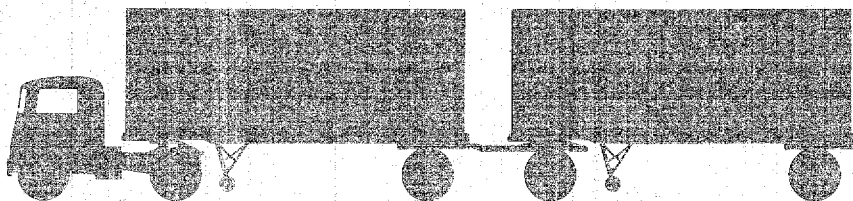
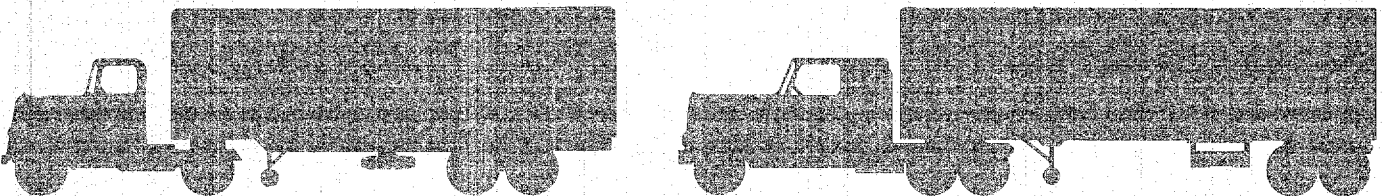
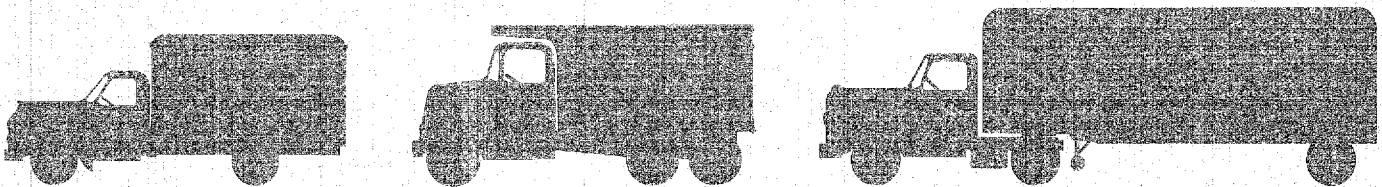
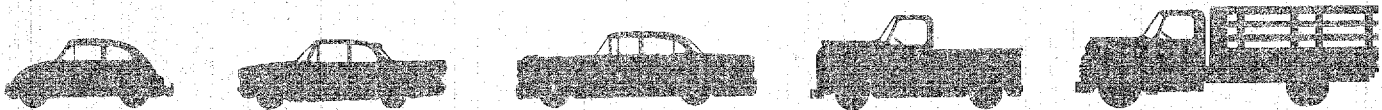


# ROAD-USER AND PROPERTY TAXES

ON SELECTED MOTOR VEHICLES, 1964





VERY LIGHT PASSENGER CAR

No. 1



MEDIUMWEIGHT PASSENGER CAR

No. 2



HEAVYWEIGHT PASSENGER CAR

No. 3



5,000-POUND PICKUP TRUCK

No. 4



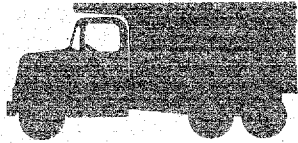
15,000-POUND STAKE TRUCK

No. 5



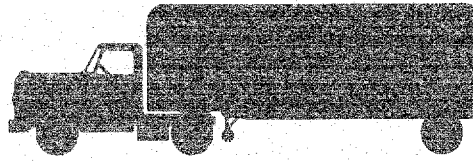
<sup>20</sup> 39,000-POUND VAN TRUCK

No. 6



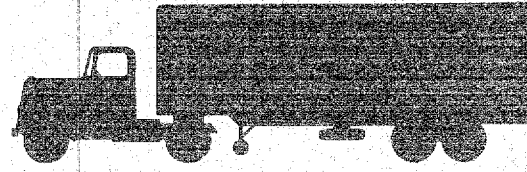
40,000-POUND 3-AXLE DUMP TRUCK

No. 7



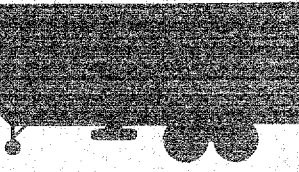
40,000-POUND 3-AXLE TRACTOR-SEMITRAILER

No. 8



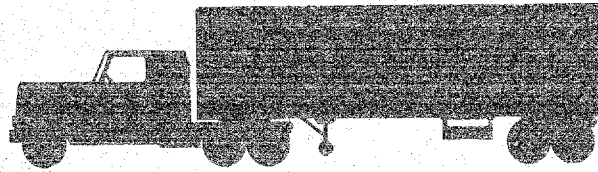
55,000-POUND 4-AXLE TRACTOR-SEMITRAILER GASOLINE-POWERED

No. 9



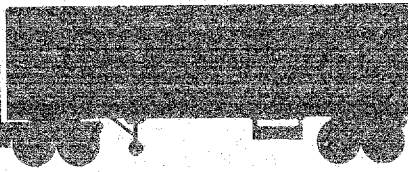
DIESEL-POWERED

No. 10



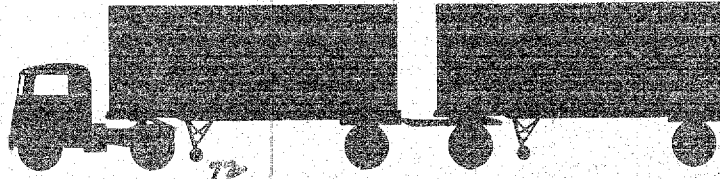
52,000-POUND DIESEL-POWERED 5-AXLE TRACTOR-SEMITRAILER

NO. 11



72,000-POUND DIESEL-POWERED 5-AXLE TRACTOR-SEMITRAILER

NO. 12



<sup>72</sup> 76,000-POUND DIESEL-POWERED 5-AXLE TRACTOR-SEMITRAILER AND FULL TRAILER

No. 13

DIESEL-POWERED

76 POUND DIESEL 5 AXLE TRUCK + FULL TRAILER AND

ERRATA AND ADDENDA: Road User and Property Taxes on Selected Motor Vehicles, 1968

Page 5, Figure 5 -- Vehicle 13 (72,000 lb. GVW, 5 axle tractor semi-trailer, full trailer combination) should be shown as legal in Delaware, Indiana, and Nebraska. It is also in general use in Utah under readily available oversize permits that cost \$25.00 per year. Vehicle 13, though barred from general use of Kentucky's highways, is permitted on a closely restricted mileage of high-type roads. (Data for Vehicle 13 for the five above-mentioned States for the 1968 report will not be compiled. Full coverage will be given in the next study in this series.)

Page 8 Stub -- Length of combination should show feet--not inches.

Page 9 -- A revision of specifications for Vehicle No. 11 (3-S2, diesel) was made after the study was under way. However, the revision was not entirely followed through in the specification sheet. The correct specifications for Vehicle 11, and on which the vehicle was rated throughout the report, follow:

		<u>Tractor-truck</u>	<u>Semitrailer</u>
Price f.o.b. factory (1966)		\$16,800	\$5,940
Horsepower NACC (SAE)		43.45	-
Horsepower, max. brake		218	-
Weight: Chassis weight (incl. cab)	lb.	11,125	-
Empty weight	lb.	12,085	10,500
Load capacity	lb.	24,915	14,500
Gross vehicle weight	lb.	37,000	25,000
Gross weight of combination	lb.	62,000	-
Length: Wheel base	in.	138	-
Distance between tandem axles	in.	48 1/2	48 3/8
Length of combination	ft.	50.2	-
Tires: Size		10.00X20	10.00X20
Ply rating		12	12
Arrangement: Front		Single	-
Rear		Dual-tandem	Dual-tandem
Annual miles traveled:			
Private operation	mi.	70,000	-
Contract carrier	mi.	70,000	-
Average miles per gallon:			
Private operation	mi.	5.0	-
Contract carrier	mi.	5.0	-
Annual motor-fuel consumption:			
Private operation	gal.	14,000	-
Contract carrier	gal.	14,000	-

U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION  
BUREAU OF PUBLIC ROADS  
WASHINGTON, D.C. 20591

March 20, 1968

CIRCULAR MEMORANDUM TO: Regional Federal Highway Administrators and  
Division Engineers

FROM: S. T. Hitchcock, Deputy Director of Planning  
38-50

*S. T. Hitchcock*

SUBJECT: Road-User and Property Taxes on Selected Motor Vehicles, 1968

A review of the above named publication subsequent to its distribution has revealed errors. Errata and addenda are printed on the back of this memorandum. It should be given the same distribution as that given to "Road-User and Property Taxes on Selected Motor Vehicles, 1968."

# ROAD-USER AND PROPERTY TAXES ON SELECTED MOTOR VEHICLES, 1964

By LAURENCE L. LISTON and WILLIAM A. ALLEN  
Research Statistics Staff

OFFICE OF RESEARCH AND DEVELOPMENT  
ROBERT F. BAKER, Director



U.S. DEPARTMENT OF COMMERCE  
LUTHER H. HODGES, Secretary

BUREAU OF PUBLIC ROADS  
REX M. WHITTON, Administrator

ROAD-USER AND PROPERTY TAXES ON SELECTED MOTOR VEHICLES, 1964

Errata

In making this study, it was assumed that the registration fees prescribed by Massachusetts Law for "other than gasoline" vehicles applied to diesel-powered vehicles. It was later found that Chapter 90, Section 33 of Massachusetts General Laws annotated provides that "The term 'gasoline-driven' as used in this section shall include vehicles propelled by diesel fuel..." For this reason, the registration fees for diesel-powered vehicles are erroneously reported in this study as follows:

<u>Vehicle</u>	<u>Registration Fee As Reported in This Study</u>	<u>Correct Regis- tration Fee</u>
No. 10, four-axle, tractor-semitrailer combination, 55,000 pounds gross vehicle weight	\$565.00	\$180.00
No. 11, five-axle, tractor-semitrailer combination, 62,000 pounds gross vehicle weight.	615.00	201.00
No. 12, five-axle, tractor-semitrailer combination, 72,000 pounds gross vehicle weight.	615.00	231.00

## PREFACE

---

The report contained in this publication supplies basic information for 1964 from each State on the application of road-user taxes and property taxes to a selected group of vehicles. It is neither the intent to weigh herein the merits of any of the taxes being reviewed nor to recommend any tax policy but to supply the means to measure and compare the annual payments that would be made for each of 13 carefully selected vehicles in each State. By arranging these payments in a uniform manner, a useful research and planning tool is made available to highway administrators, legislators, and others who are concerned with highways, and with vehicles and their use.

Highway-user taxes paid on each vehicle and total taxes paid are compared from State to State in dollar amounts in the tables. Rank columns in each table aid in the comparisons. Bar charts and maps are also presented to show amounts of taxes that would be paid to each State for each vehicle.

The authors were assisted by other members of the Research Statistics Staff and particularly acknowledge the assistance of J. S. Cangialosi, Miss Virginia Moyer, Mrs. Margaret Goins, Miss Loretta Robinson, and Miss Barbara Lake.

# LIST OF TABLES AND FIGURES

## General

	<i>Page</i>
Table 1. Basis for registration of passenger cars.....	2
Table 2. Data used in computing State road-user and property taxes on selected vehicles, 1964 registration year .....	9
Table 3. Average, low, and high road-user and property taxes on selected motor vehicles .....	10
Figure 1. Passenger-car registration fee basis (map) .....	4
Figure 2. Truck registration fee basis (map) .....	4
Figure 3. State gasoline-tax rates (map) .....	4
Figure 4. Application of personal-property taxes to motor vehicles (map) .....	4
Figure 5. Legality of heavy combinations (map) .....	5
Figure 6. Registration of tractor-semitrailer as a single unit (map) .....	5
Figure 7. Reduced registration fees for farm pickup truck (map) .....	5
Figure 8. Reduced registration fees for farm stake truck (map) .....	5
Figure 9. Annual rates of low, high, and average taxes (road-user and property) on selected vehicles in private operation .....	7
Figure 10. Comparison of private operation and farm service registration fees on a 15,000-pound stake truck .....	8

## The Selected Vehicles:

### Road-user and personal-property taxes in each State, and rank of State

<b>Vehicle</b>	<b>Table</b>		<b>Figure</b>	
	<b>No.</b>	<b>Page</b>	<b>Nos.</b>	<b>Page</b>
No. 1: Very light passenger car .....	4	45	11, 12	11, 13
No. 2: Mediumweight passenger car .....	4	45	13, 14	15, 17
No. 3: Heavyweight passenger car .....	4	45	15, 16	19, 20
No. 4: 5,000-pound pickup truck .....	5	46	17, 19	21, 23
No. 5: 15,000-pound stake truck .....	6	47	18, 20	22, 23
No. 6: 19,000-pound van truck .....	7	48	21, 23	24, 26
No. 7: 40,000-pound three-axle dump truck .....	8	49	22, 24	25, 27
No. 8: 40,000-pound three-axle tractor-semitrailer:				
Tractor and semitrailer separately .....	9	50	—	—
Tractor-semitrailer combination .....	10	51	25, 26	29, 31
No. 9: 55,000-pound gasoline-powered four-axle tractor-semitrailer .....	11	52	27, 28	32, 33
No. 10: 55,000-pound diesel-powered four-axle tractor-semitrailer .....	12	53	29, 30	34, 35
No. 11: 62,000-pound diesel-powered five-axle tractor-semitrailer .....	13	54	31, 32	36, 37
No. 12: 72,000-pound diesel-powered five-axle tractor-semitrailer .....	14	55	33, 34	38, 39
No. 13: 76,000-pound diesel-powered five-axle tractor-semitrailer and full trailer .....	15	56	35, 36	40, 41

### Comparisons of State road-user taxes in cents per mile, for private use and contract operation

	<i>Page</i>
Figure 37. Comparison for vehicles Nos. 8 and 9 .....	42
Figure 38. Comparison for vehicles Nos. 10 and 11 .....	43
Figure 39. Comparison for vehicles Nos. 12 and 13 .....	44



## INTRODUCTION

---

There were approximately 82.2 million registered motor vehicles at the end of 1963, and the number is expected to exceed 100 million by 1971. Thus, public officials are faced with the compounding of two problems: (1) the continuing, insistent demand for improvement in the quality of highways, and (2) the need to provide highway capacity for ever-increasing numbers of vehicles—numbers that are growing even faster than our population. As the costs of supplying highways are derived primarily from motor-vehicle user imposts, the user imposts are under almost constant review with respect to both equity and adequacy.

During the past 13 years, four studies have been published by the Bureau of Public Roads that have compared the magnitudes of State highway-user taxes and property taxes on a selected group of vehicles. These studies in 1950, 1953, 1956, and 1960 have provided check points along the full range of vehicle size and use classes so that comparisons can be made among States on the effect of each of the taxes, as well as the yield from the entire group of taxes.

The purpose of the study published here was to supply basic information on the application of road-user and property taxes as of January 1, 1964. The data presented give both a direct measurement of the impact of the taxes on different vehicles and place these taxes in proper perspective. The objective was the measurement of payments, and it was not the intent to assess the merits of the taxes imposed nor to indicate support for or opposition to any tax policy. As in prior studies, the vehicles chosen as examples and the operating factors applying to them are considered to be representative of the kinds and sizes of vehicles generally in operation throughout the United States. Although the vehicles are types in common use, and the assumed amounts and conditions of their use are believed to be well within reasonable expectancy, they are not intended to be considered as representative of averages. They were selected, rather, to show given points in the tax structures of the States. No consideration was given to the concentration of numbers of vehicles in various groups, a factor that will be of great importance in applying the findings of this study.

### *Background of Study*

The main problem of motor-vehicle taxation is that of distributing tax responsibility equitably among vehicles of different types and sizes. The principal portion of current State road-user revenues is derived from the

gasoline tax and from registration fees on motor vehicles. In some States, a relatively low gasoline tax rate is accompanied by above-average registration fees; in others, higher gasoline tax rates are accompanied by relatively low registration fees. In Louisiana, in 1964, a mediumweight automobile could be registered for \$3, and the gasoline tax was 7 cents per gallon; in Illinois it cost \$17 to register the same automobile, but the gasoline tax was 5 cents. Assuming average travel, the total road-user taxes on an automobile would be approximately the same in the two States.

In this study individual road-user tax payments are compared as to the size of vehicles, and total direct State road-user and personal property taxes are measured. With this information, comparisons can be made among vehicles, among States, and among types of service. The tax rates in effect January 1, 1964 have been used, and the taxes that would be paid for a full year in each State are shown for each vehicle studied.

As much similarity as possible to the prior studies was retained in this study and the form of data presented here. The similarity of subject matter and methods of presentation should be helpful to those who have used the earlier studies in following more recent trends in the road-user taxes of the States. Some of the vehicles selected for this study differ slightly from those used in earlier studies. This selection reflects recognition of changes in legislation governing vehicle registration, classifications, and weights, and changes in designs and usage of motor vehicles.

The methods used and assumptions made in deriving the data presented should be studied carefully in order to avoid misunderstandings. Probably no vehicle would pay exactly the annual amounts shown in the tabulations, and this is particularly true for the large commercial vehicles. When comparative tax data have been assembled for study, consideration has been given to reporting tax payments on the basis of ton-miles of operation or vehicle-miles of travel, but to do so would have been going substantially beyond the limited objectives of this study. Furthermore, comparison of the annual taxes was more advantageous because: Such amounts are more readily understood by the layman; many of the taxes and fees are levied on an annual basis; and, by using the same assumptions, the relative positions of the States are the same on either an annual or a vehicle-mile basis.

Although there would be no differences among the relative positions of the States when their vehicle taxes

were compared on an annual basis or on a vehicle-mile basis, the annual mileage assumed for each vehicle for the purpose of making the comparison is important. If the annual mileage figures assumed were too small, States having relatively large license or other annual fees but no mileage taxes would be placed in an unfavor-

able position in relation to States that have low annual fees and impose mileage taxes. But, if the assumed mileages were too great, the States imposing mileage taxes would be placed in an unfavorable position in comparison to those that depend principally upon the taxation of heavy vehicles for high annual fees.

Table 1.—Basis for registration of passenger cars

FLAT FEE	EMPTY WEIGHT OR SHIPPING WEIGHT		OTHER	
<p><b>FLAT FEE ONLY:</b> Alabama Alaska Arizona California Connecticut Kentucky Louisiana Maine Massachusetts Nebraska Nevada Ohio Oregon Pennsylvania Utah Vermont Virginia Washington Wisconsin Wyoming</p>	<p><b>WEIGHT GROUPS:</b> Delaware Florida Kansas Maryland Montana New Jersey North Carolina Tennessee West Virginia District of Columbia</p>	<p><b>WEIGHT GROUPS AND AGE:</b> Colorado Michigan New York Texas</p> <p><b>100-POUND INTERVALS AND AGE:</b> New Mexico</p> <p><b>100-POUND INTERVALS, AGE, AND VALUE:</b> Iowa</p> <p><b>500-POUND INTERVALS:</b> Georgia South Carolina</p>	<p><b>100-POUND INTERVALS:</b> Colorado Michigan New York Texas</p> <p><b>100-POUND INTERVALS AND AGE:</b> New Mexico</p> <p><b>100-POUND INTERVALS, AGE, AND VALUE:</b> Iowa</p> <p><b>500-POUND INTERVALS:</b> Georgia South Carolina</p>	<p><b>HORSEPOWER GROUPS:</b> Illinois Indiana Missouri</p>
<p><b>FLAT FEE BY AGE:</b> Idaho</p>	<p><b>GROSS WEIGHT</b></p> <p><b>WEIGHT GROUPS:</b> New Hampshire Rhode Island</p>		<p><b>100-POUND INTERVALS AND HORSEPOWER</b> Arkansas</p>	<p><b>FACTORY DELIVERED PRICE AND AGE:</b> Oklahoma</p>

## THE TYPICAL VEHICLES

The bases for registering motor vehicles vary considerably among the States. The most common basis for registering passenger cars is the flat fee, as shown in table 1. In contrast to a flat annual fee, Mississippi determines its levy by compounding a fixed fee and tax components based upon gross weight and vehicle age. The bases used by different States for registering passenger cars are geographically shown in figure 1, and those for registering trucks are given in figure 2. Data in figures 3 and 4, respectively, show the gasoline tax rates by States and identify the States in which motor vehicles are taxed as personal property:

### *Vehicles Selected*

Thirteen vehicles were selected to illustrate the range and magnitude of State taxes on motor vehicles: Three passenger cars, four single-unit trucks, and six vehicle combinations. Their relative sizes and axle arrangements are shown in silhouette inside the front cover. Descriptions of the vehicles are in the following paragraphs.

#### **Passenger cars:**

No. 1.—A small, imported 4-passenger sedan.

No. 2.—A mediumweight sedan, typified by the "big three."

No. 3.—A heavy sedan.

#### **Single-unit trucks:**

No. 4.—A pickup truck registered for 5,000 pounds gross weight (commonly called a half-ton truck).

No. 5.—A stake truck registered for 15,000 pounds gross weight (commonly called a 1½-ton truck).

No. 6.—A van truck registered for 19,000 pounds gross weight (commonly called a 2¾-ton truck).

No. 7.—A tandem-axle dump truck registered for 40,000 pounds gross weight and of the type used for hauling coal, excavation dirt, and building materials.

#### **Vehicle combinations:**

No. 8.—A three-axle tractor-semitrailer registered for 40,000 pounds gross weight, chosen so that its maximum length and weight were within the legal limits of all States.

No. 9.—A four-axle tractor-semitrailer (tandem axles in the semitrailer), gasoline-powered, and registered for 55,000 pounds gross weight (No. 10 is the same vehicle but has diesel power).

No. 10.—A four-axle tractor-semitrailer (tandem axles on the semitrailer), diesel-powered, and registered for 55,000 pounds gross weight (No. 9 is the same vehicle but is gasoline-powered).

No. 11.—A five-axle tractor-semitrailer (tandem axles on both units), diesel-powered, and registered for 62,000 pounds gross weight.

No. 12.—A five-axle tractor-semitrailer (tandem axles on both units), diesel-powered, and registered for 72,000 pounds gross weight.

No. 13.—A five-axle combination composed of a two-axle, cab-over-engine, diesel-powered tractor-truck, single-axle semitrailer, and a two-axle full trailer, and registered for 76,000 pounds gross weight.

#### **Very light passenger car**

The very light passenger car (No. 1) was included in the 1960 study for the first time and has again been included in this study because of the many imported small, lightweight cars that the American public has purchased in recent years. At the time that the 1960 study was made some consideration was given to including data on a compact American car; but, lack of information on its operating characteristics made this inclusion impracticable. Also, from the three passenger cars chosen for this study, adequate data on the tax range on passenger cars should be available without inclusion of information on an American compact.

#### **Tandem-axle, single-unit truck**

The tandem-axle, single-unit truck of 40,000 pounds gross weight (No. 7), familiar in specialized forms such as heavy dump trucks and concrete transit-mixers, can be registered in all States; but its registration and operation is on the borderline of legality in some States. Data on this type of truck was included in this study to show the applicable point in the tax schedules.

#### **40,000-pound, three-axle combination**

The 40,000-pound, three-axle combination (No. 8) is in almost universal use and can be registered and operated in all States. The popularity of this vehicle for over-the-road transportation has been declining in recent years; larger combinations having more axles are being favored since gross weight limits have been raised in many key States. The three-axle combination is now most frequently being used for intracity and local deliveries or for over-the-road transportation of products having a low-weight-to-density relationship.

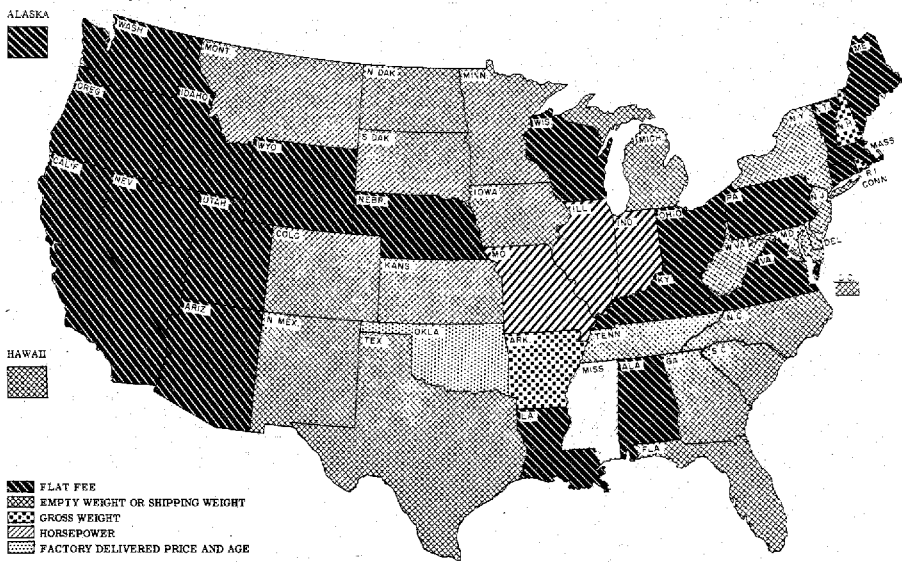


Figure 1.—Passenger-car registration fee basis.

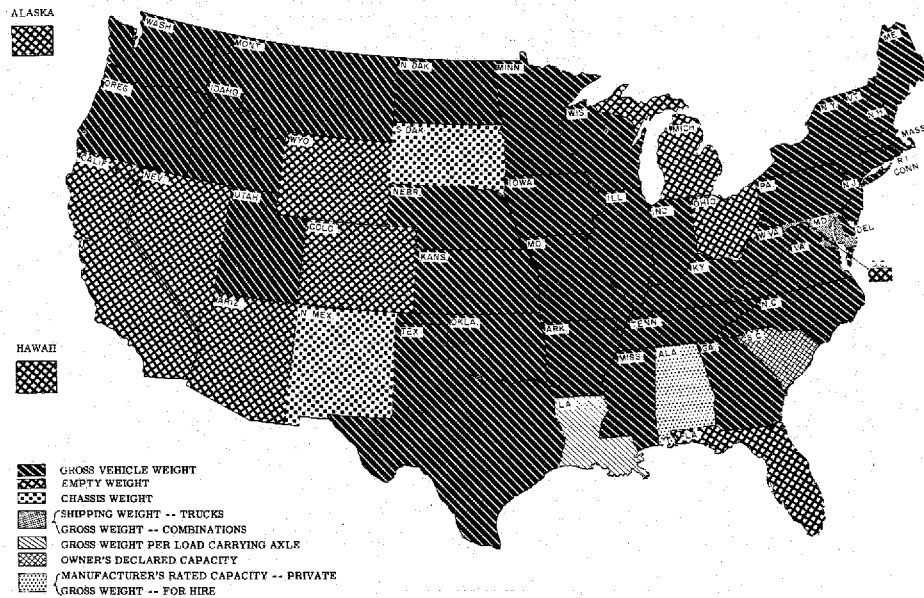


Figure 2.—Truck registration fee basis.

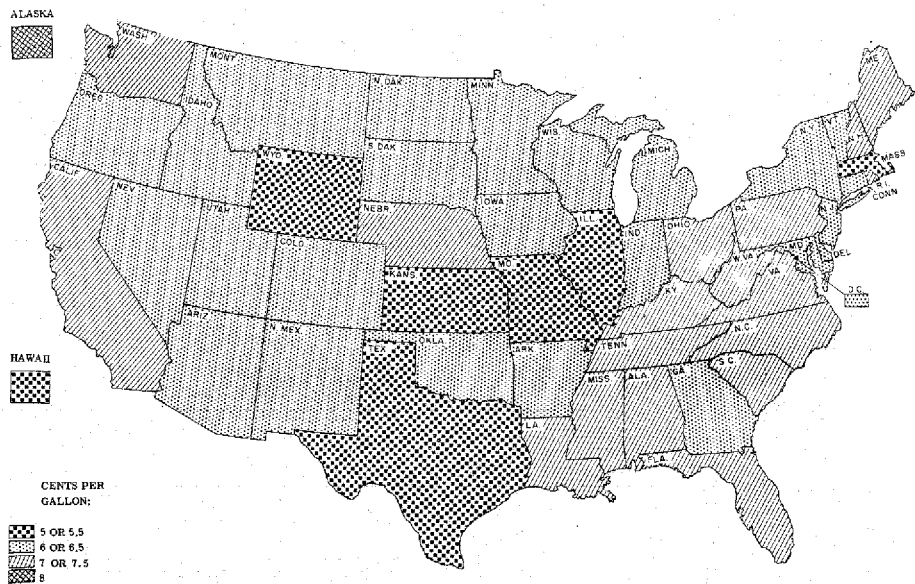


Figure 3.—State gasoline tax rates.

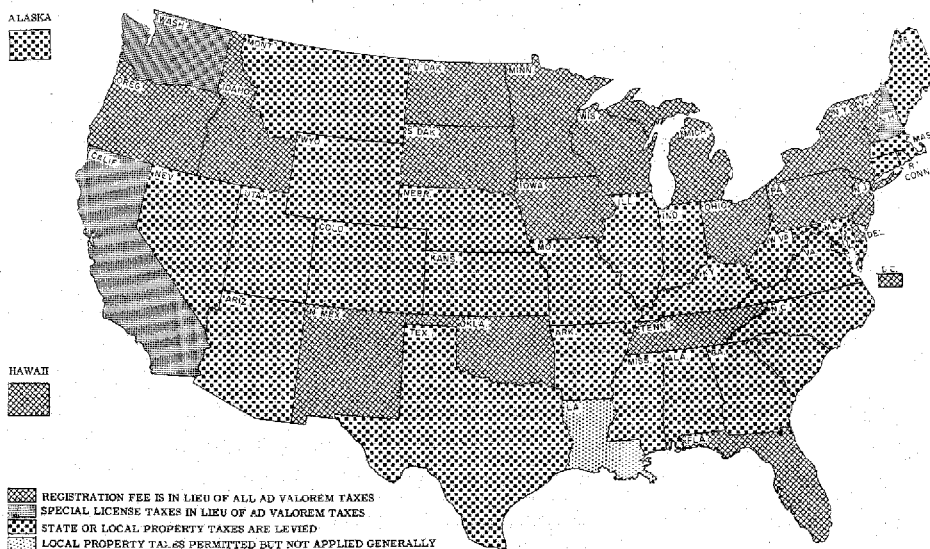


Figure 4.—Application of personal-property taxes to motor vehicles.

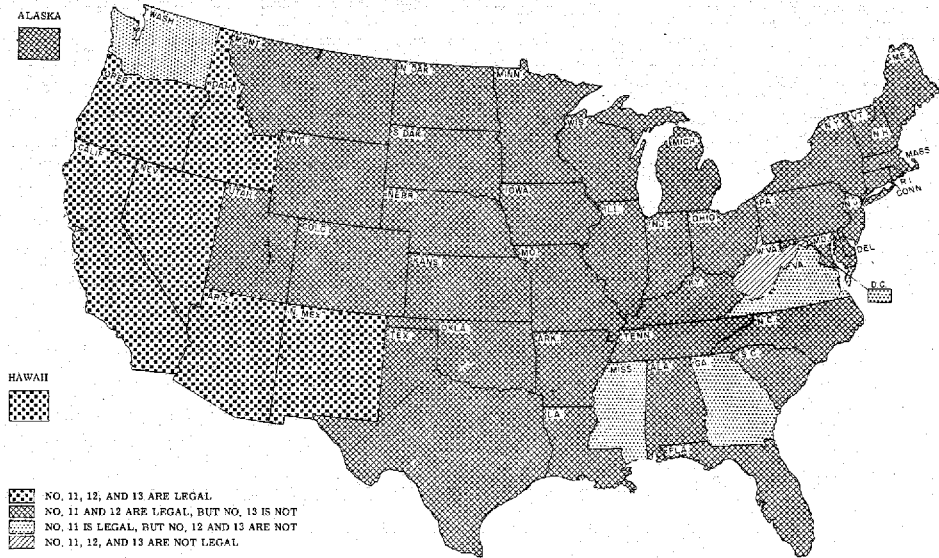


Figure 5.—Legality of heavy combinations.

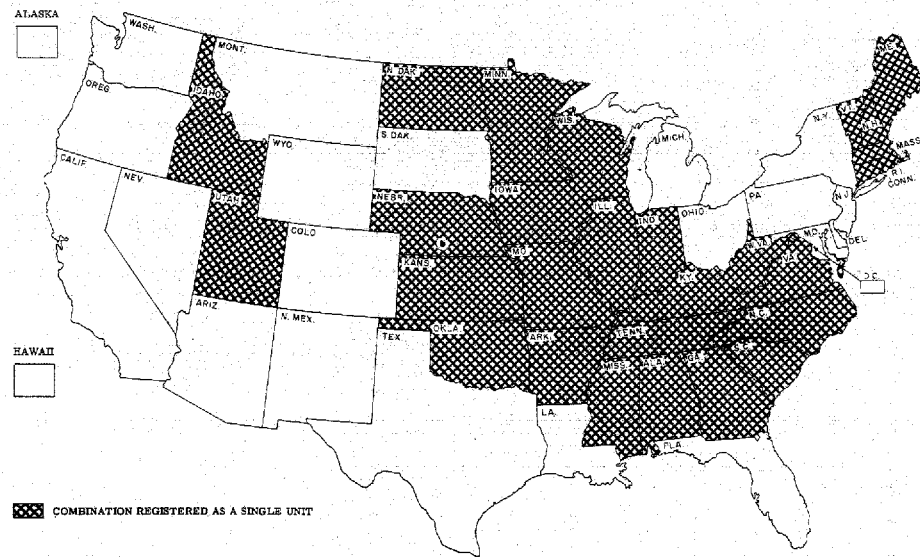


Figure 6.—Registration of tractor-semitrailer as a single unit.

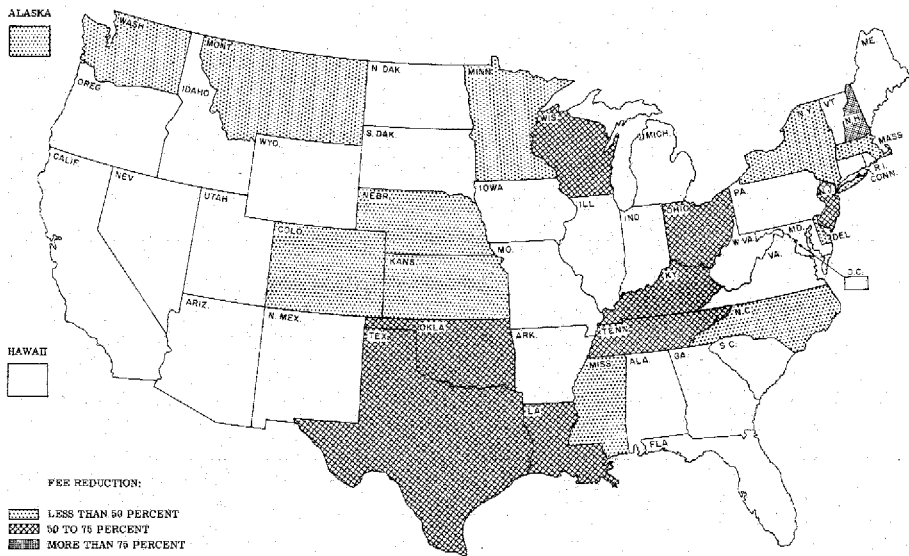


Figure 7.—Reduced registration fees for farm truck (No. 4, pickup truck).

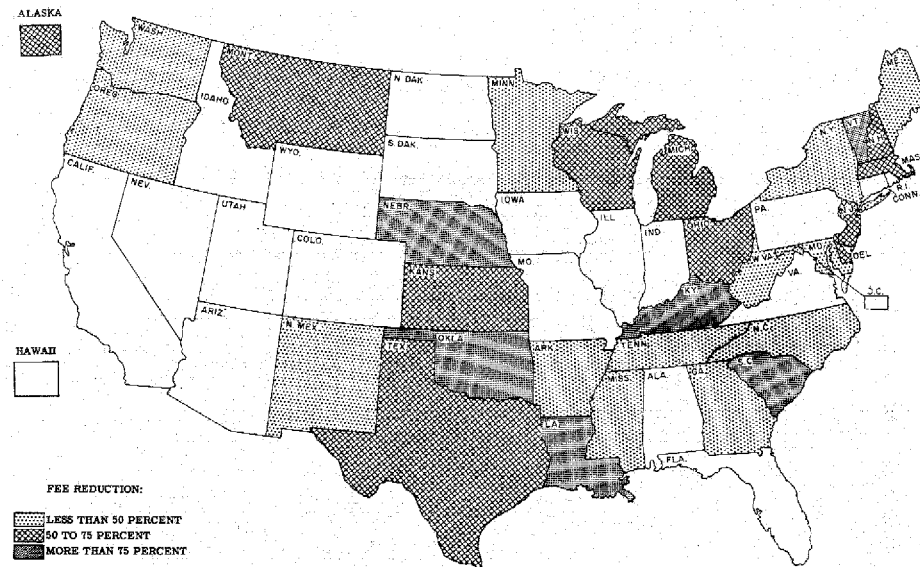


Figure 8.—Reduced registration fees for farm truck (No. 5, stake truck).

## Fuel

In order to compare taxes on vehicles that differed only in the fuel used, data have been included on two types of 55,000-pound, four-axle combinations (Nos. 9 and 10)—one type has a gasoline engine and the other a diesel engine. An arbitrary assumption, but one considered reasonable, was made of a fuel-consumption rate of 4 miles per gallon for the gasoline combination and 5½ miles per gallon for the diesel combination, for each of the studies. Nine States now (1964) impose a higher tax on diesel fuel than on gasoline, and other States are studying the possible imposition of higher taxes on diesel fuel to reduce or eliminate the apparent tax advantage of diesel-powered vehicles.

Diesel power was selected for all of the heavier combinations (Nos. 11–13) included in the study because of the tendency to replace gasoline-powered vehicles with diesel-powered vehicles in the larger units where the heavier diesel engine can be more efficiently employed. The 62,000-pound combination (No. 11), a five-axle diesel-powered tractor-semitrailer combination, 50 feet long, can be operated in 47 of the 48 contiguous States. The heaviest, longest combination (No. 13) can be operated in six Western States. It can also be operated on the New York Thruway but cannot be used on any of the other highways of that State. Hawaii permits all of the heavy vehicles (Nos. 11–13) and Alaska permits Nos. 11 and 12 but excludes No. 13 because of its length.

Figure 5 data show that as of January 1, 1964, vehicle No. 12 could be operated legally in 21 Western States and 22 Eastern States. The trend toward permitting

use of heavier vehicles is reflected by the fact that just 4 years earlier, only 12 of the Eastern States permitted use of vehicle No. 12. However, most of the toll roads in the Eastern States do permit the operation of all of the vehicles covered by this study.

The determination of whether data from any State for any given vehicle would be included or excluded from the study was based solely on whether the vehicle, as specified, would be registered and permitted to operate in that State. In some States the vehicle or combination could be registered but could not be operated legally with a full load. All such vehicles were omitted from the study, even though they could be registered and might sometimes be operated on the highways of the State with slightly lower gross weights. Where minor variances of axle spacing would permit a vehicle to be used legally in a State, it was assumed for study purposes that the vehicle so altered was essentially the same as that described in the specification sheet and could be reasonably compared with the vehicle of the same description from other States.

As shown in figure 6, tractor-semitrailer combinations are registered as single units in slightly more than half of the States, and in the others tractor trucks and semitrailers are registered as separate units. In this study, combinations are considered to be registered as single units in those States 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.

## SPECIFICATION AND USE FACTORS

During the summer of 1963 a detailed statement of the specifications for each of the 13 vehicles selected was submitted to the State authorities for determination of the specific fees and taxes that would be payable on them during a full year under laws existing January 1, 1964. Table 2 shows these specifications together with the assumed annual mileage traveled, motor fuel consumed, and other factors needed to compute the various taxes that would be paid. The State road-user levies to be reported were: Motor-fuel taxes and vehicle registration

fees, other annual vehicle fees closely related to registration, and the applicable motor-carrier taxes. In addition, all direct personal property taxes levied on motor vehicles by all levels of government were to be reported. The property taxes for 1964 were estimated by the State authorities on the basis of 1963 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 were not available for travel mileages, fuel-

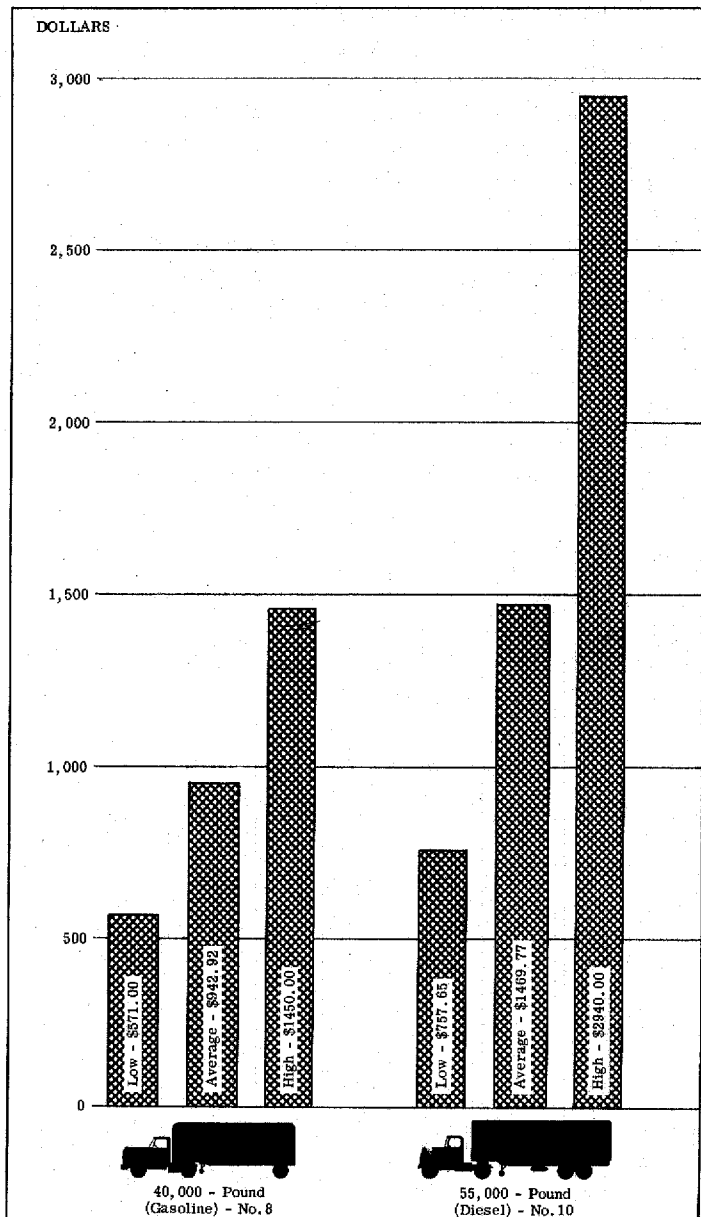
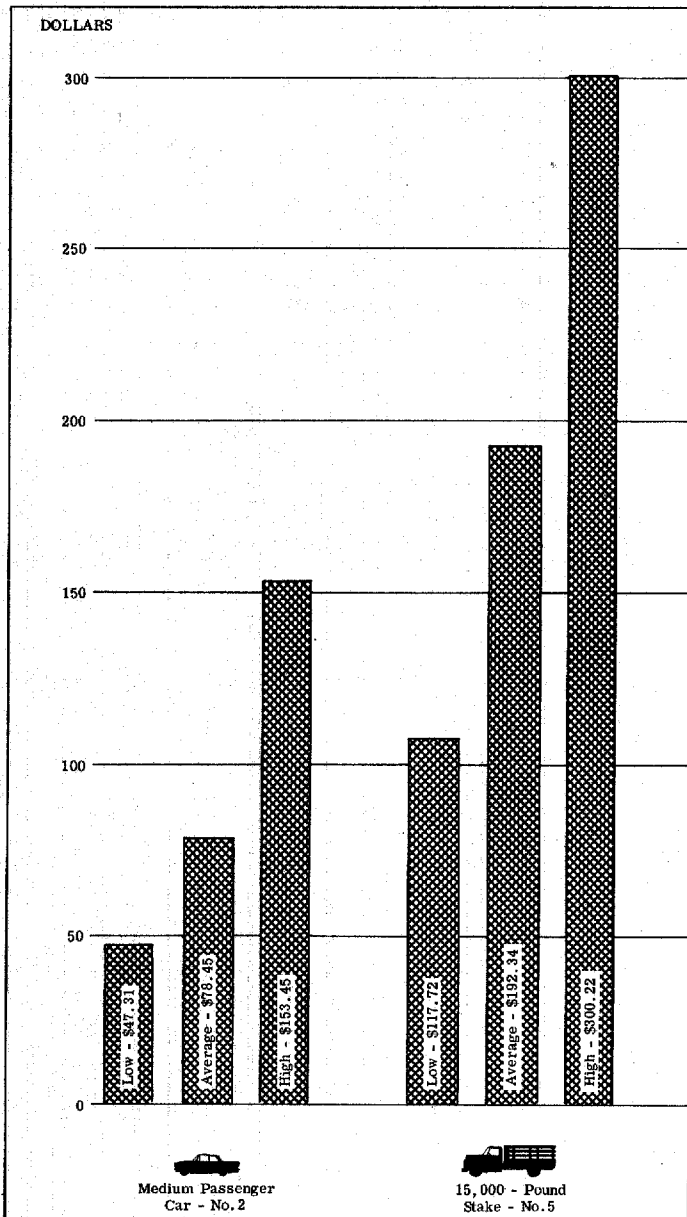


Figure 9.—Annual rates of low, high, and average road-user and personal-property taxes on selected vehicles in private use.

consumption rates, and earnings for each selected vehicle. It was, therefore, necessary to assign values arbitrarily, but special effort was made to select amounts that were reasonable. The objective was to supply specific factors to which tax rates could be applied uniformly in all States, and to present data reflecting these rates to permit 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 unduly complicated by the necessity of having to (1) include the many varieties of carrier taxes, and (2) consider an almost infinite variety of circumstances. Obviously, few large combinations travel entirely in one State for an entire year. However, the stipulation of intrastate travel was permissible, even indispensable, because the purpose of the study was to compare tax rates rather than to select typical vehicles or the most probable amount and kind of service for the most probable tax payments. It was specified that the vehicles were assumed to have been operated in the same State since purchased new in 1962. This made 1964 the third year of registration and thus excluded from the study nonrecurring taxes, such as those on sales and titling, and removed the vehicles from the top property tax brackets.

In this study the group of taxes imposed by the Federal Government on gasoline, vehicles, tires, and associated products has been specifically excluded, as has the annual use tax on vehicles of more than 26,000 pounds gross weight. These levies have been excluded because they are uniform throughout the Nation and would have no effect on the comparisons among States.

The data received from the States are presented for the individual selected vehicles in tables 4-15 and figures 11-39. In all of the tables, except table 15, the States are arranged in regional groupings to permit ready comparison of data for each State with data for its neighbors. The figures show the principal groups of taxes; this permits a quick comparison between the elements reported and among the States.

The national averages and extremes are shown in table 3. The averages are simple, unweighted averages of the totals for all States in which the vehicles are permitted to operate. For property taxes, the averages reflect only the States in which such taxes are levied. In figure 9 a comparison is shown of the low, average, and the high annual rates on four of the vehicles covered in the study. (Note the two different vertical scales in the figures.)

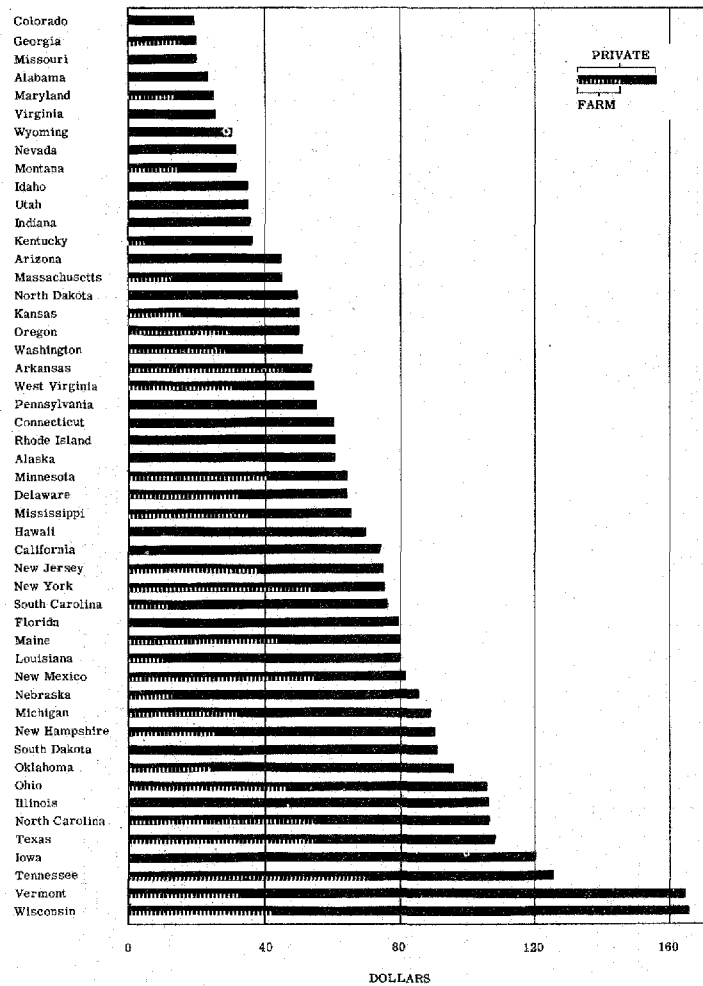


Figure 10.—Comparison of private use and farm service registration fees on a 15,000-pound stake truck (No. 5).



Factors affecting taxation	Passenger cars			Single-unit trucks				Tractor-semitrailer combinations										Tractor-semitrailer and full trailer		
	No. 1. Very light	No. 2. Medium	No. 3 Heavy	No. 4 Pickup	No. 5. Stake	No. 6. Van	No. 7. Dump	No. 8 (2-S1) (gasoline)		No. 9 (2-S2) (gasoline)		No. 10 (2-S2) (diesel)		No. 11 (3-S2) (diesel)		No. 12 (3-S2) (diesel)		No. 13 (2-S1-2) (diesel)		
								Tractor-truck	Semi-trailer	Tractor-truck	Semi-trailer	Tractor-truck	Semi-trailer	Tractor-truck	Semi-trailer	Tractor-truck	Semi-trailer	Tractor-truck	Semi-trailer	Tractor-truck
Body type .....	2-door, 4-pass.	4-door, 6-pass.	4-door, 6-pass.	Pickup	Stake	Van	Dump	Tractor	Van, 30-ft.	Tractor	Van, 35-ft.	Tractor	Van, 35-ft.	Tractor	Van, 40-ft.	Tractor	Van, 40-ft.	Tractor	Van, 27-ft.	Van, 27-ft.
Price f.o.b. factory (1962) .....	\$1,650	\$2,387	\$5,565	\$1,726	\$2,940	\$4,460	\$13,400	\$6,120	\$4,000	\$11,285	\$6,300	\$12,600	\$6,300	\$16,560	\$6,500	\$18,988	\$6,500	\$19,190	\$4,500	\$5,700
Horsepower, NACC (SAE) .....	14.00	48.00	59.17	31.54	48.35	45.00	45.90	42.50	.....	54.50	.....	57.00	.....	43.35	.....	63.00	.....	72.60	.....	.....
Horsepower, max. brake .....	40	170	300	189	165	172	182	194	.....	226	.....	180	.....	210	.....	220	.....	250	.....	.....
Weight:																				
Mfrs. rated capacity .....	.....	.....	.....	¾	1½	2¾	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chassis weight (incl. cab) .....	.....	.....	.....	3,480	5,300	5,000	12,500	6,800	.....	8,740	.....	9,925	.....	11,040	.....	12,800	.....	10,400	.....	.....
Empty weight .....	1,565	3,480	4,929	3,905	6,315	7,500	17,500	7,200	8,600	9,960	9,060	10,700	9,960	12,000	10,200	12,750	10,200	11,200	7,050	9,480
Load capacity .....	600	900	900	1,095	8,685	11,500	22,500	14,800	9,400	15,040	20,040	13,800	21,040	25,000	14,800	26,250	21,800	15,300	10,950	21,820
Gross vehicle weight .....	2,165	4,880	5,829	5,000	15,000	19,000	40,000	22,000	18,000	25,000	30,000	24,000	31,000	35,000	27,000	40,000	32,000	27,000	18,000	31,000
Gross weight of combination .....	.....	.....	.....	.....	.....	.....	.....	40,000	.....	55,000	.....	65,000	.....	62,000	.....	72,000	.....	76,000	.....	.....
Length:																				
Wheel base .....	94½	119	123	119	157	172	175-50	132	.....	111	.....	146½	.....	138-50	.....	148-50	.....	(1)	(1)	(1)
Distance betw. tandem axles .....	.....	.....	.....	.....	.....	.....	50	.....	.....	48½	.....	48½	.....	50	48½	50	48½	.....	.....	.....
Length of combination .....	.....	.....	.....	.....	.....	.....	.....	41	.....	45	.....	45	.....	50	.....	50	.....	65	.....	.....
Tires:																				
Size .....	.....	.....	.....	6.70×15	8.00-22.5	9.00×20	10.00×20	10.00×20	10.00×20	10.00×20	10.00×20	10.00×20	10.00×20	10.00×20	10.00×20	10.00×20	10.00×20	10.00×20	10.00×20	10.00×20
Ply rating .....	.....	.....	.....	6	8	10	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Front arrangement .....	.....	.....	.....	Single	Single	Single	Single	Single	.....	Single	.....	Single	.....	Single	.....	Single	.....	Single	.....	Dual
Rear arrangement .....	.....	.....	.....	Single	Dual	Dual	Dual-tandem	Dual	Dual	Dual	Dual-tandem	Dual	Dual-tandem	Dual-tandem	Dual-tandem	Dual-tandem	Dual-tandem	Dual-tandem	Dual	Dual
Total annual miles traveled:																				
Farm service .....	.....	.....	.....	6,000	5,000	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Private operation .....	9,000	9,500	11,000	9,000	12,000	15,000	30,000	40,000	.....	60,000	.....	60,000	.....	70,000	.....	70,000	.....	70,000	.....	.....
Contract carrier .....	.....	.....	.....	.....	20,000	25,000	.....	40,000	.....	60,000	.....	60,000	.....	70,000	.....	70,000	.....	70,000	.....	.....
Average miles per gallon:																				
Farm service .....	.....	.....	.....	12.5	9.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Private operation .....	27.0	15.0	14.0	12.0	8.5	7.5	4.0	5.0	.....	4.0	.....	5.5	.....	4.7	.....	4.8	.....	4.2	.....	.....
Contract carrier .....	.....	.....	.....	.....	8.5	7.5	.....	5.0	.....	4.0	.....	5.5	.....	4.7	.....	4.8	.....	4.2	.....	.....
Annual motor-fuel consumption:																				
Farm service .....	.....	.....	.....	480	556	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Private operation .....	333	633	786	750	1,412	2,000	7,500	8,000	.....	15,000	.....	10,909	.....	14,894	.....	16,279	.....	16,667	.....	.....
Contract carrier .....	.....	.....	.....	.....	2,353	3,338	.....	8,000	.....	15,000	.....	10,909	.....	14,894	.....	16,279	.....	16,667	.....	.....
Total revenue ton-miles (avg. load) .....	.....	.....	.....	.....	54,560	83,200	.....	279,900	.....	662,500	.....	674,500	.....	1,031,500	.....	1,257,900	.....	1,205,000	.....	.....
Average Gross Weight .....	.....	.....	.....	.....	11,250	14,225	.....	30,100	.....	42,200	.....	48,100	.....	52,900	.....	59,900	.....	62,600	.....	.....
Gross annual earnings .....	.....	.....	.....	.....	\$11,500	\$12,800	.....	\$22,700	.....	\$50,400	.....	\$52,600	.....	\$78,400	.....	\$95,600	.....	\$84,400	.....	.....

<sup>1</sup> The distances between axles on vehicle number 13 are: first and second, 114 inches; second and third, 245 inches; third and fourth, 93½ inches; fourth and fifth, 257 inches.

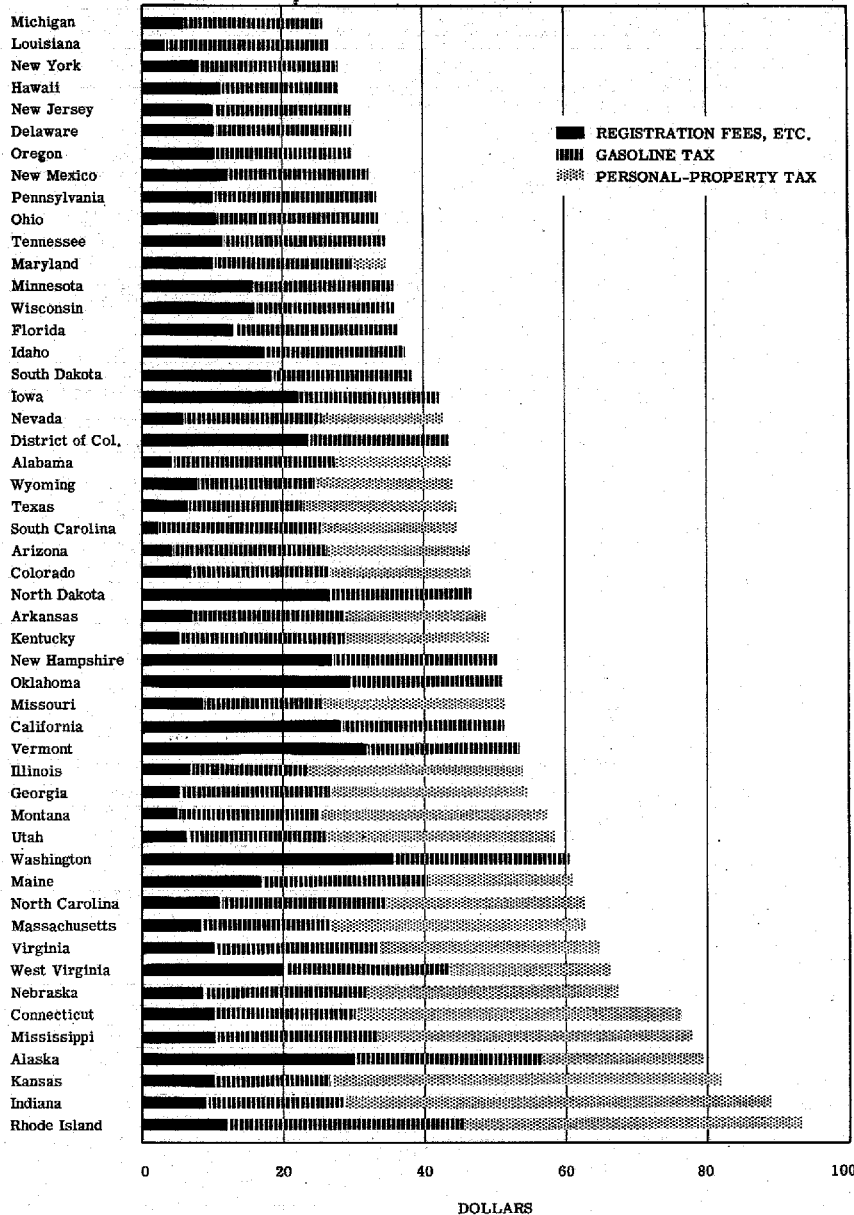
Vehicle and service	Average fee for States where vehicle may operate					Lowest fee					Highest fee				
	Regis- tration fee, etc.	Motor- fuel tax	Total road- user taxes	Prop- erty tax	Total	Regis- tration fee, etc.	Motor- fuel tax	Total road- user taxes	Prop- erty tax	Total	Regis- tration fee, etc.	Motor- fuel tax	Total road- user taxes	Prop- erty tax	Total
Passenger car:															
Very light (No. 1)-----	\$12.75	\$21.02	\$33.77	\$15.54	\$49.31	\$2.00	\$16.65	\$22.89	(\$5.00)	\$25.58	\$35.50	\$26.64	\$60.48	\$60.08	\$93.03
Mediumweight (No. 2)-----	17.07	39.97	57.04	21.41	78.45	3.00	31.65	39.15	(5.00)	47.31	41.50	50.64	88.98	88.14	153.45
Heavy (No. 3)-----	26.12	49.63	75.75	48.12	123.87	3.00	39.30	46.80	(8.00)	57.16	87.50	62.88	146.45	186.68	260.62
Pickup (No. 4):															
Farm-----	17.40	30.34	47.74	11.44	59.18	3.00	24.00	32.50	(4.55)	36.60	51.00	38.40	84.60	58.50	111.10
Private-----	22.56	47.35	69.91	17.06	86.97	5.00	37.50	47.50	(5.00)	55.00	51.00	60.00	105.90	63.28	130.00
Stake truck (No. 5):															
Farm-----	42.69	35.14	77.83	18.13	95.96	5.00	27.80	42.80	(7.00)	44.58	120.00	44.48	153.36	105.30	206.22
Private-----	76.81	89.15	165.96	26.38	192.34	20.00	70.60	90.60	(8.00)	117.72	215.50	112.96	300.22	105.30	300.22
Contract-----	112.30	148.56	260.86	26.24	287.10	25.00	117.65	166.18	(8.00)	174.18	337.83	188.24	502.54	105.30	515.43
Van (No. 6):															
Private-----	109.64	126.27	235.91	36.88	272.79	30.00	100.00	155.00	(15.00)	170.00	263.00	160.00	383.00	163.80	383.00
Contract-----	152.28	210.43	362.71	36.73	399.44	35.00	166.65	225.65	(15.00)	249.98	388.68	266.64	621.99	163.80	634.93
Dump (No. 7):															
Private-----	342.56	479.41	821.97	105.14	927.11	100.00	375.00	475.00	(35.00)	556.50	873.00	675.00	1,323.00	438.07	1,323.00
Three-axle combination (No. 8):															
Private-----	346.90	511.37	858.27	84.65	942.92	76.00	400.00	571.00	(45.00)	571.00	970.00	720.00	1,450.00	374.64	1,450.00
Contract-----	415.79	511.37	927.16	84.29	1,011.45	116.00	400.00	587.00	(45.00)	603.00	970.00	720.00	1,450.00	374.64	1,450.00
Four-axle combination, gasoline (No. 9):															
Private-----	555.13	958.82	1,513.95	143.82	1,657.77	76.00	750.00	962.20	(55.00)	962.20	2,040.00	1,350.00	2,940.00	565.60	2,940.00
Contract-----	667.92	958.82	1,626.74	143.26	1,770.00	145.00	750.00	1,001.20	(55.00)	1,001.20	2,040.00	1,350.00	2,940.00	565.60	2,940.00
Four-axle combination, diesel (No. 10):															
Private-----	612.47	690.90	1,303.37	166.40	1,469.77	76.00	545.45	757.65	(55.00)	757.65	2,940.00	981.81	2,940.00	628.08	2,940.00
Contract-----	728.53	690.90	1,419.43	165.63	1,585.06	145.00	545.45	796.65	(55.00)	796.65	2,940.00	981.81	2,940.00	628.08	2,940.00
Five-axle combination, diesel (No. 11):															
Private-----	763.22	941.30	1,704.52	200.26	1,904.78	120.00	744.70	979.70	(55.00)	979.70	3,670.00	1,340.46	3,670.00	843.88	3,880.46
Contract-----	909.28	941.30	1,850.58	199.31	2,049.89	145.00	744.70	1,021.70	(55.00)	1,021.70	3,670.00	1,340.46	3,670.00	843.88	3,880.46
Five-axle combination, diesel (No. 12):															
Private-----	892.60	1,032.24	1,924.84	216.87	2,141.71	170.00	813.95	1,066.45	(55.00)	1,066.45	4,040.00	1,465.11	4,188.64	800.80	4,494.44
Contract-----	1,056.35	1,032.24	2,088.59	215.60	2,304.19	210.00	813.95	1,114.45	(55.00)	1,114.45	4,040.00	1,465.11	4,188.64	800.80	4,494.44
Five-axle combination, diesel (No. 13):															
Private-----	1,416.42	714.30	2,069.44	91.37	2,222.09	296.80	833.35	1,130.15	(243.00)	1,130.15	4,157.50	1,166.69	4,157.50	396.60	4,157.50
Contract-----	1,954.33	714.30	2,607.34	91.37	2,760.00	296.80	833.35	1,185.15	(243.00)	1,185.15	4,157.50	1,166.69	4,157.50	396.60	4,157.50

1/ In 23 States and the District of Columbia, personal-property taxes are not imposed. In three States diesel fuel is not taxed directly. The fees in parentheses are the lowest for the States which impose a personal-property tax.

Table 3.—Average, low, and high road-user and personal-property taxes on selected motor vehicles<sup>1</sup>

25% larger

STATES RANKED ACCORDING TO TOTAL TAXES



STATES RANKED ACCORDING TO ROAD-USER TAXES

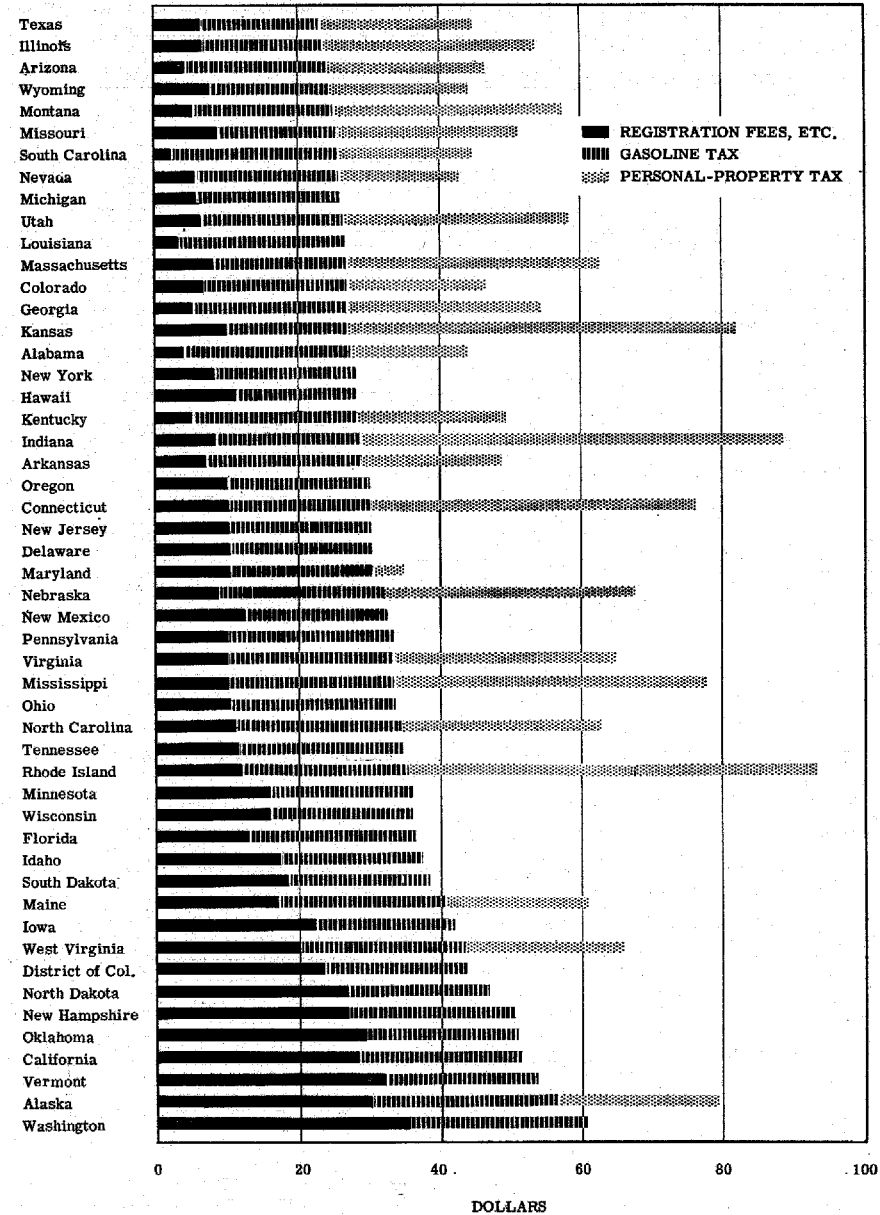


Figure 11.—State road-user and personal property taxes on a very light passenger car (No. 1).

## THE CLASSIFICATION OF ROAD-USER TAXES

---

Historically, road-user taxes have been divided by most authorities into three major groups, the most important consists of fuel taxes and miscellaneous fees incidental to fuel taxation. The second major group, usually termed motor-vehicle revenues, consists of motor-vehicle registration fees and other related fees, some of which are not paid annually (title fees, drivers' licenses, and other revenues of relatively minor importance). The third group, motor-carrier taxes, has in the past consisted primarily of special taxes on for-hire carriers. In recent years, however, the so-called carrier taxes have evolved into a broader, more varied group and are no longer as closely associated with for-hire carriers as they were in earlier years. More and more, these taxes have come to include vehicle-mile, ton-mile, axle-mile, and similar taxes applied without regard to whether the vehicle is used in for-hire service or is in private use. The classification and treatment of mileage taxes is something of a problem. Such taxes have come to be known as "third structure" taxes, a term that is disliked by some authorities on highway finance, but nevertheless one that is being used widely.

In the past, the three major groupings have afforded adequate classification of road-user revenues, although there were borderline instances in which there has been considerable question concerning proper classification. The most common among these borderline cases is the annual registration fee in States that levy higher rates on for-hire carriers. The differential between the registration fees for private and for-hire operation possibly could be considered to be a carrier tax, but it has not been so considered in this study under the theory that carriers' vehicles, as a rule, can be expected to be operated for 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 example for borderline classification is the special registration fee charged for diesel-powered vehicles. An argument can be made for classification of these additional fees as fuel taxes, but they have not been so classed in this study. The important consideration is the overall fairness of the State's tax system, and this must be measured, finally, by the total taxes collected on the vehicles. Although the methods of accounting for, and reporting, tax liabilities sometimes impose additional costs not reflected in the tax payments, no effort was made in this study to determine the amounts or effects of any such costs. Although the effects of the historical development are still present

in the tax structures of many States, the tendency to impose taxes on for-hire carriers that are not imposed on private carriers, or to levy higher rates on carriers, seems to have diminished. In recent years, mileage taxes have been imposed in Colorado, New York, Ohio, and Oregon in avowed attempts to obtain revenues based almost entirely on the vehicles and their use and to make little, if any, distinction between operation of a transportation service for profit and operation incidental to the conduct of any other enterprise. Highway authorities and students of highway and general public finance have shown much interest in these mileage taxes. The fact that nearly half of the States are applying some sort of mileage taxes demonstrates the interest connected with this phase of motor-vehicle taxation.

### Mileage taxes

Mileage taxes can have two distinct advantages: They should yield considerable amounts of revenue; and they should be imposed, in theory, at rates that take into account the value of service received and the cost of providing that service—the cost of highways. Mileage taxes also have at least two major disadvantages. The more important of these, from the States' point of view, is the cost of administration. The cost of establishing and maintaining complete records, weighing stations, and an enforcement staff is substantial and consumes a relatively greater proportion of the revenue collected than do the other two basic revenue producers—the gasoline tax and registration fees. The second disadvantage is the necessity for the vehicle operators to maintain records for filing the reports required under a mileage tax. This can constitute a sizable burden on the vehicle owner over and above the actual amount of tax paid, but the disadvantage may become one of diminishing importance, particularly in States that are members of registration proration compacts. In the proration States vehicle owners and operators must keep complete records of the vehicle-miles of operation of each piece of equipment and send reports of this information to each of the States in which their vehicles are prorated, so there would be little if any additional information required for mileage tax application.

Although tolls collected are, in effect, another form of mileage tax, they are omitted from this study. Although tolls have played an important part in financing a few of the principal routes of interstate traffic, their effects are largely concentrated in the eastern half of the United States. Also, the use of toll roads would vary

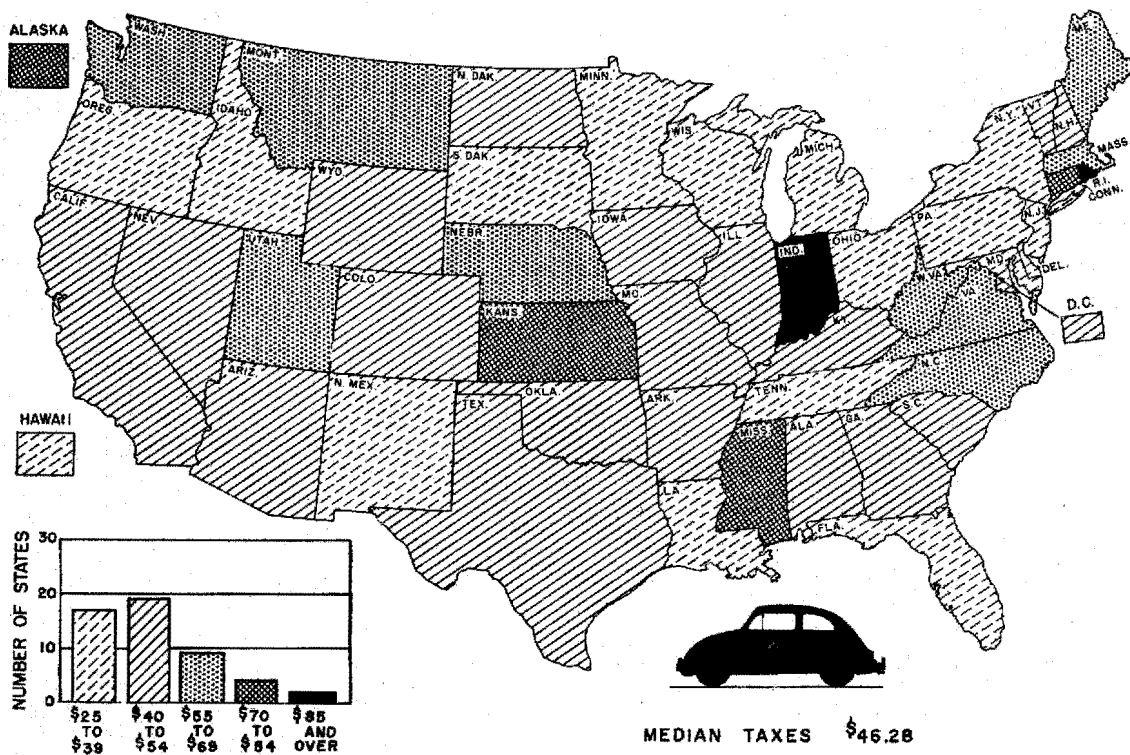
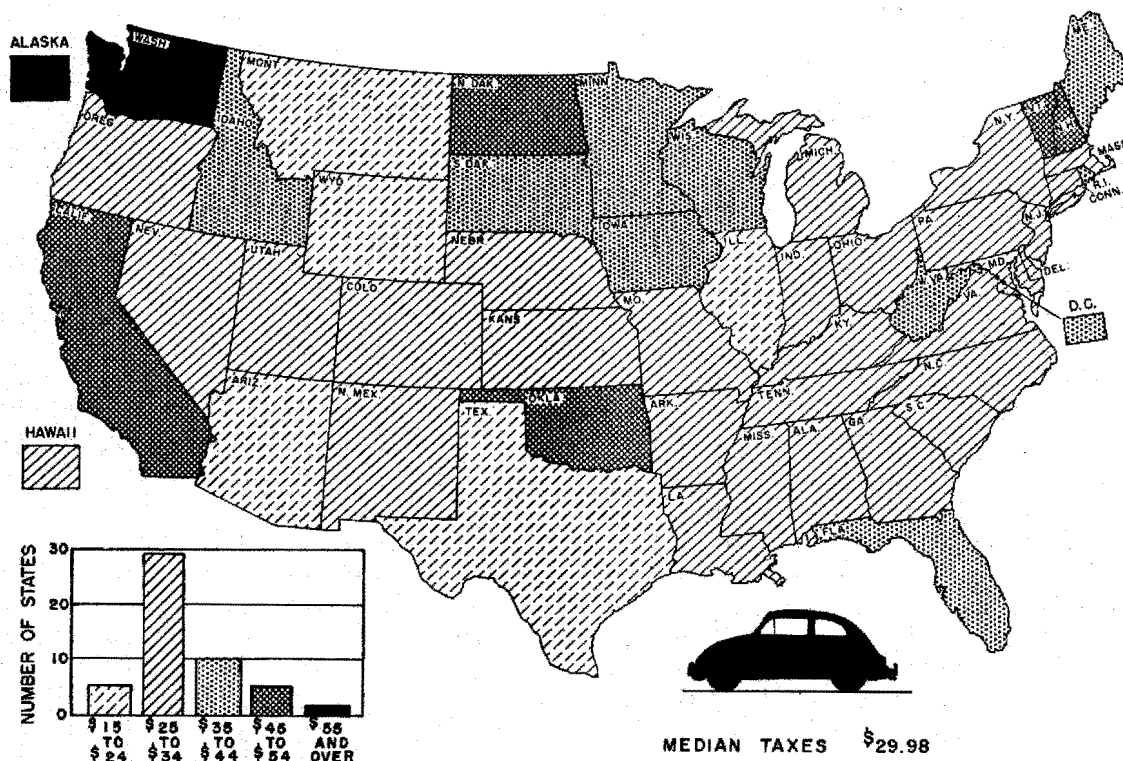


Figure 12.—State road-user and personal-property taxes on a very light passenger car (No. 1). State road-user taxes only (top); total taxes (bottom).

so greatly among different users and different classes of vehicles that the application of acceptable factors for general estimates and comparisons is impossible within

the scope of this study. Furthermore, the use of toll routes (and the payment of tolls) is optional rather than mandatory.

## CARRIER TAXES

---

In the tax comparisons and discussions in this study of vehicles in motor-carrier service, gross receipts taxes and other levies that are imposed on general business—levies that are not limited to motor carriers—have been excluded. 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.

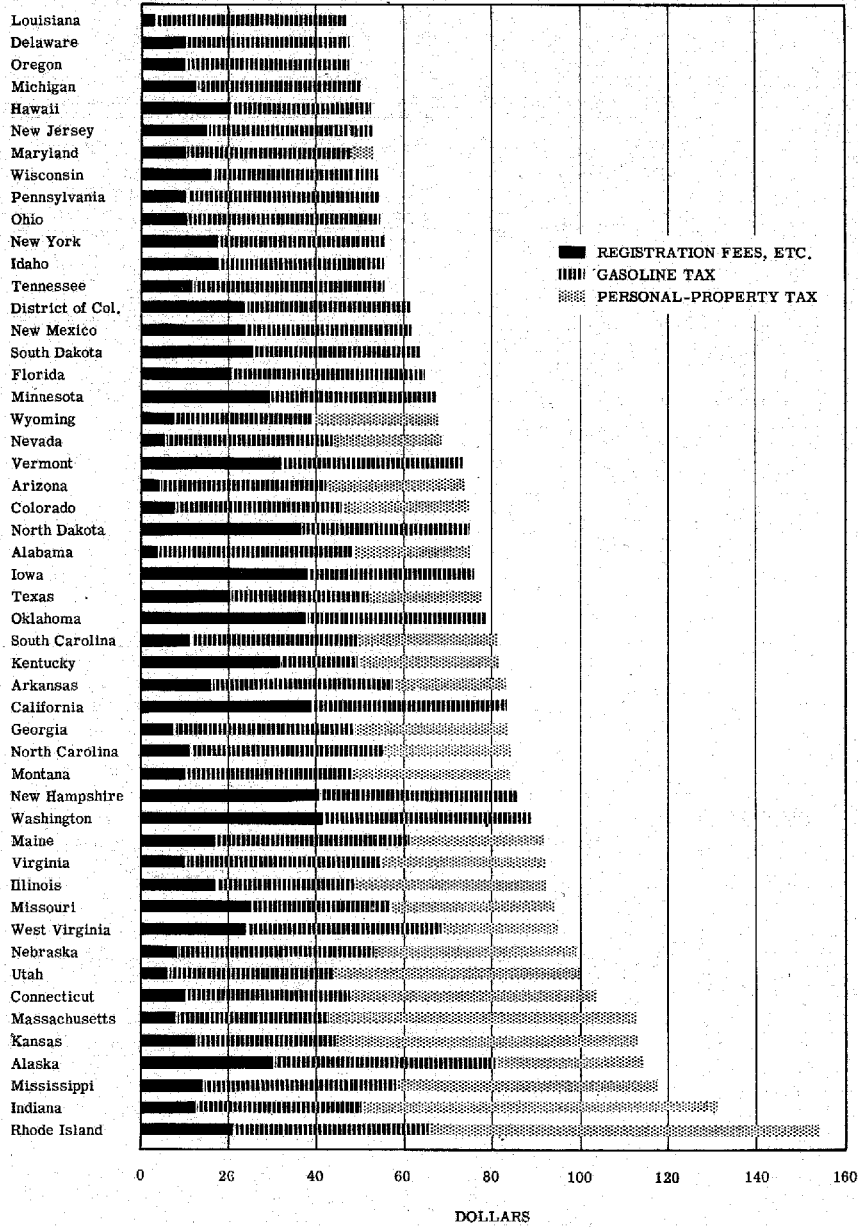
The point at which a road-user tax becomes a "carrier tax" is difficult to determine. Care should be taken when comparing the carrier taxes of the several States. Many of the States have special registration classes for vehicles used in contract (for-hire) service. Most of the fees in the special registration classes are substantially greater than the registration fees for vehicles in private (not-for-hire) service. Although the difference is technically classed as a part of the registration fee, it is in reality a special carrier fee. There is, of course, the justifying factor that vehicles in carrier service usually operate for a much greater mileage than those in private service, thus reducing the per-mile cost of their registration fees.

A majority of trucks are used in ordinarily private service, but even these are subject to mileage or other

carrier taxes under some conditions. Such variations in the tax structure of the States made it necessary, in this study, to make a few arbitrary decisions based on judgment on the inclusion or exclusion of these special levies.

A general policy followed was to include only the taxes that must be paid on almost all of the vehicles in a given group. For example, the laws of some States are written so that practically all vehicles of more than 1½ tons (manufacturer's rated capacity) must pay certain mileage or compensatory taxes whether used in private or contract operation. In the same States, many vehicles of 1½ tons or less are not subject to the tax. In such cases, the tax is shown only for the heavier vehicles, because the purpose of the study is to present a comparison of tax burdens on certain selected vehicles rather than to include all of the taxes on all vehicles. Undoubtedly, many of the larger trucks traveling in interstate commerce are subject to higher taxes than are reported in this study, and they 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.

STATES RANKED ACCORDING TO TOTAL TAXES



STATES RANKED ACCORDING TO ROAD-USER TAXES

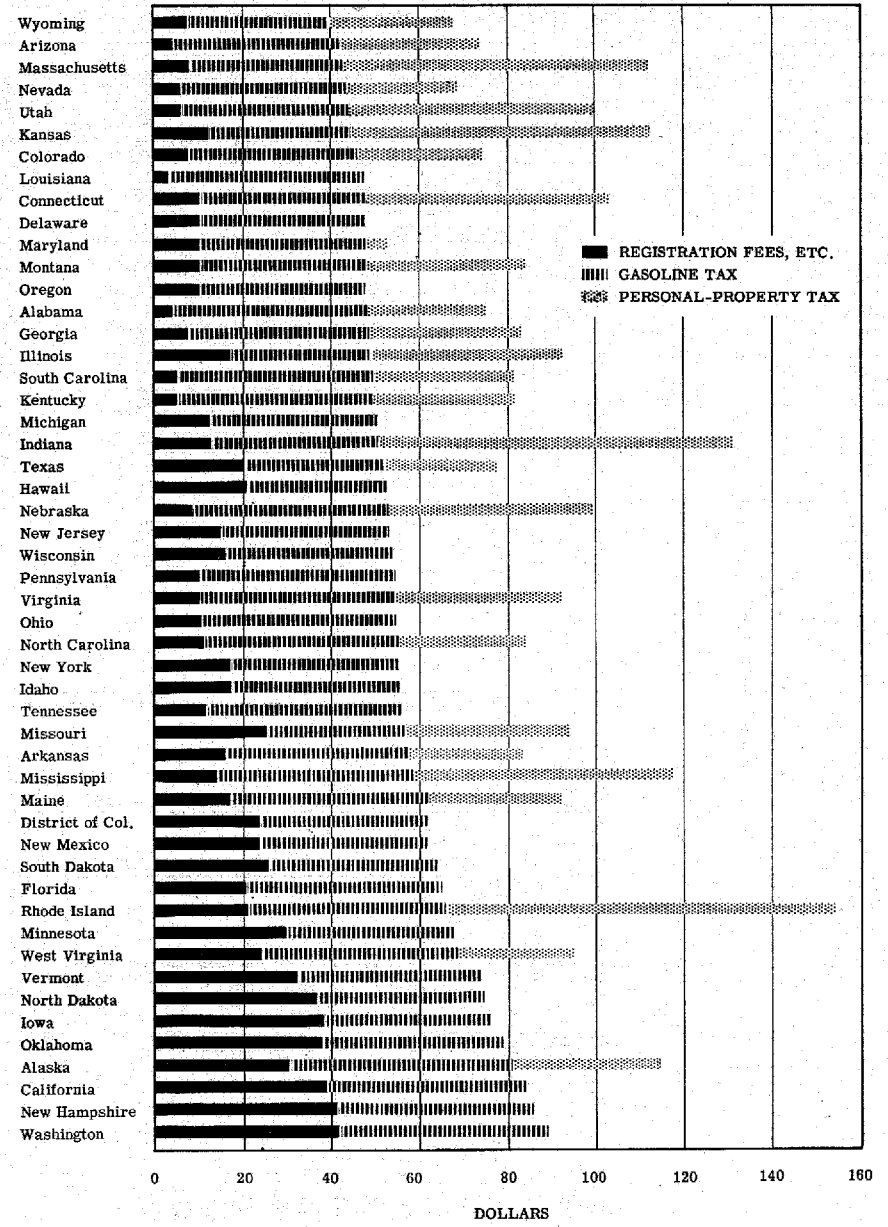


Figure 13.—State road-user and personal-property taxes on a mediumweight passenger car (No. 2).

## PROPERTY TAXES

---

In most States property taxes on motor vehicles have little or no direct relation to the use of highways, and the revenues from these property taxes 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 they comprise such a large portion of the total taxes paid on motor vehicles in some States, that their inclusion in this study was necessary in order to obtain equitable comparisons. The registration fees for individual vehicles vary considerably among the States, and property taxes in some instances greatly exceed the registration fees paid, but when property taxes and registration fees are considered together the differences among the States are generally smaller.

Figure 4 shows 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, the registration fees of many 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. The relation of property taxes to registration fees and total taxes on motor vehicles is shown in tables 4-15.

The valuation of motor vehicles for tax purposes is generally conceded to be much closer to market value than the valuation of other personal property—household furnishings for example—subject to the same taxes. It is also probable that motor vehicles constitute a substantial portion of taxable personal property in many jurisdictions. Therefore, although this study is not directly concerned with personal property taxes per se, they are of considerable importance in the analysis of the total tax burden on the motor vehicle either by those concerned solely with highway finance or with research in broader fields of public finance.

For a mediumweight car (No. 2) the registration fee in Pennsylvania is \$10, \$4 greater than the \$6 fee levied on the same type of vehicle by Massachusetts. In Pennsylvania, however, the flat registration fee of \$10 applicable to all automobiles is in lieu of all other ad valorem taxes, whereas in Massachusetts vehicles are subject to property taxes in addition to registration fees. The addition of the \$69.30 property tax to the \$6 registration fee in Massachusetts makes a total of \$75.30, nearly eight times as much as the Pennsylvania registration fee and far greater than the registration fee alone of

any State. In Iowa, the registration fee on the mediumweight sedan is \$38, a larger fee than for any other State, but Iowa levies no property tax on automobiles. Seven other States impose a registration fee of \$25 or more on the mediumweight automobile cited in this study, and only two of them levy property taxes on the vehicles. In one of these States, Alaska, cities now generally tax motor vehicles as personal property, but they did not do so in 1960. In the other State, Missouri, automobiles are registered according to their taxable horsepower, and the mediumweight passenger car in this study has a substantially higher taxable horsepower than the comparable car in the 1960 study. It is interesting to note that in Missouri the taxable horsepower of both the mediumweight and the heavy passenger cars in the 1964 study are rated for the same registration fee.

### Relative Importance of Property Taxes

An excellent illustration of the relative importance of property taxes as a part of the total tax burden on the automobile owner is given in table 4. Massachusetts, which has a property tax on motor vehicles, ranks 6th highest among the States in total taxes on the mediumweight automobile but drops to 49th place when a comparison is made after property taxes have been excluded. Iowa and Oklahoma have no property taxes and rank 26th and 24th respectively in total taxes on this vehicle, but rise to 4th and 5th places respectively when property taxes are excluded. These are only a few of the many significant comparisons that can be made from the tables.

Another factor that demonstrates the close relationship between registration fees and property taxes is the reduction of the registration fee in several States according to the age (and value) of the vehicle. Eight States use the factor of age in determining the registration fee on passenger cars.

The property taxes that are given in the tables, except for the farm vehicles, include all such taxes levied by the State, county, city, or other local government unit in which the vehicle is domiciled, and these 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 a typical, rural agricultural community in the State. In a few States where uniform Statewide property evaluation



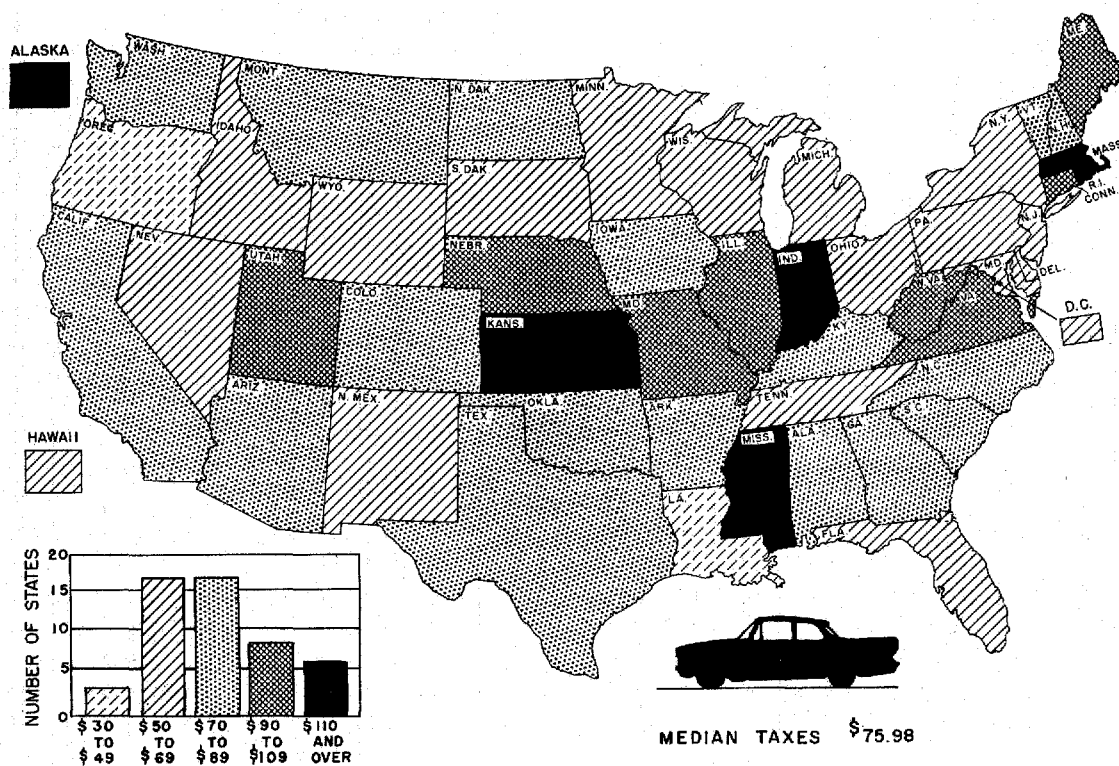
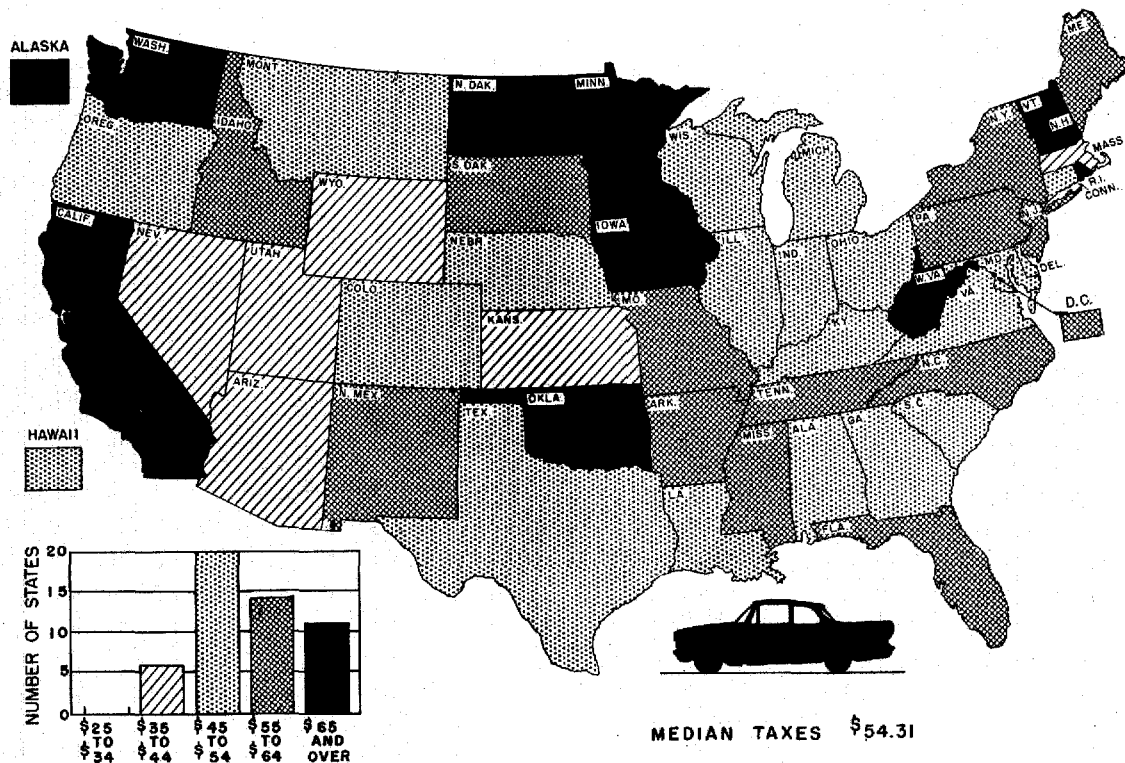


Figure 14.—State road-user and personal-property taxes on a mediumweight passenger car (No. 2). State road-user taxes only (top); total taxes (bottom).

and State rates were in effect in all jurisdictions there is no difference between property taxes on farm vehicles and vehicles registered in the State capital.

In two States—California and Washington—property taxes on motor vehicles have been replaced by “in lieu” taxes. These taxes have many characteristics of prop-

erty taxes but, as neither the levies nor the distribution of their proceeds are directly related to the jurisdiction in which they are collected, they have been classified as road-user imposts. In both of these States, the State courts have ruled that the in lieu taxes are not property taxes.

## TYPES OF SERVICE

---

Most States levy distinctly different tax rates for commercial vehicles operated privately (not for hire), as contract carriers (for hire), and in farm service. Information was therefore obtained and tabulated separately for all vehicles in private operation, for the pickup and stake trucks (Nos. 4 and 5) in farm service, and for the stake and van trucks (Nos. 5 and 6) and all combinations (Nos. 8-13) in contract carrier service. Vehicles in private operation are those used solely by the vehicle owner for his transportation or for carrying his own goods 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, were not included in this study because of the more complex tax schedules and forms of regulation, and because their operation is predominantly in interstate commerce.

The farm-service classification includes vehicles registered at a reduced fee without restriction as to the highways they may use. Provision for reduced fees for farm trucks in different forms is in effect in 30 States. Farm vehicles registered, by some States at a nominal charge imposed as the sole registration fee and license, for restricted operation on or in the immediate vicinity of the farm have not been included in this study.

### *Farm Service*

Provision for registration of farm trucks at a reduction of as much as half of the regular fee for private trucks is common but, as shown in tables 5 and 6, some States do not allow such large reductions and some allow considerably more. The registration fee reductions for farm vehicles vary not only among the States but also vary somewhat for vehicles of different capacities,

this can be seen from a comparison of figures 7 and 8. Many farm trucks are in the lighter weight groups, and what may at first glance appear to be relatively minor concessions in the form of reduced registration fees can in fact be of major importance from a revenue standpoint, particularly in predominantly agricultural States. In 6 States as indicated in figure 8, the 15,000-pound stake truck (No. 5), if classified as a farm truck, is allowed a reduction of more than 75 percent in registration fee; in 11 States the reduction is from 50 to 75 percent; and in 13 States the reduction is less than 50 percent.

A comparison of the regular and farm registration fees in each State for vehicle No. 5 is shown in figure 10. In Nebraska, the regular registration fee for this vehicle is \$85.50, but a farmer can register the same truck for \$12.50. Larger or lesser differences than those shown in figure 10 occur in some cases for vehicles of different types or weights. In Kentucky, farm trucks of 22,000 pounds or less gross weight can be registered for \$5, but a \$135 registration fee is required for a 22,000-pound vehicle in private use. In 1962, nearly 53 percent of Nebraska's and 39 percent of Kentucky's trucks were registered at reduced farm rates. Similar situations existed in other States, but most of the reductions were not as large.

In 1962, all 30 States having farm registration classifications reported farm truck registrations separately. In three of these States, farm trucks constituted more than half of all trucks registered, and farm trucks exceeded 30 percent of all trucks in twelve States. When considering the equity of special reduced registration rates for farm trucks, it should be remembered that farm trucks probably average fewer miles per year than other trucks, and the reductions are not as large on a cents-per-mile basis as they might appear from the comparisons shown in tables 5 and 6, and in figures 7 and 8.

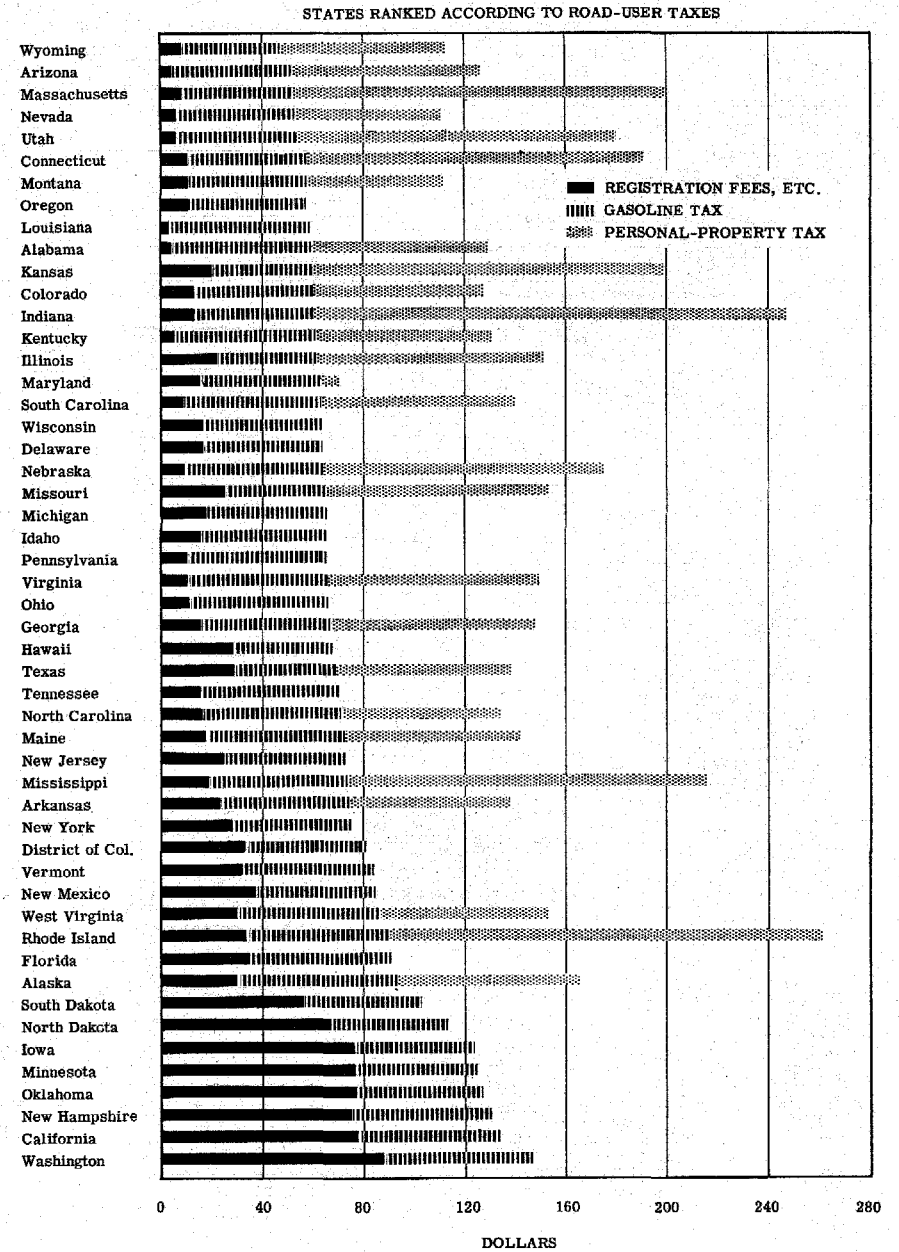
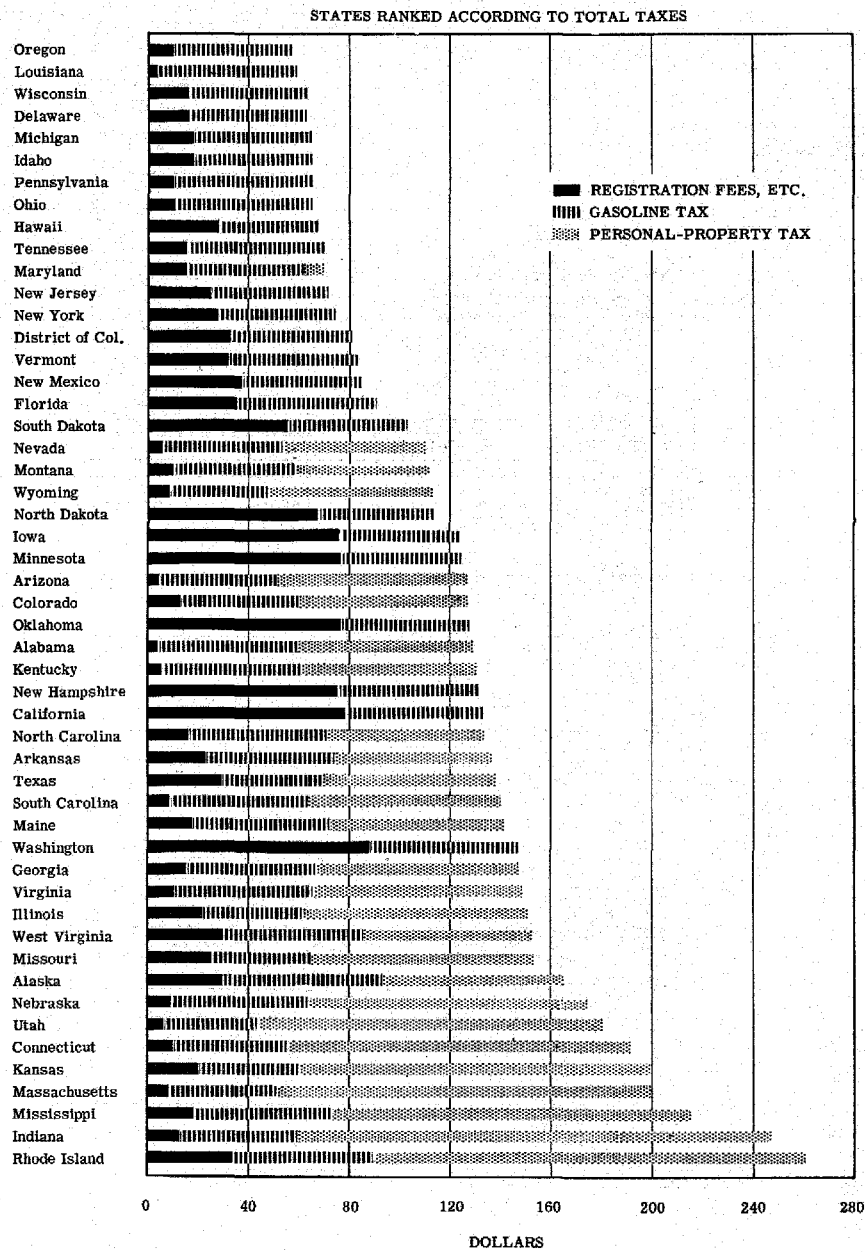


Figure 15.—State road-user and personal-property taxes on a heavyweight passenger car (No. 3).

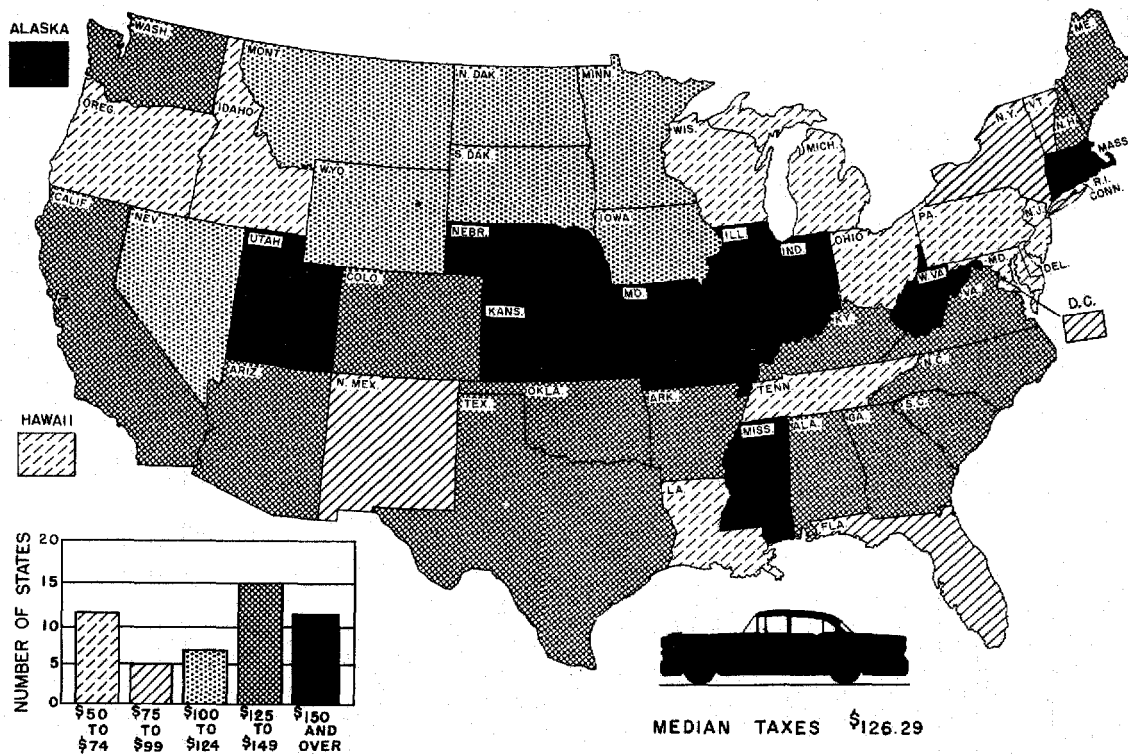
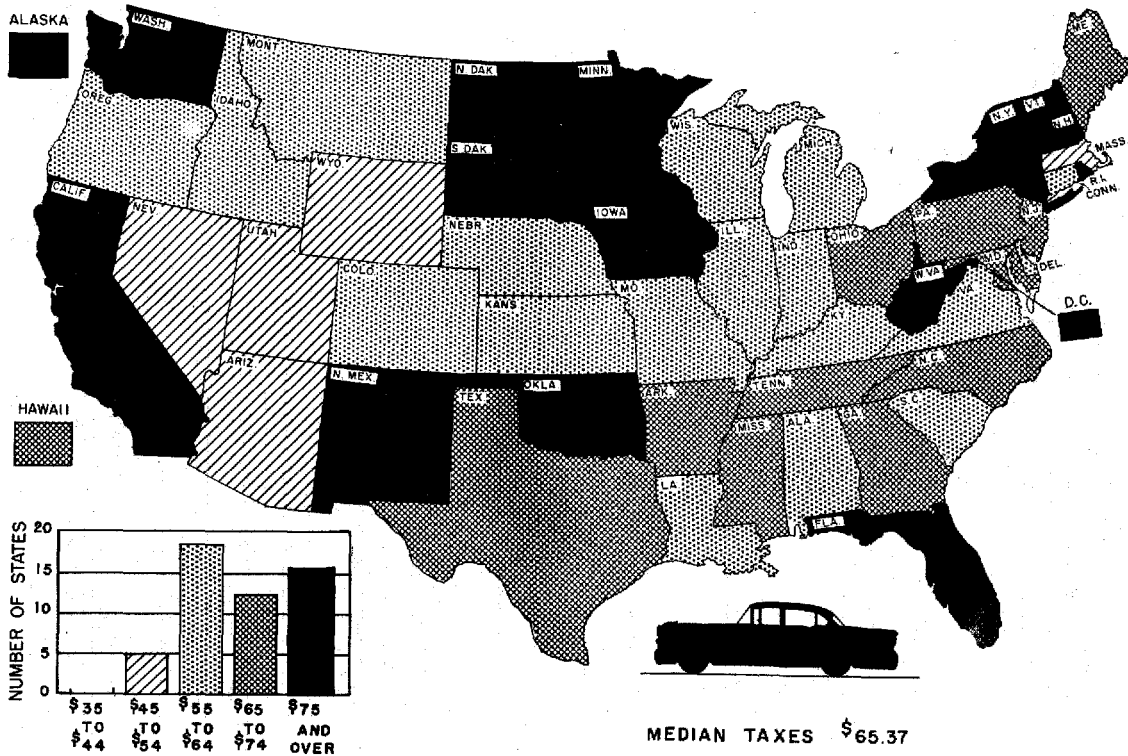
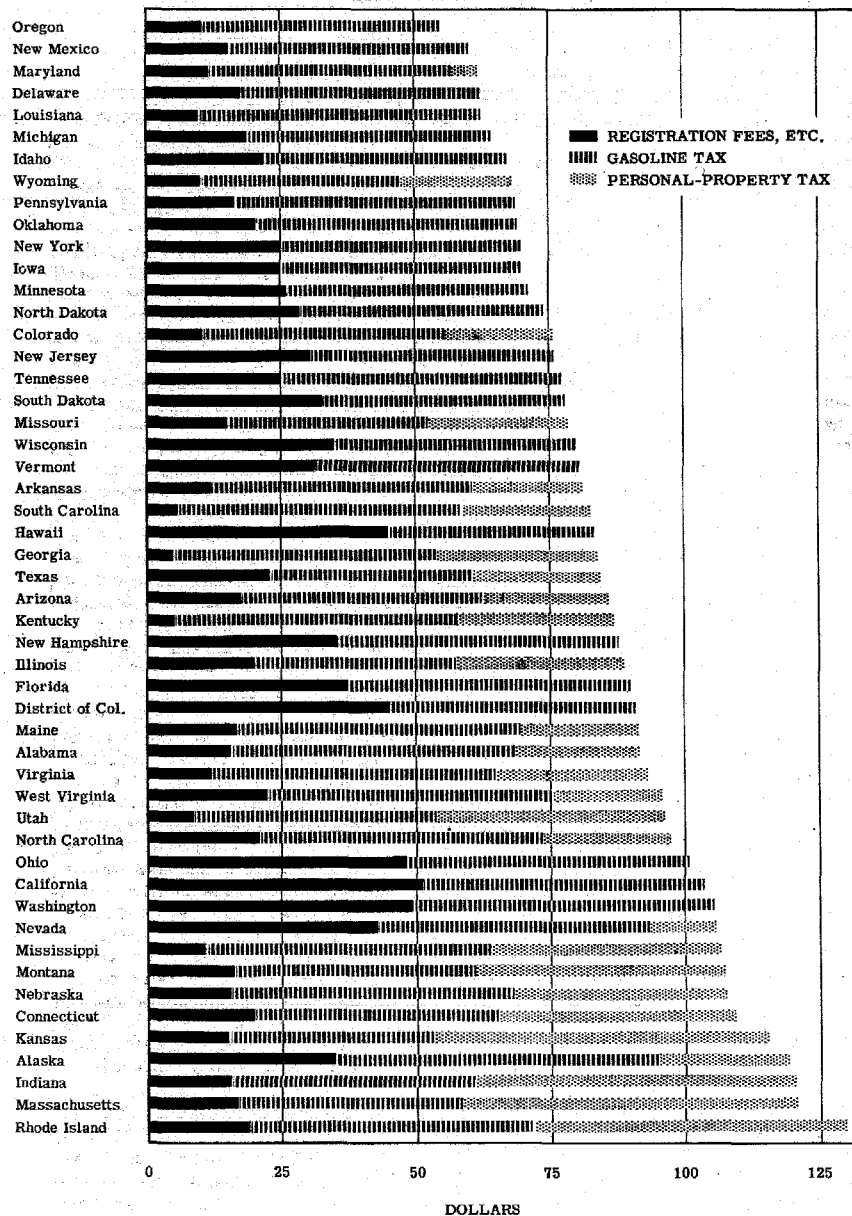


Figure 16.—State road-user and personal-property taxes on a heavyweight passenger car (No. 3). State road-user taxes only (top); total taxes (bottom).

STATES RANKED ACCORDING TO TOTAL TAXES



STATES RANKED ACCORDING TO ROAD-USER TAXES

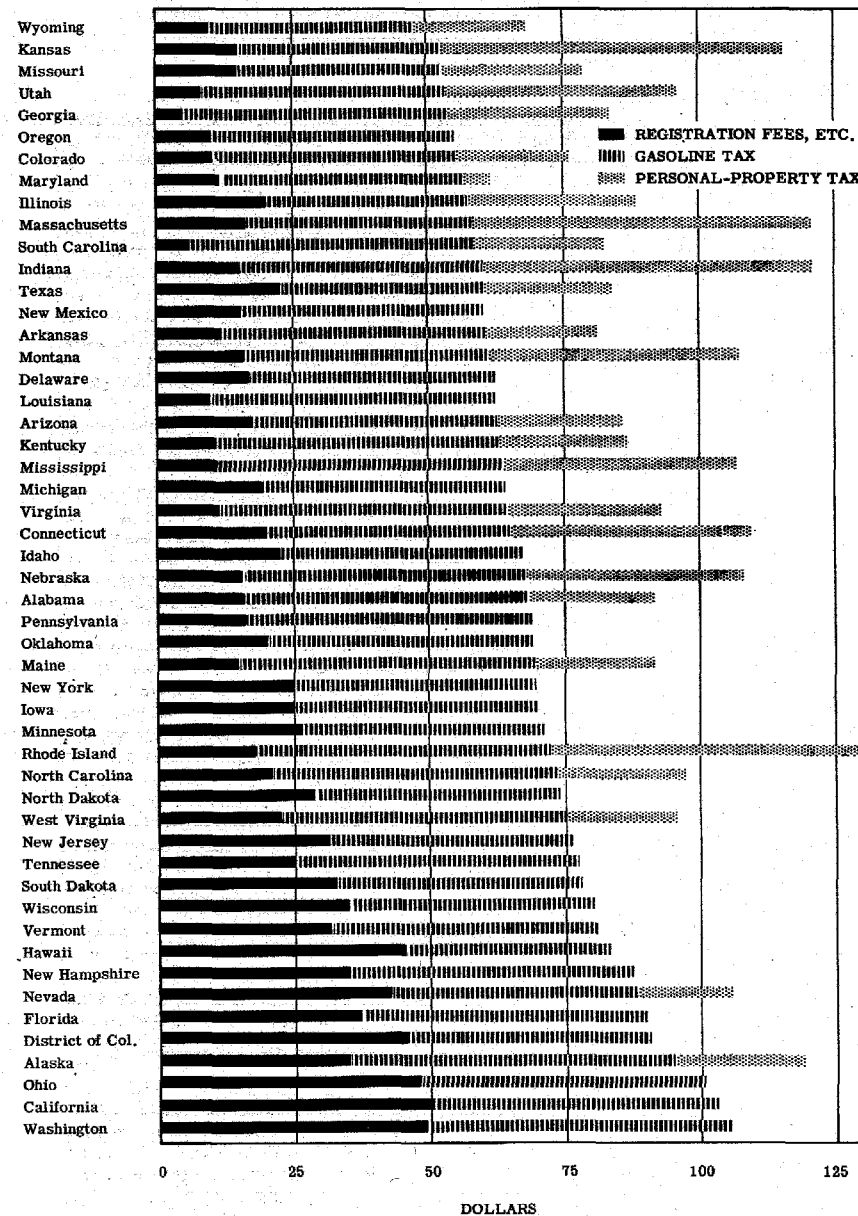


Figure 17.—State road-user and personal-property taxes on a pickup truck (No. 4), in private use.

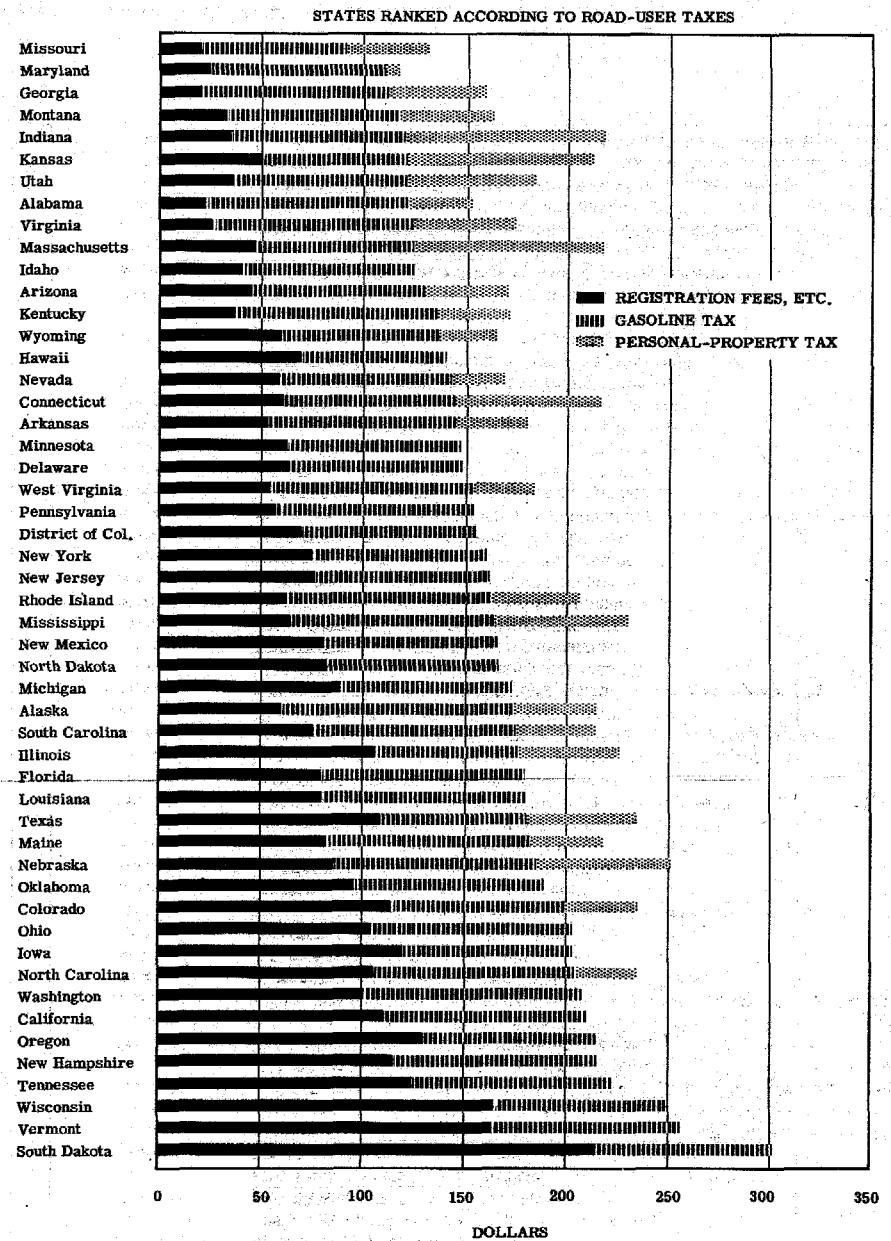
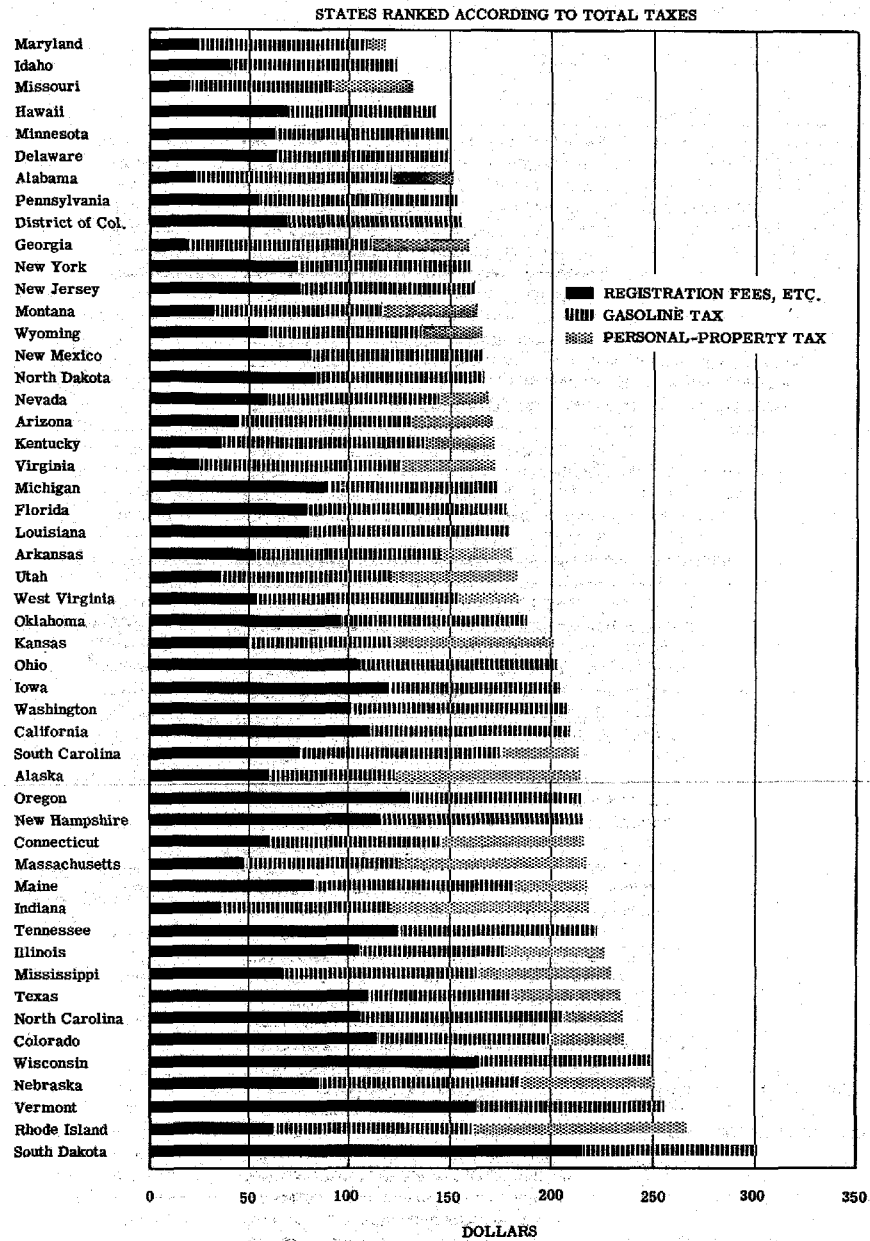


Figure 1B.—State road-user and personal-property taxes on a 15,000-pound stake truck (No. 5), in private use.

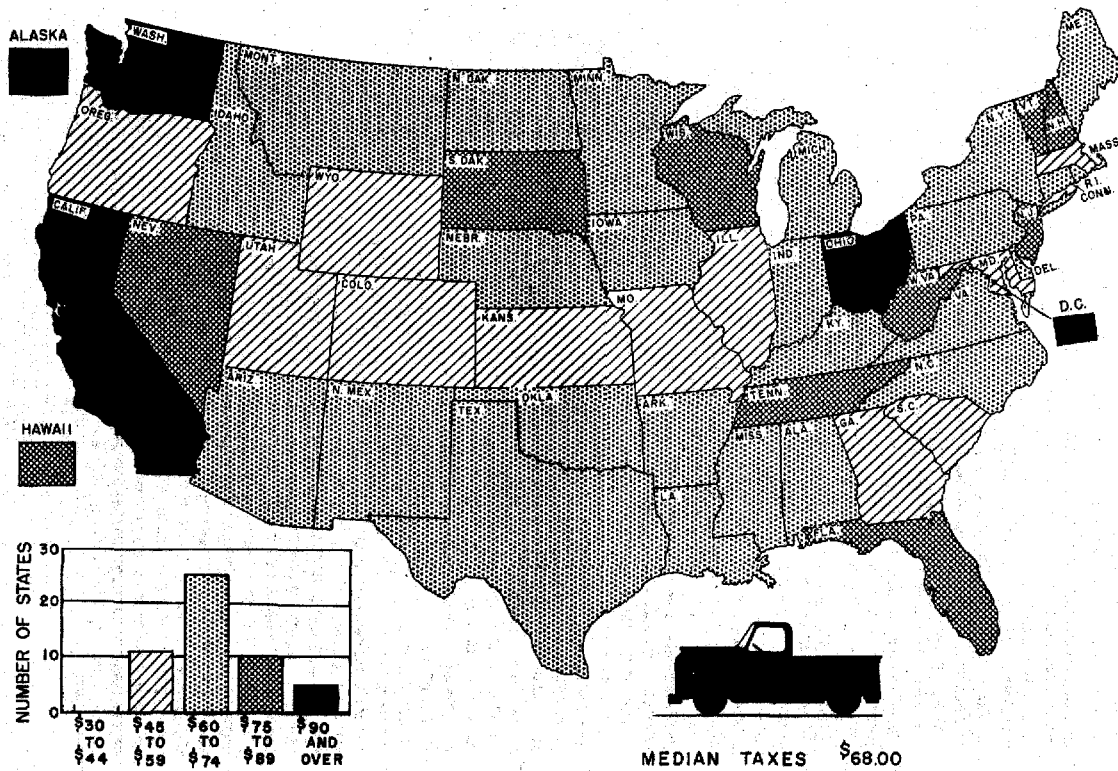


Figure 19.—State road-user taxes on a pickup truck (No. 4), in private use.

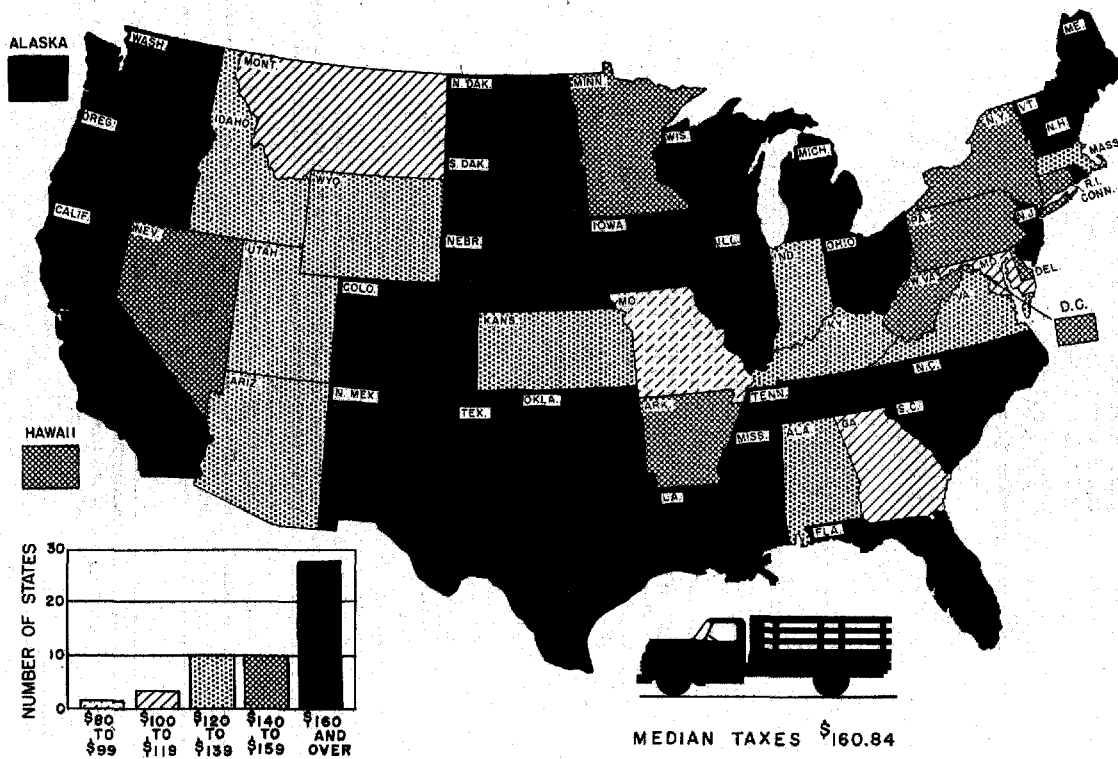


Figure 20.—State road-user taxes on a 15,000-pound stake truck (No. 5), in private use.

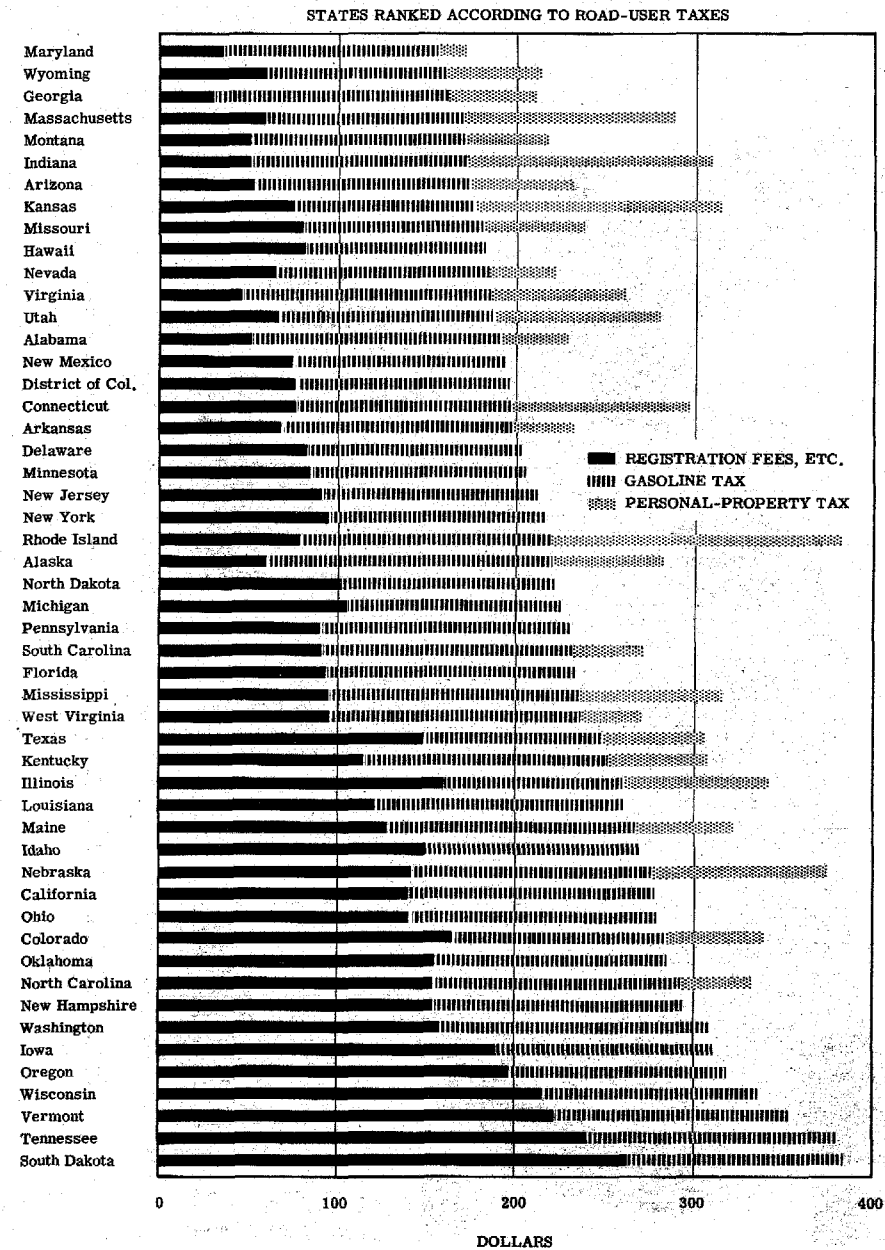
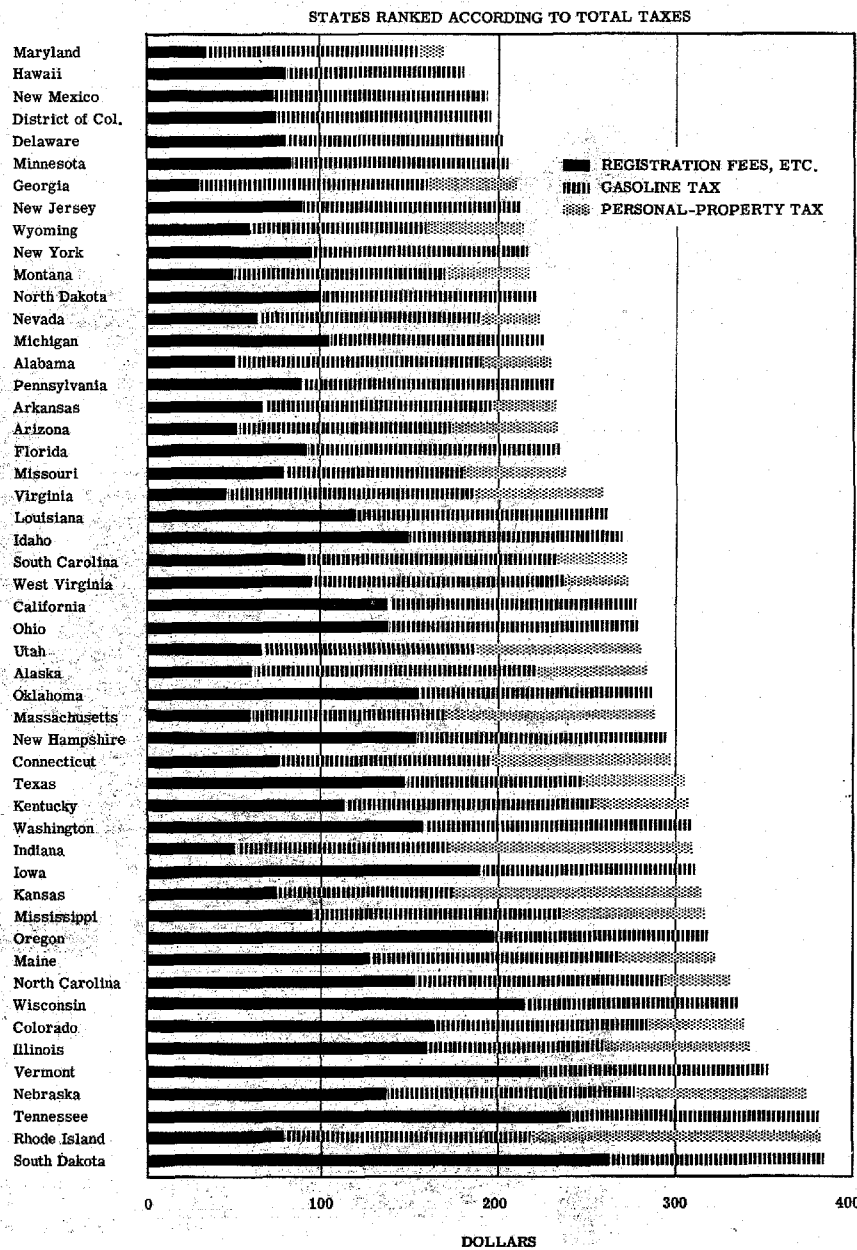


Figure 21.—State road-user and personal-property taxes on a 19,000-pound van truck (No. 6), in private use.



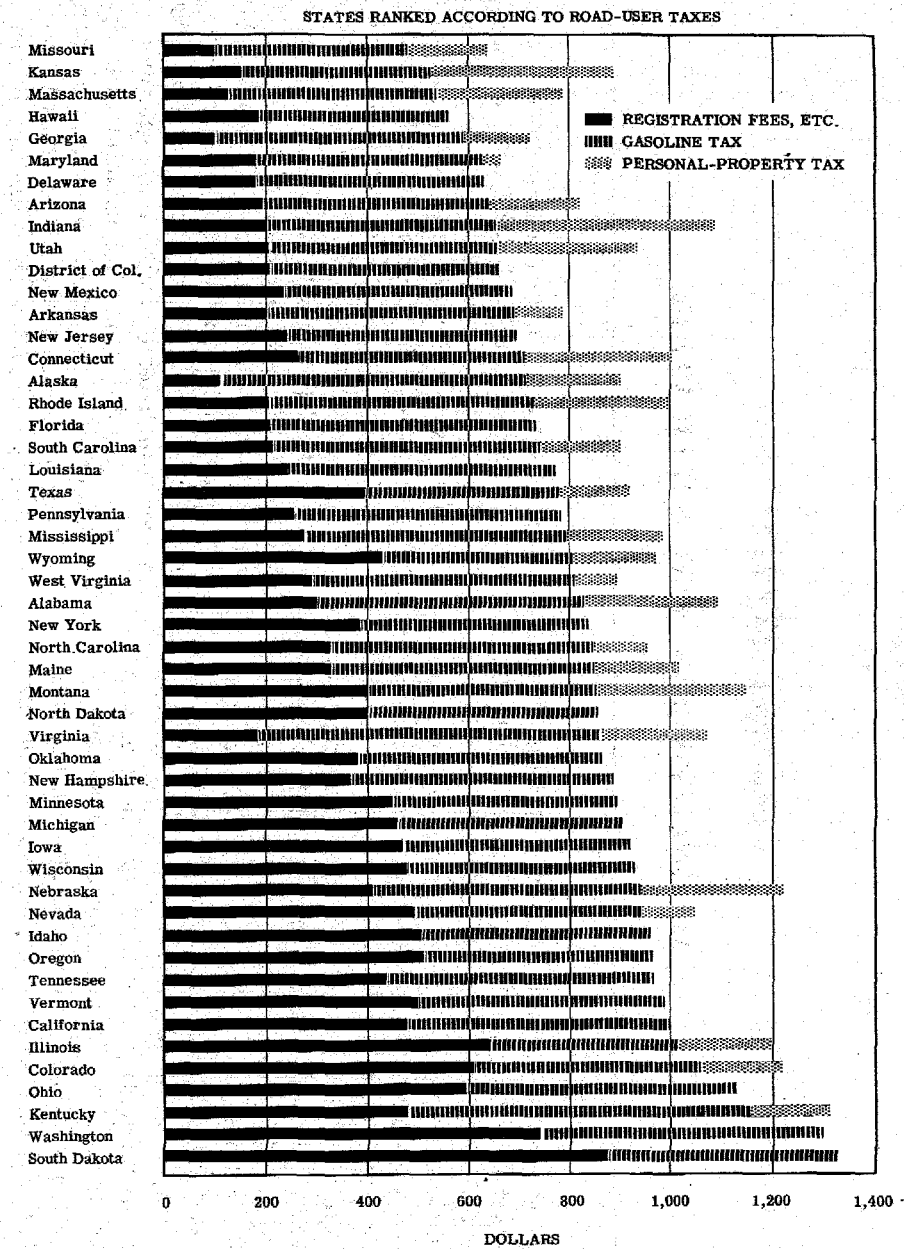
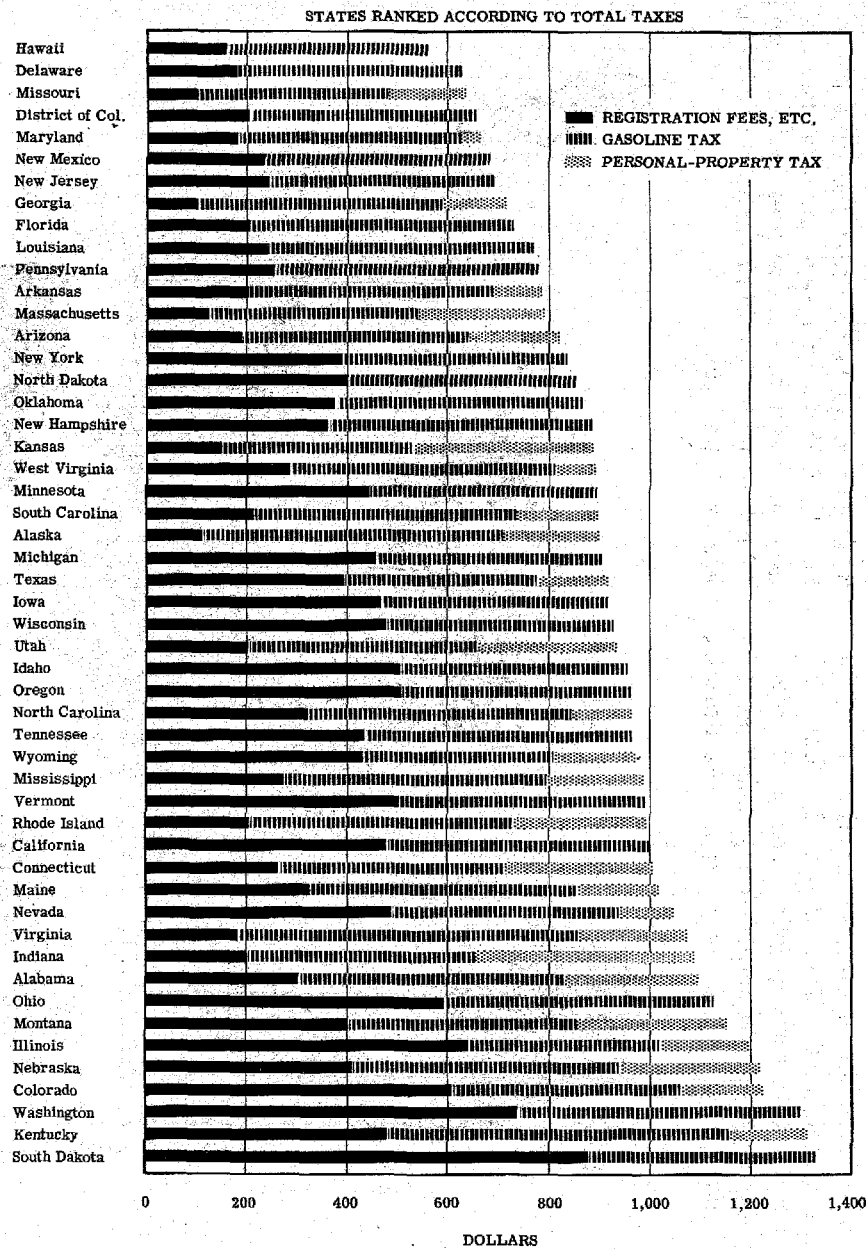


Figure 22.—State road-user and personal-property taxes on a 40,000-pound tandem-axle dump truck (No. 7).

## ADMINISTRATION AND APPLICATION

Although this study is based primarily on legislation, it is appropriate to call attention to administration and enforcement as they affect vehicle taxation. The interpretation and application of road-user taxes in one State as compared with another having similar tax laws may easily cause substantial tax differences on similar vehicles in similar service. The registration revenues of some States would undoubtedly increase if there were rigid insistence that vehicles be registered for the full weight they actually carry. This is not to be confused with size and weight limit enforcement. Practices are understood to vary considerably with respect to registration. In an exhaustive comparison of road-user taxes in different States, it would be pertinent to examine practices and interpretations in the application of the existing statutes, but in this study no allowance was made for such differences.

The payment of motor-fuel taxes is another item that merits close examination. Most persons familiar with the subject agree that some gasoline used on the highways escapes taxation (through refund), and that the amounts undoubtedly vary greatly among the States.

There is no way of knowing how much revenue escapes through excessive refund claims, but it is probable that the total is considerable. During 1962, three States refunded or exempted more than 25 percent of the tax on motor fuel used. In three additional States the refunds and exemptions accounted for between 15 and 20 percent of the tax. In five other States, claims for nonhighway use of fuel represented from 10 to 15 percent of all motor fuel used. Experience of this kind undoubtedly has been an influence on some State legislatures that have tended to levy larger-than-average ownership taxes (registration fees, sales taxes, and associated fees) rather than taxes on vehicle use (gasoline taxes).

Another subject worth consideration is the collection of diesel-fuel taxes. There appear to be many ways of avoiding or evading the tax on diesel fuel, and State authorities charged with collecting it are in general agreement that a considerable amount escapes taxation. The authorities believe that the situation is improving, but the fact that kerosene and some heating oils can be used as diesel fuel substitutes makes it probable that collection of the tax will remain an administration problem for some time.

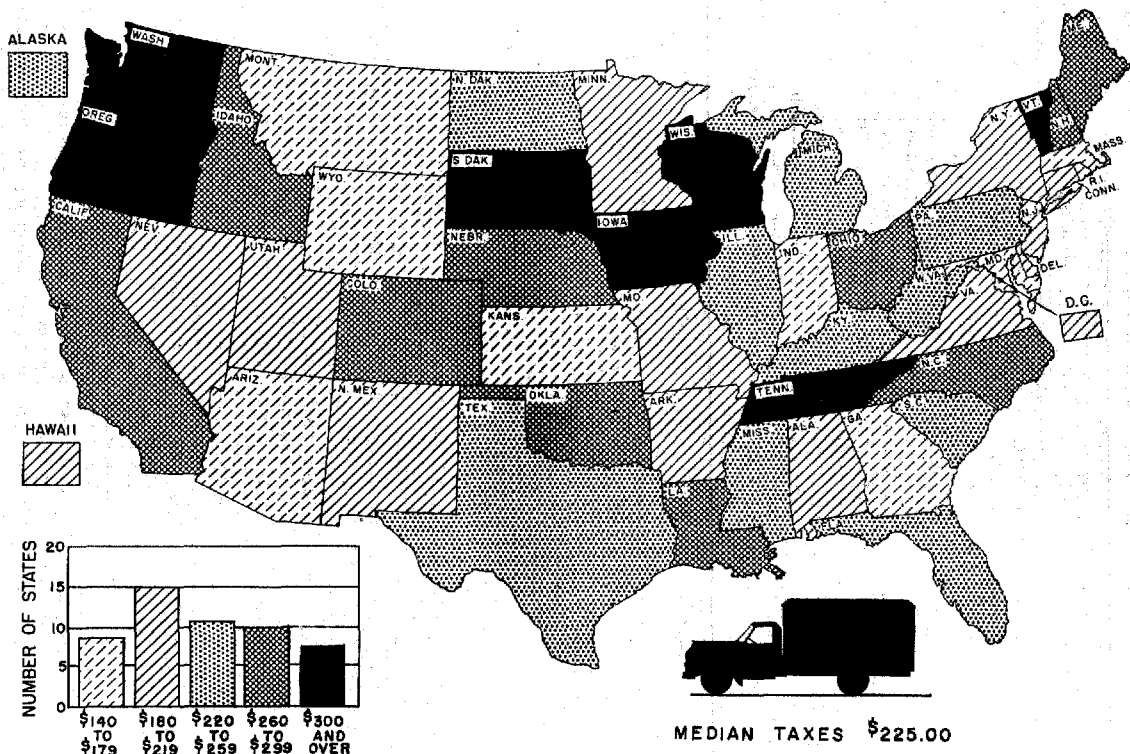


Figure 23.—State road-user taxes on a 19,000-pound van truck (No. 6), in private use.

## SUMMARY OF COMPARISONS

General subjects have been discussed in the foregoing sections rather than specific vehicles, except for the discussion of rates on farm vehicles. It would be pointless to include in this publication a full discussion of each of the tables and figures presented as they speak for themselves; but there are comparisons and items of special interest in connection with some of the vehicles that do merit special attention. In addition to the tables and bar-chart figures that show total taxes and road-user taxes ranked by States for each of the selected vehicles, maps have been included that show the amounts of taxes paid for each vehicle. In each map figure the broad range of tax payments is divided into class intervals, and the number of States in each tax class interval is shown in a frequency diagram that accompanies each map.

**Vehicle No. 1, very light passenger car** (table 4, figures 11 and 12).—Registration fees for the very light passenger car range from \$2 to \$32, and total road-user taxes (excluding property taxes) range from \$23 to \$60. As this vehicle is assumed to use 333 gallons of gasoline a year, each cent of a State's gasoline tax rate amounts

to a levy of \$3.33 during the course of the year, or about 6½ cents a week.

Sixteen States have property taxes that alone equal or exceed the \$23 total of the road-user taxes paid in the State ranking lowest. The property tax shown is for the State's capital city, however, and undoubtedly it usually exceeds the average for the State. In more than half of the States, the highway-user taxes on vehicle No. 1 fall between \$25 and \$34. Even so, the States in this tax group are fairly evenly distributed throughout the United States, and no major geographical concentrations are apparent in any tax class interval.

**Vehicle No. 2, mediumweight passenger car** (table 4, figures 13 and 14).—The vehicles represented by this passenger car account for the vast majority of all automobiles. As automobiles outnumber trucks and buses by about five to one, this group of automobiles alone accounts for substantially more revenue in road-user taxes than all trucks and buses combined. Differences between the road-user taxes on very light and mediumweight automobiles are not great. The registration fees for vehicle No. 2 range from \$4 to \$38. In nearly half

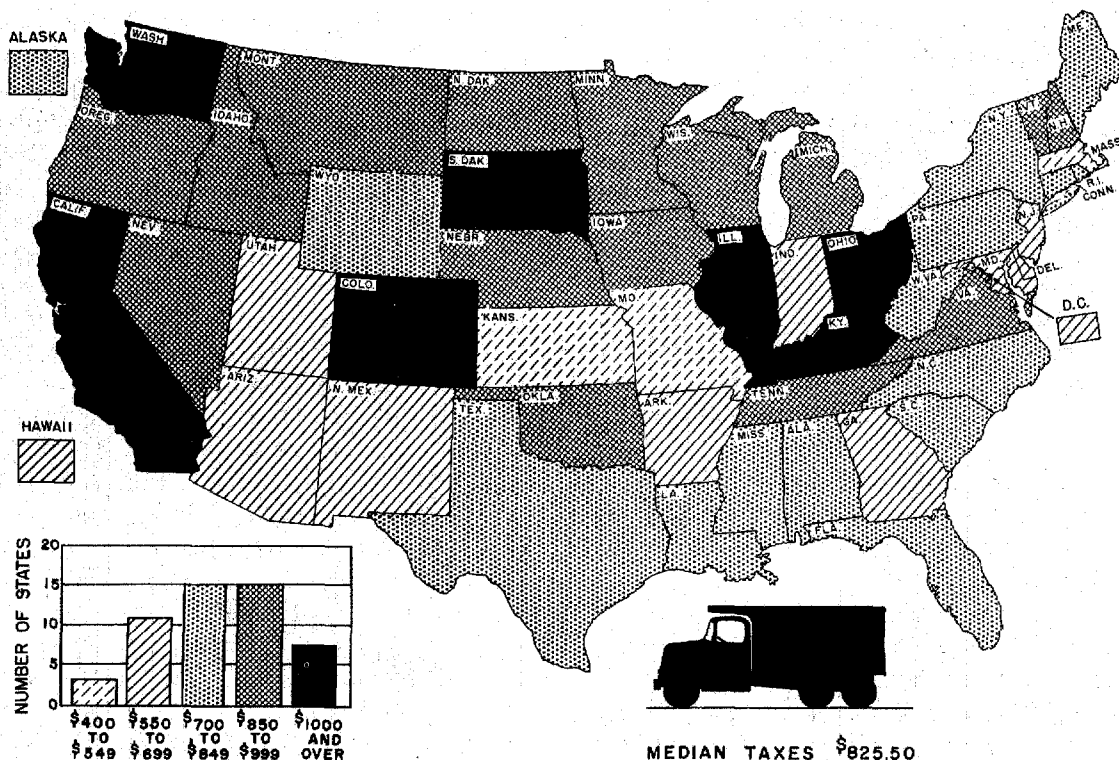


Figure 24.—State road-user taxes on a 40,000-pound tandem-axle dump truck (No. 7).

of the States the total road-user taxes (excluding property taxes) on the mediumweight automobile, are less than \$52 per year or \$1 per week. In the State imposing the highest road-user taxes on this vehicle, the annual amount paid is \$89.

**Vehicle No. 3, heavy passenger car** (table 4, figures 15 and 16).—The registration fee for this vehicle ranges from \$3 to \$77, and averages \$22. In 5 States the registration fee is \$50 or more, and in another 12 States is \$25 to \$50. In nearly every State that levies a property tax on this vehicle the annual registration fee is relatively low, but the total cost to the owner, because of the property tax, is substantially more.

Unlike vehicles Nos. 1 and 2, there is no well-defined modal road-user "total tax" class for the heavy passenger car. Even when property taxes are added, no significant pattern of tax application is shown by the distribution of States among the tax classes, either numerically or geographically.

**Vehicle No. 4, pickup truck** (table 5, figures 17 and 19).—The registration fees for the pickup truck in private use are generally higher than those for passenger cars. The national average registration fee for this vehicle in private use is \$20 compared with \$15 for the mediumweight passenger car. However, large numbers of pickup trucks are registered at reduced farm rates. The lowest registration fee for the pickup truck in unlimited operation in any State is \$2, and this rate applies to farm service only. In only three States are the registration fees for the pickup in ordinary (nonfarm) service less than \$10. The highest registration fee for the pickup truck in private (nonfarm) service is \$48 compared to \$10 for a mediumweight automobile in the same State. Although the total taxes on each pickup truck are relatively small as compared with taxes on heavier vehicles, the large number of pickup trucks makes this an extremely important category as a source of revenue.

**Vehicle No. 5, 15,000-pound stake truck** (table 6, figures 18 and 20).—The registration fees for vehicles in the 15,000-pound group are substantially higher in some States than the fees charged on automobiles and pickup trucks. In 1964, the stake truck could be registered in six States for fees of \$25 or less. At the other end of the scale, the registration fee for this vehicle is \$165 in two States and exceeds \$100 in six other States. Here again the farm vehicle rates offer substantial fee reductions in many States, including the two having the highest registration rates.

In contrast to the heavier trucks, many vehicles are registered in the approximate weight range represented by this 15,000-pound unit (the group commonly classed as 1½-ton manufacturer's rated capacity). The median of road-user taxes for this vehicle (\$160.84) falls in the \$160 and over tax grouping in figure 20. More than half of the States are in this group.

**Vehicle No. 6, 19,000-pound van truck** (table 7, figures 21 and 23).—The average registration fee for the 19,000-pound van truck in private service is \$93; the lowest fee is \$19, and the highest, \$240. The \$19 fee is

accompanied by both a property tax and a mileage tax, but the \$240 fee is not supplemented by either of these other taxes. Other road-user taxes—those not included in the motor-fuel or registration groups—become more in evidence on the vehicles in the 19,000-pound weight group. In eight States, such additional fees on this vehicle in private operation amount to \$35 or more.

**Vehicle No. 7, 40,000-pound dump truck** (table 8, figures 22 and 24).—The 40,000-pound dump truck, with perhaps minor adjustments of axle spacing, is permitted to operate in all States. (Its axle spacing and loading are representative of concrete transit-mix and other special equipment.) The lowest registration fee on this truck in the States that do not impose mileage taxes is \$87; and there are two other States in which the registration fee does not exceed \$100 and no mileage tax is levied. The highest fee, \$640, is also levied in a State where no mileage tax is levied. The average registration fee for all States is \$273. The registration fees, although important, are of relatively reduced significance on vehicles having this gross weight. The mileage and other taxes must be combined with registration fees in order to get a significant comparison.

**Vehicle No. 8, 40,000-pound combination** (tables 9 and 10, figures 25 and 26).—The 40,000-pound combination is typical of a large group of combinations, and although the number of 40,000-pound vehicles is diminishing, it still has many uses. With higher, maximum gross weights being permitted in an increasing number of States, larger and more economical vehicles are being used to replace the 40,000-pound combination in over-the-road operations. Vehicle No. 8 is legal in all States, and its use for local delivery purposes is increasing. Table 9 shows the road-user and personal property taxes that would be paid on the tractor and semitrailer units separately, when the vehicle is used in private service. In table 10, the taxes on the two units have been combined to permit a comparison with similar combinations in contract carrier service, and with other combinations.

The average road-user tax payment (excluding property tax) on the 40,000-pound combination in private operation is \$858. The lowest registration fee on this combination is a nominal \$25, but this is accompanied by a substantial mileage tax. The highest registration fee is \$640, but this is accompanied by a below-average gasoline tax and no mileage tax.

As shown in table 9, in only three States is the semitrailer now charged a major part of the total registration fee. In 30 States the major part of the fee is on the tractor truck, and in the remaining States the combination registration fee is shared between the units according to their individual weights. The differences between the taxes on vehicle No. 8 in private operation and the same vehicle in contract service are not discussed in detail here, but the variations in the types and the total amounts of the taxes on the different services are very great in some States. The degrees of difference in road-user taxes between private and for-hire service can be seen by comparing the maps in figure 26. Similar com-

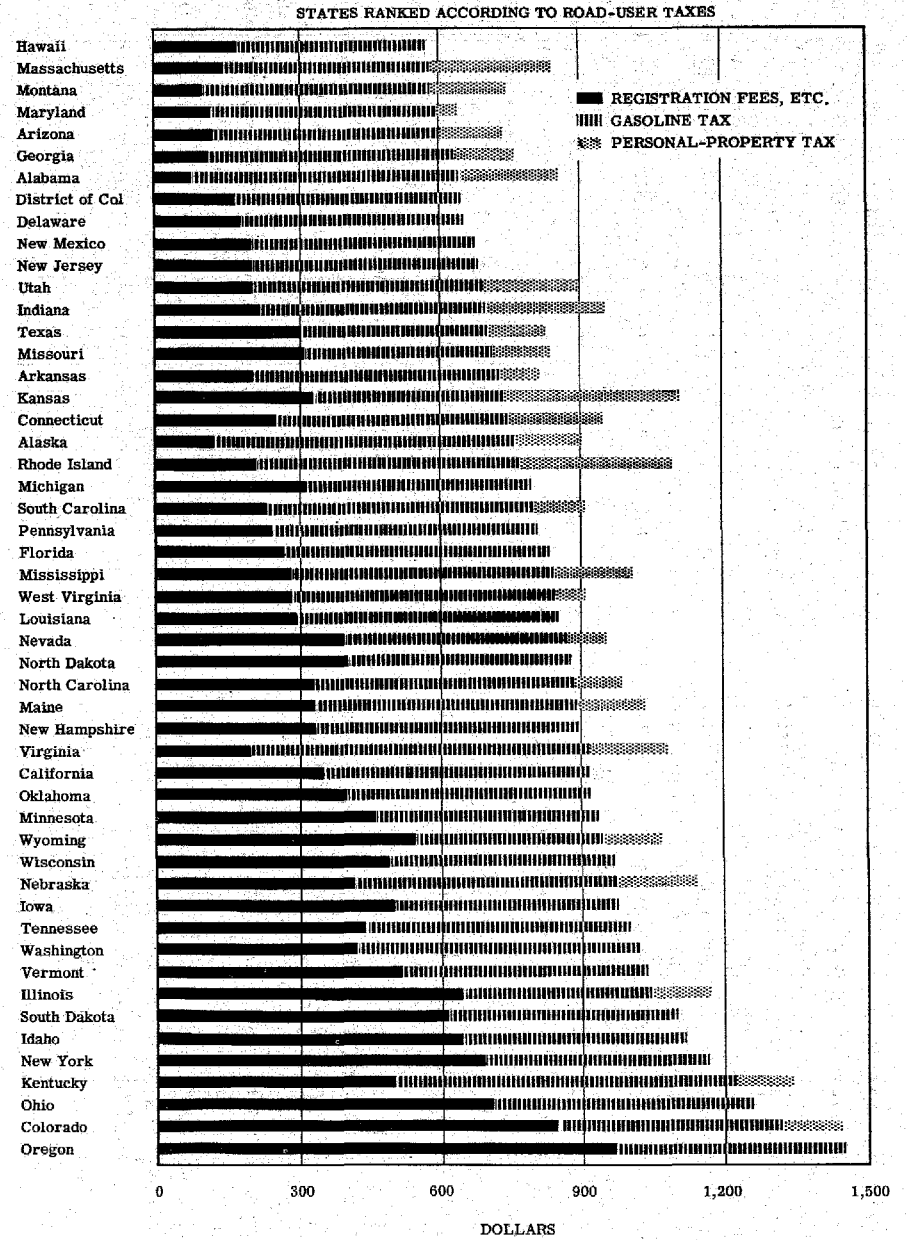
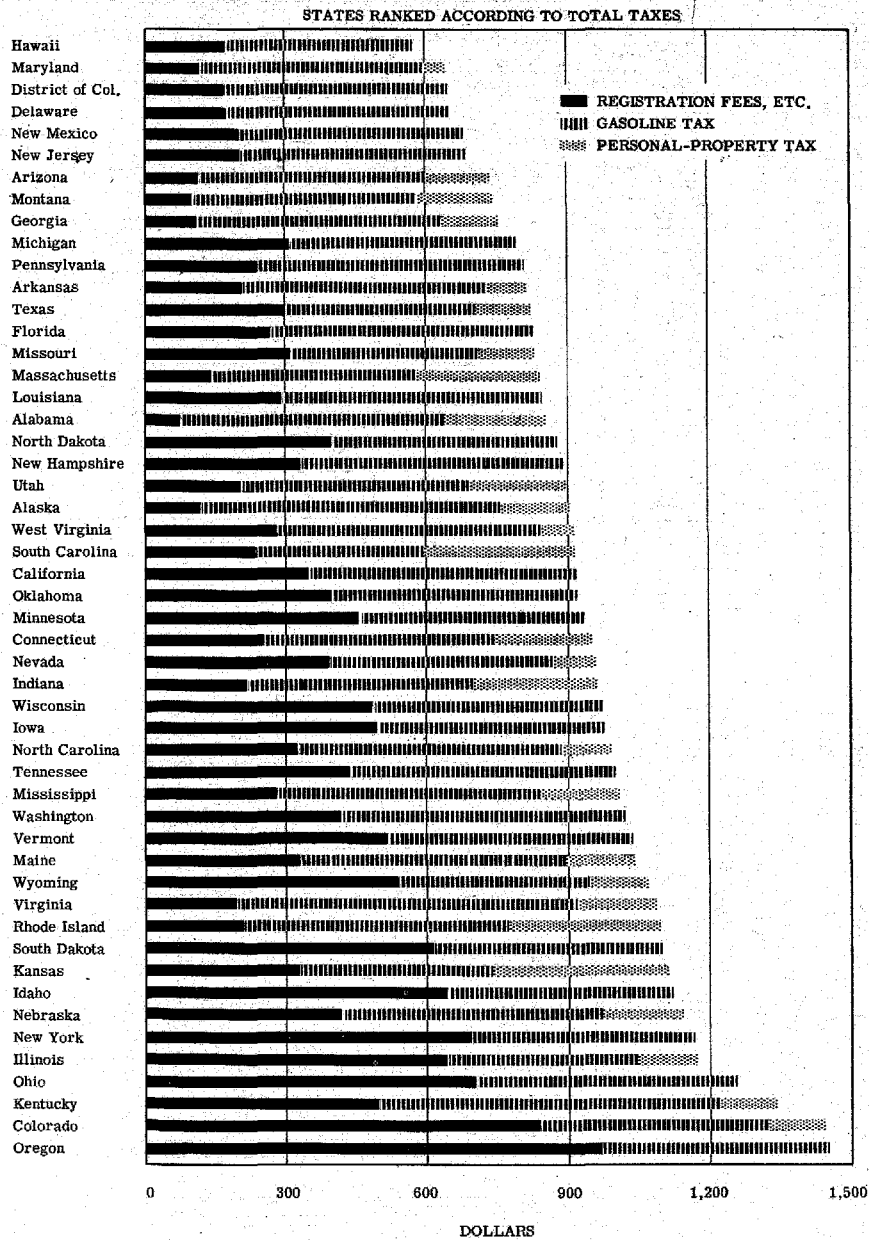


Figure 25.—State road-user and personal-property taxes on a 40-000-pound three-axle tractor-semitrailer combination (No. 8), in private use.

parisons for vehicles Nos. 9, 10, 11, 12, and 13 can be seen in figures 28, 30, 32, 34, and 36, respectively.

Although there is a larger range in highway-user taxes for vehicle No. 7 than for vehicle No. 8, the median tax differs by only \$20 (figs. 24 and 26). For the 40,000-pound gross weight dump truck (No. 7) the median tax is \$825.50, and for the 40,000-pound gross weight tractor-semitrailer combination in private use (No. 8) the median tax is \$845.50. The operating characteristics of these two vehicles are somewhat different. Vehicle No. 8 is assumed to travel more annual mileage and realize greater fuel economy than vehicle No. 7. Even so, there are four widely separated States in which the highway-user charges for the 40,000-pound vehicle combination (No. 8) fall into a lower tax class than those for the single-unit truck (No. 7).

**Vehicle No. 9, 55,000-pound, gasoline-powered combination** (table 11, figures 27 and 28).—This combination is the largest gasoline-powered vehicle shown, although there are much larger gasoline-powered combinations in use. The average registration fee for this combination is \$370 in private service, but in contract service the average registration fee is \$404. In eight States the annual total of road-user and property taxes exceeds \$2,000, and in two of these States the amount is slightly more than \$2,900. A major portion of the total fee in the latter two States is composed of mileage taxes.

**Vehicle No. 10, 55,000-pound, diesel-powered combination** (table 12, figures 29 and 30).—The 55,000-pound, diesel-powered combination when empty is somewhat heavier than the 55,000-pound, gasoline-powered combination, and thus it carries a correspondingly smaller payload when operated at full capacity. The diesel-powered combination is also somewhat more expensive than the one powered by gasoline and is subject to a higher property-tax rate in many States. Offset against this, however, is the substantial saving in total fuel cost, including the tax. The diesel-powered combination is assumed to save nearly one-third in fuel gallonage. This saving in fuel is highly desirable from almost any standpoint, but the resultant reduction in fuel-tax contributions for the support of highways poses a problem. Nine States impose higher tax rates on diesel fuel in an effort to obtain a tax contribution similar to that obtained from comparable gasoline-powered vehicles. Vermont does not tax diesel fuel but does impose an equalization fee. The relation between taxes paid on a gasoline-powered combination of 55,000 pounds gross weight and a similar diesel-powered combination may be developed

by a comparison of data in tables 11 and 12. For two States, Idaho and Oregon, no diesel fuel tax is shown in tables 12–15. This does not mean that there is no tax charge, but rather that the manner of collection is through a special schedule of mileage taxes that contain an “in lieu” fuel tax portion. No attempt has been made to place the in lieu tax portion in the diesel tax column.

The annual motor-fuel consumption by vehicle No. 10 of 4,000 gallons less than that shown for vehicle No. 9 is the major reason that the average road-user tax is some \$240 less for vehicle No. 10 (figs. 27 and 29).

**Vehicle No. 11, 62,000-pound, diesel-powered combination** (table 13, figures 31 and 32).—The 62,000-pound, diesel-powered combination is now legal in all but one State. The average registration fee for this combination is \$469 in private service and \$501 in contract service. In 1963, this vehicle was not yet in general use in the East. Recent changes in the weight limits and axle spacing requirements, however, now permit its use.

**Vehicle No. 12, 72,000-pound, diesel-powered combination** (table 14, figures 33 and 34).—In 1960 only 26 States permitted the operation of this vehicle, but during 1963 an additional 18 States increased their weight limits to 73,280 pounds (this includes tolerances). As of January 1, 1964, 44 States register and permit the operation of vehicle No. 12. The average registration fee for this combination is \$524 in private service, and \$541 in contract for-hire service. Although Georgia does not permit a vehicle of this type and weight to be registered in the State, it has made reciprocal agreements with nine Eastern States whereby such vehicles registered in these States are permitted to operate on the highways of Georgia.

**Vehicle No. 13, 76,000-pound, diesel-powered combination** (table 15, figures 35 and 36).—This vehicle, which has an overall length of 65 feet, is permitted to operate in only seven States. In 1960, a vehicle of the same general description as vehicle No. 13, but having an overall length of only 60 feet, was permitted to operate in 11 States. Although the change in length means that the vehicles are not comparable from the 1960 study to the 1964 study, it is believed that each vehicle properly represents a point on the vehicle size and weight scale for the year shown. The remaining data for this vehicle are self-explanatory.

A comparison of the tax costs (excluding property taxes) in cents-per-mile for private use and contract operation under the assumptions used in this study is shown for each of the combinations, Nos. 8–13, in figures 37–39.

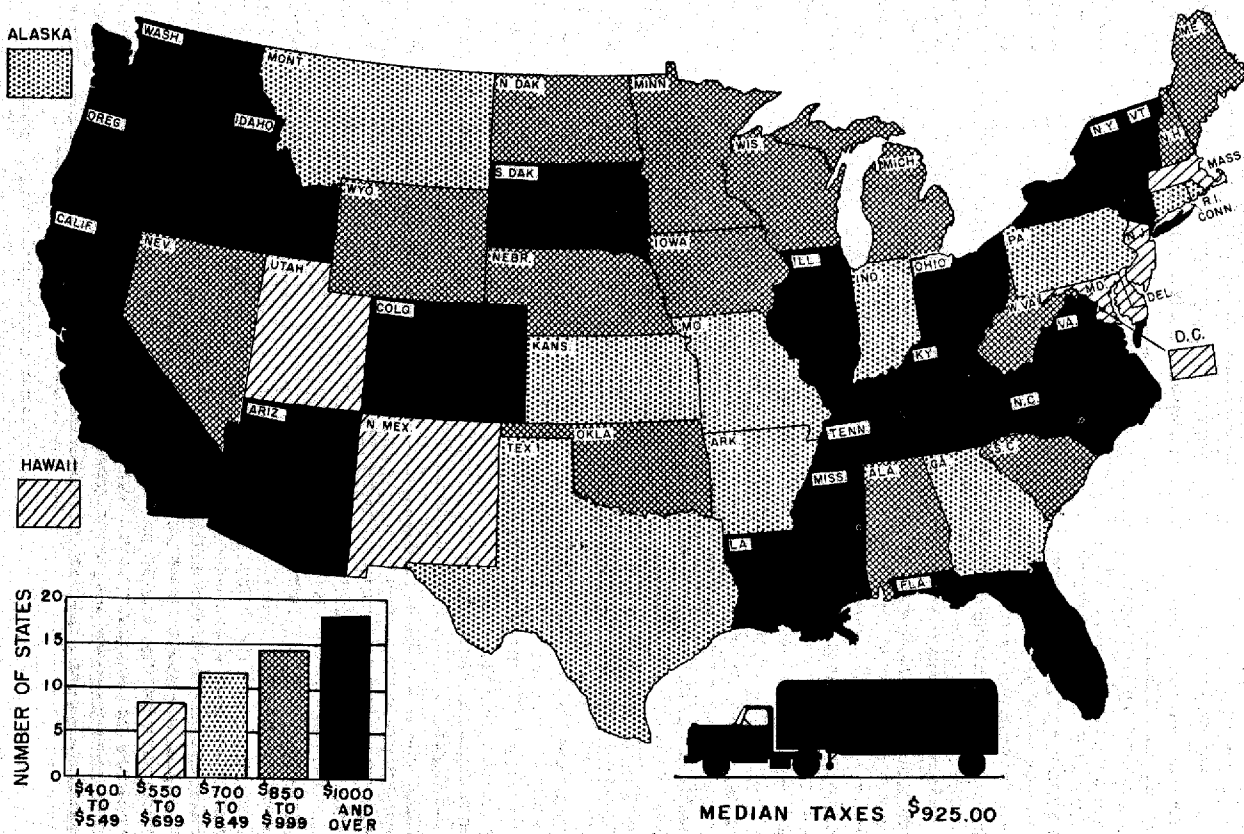
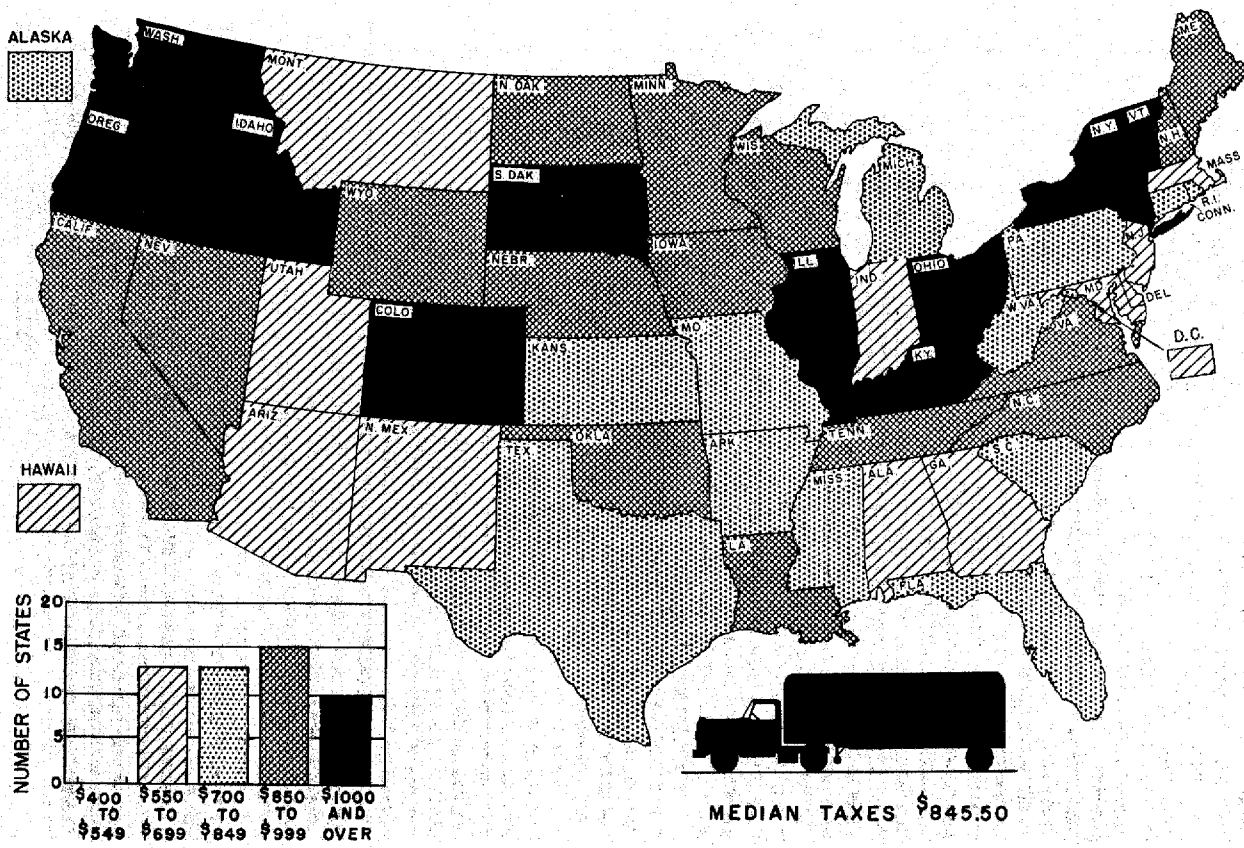
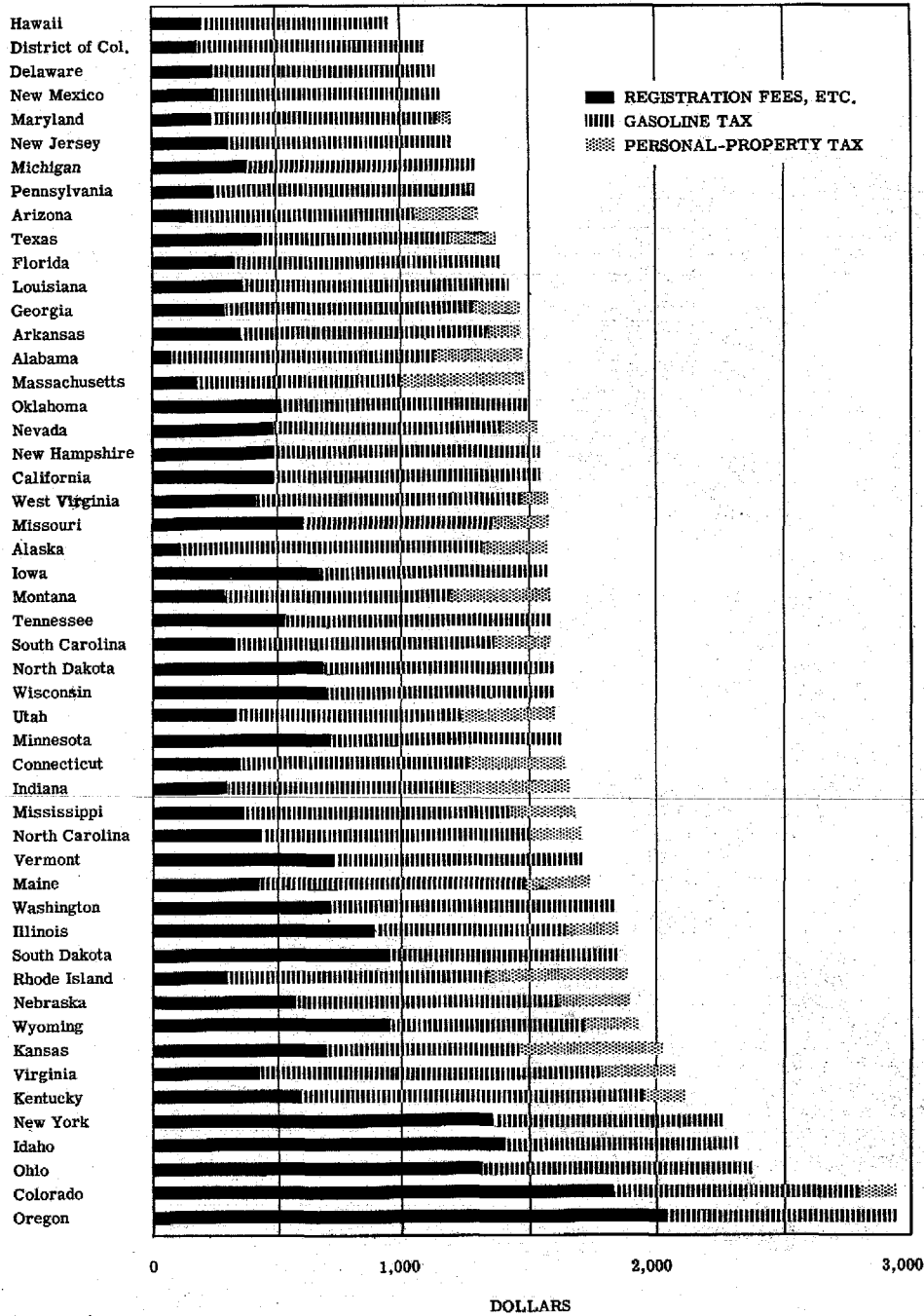


Figure 26.—State road-user taxes on a 40,000-pound three-axle tractor-semitrailer combination (No. 3). Private use (top); contract operation (bottom).

STATES RANKED ACCORDING TO TOTAL TAXES



STATES RANKED ACCORDING TO ROAD-USER TAXES

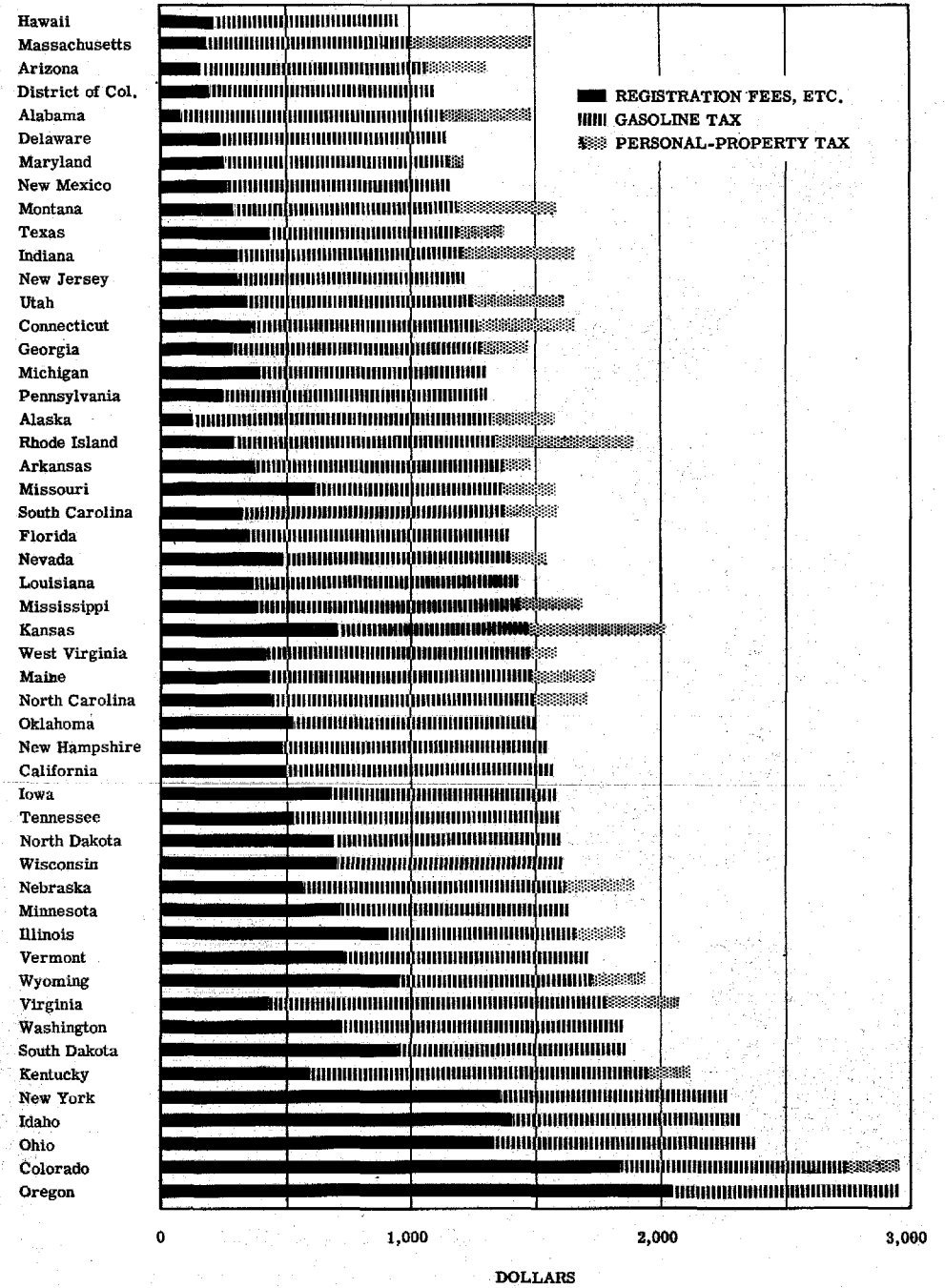


Figure 27.—State road-user and personal-property taxes on a 55,000-pound gasoline-powered, four-axle, tractor-semitrailer combination (No. 9), in private use.



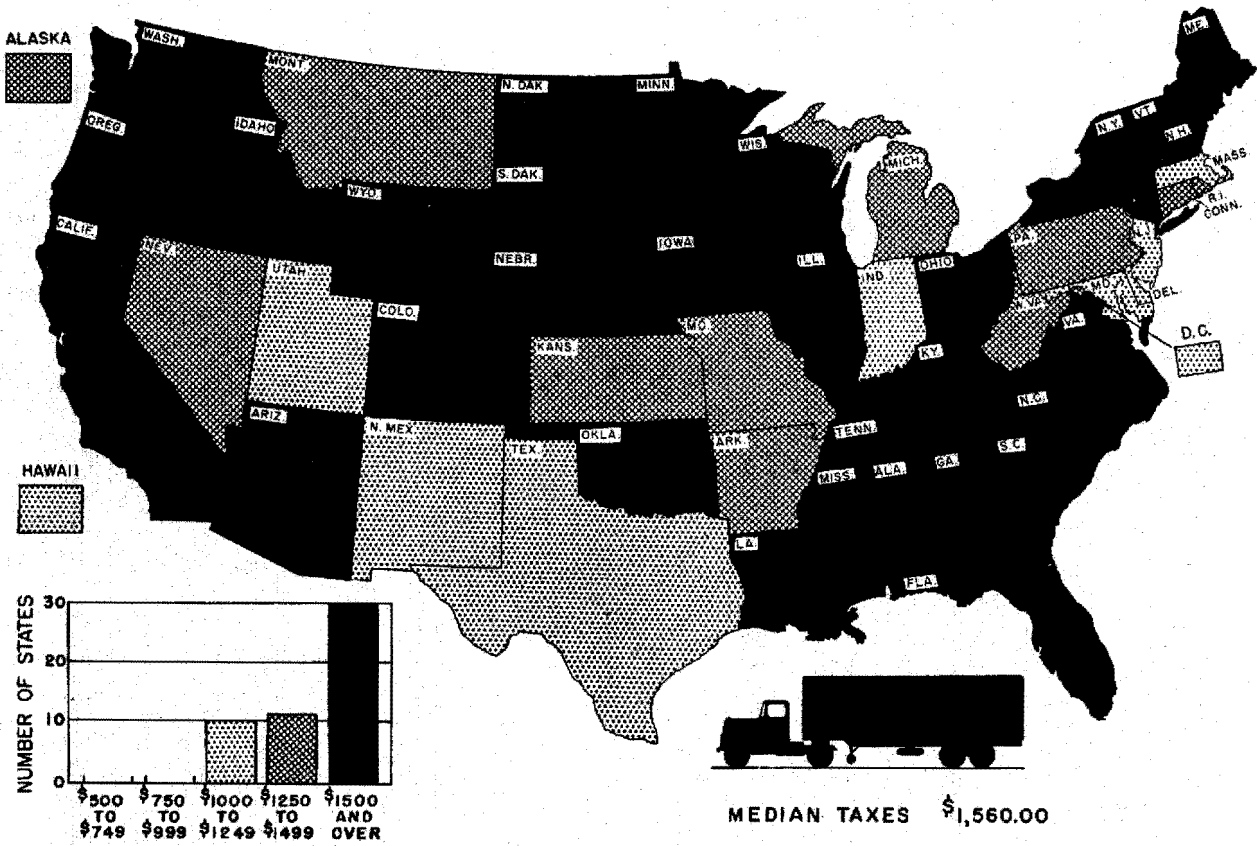
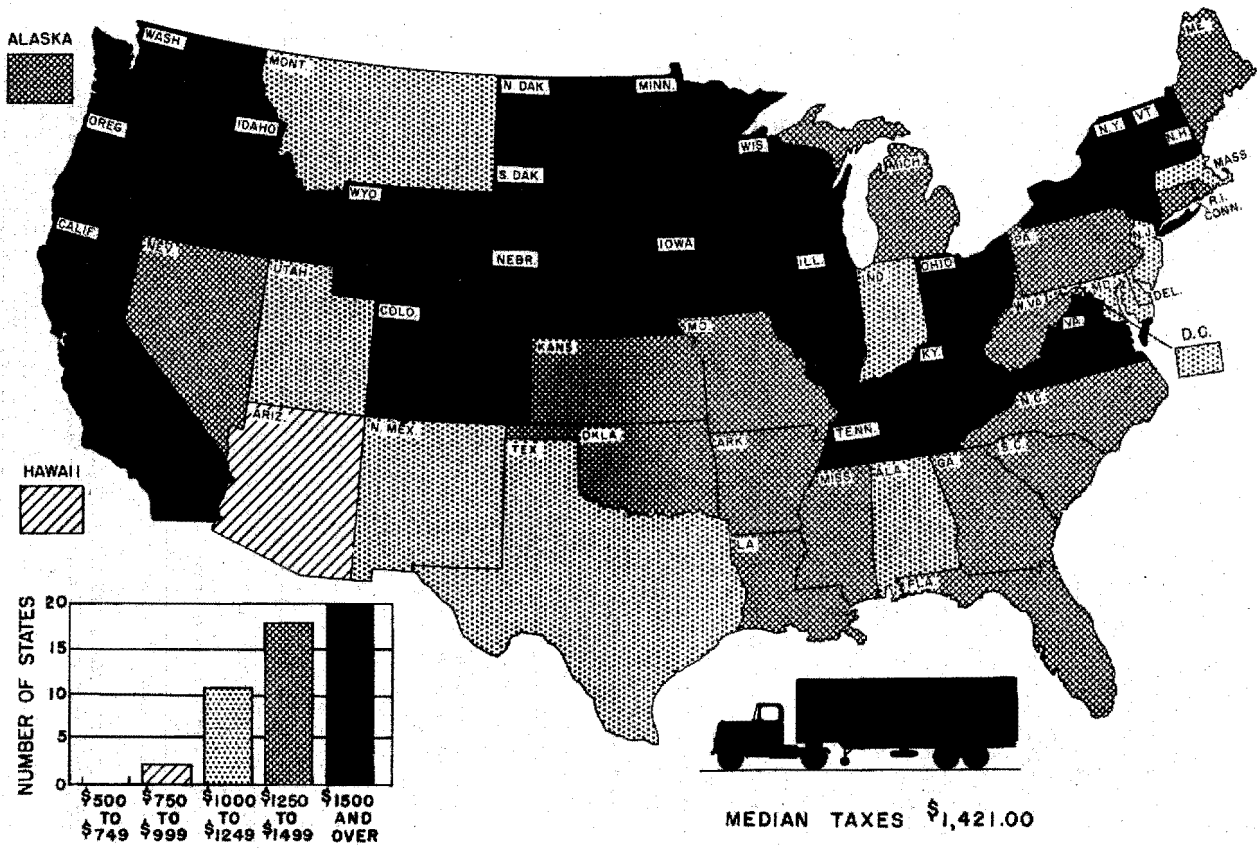
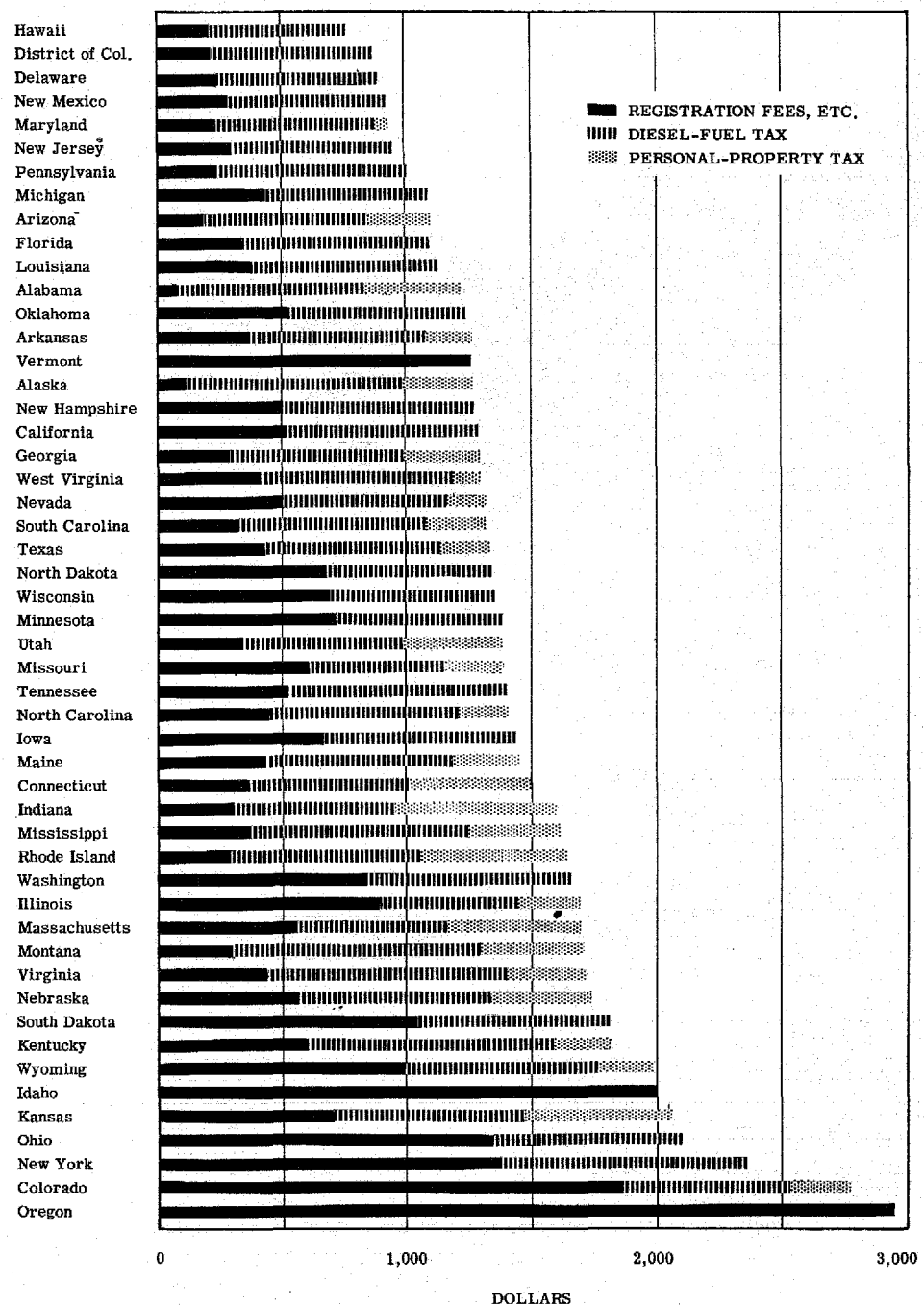


Figure 28.—State road-user taxes on a 55,000-pound gasoline-powered, four-axle, tractor-semitrailer combination (No. 9). Private use (top); contract operation (bottom).

STATES RANKED ACCORDING TO TOTAL TAXES



STATES RANKED ACCORDING TO ROAD-USER TAXES

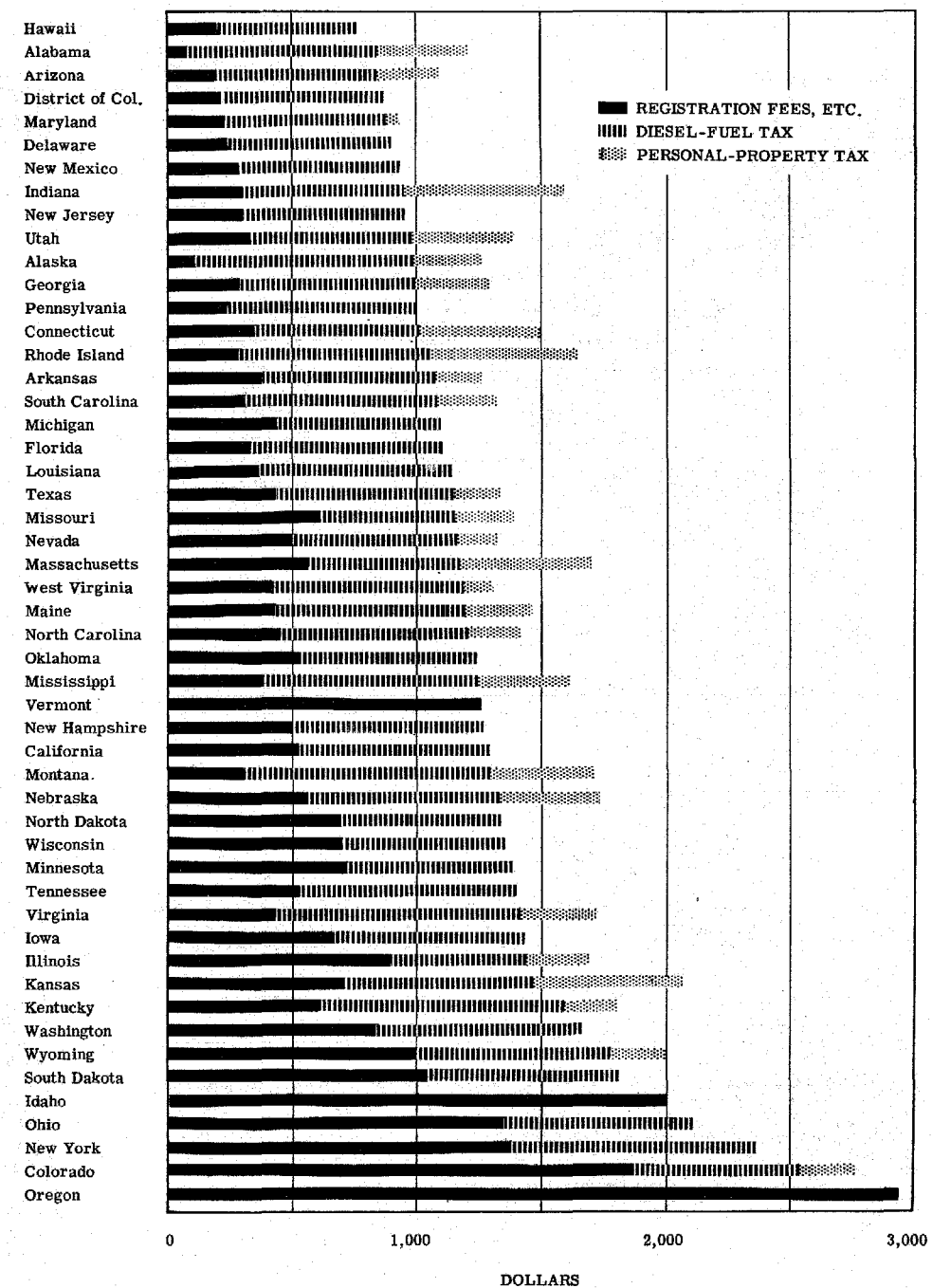


Figure 29.—State road-user and personal-property taxes on a 55,000-pound diesel-powered, four-axle tractor-semitrailer combination (No. 10), in private use.

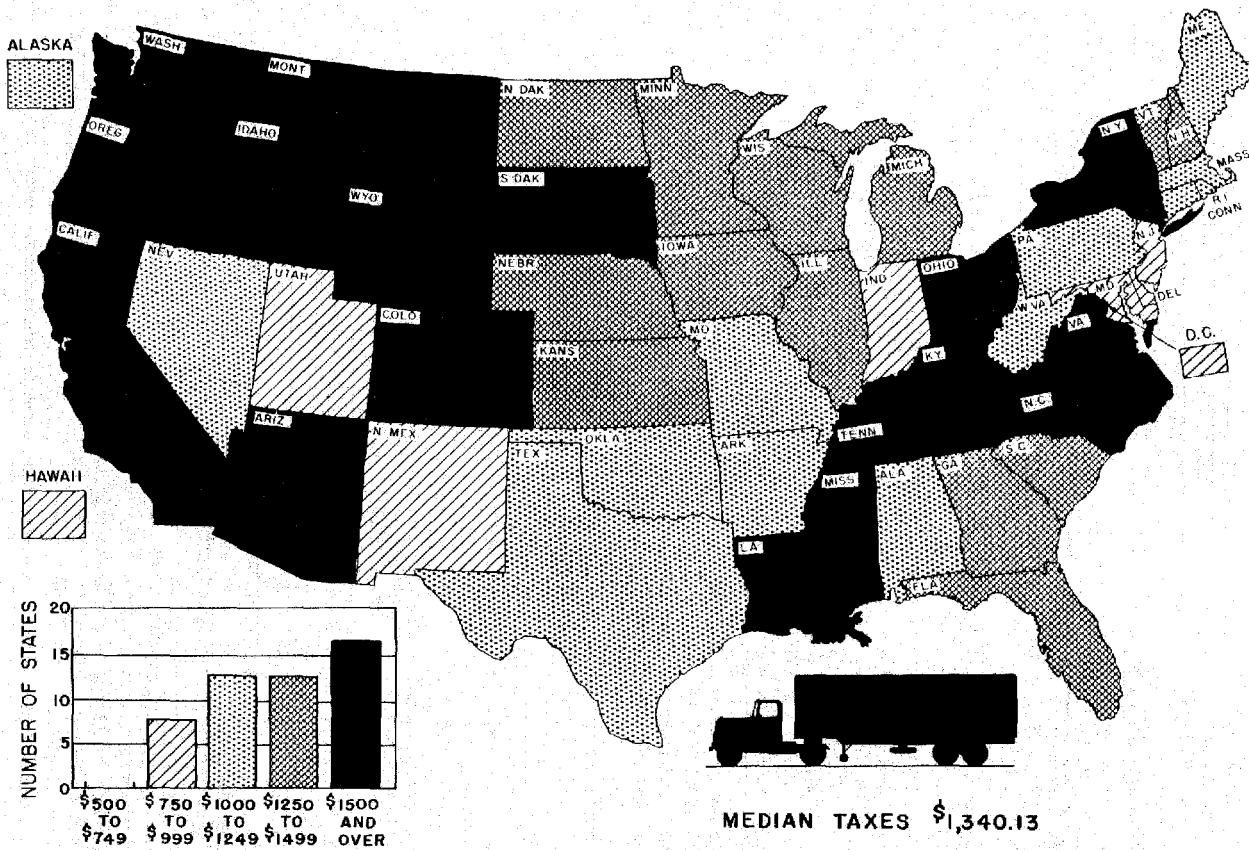
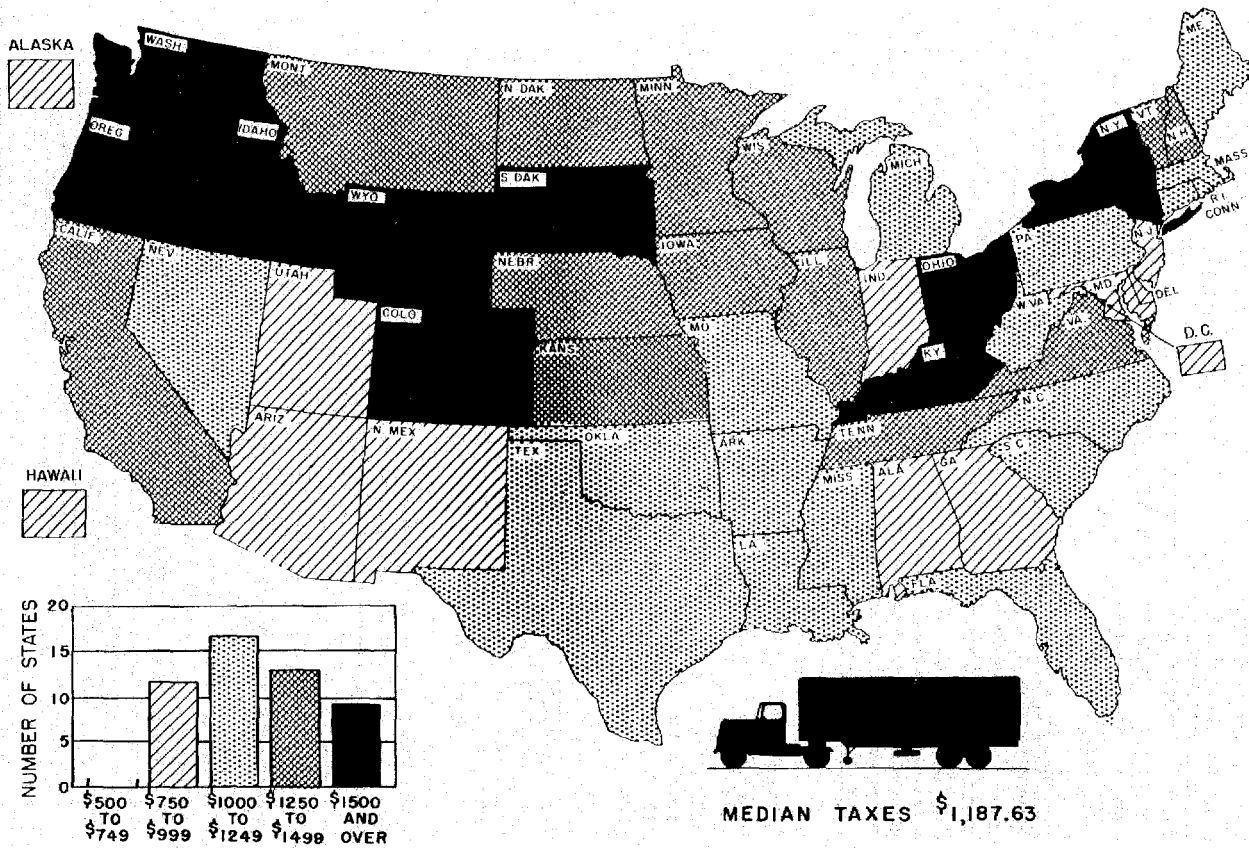
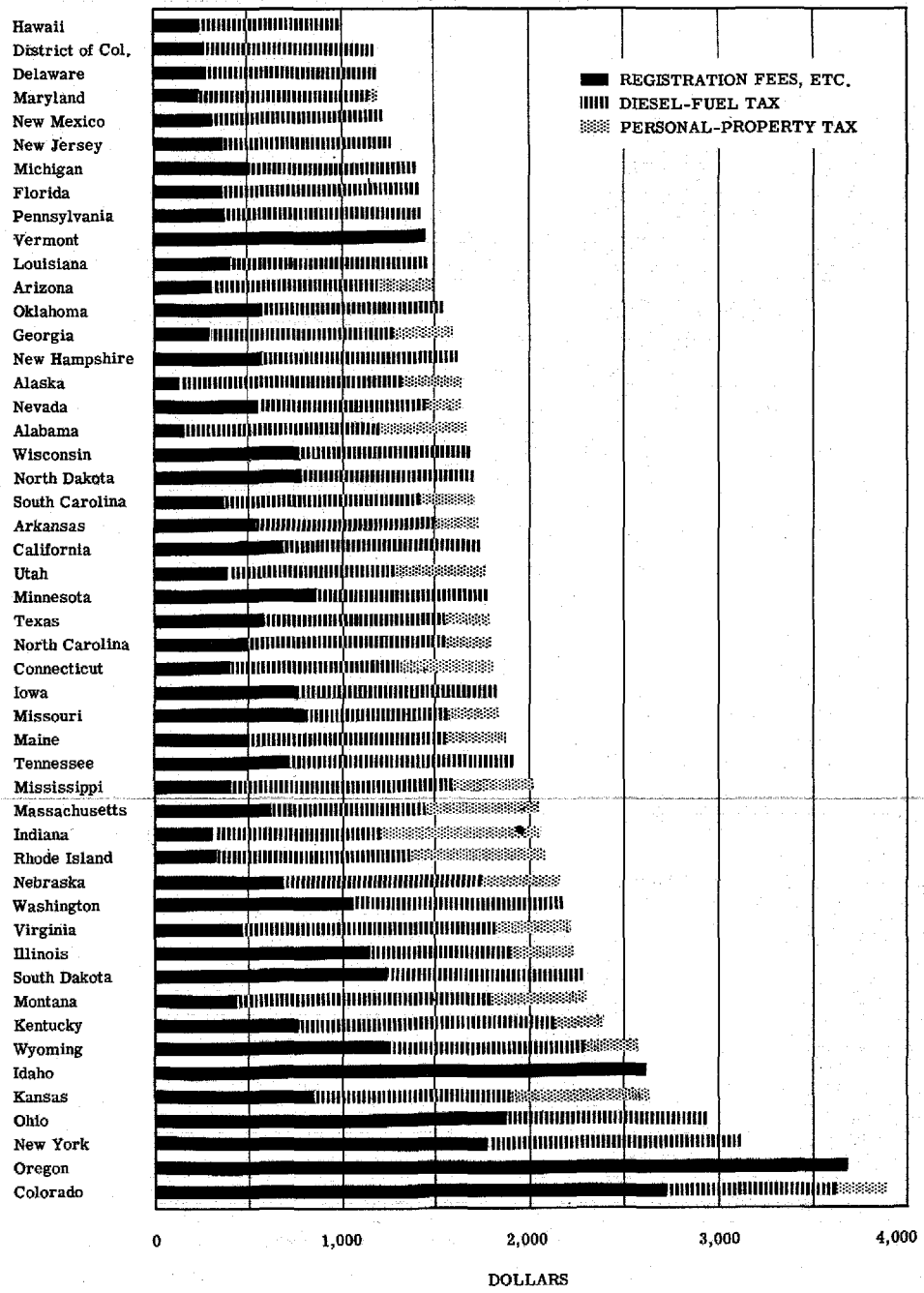


Figure 30.—State road-user taxes on a 55,000-pound diesel-powered, four-axle, tractor-semitrailer combination (No. 10). Private use (top); contract operation (bottom).

STATES RANKED ACCORDING TO TOTAL TAXES



STATES RANKED ACCORDING TO ROAD-USER TAXES

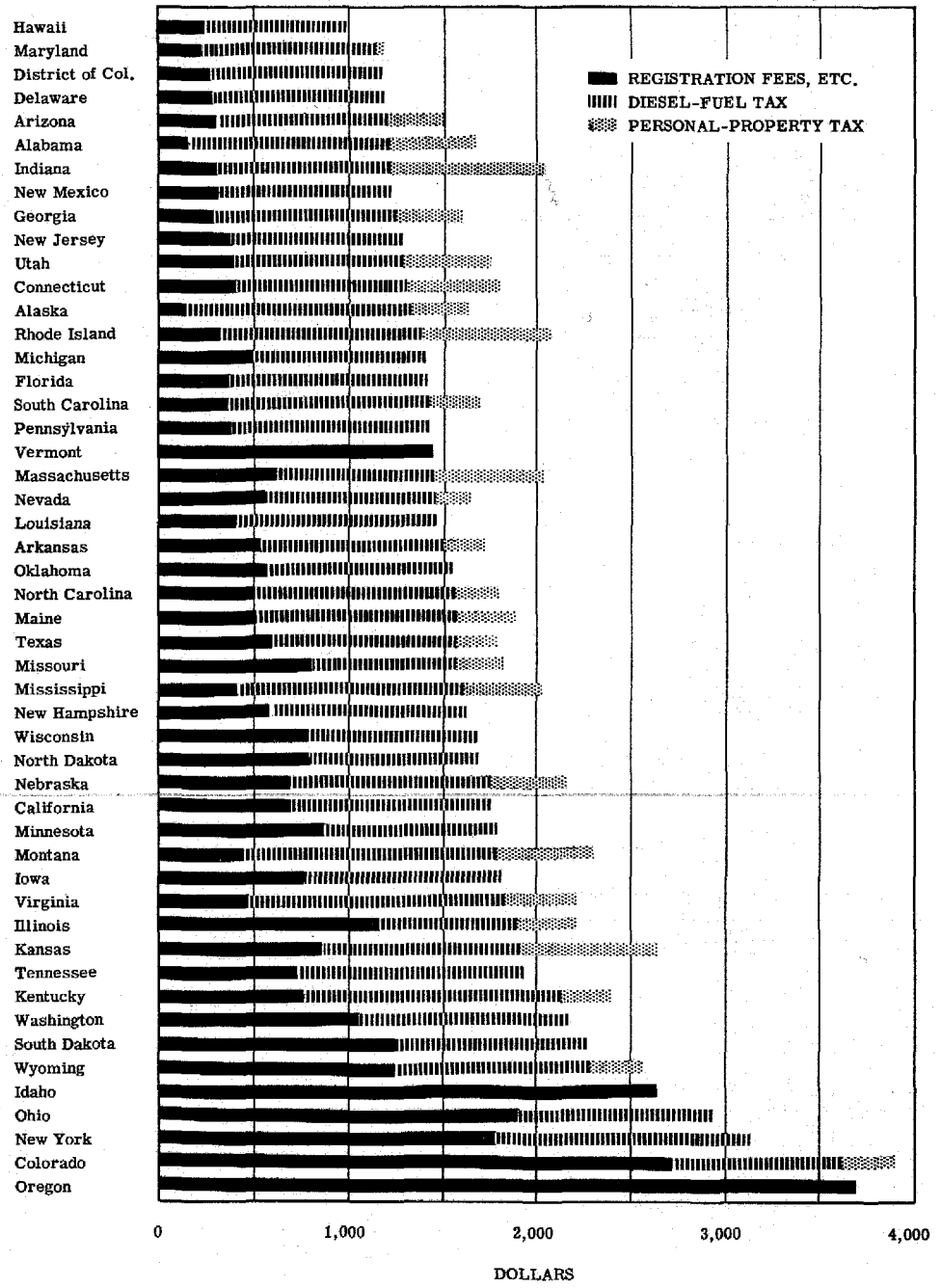
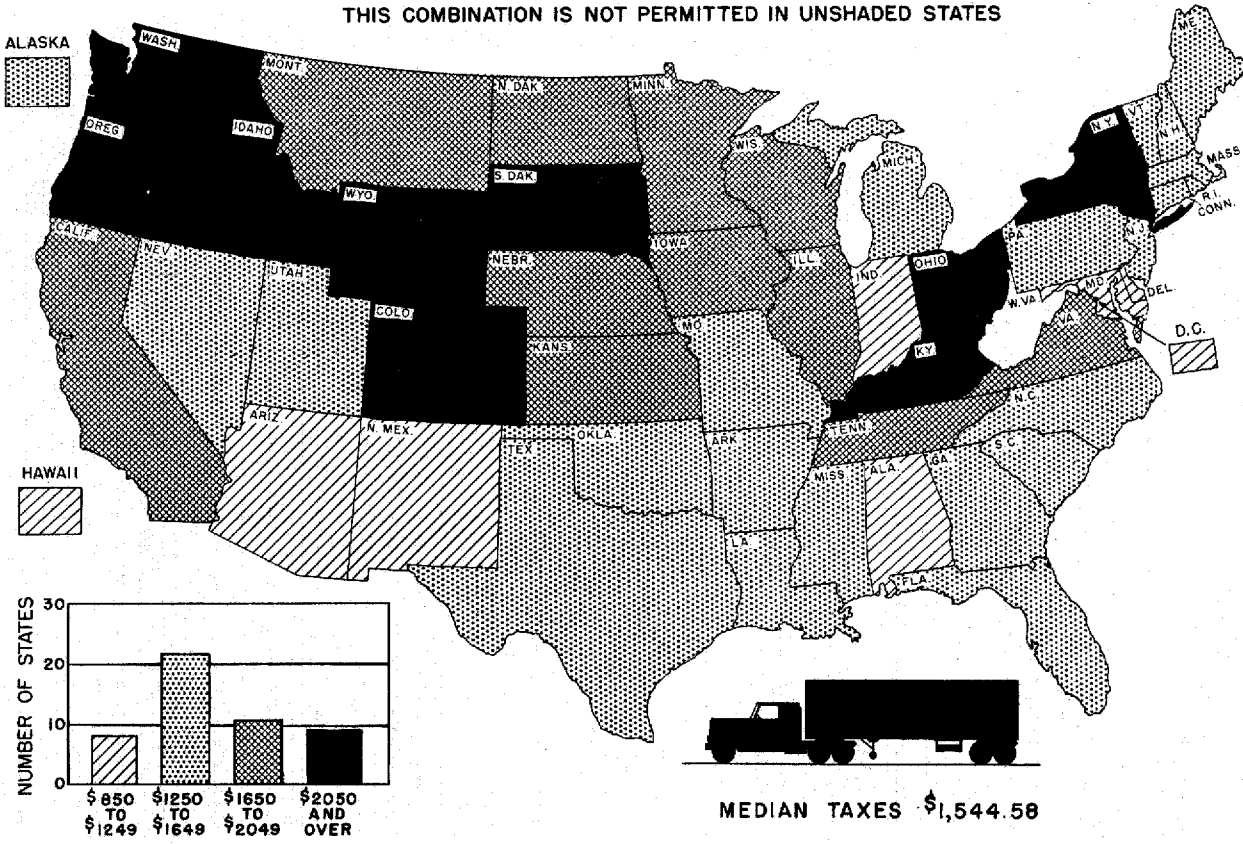


Figure 31.—State road-user and personal-property taxes on a 62,000-pound diesel-powered, five-axle, tractor-semitrailer combination (No. 11), in private use.

THIS COMBINATION IS NOT PERMITTED IN UNSHADED STATES



THIS COMBINATION IS NOT PERMITTED IN UNSHADED STATES

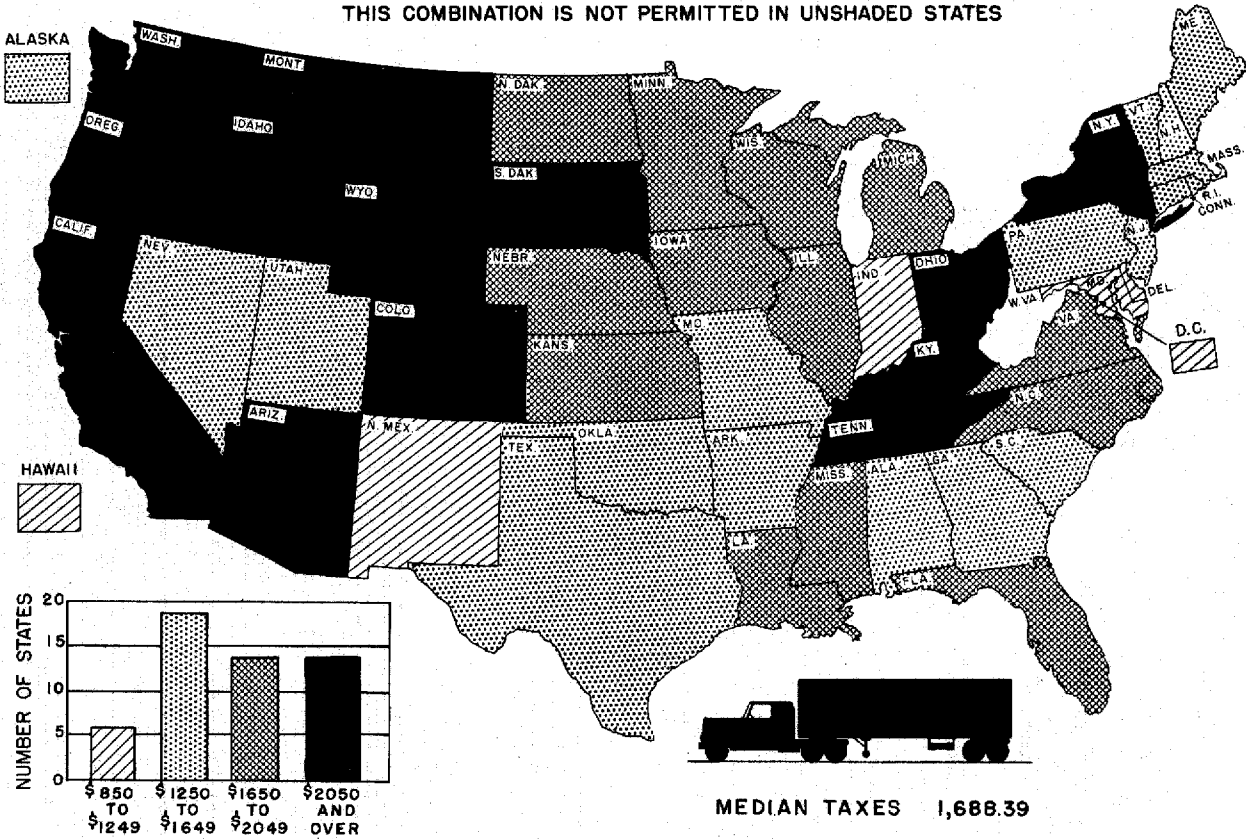
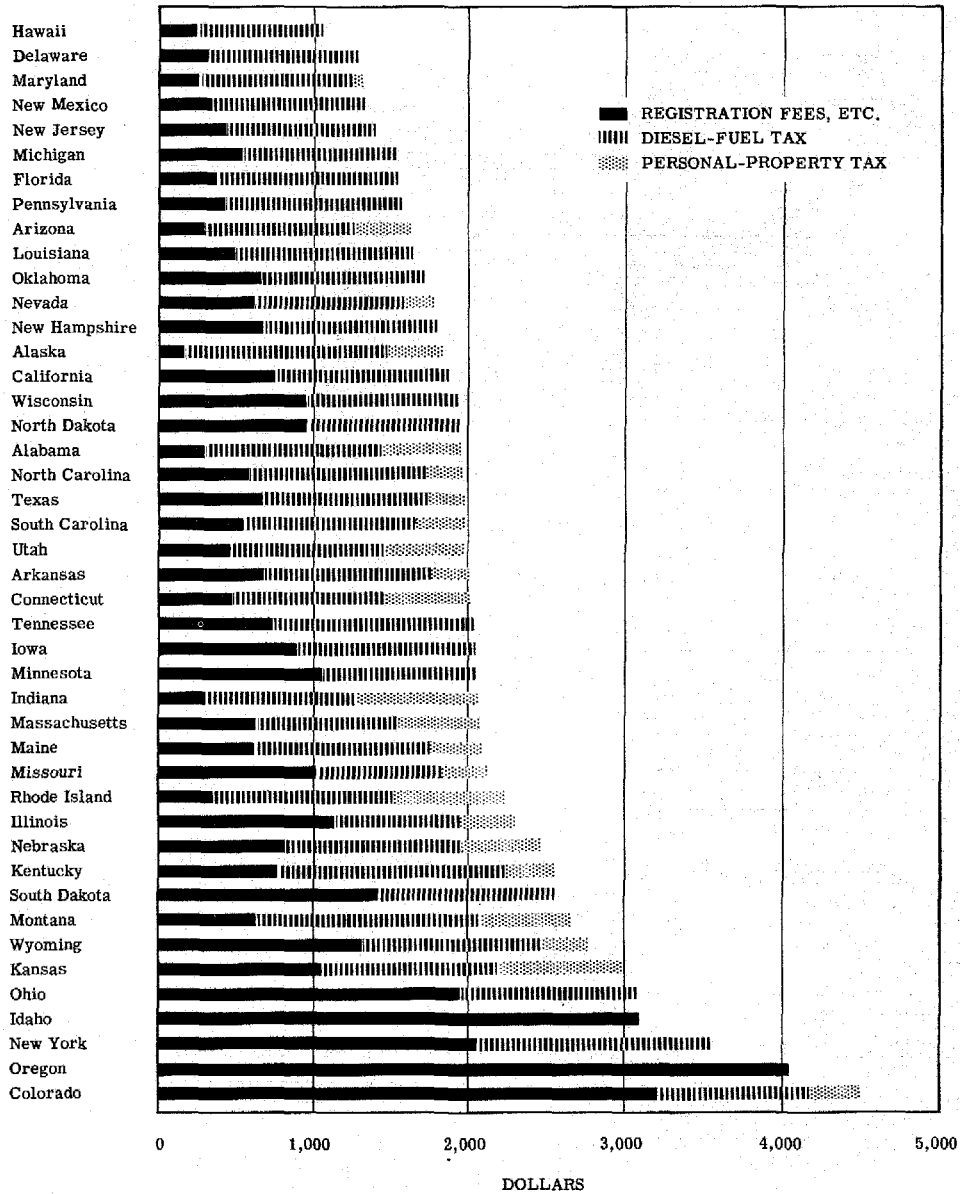


Figure 32.—State road-user taxes on a 62,000-pound diesel-powered, five-axle, tractor-semitrailer combination (No. 11). Private use (top); contract operation (bottom).

STATES RANKED ACCORDING TO TOTAL TAXES



STATES RANKED ACCORDING TO ROAD-USER TAXES

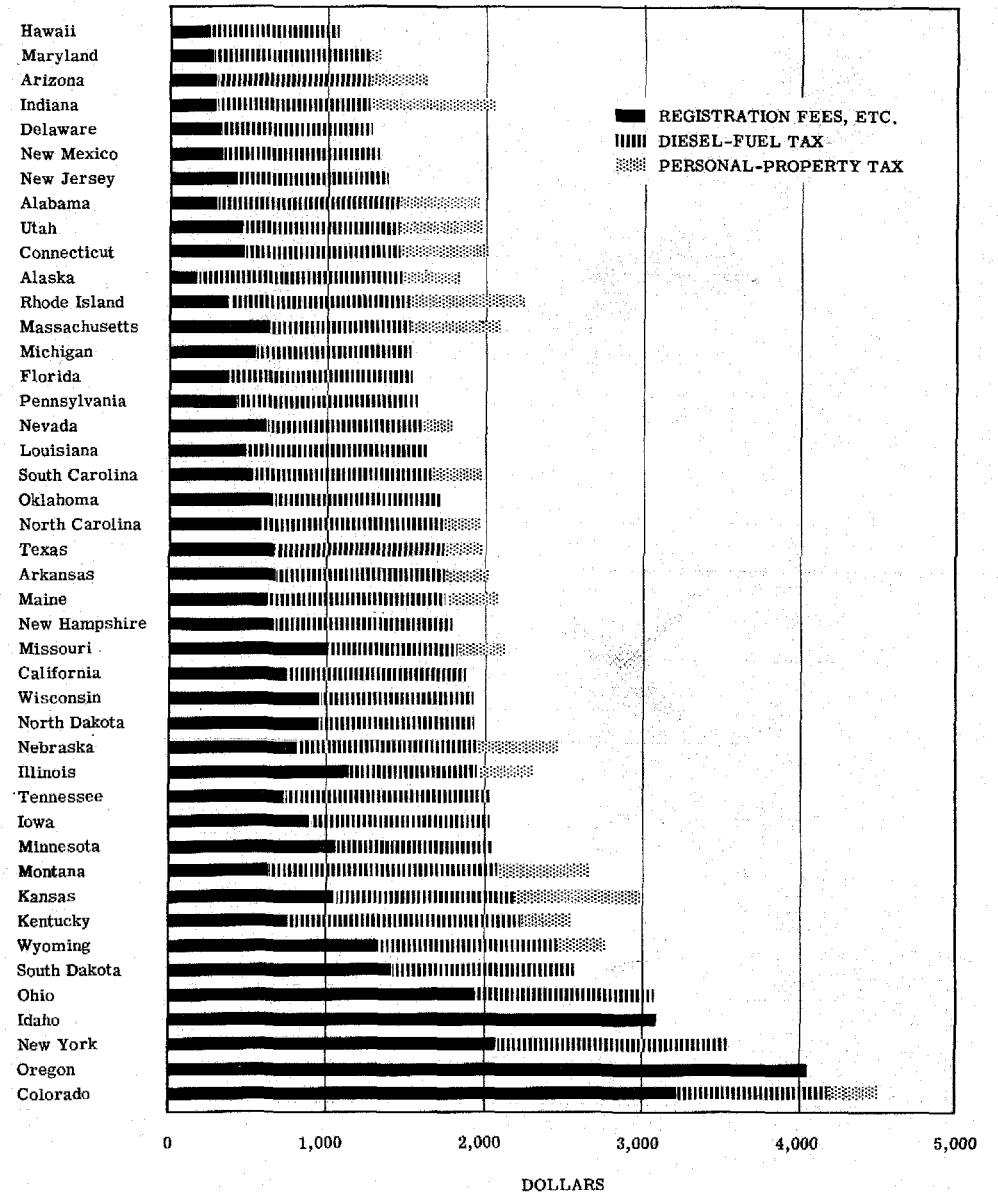
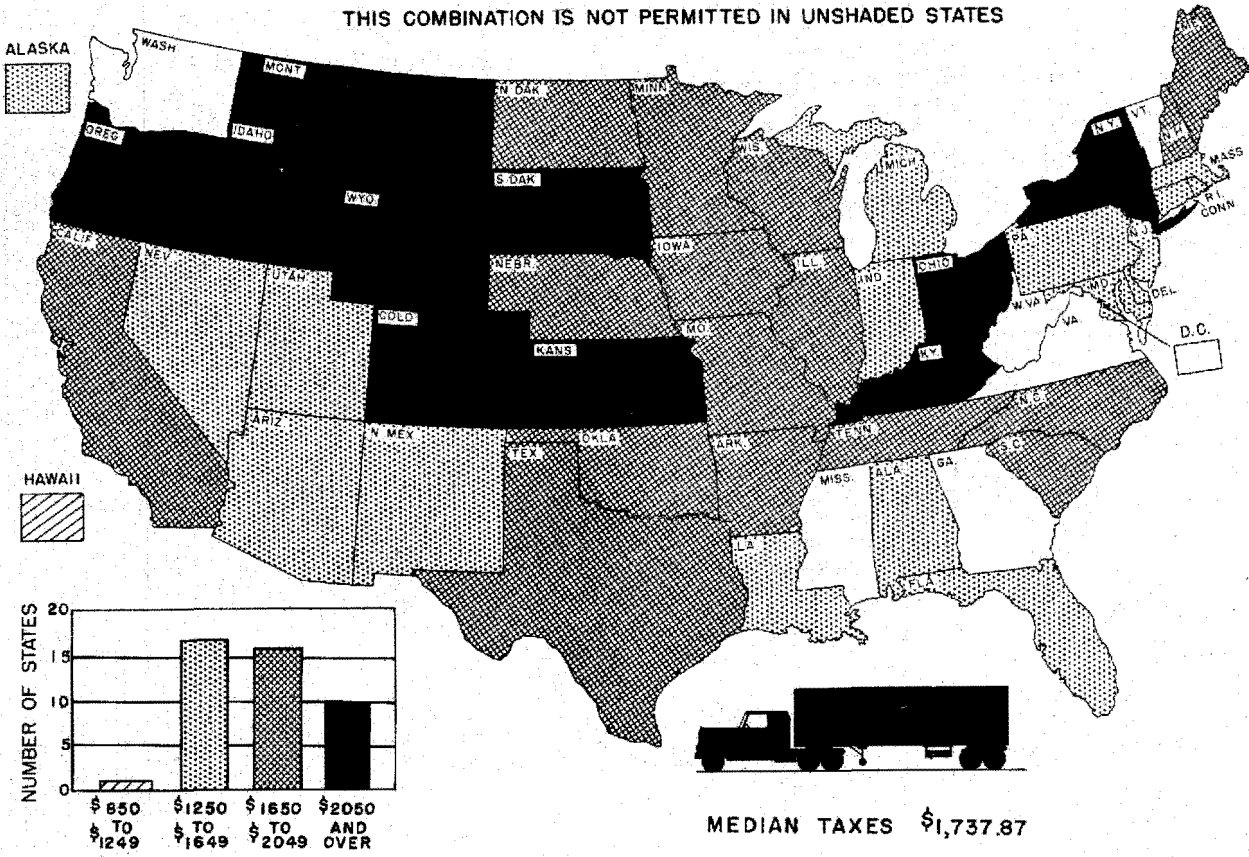


Figure 33.—State road-user and personal-property taxes on a 72,000-pound diesel-powered, five-axle, tractor-semitrailer combination (No. 12), in private use.

THIS COMBINATION IS NOT PERMITTED IN UNSHADED STATES



THIS COMBINATION IS NOT PERMITTED IN UNSHADED STATES

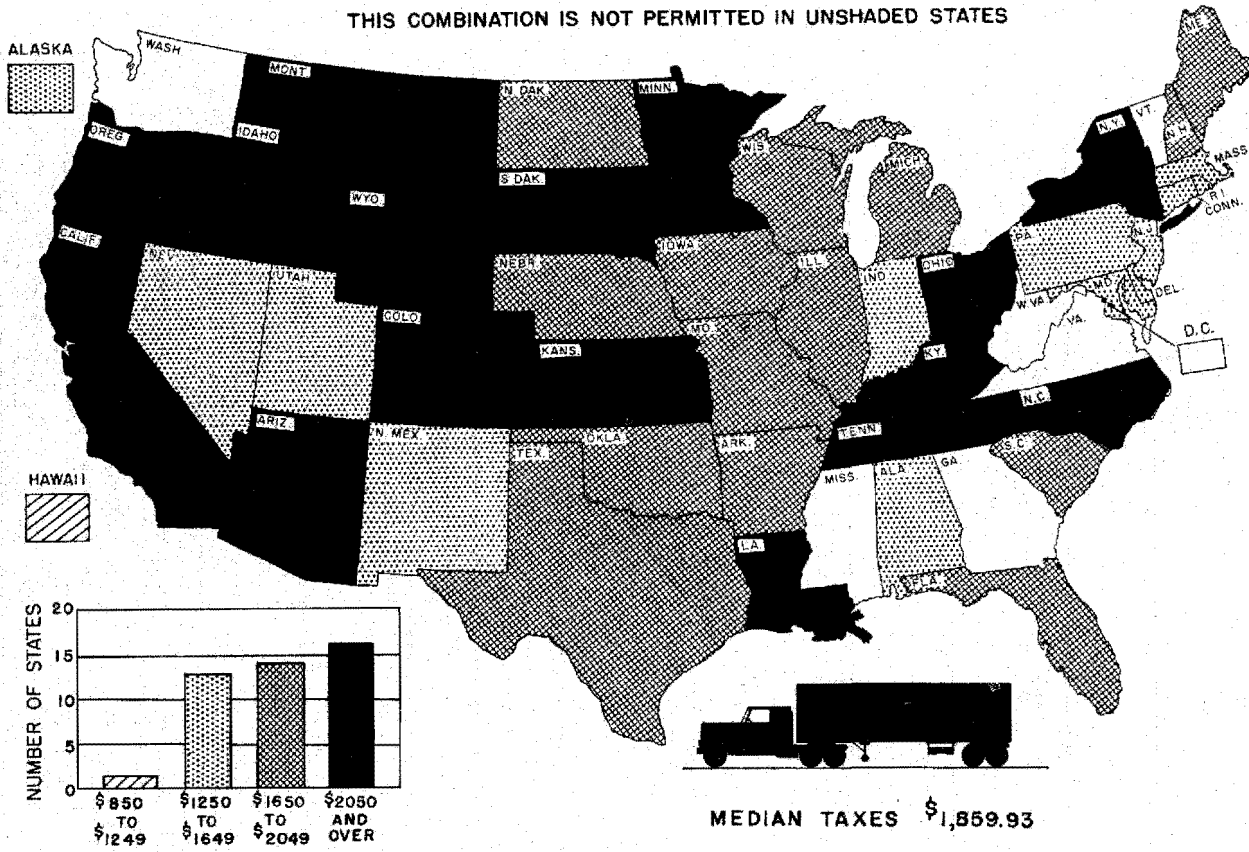
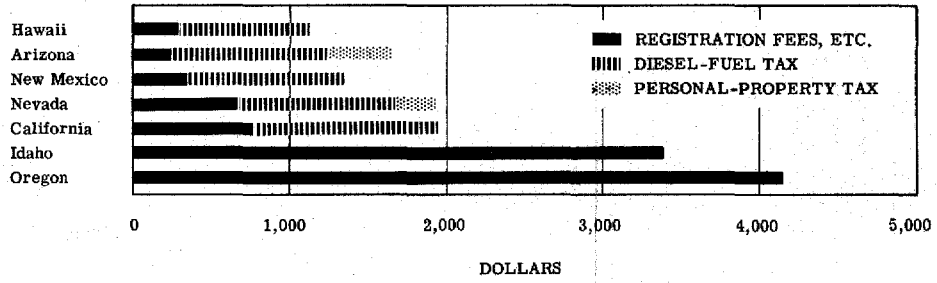


Figure 34.—State road-user taxes on a 72,000-pound diesel-powered, five-axle, tractor-semitrailer combination (No. 12). Private use (top); contract operation (bottom).

STATES RANKED ACCORDING TO ROAD-USER TAXES



STATES RANKED ACCORDING TO TOTAL TAXES

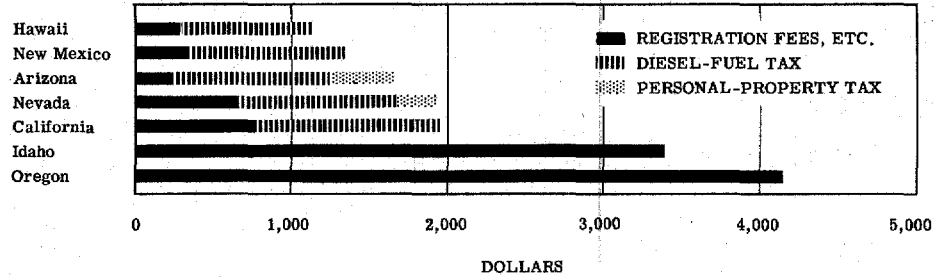
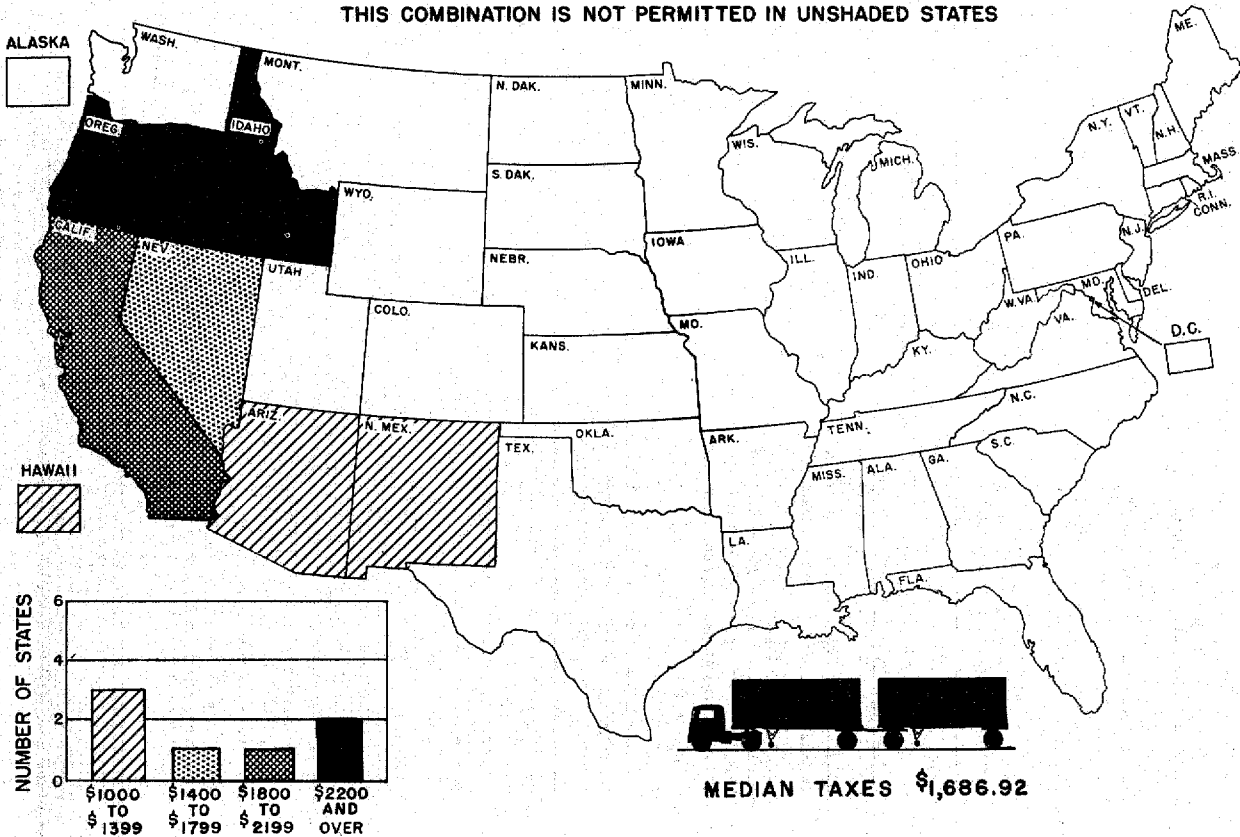


Figure 35.—State road-user and personal-property taxes on a 76,000-pound diesel-powered, five-axle, tractor-semitrailer and full trailer combination (No. 13), in private use.



THIS COMBINATION IS NOT PERMITTED IN UNSHADED STATES



THIS COMBINATION IS NOT PERMITTED IN UNSHADED STATES

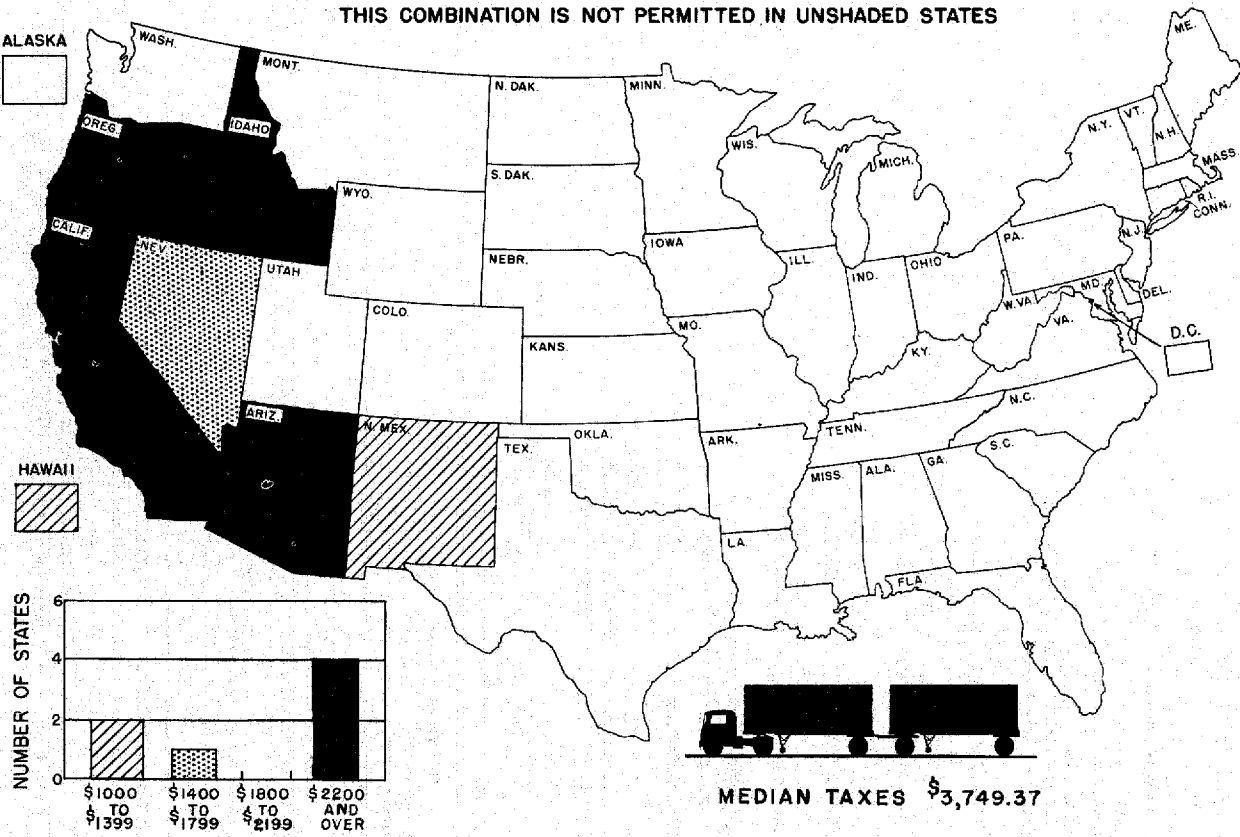
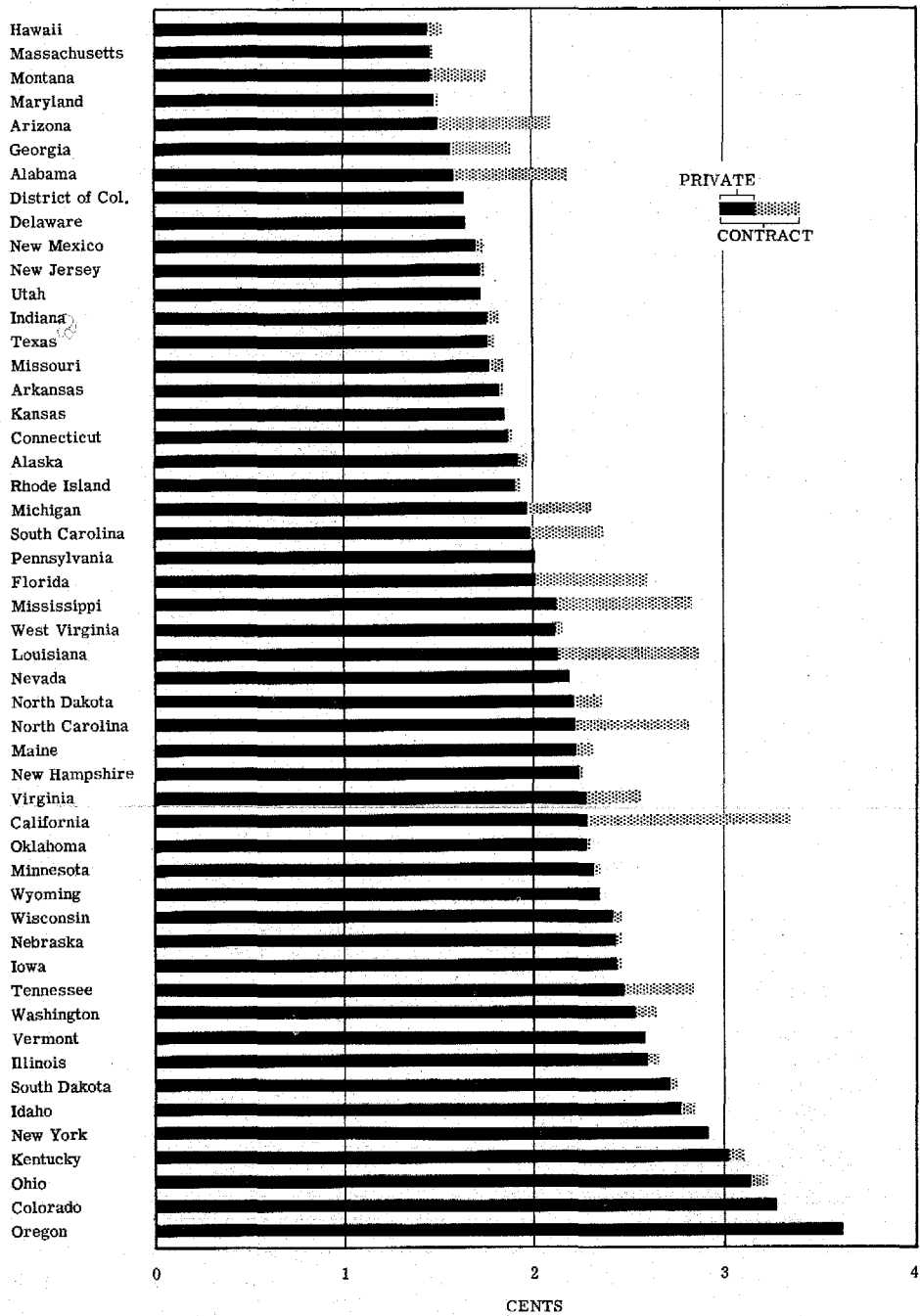


Figure 36.—State road-user taxes on a 76,000-pound diesel-powered, five-axle, tractor-semitrailer and full trailer combination (No. 13.) Private use (top); contract operation (bottom).

40,000-POUND THREE-AXLE TRACTOR-SEMITRAILER (NO. 8)



55,000-POUND GASOLINE-POWERED FOUR-AXLE TRACTOR-SEMITRAILER (NO. 9)

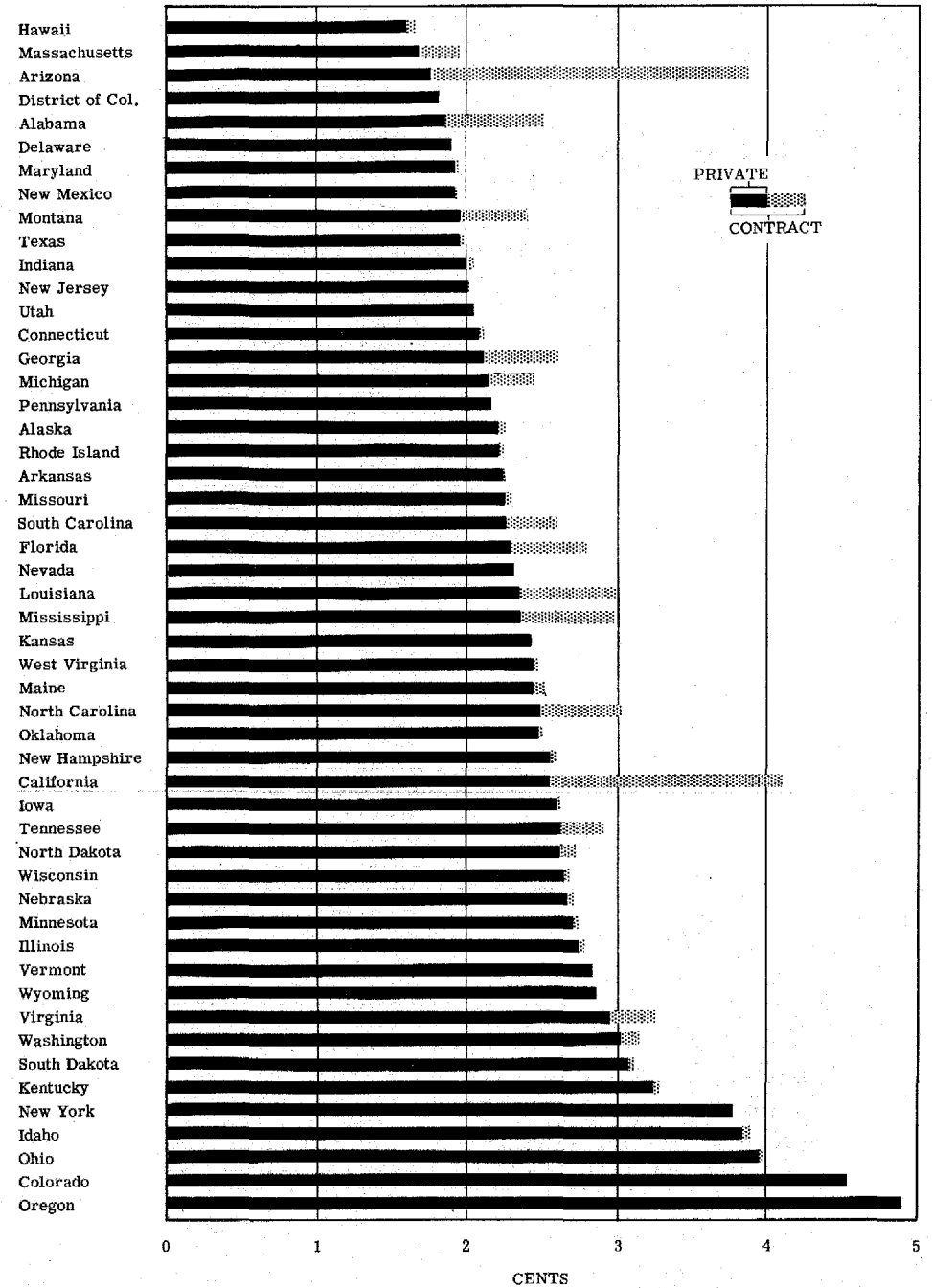
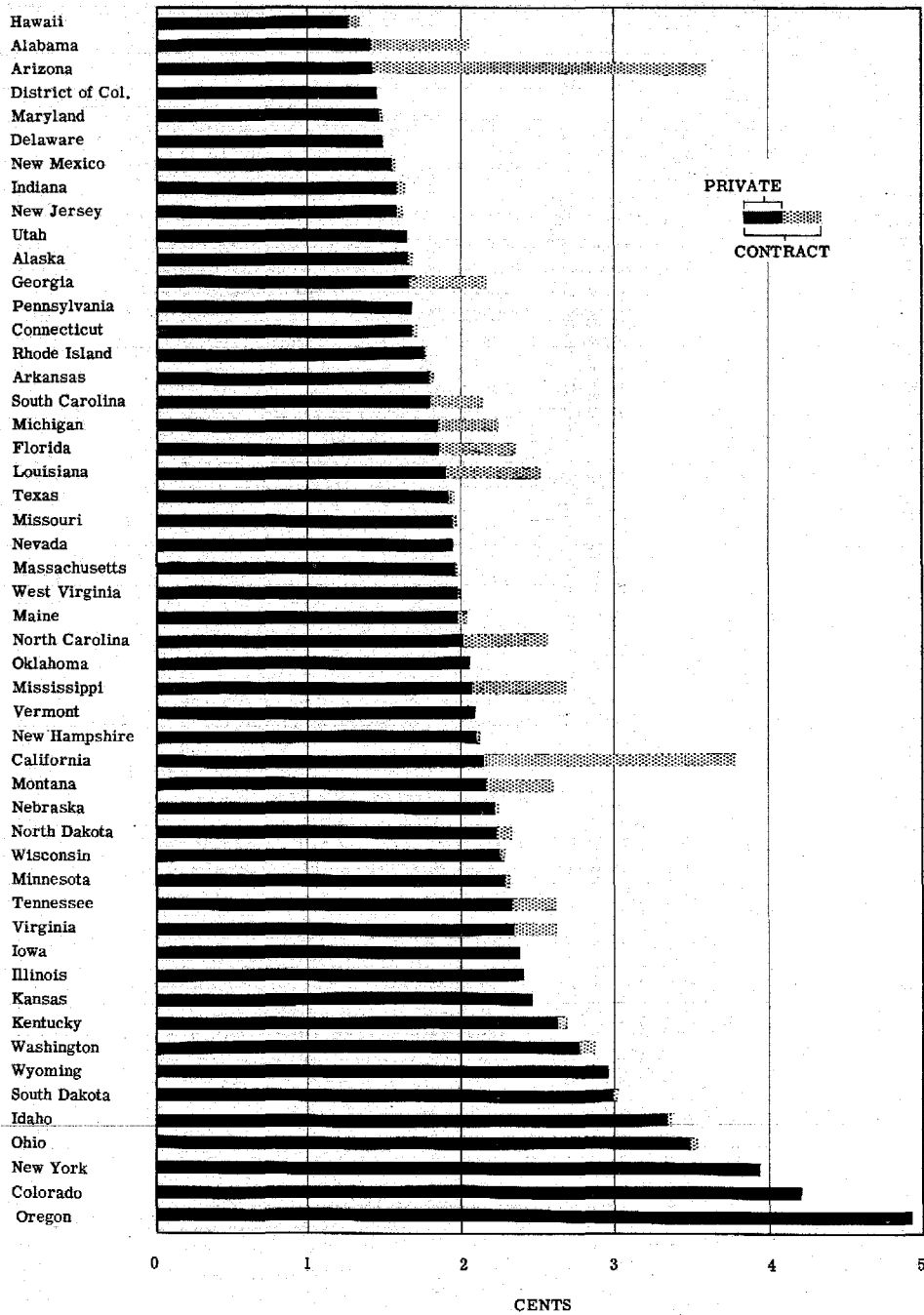


Figure 37.—Comparison of State road-user taxes (personal-property taxes excluded), in cents per mile, for private use and contract operation, for vehicles Nos. 8 and 9.

55,000-POUND DIESEL-POWERED FOUR-AXLE TRACTOR-SEMITRAILER (NO. 10)



62,000-POUND DIESEL-POWERED FIVE-AXLE TRACTOR-SEMITRAILER (NO. 11)

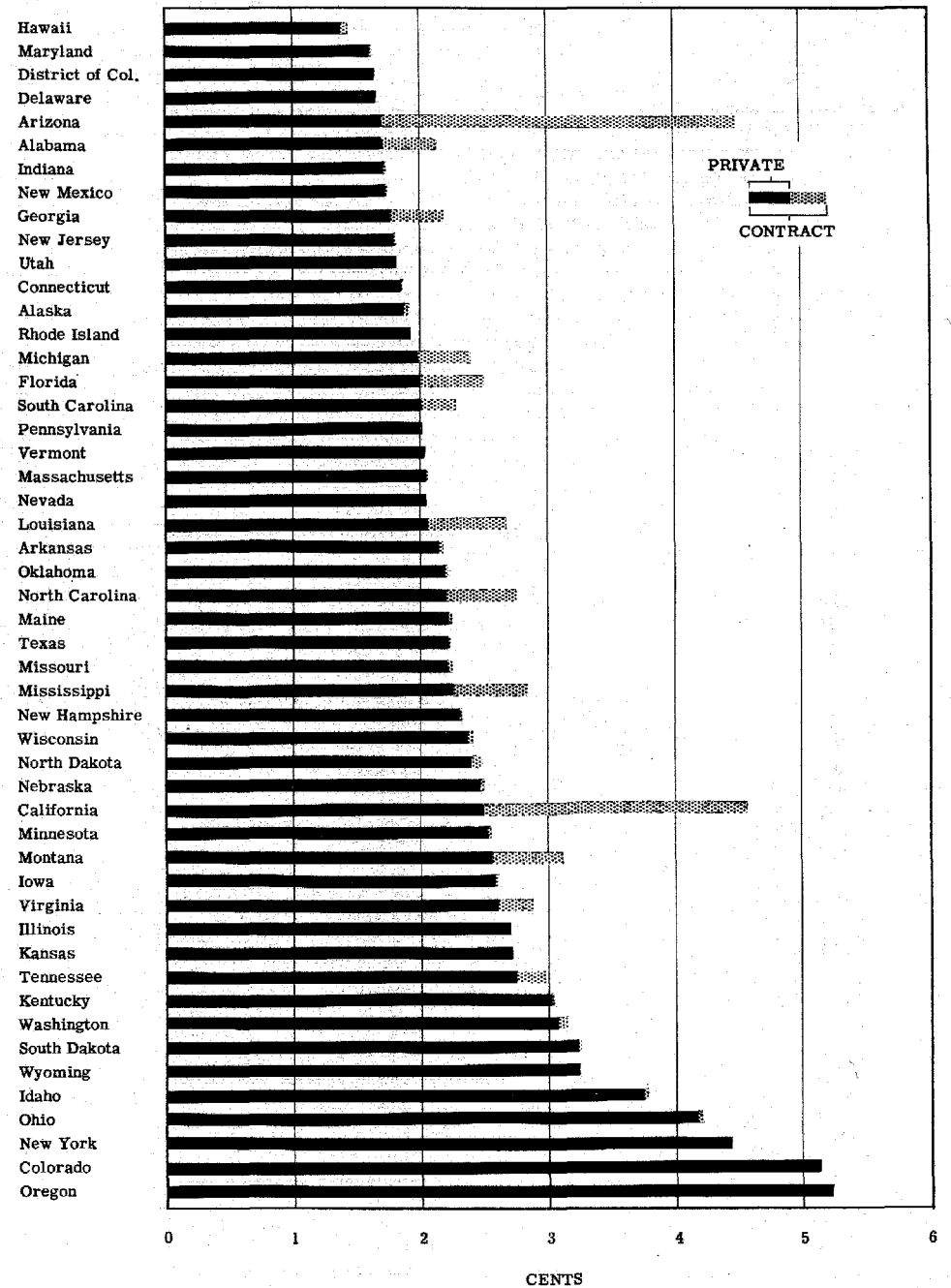
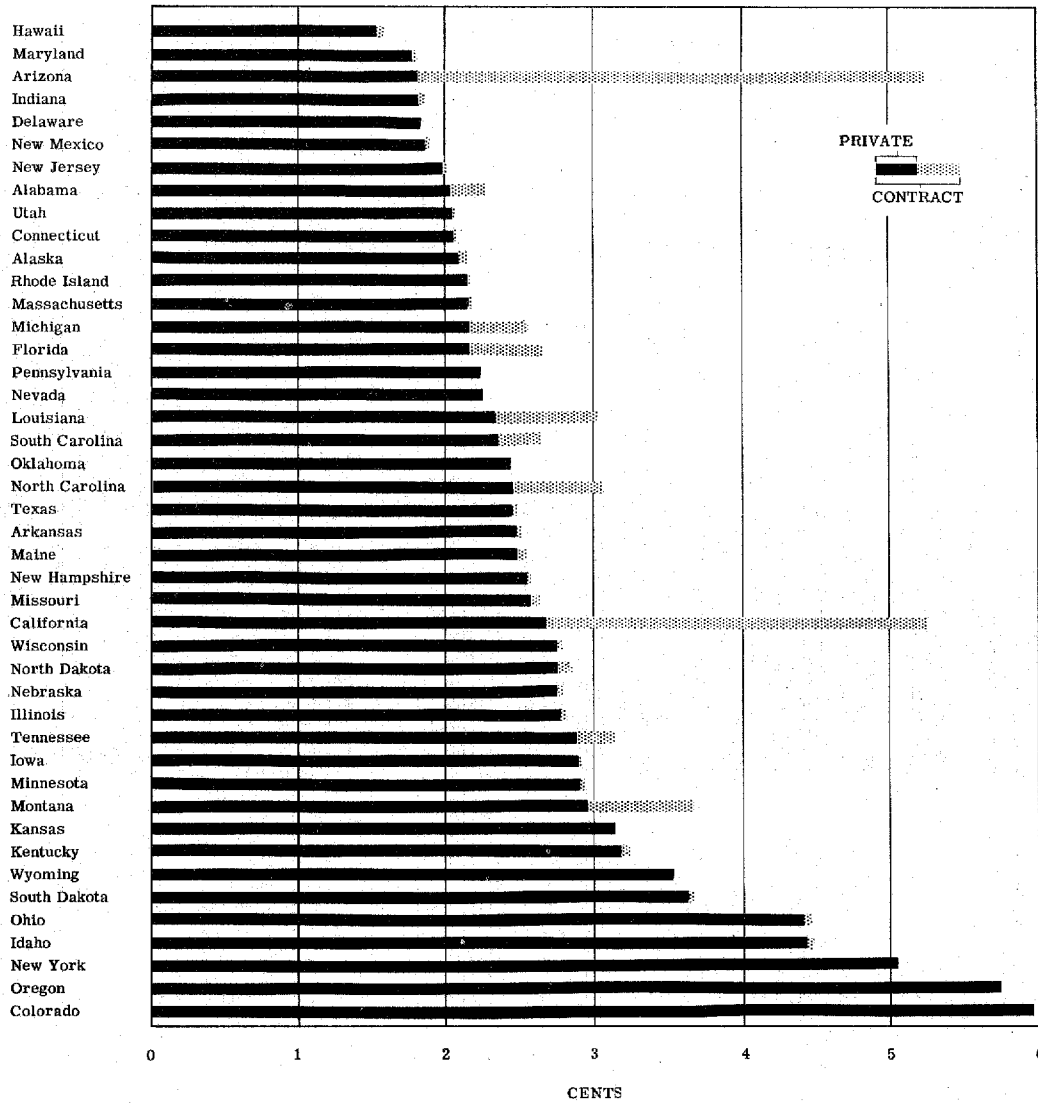


Figure 38.—Comparison of State road-user taxes (personal-property taxes excluded), in cents per mile, for private use and contract operation, for vehicles Nos. 10 and 11.

72,000-POUND DIESEL-POWERED FIVE-AXLE TRACTOR-SEMITRAILER (NO. 12)



76,000-POUND DIESEL-POWERED FIVE-AXLE TRACTOR-SEMITRAILER AND FULL TRAILER (NO. 13)

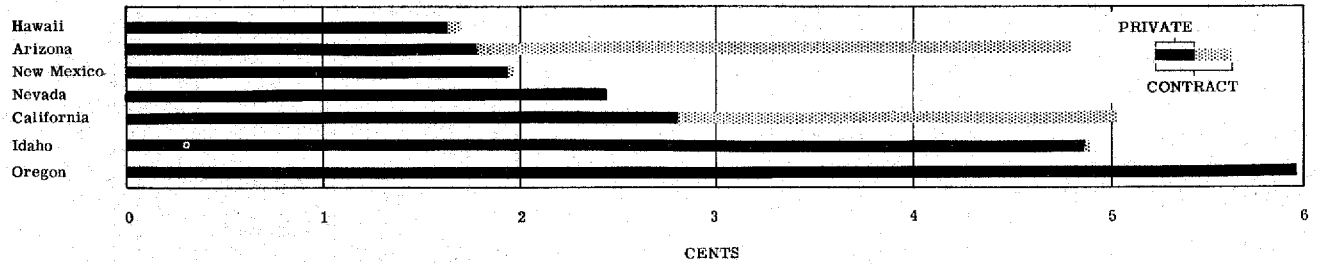


Figure 39.—Comparison of State road-user taxes (personal-property taxes excluded), in cents per mile, for private use and contract operation, for vehicles Nos. 12 and 13.

*Handwritten initials: JN*











Table 8.—Road-user and personal-property taxes on a single-unit, three-axle dump truck, 40,000 pounds gross vehicle weight (No. 7)

State	Private operation						Rank of State	
	Registration fee	Property tax	Other taxes and fees	Mileage or ton-mile tax	Gasoline tax	Total	Total fees and taxes	Total, excluding property tax
<b>New England:</b>								
Connecticut-----	\$260.00	\$291.72	-----	-----	\$450.00	\$1,001.72	14	36
Maine-----	321.00	167.50	\$2.00	-----	525.00	1,015.50	13	23
Massachusetts-----	120.00	254.10	2.00	-----	412.50	788.60	39	49
New Hampshire-----	240.00	-----	120.60	-----	525.00	885.60	34	18
Rhode Island-----	200.00	271.60	2.00	-----	525.00	998.60	16	35
Vermont-----	500.00	-----	-----	-----	487.50	987.50	17	8
<b>Middle Atlantic:</b>								
New Jersey-----	240.00	-----	1.00	-----	450.00	691.00	45	38
New York-----	200.00	-----	-----	\$187.50	450.00	837.50	37	25
Pennsylvania-----	252.00	-----	-----	-----	525.00	777.00	41	30
<b>East North Central:</b>								
Illinois-----	640.00	183.14	-----	-----	375.00	1,198.14	6	6
Indiana-----	200.50	438.07	-----	-----	450.00	1,088.57	10	43
Michigan-----	393.75	-----	-----	60.00	450.00	903.75	28	16
Ohio-----	447.10	-----	-----	150.00	525.00	1,122.10	8	4
Wisconsin-----	475.00	-----	-----	-----	450.00	925.00	25	14
<b>West North Central:</b>								
Iowa-----	465.00	-----	-----	-----	450.00	915.00	26	15
Kansas-----	150.00	360.64	-----	-----	375.00	885.64	33	50
Minnesota-----	443.65	-----	-----	-----	450.00	893.65	31	17
Missouri-----	100.00	156.56	-----	-----	375.00	631.56	49	51
Nebraska-----	410.50	279.57	-----	-----	525.00	1,215.07	5	13
North Dakota-----	400.00	-----	.50	-----	450.00	850.50	36	21
South Dakota-----	408.00	-----	465.00	-----	450.00	1,323.00	1	1
<b>South Atlantic:</b>								
Delaware-----	178.50	-----	-----	-----	450.00	628.50	50	45
District of Columbia-----	202.50	-----	1.00	-----	450.00	653.50	48	41
Florida-----	203.00	-----	-----	-----	525.00	728.00	43	34
Georgia-----	100.00	126.80	-----	-----	487.50	714.30	44	47
Maryland-----	175.00	35.00	-----	-----	450.00	660.00	47	46
North Carolina-----	321.00	112.75	-----	-----	525.00	958.75	21	24
South Carolina-----	211.00	158.40	-----	-----	525.00	894.40	30	33
Virginia-----	180.00	214.50	1.00	-----	675.00	1,070.50	11	20
West Virginia-----	284.50	81.02	1.00	-----	525.00	891.52	32	27
<b>East South Central:</b>								
Alabama-----	300.50	268.00	-----	-----	525.00	1,093.50	9	26
Kentucky-----	475.75	159.20	-----	-----	675.00	1,309.95	2	3
Mississippi-----	272.00	188.83	-----	-----	525.00	985.83	18	29
Tennessee-----	435.00	-----	-----	-----	525.00	960.00	20	9
<b>West South Central:</b>								
Arkansas-----	200.00	92.40	-----	-----	487.50	779.90	40	39
Louisiana-----	240.00	-----	-----	-----	525.00	765.00	42	32
Oklahoma-----	375.50	-----	-----	-----	487.50	863.00	35	19
Texas-----	396.00	142.13	1.00	-----	375.00	914.13	27	31
<b>Mountain:</b>								
Arizona-----	189.00	180.80	-----	-----	450.00	819.80	38	44
Colorado-----	19.00	160.80	-----	589.68	450.00	1,219.48	4	5
Idaho-----	100.00	-----	5.00	399.00	450.00	954.00	23	11
Montana-----	400.00	297.32	-----	-----	450.00	1,147.32	7	22
Nevada-----	87.50	111.00	398.25	-----	450.00	1,046.75	12	12
New Mexico-----	232.10	-----	-----	-----	450.00	682.10	46	40
Utah-----	200.00	281.75	1.00	-----	450.00	932.75	24	42
Wyoming-----	30.00	160.80	5.00	393.75	375.00	964.55	19	28
<b>Pacific:</b>								
California-----	327.00	-----	148.00	-----	525.00	1,000.00	15	7
Oregon-----	110.00	-----	398.50	-----	450.00	958.50	22	10
Washington-----	521.90	-----	213.50	-----	562.50	1,297.90	3	2
<b>Other Areas:</b>								
Alaska-----	110.00	187.65	-----	-----	600.00	897.65	29	36
Hawaii-----	181.50	-----	-----	-----	375.00	556.50	51	48
<b>Average 1/</b>	<b>\$273.03</b>	<b>\$198.59</b>	<b>\$98.13</b>	<b>\$296.65</b>	<b>\$479.41</b>	<b>\$927.11</b>		

1/ The average fee has been computed in each category on the basis of States that levy a tax in the category.

Table 9.—Road-user and personal-property taxes on the tractor and the semitrailer of a three-axle combination, 40,000 pounds gross vehicle weight (No. 8), in private use

State	Tractor truck						Semitrailer				
	Registration fee	Property tax	Other taxes and fees	Mileage or ton-mile tax	Gasoline tax	Total	Registration fee	Property tax	Other taxes and fees	Mileage or ton-mile tax	Total
<b>New England:</b>											
Connecticut-----	\$260.00	\$92.82	-----	-----	\$480.00	\$832.82	-----	\$114.92	-----	-----	\$114.92
Maine-----	321.00	76.50	\$2.00	-----	560.00	959.50	\$5.00	69.00	\$2.00	-----	76.00
Massachusetts-----	120.00	161.70	2.00	-----	440.00	723.70	15.00	105.60	-----	-----	120.60
New Hampshire-----	240.00	-----	55.08	-----	560.00	855.08	-----	36.00	-----	-----	36.00
Rhode Island-----	200.00	190.94	2.00	-----	560.00	952.94	2.00	130.07	2.00	-----	134.07
Vermont-----	500.00	-----	-----	-----	520.00	1,020.00	15.00	-----	-----	-----	15.00
<b>Middle Atlantic:</b>											
New Jersey-----	110.00	-----	1.00	-----	480.00	591.00	90.00	-----	1.00	-----	91.00
New York-----	72.00	-----	-----	\$450.00	480.00	1,002.00	165.00	-----	-----	-----	165.00
Pennsylvania-----	120.00	-----	-----	-----	560.00	680.00	125.00	-----	-----	-----	125.00
<b>East North Central:</b>											
Illinois-----	640.00	87.38	-----	-----	400.00	1,127.38	-----	44.92	-----	-----	44.92
Indiana-----	190.50	141.40	-----	-----	480.00	811.90	25.50	123.19	-----	-----	148.69
Michigan-----	140.40	-----	-----	-----	480.00	620.40	167.70	-----	-----	-----	167.70
Ohio-----	129.95	-----	-----	400.00	560.00	1,089.95	169.15	-----	-----	-----	169.15
Wisconsin-----	475.00	-----	-----	-----	480.00	955.00	10.00	-----	-----	-----	10.00
<b>West North Central:</b>											
Iowa-----	435.00	-----	-----	-----	480.00	915.00	60.00	-----	-----	-----	60.00
Kansas-----	300.00	195.44	10.00	-----	400.00	905.44	20.00	179.20	-----	-----	199.20
Minnesota-----	443.65	-----	-----	-----	480.00	923.65	10.50	-----	-----	-----	10.50
Missouri-----	300.00	72.07	-----	-----	400.00	772.07	7.00	53.43	-----	-----	60.43
Nebraska-----	410.50	94.53	-----	-----	560.00	1,065.03	1.00	74.37	-----	-----	75.37
North Dakota-----	400.00	-----	.50	-----	480.00	880.50	-----	-----	-----	-----	-----
South Dakota-----	133.00	-----	215.00	-----	480.00	828.00	107.50	-----	155.00	-----	262.50
<b>South Atlantic:</b>											
Delaware-----	95.70	-----	-----	-----	480.00	575.70	77.30	-----	-----	-----	77.30
District of Columbia-----	74.50	-----	1.00	-----	480.00	555.50	92.50	-----	1.00	-----	93.50
Florida-----	89.70	-----	-----	-----	560.00	649.70	182.50	-----	-----	-----	182.50
Georgia-----	100.00	59.92	-----	-----	520.00	679.92	10.00	64.20	-----	-----	74.20
Maryland-----	105.00	25.00	-----	-----	480.00	610.00	10.00	20.00	-----	-----	30.00
North Carolina-----	321.00	42.07	-----	-----	560.00	923.07	3.00	56.54	-----	-----	59.54
South Carolina-----	221.00	58.80	1.00	-----	560.00	840.80	11.00	58.80	-----	-----	69.80
Virginia-----	180.00	100.98	1.00	-----	720.00	1,001.98	12.00	66.00	-----	-----	78.00
West Virginia-----	267.00	33.47	1.00	-----	560.00	861.47	17.50	29.96	-----	-----	47.46
<b>East South Central:</b>											
Alabama-----	50.50	140.60	-----	-----	560.00	751.10	25.50	80.40	-----	-----	105.90
Kentucky-----	475.75	72.83	-----	-----	720.00	1,268.58	20.00	47.76	-----	-----	67.76
Mississippi-----	272.00	101.65	-----	-----	560.00	933.65	12.00	60.88	-----	-----	72.88
Tennessee-----	435.00	-----	-----	-----	560.00	995.00	-----	-----	-----	-----	-----
<b>West South Central:</b>											
Arkansas-----	200.00	46.20	-----	-----	520.00	766.20	5.00	40.26	-----	-----	45.26
Louisiana-----	280.00	-----	-----	-----	560.00	840.00	10.00	-----	-----	-----	10.00
Oklahoma-----	375.50	-----	-----	-----	520.00	895.50	20.50	-----	-----	-----	20.50
Texas-----	169.40	76.34	1.00	-----	400.00	646.74	128.70	48.04	1.00	-----	177.74
<b>Mountain:</b>											
Arizona-----	50.80	82.40	-----	-----	480.00	613.20	68.50	54.00	-----	-----	122.50
Colorado-----	19.00	73.44	-----	-----	480.00	572.44	6.50	48.00	-----	\$812.60	867.10
Idaho-----	100.00	-----	5.00	532.00	480.00	1,117.00	2.00	-----	-----	-----	2.00
Montana-----	60.00	72.94	-----	-----	480.00	612.94	40.00	88.64	-----	-----	128.64
Nevada-----	36.00	51.00	145.10	-----	480.00	712.10	43.00	33.00	167.10	-----	243.10
New Mexico-----	112.40	-----	-----	-----	480.00	592.40	86.50	-----	-----	-----	86.50
Utah-----	200.00	128.63	1.00	-----	480.00	809.63	5.00	84.00	-----	-----	89.00
Wyoming-----	30.00	73.44	5.00	216.00	400.00	724.44	30.00	48.00	5.00	258.00	341.00
<b>Pacific:</b>											
California-----	89.00	-----	67.00	-----	560.00	716.00	152.00	-----	45.00	-----	197.00
Oregon-----	65.00	-----	2.50	860.00	480.00	1,407.50	40.00	-----	2.50	-----	42.50
Washington-----	151.90	-----	84.50	-----	600.00	836.40	91.90	-----	86.00	-----	177.90
<b>Other Areas:</b>											
Alaska-----	60.00	85.70	-----	-----	640.00	785.70	60.00	56.02	-----	-----	116.02
Hawaii-----	78.50	-----	-----	-----	400.00	478.50	92.50	-----	-----	-----	92.50
<b>Average 1/</b>	\$209.91	\$90.30	\$30.13	\$491.60	\$511.37	\$829.11	\$51.10	\$69.60	\$41.97	\$535.30	\$118.45

1/ The average fee has been computed in each category on the basis of States that levy a tax in the category.











Table 15.—Road-user and personal-property taxes on a diesel-powered, five-axle, tractor-semitrailer and full trailer combination, 76,000 pounds gross vehicle weight (No. 13)

State	Private operation							Rank of State	
	Regis- tration fee	Property tax	Other taxes and fees	Mileage on ton- mile tax	Diesel fuel tax	Total	Total fees and taxes	Total, excl. prop. tax	
Arizona-----	\$240.75	\$396.60	-----	-----	\$1,000.02	\$1,637.37	5	6	
Idaho-----	104.00	-----	\$5.00	\$3,290.00	-----	3,399.00	2	2	
Nevada-----	139.00	243.00	547.90	-----	1,000.02	1,929.92	4	4	
New Mexico---	355.00	-----	1.00	-----	1,000.02	1,356.02	6	5	
California---	456.00	-----	322.00	-----	1,166.69	1,944.69	3	3	
Oregon-----	195.00	-----	7.50	3,955.00	-----	4,157.50	1	1	
Hawaii-----	296.80	-----	-----	-----	833.35	1,130.15	7	7	
Average <u>1/</u> ---	\$255.22	\$319.80	\$176.68	\$3,622.50	\$1,000.02	\$2,222.09			

State	Contract carrier							Rank of State	
	Regis- tration fee	Property tax	Other taxes and fees	Carrier taxes and fees	Mileage on ton- mile tax	Diesel fuel tax	Total	Total fees and taxes	Total, excl. prop. tax
Arizona-----	\$240.75	\$396.60	-----	\$2,112.00	-----	\$1,000.02	\$3,749.37	2	4
Idaho-----	104.00	-----	-----	30.00	\$3,290.00	-----	3,424.00	4	3
Nevada-----	139.00	243.00	-----	547.90	-----	1,000.02	1,929.92	5	5
New Mexico---	355.00	-----	\$11.00	-----	-----	1,000.02	1,366.02	6	6
California---	456.00	-----	322.00	1,563.33	-----	1,166.69	3,508.02	3	2
Oregon-----	195.00	-----	7.50	-----	3,955.00	-----	4,157.50	1	1
Hawaii-----	296.80	-----	-----	55.00	-----	833.35	1,185.15	7	7
Average <u>1/</u> ----	\$255.22	\$319.80	\$113.50	\$861.65	\$3,622.50	\$1,000.02	\$2,760.00		

1/ The average fee has been computed in each category on the basis of States that levy a tax in the category.



