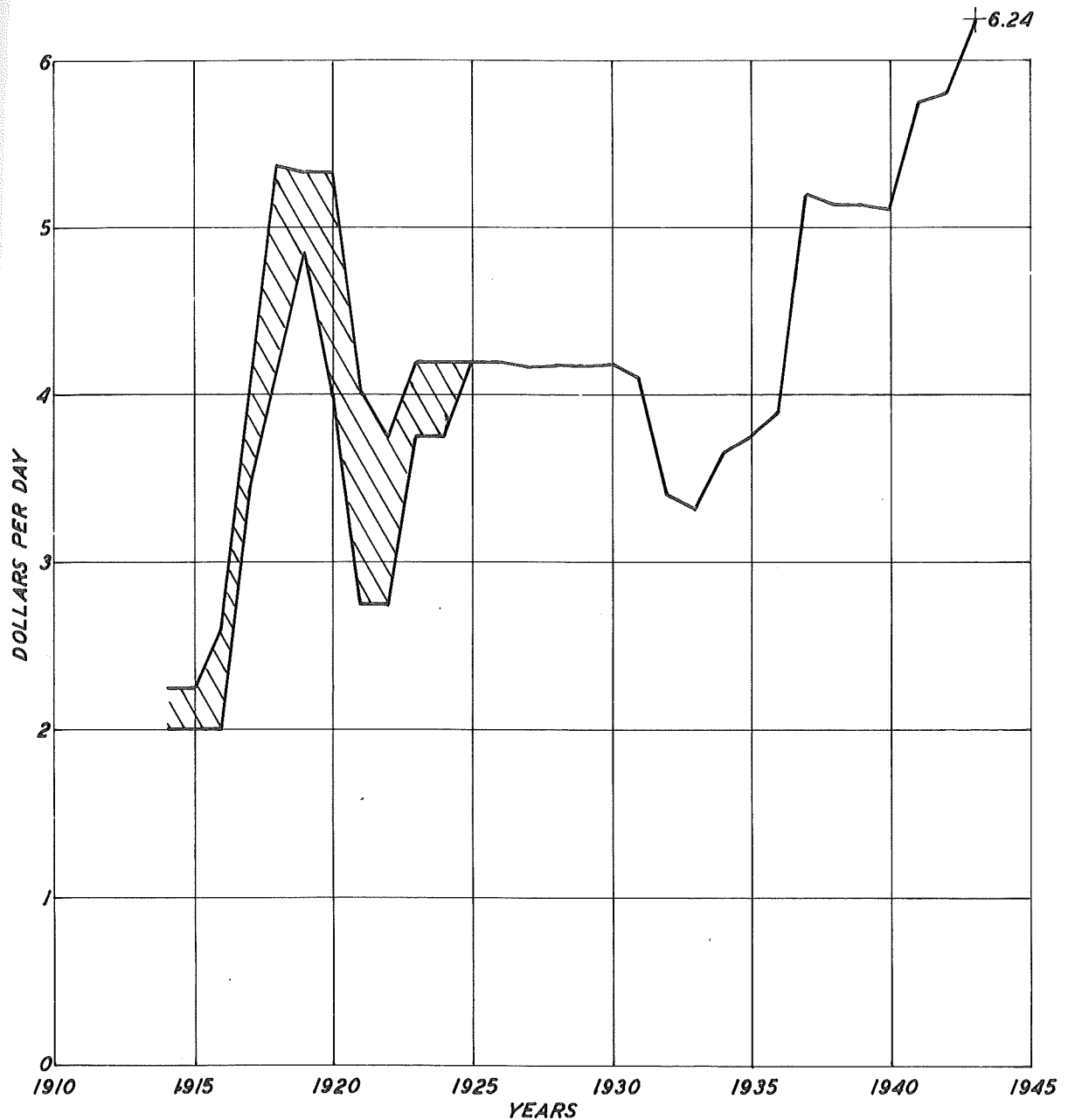
MINING COSTS IN MINNESOTA IRON MINING INDUSTRY  
INCLUDING LABOR, DEVELOPMENT, ROYALTY, TAXES  
AND OTHER COSTS. 1923-1941

| Year              | LABOR MINING COSTS                  |                       |                                      | DEVELOPMENT COSTS     |                                                                | MISC. ITEMS OF COST   |                                                                |                                                                            | Total Costs<br>of Develop.<br>Royalty, &<br>Other Costs<br>Except<br>Taxes<br>Million<br>Dollars | Approx.<br>Total Costs<br>of Ad Valorem<br>Occupation &<br>Royalty Taxes<br>Million<br>Dollars |
|-------------------|-------------------------------------|-----------------------|--------------------------------------|-----------------------|----------------------------------------------------------------|-----------------------|----------------------------------------------------------------|----------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
|                   | Tonnage<br>Mined<br>Million<br>Tons | Average<br>Per<br>Ton | Total<br>Million<br>Dollars<br>(2x3) | Average<br>Per<br>Ton | Estimated<br>Total<br>Labor<br>Million<br>Dollars<br>(2x5x50%) | Average<br>Per<br>Ton | Estimated<br>Total<br>Labor<br>Million<br>Dollars<br>(2x7x30%) | Estimated<br>Total<br>Wages &<br>Salaries<br>Million<br>Dollars<br>(4+6+8) |                                                                                                  |                                                                                                |
| 1923              | 44.8                                | \$0.362               | \$ 16.25                             | \$0.247               | \$ 5.59                                                        | \$0.141               | \$ 1.89                                                        | \$ 23.73                                                                   | \$ 64.7                                                                                          | \$ 26.8                                                                                        |
| 1924              | 32.4                                | 0.471*                | 15.25                                | 0.240                 | 3.89                                                           | 0.153                 | 1.49                                                           | 20.63                                                                      | 51.6                                                                                             | 22.5                                                                                           |
| 1925              | 37.6                                | 0.392                 | 14.73                                | 0.236                 | 4.44                                                           | 0.181                 | 2.04                                                           | 21.21                                                                      | 56.3                                                                                             | 21.7                                                                                           |
| 1926              | 41.6                                | 0.335                 | 13.94                                | 0.239                 | 4.97                                                           | 0.154                 | 1.92                                                           | 20.83                                                                      | 57.3                                                                                             | 20.9                                                                                           |
| 1927              | 36.5                                | 0.345                 | 12.59                                | 0.251                 | 4.58                                                           | 0.178                 | 1.95                                                           | 19.12                                                                      | 52.4                                                                                             | 20.4                                                                                           |
| 1928              | 38.5                                | 0.299                 | 11.50                                | 0.228                 | 4.39                                                           | 0.147                 | 1.70                                                           | 17.59                                                                      | 50.6                                                                                             | 20.2                                                                                           |
| 1929              | 46.9                                | 0.257                 | 12.05                                | 0.220                 | 5.16                                                           | 0.128                 | 1.80                                                           | 19.01                                                                      | 57.9                                                                                             | 22.1                                                                                           |
| 1930              | 36.2                                | 0.297                 | 10.75                                | 0.217                 | 3.92                                                           | 0.166                 | 1.80                                                           | 16.47                                                                      | 47.9                                                                                             | 20.8                                                                                           |
| 1931              | 18.4                                | 0.307                 | 5.65                                 | 0.191                 | 1.76                                                           | 0.246                 | 1.36                                                           | 8.77                                                                       | 25.3                                                                                             | 18.7                                                                                           |
| 1932              | 5.5                                 | 0.337                 | 1.85                                 | 0.258                 | 0.71                                                           | 0.444                 | 0.73                                                           | 3.29                                                                       | 9.9                                                                                              | 16.6                                                                                           |
| 1933              | 12.6                                | 0.187                 | 2.36                                 | 0.241                 | 1.52                                                           | 0.245                 | 0.93                                                           | 4.81                                                                       | 15.6                                                                                             | 17.9                                                                                           |
| 1934              | 16.2                                | 0.276                 | 4.47                                 | 0.197                 | 1.60                                                           | 0.194                 | 0.94                                                           | 7.01                                                                       | 20.3                                                                                             | 19.3                                                                                           |
| 1935              | 19.9                                | 0.279                 | 5.55                                 | 0.208                 | 2.07                                                           | 0.164                 | 0.98                                                           | 8.60                                                                       | 24.8                                                                                             | 19.2                                                                                           |
| 1936              | 32.5                                | 0.230                 | 7.48                                 | 0.206                 | 3.35                                                           | 0.207                 | 2.02                                                           | 12.85                                                                      | 39.7                                                                                             | 21.2                                                                                           |
| 1937              | 49.6                                | 0.264                 | 13.10                                | 0.220                 | 5.46                                                           | 0.166                 | 2.47                                                           | 21.03                                                                      | 60.3                                                                                             | 27.6                                                                                           |
| 1938              | 14.7                                | 0.409                 | 6.02                                 | 0.186                 | 1.37                                                           | 0.407                 | 1.80                                                           | 9.19                                                                       | 24.2                                                                                             | 18.5                                                                                           |
| 1939              | 31.8                                | 0.241                 | 7.67                                 | 0.215                 | 3.42                                                           | 0.258                 | 2.47                                                           | 13.56                                                                      | 41.8                                                                                             | 22.2                                                                                           |
| 1940              | 48.3                                | 0.183                 | 8.85                                 | 0.201                 | 4.87                                                           | 0.212                 | 3.07                                                           | 16.79                                                                      | 54.8                                                                                             | 23.1                                                                                           |
| 1941              | 63.7                                | 0.207                 | 13.18                                | 0.206                 | 6.56                                                           | 0.162                 | 3.09                                                           | 22.83                                                                      | 72.0                                                                                             | 24.8                                                                                           |
| Totals            | 627.7                               |                       | \$183.24                             |                       | \$69.63                                                        |                       | \$34.45                                                        | \$287.32                                                                   | \$827.4                                                                                          | \$404.5                                                                                        |
| Av. for<br>Period | 33.0                                | \$0.299               | \$ 9.65                              | \$0.221               | \$ 3.66                                                        | \$0.208               | \$ 1.81                                                        | \$ 15.12                                                                   | \$ 43.5                                                                                          | \$ 21.3                                                                                        |

Source: State Department of Taxation Reports, Table 11, page 89 of 1942 Report and page 125 of 1938 Report.

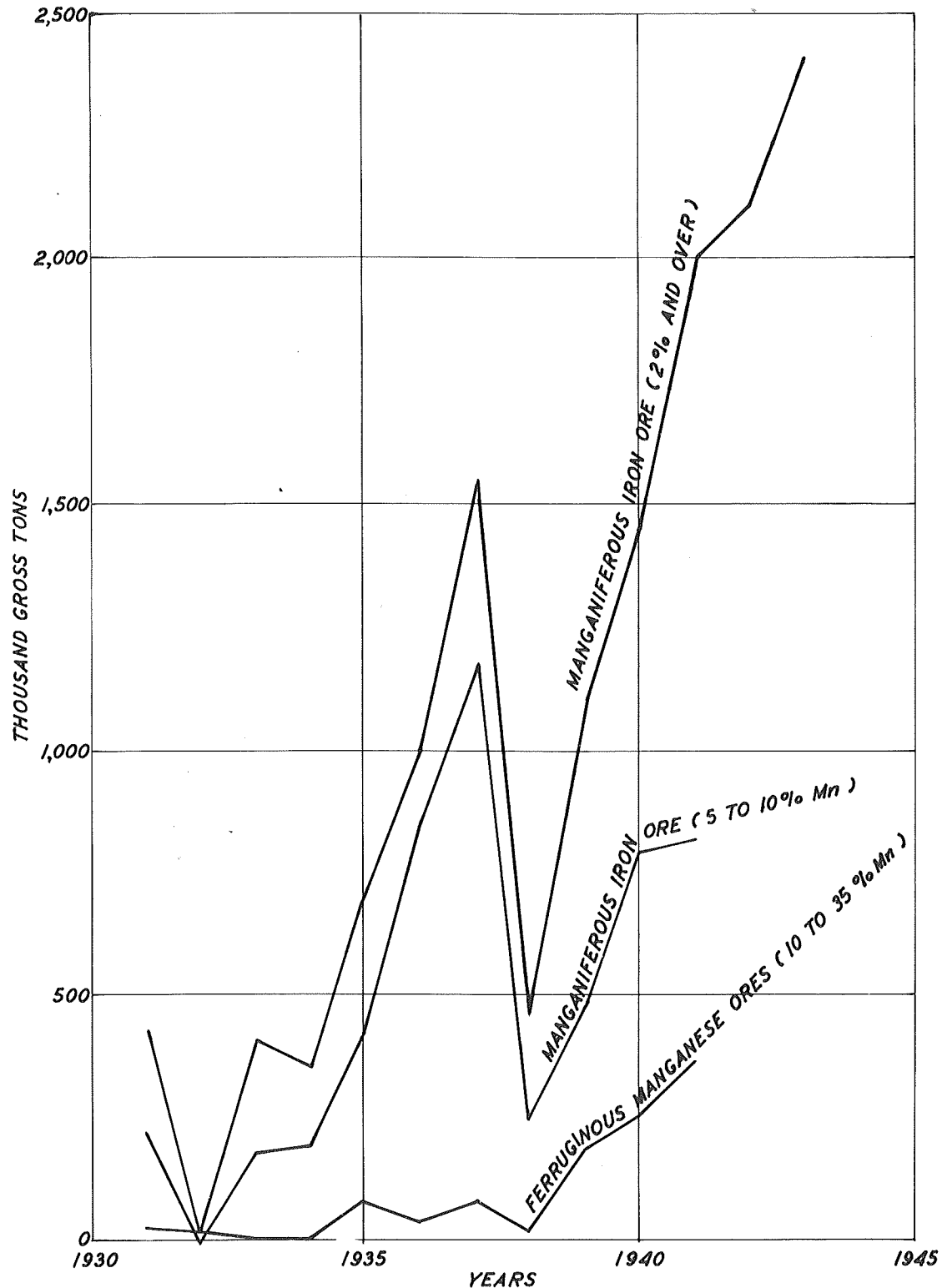
\* Includes costs on 1,745,000 tons of high cost ore not subject to tax.

**COST OF COMMON LABOR PER DAY  
IN SAINT LOUIS COUNTY, MINNESOTA  
1914-1943**



SOURCE:— MINING DIRECTORY OF  
MINNESOTA—1944

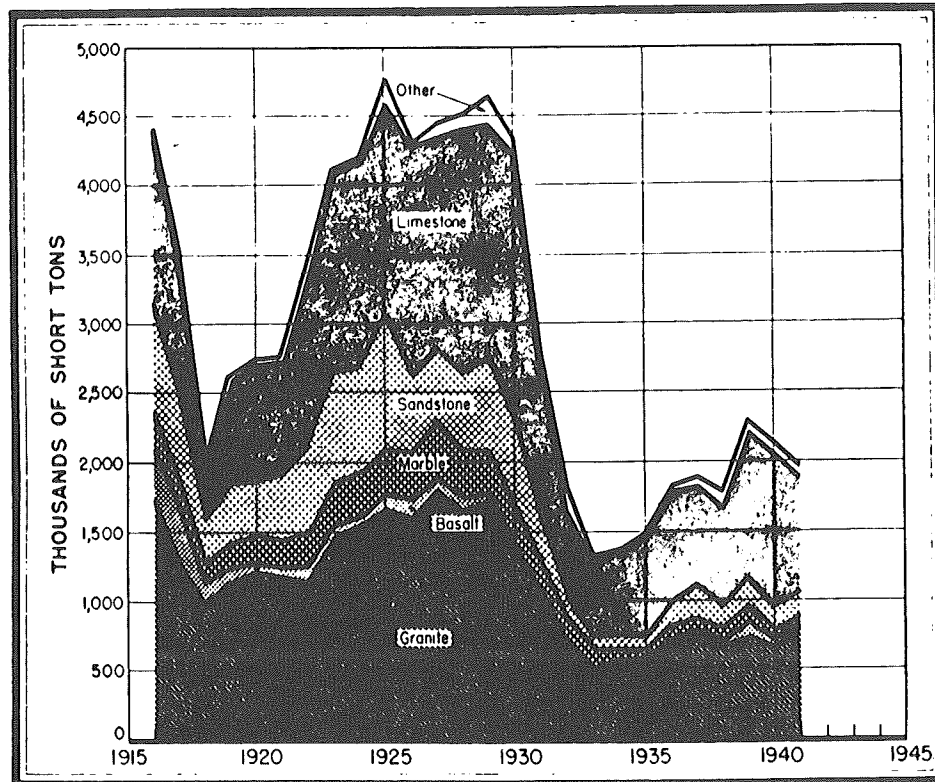
TONNAGES OF MANGANIFEROUS IRON ORE, CONTAINING  
5% TO 10% MANGANESE, AND OF FERRUGINOUS  
MANGANESE ORES, CONTAINING 10% TO 35%  
MANGANESE, SHIPPED FROM MINNESOTA  
1931-1941



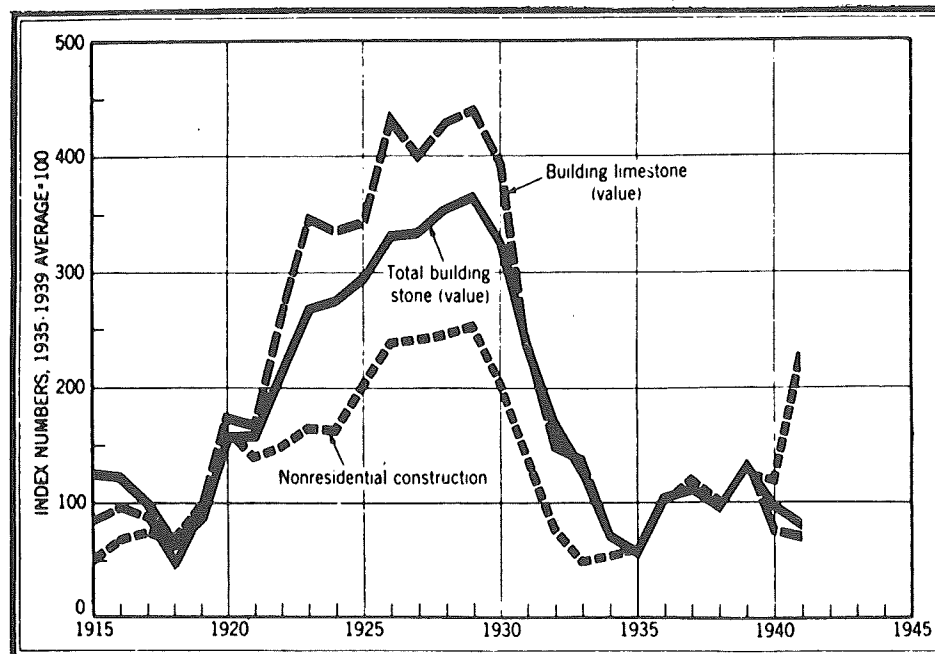
SOURCE:— U.S. BUREAU OF MINES

THE J. G. WHITE ENGINEERING CORP. NEW YORK

## SALES OF VARIOUS STONES IN THE UNITED STATES 1916 - 1941



Sales of dimension stone in the United States, by kinds, 1916-41.



Sales of all building stone and building limestone compared with nonresidential construction (public and private), 1915-41. Data on nonresidential building construction from Bureau of Foreign and Domestic Commerce.

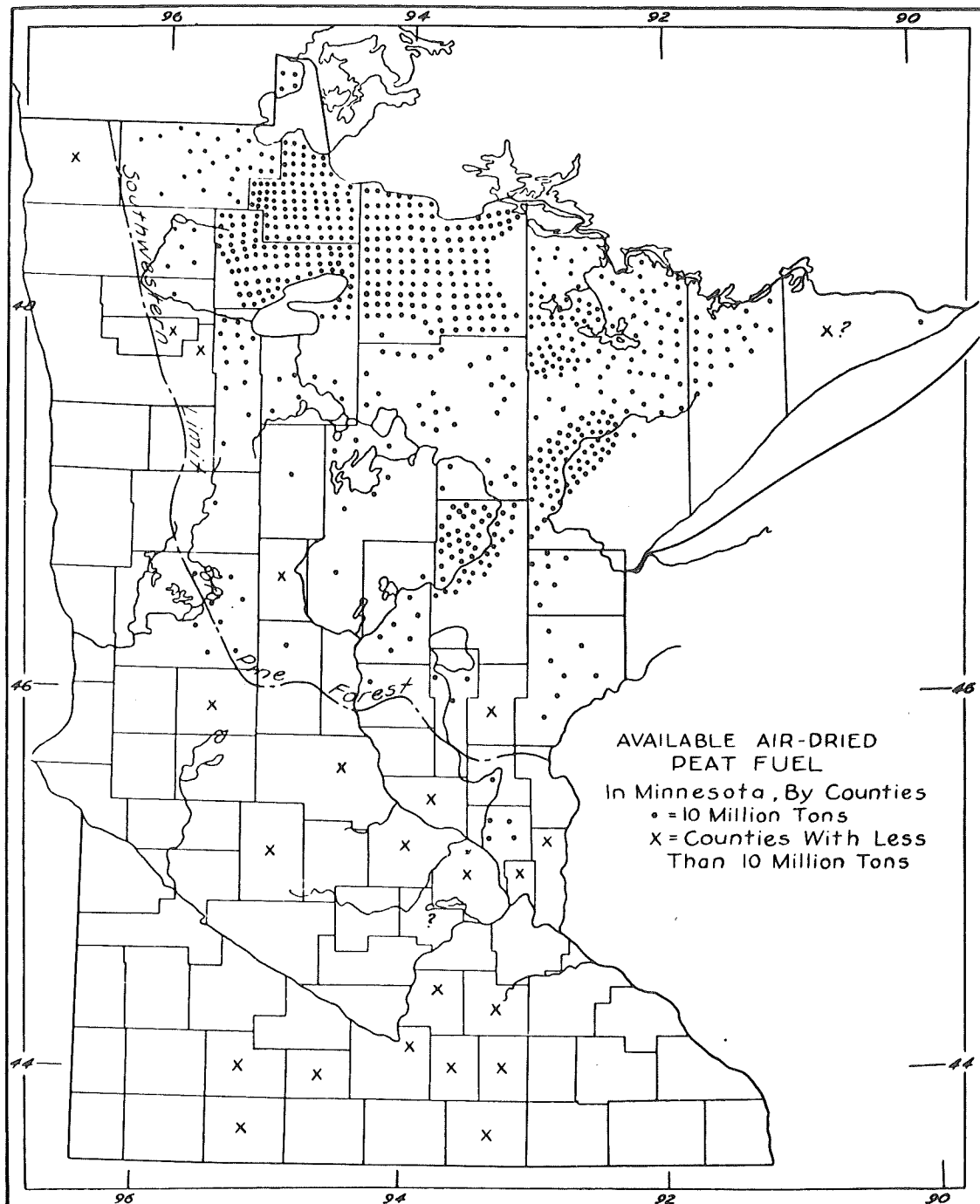
**SOURCE:**

1941 MINERALS YEARBOOK

THE J.G.WHITE ENGINEERING CORP. NEW YORK



# AVAILABLE AIR-DRIED PEAT FUEL IN MINNESOTA BY COUNTIES



**SOURCE:** MINNESOTA GEOLOGICAL SURVEY—  
BULLETIN 30, MINERAL RESOURCES OF MINNESOTA



TONNAGE OF PEAT PRODUCED IN THE UNITED STATES  
1917-1926 AND 1934-1942

| <u>Year</u> | <u>Short Tons</u> | <u>Value</u> |
|-------------|-------------------|--------------|
| 1917        | 97,363            | \$ 709,900   |
| 1918        | 107,261           | 1,047,243    |
| 1919        | 69,197            | 705,532      |
| 1920        | 73,204            | 921,732      |
| 1921        | 30,406            | 260,119      |
| 1922        | 60,680            | 397,729      |
| 1923        | 61,355            | 376,834      |
| 1924        | 55,469            | 395,470      |
| 1925        | 72,436            | 452,898      |
| 1926        | 61,936            | 364,413      |
|             |                   |              |
| 1934        | 40,544            | 214,185      |
| 1935        | 37,060            | 199,377      |
| 1936        | 46,126            | 266,883      |
| 1937        | 51,223            | 305,156      |
| 1938        | 45,933            | 286,127      |
| 1939        | 55,483            | 362,066      |
| 1940        | 70,097            | 516,865      |
| 1941        | 86,503            | 657,556      |

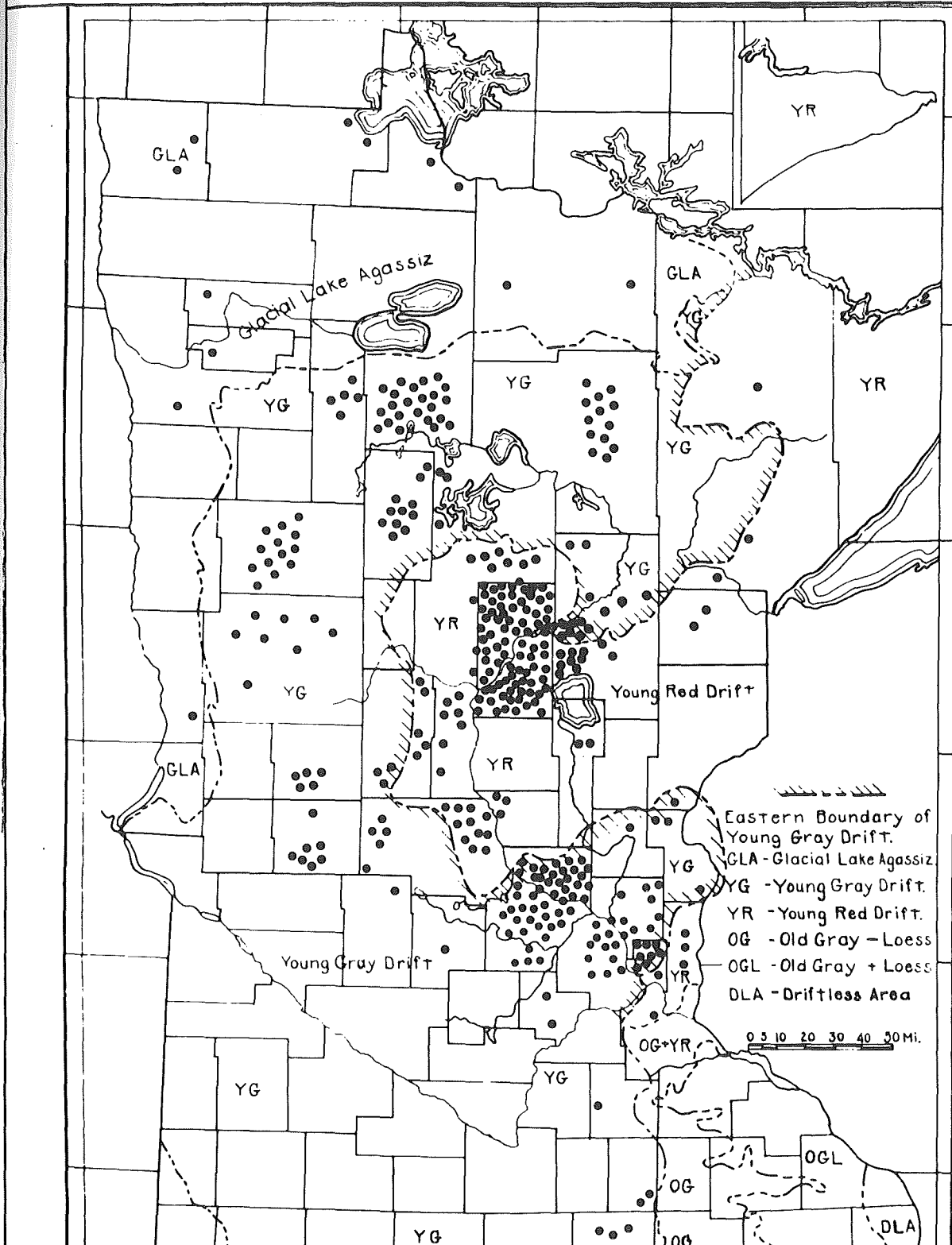
SOURCE:- 1941 MINERALS YEAR BOOK PAGE 1018

TONNAGE AND VALUE OF PEAT MOSS IMPORTED ANNUALLY  
INTO THE UNITED STATES 1919-1940

| <u>Year</u> | <u>Short Tons</u> | <u>Value</u> |
|-------------|-------------------|--------------|
| 1919        | 464               | \$ 16,345    |
| 1920        | 2,762             | 36,201       |
| 1921        | 3,450             | 22,754       |
| 1922        | 4,805             | 33,034       |
| 1923        | 5,973             | 43,184       |
| 1924        | 5,541             | 47,208       |
| 1925        | 10,233            | 121,719      |
| 1926        | 16,669            | 174,241      |
| 1927        | 31,595            | 326,549      |
| 1928        | 40,087            | 422,275      |
| 1929        | 57,531            | 657,145      |
| 1930        | 70,466            | 869,381      |
| 1931        | 63,928            | 682,553      |
| 1932        | 64,701            | 601,372      |
| 1933        | 41,217            | 442,766      |
| 1934        | 44,132            | 547,353      |
| 1935        | 54,547            | 677,513      |
| 1936        | 75,066            | 955,807      |
| 1937        | 86,871            | 1,219,127    |
| 1938        | 69,509            | 1,092,942    |
| 1939        | 78,611            | 1,204,883    |
| 1940        | 21,689            | 454,632      |

**SOURCES:—1938 MINERALS YEAR BOOK PAGE 665 AND  
1941 MINERALS YEAR BOOK PAGE 1019**

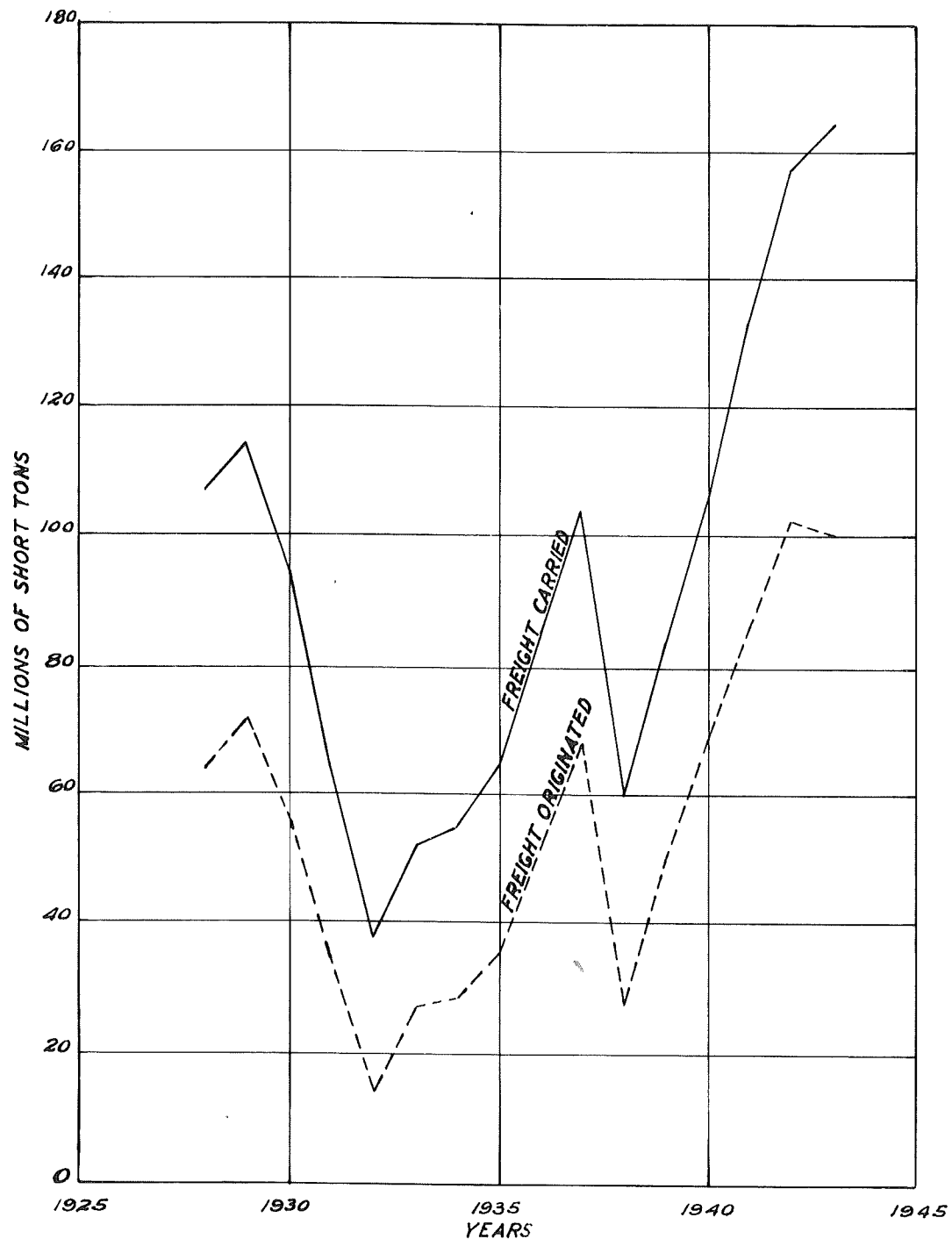
# DISTRIBUTION OF PRINCIPAL MARL DEPOSITS IN MINNESOTA AND THEIR RELATIONS TO DIFFERENT GLACIAL DRIFTS



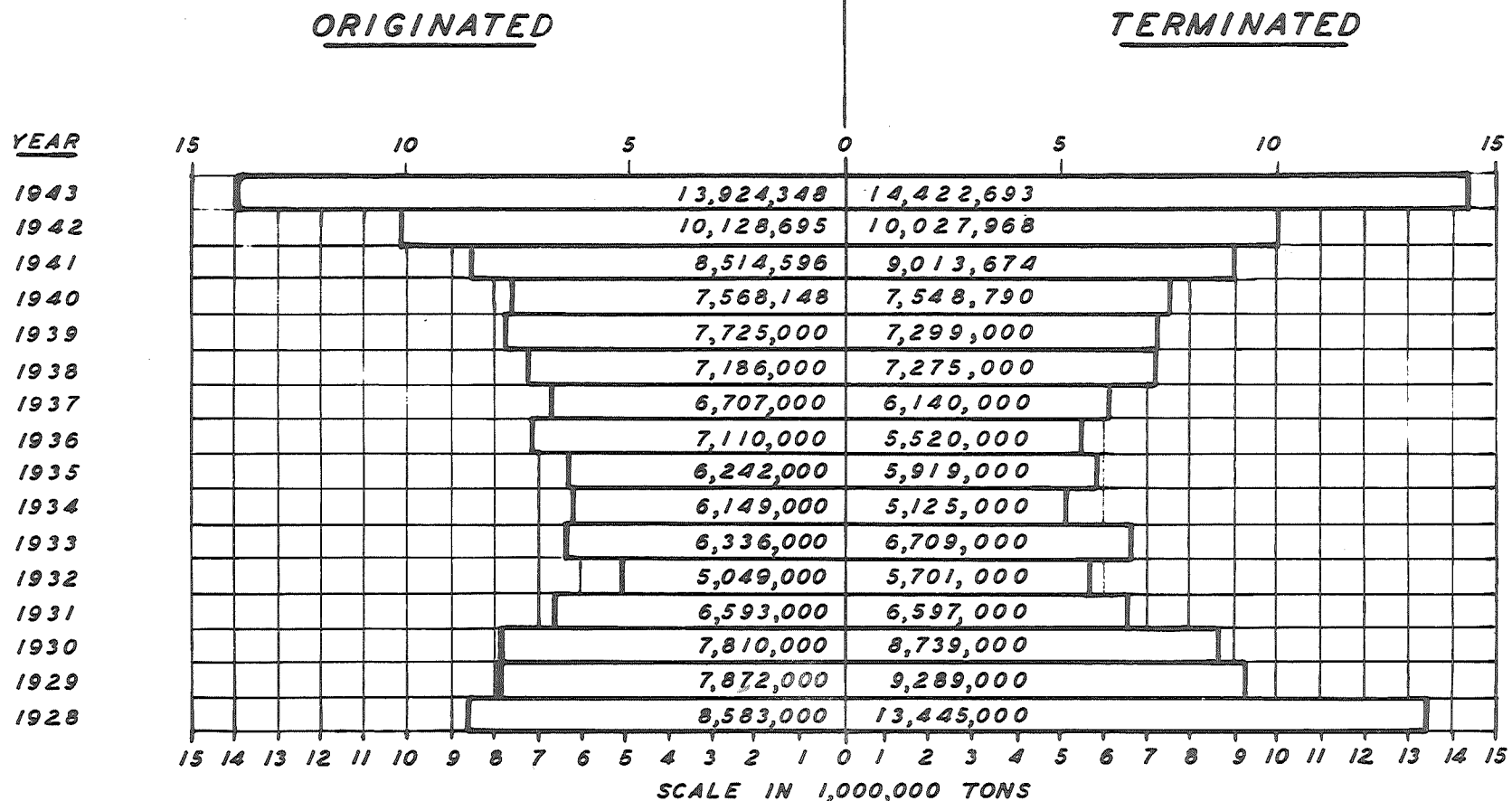
SOURCE: MINNESOTA GEOLOGICAL SURVEY -  
BULLETIN 30, MINERAL RESOURCES OF MINNESOTA

THE J.G. WHITE ENGINEERING CORP. NEW YORK

CARLOAD REVENUE FREIGHT TONNAGE  
ORIGINATED AND CARRIED IN MINNESOTA  
BY CLASS I RAILROADS 1928-1943



**CARLOAD REVENUE FREIGHT TONNAGE  
ORIGINATED AND TERMINATED IN MINNESOTA  
BY CLASS I RAILROADS-1928-1943  
GROUP I-PRODUCTS OF AGRICULTURE**

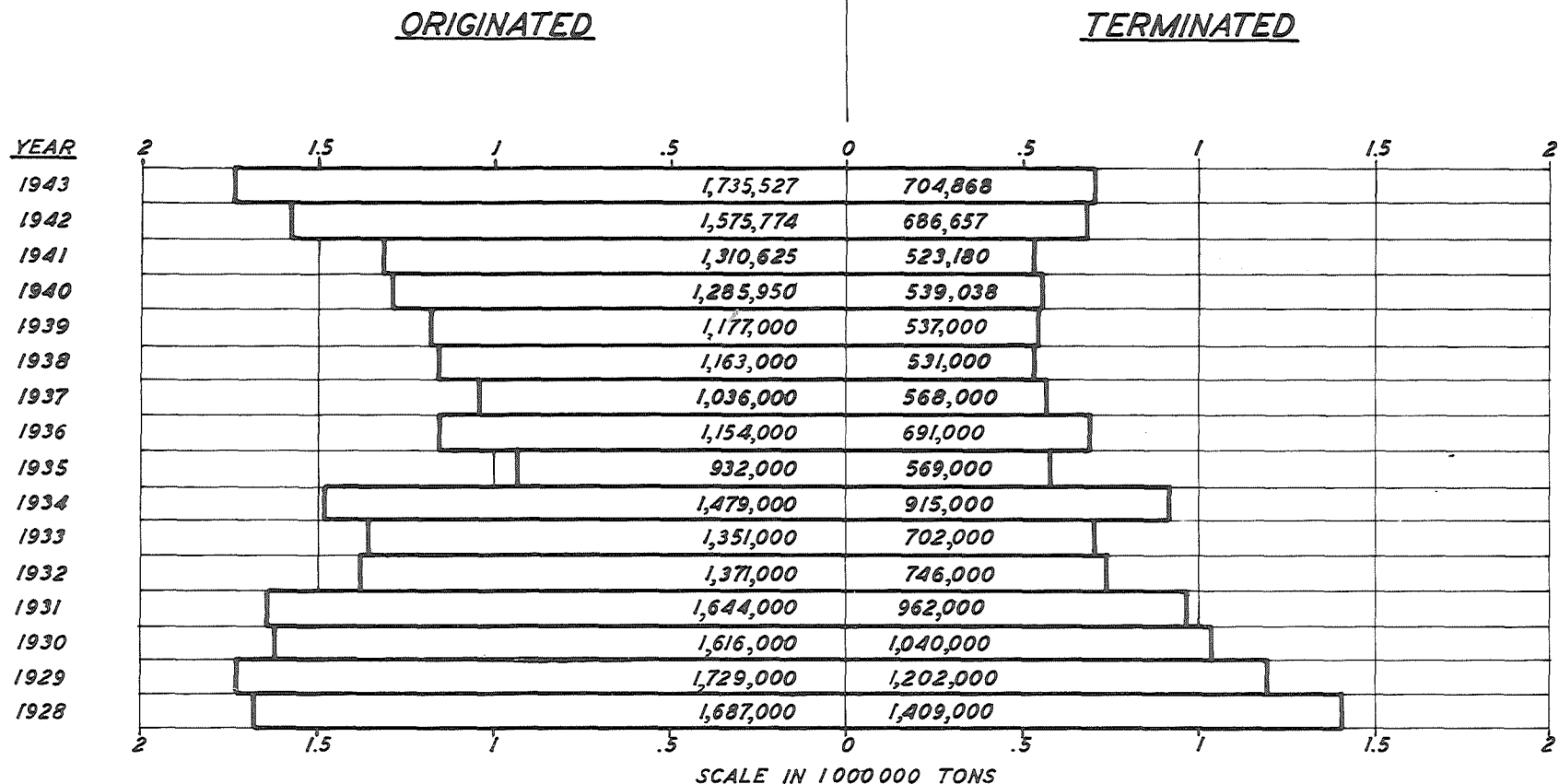


SOURCE: INTERSTATE COMMERCE COMMISSION

THE J.G. WHITE ENGINEERING CORP. NEW YORK

CYBLOTO BEAEMOE EREIOWHLOM

CARLOAD REVENUE FREIGHT TONNAGE  
ORIGINATED AND TERMINATED IN MINNESOTA  
BY CLASS I RAILROADS-1928-1943  
GROUP II-ANIMALS AND PRODUCTS



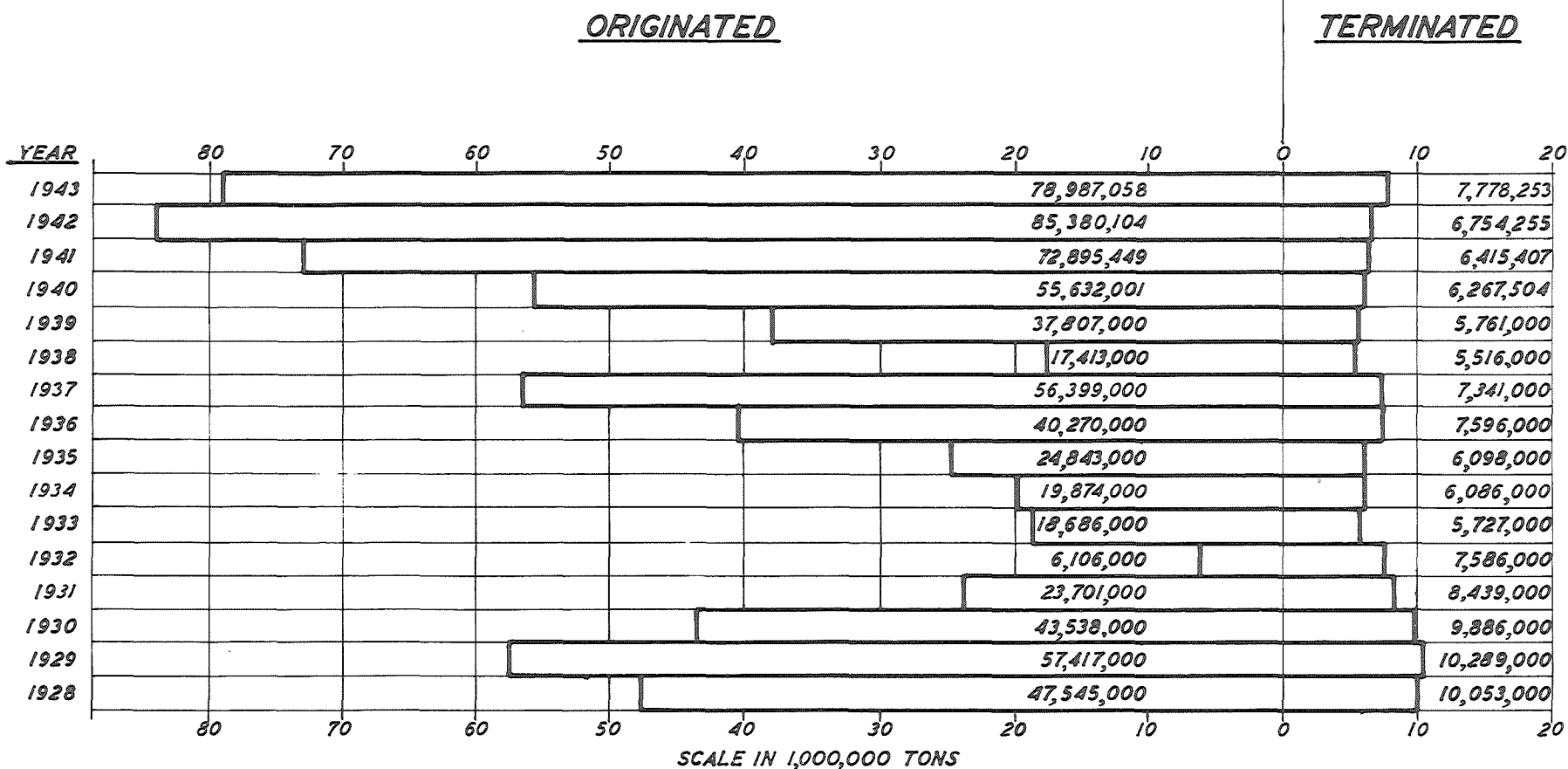
SOURCE: INTERSTATE COMMERCE COMMISSION

THE J. G. WHITE ENGINEERING CORP. NEW YORK

EXHIBIT NO. III-E-3



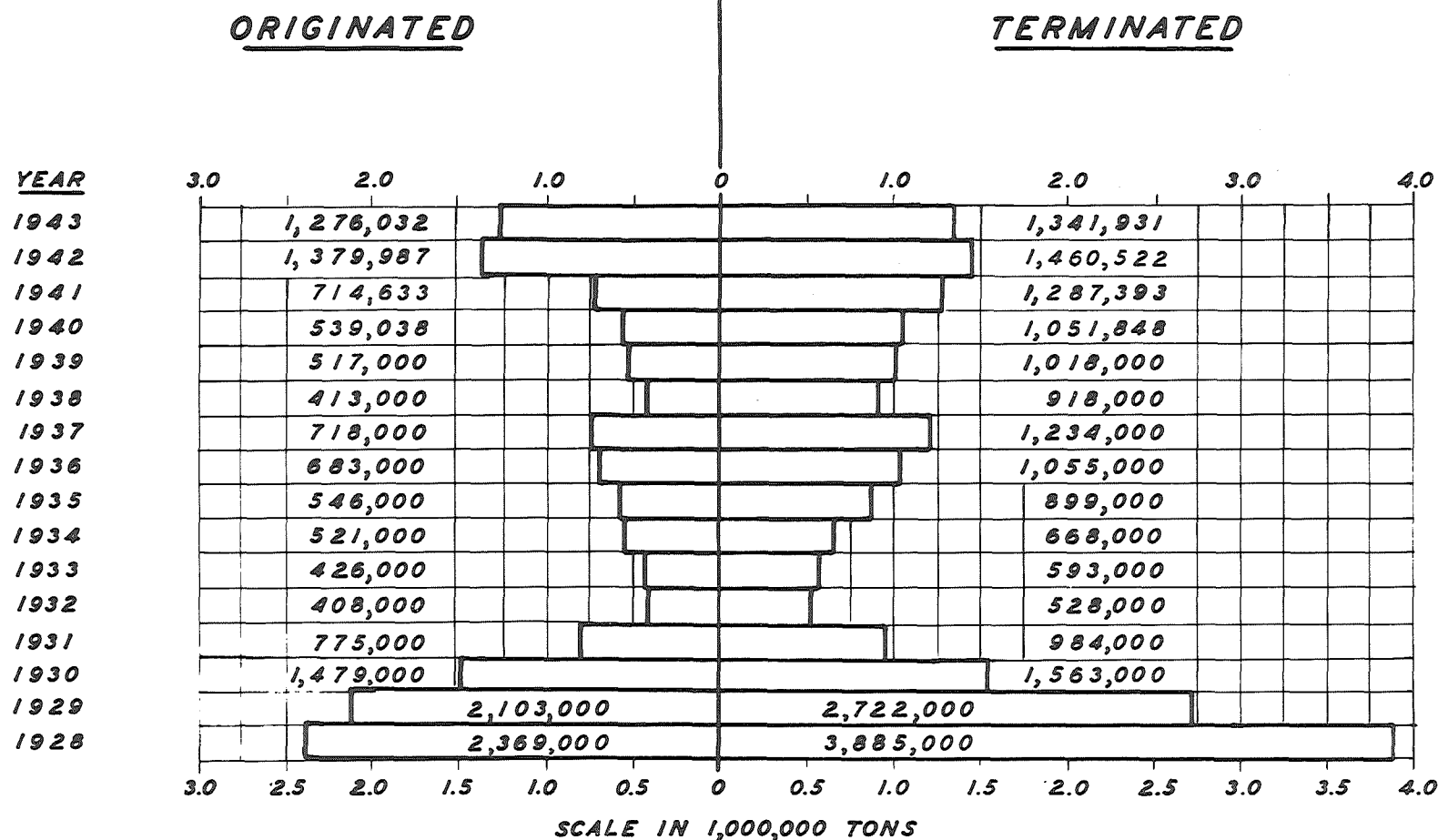
RECEIVED AND TERMINATED IN MINNESOTA  
 CARLOAD REVENUE FREIGHT TONNAGE  
 ORIGINATED AND TERMINATED IN MINNESOTA  
 BY CLASS I RAILROADS-1928-1943  
 GROUP III - PRODUCT OF MINES



SOURCE: INTERSTATE COMMERCE COMMISSION

THE J. G. WHITE ENGINEERING CORP. NEW YORK

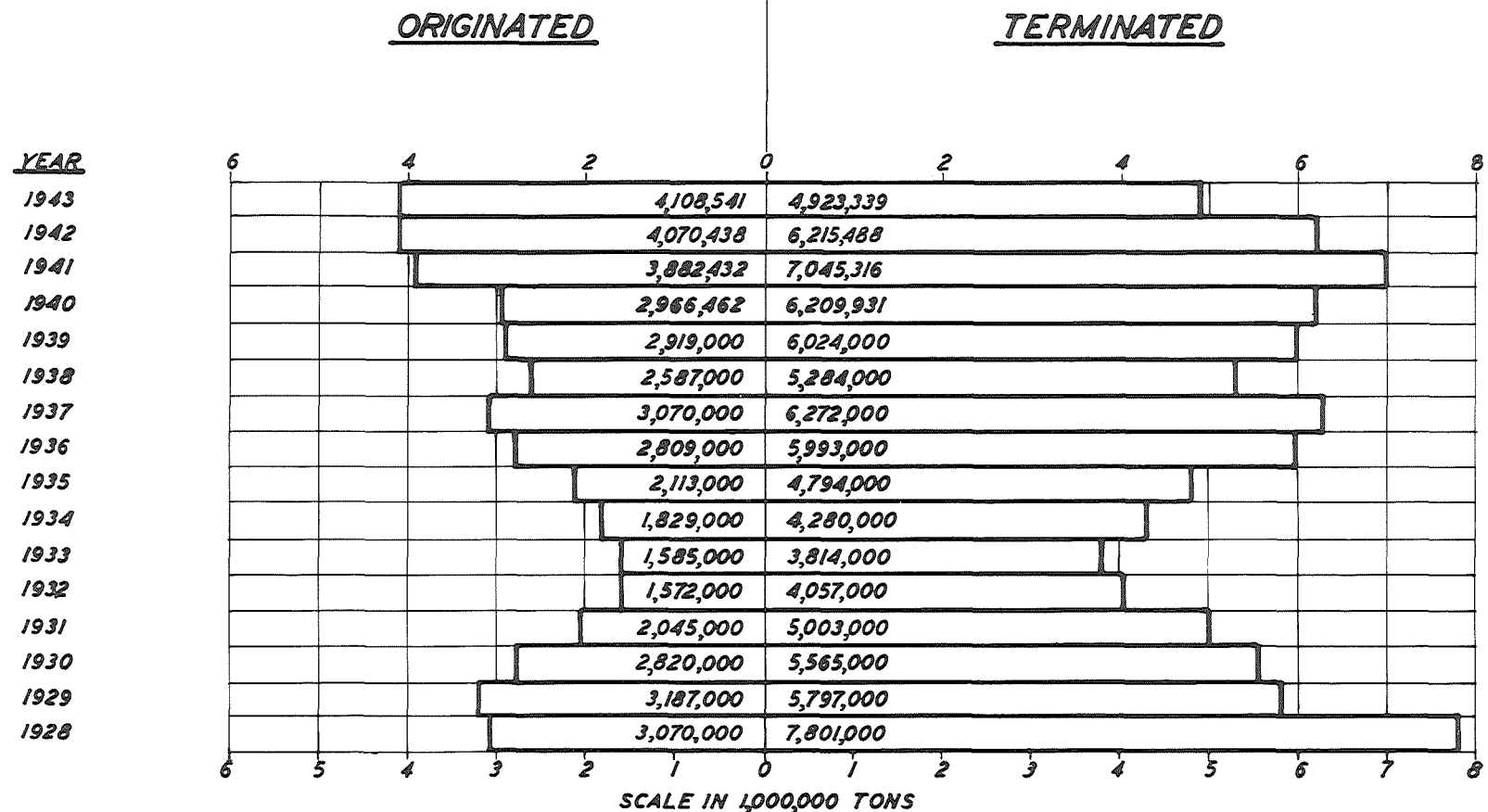
ORIGINAL AND TERMINATED IN MINNESOTA  
 CARLOAD REVENUE FREIGHT TONNAGE  
 BY CLASS I RAILROADS-1928-1943  
 GROUP IV-PRODUCTS OF FORESTS



SOURCE: INTERSTATE COMMERCE COMMISSION

THE J.C. WHITE ENGINEERING CORP. NEW YORK

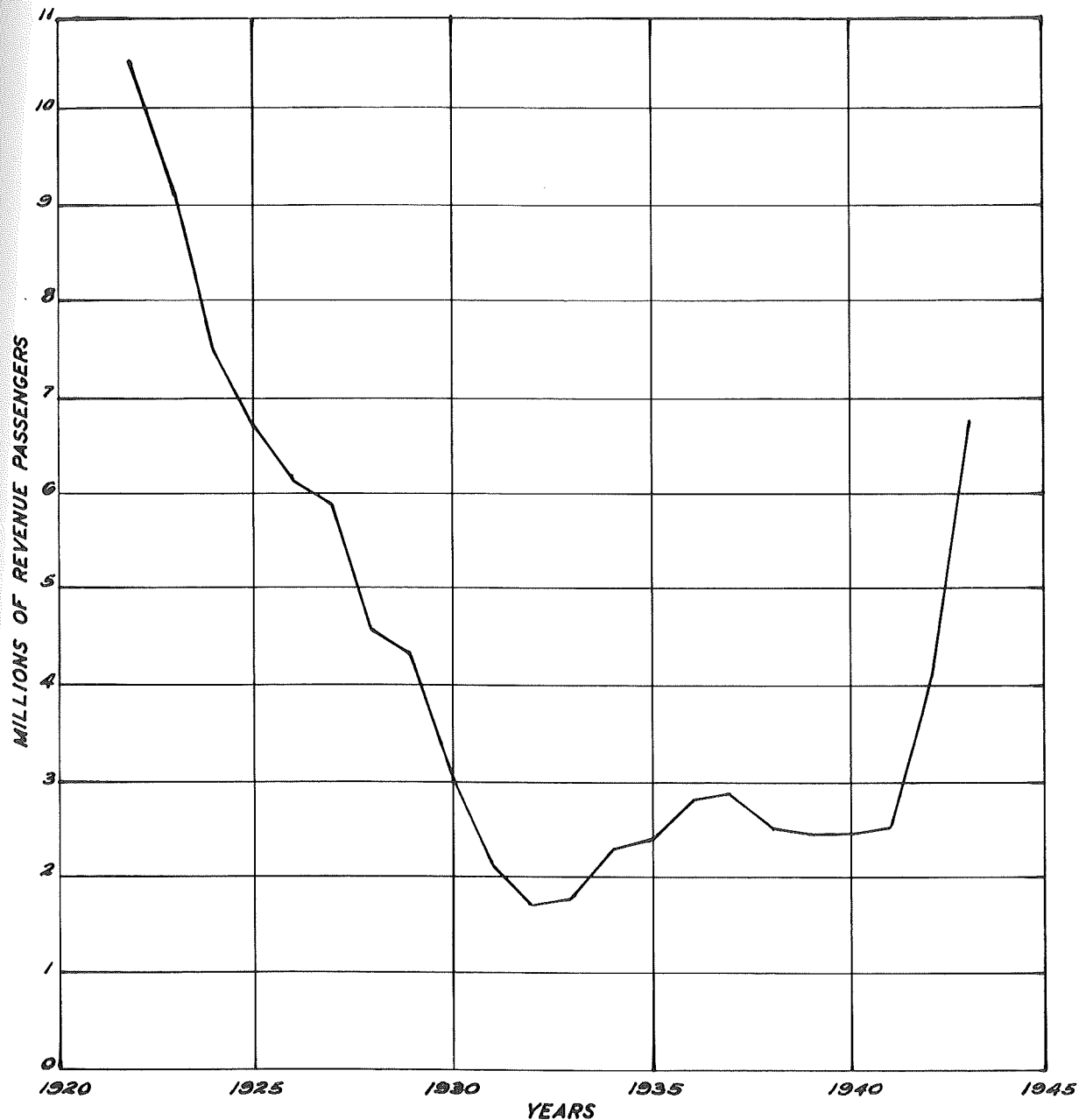
ORIGINATED AND TERMINATED IN MINNESOTA  
 CARLOAD REVENUE FREIGHT TONNAGE  
 BY CLASS I RAILROADS-1928-1943  
 GROUP V MANUFACTURES AND MISCELLANEOUS



SOURCE: INTERSTATE COMMERCE COMMISSION

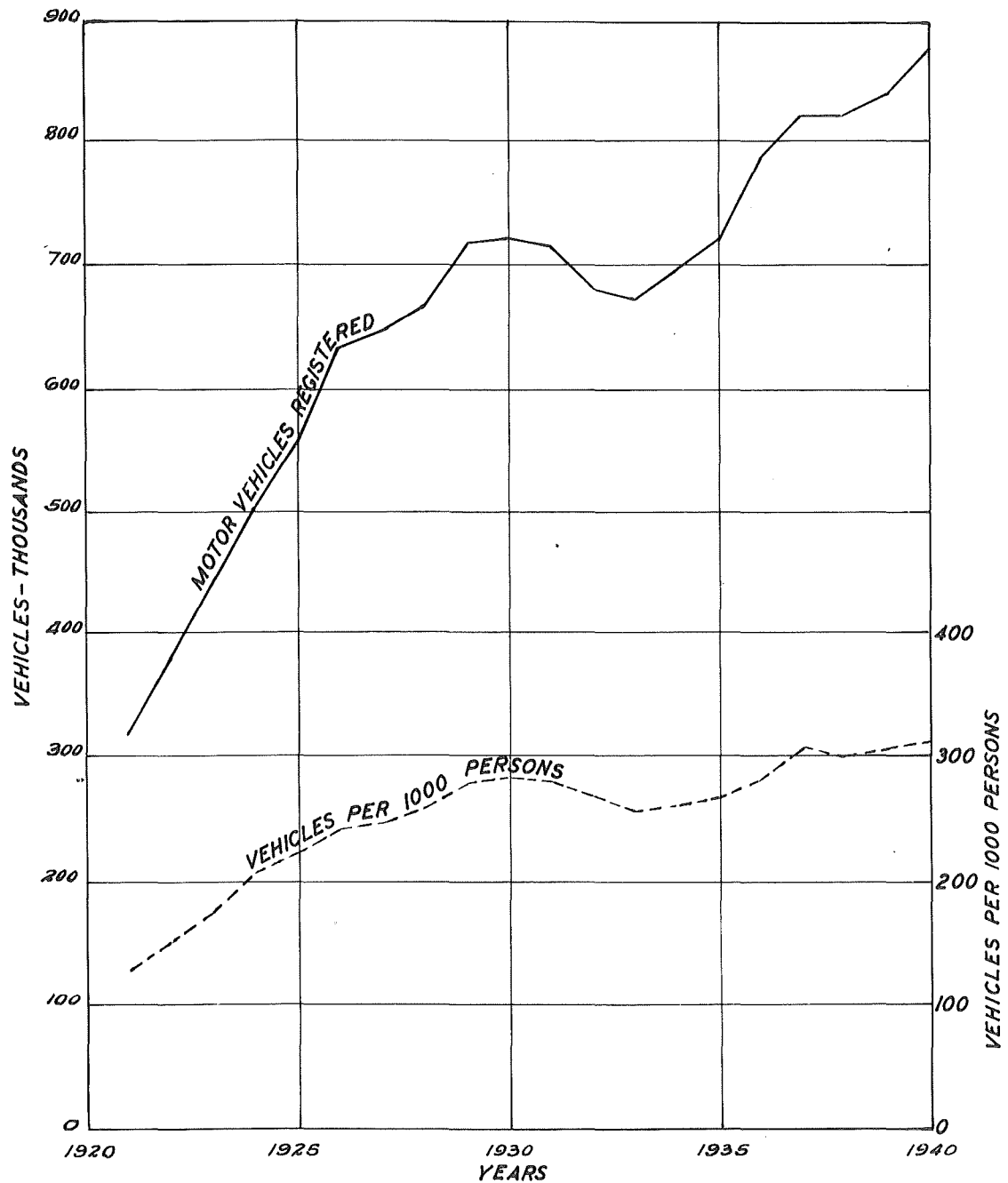
THE J. G. WHITE ENGINEERING CORP. NEW YORK

# REVENUE PASSENGERS CARRIED BY CLASS I RAILROADS IN MINNESOTA 1922-1943

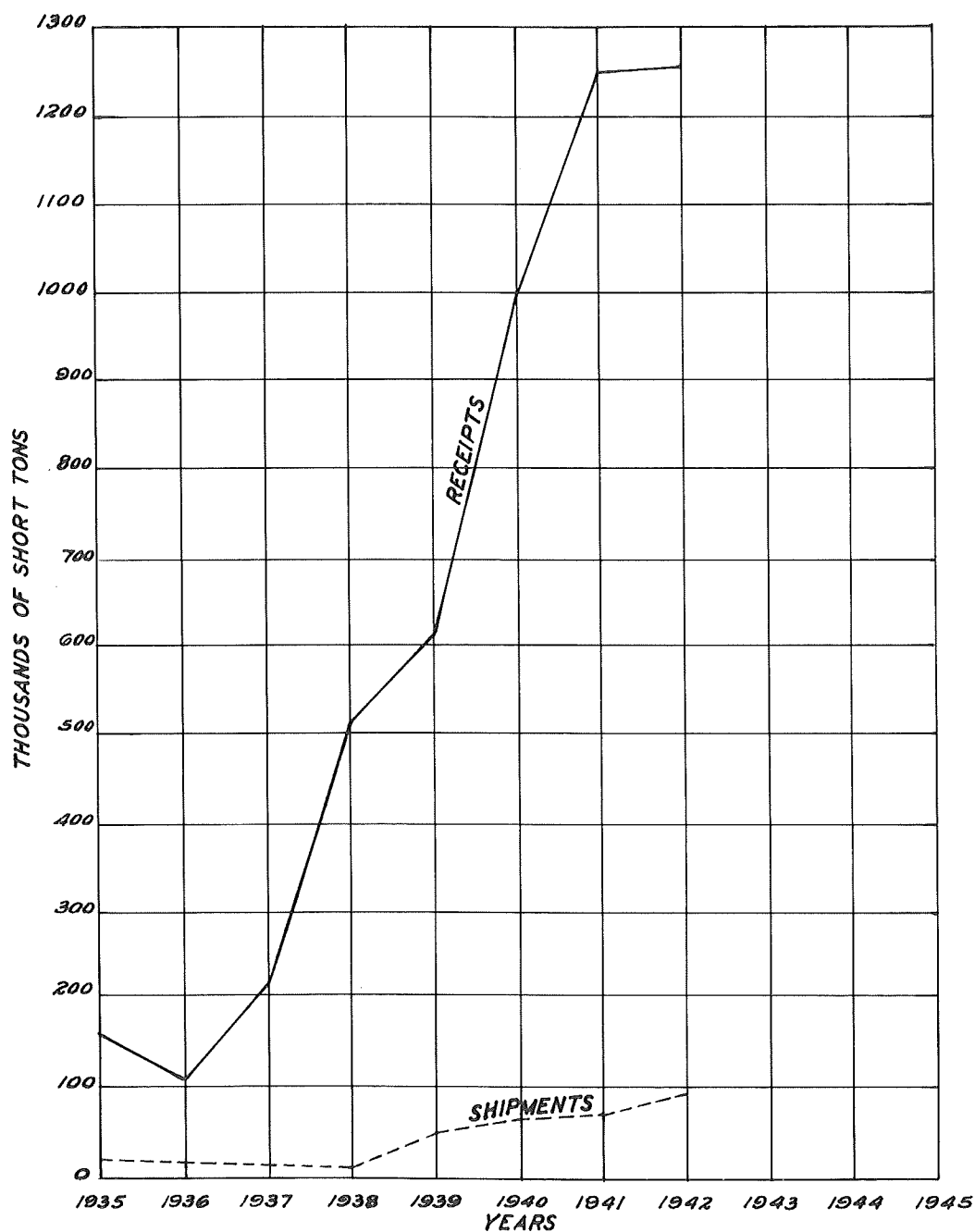


**SOURCE:** MINNESOTA RAILROAD AND  
WAREHOUSE COMMISSION

# MOTOR VEHICLE REGISTRATION IN MINNESOTA AND VEHICLES PER 1000 POPULATION 1921-1940



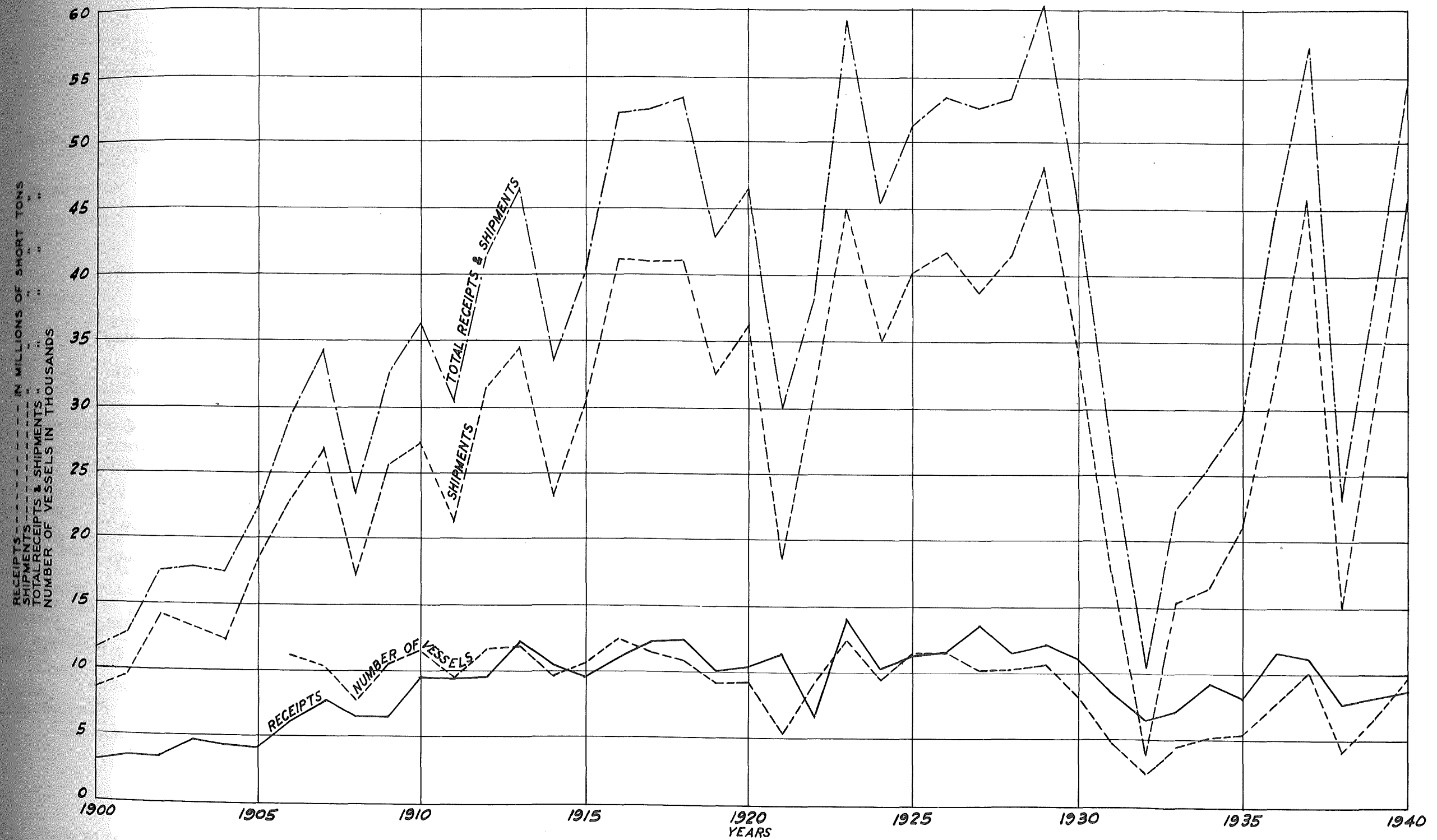
SOURCE: MINNESOTA STATE RECORDS

UPPER MISSISSIPPI WATERWAYS-FREIGHT RECEIPTS  
AND SHIPMENTS IN MINNESOTA 1935-1942SOURCE:

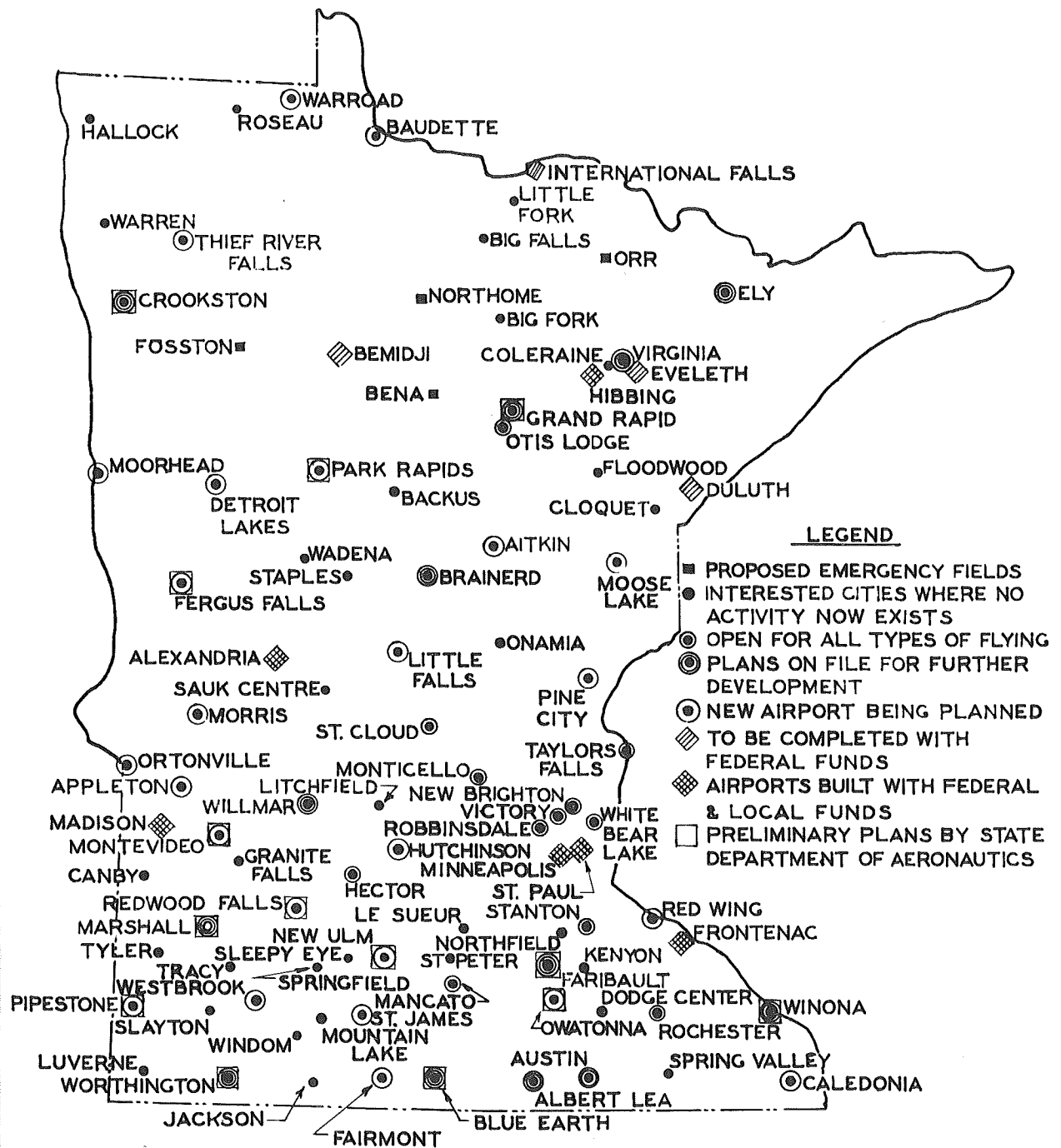
U. S. ARMY DISTRICT ENGINEER,  
SAINT PAUL, MINNESOTA



# GREAT LAKES CARRIERS-FREIGHT RECEIPTS AND SHIPMENTS AT DULUTH-SUPERIOR 1900-1940 AND NUMBER OF VESSELS 1906 - 1940



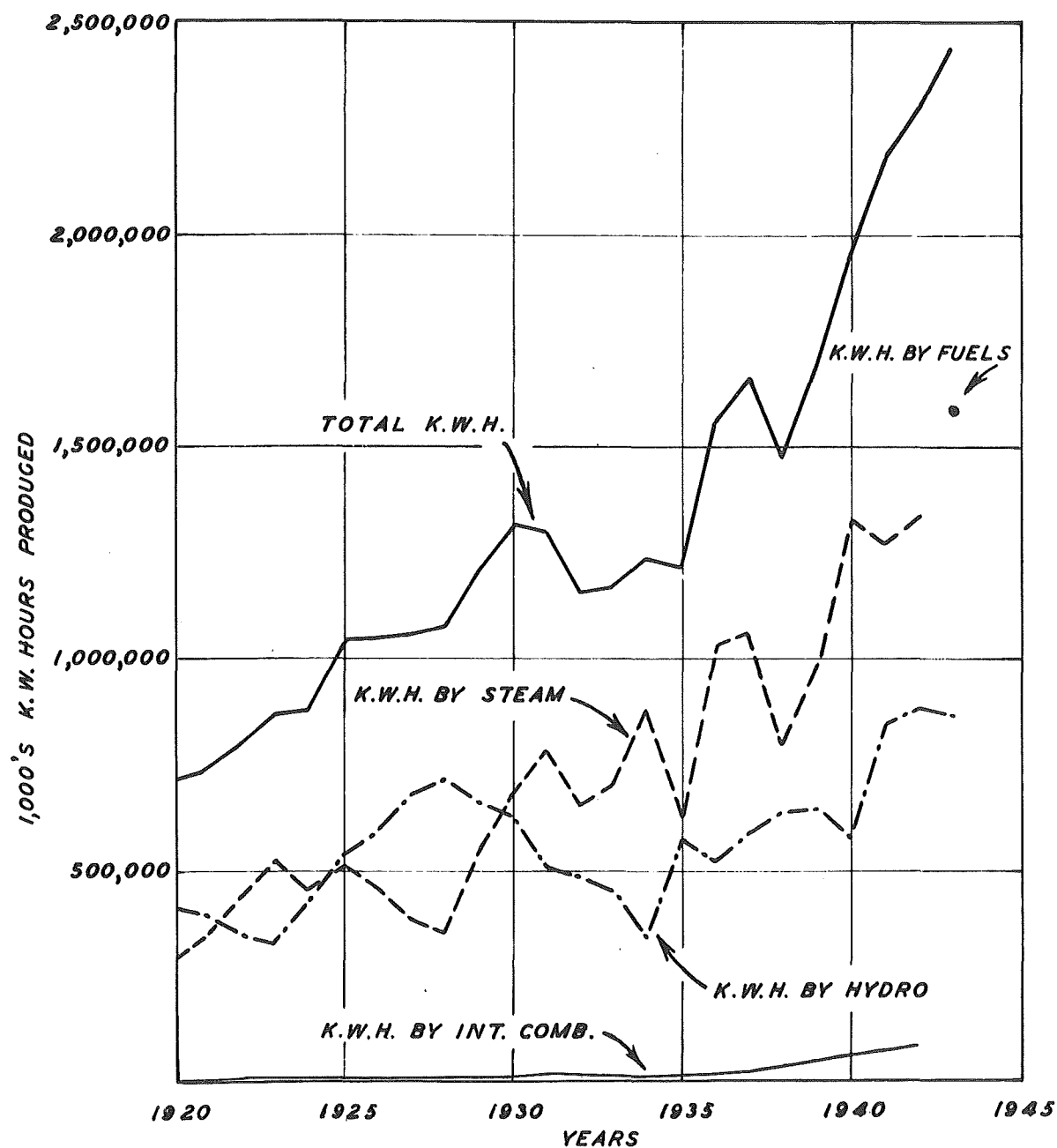
# MAP OF MINNESOTA SHOWING STATUS OF AIR FIELDS AND AIR PORTS



SOURCE:—MINNESOTA DEPARTMENT  
OF AERONAUTICS

THE J. G. WHITE ENGINEERING CORP. NEW YORK

# ELECTRIC ENERGY PRODUCTION IN MINNESOTA 1920-1942, CLASSIFIED BY TYPE OF GENERATION



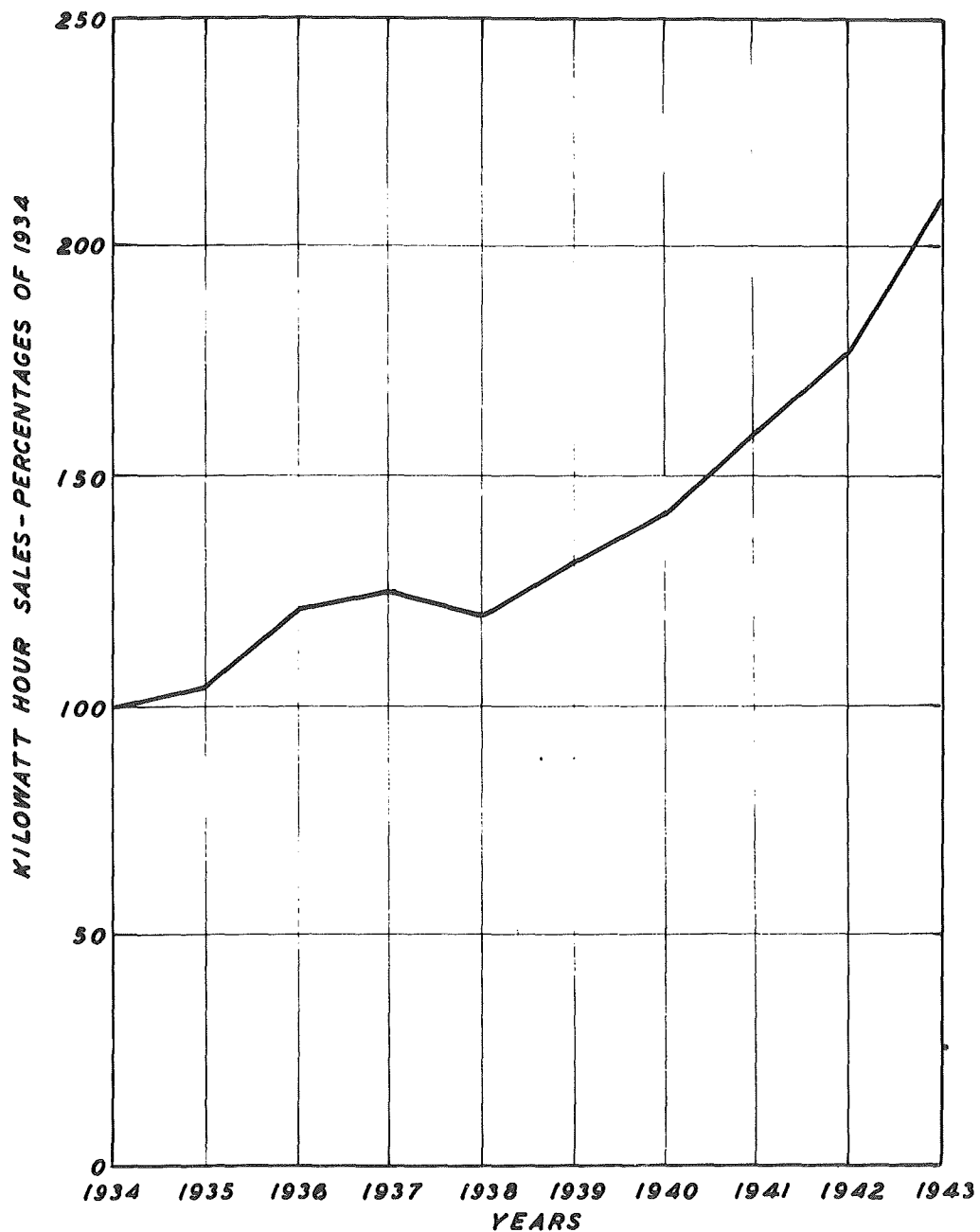
SOURCE:— FEDERAL POWER COMMISSION

KILOWATT CAPACITY OF ELECTRIC GENERATING STATIONS  
IN MINNESOTA 1920 AND 1942 CLASSIFIED BY TYPE OF  
PRIME MOVER AND OWNERSHIP

|                                          | <u>1 9 2 0</u> | <u>1 9 4 2</u> |
|------------------------------------------|----------------|----------------|
| <u>STEAM ENGINES AND TURBINES</u>        |                |                |
| <u>Privately Owned</u>                   |                |                |
| Electric Utilities                       | 110,736        | 403,342        |
| Mining and Manufacturing                 | 0              | 490            |
| Railways and Railroads                   | <u>74,000</u>  | <u>75,000</u>  |
| Total - Privately Owned                  | 184,736        | 478,832        |
| <u>Publicly Owned</u>                    |                |                |
| Municipal Electric Utilities             | 16,112         | 85,692         |
| Cooperatives                             | <u>0</u>       | <u>0</u>       |
| Total - Publicly Owned                   | <u>16,112</u>  | <u>85,692</u>  |
| Total - Steam Engines and Turbines       | <u>200,848</u> | <u>564,524</u> |
| <u>WATER WHEELS AND TURBINES</u>         |                |                |
| <u>Privately Owned</u>                   |                |                |
| Electric Utilities                       | 86,461         | 123,357        |
| Mining and Manufacturing                 | 0              | 14,130         |
| Railways and Railroads                   | <u>16,000</u>  | <u>16,000</u>  |
| Total - Privately Owned                  | 102,461        | 153,487        |
| <u>Publicly Owned</u>                    |                |                |
| Municipal Electric Utilities             | 1,822          | 3,292          |
| Cooperatives                             | <u>0</u>       | <u>0</u>       |
| Total - Publicly Owned                   | <u>1,822</u>   | <u>3,292</u>   |
| Total - Water Wheels and Turbines        | <u>104,283</u> | <u>156,779</u> |
| <u>INTERNAL COMBUSTION ENGINES</u>       |                |                |
| <u>Privately Owned</u>                   |                |                |
| Electric Utilities                       | 1,060          | 8,269          |
| Mining and Manufacturing                 | 0              | 0              |
| Railways and Railroads                   | <u>0</u>       | <u>0</u>       |
| Total - Privately Owned                  | 1,060          | 8,269          |
| <u>Publicly Owned</u>                    |                |                |
| Municipal Electric Utilities             | 506            | 34,253         |
| Cooperatives                             | <u>0</u>       | <u>4,806</u>   |
| Total - Publicly Owned                   | <u>506</u>     | <u>39,059</u>  |
| Total - Internal Combustion Engines      | <u>1,566</u>   | <u>47,328</u>  |
| <u>TOTAL - ALL TYPES OF PRIME MOVERS</u> |                |                |
| <u>Privately Owned</u>                   |                |                |
| Electric Utilities                       | 198,257        | 534,968        |
| Mining and Manufacturing                 | 0              | 14,620         |
| Railways and Railroads                   | <u>90,000</u>  | <u>91,000</u>  |
| Total - Privately Owned                  | 288,257        | 640,588        |
| <u>Publicly Owned</u>                    |                |                |
| Municipal Electric Utilities             | 18,440         | 123,237        |
| Cooperatives                             | <u>0</u>       | <u>4,806</u>   |
| Total - Publicly Owned                   | <u>18,440</u>  | <u>128,043</u> |
| Total - All Types of Prime Movers        | <u>306,697</u> | <u>768,631</u> |

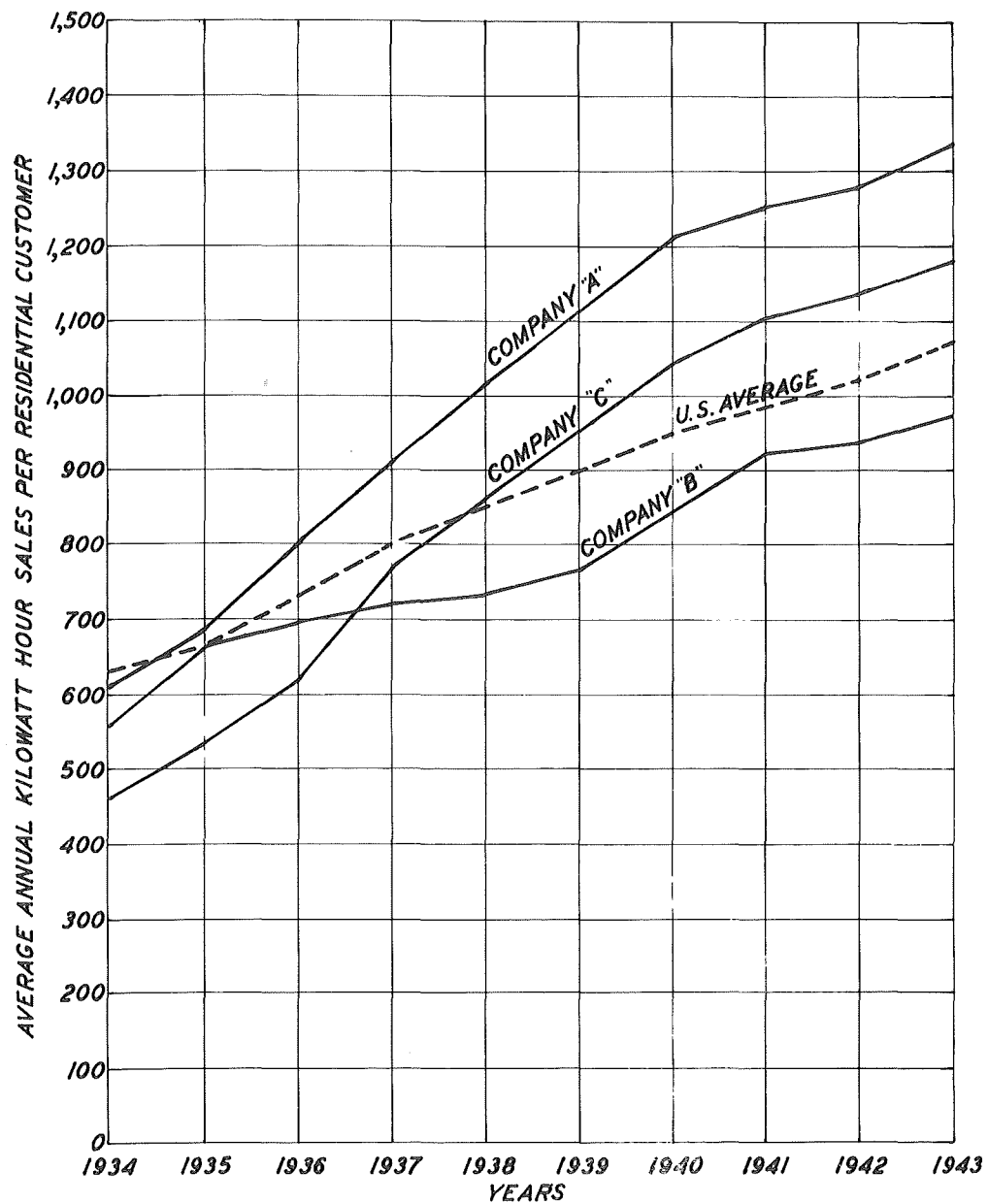
Source: Federal Power Commission - Production of Electric Energy and Capacity of Generating Plants. The J. G. White Engineering Corp., New York

USE OF ELECTRIC ENERGY IN MINNESOTA  
FOR COMMERCIAL AND INDUSTRIAL PURPOSES  
1934-1943, EXPRESSED AS PERCENTAGES  
OF USE IN 1934



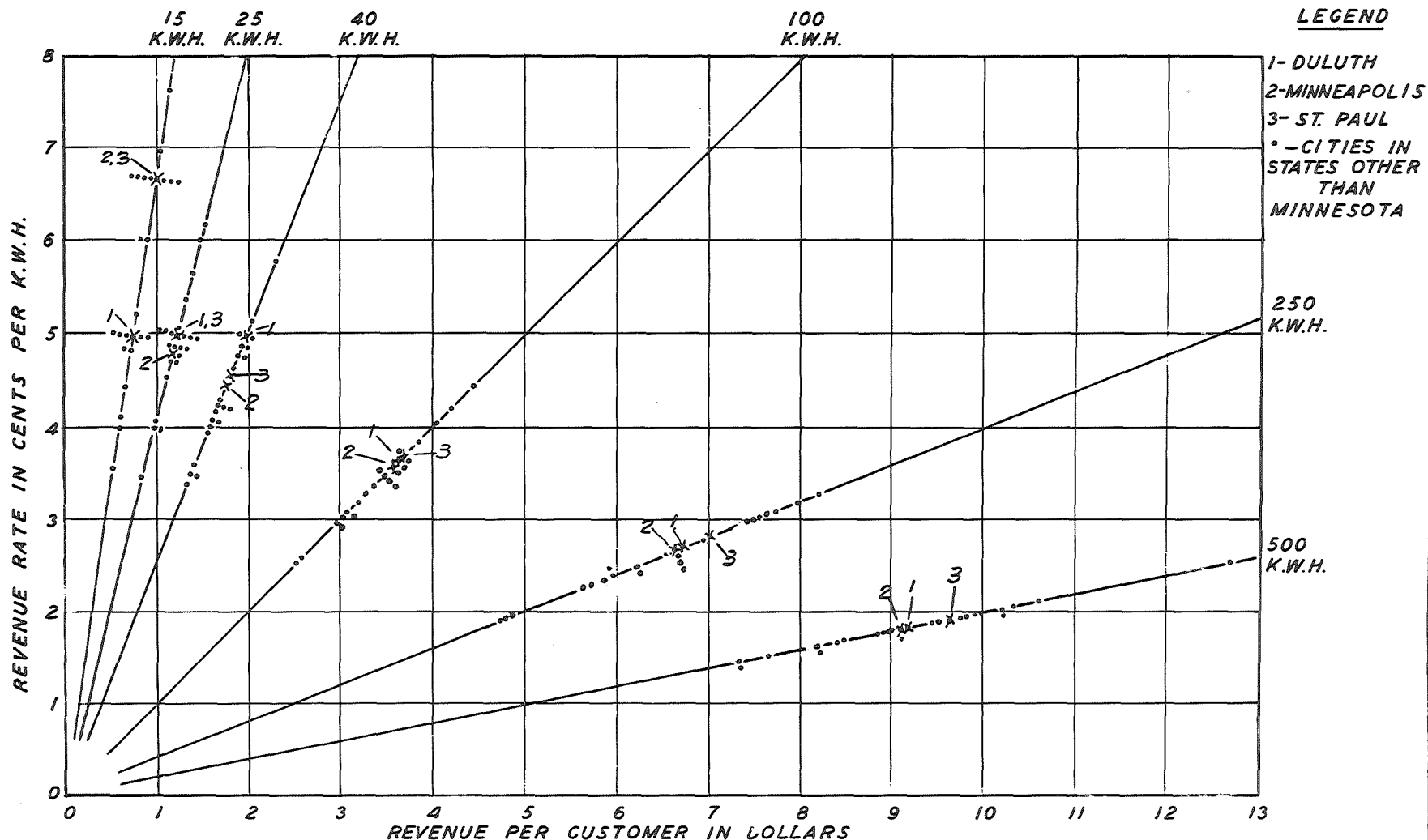


AVERAGE ANNUAL KILOWATT HOUR CONSUMPTIONS  
BY RESIDENTIAL CUSTOMERS 1934 TO 1943.  
THREE LARGE PRIVATE UTILITIES IN MINNESOTA  
AND UNITED STATES AVERAGE



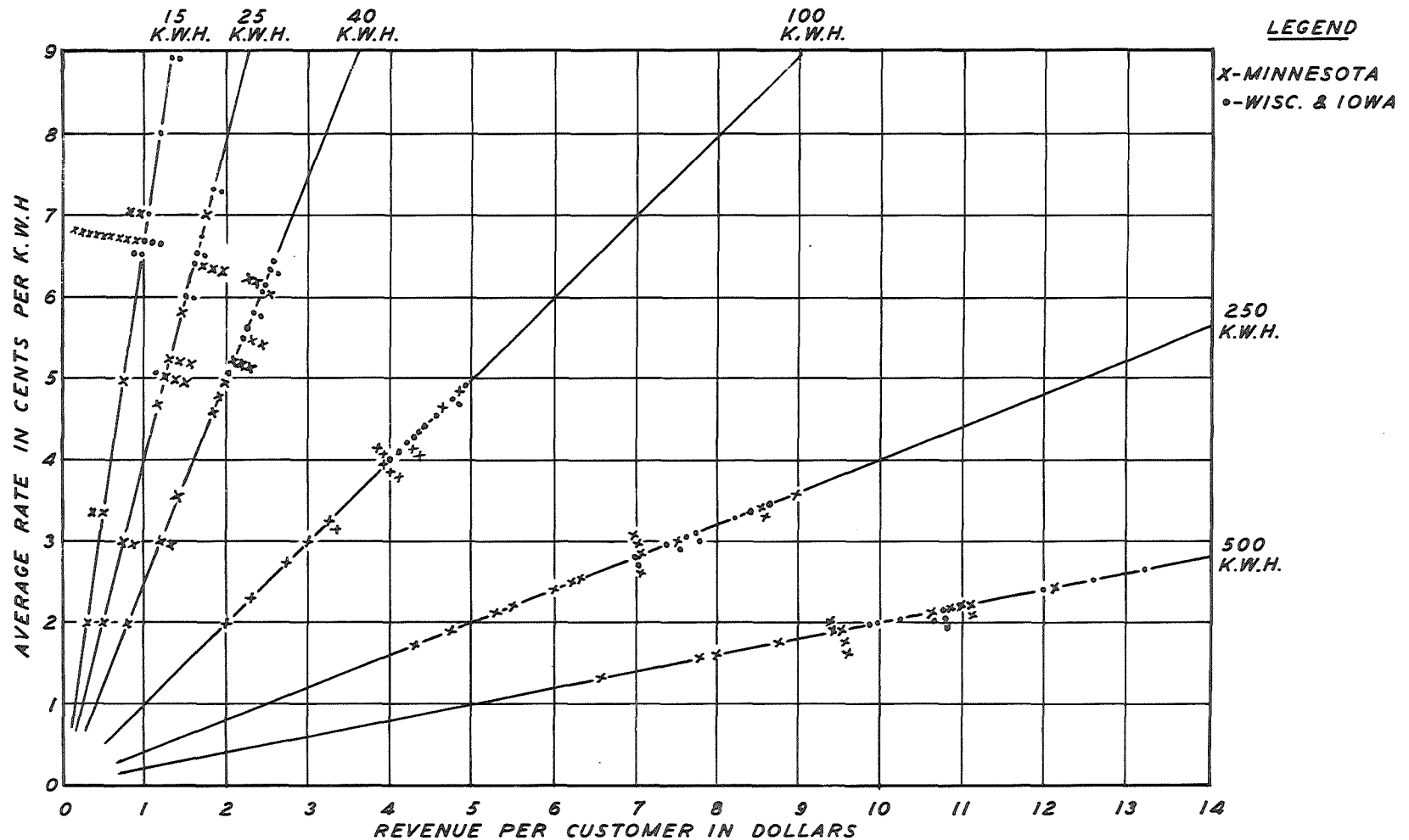


RESIDENTIAL ELECTRIC RATES IN EFFECT ON JANUARY 1, 1943  
IN 25 CITIES OF OVER 50,000 POPULATION.  
MINNESOTA, ILLINOIS, INDIANA, IOWA, KANSAS,  
MICHIGAN. MISSOURI AND WISCONSIN



SOURCE:- FEDERAL POWER COMMISSION DATA

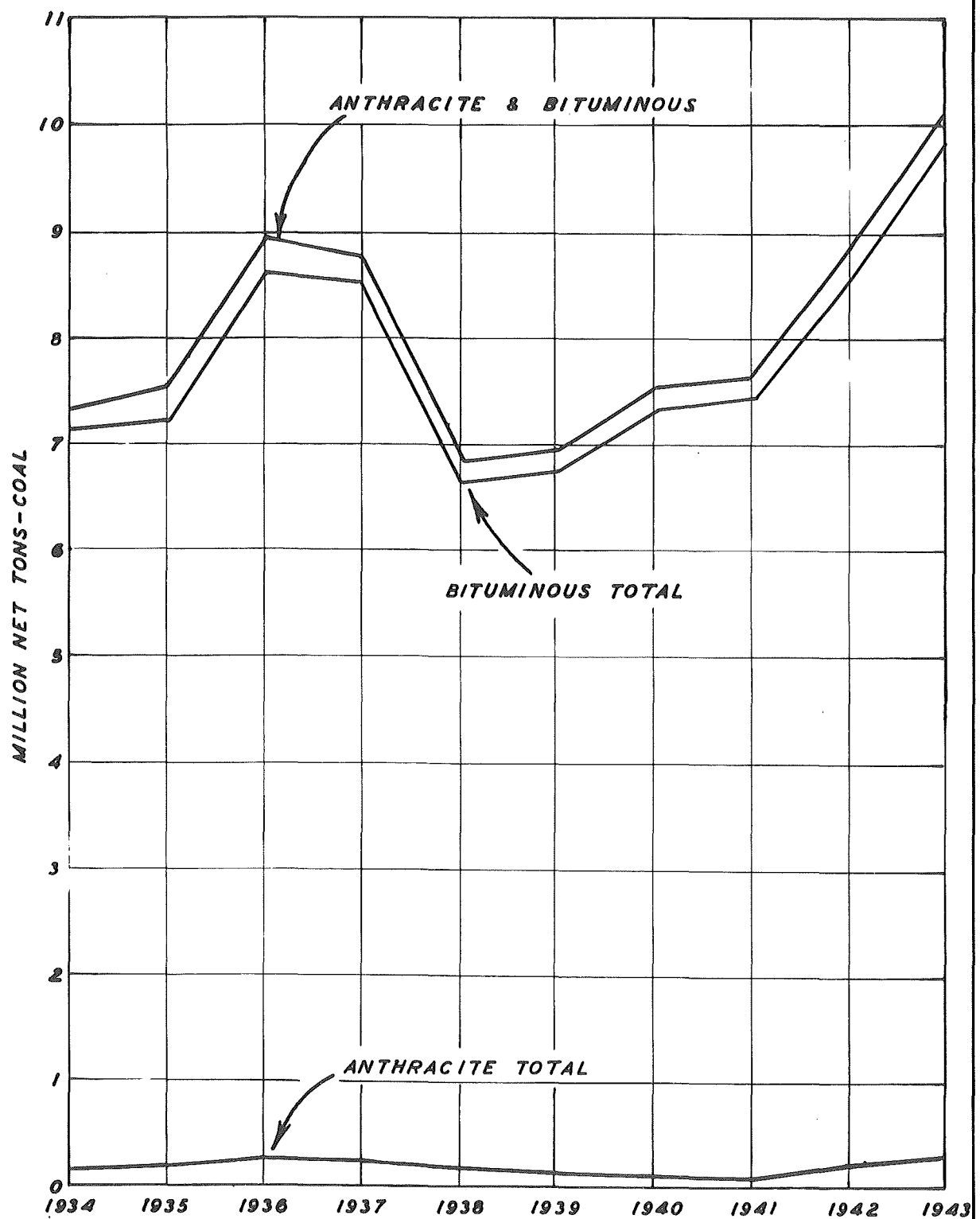
THE J.G. WHITE ENGINEERING CORP. NEW YORK



SOURCE - FEDERAL POWER COMMISSION DATA

THE J.G. WHITE ENGINEERING CORP. NEW YORK

# COAL SHIPMENTS FROM DULUTH-SUPERIOR AND ASHLAND-WASHBURN DOCKS, 1934-1943



COAL SHIPMENTS INTO MINNESOTA FROM THE HEAD-OF-THE-LAKES  
PORTS, MISSISSIPPI RIVER BARGES AND ALL RIVER ROUTES

| Year | Head-of-Lakes |           |           |           | Barge               |        |         | All     |           | Revenue                                    |
|------|---------------|-----------|-----------|-----------|---------------------|--------|---------|---------|-----------|--------------------------------------------|
|      | Ant.          | Bit.      | R.R.      | Total     | Minn. &<br>St. Paul | Other  | Total   | Rail    | Total     | Tons<br>Terminated<br>Class 1<br>Railroads |
| 1    | 2             | 3         | 4         | 5=2+3+4   | 6                   | 7      | 8=6+7   | 9       | 10=5+8+9  | 11                                         |
| 1934 | XXX           | XXX       | XXX       | ---       | ---                 | ---    | ---     | 424,214 | ---       | 4,617,996                                  |
| 1935 | XXX           | XXX       | XXX       | ---       | 51,027              | 3,682  | 54,709  | 500,284 | ---       | 4,708,221                                  |
| 1936 | XXX           | XXX       | XXX       | ---       | 31,830              | ---    | 31,830  | 556,932 | ---       | 5,465,858                                  |
| 1937 | XXX           | XXX       | XXX       | ---       | 43,673              | 928    | 44,601  | 564,826 | ---       | 5,287,633                                  |
| 1938 | XXX           | XXX       | XXX       | ---       | 130,874             | 4,424  | 135,298 | 423,325 | ---       | 4,131,206                                  |
| 1939 | 93,233        | 3,701,957 | 1,322,000 | 5,117,190 | 152,975             | 46,234 | 199,209 | 398,771 | 5,715,170 | 4,151,126                                  |
| 1940 | 80,176        | 4,016,182 | 1,405,000 | 5,501,358 | 362,231             | 63,446 | 425,677 | 382,761 | 6,309,796 | 4,417,343                                  |
| 1941 | 69,571        | 3,924,005 | 1,480,000 | 5,473,576 | 512,830             | 65,566 | 578,396 | 387,369 | 6,439,341 | 4,230,890                                  |
| 1942 | 80,202        | 4,356,901 | 1,660,000 | 6,097,103 | 671,038             | 73,176 | 744,214 | #       | ---       | 4,734,558                                  |
| 1943 | 88,361        | 4,479,813 | 1,900,000 | 6,468,174 | Ø                   | Ø      | Ø       | #       | ---       | 5,239,256                                  |

NOTES:

Cols. 2, 3, Maher Coal Bureau  
 " 4, Estimated from Maher Coal Bureau  
 " 6, 7 District Engineer, U. S. Army  
 " 9, Illinois Coal Bureau  
 " 11, Reports to I.C.C. and M.R.W.C.

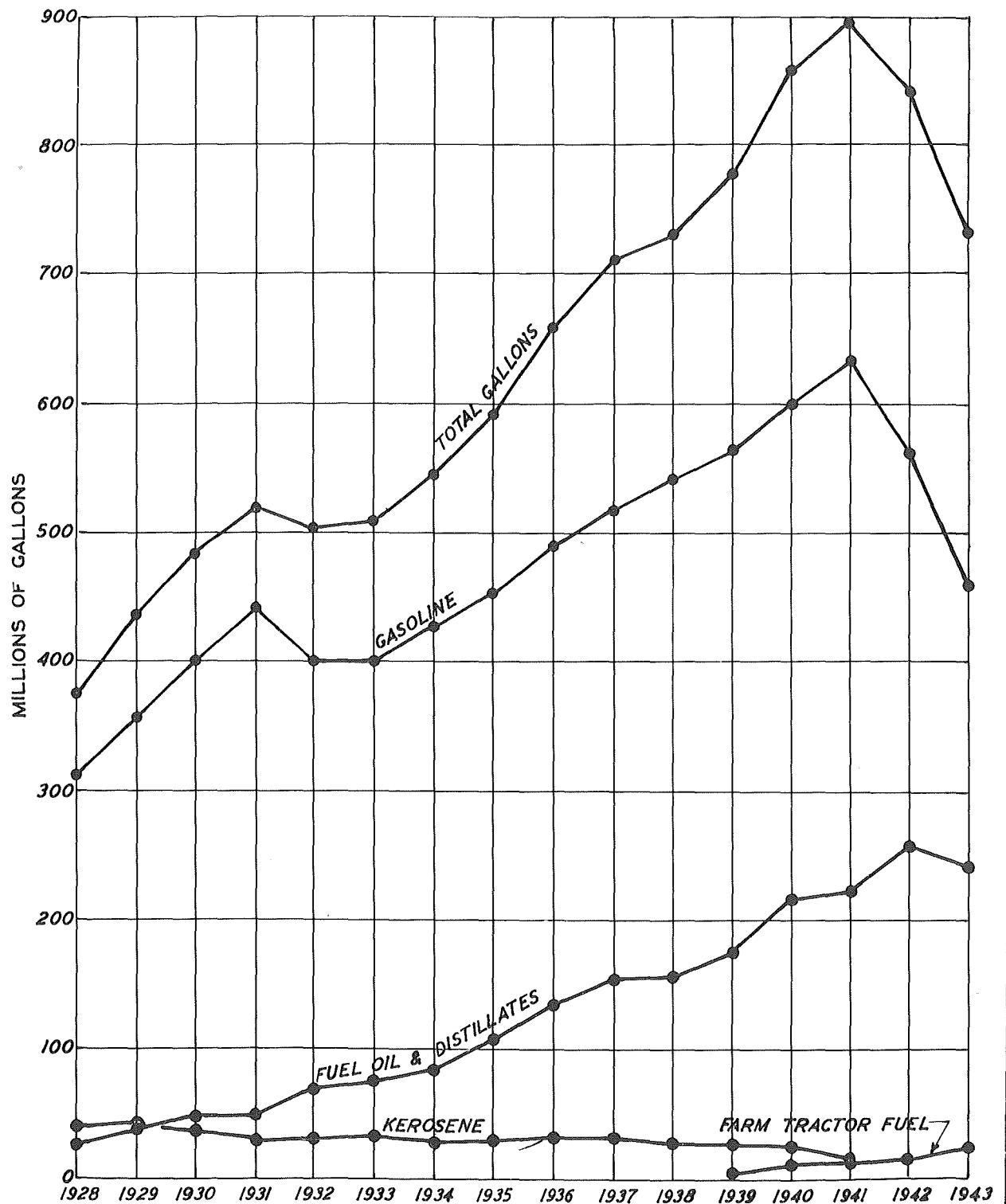
XXX not available for Minnesota separately

Ø restricted  
 # not available

1944 PRICES PER TON OF COAL SUPPLIED FROM HEAD-OF-THE-LAKES PORTS  
TO VARIOUS MINNESOTA CITIES, CLASSIFIED BY COAL SIZE

|              | LUMP   |       | EGG    |       | EGG/STOVE |       | STOVE  |       | UNSCREENED<br>STOKER |       | SCREENINGS |       |
|--------------|--------|-------|--------|-------|-----------|-------|--------|-------|----------------------|-------|------------|-------|
|              | High   | Low   | High   | Low   | High      | Low   | High   | Low   | High                 | Low   | High       | Low   |
| COST AT DOCK | 9.13   | 6.65  | 9.32   | 6.50  | 8.55      | 6.50  | 8.86   | 6.35  | 7.40                 | 6.40  | 6.45       | 5.85  |
| Dlvd. at     |        |       |        |       |           |       |        |       |                      |       |            |       |
| Hibbing      | 10.54½ | 8.06½ | 10.73½ | 7.91½ | 9.96½     | 7.91½ | 10.27½ | 7.76½ | 8.81½                | 7.81½ | 7.57½      | 6.97½ |
| Int. Falls   | 11.14½ | 8.66½ | 11.33½ | 8.51½ | 10.56½    | 8.51½ | 10.87½ | 8.36½ | 9.41½                | 8.41½ | 8.22½      | 7.62½ |
| Crookston    | 11.81½ | 9.33½ | 12.00½ | 9.18½ | 11.23½    | 9.18½ | 11.54½ | 9.03½ | 10.08½               | 9.08½ | 8.91½      | 8.31½ |
| Bemidji      | 11.17½ | 8.69½ | 11.36½ | 8.54½ | 10.59½    | 8.54½ | 10.90½ | 8.39½ | 9.44½                | 8.44½ | --         | --    |
| Brainerd     | 10.80½ | 8.32½ | 10.99½ | 8.17½ | 10.22½    | 8.17½ | 10.53½ | 8.02½ | 9.07½                | 8.07½ | 7.72½      | 7.12½ |
| Fergus Falls | 11.46½ | 8.98½ | 11.65½ | 8.83½ | 10.88½    | 8.83½ | 11.19½ | 8.68½ | 9.73½                | 8.73½ | 8.73½      | 8.13½ |
| Benson       | 11.61½ | 9.13½ | 11.80½ | 8.98½ | 11.03½    | 8.98½ | 11.34½ | 8.83½ | 9.88½                | 8.88½ | 8.73½      | 8.13½ |
| Willmar      | 11.39½ | 8.91½ | 11.58½ | 8.76½ | 10.81½    | 8.76½ | 11.12½ | 8.61½ | 9.66½                | 8.66½ | --         | --    |
| St. Cloud    | 10.95½ | 8.47½ | 11.14½ | 8.32½ | 10.37½    | 8.32½ | 10.68½ | 8.17½ | 9.22½                | 8.22½ | 7.87½      | 7.27½ |
| Pine City    | 10.56½ | 8.08½ | 10.75½ | 7.93½ | 9.98½     | 7.93½ | 10.29½ | 7.78½ | 8.83½                | 7.83½ | 7.77½      | 7.17½ |
| Mankato      | 11.61½ | 9.13½ | 11.80½ | 8.98½ | 11.03½    | 8.98½ | 11.34½ | 8.83½ | 9.88½                | 8.88½ | 8.49½      | 7.89½ |
| Fairmont     | 11.93½ | 9.45½ | 12.12½ | 9.30½ | 11.35½    | 9.30½ | 11.66½ | 9.15½ | 10.20½               | 9.20½ | 8.68½      | 8.08½ |
| Worthington  | 12.18½ | 9.70½ | 12.37½ | 9.55½ | 11.60½    | 9.55½ | 11.91½ | 9.40½ | 10.45½               | 9.45½ | 8.68½      | 8.08½ |
| New Ulm      | 11.68½ | 9.20½ | 11.87½ | 9.05½ | 11.10½    | 9.05½ | 11.41½ | 8.90½ | 9.95½                | 8.95½ | 8.53½      | 7.93½ |
| Marshall     | 11.81½ | 9.33½ | 12.00½ | 9.18½ | 11.23½    | 9.18½ | 11.54½ | 9.03½ | 10.08½               | 9.08½ | --         | --    |
| Twin Cities  | 11.02½ | 8.54½ | 11.21½ | 8.39½ | 10.44½    | 8.39½ | 10.75½ | 8.24½ | 9.29½                | 8.29½ | 7.77½      | 7.17½ |

## PETROLEUM PRODUCTS SHIPMENTS INTO MINNESOTA, 1928-1943





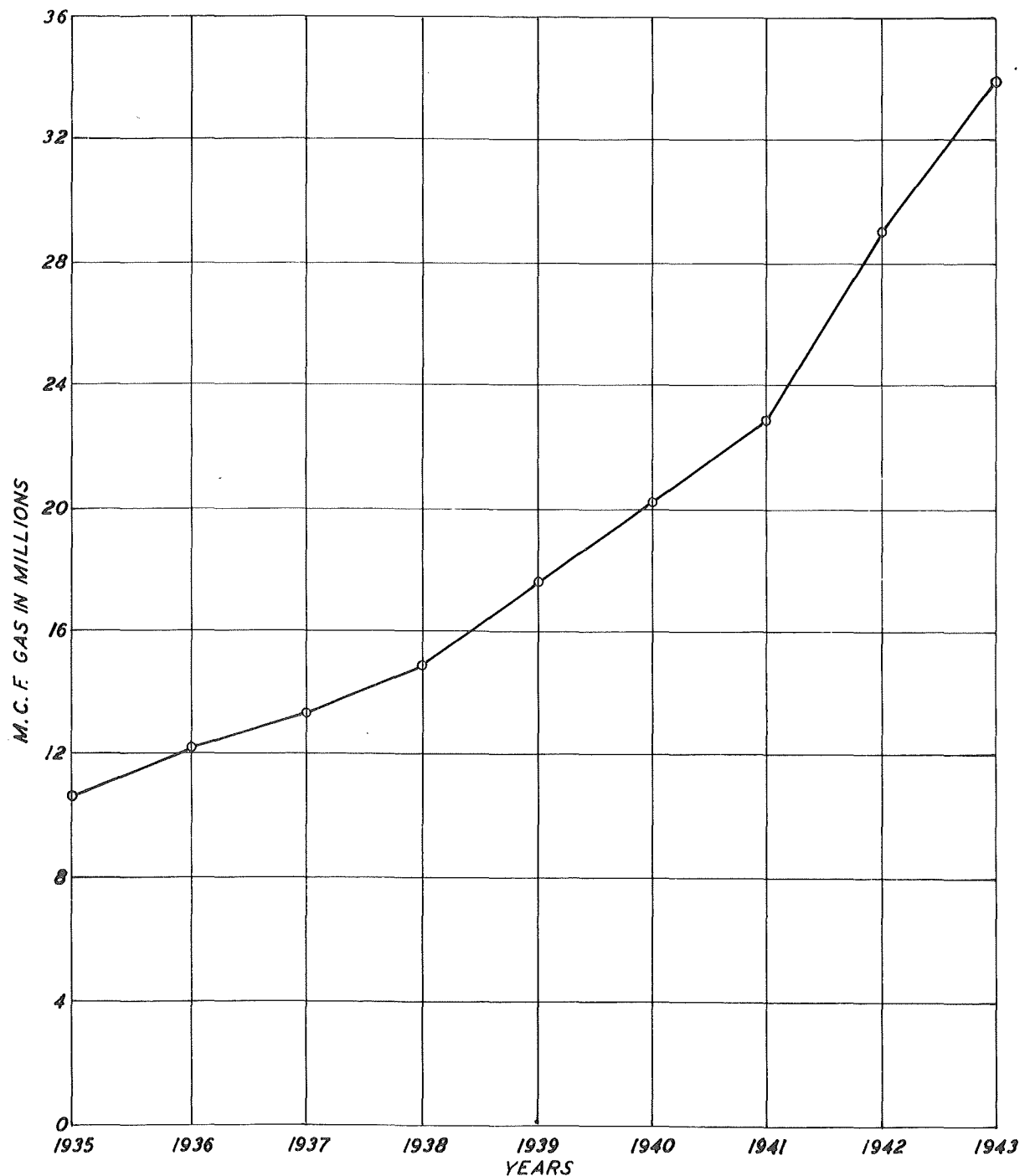
TYPICAL CURRENT TANK WAGON POSTED PRICES FOR  
VARIOUS PETROLEUM PRODUCTS IN MINNESOTA

CENTS PER GALLON INCLUDING STATE AND FEDERAL TAXES  
FOR PETROLEUM PRODUCTS

| City              | Ethyl<br>Gasoline | H.B.<br>Gasoline | 3rd<br>Grade<br>Gasoline | Kerosene | #1<br>Fuel Oil |              | #2<br>Fuel Oil |              | #3<br>Fuel Oil |              | Diesel Oil    |              |
|-------------------|-------------------|------------------|--------------------------|----------|----------------|--------------|----------------|--------------|----------------|--------------|---------------|--------------|
|                   |                   |                  |                          |          | Gals.<br>1-99  | Cents<br>9.8 | Gals.<br>1-99  | Cents<br>9.1 | Gals.<br>1-99  | Cents<br>9.1 | Gals.<br>1-99 | Cents<br>9.1 |
| Twin Cities       | 17.4              | 15.9             | 15.4                     | 10.6     | 100-199        | 8.8          | 100+           | 8.1          |                |              |               | 8.1          |
|                   |                   |                  |                          |          | 200+           | 8.3          |                |              |                |              |               |              |
| Duluth            | 17.7              | 16.2             | 15.7                     | 10.9     | 1-24           | 10.0         | 1-99           | 9.5          | 1-99           | 9.5          |               |              |
|                   |                   |                  |                          |          | 25+            | 9.0          | 100+           | 8.5          | 100+           | 8.5          |               | 8.5          |
| Winona            | 17.4              | 15.9             | 15.4                     | 10.6     | 1-24           | 9.6          | 1-99           | 9.1          | 1-99           | 9.1          |               |              |
|                   |                   |                  |                          |          | 25+            | 8.6          | 100+           | 8.1          | 100+           | 8.1          |               | 8.1          |
| Albert Lea        | 17.4              | 15.9             | 15.4                     | 10.6     | 1-24           | 9.6          | 1-99           | 9.1          | 1-99           | 9.1          |               |              |
|                   |                   |                  |                          |          | 25+            | 8.6          | 100+           | 8.1          | 100+           | 8.1          |               | 8.1          |
| Willmar           | 17.4              | 15.9             | 15.4                     | 10.6     | 1-24           | 9.6          | 1-99           | 9.1          | 1-99           | 9.1          |               |              |
|                   |                   |                  |                          |          | 25+            | 8.6          | 100+           | 8.1          | 100+           | 8.1          |               | 8.1          |
| Fergus Falls      | 18.2              | 16.7             | 16.2                     | 11.4     | 1-24           | 10.5         | 1-99           | 10.0         | 1-99           | 10.0         | 1-99          | 10.0         |
|                   |                   |                  |                          |          | 25+            | 9.5          | 100+           | 9.0          | 100+           | 9.0          | 100+          | 9.0          |
| Brainerd          | 18.1              | 16.6             | 16.1                     | 11.2     | 1-24           | 10.4         | 1-99           | 9.9          | 1-99           | 9.9          | 1-99          | 9.9          |
|                   |                   |                  |                          |          | 25+            | 9.4          | 100+           | 8.9          | 100+           | 8.9          | 100+          | 8.9          |
| Bemidji           | 18.6              | 17.1             | 16.6                     | 11.8     | 1-24           | 10.8         | 1-99           | 10.3         | 1-99           | 10.3         | 1-99          | 10.3         |
|                   |                   |                  |                          |          | 25+            | 9.8          | 100+           | 9.3          | 100+           | 9.3          | 100+          | 9.3          |
| Thief River Falls | 19.0              | 17.5             | 17.0                     | 12.2     |                | 9.6          |                | 9.4          |                | 9.4          |               | 10.4         |

The J. G. White Engineering Corp., New York

TOTAL ANNUAL M. C. F. OF NATURAL GAS DELIVERED  
THROUGH TOWN BORDER STATIONS IN MINNESOTA, 1935 - 1943



SOURCE: NORTHERN NATURAL GAS CO.

THE J. C. WHITE ENGINEERING CORP. NEW YORK

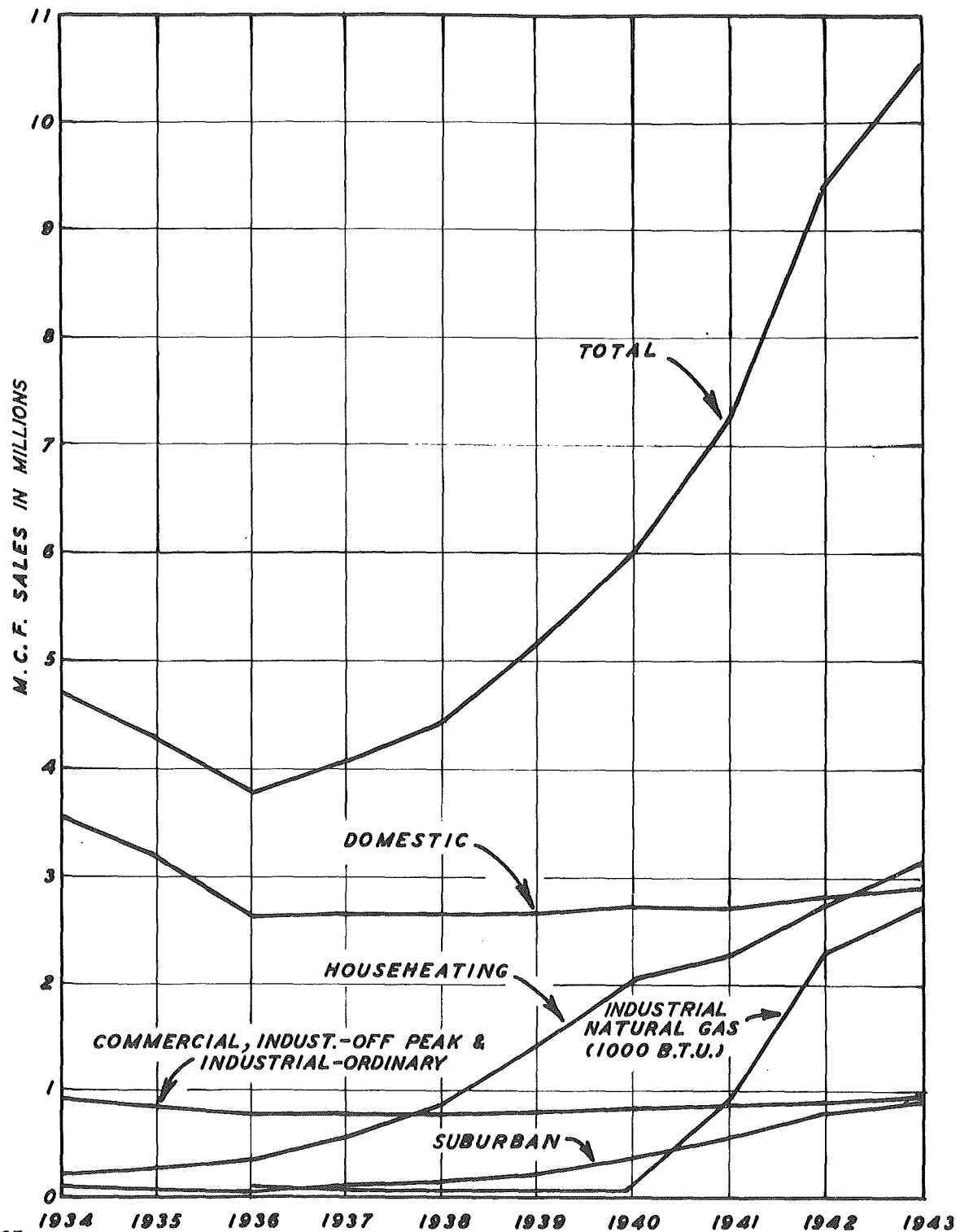
ANNUAL M.C.F. GAS SALES AND NUMBER OF CUSTOMERS OF  
THE MINNEAPOLIS GAS LIGHT COMPANY 1934-1943

ANNUAL M.C.F. GAS SALES AND NUMBER OF CUSTOMERS  
OF THE  
MINNEAPOLIS GAS LIGHT COMPANY, 1934 TO 1943

| <u>M.C.F. Sales*</u>                | <u>1934</u>      | <u>1935</u>      | <u>1936</u>      | <u>1937</u>      | <u>1938</u>      | <u>1939</u>      | <u>1940</u>      | <u>1941</u>      | <u>1942</u>      | <u>1943</u>       |
|-------------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-------------------|
| Domestic                            | 3,522,638        | 3,149,732        | 2,599,744        | 2,617,012        | 2,663,599        | 2,647,610        | 2,729,857        | 2,698,090        | 2,794,175        | 2,900,321         |
| Househeating                        | 182,328          | 237,225          | 322,069          | 522,444          | 877,374          | 1,415,832        | 2,032,098        | 2,301,772        | 2,726,901        | 3,131,596         |
| Commercial                          | 252,270          | 287,362          | 275,470          | 524,298          | 516,904          | 516,191          | 519,802          | 520,151          | 511,053          | 493,534           |
| Industrial - Ordinary               | 604,493          | 509,725          | 431,440          | 214,639          | 198,064          | 222,171          | 250,688          | 286,426          | 329,080          | 436,034           |
| Industrial - Off Peak               | -                | -                | -                | -                | -                | 56,421           | 42,975           | 36,370           | 29,155           | 35,924            |
| Industrial - Natural (1,000 B.T.U.) | -                | -                | 73,329           | 66,602           | 62,782           | 63,017           | 64,274           | 890,813          | 2,295,750        | 2,679,020         |
| Suburban                            | 87,113           | 75,264           | 67,555           | 84,091           | 113,720          | 201,658          | 373,564          | 533,298          | 782,637          | 890,540           |
| Total                               | <u>4,648,842</u> | <u>4,259,308</u> | <u>3,769,607</u> | <u>4,029,086</u> | <u>4,432,443</u> | <u>5,122,900</u> | <u>6,013,258</u> | <u>7,266,920</u> | <u>9,468,751</u> | <u>10,566,969</u> |
| <br><u>Number of Customers</u>      |                  |                  |                  |                  |                  |                  |                  |                  |                  |                   |
| Domestic                            | 105,421          | 107,150          | 108,334          | 109,974          | 109,982          | 110,830          | 111,351          | 113,616          | 115,968          | 117,415           |
| Househeating                        | 541              | 854              | 1,480            | 2,739            | 5,409            | 8,493            | 11,606           | 14,644           | 17,358           | 17,629            |
| Commercial                          | 4,394            | 4,823            | 5,050            | 5,548            | 5,555            | 5,492            | 5,364            | 5,190            | 4,943            | 4,717             |
| Industrial - Ordinary               | 2,501            | 2,068            | 1,836            | 484              | 487              | 475              | 475              | 495              | 501              | 510               |
| Industrial - Off Peak               | -                | -                | -                | -                | -                | 2                | 2                | 2                | 2                | 2                 |
| Industrial - Natural                | -                | -                | 1                | 1                | 1                | 1                | 1                | 9                | 9                | 11                |
| Total                               | <u>112,857</u>   | <u>114,895</u>   | <u>116,701</u>   | <u>118,746</u>   | <u>121,434</u>   | <u>125,293</u>   | <u>128,799</u>   | <u>133,956</u>   | <u>138,781</u>   | <u>140,284</u>    |

\*Heating Value: 550 B.T.U. to 6-1-35; 800 B.T.U. after 6-1-35; except Industrial-Natural which is 1,000 B.T.U.

# ANNUAL M. C. F. GAS SALES OF THE MINNEAPOLIS GAS LIGHT COMPANY 1934-1943



SOURCE:  
MINNESOTA GAS LIGHT CO.

THE J.G. WHITE ENGINEERING CORP. NEW YORK

ANNUAL M.C.F. GAS SALES AND NUMBER OF CUSTOMERS OF THE  
SAINT PAUL DIVISION OF NORTHERN STATES POWER COMPANY 1934-1943

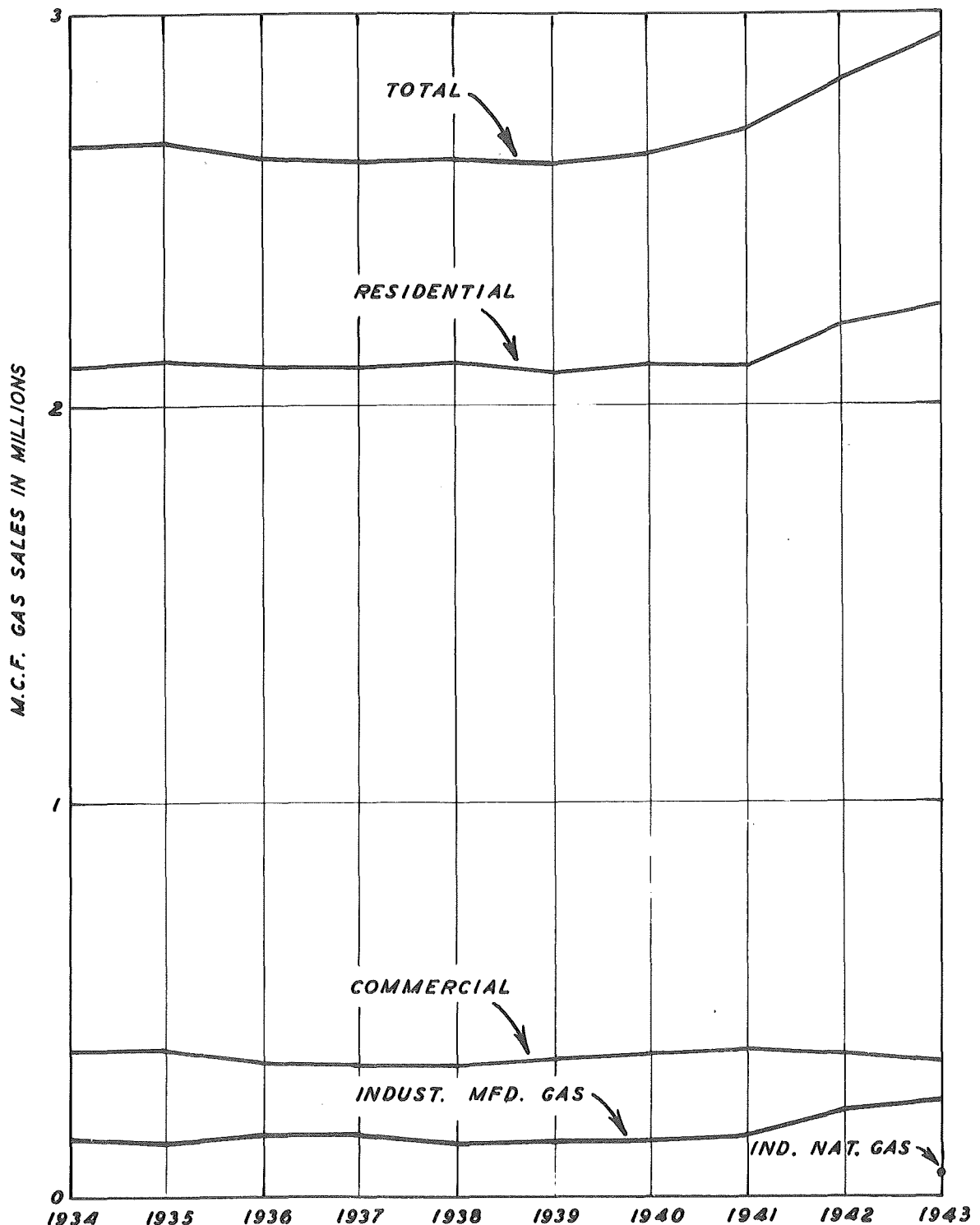
NORTHERN STATES POWER COMPANY - ST. PAUL DIVISION  
ANNUAL M.C.F. GAS SALES

| Gas Sales M.C.F.            | 1934               | 1935               | 1936               | 1937               | 1938               | 1939               | 1940               | 1941               | 1942               | 1943               |
|-----------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Residential                 | 2,118,767.5        | 2,134,976.9        | 2,105,656.9        | 2,096,010.3        | 2,125,660.5        | 2,108,577.3        | 2,128,093.3        | 2,134,068.8        | 2,228,527.8        | 2,281,100.2        |
| Commercial                  | 379,220.3          | 388,908.5          | 362,338.3          | 361,910.8          | 365,705.5          | 370,307.5          | 383,266.6          | 389,614.7          | 384,699.8          | 367,109.5          |
| Industrial Manufactured Gas | 153,733.6          | 149,729.1          | 166,844.2          | 173,033.9          | 148,663.8          | 152,529.3          | 156,160.6          | 185,058.8          | 222,851.8          | 250,105.2          |
| Industrial Natural Gas      | -                  | -                  | -                  | -                  | -                  | -                  | -                  | -                  | -                  | 55,842.0           |
| Total                       | <u>2,651,721.4</u> | <u>2,673,614.5</u> | <u>2,634,839.4</u> | <u>2,630,955.5</u> | <u>2,640,029.8</u> | <u>2,631,414.1</u> | <u>2,667,520.5</u> | <u>2,708,742.3</u> | <u>2,836,079.4</u> | <u>2,954,156.9</u> |

NORTHERN STATES POWER COMPANY - ST. PAUL DIVISION  
GAS CUSTOMERS

|                             | 1934          | 1935          | 1936          | 1937          | 1938          | 1939          | 1940          | 1941          | 1942          | 1943          |
|-----------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Residential                 | 66,526        | 67,843        | 69,287        | 69,191        | 69,588        | 70,314        | 71,071        | 72,515        | 73,789        | 73,924        |
| Commercial                  | 4,472         | 4,464         | 4,109*        | 4,048         | 4,013         | 4,047         | 4,088         | 4,072         | 3,896         | 3,788         |
| Industrial Manufactured Gas | 275           | 273           | 286           | 285           | 265           | 275           | 270           | 286           | 288           | 308           |
| Industrial Natural Gas      | -             | -             | -             | -             | -             | -             | -             | -             | -             | -             |
| Total                       | <u>71,723</u> | <u>72,580</u> | <u>73,682</u> | <u>73,524</u> | <u>73,866</u> | <u>74,636</u> | <u>75,429</u> | <u>76,873</u> | <u>77,973</u> | <u>78,021</u> |

\*Rooming houses which had heretofore been classified as Commercial were transferred to Residential rate.

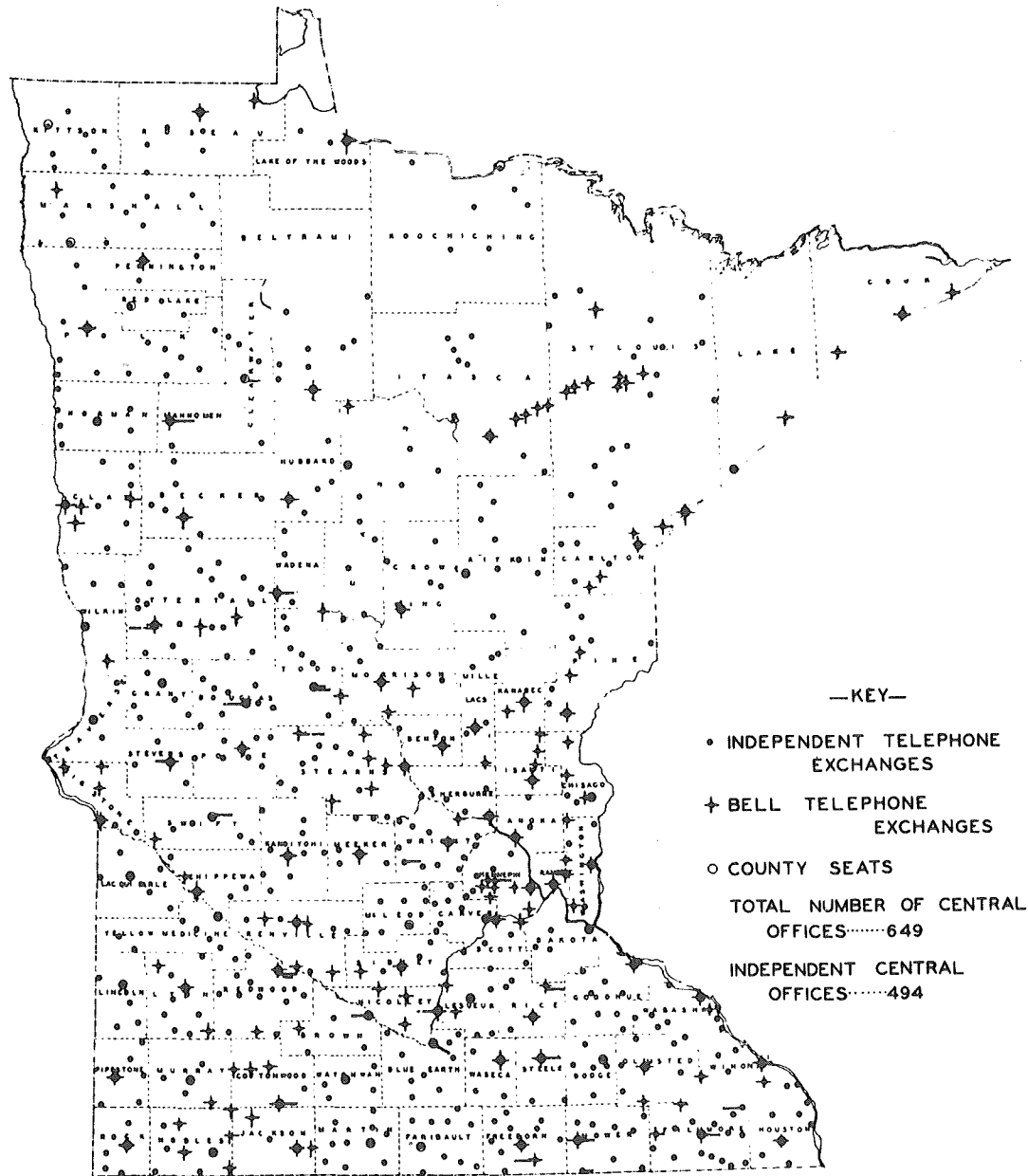
ANNUAL M.C.F. GAS SALES OF THE SAINT PAUL DIVISION  
OF NORTHERN STATES POWER COMPANY, 1934 - 1943

SOURCE:  
NORTHERN STATES POWER CO.

THE J.G. WHITE ENGINEERING CORP. NEW YORK



# BELL SYSTEM AND INDEPENDENT TELEPHONE EXCHANGES IN MINNESOTA JANUARY 1, 1941



SOURCE: MINNESOTA TELEPHONE ASSOCIATION

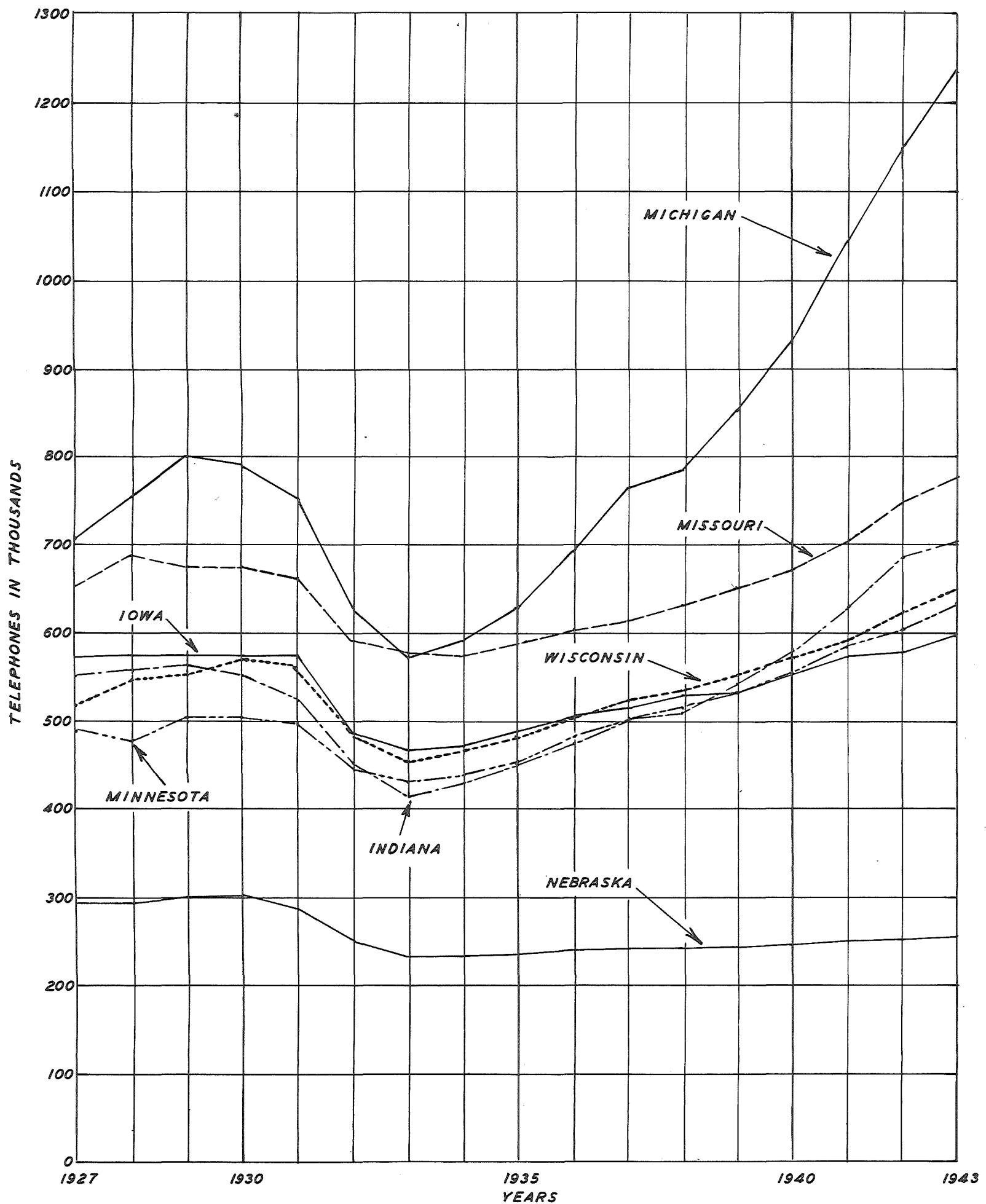
THE J.G. WHITE ENGINEERING CORP. NEW YORK

TOTAL NUMBER OF TELEPHONES AND TELEPHONES PER 100 POPULATION  
FOR MINNESOTA, INDIANA, IOWA, MICHIGAN, MISSOURI, NEBRASKA AND WISCONSIN,  
1907, 1912, 1917, 1922 AND 1924-1943

| Year | MINNESOTA                    |                           | INDIANA                      |                           | IOWA                         |                           | MICHIGAN                     |                           | MISSOURI                     |                           | NEBRASKA                     |                           | WISCONSIN                    |                           |
|------|------------------------------|---------------------------|------------------------------|---------------------------|------------------------------|---------------------------|------------------------------|---------------------------|------------------------------|---------------------------|------------------------------|---------------------------|------------------------------|---------------------------|
|      | Total<br>Telephones<br>1000s | Phones<br>Per<br>100 Pop. | Total<br>Telephones<br>1000s | Phones<br>Per<br>100 Pop. | Total<br>Telephones<br>1000s | Phones<br>Per<br>100 Pop. | Total<br>Telephones<br>1000s | Phones<br>Per<br>100 Pop. | Total<br>Telephones<br>1000s | Phones<br>Per<br>100 Pop. | Total<br>Telephones<br>1000s | Phones<br>Per<br>100 Pop. | Total<br>Telephones<br>1000s | Phones<br>Per<br>100 Pop. |
| 1907 | 171                          | 8.6                       | 289                          | 10.9                      | 333                          | 14.9                      | 210                          | 7.8                       | 313                          | 9.6                       | 152                          | 13.2                      | 159                          | 7.0                       |
| 1912 | 272                          | 12.7                      | 355                          | 12.9                      | 380                          | 16.8                      | 335                          | 11.1                      | 404                          | 12.2                      | 202                          | 16.6                      | 250                          | 10.4                      |
| 1917 | 408                          | 17.5                      | 459                          | 16.1                      | 489                          | 22.1                      | 434                          | 13.9                      | 511                          | 14.9                      | 248                          | 19.2                      | 349                          | 13.7                      |
| 1922 | 425                          | 17.1                      | 509                          | 17.0                      | 533                          | 21.7                      | 508                          | 12.9                      | 551                          | 16.0                      | 274                          | 20.6                      | 430                          | 15.8                      |
| 1924 | 436                          |                           | 518                          |                           | 557                          |                           | 582                          |                           | 596                          |                           | 283                          |                           | 460                          |                           |
| 1925 | 455                          |                           | 535                          |                           | 566                          |                           | 631                          |                           | 620                          |                           | 285                          |                           | 482                          |                           |
| 1926 | 460                          |                           | 537                          |                           | 564                          |                           | 676                          |                           | 642                          |                           | 286                          |                           | 500                          |                           |
| 1927 | 488                          | 18.0                      | 552                          | 17.5                      | 566                          | 23.3                      | 711                          | 15.6                      | 658                          | 18.7                      | 295                          | 21.0                      | 518                          | 17.7                      |
| 1928 | 477                          |                           | 559                          |                           | 570                          |                           | 755                          |                           | 684                          |                           | 295                          |                           | 542                          |                           |
| 1929 | 504                          |                           | 561                          |                           | 569                          |                           | 805                          |                           | 676                          |                           | 301                          |                           | 558                          |                           |
| 1930 | 506                          | 19.6                      | 555                          | 17.1                      | 576                          | 23.3                      | 789                          | 16.3                      | 679                          | 18.7                      | 304                          | 22.1                      | 570                          | 19.4                      |
| 1931 | 495                          |                           | 524                          |                           | 560                          |                           | 746                          |                           | 661                          |                           | 287                          |                           | 560                          |                           |
| 1932 | 444                          | 17.1                      | 445                          | 13.6                      | 485                          | 19.6                      | 622                          | 12.4                      | 592                          | 16.2                      | 248                          | 17.8                      | 482                          | 16.2                      |
| 1933 | 428                          |                           | 416                          |                           | 467                          |                           | 568                          |                           | 569                          |                           | 230                          |                           | 454                          |                           |
| 1934 | 437                          |                           | 426                          |                           | 470                          |                           | 589                          |                           | 573                          |                           | 233                          |                           | 464                          |                           |
| 1935 | 456                          | 16.7                      | 445                          | 12.4                      | 486                          | 18.5                      | 627                          | 12.7                      | 584                          | 14.7                      | 238                          | 17.1                      | 479                          | 16.0                      |
| 1936 | 481                          | 18.2                      | 476                          | 13.7                      | 506                          | 19.8                      | 692                          | 14.4                      | 603                          | 15.1                      | 242                          | 17.7                      | 506                          | 17.4                      |
| 1937 | 500                          | 18.8                      | 505                          | 14.5                      | 514                          | 20.2                      | 760                          | 15.7                      | 616                          | 15.4                      | 242                          | 17.8                      | 528                          | 18.1                      |
| 1938 | 516                          | 19.4                      | 515                          | 14.8                      | 528                          | 20.6                      | 782                          | 16.8                      | 629                          | 15.8                      | 241                          | 17.7                      | 536                          | 18.3                      |
| 1939 | 534                          | 20.2                      | 541                          | 15.3                      | 534                          | 21.1                      | 846                          | 17.5                      | 650                          | 16.3                      | 241                          | 17.8                      | 549                          | 18.8                      |
| 1940 | 556                          | 19.9                      | 575                          | 16.8                      | 553                          | 21.8                      | 928                          | 17.6                      | 673                          | 17.8                      | 246                          | 18.8                      | 571                          | 18.2                      |
| 1941 | 583                          | 20.9                      | 626                          | 18.2                      | 572                          | 22.8                      | 1,043                        | 19.9                      | 709                          | 18.8                      | 250                          | 19.0                      | 593                          | 18.9                      |
| 1942 | 604                          | 21.6                      | 682                          | 19.7                      | 578                          | 22.1                      | 1,151                        | 21.9                      | 744                          | 19.8                      | 261                          | 19.8                      | 623                          | 19.8                      |
| 1943 | 629                          | 22.5                      | 710                          | 20.4                      | 599                          | 23.7                      | 1,236                        | 23.1                      | 778                          | 20.5                      | 272                          | 20.6                      | 653                          | 20.8                      |

Source: For years 1907, 1912, 1917, 1922, 1927, 1932 and 1937, U. S. Census of Electrical Industries 1922, 1927, 1932 and 1937  
For years 1924/6 Telephony's Directories 1927, 1928, 1932 and American Telephone & Telegraph Company for the balance.

# NUMBER OF TELEPHONES IN MINNESOTA, INDIANA, IOWA, MICHIGAN, MISSOURI, NEBRASKA AND WISCONSIN 1927-1943



SOURCE:- AMERICAN TELEPHONE & TELEGRAPH CO.

THE J.G. WHITE ENGINEERING CORP. NEW YORK

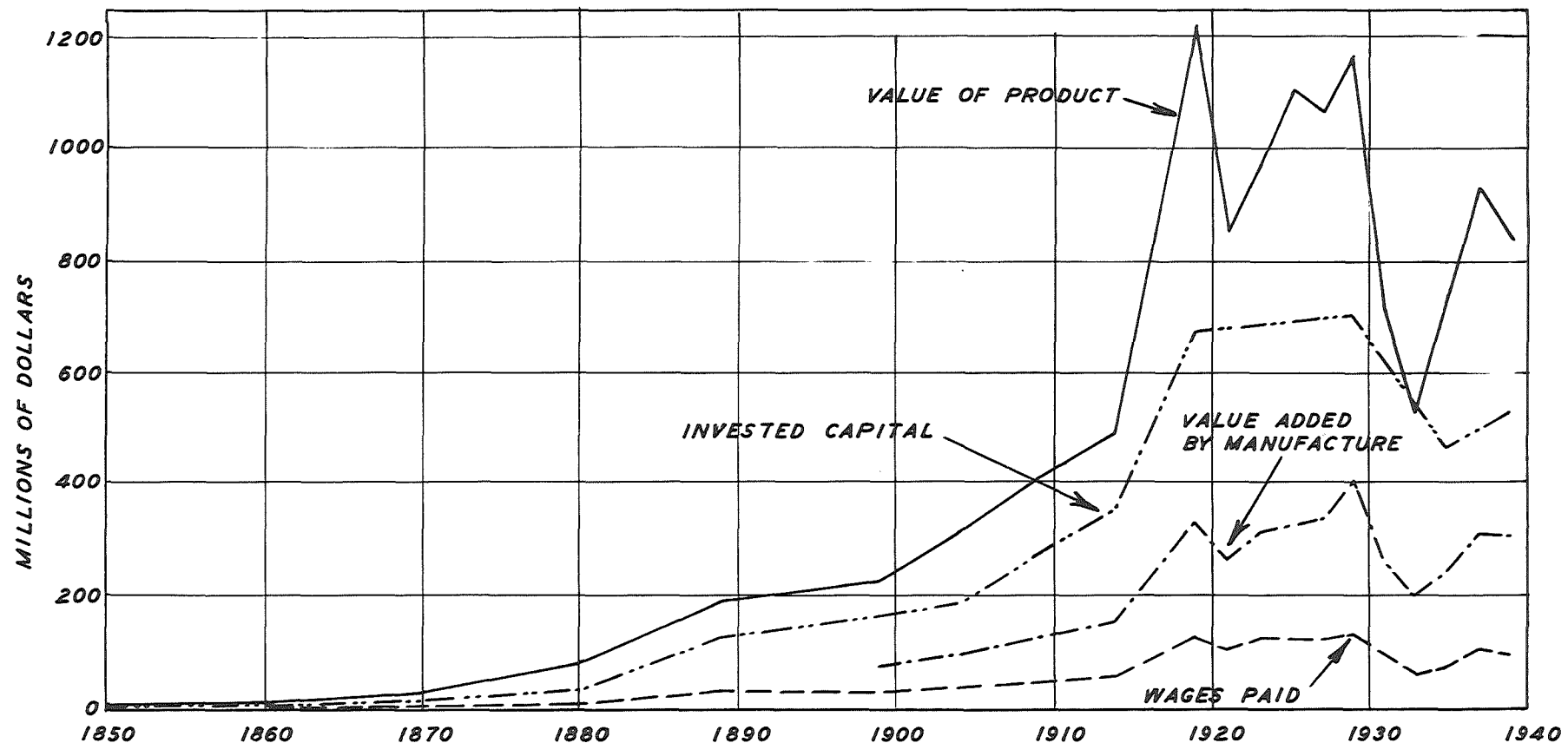
TELEPHONE CALLS AND CALLS PER CAPITA ORIGINATING  
WITH SYSTEMS REPORTING TO U.S. CENSUS FOR  
MINNESOTA, INDIANA, IOWA, MICHIGAN, MISSOURI, NEBRASKA,  
AND WISCONSIN, 1912, 1917, 1922, 1927, 1932 AND 1937

NUMBER OF CALLS EXPRESSED IN MILLIONS

| Year | MINNESOTA    |               | INDIANA      |               | IOWA         |               | MICHIGAN     |               | MISSOURI     |               | NEBRASKA     |               | WISCONSIN    |               |
|------|--------------|---------------|--------------|---------------|--------------|---------------|--------------|---------------|--------------|---------------|--------------|---------------|--------------|---------------|
|      | Calls        |               | Calls        |               | Calls        |               | Calls        |               | Calls        |               | Calls        |               | Calls        |               |
|      | Total        | Per           | Total        | Per           | Total        | Per           | Total        | Per           | Total        | Per           | Total        | Per           | Total        | Per           |
|      | <u>Calls</u> | <u>Capita</u> | <u>Calls</u> | <u>Capita</u> | <u>Calls</u> | <u>Capita</u> | <u>Calls</u> | <u>Capita</u> | <u>Calls</u> | <u>Capita</u> | <u>Calls</u> | <u>Capita</u> | <u>Calls</u> | <u>Capita</u> |
| 1912 | 418.7        | 196           | 583.6        | 209           | 471.1        | 208           | 694.3        | 207           | 655.6        | 198           | 291.6        | 239           | 340.7        | 140           |
| 1917 | 630.2        | 270           | 784.4        | 275           | 634.3        | 291           | 842.0        | 270           | 842.6        | 246           | 425.4        | 328           | 488.2        | 192           |
| 1922 | 678.2        | 273           | 790.8        | 265           | 582.3        | 236           | 771.1        | 196           | 848.8        | 246           | 437.5        | 330           | 537.4        | 198           |
| 1927 | 931.1        | 343           | 1061.0       | 336           | 915.5        | 377           | 1140.2       | 250           | 1269.0       | 361           | 524.4        | 374           | 807.6        | 276           |
| 1932 | 849.2        | 327           | 864.4        | 264           | 774.6        | 314           | 981.9        | 196           | 1157.3       | 316           | 366.9        | 263           | 740.5        | 249           |
| 1937 | 890.1        | 335           | 892.8        | 255           | 792.8        | 311           | 1196.0       | 246           | 1207.2       | 302           | 417.7        | 298           | 784.0        | 268           |

Source: U. S. Department of Commerce, Bureau of the Census, Census of Electrical Industries, 1922, 1927, 1932, 1937

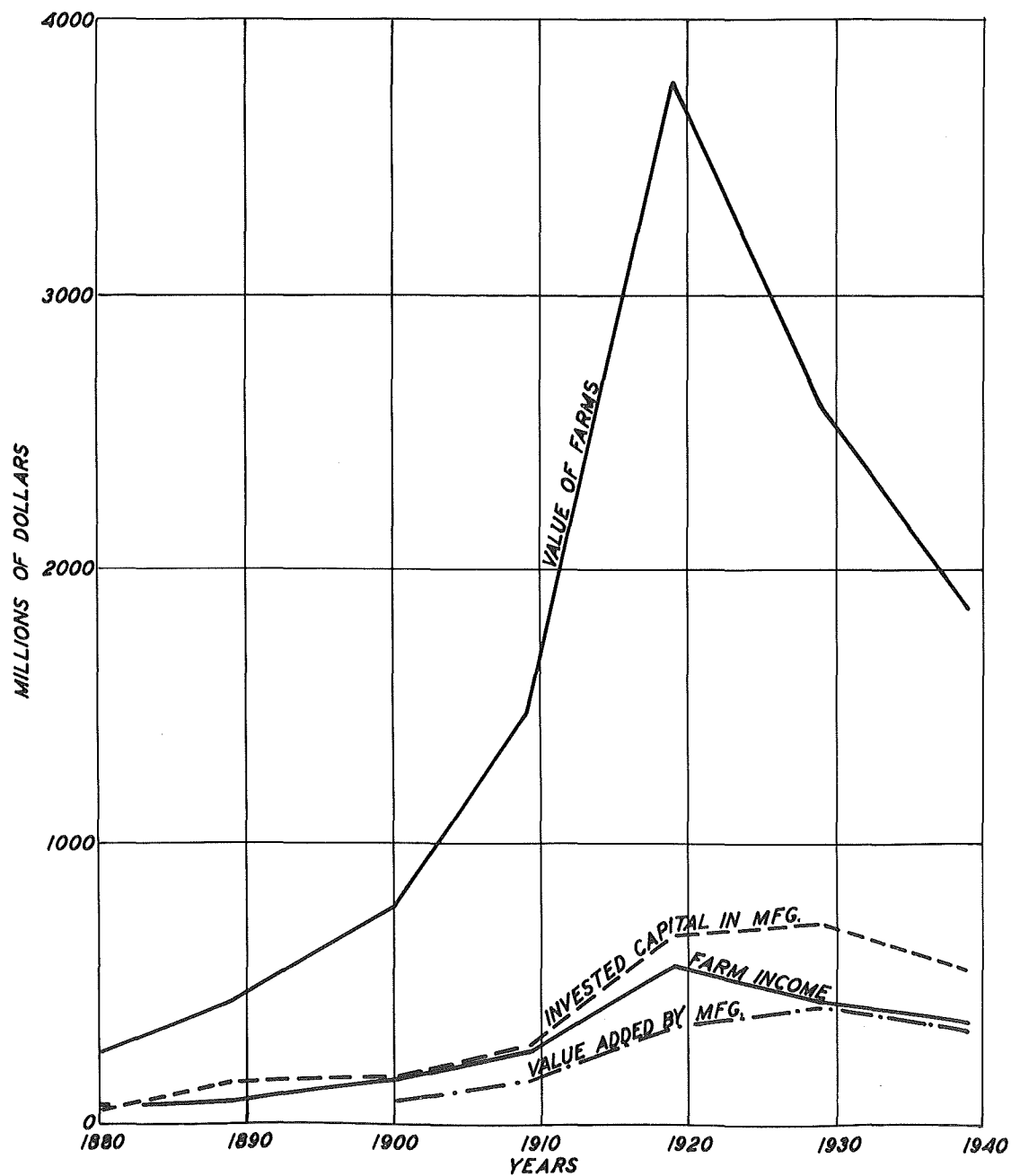
# ALL MANUFACTURING IN MINNESOTA-1850-1939 VALUE OF PRODUCTS, INVESTED CAPITAL, VALUE ADDED BY MANUFACTURE AND WAGES PAID



NOTE:- INVESTED CAPITAL HAS BEEN ESTIMATED SINCE 1919 WHICH WAS THE LAST YEAR REPORTED BY THE U.S. CENSUS OF MANUFACTURES. THESE ESTIMATES ARE BASED ON THE NUMBER OF WAGE EARNERS IN SPECIFIED INDUSTRIES AS REPORTED BY THE CENSUS AND THE NET CAPITAL PER WAGE EARNER EMPLOYED IN THESE INDUSTRIES FROM THE TABLE PUBLISHED BY THE CONFERENCE BOARD IN "THE ECONOMIC ALMANAC FOR 1944-1945."

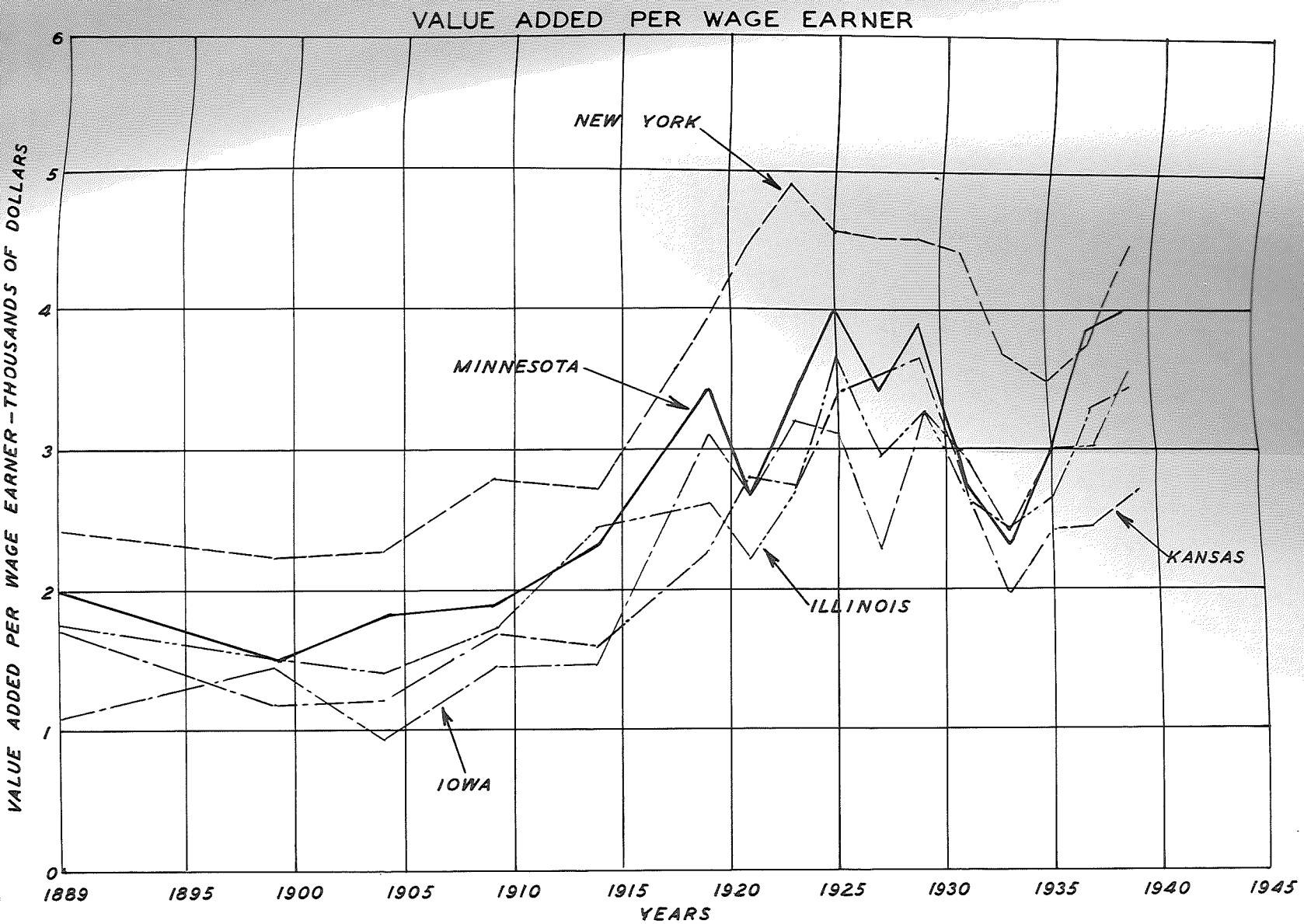
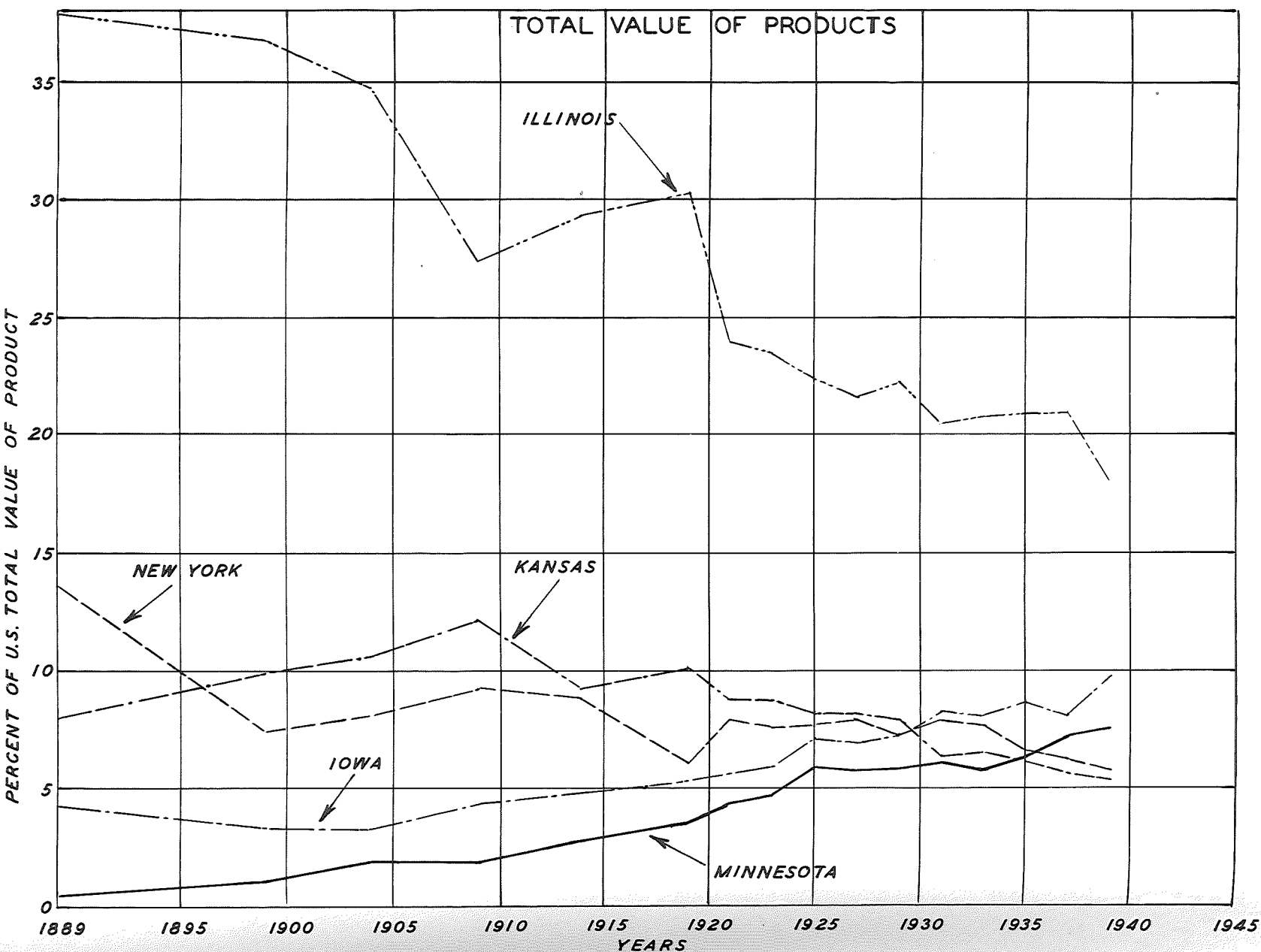
THE J.G. WHITE ENGINEERING CORP. NEW YORK

COMPARISON OF MANUFACTURING AND AGRICULTURE IN MINNESOTA  
INVESTED CAPITAL IN MANUFACTURING, VALUE ADDED BY  
MANUFACTURE, VALUE OF FARMS AND FARM INCOME, 1880-1939

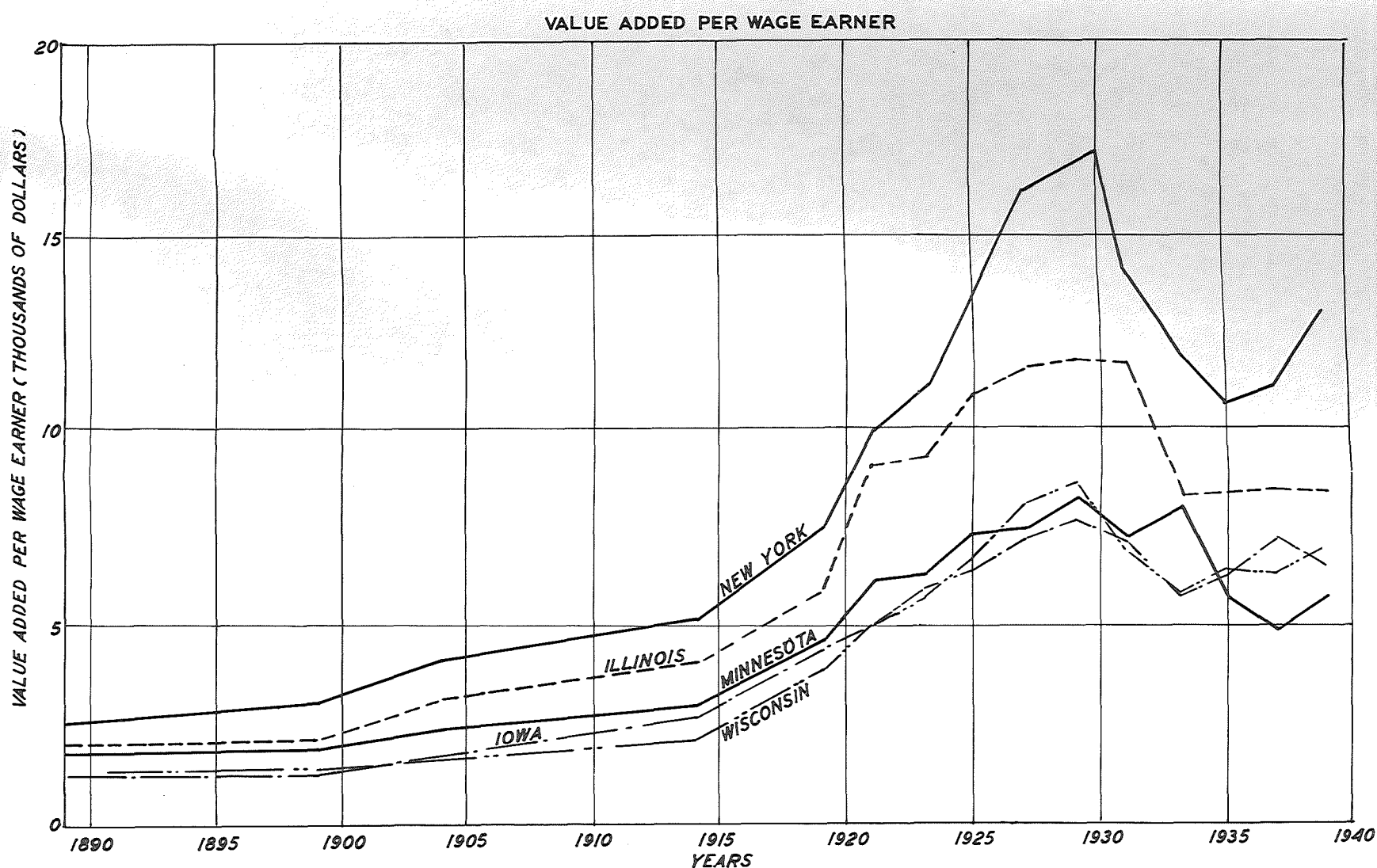
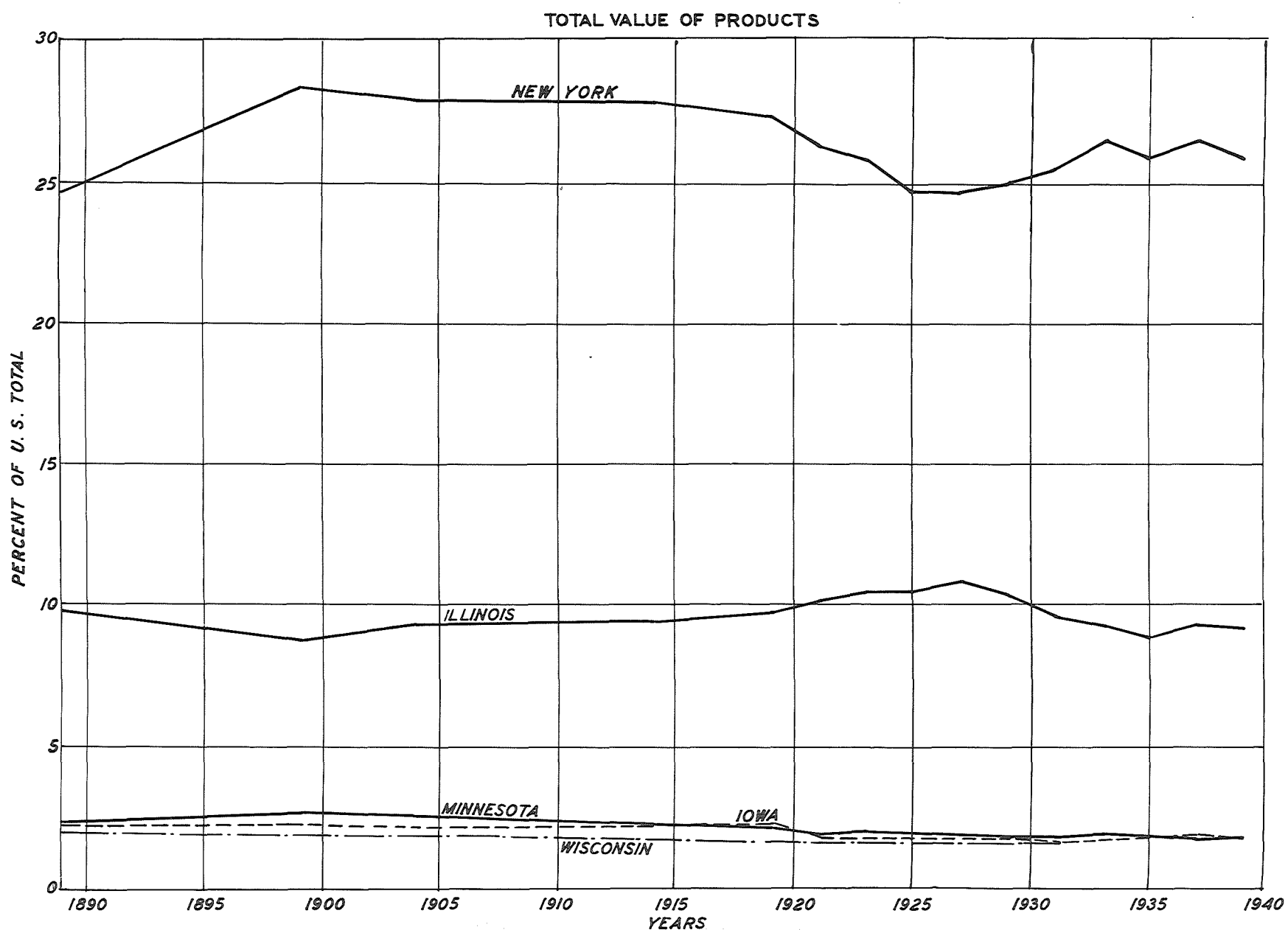




# MEAT PACKING IN MINNESOTA, 1889-1939 VALUE ADDED PER WAGE EARNER AND VALUE OF PRODUCTS IN PERCENT OF UNITED STATES TOTAL

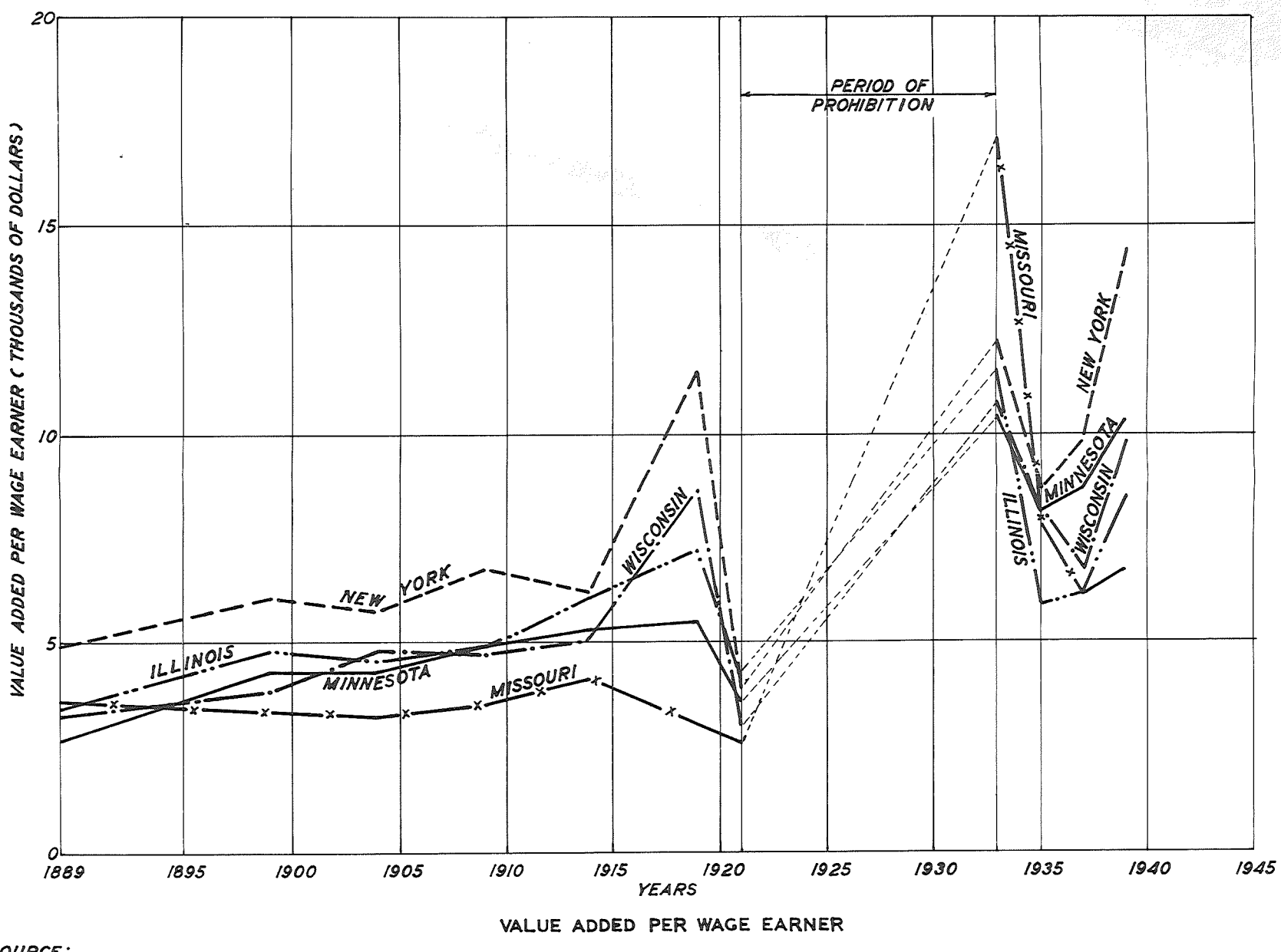
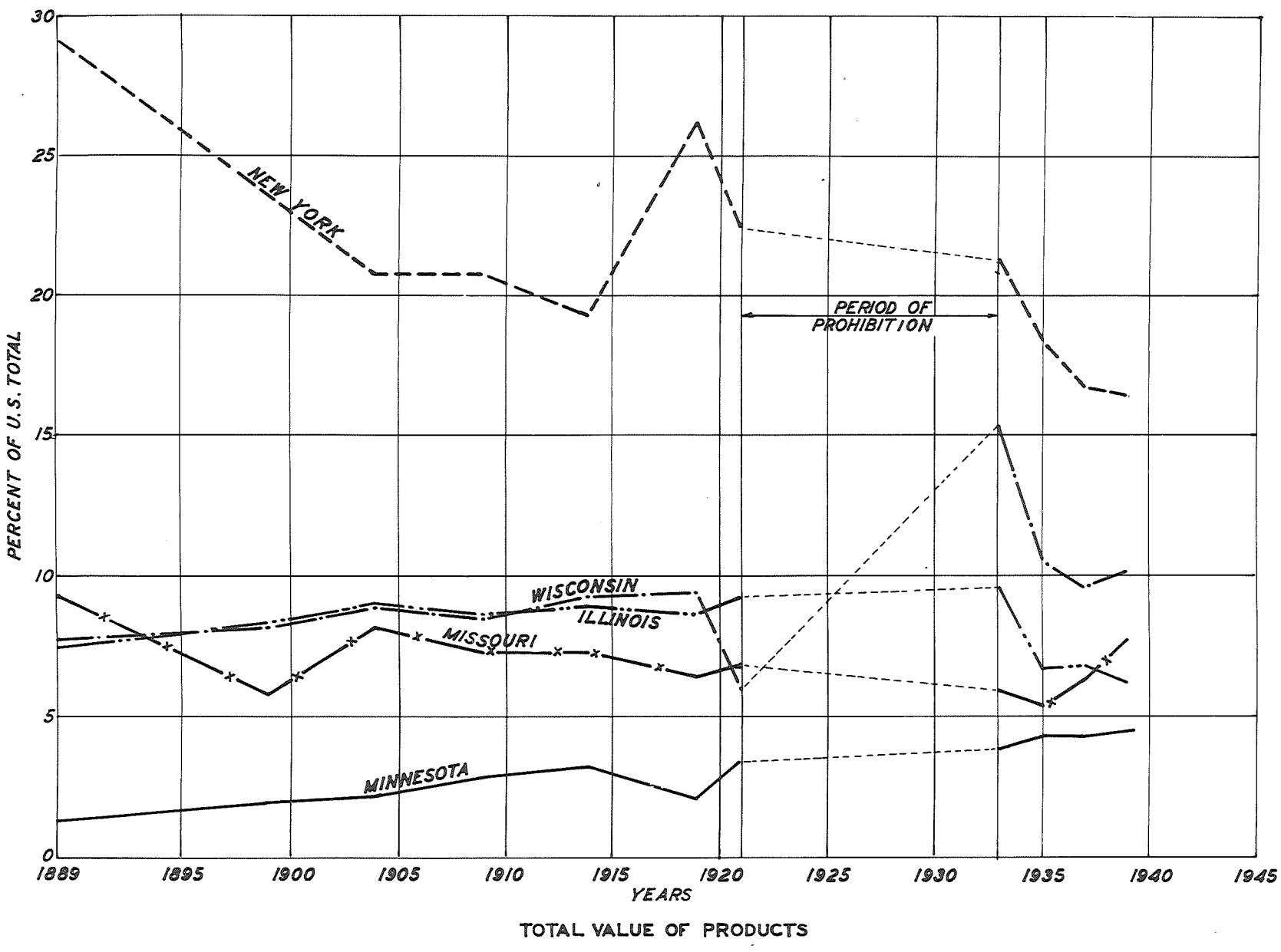


# NEWS AND PERIODICALS PRINTING IN MINNESOTA 1889-1939, VALUE ADDED PER WAGE EARNER AND VALUE OF PRODUCTS IN PERCENT OF UNITED STATES TOTAL



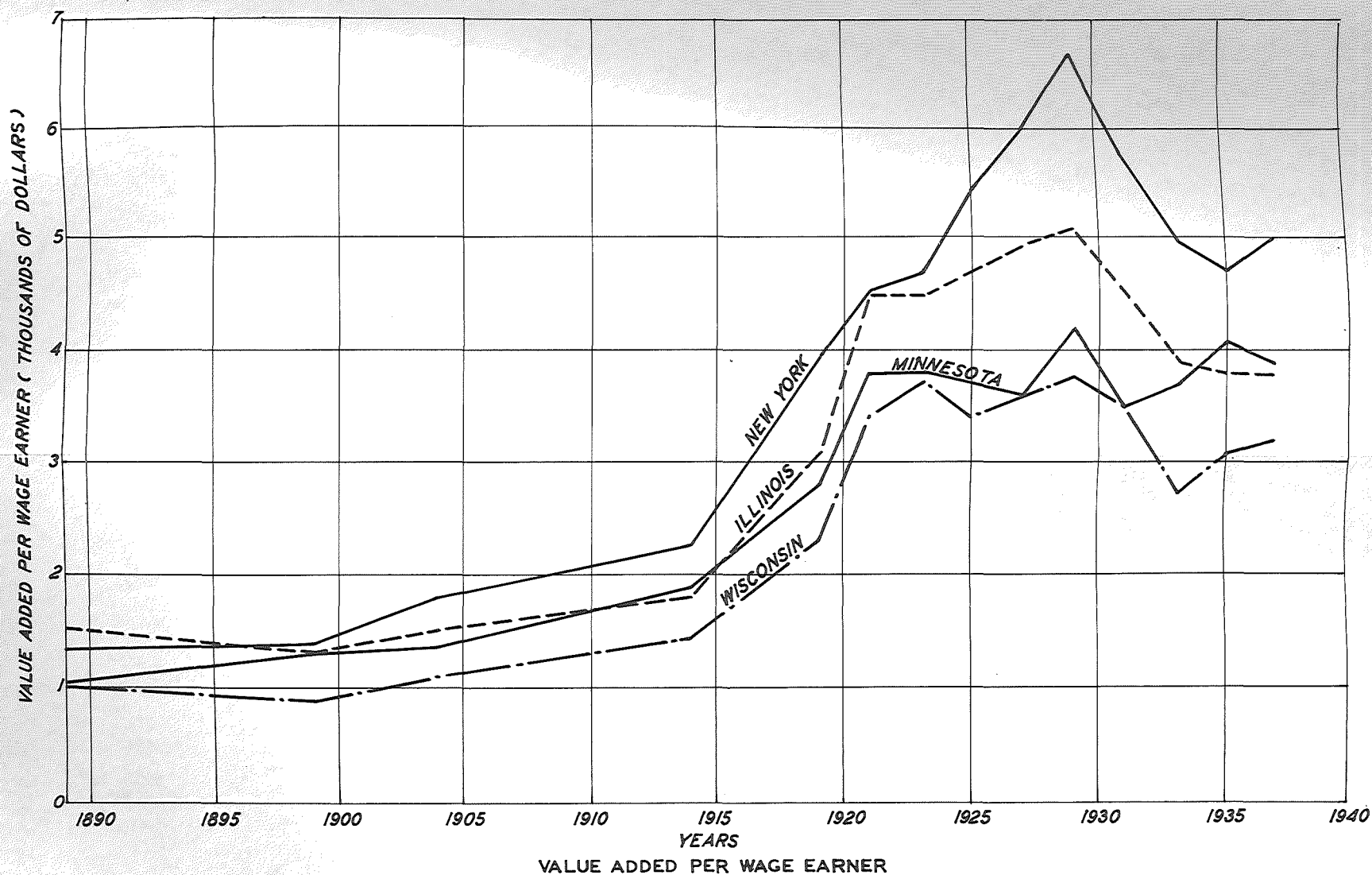
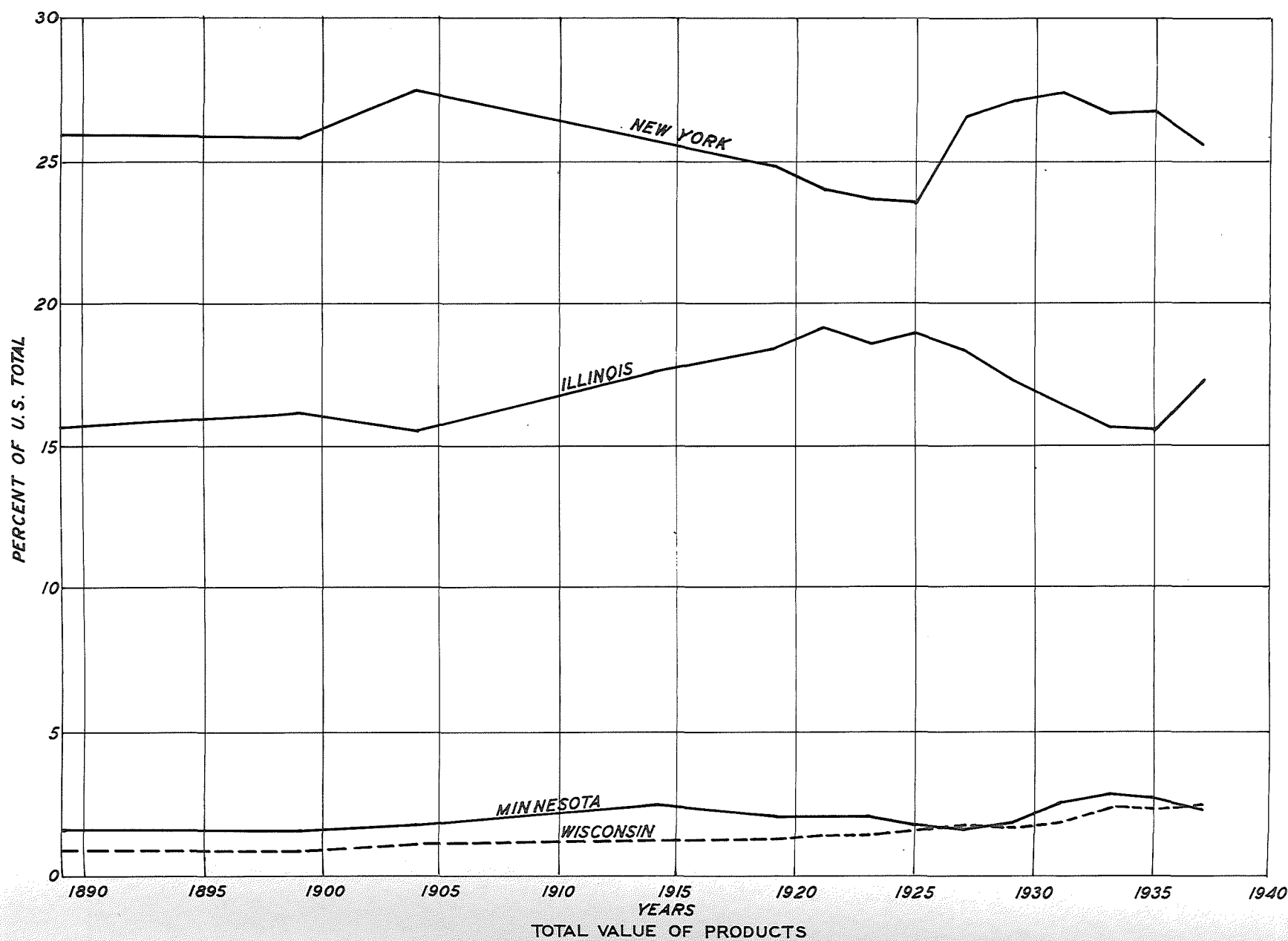
SOURCE: U. S. CENSUS

# MALT LIQUOR MANUFACTURE IN MINNESOTA, 1889-1939, VALUE ADDED PER WAGE-EARNER AND VALUE OF PRODUCTS IN PERCENT OF UNITED STATES TOTAL



SOURCE: U. S. CENSUS

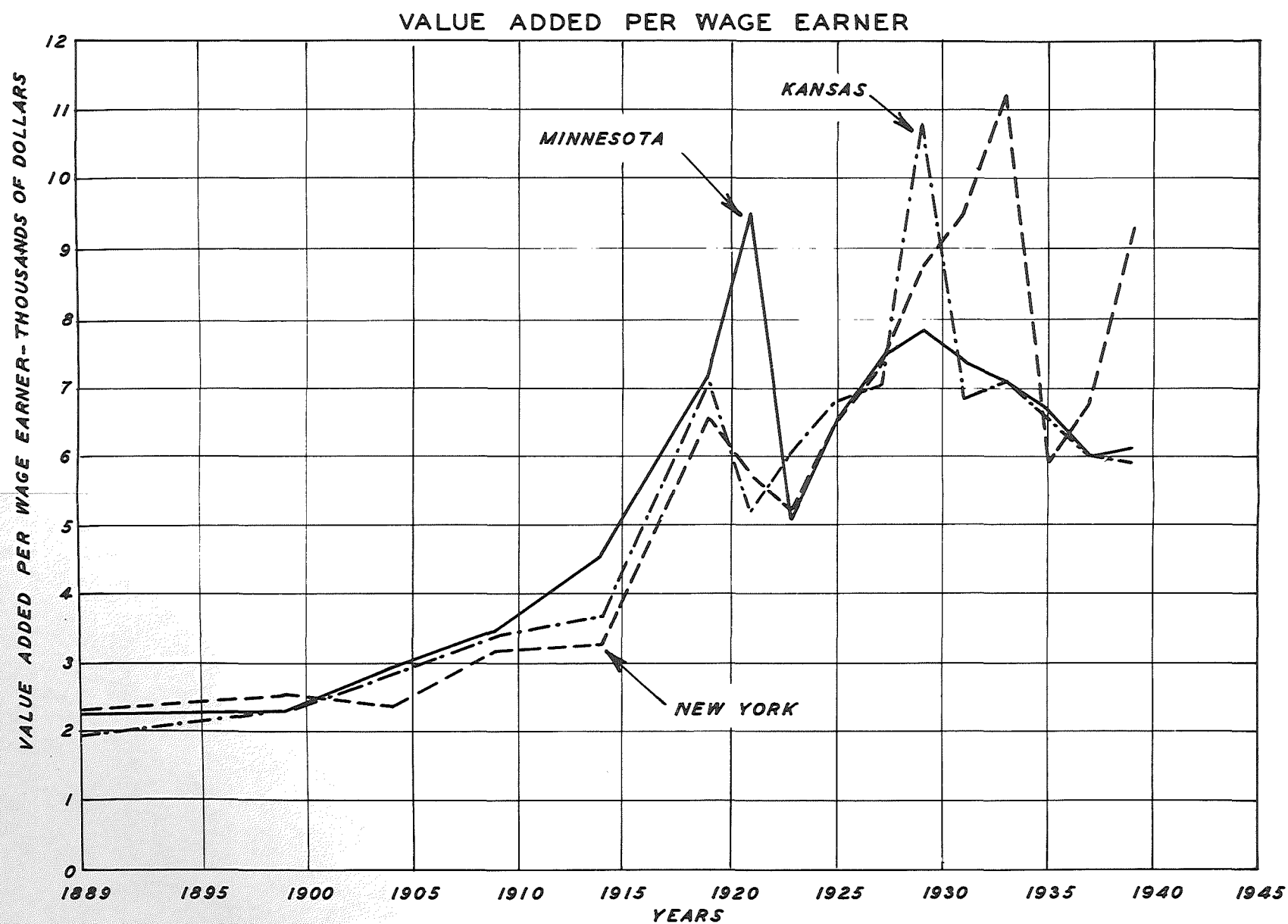
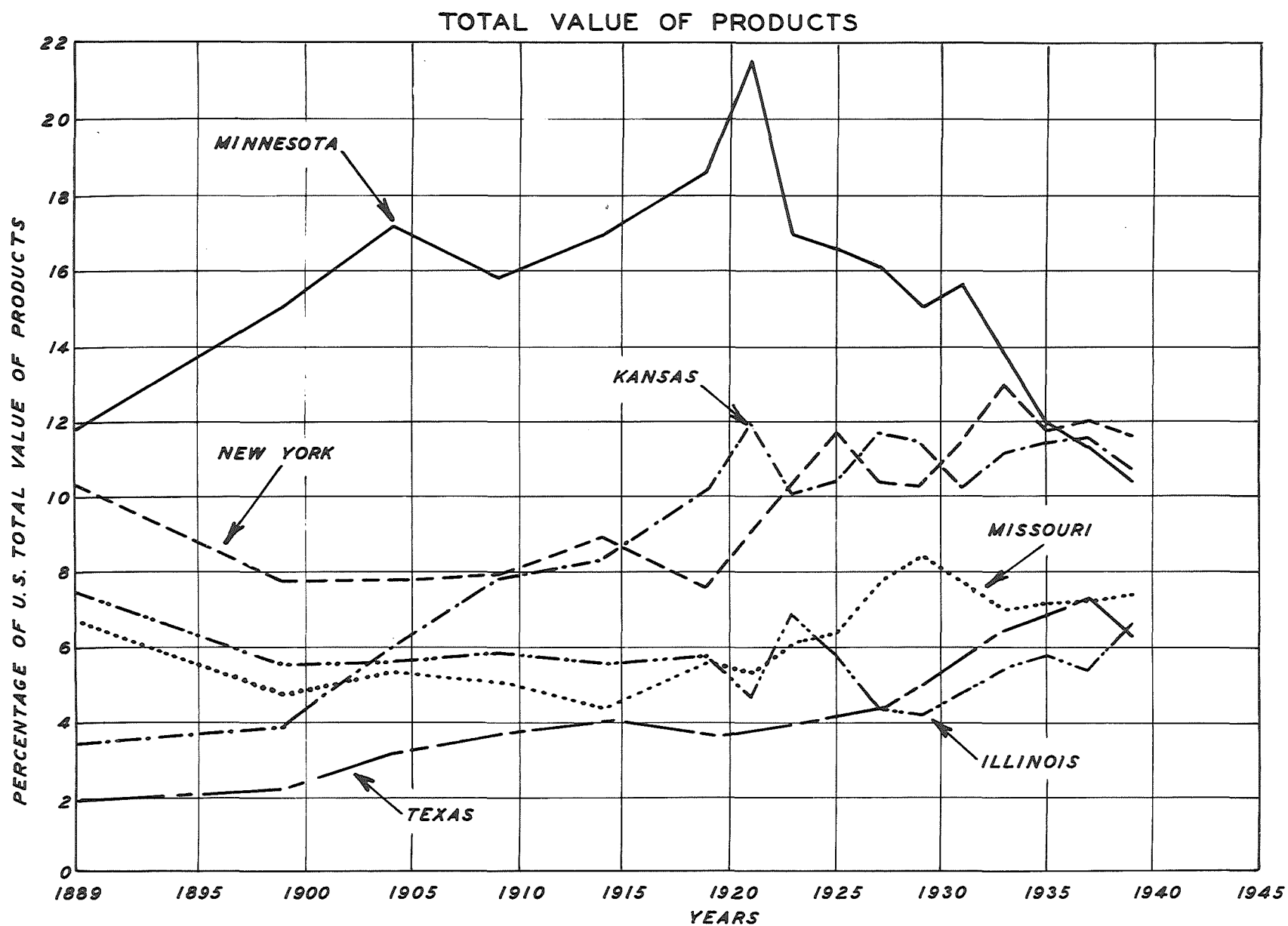
BOOK AND JOB PRINTNG IN MINNESOTA 1889-1937, VALUE ADDED PER WAGE -  
EARNER AND VALUE OF PRODUCTS IN PERCENT OF UNITED STATES TOTAL



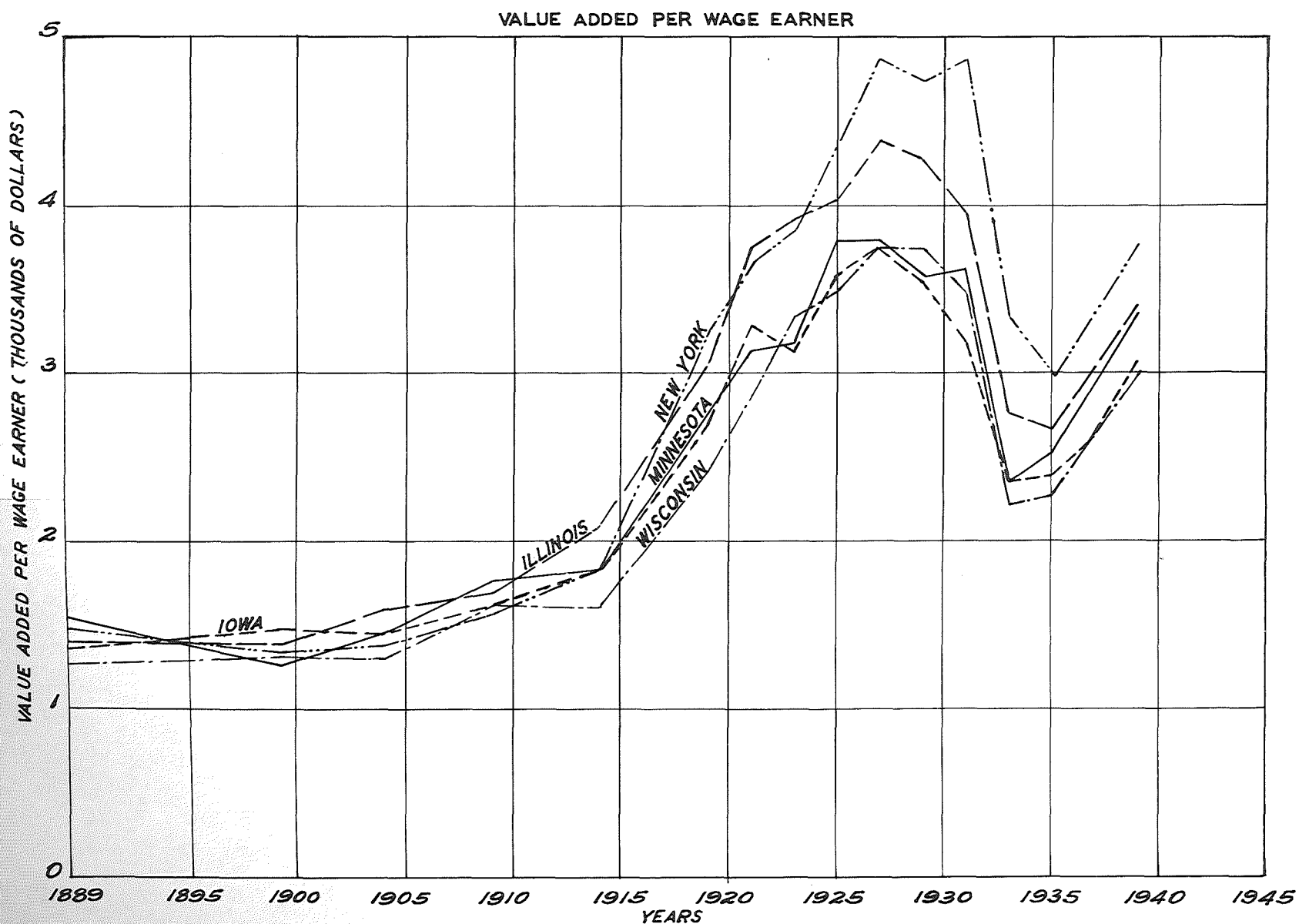
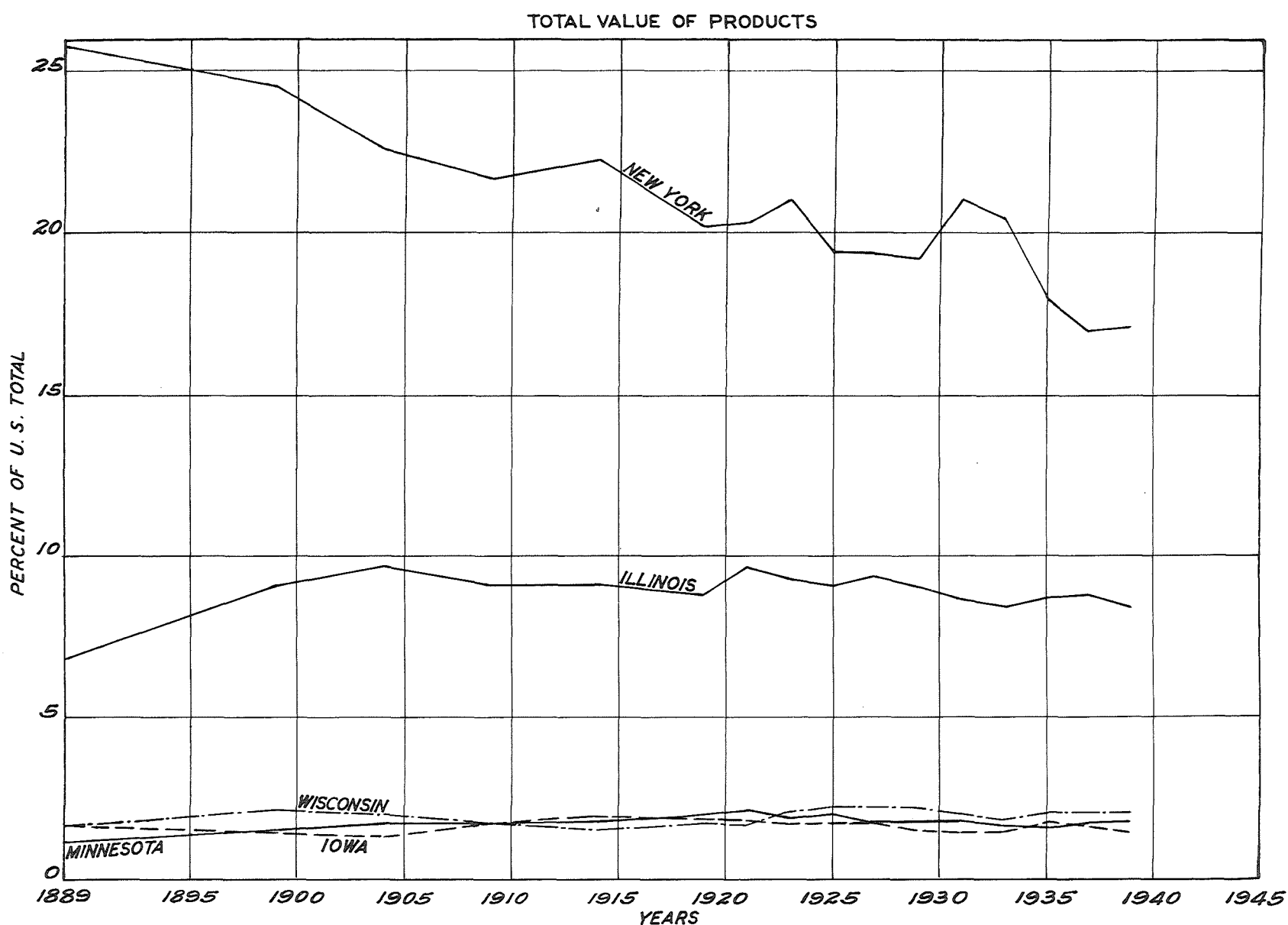
SOURCE:  
U. S. CENSUS



# FLOUR AND OTHER GRAIN MILL PRODUCTS MANUFACTURED IN MINNESOTA-1889-1939 VALUE ADDED PER WAGE EARNER AND VALUE OF PRODUCTS IN PERCENT OF UNITED STATES TOTAL



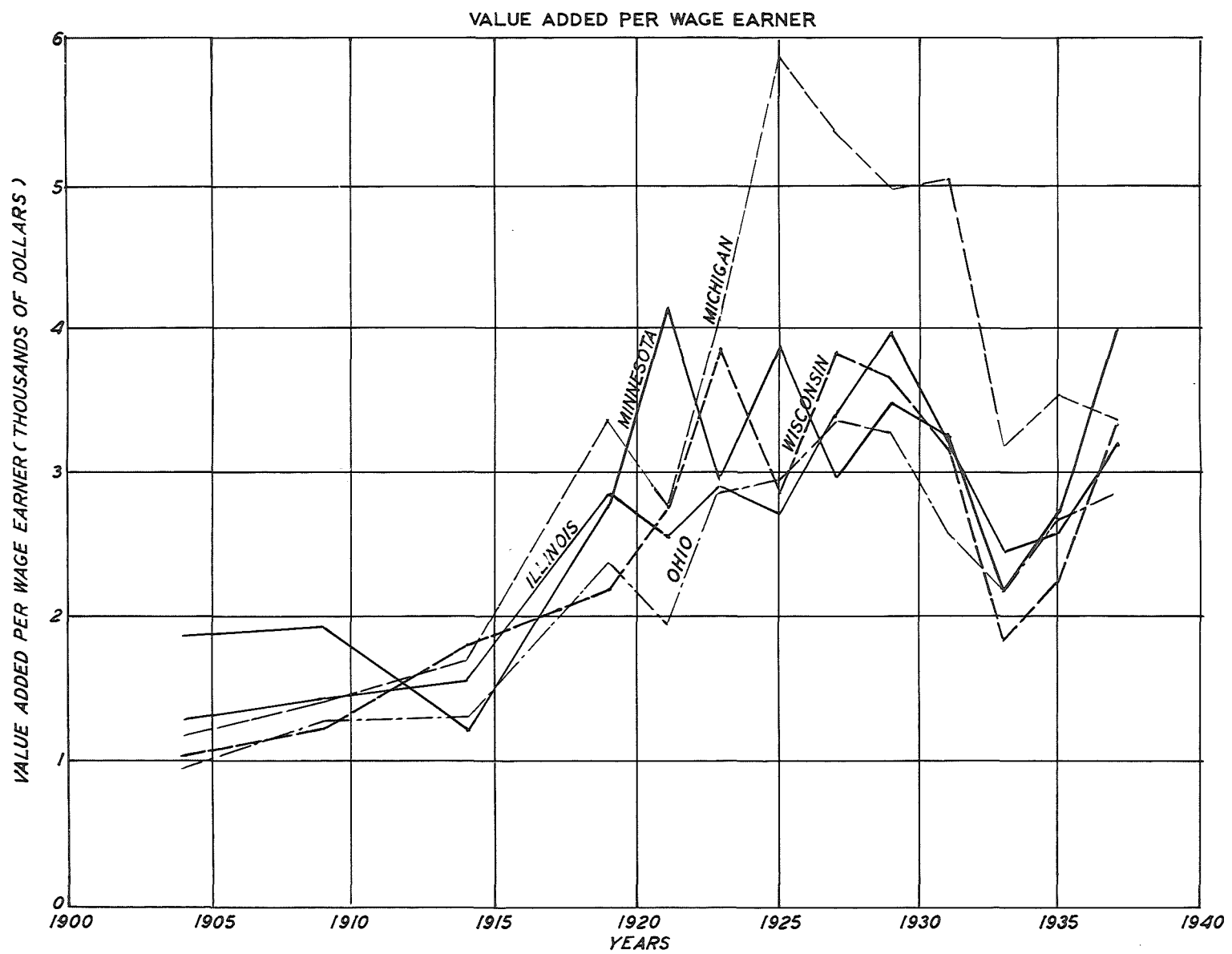
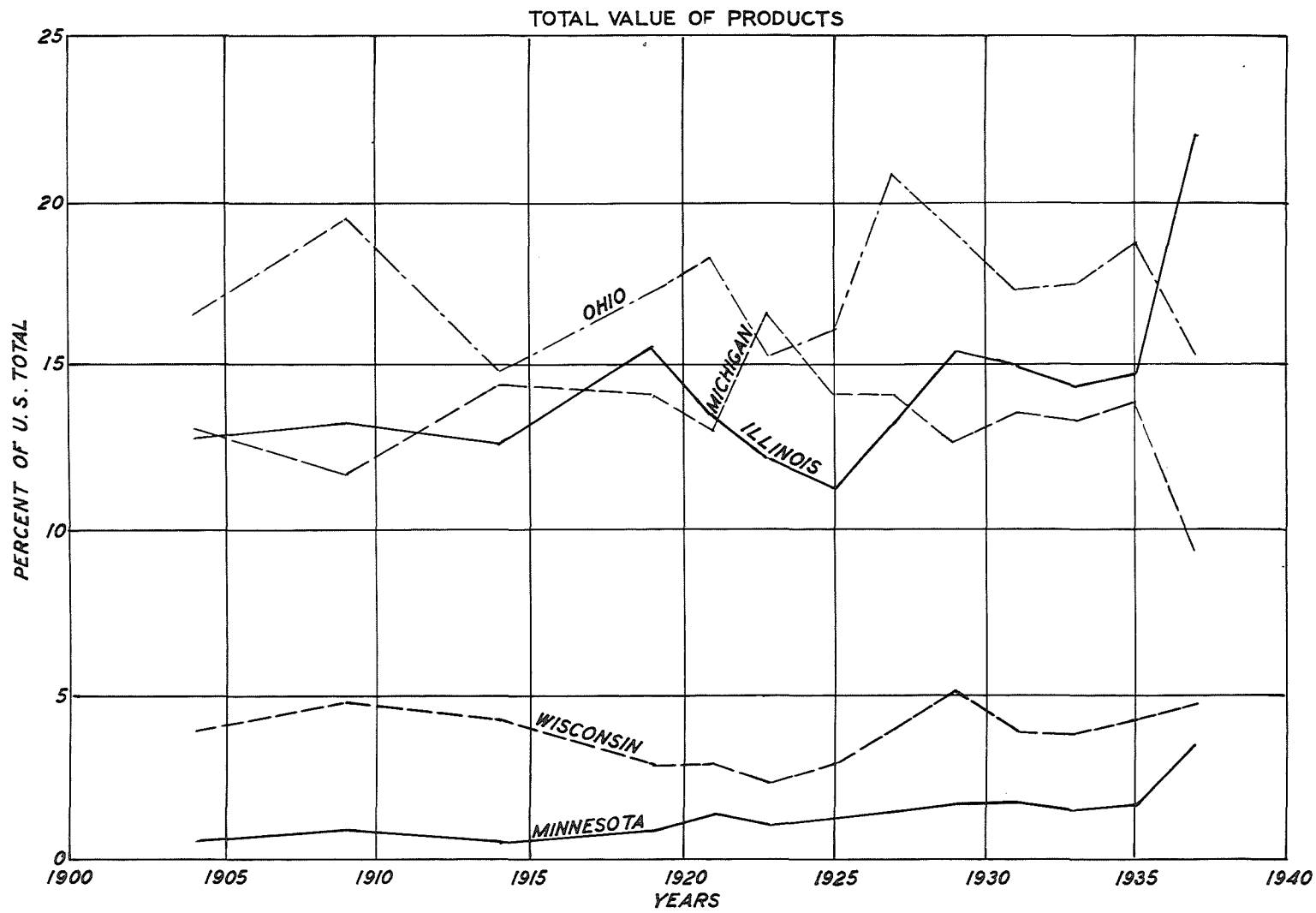
# BREAD AND OTHER BAKERY PRODUCTS MANUFACTURED IN MINNESOTA 1889-1939, VALUE ADDED PER WAGE EARNER AND VALUE OF PRODUCTS IN PERCENT OF UNITED STATES TOTAL



SOURCE:  
U. S. CENSUS

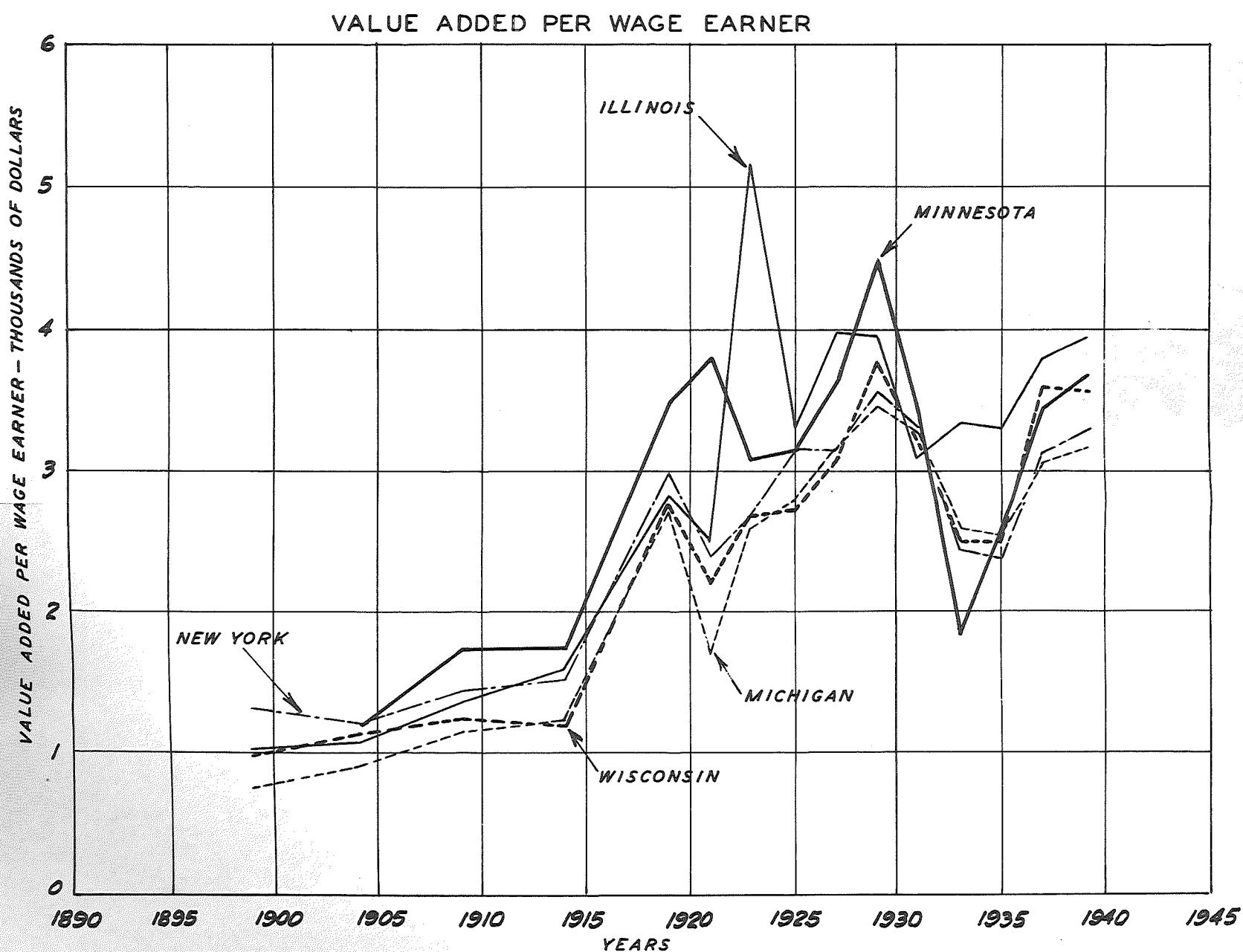
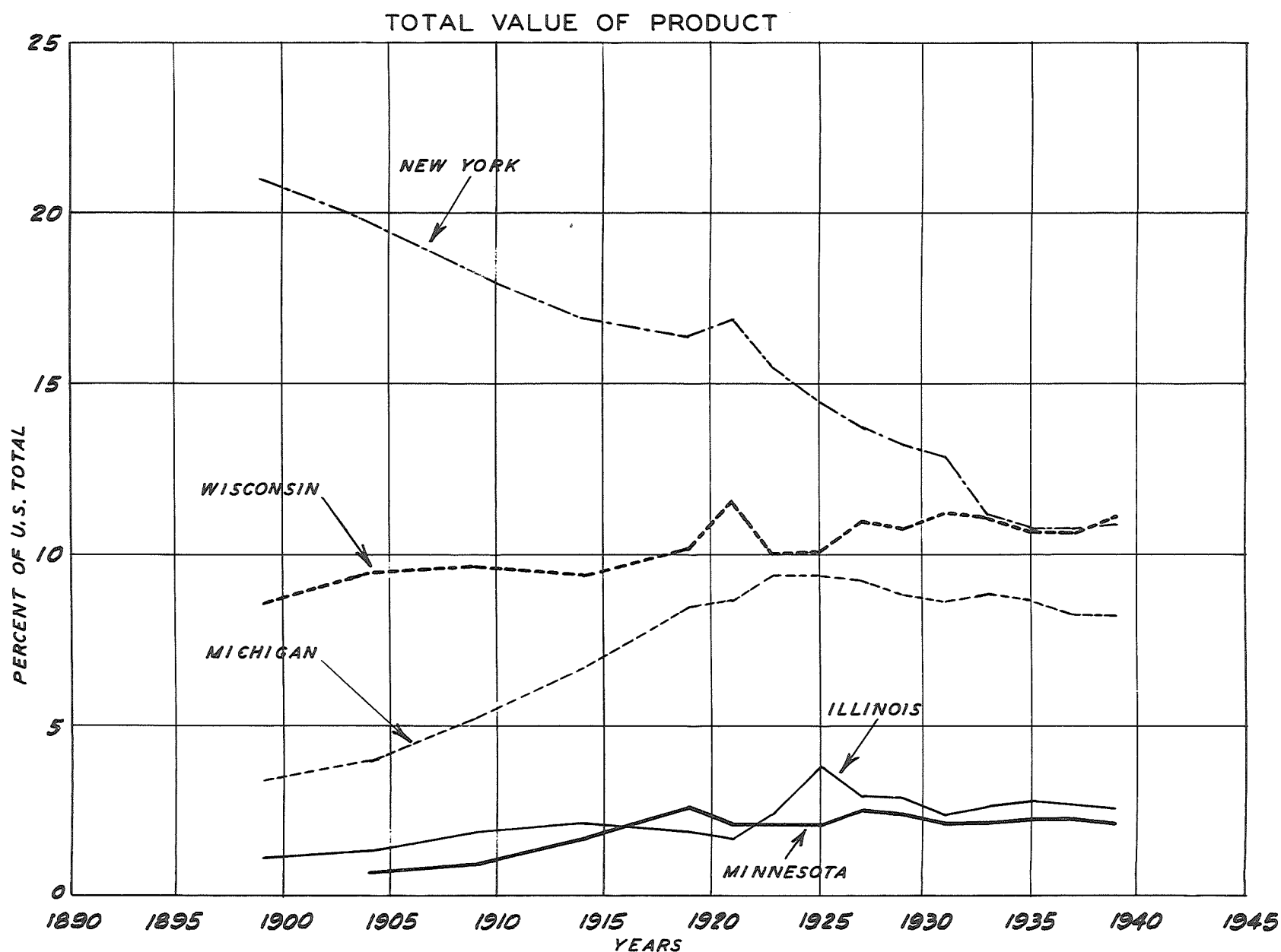


HEATING AND COOKING APPARATUS MANUFACTURE IN MINNESOTA 1889-1937 VALUE ADDED  
PER WAGE EARNER AND VALUE OF PRODUCT IN PERCENT OF UNITED STATES TOTAL

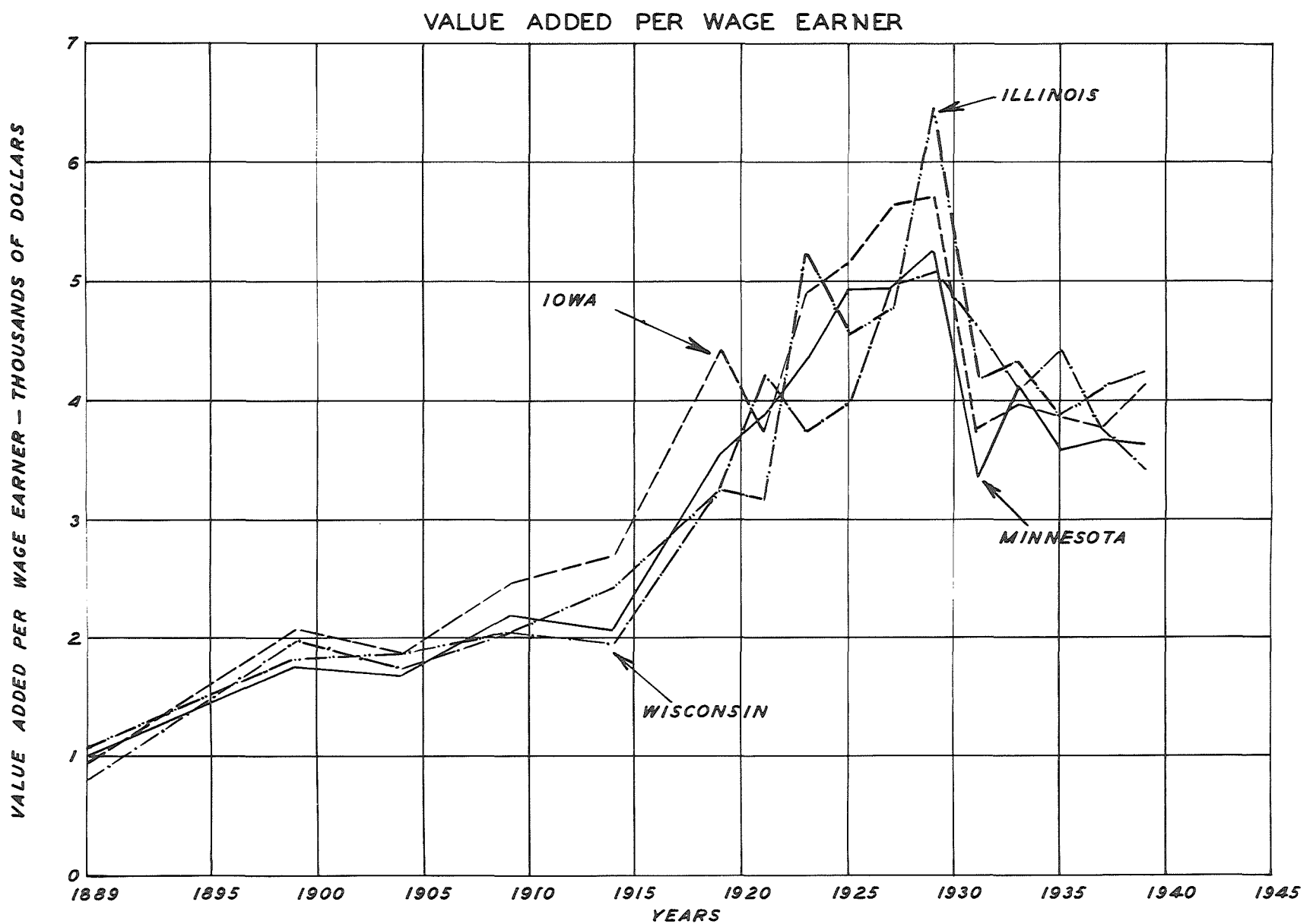
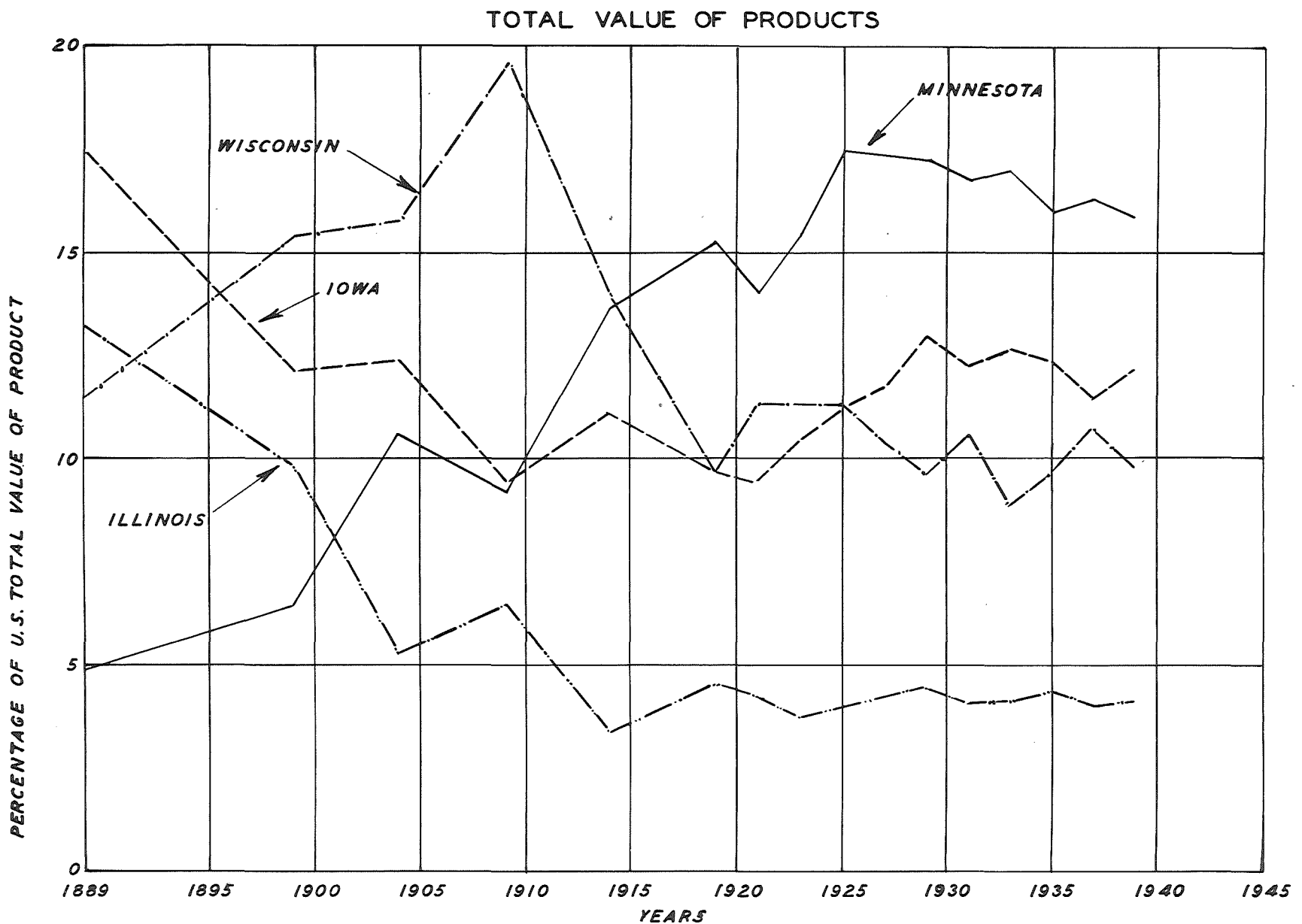


SOURCE: U.S. CENSUS

PAPER AND PULP MANUFACTURE IN MINNESOTA, 1889-1939.  
 VALUE ADDED PER WAGE EARNER AND VALUE OF PRODUCTS  
 IN PERCENT OF UNITED STATES TOTAL



# BUTTER MANUFACTURE IN MINNESOTA-1889-1939 VALUE ADDED PER WAGE EARNER AND VALUE OF PRODUCTS IN PERCENT OF UNITED STATES TOTAL



SOURCE:- U.S CENSUS

THE J.G. WHITE ENGINEERING CORP. NEW YORK

WHOLESALE TRADE STATISTICS FOR MINNESOTA, INDIANA, IOWA,  
MICHIGAN, MISSOURI AND WISCONSIN—NUMBER OF ESTABLISHMENTS,  
VOLUME OF SALES, NUMBER OF EMPLOYEES AND TOTAL PAYROLL  
1929, 1935 AND 1939

| State     | NUMBER<br>OF ESTABLISHMENTS |       |       | VOLUME OF SALES<br>(Thousands of Dollars) |           |           |
|-----------|-----------------------------|-------|-------|-------------------------------------------|-----------|-----------|
|           | 1929                        | 1935  | 1939  | 1929                                      | 1935      | 1939      |
| Minnesota | 5,243                       | 5,695 | 6,460 | 1,667,535                                 | 1,188,413 | 1,458,224 |
| Indiana   | 3,726                       | 4,333 | 4,842 | 888,816                                   | 654,917   | 847,035   |
| Iowa      | 4,946                       | 5,063 | 5,802 | 1,043,316                                 | 627,795   | 790,518   |
| Michigan  | 5,239                       | 6,065 | 6,908 | 2,027,341                                 | 1,410,767 | 1,926,474 |
| Missouri  | 6,649                       | 6,691 | 7,649 | 3,306,536                                 | 1,811,544 | 2,261,256 |
| Wisconsin | 3,502                       | 4,145 | 4,798 | 928,304                                   | 677,170   | 824,956   |

| State     | NUMBER OF EMPLOYEES* |        |        | TOTAL PAY ROLL*<br>(Thousands of Dollars) |        |         |
|-----------|----------------------|--------|--------|-------------------------------------------|--------|---------|
|           | 1929**               | 1935** | 1939** | 1929                                      | 1935   | 1939    |
| Minnesota | 36,054               | 32,079 | 37,523 | 62,428                                    | 49,564 | 60,716  |
| Indiana   | 24,311               | 23,263 | 28,555 | 42,531                                    | 32,469 | 42,844  |
| Iowa      | 26,748               | 19,753 | 24,120 | 40,839                                    | 25,515 | 32,088  |
| Michigan  | 44,584               | 41,587 | 52,292 | 94,052                                    | 65,653 | 88,969  |
| Missouri  | 77,329               | 56,576 | 64,373 | 144,167                                   | 87,798 | 106,362 |
| Wisconsin | 28,820               | 24,936 | 26,728 | 50,518                                    | 37,394 | 42,663  |

NOTE: Figures for 1929 and 1935 are adjusted to the scope of the 1939 Census.

\*Employees and pay roll include paid executives of corporations, but not number and compensation of proprietors of unincorporated businesses.

\*\*Figures for 1935 and 1939 are monthly averages; those for 1929 are quarterly averages.

Employees = full time and part time (average for year).

While unadjusted figures were published for 1933, they are not comparable with those shown above and consequently are not included here.

Source: Statistical Abstract of the U. S. 1942.

WHOLESALE TRADE DERIVED UNITS FOR MINNESOTA, INDIANA, IOWA, MICHIGAN, MISSOURI and WISCONSIN  
SALES PER CAPITA, AVERAGE POPULATION PER ESTABLISHMENT, SALES PER ESTABLISHMENT, SALES PER EMPLOYEE,  
WAGES PER EMPLOYEE and EMPLOYEES PER ESTABLISHMENT  
1929, 1935 and 1939

|           | <u>SALES PER CAPITA</u> |               |                | <u>AVERAGE POPULATION<br/>PER ESTABLISHMENT</u> |               |                | <u>SALES PER ESTABLISHMENT<br/>(Thousands of Dollars)</u> |             |             |
|-----------|-------------------------|---------------|----------------|-------------------------------------------------|---------------|----------------|-----------------------------------------------------------|-------------|-------------|
|           | <u>*1929</u>            | <u>**1935</u> | <u>***1939</u> | <u>*1929</u>                                    | <u>**1935</u> | <u>***1939</u> | <u>1929</u>                                               | <u>1935</u> | <u>1939</u> |
| Minnesota | \$650                   | \$444         | \$522          | 489                                             | 470           | 432            | 318                                                       | 209         | 226         |
| Indiana   | 274                     | 196           | 247            | 869                                             | 769           | 708            | 239                                                       | 151         | 175         |
| Iowa      | 422                     | 251           | 311            | 500                                             | 495           | 437            | 211                                                       | 124         | 136         |
| Michigan  | 419                     | 279           | 367            | 924                                             | 833           | 761            | 387                                                       | 233         | 279         |
| Missouri  | 911                     | 489           | 597            | 546                                             | 554           | 495            | 497                                                       | 271         | 296         |
| Wisconsin | 316                     | 223           | 263            | 839                                             | 733           | 654            | 265                                                       | 163         | 172         |

|           | <u>SALES PER EMPLOYEE<br/>(Thousands of Dollars)</u> |             |             | <u>WAGES PER EMPLOYEE</u> |             |             | <u>EMPLOYEES PER ESTABLISHMENT</u> |             |             |
|-----------|------------------------------------------------------|-------------|-------------|---------------------------|-------------|-------------|------------------------------------|-------------|-------------|
|           | <u>1929</u>                                          | <u>1935</u> | <u>1939</u> | <u>1929</u>               | <u>1935</u> | <u>1939</u> | <u>1929</u>                        | <u>1935</u> | <u>1939</u> |
| Minnesota | 46                                                   | 37          | 39          | \$1732                    | \$1545      | \$1618      | 6.9                                | 5.6         | 5.8         |
| Indiana   | 37                                                   | 28          | 30          | 1749                      | 1396        | 1500        | 6.5                                | 5.4         | 5.9         |
| Iowa      | 39                                                   | 32          | 33          | 1527                      | 1292        | 1330        | 5.4                                | 3.9         | 4.2         |
| Michigan  | 45                                                   | 34          | 37          | 2110                      | 1579        | 1701        | 8.5                                | 6.9         | 7.6         |
| Missouri  | 43                                                   | 32          | 35          | 1864                      | 1552        | 1652        | 11.6                               | 8.5         | 8.4         |
| Wisconsin | 32                                                   | 27          | 31          | 1753                      | 1500        | 1596        | 8.2                                | 6.0         | 5.6         |

\*Using 1930 census population

\*\*Estimated population (Average 1930 and 1940)

\*\*\*Using 1940 census population

RETAIL TRADE STATISTICS FOR MINNESOTA, INDIANA, IOWA, MICHIGAN,  
MISSOURI AND WISCONSIN, NUMBER OF STORES, VOLUME OF SALES,  
NUMBER OF EMPLOYEES AND TOTAL PAYROLLS  
1929, 1935 AND 1939

| State     | NUMBER OF STORES |        |        | VOLUME OF SALES<br>(Thousands of Dollars) |           |           |
|-----------|------------------|--------|--------|-------------------------------------------|-----------|-----------|
|           | 1929*            | 1935*  | 1939   | 1929*                                     | 1935*     | 1939      |
| Minnesota | 29,206           | 35,481 | 40,448 | 1,036,012                                 | 808,857   | 1,017,195 |
| Indiana   | 39,402           | 40,318 | 47,317 | 1,200,458                                 | 771,377   | 1,066,383 |
| Iowa      | 30,933           | 36,768 | 39,024 | 956,008                                   | 640,621   | 822,905   |
| Michigan  | 53,952           | 59,820 | 67,414 | 2,202,405                                 | 1,377,122 | 1,820,798 |
| Missouri  | 44,586           | 48,581 | 53,196 | 1,422,449                                 | 935,027   | 1,102,503 |
| Wisconsin | 38,045           | 42,388 | 47,604 | 1,222,409                                 | 862,109   | 1,064,994 |

| State     | NUMBER OF EMPLOYEES** |         |         | TOTAL PAY ROLL**<br>(Thousands of Dollars) |         |         |
|-----------|-----------------------|---------|---------|--------------------------------------------|---------|---------|
|           | 1929*                 | 1935*   | 1939    | 1929*                                      | 1935*   | 1939    |
| Minnesota | 90,918                | 90,967  | 106,282 | 101,246                                    | 81,798  | 104,204 |
| Indiana   | 115,269               | 96,473  | 123,192 | 122,122                                    | 80,388  | 110,895 |
| Iowa      | 83,128                | 71,802  | 87,684  | 83,502                                     | 54,768  | 72,514  |
| Michigan  | 180,121               | 161,314 | 198,018 | 237,340                                    | 150,637 | 204,026 |
| Missouri  | 136,541               | 122,579 | 132,583 | 148,283                                    | 102,261 | 119,237 |
| Wisconsin | 103,168               | 96,026  | 107,409 | 118,650                                    | 82,932  | 103,249 |

\*Revised to exclude data for service garages and other automotive service businesses whose receipts from service sales exceeded their sales of merchandise. These are included in the Census of Service Establishments for 1939.

\*\*Employees and pay roll include paid executives of corporations, but not number and compensation of proprietors of unincorporated businesses. Employees = full time and part time (average for year). While unrevised statistics were published for 1933, they are not comparable with those shown above and consequently are not included here.

Source: Statistical Abstract of the U. S. 1942.



RETAIL TRADE DERIVED UNITS FOR MINNESOTA, INDIANA, IOWA, MICHIGAN, MISSOURI and WISCONSIN  
 SALES PER CAPITA, AVERAGE POPULATION PER STORE, SALES PER STORE, SALES PER EMPLOYEE,  
 WAGES PER EMPLOYEE and EMPLOYEES PER STORE

|           | SALES PER CAPITA |        |         | AVERAGE POPULATION<br>PER STORE |        |         | SALES PER STORE<br>(Thousands of Dollars) |      |      |
|-----------|------------------|--------|---------|---------------------------------|--------|---------|-------------------------------------------|------|------|
|           | *1929            | **1935 | ***1939 | *1929                           | **1935 | ***1939 | 1929                                      | 1935 | 1939 |
| Minnesota | \$404            | \$302  | \$364   | 88                              | 75     | 69      | 35                                        | 23   | 29   |
| Indiana   | 371              | 231    | 311     | 82                              | 83     | 72      | 30                                        | 19   | 26   |
| Iowa      | 387              | 256    | 324     | 80                              | 68     | 65      | 31                                        | 17   | 21   |
| Michigan  | 455              | 273    | 346     | 90                              | 84     | 78      | 41                                        | 23   | 27   |
| Missouri  | 392              | 252    | 291     | 81                              | 76     | 71      | 32                                        | 19   | 21   |
| Wisconsin | 416              | 284    | 339     | 77                              | 72     | 66      | 32                                        | 20   | 22   |

|           | SALES PER EMPLOYEE<br>(Thousands of Dollars) |      |      | WAGES PER EMPLOYEE |       |       | EMPLOYEES PER STORE |      |      |
|-----------|----------------------------------------------|------|------|--------------------|-------|-------|---------------------|------|------|
|           | 1929                                         | 1935 | 1939 | 1929               | 1935  | 1939  | 1929                | 1935 | 1939 |
| Minnesota | 11                                           | 9    | 10   | \$1114             | \$899 | \$980 | 3.1                 | 2.6  | 2.6  |
| Indiana   | 10                                           | 8    | 9    | 1059               | 833   | 900   | 2.9                 | 2.4  | 2.6  |
| Iowa      | 12                                           | 9    | 9    | 1004               | 763   | 827   | 2.7                 | 2.0  | 2.2  |
| Michigan  | 12                                           | 9    | 9    | 1318               | 934   | 1030  | 3.3                 | 2.7  | 2.9  |
| Missouri  | 10                                           | 8    | 8    | 1086               | 834   | 899   | 3.6                 | 2.5  | 2.8  |
| Wisconsin | 12                                           | 9    | 10   | 1130               | 864   | 961   | 2.7                 | 2.3  | 2.3  |

\*Using 1930 census population  
 \*\*Using estimated population  
 \*\*\*Using 1940 census population

TONNAGE OF REVENUE FREIGHT ORIGINATING AND TERMINATING  
IN MINNESOTA BY CLASS 1 RAILROADS 1940  
GROUP 1-PRODUCTS OF AGRICULTURE

| I.C.C.<br>Commodity<br>Number | GROUP I - PRODUCTS OF AGRICULTURE (C.L.)       | 1 9 4 0    |            |            |
|-------------------------------|------------------------------------------------|------------|------------|------------|
|                               |                                                | Originated | Terminated | Difference |
| 10                            | Wheat                                          | 1,243,079  | 3,623,922  | -2,380,843 |
| 20                            | Corn                                           | 871,180    | 578,923    | + 292,257  |
| 30                            | Oats                                           | 572,736    | 353,367    | + 219,369  |
| 40                            | Barley and Rye                                 | 1,686,063  | 1,267,615  | + 418,448  |
| 41                            | Rice                                           | 70         | 3,830      | - 3,760    |
| 42                            | Grain, N.O.S.                                  | 6,001      | 3,925      | + 2,076    |
| 50                            | Flour, wheat                                   | 1,097,817  | 179,428    | + 918,389  |
| 51                            | Meal, corn                                     | 13,239     | 1,537      | + 11,702   |
| 52                            | Flour and Meal, edible, N.O.S.                 | 58,497     | 7,327      | + 51,170   |
| 60                            | Cereal Food Preparations, edible, N.O.S.       | 38,223     | 21,469     | + 16,754   |
| 61                            | Mill Products, N.O.S.                          | 554,787    | 158,697    | + 396,090  |
| 70                            | Hay and Alfalfa                                | 8,297      | 6,125      | + 2,172    |
| 71                            | Straw                                          | 41,193     | 28,489     | + 12,704   |
| 80                            | Tobacco, leaf                                  | 233        | 323        | - 90       |
| 90                            | Cotton in Bales                                | 20         | 264        | - 244      |
| 91                            | Cotton Linters, Noils, and Regins              | 123        | 2,320      | - 2,197    |
| 100                           | Cotton Seed                                    | 0          | 49         | - 49       |
| 101                           | Cottonseed Meal and Cake                       | 107        | 3,190      | - 3,083    |
| 110                           | Oranges and Grapefruit                         | 30         | 63,582     | - 63,552   |
| 111                           | Lemons, Limes, and Citrus Fruits, N.O.S.       | 0          | 5,917      | - 5,917    |
| 120                           | Apples, fresh                                  | 500        | 38,412     | - 37,912   |
| 121                           | Bananas                                        | 581        | 31,447     | - 30,866   |
| 122                           | Berries, fresh                                 | 9          | 2,240      | - 2,231    |
| 123                           | Cantaloupes and Melons, N.O.S.                 | 0          | 2,848      | - 2,848    |
| 124                           | Grapes, fresh                                  | 27         | 9,318      | - 9,291    |
| 125                           | Peaches, fresh                                 | 18         | 14,478     | - 14,460   |
| 126                           | Watermelons                                    | 44         | 5,338      | - 5,294    |
| 127                           | Fruits, fresh, domestic, N.O.S.                | 558        | 18,360     | - 17,802   |
| 128                           | Fruits, fresh, tropical, N.O.S.                | 0          | 779        | - 779      |
| 130                           | Potatoes, other than sweet                     | 237,434    | 93,646     | + 143,788  |
| 140                           | Cabbage                                        | 2,839      | 6,492      | - 3,653    |
| 141                           | Onions                                         | 25,799     | 6,409      | + 19,390   |
| 142                           | Tomatoes                                       | 0          | 5,476      | - 5,476    |
| 143                           | Vegetables, fresh, N.O.S.                      | 4,047      | 40,365     | - 36,318   |
| 150                           | Beans and Peas, dried                          | 2,102      | 7,269      | - 5,167    |
| 151                           | Fruits, dried or evaporated                    | 146        | 10,689     | - 10,543   |
| 152                           | Vegetables, dry, N.O.S.                        | 3,878      | 2,436      | + 1,442    |
| 160                           | Vegetable-oil Cake and Meal, except cottonseed | 147,841    | 51,292     | + 96,549   |
| 161                           | Peanuts                                        | 298        | 6,968      | - 6,670    |
| 162                           | Flaxseed                                       | 432,987    | 469,713    | - 36,726   |
| 163                           | Sugar Beets                                    | 270,758    | 290,202    | - 19,444   |
| 164                           | Products of Agriculture, N.O.S.                | 246,587    | 124,314    | + 122,273  |
| (800)                         | Total Products of Agriculture                  | 7,568,148  | 7,548,790  |            |

Note: C.L. means carload, N.O.S. means not otherwise specified, and K.D. means knocked down.

Source: Interstate Commerce Commission, Bureau of Statistics, Statement Q-550 (SCS), 1940 and 1941.

TONNAGE OF REVENUE FREIGHT ORIGINATING AND TERMINATING  
IN MINNESOTA BY CLASS 1 RAILROADS 1940  
GROUP II-ANIMALS AND PRODUCTS

| I.C.C.<br>Commodity<br>Number | GROUP II - ANIMALS AND PRODUCTS (C.L.)                                      | 1 9 4 0    |            |            |
|-------------------------------|-----------------------------------------------------------------------------|------------|------------|------------|
|                               |                                                                             | Originated | Terminated | Difference |
| 170                           | Horses, mules, ponies and asses                                             | 2,318      | 2,348      | - 30       |
| 180                           | Cattle and Calves, single deck                                              | 97,508     | 184,855    | - 87,347   |
| 181                           | Calves, double deck                                                         | 1,441      | 2,951      | - 1,510    |
| 190                           | Sheep and goats, single deck                                                | 4,093      | 10,668     | - 6,575    |
| 191                           | Sheep and goats, double deck                                                | 10,254     | 46,210     | - 35,956   |
| 200                           | Hogs, single deck                                                           | 73,004     | 70,474     | + 2,530    |
| 201                           | Hogs, double deck                                                           | 146,676    | 84,799     | + 61,877   |
| 210                           | Fresh Meats, N.O.S.                                                         | 459,048    | 52,232     | + 406,816  |
| 220                           | Meats, cured, dried, or smoked                                              | 49,237     | 5,218      | + 44,019   |
| 221                           | Butterine and Margarine                                                     | 196        | 162        | + 34       |
| 222                           | Packing-house Products, edible, N.O.S., not including<br>canned meats       | 108,320    | 4,992      | + 103,328  |
| 230                           | Poultry, live                                                               | 233        | 104        | + 129      |
| 231                           | Poultry, dressed                                                            | 32,915     | 2,728      | + 30,187   |
| 240                           | Eggs                                                                        | 53,390     | 4,270      | + 49,120   |
| 250                           | Butter                                                                      | 118,679    | 32,826     | + 85,853   |
| 251                           | Cheese                                                                      | 4,044      | 1,750      | + 2,294    |
| 260                           | Wool                                                                        | 5,571      | 6,335      | - 764      |
| 270                           | Hides, green                                                                | 46,290     | 5,621      | + 40,669   |
| 271                           | Leather                                                                     | 423        | 317        | + 106      |
| 280                           | Fish or Sea-Animal Oil                                                      | 402        | 1,746      | - 1,344    |
| 281                           | Animals, live, N.O.S.                                                       | 0          | 53         | - 53       |
| 282                           | Animal Products, N.O.S. (other than fertilizer and<br>fertilizer materials) | 71,908     | 18,379     | + 53,529   |
| (810)                         | Total Animals and Products                                                  | 1,285,950  | 539,038    |            |

Note: C.L. means carload, N.O.S. means not otherwise specified, and K.D. means knocked down.

Source: Interstate Commerce Commission, Bureau of Statistics, Statement Q-550 (SCS), 1940 and 1941.

The J. G. White Engineering Corp., New York

TONNAGE OF REVENUE FREIGHT ORIGINATING AND TERMINATING  
IN MINNESOTA BY CLASS 1 RAILROADS 1940  
GROUP III-PRODUCTS OF MINES

| I.C.C.<br>Commodity<br>Number | GROUP III - PRODUCTS OF MINES (C.L.)          | 1 9 4 0    |            |             |
|-------------------------------|-----------------------------------------------|------------|------------|-------------|
|                               |                                               | Originated | Terminated | Difference  |
| 290                           | Anthracite Coal                               | 0          | 83,720     | - 83,720    |
| 300                           | Bituminous Coal                               | 1,639      | 4,333,623  | -4,331,984  |
| 310                           | Coke                                          | 311,995    | 351,293    | - 39,298    |
| 320                           | Iron Ore                                      | 54,812,459 | 520,565    | +54,291,894 |
| 330                           | Copper Ore and Concentrates                   | 0          | 890        | - 890       |
| 331                           | Lead Ore and Concentrates                     | 236        | 40         | + 196       |
| 332                           | Zinc Ore and Concentrates                     | 305        | 0          | + 305       |
| 333                           | Ores and Concentrates, N.O.S.                 | 50         | 596        | - 546       |
| 350                           | Gravel and Sand (other than glass or molding) | 333,446    | 281,411    | + 52,035    |
| 351                           | Stone, broken, ground, or crushed             | 36,505     | 94,182     | - 57,677    |
| 352                           | Stone, rough, N.O.S.                          | 51,709     | 77,317     | - 25,608    |
| 353                           | Stone, finished, N.O.S.                       | 19,863     | 4,101      | + 15,762    |
| 360                           | Petroleum, crude                              | 60         | 166,988    | - 166,928   |
| 370                           | Asphalt (natural, by product, or petroleum)   | 1,738      | 131,325    | - 129,587   |
| 380                           | Salt                                          | 23,518     | 149,670    | - 126,152   |
| 390                           | Phosphate rock, crude                         | 0          | 639        | - 639       |
| 391                           | Sulphur (brimstone)                           | 0          | 355        | - 355       |
| 392                           | Products of Mines, N.O.S.                     | 38,478     | 70,789     | - 32,311    |
| (820)                         | Total Products of Mines                       | 55,632,001 | 6,267,504  |             |

Note: C.L. means carload, N.O.S. means not otherwise specified, and K.D. means knocked down.

Source: Interstate Commerce Commission, Bureau of Statistics, Statement Q-550 (SCS), 1940 and 1941.

TONNAGE OF REVENUE FREIGHT ORIGINATING AND TERMINATING  
IN MINNESOTA BY CLASS 1 RAILROADS 1940  
GROUP IV-PRODUCTS OF FORESTS

| I.C.C.<br>Commodity<br>Number | GROUP IV - PRODUCTS OF FORESTS (C.L.) | 1 9 4 0    |            |            |
|-------------------------------|---------------------------------------|------------|------------|------------|
|                               |                                       | Originated | Terminated | Difference |
| 400                           | Logs                                  | 17,335     | 16,768     | + 567      |
| 401                           | Posts, Poles, and Piling              | 46,148     | 143,340    | - 97,192   |
| 402                           | Wood (fuel)                           | 7,884      | 10,669     | - 2,785    |
| 410                           | Ties, railroad                        | 23,172     | 37,743     | - 14,571   |
| 420                           | Pulpwood                              | 255,558    | 110,472    | + 145,086  |
| 430                           | Lumber, Shingles, and Lath            | 135,597    | 653,324    | - 517,727  |
| 431                           | Box, Crate and Cooperage Materials    | 19,239     | 37,272     | - 18,033   |
| 432                           | Veneer and Built-up Wood              | 1,940      | 11,196     | - 9,256    |
| 440                           | Rosin                                 | 53         | 1,828      | - 1,775    |
| 441                           | Turpentine                            | 56         | 1,560      | - 1,504    |
| 442                           | Crude Rubber (not reclaimed)          | 1,406      | 2,504      | - 1,098    |
| 443                           | Products of Forests, N.C.S.           | 30,650     | 25,172     | + 5,478    |
| (830)                         | Total Products of Forests             | 539,038    | 1,051,848  |            |

Note: C.L. means carload, N.O.S. means not otherwise specified, and K.D. means knocked down.

Source: Interstate Commerce Commission, Bureau of Statistics, Statement Q-550 (SCS), 1940 and 1941.

TONNAGE OF REVENUE FREIGHT ORIGINATING AND TERMINATING  
IN MINNESOTA BY CLASS 1 RAILROADS 1940  
GROUP V - MANUFACTURES AND MISCELLANEOUS

| I.C.C.<br>Commodity<br>Number | GROUP V - MANUFACTURES AND MISCELLANEOUS (C.L.)                                          | 1 9 4 0    |            |            |
|-------------------------------|------------------------------------------------------------------------------------------|------------|------------|------------|
|                               |                                                                                          | Originated | Terminated | Difference |
| 450                           | Petroleum Oils, refined, and all other gasolines                                         | 702,946    | 1,807,364  | -1,104,418 |
| 451                           | Fuel, road, and petroleum residual oils, N.O.S.                                          | 66,752     | 701,512    | - 634,760  |
| 452                           | Lubricating Oils and Greases                                                             | 6,829      | 83,593     | - 76,764   |
| 453                           | Petroleum Products, N.O.S.                                                               | 58         | 3,004      | - 2,946    |
| 460                           | Cottonseed Oil                                                                           | 613        | 982        | - 369      |
| 461                           | Linseed Oil                                                                              | 86,218     | 4,085      | + 82,133   |
| 462                           | Vegetable Oils, N.O.S.                                                                   | 1,204      | 2,639      | - 1,435    |
| 470                           | Sugar (beet or cane)                                                                     | 45,574     | 137,218    | - 91,644   |
| 471                           | Table Sirups and edible Molasses                                                         | 1,033      | 14,283     | - 13,250   |
| 472                           | Molasses, Blackstrap, and beet residual                                                  | 16,431     | 9,432      | + 6,999    |
| 490                           | Iron, pig                                                                                | 23,602     | 17,553     | + 6,049    |
| 491                           | Iron and Steel, rated 6th class in official classification,<br>N.O.S.                    | 35,131     | 609        | + 34,522   |
| 500                           | Rails, Fastenings, Frogs, and Switches                                                   | 3,113      | 81,248     | - 78,135   |
| 510                           | Cast-iron pipe and fittings                                                              | 553        | 14,080     | - 13,527   |
| 511                           | Iron and steel pipe and fittings, N.O.S.                                                 | 718        | 29,651     | - 28,933   |
| 512                           | Iron and steel: Nails and wire, not woven                                                | 37,068     | 25,135     | + 11,933   |
| 513                           | Iron and steel, rated 5th class in classification, N.O.S.,<br>(also tin and terne plate) | 72,502     | 246,848    | - 174,346  |
| 520                           | Copper: Ingot, Matte, and Pig                                                            | 92         | 7,286      | - 7,194    |
| 521                           | Copper, Brass and Bronze: Bar, sheet, and pipe                                           | 55         | 1,809      | - 1,754    |
| 522                           | Lead and Zinc: Ingot, Pig, or Bar                                                        | 4,218      | 7,858      | - 3,640    |
| 523                           | Aluminum: Ingot, Pig, or Slab                                                            | 0          | 215        | - 215      |
| 530                           | Machinery and Boilers                                                                    | 26,800     | 31,081     | - 4,281    |
| 540                           | Cement, natural or portland (building)                                                   | 216,254    | 447,037    | - 230,783  |
| 550                           | Brick, common                                                                            | 17,261     | 25,948     | - 8,687    |
| 551                           | Brick, N.O.S., and building tile                                                         | 14,178     | 84,988     | - 70,810   |
| 552                           | Artificial stone, N.O.S.                                                                 | 2,976      | 3,392      | - 416      |
| 560                           | Lime, common (quick or slaked)                                                           | 32,900     | 29,620     | + 3,280    |
| 561                           | Plaster (stucco or wall) and dry kalsomine                                               | 436        | 23,189     | - 22,753   |
| 570                           | Sewer pipe and drain tile (not metal)                                                    | 16,979     | 33,544     | - 16,565   |
| 580                           | Agricultural implements and parts, N.O.S.                                                | 23,911     | 51,548     | - 27,637   |
| 581                           | Vehicles, horse-drawn, and parts, N.O.S.                                                 | 70         | 271        | - 201      |
| 582                           | Tractors and parts                                                                       | 20,875     | 31,297     | - 10,422   |
| 583                           | Railway car wheels                                                                       | 3,182      | 5,605      | - 2,423    |
| 590                           | Automobiles (passenger)                                                                  | 25,328     | 74,933     | - 49,605   |
| 591                           | Auto trucks                                                                              | 2,231      | 2,828      | - 597      |
| 592                           | Automobiles and auto trucks, K.D., and parts N.O.S.                                      | 2,597      | 61,018     | - 58,421   |
| 593                           | Automobile and auto truck tires                                                          | 814        | 8,945      | - 8,131    |
| 610                           | Furniture, metal                                                                         | 111        | 2,657      | - 2,546    |
| 611                           | Furniture, other than metal                                                              | 1,775      | 16,718     | - 14,943   |
| 620                           | Beverages                                                                                | 132,583    | 85,066     | + 47,517   |
| 630                           | Ice                                                                                      | 102,653    | 101,667    | + 986      |
| 640                           | Fertilizers, N.O.S.                                                                      | 28,279     | 55,490     | - 27,211   |
| 650                           | Newsprint Paper                                                                          | 63,022     | 81,774     | - 18,752   |
| 651                           | Printing Paper, N.O.S.                                                                   | 34,051     | 27,141     | + 6,910    |
| 660                           | Alcohol, denatured or wood                                                               | 808        | 4,782      | - 3,974    |
| 661                           | Sulphuric Acid                                                                           | 53         | 11,239     | - 11,186   |
| 662                           | Explosives, N.O.S.                                                                       | 4,137      | 8,931      | - 4,794    |
| 670                           | Cotton cloth and cotton fabrics, N.O.S.                                                  | 144        | 3,070      | - 2,926    |
| 671                           | Bagging and bags, burlap, gunny, or jute                                                 | 1,289      | 10,536     | - 9,247    |
| 680                           | Canned food products, N.O.S.                                                             | 133,657    | 104,729    | + 28,928   |
| 690                           | Tobacco, manufactured products                                                           | 247        | 11,244     | - 10,997   |
| 691                           | Paints in oil and varnishes                                                              | 1,275      | 8,996      | - 7,721    |
| 692                           | Furnace slag                                                                             | 24         | 1,125      | - 1,101    |
| 693                           | Scrap iron and scrap steel                                                               | 297,175    | 287,897    | + 9,278    |
| 694                           | Paper bags and wrapping paper                                                            | 12,553     | 35,852     | - 23,299   |
| 695                           | Paperboard, pulpboard, and wallboard (paper)                                             | 49,023     | 31,186     | + 17,837   |
| 696                           | Building paper and prepared roofing materials                                            | 37,078     | 40,778     | - 3,700    |
| 697                           | Building woodwork (millwork)                                                             | 17,619     | 12,915     | + 4,704    |
| 698                           | Soap and washing compounds                                                               | 1,119      | 28,991     | - 27,872   |
| 699                           | Glass: Flat, other than plate                                                            | 7,115      | 7,708      | - 593      |
| 700                           | Glass: Bottles, jars, and jelly glasses                                                  | 1,521      | 40,244     | - 38,723   |
| 701                           | Manufactures and miscellaneous, N.O.S.                                                   | 527,649    | 1,077,547  | - 549,898  |
| (840)                         | Total Manufactures and Miscellaneous                                                     | 2,966,462  | 6,209,931  |            |
| (850)                         | Grand Total, Carload Traffic                                                             | 67,991,599 | 21,617,111 |            |
| 701A                          | Forwarder Traffic Included in Class 701                                                  | 8,178      | 66,308     |            |

Note: C.L. means carload, N.O.S. means not otherwise specified, and K.D. means knocked down.

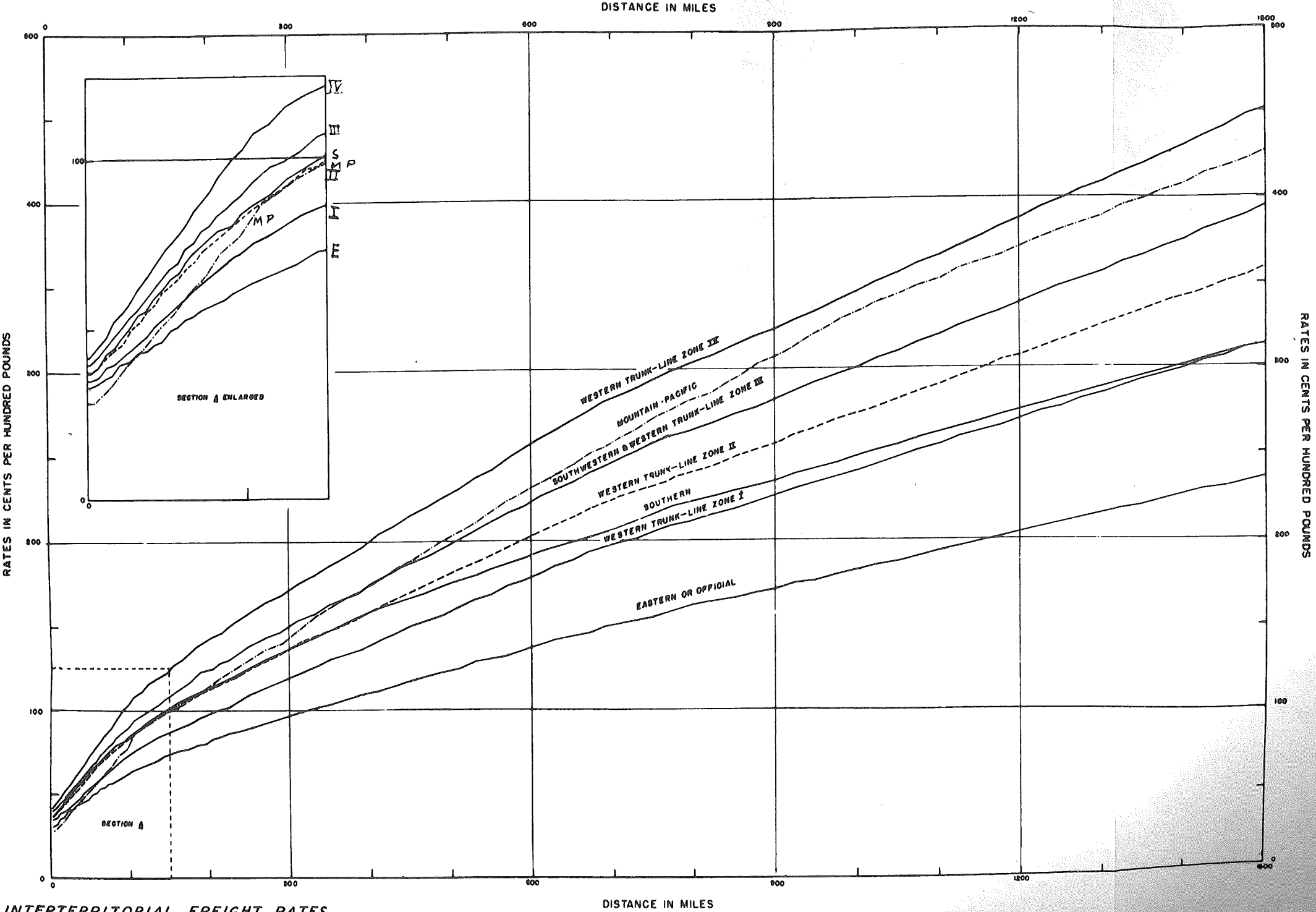
Source: Interstate Commerce Commission, Bureau of Statistics, Statement Q-550 (SCS), 1940 and 1941.



## RAILROAD CLASS RATE TERRITORIES-1942



INTRATERRITORIAL SCALES OF FIRST-CLASS RATES  
PRESCRIBED BY INTERSTATE COMMERCE COMMISSION  
INCLUDES EX PARTE 123 INCREASES

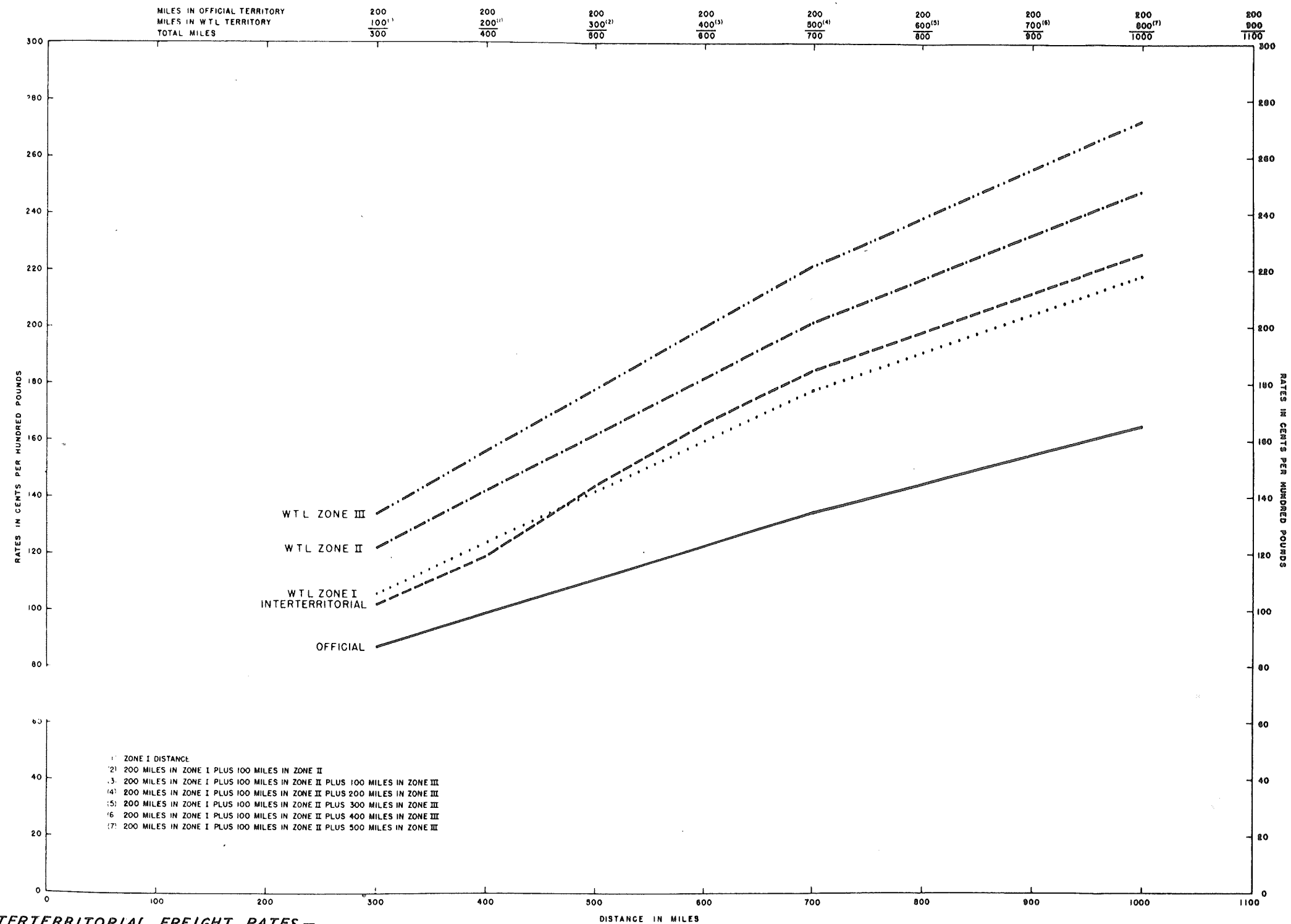


SOURCES:— REPORT ON INTERTERRITORIAL FREIGHT RATES  
BOARD OF INVESTIGATION AND RESEARCH

INTRATERRITORIAL SCALES OF FIRST-CLASS RATES  
PRESCRIBED BY INTERSTATE COMMERCE COMMISSION\*

THE J.G. WHITE ENGINEERING CORP. NEW YORK  
\*INCLUDES EX PARTE 123 INCREASES

## OFFICIAL-WESTERN TRUNK LINE INTERTERRITORIAL FIRST-CLASS RATE LEVELS



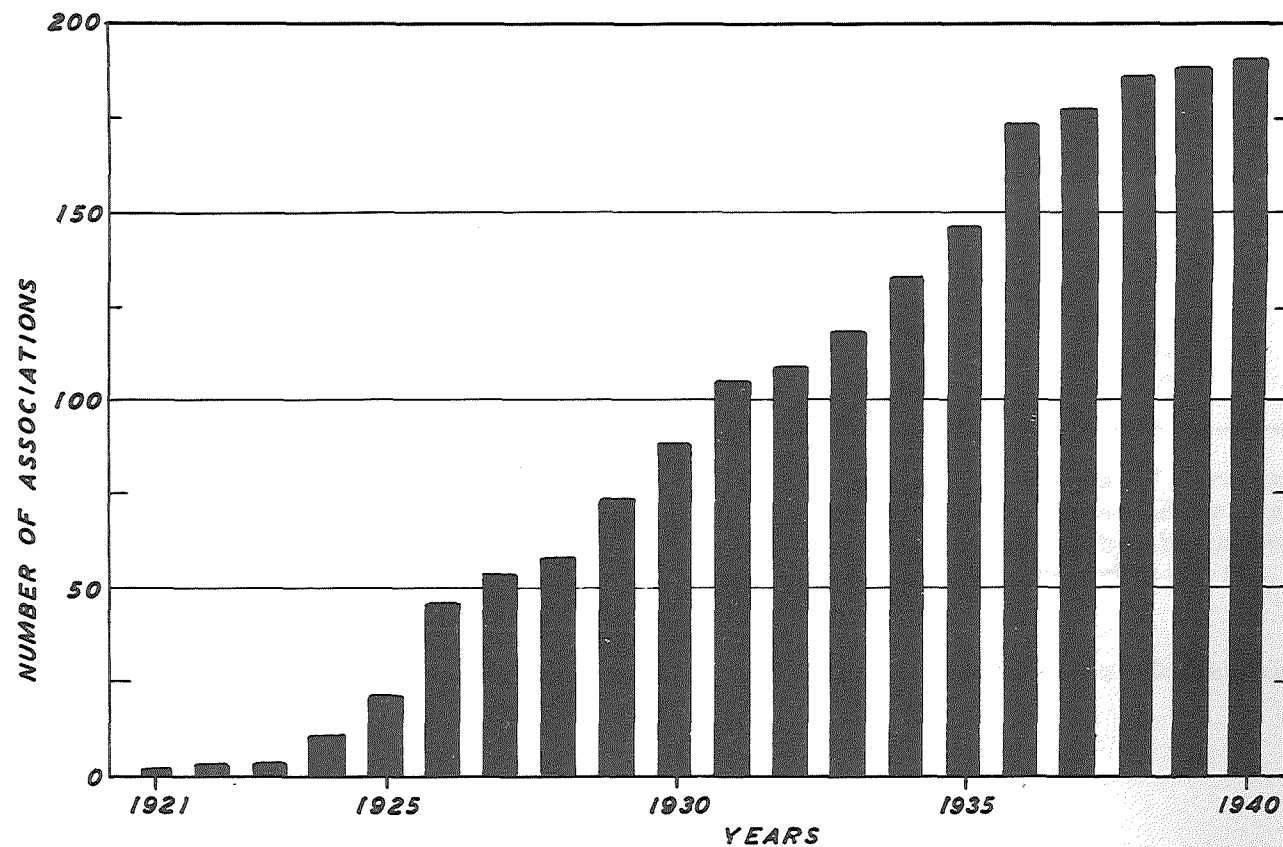
SOURCE:—REPORT ON INTERTERRITORIAL FREIGHT RATES—  
BOARD OF INVESTIGATION AND RESEARCH

OFFICIAL-W.T.L. INTERTERRITORIAL FIRST-CLASS RATE LEVELS

SCALES NOT INCREASED UNDER EX PARTE 123

THE J.G. WHITE ENGINEERING CORP. NEW YORK

## NUMBER OF COOPERATIVE OIL ASSOCIATIONS IN MINNESOTA 1921-1940



SOURCE:—UNIVERSITY OF MINNESOTA  
AGRICULTURAL BULLETIN NO. 351-1941

THE J.G. WHITE ENGINEERING CORP. NEW YORK



# INDEX OF ECONOMIC ABILITY OF THE STATES 1941

(Per capitas of states are divided by the national per capita to obtain the "ranks" of states. "Average ranks" are the averages of the ranks for the three indicated series.)

| State                     | Economic Income |      | Output of Industries |      | Retail Sales   |      | Average Rank |
|---------------------------|-----------------|------|----------------------|------|----------------|------|--------------|
|                           | Per Capita (a)  | Rank | Per Capita (b)       | Rank | Per Capita (c) | Rank |              |
| Total.....                | \$ 532          | 100  | \$277                | 100  | \$322          | 100  | 100          |
| Alabama.....              | 242             | 46   | 146                  | 53   | 155            | 48   | 49           |
| Arizona.....              | 451             | 85   | 255                  | 92   | 330            | 102  | 93           |
| Arkansas.....             | 242             | 45   | 130                  | 47   | 154            | 48   | 47           |
| California.....           | 742             | 139  | 291                  | 105  | 472            | 147  | 130          |
| Colorado.....             | 517             | 97   | 227                  | 82   | 368            | 114  | 98           |
| Connecticut.....          | 767             | 144  | 438                  | 158  | 423            | 131  | 144          |
| Delaware.....             | 331             | 156  | 279                  | 101  | 418            | 130  | 129          |
| District of Columbia..... | 1,192           | 224  | 69                   | 25   | 620            | 193  | 147          |
| Florida.....              | 444             | 83   | 120                  | 43   | 337            | 105  | 77           |
| Georgia.....              | 290             | 54   | 149                  | 54   | 202            | 63   | 57           |
| Idaho.....                | 446             | 84   | 280                  | 101  | 339            | 105  | 97           |
| Illinois.....             | 637             | 120  | 362                  | 131  | 364            | 113  | 121          |
| Indiana.....              | 491             | 92   | 368                  | 133  | 314            | 98   | 108          |
| Iowa.....                 | 444             | 83   | 323                  | 117  | 326            | 101  | 100          |
| Kansas.....               | 410             | 77   | 235                  | 85   | 262            | 81   | 81           |
| Kentucky.....             | 298             | 56   | 161                  | 58   | 185            | 54   | 57           |
| Louisiana.....            | 347             | 65   | 186                  | 67   | 208            | 65   | 66           |
| Maine.....                | 477             | 90   | 242                  | 87   | 335            | 104  | 94           |
| Maryland.....             | 588             | 111  | 276                  | 100  | 344            | 107  | 106          |
| Massachusetts.....        | 703             | 132  | 292                  | 105  | 402            | 125  | 121          |
| Michigan.....             | 594             | 112  | 408                  | 147  | 356            | 111  | 123          |
| Minnesota.....            | 501             | 94   | 274                  | 99   | 368            | 114  | 102          |
| Mississippi.....          | 202             | 38   | 109                  | 39   | 131            | 41   | 39           |
| Missouri.....             | 471             | 89   | 232                  | 84   | 292            | 91   | 88           |
| Montana.....              | 544             | 102  | 316                  | 114  | 399            | 124  | 113          |
| Nebraska.....             | 419             | 79   | 214                  | 77   | 300            | 93   | 83           |
| Nevada.....               | 800             | 150  | 454                  | 164  | 572            | 178  | 164          |
| New Hampshire.....        | 516             | 97   | 264                  | 95   | 375            | 116  | 103          |
| New Jersey.....           | 643             | 121  | 390                  | 141  | 382            | 119  | 127          |
| New Mexico.....           | 320             | 60   | 216                  | 78   | 243            | 75   | 71           |
| New York.....             | 749             | 141  | 273                  | 99   | 418            | 130  | 123          |
| North Carolina.....       | 299             | 56   | 242                  | 87   | 180            | 56   | 66           |
| North Dakota.....         | 360             | 68   | 234                  | 84   | 242            | 75   | 76           |
| Ohio.....                 | 605             | 114  | 444                  | 160  | 355            | 110  | 128          |
| Oklahoma.....             | 341             | 64   | 203                  | 73   | 219            | 66   | 68           |
| Oregon.....               | 542             | 102  | 266                  | 96   | 412            | 128  | 109          |
| Pennsylvania.....         | 574             | 108  | 324                  | 117  | 318            | 99   | 108          |
| Rhode Island.....         | 663             | 125  | 351                  | 127  | 391            | 121  | 124          |
| South Carolina.....       | 267             | 50   | 151                  | 54   | 177            | 55   | 53           |
| South Dakota.....         | 372             | 70   | 232                  | 84   | 260            | 81   | 78           |
| Tennessee.....            | 294             | 55   | 173                  | 62   | 211            | 65   | 61           |
| Texas.....                | 399             | 75   | 238                  | 86   | 284            | 88   | 83           |
| Utah.....                 | 445             | 84   | 275                  | 99   | 313            | 97   | 93           |
| Vermont.....              | 485             | 91   | 166                  | 60   | 344            | 107  | 86           |
| Virginia.....             | 381             | 72   | 214                  | 77   | 238            | 74   | 74           |
| Washington.....           | 600             | 113  | 253                  | 91   | 392            | 122  | 109          |
| West Virginia.....        | 374             | 70   | 262                  | 95   | 215            | 67   | 77           |
| Wisconsin.....            | 496             | 93   | 313                  | 113  | 342            | 107  | 104          |
| Wyoming.....              | 606             | 114  | 405                  | 146  | 404            | 125  | 128          |

(a) Data for 1940 from "Income Payments by States," Survey of Current Business, Vol. XXI, No. 3 (August, 1941), p. 14.

(b) Comprises the values of farming and mining production and the value added by manufacturing. Data for 1939, reported by the Bureau of the Census.

(c) Data for 1939, reported by the Bureau of the Census.

Source: From Financing Federal, State, and Local Governments: 1941, U. S. Department of Commerce, Bureau of the Census, September, 1942.

INDEX OF STATE AND LOCAL PUBLIC REVENUES  
OF THE STATES  
1941

| State                  | Total State and Local<br>Revenue, 1941<br>(Except Fiscal Aid) |                    |                             | State Revenue, 1941<br>(Except Fiscal Aid) |                    |                             | Local Revenue, 1941<br>(Except Fiscal Aid) |                    |                             |
|------------------------|---------------------------------------------------------------|--------------------|-----------------------------|--------------------------------------------|--------------------|-----------------------------|--------------------------------------------|--------------------|-----------------------------|
|                        | Per<br>Capita                                                 | Rank of<br>Revenue | Index of<br>Revenue<br>Load | Per<br>Capita                              | Rank of<br>Revenue | Index of<br>Revenue<br>Load | Per<br>Capita                              | Rank of<br>Revenue | Index of<br>Revenue<br>Load |
| Total.....             | \$ 77.57                                                      | 100                | 100                         | \$37.68                                    | 100                | 100                         | \$39.89                                    | 100                | 100                         |
| Alabama.....           | 42.77                                                         | 55                 | 112                         | 23.92                                      | 63                 | 129                         | 14.43                                      | 36                 | 73                          |
| Arizona.....           | 81.97                                                         | 106                | 114                         | 42.82                                      | 114                | 123                         | 39.15                                      | 98                 | 105                         |
| Arkansas.....          | 30.78                                                         | 40                 | 85                          | 20.17                                      | 53                 | 113                         | 10.61                                      | 27                 | 57                          |
| California.....        | 107.55                                                        | 139                | 107                         | 57.90                                      | 154                | 118                         | 49.65                                      | 124                | 114                         |
| Colorado.....          | 81.27                                                         | 105                | 107                         | 40.90                                      | 108                | 110                         | 40.37                                      | 101                | 103                         |
| Connecticut.....       | 105.11                                                        | 135                | 94                          | 45.69                                      | 121                | 84                          | 59.42                                      | 149                | 103                         |
| Delaware.....          | 73.03                                                         | 94                 | 73                          | 52.66                                      | 140                | 109                         | 20.37                                      | 51                 | 40                          |
| District of Columbia.. | 66.76                                                         | 86                 | 59                          | -                                          | -                  | -                           | 66.76                                      | 167                | 114                         |
| Florida.....           | 75.78                                                         | 98                 | 127                         | 37.52                                      | 100                | 130                         | 38.26                                      | 96                 | 125                         |
| Georgia.....           | 36.64                                                         | 47                 | 82                          | 20.71                                      | 55                 | 96                          | 15.93                                      | 40                 | 70                          |
| Idaho.....             | 72.55                                                         | 94                 | 97                          | 32.42                                      | 86                 | 89                          | 40.13                                      | 101                | 104                         |
| Illinois.....          | 85.44                                                         | 110                | 91                          | 36.98                                      | 98                 | 81                          | 48.46                                      | 121                | 100                         |
| Indiana.....           | 67.43                                                         | 87                 | 81                          | 35.02                                      | 93                 | 86                          | 32.41                                      | 81                 | 75                          |
| Iowa.....              | 77.01                                                         | 99                 | 99                          | 32.95                                      | 87                 | 87                          | 44.06                                      | 110                | 110                         |
| Kansas.....            | 66.68                                                         | 86                 | 106                         | 27.55                                      | 73                 | 90                          | 39.13                                      | 98                 | 121                         |
| Kentucky.....          | 37.49                                                         | 48                 | 84                          | 23.52                                      | 62                 | 109                         | 13.97                                      | 35                 | 61                          |
| Louisiana.....         | 59.95                                                         | 77                 | 117                         | 38.81                                      | 103                | 156                         | 21.14                                      | 53                 | 80                          |
| Maine.....             | 73.73                                                         | 95                 | 101                         | 35.80                                      | 95                 | 101                         | 37.93                                      | 95                 | 100                         |
| Maryland.....          | 74.05                                                         | 96                 | 91                          | 37.60                                      | 100                | 94                          | 36.45                                      | 91                 | 86                          |
| Massachusetts.....     | 100.96                                                        | 130                | 107                         | 42.86                                      | 114                | 94                          | 58.10                                      | 146                | 121                         |
| Michigan.....          | 88.71                                                         | 114                | 93                          | 49.19                                      | 130                | 106                         | 39.52                                      | 99                 | 80                          |
| Minnesota.....         | 80.68                                                         | 104                | 102                         | 38.04                                      | 101                | 99                          | 42.64                                      | 107                | 105                         |
| Mississippi.....       | 34.49                                                         | 44                 | 128                         | 17.99                                      | 48                 | 123                         | 16.50                                      | 41                 | 105                         |
| Missouri.....          | 56.19                                                         | 72                 | 82                          | 29.94                                      | 79                 | 90                          | 26.25                                      | 66                 | 75                          |
| Montana.....           | 86.57                                                         | 112                | 99                          | 34.61                                      | 92                 | 81                          | 51.97                                      | 130                | 115                         |
| Nebraska.....          | 57.66                                                         | 74                 | 89                          | 21.96                                      | 58                 | 70                          | 35.70                                      | 89                 | 107                         |
| Nevada.....            | 114.04                                                        | 147                | 90                          | 48.18                                      | 128                | 78                          | 65.86                                      | 165                | 101                         |
| New Hampshire.....     | 93.98                                                         | 121                | 117                         | 37.88                                      | 100                | 97                          | 56.10                                      | 141                | 137                         |
| New Jersey.....        | 112.14                                                        | 145                | 114                         | 40.80                                      | 108                | 85                          | 71.34                                      | 179                | 141                         |
| New Mexico.....        | 61.45                                                         | 79                 | 111                         | 43.95                                      | 117                | 165                         | 17.50                                      | 44                 | 62                          |
| New York.....          | 126.25                                                        | 163                | 132                         | 49.58                                      | 132                | 107                         | 76.67                                      | 192                | 156                         |
| North Carolina.....    | 48.46                                                         | 62                 | 94                          | 30.21                                      | 80                 | 121                         | 18.25                                      | 46                 | 70                          |
| North Dakota.....      | 60.49                                                         | 78                 | 103                         | 28.42                                      | 75                 | 99                          | 32.07                                      | 80                 | 105                         |
| Ohio.....              | 84.83                                                         | 109                | 85                          | 47.81                                      | 127                | 99                          | 37.02                                      | 93                 | 151                         |
| Oklahoma.....          | 49.91                                                         | 64                 | 94                          | 29.25                                      | 78                 | 115                         | 20.66                                      | 52                 | 76                          |
| Oregon.....            | 83.85                                                         | 108                | 99                          | 39.65                                      | 105                | 96                          | 44.20                                      | 111                | 102                         |
| Pennsylvania.....      | 79.77                                                         | 103                | 95                          | 40.93                                      | 109                | 101                         | 38.84                                      | 97                 | 90                          |
| Rhode Island.....      | 85.09                                                         | 110                | 89                          | 39.82                                      | 106                | 85                          | 45.27                                      | 113                | 91                          |
| South Carolina.....    | 39.29                                                         | 51                 | 96                          | 23.25                                      | 62                 | 117                         | 16.04                                      | 40                 | 75                          |
| South Dakota.....      | 71.69                                                         | 92                 | 118                         | 33.39                                      | 89                 | 114                         | 38.30                                      | 96                 | 123                         |
| Tennessee.....         | 47.37                                                         | 61                 | 100                         | 20.50                                      | 54                 | 88                          | 26.87                                      | 67                 | 110                         |
| Texas.....             | 50.04                                                         | 64                 | 77                          | 27.60                                      | 73                 | 88                          | 22.44                                      | 56                 | 67                          |
| Utah.....              | 77.88                                                         | 100                | 108                         | 44.83                                      | 119                | 128                         | 33.05                                      | 83                 | 89                          |
| Vermont.....           | 89.89                                                         | 116                | 135                         | 36.43                                      | 97                 | 113                         | 53.46                                      | 134                | 156                         |
| Virginia.....          | 43.69                                                         | 63                 | 85                          | 29.45                                      | 78                 | 105                         | 19.24                                      | 48                 | 65                          |
| Washington.....        | 83.15                                                         | 107                | 98                          | 48.26                                      | 128                | 117                         | 34.89                                      | 87                 | 80                          |
| West Virginia.....     | 52.47                                                         | 68                 | 89                          | 36.28                                      | 96                 | 125                         | 16.19                                      | 41                 | 53                          |
| Wisconsin.....         | 81.36                                                         | 105                | 101                         | 37.86                                      | 100                | 96                          | 43.49                                      | 109                | 105                         |
| Wyoming.....           | 88.49                                                         | 114                | 89                          | 42.82                                      | 114                | 89                          | 45.67                                      | 114                | 89                          |

Source: From Financing Federal, State, and Local Governments: 1941, U. S. Department of Commerce, Bureau of the Census, September, 1942.

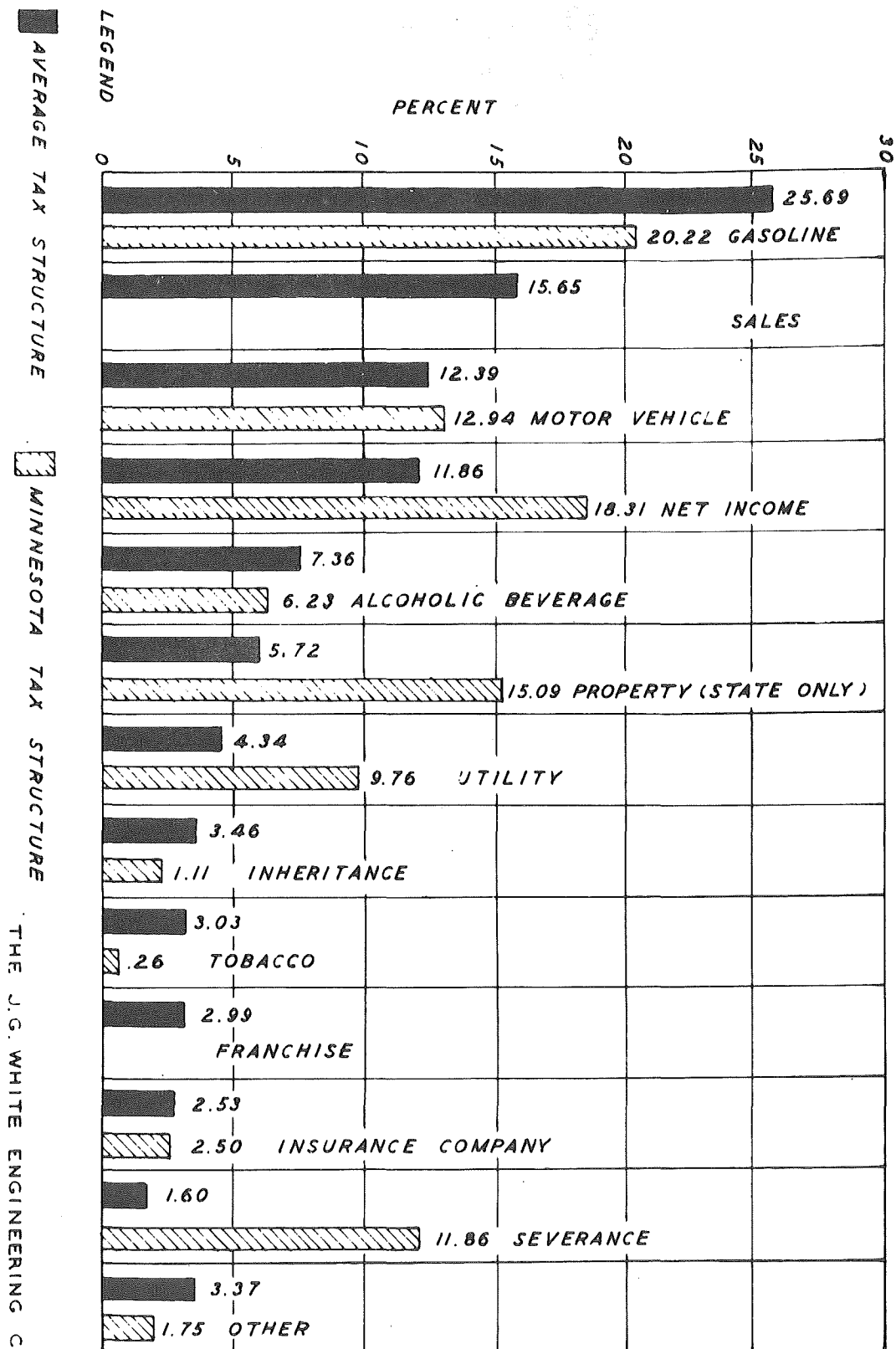


MINNESOTA TAX STRUCTURE COMPARED  
WITH "AVERAGE TAX STRUCTURE"  
1941

| <u>Type of Tax</u>                   | <u>1941</u>                      |                                           | <u>Difference</u> |
|--------------------------------------|----------------------------------|-------------------------------------------|-------------------|
|                                      | <u>Average Tax<br/>Structure</u> | <u>Minnesota<br/>Use of<br/>Structure</u> |                   |
| Gasoline                             | 25.69%                           | 20.22%                                    | - 5.47%           |
| Sales                                | 15.65                            | -                                         | - 15.65           |
| Motor Vehicle                        | 12.39                            | 12.94                                     | + .55             |
| Net Income                           | 11.86                            | 18.31                                     | + 6.45            |
| Alcoholic Beverage                   | 7.36                             | 6.23                                      | - .13             |
| Property                             | 5.72                             | 15.09                                     | + 9.37            |
| Utility                              | 4.34                             | 9.76                                      | + 5.42            |
| Inheritance                          | 3.46                             | 1.11                                      | - 2.35            |
| Tobacco                              | 3.03                             | .26                                       | - 2.77            |
| Franchise                            | 2.99                             | -                                         | - 2.99            |
| Insurance Co.                        | <u>2.53</u>                      | <u>2.50</u>                               | - .03             |
| Total Percentage for<br>Eleven Taxes | 95.22%                           | 86.42%                                    |                   |

Source: Tax Systems - Ninth Edition  
The Tax Research Foundation

# COMPARISON OF MINNESOTA TAX STRUCTURE WITH "AVERAGE TAX STRUCTURE"



TYPES OF TAXES  
COMPRISING VARIOUS TAX STRUCTURES OF THE 48 STATES  
1941

| Name<br>of<br>State | Admission &<br>Amusement | Alcoholic<br>Beverage | Chain Store | Franchise | Casoline | Income | Inheritance | Insurance | License | Miscellaneous | Motor Vehicle | Oleomargarine | Poll | Property | Racing | Sales & Use<br>Gross Receipts<br>& Gross Income | Severance | Soft Drinks | Stock Transfer | Tobacco | Utility | Totals<br>By<br>State |
|---------------------|--------------------------|-----------------------|-------------|-----------|----------|--------|-------------|-----------|---------|---------------|---------------|---------------|------|----------|--------|-------------------------------------------------|-----------|-------------|----------------|---------|---------|-----------------------|
| Alabama             |                          | *                     | *           | *         | *        | *      | *           | *         | *       | *             | *             |               |      | *        |        | *                                               | *         | *           | *              | *       | *       | 17                    |
| Arizona             |                          | *                     |             | *         | *        | *      | *           | *         |         | *             | *             |               |      | *        | *      | *                                               |           | *           | *              | *       | *       | 12                    |
| Arkansas            | *                        | *                     |             | *         | *        | *      | *           | *         |         | *             | *             |               |      | *        | *      | *                                               | *         |             | *              | *       | *       | 15                    |
| California          | *                        | *                     |             |           | *        | *      | *           | *         |         | *             | *             |               |      | *        | *      | *                                               | *         |             |                |         |         | 12                    |
| Colorado            |                          | *                     | *           | *         | *        | *      | *           | *         |         | *             | *             |               |      | *        |        | *                                               | *         |             |                |         |         | 12                    |
| Connecticut         | *                        | *                     |             |           | *        | *      | *           | *         |         | *             | *             |               | *    | *        |        |                                                 | *         |             |                | *       | *       | 12                    |
| Delaware            |                          | *                     | *           | *         | *        | *      | *           | *         | *       | *             | *             |               |      | *        | *      | *                                               |           |             |                | *       | *       | 12                    |
| Florida             |                          | *                     | *           | *         | *        | *      | *           | *         | *       | *             | *             |               |      | *        | *      | *                                               |           |             | *              | *       | *       | 13                    |
| Georgia             |                          | *                     | *           | *         | *        | *      | *           | *         | *       | *             | *             |               | *    | *        |        |                                                 | *         | *           | *              | *       | *       | 13                    |
| Idaho               | *                        | *                     | *           | *         | *        | *      | *           | *         | *       | *             | *             |               | *    | *        |        |                                                 | *         |             |                | *       | *       | 14                    |
| Illinois            | *                        | *                     |             | *         | *        |        | *           | *         |         |               | *             |               |      | *        | *      | *                                               |           |             |                | *       | *       | 11                    |
| Indiana             |                          | *                     | *           | *         | *        |        | *           | *         |         |               | *             |               | *    | *        |        | *                                               | *         |             |                | *       | *       | 11                    |
| Iowa                |                          | *                     | *           | *         | *        | *      | *           | *         |         |               | *             | *             | *    | *        |        | *                                               | *         |             |                | *       | *       | 14                    |
| Kansas              |                          | *                     |             | *         | *        | *      | *           | *         |         |               | *             |               |      | *        |        | *                                               | *         |             |                | *       | *       | 11                    |
| Kentucky            | *                        | *                     | *           | *         | *        | *      | *           | *         | *       | *             | *             |               |      | *        | *      | *                                               | *         |             |                | *       | *       | 15                    |
| Louisiana           |                          | *                     | *           | *         | *        | *      | *           | *         | *       | *             | *             |               |      | *        | *      | *                                               | *         | *           |                | *       | *       | 16                    |
| Maine               |                          | *                     |             | *         | *        | *      | *           | *         |         | *             | *             |               | *    | *        |        |                                                 |           |             | *              | *       | *       | 11                    |
| Maryland            | *                        | *                     | *           | *         | *        | *      | *           | *         |         |               | *             |               |      | *        | *      | *                                               |           |             | *              | *       | *       | 14                    |
| Massachusetts       |                          | *                     |             | *         | *        | *      | *           | *         |         |               | *             |               | *    | *        | *      | *                                               |           |             | *              | *       | *       | 12                    |
| Michigan            | *                        | *                     | *           | *         | *        |        | *           | *         |         | *             | *             |               |      | *        | *      | *                                               | *         |             |                | *       | *       | 13                    |
| Minnesota           |                          | *                     |             | *         | *        | *      | *           | *         |         | *             | *             |               |      | *        |        | *                                               | *         |             | *              | *       | *       | 13                    |
| Mississippi         | *                        | *                     | *           | *         | *        | *      | *           | *         | *       | *             | *             |               |      | *        |        | *                                               |           |             | *              | *       | *       | 15                    |
| Missouri            |                          | *                     |             | *         | *        | *      | *           | *         |         |               | *             |               |      | *        |        | *                                               | *         | *           |                | *       | *       | 11                    |
| Montana             | *                        | *                     | *           | *         | *        | *      | *           | *         |         | *             | *             | *             |      | *        |        | *                                               | *         |             | *              | *       | *       | 15                    |
| Nebraska            |                          | *                     |             | *         | *        |        | *           | *         |         |               | *             | *             | *    | *        |        | *                                               | *         |             |                | *       | *       | 10                    |
| Nevada              |                          | *                     |             | *         | *        |        | *           | *         |         |               | *             |               |      | *        | *      | *                                               | *         |             |                | *       | *       | 8                     |
| New Hampshire       |                          | *                     |             | *         | *        | *      | *           | *         |         |               | *             |               |      | *        | *      | *                                               |           |             | *              | *       | *       | 10                    |
| New Jersey          | *                        | *                     |             | *         | *        | *      | *           | *         |         | *             | *             |               |      | *        |        | *                                               | *         |             |                | *       | *       | 10                    |
| New Mexico          |                          | *                     |             | *         | *        | *      | *           | *         |         |               | *             |               |      | *        |        | *                                               | *         |             |                | *       | *       | 11                    |
| New York            | *                        | *                     |             | *         | *        | *      | *           | *         | *       | *             | *             |               |      | *        | *      | *                                               |           |             | *              | *       | *       | 14                    |
| North Carolina      |                          | *                     | *           | *         | *        | *      | *           | *         | *       | *             | *             |               | *    | *        |        | *                                               | *         |             |                | *       | *       | 14                    |
| North Dakota        |                          | *                     |             | *         | *        | *      | *           | *         |         |               | *             | *             |      | *        |        | *                                               | *         |             | *              | *       | *       | 11                    |
| Ohio                | *                        | *                     |             | *         | *        |        | *           | *         |         |               | *             |               |      | *        | *      | *                                               | *         |             |                | *       | *       | 12                    |
| Oklahoma            |                          | *                     |             | *         | *        | *      | *           | *         |         |               | *             | *             |      | *        |        | *                                               | *         |             | *              | *       | *       | 13                    |
| Oregon              |                          | *                     |             | *         | *        | *      | *           | *         |         | *             | *             |               |      | *        |        | *                                               | *         |             |                | *       | *       | 10                    |
| Pennsylvania        | *                        | *                     |             | *         | *        | *      | *           | *         |         | *             | *             | *             |      | *        |        | *                                               | *         |             | *              | *       | *       | 14                    |
| Rhode Island        |                          | *                     |             | *         | *        | *      | *           | *         |         | *             | *             |               |      | *        | *      | *                                               |           |             | *              | *       | *       | 10                    |
| South Carolina      | *                        | *                     | *           | *         | *        | *      | *           | *         |         | *             | *             |               |      | *        |        | *                                               | *         | *           | *              | *       | *       | 15                    |
| South Dakota        |                          | *                     | *           | *         | *        | *      | *           | *         |         |               | *             |               |      | *        |        | *                                               | *         | *           | *              | *       | *       | 12                    |
| Tennessee           | *                        | *                     | *           | *         | *        | *      | *           | *         |         | *             | *             | *             |      | *        |        | *                                               | *         | *           | *              | *       | *       | 16                    |
| Texas               | *                        | *                     | *           | *         | *        | *      | *           | *         |         | *             | *             |               | *    | *        |        | *                                               | *         | *           | *              | *       | *       | 15                    |
| Utah                |                          | *                     |             | *         | *        | *      | *           | *         | *       | *             | *             | *             |      | *        |        | *                                               | *         | *           | *              | *       | *       | 14                    |
| Vermont             |                          | *                     |             | *         | *        | *      | *           | *         |         | *             | *             | *             | *    | *        |        | *                                               | *         |             | *              | *       | *       | 13                    |
| Virginia            |                          | *                     |             | *         | *        | *      | *           | *         | *       | *             | *             |               | *    | *        |        | *                                               | *         |             | *              | *       | *       | 12                    |
| Washington          | *                        | *                     |             | *         | *        | *      | *           | *         |         | *             | *             |               |      | *        | *      | *                                               | *         | *           | *              | *       | *       | 14                    |
| West Virginia       |                          | *                     | *           | *         | *        | *      | *           | *         |         | *             | *             |               | *    | *        | *      | *                                               | *         |             | *              | *       | *       | 14                    |
| Wisconsin           | *                        | *                     |             | *         | *        | *      | *           | *         |         | *             | *             |               |      | *        |        | *                                               | *         |             | *              | *       | *       | 13                    |
| Wyoming             |                          | *                     |             | *         | *        |        | *           | *         |         |               | *             |               |      | *        |        | *                                               | *         |             |                | *       | *       | 9                     |
| Totals              | 19                       | 48                    | 20          | 44        | 48       | 35     | 47          | 48        | 12      | 23            | 48            | 9             | 12   | 47       | 18     | 23                                              | 19        | 7           | 12             | 29      | 40      |                       |

Source: Tax Yields - 1941.

COMPARISON OF TAX PERCENTAGES IN MINNESOTA  
WITH 48 STATES  
1941

| <u>Tax</u>              | <u>Average Tax Structure<br/>All States<br/>1941</u> | <u>Tax Structure<br/>Minnesota<br/>1941</u> | <u>Difference</u> |
|-------------------------|------------------------------------------------------|---------------------------------------------|-------------------|
| Gasoline                | 25.69%                                               | 20.22%                                      | - 5.47%           |
| Sales                   | 15.65                                                | -                                           | - 15.65           |
| Motor Vehicle           | 12.39                                                | 12.94                                       | + .55             |
| Net Income              | 11.86                                                | 18.31                                       | + 6.45            |
| Alcoholic Beverage      | 7.36                                                 | 6.23                                        | - .13             |
| Property                | 5.72                                                 | 15.09                                       | + 9.37            |
| Utility                 | 4.34                                                 | 9.76                                        | + 5.42            |
| Inheritance             | 3.46                                                 | 1.11                                        | - 2.35            |
| Tobacco                 | 3.03                                                 | .26                                         | - 2.77            |
| Franchise               | 2.99                                                 | -                                           | - 2.99            |
| Insurance Co.           | 2.53                                                 | 2.50                                        | - .03             |
| Severance               | 1.60                                                 | 11.86                                       | + 10.26           |
| License                 | 1.01                                                 | 1.38                                        | + .37             |
| Admission and Amusement | .68                                                  | -                                           | - .68             |
| Stock Transfer          | .55                                                  | .01                                         | - .54             |
| Bank                    | .52                                                  | -                                           | - .52             |
| Poll                    | .21                                                  | -                                           | - .21             |
| Chain Store             | .14                                                  | .23                                         | + .09             |
| Miscellaneous           | .13                                                  | .13                                         | -                 |
| Soft Drink              | .12                                                  | -                                           | - .12             |
| Oleomargarine           | .01                                                  | .001                                        | - .009            |
|                         | 99.99%                                               | 100.03%                                     |                   |

Source: Tax Systems - Ninth Edition  
The Tax Research Foundation

MINNESOTA - STATE AND LOCAL TAX COLLECTIONS  
1930-1943

| 1 9 3 0    | 1 9 3 1     | 1 9 3 2     | 1 9 3 3     | 1 9 3 4     | 1 9 3 5     | 1 9 3 6     | 1 9 3 7     | 1 9 3 8     | 1 9 3 9     | 1 9 4 0     | 1 9 4 1     | 1 9 4 2     | 1 9 4 3     |
|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 22,186,244 | 119,044,062 | 107,011,558 | 109,293,338 | 109,652,952 | 110,768,445 | 110,768,827 | 112,807,843 | 111,576,632 | 112,173,909 | 110,890,177 | 110,115,680 | 110,411,314 | 110,731,85  |
| 7,977,783  | 5,926,901   | 4,435,505   | 4,873,940   | 4,911,820   | 5,380,252   | 6,398,206   | 7,647,399   | 6,213,884   | 7,114,157   | 8,149,559   | 9,584,588   | 11,132,213  | 12,404,81   |
| 1,336,645  | 1,259,265   | 1,205,985   | 1,245,664   | 1,423,273   | 1,678,694   | 2,008,397   | 2,152,409   | 2,054,252   | 2,307,306   | 2,461,986   | 2,586,286   | 2,626,477   | -           |
| 424,510    | 198,214     | 173,426     | 116,482     | 288,918     | 228,513     | 391,621     | 242,901     | 242,901     | 273,181     | 293,445     | 351,555     | 239,254     | 240,CO      |
| 1,899,227  | 1,893,787   | 1,712,970   | 1,571,089   | 1,735,332   | 1,747,066   | 1,788,090   | 1,493,298   | 1,887,131   | 1,964,593   | 2,043,654   | 2,117,888   | 2,171,219   | 2,171,79    |
| -          | -           | -           | -           | 2,175,747   | 3,193,174   | 4,074,991   | 6,540,766   | 11,900,417  | 9,206,217   | 11,712,976  | 13,141,472  | 18,322,465  | 23,615,65   |
| 10,359,111 | 11,070,423  | 10,000,557  | 10,014,857  | 10,845,377  | 11,241,028  | 12,132,788  | 17,007,610  | 19,380,368  | 18,645,780  | 18,345,719  | 18,851,275  | 18,860,757  | 13,390,03   |
| 2,782,361  | 1,383,145   | 260,604     | 990,653     | 1,228,626   | 1,387,546   | 2,648,669   | 9,033,930   | 1,618,439   | 4,888,964   | 6,387,700   | 8,399,387   | 8,233,102   | 6,711,68    |
| 921,167    | 649,804     | 415,793     | 335,602     | 364,127     | 461,544     | 546,815     | 1,305,385   | 607,985     | 865,926     | 1,107,914   | 1,823,592   | 2,163,602   | 1,945,80    |
| 11,009,002 | 10,721,972  | 10,056,116  | 6,252,500   | 6,601,465   | 7,023,496   | 7,997,199   | 8,607,570   | 9,179,866   | 9,403,534   | 9,970,973   | *18,865,555 | 565,521     | 8,981,16    |
| -          | -           | -           | -           | 2,815,355   | 3,270,430   | 4,086,936   | 5,140,715   | 5,331,503   | 5,301,691   | 5,377,226   | 5,920,342   | 6,248,769   | 5,211,37    |
| 2,362,340  | 1,819,602   | 2,372,824   | 1,201,301   | 1,295,675   | 1,235,003   | 791,314     | 833,000     | 1,980,468   | 1,355,125   | 1,028,231   | 1,190,663   | 1,173,105   | 1,433,61    |
| -          | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | 500,593     | 679,407     | 813,80      |
| 72,691     | 80,066      | 51,459      | 52,131      | 59,311      | 43,585      | 62,808      | 52,723      | 70,983      | 80,783      | 88,081      | 123,606     | 134,190     | 138,05      |
| 51,027     | 47,206      | 40,147      | 37,644      | 39,018      | 40,000      | 38,361      | 38,362      | 52,781      | 51,593      | 54,571      | 58,106      | 59,835      | 59,95       |
| 27,343     | 24,888      | 26,063      | 27,378      | 27,378      | 22,783      | 43,728      | 24,303      | 24,591      | 25,723      | 24,957      | 24,063      | 26,518      | 22,34       |
| -          | -           | -           | -           | 219,329     | 395,798     | 462,042     | 146,002     | 101,000     | 95,069      | 93,000      | -           | -           | -           |
| -          | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | -           | 7,675       | 8,04        |
| 61,409,451 | 154,119,335 | 137,763,007 | 136,012,579 | 143,683,703 | 148,117,357 | 154,240,792 | 173,074,216 | 172,223,201 | 173,753,551 | 178,030,169 | 193,654,651 | 183,055,423 | 187,879,994 |

or 2 years.

Department of Taxation, 1936 and 1942, and typed sheets from Department of Taxation for 1942-43.

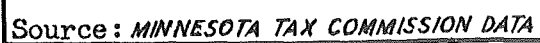
MINNESOTA - STATE AND LOCAL TAX COLLECTIONS  
1930-1943

| Source of Tax      | 1930        | 1931        | 1932        | 1933        | 1934        | 1935        | 1936        | 1937        |
|--------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| General Property   | 122,186,244 | 119,044,062 | 107,011,558 | 109,293,338 | 109,652,952 | 110,768,445 | 110,768,827 | 112,868,445 |
| Gross Earnings     | 7,977,783   | 5,926,901   | 4,435,505   | 4,873,940   | 4,911,820   | 5,380,252   | 6,398,206   | 7,868,445   |
| Money & Credits    | 1,336,645   | 1,259,265   | 1,205,985   | 1,245,664   | 1,423,273   | 1,678,694   | 2,008,397   | 2,168,445   |
| Mortgage Registry  | 424,510     | 198,214     | 173,426     | 116,482     | 288,918     | 228,513     | 391,621     | 2,168,445   |
| Insurance          | 1,899,227   | 1,893,787   | 1,712,970   | 1,571,089   | 1,735,332   | 1,747,066   | 1,788,090   | 1,468,445   |
| Income             | -           | -           | -           | -           | 2,175,747   | 3,193,174   | 4,074,991   | 6,568,445   |
| Gasoline           | 10,359,111  | 11,070,423  | 10,000,557  | 10,014,857  | 10,845,377  | 11,241,028  | 12,132,788  | 17,068,445  |
| Occupation         | 2,782,361   | 1,383,145   | 260,604     | 990,653     | 1,228,626   | 1,387,546   | 2,648,669   | 9,068,445   |
| Royalty            | 921,167     | 649,804     | 415,793     | 335,602     | 364,127     | 461,544     | 546,815     | 1,368,445   |
| Motor Vehicle      | 11,009,002  | 10,721,972  | 10,056,116  | 6,252,500   | 6,601,465   | 7,023,496   | 7,997,199   | 8,668,445   |
| Liquor             | -           | -           | -           | -           | 2,815,355   | 3,270,430   | 4,086,936   | 5,168,445   |
| Inheritance & Gift | 2,362,340   | 1,819,602   | 2,372,824   | 1,201,301   | 1,295,675   | 1,235,003   | 791,314     | 8,668,445   |
| Bank Excise        | -           | -           | -           | -           | -           | -           | -           | -           |
| Bushel             | 72,691      | 80,066      | 51,459      | 52,131      | 59,311      | 43,585      | 62,808      | -           |
| Fire Marshal       | 51,027      | 47,206      | 40,147      | 37,644      | 39,018      | 40,000      | 38,361      | -           |
| Vessel Tonnage     | 27,343      | 24,888      | 26,063      | 27,378      | 27,378      | 22,783      | 43,728      | -           |
| Chain Store        | -           | -           | -           | -           | 219,329     | 395,798     | 462,042     | -           |
| Cooperative Power  | -           | -           | -           | -           | -           | -           | -           | -           |
| Totals             | 161,409,451 | 154,119,335 | 137,763,007 | 136,012,579 | 143,683,703 | 148,117,357 | 154,240,792 | 173,068,445 |

\* Collection of taxes for 2 years.

Source: Report of the Department of Taxation, 1936 and 1942, and typed sheets from Department of Taxation for 1942-43.





COMPARISON OF MINNESOTA PERSONAL INCOME  
TAX LEVY ON NET INCOME OF \$3,000 WITH OTHER STATES  
1943

COUPLE WITH TWO DEPENDENTS

1. Connecticut
2. Florida
3. Illinois
4. Indiana
5. Maine
6. Michigan
7. Nebraska
8. Nevada
9. New Hampshire
10. New Jersey
11. Ohio
12. Pennsylvania
13. Rhode Island
14. South Dakota
15. Tennessee
16. Texas
17. Washington
18. West Virginia
19. Wyoming

No Personal Income  
Tax in these  
States

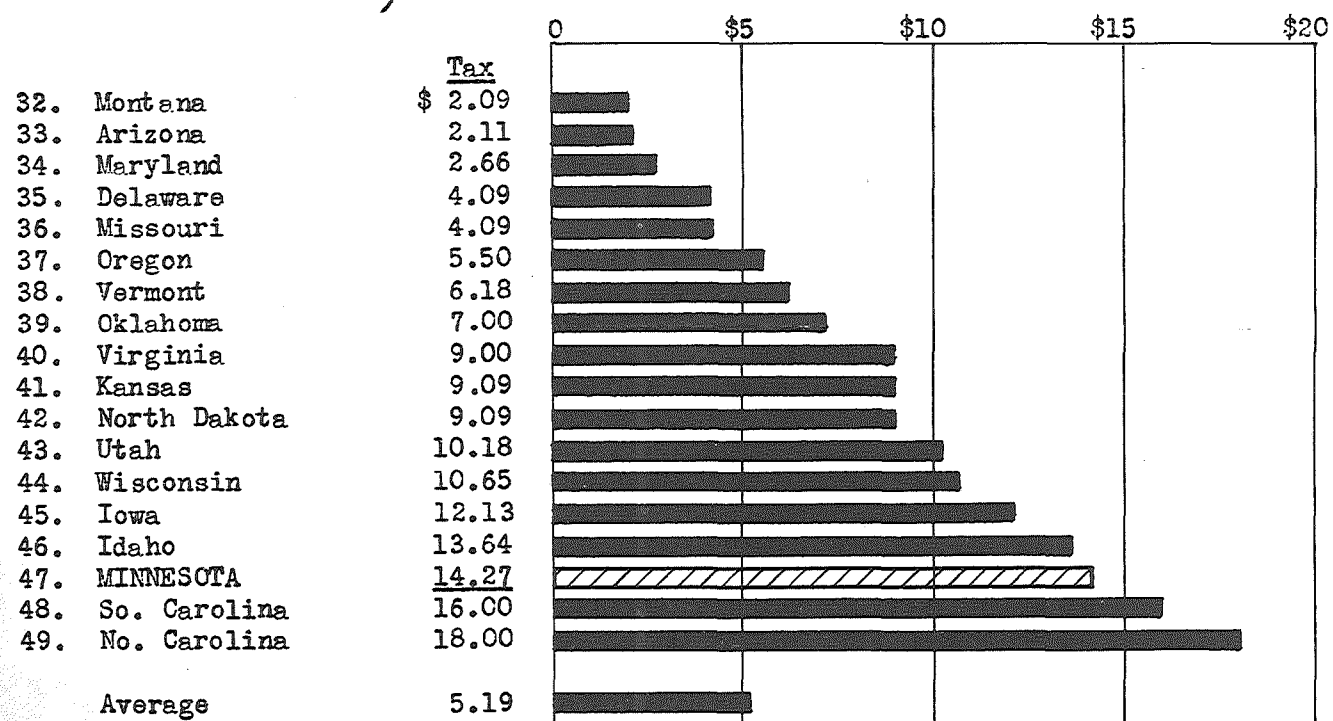
20. Alabama
21. Arkansas
22. California
23. Colorado
24. D. of C.
25. Georgia
26. Kentucky
27. Louisiana
28. Massachusetts
29. Mississippi
30. New Mexico
31. New York

No tax on this  
bracket

NOTE: It is assumed that the only deductions remaining to be taken from the \$3,000 net income before computing the tax are:

- a. credits for married status and dependents;
- b. federal income taxes paid.

These deductions are taken where state laws permit before computing the tax.



Source: Minnesota Institute of Governmental Research Inc.

The J. G. White Engineering Corp., New York

COMPARISON OF MINNESOTA PERSONAL INCOME  
TAX LEVY ON NET INCOME ON \$5,000 WITH OTHER STATES  
1943

COUPLE WITH TWO DEPENDENTS

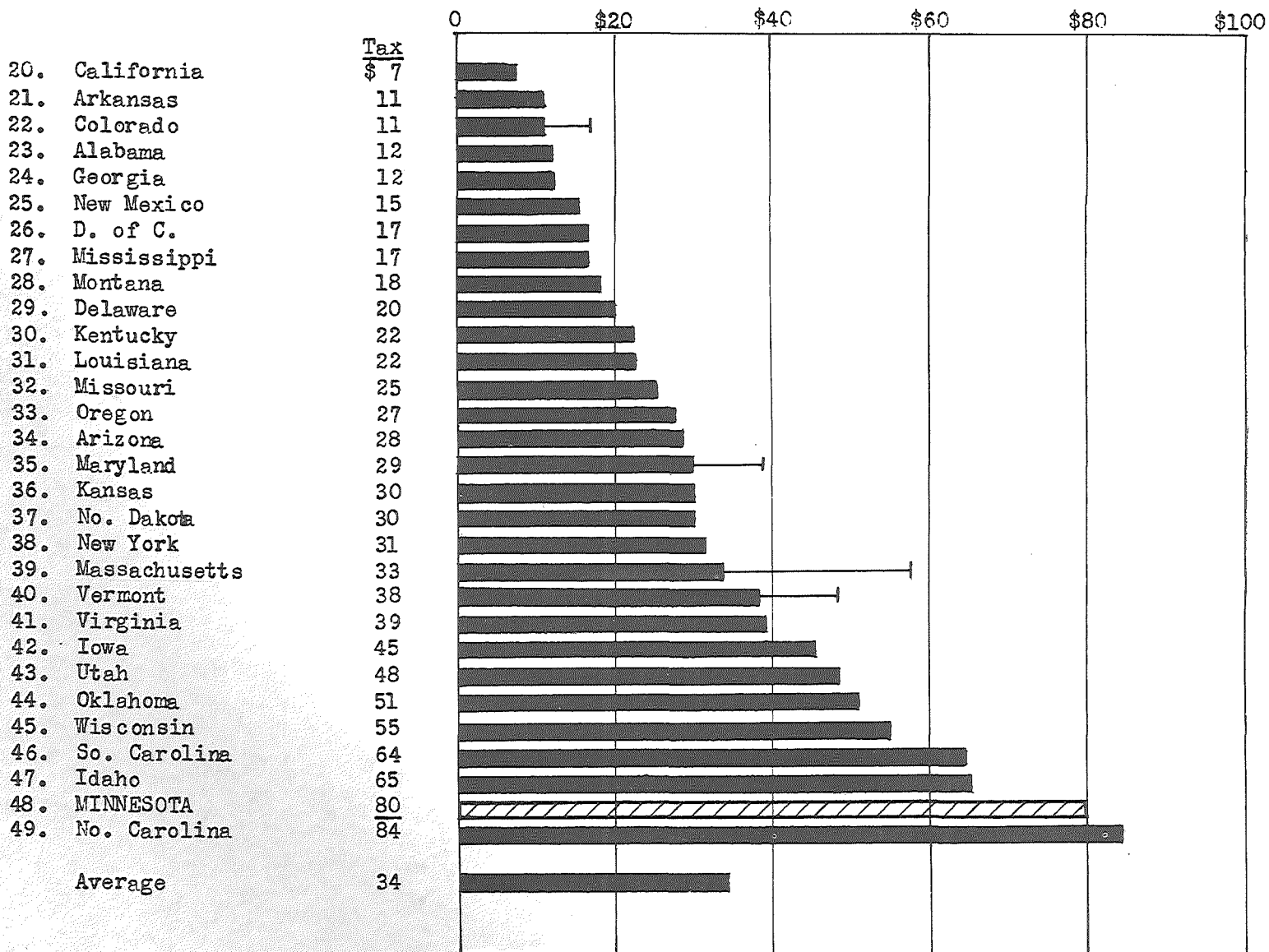
1. Connecticut
2. Florida
3. Illinois
4. Indiana
5. Maine
6. Michigan
7. Nebraska
8. Nevada
9. New Hampshire
10. New Jersey
11. Ohio
12. Pennsylvania
13. Rhode Island
14. South Dakota
15. Tennessee
16. Texas
17. Washington
18. West Virginia
19. Wyoming

No Personal Income  
Tax in these  
States

NOTE: It is assumed that the only deductions remaining to be taken from the \$5,000 net income before computing the tax are:

- a. credits for married status and dependents;
- b. federal income taxes paid.

These deductions are taken where state laws permit before computing the tax.



N.B. Certain states tax interest and dividends at higher than normal rates. If \$500 of the \$5,000 net income were taxed as interest and dividends, the tax in those states would extend on the chart to the points indicated thus: —|.

Source: Minnesota Institute of Governmental Research Inc.

COMPARISON OF MINNESOTA PERSONAL INCOME  
TAX LEVY ON NET INCOME OF \$10,000 WITH OTHER STATES  
1943

COUPLE WITH TWO DEPENDENTS

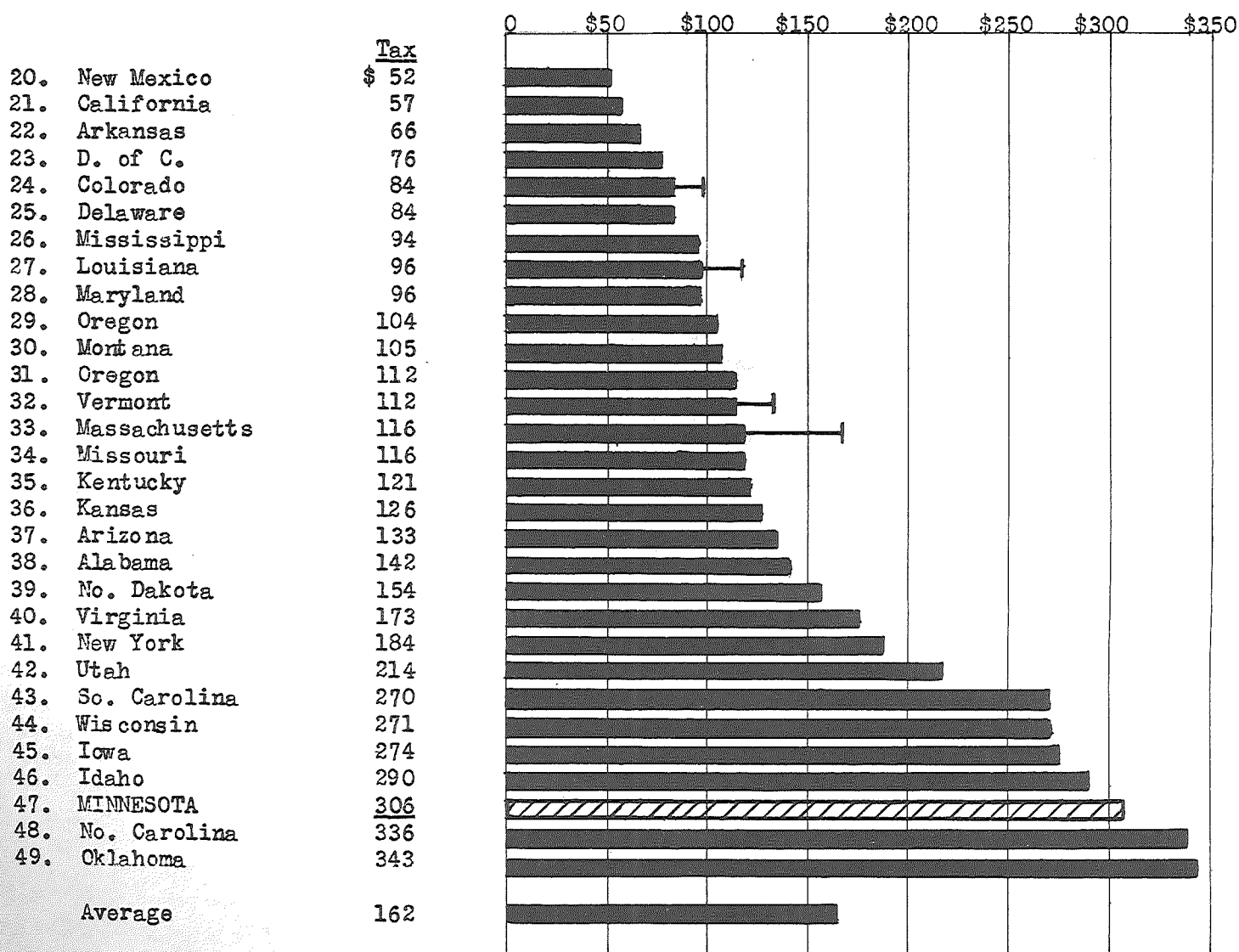
1. Connecticut
2. Florida
3. Illinois
4. Indiana
5. Maine
6. Michigan
7. Nebraska
8. Nevada
9. New Hampshire
10. New Jersey
11. Ohio
12. Pennsylvania
13. Rhode Island
14. South Dakota
15. Tennessee
16. Texas
17. Washington
18. West Virginia
19. Wyoming

No Personal Income  
Tax in these  
States

NOTE: It is assumed that the only deductions remaining to be taken from the \$10,000 net income before computing the tax are:

- a. credits for married status and dependents;
- b. federal income taxes paid.

These deductions are taken where state laws permit before computing the tax.



N.B. Certain states tax interest and dividends at higher than normal rates. If \$1,000 of the \$10,000 net income were taxed as interest and dividends, the tax in those states would extend on the chart to the points indicated thus: ————.

Source: Minnesota Institute of Governmental Research Inc.



COMPARISON OF MINNESOTA PERSONAL INCOME  
TAX LEVY ON NET INCOME OF \$25,000 WITH OTHER STATES  
1943

COUPLE WITH TWO DEPENDENTS

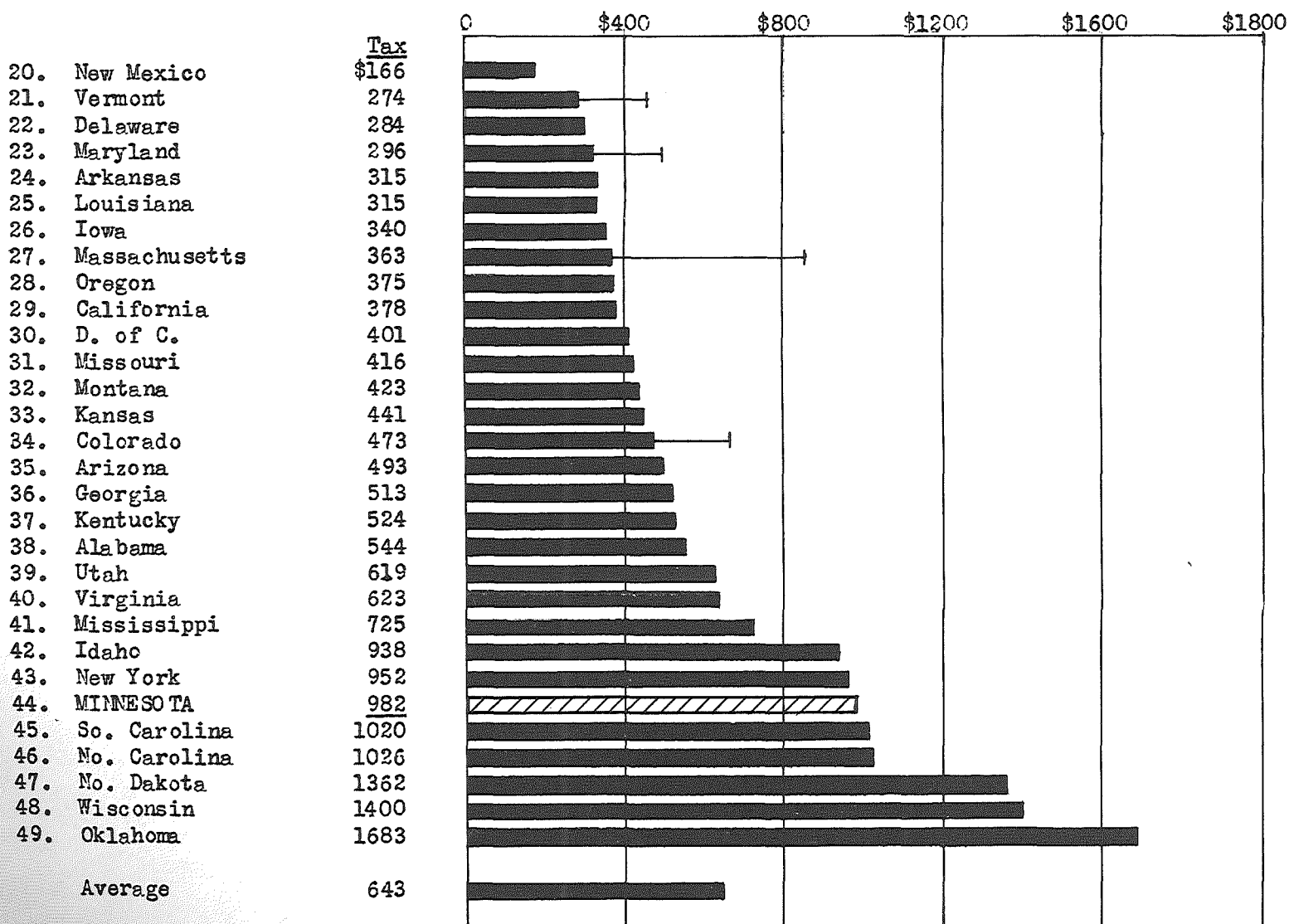
1. Connecticut
2. Florida
3. Illinois
4. Indiana
5. Maine
6. Michigan
7. Nebraska
8. Nevada
9. New Hampshire
10. New Jersey
11. Ohio
12. Pennsylvania
13. Rhode Island
14. So. Dakota
15. Tennessee
16. Texas
17. Washington
18. West Virginia
19. Wyoming

No Personal Income  
Tax in These  
States

NOTE: It is assumed that the only deductions remaining to be taken from the \$25,000 net income before computing the tax are:

- a. credits for married status and dependents;
- b. federal income taxes paid.

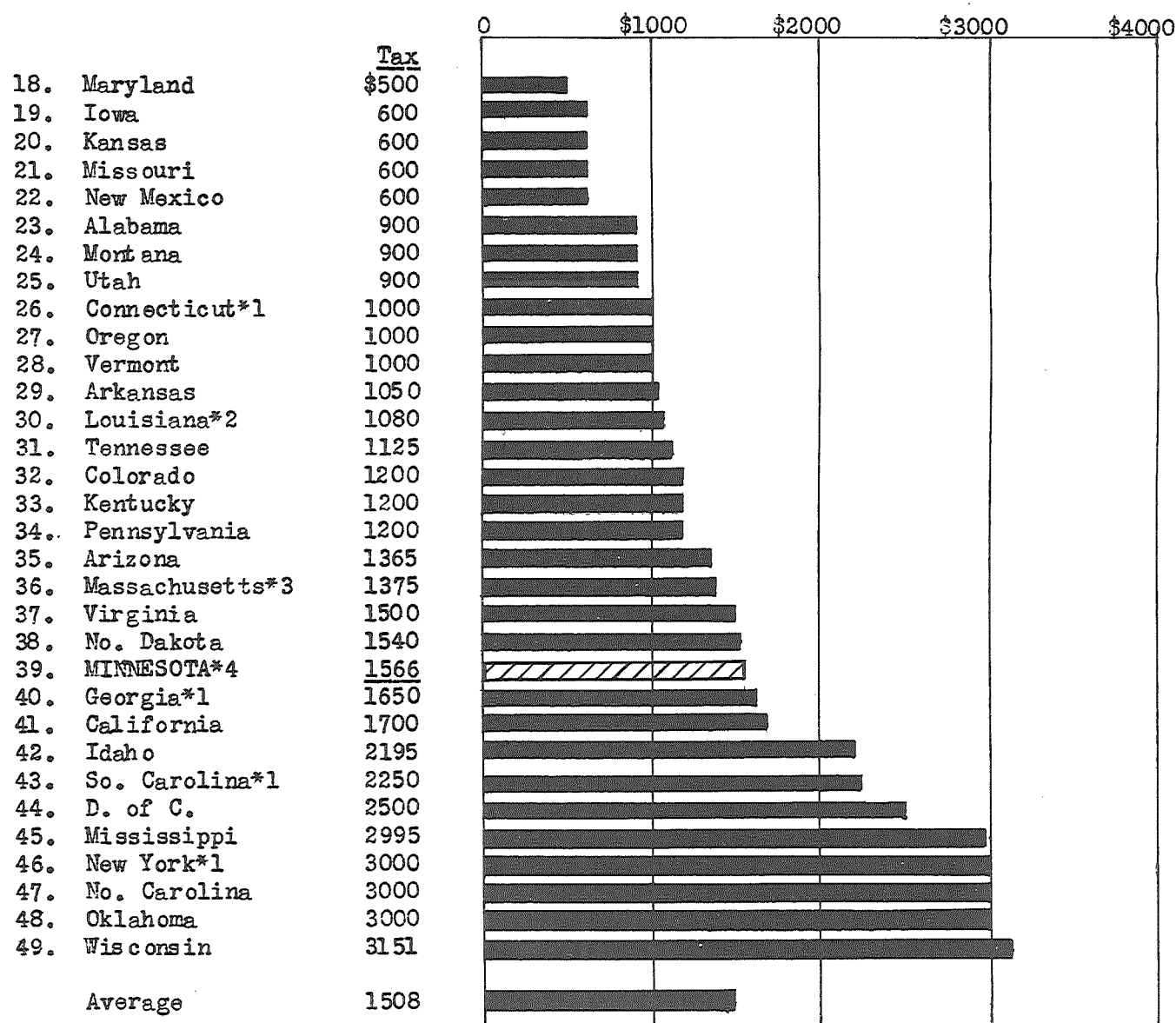
These deductions are taken where state laws permit before computing the tax.



N.B. Certain states tax interest and dividends at higher than the normal rates. If \$10,000 of the \$25,000 net income were taxed as interest and dividends, the tax in those states would extend on the chart to the points indicated thus: —→.

Source: Minnesota Institute of Governmental Research Inc.

13. South Dakota
14. Texas
15. Washington
16. West Virginia
17. Wyoming



#### NOTES

\*1 - When there are alternative methods of figuring this tax, the flat percentage basis has been used. (Data necessary for computing tax by alternative methods are not available.) Therefore, the flat rates have been used for the following states:

|             |                |
|-------------|----------------|
| Connecticut | South Carolina |
| Georgia     | Utah           |
| New York    |                |

\*2 - Louisiana exempts \$3,000 from the tax.

\*3 - Massachusetts: In addition to the tax based on income, corporations pay \$5 per \$1,000 of taxable corporate excess or \$5 per \$1,000 of tangible property in Massachusetts not taxed locally, whichever is higher. Some corporations would therefore pay a larger tax than indicated in the chart, but data are not available to arrive at a representative figure for this tax which would not be highly misleading.

\*4 - Minnesota: A variable credit against the tax is provided, based upon the ratio of property and payrolls in Minnesota to all property and payrolls of the corporation.

In this illustration, it is assumed that all of the corporation's property and payroll is in Minnesota, and the maximum credit of 10% allowed in such cases has been taken, thus making the effective rate 5.4% instead of 6%.

Minnesota also exempts \$1,000 of net income from tax.

Source: Minnesota Institute of Governmental Research Inc.



COMPARISON OF MINNESOTA CORPORATE INCOME  
TAX LEVY ON NET INCOME OF \$50,000 WITH OTHER STATES  
1943

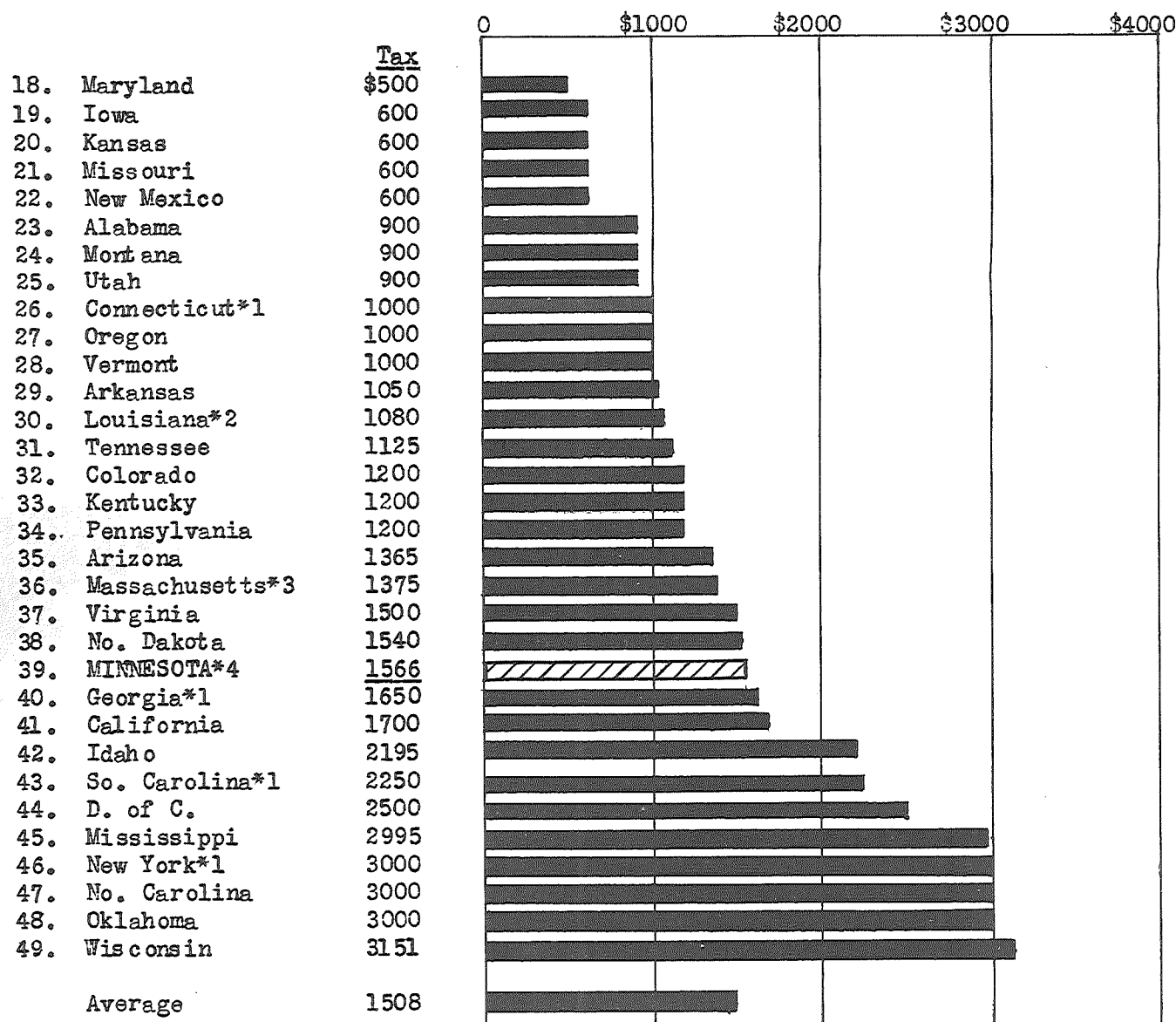
1. Delaware
2. Florida
3. Illinois
4. Indiana
5. Maine
6. Michigan
7. Nebraska
8. Nevada
9. New Hampshire
10. New Jersey
11. Ohio
12. Rhode Island
13. South Dakota
14. Texas
15. Washington
16. West Virginia
17. Wyoming

No Corporate Income  
Tax in These  
States

NOTE: It is assumed that the only deductions remaining to be taken from the \$50,000 net income before computing the tax are:

- a. credit allowed by the state;
- b. federal income taxes paid.

These deductions are taken where state laws permit before computing the tax.



NOTES

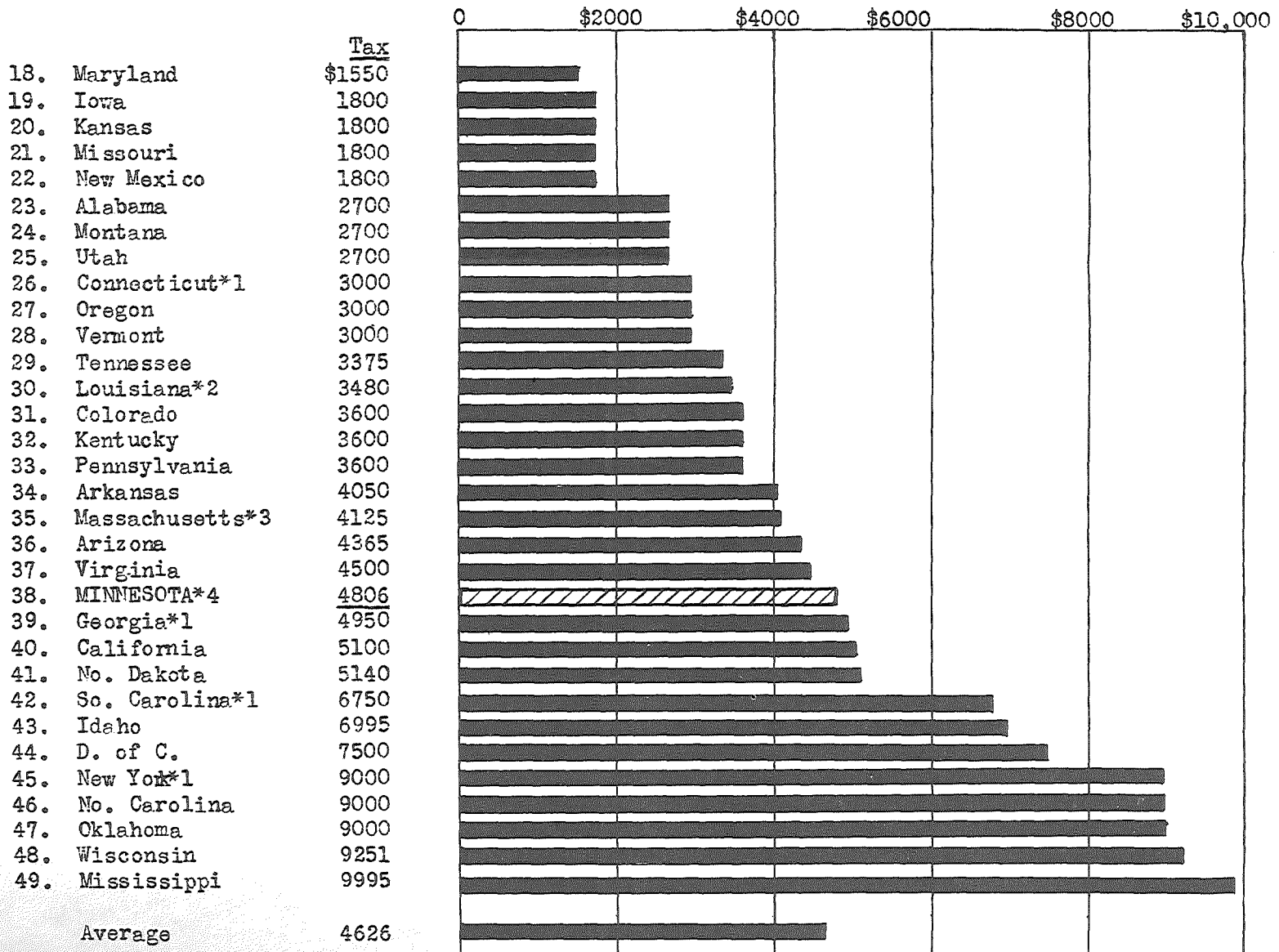
\*1 - When there are alternative methods of figuring this tax, the flat percentage basis has been used. (Data necessary for computing tax by alternative methods are not available.) Therefore, the flat rates have been used for the following states:

|             |                |
|-------------|----------------|
| Connecticut | South Carolina |
| Georgia     | Utah           |
| New York    |                |

\*2 - Louisiana exempts \$3,000 from the tax.

\*3 - Massachusetts: In addition to the tax based on income, corporations pay \$5 per \$1,000 of taxable corporate excess or \$5 per \$1,000 of tangible property in Massachusetts not taxed locally, whichever is higher. Some corporations would therefore pay a larger tax than indicated in the chart, but data are not available to arrive at a representative figure for this tax which would not be highly misleading.

12. Rhode Island
13. South Dakota
14. Texas
15. Washington
16. West Virginia
17. Wyoming



#### NOTES

\*1 - When there are alternative methods of figuring this tax, the flat percentage basis has been used. (Data necessary for computing tax by alternative methods are not available.) Therefore, the flat rates have been used for the following states:

|             |                |
|-------------|----------------|
| Connecticut | South Carolina |
| Georgia     | Utah           |
| New York    |                |

\*2 - Louisiana exempts \$3,000 from the tax.

\*3 - Massachusetts: In addition to the tax based on income, corporations pay \$5 per \$1,000 of taxable corporate excess or \$5 per \$1,000 of tangible property in Massachusetts not taxed locally, whichever is higher. Some corporations would therefore pay a larger tax than indicated in the chart, but data are not available to arrive at a representative figure for this tax which would not be highly misleading.

\*4 - Minnesota: A variable credit against the tax is provided, based upon the ratio of property and payrolls in Minnesota to all property and payrolls of the corporation.

In this illustration, it is assumed that all of the corporation's property and payroll is in Minnesota, and the maximum credit of 10% allowed in such cases has been taken, thus making the effective rate 5.4% instead of 6%.

Minnesota also exempts \$1,000 of net income from tax.

Source: Minnesota Institute of Governmental Research Inc.

COMPARISON OF MINNESOTA CORPORATE INCOME  
TAX LEVY ON NET INCOME OF \$150,000 WITH OTHER STATES  
1943

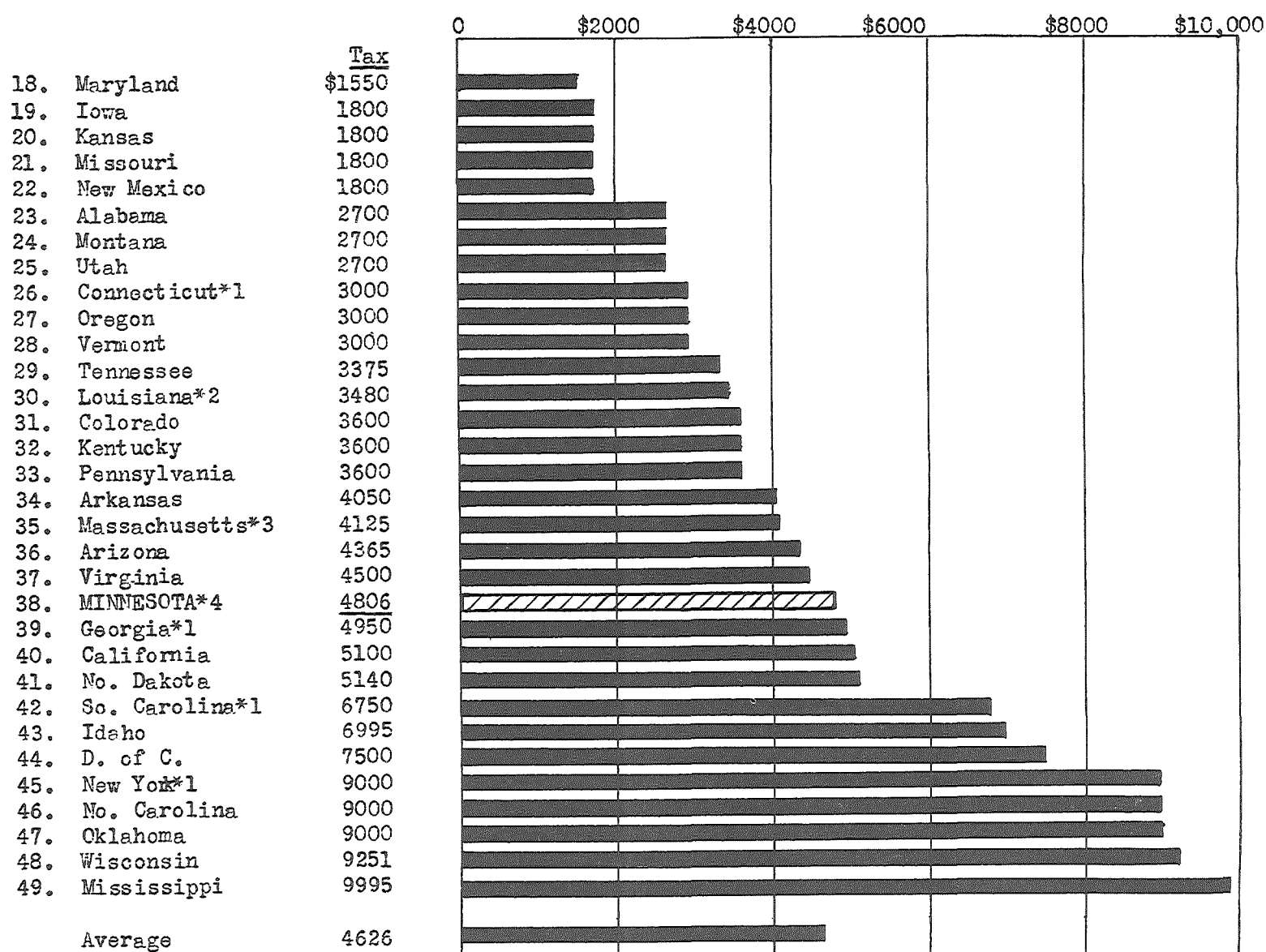
1. Delaware
2. Florida
3. Illinois
4. Indiana
5. Maine
6. Michigan
7. Nebraska
8. Nevada
9. New Hampshire
10. New Jersey
11. Ohio
12. Rhode Island
13. South Dakota
14. Texas
15. Washington
16. West Virginia
17. Wyoming

No Corporate Income  
Tax in these  
States

NOTE: It is assumed that the only deductions remaining to be taken from the \$150,000 net income before computing the tax are:

- a. credit allowed by the state;
- b. federal income taxes paid.

These deductions are taken where state laws permit before computing the tax.



NOTES

\*1 - When there are alternative methods of figuring this tax, the flat percentage basis has been used. (Data necessary for computing tax by alternative methods are not available.) Therefore, the flat rates have been used for the following states:

Connecticut  
Georgia  
New York

South Carolina  
Utah

\*2 - Louisiana exempts \$3,000 from the tax.

\*3 - Massachusetts: In addition to the tax based on income, cor-

COMPARISON OF MOTOR VEHICLE LICENSE FEE  
FOR NEW AND 5 YEAR OLD FORD PASSENGER CAR  
MINNESOTA WITH 15 SELECTED STATES

BASED ON 1942 FORD - 4-DOOR DELUXE SEDAN  
WEIGHT 3050 LBS. HORSE POWER S.A.E. 30.01  
APPROXIMATE PRICE \$1,012.00

| State        | Method of Taxation                                                                               | New<br>Fee   | 5 Year Old<br>Fee |
|--------------|--------------------------------------------------------------------------------------------------|--------------|-------------------|
| Alabama      | 2,500-3,250 lb. \$13.00                                                                          | \$13.00      | \$13.00           |
| Illinois     | 25-35 H.P. \$10.50                                                                               | 10.50        | 10.50             |
| Indiana      | 25 H.P. or more; 2,500-3,000 lb. \$9.00                                                          | 9.00         | 9.00              |
| Iowa         | 1% of value plus 40¢ per CWT. 3rd Registration, 75% of new - 4th - 50% - 5th - 25% - 6th - none. | 22.32        | 12.20             |
| Kansas       | \$4.00 plus 25¢ per CWT. over 2,000 lb.                                                          | 6.63         | 6.63              |
| Kentucky     | \$4.50 plus 50¢ clerks fee                                                                       | 5.00         | 5.00              |
| Michigan     | 35¢ per CWT.                                                                                     | 10.68        | 10.68             |
| Minnesota    | 2.2% of value reduced 10% - 2nd registration 15% - 3rd registration \$7.50 minimum               | 22.26        | 7.50              |
| Missouri     | 24-36 H.P. \$11.00                                                                               | 11.00        | 11.00             |
| Nebraska     | Over 2,800 lb. - \$5.00                                                                          | 5.00         | 5.00              |
| North Dakota | 2,800-3,200 lb. \$20.00. Reduced 10% annually.                                                   | 20.00        | 10.00             |
| Ohio         | 25-31 H.P. \$10.00                                                                               | 10.00        | 10.00             |
| Pennsylvania | 40¢ per H.P.                                                                                     | 12.00        | 12.00             |
| South Dakota | 3,000-3,500 lb. \$20.00. Over 3 years old 1/2 rate. Over 5 years old 30%.                        | 20.00        | 6.00              |
| Tennessee    | To 3,500 lb, \$7.50                                                                              | 7.50         | 7.50              |
| Wisconsin    | 2,800-3,200 lb. \$16.00 - if over 5 years old 75% of fee.                                        | <u>16.00</u> | <u>12.00</u>      |
| Average      |                                                                                                  | \$12.55      | \$ 9.25           |

Source: Tax Systems - Ninth Edition  
The Tax Research Foundation

The J. G. White Engineering Corp., New York



COMPARISON OF MOTOR VEHICLE LICENSE  
FEE FOR NEW AND 5 YEAR OLD G.M.C.  
5-TON TRUCK IN MINNESOTA WITH  
15 SELECTED STATES

BASED ON GMC 1942 MODEL A.C.R. 720 - 5-TON TRUCK  
WEIGHT 8600 H.P. S.A.E. 43.34  
APPROXIMATE PRICE \$5,800.00

| State        | Method of Taxation                                                                                             | New<br>Tax     | 5 Year Old<br>Tax |
|--------------|----------------------------------------------------------------------------------------------------------------|----------------|-------------------|
| Alabama      | 4-5 Ton \$200.00                                                                                               | \$200.00       | \$200.00          |
| Illinois     | 16,000-20,000 lb. gross \$105.00 or<br>Optional Mileage Weight Tax \$5.00,<br>plus (16,000-20,000 lb.) 1.0¢.   | 105.00         | 105.00            |
| Indiana      | 3-1/2 to 5 Ton \$60.00                                                                                         | 60.00          | 60.00             |
| Iowa         | 3-5 Ton \$25.00                                                                                                | 25.00          | 25.00             |
| Kansas       | 4-5 Ton \$150.00                                                                                               | 150.00         | 150.00            |
| Kentucky     | 9,001-10,000 lb. \$187.00 (capacity)                                                                           | 187.00         | 187.00            |
| Michigan     | Over 6,000 lb. \$1.25 CWT.                                                                                     | 107.50         | 107.50            |
| Minnesota    | 3,000 lb. or over 2.4% of value                                                                                | 139.20         | 139.20            |
| Missouri     | 2-5 Ton \$18.00                                                                                                | 18.00          | 18.00             |
| Nebraska     | 4-1/2-5 Ton \$100.00                                                                                           | 100.00         | 100.00            |
| North Dakota | 18,000-20,000 lb. gross \$34.00,<br>reduced 10% annually                                                       | 34.00          | 17.00             |
| Ohio         | 6,000-10,000 lb. \$2.00 CWT. Min. \$6.00                                                                       | 172.00         | 172.00            |
| Pennsylvania | 7,500-9,000 lb. Chassis Wt.,<br>pneumatic tires \$110.00                                                       | Approx. 100.00 | Approx. 100.00    |
| South Dakota | 6,500-7,000 lb. \$112.50 plus<br>\$50.00 per 1,000 lb. over 7,000 lb.                                          | 212.50         | 212.50            |
| Tennessee    | 18,000-24,000 lb. gross wt.<br>\$150.00 (2/5 above fee if paid<br>during first quarter of calen-<br>dar year.) | 60.00          | 60.00             |
| Wisconsin    | 4-5 Tons - \$60.00                                                                                             | 60.00          | 60.00             |
| Average      |                                                                                                                | \$108.14       | \$107.07          |

Source: Tax Systems - Ninth Edition  
The Tax Research Foundation

The J. G. White Engineering Corp., New York

INDEX OF FEDERAL AID TO STATES  
1941

(Per capitas of states are divided by the national per capita to obtain the "ranks" of states. To secure the "indexes," these per capita ranks are divided by the corresponding average ranks of economic ability and multiplied by 100.)

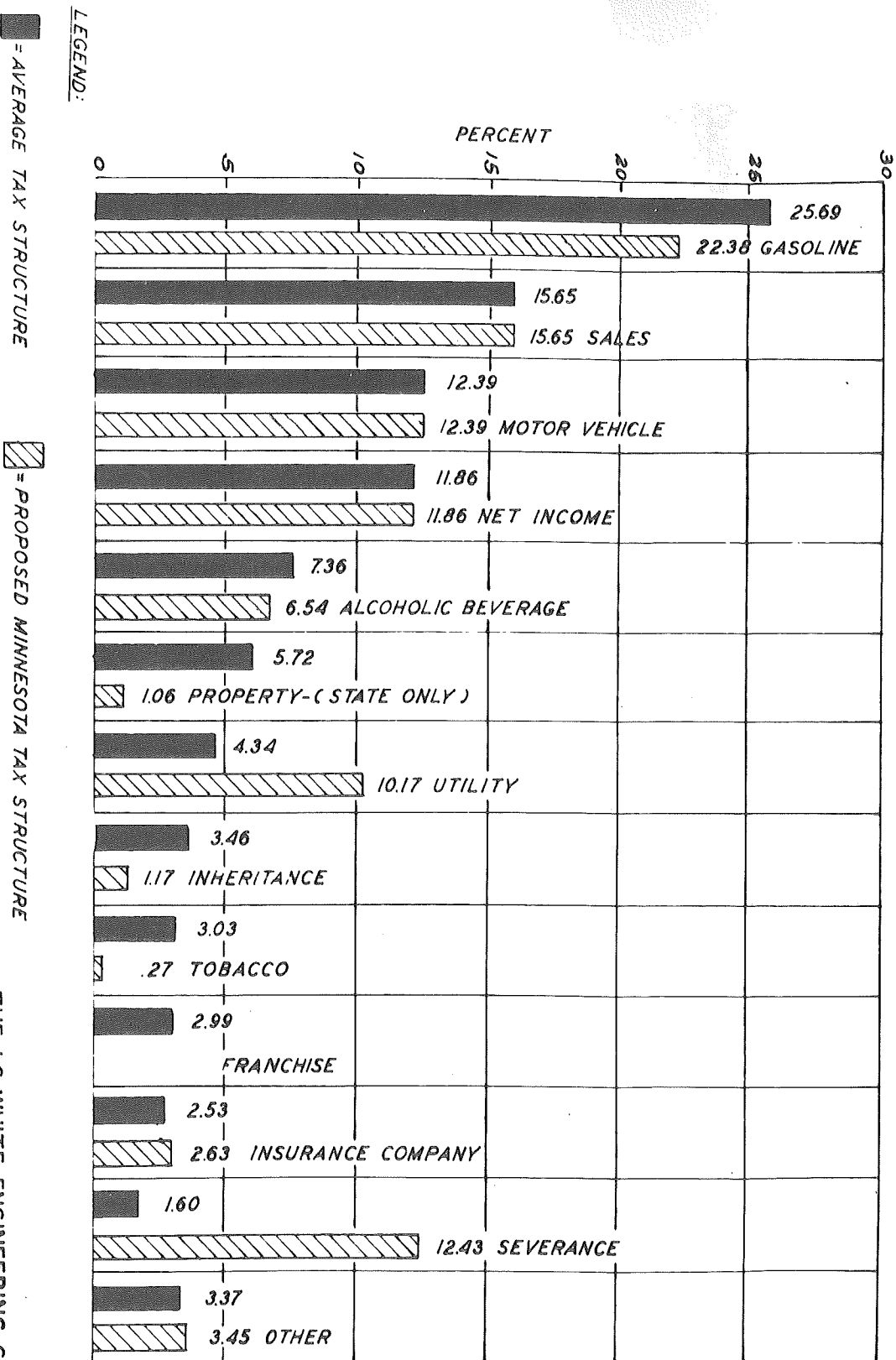
| State                     | Federal Aid to States<br>and Localities, 1941 |                           |                    |
|---------------------------|-----------------------------------------------|---------------------------|--------------------|
|                           | Per<br>Capita                                 | Rank of<br>Federal<br>Aid | Index<br>of<br>Aid |
| Total.....                | \$ 6.38                                       | 100                       | 100                |
| Alabama.....              | 4.43                                          | 69                        | 141                |
| Arizona.....              | 10.61                                         | 166                       | 178                |
| Arkansas.....             | 4.52                                          | 71                        | 151                |
| California.....           | 9.58                                          | 150                       | 115                |
| Colorado.....             | 12.21                                         | 191                       | 195                |
| Connecticut.....          | 6.24                                          | 98                        | 68                 |
| Delaware.....             | 7.52                                          | 118                       | 91                 |
| District of Columbia..... | 16.47                                         | 253                       | 172                |
| Florida.....              | 4.85                                          | 76                        | 99                 |
| Georgia.....              | 4.04                                          | 63                        | 110                |
| Idaho.....                | 9.79                                          | 153                       | 158                |
| Illinois.....             | 6.28                                          | 98                        | 81                 |
| Indiana.....              | 6.66                                          | 104                       | 96                 |
| Iowa.....                 | 6.78                                          | 106                       | 106                |
| Kansas.....               | 7.04                                          | 110                       | 136                |
| Kentucky.....             | 4.36                                          | 68                        | 119                |
| Louisiana.....            | 4.52                                          | 71                        | 108                |
| Maine.....                | 5.06                                          | 79                        | 84                 |
| Maryland.....             | 5.20                                          | 81                        | 76                 |
| Massachusetts.....        | 6.78                                          | 106                       | 88                 |
| Michigan.....             | 5.77                                          | 90                        | 73                 |
| Minnesota.....            | 7.31                                          | 115                       | 113                |
| Mississippi.....          | 4.89                                          | 77                        | 197                |
| Missouri.....             | 6.58                                          | 103                       | 117                |
| Montana.....              | 12.43                                         | 195                       | 173                |
| Nebraska.....             | 11.36                                         | 178                       | 214                |
| Nevada.....               | 26.70                                         | 418                       | 255                |
| New Hampshire.....        | 7.40                                          | 116                       | 113                |
| New Jersey.....           | 5.11                                          | 80                        | 63                 |
| New Mexico.....           | 9.34                                          | 146                       | 206                |
| New York.....             | 5.52                                          | 86                        | 70                 |
| North Carolina.....       | 3.84                                          | 60                        | 91                 |
| North Dakota.....         | 7.49                                          | 117                       | 154                |
| Ohio.....                 | 6.94                                          | 109                       | 85                 |
| Oklahoma.....             | 8.46                                          | 133                       | 196                |
| Oregon.....               | 8.78                                          | 138                       | 127                |
| Pennsylvania.....         | 6.50                                          | 102                       | 94                 |
| Rhode Island.....         | 6.96                                          | 109                       | 88                 |
| South Carolina.....       | 6.91                                          | 108                       | 204                |
| South Dakota.....         | 9.23                                          | 146                       | 187                |
| Tennessee.....            | 4.68                                          | 73                        | 120                |
| Texas.....                | 4.90                                          | 77                        | 93                 |
| Utah.....                 | 11.35                                         | 178                       | 191                |
| Vermont.....              | 7.62                                          | 119                       | 138                |
| Virginia.....             | 3.76                                          | 59                        | 80                 |
| Washington.....           | 10.09                                         | 158                       | 145                |
| West Virginia.....        | 5.27                                          | 83                        | 108                |
| Wisconsin.....            | 5.73                                          | 90                        | 86                 |
| Wyoming.....              | 17.72                                         | 278                       | 217                |

Source: From Financing Federal, State, and Local Governments: 1941, U. S. Department of Commerce, Bureau of the Census, September, 1942.

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# COMPARISON-PROPOSED MINNESOTA TAX STRUCTURE WITH "AVERAGE TAX STRUCTURE"



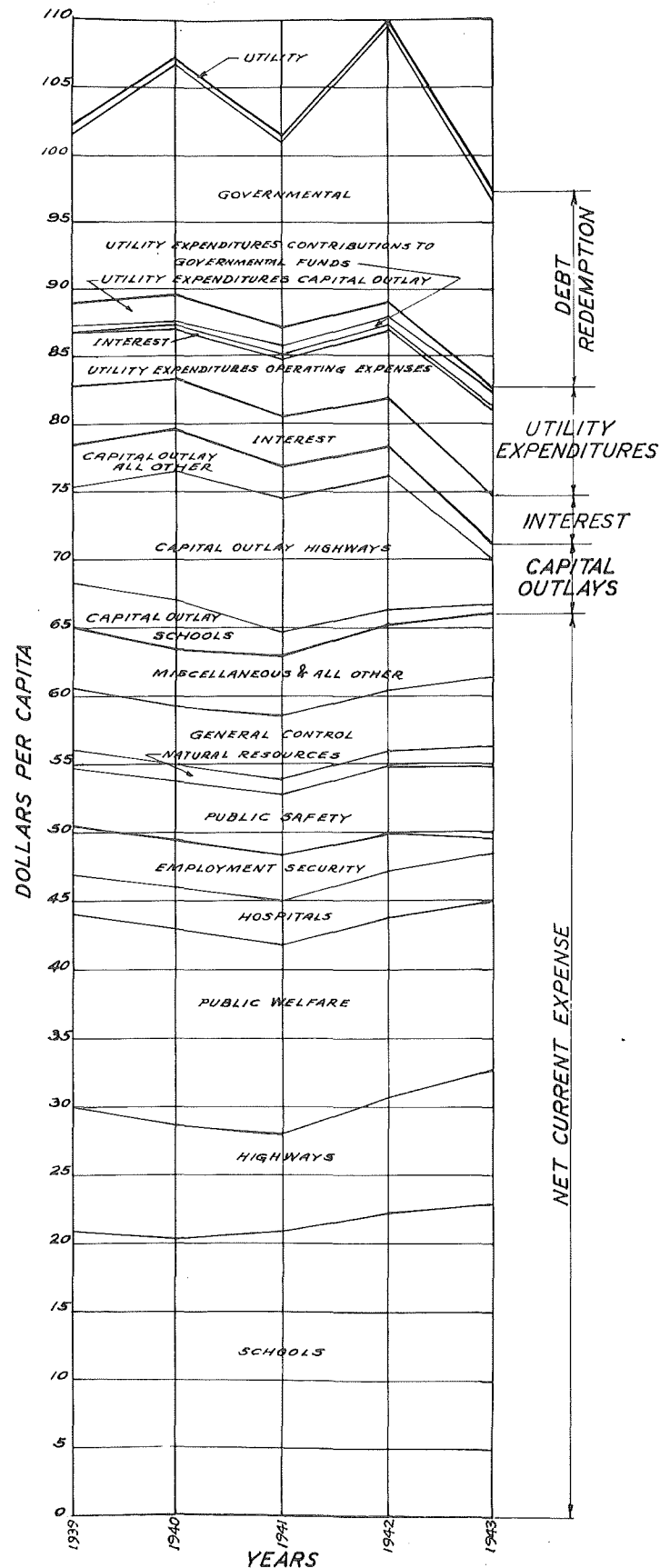
THE J.G. WHITE ENGINEERING CORP. NEW YORK

MINNESOTA STATE AND LOCAL GOVERNMENTS  
NET EXPENDITURES - SELECTED FUNCTIONS  
ALSO  
OFFSETTING REVENUES FROM DEPARTMENTAL  
FEES AND SERVICE CHARGES

| Objects of Expenditures                                |       | 1941    | 1942    | 1943    |
|--------------------------------------------------------|-------|---------|---------|---------|
| Governmental Expenditures                              |       | \$000's | \$000's | \$000's |
| (Current Expenses and Capital Outlay)                  |       |         |         |         |
| General Government                                     | Total | 13,368  | 12,764  | 13,884  |
| State Government                                       |       | 2,917   | 2,384   | 2,947   |
| Counties                                               |       | 6,036   | 5,986   | 6,241   |
| Cities and Villages                                    |       | 3,663   | 3,801   | 3,670   |
| Towns                                                  |       | 752     | 592     | 1,026   |
| Highways                                               | Total | 47,537  | 49,079  | 35,466  |
| State Government                                       |       | 23,755  | 22,418  | 11,915  |
| Counties                                               |       | 12,811  | 13,728  | 10,904  |
| Cities and Villages                                    |       | 7,866   | 9,330   | 7,643   |
| Towns                                                  |       | 3,105   | 3,603   | 5,004   |
| Education                                              | Total | 63,090  | 62,323  | 63,045  |
| State Government                                       | Total | 13,393  | 12,668  | 12,969  |
| University of Minnesota                                |       | 11,638  | 10,834  | 11,050  |
| Teachers Colleges                                      |       | 1,394   | 1,470   | 1,553   |
| Other State Educational Enterprises                    |       | 189     | 197     | 175     |
| Vocational Education of Defense Workers                |       | 24      | 15      | 38      |
| Federal Vocational Rehabilitation                      |       | 39      | 45      | 37      |
| Supervision - Dept. of Education                       |       | 109     | 107     | 116     |
| Counties                                               |       | 286     | 294     | 306     |
| School Districts                                       |       | 49,412  | 49,361  | 49,770  |
| Public Welfare                                         | Total | 39,073  | 35,809  | 32,703  |
| State                                                  |       | 2,715   | 2,541   | 2,246   |
| Counties                                               |       | 30,218  | 29,091  | 27,159  |
| Cities and Villages                                    |       | 5,991   | 4,044   | 3,050   |
| Towns                                                  |       | 149     | 133     | 248     |
| Public Safety                                          | Total | 12,589  | 13,655  | 14,432  |
| State                                                  |       | 3,363   | 4,017   | 4,187   |
| Counties                                               |       | 878     | 856     | 807     |
| Cities and Villages                                    |       | 8,246   | 8,704   | 9,389   |
| Towns                                                  |       | 102     | 78      | 34      |
| Other Districts                                        |       | -0-     | -0-     | 15      |
| Interest Payments                                      | Total | 10,304  | 9,639   | 9,165   |
| State                                                  |       | 4,268   | 4,020   | 3,228   |
| Counties                                               |       | 1,648   | 1,414   | 1,098   |
| Cities and Villages                                    |       | 3,623   | 3,515   | 3,513   |
| Towns                                                  |       | 109     | 94      | 103     |
| School Districts                                       |       | 656     | 596     | 1,380   |
| Other Districts                                        |       | -0-     | -0-     | 43      |
| Employment Security                                    | Total | 10,022  | 7,592   | 2,974   |
| Benefits                                               |       | 8,620   | 6,485   | 2,192   |
| Administration                                         |       | 1,402   | 1,107   | 782     |
| <u>Credits</u>                                         |       |         |         |         |
| Unemployment Compensation Revenues                     |       | 11,069  | 12,882  | 14,740  |
| Revenues from Departmental<br>Fees and Service Charges | Total | 12,773  | 14,053  | 14,503  |
| State                                                  | Total | 8,538   | 8,700   | 8,086   |
| State from university                                  |       | 4,753   | 4,816   | 4,872   |
| State from Teachers Colleges                           |       | 426     | 357     | 353     |
| State from other schools                               |       | 9       | 19      | 17      |
| Counties                                               |       | 1,001   | 1,403   | 1,398   |
| Cities and Villages                                    |       | 3,140   | 3,836   | 4,058   |
| Towns                                                  |       | 94      | 114     | -0-     |
| Other Districts                                        |       | -0-     | -0-     | 961     |

Source: Reports of Public Examiner 1941 & 1942

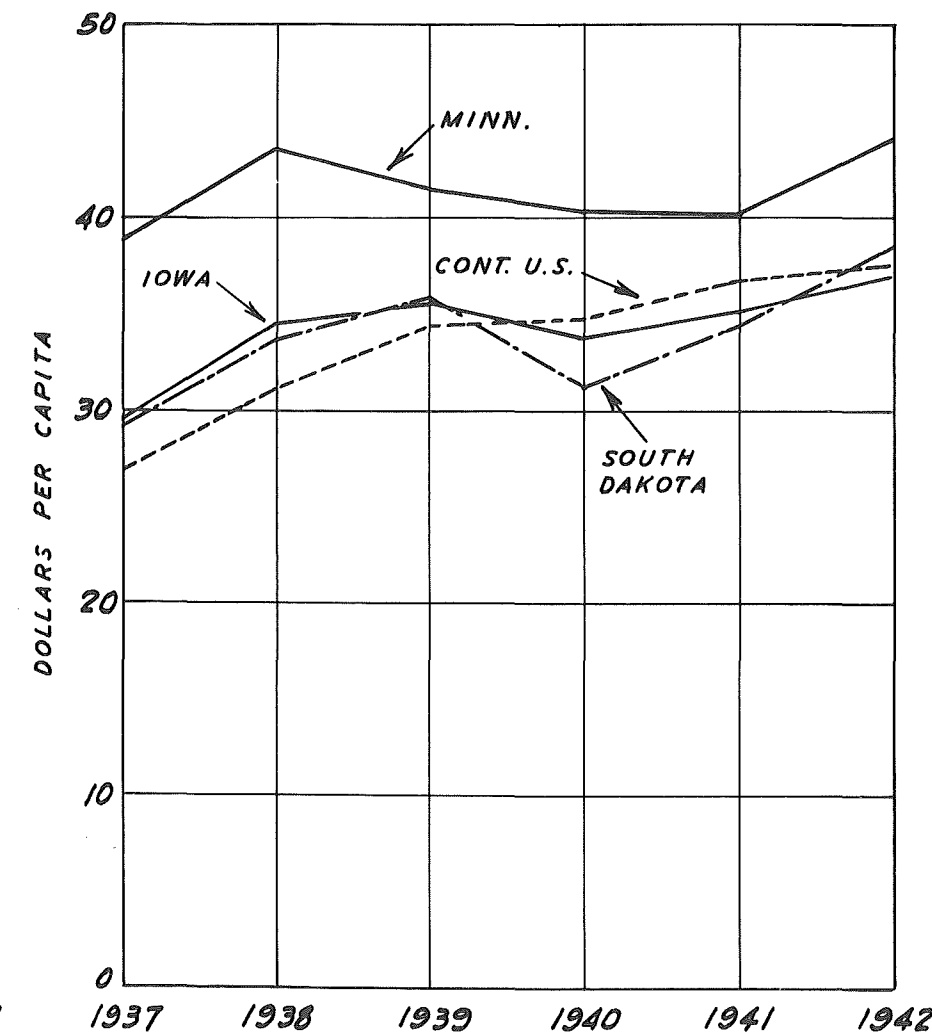
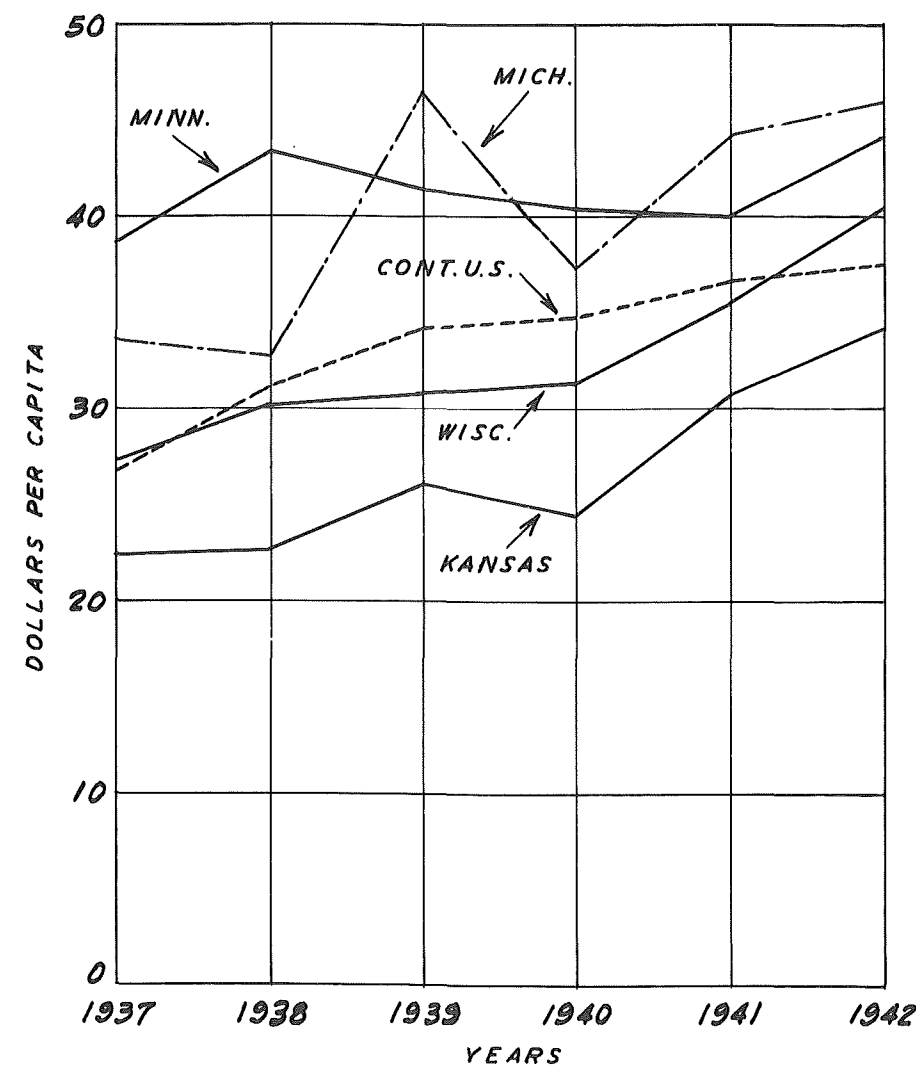
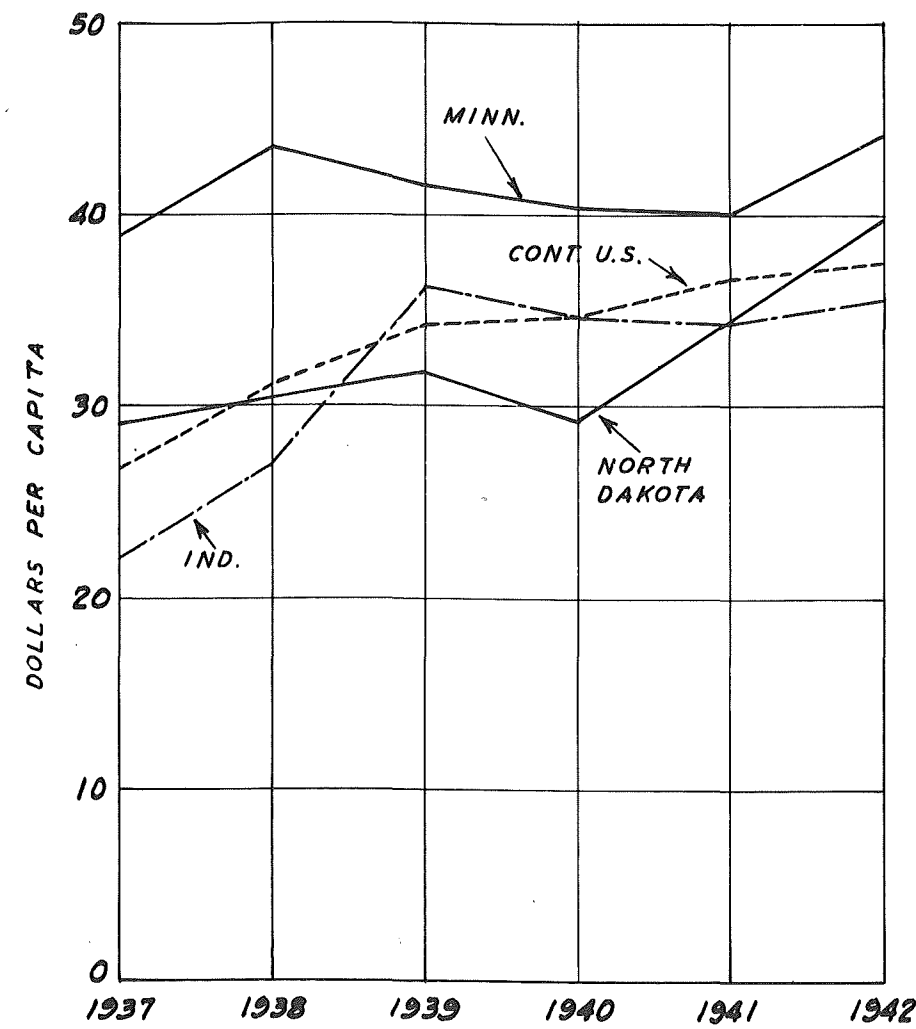
# PER CAPITA GOVERNMENT EXPENDITURES MINNESOTA-STATE AND MINOR CIVIL DIVISIONS



SOURCE: REPORTS OF PUBLIC EXAMINER  
1940-1941-1942

THE J. G. WHITE ENGINEERING CORP. NEW YORK

PER CAPITA STATE PAYMENTS IN MINNESOTA  
COMPARED WITH SELECTED STATES AND  
UNITED STATES AVERAGE  
1937-1942



PER CAPITA STATE COST PAYMENTS  
OF STATES HAVING  
PER CAPITA COST PAYMENTS EXCEEDING MINNESOTA  
1937-1942

|            | <u>1937</u> | <u>1938</u> | <u>1939</u> | <u>1940</u> | <u>1941</u> | <u>1942</u> |
|------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Minnesota  | 38.85       | 43.46       | 41.59       | 40.32       | 40.09       | 44.07       |
| Arizona    | 46.70       | 42.11       | 45.28       | 45.72       | 52.32       | 64.14       |
| California | 38.04       | 45.48       | 50.22       | 53.62       | 58.33       | 53.30       |
| Colorado   | 45.98       | 49.11       | 48.01       | 48.37       | 47.14       | 48.66       |
| Delaware   | 46.30       | 48.81       | 51.66       | 53.58       | 54.98       | 52.33       |
| Idaho      | 36.94       | 37.77       | 37.53       | 36.24       | 42.08       | -           |
| Michigan   | 33.78       | 32.91       | 46.45       | 37.38       | 44.06       | 46.44       |
| Nevada     | 76.00       | 70.17       | 74.56       | 62.12       | 81.21       | 68.04       |
| New Mexico | 55.04       | 53.26       | 46.13       | 48.98       | 47.55       | 49.12       |
| New York   | 33.19       | 37.80       | 39.86       | 40.17       | 46.84       | 45.67       |
| Ohio       | 28.59       | 26.41       | 33.34       | 37.12       | 40.40       | -           |
| Utah       | 40.96       | 47.91       | 50.90       | 49.79       | 53.26       | 55.83       |
| Washington | 43.13       | 44.46       | 49.30       | 54.72       | 55.38       | 60.39       |
| Wyoming    | 56.00       | 51.73       | 52.81       | 56.45       | 50.89       | -           |

\* Functionalized current cost payments, including grants for state aid; capital outlays, and interest payments.

Source: Financial Statistics of States 1937, 1938, 1939, 1940 and 1941  
State Finances 1942  
U.S. Department of Commerce; Bureau of the Census.

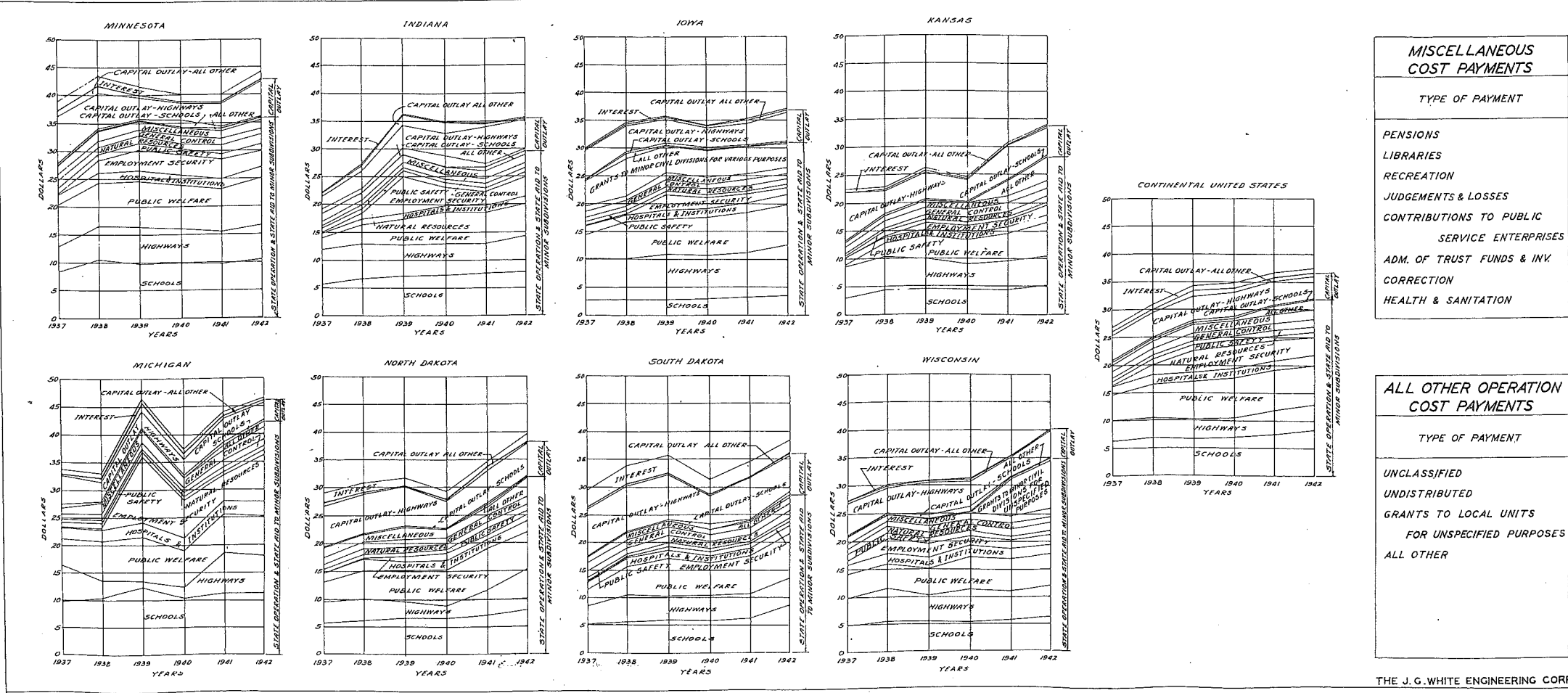
COMPARISON OF FUNCTIONALIZED EXPENDITURES  
DIVIDED BETWEEN  
"DIRECT OPERATION" AND "STATE AID PAID"  
SELECTED STATES  
FISCAL YEAR ENDING JUNE 30, 1942

|                                      | Direct Operation |         | State Aid Paid |         | Total     |         |
|--------------------------------------|------------------|---------|----------------|---------|-----------|---------|
|                                      | \$000's          | Percent | \$000's        | Percent | \$000's   | Percent |
| <u>Minnesota</u>                     |                  |         |                |         |           |         |
| Total                                | 36,503           | 44      | 46,378         | 56      | 82,881    | 100     |
| Schools                              | 7,341            | 31      | 16,141         | 69      | 23,482    | 100     |
| Highways                             | 7,673            | 48      | 8,195          | 52      | 15,868    | 100     |
| Public Welfare                       | 2,392            | 11      | 20,257         | 89      | 22,649    | 100     |
| <u>Iowa</u>                          |                  |         |                |         |           |         |
| Total                                | 42,808           | 56      | 32,990         | 44      | 75,798    | 100     |
| Schools                              | 7,193            | 83      | 1,441          | 17      | 8,634     | 100     |
| Highways                             | 5,254            | 24      | 16,669         | 76      | 21,923    | 100     |
| Public Welfare                       | 16,418           | 94      | 1,125          | 6       | 17,543    | 100     |
| <u>Michigan</u>                      |                  |         |                |         |           |         |
| Total                                | 92,994           | 50      | 93,106         | 50      | 186,100   | 100     |
| Schools                              | 11,835           | 19      | 49,975         | 81      | 61,810    | 100     |
| Highways                             | 7,949            | 21      | 29,475         | 79      | 37,424    | 100     |
| Public Welfare                       | 34,207           | 86      | 5,506          | 14      | 39,713    | 100     |
| <u>Wisconsin</u>                     |                  |         |                |         |           |         |
| Total                                | 27,518           | 27      | 74,992         | 73      | 102,510   | 100     |
| Schools                              | 8,471            | 43      | 11,025         | 57      | 19,496    | 100     |
| Highways                             | 236              | 1       | 17,411         | 99      | 17,647    | 100     |
| Public Welfare                       | 862              | 5       | 17,437         | 95      | 18,299    | 100     |
| <u>North Dakota</u>                  |                  |         |                |         |           |         |
| Total                                | 11,384           | 70      | 4,906          | 30      | 16,290    | 100     |
| Schools                              | 2,189            | 50      | 2,155          | 50      | 4,344     | 100     |
| Highways                             | 2,007            | 51      | 1,925          | 49      | 3,932     | 100     |
| Public Welfare                       | 3,279            | 83      | 660            | 17      | 3,939     | 100     |
| <u>South Dakota</u>                  |                  |         |                |         |           |         |
| Total                                | 12,352           | 84      | 2,412          | 16      | 14,764    | 100     |
| Schools                              | 1,889            | 56      | 1,460          | 44      | 3,349     | 100     |
| Highways                             | 2,334            | 80      | 575            | 20      | 2,909     | 100     |
| Public Welfare                       | 4,532            | 97      | 127            | 3       | 4,659     | 100     |
| <u>Indiana</u>                       |                  |         |                |         |           |         |
| Total                                | 34,869           | 39      | 54,407         | 61      | 89,276    | 100     |
| Schools                              | 6,679            | 26      | 18,929         | 74      | 25,608    | 100     |
| Highways                             | 7,592            | 33      | 15,180         | 67      | 22,772    | 100     |
| Public Welfare                       | 1,914            | 10      | 17,963         | 90      | 19,877    | 100     |
| <u>Kansas</u>                        |                  |         |                |         |           |         |
| Total                                | 22,401           | 48      | 23,809         | 52      | 46,210    | 100     |
| Schools                              | 6,522            | 75      | 2,166          | 25      | 8,688     | 100     |
| Highways                             | 4,902            | 54      | 4,243          | 46      | 9,145     | 100     |
| Public Welfare                       | 554              | 5       | 10,076         | 95      | 10,630    | 100     |
| <u>48 States in Continental U.S.</u> |                  |         |                |         |           |         |
| Total                                | 1,862,203        | 51      | 1,789,193      | 49      | 3,651,396 | 100     |
| Schools                              | 243,305          | 24      | 786,812        | 76      | 1,030,117 | 100     |
| Highways                             | 251,503          | 42      | 349,873        | 58      | 601,376   | 100     |
| Public Welfare                       | 510,760          | 56      | 396,263        | 44      | 907,023   | 100     |

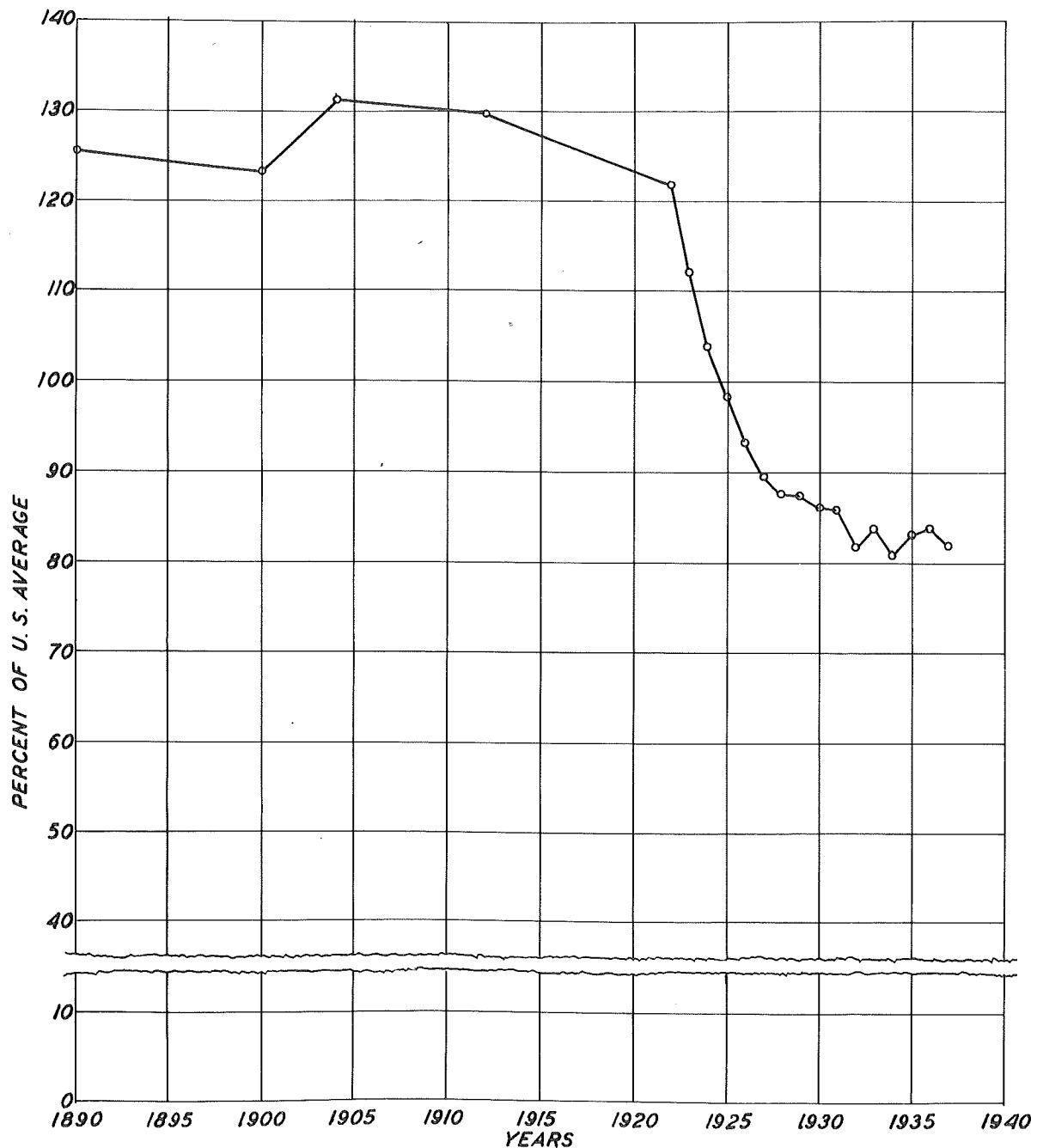
Source: State Finances 1942  
U.S. Department of Commerce, Bureau of the Census



PER CAPITA COST PAYMENTS FOR PRINCIPAL GOVERNMENT FUNCTIONS  
MINNESOTA COMPARED WITH SELECTED STATES AND CONTINENTAL UNITED STATES  
(STATE OPERATION, STATE AID TO MINOR SUBDIVISIONS, CAPITAL OUTLAY AND INTEREST 1937 - 1942)



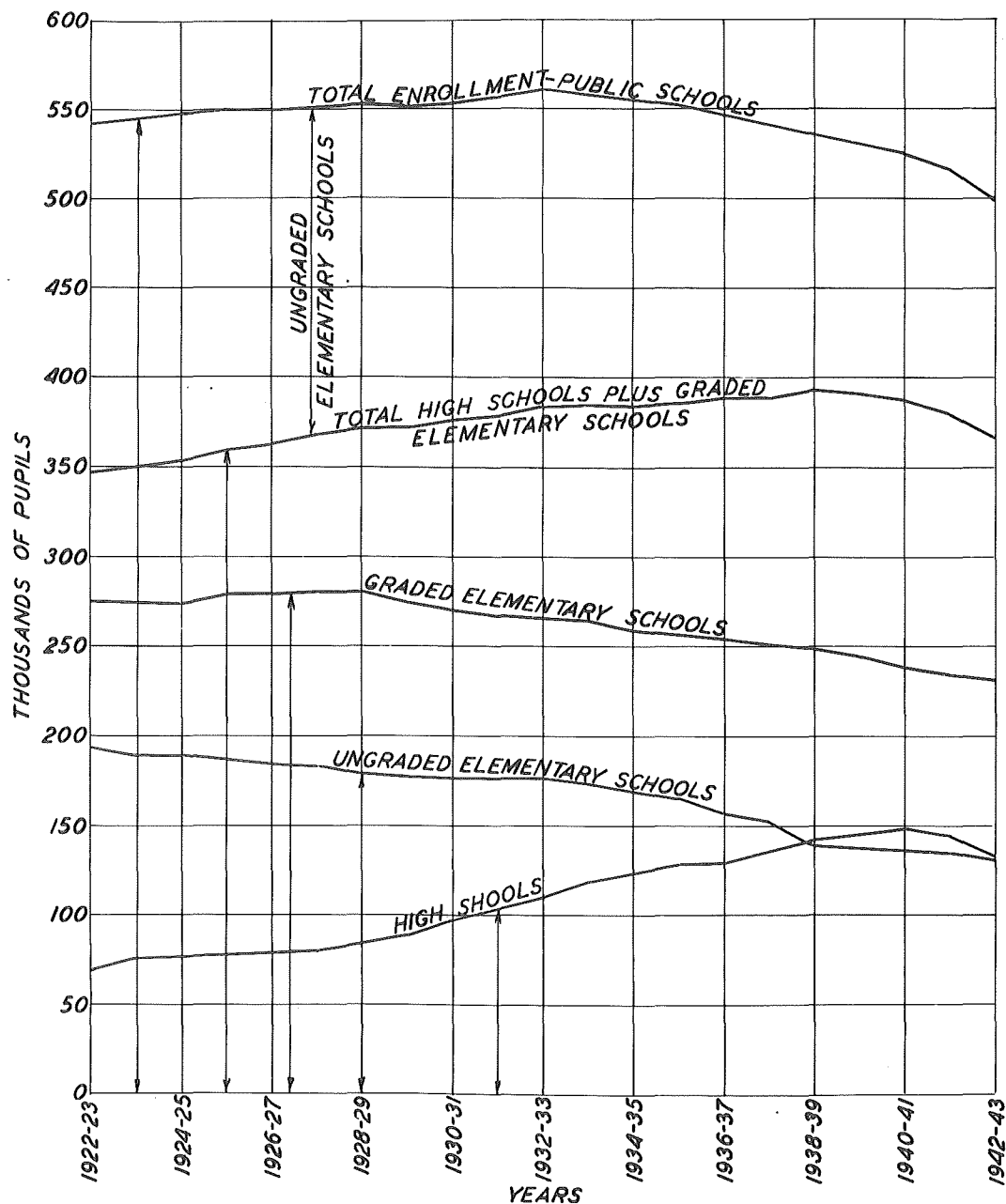
PER CAPITA WEALTH IN MINNESOTA  
PERCENT OF U. S. AVERAGE



SOURCE:

CALCULATED FROM DATA IN TABLE  
"MINNESOTA WEALTH" IN SECTION III-E  
OF THIS REPORT-VOL. 2

# GROSS ENROLLMENT MINNESOTA PUBLIC SCHOOLS 1922-23 TO 1942-43



SOURCE: MINNESOTA-DEPT. OF EDUCATION-STATISTICAL  
BUREAU-TABLES 1 & 3 CODE XVIII-B-7