# Road-User and Property Taxes on Selected Motor Vehicles 

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Faced with the need to find additional funds for acceleration of the highway-improvement program, administrators, economists, and engineers are studying all sources of highway revenue. Highway-finance theories all seek a common aim-the equitable levying of costs, through taxation or other means, on those who use and benefit from roads and streets.

This paper presents data on the state road-user imposts-registration fees and motor-fuel taxes-which furnish the bulk of the current income for highways. Since property taxes levied on motor vehicles in many states are an important part of the cost of vehicle ownership and operation, data on these taxes are included, even though they are not collected as highway revenue. Information is reported separately for some of the commercial vehicles according to their use in private operation, farm service, or contract hauling.

The data are reported for 11 typical vehicles, operating under uniform assumed conditions, with tax rates effective on January 1, 1953. Comparisons can thus be made of the taxes paid for similar vehicles in different states, for different types of vehicles in the same state, and for a particular vehicle in different types of operation.

The ranges found are extensive, varying in total amount paid annually from $\$ 20$ to $\$ 4,475$. The national average for a farm pickup truck is only $\$ 44$ a year (less than for a light passenger car), while for a six-axle diesel combination in contract operation it is more than $\$ 3,000$. Annual taxes on a stake truck average $\$ 75$ if in farm service, $\$ 140$ in private use, and $\$ 230$ in contract-hauling operation. A three-axle combination in private use, on the average, pays $\$ 256$ in registration fees, $\$ 422$ in motor-fuel tax, and $\$ 164$ in property tax.

TODAY there are 44 million automobiles and more than 9 million trucks and busses on the highways - 53 million vehicles, a total undreamed of 10 years ago. Partly as a result of the great increases in the number of vehicles and partly because of enforced neglect of our highways during the war years and difficulties encountered since, public authorities, legislatures, and highway-user groups are engaged in a desperate effort to accelerate
the highway-improvement program. The most pressing problem faced is that of finding the necessary funds. A considerable amount of study has been given to highway-finance theories- the increment theory, the theory of ability to pay, the cost and the value of the service, and the portion that should be attributed to defense. As a preliminary to any work in tax theory, there is need for measurement of the amounts already being collected

under existing tax rates. In the search for revenue, full consideration must be given to the burden of all direct taxes, including property taxes, on the vehicle owner.

The principal, current, state road-user revenues are derived from the gasoline tax and from registration fees on motor vehicles, but in some states a relatively low gasoline tax is accompanied by above-average registration fees, while in others, higher gasoline taxes are accompanied by low registration fees. In Alabama an automobile can be registered for $\$ 3.00$ and the gasoline-tax rate is 6 cents; in New York State it costs five times as much to register the same automobile, but the gasoline tax is only 4 cents. The result is that the road-user taxes are about the same on that automobile in the two states.
The purpose of this study is to provide data that make it possible to compare the total direct state and personal-property taxes on the road user, as well as the yields from the individual levies. It supplies the needed tool of direct measurement of existing taxes so that comparisons can be made between vehicles, between states, and between different services. This is accomplished through presentation of the amounts of state road-user taxes and all direct personal-property taxes that would be paid in each state (except Oregon) during one full year, at rates in effect January 1, 1953, for each of a group of vehicles that represent significant points in the tax range. The study is similar in many respects to the one presented for 1950 in Public Roads. ${ }^{1}$ The 1953 information is summarized or illustrated in tables, bar charts, and maps. The presentations are intended to be selfexplanatory and not every one is discussed in detail in the text.

The absence of data for Oregon is a regrettable deficiency. At the time the study was being prepared, the Oregon weight-distance tax was subject to popular referendum in the November 4, 1952, general election and, even if approved, would have been invalidated by the approval of a constitutional amendment appearing on the same ballot. ${ }^{2}$ Since the imposition of the Oregon weight-distance law was contingent upon both of these pending

[^0]actions and could have been invalidated by the outcome of either, data for the state were not included. Consequently, where the phrase "all states" is used, it includes the Districtof Columbia (in order to avoid the necessity of naming it separately) and all states except Oregon. The absence of Oregon data obviously affects the ranking of states according to total taxes that would be paid on specific vehicles under the prescribed conditions. If it had been possible to include data for Oregon, the ranking of taxes for most of the hearier vehicles would have been affected for all, or nearly all, states (particularly for vehicles in private, not-for-hire operation).

## THE TYPICAL VEHICLES

The bases for registering motor vehicles vary considerably among the states. As shown in Table 1, passenger cars are registered in some states on a flat-fee basis, with no regard for other factors. In Mississippi, at the other extreme, a flat-fee rate is also in effect but is compounded by consideration of horsepower, gross weight, and vehicle age. The variations in registration bases are shown for passenger cars in Figure 1 and for trucks in Figure 2. State gasoline-tax rates are represented in Figure 3 and the states in which motor vehicles are taxed as personal property are shown in Figure 4.

Eleven vehicles that are reasonably representative of the types and sizes that comprise the vehicle population were selected for the study: two passenger cars, four single-unit trucks, and five combinations. Their relative sizes and axle arrangements are shown in silhouette on page 12. Brief descriptions of the vehicles follow.

## Passenger Cars

No. 1: A light-weight club coupé.
No. 2: A medium-weight sedan.

## Single-Cnit Trucks

No. 3: A pickup truck registered for 4,700 lb. of gross vehicle weight (commonly called a $1 / 2$-ton truck).

No. 4: A stake truck registered for 12,500 lb. gross vehicle weight (commonly called a $11 / 2$-ton truck).

Yo. 5: A van registered for $19,000 \mathrm{lb}$. gross

TABLE 1
BASIS FOR REGISTERING PASSENGER CARS Flat Fee

Alabama
Arizona
California
Idaho
Kentucky
Louisiana
Nevada
Ohio
Oregon
Pennsylvania
Utah
Virginia
Washington
Wisconsin
Wyoming
Flat Fee and Age
Vermont
Horsepower Groups
Illinois
Maine
Massachusetts
Missouri
New Jersey
Empty Height
Weight Groups
Connecticut
Delaware
Florida
Maryland
Montana
North Carolina
Tennessee
Texas
Dist. of Col.
Weight Groups and Horse power Indiana

Weight Groups and Age North Dakota
South Dakota
100-pound intervals
Colorado
Michigan
West Virginia
100-pound intervals and Age New Mexico

100-pound intervals, Value, and Ags Iowa

500-pound intervals Georgia

Shipping Weight
Weight Groups Nebraska

Weight Groups and Age Minnesota

100-pound intervals New York

500-pound intervals South Carolina
Gross Weight
Weight Groups
New Hampshire
Rhode Island
Weight Groups and Horsepouer Arkansas

100-pound intervals Kansas

Factory Delivered Price and Age Oklahoma

Flat Fee, Horsepower, Gross Weight, and Age Mississippi


Figure 1. Passenger-car registration-fee basis.


Figure 2. Truck registration -fee basis.


Figure 3. State gasoline-tax rates.


Figure 4. Application of personal-property taxes to motor vehicles.
vehicle weight (commonly called a 23/4-ton truck).

No. 6: A tandem-axle dump truck registered for $40,000 \mathrm{lb}$. gross vehicle weight, of the type used in hauling coal, building materials, etc.

## Combinations

Fo. 7: A three-anle, tractor-semitrailer combination registered for $40,000 \mathrm{lb}$. gross rehicle weight, chosen so that it falls within the maximum length and weight limits of all states.

No. 8: A four-axle, tractor-semitrailer combination (tandem axles on the semitrailer), gasoline powered, and registered for $50,000 \mathrm{lb}$. gross vehicle weight (No. 9 is the same vehicle, but with diesel power).

No. 9: A four-axle, tractor-semitrailer combination (tandem axles on the semitrailer), diesel powered, and registered for $50,000 \mathrm{lb}$. gross vehicle weight (No. 8 is the same vehicle, but with gasoline power).

No. 10: A five-axle, tractor-semitrailer combination (tandem axles on both units), diesel powered, and registered for $64,000 \mathrm{lb}$. gross vehicle weight.

No. 11: A six-axle, truck-and-full-trailer combination (tandem axles on both units), diesel powered, and registered for $72,000 \mathrm{lb}$. gross vehicle weight.

The $40,000-\mathrm{lb}$. combination (No. 7) would be permitted to register and operate in all states, but the $40,000-\mathrm{lb} .$, tandem-axle, single-unit truck (No. 6) would not. Washington has a flat limitation of $36,000 \mathrm{lb}$. on a truck with three axles, and Mississippi has a limit of $37,650 \mathrm{lb}$ for such vehicles. Because of axle spacing and axle load limits, the $40,000-$ lb., single-unit truck is on the borderline of legality in some of the states with respect to registration and operation, but it has been included in order to show that point in the tax schedules. Although the $40,000-\mathrm{lb}$., singleunit truck is found chiefly in specialized operations, the $40,000-\mathrm{lb}$., three-axle combination is in almost universal use and is undoubtedly the most commonly found heavy unit.

Three states have size and weight limitations that prohibit the use of tractor-semitrailer combinations as heavy as $50,000 \mathrm{lb}$., but all others permit them. The limit in Kentucky and Tennessee is $42,000 \mathrm{lb}$. for any combination and Pennsylvania permits a
maximum of $45,000 \mathrm{lb}$. for tractor-semitrailer and $62,000 \mathrm{lb}$. for other combinations.

In order to present a comparison of the taxes on vehicles similar in most respects except type of fuel used, two $50,000-1 \mathrm{~b}$., four-axle combinations are included in the study, one with a gasoline engine, the other with diesel power. The assumption made that the gasoline combination operates 4 mi . per gal. and that the fuel-consumption rate of the diesel combination is 6 mi . per gal. is arbitrary, but believed to be reasonable. It is recognized


Figure 5. Legality of $64,000-1 \mathrm{lb}$. tractor-semitrailer (No. 10 ) and $72,000-1 \mathrm{~b}$. truck and full traller (No. 11).
that the difference in the miles-per-gallon rates of two individual vehicles might fall substantially short of, or could exceed, the assumed 50 -percent differential. (A 50-percent difference in consumption may also be expressed as a one-third saving in fuel.) It is of interest that New York also assumed a 50 -percent differential in recently increasing the tax on diesel fuel from 4 cents to 6 cents per gal.

The $64,000-\mathrm{lb}$. combination (No. 10) is a five-axle, diesel-powered, tractor-semitrailer combination, 49 ft . long, that can be operated in the West and a few eastern states that are not contiguous, as shown in Figure 5. The $64,000-1 \mathrm{~b}$. combination in the 1950 study had a gasoline engine, but the growing popularityof diesel power for busses and heavy trucks dictated the selection of diesel power for both the $64,000-\mathrm{lb}$. and the $72,000-\mathrm{lb}$. combinations in the present study. The $72,000-1 \mathrm{~b}$. truck-and-full-trailer combination (No. 11) is permitted in Ohio, Louisiana, and all of the western states. Ohio is the only state that permits Vehicle 11 but prohibits Vehicle 10 (see Fig. 5). This is because of differences in the state's length limitations for the two types of combinations.

As shown in Figure 6, tractor-semitrailer combinations are registered as single units in all six of the New England states, in 12 of the states in the Mississippi and Ohio river vallevs, and in Virginia. In the remainder of the states, tractor-trucks and semitrailers are registered asseparate units. Combinations are considered to be registered as single units where the fee for either the tractor or the semitrailer is based on the gross weight or capacity of the combination, even though in most of these states a relatively small fee is also levied on the other unit of the combination.


Figure 6. Registration of tractor-semitrailer combination as a single unit.

In some states the registration-fee schedule is so established that from a tax standpoint it is more economical to operate a combination than a single-unit truck at a given gross vehicle weight. In Montana, for example, registration of a $40,000-\mathrm{lb}$., single-unit truck costs $\$ 300$, but the tractor and semitrailer components of a $40,000-\mathrm{lb}$. combination, registered separately, cost only $\$ 92.59$ in total.

The inclusion or exclusion of (lata for a given vehicle in each state was determined solely on the basis of whether the vehicle, as specified, would be permitted to register and operate. Numerous instances were found in which the vehicle or combination might be registered, but could not legally be operated with a full load. In New York, for instance, Vehicle 10 could be registered but would be permitted to operate at a maximum gross weight of approximately $62,000 \mathrm{lb}$. Consequently, it was omitted from the study, even though it was eligible to be registered for a slightly smaller gross weight. Several similar situations existed with respect to the heavy
vehicles, and all were omitted unless they could be legally operated at the gross weights and sizes specified. Minor adjustments of axle spacing were assumed in a few cases, however, in order to include vehicles that otherwise were within the legal limits.

## SPECIFICATIONS AND USE FACTORs

In order to obtain the tax data on a uniform basis in all of the states, a detailed outline of the specifications of each of the 11 vehicles selected was submitted to the state authorities in the latter part of 1952 for determination of the specific fees and taxes that would be payable during a full year under laws existing January 1, 1953. (It was the uncertainty on this point that necessitated the exclusion of Oregon.) Table 2 gives these specifications, together with the assumed annual mileage traveled, motor fuel consumed, and other factors needed to compute the various taxes. The taxes to be reported were the state roaduser taxes-on motor fuel, on vehicle registration, other annual vehicle fees closely related to registration, and the applicable motor-carrier taxes-and all direct personalproperty taxes levied on motor vehicles at all levels of government. The property taxes for 1953 were to be estimated by the state authorities on the basis of 1952 property valuations and tax rates.

The same care that was taken in the selection of vehicles was taken in the selection of use factors. Average values are not available, however, for the mileages, fuel consumption rates, and earnings. It was therefore necessary to assign these values arbitrarily, but sincere effort was made to select amounts that are reasonable. The primary objective was to supply specific factors to which rates could be applied uniformly in all states, and ones that would reflect these rates in a way that makes possible valid comparisons between states, vehicles, and services. In order to avoid the complex situations that would have been encountered in computing taxes on vehicles in interstate operation, intrastate use was specified. Without this stipulation, the study would have been imprartical. Obviously, however, it is almost unthinkable that large combinations would travel entirely in one state for a whole year, particularly in such states as Rhode Island, Delaware, or for that matter, almost any of the smaller states; and
it is improbable that their travel would be restricted to just one of the larger states. However, the stipulation of intrastate travel is permissible, even indispensable, when it is remembered that the purpose of the study is to compare tax rates, rather than to select the most typical vehicles or the most probable amount and kind of service, or the most probable earnings.

It was also specified that the vehicles had been operated in the samestate since purchased new in 1951. This made 1953 the third year of registration, thus excluding from the sturly such nonrecurring taxes as those on sales and titling, and removing the vehicles from the top property-tax brackets.
Another large group of taxes omitted are those imposed by the federal government on gasoline, oil, vehicles, and accessories and parts, which yielded over $\$ 2$ billion in 1952. These are excise taxes, identical in nature with those levied on tobaceo, cosmetics, ete. Their exclusion has no effect on the comparisons between states of the data presented in this article, since the levies are uniform throughout the nation.
The data received from the states are presented in Tables 4 to 14. In all of these tables the states are arranged in groupings so as to permit ready comparison of data for each state with those of its neighbors.

The national averages and extremes are shown in Table 3. The averages are simple unweighted averages of the totals for all states where the vehicles are permitted. In the case of property taxes, they are averages reflecting only the states where such taxes are levied. Figures 9 to 21 portray the data graphically, permitting quick comparisons of the several elements reported.

## PROPERTY 'JAXES

In most cases the property taxes on motor vehicles have little or no direct relation to the use of highwars, and the revenues from them are not available for highways. They are, however, so closely associated with registration fees in their application and their relation to costs of operation and comprise such a large portion of the total taxes paid on motor vehicles in some states that their inclusion was necessary in order to obtain equitable romparisons. The registration fees for individual vehicles vary considerably among the
states, and property taxes in some instances greatly exceed the registration fees paid. When property taxes and registration fees are considered together, however, the differences among the states are smaller in most instances.

In Figure 4 are shown the states in which state or local property taxes are levied and the states in which registration fees are in lieu of ad valorem or property taxes. In this connection it should be noted that the registration fees of quite a few states are based at least in part on the age or valuation of the vehicle. Louisiana permits local property taxes to be levied in addition to the registration fee, but the application of such levies is not general in the state.

It is worth moting that the valuation of motor vehicles for tax purposes is generally conceded to be much closer to market value than is the valuation of other personal property (household furnishings, for instance) subject to the same taxes. It is also probable that motor vehicles constitute a considerable portion of taxable personal property in many jurisdictions. Therefore, although this study is not directly concerned with personaiproperty taxes per se, it suggests an area of research that must not be neglected by those interested in the tax burdens on the motorvehicle owner.

The relation of property taxes to registration fees and total taxes on motor vehicles is illustrated in Tables 4 through 14. It will be seen in Table 4 that the registration fee in Pennsylyania for the light, two-door passenger (ar is $\$ 10$, more than twice as much as the St. 50 shown in Massachusetts. In Pennsylvania, however, the flat registration fee of \$10, which applies to all automohiles, is in lieu of all other ad valorem tases, whereas in Massachusetts vehicles are subject to property taxes in addition to registration fees. The addition of the $\$ 31.50$ property tax to the \$4.50 registration fee yields a total of $\$ 36$, which is 3.6 times as much as the Pennsylvania registration fee and much greater than the registration fee alone for any state. North Dakota and Vermont, with registration fees of $\$ 25$ and $\$ 26$, respectively, appear to be exacting greater taxes on the light automolile than other states. Yet in neither of these states is there a property tax on motor vehicles, and when property taxes and regis- 1953 Registration Year

$$
\left\lvert\, \begin{gathered}
\text { Truck-Full Trailer } \\
11
\end{gathered}\right.
$$

Vehicle Description and Use Data
Truck-Full Trailer


| Annual Motor-Fuel Consumption: <br> A. Farm, gal. <br> 13. Not for hire, gal. <br> C. For hire: contract carrier, gal. | 576 | 724 | $\begin{aligned} & 387 \\ & 6000 \\ & \hline \end{aligned}$ | 550 1,333 2, 222 | 2,307 3,846 | 7,500 | 8,000 8,000 | -- | 16, 250 16,250 | $\stackrel{-}{-}$ | 10,833 10,833 | - | 17,021 17,021 | - | 20,930 20,930 | - |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| T'otal revenue ton miles (avg. load) <br> A verage gross weight, lb. (iross annual earnings | $\cdots$ | 二 | $\cdots$ | 40,000 9,270 $\$ 8,000$ | 71,000 14.325 $\$ 11,500$ |  | 285,000 30,458 $\$ 23,000$ | $\cdots$ | 695,000 38885 $\mathbf{\$ 5 2 , 0 0 0}$ | - | 665,000 38,989 $\$ 50,000$ | - | 1,085,000 52,387 | - | $1,400,000$ 59,900 $\$ 96,000$ | 二 |

average, low, and high road-user and property taxes on selected motor vehicles

| Vehicle and Service | Average Fee For All States ${ }^{\text {a }}$ |  |  |  |  | Lowest Fee |  |  |  |  | Highest Fee |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Registration Fee, etc. | Motorfuel Tax |  | $\begin{gathered} \text { Property } \\ \text { Tax } \end{gathered}$ | Total | Registration Fee, etc. | Motor- <br> Fuel Tax | $\begin{gathered} \text { Total } \\ \text { Road-user } \\ \text { Taxes } \end{gathered}$ | $\begin{aligned} & \text { Property } \\ & \text { Tax }^{\mathbf{a}} \end{aligned}$ | Total | Registration Fee, etc. | Motorfuel Tax | Total Road-user Taxes | $\begin{aligned} & \text { Property } \\ & \text { Tax } \end{aligned}$ | Total |
| Pussenger car: Light-weight Medium-weight | $\$ 11.95$ 14.67 | $\$ 30.36$ 38.16 | $\$ 42.31$ 52.83 | 828.41 38.45 | $\$ 58.88$ 75.26 | $\$ 3.00$ 3.00 | $\$ 17.28$ 21.72 | $\$ 28.28$ 32.72 | $\begin{gathered} (85.00) \\ (8.00) \end{gathered}$ | $\$ 28.28$ 38.96 | $\begin{array}{r}\$ 29.26 \\ 37.26 \\ \hline\end{array}$ | $\begin{array}{r}\$ 40.32 \\ 50.68 \\ \hline\end{array}$ | $\$ 66.70$ 84.82 | $\begin{array}{r} \$ 54.32 \\ 74.51 \end{array}$ | $\begin{array}{r}\$ 88.12 \\ 115.71 \\ \hline\end{array}$ |
| $\begin{aligned} & \text { Pickup: } \\ & \text { Farm. } \\ & \text { Private } \end{aligned}$ | 13.79 <br> 16.97 | 20.40 31.63 | 34.19 48.60 | 16.25 23.86 | 43.67 62.52 | 2.50 2.50 | 11.61 18.00 | 20.48 32.00 | (5.00) | 20.48 44.00 | 32.00 34.80 | 27.09 42.00 | 51.34 68.00 | $\begin{aligned} & 34.58 \\ & 55.06 \end{aligned}$ | 64.35 94.31 |
| Stake truck: Farm Private. Contract | 32.80 50.07 94.16 | 28.99 70.26 117.12 | $\begin{array}{r}61.79 \\ \text { 121.33 } \\ 211.28 \\ \hline\end{array}$ | 22.31 32.96 32.96 | 74.80 140.55 230.51 | 4.00 10.00 25.00 | 16.50 39.99 66.66 | $\begin{array}{r}31.50 \\ 81.65 \\ 127.66 \\ \hline\end{array}$ | $\begin{array}{r}(5.17) \\ (15.00) \\ (15.00) \\ \hline\end{array}$ | 44.50 100.99 127.66 | $\begin{array}{r}86.00 \\ 132.50 \\ 289.00 \\ \hline\end{array}$ | $\begin{array}{r}38.50 \\ 93.31 \\ 155.54 \\ \hline\end{array}$ | $\begin{aligned} & 113.50 \\ & 199.15 \\ & 401.54 \end{aligned}$ | 51.05 77.50 77.50 | 127.57 <br> 199.15 <br> 401.54 |
| Van: Private Contract | 104.65 170.12 | 121.60 202.72 | $\begin{array}{r}226.25 \\ 372.84 \\ \hline\end{array}$ | 75.92 75.92 | 270.53 <br> 417.13 | 26.00 59.00 | $\begin{array}{r}69.21 \\ 115.38 \\ \hline\end{array}$ | 142.53 <br> 206.38 | $\begin{aligned} & (18.25) \\ & (18.25) \end{aligned}$ | 160.21 <br> 206.38 | $\begin{array}{r}285.00 \\ 497.50 \\ \hline\end{array}$ | 161.49 269.22 | $\begin{aligned} & 400.35 \\ & 766.72 \end{aligned}$ | $\begin{aligned} & 156.16 \\ & 156.16 \end{aligned}$ | $\begin{aligned} & 434.88 \\ & 766.72 \end{aligned}$ |
| Dump: <br> Private | 295.20 | 390.49 | 685.69 | 182.66 | 792.90 | 50.00 | 225.00 | 427.00 | (40.18) | 466.00 | 877.50 | 525.00 | 1,252.50 | 471.95 | 1,252.50 |
| Threc-rxle combination P'rivate Contract | 255.83 <br> 399.27 | 421.67 421.67 | 677.50 <br> 820.94 | 164.37 <br> 164.37 | 773.38 916.82 | 46.00 115.00 | 240.00 240.00 | 442.00 <br> 442.00 | $(45.00)$ <br> $(45.00)$ | 442.00 <br> 442.00 | 640.00 <br> 915.00 | 560.00 <br> 560.00 | $\begin{array}{r}1,040.00 \\ 1,275.00 \\ \hline\end{array}$ | 371.32 371.32 | $\begin{array}{r}1,122.37 \\ 1,284.45 \\ \hline\end{array}$ |
| Four-axle combination, gasoline: Private Contract | $\begin{array}{r}342.84 \\ 588.37 \\ \hline\end{array}$ | 845.00 845.00 | $1,187.84$ <br> 1.433 .37 | 197.79 197.79 | $\begin{array}{r}1,306.52 \\ 1,552.04 \\ \hline\end{array}$ | 66.00 130.00 | 487.50 <br> 487.50 | 749.50 <br> 749.50 | $\begin{aligned} & (45.00) \\ & (45.00) \end{aligned}$ | $\begin{aligned} & 749.50 \\ & 749.50 \end{aligned}$ | $\begin{array}{r} 961.50 \\ 1,824.00 \end{array}$ | $\begin{aligned} & 1,137.50 \\ & 1,137.50 \end{aligned}$ | $\begin{aligned} & \frac{1}{2}, 637.50 \\ & 2,555.25 \end{aligned}$ | 378.13 378.13 | $\begin{aligned} & 1,767.00 \\ & 2,589.54 \end{aligned}$ |
| Four-uxde combination, diesel Private Contract | 415.85 <br> 6857.53 | 579.05 579.05 | $\begin{array}{r} 956.30 \\ 1,197.98 \end{array}$ | 259.51 259.51 | $\begin{array}{r}1,112.00 \\ 1,353.68 \\ \hline\end{array}$ | $\begin{array}{r}66.00 \\ 135.00 \\ \hline\end{array}$ | $(324.99)$ <br> $(324.99)$ | 543.32 586.99 | $\begin{aligned} & (45.00) \\ & (45.00) \end{aligned}$ | 586.99 <br> 586.99 | $\begin{aligned} & 1,524.90 \\ & 1,816.67 \end{aligned}$ | 866.64 866.64 | $\begin{aligned} & 1,617.98 \\ & 2,304.16 \end{aligned}$ | $\begin{aligned} & 603.82 \\ & 603.82 \end{aligned}$ | $\begin{aligned} & 1,617.98 \\ & 2,304.16 \end{aligned}$ |
| Five-uxle combination, dievel: Private Contract | $\begin{array}{r}605.69 \\ 1,148.47 \\ \hline\end{array}$ | 955.07 955.07 | 1.465 .25 <br> $2,008.03$ | 413.21 413.21 | $1,713.18$ <br> $\mathbf{2 , 2 5 5 . 9 6}$ | 101.00 135.00 | $\begin{aligned} & (680.84) \\ & (680.84) \end{aligned}$ | 860.84 <br> 986.05 | $\begin{aligned} & (45.00) \\ & (45.00) \end{aligned}$ | $1,031.05$ <br> $1,031.05$ | $\begin{aligned} & 2,926.40 \\ & 2,926.40 \end{aligned}$ | $\begin{aligned} & 1,191.47 \\ & 1,191.47 \end{aligned}$ | $\begin{aligned} & 2,926.40 \\ & 3,581.29 \end{aligned}$ | 777.33 <br> 777.33 | $\begin{aligned} & 2,926.40 \\ & 3,581.29 \end{aligned}$ |
| Six-axle combination, diesel: Private Contract | 736.19 $1,844.07$ | $1,132.12$ $1,132.12$ | ${ }^{1,773.97}$ | 453.64 453.64 | $2,000.79$ $3,108.67$ | 108.50 445.00 | $(837.20)$ $(837.20)$ | $1,057.20$ $1,491.50$ | (310.79) | 1,367.99 | $\begin{aligned} & 3,427.20 \\ & 3,427.20 \end{aligned}$ | $\begin{aligned} & 1,465.10 \\ & 1,465.10 \end{aligned}$ | $\begin{array}{r} 3,427.20 \\ 4,320.18 \end{array}$ | 741.23 741.23 | $3,427.20$ $4,475.09$ |


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TABLE 6
ROAD－USER AND PERSONAL－PROPERTY TAXES ON A STAKE TRUCK，12，500 POUNDS GVW

| State | Regis－ tration Fee | Property Tax | Other Taxes and Fees | Carrier Taxes and Fees | Gasoline Tax | Total | Rank of State |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | Total <br> Fees and Taxes | Total， Excluding Property Tax |
| Farm： |  |  |  |  |  |  |  |  |
| New England： |  |  |  |  |  |  |  |  |
| Maine | \＄60．00 | \＄22．30 | － |  | \＄33．00 | \＄115．30 | 3 | 3 |
| New Hampshire | 25.00 | 16.06 | － |  | 27.50 | 68.56 | 29 | 31 |
| Vermont | 32.00 | － | － |  | 27.50 | 59.50 | 38 | 24 |
| Massachusetts | 12.00 | 35.68 | － |  | 27.50 | 75.18 | 21 | 46 |
| Rhode Island | 39.00 | 28.00 | － |  | 22.00 | 89.00 | 11 | 19 |
| Connecticut | 37.50 | 44.33 | －－ |  | 22.00 | 103.83 | 4 | 22 |
| Middle Atlantic： |  |  |  |  |  |  |  |  |
| New York | 62.50 | － | － |  | 22.00 | 84.50 | 14 | 6 |
| New Jersey | 30.00 | － | \＄1．00 |  | 16.50 | 47.50 | 47 | 41 |
| Pennsylvania | 45.00 | － | － |  | 27.50 | 72.50 | 25 | 11 |
| Delaware | 22.50 10.00 | 7.00 | 二 |  | 27.50 | 50.00 | 44 | 37 |
| Maryland | 10.00 35.00 | 7.00 25.50 | 二 |  | 27.50 | 44.50 | 48 | 47 |
| West Virginia | 35.00 38.00 | 25.50 35.68 | － |  | 27.50 27.50 | 88.00 101.18 | 12 | 18 |
|  |  |  |  |  |  |  |  |  |
| Virginia | 19.50 | 10.80 | － |  | 33.00 | 63.30 | 34 | 33 |
| North Carolina | 31.25 | 12.26 | － |  | 38.50 | 82.01 | 16 | 13 |
| South Carolina | 66.00 | 14.00 | － |  | 38.50 | 118.50 | 2 | 2 |
| Georgia | 10.00 | 14.53 | － |  | 33.00 | 57.53 | 40 | 44 |
| Florida | 53.00 | － | ． 25 |  | 38.50 | 91.75 | 9 | 5 |
| Kentucky | 4.50 | 20.00 | ． 50 |  | 38.50 | 63.50 | 33 | 43 |
| Tennessee | 12.50 | －70 | ． 50 |  | 38.50 | 51.50 | 42 | 35 |
| Alabama | 22.50 | 14.70 | ． 50 |  | 33.00 | 70.70 | 28 | 29 |
| East Central：｜$\quad$ 年 |  |  |  |  |  |  |  |  |
| Ohio | 33.70 | $\rightarrow$ | － |  | 22.00 | 55.70 | 41 | 30 |
| Indiana | 35.00 | 45.00 | ． 25 |  | 22.00 | 102.25 | 5 | 28 |
| Illinois | 86.00 | 14.07 | － |  | 27.50 | 127.57 | 1 | 1 |
| Michigan | 26.50 | － | － |  | 24.75 | 51.25 | 43 | 36 |
| Wisconsin | 27.50 | － | － |  | 22.00 | 49.50 | 45 | 38 |
| Minnesota | 32.40 | － | － |  | 27.50 | 59.90 | 36 | 20 |
| Iowa | 70.00 | － 20 | $\cdots$ |  | 22.00 | 92.00 | 8 | 4 |
| Southwestern：｜ |  |  |  |  |  |  |  |  |
| Arkansas | 36.00 | 15.73 | － |  | 35.75 | 87.48 | 13 | 12 |
| Louisiana | 10.00 | － | － |  | 38.50 | 48.50 | 46 | 40 |
| Oklahoma | 22.40 | － | ． 50 |  | 35.75 | 58.65 | 39 | 25 |
| West Central： |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| North Dakota | 32.00 | － | － |  | 27.50 | 59.50 | 37 | 23 |
| South Dakota | 37.50 | － | － |  | 27.50 | 65.00 | 31 | 16 |
| Nebraska | 4.00 | 31.42 | － |  | 27.50 | 62.92 | 35 | 48 |
| Kansas． | 30.00 | 19.00 | － |  | 27.50 | 76.50 | 17 | 27 |
| Mountain： |  |  |  |  |  |  |  |  |
| Idaho | 40.00 | 2.00 | － |  | 33.00 33.00 | 75.60 73.00 | 19 | 42 |
| Wyoming | 15.00 | 21.41 | － |  | 27.50 | 63.91 | 32 | 45 |
| Colorado | 17.50 | 21.41 | 1.00 |  | 33.00 | 72.91 | 24 | 34 |
| New Mexico | 43.50 | － | － |  | 33.00 | 76.50 | 18 | 8 |
| Arizona | 30.00 | 32.20 19.00 | － |  | 27.50 | 89.70 | 10 | 26 |
| Utah | 25.00 23.85 | 19.00 | － |  | 27.50 | 71.50 | 26 | 32 |
| Pevada | 23.85 | 51.05 | － |  | 24.75 | 99.65 | 7 | 39 |
| Wushington | 17.50 | － | 22.00 |  | 35.75 | 75.25 | 20 | 9 |
| Oregon |  |  |  |  |  |  |  | ， |
| California | 36.00 | － | 23.00 |  | 24.75 | 83.75 | 15 | 7 |
| Private |  |  |  |  |  |  |  |  |
| New England： |  |  |  |  |  |  |  |  |
| Maine | \＄60．00 | \＄22．30 | － |  | \＄79．98 | \＄162．28 | 12 | 11 |
| New Hampshire | 75.00 | 16.06 | － |  | 66.65 | 157.71 | 14 | 10 |
| Vermont | 118.75 | － | － |  | 66.65 | 185.40 | 4 | 2 |
| Massachusetts | 39.00 | 35.68 | － |  | 66.85 | 141.33 | 20 | 31 |
| Rhode Island | 39.00 | 41.16 | － |  | 53.32 | 133.48 | 25 | 41 |
| Connecticut Middle Atlantic： | 37.50 | 44.33 | － |  | 53.32 | 135.15 | 22 | 43 |
| New York | 62.50 | － | － |  | 53.32 | 115.82 | 42 | 26 |
| New Jersey | 60.00 | － | 1.00 |  | 39.99 | 100.99 | 48 | 37 |
| Pennsylvania | 45.00 | － | － |  | 66.65 | 111.65 | 45 | 29 |
| Delaware | 45.00 | 15.00 | 二 |  | 66.65 | 111.65 | 44 | 28 |
| Maryland Dist．of Col． | 35.00 35.00 | 15.00 25.50 | 二 |  | 66.65 66.65 | 116.65 127.15 | 40 28 | 35 36 |
| Dist．of West Virginia | 35.00 38.00 | 25.50 44.60 | － |  | 66.65 66.65 | 127.15 149.25 | 28 18 | 36 32 |

TABLE 6-Continued


TABLE 6-Concluded

| State | Registration Fee | Property <br> Tax | $\begin{aligned} & \text { Other } \\ & \text { Taxes and } \\ & \text { Fees } \end{aligned}$ | Carrier Taxes and Fees | Gasoline Tax | Total | Rank of State |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | Total Fees and Taxes | Total, Excluding Property Tax |
| Southwestern: |  |  |  |  |  |  |  |  |
| Arkansas | \$ 42.00 | \$21.83 | - | - | \$144.43 | \$208. 26 | 28 | 28 |
| Louisiana | 120.00 | - | - | \$10.00 | 155.54 | 285.54 | 9 | i |
| Oklahoma | 95.00 81.25 | $\overline{16.21}$ | \$0.50 | T1. 00 | 144.43 88.88 | ${ }_{197}^{239.93}$ | 17 | 12 |
| West Central: |  |  |  |  |  |  |  |  |
| North Dakota | 32,00 | - | 21.00 | 50.00 | 111.10 | 214.10 | 24 | 19 |
| South Dakota | 37.50 | - | 95.00 | 10.00 | 111.10 | 253.60 | 14 | 11 |
| Nebraska | 60.00 | 70.96 | - | 10.00 | 111.10 | 252.06 | 16 | 32 |
| Kansas | 30.00 | 30.00 | -- | 63.00 | 111.10 | 234.10 | 18 | 22 |
| Mountain: |  |  |  |  |  |  |  |  |
| Montana | 28.00 | 49.87 | - | 50.00 | 133.32 | 261.19 | 13 | 21 |
| Idaho | 40.00 | - | - | - 70 | 133.32 | 173.32 | 39 | 34 |
| Wyoming | 15.00 | 21.41 | - | 60.70 | 111.10 | 208.21 | 29 | 27 |
| Colorado | 17.50 | 21.41 | 1.00 | 80.00 | 133.32 | 253.23 | 15 | 14 |
| New Mexico | 21.75 | - | - | 25.00 | 133.32 | 180.07 | 36 | 33 |
| Arizona | 30.00 | 32.20 | - | 200.00 | 111.10 | 373.30 | 3 | 3 |
| Utah | 25.00 | 32.86 | -- | - | 111.10 | 168.96 | 41 | 45 |
| Nevada | 23.85 | 51.05 | - | 102.15 | 99.99 | 277.04 | 11 | 16 |
| Pacific: |  |  |  |  |  |  |  |  |
| Washington Oregon | 30.00 | - | 22.00 | 15.00 | 144.43 | 211.43 | 27 | 20 |
| California | 36.00 | - | 23.00 | 230.00 | 99.99 | 388.99 | 2 | 2 |

tration fees are combined, the total in a great many states exceeds the fees in North Dakota and Vermont. Although Pennsylvania, Massachusetts, North Dakota, and Vermont are used as examples, it may be seen from the tables presented in this study that many other significant comparisons can be made.

Another factor that demonstrates the close relation between registration fees and property taxes is the reduction of the registration fee according to the age (and value) of the vehicle, as may be seen in Table 1.

The property taxes that are given in Tables 4 to 14 , for all except the farm vehicles, include all taxes levied by the state, county, city, or other local governmental unit in which the vehicle is domiciled, and are the taxes that would be imposed on the vehicles in the capital city of the state. The property taxes given for farm vehicles include state, county, and district or other property taxes that would be collected in an a verage ruralagricultural community in the state. In a few states where uniform state-wide valuation and tax rates are in effect in all jurisdictions, there is no difference between property taxes on farm vehicles and those registered in the capital city of the state.

In two states, California and Washington, property taxes on motor vehicles have been replaced by so-called in lieu taxes. These taxes have many of the characteristics of
property taxes, but since neither the levies nor the distributions of their proceeds are directly related to the jurisdiction in which they were collected, they have been classified as road-user imposts. In both of these instances the state courts have ruled them not to be property taxes.

## TYPES OF SERVICE

Distinctly different tax rates are in effect in most states for commercial vehicles operated privately (not for hire), as contract carriers (for hire), and in farm service. Information was therefore obtained, and was tabulated separately, for all vehicles in private operation, for the pickup and stake trucks (Nos. 3 and 4) in farm service, and for the stake and van trucks (Nos. 4 and 5) and all combinations (Nos. 7 to 11) in contract carrier service.

Vehicles in private operation are those used solely for carrying goods owned or sold by the vehicle owner, with no direct transportation charge.

Contract carriers are those employed in hauling goods for others, with a direct transportation charge, at times and to destinations required by the jobs for which they are hired. Operation of contract carriers is usually subject to state franchise and regulation. Common carriers, which operate for hire over established routes and on fixed schedules, are not


TABLE 5
ROAD－USER AND PERSONAL－PROPERTY TAXES ON A SINGLE－UNIT，3－AXLE DUMP TRUCK， 40，000 POUNDS GVW

| State | Private |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Registration Fee | Property Tax | Other Taxes and Fees | Gasoline Tax | Total | Rank of State |  |
|  |  |  |  |  |  | Total <br> Fees and Taxes | Total， Excluding Property Tax |
| Nem England： |  |  |  |  |  |  |  |
| Maine | \＄300．00 | \＄140．88 | － | \＄450．00 | \＄890．88 | 11 | 15 |
| New Hanpshire | 240.00 | 101.43 | － | 375.00 | 716.43 | 30 | 31 |
| Vermont | 420.00 |  | － | 375.00 | 795.00 | 18 | 11 |
| Massachusetts | 120.00 | 225.40 | － | 375.00 | 720.40 | 29 | 44 |
| Rhode Island | 127.00 | 265.00 | － | 300.00 | ${ }^{692.00}$ | 34 | 46 |
| Middle Atlantic |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| New York | 200.00 | － | \＄187．50 | 300.00 | 687.50 | 35 | 23 |
| New Jersey | 240.00 | － | 1.00 | 225.00 | 466.00 | 46 | 45 |
| Pennsylvania | 250.00 | 二 | － | 375.00 | 625.00 | 41 | 28 |
| Delavare | 155.00 | － | － | 375.00 | 530.00 | 45 | 35 |
| Maryland | 200.00 | 50.00 | － | 375.00 | 625.00 657.00 | 40 39 | 33 39 3 |
| Dist．of Col． | 150.00 | 132.00 | － | 375.00 375.00 | 657.00 898.75 | 39 10 | 39 |
| West Virginia | 242.00 | 281.75 | － | 375.00 | 898.75 |  |  |
| Southeastern： |  |  |  |  |  |  |  |
| North Carolina | 320.00 | 165.67 | － | 525.00 | 1，010．67 | 6 | 7 |
| South Carolina | 351.00 | 209.00 | － | 525.00 | 1， 085.00 | 4 | 4 |
| Georgia | 50.00 | 206.24 | － | 450.00 | 306.24 | 33 | 43 |
| Florida | 189.00 | － | ． 25 | 525.00 | 714.25 | 32 | 21 |
| Kentucky | 350.00 | 227.09 | ． 75 | 525.00 | 1， 102.84 | 33 | 10 |
| Tennessee | 275.00 | － | ． 50 | 525.00 | 800.50 | 17 43 | 10 |
| Alabama | 50.00 | 101.84 | ． 50 | 450.00 | $\stackrel{602.34}{ }$ | $\stackrel{4}{-}$ | 40 |
|  |  |  |  |  |  |  |  |
| Ohio | 492.25 | － | － | 300.00 | 792.25 | 19 | 12 |
| Indiana | 200.00 | 471.95 | ． 25 | 300.00 375 | 972.20 107125 |  | 41 |
| Illinois | 640.00 378 | 56.25 | － | 375.00 337.50 | $1,071.25$ 715.50 | 5 31 | $\stackrel{2}{2}$ |
| Michigan | 378.00 46000 | 二 | － | 337.50 300.00 | 715.50 760.00 | 31 24 | 14 |
| Wisconsin | 460.00 350.00 | － | 二 | 300.00 375.00 | 760.00 725.00 | 28 | 19 |
| Minnesota Iowa | 350.00 465.00 | －－ | － | 375.00 300.00 | 765.00 765.00 | 28 | 13 |
| Missouri | 300.00 | 48.12 | － | 225.00 | 573.12 | 44 | 37 |
|  |  |  |  |  |  |  |  |
| Arkansas | 200.00 | 40.18 | － | 487.50 | 727.68 | 26 | 22 |
| Louisiana | 200.00 | － | 50 | 525.00 | 725.00 | 27 | 18 |
| Oklahoma | 395.00 | 103.17 | ． 50 | 487.50 | 883.00 | 12 | 3 26 |
| Wexas | 360.00 | 103.17 | － | 300.00 | 763.17 | 23 | 26 |
| West Central： |  |  |  |  |  |  |  |
| South Dakota | 412.50 | － | 465.00 | 375.00 | 1，252．50 | 1 | 1 |
| Nebraska | 220.00 | 353.46 |  | 375.00 | 948.46 | 9 | 32 |
| Kansas | 250.00 | 140.00 | 100.00 | 375.00 | 865.00 | 14 | 17 |
|  |  |  |  |  |  |  |  |
| Montana | 300.00 | 230.84 | ${ }_{394}{ }^{20}$ | 450.00 450.00 | 980.84 844.20 | ${ }_{6}^{7}$ | 16 8 |
| Idaho |  | 135．24 | 394.20 | 450.00 375.00 | 844.20 660.24 | 38 | －888888 |
| Wyoming | 150.00 | 135.24 135.24 | $\underline{1.00}$ | 375.00 450.00 | 660.24 | 34 | 36 |
| Colorado | 75.00 172.50 | 135.24 | 1．00 | 450.00 | 622.50 | 42 | 29 |
| New Mexico Arizona | 172.50 188.50 | 202．80 | － | 375.00 | 766.30 | 21 | 34 |
| Arizona | 295.00 | 177.32 | － | 375.00 | 847.32 | 15 | 24 |
| Nevada | 85.05 | 322.55 | 398.00 | 337.50 | 1，143．10 | 2 | 9 |
| Pacific： |  |  |  |  |  |  |  |
| Washington | － | － | － | － | － | － | － |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

included in the study because of their more complex tax schedules and forms of regulation and the fact that their operation is predomi－ nantly interstate．

The farm－service classification represents a reduced registration fee for farmers＇trucks， but without restriction as to the highways they may use．This provision，in various forms，is in effect in 22 states．（The nominal
charge imposed as the sole registration fee by some states for farm vehicles licensed for restricted operation on or in the immediate vicinity of the farm is not included in this study．）

## FARM SERVICE

Provision for registration of farm trucks at half the regular fee for private trucks is

TABLE 9
ROAD-USER AND PERSONAL-PROPERTY TAXES ON THE TRACTOR AND THE SEMITRAILER OF A 3-AXLE COMBINATION, 40,000 POUNDS GVW, IN PRIVATE OPERATION

| State | Tractor-truck |  |  |  |  | Semitrailer |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Registration Fee | Property Tax | Other <br> Taxes and Fees | Gasoline Tax | Total | Registration Fee | Property Tax | Other <br> Taxes and $F$ ees | Total |
| New England: |  |  |  |  |  |  |  |  |  |
| Maine | \$300.00 | \$76.28 | - | \$480.00 | \$856.28 | \$5.00 | 875.00 | - | \$80.00 |
| New Hampshire | 240.00 | 94.52 | - | 400.00 | 734.52 |  |  |  |  |
| Vermont | 420.00 | - | -- | 400.00 | 820.00 | 15.00 | - 0 | - | 15.00 |
| Massachusetts | 120.00 | 122.04 | - | 400.00 | 642.04 | 2.00 | 88.00 | - | 90.00 |
| Rhode Island | 127.00 | 144.00 | - | 320.00 | 591.00 | 2.00 | 103.00 | - | 105.00 |
| Connecticut | 200.00 | 240.29 | - | 320.00 | 760.29 | - | - | - | - |
| Middle Atlantic: |  |  |  |  |  |  |  |  |  |
| New York | 88.25 | - | \$370.00 | 320.00 | 778.25 | 90.00 | - | - | 90.00 |
| New Jersey | 110.00 | - | 1.00 | 240.00 | 351.00 | 90.00 | - | \$1.00 | 91.00 |
| Pennsylvania | 120.00 | - | - | 400.00 | 520.00 | 75.00 | - | - | 75.00 |
| Delaware | 83.00 | $\overrightarrow{-0}$ | - | 400.00 | 483.00 | 67.00 | - | - | 67.00 |
| Maryland | 35.00 | 30.00 | - | 400.00 | 465.00 | 100.00 | 15.00 | - | 115.00 |
| Dist. of Col. | 65.00 | 75.50 | - | 400.00 | 540.50 | 50.00 | 70.40 | - | 120.40 |
| West Virginia Southeastern: | 227.00 | 152.55 | - | 400.00 | 779.55 | 15.00 | 110.00 | - | 125.00 |
| Southeastern: | 30.00 | 82.28 | - | 480.00 | 592.28 | 150.00 | 59.40 | - | 209.40 |
| North Carolina | 160.00 | 72.28 | - | 560.00 | 792.28 | 160.00 | 68.60 | -.. | 228.60 |
| South Carolina | 66.00 | 100.00 | - | 560.00 | 726.00 | 96.00 | 77.00 | - | 173.00 |
| Georgia | 20.00 | 52.16 | - | 480.00 | 552.16 | 100.00 | 80.52 |  | 180.52 |
| Florida | 88.00 | $\cdots$ | . 25 | 560.00 | 648.25 | 109.50 | - | 25 | 109.75 |
| Kentucky | 350.00 | 122.96 | . 75 | 560.00 | 1,033.71 | - | 88.66 |  | 88.66 |
| Tennessee | 275.00 | $\bigcirc$ | . 50 | 560.00 | 835.50 | - | - | - |  |
| Alabama | 50.00 | 50.25 | . 50 | 480.00 | 580.75 | 25.00 | 40.20 | . 50 | 65.70 |
| Mississippi East Centrul: | 271.00 | 61.86 | - | 560.00 | 892.86 | 11.00 | 45.75 | - | 56.75 |
| Ohio | 177.20 | - | - | 320.00 | 497.20 | 135.20 | - | - | 135.20 |
| Indiana | 190.00 | 204.75 | . 25 | 320.00 | 715.00 | 25.00 | 166.57 | --. | 191.57 |
| Illinois | 640.00 | 78.75 | - | 400.00 | 1,118.75 | -- | - | - |  |
| Michigan | 154.00 |  | - | 360.00 | - 514.00 | 127.75 | - | - | 127.75 |
| Wisconsin | 60.00 | - | - | 320.00 | 380.00 | 167.50 | - | -- | 167.50 |
| Minnesota | 350.00 | - | - | 400.00 | 750.00 | 10.00 | - | $\cdots$ | 10.00 |
| Iowa | 435.00 | - | - | 320.00 | 755.00 | 60.00 | - | - | 60.00 |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| Arkansas | 200.00 | 34.56 | - | 520.00 | 754.56 | 5.00 | 29.40 | - | 34.40 |
| Louisiana | 140.00 | - | - 50 | 560.00 | 700.00 | 120.00 | - | . | 120.00 |
| Oklahoma | 65.00 | $\bar{\square}$ | . 50 | 520.00 | 585.50 | 295.00 | - | . 50 | 295.50 |
| Texas | 154.00 | 56.00 | - | 320.00 | 530.00 | 117.00 | 45.46 | -- | 162.46 |
| West Central: |  |  |  |  |  |  |  |  |  |
| South Dakota | 162.50 | - | 215.00 | 400.00 400.00 | 900.00 777.50 | 60.00 | - | 185.00 | $\underline{-75.00}$ |
| Nebraska | 240.00 | 160.76 | 215.00 | 400.00 | 800.76 | 1.00 | 111.36 | 185.0 | 112.36 |
| Kansas | 30.00 | 83.00 | 200.00 | 400.00 | 713.00 | 100.00 | 55.00 |  | 155.00 |
|  |  |  |  |  |  |  |  |  |  |
| Montana | 60.00 | 124.82 | - | 480.00 | 664.82 | 32.50 | 90.03 | -- | 122.53 |
| Idaho | 65.00 |  | -- | 480.00 | 545.00 | 54.00 | - | - | 54.00 |
| Wyoming | 50.00 | 73.22 | - 0 | 400.00 | 523.22 | 40.00 | 52.80 | - | 92.80 |
| Colorado | 25.00 | 73.22 | 1.00 | 480.00 | 579.22 | 20.00 | 52.80 | - | 72.80 |
| New Mexicu | 88.50 | --- | - | 480.00 | 568.50 | 74.00 | - | - | 74.00 |
| Arizona | 69.50 | 109.80 | - | 400.00 | 579.30 | 50.95 | 79.20 | - | 130.15 |
| Utah | 70.00 | 91.76 | - | 400.00 | 561.76 | 90.00 | 81.84 | - | 171.84 |
| Nevada | 39.60 | 174.64 | 156.40 | 360.00 | 730.64 | 32.85 | 125.93 | 133.15 | 291.83 |
| Pacific: Washington |  |  |  |  |  |  |  |  |  |
| Washington Oregon | 105.00 | - | 46.25 | 520.00 | 671.25 | 55.00 | - | 39.50 | 94.50 |
| California | 66.00 | $\cdots$ | 71.00 | 360.00 | 497.00 | 81.00 | - | 52.00 | 133.00 |

common, but as shown in Tables 5 and 6, some states do not allow reductions that great, and some allow considerably more. Since there are large numbers of farm trucks, what may, at first glance, appear to be relatively minor concessions in registration fees can, in fact, be of major importance from a revenue standpoint, particularly in predominantly agricultural states.

The reductions for farm vehicles not only vary among the states but also vary somewhat
for vehicles of different capacities, as may be seen from a comparison of Figures 7 and 8. In four states, as indicated in Figure 8, the farm classification allows the $12,500-\mathrm{lb}$. stake truck (No. 4) a reduction of more than 75 percent in registration fee, in 13 states the reduction is from 50 to 75 percent, and in four states, it is less than 50 percent. A comparison of the regular and farm registration fees for this vehicle in each state is shown in Figure 9.

In Nebraska, the regular registration fee

ROAD-USER AND PERSONAL-PROPFRTY TAXES ON A GASOLINE-POWERED, 4-AXLE, TRACTOR-SEMITRAILER COMBINATION, 50,000 POUNISS GVW


for the $12,500-1 \mathrm{l}$ ). stake truck is $\$ 60$, but a farmer can register the same truck for $\$ 4$. In Kentucky, a flat fee of $\$ 4.50$ is applicable to farm trucks of $22,000 \mathrm{lb}$. or less, but a $22,000-\mathrm{lb}$. vehicle in private use requires a registration fee of $\$ 134$. The importance of these figures is underscored by the fact that in 1951 more than 54 percent of Nebraska's


Figure 7. Reduced registration fees for farm truck (No. 3, pickup truck).


Figure 8. Reduced registration fees for farm truck (No. 4, stake truck).
trucks and over 39 percent in Kentucky were registered at reduced farm rates. Similar situations exist in other states, but in most the reductions are not as great. In New Hampshire, for example, a farm truck of less than $16,000 \mathrm{lb}$. may be registered at a flat fee of $\$ 25$, but since this is greater than the regular fee of $\$ 21.15$ for a pickup truck having a gross weight of $4,700 \mathrm{lb}$., the farm rate is of no advantage to owners of the pickup. Consequently, only $\mathbf{5} .2$ percent of the total truck registrations in New Hampshire are in the farm classification.

In 1951, the farm-truck registrations were more than half of all truck registrations in 5 states and exceeded 30 percent in 13 states.

It should not be forgotten, however, that the special reduced rates for registration of farm trucks are, in part, compensated for by the fact that farm trucks probably average fewer miles per year than other trucks. Thus the reductions are not as great on a cents-per-mile basis as it might appear from the comparisons in Tables 5 and 6 and in Figures 7 and 8.

## CARRIER TAXES

In the consideration of motor-carrier service, the gross-receipts taxes and other levies that are imposed on general business, and not


Figure 9. Comparison of private-operation and farmservice registration fees on a $\mathbf{1 2 , 5 0 0}$-pound stake truck
(No. 4).
limited to motor carriers, have been eliminated. Fees for authority to operate, and other fees paid only at the time a carrier begins to haul goods for hire, have also been excluded.

Care should be taken in comparing the carrier taxes of the states. Many states have special registration classes for vehicles used in contract (for-hire) service. The fees in the special registration classes, in most cases, are substantially greater than the registration fees for vehicles in private (not-for-hire) service. The difference, while technically classed as part of the registration fee, is in reality a special carrier fee. There is, of course, the compensating factor that vehicles in carrier service usually can be expected to operate a considerably greater mileage than
those in private use, thus reducing the per-mile cost of their registration fees.

The majority of trucks are used for the ordinary private service of carrying goods owned or sold by the vehicle owner, and for which there is no direct transportation charge. Even these trucks, however, are subject to mileage or other carrier taxes under some conditions, and the variations in the tax structures of the states made it necessary in a few instances to make arbitrary decisions on the inclusion or exclusion of these special levies.

The general policy followed was to include only the taxes that have to be paid on almost all of the vehicles in a given group. For example, the laws of some states are so written that practically all vehicles of more than $11 / 2$ tons (manufacturer's rated capacity) dave to pay certain mileage or compensatory taxes, whether in private or contract operation. In the same states many vehicles of $11 / 2$-ton capacity or less are not subject to the tax. In such a case the tax has been shown only for the heavier vehicles. It should be remembered that the purpose of the study is to present a comparison of tax rates and burdens on certain typical vehicles, rather than to include all taxes on all vehicles. Undoubtedly many of the larger trucks traveling in interstate commerce are subject to greater taxes than are reported in this study and are also subject to additional restrictions and regulations. The larger units apparently have certain offsetting economic advantages, however, or they would not be in use.

## MILEAGE 'TAXES

The classification and treatment of mileage taxes is something of a problem. Historically, road-user taxes have been classed by most authorities into three major groups. The first and most important of these consists of fuel taxes and miscellaneous fees incidental to fuel taxation. The second major group of taxes, usually termed motor-vehicle revenues, consists of motor-vehicle registration fees and a group of additional fees, some of which are not paid annually, that include title fees, drivers' licenses, and other revenues of relatively minor importance. The third group of road-user revenues, motor-carrier taxes, consists of special taxes on for-hire carriers.

These three groups have, in the past,
afforded adequate classification of road-user revenues, although there are borderline instances in which there was considerable question as to proper classification. Most common among these, of course, is the annual registration fee in states that levy higher plate fees on for-hire carriers. Should the difference between the registration fee in private operation and for-hire operation be classed as a carrier tax? It has not been in the past, under the theory that carriers' vehicles can be expected to operate more miles than vehicles in private operation and that the higher registration fee for carriers' vehicles serves as an adjustment for the greater mileage.

Another instance of borderline classification is the special fee charged to diesel-powered vehicles in the states that do not tax diesel fuel. An argument can be made for classification of these additional registration fees as fuel taxes. But the important point is the fairness of the state's tax system, and this is judged primarily on the total taxes levied on any vehicle, provided, of course, that the methods of reporting or collecting the tax do not in themselves impose additional burdens of record keeping or other requirements not reflected in the actual amounts of taxes paid.

We may be witnessing the development of a field of highway taxation-mileage and tonmile taxes-that should not be placed in any of the three historical groups. It does not appear that the mileage taxes in Idaho, New York, and Oregon can be classed as fuel taxes, as registration fees, or as carrier taxes. They are avowed attempts to obtain specific amounts of revenues based almost entirely on the vehicles and their use and make no distinction between operation for profit as a transportation facility and operation incidental to the conduct of any other enterprise. It is not suggested at present that a separate classification of mileage taxes be established, but it is time to put forth the question for discussion. Several states have shown great interest in mileage taxes, and if the movement spreads, those interested in highway finance will be required to give it considerable attention.

Mileage taxes may prove to have two great advantages: they should yield considerable amounts of revenue, and they should, in theory at least, be imposed at rates that measure
value of service received and be applied toward the costs of providing the service. Undoubtediy the mileage tax will also prove to have at least two major offsetting disadvantages. The most important of these from the states' point of view is the cost of administration: The cost of establishing and maintaining complete records, weight stations, and enforcement staff will make any state considering a mileage tax look twice. For the vehicle owner, the maintenance of records for filing of reports necessary under a mileage tax will certainly constitute a substantial burden over and above the actual amount of tax paid.

## ADMINISTRATION AND APPLICATION

While this study is based primarily on legislation, it is necessary to call attention to administration and enforcement as they affect vehicle taxation. The interpretation and application of roarl-user taxes in one state as compared to another with similar tax laws might easily result in substantial tax differences on similar vehicles in similar service. Rigid insistence that vehicles be registered for the full weights they carry (not to be confused with size- and weight-limit enforcement) would undoubtedly increase the registration revenues in some states. Practices are understood to vary considerably in this respect. It is therefore necessary that any careful comparison of road-user taxes be accompanied by a close examination of practices and interpretations in the application of existing statutes. The data presented in this study make no allowances for such differences.

The payment of motor-fuel taxes is another item that merits close examination. Practically all persons familiar with highway finance agree that some of the gasoline used on the highways escapes taxation (by means of refunded taxes), and that the amounts vary greatly between states. There is no way of knowing how much revenue escapes through excessive refund claims, but it is probable that the total is considerable. For example, the stipulation for the light-weight automobile is $9,500 \mathrm{mi}$. of annual travel at 16.5 mi. per gal. with total gasoline consumption of $5 \overline{7} 6 \mathrm{gal}$. for the year. Yet the average for all vehicles in one state was less than 500 taxed gallons in both 1950 and 1951. Traffic counts and other information indicate that the residents operate their vehicles about as much as
residents of other states. In view of the amazing "fuel economy" of their vehicles, it appears that taxation of ownership, as distinguished from taxation of use, is a surer source of revenue under such conditions. (The state legislature apparently made this deduction some time ago, and imposed registration fees of $\$ 25$ and $\$ 35$ on light- and medium-weight passenger cars, respectively, and eliminated reductions for farm trucks.)
Another subject for scrutiny is the collection of diesel-fuel taxes. There are numerous ways of avoiding or evading the tax on diesel fuel, and the state authorities charged with collecting it are in practically unanimous agreement that a considerable amount escapes taxation or is uncollectible. These authorities feel, however, that the situation is improving.
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## SUMMARY OF COMPARISONS

The foregoing discussion concerns general subjects rather than specific vehicles, except for the remarks on farm rates. It would be impractical to include in this report a full discussion of each of the tables and charts presented, but there are comparisons and items of special interest that do merit being called to attention in connection with each of the vehicles.

## Vehicle 1, Light-Weight Passenger Car

Registration fees for the light-weight passenger car range from $\$ 3$ to $\$ 28.76$, total roarluser taxes from $\$ 28.28$ to $\$ 66.70$ (see Table 4; Fig. 10). Since this vehicle is assumed to use 576 gal . of gasoline a year, each cent of a state's gasoline-tax rate amounts to a levy of $\$ 5.76$ during the course of a year, or 11 cents a week. The lowest gasoline-tax rate costs the owner of the light passenger car 33 cents a week, the highest about 78 cents a week.
There are 15 states with property taxes alone that exceed the total road-user taxes paid in the lowest state. (The property taxes shown on these vehicles are for the state capitals, however, and undoubtedly exceed the averages for the states in most cases.)
There are 25 states in which the total roaduser taxes on this light automobile amount to less than $\$ 40$ a year, or 80 cents a week. In 11 of the states, road-user taxes amount to between $\$ 40$ and $\$ 50$, and in 10 states they are between $\$ 50$ and $\$ 60$. In only two states do they exceed $\$ 60$.


Figure 10. State road-user and personal-property taxes on alight-weight passenger car (No. 1), ranked according to total taxes (left) and road-user taxes (right).


Figure 11. State road-user and personal-property taxes on a pickup truck (No. 3) in private use, ranked according to total taxes (left) and road-user taxes (right).

## Velicle 2, Medium-Weight Passenger Car

The medium- and light-weight passenger cars are representative of far more than half of all vehicles on the highways. Although the taxation of automobiles probably receives less attention than the taxation of heavier commercial units, automobiles contribute substantially more in road-user taxes, due to their vast numbers.

There are not great differences between the road-user taxes on light automobiles and those of medium weight. The registration fees for the medium-weight vehicle range from $\$ 3$ to $\$ 37.26$. The $\$ 37.26$ fee applies in Oklahoma and this registration fee combinerl with a $6.5-$ cent gasoline tax makes the total road-user taxes $\$ 84.82$, the highest for this vehicle in any state. However, there is no property tax
on motor vehicles in Oklahoma, and if property taxes are included for states in which they are imposed, Oklahoma ranks eighteenth in total fees and taxes. Nebraska, on the other hand, with a $\$ 5$ registration fee and a 5 -cent gasoline tax, obtains a total of $\$ 41.20$ in roaduser tases on the medium-weight sedan and ranks fortieth among the states. If the prop-

Vehicle 4, Stake Truck, 12,500-lb. Gross V'ehicle Weight

Vehicles in the $12,500-1 b$. weight group are subject to registration fees that in some states break away rather sharply from the fees charged on automobiles and pickup trucks, although this is not true in all cases (Table 6; Fig. 12). The stake truck may be registered


Figure 12. State road-user and personal-property taxes on a 12,500-1b. stake truck (No. 4 ) in private use, ranked according to total taxes (left) and road-user taxes (right).
ery tax of $\$ 74.51$ is added, however, the total becomes $\$ 115.71$, the highest in any state.

## Vehicle 3, Pickup Truck

The registration fees for the pickup truck in private use are slightly higher than those on passenger cars in most states (Table 5 ; Fig. 11). However, large numbers of pickup trucks are registered at reduced farm rates. The lowest registration fee on any vehicle (overed in the study, $\$ 2.50$, applies to pickup trucks in Georgia regardless of whether they are in farm or private service. The highest registration fee on the pickup truck, $\$ 34.80$, was found in Ohio. It is probable that pickup trucks outnumber other trucks in all states. Consequently, although the total taxes on each pickup are relatively small compared to taxes on heavier vehicles, the large number of pickups makes this an extremely important category from a revenue standpoint.
in Wyoming for $\$ 15$, in Colorado for $\$ 17.50$, and in Virginia for $\$ 19.50$. In Vermont and Wisconsin, however, the fees are $\$ 118.75$ and \$110, respectively, for registration in private service. The farm rates, as discussed elsewhere, offer vehicles substantial reductions in many states, including Vermont and Wisconsin.

In contrast to the heavier trucks, there are large numbers of vehicles registered in the approximate weight range represented by this $12,500-\mathrm{lb}$. unit (the group) commonly (lassed as $11 / 2$-ton).

## Vehicle 5, Van Truck, 19,000-lb. Gross Vehicle Weight

The lowest registration fee on the $19,000-\mathrm{lb}$. van truck, $\$ 25$, is found in Colorado, and the highest, $\$ 199.50$, is found in Vermont (Table 7 ; Fig. 13). Although this van can be registered in South Dakota for $\$ 100$ (slightly below the


Figure 13. State road-user and personal-property taxes on a $19,000-1 b$. van truck (No. 5) in private use, ranked according to total taxes (left) and road-user taxes (right).


Figure 14. State road-user and personal-property taxes on a 40,000-1b., tandem-axle, dump truck (No. 6) in pri vate use, ranked according to total taxes (left) and road-user taxes (right).
average of $\$ 104.65$ for all states) the inclusion of the mileage tax of $\$ 185$ in South Dakota makes a total of $\$ 400.35$ in road-user taxes, the highest found in any state on this vehicle.

## Vehicle 6, 40,000-lb. Dump Truck

The $40,000-\mathrm{lb}$. dump truck, with perhaps minor adjustments of axle spacing, would be permitted to operate in all states except Mississippi and Washington (see Table 8;

Fig. 14). (Its axle spacing and loading are representative of concrete transit-mix and other special equipment.) The lowest registration fees on this vehicle are $\$ 50$ in Alabama and Georgia and $\$ 75$ in Colorado. These are the only states that still register trucks on the basis of manufacturer's rated capacity. The highest fee, $\$ 640$ is found in Illinois, and the average for all states is $\$ 295.20$. Although the Illinois registration fee is higher than that of


Figure 15. State road-user and personal-property taxes on a 40,000-1b., three-axle, tractor-semitrailer combination (No. 7) in private use, ranked according to total taxes (left) and road-user taxes (right).


Figure 16. State road-user and personal-property taxes on a $50,000-1 b$., gasoline-powered, four-axle, tractor-semitrailer combination (No. 8) in private use, ranked according to total taxes (left) and road-user taxes (right).
any state on this vehicle, the total road-user taxes on it would be greater in South Dakota, where the mileage tax applies.

## Vehicle 7, 40,000-lb. Combination

The $40,000-\mathrm{lb}$. combination is typical of the largest group of combinations and is found in substantial numbers even where much heavier vehicles are permitted (Table

10 ; Fig. 15). It is legal in all states. The average road-user tax payment on it in private operation is $\$ 677.50$. The lowest registration fee on this combination, $\$ 45$, is found in Colorado, the highest, $\$ 640$, in Illinois. The average registration fee is $\$ 255.83$, somewhat lower than on the three-axle, single-unit truck (No.6) of the same gross weight.

As an interesting sidelight, Table 9 shows


Figure 17. Comparison of state road-user taxes (personal-property taxes not included) in cents per mile for private use and contract operation, for a $40,000-1 \mathrm{~b}$., three-axle, tractor-semitraller combination (No. 7) (left) and a 50,0001b., gasoline-powered, four-axle, tractor-semitraller combination (No. 8) (right).


Figure 18. State road-user and personal-property taxes on a $\mathbf{5 0 , 0 0 0 - 1 b}$., diesel-powered, four-axle, tractor-semitraller combination (No. 9) in private use, ranked according to total taxes (left) and road-user taxes (right).
for this combination, in private operation, the taxes levied on the tractor-truck and on the semitrailer as individual units. The ratio of the taxes on the component units varies widely
among the states: In Minnesota, for example, the $\$ 10$ tax on the semitrailer is little more than 1 percent of the $\$ 750$ levied on the tractor, while in Oklahoma the $\$ 295.50$ for the
ROAD-LSER AND PERSONAL-PROPERTY TAXES ON A DIESEL-POWEREI), 5-AXLE, TRACTOR-SEMITRAILER COMBINATION, 64,000 POUNDS GVW



Figure 19. State road-user and personal-property taxes on a 64,000-1b., diesel-powered, five-axle, tractor-semitrailer combination (No. 10) in private use, ranked according to total taxes (left) and road-user taxes (right).


Figure 20. State road-user and personal-property taxes on a 72,000-1b., diesel-powered, six-axle, truck-and-fulltrailer combination (No. 11) in private use, ranked according to total taxes (left) and road-user taxes (right).


Figure 21. Comparison of state road-user taxes (personal-property taxes not included) in cents per mile for private use and contract operation, for a $64,000-1 \mathrm{~b}$., diesel-powered, five-axle, tractor-semitrailer combination (No. 10) (left) and a $\mathbf{7 2 , 0 0 0} \mathbf{- 1 b}$., diesel-powered, six-axle, truck-and-full-traller combination (No. 11) (right).
semitrailer is 50 percent of the $\$ 585.50$ for the power unit.

Vehicle 8, 50,000-lb. Gasoline-Powered Combination

The $50,000-\mathrm{lb}$. combination is legal in all states except Pennsylvania, Kentucky, and Tennessee and can be operated in those states with reduced loads (Table 11; Fig. 16). The average registration fee for this combination is $\$ 341.17$ when in private service, but in contract service the average registration fee is $\$ 586.70$. The highest annual total of roaduser taxes in private service is $\$ 1,637.50$, but in contract service the highest total of roaduser taxes is $\$ 2,555.25$.

Figure 17 compares, for this combination and for the $40,000-\mathrm{lb}$. combination, the tax costs in cents per mile of private and contract operation.

Vehicle 9, 50,000-lb Diesel-Powered Combination

The $50,000-\mathrm{lb}$ diesel-powered combination, empty, is somewhat heavier than the 50,000 lb. gasoline combination and thus carries a correspondingly smaller payload when at full capacity. (It is also a somewhat more expensive combination than the one with gasoline power and is subject to greater property taxes in many states.) Offset against this, however, is its substantial saving in total fuel cost, including tax. The diesel combination is assumed to save one third in fuel gallonage. The saving in fuel is highly desirable from almost any standpoint, but the resulting reductions in fuel-tax contributions for the support of highways poses a problem.

Michigan, Mississippi, New York, and Texas have already imposed higher rates on diesel fuel in an effort to obtain a tax contribution
weight and a similar diesel-powered combination may be developed from the data found in Tables 11 and 12 and Figures 16 and 18.


Figure 22. Typical vehicles included in this study.
similar to that of gasoline-powered vehicles. Vermont and Nebraska do not tax diesel fuel but do impose equalization fees. Idaho does not levy any tax on diesel fuel consumed by vehicles subject to the mileage tax, but the mileage tax on diesel-powered vehicles is higher than on gasoline-powered vehicles.

The relation between taxes paid on a gaso-line-powered combination of $50,000 \mathrm{lb}$. gross

Vehicle 10, 64,000-lb. Combination, and Vehicle 11, 72,000-lb. Combination
The heavy combinations are permitted in relatively few states. Where they are permitted, the taxes imposed are sometimes related to the effect of the vehicles on highway capacity, bridge load limits, acceptability of the vehicles from a traffic standpoint, and other factors not entirely concerned with the need
for revenue. Since the taxation of such heavy combinations poses special problems in each state, further discussion is omitted here (see Tables 13 and 14 and Figs. 19 and 20).

Comparisons between the taxes on private and contract carriers on a cents-per-mile basis are shown in Figure 21.

## SOME OBSERVATIONS

Although the essential value of this study lies in the tables and charts, there are several items that merit special mention. These cannot be classed as new information, but they are put into perspective and measured.

## Types of service

Aside from the substantial differences in the computation of road-user taxes among the states, there are very great differences in the levies on similar vehicles in different service. The vehicle of the private operator imposes the same burdens on the highway as the corresponding vehicle of the for-hire carrier, yet he does not pay nearly as much per mile in taxes in most states. It is notable that there is no difference between the taxation of forhire and private carriers under the new mileage taxes in Idaho and New York.

## Farm rates

The registration fee reductions for farm trucks are substantial. It is doubtful whether these allowances can be fully justified from
a highway-finance standpoint, even though farm vehicles may travel fewer miles than other vehicles. The justification, therefore, must come under the heading of public policy. and any state with farm rate reductions should carefully examine their relationship to other registration fees.

## Diesel vehicles

There is much evidence that, in general, diesel vehicles are making smaller tax contributions for highways in most states than corresponding gasoline-powered vehicles. The diesel vehicle is commonly assumed to use about two thirds as much fuel as its gasolinepowered counterpart. Consequently, in states where diesel fuel is taxed at the same rate as gasoline and there are no other special taxes on diesel vehicles, the annual saving to the operator in taxes paid is substantial. In the example used in this study, the saving amounts to approximately $\$ 270$ per year.

## Distribution of vehicles

Only 2 percent of all vehicles in use are trucks of $40,000 \mathrm{lb}$. or more capacity. The taxes paill by all classes of vehicles, including heary trucks, should constantly be subject to review and adjustment, but from a practical standpoint, the bulk of the revenue for highways must inevitably come from the automobiles and lighter trucks that constitute the vast majority of vehicles.


[^0]:    ${ }^{1}$ State roud-user and personal-property taxes on selected. motor vehicles, 1953, by R. W. Meadows and S. F. Bielak Public Roads, vol. 26, No. 2, June 1950.
    ${ }_{2}$ In the election, Oregon voters approved the increased weight-distance taxes enacted into law by the 1951 State legislature.

