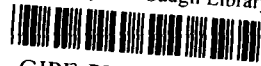


Summary

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Who pays for the highways?

Is the motor vehicle paying a fair share of the cost?

Are commercial vehicles using the roads at the expense of the general taxpayer, the railroads and the automobile owner?

These are the questions which the author studied in 1921, again in 1927 and revises now on the basis of 1929 government figures. Some of the more important facts revealed in the present survey are:

Highway Transportation Investment \$25,000,000,000

The highway transportation plant is now valued at \$25,000,000,000. Of this, the investment in highways is approximately \$12,500,000,000.

The motor vehicle investment including garages, terminals, and other automotive transport equipment, is at least \$12,000,000,000, of which two-thirds represents rolling stock.

Special Motor Tax Totals Increase 500%

From 1921 to 1929 *special* motor vehicle taxes have increased more than 500%.

In this period *special* motor vehicle tax payments *available for highway use* have grown from 10.8% of the total highway income in 1921 to 41.8% of the total in 1929.

The average special tax payment per vehicle was \$12.22 in 1921 and nearly \$30.00 in 1929.

Last year these taxes of \$780,000,000 were nearly double the figure for maintenance of all roads and were equal to the total expenditures on the main or state roads.

General property taxes for state roads decreased 65%, while total funds for these roads increased 141%. The major part of funds from property taxes were collected and expended by county and local governments.

No Levy Made on Rails for State Roads in Twenty-one States

The study of 1927 demonstrated that 2.4% of the highway income was derived from railroad taxes, or \$35,500,000, of which \$3,500,000 went to state roads.

Today, twenty-one states do *not* levy general property taxes or make appropriations from their general funds for main or state road programs. The entire amount of funds so levied in the other twenty-seven states amounts to about \$83,463,488, or less than 10% of total state highway income.

Thus, the increase in motor taxes in the period since 1927 has decreased railroad taxes devoted to state highways until they have become a negligible factor both in their relation to rail taxes as a whole and to the state highway program.

Railroad Tax Payment for Main Roads Negligible

Since motor vehicle taxes for local road uses also have increased from 1927 to 1930, while general taxes have remained constant, the railroad taxes used for this purpose are assumed to be no greater in amount than in 1927.

In other words, the railroads pay about \$30,000,000, or less than 4 per cent of the total of \$758,413,807 of the income for these local feeder roads not included in the main state highway systems, which generally are supplementary to the rail lines.

Common Carrier Vehicles Pay Many Times Private Car Tax

With respect to commercial vehicle payments, the truck and bus now constitute about 13% of the vehicles, but pay nearly 27% of the special vehicle taxes.

	Special Taxes	Times Private Car
Private Passenger Car.....	\$ 25.52	1
Average all trucks	53.78	2
Privately operated 3-ton truck.....	161.27	6 $\frac{1}{3}$
Common carrier 3-ton truck.....	458.78	18
Common carrier bus	575.00	22 $\frac{1}{2}$

State Control of Funds Increasing

Among other points of interest for further study is the fact that the states received more than half the total highway funds in 1929, while county and local income has increased but slightly since 1921.

Unless otherwise noted figures used are from the U. S. Bureau of Public Roads.

JOHN E. WALKER.

Washington, D. C.
January 5, 1931.

46030

HIGHWAY TAX COSTS

I

Sources of Rural Highway Income.

(a) Sources of All Income

Rural highway income in 1929 amounted to \$1,646,030,433.⁽¹⁾

The chief sources of these funds may be grouped as follows from the data given in Table I.

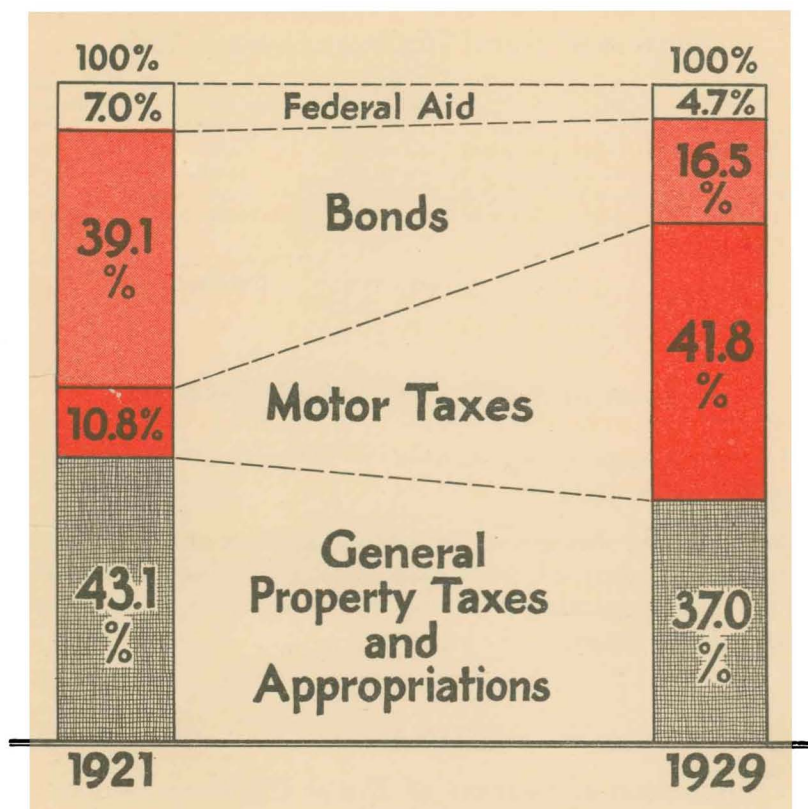
	Amount	Per Cent
Motor Vehicle Taxes ⁽²⁾	\$687,730,352	41.8
License Fees	\$329,979,058	
Gasoline Taxes	357,751,294	
	<hr/>	
General Property Taxes	608,862,947	37.0
General Tax Levy	\$425,583,916	
Appropriations	135,324,157	
Miscellaneous	47,954,874	
	<hr/>	
Bonds	271,864,443	16.5
Federal Aid ⁽³⁾	77,572,691	4.7

(1) All highways outside of cities are administered by two government groups (a) state highway departments which have jurisdiction over 10% of the total mileage representing the main routes and (b) counties and local governments such as townships, which have charge of the remaining 90%.

(2) Represents only the funds reserved for road use and not gross receipts. This figure represented 88% of gross total collected in 1929.

(3) This figure represents state receipts of Federal Aid, and does not check with the figure of Federal Aid payments to states, since the latter are given on the Federal fiscal year basis and the former on the basis of the calendar year.

Special Motor Taxes Now Four Times 1921 Share of Highway Bill



Special motor vehicle taxes in 1929 paid 41.8% of the total highway income or four times the proportion borne in 1921, while at the same time bonds contributed less than half the 1921 share and general property taxes considerably less than their 1921 proportion. The Federal Aid share was reduced by one-third.

If bonds are eliminated from consideration the motor vehicle tax funds reserved for road use amount to 50% of the total, general taxes and miscellaneous 44.3% and Federal Aid 5.7%.

TABLE I
Sources of Rural Highway Income, 1929

	State	County and Local	Total
General Tax Levy.....	\$ 11,431,349	\$414,152,567	\$425,583,916
Appropriation	60,305,631	75,018,526	135,324,157
Motor Vehicle Fees.....	278,092,734	51,886,324	329,979,058
Gas Tax	287,258,416	70,492,878	357,751,294
Miscellaneous	11,726,508	36,228,366	47,954,874
Bonds	161,229,297	110,635,146	271,864,443
Federal Aid	77,572,691	77,572,691
Total	\$887,616,626	\$758,413,807	\$1,646,030,433
Per Cent	54%	46%	100%

(b) Comparison of Sources of Income, 1921-1929

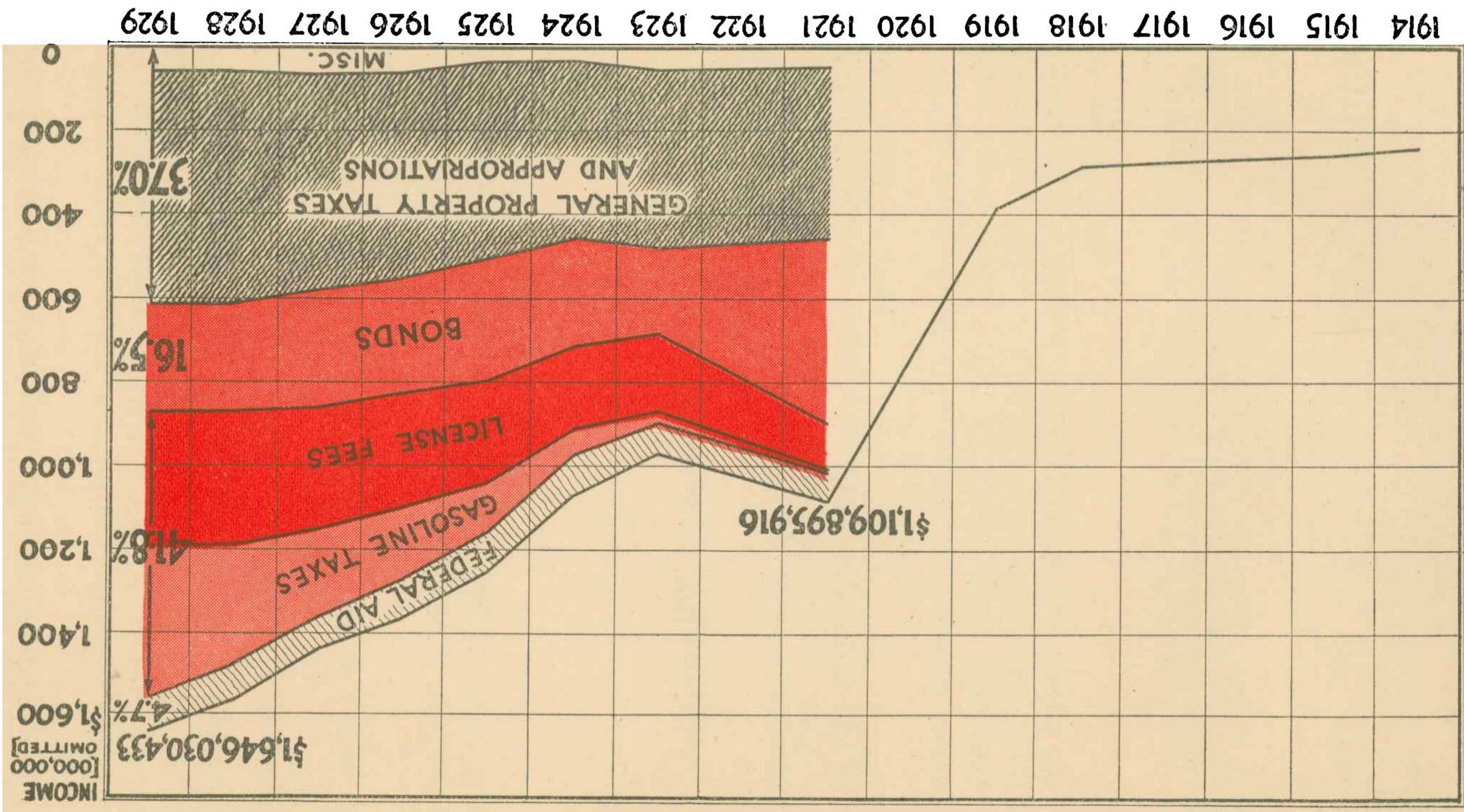
The 1929 income represented an increase of 48% over the funds raised in 1921.

Outstanding changes in the income sources are the *decrease* in the amount derived from bonds, and the *increase* both in amount and percentage of the total contributed by special motor vehicle taxes. (Table II.)

TABLE II
Comparison of Sources of Rural Highway Income
1921-1929

	1921	Per Cent	1929	Per Cent		
Motor Vehicle Fees..	\$116,401,416	} \$119,914,876	} \$329,979,058	} \$687,730,362		
Gasoline Taxes	3,513,460				357,751,294	41.8
Gen. Prop. Taxes.....	415,746,635	} 477,951,619	} 425,583,916	} 608,862,947		
Appropriations				135,324,157	37.0
Miscellaneous	62,204,984				47,954,874
Bonds	434,572,734	39.1	271,864,443	16.5		
Federal Aid	77,456,687	7.0	77,572,691	4.7		
Total	\$1,109,895,913	100.	\$1,646,030,433	100.		

Gasoline Taxes and Motor Registration Fees Contribute Steadily Increasing Proportion of Total Highway Income



Road Share of Special Motor Vehicle Taxes (4)

Motor vehicle taxes available for rural highway income have increased from \$119,914,876 or 10.8% of the total in 1921 to \$687,730,352 or 41.8% of the total in 1929, and out-ranked any other single source of income in the latter year.

The bulk of motor vehicle taxes was earmarked for road use, with 88% going to the states and counties. The balance was used for administration, apportioned to cities, or used for general expenses.

The state highway departments received 82% of the special motor taxes available for road use, while 18% was returned to the counties and local units.

General Property Taxation

General property taxes, appropriations, and miscellaneous funds (5) produced about \$608,862,947, or 37% of the rural highway income in 1929, compared with \$477,951,619 or 43.1% of the total in 1921.

While funds from this source of revenue increased 27.4% during these years, most of them were collected by county and local taxation. Thus, of the \$130,911,328 increase in total funds from this source, \$122,660,029 was levied by county and local authorities.

(4) Discussion is here confined to the portion of motor taxes actually available for roads. Gross motor vehicle taxes less some \$20,000,000 collection and administration cost represented nearly 53% of total expenditures and more than 93% of all state highway or main road costs. This is referred to later under discussion of special motor taxes.

(5) These funds have their origin in part at least in general tax funds. Appropriations are made from general funds, which may include monies derived by income taxes, and special imposts of different kinds. Including these two items under the heading of general property taxes for purposes of this discussion represents therefore, the maximum amount that general property taxes can be said to contribute to road funds.

Twenty-one States Make No Property Tax Levy for Main Roads

In 1921 twelve states did not levy for state road use any state general property taxes or make appropriations having their origin in state property taxes. By 1929 this number had increased to twenty-one. In other words, in 1929 but twenty-seven states either levied a direct property tax for state highways, or made appropriations for this purpose from general tax funds.

Bonds

Funds derived from bonds decreased from \$434,572,734 or 39.1% of the total in 1921 to \$271,864,443 or 16.5% of the total in 1929.

The income from bond sales has remained practically constant for the last five years at approximately \$272,000,000. At the same time these funds have decreased in relative importance in the total of funds available.

Principal and interest on most state highway bond issues since 1925 are being paid from special motor vehicle taxes. (°)

Federal Aid

Federal Aid during this period has not fluctuated to any appreciable extent. Receipts by states in 1929 amounted to \$77,572,691 as against \$77,456,687 in 1921. The percentage ratio to the total has declined from 7% to 4.7%.

(c) Division of Funds Between States and Local Units of Government

In 1929 the states received about 54% of all rural highway

(°) U. S. Bureau of Public Roads has prepared a table showing manner of payment of state highway bond issues.

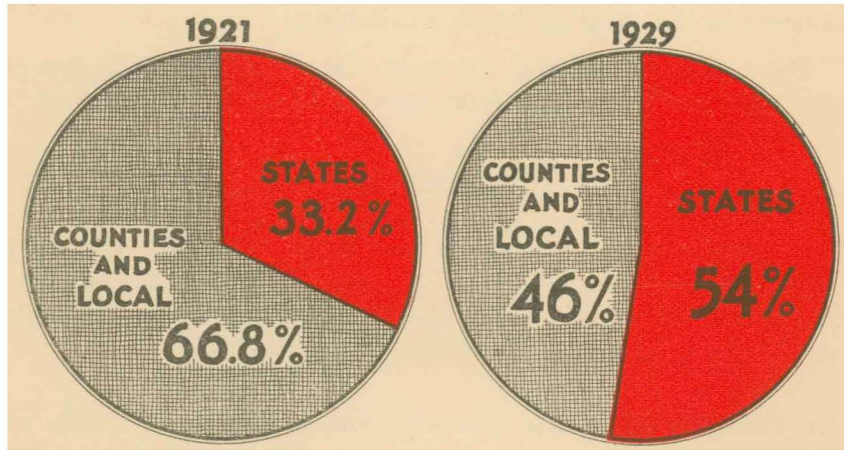
funds while the counties and local governments (towns, townships) collected 46% of the total.

In 1921 the states received but one-third of all funds, the counties taking the balance.

State highway revenues have grown from \$368,723,980 to \$887,616,626, an increase of 141%. (Table V.)

County and local funds have increased but slightly from the \$741,171,936 total in 1921 to \$758,413,807 in 1929, a gain of 2.3%.

States Collect Major Portion of Highway Income



Fifty-four per cent of the total highway fund is now collected and disbursed by state highway departments as compared with 33.2% in 1921.

The trend since 1921 has been to lodge an increasing portion of highway revenue with the state governments, due chiefly to greatly enlarged receipts from the motor vehicle tax revenues which are collected by the states.

Internal shifts in sources of local revenue have taken place, with the counties receiving a considerably augmented share of the motor taxes. Current general property taxes took up the slack in county and local receipts from bond sales, which in 1929 were but a third of their 1921 total.

The entire highway program is now very largely on a current income basis.

(d) Ratio of Motor Taxes to Current Income

Considering only the sources of current income by eliminating bond monies, it appears that available motor vehicle tax revenues accounted for 50% of all rural highway income in 1929.

On the same basis, the state share of these taxes produced nearly 78% of the income for use on the main roads.

(e) All Highway Expenditures

Expenditures in 1929 totalled \$1,444,668,985, or considerably less than income. (Tables II and III.)

TABLE III
Highway Expenditures by Purpose—1929

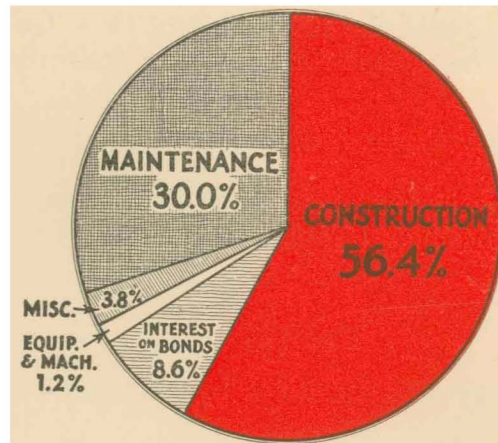
	State	Cent Per	County	Cent Per	Total	Cent Per
Construction	\$557,400,625	69.7	\$256,581,811	39.8	\$813,982,436	56.4
Maintenance	173,060,321	21.6	260,477,801	40.4	433,538,122	30.0
Miscellaneous	5,524,358	.7	49,455,959	7.7	54,980,317	3.8
Equipment and Mach.....	18,056,509	2.3	18,056,509	1.2
Interest on Bonds.....	45,834,531	5.7	78,277,070	12.1	124,111,601	8.6
Total	\$799,876,344	100.	\$644,792,641	100.	\$1,444,668,985	100.
Per Cent	55.4%		44.6%		100%	

The states spent 55.4% of the total while the counties expended 44.6%, these figures checking very closely with the division of income between the two groups.

The figures on construction and maintenance are of note as they indicate over 56% of all funds going to construction.

Maintenance charges took 30% of the funds, while interest payments on bonds required 8.6%.

Construction Constitutes 56% of Road Program; Maintenance 30%



Considerably over half of the total expenditures for highways is absorbed in the cost of construction while maintenance takes 30%, interest on bonds 8.6%, equipment and machinery 1.2%, and miscellaneous costs 3.8%.

(f) Highway Transportation Investment

The present investment in rural highways is in excess of \$12,500,000,000. This is based on the figure of \$6,850,000,000 cited by the Federal Trade Commission in its study of National Wealth and Income in 1922, plus the annual additions since that time in the form of new construction, amounting to \$5,600,000,000 at the end of 1930.

Motor vehicles and the garages, truck and bus terminals, and other automotive transport facilities are estimated at \$12,000,000,000 with two-thirds of this ascribed to the rolling stock. This estimate is carried forward from the figure on motor vehicle valuation of \$4,570,000,000 given by the U. S. Census Bureau in 1922 for a registration of 12,000,000 vehicles. Imputing to the present registration of 26,500,000 vehicles (1929) an average value of \$300 produces a total of \$7,950,000,000. The investment in private garages, commercial garages, bus terminals and garages (\$69,000,000 in 1929 for buses), is conservatively estimated to represent at least \$4,000,000,000. This latter investment is a much more stable one than that in rolling stock which is subjected to a relatively high rate of depreciation.

II

State Highway Income

(a) Sources

State highway income in 1929 was featured by the fact that available motor vehicle taxes accounted for nearly 64% of the revenue, as shown below:

	Amount	Per Cent
Motor Vehicle Taxes.....	\$565,351,150	63.7
Bonds	161,229,297	18.2
State Tax, Appropriation and Miscellaneous	83,463,488	9.4
Federal Aid	77,572,691	8.7
	\$887,616,626	100.

Eliminating bonds, motor vehicle taxes supplied nearly 78% of all funds.

TABLE IV
Sources State Highway Income, 1929

State Tax ⁽¹⁾	\$ 11,431,349
Appropriations ⁽²⁾	60,305,631
Motor Vehicle Fees.....	278,092,734
Gasoline Tax	287,258,416
Miscellaneous	11,726,508
State Bonds	161,229,297
Federal Aid	77,572,691
	\$887,616,626 ⁽³⁾

(b) Comparison of 1921 Income with 1929

State highway income was \$368,723,980 in 1921. The 1929 figure of \$887,616,626 represented an increase of 141% from the total of the earlier year.

⁽¹⁾ 13 States.

⁽²⁾ 19 States, including 5 of ⁽¹⁾.

⁽³⁾ Exclusive of transfer from counties.

The bulk of this increase was due to the imposition of additional gasoline taxes as well as the raising of old rates; and to an increase in license fees and number of vehicles registered.

The state share of special vehicle taxes produced 63.7% of the 1929 income compared with 28.4% from the same source in 1921.

General property taxes and appropriations plus miscellaneous revenues provided about \$8,000,000 more in 1929 than in the earlier year—an increase of less than 11% while the total of state highway income rose by 141%.

Receipts from general property taxes in 1929 were but \$11,431,349 against \$32,768,080 in 1921, a *decrease* of 65%.

TABLE V

Comparison of State Highway Income, 1921-1929

	1921		Per Cent	1929		Per Cent
Bonds	\$111,396,637		30.2	\$161,229,297		18.2
Property Taxes \$32,768,080				\$11,431,349		
Appropriations 34,464,718	67,232,798		18.2	60,305,631	71,736,980	8.1
Miscellaneous	8,079,391		2.2		11,726,508	1.3
Motor Vehicle Fees.....	101,284,479		27.5		278,092,734	31.3
Gasoline Taxes	3,273,988		.9		287,258,416	32.4
Federal Aid	77,456,687		21.0		77,572,691	8.7
Total	\$368,723,980		100.		\$887,616,626⁽¹⁾	100.

(1) An increase of 141% in total income.

General Taxes Produce Less Than 10% of State Highway Revenue

State general property taxes and appropriations plus miscellaneous revenues produced \$75,312,189, or 20.4% of the state highway income in 1921. By 1929 similar sources of revenues were responsible for \$83,463,488, or 9.4% of the total. Thus, the relative importance of these revenues dropped sharply.

Twenty-one States Make No Property Levy for Main Roads

In 1929 there was no property tax levy or appropriation from general funds for the main roads in 21 states. But thirteen states levied a direct road tax on general property and nineteen, including five of the foregoing thirteen, made appropriations from their general funds. Slightly more than half the states, therefore, levied any sort of tax on general property for the construction or maintenance of main roads, or for interest and principal payments on bonds.

In 1921 there were approximately thirty-five states levying taxes on general property for road improvement. The trend since that time has apparently been toward the lifting of these taxes for state road use as indicated first by the reduction in the number of states making such levies (Table VI), and second in the reduction in funds from this source.

TABLE VI

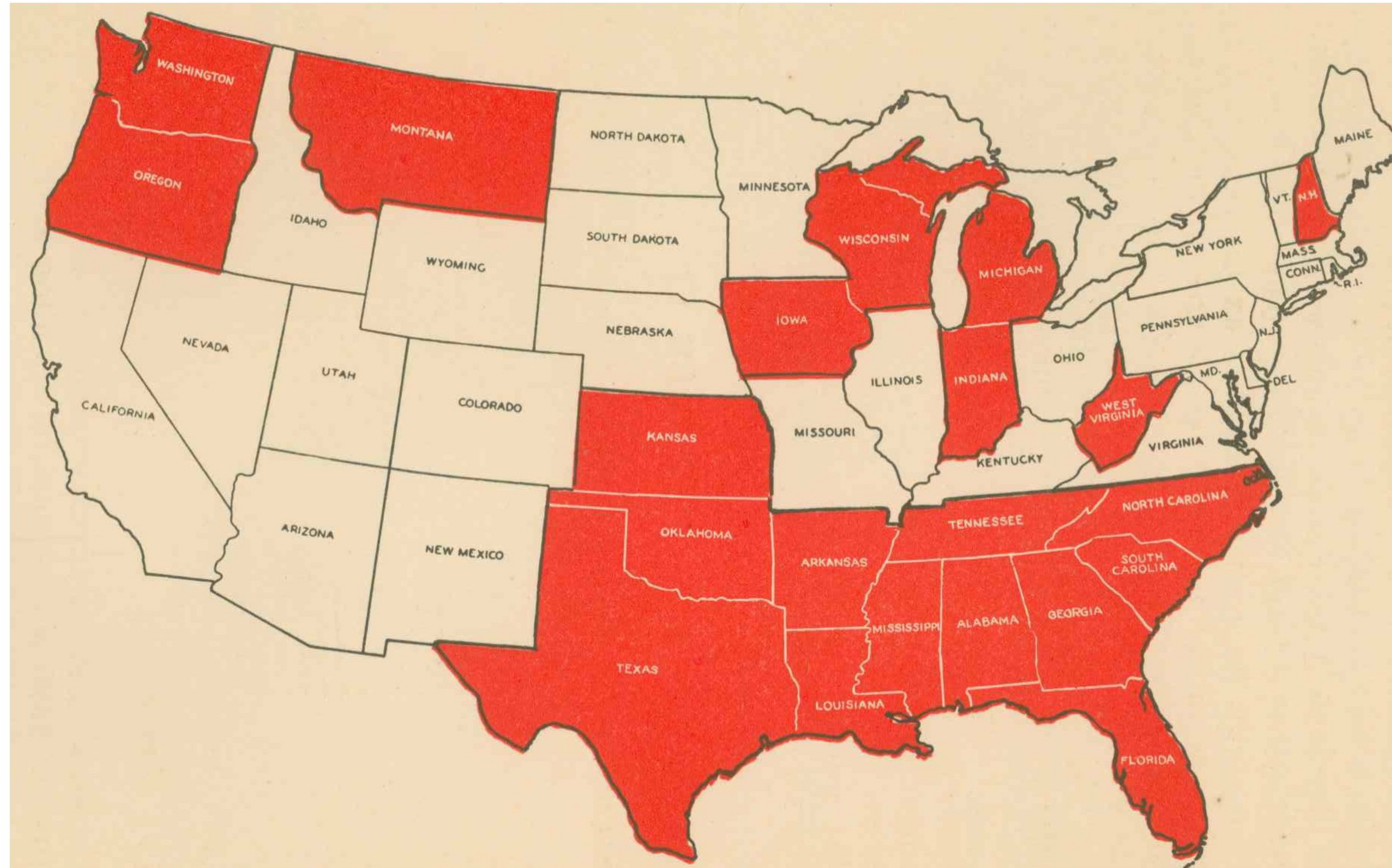
States Not Levying General Property Taxes or Appropriating From General Fund for State Highways

1921	1929
Alabama	Alabama
Arkansas	Arkansas
California	Florida
Georgia	Georgia
Iowa	Indiana
Maryland	Iowa
Missouri	Kansas
Montana	Louisiana
North Carolina	Michigan
North Dakota	Mississippi
Texas	Montana
West Virginia	New Hampshire
	North Carolina
	Oklahoma
	Oregon
	South Carolina
	Tennessee
	Texas
	Washington
	West Virginia
	Wisconsin

(c) Bonds

State highway bonds outstanding increased 270% from 1921 to 1929 with a total outstanding at the end of the latter year of \$1,008,856,150 in 30 states. At the end of 1921 state bonds outstanding totalled \$272,205,100 for 21 states.

**Twenty-one States Shown in Red Do Not Levy
General Property Taxes for State Road Purposes**



There was an increase both in amount of bonds issued and in the number of states issuing, with 45% more funds derived from bonds in 1929 than in 1921. The relative importance of bonds to total income decreased in importance, however, standing at 18.2% of the total in 1929 and 30.2% in 1921.

During the last five years a marked change in bond practice has taken place, with the majority of new issues being financed from motor vehicle license fees or gasoline taxes.

In 1928 twenty-one states out of thirty with outstanding state bond issues were financing the principal and interest on highway bonds in whole or in part from special motor vehicle taxes.

III

County and Local Income

(a) Sources

County and local income in 1929 was \$758,413,807, with 14.6% derived from bonds, 16.2% from the county and local portion of the special motor vehicle taxes, and the major part or 69.2% from property taxes. (Table VII.)

TABLE VII

Sources of County and Local Highway Income, 1929

Source	Amount	Per Cent
Bonds	\$110,635,146	14.6
Motor Vehicle Licenses	\$51,886,324	} 16.2
Gasoline Taxes	70,492,878	
Local Taxes	414,152,567	
Appropriations from General Fund.....	75,018,526	} 69.2
Miscellaneous	36,228,366	
Total	\$758,413,807⁽¹⁾	100.

(1) Exclusive of transfers from state.

(b) Comparison of 1921 Income with 1929

The total local highway income in 1929 was but 2.3% greater than in 1921.

Revenue from bonds was greatly reduced, indicating that the counties are very nearly on a current income basis of highway expenditure.

Increases took place in receipts from general property taxes and in the local share of special motor vehicle taxes. (Table VIII.) Thus \$15,356,409 in license fees and gas taxes were returned to the counties in 1921 to comprise 2.3% of

their income. In 1929 they received \$122,379,202 from these levies, amounting to 16.2% of their revenues.

TABLE VIII
Comparison of County and Local Highway Income
1921-1929

	1921	Per Cent		1929	Per Cent
Bonds	\$323,176,097	43.4		\$110,635,146	14.6
Taxes	} 348,513,837	47.0	\$414,152,567	} 525,399,459	69.2
Appropriations			75,018,526		
Miscellaneous	54,125,593	7.3	36,228,366		
Motor Vehicle Fees	15,116,937	2.0	51,886,324		
Gasoline Taxes	239,472	.3	70,492,878	122,379,202	16.2
Total	\$741,171,936	100.		\$758,418,807⁽¹⁾	100.

⁽¹⁾ Approximate increase of 2.3% over 1921.

IV

Special Motor Vehicle Taxation

(a) Registration

Motor vehicle registration increased from 10,464,715 vehicles in 1921 to 26,501,443 in 1929—a gain of 153%. In the latter year there were 23,121,589 passenger cars registered (including 46,000 common carrier buses) and 3,379,854 motor trucks.

(b) Taxes

During the same period the receipts from motor vehicle license fees and gasoline taxes rose from \$127,860,865 in the earlier year to \$779,479,997 in 1929—an increase of 510%.

The license fees in this period increased from \$122,478,654 in 1921 to \$347,843,543 in 1929, while gasoline tax receipts mounted from \$5,382,111 in the earlier year to \$431,636,454 in the latter year.

All states now levy a gasoline tax, ranging from two to six cents per gallon, and averaging 3.22 cents.

(c) Disposition of Taxes

Of the total special motor taxes in 1929 amounting to \$780,000,000, some 88% were earmarked for road use, the balance representing administration and collection costs, returns to cities and diversion to general funds, and miscellaneous uses.

After the deduction of administration costs and diversions, it appears that 82.2% of the remaining motor taxes were available for state roads in 1929, the balance of 17.8% going to counties. These levies represented 63.7% of state highway income and 16.2% of county and local income.

It is interesting to note that the *gross* motor vehicle receipts were:

- (a) equal to 88% of all state highway income and nearly *equal to all state road expenditures*,
- (b) *almost twice all rural road maintenance costs*,
- (c) *equal to 54% of all rural road expenditures*.

TABLE IX.

**Motor Vehicle Registration and Taxation
1929**

Registration		
Passenger Cars	23,121,589	
Motor Trucks	3,379,854	
		26,501,443
Taxation		
Registration Fees	\$347,843,543	
Gasoline Tax	431,636,454	
		\$779,479,997
Municipal*		20,000,000
Personal Property*		130,000,000
		\$929,479,997

(d) Division of the motor vehicle tax burden among automotive transport groups

There is a limited amount of information on the respective share of the license fees and gasoline taxes paid by automobiles, common carrier buses, and trucks.

The National Automobile Chamber of Commerce estimates that special commercial vehicle taxes in 1929 amounted to \$250,000,000, or 27% of the total gross motor vehicle receipts. These figures include an estimate for personal property taxes.

*Estimated by National Automobile Chamber of Commerce.

A close analysis of registration data indicates that commercial vehicle special taxes—license fees and gas tax payments—approximated \$208,000,000 last year, comprised as follows:

Motor truck license fees.....	\$ 72,700,000 ⁽⁷⁾
Motor truck gas taxes.....	108,800,000 ⁽⁸⁾
Common carrier bus license and gas taxes	26,500,000 ⁽⁹⁾
	\$208,000,000 ⁽¹⁰⁾
Estimate for personal property taxes, municipal levies, etc.....	42,000,000
	\$250,000,000

Average Auto Special Tax \$25.52

In thirty-three states and District of Columbia with separate registration records, 17,835,840 passenger cars (including buses) paid \$189,499,784 in license fees—an average of \$10.62 per automobile for registration only.

The average gasoline tax payment per passenger car is about \$14.90 (based on consumption 480 gallons per car and an average tax of 3.22 cents). The larger portion of the special vehicle tax therefore is paid by means of the levy on gasoline. The average special tax per private passenger car is therefore \$25.52.

Average Truck Tax \$53.78

Government registration data indicate that the motor trucks were approximately 13% of the total vehicles regis-

(7) Based on payment of \$57,000,000 in license fees in 33 states and D. C.

(8) Based on General Motors average of 11.22 miles per gallon and an annual consumption of 1,000 gallons at average tax of 3.22c. This method does not evaluate the variation in tax rates or the difference in totals of vehicles registered.

(9) National Association of Motor Bus Owners.

(10) Truck payments through personal property taxes, municipal levies and miscellaneous taxes undoubtedly equal to the \$42,000,000 difference between this figure and the National Automobile Chamber of Commerce \$250,000,000 total.

TABLE X

Average Taxes on Three-Ton Truck*

(As of January 1, 1930)

ASSUMPTIONS

The following assumptions were made in computing these fees. New truck; net weight 7,000 lbs.; chassis weight 6,000 lbs.; capacity 6,000 lbs.; gross weight 13,000 lbs.; 30 horsepower; value \$4,500.00; total solid tire width 30 inches; total pneumatic tire width 42 inches; annual mileage when privately operated 10,000;

annual mileage when operated as a common carrier 25,000; annual gross income when operated as a common carrier \$15,000; total gasoline consumption when privately operated 2,500 gallons; total gasoline consumption when operated as a common carrier 5,000 gallons.

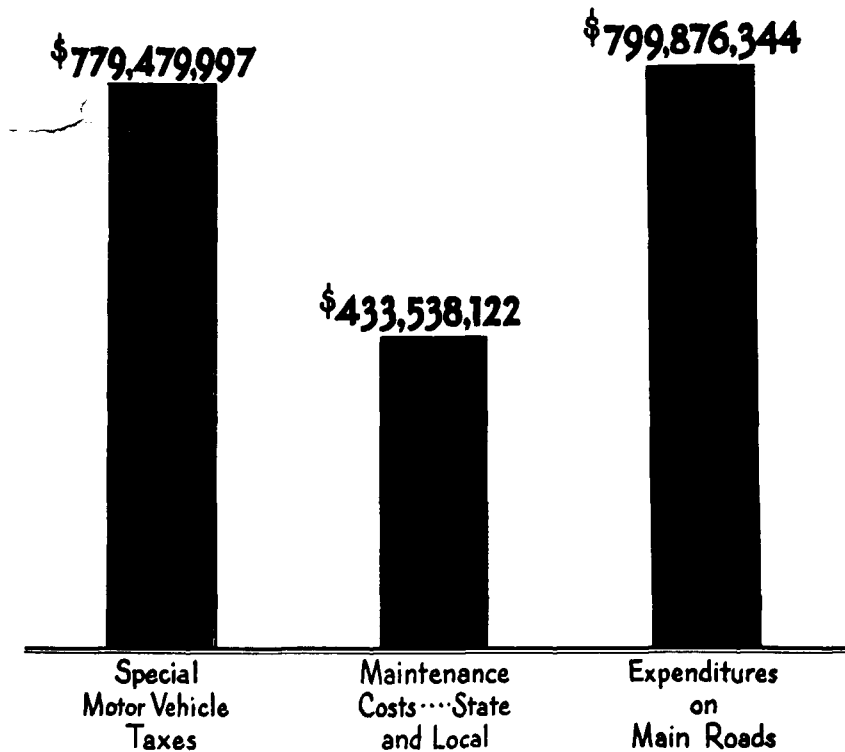
	PRIVATELY USED			COMMON CARRIER		
	Registration Fees		Gas Tax	Registration Fees		Gas Tax
	Solid A	Pneumatic B		Solid A	Pneumatic B	
Alabama	\$100.00	\$100.00	\$100.00	\$260.00	\$260.00	\$200.00
Arizona	67.00	33.50	100.00	442.00	408.50	200.00
Arkansas	187.50	125.00	125.00	881.25	787.50	250.00
California	96.00	43.00	75.00	750.00	750.00	150.00
Colorado	37.50	37.50	100.00	468.75	375.00	200.00
Connecticut	70.00	52.50	50.00	70.00	52.50	100.00
Delaware	62.00	52.00	75.00	52.00	52.00	150.00
Florida	140.00	105.00	150.00	760.00	695.00	300.00
Georgia	52.50	52.50	150.00	552.50	552.50	300.00
Idaho	108.00	72.00	100.00	302.00	248.00	200.00
Illinois	75.00	75.00	75.00	205.00	205.00	150.00
Indiana	35.00	35.00	100.00	35.00	35.00	200.00
Iowa	125.00	100.00	75.00	937.50	506.25	150.00
Kansas	90.00	45.00	75.00	235.00	185.00	150.00
Kentucky	95.00	95.00	125.00	95.00	95.00	250.00
Louisiana	104.50	98.40	100.00	260.40	230.45	200.00
Maine	73.33	55.00	100.00	73.33	55.00	200.00
Maryland	30.00	9.60	100.00	325.00	325.00	200.00
Massachusetts	19.50	19.50	50.00	19.50	19.50	100.00
Michigan	87.50	87.50	75.00	157.50	157.50	150.00
Minnesota	108.00	108.00	75.00	450.00	450.00	150.00
Mississippi	125.00	93.75	125.00	187.50	140.63	250.00
Missouri	18.00	18.00	50.00	18.00	18.00	100.00
Montana	46.88	37.50	125.00	56.88	47.50	250.00
Nebraska	35.00	35.00	100.00	35.00	35.00	200.00
Nevada	39.00	39.00	100.00	170.00	170.00	200.00
New Hampshire	104.00	78.00	100.00	104.00	78.00	200.00
New Jersey	48.00	48.00	50.00	48.00	48.00	100.00
New Mexico	167.50	134.00	125.00	333.75	317.00	250.00
New York	52.00	52.00	50.00	52.00	52.00	100.00
North Carolina	100.00	75.00	125.00	900.00	900.00	250.00
North Dakota	107.00	107.00	75.00	192.00	192.00	150.00
Ohio	70.00	70.00	100.00	140.00	140.00	200.00
Oklahoma	80.00	80.00	100.00	330.00	330.00	200.00
Oregon	105.00	70.00	100.00	180.00	145.00	200.00
Pennsylvania	150.00	90.00	100.00	150.00	90.00	200.00
Rhode Island	52.00	39.00	50.00	52.00	39.00	100.00
South Carolina	120.00	60.00	150.00	812.50	406.25	300.00
South Dakota	75.00	75.00	100.00	675.00	525.00	200.00
Tennessee	35.00	35.00	125.00	35.00	35.00	250.00
Texas	130.00	104.00	100.00	145.00	119.00	200.00
Utah	75.00	40.00	87.50	575.00	540.00	175.00
Vermont	104.00	104.00	100.00	104.00	104.00	200.00
Virginia	60.00	60.00	125.00	300.00	300.00	250.00
Washington	52.00	52.00	75.00	318.00	318.00	150.00
West Virginia	75.00	56.25	100.00	187.50	187.50	200.00
Wisconsin	75.00	75.00	50.00	775.00	440.00	100.00
Wyoming	80.00	50.00	100.00	110.00	80.00	200.00
Average, 1930	\$81.32	\$66.22	\$95.05	\$298.22	\$268.68	\$190.10
Average, 1928	\$80.50	\$66.80	\$81.11	\$251.50	\$210.90	\$162.22
Average, 1923	\$58.85	\$53.50	\$27.78	\$97.00	\$90.00	\$55.56

*Estimated by National Automobile Chamber of Commerce.

tered and paid 23% of the registration fees in 33 states and District of Columbia which kept separate records.

Some 2,640,199 motor trucks in these states paid \$56,955,890 through their **registration** licenses—an average of \$21.58 per truck. This average does not, of course, show the difference in taxation on heavy as compared with light vehicles.

Special Motor Taxes Almost Double Maintenance Costs and Nearly Equal to Expenditures for State Roads



At the rate of an annual consumption of 1,000 gallons of gasoline, times the average rate of tax, the average motor truck pays \$32.20 by means of this levy. Again this figure does not show the difference between consumption in heavy and light vehicles.

The average special tax payment per motor truck appears to be \$53.78.

An analysis of state taxation by the National Automobile Chamber of Commerce (Table X) indicates that in 1929 a privately operated 3-ton truck ⁽¹¹⁾ paid \$161.27 in license fees and gas taxes, while the same vehicle operated as a common carrier paid \$458.78.

Thus, an owner-operated three-ton truck paid more than six times the passenger car rate, while the same vehicle operated as a common carrier paid 18 times as much as the automobile. The common carrier bus paid twenty-two and one-half times the passenger car rate.

Both the greater mileage of commercial vehicles and their higher consumption of gasoline per mile operate to increase materially the per unit payment for this class of vehicle.

Average Bus Special Tax \$575

An estimate of \$26,500,000 ⁽¹²⁾ in tax payments is attributed to the license fees and gasoline taxes paid by 46,000 common carrier buses—a figure developed through a survey on operating costs by the National Association of Motor Bus Owners.

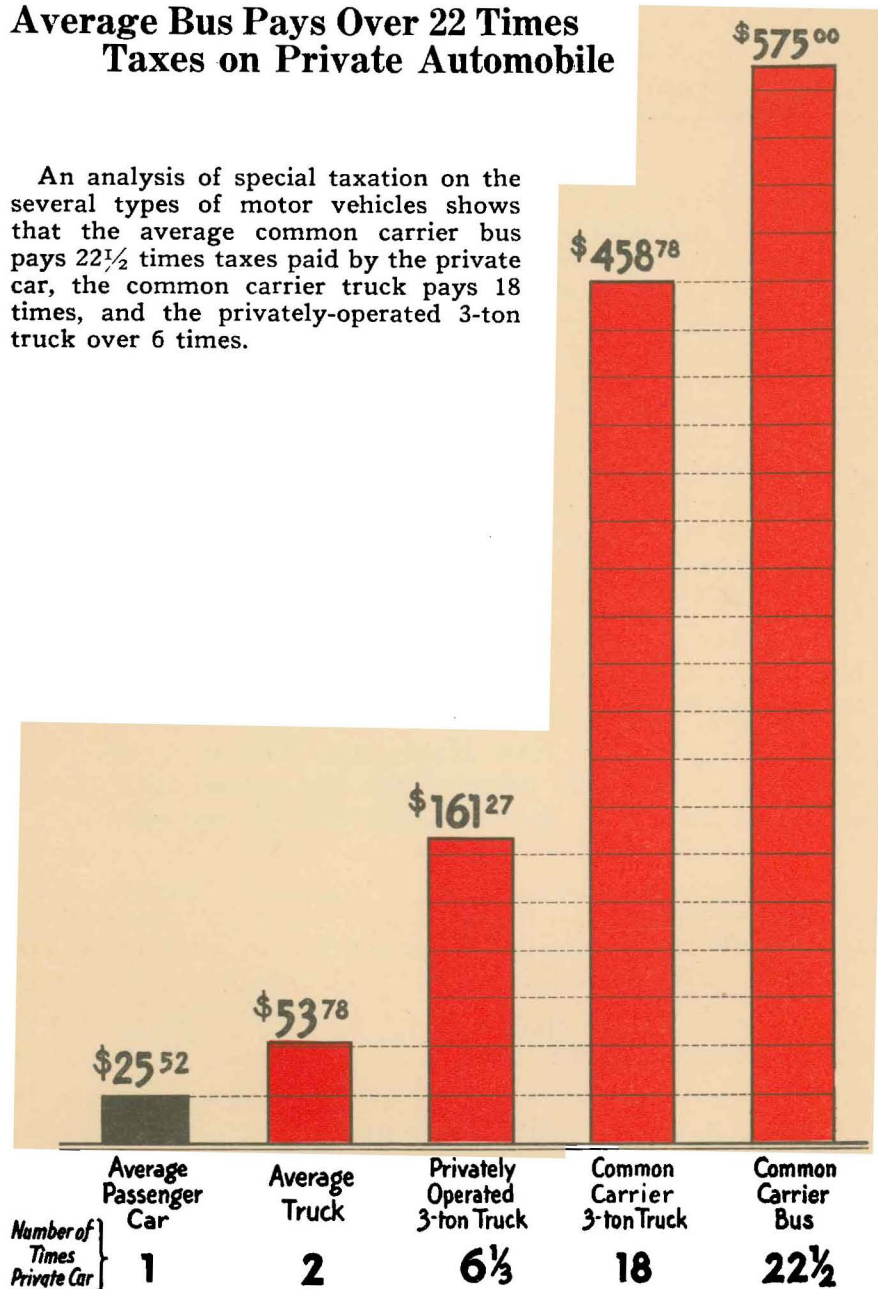
The average special tax per motor bus was found to be \$575 plus a figure of \$98 for all other taxation to which operating companies are subject, or a total of \$673 per bus.

⁽¹¹⁾ The 3-ton truck is above the average size in general use, but is cited to give a comparison with the vehicle of average size in common carrier service.

⁽¹²⁾ Business taxes \$4,500,000 additional.

Average Bus Pays Over 22 Times Taxes on Private Automobile

An analysis of special taxation on the several types of motor vehicles shows that the average common carrier bus pays 22½ times taxes paid by the private car, the common carrier truck pays 18 times, and the privately-operated 3-ton truck over 6 times.



V

Road Cost vs. Vehicle Tax Return

An analysis by the Committee on Highway Transportation⁽¹³⁾ of the Highway Research Board of two stretches of road in widely separated parts of the country and reported in the 1930 proceedings shows the relationship between the annual cost per mile of each road and the pro rated return from vehicle taxation for the same stretches of road.

These cases are, of course, special single illustrations and general conclusions cannot be drawn therefrom. They are of interest, however, as indicating a method of approach to the highway tax cost question, but one which does not attempt to evaluate the general economic benefit arising from road construction and use.

Section of U. S. 1 Surveyed

The first road studied was a section 6.55 miles of U. S. No. 1, lying between New Haven and Milford, Conn. The summary in the table below shows the annual cost of this section of road to be approximately \$11,059 per mile.

Interest on Investment at 4%.....	\$33,518.00
Annual Maintenance Charge	5,898.00
Annuity for Periodic Maintenance (14).....	32,729.00
Engr. and Adm. on Maintenance.....	324.00
	<hr/>
Total Annual Road Cost.....	\$72,469.00
Annual Cost Per Mile.....	11,059.00

An analysis was made of the tonnage of vehicular traffic moving over this road, based on actual traffic counts where obtainable and the best estimates that can be made otherwise.

⁽¹³⁾ Standing committee which reported at annual meeting, December, 1930.

⁽¹⁴⁾ Refers to periodic surface treatment.