

PUBLIC ROADS

A JOURNAL OF HIGHWAY RESEARCH



UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF PUBLIC ROADS



VOL. 17, NO. 9



NOVEMBER 1936



ON STATE ROUTE 50 IN NEW YORK

PUBLIC ROADS

▶▶▶ *A Journal of
Highway Research*

Issued by the

UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF PUBLIC ROADS

Volume 17, No. 9

November 1936

The reports of research published in this magazine are necessarily qualified by the conditions of the tests from which the data are obtained. Whenever it is deemed possible to do so, generalizations are drawn from the results of the tests; and, unless this is done, the conclusions formulated must be considered as specifically pertinent only to described conditions.

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THE NEW YORK FINANCIAL SURVEY

DIGEST OF A SURVEY OF THE FINANCES OF NEW YORK IN 1932, WITH SPECIAL REFERENCE TO HIGHWAYS¹

Reported by ELIZABETH C. PADDOCK, Assistant Highway Engineer-Economist, Division of Control, Bureau of Public Roads

IN 1934 a legislative committee was appointed in New York to make a survey of road and traffic conditions in order to assist in determining "future policy with respect * * * to the construction of streets, roads, highways, and footpaths" and "to ascertain the facts with regard to volume, character, and distribution of traffic on streets, and on primary, secondary, and tertiary roads."² It was deemed essential "that an economic survey be made to reveal sources of highway revenues to the end that road construction, both rural and urban, may be considered in accordance with the facts and funds equitably distributed for street and highway purposes."²

Prior to the initiation of the survey by this legislative committee the Bureau of Public Roads had been conducting investigations in a few other States similar to those desired by New York. Under a cooperative agreement the Bureau assisted the committee in the collection of the desired financial and road-use data. The financial and road-use surveys conducted in New York were modeled after those made in Wisconsin, Illinois, Michigan, Minnesota, New Hampshire, Colorado, Wyoming, and New Mexico.³ Similar studies are a part of the State-wide highway planning surveys currently being conducted by the Bureau in cooperation with about 40 of the various States.

The same general definitions and methods of collecting and analyzing data have been used in all the surveys. Four main processes characterize each study:

1. *Collection of data.*—In New York this step involved the detailed study of all available records in State offices, personal visits to many counties and localities, and the circulation of about 150,000 questionnaires. The process was simplified to a large extent in New York by the existence in State offices of complete records for all units of government with the exception of Rochester, Buffalo, New York City, and most of the special districts.

2. *Analysis of data.*—Much of the analysis was done as the data were collected. Where special problems of interpretation arose, however, decisions were made only after consultation with officials of the governmental agency in question.

3. *Tabulation of material.*—Detailed tabulations showing all data for the several population classifications in each county were made for the entire State. These tabulations formed the basis for the summary tables presented in this report.

4. *Preparation of report.*—An interpretation of the tabulations provided the material for this summary.

Six primary definitions are basic to an understanding and proper interpretation of the figures compiled for this

survey. The term "highways" includes all items having to do with the construction, maintenance, marking, signing, and administration of all roads, streets, alleys, and bridges. The term includes all items pertaining to the keeping of roads and streets in a usable and safe condition for vehicular traffic, but such items as sidewalks, sanitary sewers, ornamental lighting, and street cleaning are excluded.

Activities having to do with the construction, maintenance, and administration of and all teaching in public schools, libraries, and museums are classed as "education."

"Public benefit" consists of all items having to do with the protection of lives and property and with the pleasure and well-being of the people, including police and fire protection, courts, sanitation, parks, playgrounds, and charitable and penal institutions.

All general administration and such other activities as do not fall into one of the three classifications given above are classed as "government."

The definition of "expenditure" as used in this survey is synonymous with the net cost which must be met from public revenue funds, including special assessment payments.

Every payment made to a public body through the authority vested in it to collect funds is an "impost." Thus fees, fines, permits, and licenses are imposts. Where there occurs a difference in the amount of impost levied and the amount collected, the levy is shown.

OVER HALF OF THE TOTAL POPULATION AND PROPERTY VALUATION WAS IN NEW YORK CITY

In an effort to place all the surveys on a comparable basis the same population classification is used.

"Rural areas" are all rural territories outside of incorporated places. In New York all such areas are under town government. "Urban" areas are incorporated villages and cities and are grouped according to population as follows:

- Places under 2,500 persons.
- Places 2,500 to 14,999 persons.
- Places 15,000 to 74,999 persons.
- Places 75,000 to 399,999 persons.
- Places 400,000 to 999,999 persons.
- Places over 1,000,000 persons.

The names of individual cities are used in preference to the last two designations in this report since Buffalo is the only place having 400,000 to 999,999 persons and New York City is the only place having over 1,000,000 persons.

Certain data are basic to a complete understanding of the figures shown by the financial survey and should be kept in mind when reading this summary.

Population concentration in New York State is of more economic and social importance than in many of the other States. The population of New York according to the census of 1930 numbered 12,588,066 persons, more than one-tenth that of the entire con-

¹ The full report has been published by the State of New York as Legislative Document (1936) No. 115, vols. I and II. The Bureau of Public Roads does not have copies of the full report for distribution.

² Report of the New York State Highway Survey Committee, Legislative Document (1936) No. 89, p. 5.

³ These financial surveys have been made under the immediate direction of Dr. Henry R. Trumbower, professor of economics at the University of Wisconsin and economist for the Bureau of Public Roads, and H. R. Briggs, field investigator and statistician. For results of the Wisconsin, Illinois, Michigan, Minnesota, and New Hampshire surveys, see the April 1933, May 1933, June 1933, March 1936, and April 1936 issues of PUBLIC ROADS, respectively.

tinental United States (table 1). This population was crowded into a land area of 45,057 square miles, only 1.6 percent of the total gross area of the United States. Less than 14 percent of the people in New York live in rural areas. A further indication of the population concentration is made evident when it is pointed out that more than 50 percent of the population of the State (6,930,446 persons) live in New York City.

Another factor of economic importance is the valuation of property in the various parts of the State. The figures in table 1 show the full value of property, obtained by dividing the assessed value by the ratio of assessed to full value as determined by the State tax commission. This was necessary to put all valuations on a common basis.

All roads and streets in the State are classed under three general headings for the purposes of this survey. The first group includes the State highway system and any other roads or streets for which State moneys are specifically appropriated, exclusive of State aids or revenue distributions. State and county highways are the main roads included in this designation. The second group includes county roads, administered through the county boards of supervisors, while the third group embraces town highways and city and vil-

lage streets. Town highways lie entirely outside the limits of incorporated places and are administered by town boards.

The State highway system in 1932 consisted of 12,402 miles, or approximately one-eighth of the total street and road mileage of the State. This mileage is somewhat less than the legal system of State highways as established by the legislature. The system designated

by the legislature totaled some 13,947 miles, but for purposes of classification and administration all roads on the designated system are considered to be on the town highway system until they have been improved. Hence, the difference between the two figures given above is equal to the amount of the designated State highway system that was actually maintained by the towns and included in the total mileage of unimproved town highways. Though carried as part of the system designated by the legislature, these roads are actually included in the town highway system in all State reports, programs, and State-aid financing.

OVER 50 PERCENT OF ROADS ON STATE HIGHWAY SYSTEM HAD HIGH-TYPE SURFACES

Table 2 gives in summary form the distribution of the various classes of highways throughout the State in 1932. Table 3 shows that of the total mileage, 15.7 percent was pavement

NEW YORK TAXES IN 1932

Total taxes and imposts levied for all purposes in New York in 1932 were \$1,212,571,800. Taxation of general property totaled \$907,941,700; all motor-vehicle imposts, \$81,324,700; other imposts, including estate taxes, personal and business income taxes, bank taxes, and miscellaneous State, county, and local revenues, \$223,305,400.

Of the total taxes and imposts levied, rural taxpayers were charged with \$116,841,100, or 9.6 percent; residents of incorporated places other than New York City, \$362,977,000 or 30 percent; and residents of New York City, \$732,753,700 or 60.4 percent.

The average actual tax rates on general property per \$100 valuation were as follows: Rural areas, \$2.25; incorporated places under 2,500, \$1.70; places 2,500 to 14,999, \$2.24; places 15,000 to 74,999, \$3.18; places 75,000 to 399,999, \$3.33; Buffalo, \$3.34; and New York City, \$2.52.

Rural motor-vehicle owners paid in registration fees and motor-fuel taxes an average of \$27.63 per vehicle registered; those resident in incorporated places under 2,500, \$28.64; in places 2,500 to 14,999, \$30.78; in places 15,000 to 74,999, \$31.33; in places 75,000 to 399,999, \$33.35; in Buffalo, \$31.58; and in New York City, \$40.15.

TABLE 1.—Population in 1930 and full valuation of taxable real property by class of place in 1932

Class of place	Population			Full valuation ¹		
	Number	Per cent	Per square mile	Amount	Per cent	Per capita
Rural areas.....	1,712,065	13.6	39	\$3,558,877,300	10.1	\$2,079
Places under 2,500.....	372,073	3.0	807	1,052,444,600	3.0	2,829
Places 2,500 to 14,999.....	847,114	6.7	2,354	2,162,089,200	6.2	2,552
Places 15,000 to 74,999.....	1,004,222	8.0	3,837	2,137,796,300	6.1	2,129
Places 75,000 to 399,999.....	1,149,070	9.1	7,860	2,794,861,200	8.0	2,432
Buffalo.....	573,076	4.5	13,580	1,367,211,000	3.9	2,386
New York City.....	6,930,446	55.1	22,015	22,027,926,000	62.7	3,178
Total.....	12,588,066	100.0	279	35,101,205,600	100.0	2,788

RECAPITULATION						
	Number	Per cent	Per square mile	Amount	Per cent	Per capita
Rural.....	1,712,065	13.6	39	\$3,558,877,300	10.1	2,079
Urban.....	10,876,001	86.4	6,860	31,542,328,300	89.9	2,900
Total.....	12,588,066	100.0	279	35,101,205,600	100.0	2,788

¹ At State rate of equalization.

TABLE 2.—Location of the various classes of highways and streets in 1932

Place where highway was located	State highways		County roads		Local roads and streets		All highways and streets	
	Miles	Per cent	Miles	Per cent	Miles	Per cent	Miles	Per cent
Rural areas.....	11,507	92.8	11,682	99.0	60,025	78.6	83,214	82.7
Places under 2,500.....	635	5.1	61	.5	2,619	3.4	3,315	3.3
Places 2,500 to 14,999.....	246	2.0	51	.4	3,402	4.4	3,699	3.7
Places 15,000 to 74,999.....	13	.1	12	.1	2,424	3.2	2,449	2.4
Places 75,000 to 399,999.....	-----	-----	-----	-----	2,047	2.7	2,047	2.0
Buffalo.....	-----	-----	-----	-----	598	.8	598	.6
New York City.....	1	(¹)	-----	-----	5,270	6.9	5,271	5.3
Total.....	12,402	100.0	11,806	100.0	76,385	100.0	100,593	100.0

RECAPITULATION								
	Miles	Per cent	Miles	Per cent	Miles	Per cent	Miles	Per cent
Rural areas.....	11,507	92.8	11,682	99.0	60,025	78.6	83,214	82.7
Urban areas.....	895	7.2	124	1.0	16,360	21.4	17,379	17.3
Total.....	12,402	100.0	11,806	100.0	76,385	100.0	100,593	100.0

¹ Less than 0.1 percent.

(portland-cement concrete, brick, block, or asphalt) while 42.7 percent was earth. All but 2 miles of the total mileage of earth roads were on the town highway system. More than half of the State highway system was surfaced with portland-cement concrete, brick, block, or asphalt (fig. 1). The county roads in general were of intermediate type with 58.9 percent of their total mileage constructed of mixed bituminous material and 32 percent of water bound macadam and gravel.

Table 4 shows the mileage figures reduced to miles per square mile of area and per thousand persons. Thus, there was 0.27 mile of State highways per square mile of area and 0.99 mile per 1,000 persons, compared with a total on all systems in the State of 2.23 miles of roads and streets per square mile of area and 8 miles per 1,000 persons.

TABLE 3.—Classification of highways and streets by type of surface in 1932

Type of surface	State highways		County roads		Local roads and streets		All highways and streets	
	Miles	Per cent	Miles	Per cent	Miles	Per cent	Miles	Per cent
High type ¹	6,377	51.4	1,070	9.1	8,338	10.9	15,785	15.7
Mixed bituminous ²	689	5.6	6,953	58.9	1,352	1.8	8,994	8.9
Surface bituminous ³	3,875	31.2					3,875	3.9
Water-bound macadam and gravel	1,459	11.8	3,783	32.0	23,738	31.1	28,980	28.8
Earth	2	(4)			42,957	56.2	42,959	42.7
Total ⁵	12,402	100.0	11,806	100.0	76,385	100.0	100,593	100.0

BY PERCENTAGE ON EACH SYSTEM

High type ¹		40.4		6.8		52.8		100.0
Mixed bituminous ²		7.7		77.3		15.0		100.0
Surface bituminous ³		100.0						100.0
Water-bound macadam and gravel		5.0		13.1		81.9		100.0
Earth		(4)				100.0		100.0
Total		12.3		11.7		76.0		100.0

¹ Includes portland-cement concrete, brick, asphalt, and block pavements.
² Includes bituminous macadam and other bituminous mixes.
³ Includes penetration macadam and other low-cost bituminous surfaces.
⁴ Less than 0.1 percent.
⁵ System as accepted by State—not routes eligible to become State roads.

TABLE 4.—Mileages of the various classes of roads per square mile of area and per 1,000 persons¹

Highway system	Miles per square mile of area	Miles per 1,000 persons
State highways	0.27	0.99
County roads	.26	.94
Local roads and streets	1.70	6.07
All highways and streets	2.23	8.00

¹ Road mileage figures for 1932 were used. Population and area figures for 1930 were used.

State expenditures for highway purposes in 1932 constituted 33.5 percent of the total State expenditures for all purposes. When all units of government of the State are considered, the total expenditures for highways and streets amounted to 15.8 percent of all expenditures. The magnitude of highway expenditures is noteworthy in light of the fact that the functions of the local units of government are more especially concerned with education and public benefit.

Annual expenditures on the State highway system grew steadily from 1924 to 1932. Much of this increase in cost was caused by the enlargement of the system. In 1922 there were but 8,285 miles of improved highways, while there were more than 12,400 miles of improved highways in 1932. Also, the State built almost twice as many miles of highway in 1932 as it did in 1922.

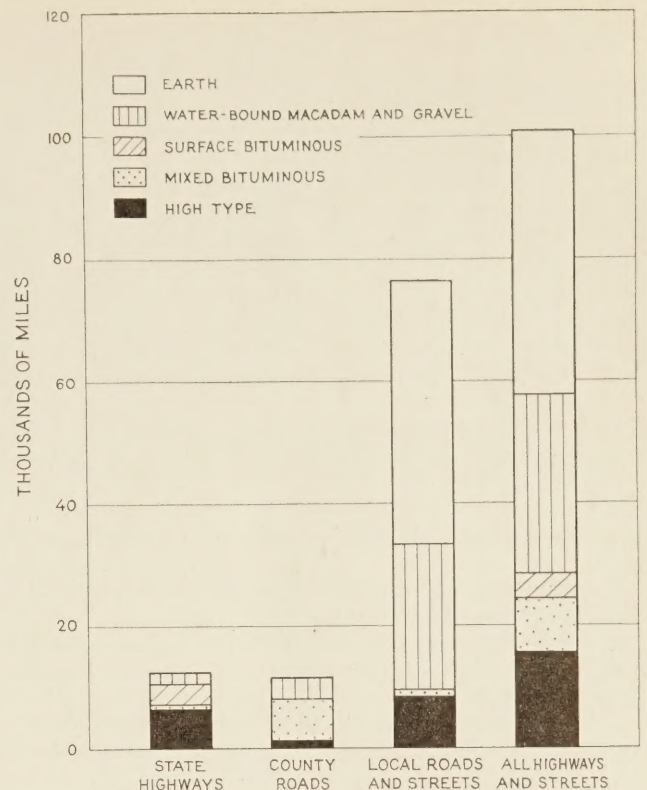


FIGURE 1.—MILEAGE OF ALL HIGHWAYS AND STREETS IN NEW YORK IN 1932, BY TYPES.

Table 5 indicates the considerable drop in expenditures which occurred in 1932. New York, like many other State governments throughout the country, felt in 1930 and 1931 that the economic depression would be of short duration and that its end would be hastened and the unemployed given useful work by the expenditure of large sums of money for public works. The figures for 1932 shown in table 5 are not entirely comparable with those of other years inasmuch as some information available for that year was not available for other years, i. e., expenditures by other agencies, such as the conservation department, for highway purposes. Other items, such as the expenditures by relief organizations, were not significant in the highway expenditures for the years prior to 1932.

\$17 PER CAPITA SPENT FOR HIGHWAYS IN 1932

One phenomenon of the 1932 road program in New York was the fact that even though total expenditures dropped more than \$16,000,000 from the high of 1931, a considerably greater mileage was constructed and maintained than would normally be expected with such a large decrease in expenditures. This resulted from a decrease in labor costs and material prices and from extremely low bidding by contractors.

The total highway program in New York cost \$215,583,200, or \$17.13 per capita, in 1932. The extent to which the several units of government participated in the 1932 highway program is shown in table 6. State and county expenditures, allocated to the places where the funds were actually spent, are shown in table 7.

Over 31 percent of the total highway expenditures were made for State highways, and other agencies besides the State made expenditures for the State

TABLE 5.—Expenditures administered by the State on State highway system, 1924-34

Year	Construction			Maintenance	Overhead			Grand total
	Highways ¹	Grade crossings ²	Total		General ³	Interest	Total	
1924	\$23,312,000		\$23,312,000	\$8,053,600	\$1,625,700	\$2,847,600	\$4,473,300	\$35,838,900
1925	26,232,000		26,232,000	9,231,700	2,178,000	2,800,700	4,978,700	40,442,400
1926	27,535,100		27,535,100	9,622,800	2,351,000	2,944,700	5,295,700	42,453,600
1927	37,534,000		37,534,000	11,690,600	1,831,800	3,069,100	4,900,900	54,125,500
1928	39,931,100	\$400	39,931,500	12,954,400	1,757,900	3,005,900	4,763,800	57,649,700
1929	44,234,600	1,228,500	45,463,100	14,048,700	2,037,400	2,931,300	4,968,700	64,480,500
1930	48,792,200	5,190,300	53,982,500	14,270,700	2,314,100	2,887,200	5,201,300	73,454,500
1931	56,254,700	4,754,900	61,009,600	13,320,000	2,081,000	3,313,700	5,394,700	79,724,300
1932	38,001,400	6,263,000	44,264,400	13,773,700	1,707,100	3,869,300	5,576,400	63,614,500
1933	25,416,200	6,963,600	32,379,800	10,636,100	1,512,100	4,111,800	5,623,900	48,639,800
1934	32,565,400	4,402,200	36,967,600	9,879,200	1,788,500	4,190,900	5,979,400	52,826,200
Total	399,808,700	28,802,900	428,611,600	127,481,500	21,184,600	35,972,200	57,156,800	613,249,900

¹ Includes grade crossing expenditures made under supervision of the Division of Highways.

² Includes only expenditures in Buffalo, Syracuse, and New York City not administered by Department of Public Works.

³ Includes operation expenses of Bureau of Motor Vehicles of the Department of Taxation and Finance.

⁴ Includes \$1,152,900 of county and local funds administered by the State.

⁵ Approximate.

highway system. These additional expenditures include:

1. Payments by the counties for snow removal on State highways (\$645,800).
2. Payments by the counties for right-of-way for new construction or reconstruction projects on State highways (\$3,834,000).
3. The contributions to the State for work done on county roads which are part of the State system (\$1,152,900).

TABLE 6.—Total street and highway expenditures as originally made by the several governmental agencies in 1932

Unit of government making expenditure	Amount of expenditure	Percent	Expenditure per capita
State	\$62,461,600	29.0	\$4.96
Counties	43,917,100	20.4	3.49
Towns	22,531,100	10.5	13.16
Places under 2,500	1,729,600	.8	4.65
Places 2,500 to 14,999	4,178,500	1.9	4.93
Places 15,000 to 74,999	4,902,800	2.3	4.88
Places 75,000 to 399,999	5,697,400	2.6	4.96
Buffalo	1,577,600	.7	2.75
New York City	68,587,500	31.8	9.90
Total	215,583,200	100.0	17.13

TABLE 7.—Total street and highway expenditures as made in each class of place in 1932

Place where expenditure was made	Amount of expenditure	Percent	Expenditure per capita
Rural areas	\$112,585,900	52.2	\$65.76
Places under 2,500	4,327,500	2.0	11.63
Places 2,500 to 14,999	6,917,000	3.2	8.17
Places 15,000 to 74,999	6,209,300	2.9	6.18
Places 75,000 to 399,999	10,126,600	4.7	8.81
Buffalo	2,187,600	1.0	3.82
New York City	73,229,300	34.0	10.57
Total	215,583,200	100.0	17.13

RECAPITULATION

Rural areas	\$112,585,900	52.2	\$65.76
Urban areas	102,997,300	47.8	9.47
Total	215,583,200	100.0	17.13

A large portion but not all of the State highway expenditures is administered through the Division of Highways. Payments of principal and interest on highway debt are in the hands of the State comptroller. Expenditures for snow removal and the purchase of right-of-way are made by the counties. Certain high-

way expenditures are made by the Conservation Department, by the emergency-relief commissions, and by various other special commissions such as the Westchester County Parkway Commission. Funds for grade crossing elimination projects in Buffalo, Syracuse, and New York City are controlled by city commissions. The cost of operation of the Bureau of Motor Vehicles, considered in this study as a highway expenditure, is under the supervision of the Department of Taxation and Finance.

One difficulty encountered in this survey was in making the distinction between expenditures for construction and those for maintenance. The State authorities realized that the maintenance accounts included more than maintenance figures and in 1933 changed the system of records so that expenditures for betterments would not appear as general maintenance. In the analysis of the 1932 accounts, maintenance expenditures as shown are not the reported maintenance-fund disbursements but are made up of those items which, as far as could be ascertained, were truly maintenance costs. Table 8 shows expenditures on the several highway systems by the purposes for which they were made, i. e., construction, maintenance, and overhead. The portion expended in or for the benefit of rural areas is given in table 9.

TABLE 8.—Total expenditures on the several highway systems in 1932

Purpose of expenditure	State highways	County roads	Local roads and streets	All highways and streets	Percentage of total
Construction:					
Amount	\$48,907,900	\$33,440,800	\$54,398,000	\$136,746,700	63.4
Percent	35.8	24.4	39.8	100.0	
Maintenance:					
Amount	\$13,635,800	\$3,999,800	\$41,284,200	\$58,919,800	27.3
Percent	23.1	6.8	70.1	100.0	
Overhead: ¹					
Amount	\$5,550,600	\$843,800	\$13,522,300	\$19,916,700	9.3
Percent	27.9	4.2	67.9	100.0	
Total:					
Amount	\$68,094,300	\$38,284,400	\$109,204,500	\$215,583,200	100.0
Percent	31.6	17.8	50.6	100.0	

¹ Includes interest payments.

ONE-HALF OF ALL HIGHWAY EXPENDITURES WAS FOR LOCAL ROADS AND STREETS

Maintenance expenditures in 1932 compared to those of previous years show considerable increase caused not only by the greater mileage of highways maintained but

TABLE 9.—Total highway expenditures on all highway systems in rural areas in 1932

Purpose of expenditure	State highways		County roads		Town roads		All highways	Percent
	Amount	Percent	Amount	Percent	Amount	Percent		
Construction:								
Amount.....	\$34,590,600	65.9	\$32,773,700	87.3	\$6,317,300	28.0	\$73,681,600	65.4
Percent.....	46.9	-----	44.5	-----	8.6	-----	100.0	-----
Maintenance:								
Amount.....	\$12,782,300	24.4	\$3,949,200	10.5	\$14,431,000	64.1	\$31,162,500	27.7
Percent.....	41.0	-----	12.7	-----	46.3	-----	100.0	-----
Overhead: ¹								
Amount.....	\$5,116,300	9.7	\$842,700	2.2	\$1,782,800	7.9	\$7,741,800	6.9
Percent.....	66.1	-----	10.9	-----	23.0	-----	100.0	-----
Total:								
Amount.....	\$52,489,200	100.0	\$37,565,600	100.0	\$22,531,100	100.0	\$112,585,900	100.0
Percent.....	46.6	-----	33.4	-----	20.0	-----	100.0	-----

¹ Includes interest payments.

also by the fact that in 1932 the Division of Highways performed many functions of maintenance which it did not formerly undertake. The costs of maintenance per mile and per vehicle are shown in table 10.

While the county roads constituted 11.7 percent of the total highway mileage of the State, they carried but 5.9 percent of the total travel performed by New York State residents on all New York roads and streets in 1932. The travel figures, obtained through the road-use survey, indicate the small total travel on county roads. This, however, does not mean that the county roads do not have an important place in the highway system of the State. They are in most cases necessary feeder roads which serve to carry local traffic quickly and cheaply to the State highways and other through routes.

An attempt was made during this survey to determine the amount of county expenditures made for the acquisition of right-of-way for State highways. On the basis of returns to questionnaires received from approximately two-thirds of the county superintendents of highways or from the boards of supervisors, this expenditure was estimated to have been \$3,834,000 in 1932. The incidental costs in connection with acquiring the various parcels of land for right-of-way were no inconsiderable portion of the total, amounting to approximately 10 percent for the State as a whole and in some counties running as high as 20 percent of the total.

TABLE 10.—Per-mile, per-vehicle, and total expenditures for street and highway maintenance in the various places in New York in 1932

Unit of government where vehicle was registered and where highway expenditure was made	Maintenance expenditures		
	Expenditure per mile	Expenditure per vehicle registered	Total
Rural areas.....	\$374	\$69	\$31,162,500
Places under 2,500.....	502	11	1,662,300
Places 2,500 to 14,999.....	687	10	2,540,300
Places 15,000 to 74,999.....	897	9	2,197,000
Places 75,000 to 399,999.....	758	6	1,550,700
Buffalo.....	980	5	585,800
New York City.....	365	24	19,221,200
Total.....	586	25	58,919,800

By legal interpretation the counties are responsible for the maintenance of the State highways between November 15 and May 1, as the highway law provides that the State shall not be liable for damages suffered by any person from defects on State and county high-

ways except between the first day of May and the fifteenth day of November.

Town highways constitute by far the largest mileage in any one class of roads or streets, totaling 60,025 miles or approximately 60 percent of the total mileage of the State. All of this mileage of town highways was in unincorporated areas and more than two-thirds of it was unsurfaced in 1932. The road-use survey shows that town highways carried an average of 8,410 vehicles per mile per year, or but 23 vehicles per mile per day. There are, of course, sizeable areas, adjacent to incorporated places, where town highways are of considerable importance, and the traffic on town highways in densely populated areas is much heavier than the average figure indicates.

Table 9 shows that in 1932 more than \$22,500,000 was expended on the town highways of New York, or more than \$370 on each mile of the system.

The total city and village street mileage in the State was more than either the county road or the State highway mileage, totaling 16,360 miles. Of this, 35.4 percent was in the city of New York. Forty percent of all highway expenditures in the State was made by urban communities. The State and counties spent \$16,323,900 on routes in urban places, and the total highway expenditure was \$102,997,300 in these communities.

A distinction is made in these surveys between the taxes imposed specifically for highway purposes and those imposts which are eventually used for roads and streets. The practice in most communities is to place the proceeds from all imposts into a general fund on which vouchers are drawn for all purposes. Highways are supported by the several types of imposts, therefore, in the same ratio that the proceeds from these imposts bear to the total income of the unit of government. More than half of the amount necessary to pay for the total highway costs in 1932 was raised from specific highway taxes which amounted to \$10.13 per capita or \$55.52 per vehicle (table 11). Over one-third of this amount was raised by levies on property. The towns of New York are the only units of government that levy specific highway taxes on property, with the exception of special assessments levied on property benefited in the several villages and cities of the State.

Tables 12 and 13 and figure 2 indicate that half of the cost of State highways was financed by motor-vehicle imposts. In addition, almost \$17,000,000 of loans and reserves and \$11,401,700 of Federal aid were necessary to meet these costs. Table 12 gives the breakdown of the amount spent out of current receipts into payments by taxpayers and motor-vehicle owners in the several classes of local units, and thus shows the contributions by each of these classes to the expenditures on the several highway systems and local streets.

EXPENDITURES FOR ALL PURPOSES AMOUNTED TO \$108 PER CAPITA

The presentation of highway data alone does not give an indication of the importance of this activity among all functions of the various governmental agencies. It is necessary to show the cost of all governmental operations and the various sources from which imposts are derived to pay for the activities.

Tax, expenditure, and debt data are shown in two ways:

1. By unit of government levying the tax, making the expenditure, or incurring the debt.

2. By actual incidence of tax payment, expenditures made, and debt liability. This applies not only

TABLE 11.—Specific highway taxes levied for collection, in 1932, by class of place where tax was paid

Class of place where tax was paid	AMOUNTS OF IMPOSTS					
	General prop-erty tax	Special assess-ments	Motor-fuel tax	Registration fees	Miscellaneous charges ¹	Total
Rural areas.....	\$13,044,600		\$6,144,200	\$6,246,700	\$615,700	\$26,051,200
Places under 2,500.....	549,500	\$302,300	2,099,800	2,158,800	212,600	5,323,000
Places 2,500 to 14,999.....	489,600	399,900	3,955,000	4,137,300	405,000	9,391,800
Places 15,000 to 74,999.....	54,200	905,100	3,899,000	3,846,300	385,400	9,090,000
Places 75,000 to 399,999.....		4,232,500	4,697,200	4,163,000	402,600	13,495,300
Buffalo.....		455,300	2,017,100	1,960,800	183,600	4,616,800
New York City.....		25,727,700	17,527,600	14,474,100	1,787,900	59,517,300
Total.....	14,137,900	32,022,800	40,340,900	36,987,000	3,996,800	² 127,485,400

PERCENTAGE, PER-CAPITA, AND PER-VEHICLE DISTRIBUTION OF IMPOSTS

Percentage of total.....	11.1	25.1	31.7	29.0	3.1	100.
Amount per capita.....	\$1.12	\$2.54	\$3.21	\$2.94	\$0.32	\$10.13
Amount per vehicle.....	6.16	13.95	17.57	16.11	1.73	55.52

¹ Drivers' licenses, transfers, etc.² An additional \$237,800 was derived from nonresidents. This amount was composed of \$206,900 registration fees and \$30,900 miscellaneous charges.

TABLE 12.—Approximate amounts of the 1932 taxes and imposts expended on New York highways listed according to highway system, type of tax, and class of local unit by which the tax was paid

Paid by residents of—	PROPERTY TAXES								
	State highways		County roads		Local roads and streets		All highways and streets		Percent- age of total
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent	
Rural areas.....	\$1,780,000	5.7	\$9,269,200	29.4	\$20,436,700	64.9	\$31,485,900	100.0	
Places under 2,500.....	416,700	6.8	2,170,600	35.4	3,550,000	57.8	6,137,300	100.0	
Places 2,500 to 14,999.....	906,900	7.3	4,722,600	38.3	6,716,300	54.4	12,345,800	100.0	
Places 15,000 to 74,999.....	929,400	7.4	4,840,000	38.5	6,812,200	54.1	12,581,600	100.0	
Places 75,000 to 399,999.....	980,100	6.0	5,104,000	31.4	10,170,400	62.6	16,254,500	100.0	
Buffalo.....	619,600	8.5	3,226,600	44.2	3,454,100	47.3	7,300,300	100.0	
New York City.....					44,807,300	100.0	44,807,300	100.0	
Total.....	¹ 5,632,700	4.3	29,333,000	22.4	95,947,000	73.3	130,912,700	100.0	60.7

MOTOR-VEHICLE IMPOSTS									
Rural areas.....	\$5,456,100	65.0	\$1,368,400	16.3	\$1,573,100	18.7	\$8,397,600	100.0	
Places under 2,500.....	1,875,500	65.0	470,400	16.3	540,800	18.7	2,886,700	100.0	
Places 2,500 to 14,999.....	3,580,500	65.0	897,900	16.3	1,032,400	18.7	5,510,800	100.0	
Places 15,000 to 74,999.....	3,410,000	65.0	855,200	16.3	983,200	18.7	5,248,400	100.0	
Places 75,000 to 399,999.....	3,887,400	65.0	975,000	16.3	1,120,900	18.7	5,983,300	100.0	
Buffalo.....	1,807,300	65.0	453,300	16.3	521,100	18.7	2,781,700	100.0	
New York City.....	14,083,500	65.0	3,532,100	16.3	4,060,700	18.7	21,676,300	100.0	
Total.....	34,100,300	65.0	8,552,300	16.3	9,832,200	18.7	52,484,800	100.0	24.3

OTHER IMPOSTS									
Rural areas.....			\$120,900	33.8	\$236,300	66.2	\$357,200	100.0	
Places under 2,500.....			26,800	34.3	51,400	65.7	78,200	100.0	
Places 2,500 to 14,999.....			59,500	27.9	154,100	72.1	213,600	100.0	
Places 15,000 to 74,999.....			71,000	23.6	229,500	76.4	300,500	100.0	
Places 75,000 to 399,999.....			81,000	20.3	318,600	79.7	399,600	100.0	
Buffalo.....			39,900	20.9	150,700	79.1	190,600	100.0	
New York City.....					2,284,700	100.0	2,284,700	100.0	
Total.....			399,100	10.4	3,425,300	89.6	3,824,400	100.0	1.8

ALL TAXES AND IMPOSTS									
Rural areas.....	\$7,236,100	18.0	\$10,758,500	26.7	\$22,246,100	55.3	\$40,240,700	100.0	
Places under 2,500.....	2,292,200	25.2	2,667,800	29.3	4,142,200	45.5	9,102,200	100.0	
Places 2,500 to 14,999.....	4,487,400	24.8	5,680,000	31.4	7,902,800	43.8	18,070,200	100.0	
Places 15,000 to 74,999.....	4,339,400	23.9	5,766,200	31.8	8,024,900	44.3	18,130,500	100.0	
Places 75,000 to 399,999.....	4,867,500	21.5	6,160,000	27.2	11,609,900	51.3	22,637,400	100.0	
Buffalo.....	2,426,900	23.6	3,719,800	36.2	4,125,900	40.2	10,272,600	100.0	
New York City.....	14,083,500	20.5	3,532,100	5.1	51,152,700	74.4	68,768,300	100.0	
Total.....	39,733,000	21.2	38,284,400	20.5	109,204,500	58.3	187,221,900	100.0	86.8
Federal aid.....	11,401,700	100.0					11,401,700	100.0	5.3
Loans and reserves.....	16,959,600	100.0					16,959,600	100.0	7.9
Grand total.....	68,094,300	31.6	38,284,400	17.8	109,204,500	50.6	215,583,200	100.0	100.0

¹ Arises from county participation in financing right-of-way and certain other costs in connection with State roads.

to State and county data but also to the taxes levied, expenditures made, and debt incurred by the town governments. Their taxes are generally a levy on the village residents as well as on the residents of the rural areas of the town because villages are a part of the town in which they are located.

In the State as a whole, \$1,362,616,300, or \$108 per resident, was spent for all activities of the State, counties, and local governments (fig. 3). Of this amount, \$17 per capita was the cost of highways. Twenty-nine percent of the highway expenditure was made by the State, 20.4 percent by the counties, and 50.6 percent by the local governments. Expenditures by the State for education were only 3.6 percent of the total for all governmental units, those for public benefit 13.8 percent, and those for government 14.2 percent.

Public benefit costs accounted for over 55 percent of the expenditures for all purposes by all governmental agencies. Nearly 79 percent of these expenditures was made by the local units of government. Educational activities were almost entirely a matter of local concern, with 96.4 percent of the expenditures for this purpose being made by the towns, villages, cities, and school districts. The county expenditures for education were almost negligible, amounting to only 1 cent per capita, while the State spent about \$1 per capita for these activities.

Table 14 shows that the local units of government—the towns, villages, cities, school districts, and special districts—spent more per capita than did the counties and State. The State and counties made most of their expenditures for public benefit and highways. Expenditures by the local units of government for public benefit were also large, but education costs replaced those of highways as second largest in amount.

Most of the highway expenditures by the State and the counties were made in the rural areas. Added to these expenditures were those made by the local units of government in their respective areas, bringing the

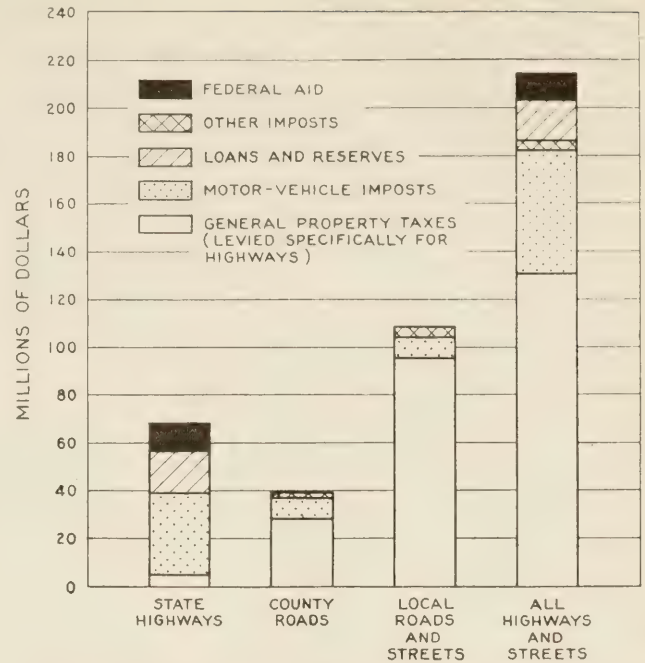


FIGURE 2.—DISTRIBUTION OF TOTAL EXPENDITURES FOR HIGHWAYS AND STREETS, SHOWING SOURCES OF FUNDS.

total expenditures for highways in the rural areas to \$112,585,900, or \$66 per capita. Highway expenditures in the urban areas were \$102,997,300, or \$9.47 per capita.

Practically all of the other expenditures made by the State and the counties were made for the residents of the State in general proportion to the population distribution (table 15). Public benefit and education expenditures in the urban areas were more per capita than in the rural areas. This is true because urban communities maintain more expensive educational equipment and provide more secondary schools than

TABLE 13.—Funds expended on highways and streets in New York in 1932 and the approximate amounts and percentages of these funds provided by imposts and by loan and reserve funds, as made by the various governmental units

Highway system	Governmental agency providing funds					Percentage of total current tax funds	Percentage of total funds
	Federal	State	County	Local	Total		
State highways:							
Loans and reserves		\$16,959,600			\$16,959,600		
Current taxes	\$11,401,700	34,100,300	\$5,632,700		51,134,700	25.7	
Total	11,401,700	51,059,900	5,632,700		68,094,300		31.6
Percentage of total	16.7	75.0	8.3		100.0		
County roads:							
Loans and reserves		\$8,951,400	\$29,333,000		\$38,284,400	19.3	
Current taxes							
Total		8,951,400	29,333,000		38,284,400		17.8
Percentage of total		23.4	76.6		100.0		
Local roads and streets:							
Loans and reserves				\$95,947,000	\$95,947,000	55.0	
Current taxes		\$13,257,500			\$13,257,500		
Total		13,257,500		95,947,000	109,204,500		50.0
Percentage of total		12.1		87.9	100.0		
All highways and streets:							
Loans and reserves		\$16,959,600			\$16,959,600		
Current taxes	\$11,401,700	56,309,200	\$34,965,700	\$95,947,000	198,623,600	100.0	
Total	11,401,700	73,268,800	34,965,700	95,947,000	215,583,200		100.6
Percentage of total	5.3	34.0	16.2	44.5	100.0		

¹ Includes proceeds of general State improvement bonds and notes as of Dec. 31, 1932, and grade crossing elimination bonds and notes as of June 30, 1933, and grade crossing elimination funds used as of June 30, 1933.

² Report of the State tax commission, 1932, and annual report of the department of audit and control, June 30, 1933.

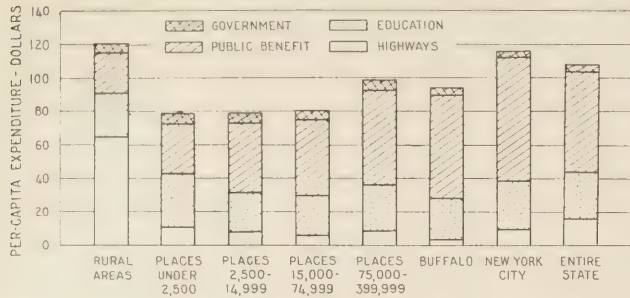


FIGURE 3.—PER-CAPITA EXPENDITURES FOR DIFFERENT PURPOSES, DISTRIBUTED BY GOVERNMENTAL UNITS IN OR FOR WHICH EXPENDITURES WERE MADE.

do rural areas, and also support many institutions not necessary in the rural areas.

The effect that New York City has on the activities of the entire State and the proportion that the expenditures of this one city bear to the total for the State are illustrated by the fact that of all expenditures, 59.5 percent was made in or for the benefit of the residents of New York City.

TABLE 14.—Expenditures by all units of government in New York for various purposes, in 1932

Expenditures made by—	Total expenditures	Per cent	Per-capita expenditures for—				Total
			Highways	Edu-cation	Public benefit	Government	
State.....	\$186,429,300	13.7	\$4.96	\$0.97	\$8.28	\$0.60	\$14.81
Counties.....	110,312,200	8.1	3.49	.01	4.64	.62	8.76
Towns.....	85,985,500	6.3	13.16	23.84	9.82	3.40	50.22
Places under 2,500.....	17,268,600	1.3	4.65	30.63	9.00	2.13	46.41
Places 2,500 to 14,999.....	40,817,500	3.0	4.93	22.50	17.83	2.92	48.18
Places 15,000 to 74,999.....	57,470,400	4.2	4.88	22.91	26.72	2.72	57.23
Places 75,000 to 399,999.....	84,816,700	6.2	4.96	26.01	38.76	4.08	73.81
Buffalo.....	42,074,100	3.1	2.75	23.51	44.81	2.35	73.42
New York City.....	737,442,000	54.1	9.90	27.28	66.29	2.94	106.41
Total.....	1,362,616,300	100.0	17.13	26.93	59.93	4.26	108.25

RECAPITULATION

State.....	\$186,429,300	13.7	\$4.96	\$0.97	\$8.28	\$0.60	\$14.81
Counties.....	110,312,200	8.1	3.49	.01	4.64	.62	8.76
Local governments.....	1,065,874,800	78.2	8.68	25.95	47.01	3.04	84.68
Total.....	1,362,616,300	100.0	17.13	26.93	59.93	4.26	108.25

TABLE 15.—Expenditures by State, counties, and local governments for various purposes, showing unit of government in or for which expenditure was made in 1932

Expenditures made in or for residents of—	Total expenditures	Per cent	Per-capita expenditures for—				Total
			Highways	Edu-cation	Public benefit	Government	
Rural areas.....	\$206,827,400	15.2	\$65.76	\$24.83	\$25.92	\$4.30	\$120.81
Places under 2,500.....	29,607,100	2.2	11.63	31.60	30.43	5.91	79.57
Places 2,500 to 14,999.....	67,266,300	4.9	8.17	23.48	41.50	6.26	79.41
Places 15,000 to 74,999.....	80,561,000	5.9	6.18	23.88	45.26	4.90	80.22
Places 75,000 to 399,999.....	114,071,900	8.4	8.81	27.02	57.45	5.99	99.27
Buffalo.....	53,952,800	3.9	3.82	24.54	61.53	4.26	94.15
New York City.....	810,329,800	59.5	10.57	28.25	74.56	3.54	116.92
Total.....	1,362,616,300	100.0	17.13	26.93	59.93	4.26	108.25

RECAPITULATION

Rural areas.....	\$206,827,400	15.2	\$65.76	\$24.83	\$25.92	\$4.30	\$120.81
Urban areas.....	1,155,788,900	84.8	9.47	27.26	65.28	4.26	106.27
Total.....	1,362,616,300	100.0	17.13	26.93	59.93	4.26	108.25

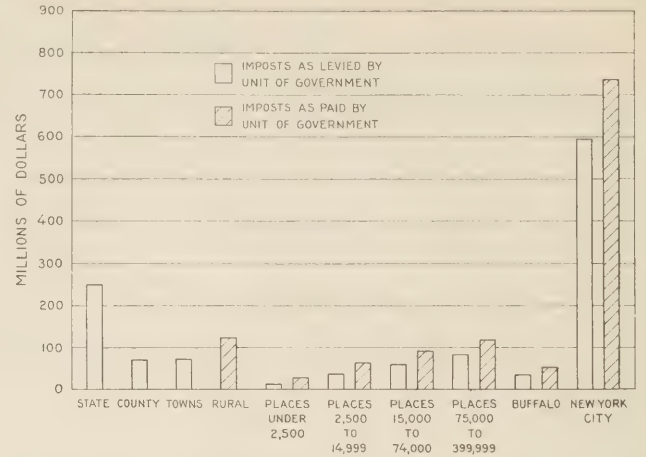


FIGURE 4.—IMPOSTS AS LEVIED AND AS PAID BY THE SEVERAL UNITS OF GOVERNMENT OF NEW YORK IN 1932.

LOCAL UNITS OF GOVERNMENT LEVIED 74 PERCENT OF ALL IMPOSTS

Tables 16 and 17 and figure 4 give a comparison between the imposts levied by a unit of government and the taxes which its residents must pay. From these tables the proportion that each kind of impost levied—property, motor-vehicle, other taxes, and miscellaneous imposts—bears to the total of all taxes can be seen. Thus, of the total of \$96 per capita which residents of New York paid to the State, counties, and local units of government in taxes, \$20 or 20.5 percent was levied by the State and \$6 or 5.8 percent by the counties, while the local units levied the remainder, \$71 or 73.7 percent. It is evident that the local units of government created the largest tax bill in the levy of imposts for carrying out of their own local functions. In this respect, New York City was highest with \$86 per capita.

The State obtained little of its income from the general property tax. The court stenographers' and armory taxes were levies on general property, but the proceeds were distributed to the counties and judicial districts of the State and were not used for State purposes. The greatest share of State imposts came from motor-vehicle and other imposts, such as personal

TABLE 16.—Total and per-capita amounts of imposts levied by the several units of government in 1932

Levied by—	Total of all imposts	Per cent	Imposts per capita				Total
			Property taxes	Motor-vehicle imposts	Other taxes	Miscellaneous	
State.....	\$248,519,600	20.5	\$0.08	\$6.46	\$13.20	-----	\$19.74
Counties.....	70,952,400	5.8	5.24	-----	-----	\$0.40	5.64
Towns.....	66,474,200	5.5	37.26	-----	-----	1.57	38.83
Places under 2,500.....	12,096,600	1.0	30.89	-----	-----	1.62	32.51
Places 2,500 to 14,999.....	37,424,700	3.1	41.40	-----	-----	2.78	44.18
Places 15,000 to 74,999.....	59,210,700	4.9	56.36	-----	-----	2.60	58.96
Places 75,000 to 399,999.....	83,210,700	6.9	70.82	-----	-----	1.60	72.42
Buffalo.....	39,153,100	3.2	66.86	-----	-----	1.46	68.32
New York City.....	595,529,800	49.1	79.97	-----	-----	5.96	85.93
Total.....	1,212,571,800	100.0	72.13	6.46	13.20	4.54	96.33

RECAPITULATION

State.....	\$248,519,600	20.5	\$0.08	\$6.46	\$13.20	-----	\$19.74
Counties.....	70,952,400	5.8	5.24	-----	-----	\$0.40	5.64
Local governments.....	893,099,800	73.7	66.81	-----	-----	4.14	70.95
Total.....	1,212,571,800	100.0	72.13	6.46	13.20	4.54	96.33

TABLE 17.—Total and per-capita amounts of imposts as finally paid by the residents of the several classes of places in 1932

Paid by residents of—	Total of all imposts	Per cent	Imposts per capita				
			Property taxes	Motor-vehicle imposts	Other taxes	Miscellaneous income	Total
Rural areas.....	\$116,841,100	9.6	\$46.87	\$7.60	\$11.25	\$2.53	\$68.25
Places under 2,500.....	27,556,300	2.3	48.02	12.02	11.43	2.59	74.06
Places 2,500 to 14,999.....	71,019,700	5.9	57.24	10.04	12.83	3.73	83.84
Places 15,000 to 74,999.....	90,381,400	7.5	67.79	8.10	10.87	3.24	90.00
Places 75,000 to 399,999.....	117,028,100	9.6	80.98	8.06	10.54	2.27	101.85
Buffalo.....	56,991,500	4.7	79.72	7.62	9.33	2.78	99.45
New York City.....	732,753,700	60.4	80.01	4.85	14.91	5.96	105.73
Total.....	1,212,571,800	100.0	72.13	6.46	13.20	4.54	96.33

RECAPITULATION

Rural areas.....	\$116,841,100	9.6	\$46.87	\$7.60	\$11.25	\$2.53	\$68.25
Urban areas.....	1,095,730,700	90.4	76.10	6.28	13.51	4.86	100.75
Total.....	1,212,571,800	100.0	72.13	6.46	13.20	4.54	96.33

and business income taxes, estate taxes, and bank taxes.

All but 7 percent of the county taxes in 1932 were derived from the property tax. The local units of government levied \$840,-890,200 in property taxes or over 94 percent of their total imposts. In addition to these imposts received by the counties and the local units of government, there was available for their use the funds supplied by Federal and State grants and aids. That is, while the State levied and administered \$248,519,600 in taxes, a large share of this amount was distributed among the counties and localities in the form of aids, and only a relatively small portion was used for State purposes exclusively.

Motor-vehicle imposts were levied only by the State government, and they totaled \$81,324,700 or nearly 7 percent of the imposts of all units of government from all sources.

All State and county levies are eventually paid by the residents of either rural or urban areas of the State. Thus, the imposts received by the State and counties were distributed among the local units of government in the approximate amounts which they were responsible for paying to the larger governmental units. In New York City, for example, which levied imposts in the amount of \$85.93 per capita, an additional \$19.80 was collected from its residents in order to pay the State imposts levied against the area.

Table 18 and figure 5 are of special significance, as they give a comparison between the tax rates on property and the rates applicable if all imposts were derived from a property levy. As an example of the facts presented in the table, the actual tax rate on property because of property levies in the rural areas was \$2.25 per \$100 of full value. If all imposts had been obtained

TABLE 18.—Property tax rates per \$100 valuation and their relation to the total of all imposts in 1932

Paid by residents of—	Actual tax rate on property	Tax rate needed to raise all taxes by property levies	Percentage that property taxes are of all imposts
Places under 2,500.....	1.70	2.62	64.8
Places 2,500 to 14,999.....	2.24	3.28	68.3
Places 15,000 to 74,999.....	3.18	4.23	75.3
Places 75,000 to 399,999.....	3.33	4.19	79.5
Buffalo.....	3.34	4.18	80.4
New York City.....	2.52	3.33	75.7
Average for State.....	2.59	3.45	74.9

from a property levy, property would have had to pay \$3.28 per \$100 of value.

It is also evident that in the State as a whole the property levies constituted the major source of revenue—74.9 percent. The ratio of property levies to total imposts was highest in Buffalo where 80.4 percent of the revenues was derived from the taxes on property.

Table 19 and figure 6 show relations between the taxes paid by a community and the expenditures made in or for the benefit of the community by State, county, and local governments. In rural areas, incorporated places under 2,500, and in New York City, expenditures by and for the community exceeded the taxes paid. In the other incorporated places expenditures ranged from 89 to 97 percent of taxes paid. For the State as a whole expenditures exceeded taxes. This situation was due in a large measure to the financing by borrowings necessitated primarily by heavy expenditures for relief.

TABLE 19.—Imposts paid by and expenditures made in or for the benefit of residents of the several classes of places in 1932

Place	Imposts			Expenditures			Ratio of expenditures to taxes
	Total amount	Per cent	Per capita	Total amount	Per cent	Per capita	
Rural areas.....	\$116,841,100	9.6	\$68.25	\$206,827,400	15.2	\$120.81	1.77
Places under 2,500.....	27,556,300	2.3	74.06	29,607,100	2.2	79.57	1.07
Places 2,500 to 14,999.....	71,019,700	5.9	83.84	67,266,300	4.9	79.41	.95
Places 15,000 to 74,999.....	90,381,400	7.4	90.00	80,561,000	5.9	80.22	.89
Places 75,000 to 399,999.....	117,028,100	9.7	101.85	114,071,900	8.4	99.27	.97
Buffalo.....	56,991,500	4.7	99.45	53,952,800	3.9	94.15	.95
New York City.....	732,753,700	60.4	105.73	810,329,800	59.5	116.92	1.11
Total.....	1,212,571,800	100.0	96.33	1,362,616,300	100.0	108.25	1.12

RECAPITULATION

Rural areas.....	\$116,841,100	9.6	\$68.25	\$206,827,400	15.2	\$120.81	1.77
Urban areas.....	1,095,730,700	90.4	100.75	1,155,788,900	84.8	106.27	1.05
Total.....	1,212,571,800	100.0	96.33	1,362,616,300	100.0	108.25	1.12

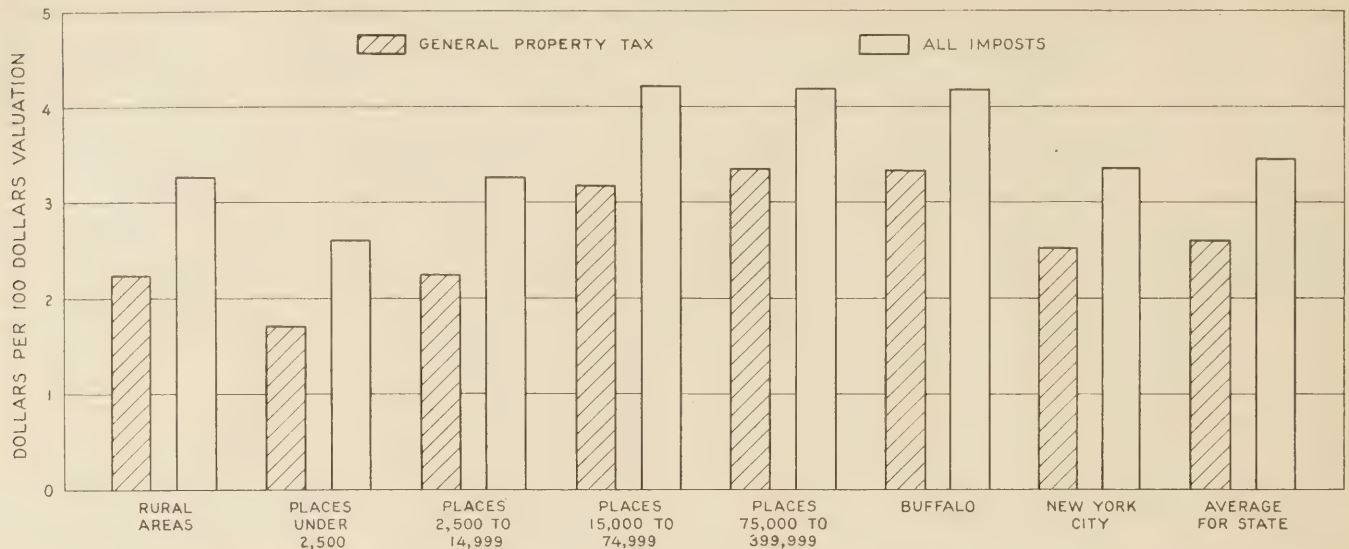


FIGURE 5.—ACTUAL TAX RATES ON GENERAL PROPERTY IN THE SEVERAL CLASSES OF PLACES, AND RATES NEEDED TO RAISE ALL TAXES BY PROPERTY LEVIES.

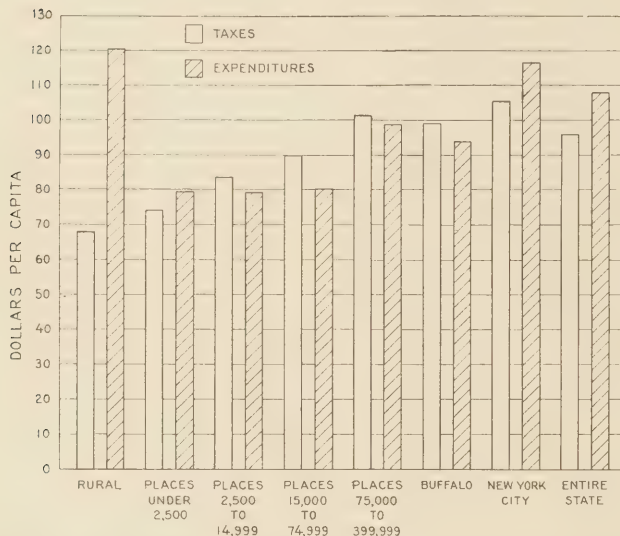


FIGURE 6.—PER-CAPITA TAXES PAID BY AND EXPENDITURES MADE FOR RESIDENTS OF THE SEVERAL UNITS OF GOVERNMENT BY ALL GOVERNMENTAL AGENCIES IN NEW YORK IN 1932.

LOCAL UNITS OF GOVERNMENT MADE 78 PERCENT OF ALL GOVERNMENTAL EXPENDITURES

Tables 20, 21, and 22 give the amounts of taxes levied and expenditures made by the local communities in relation to similar transactions for the community by the State and county. For example, 53 percent of the taxes paid by residents of the rural areas were levied by the local governments and 47 percent by the State and county (table 20). Of the \$206,827,400 of expenditures made in or for the benefit of rural residents, however, 61.6 percent was by State and county and 38.4 percent by the local unit of government itself.

The primary debt and debt service data for New York in 1932 are summarized in tables 23, 24, and 25. Of particular importance are the following facts:

1. Over one-half (53.5 percent) of the outstanding debt was originally incurred for public benefit purposes.

2. New York City itself had outstanding over one-half (58.4 percent) of the entire debt incurred by all units of government and was liable for the payment of 66.5 percent of all debt.

3. Local debt for public benefit constituted 55.5 percent of the total local debt outstanding.

4. The outstanding debt per capita for all purposes was \$299.94, of which \$240.71 was local debt.

5. Rural areas (which incurred 4.4 percent of the outstanding debt) were liable for the payment of 7.7 percent of the total debt.

6. Interest and principal payments on short-term debt constituted 74.1 percent of all debt-service costs.

7. Interest payments were but 12.9 percent of the debt service costs; retirements constituted the remaining 87.1 percent.

The incidence of motor-vehicle imposts was determined by an analysis of over 100,000 registration applications and the replies to as many questionnaires distributed to motor-vehicle owners throughout the State. In the analysis the data from the State motor-vehicle bureau were grouped under the following designations: "Cars" include passenger cars, taxis, and the majority of dealer registrations; "trucks and busses" consist of busses (from the State omnibus classification), commercial vehicles, ambulances, suburban cars, and a small number of vehicles with dealer licenses; trailers and motorcycles are "other" vehicles.

The New York motor-vehicle bureau licensed 2,302,259 vehicles⁴ in 1932, of which 6,196 vehicles were registered by nonresidents. The residents of New York State, therefore, procured licenses for 2,296,063 vehicles. Most of the vehicles registered were cars—84.3 percent (table 26). The proportion of cars to trucks remained fairly constant except in the rural areas where, as would be expected, there were relatively more trucks than in the urban areas. In rural areas a truck is often the only vehicle owned, serving both as pleasure and business vehicle. Or if a passenger car is owned, a truck is usually also necessary.

⁴This registration figure differs from a previous figure released by the Bureau because of inaccuracies in the figures originally reported by the State.

TABLE 20.—*Imposts paid by and expenditures made in or for the benefit of residents of rural areas in 1932*

CLASSIFICATION OF TAXES AND GOVERNMENTAL UNIT LEVYING THEM

Item	State and county			Local government			All governments		
	Total amount	Percent	Per capita	Total amount	Percent	Per capita	Total amount	Percent	Per capita
IMPOST									
Property:									
Amount	\$21,061,700	38.3	\$12.30	\$59,189,200	95.7	\$34.57	\$80,250,900	68.7	\$46.87
Percent	26.2			73.8			100.0		
Motor vehicle:									
Amount	\$13,066,600	23.7	7.60				\$13,066,600	11.1	7.60
Percent	100.0						100.0		
Other:									
Amount	\$20,903,900	38.0	12.21	\$2,679,700	4.3	1.57	\$23,583,600	20.2	13.78
Percent	88.6			11.4			100.0		
Total:									
Amount	\$54,972,200	100.0	32.11	\$61,868,900	100.0	36.14	\$116,841,100	100.0	68.25
Percent	47.0			53.0			100.0		

CLASSIFICATION OF EXPENDITURES BY PURPOSE AND BY GOVERNMENTAL UNIT MAKING THEM

EXPENDED FOR	State and county			Local government			All governments		
	Total amount	Percent	Per capita	Total amount	Percent	Per capita	Total amount	Percent	Per capita
Highways:									
Amount	\$90,054,800	70.7	\$52.60	\$22,531,100	28.3	\$13.16	\$112,585,900	54.4	\$65.76
Percent	80.0			20.0			100.0		
Education:									
Amount	\$1,686,400	1.3	.99	\$40,815,000	51.4	23.84	\$42,501,400	20.5	24.83
Percent	4.0			96.0			100.0		
Public benefit:									
Amount	\$32,099,300	25.2	18.75	\$12,270,100	15.4	7.17	\$44,369,400	21.5	25.92
Percent	72.3			27.7			100.0		
Government:									
Amount	\$3,512,300	2.8	2.05	\$3,858,400	4.9	2.25	\$7,370,700	3.6	4.30
Percent	47.7			52.3			100.0		
Total:									
Amount	\$127,352,800	100.0	74.39	\$79,474,600	100.0	46.42	\$206,827,400	100.0	120.81
Percent	61.6			38.4			100.0		

TABLE 21.—*Imposts paid by and expenditures made in or for the benefit of residents of urban areas in 1932*

CLASSIFICATION OF TAXES AND GOVERNMENTAL UNIT LEVYING THEM

Item	State and county			Local government			All governments		
	Total amount	Percent	Per capita	Total amount	Percent	Per capita	Total amount	Percent	Per capita
IMPOST									
Property:									
Amount	\$45,989,800	17.4	\$4.23	\$781,701,000	94.0	\$71.87	\$827,690,800	75.6	\$76.10
Percent	5.6			94.4			100.0		
Motor vehicle:									
Amount	\$68,318,100	25.8	6.28				\$68,318,100	6.2	6.28
Percent	100.0						100.0		
Other:									
Amount	\$150,191,900	56.8	13.81	\$49,529,900	6.0	4.56	\$199,721,800	18.2	18.37
Percent	75.2			24.8			100.0		
Total:									
Amount	\$264,499,800	100.0	24.32	\$831,230,900	100.0	76.43	\$1,095,730,700	100.0	100.75
Percent	24.1			75.9			100.0		

CLASSIFICATION OF EXPENDITURES BY PURPOSE AND BY GOVERNMENTAL UNIT MAKING THEM

EXPENDED FOR	State and county			Local government			All governments		
	Total amount	Percent	Per capita	Total amount	Percent	Per capita	Total amount	Percent	Per capita
Highways:									
Amount	\$16,323,900	9.6	\$1.50	\$86,673,400	8.8	\$7.97	\$102,997,300	8.9	\$9.47
Percent	15.8			84.2			100.0		
Education:									
Amount	\$10,602,700	6.3	.97	\$285,922,600	29.0	26.29	\$296,525,300	25.7	27.26
Percent	3.6			96.4			100.0		
Public benefit:									
Amount	\$130,528,600	77.1	12.00	\$579,455,700	58.7	53.28	\$709,984,300	61.4	65.28
Percent	18.4			81.6			100.0		
Government:									
Amount	\$11,933,500	7.0	1.10	\$34,348,500	3.5	3.16	\$46,282,000	4.0	4.26
Percent	25.8			74.2			100.0		
Total:									
Amount	\$169,388,700	100.0	15.57	\$986,400,200	100.0	90.70	\$1,155,788,900	100.0	106.27
Percent	14.7			85.3			100.0		

TABLE 22.—*Imposts paid by and expenditures made in or for the benefit of residents of all units of government of New York State in 1932*
CLASSIFICATION OF TAXES AND GOVERNMENTAL UNIT LEVYING THEM

Item	State and county			Local government			All governments		
	Total amount	Percent	Per capita	Total amount	Percent	Per capita	Total amount	Percent	Per capita
IMPOST									
Property:									
Amount.....	\$67,051,500	21.0	\$5.33	\$840,890,200	94.2	\$66.80	\$907,941,700	74.9	\$72.13
Percent.....	7.4			92.6			100.0		
Motor vehicle:									
Amount.....	\$81,324,700	25.5	\$6.46				\$81,324,700	6.7	\$6.46
Percent.....	100.0						100.0		
Other:									
Amount.....	\$171,095,800	53.5	\$13.59	\$52,209,600	5.8	\$4.15	\$223,305,400	18.4	\$17.74
Percent.....	76.6			23.4			100.0		
Total:									
Amount.....	\$319,472,000	100.0	\$25.38	\$893,099,800	100.0	\$70.95	\$1,212,571,800	100.0	\$96.33
Percent.....	26.3			73.7			100.0		

CLASSIFICATION OF EXPENDITURES BY PURPOSE AND BY GOVERNMENTAL UNIT MAKING THEM

EXPENDED FOR	State and county			Local government			All governments		
	Total amount	Percent	Per capita	Total amount	Percent	Per capita	Total amount	Percent	Per capita
Highways:									
Amount.....	\$106,378,700	35.8	\$8.45	\$109,204,500	10.2	\$8.68	\$215,583,200	15.8	\$17.13
Percent.....	49.3			50.7			100.0		
Education:									
Amount.....	\$12,289,100	4.2	\$0.98	\$326,737,600	30.7	\$25.95	\$339,026,700	24.9	\$26.93
Percent.....	3.6			96.4			100.0		
Public benefit:									
Amount.....	\$162,627,900	54.8	\$12.92	\$591,725,800	55.5	\$47.01	\$754,353,700	55.4	\$59.93
Percent.....	21.6			78.4			100.0		
Government:									
Amount.....	\$15,445,800	5.2	\$1.22	\$38,206,900	3.6	\$3.04	\$53,652,700	3.9	\$4.26
Percent.....	28.8			71.2			100.0		
Total:									
Amount.....	\$296,741,500	100.0	\$23.57	\$1,065,874,800	100.0	\$84.68	\$1,362,616,300	100.0	\$108.25
Percent.....	21.8			78.2			100.0		

TABLE 23.—*Total debt outstanding in 1932, showing purpose and unit of government by which incurred*

Unit of government by which incurred	Purpose for which originally incurred				Total
	Highways	Education	Public benefit	Government	
State:					
Amount.....	\$102,027,100	\$5,592,700	\$225,487,800	\$164,843,600	\$497,951,200
Percent.....	20.5	1.1	45.3	33.1	100.0
Per capita.....	\$8.11	\$0.44	\$17.91	\$13.10	\$39.56
Counties:					
Amount.....	\$90,000,400	\$5,900	\$114,427,100	\$43,198,800	\$247,632,200
Percent.....	36.3	(1)	46.2	17.5	100.0
Per capita.....	\$7.15	(2)	\$9.09	\$3.43	\$19.67
Local governments:					
Amount.....	\$435,961,100	\$565,810,400	\$1,680,632,800	\$347,742,600	\$3,030,146,900
Percent.....	14.4	18.6	55.5	11.5	100.0
Per capita.....	\$34.63	\$44.95	\$133.51	\$27.62	\$240.71
Total:					
Amount.....	\$627,988,600	\$571,409,000	\$2,020,547,700	\$555,785,000	\$3,775,730,300
Percent.....	16.7	15.1	53.5	14.7	100.0
Per capita.....	\$49.89	\$45.39	\$160.51	\$44.15	\$299.94

¹ Less than 0.1 percent.

² Less than \$0.01.

The extent of the influence of New York City registrations on the average for the State is readily apparent. The heavy traffic conditions, inaccessibility to through routes, and large proportion of persons unable to finance an automobile account for the relatively low registration in this area. Registration figures possess more significance when expressed in terms of persons per vehicle (table 26). The following relations are apparent: (1) There were more vehicles compared to population in rural than in urban areas; (2) the proportion of trucks registered in rural areas to those in urban places was greater than the proportion of cars in the rural areas to those in the urban areas; (3) the small incorporated communities had relatively more registrations

TABLE 24.—*Liability of residents of rural and urban areas for payment of outstanding debt of State, counties, and local governments in 1932*

Debt liability of residents of—	Total debt liability	Percent	Amount per capita
Rural areas.....	\$290,686,000	7.7	\$169.79
Places under 2,500.....	70,638,400	1.9	189.85
Places 2,500 to 14,999.....	200,808,300	5.3	237.05
Places 15,000 to 74,999.....	215,964,300	5.7	215.06
Places 75,000 to 399,999.....	323,937,000	8.6	281.91
Buffalo.....	160,595,100	4.3	280.23
New York City.....	2,513,158,300	66.5	362.63
Total.....	3,775,787,400	100.0	299.95

RECAPITULATION

	Total debt liability	Percent	Amount per capita
Rural areas.....	290,686,000	7.7	169.79
Urban areas.....	3,485,101,400	92.3	320.44
Total.....	3,775,787,400	100.0	299.95

TABLE 25.—*Total debt service payments by all units of government in 1932*

Item	Total amount	Percent	Percentage of total	Amount per capita
Bonded debt:				
Interest.....	\$134,430,400	47.5		\$10.68
Principal.....	148,703,900	52.5		11.81
Total.....	283,134,300	100.0	25.9	22.49
Short-term debt:				
Interest.....	7,218,800	.9		.57
Principal.....	804,376,700	99.1		63.90
Total.....	811,595,500	100.0	74.1	64.47
All debt:				
Interest.....	141,649,200	12.9		11.25
Principal.....	953,080,600	87.1		75.71
Total.....	1,094,729,800	100.0	100.0	86.96

TABLE 26.—Number and types of motor vehicles registered and persons per vehicle in 1932, by place of registration

Place of registration	Type of vehicles registered				Percentage of total	Persons per vehicle		
	Passenger cars	Trucks and busses	Other	Total		Passenger cars	Trucks and busses	Total
	Number	Number	Number	Number	Per-cent			
Rural areas.....	360,531	81,581	6,334	448,446	19.5	4.7	21.0	3.8
Places under 2,500.....	127,867	19,199	1,632	148,698	6.5	2.9	19.4	2.5
Places 2,500 to 14,999.....	225,224	34,810	2,920	262,954	11.4	3.8	24.3	3.2
Places 15,000 to 74,999.....	212,773	31,571	2,891	247,235	10.8	4.7	31.8	4.1
Places 75,000 to 399,999.....	232,915	29,690	3,063	265,668	11.6	4.9	38.7	4.3
Buffalo.....	110,708	13,933	1,320	125,961	5.5	5.2	41.1	4.5
New York City.....	666,938	121,234	8,929	797,101	34.7	10.4	57.2	8.7
Total.....	1,936,956	332,018	27,089	2,296,063	100.0	6.5	37.9	5.5

RECAPITULATION

Rural areas.....	360,531	81,581	6,334	448,446	19.5	4.7	21.0	3.8
Urban areas.....	1,576,425	250,437	20,755	1,847,617	80.5	6.9	43.4	5.9
Total.....	1,936,956	332,018	27,089	2,296,063	100.0	6.5	37.9	5.5
Percentage of total.....	84.3	14.5	1.2	100.0				

than any of the other units of government; and (4) exclusive of the incorporated communities under 15,000, the proportionate number of vehicles decreased as the population increased.

MOTOR-VEHICLE IMPOSTS PROVIDED \$67 OF EACH \$1,000 OF TAXES IN 1932

License fees collected for the 1932 registration year amounted to \$37,193,900. Nonresidents obtained licenses for 6,196 vehicles and paid \$206,900. New York residents obtained licenses for 2,296,063 vehicles and paid \$36,987,000 (table 27). Cars comprised 84.3 percent of the vehicle registrations, and 73 percent of the registration fees were paid for them (fig. 7). This difference is caused by the lower fees paid by passenger vehicles. The contrast between rural and urban areas is interesting. Passenger cars in rural areas constituted 80.4 percent of the rural registrations and 73.2 percent of the rural registration fees were paid for them, while cars in urban places comprised 85.3 percent of the urban registrations and only 72.9 percent of the urban registration fees were paid for them. Passenger cars owned by rural residents comprised 18.6 percent of the total State passenger-car registration and 16.9 percent of the passenger-car registration fees were paid for them. The proportionate difference is even greater for trucks.

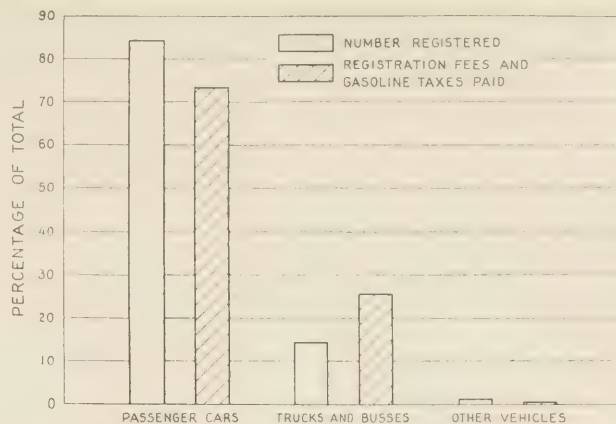


FIGURE 7.—PERCENTAGE DISTRIBUTION OF ALL VEHICLES BY NUMBER REGISTERED AND BY REGISTRATION FEES AND GASOLINE TAXES PAID.

The explanations for these differences are apparent from table 27, which gives the per-vehicle fees. For both cars and trucks in the rural areas lower registration fees were paid than for vehicles in urban places (fig. 8). This was expected because the registration fee schedule is based on the weight of vehicles, and vehicles owned in rural areas tend to be lighter than those owned in urban areas. The heavy contract-hauler and common-carrier trucks are generally registered in the cities or villages. The trucks owned in rural areas, mainly for private use, are light-weight trucks.

The more expensive passenger cars are usually owned by residents of larger cities and villages. The more valuable car is usually also the heavier vehicle. The general tendency for per-vehicle fees to increase as the place of registration becomes larger in population is evident also for trucks as well as for passenger cars.

No motor-fuel tax was collected in New York State until 1929. During the fol-

lowing 4 years the total revenues from this source increased more than 100 percent and the average tax per vehicle doubled. The motor-fuel tax collected in 1932 totaled \$40,340,900, of which 74.5 percent was paid for cars and 25.5 percent for trucks and busses. The ratio of the amount contributed by cars to the total amount, for both rural and urban areas, was almost the same.

Residents of rural areas furnished 19.5 percent of the total motor-vehicle registration and paid 15.2 percent of the gasoline tax. The percentages are nearly the same

HIGHWAY TAXES AND HIGHWAY EXPENDITURES

Expenditures on the State highway system in 1932 were \$68,094,300; on the county system, \$38,284,400; and on local roads and streets, \$109,204,500.

Of the total property taxes expended on all roads and streets, 4.3 percent was expended on State highways; 22.4 percent on county roads; and 73.3 percent on local roads and streets.

Of the total motor-vehicle imposts expended on all roads and streets, 65 percent was expended on the State system, 16.3 percent on county roads, and 18.7 percent on local roads and streets.

Of all taxes and imposts expended on roads and streets, rural property and motor-vehicle owners paid 21.5 percent, and travel by rural owned vehicles made up 18.2 percent of all travel by residents on New York streets and highways; urban property and vehicle owners paid 78.5 percent and urban owned vehicles provided 81.8 percent of the total travel by residents on New York streets and highways.

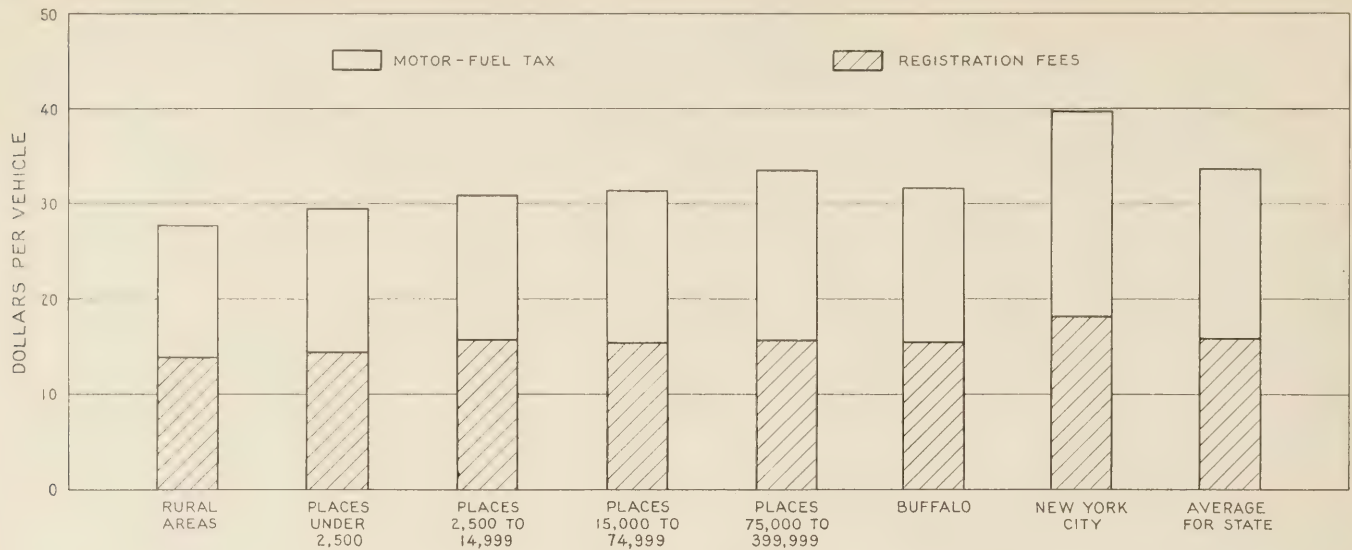


FIGURE 8.—AVERAGE REGISTRATION FEES AND MOTOR-FUEL TAXES PAID BY MOTOR-VEHICLE OWNERS, DISTRIBUTED BY PLACE OF OWNERSHIP.

TABLE 27.—Motor-vehicle registration fees and motor-fuel taxes paid by vehicle owners in rural and urban areas in 1932

MOTOR-VEHICLE REGISTRATION FEES								
Paid by vehicle owners of—	Total payments				Per-vehicle payments ¹			
	Passenger cars	Trucks and busses	Other	Total	Passenger cars	Trucks and busses	Other	Total
Rural areas...	\$4,575,200	\$1,630,500	\$41,000	\$6,246,700	\$12.69	\$19.99	\$6.47	\$13.93
Urban areas...	22,405,800	8,111,700	222,800	30,740,300	14.21	32.39	10.73	16.64
Total...	26,981,000	9,742,200	263,800	36,987,000	13.93	29.34	9.74	16.11

MOTOR-FUEL TAX								
	Passenger cars	Trucks and busses	Other	Total	Passenger cars	Trucks and busses	Other	Total
Rural areas...	\$4,725,600	\$1,418,600	-----	\$6,144,200	\$13.11	\$17.39	-----	\$13.90
Urban areas...	25,333,300	8,863,400	-----	34,196,700	16.07	35.29	-----	18.72
Total...	30,058,900	10,282,000	-----	40,340,900	15.52	30.97	-----	17.78

REGISTRATION FEES AND MOTOR-FUEL TAX								
	Passenger cars	Trucks and busses	Other	Total	Passenger cars	Trucks and busses	Other	Total
Rural areas...	\$9,300,800	\$3,049,100	\$41,000	\$12,390,900	\$25.80	\$37.38	\$6.47	\$27.63
Urban areas...	47,739,100	16,975,100	222,800	64,937,000	30.28	67.78	10.73	35.15
Total...	57,039,900	20,024,200	263,800	77,327,900	29.45	60.31	9.74	33.68

¹ Other vehicles are not included in motor-fuel tax per vehicle; therefore total per-vehicle registration fees and motor-fuel taxes do not equal the sum of per-vehicle payments.

for cars and trucks taken separately. For the average car in rural areas a gasoline tax of \$13.11 was paid and for the average truck and bus \$17.39 was paid. In contrast, urban residents paid \$16.07 per car and \$35.29 per truck and bus. For the State as a whole for each vehicle registered in 1932 a gasoline tax of \$17.78 was paid.

A tendency similar to that observed in the registration fees may also be pointed out for the gasoline tax; i. e., the average tax increased as the size of the place in which the vehicle was registered increased.

Registration fees and gasoline taxes constitute the major portion of the special imposts on motor-vehicle owners. In addition, however, certain miscellaneous fees amounting to \$3,996,800 were paid, raising the total contributions by motor-vehicle owners to \$81,324,700. The imposts included in this classification were

chauffeurs' and operators' licenses, fees from driving school, and other imposts such as fines, penalties, and reregistrations. These taxes averaged less than \$2 per vehicle.

Administration of the vehicle and traffic laws and of the motor-fuel tax is performed by the Department of Taxation and Finance. During 1932, \$1,497,200 was the cost of administering the vehicle and traffic law, amounting to 65 cents per vehicle registered or 4 percent of the total collections. The greater share of this cost was for the registration and licensing activities. It cost \$92,300 to collect the \$40,340,900 of gasoline tax, an average of 4 cents per vehicle registered in the State and but 0.2 percent of the total tax collected.

Tables 28, 29, 30, and figure 9 summarize pertinent facts determined by the financial survey. The following statements emphasize some of the most important relations determined by this study.

SUMMARY

1. Rural property owners paid no tax for urban streets.
2. Urban property owners in the villages paid taxes for town highways.
3. Of that portion of the total property tax on rural property expended for highways:
 - (a) 5.7 percent was expended on State trunk highways.
 - (b) 29.4 percent was expended on county roads.
 - (c) 64.9 percent was expended on town highways.

TABLE 28.—Sources of each \$1,000 of taxes in New York in 1932

Residents of—	Pay in—		
	General property taxes	Motor-vehicle imposts	Miscellaneous imposts
Rural areas	\$65.89	\$10.73	\$19.52
Places under 2,500	14.98	3.69	4.24
Places 2,500-14,999	40.43	7.04	11.60
Places 15,000-74,999	56.16	6.71	11.60
Places 75,000-399,999	76.37	7.65	12.16
Buffalo	37.44	3.55	5.89
New York City	457.50	27.70	119.15
Total	748.77	67.07	184.16

TABLE 29.—Percentage distribution of financial, travel, and other data, for 1932

Class of place	Population ¹	Area ¹	Property valuation	Highway mileages	Motor-vehicles registered	All taxes paid	Motor-vehicle imposts paid	All expenditures	Highway expenditures	Travel performed
	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
Rural areas.....	13.6	96.5	10.1	82.7	19.5	13.1	16.0	34.2	52.2	18.2
Places under 2,500.....	3.0	1.0	3.0	3.3	6.5	3.5	5.5	3.1	2.0	7.0
Places 2,500 to 14,999.....	6.7	.8	6.2	3.7	11.4	7.9	10.5	5.8	3.2	11.9
Places 15,000 to 74,999.....	8.0	.6	6.1	2.4	10.8	7.7	10.0	6.0	2.9	11.3
Places 75,000 to 399,999.....	9.1	.3	8.0	2.0	11.6	8.7	11.4	8.4	4.7	12.1
Buffalo.....	4.5	.1	3.9	.6	5.5	1.0	5.3	3.4	1.0	6.0
New York City.....	55.1	.7	62.7	5.3	34.7	55.1	41.3	39.1	34.0	33.2
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

RECAPITULATION

Rural areas.....	13.6	96.5	10.1	82.7	19.5	13.1	16.0	34.2	52.2	18.2
Urban areas.....	86.4	3.5	89.9	17.3	80.5	86.9	84.0	65.8	47.8	81.8
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

¹ Figures for 1930.

TABLE 30.—Purposes for which each \$1,000 of expenditures were made in New York in 1932

Expended for—	Source of funds expended	Amount
State highways.....	(Taxes paid in:	
	Rural areas.....	\$5.30
	Urban areas.....	23.85
	Federal aid.....	8.40
	Loans and reserves.....	12.45
	Total.....	50.00
County roads.....	(Taxes paid in:	
	Rural areas.....	7.91
	Urban areas.....	20.25
	Total.....	28.16
Local roads and streets.....	(Taxes paid in:	
	Rural areas.....	16.33
	Urban areas.....	63.72
	Total.....	80.05
Total all highways and streets.....		158.21
Education.....		248.81
Public benefit.....		553.61
Government.....		39.37
Grand total.....		1,000.00

4. Of that portion of the total tax on urban property expended for highways:

- (a) 25.7 percent was expended on rural roads.
- (b) 74.3 percent was expended on urban streets.

5. Of that portion of the total taxes on urban property expended for highways:

- (a) 3.9 percent was expended on State highways. (The counties contribute funds for the State highway system, and such contributions are financed out of general property taxes and the county portion of motor-vehicle imposts.)
- (b) 20.2 percent was expended on county roads.
- (c) 75.9 percent was expended on local roads and streets. The figure of 75.9 percent for local roads and streets may be divided into 1.6 percent of urban funds which went to town highways and 74.3 percent to city and village streets. The figure of 1.6 percent was the contribution by village taxpayers to town highways.

6. Since, of the total property valuation of \$35,101,205,600, \$3,558,877,300 or 10.1 percent was in rural areas and 89.9 percent was in urban areas:

- (a) Expenditures from property taxes for all highways were at the following rates:
Rural—88.5 cents per \$100 of full valuation.
Urban—31.5 cents per \$100 of full valuation.
- (b) Expenditures from property taxes for the State highways were at the following rates:

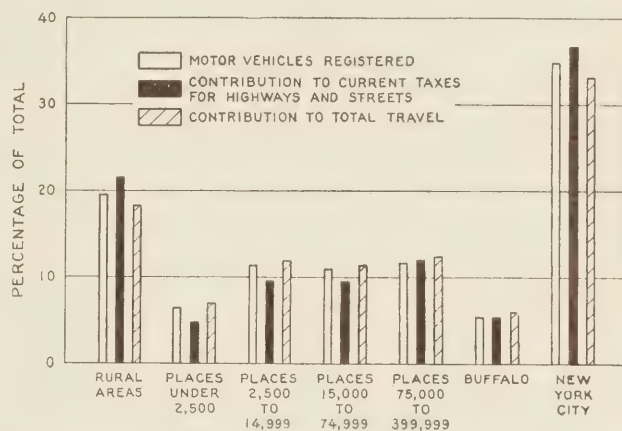


FIGURE 9.—PERCENTAGE DISTRIBUTION OF MOTOR VEHICLES REGISTERED, CONTRIBUTION TO CURRENT TAXES EXPENDED ON HIGHWAYS AND STREETS, AND TRAVEL PERFORMED, DISTRIBUTED BY THE SEVERAL CLASSES OF PLACES.

Rural—5 cents per \$100 of full valuation.

Urban—1.2 cents per \$100 of full valuation.

(c) Expenditures from property taxes for county roads were at the following rates:

Rural—26.1 cents per \$100 of full valuation.

Urban—6.4 cents per \$100 of full valuation.

(d) Expenditures from property taxes for town highways and city and village streets were at the following rates:

Rural—57.4 cents (all for town highways) per \$100 of full valuation.

Urban—23.9 cents per \$100 of full valuation.

7. Of that portion of the total property taxes used for all highways:

- (a) 4.3 percent was expended on State highways.
- (b) 22.4 percent was expended on the county roads.
- (c) 15.6 percent was expended on the town highways.
- (d) 57.7 percent was expended on city and village streets.

8. Of the total motor-vehicle imposts expended on all classes of roads and streets:

- (a) Rural motor-vehicle owners paid 16 percent and travel by these same rural owners made up 18.2 percent of the total travel on all classes of roads and streets.
- (b) Urban motor-vehicle owners paid 84 percent and accounted for 81.8 percent of the total travel.

9. Of the total motor-vehicle imposts:

- (a) 65 percent was expended on the State highways.
- (b) 16.3 percent was expended on county roads.
- (c) 3 percent was expended on town highways.
- (d) 15.7 percent was expended on city and village streets.

10. Of all imposts and taxes expended on all highways and streets:

- (a) 21.2 percent was expended on State highways.
- (b) 20.5 percent was expended on county roads.
- (c) 11.9 percent was expended on town highways.
- (d) 46.4 percent was expended on city and village streets.

11. Of that portion of the total of all taxes and imposts which was expended on all highways and streets:

- (a) Rural property and motor-vehicle owners paid 21.5 percent, and travel by rural vehicles made up 18.2 percent of all New York travel on all New York streets and highways.
- (b) Urban property and vehicle owners paid 78.5 percent while urban vehicles provided 81.8 percent of the total travel by residents on all New York streets and highways.

12. Receipts from motor-vehicle imposts, if they had been used solely by the State for highway purposes in 1932, would have been more than adequate to pay for all of the expenditures on the State highway system including the cost of grade crossing eliminations.

13. The State's portion of the motor-vehicle imposts if used solely for highways (approximately 75 percent) plus Federal-aid allotments, also would have been more than adequate to pay for the expenses of the State highway system.

14. In 1932, 8.3 percent of the total expenditures on the State highway system was financed out of county funds as occasioned by snow removal performed, right of way purchased, and maintenance performed by the county on State highways.

15. The counties received \$16,710,800 as their portion of the motor-vehicle imposts and expended \$5,632,700 of their funds for State highway purposes.

16. The expenditures for State highways by the State constituted 33.5 percent of the total expenditures by the State, and the total expenditures by the State on the State highways constituted 29 percent of all highway expenditures in the State and 4.6 percent of all expenditures for all purposes by all units of government in 1932.

17. For the average truck in New York an excess of \$30.86 was paid in motor-vehicle registration fees and motor-fuel taxes over similar taxes paid for the average car. Owners of the 332,018 trucks thus paid \$10,246,100 more than was paid for the same number of cars. This amount is almost 75 percent of the total State expenditures for the maintenance of State highways in 1932.

18. Local governments—towns, special districts, cities, and villages—are the principal units of government in New York considered on the basis of the amount of expenditures made in the State in 1932 (78.2 percent of total for all units of government), the amount of taxes levied (73.7 percent), and the debt incurred (80.2 percent).

19. Measured by expenditures, public benefit functions in New York were by far the most extensive activities, constituting 55.4 percent of all expenditures for all purposes and exceeding by 30.5 percent the costs of education and by 39.6 percent the highway expenses.

20. Of each \$1,000 of taxes, \$748.77 was paid in general property taxes, \$67.07 in motor-vehicle imposts, and \$184.16 in other imposts.

PUBLIC ROADS TO BE PUBLISHED IN SPANISH

"Carreteras", a Spanish translation of PUBLIC ROADS is soon to be published in Argentina and will be available for circulation in Spanish-speaking countries. A few months ago Ing. J. Allende Posse, head of the national highway organization of Argentina, while inspecting road construction in the United States, expressed a desire to keep the highway engineers of Argentina informed regarding research and methods of construction in this country. Difference in language has been a serious difficulty which he proposed to overcome by publishing PUBLIC ROADS in Spanish. Arrangements have been completed and the first issue of "Carreteras", which will contain the report that appeared in the March 1936 issue of PUBLIC ROADS, will be published in the near future.

A nominal charge will be made for "Carreteras", and subscriptions should be placed with the Jefe De Publicidad, Direccion Nacional de Vialidad, Buenos Aires, Argentina.

SECOND CONGRESS OF THE INTERNATIONAL ASSOCIATION FOR TESTING MATERIALS TO BE HELD IN LONDON, APRIL 19-24, 1937

For those concerned with concrete, natural stones, and ceramic materials the congress of the International Association for Testing Materials, which is to be held in London next April will be of considerable interest. The subjects to be discussed are divided into four groups: Metals, inorganic materials, organic materials, and subjects of general importance. The second group, which covers concrete, natural stones, and ceramic materials, has Prof. E. Suenson, of Denmark, as president, and an inspection of the preliminary list of papers which are to be presented indicates that the treatment of the different subjects will be most comprehensive, as the papers originate in some 11 different countries. Among the subjects included under "Concrete" are the testing of aluminous cement and plastic mortars, the development of heat by cement, sea-water cements, waterproofing compounds, the creep of concrete under load, vibrated concrete, cement pipes, and the strength of reinforced concrete beams. Natural stones are discussed in Austrian, German, and British papers, while under ceramic materials, the general testing of ceramic materials, the strength and testing of bricks and tiles, refractories, electrical porcelain, and the classification of clays are dealt with.

The last congress for testing materials was held in 1931, and the association says that every effort is being made to insure that the knowledge in this most important field will be brought completely up to date. The papers will be presented in the form of summaries, so that a large amount of information will be made available in easily accessible form. Inquiries should be addressed to the honorary secretary of the congress, Mr. K. Headlam-Morley, at the offices of the British committee, the International Association for Testing Materials, 28 Victoria Street, London, S. W. 1.

STATUS OF FEDERAL-AID HIGHWAY PROJECTS
1936-1937

AS OF OCTOBER 31, 1936

STATE	APPORTIONMENT		COMPLETED		UNDER CONSTRUCTION			APPROVED FOR CONSTRUCTION			BALANCE OF FUNDS AVAILABLE FOR PROJECTS	
	Estimated Total Cost	Federal Aid	Miles	Estimated Total Cost	Federal Aid	Miles	Estimated Total Cost	Federal Aid	Miles	Estimated Total Cost	Federal Aid	Miles
Alabama	\$ 5,208,287	\$ 1,385,866	98.3	\$ 585,592	\$ 292,796	23.2	\$ 474,000	\$ 237,000	13.7	\$ 474,000	\$ 237,000	13.7
Arizona	3,564,709			744,298	615,810	21.7	351,723	266,083	16.3	351,723	266,083	16.3
Arkansas	4,275,929						1,070,297	1,059,785	30.0	1,070,297	1,059,785	30.0
California	9,508,671	1,570,947	69.0	9,467,091	5,422,502	259.7	2,709,024	1,560,909	55.8	2,709,024	1,560,909	55.8
Colorado	4,575,144	1,216,773	93.4	3,358,371	1,746,114	109.9	1,884,899	1,092,147	72.2	1,884,899	1,092,147	72.2
Connecticut	1,582,913	141,308	4.8	818,140	406,867	10.3	122,827	61,414	1.4	122,827	61,414	1.4
Delaware	1,218,750	119,768	30.3	340,946	170,375	19.9	402,095	194,327	13.0	402,095	194,327	13.0
Florida	3,315,558	415,560	27.5	622,727	311,365	19.3	13,828	6,914		13,828	6,914	
Georgia	6,336,443	825,838	62.4	2,282,251	1,116,897	136.3	854,393	418,082	36.5	854,393	418,082	36.5
Idaho	3,065,304	975,613	201.1	1,522,870	911,284	87.9	689,563	412,629	42.5	689,563	412,629	42.5
Illinois	10,325,922	1,720,251	72.0	8,101,079	4,016,065	125.1	3,553,230	1,751,190	88.5	3,553,230	1,751,190	88.5
Indiana	6,184,258	3,517,770	109.2	2,653,849	1,326,216	96.1	4,189,246	2,093,824	103.3	4,189,246	2,093,824	103.3
Iowa	6,466,628	5,065,011	388.3	3,992,495	1,923,329	151.6	2,085,936	1,009,653	68.0	2,085,936	1,009,653	68.0
Kansas	6,631,085	2,082,561	409.2	4,449,151	2,198,122	466.4	3,068,318	1,532,090	160.2	3,068,318	1,532,090	160.2
Kentucky	4,611,955	2,140,374	139.5	406,528	203,284	14.2	1,238,575	614,842	45.9	1,238,575	614,842	45.9
Louisiana	3,557,930	1,458,617	52.9	1,143,103	571,537	36.3	659,364	327,682	16.1	659,364	327,682	16.1
Maine	2,177,197	729,308	48.5	721,452	360,726	21.3	715,448	357,724	14.5	715,448	357,724	14.5
Maryland	2,050,870	1,643,303		791,731	395,831	11.3	937,600	428,277	12.5	937,600	428,277	12.5
Massachusetts	3,485,364			3,788,933	1,844,467	12.2	1,063,134	531,567	8.2	1,063,134	531,567	8.2
Michigan	7,668,768	4,082,735	162.4	9,759,918	4,879,434	289.0	1,270,694	635,347	33.5	1,270,694	635,347	33.5
Minnesota	6,849,307	7,469,615	472.2	1,971,297	976,460	113.3	1,996,884	938,142	85.3	1,996,884	938,142	85.3
Mississippi	4,387,636			108,905	54,452	8.1	1,334,283	667,211	79.2	1,334,283	667,211	79.2
Missouri	7,601,200	2,645,970	364.7	6,447,469	3,222,914	264.7	2,810,227	1,373,248	141.7	2,810,227	1,373,248	141.7
Montana	5,122,333	3,649,930	375.7	2,113,657	1,183,437	145.4	1,502,528	803,073	64.4	1,502,528	803,073	64.4
Nebraska	5,167,930	1,374,766	106.7	3,592,893	1,782,029	320.7	577,816	288,908	26.3	577,816	288,908	26.3
Nevada	3,189,479	1,157,803	253.7	1,718,126	620,662	29.4	83,813	72,545	1.1	83,813	72,545	1.1
New Hampshire	1,223,750	734,176	22.2	179,821	89,285	3.0	196,260	98,317	1.9	196,260	98,317	1.9
New Jersey	3,322,469	565,970	12.0	3,682,660	1,734,799	37.0	324,309	162,154	5.4	324,309	162,154	5.4
New Mexico	3,990,023	2,298,579	173.6	1,940,171	1,195,049	160.0	1,265,576	769,714	90.8	1,265,576	769,714	90.8
New York	12,306,710	3,669,155	83.0	4,772,034	7,272,867	271.4	2,297,700	1,148,850	26.9	2,297,700	1,148,850	26.9
North Carolina	5,879,466	1,500,282	199.6	2,915,535	1,456,870	291.5	971,681	435,809	43.4	971,681	435,809	43.4
North Dakota	3,918,269	749,559		191,740	101,206	1.1	208,710	111,743	3.3	208,710	111,743	3.3
Ohio	9,131,204	761,780	12.3	6,443,773	3,105,688	80.7	1,616,442	724,528	11.1	1,616,442	724,528	11.1
Oklahoma	5,884,927	1,687,839	60.8	1,817,027	952,592	62.3	1,517,374	741,861	51.2	1,517,374	741,861	51.2
Oregon	4,089,711	2,197,702	89.5	1,324,878	1,701,891	93.5	967,166	562,452	40.1	967,166	562,452	40.1
Pennsylvania	10,695,448	4,272,818	73.4	7,778,840	3,881,866	105.8	3,528,590	1,752,706	50.9	3,528,590	1,752,706	50.9
Rhode Island	1,218,750	32,682	8.7	386,963	193,482	5.1	551,309	275,655	4.1	551,309	275,655	4.1
South Carolina	3,381,337	1,197,797	59.4	2,622,757	1,064,493	198.9	1,916,952	804,277	135.2	1,916,952	804,277	135.2
South Dakota	4,078,647	1,194,361	157.5	237,222	140,952	33.5	275,011	150,780	20.3	275,011	150,780	20.3
Tennessee	5,268,270	1,792,087	75.2	909,406	454,693	34.0	209,297	104,648	9.0	209,297	104,648	9.0
Texas	15,548,821	8,141,882	462.4	6,481,241	3,234,685	320.7	692,574	347,173	18.8	692,574	347,173	18.8
Utah	2,856,960	1,781,746	125.6	626,138	450,940	37.4	336,078	213,250	16.3	336,078	213,250	16.3
Vermont	1,218,750	1,197,797	59.4	718,653	348,488	20.0	280,100	122,435	6.0	280,100	122,435	6.0
Virginia	4,559,200	1,291,878	51.2	2,785,320	1,392,696	116.0	1,999,359	999,676	61.0	1,999,359	999,676	61.0
Washington	3,904,738	2,976,479	93.3	2,555,685	1,342,471	132.9	516,534	271,400	8.9	516,534	271,400	8.9
West Virginia	2,716,754	208,599	9.7	1,279,426	639,694	45.9	841,850	420,925	20.3	841,850	420,925	20.3
Wisconsin	6,090,504	2,851,076	106.7	4,596,563	2,662,758	177.8	649,590	320,345	23.9	649,590	320,345	23.9
Wyoming	3,121,972	2,594,867	305.0	1,283,686	785,173	190.8	34,226	21,790	1.0	34,226	21,790	1.0
District of Columbia												
Hawaii	1,218,750			467,855	231,167	8.2	69,938	34,754	1.6	69,938	34,754	1.6
TOTALS	243,750,000	92,071,383	5,722.9	138,042,271	70,586,288	5,233.9	56,922,171	29,359,895	1,887.6	56,922,171	29,359,895	1,887.6

CURRENT STATUS OF UNITED STATES WORKS PROGRAM HIGHWAY PROJECTS

(AS PROVIDED BY THE EMERGENCY RELIEF APPROPRIATION ACT OF 1935)

AS OF OCTOBER 31, 1936

STATE	APPORTIONMENT		COMPLETED		UNDER CONSTRUCTION		APPROVED FOR CONSTRUCTION		BALANCE OF FUNDS AVAILABLE FOR PROJECTS
Alabama	\$ 4,151,115	\$ 954,131	\$ 954,131	51.1	\$ 3,035,965	\$ 3,035,965	77.9	\$ 68,086	\$ 92,932
Arizona	2,569,841	2,091,221	1,900,872	132.9	926,779	589,840	54.6	22,200	56,929
Arkansas	3,352,061	2,004,968	1,889,135	186.4	1,242,977	1,239,356	159.0	46,803	77,006
California	7,747,928	4,456,917	4,259,584	188.2	3,366,229	3,331,255	65.9	73,063	84,046
Colorado	3,395,263	1,324,374	1,350,897	76.5	731,519	731,518	27.6	328,018	1,272,849
Connecticut	1,418,709	90,507	89,377	.2	545,855	524,898	5.9		476,416
Delaware	900,310	170,776	168,080	29.2	443,540	414,700	19.9		171,583
Florida	2,597,144	638,166	638,166	27.6	1,704,848	1,704,848	59.8	212,677	41,453
Georgia	4,988,967	439,351	438,662	29.0	484,328	484,328	34.5	647,444	3,418,533
Idaho	2,222,747	1,436,000	1,418,429	120.3	808,409	771,953	62.9	283,526	32,365
Illinois	8,694,009	5,518,233	5,514,724	328.6	2,885,005	2,880,305	122.4	37,924	15,454
Indiana	4,941,255	883,857	880,554	38.0	4,180,838	3,960,933	199.5	49,826	61,843
Iowa	4,991,664	1,670,780	1,594,689	204.7	3,498,499	3,400,569	230.4	49,050	1,007,526
Kansas	4,994,975	1,720,535	1,720,291	194.5	3,279,778	3,269,967	180.6	4,717	4,717
Kentucky	3,756,271	1,528,096	1,520,582	197.9	1,389,464	1,389,464	125.0	573,566	573,566
Louisiana	2,890,429	628,845	498,243	32.4	2,105,535	1,902,329	119.8	402,579	242,667
Maine	1,676,799	1,081,242	1,080,012	45.7	498,618	498,618	24.5	52,100	152,257
Maryland	1,750,738	122,867	122,867	7.4	569,657	569,657	10.9	783,659	46,069
Massachusetts	3,262,885	50,481	50,481	.6	1,867,213	1,867,213	12.3	337,664	437,896
Michigan	6,301,414	4,664,500	4,604,470	208.0	1,499,021	1,499,021	76.8	55,700	1,007,526
Minnesota	5,217,145	4,013,661	3,435,080	676.6	2,155,773	1,636,739	224.0	281,464	142,223
Mississippi	3,457,552	901,439	900,469	83.1	2,128,679	2,124,212	117.0	199,490	17,252
Missouri	6,012,652	3,087,860	3,066,506	688.2	2,451,252	2,345,978	106.4	700,306	273,380
Montana	3,676,416	3,093,066	3,093,066	174.0	514,971	514,971	11.3	39,585	36,764
Nebraska	3,870,739	1,399,755	1,379,246	153.5	2,151,471	2,125,666	204.2	118,088	247,739
Nevada	2,243,074	1,521,413	1,475,055	66.5	485,320	485,320	24.7	2,738	279,961
New Hampshire	945,225	353,695	350,039	19.4	398,649	376,750	13.2	48,230	170,206
New Jersey	3,129,809	93,993	93,993	2.2	2,487,986	2,471,831	26.1	508,731	64,220
New Mexico	2,871,397	1,777,570	1,777,570	147.0	587,069	587,069	32.5	436,125	68,937
New York	11,046,377	4,337,273	4,264,082	83.9	6,790,600	6,450,029	84.0	328,700	3,566
North Carolina	4,720,173	900,349	900,349	60.9	3,086,460	3,053,871	204.3	669,686	189,140
North Carolina	2,867,245	789,824	789,287	129.5	1,723,545	1,720,520	162.8	225,493	131,945
North Dakota	7,670,815	1,531,552	1,519,652	45.8	4,560,171	4,426,443	143.6	987,645	766,079
Ohio	4,580,670	949,097	940,883	82.7	2,426,515	2,423,887	238.1	774,401	448,628
Oklahoma	3,096,642	1,625,881	1,621,006	141.2	1,941,402	1,176,860	15.2	109,669	133,057
Oregon	9,347,797	1,196,870	1,135,212	53.0	1,829,686	1,825,608	50.5	1,945,378	4,479,237
Pennsylvania	989,208	682,694	681,082	11.9	298,453	298,453	6.9	270,906	9,673
Rhode Island	2,207,012	682,189	649,539	74.6	1,497,560	1,441,830	132.8	266,452	344,192
South Carolina	2,976,454	1,441,331	1,441,331	315.6	1,084,918	1,084,918	127.0	271,618	178,587
South Dakota	4,192,460	1,434,869	1,432,450	66.3	1,417,563	1,417,563	46.2	452,468	889,940
Tennessee	11,969,350	8,682,940	7,886,409	794.7	4,362,446	3,978,228	317.2	76,061	64,238
Texas	2,067,154	1,244,273	1,116,701	142.6	778,767	746,853	49.4	33,660	169,940
Utah	924,306	642,881	642,881	16.1	317,538	317,538	5.7	7,880	34,587
Vermont	3,652,667	2,210,531	2,140,006	179.9	1,066,484	1,060,747	279.7	296,779	156,194
Virginia	3,026,161	2,385,763	2,168,811	149.4	900,911	742,570	14.1	92,098	22,683
Washington	2,231,412	194,382	194,382	11.8	1,762,939	1,759,386	65.5	163,409	92,098
West Virginia	4,823,884	3,473,308	3,098,186	247.5	2,029,393	1,720,935	93.2	3,355	114,967
Wisconsin	2,123,155	1,135,864	1,135,849	96.5	1,003,194	1,003,188	43.4	60,800	38,184
Wyoming	949,496	909,101	909,101	8.5	25,011	4,295	.2	25,600	35,738
District of Columbia	926,033	142,719	129,996	2.6	502,444	494,109	6.3	54,421	248,044
Hawaii									
TOTALS	195,000,000	84,350,390	81,123,612	7,414.8	87,494,315	83,783,634	4,512.0	13,376,934	17,497,871

CURRENT STATUS OF UNITED STATES WORKS PROGRAM GRADE CROSSING PROJECTS

(AS PROVIDED BY THE EMERGENCY RELIEF APPROPRIATION ACT OF 1935)

AS OF OCTOBER 31, 1936

STATE	APPORTIONMENT	COMPLETED			UNDER CONSTRUCTION			APPROVED FOR CONSTRUCTION			BALANCE OF ABLE FOR NEW PROJECTS
		Estimated Total Cost	Works Program Funds	NUMBER Grade Crossing by State (in or out of balance)	Estimated Total Cost	Works Program Funds	NUMBER Grade Crossing by State (in or out of balance)	Estimated Total Cost	Works Program Funds	NUMBER Grade Crossing by State (in or out of balance)	
Alabama	\$ 4,034,617	\$ 440,449	\$ 440,449	4	\$ 2,984,183	\$ 2,984,188	30	\$ 474,535	\$ 474,535	4	\$ 135,445
Arizona	1,296,099	394,444	394,444	5	723,342	711,898	7	63,200	63,200	1	86,598
Arkansas	3,574,060	1,082,359	1,078,173	26	4,776,686	4,638,899	34	662,597	661,542	8	52,788
California	7,486,362	2,637,534	2,531,037	17	639,929	639,929	6	380,600	380,600	3	316,426
Colorado	2,631,567	926,063	905,063	18	563,087	491,009	3	494,014	494,014	1	727,661
Connecticut	1,712,684										
Delaware	418,239										
Florida	2,827,863	660,331	658,600	5	1,334,594	1,334,014	15	396,932	396,932	9	298,239
Georgia	4,895,949	12,090	12,090	1	318,336	318,336	5	546,193	546,193	17	4,019,330
Idaho	1,674,479	800,908	800,908	12	315,924	315,924	5	153,291	153,291	1	404,355
Illinois	10,307,184	1,193,414	1,193,414	16	6,452,415	6,452,415	39	1,507,983	1,507,983	9	1,153,372
Indiana	5,111,096	241,288	241,288	4	4,689,802	4,506,663	33	405,820	405,820	2	8,306
Iowa	5,600,679	835,749	802,334	25	4,167,065	4,117,883	73	610,165	599,350	9	80,912
Iowa	5,246,258	595,723	595,723	8	4,577,171	4,521,743	44	128,192	128,192	3	
Kentucky	3,672,327	111,700	111,700	4	2,872,095	2,872,095	18	156,898	156,898	2	
Louisiana	3,213,467	385,978	385,978	11	1,447,148	1,447,148	13	967,081	922,616	8	1,131,694
Maine	1,426,861										
Maryland	2,061,751										
Massachusetts	4,210,833	117,449	117,449	2	1,977,105	1,977,105	15	1,034,152	1,034,152	5	1,082,128
Michigan	6,765,197	1,492,775	1,492,775	19	5,096,377	5,011,877	24	237,120	237,120	2	23,425
Minnesota	5,395,441	1,460,138	1,459,752	43	3,679,391	3,484,020	43	145,800	145,800	2	305,828
Mississippi	3,241,475	171,046	171,046	8	2,333,513	2,333,513	41	83,000	83,000	5	653,916
Missouri	6,142,153	261,639	261,639	5	5,580,301	5,479,026	40	367,252	253,300	3	148,187
Montana	2,722,327	2,010,499	2,010,499	3	649,819	649,819	7				62,009
Nebraska	3,556,441	1,051,080	1,051,080	43	1,973,990	1,973,990	33	434,876	434,876	4	96,496
Nevada	887,260	306,096	306,096	7	598,335	577,534	2	3,630	3,630	1	320,246
New Hampshire	822,484	151,745	151,745	1	320,493	320,493	2				
New Jersey	3,983,826	59,838	59,838	1	1,836,798	1,825,753	14	708,283	708,283	3	1,389,953
New Mexico	1,725,286	532,909	532,909	10	925,812	925,812	6	72,214	72,214	1	194,352
New York	12,577,189	637,207	637,207	2	9,910,837	9,649,991	31	1,467,700	1,467,700	7	1,822,291
North Carolina	4,823,958	476,941	476,941	5	2,009,985	2,009,985	25	1,114,596	1,099,096	11	1,237,936
North Dakota	3,207,473	210,034	210,034	7	1,824,361	1,823,361	36	217,540	217,540	4	956,537
Ohio	8,439,897	2,102,034	2,102,034	5	3,677,330	3,464,031	24	2,942,293	2,793,989	15	2,181,877
Oklahoma	5,004,711	1,208,387	1,208,387	26	1,680,402	1,680,402	12	566,379	566,379	7	1,547,543
Oregon	2,334,204	335,153	335,153	4	2,017,153	1,943,537	18	41,500	41,500	3	14,013
Pennsylvania	11,483,613	390,192	390,192	17	5,673,422	5,163,635	35	2,745,070	2,703,208	13	3,127,810
Rhode Island	699,691	236,879	236,879	1	418,195	417,129	4	21,195	21,195	1	24,488
South Carolina	3,059,956	273,675	270,371	9	1,539,890	1,524,538	28	259,614	259,614	1	1,005,598
South Dakota	3,249,086	435,409	435,409	17	1,633,542	1,633,542	34	291,116	291,116	5	889,016
Tennessee	3,903,979	254,476	254,476	7	1,142,547	1,142,547	14	673,662	673,662	9	1,833,294
Texas	10,855,982	1,942,453	1,942,453	34	7,347,903	7,341,926	83	1,268,991	1,211,992	7	360,010
Utah	1,230,763	87,218	87,218	1	1,015,391	998,743	12	93,695	93,695	2	52,496
Vermont	729,857	462,107	462,107	5	172,547	172,547	1	75,853	75,853	2	69,638
Virginia	3,774,287	532,655	532,655	19	1,464,508	1,374,642	19	662,182	662,182	2	1,204,812
Washington	3,095,041	691,778	686,978	12	2,141,128	2,140,703	10	4,290	4,290	3	263,070
West Virginia	2,677,937	793,936	793,936	12	1,211,697	1,211,673	11	495,561	495,561	10	970,703
Wisconsin	5,022,663	251,237	251,237	4	3,653,409	3,568,328	24	65,000	30,000	1	640,418
Wyoming	1,360,841				798,106	798,106	7				281,609
Dist. of Columbia	410,804				425,564	396,804	3				14,000
Hawaii	453,703				522,380	453,703	5				
TOTALS	196,000,000	27,157,815	26,921,358	510	113,915,136	111,326,451	1032	24,185,076	23,615,409	207	34,136,782

PUBLICATIONS of the BUREAU OF PUBLIC ROADS

Any of the following publications may be purchased from the Superintendent of Documents, Government Printing Office, Washington, D. C. As his office is not connected with the Department and as the Department does not sell publications, please send no remittance to the United States Department of Agriculture.

ANNUAL REPORTS

- Report of the Chief of the Bureau of Public Roads, 1924. 5 cents.
Report of the Chief of the Bureau of Public Roads, 1927. 5 cents.
Report of the Chief of the Bureau of Public Roads, 1928. 5 cents.
Report of the Chief of the Bureau of Public Roads, 1929. 10 cents.
Report of the Chief of the Bureau of Public Roads, 1931. 10 cents.
Report of the Chief of the Bureau of Public Roads, 1933. 5 cents.
Report of the Chief of the Bureau of Public Roads, 1934. 10 cents.
Report of the Chief of the Bureau of Public Roads, 1935. 5 cents.

DEPARTMENT BULLETINS

- No. 583D . . Reports on Experimental Convict Road Camp, Fulton County, Ga. 25 cents.
No. 1279D . . Rural Highway Mileage, Income, and Expenditures, 1921 and 1922. 15 cents.

TECHNICAL BULLETINS

- No. 55T . . . Highway Bridge Surveys. 20 cents.
No. 265T . . . Electrical Equipment on Movable Bridges. 35 cents.

MISCELLANEOUS PUBLICATIONS

- No. 76MP . . The Results of Physical Tests of Road-Building Rock. 25 cents.

Federal Legislation and Regulations Relating to Highway Construction. 10 cents.

Supplement No. 1 to Federal Legislation and Regulations Relating to Highway Construction. 5 cents.

No. 191 . . . Roadside Improvement. 10 cents.

The Taxation of Motor Vehicles in 1932. 35 cents.

An Economic and Statistical Analysis of Highway-Construction Expenditures. 15 cents.

Highway Bond Calculations. 10 cents.

Single copies of the following publications may be obtained from the Bureau of Public Roads upon request. They cannot be purchased from the Superintendent of Documents.

SEPARATE REPRINT FROM THE YEARBOOK

No. 1036Y . . Road Work on Farm Outlets Needs Skill and Right Equipment.

TRANSPORTATION SURVEY REPORTS

Report of a Survey of Transportation on the State Highway System of Ohio (1927).

Report of a Survey of Transportation on the State Highways of Vermont (1927).

Report of a Survey of Transportation on the State Highways of New Hampshire (1927).

Report of a Plan of Highway Improvement in the Regional Area of Cleveland, Ohio (1928).

Report of a Survey of Transportation on the State Highways of Pennsylvania (1928).

Report of a Survey of Traffic on the Federal-Aid Highway Systems of Eleven Western States (1930).

A complete list of the publications of the Bureau of Public Roads, classified according to subject and including the more important articles in PUBLIC ROADS, may be obtained upon request addressed to the U. S. Bureau of Public Roads, Willard Building, Washington, D. C.

CURRENT STATUS OF UNITED STATES PUBLIC WORKS ROAD CONSTRUCTION

AS PROVIDED BY SECTION 204 OF THE NATIONAL INDUSTRIAL RECOVERY ACT (1934 FUNDS) AND BY THE ACT OF JUNE 18, 1934 (1935 FUNDS)

AS OF OCTOBER 31, 1936

STATE	APPORTIONMENTS		COMPLETED					UNDER CONSTRUCTION					APPROVED FOR CONSTRUCTION			BALANCE OF FUNDS AVAILABLE FOR NEW PROJECTS	
	Sys. 204 of the Act of June 18, 1934 (1934 Fund)	Act of June 18, 1934 (1935 Fund)	Total Cost	1934 Public Works Funds	1935 Public Works Funds	Mileage	Estimated Total Cost	1934 Public Works Funds	1935 Public Works Funds	Mileage	1934 Public Works Funds	1935 Public Works Funds	Mileage	1934 Public Works Funds	1935 Public Works Funds		
Alabama.....	\$ 4,259,842		\$15,305,076	\$ 3,304,382	\$3,512,878	759.3	\$ 467,758	\$ 52,665	\$ 415,093	16.7	\$ 26,258	\$ 304,982	2.5	\$13,085	\$ 26,890		
Arizona.....	5,241,935		8,980,818	8,980,818	2,570,184	543.0	12,500	2,570,184	12,500		7,447			7,447			
Arkansas.....	3,482,049		10,906,509	6,534,351	3,303,237	618.5	126,046	39,524	88,261	3.7		18,148	1.0	48,172	18,403		
California.....	7,922,206		30,587,308	15,266,149	7,774,590	752.8	115,026		115,016			820		21,295	41,781		
Colorado.....	3,486,006		11,295,101	6,871,970	3,441,857	639.7	36,318				22,245	6,619	1.3	2,560	37,530		
Connecticut.....	2,689,740		4,514,947	2,750,269	1,312,344	74.0								48,909	141,924		
Delaware.....	923,395		2,680,794	1,818,804	815,188	128.3	109,467		105,525	1.6		67,339		284	8,682		
Florida.....	5,231,834		8,897,748	5,175,534	2,344,564	309.6	294,979		230,665			166,158		1,702	1,111,085		
Georgia.....	10,091,185		12,946,454	9,323,487	2,901,476	734.0	1,356,136	403,675	934,433	91.7			5	279,952			
Idaho.....	4,486,249		6,927,035	4,415,568	2,088,070	591.1	157,733		155,185			1,521		26,776	32,710		
Illinois.....	17,570,770		25,063,825	16,835,536	7,280,243	699.1	2,146,315	635,560	1,627,395	4		7,424	20.0	39,234	26,339		
Indiana.....	10,037,843		15,312,360	9,866,563	4,723,209	476.6	364,807	158,875	205,932	11.5		108,068		12,405	51,754		
Iowa.....	10,085,560		15,428,981	10,055,161	4,777,361	1,221.9	361,891	79,764	341,000	5.4		499		6,107	43,665		
Kansas.....	1,029,604		1,358,281	1,358,281	5,147,113	1,467.7	1,467,113		1,467,113					10,217	32,669		
Kentucky.....	7,531,399		11,924,166	7,444,139	3,954,165	601.7	218,192	59,003	191,149	5.2		72,331	2.8				
Louisiana.....	5,222,591		8,983,157	5,731,324	2,593,089	252.5	318,465	56,549	198,434	13.4		122,372	5.2	40,718	44,037		
Maine.....	3,369,917		5,239,639	3,346,881	1,657,506	193.1	7,234		6,916		16,120	11,800		6,916	35,046		
Maryland.....	3,564,527		5,364,565	3,346,772	982,038	143.7	270,868	131,266	127,806	9.8		347,837	7.6	87,449	352,376		
Massachusetts.....	6,937,100		9,852,801	6,952,733	2,647,991	112.2	431,715		431,715			91,944		44,367	178,824		
Michigan.....	12,736,227		20,358,539	12,695,114	6,060,666	754.9	4,311,000	40,113	292,582	13.2		136,788		2,651	2,651		
Minnesota.....	10,695,969		16,086,504	10,260,596	4,749,513	653.0	494,238	58,110	390,348	17.2		34,800		77,865	251,290		
Mississippi.....	6,976,675		12,948,013	6,723,551	2,863,665	715.1	787,650	188,861	598,789	28.8		3,960		68,304	36,662		
Missouri.....	12,180,306		17,409,640	11,637,146	4,718,947	1,436.5	2,114,082	471,210	1,380,892	15.3		62,100	1.9	71,949	11,801		
Montana.....	7,439,748		11,707,589	7,423,766	3,610,494	1,042.2	147,241		147,241					15,942	11,999		
Nebraska.....	7,822,961		12,833,314	7,833,593	3,613,893	1,018.3	283,045	270,939	270,939	27.8		63,537	5.9	15,368	15,995		
Nevada.....	4,940,517		7,078,791	4,940,517	2,266,933	764.5	26,804		26,804			1,650		6,969	6,969		
New Hampshire.....	1,903,639		2,981,515	1,903,639	933,904	77.7	4,174		4,174			16,591		4,888	14,793		
New Jersey.....	6,346,039		8,075,122	6,050,468	1,519,076	82.0	2,148,474	120,518	1,429,346	14.2		82,145		92,907	202,497		
New Mexico.....	2,941,700		8,816,508	5,775,899	2,813,242	743.9	72,518		72,518					16,076	102,433		
New York.....	11,327,921		38,706,319	21,169,967	10,046,565	812.2	1,615,030	444,610	1,031,299	8.2		162,275	1.3	33,817	81,163		
North Carolina.....	4,840,941		14,668,317	9,044,673	4,394,008	1,329.6	540,290	402,234	138,056			253,514	8.2	20,369	55,363		
North Dakota.....	5,604,448		8,288,425	5,389,998	2,096.9	570,401	139,342	139,342	469,600	50.7		15,703		59,406	341,214		
Ohio.....	15,484,592		23,905,703	15,341,142	6,775,436	2,774.3	1,121,223	1,121,223	969,176	21.9		34,083		22,200	38,706		
Oklahoma.....	9,216,796		14,228,221	9,146,846	4,303,865	804.9	182,796	67,007	115,745	1.6		174,301		2,945	91,868		
Oregon.....	3,697,494		8,712,525	3,395,482	2,932,035	1,065.8	221,747	64,950	89,384			165,153		56,584	51,394		
Pennsylvania.....	13,591,004		28,274,755	18,174,426	8,174,237	1,023.8	927,289	418,858	418,858	34.2		153,388	4.3	144,332	301,493		
Rhode Island.....	1,998,708		3,144,602	1,998,708	1,012,447	89.1	421,097	171,812	237,426	14.6		46,320	2.1	8,888	8,086		
South Carolina.....	2,770,954		7,832,225	5,236,144	2,319,317	612.3	284,062	110,078	173,984	44.5		11,078	8.8	90,064	62,470		
South Dakota.....	6,011,479		9,187,205	5,811,337	3,600,111	1,536.9											
Tennessee.....	4,302,991		13,369,285	8,102,543	3,879,608	1,009.9	369,442	284,404	369,442	7.4		43,164	5.9	76	90,776		
Texas.....	24,244,024		37,518,234	23,007,966	11,713,914	3,772.8	595,000	284,404	1,173,712	7.2		15,036		51,565	322,913		
Utah.....	4,194,708		7,238,246	4,160,916	2,094,401	590.9	70,718	32,291	38,250					1,500			
Vermont.....	1,867,573		3,144,725	1,863,531	924,950	140.3	21,644	3,922	17,722					121	5,335		
Virginia.....	7,416,757		11,866,281	7,294,304	3,345,109	601.4	189,561	8,575	180,986	22.4		14,748	25.6	34,264	42,078		
Washington.....	3,106,412		9,369,715	6,100,928	3,022,752	302.7	64,596		64,596					3,825	22,315		
West Virginia.....	4,474,234		6,115,399	4,315,121	1,514,235	209.9	735,027	83,534	594,986	12.5		66,445		75,579	104,689		
Wisconsin.....	2,384,657		19,150,670	9,116,001	4,875,354	619.7	241,316	5,760	24,316			7,915		8,660	34,012		
Wyoming.....	2,501,527		6,879,280	2,428,712	1,051,371	1,051.7	5,761							43,684	36,290		
District of Columbia.....	1,918,469		2,878,699	1,909,584	968,979	22.3	8,885	8,885									
Hawaii.....	1,871,062		2,693,451	1,870,383	264,953	51.1	650,838							679	4,863		
TOTALS.....	394,000,000	200,000,000	618,053,780	386,537,691	176,496,131	34,758.4	22,487,226	4,692,641	15,566,771	588.6	897,711	3,290,642	152.4	1,711,957	4,726,496		

