

SOME COLORADO TAX PROBLEMS

WITH SPECIAL REFERENCE TO THEIR
EFFECT ON AGRICULTURE

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SOME COLORADO TAX PROBLEMS

Farm taxation studies in Colorado were proposed during the autumn of 1925. As a result of several conferences on this subject, the Division of Agricultural Finance, Bureau of Agricultural Economics, United States Department of Agriculture, and the Department of Economics and Sociology, under the direction of the Colorado Experiment Station, developed a plan for immediate consideration and began a cooperative study of taxation as related to the agricultural industry of Colorado.

This cooperative agreement became effective December 1, 1925. Our objective was to ascertain the present status of farm taxation in Colorado and the total burden of farm taxes for selected years; also to determine whether a revision of existing tax laws might not lead to a more equitable distribution of the tax load.

This bulletin includes a discussion of a part of the material which has been assembled as a result of the joint efforts of these two departments. It is hoped that this presentation may create a new interest in the study of public finance and that it may lead to constructive and intelligent effort in the improvement of present-day methods of securing and expending public revenue.

The immediate purpose of this bulletin is to supply to the farmers of Colorado information concerning the operation of their tax system. In order to furnish the necessary material for a general understanding and appraisal of the system, it has been thought necessary to lay chief emphasis on three subjects: (1) The relations between the income and taxation of various types of property; (2) the assessment of taxable property; and (3) an analysis of the receipts and expenditures of the various governmental units of the state. A brief explanation will show the interrelations of these three subjects.

The general property tax accounts for the bulk of the taxes collected from agriculture. For this reason the first two sections of this report will be concerned mainly with the general property tax. The third section will describe the receipts from all taxes and will show the amounts of taxes spent by the various governmental units.

A discussion of the burden of taxation is appropriate as the opening section of the report because of the wide interest in the subject of tax burdens, and because of the importance of the subject in any

The authors desire to give due credit to Mrs. Thelma M. Penn and Mrs. Martha M. Adams for their careful work in making computations and in setting up many of the tables which have been used in this bulletin.

discussion of the effects of taxation. The chief data presented concern agriculture, altho an attempt is made to present comparable figures indicating the approximate tax burden of other industries and other types of property.

With an idea of the relative burdens of taxation in Colorado in mind, it becomes desirable to examine the reasons why taxes are at their present level. So far as the general property tax is concerned two factors determine the amount that an individual piece of property must pay: (1) Its assessed value, and (2) the tax rate. The second part of the report, therefore, proceeds to examine first the basis of the assessment system and the results of its operation, particularly in the rural sections of the state. Then the actual receipts of the state and local units are analyzed in order to show the amounts that have been collected by various means, particularly by the general property tax. Finally the expenditures of the various units are examined with especial attention being given to those that relate to agriculture and to those of the local units that are primarily agricultural.

On the basis of the examination of tax burdens in the state, of the assessment process by which these burdens are distributed over the various types of property, and of the actual tax receipts and expenditures, a tentative appraisal of the tax system of the state so far as it relates to agriculture is reached. The analysis indicates certain methods by which an improved system may be obtained. It also points the way to several additional lines of research that need attention before anything that approaches a final appraisal of the state's tax system can be made.

I. INCOME AND TAXATION OF COLORADO FARMS

Income is generally considered the best single test of ability to pay taxes. From income must come tax payments unless capital is to be levied on and diminished. A comparison, therefore, of the amount of income taken by taxes levied in various years and on various types of property gives much information that will help to determine the effects and fairness of a tax system. In this chapter, the results of studies of farm income and taxation made in Colorado will be described and compared with results of similar studies in other states. They will also be compared with the figures that are available relating to the taxation of types of property other than agricultural. From the material that can be gathered, an estimate of the relative burden of taxation in Colorado will be prepared.

Data concerning farm income and taxes have been secured from two sources. Questionnaires have been sent to owners of rented farm land in the state, requesting that they supply certain information

relating to the years 1919, 1923, 1925 and 1926. From these questionnaires data which concern the state as a whole have been computed. In order to have more detailed information for certain important agricultural areas, detailed field investigations have been made, and based on them it is possible to present an intensive picture of conditions in certain sections.

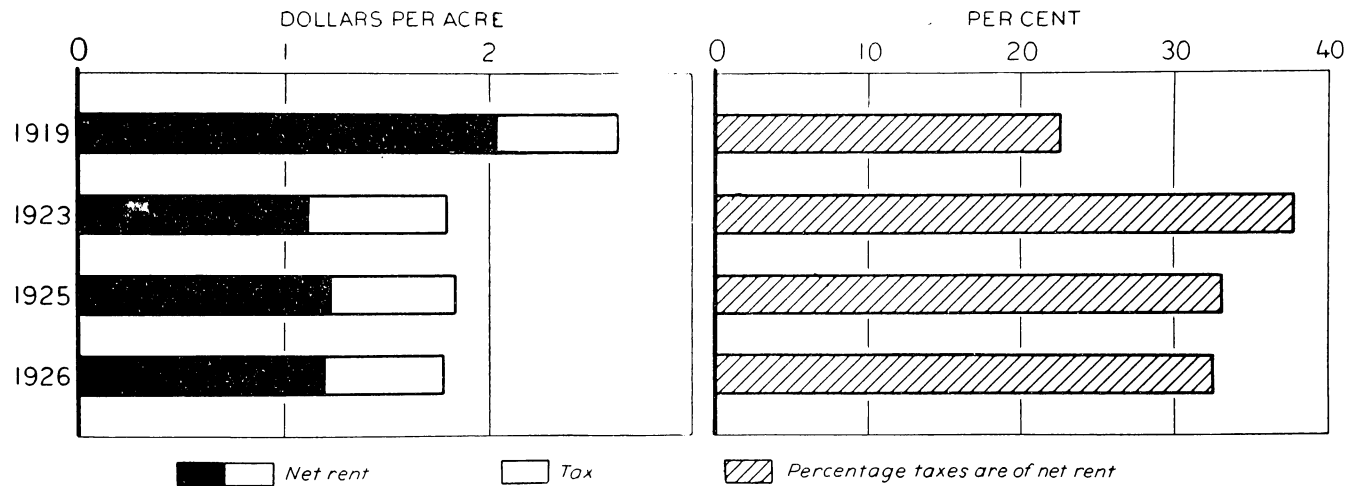
It will be noted that major emphasis is placed on the results of the studies of returns on rented land. It is possible definitely to compute the income that is properly attributable to land of this type. Such a computation cannot be made without certain arbitrary assumptions for land that is farmed by its owner. Income reported for such land includes return on the operator's investment, and on his labor and his managerial ability, and it has been impossible satisfactorily to separate these types of income. In other words, the first portion of this farm-income and taxation study will be concerned with property income and a latter portion with personal income and property income combined. Rent in the first portion of the study will be used as a basis of the income figure, with which taxes on land and buildings will be compared. The rent figure reported on the questionnaires has been changed to a net rent figure by the deduction of insurance,¹ depreciation on buildings and fences,² cost of seed and other supplies furnished by the landlord, interest on the landlord's investment in livestock and machinery, and certain other deductions which appear fair in special cases.

A comparison of the results of the questionnaires, which cover the years 1919, 1923, 1925 and 1926, and which are summarized in Table 1, shows that taxes took the greatest percentage of net rent—computed without deducting taxes—in 1923, when the average for 414 farms was 37.8 percent. In 1925, reports from 568 farms showed that net rent³ had increased slightly and that taxes had decreased. Taxes in that year amounted to 33.2 percent of net rent. The following year brought a slight additional improvement in farm owners' tax position. Reports from 304 farms indicate that taxes took 32.6 percent of net rent. These recent years should be compared with 1919, when reports from 282 farms indicate that taxes were 22.7 percent of net rent. Figure 1 presents this comparison in graphic form. It will be noticed that the improvement in the condition of the land owner in the two recent years has been due to a decrease in the tax per acre rather than to any increase in the income from land.

¹ Computed at 50 cents on a \$100 valuation of buildings, the current rate for mutual farm fire insurance as computed by the U. S. Dept. of Agriculture.

² Computed at 3 percent and 8 percent, respectively.

³ Net rent, when used in the following pages, should be understood as meaning net rent before deducting taxes.



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Figure 1.—Relation of Taxes and Rent on Farms in Colorado, 1919, 1923, 1925, and 1926. Net rent was highest in 1919, lowest in 1923 and close to the 1923 level in 1925 and 1926. Taxes were highest in 1923, making the percentage of rent taken by taxes highest in that year.

TABLE 1.—General Property Taxes and Net Rent of Farms Reporting in Colorado, 1919, 1923, 1925 and 1926.

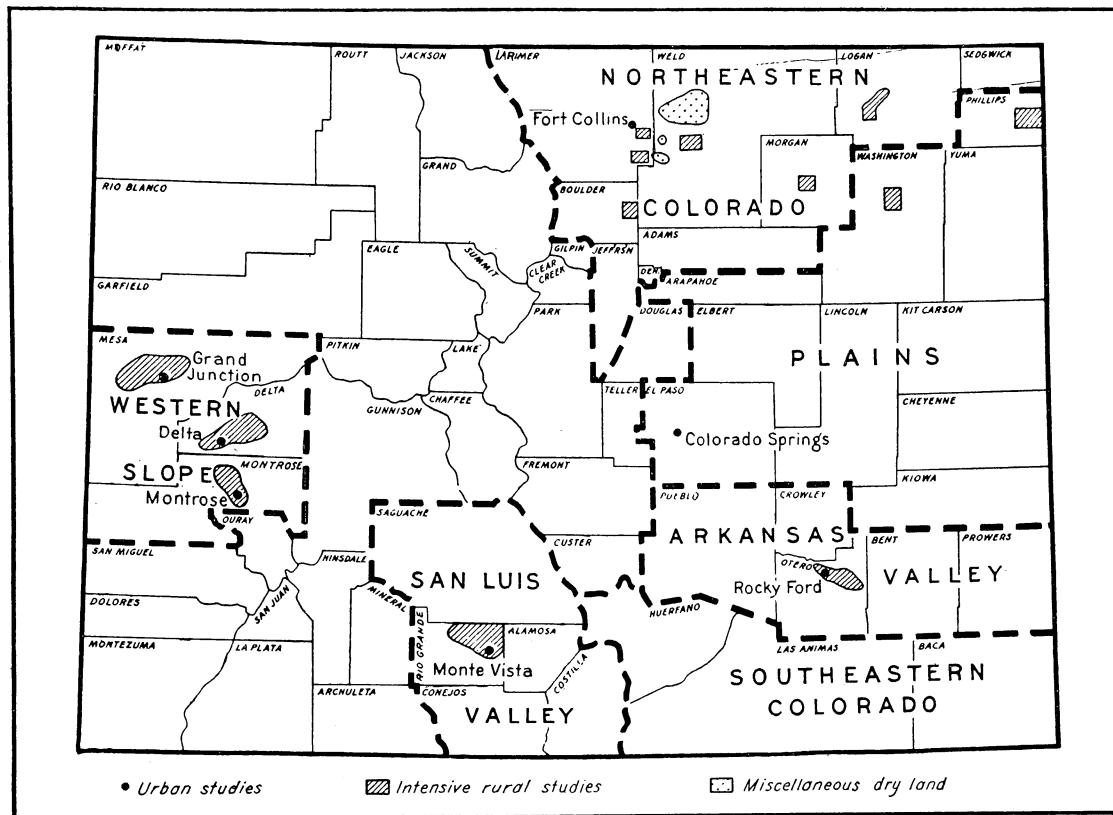
Year	Farms reporting	Acres in farms reporting	Average size of farms	Net rent per acre (before deducting taxes)	Tax per acre	Relation of taxes to net rents
	Number	Acres	Acres	Dollars	Dollars	Percent
1919	282	88,832	315	2.64	0.60	22.7
1923	414	127,829	309	1.80	.68	37.8
1925	568	182,185	321	1.84	.61	33.2
1926	304	98,190	323	1.78	.58	32.6

Average figures for a state the size of Colorado frequently fail to reveal conditions that affect only a portion of the state. In order to make the figures presented of greater local significance, they have been tabulated in groups of counties which comprise certain of the agricultural regions of Colorado and the results included in Table A.¹ A further tabulation on the basis of individual counties would have been made if a sufficient number of returns had been secured. It is not believed, however, that the returns available are sufficient to represent properly all types of agriculture within many of the counties. Figures for certain districts into which intensive studies have been carried are on pages 17-18, *infra*. Within the districts², indicated in Figure 2 and designated as Northern Colorado, the Plains, the Arkansas Valley, Southeastern Colorado and the Western Slope, it is believed that an adequate sample to indicate general trends of rent and taxation has been secured. Figure 3 compares taxes and net rents for the four years for which information is available in each of the five regions. It is to be expected that the average amounts of rent and taxes per acre will vary in the different sections. For purposes of comparison the relationship between net rent and taxes is of more significance than the figures for either taken alone. Is a greater proportion of the net income from land taken by taxation in one section of the state than in another?

The answer to this question should indicate whether there are local conditions which need special study in order to bring tax equality among the different sections. This problem may be fully as important as a consideration of such inequalities as may exist between agriculture and other industries.

¹In order to make the reading of the report more easy for those who do not wish to examine all the tables, certain of the less important ones have been placed at the end. These are designated by letters. Table A appears on page 81.

²The counties from which reports have been received in each of the districts follow: Northern Colorado—Adams, Boulder, Larimer, Logan, Morgan, Sedgwick and Weld; Plains—Arapahoe, Cheyenne, Elbert, El Paso, Kiowa, Kit Carson, Lincoln, Phillips, Washington and Yuma; Western Slope—Delta, Mesa and Montrose; Arkansas Valley—Bent, Crowley, Otero, Prowers and Pueblo; Southern Colorado—Baca, Huerfano and Las Animas.



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 Figure 2.—Counties, Cities, and Districts Forming the Basis of the Regional Comparisons of Farm and Urban Rents and Taxes.

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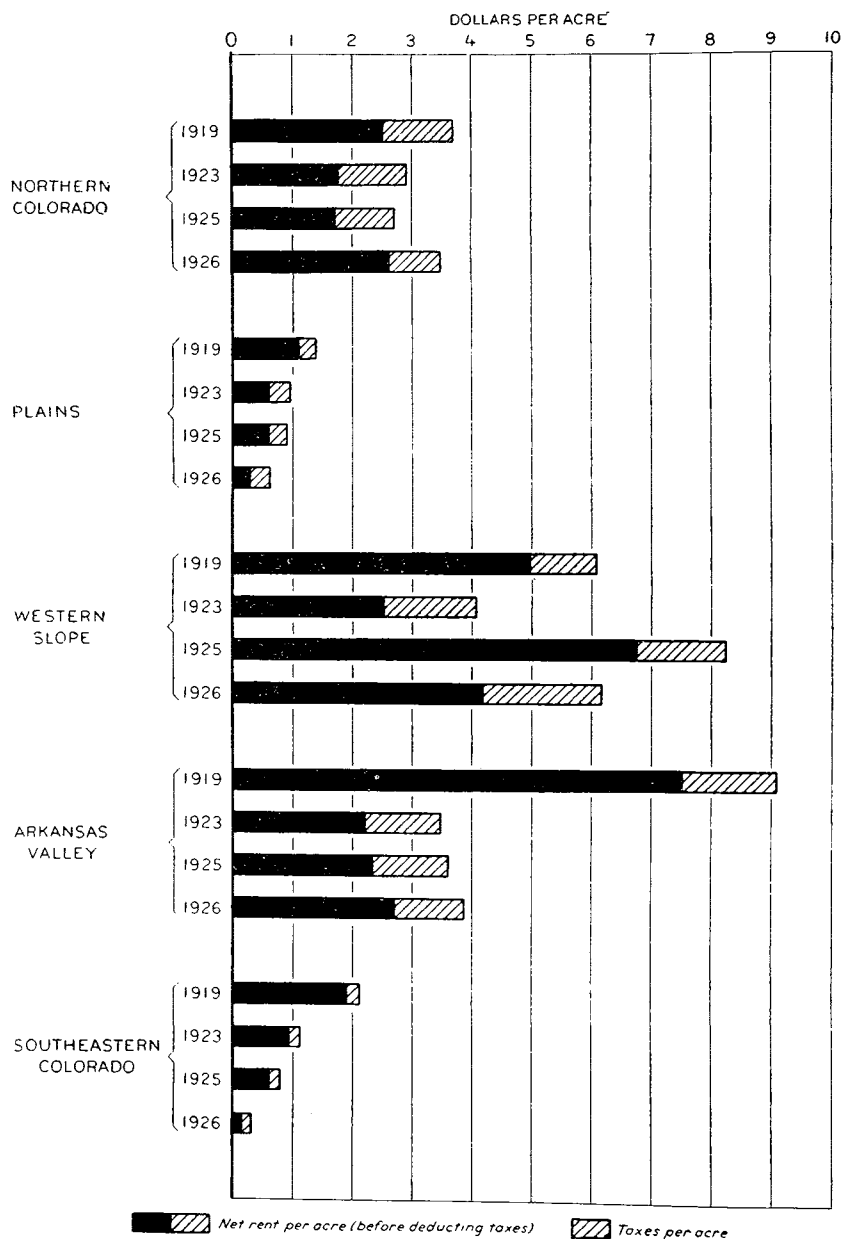


Figure 3.—Relation of Taxes and Net Rent on Farms in Several Districts of Colorado, 1919, 1923, 1925, and 1926. The Arkansas Valley in 1919 reports the highest net-rent per-acre figures, closely followed by the Western slope in 1925. Per-acre rents are consistently lowest in the Plains and Southeastern Colorado.

In 1919 the farms of the Plains, Southeastern Colorado, the Western Slope and the Arkansas Valley were in a better tax position as revealed by the percentage of net rent taken by taxes than farms in Northern Colorado. A condition of general uniformity for all the regions, except Southeastern Colorado which again was in a better condition than the others, is revealed by the results for 1923. In 1925 the Western Slope and Southeastern Colorado show a distinctly better ratio than the other sections. In the following year Northern Colorado, the Arkansas Valley and the Western Slope, are in a more favorable tax condition than the other regions. While this review shows that the farms which reported from the Western Slope and from Southeastern Colorado have paid a lower portion of their income in taxes than have those of the remaining sections from which reports have been received, the small number of farms which have reported from these two sections makes some caution necessary in drawing conclusions from the figures.

In the Plains and Northern Colorado sections where the number of reports is adequate to present a fair sample, an important difference is indicated. The ratio of taxes to net rent in Northern Colorado was high in the two early years covered by the study and relatively low in 1926. In the Plains section, the ratio was below the average for the state in 1919 and 1923. For the last two years covered by the study, it was above the average for the state, running materially above it in 1926.

It is of interest to trace the reasons for the change in ratios in each of these cases. Net rent in Northern Colorado, as in the rest of the state, was at its peak in 1919. It declined in the two following years for which figures are available, but in 1926 it increased until it approached its peak of 1919.

Taxes, on the other hand, declined in each of the years which were studied since 1919. Net rent per acre was also at its high point in the Plains region in 1919. It declined in each of the years covered since then, and in 1926 was less than half of the 1919 figure. Taxes on the Plains farms increased from 1919 to 1923, dropped off slightly in 1925, and the following year increased almost to the 1923 level.

While there are pronounced differences among the farming sections of Colorado in the tax situation of land owners, there seems to be no single section which in each of the four years covered has been greatly worse than the other sections. It is not possible from the data presented to say that any section or sections need relief to the exclusion of the rest. If similar data could be presented for counties, it is believed that certain of them would be found in which the tax-

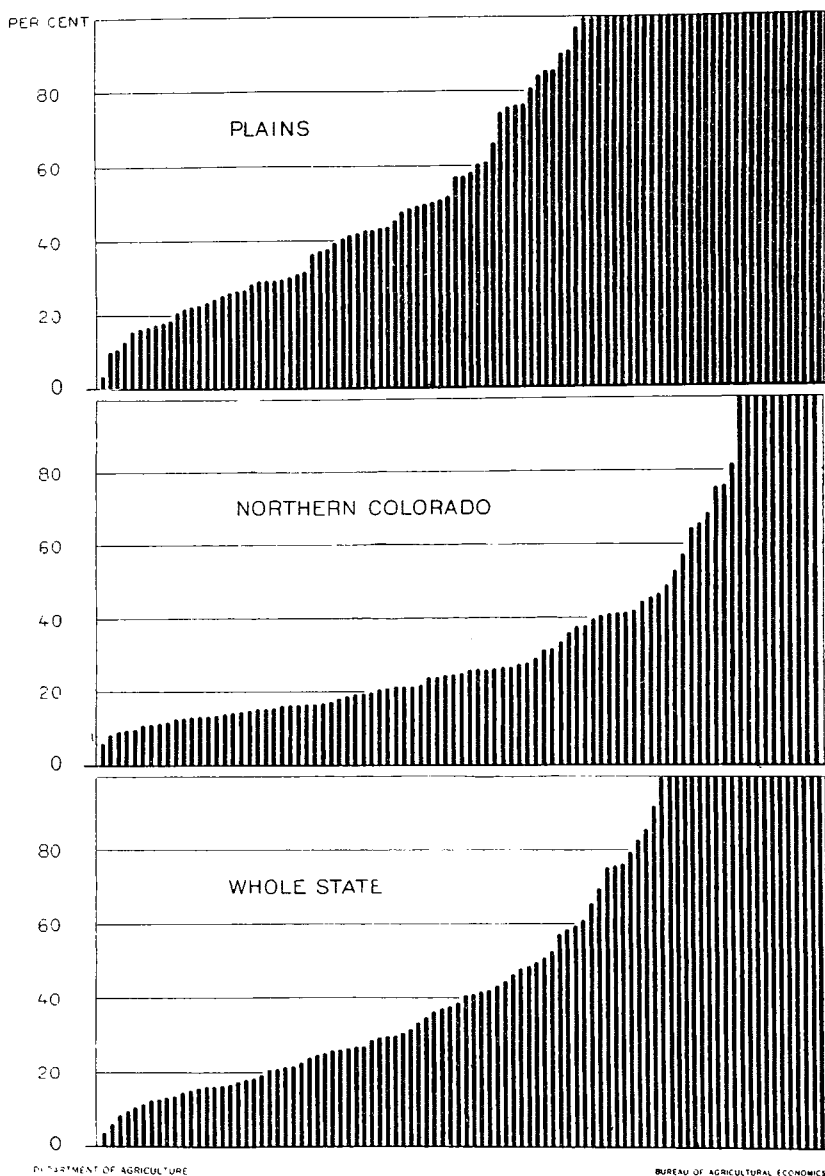


Figure 4.—Percentage of Property Earnings Taken by Taxes of Individual Rented Farms, Colorado as a Whole, Northern Colorado, and the Plains, 1926. Each bar in the Plains and Northern Colorado sections of the chart represents a single farm. Each one in the whole-state section represents three farms. Only farms reporting some income before paying taxes are included in the chart. This involved the omission of 3 farms in Northern Colorado, 17 in the Plains, and 30 for the whole state as these farms reported a deficit before taxes.

payers have a more difficult time financing the necessities of government than in others.

As has already been mentioned, the statistical data relating to incomes and taxes are not sufficiently numerous in more than a few scattered counties to make their presentation on a county basis feasible. One fact relating to inequality is indicated by the figures that have been gathered. In those counties where income is extremely variable, the relationship between taxes and income will also tend to fluctuate sharply. In other words, taxes are a relatively fixed charge. For any particular year they are determined without reference to that year's income. They have little direct relation to income in any year. This fact is most clearly appreciated in those years and regions where a drouth or other disaster has seriously affected agricultural income. In a state the size of Colorado, where conditions may vary greatly from one section to another, some equalization to take account of such conditions should be possible. This subject will be reverted to later, after more data on the subject of inequalities have been presented.

It has been shown that certain variations in the ratio of taxes to rent exist between sections. Within any one section, however, the variations between individuals are far more striking than are the average variations between sections. The data from each farm reporting in 1926 have been tabulated and the relation between taxes and income for each computed. Figure 4 shows this relationship for the 304 farms reporting. It will be seen that for half of these, farms taxes took 45 percent or less of net rent. Over a quarter paid 25 percent or less of their net rent in taxes. Not quite three-fourths of the farms are included among those on which taxes took 100 percent or less of the net rent which was left before deducting taxes. In other words, over one-quarter of the farms reporting in 1926 suffered a deficit after paying taxes. Thirty of the farms, or 10 percent of the total number reporting, had failed to yield enough to pay deductions from gross income other than taxes.

Figure 4 also contains a similar comparison for the farms of Northern Colorado and for those of the Plains. In the latter region it has been pointed out that the ratio between taxes and rent was particularly unfavorable in 1926. Seventeen of the 113 farms reporting had deficits before paying taxes, and half paid 80 percent or more of their net rent in taxes. Less than 40 percent had half their net rent left after paying taxes. In Northern Colorado, where conditions were reasonably good in 1926, half the farms paid less than 25 percent of their net rent in taxes. Only three farms reported a deficit before paying taxes, and less than one-quarter of the farms reported paying more than half their net rents in taxes. In making

this comparison between the two sections, it must constantly be kept in mind that the situation on the farms reporting in the Plains section was particularly bad in 1926 and that the differences are more extreme than they would have been in the other years. Conditions in the two sections do furnish a striking example of the effects of a relatively inflexible tax system on farms that are subject to years of exceedingly low income.

PROFITS AND TAXES ON OWNER OPERATED FARMS

In addition to the data that have been presented for rented farm property it seems desirable to consider briefly the situation of the farmer who owns and operates his farm. It must be kept firmly in mind in this discussion that the profits figure discussed is not equivalent to the net rent figure that has been used in the preceding pages. Net rent represents property income. Profits, as here used, represent the income from farm property, plus income due the operator for his managerial labor, i. e., all return for his personal efforts save a labor allowance computed at the rate paid hired labor.

Such figures appear in Table 2 and were secured in the Rocky Ford area of the Arkansas Valley, the Monte Vista area of the San Luis Valley, the Montrose, Delta and Grand Junction areas of the Western Slope and the Greeley area of Northeastern Colorado for the year 1926. Records for the year 1922 were secured in the Rocky Ford and Greeley areas.

Farm receipts as considered in the data summarized in Table 2 comprise receipts from crop and livestock sales, increase in inventory and appreciation on real estate, livestock, equipment and supplies. Farm expenses comprise current expenses, depreciation on equipment, livestock and real estate, interest on investment in equipment and livestock and interest on cash to run farm, decrease in inventory, and a fixed charge for operator's labor. Farm profits rep-

TABLE 2.—Profits and Taxes on Owner-operated Farms in Several Districts of Colorado, 1922 and 1926.

1922				
District	Number of records	Profits before deducting taxes	Taxes	Taxes as a percentage of profits before deducting taxes
Arkansas Valley	13	\$ -1,040.00	\$ 3,453.00	.....
Northeastern Colorado	21	13,710.23	9,182.51	67.0
All districts	34	12,670.23	12,635.51	99.7
1926				
Arkansas Valley	10	\$ 17,690.00	\$ 2,076.00	11.7
Northeastern Colorado	18	87,843.26	8,368.09	9.5
San Luis Valley	23	212,290.00	14,065.00	6.6
Western Slope	30	24,551.90	5,201.20	21.2
All Districts	81	342,375.16	29,710.29	8.7

resent the difference between receipts and expenses, and include, besides the return from the real estate before deducting interest on investment in real estate and operator's wages of management.

In 1926 taxes took an average of 3.64 percent of total farm receipts. They represented 5.9 percent of farm expenses and 8.7 percent of farm profits on the 81 farms studied. The average percentage of farm profits consumed by taxes was highest in the Western Slope district, 21.2 percent. It was the lowest in the San Luis Valley district, 6.6 percent. Taxes took the greatest share of the receipts in the Arkansas Valley district and constituted the largest share of the expenses in the San Luis Valley. The high percentage of taxes to farm profits in the Western Slope district was evidently due to low income rather than higher taxes.

When taxes, as a percentage of farm receipts, expenses and profits in 1922, are compared with these items for 1926, it is found that taxes consumed a much larger share in 1922 than in 1926. Much of the difference shown between 1922 and 1926 was due to low receipts in 1922 rather than to higher taxes in that year. While the taxes were higher in 1922 than in 1926, they were not so high as to make the difference indicated.

INCOME AND TAXATION OF URBAN PROPERTY

Figures have been collected for rented urban property in the cities of Colorado Springs, Fort Collins, Rocky Ford, Monte Vista, Montrose, Delta and Grand Junction. While such figures can not be put forward as definitely representative of all urban conditions of the state, outside of Denver, it will be seen from the map on page 12 that these cities are located in different sections and so present a fairly adequate idea of the burden of taxation on urban property in rather widely separated parts of the state. A statement of total rent received on each of the 154 urban properties has been secured from its owner or his agent. The various expenses deductible from gross rent have also been recorded. Tax figures have been taken from the county records. The computations have been kept as closely comparable as possible to those used to arrive at the income and taxes of rural property. The figures are summarized in Table 3.

Total taxes including city taxes on 94 business properties accounted for an average of 27.4 percent of the net rent received from these properties. Taxes on 60 residence properties consumed 34.3 percent of the net rent derived from them.

Taxes on business properties expressed as percentages of net rent are highest in Delta, 42.5 percent, and lowest in Fort Collins, 22.6 percent. Taxes on residence properties expressed as percentages of net rent are highest in Rocky Ford in the Arkansas Valley

district, 52.0 percent, and lowest in Monte Vista in the San Luis Valley district, 29.1 percent.

It is instructive to compare taxes as percentages of net rent in Colorado Springs, one of the largest cities of the state, with the percentage obtaining in the six other towns included in the survey, namely, Fort Collins in the Northern Colorado district, Rocky Ford in the Arkansas Valley district, Monte Vista in the San Luis Valley district, and Montrose, Delta and Grand Junction in the Western Slope district. It is found that the average tax as a percentage of net rent on business properties is higher in Colorado Springs than the average for the business properties of the other six towns. The average tax expressed as a percentage of the net rent on residence properties is lower in Colorado Springs than the unweighted average for the other six towns.

Urban taxes other than city taxes i. e., state, county, and school district taxes, in comparison to net rents received from these properties, were found to vary from 6.7 to 50.6 percent in 1926. Business properties varied from 6.7 to 50.6 percent while residence properties showed a variation from 8.2 to 44.5 percent. The average for business properties was 18.1 percent; for residence properties, 21.9 percent. Altho greater variation is found among the business properties, the average is higher among the residence properties.

TABLE 3.—General Property Taxes and Net Rent of Urban Property in Seven Cities of Colorado, 1926.

Cities	Number of records	Net rent be- fore deduct- ing taxes	General property taxes	Taxes as a per- cent of net rent before deducting taxes
Business properties:				
Colorado Springs	15	\$ 85,767.00	\$ 25,114.66	29.3
Delta	11	15,091.00	6,408.06	42.4
Fort Collins	29	125,942.00	28,453.90	22.6
Grand Junction	10	41,607.00	12,619.75	30.3
Monte Vista	12	20,539.00	4,728.59	23.0
Montrose	3	7,941.00	1,958.06	24.7
Rocky Ford	14	18,426.00	7,278.73	39.5
All Cities	94	315,313.00	86,561.75	27.4
Residence properties:				
Colorado Springs	19	\$ 4,648.00	\$ 1,451.69	31.2
Fort Collins	9	2,394.00	725.84	30.3
Grand Junction	7	1,977.00	648.82	32.8
Monte Vista	9	2,690.00	783.92	29.1
Montrose	2	433.00	177.65	41.0
Rocky Ford	14	2,164.00	1,124.52	52.0
All Cities	60	14,306.00	4,912.44	34.3

Considering Montrose, Delta and Grand Junction as representative of the Western Slope district, Monte Vista of the San Luis Valley district, Rocky Ford of the Arkansas Valley and Fort Collins of northeastern Colorado, a comparison of taxes other than city in these districts among themselves and with Colorado Springs, one of the larger cities of the State, not agricultural, may be enlightening.

Among the cities of the agricultural districts the Western Slope shows the highest percentage of taxes other than city in comparison to net rent, 21.9 percent. Northeastern Colorado shows the lowest percentage, 15.1 percent. Of the business properties, the Western Slope has the highest percentage of taxes other than city in comparison with net rent, 21.9 percent. The highest percentage of taxes among residence properties was found in the Arkansas Valley. Northeastern Colorado exhibits the lowest percentage in both business and residence properties, 15.0 and 19.5 percent respectively.

Comparing the towns in the agricultural districts with Colorado Springs, it is found that the average percentage for Colorado Springs is slightly higher among business properties and slightly lower among the residence districts.

It is of some value to compare general property taxes expressed as a percentage of rural net rent with general property taxes expressed as a percentage of urban net rent. The figures presented in Table 4 represent a by no means exhaustive study of the tax-and-income situation in country as compared with the city but are suggestive and altho the number of records is limited, are considered to be fairly representative of the districts covered.

TABLE 4.—Comparison of the Percentages of Net Rent Taken by Rural and Urban Taxes, 1926.

District	Rural Properties ¹		Urban Properties ²		
	Properties reported	Percentage of net rent taken by taxes	Properties reported	Percentage of net rent taken by total urban taxes	Percentage of net rent taken by urban taxes other than city
	Number	Percent	Number	Percent	Percent
Northern Colorado	100	21.9	38	22.7	15.1
Western Slope	27	32.0	33	32.5	21.9
Arkansas Valley	45	28.0	28	40.8	21.2
San Luis Valley	27	12.4	21	23.7	17.0
Total	180	23.8	120	27.1	17.7

¹The difference between the figures for rural properties in Table 4 and Table A arise from the fact that comparable figures from two separate surveys are combined in order to give a more representative sample in Table 4 than could be obtained from the figures of Table A alone.

²The figures for urban properties are computed on the basis of a simple summation of business and residence figures. The fact that the rent of business properties amounts to much more than that of the residence properties gives the former much greater weight in the combined figure. If the two types of property are given equal weight the percentages will be slightly increased, but the change is not sufficient to alter the conclusions of the text.

Total taxes expressed as a percentage of urban net rent are greater than total taxes expressed as a percentage of rural net rent; 27.1 percent as compared with 23.8 percent. In each of the four districts studied, total taxes consumed a larger share of net rent on urban properties than on rural properties.

If, however, one is to compare taxes other than city taxes, i. e., state, county, and school-district taxes on the urban properties with these same taxes on rural property, it is found that taxes take a greater part of net rent on rural property than on urban property; 23.8 percent compared with 17.7 percent. In only one district, the San Luis Valley district, is the tax on rural property less in comparison to net rent, than taxes other than city or urban property; 12.4 percent as compared with 17.0. The significance of such a comparison lies in the fact that the city taxes are, in the main, a charge for services which are rendered to the city taxpayer but which are in no sense duplicated in the rural sections.

COMPARISONS WITH OTHER STATES

It is reasonable to ask whether the Colorado farmer is in a worse situation, so far as taxes are concerned, than is the farmer in other states. It is unfortunate that there is little recent information from nearby states on the subject. Data have, however, been collected from owners of rented farms in some few states and the results of such studies are comparable with the one that has been made in Colorado.

It was found that the owners of rented farms in certain sections of Michigan paid in taxes 55 percent of their net return in 1926, while for the eight years from 1919 to 1926 they paid 52 percent. On farms in three counties of North Dakota, taxes were found to take 16 percent of the net rent in 1924 and about 40 percent over a period from 1919 to 1924. In South Dakota certain rented farms paid 30 percent of the net return to their owners in taxes in 1926 and 28 percent over the period 1920-1926. A study of rent and taxes on nearly 1,100 farms in Virginia indicated that in 1926 taxes took 20 percent of the net returns to the farm owners. Reports from Arkansas showed that taxes took 17 percent of the net rent of farms in five representative districts in 1925 and averaged 18 percent over the five-year period 1921-1925. In three counties of Indiana, taxes on rented farm land, from 1919 to 1923, averaged 33 percent of the net income and in the year 1923, averaged nearly 40 percent. A report from Missouri shows taxes on farms in four counties to have taken 16 percent of net rent over the same five-year period and 20 percent in the year 1923. Figures from certain selected farms in Ohio indi-

cated that about 36 percent of the net rent went into taxes during the years 1919 to 1922.

The only conclusions that can be drawn from the figures that have been presented from other studies are that farm taxes wherever they have been studied are taking a heavy toll from the land owner's income and that the situation in Colorado is about the average—not as unfavorable as in the states where taxes are heaviest when compared with income, but somewhat worse than in a few states where the tax situation seems most favorable. In this connection, one particular qualification needs to be kept in mind. Taxes should be measured in two ways—by the amount that the taxpayer is compelled to pay and by the things which he receives as a result of such payment.

Thus, two groups of farmers may each be paying out the same proportion of their net incomes in taxes and still their real tax burdens may be very different. In one community tax money may be spent efficiently, governmental organization may be adapted to the needs of the locality, and excellent roads and schools may be provided. In another, inefficiency, not necessarily blamable to any individuals, but possibly inherent in the governmental organization, makes it necessary to exact a high proportion of income in taxes and still does not permit the maintenance of satisfactory roads, schools and other governmental services. It requires no argument to prove that if the farmers of the two communities are paying the same proportions of net income in taxes, those of the latter community have a much heavier tax burden than those of the first. For these reasons the comparisons that are made between taxes and incomes among different communities and to some extent, among different groups, need to be considered as a starting point for a study of tax burdens, rather than as a definite indication of the amounts of the burdens.

In so far as the ratio between the net income of rented farm land and taxes on that land are concerned, there will tend to be, over a period of years, an adjustment in net rent which will somewhat reflect the value of the services rendered to the land and to those who live on it by the governmental agencies. Thus, a farm that is located near good roads and schools will be expected over a period of years to rent for more money than a farm similar in other ways, but not convenient to good roads and schools. Such adjustments, however, particularly in the case of schools, are apt to be made only after a long period of years, and with the lack of stability in income from land which is characteristic of present conditions, may never become apparent. For the reasons that have been mentioned, however, the ratio between net rent and taxes needs to be considered subject to an adjustment based on the governmental services in return for taxes paid.

INCOME AND TAXATION OF COLORADO PUBLIC UTILITIES

Taxation of public utilities, particularly during the past few years, has been high. It may be urged as an attenuating factor that the rates of those public utilities which have their charges fixed by the state are intended to permit such utilities to make a fair return on their value. If such intentions work out in practice the utilities will be able to pass on to their customers the taxes which they pay. It is a well-known fact that in recent years certain types of utilities have made little or no profits. With fairly high taxes it can be understood that the percentage of operating profits, before deducting taxes, which is taken by taxation, will be high. It is not, however, wholly fair to compare such percentage with the percentage of farm income or of income from farm land taken by taxes. Farm taxes as a whole cannot be shifted. Figures presented for income from farm land are investment-income figures and should only be compared with other figures considered on that basis. The qualifications that must be kept in mind in any use that is made of the farm-business-income figures have already been explained.

In spite of the reservations that have been made in their use, it has been deemed of sufficient interest to present, in Table B¹, public-utility-income figures for the years 1922 and 1923, the latest that have been published by the Public Utilities Commission of Colorado. The percentage that taxes take of net operating profits varies among the different types of utilities, the highest figure recorded being 54.2 percent in 1923 for gas companies. This figure, however, should be considered with the electric light and power company figure for the same year as it seems probable that arbitrary assignment of income to either gas or electricity was made by certain of the companies which supply both utilities. If gas and electricity are combined it is found that taxes took 25.0 percent of the combined-profits figure in 1922 and 20.3 percent in 1923. In general, the taxation of companies furnishing gas and electricity seems relatively low compared with profits, while that of the water and telephone companies is high. The average figures for public utilities reporting were heavily influenced by the figures of the electric power companies. The average percentage that taxes took of income was 30.4 percent in 1922, and 25.2 percent in 1923.¹

INCOME AND TAXATION OF COLORADO NATIONAL BANKS

The reports of the comptroller of the currency publish figures relating to income and taxes of Colorado national banks. It is difficult here, as in the previous case, to secure figures that are closely comparable with the figures for agriculture that have been presented.

¹ See page 81.

Table C¹ contains two income figures for each of the years from 1919 to 1926 for the national banks of the state outside of Denver and Pueblo, and for those in Denver and Pueblo. The first of these income figures, designated "net earnings (before deducting taxes)" represents the year's business before taking into account losses charged off or recoveries on assets that have been previously charged off. It may be roughly compared with operating profits in certain other lines. The net additions to profits figures take into account losses charged off and recoveries. For the years since 1921 the differences between these figures have been marked, due to the large losses of the deflation period which have been charged off in each of the successive years. The banks have suffered along with the farmers during this period.

One important fact relating to the tax burden on banks remains constant thru the whole period since 1919. The percentage of profits taken by taxes is higher on the country banks than on those of Denver. Only in the year 1921 did taxes take over one-third of the profits of the latter banks. From 1921 on, country banks have paid over one-third of profits in taxes and from 1923 thru 1926 have paid over two-thirds. The fraction of net earnings taken by taxes from the Denver banks rose above one-fifth only in the years 1919, 1921 and 1923. For the country banks it has been between one-quarter and one-third in each of the years from 1921 to 1926, inclusive. The reports from the two Pueblo banks are not examined in detail as they represent a very small part of all the national banks of the state. Except for heavy losses in 1922 and 1924 they show no great divergence from the general trends.

By combining the figures for all the national banks of the state there has been computed an average figure, in which the Denver banks have about as much weight as all the other banks. The percentage of taxes to net additions to profits of all the national banks was 21 in 1919. It increased to 52 in 1922, dropped to 36 in 1924 and increased to 46 in 1926. The percentage that taxes were of net earnings showed much less variation. It was 19 in 1919 and had by 1923 increased to 28. It dropped the following year to 19, rising in 1925 to 24 and declining in 1926 to 21.

While the bank figures that have been presented must be used with caution in comparisons with other figures, they do show fairly heavy taxation of current income of country banks with much less burdensome taxation for Denver banks and very heavy taxation of net additions to profits in recent years for the country banks, together with fairly heavy taxation of the Denver banks on this basis.

¹ See page 82.

No attempt will be made to examine the reasons for these differences. Attention, however, is called to the ease with which banks may be assessed, as one of the reasons why bank taxation may be expected to be higher than that of many other classes of business.

INCOME AND TAXATION OF COLORADO CORPORATIONS

No attempt will be made here to outline in detail the types of taxes to which corporations in Colorado are subject. Two, however, account for the bulk of revenue derived from corporate enterprise, the general property tax and the federal corporation income tax. Information relating to the amounts collected from corporations by these and other taxes is scanty. The only available material, aside from that which has been presented in the preceding sections, and which relates to special classes of corporations, is derived from the corporate income returns submitted to the Federal Bureau of Internal Revenue. A tabulation of these returns for corporations reporting from Colorado has been made for their income and expenses for the year 1924. This will be examined in detail and certain additional information, relating to corporations reporting profits and those reporting no profits since the year 1919, will be presented.

In considering these returns it should be kept in mind that they do not represent all corporations doing business in Colorado and that they relate to some extent to business done outside of the State. Corporations usually file their reports in the State where their principal office is located. Thus, many corporations doing business in Colorado have made their reports from other states. This is particularly true of the railroad systems that operate thru Colorado. The figures that are designated "Transportation and Other Public Utilities" in Table 5 should be considered with this qualification in mind. Some of the corporations that have their principal offices in Colorado do extensive business in other states and are taxed in such jurisdictions. For this reason the figures which are designated as "Taxes Other Than Income and Profits Taxes" and which indicate the state and local taxes paid by the corporations, contain a certain amount of taxes paid to jurisdictions outside of Colorado. While these qualifications need to be considered, it is safe to assume that taxes paid in Colorado and profits made on Colorado business constitute most of those considered in the discussion that follows and that a fair sample of corporate tax conditions within the state is given. It is necessary to remember that much of the business of the state is not carried on by corporations. The results of such business are of course not included in the figures that are given.

It will be desirable in the first place to consider figures relating to the number of corporations reporting net income and those that

reported failure to earn net income during the years from 1919 to 1925. (Table D¹). In no year since 1919 have half of the total number of corporations from Colorado reported that their operations yielded them some net income. The years 1919 and 1925 show the highest proportion making such reports with 46.4 percent and 46.6 percent respectively. In 1921 only 35.7 percent of the total reported net income. The corporations reporting some net income in 1925 had a total gross income of over \$760,000,000 while those reporting no net income had a gross of slightly less than \$162,000,000. In other words, the corporations that did not earn a net income for their stockholders were on the average less than one-quarter of the size, if size is judged by gross income, of the corporations that made a net return.

When the corporation returns of the three-year period, 1923-1925, Table E², are considered by industrial groups, certain significant facts are discovered. Mining and quarrying corporations are lowest in the percentage of the total reporting net income. The corporations classified as agricultural are next altho there has been a decided improvement during the period in the number of such corporations that reported net income. Except for a single year, 1923, and a single group, Transportation and Other Public Utilities, there is no case in which less than half of any other group failed to report net income. Corporations engaged in wholesale and retail trade made the best showing with from 60 to 66 percent reporting net income. The data on corporations that have been presented thus far are not in sufficient detail to make possible detailed conclusions as to the relative profitableness of the various types of corporate industry in Colorado. They are, however, sufficient to indicate that there are differences in the income-producing powers of corporations, just as there are between farms, and that lack of net income is not confined to any single class of business.

A comparison of income and taxes is, however, of chief interest for present purposes. Table 5 contains figures for 1924, making such a comparison possible. Three groups, agricultural and related industries, mining and quarrying, and construction companies, reported a deficit before paying taxes. Of the important remaining industrial groups, transportation and other public utility corporations paid over 54 percent of their net income in state and local taxes and over two-thirds in all taxes. The group designated professional, hotel, amusement, etc., paid 31 and 39 percent, respectively, of its net

¹ See page 82.

² See page 83.

TABLE 5.—Income and Taxation, all Corporations Reporting, Colorado 1924.¹

Industrial group	Net profit before de- ducting taxes	Taxes other than U. S. in- come and profits taxes	Percentage taxes other than income take of net profits	All Taxes	Percentage all taxes take of net profits
	Dollars	Dollars	Percent	Dollars	Percent
Agriculture and related industries	-1,133,189	422,386	.....	439,258	.....
Mining and quarrying	-4,369,247	792,078	.....	1,074,765	.....
Manufacturing	36,564,565	4,571,460	12.5	8,271,438	22.6
Construction	-53,075	35,974	.....	59,251	.....
Transportation and other public utilities	7,610,592	4,129,959	54.3	5,058,115	66.9
Trade	7,262,855	1,709,910	23.5	2,508,904	34.5
Professional, hotel, amusement, etc.,	1,314,776	401,318	30.5	516,198	39.3
Finance, banking, insurance, etc.,	22,573,434	3,242,588	14.4	4,371,353	19.4
Combinations, predominant industry not ascertainable	8,118	65,763	810.1	66,251	816.1
All corporations	69,777,940	15,471,451	22.0	22,395,548	32.1

¹Computed from data supplied by the United States Bureau of Internal Revenue.

income in state and local taxes and in all taxes. At the other extreme are manufacturing which paid 12.5 percent in state and local taxes and 23 percent in all taxes, and finance, including banking, insurance and realty corporations, which paid 14 percent of their net income to state and local jurisdictions and 19 percent to all governmental units. A combination of the figures for all corporations reporting indicates that they paid 22 percent of their net income in state and local taxes and 32 percent in all taxes.

Detailed figures are available for a number of different groups in the manufacturing industry of the state. They appear in Table 6. It will be seen that there is a wide difference in the relationship which exists between taxes and net profits within this industry. Those concerns engaged in manufacturing food products, tobacco and beverages, in printing and publishing, in the manufacture of stone, clay and glass products, and in the manufacture of chemicals, show ratios of total taxes to net profits lower than the average of the industry of the state.

The relationship between local and state taxes and net profits is, however, of particular interest. Printing and publishing corporations reported only 3.3 percent of net profits paid in state and local taxes. Corporations manufacturing stone, clay and glass products paid 5.2 percent and those manufacturing food products 9.5 percent. At the other extreme is a group of corporations engaged in the manufacture of metal and metal products which paid 72.4 percent.

No attempt will be made here to draw definite conclusions from these figures. The subject needs more study before this can be done. The extremely low ratio in the printing and publishing industry is due to the low investment of the industry in real estate. In the food manufacturing industry a similar tax situation is probably due to the fact that much of the real estate of the industry is situated outside of the limits of cities and is thus subject to a lower tax rate and possibly to a lower valuation than is the property of many other industries.

TABLE 6.—Income and Taxation of Corporations Engaged in Manufacturing, Colorado, 1924.

Division of Industry	Net profits before ded- ucting taxes	Taxes other than U. S. income and profits taxes	Percentage taxes other than income take of net profits	All Taxes	Percentage all taxes take of net profits
	Dollars	Dollars	Percentage	Dollars	Percentage
Food Products	20,065,002	1,913,281	9.5	3,959,155	19.7
Textiles	81,997	23,689	28.2	32,928	40.2
Leather	49,059	8,094	16.4	12,879	26.0
Rubber	253,892	132,205	52.1	148,139	58.4
Lumber	118,912	67,574	56.8	105,639	88.8
Paper and Pulp	-41,410	4,513	.....	5,160	.....
Printing & Publ.	2,065,752	68,603	3.3	313,354	15.2
Chemicals	8,597,892	1,010,885	11.8	1,872,416	21.8
Stone, Clay & Glass ..	3,789,962	196,737	5.2	599,770	15.8
Metal & Metal Prod. ..	1,523,823	1,102,977	72.4	1,157,669	76.0
All Other	59,234	43,502	73.4	64,329	108.6
Total Manufacturing	36,564,565	4,571,460	12.5	8,271,438	22.6

The examination that has been made of the taxation of corporations in 1924 reveals the fact that there is a great diversity among them, both so far as their taxes and so far as their profits are concerned. If information were available for individual corporations, it would doubtless be possible to show that some corporations were paying such a small percentage of their net profits in taxes that this item is of little importance in the corporations' annual budgets. Other corporations could be shown to be paying an exceedingly large part of their net profits in taxes, and the large group of corporations reporting a deficit before paying taxes would present a worse picture. Similar information was presented for investments in farm land in Colorado. In considering the corporate tax situation, it should be recalled that the amounts spent for taxes represent on the average a relatively unimportant part of the total receipts of a Colorado corporation. For corporations as a whole, state and local taxes took in 1924 only 1.7 percent of the total receipts and all taxes only 2.5 percent. In the case of agricultural and related corporations the figures were 6.4 percent and 6.6 percent respectively; in the case of mining and quarrying corporations, 1.3 percent and 1.8 percent.

In general, these figures would seem to indicate that only in exceptional cases can taxation in Colorado be assigned as a major cause

of a corporation's failure to make profits for its stockholders. It seems hardly possible that a single item which on the average takes about one-sixtieth of the total receipts, as does the state and local-tax item, can be the chief or even a very strong influence in determining the success of the average corporation.

State and local taxes have been shown to take on the average slightly over one-fifth of the net profits of all corporations reporting from Colorado. The ratio of taxes to profits varies greatly among classes of corporations and could no doubt be shown to vary even more among individual corporations if data for them were available. As a percentage of total receipts, however, state and local taxes make a very slight showing, amounting to 6.4 percent in the case of the group where the percentage is highest and averaging only 1.7 percent.

In corporation taxation, just as in farm taxation, it seems entirely reasonable to assume that cases of hardship would be lessened by a form of taxation which placed more emphasis on the ability of the corporation to pay taxes and less on certain tangible evidences of the corporation's property. In the case of corporations, as in the case of agricultural property, income is probably the best single indication of ability to pay taxes and a greater reliance on this indication would make possible a fairer corporation tax system in Colorado.

RELATIVE TAX BURDENS IN COLORADO

A comparison of relative tax burdens among the different groups in any particular place or among different localities involves a comparison of so many divergent factors that any simple and obvious conclusions are to be viewed with suspicion. The definition of tax burden itself is no simple matter. How is it to be measured? What units of comparison between different groups are valid? How may benefits from taxation be related to tax payments and results expressed in quantitative terms? No single answer to any of these questions exists.

The usual basis for considering tax burden is a comparison of taxes and income. In a section where governmental services are all similar, such a comparison is of some significance. It should, however, be remembered that even in this case two individuals or groups paying the same percentage of taxes may be burdened unequally. The cases of two individuals with net incomes of \$1500 and \$150,000 each illustrates this. Taxes that take \$150 of the former's income are commonly considered vastly more burdensome than taxes that take \$15,000 from the latter. In each case, however, the percentage taken is ten. If there be added to the difference in individual incomes

differences which come from varying services supplied by the government, then the situation becomes much more complicated and, as has already been said, no definite measure of comparison exists.

From one point of view a fairly satisfactory comparison of relative tax burdens may be made. The subject may be considered from the point of view of an investor. The possible alternative investments of his money and the effects of taxes on net yield will be calculated. The assumption will be that there are presented for consideration several possible investments each yielding the definite amount of \$1,000 a year before taxes are paid. It must be admitted that many considerations other than taxes will help to determine the desirability of the various investments. These other considerations must be put aside, however, so far as this discussion is concerned and attention paid exclusively to the tax features of the various investments.

The average investor in farm land in Colorado will find that taxes take approximately one-third of his net income from this source. The owner of rented city property in certain sections of the state paid on the average 28 percent of his net income in taxes. The owner of stock in an average public utility corporation of Colorado found in 1923 that one-quarter of what otherwise might have been devoted to dividends for him and to surplus for his protection was paid out by the corporation in taxes of all kinds. The previous year taxes had taken a somewhat larger portion of net profits. The owner of national-bank stock found that for the three years, 1924 to 1926, inclusive, federal, state and local taxes took on the average about 40 percent of the net additions to profits. Banks were charging off many losses during these years and so the situation was somewhat abnormal. Manufacturing corporations in 1924 paid in state and local taxes 12.5 percent of what otherwise might have been distributed to the owners of the corporations. If federal taxes as well as local taxes be considered, the figure would be nearly 23 percent.

This comparison would seem to indicate that from the owner's point of view, the tax situation of the holder of stock of manufacturing corporations is somewhat better than that of the owner of other income-producing property of the state. It has been explained earlier in the report that no uniformity exists even within this field. The figures are averages and do not, of course, accurately describe the condition of any individual company.

One inequality of the tax system of Colorado has been demonstrated by this study and by others that have been made. This relates to the taxation of tangible property as compared with intangible. Under Colorado's present system of taxation, almost no intangible property is assessed. While this is in distinct violation of law, there seems no way by which the law can be enforced. Many people

feel that enforcement of the law in this respect would result in more injustice than does the present system. It seems unnecessary to discuss this here as there is no possibility of strict enforcement. Some means, however, should be found of forcing possessors of intangible property to pay a fair contribution toward the cost of government. This will be discussed in detail in a later portion of this report.

The data that have been compiled show little difference between the taxation of rural and of urban real estate. The figures for city real estate, however, relate to only a few towns of the state and so may be considered to cover a relatively insignificant part of the whole. The average relationship of assessed value to owners' value, for the urban and farm groups studied, will be shown to be fairly close, so no great difference arises from this score. So far as property income and taxation go, the two groups are also fairly close together.

In concluding the indecisive survey of relative tax burdens that can be made on the basis of present information, it should be emphasized that the most striking inequalities at present are those between income-producing properties that are not taxed and those which are. In the latter group, some adjustment doubtless should be made, but major attention needs to be given to those measures which will make possible a broadening of the tax base to include those types of tax-paying ability which at present are making no contribution to the support of the government.

II. ASSESSMENT OF TAXABLE PROPERTY IN COLORADO

Certain facts relating to the tax burden on different types of property in Colorado have been presented in the preceding section. The assessment of property is recognized as an important factor in determining the burden of taxation. It is therefore appropriate to consider next the methods and results of the assessment of property in Colorado. Thruout this consideration it should be kept in mind that the bulk of farm property is of a type that is easily found by assessors and for this reason does not escape taxation. Agriculture is more interested in a fair assessment of property than are those industries or individuals who possess property which is of the sort that rarely attracts the attention of the assessors and so pays little in taxes.

The general property tax in Colorado rests theoretically on the assessment and taxation of all property within the state which is not expressly exempted by law. Two groups of public officials are concerned with the assessing of property, the local county assessors and the state tax commission. The work of each of these will be described in turn.

THE LOCAL ASSESSORS

The county assessors who are popularly elected for a two-year term are the only elective officers who give direct attention to the assessment of property. They and their deputies and field agents carry out the township and municipal assessment of the entire county. All taxable property, tangible and intangible, with the exception of public utility property which is assessed by the tax commission, is supposed to be listed and assessed by them. Their assessment is reviewed by the county commissioners acting as a board of equalization. This board hears and settles such complaints relating to assessment as may be brought before it.

It is the duty of the assessors or their agents to visit between January 1 and May 20 all resident owners of taxable property for the purpose of listing, examining and assessing it. In cases where the property in question has been listed the previous year the owner is questioned concerning changes that may have occurred in its condition or value. After the examination and listing of the property the owner is required to sign under oath a schedule containing the relevant information. If the assessor has reason to believe that the statement of the owner of the property is erroneous, he may assess the property on the basis of such evidence as he can assemble. Personalty, improvements and land must be listed and assessed separately.

The assessors' records of farm real estate vary widely among the different counties of the state. In most cases there is a permanent record in abstract, or in plat or map books. This record contains the legal description of the property, locating it in section, township and range or in lot and block, if it is platted property. The abstract record ordinarily contains a division of the land into various classification groups together with the total assessed value of each class within the property. These classification groups are, however, not uniform from county to county and so do not all correspond to the classification contained in the annual report of the state tax commission. An arbitrary conformation to this latter classification is resorted to by certain of the counties in making their reports.

The abstract record contains the value of improvements along with land values. Owners' names and schedule numbers are usually a part of the abstract while in some cases it contains records of property transfers, trust deeds, mortgages and court decisions affecting the property. Roads, waste and right-of-ways are in some counties included with these records and are deducted from the gross land owned. In other counties these items are wholly or partly ignored or, where recognized, are not deducted from the whole. Mineral and coal reserves are sometimes shown in the abstracts.

The assessed valuation of the lot and the valuation of improvements appear in the abstract in the case of city real estate. Such property is described as to subdivision within the municipality by referring to the lot and block, or by meets and bounds if the property is not in a subdivided area. In some counties the abstract also contains the location on the lot of the improvements.

Assessed values of rural real estate seem at the present time to be based largely on the values used in previous years. In some counties these values are revised annually. In others they are changed only when pressure from one source or another is brought to bear on the assessors. Such revision, however, is usually based on some figures adopted in advance and only modified under exceptional circumstances. Even the reappraisal which may take place every five or six years usually consists of a percentage change based on the earlier figure at which the property was assessed. Changes in the utility of land over a period of years are seldom taken into consideration in assessment except when brought to the assessor's attention by some unusual means. General or local economic trends exercise some influence in determining the assessment figure, but it is safe to say that no two assessors consider these influences in the same light. On the whole there is the natural tendency of keeping real property at the same figure from year to year, no matter how its use or value may have changed. There are, of course, many exceptions to this, but it is characteristic of most of the counties in the state.

No attempt is made to assess or reassess real property at its full cash value. In setting a final figure each assessor has in mind a certain percentage of full cash value at which he believes he is assessing the real property of his county. An informal inquiry made of assessors in a number of different counties indicates that there is a considerable variation from county to county in the percentages which the assessors use for this purpose.

Valuations of all classes of personal property except motor vehicles, livestock and securities with a face value are arrived at more or less haphazardly. Once such property appears on the tax rolls at any value, it is likely to remain at approximately the same figure year after year. While a theoretical attempt is made to assess personal property at its full cash value, little uniformity exists among the several counties. The owners' figures of the value of this property are usually accepted unless they are glaringly out of line. Only in the case of motor vehicles and livestock is there a concerted attempt at uniformity. The former are assessed on the basis of figures of the value of new cars at the factory. These are supplied to the asses-

sors by the state tax commission. Cars that are in the first year of use at the time of assessment are given a valuation of 70 percent of this figure. Those in their second year drop to 50 percent, and in the third year to 30 percent. In most counties some cooperation exists between the county clerk and the assessor in recording the owners of motor vehicles which are reported separately from other personalty on the assessors' schedules and rolls. There is, however, no automatic check whereby license tags can be secured only on the presentation of the previous year's tax receipts.

Livestock valuations are quite uniform thruout the state, but there is no pretense that they are made on the basis of full cash value. Figures to be used each year are generally discussed and agreed upon by the county assessors at their annual meeting.

From what has been said it will be easily understood that both methods of assessing and the efficiency of assessment differ widely from county to county. Quantity as well as quality of the recorded information varies among the different assessors, some collecting very detailed information, others being content with a very meager amount. Thus in some counties realty transfers are checked every day in order to be certain that assessment is made to the proper parties; in others all transferred property is assessed under the name of the former owner, or it is assessed "owner unknown." Field men in some counties are supplied with maps every year to check up on land classifications, changes in buildings, the location of wells and other features affecting the value of the property. In most counties, however, this is not the practice and changes are recorded more or less by chance. It has already been pointed out that there is no uniformity among the various counties in their classifications of agricultural land. It is therefore necessary for some of them to make arbitrary adjustments in order to make their reports conform to the classification of the state tax commission.

While the initial assessment of most property for tax purposes is the work of the county assessors, supervision and certain definite duties belong to the state tax commission. The section that follows will explain the commission's part in the assessment system of the state.

THE COLORADO STATE TAX COMMISSION

The Colorado State Tax Commission, which was authorized by law in 1911, consists of three members appointed by the governor and treasurer for a term of six years. According to law, one vacancy occurs in each biennial period and one appointment must therefore be made every two years. A knowledge of and training in the sub-

ject of taxation are qualifications which are taken into consideration in the selection of men who are to serve as members of the commission.

The duties and powers of the state tax commission which relate directly to the local assessment of property will first be set forth in detail, and then certain other aspects of the commission's work will be considered. The law provides that the state tax commission shall have:

- (1) General supervision over the administration and enforcement of all laws for the assessment, levying and collection of taxes. To this end the commission shall exercise supervision over the county assessors, boards of county commissioners, county boards of equalization and all of the boards of assessment, levy and collection so that all assessment of property, real and personal and mixed, may be made relatively just and uniform and at its true and full cash value. It shall have the power to require all county assessors, county commissioners and county boards of equalization under penalty of forfeiture and removal from office as such assessors or boards to assess all property of every kind or character at its actual and true cash value.
- (2) The duty of preparing and transmitting to the assessors of the several counties such forms of returns to be made by them to its office and such instructions as it deems conducive to the best interest of the state upon any subject affecting taxation.
- (3) The power to prescribe a uniform system of procedure in the assessors' offices and the form and size of tax schedules, tax rolls and warrants, field books, plat and block books and maps.
- (4) The right to order transcripts of records or parts thereof and other information on file in the respective offices deemed necessary by the commission.
- (5) The power to investigate the work and methods of county assessors, boards of county commissioners, county boards of equalization and county treasurers in the assessment, equalization and collection of taxes on all kinds of property in the state.
- (6) The power to require any assessor to appear before the commission at any of its meetings for examination concerning the assessment in his county.

- (7) The duty of calling an annual meeting of the county assessors to be held at the State Capitol or to call group meetings of two or more assessors at such time and place as it may designate.
- (8) The right to appear and be heard in any court, or tribunal in any proceeding in which abatement or refund of taxes is sought.

Each of the commissioners, the secretary and agents employed are invested with all the necessary powers which are required in the securing of the records and facts that are to be used in the appraisal and valuation of property, real and personal.

It is the duty of the commission, on or before the first day of October each year, to determine whether the real and personal property of each of the several counties in the state shall have been assessed at true and full cash value and if in the opinion of the commission the real and personal property within any county in the state as reported by county assessor to the commission is not on the assessment roll at its true and full cash value the commission shall determine the increase or decrease in the valuation in such county by such rate in percentage or such amount as will place this property on the assessment roll at its true and full cash value.

When the commission has determined the true value of the real and personal property in the several counties the commission transmits to the state board of equalization a statement of amount to be added to or deducted from the valuation of the real and personal property of each county, specifying the amount to be added or deducted from the valuation of the real and personal property.

It is the duty of the state board of equalization, which consists of the governor, auditor, treasurer, secretary of state and attorney general, to examine the abstracts of assessment as submitted by the state tax commission. The board approves the abstract for each county, or makes such changes as it deems necessary. A record of its action is made on the abstract for each county and this is certified to the county assessor. He is required to make such changes in the valuations of each tract or lot and its improvements and of all personal property as the state board of equalization shall direct. Assessments are adjusted to the nearest \$10.00 unit.

Two other duties of the state board of equalization should be mentioned in this connection.

- (a) The right to make reappraisal of property in cases where it appears that property in any county or municipal subdivision thereof has not been assessed at its true and full cash value and to require assessors to place upon the assessment roll any property which may have escaped taxation.
- (b) The duty of raising or lowering the assessed value of any real or general property, first giving notice to the owners thereof and fixing a time and place for hearing to the end that the assessment laws of the state be equitably administered.

The state tax commission is also charged with the duty of assessing for taxation the property of railroad, telegraph, telephone, express, private car and other public-utility companies. In many cases the business and properties of such companies extend into many counties of the state and a fair valuation can only be made by an assessor or group of assessors who can consider the state as a whole. The tax commission determines the value of a utility as a whole and apportions this value on an equitable basis among the counties served. The valuation for the county is then distributed among the local taxing districts by the county commissioners and taxes are levied on the basis of the rates that apply to each unit.

RESULTS OF THE WORK OF THE ASSESSORS

KINDS OF PROPERTY ASSESSED.—The methods of assessment that are in use in Colorado have been described briefly. The next step in an attempt to understand and appraise the tax system is an examination of the way the assessment system has worked. What are its results? What kinds of property have the assessors discovered and placed on the tax books? Partial answers to these questions can be obtained from a study of the annual abstracts of assessment which are assembled in the reports of the Colorado tax commission. Table F summarizes the abstracts for certain recent years.¹

Two striking facts which will be confirmed by the experience of the individual taxpayer are revealed by an examination of this table. Very little property that is not tangible is discovered and reported by the assessors. It will be recalled that the tax laws make all property, tangible or intangible, subject to the same assessment and taxation. Of the groups listed in the table only two may be described as intangible, namely, bank stocks and money credits and accounts. These amount to only about 2.8 percent of the total assessed value of the property in the state in 1925. If bank stocks be omitted from

¹ See page 84.

consideration less than 1.6 percent of the total assessed property is found to be in the intangible classification. There will be a more detailed discussion of this later in the report.

The second important fact that emerges from an examination of Table F is the overshadowing importance of real estate in the property valued by the assessors. In 1925, classifications comprising two-thirds of the assessed property of the state were composed wholly of real estate. The additional class, corporations assessed by the tax commission, is made up to a considerable extent of real estate and probably brings the proportion of real estate to total property assessed up to three-fourths. This fact makes a study of the changes in the assessed valuations in this special class of property of great importance in any consideration of the taxing system of the state.

Table 7 shows four classes which are composed wholly of real estate: (1) Land and improvements; (2) town and city lots and improvements; (3) metalliferous mining property; (4) timber, coal and oil properties. The first two of these include most of the real estate and particular attention may be paid to them. Land and improvements might well be given the designation of "farm real estate." It amounted to 32.2 percent of the total assessed property of the state in 1925. Its proportion of the total had shown a steady decline of a small amount each year since 1921 when it stood at 34.8 percent of the total. It had risen materially from 1918 when it was 28.6 percent of the total. In 1912, it had been 21.3 percent, and the following year 24.7 percent of the total assessed value of the property of the state. Emphasis should be placed on the fact that there is no evidence which definitely indicates that the proportion of the earlier years was in closer accord with the actual situation in the state than the proportion in recent years. The figures are presented to give an understanding of the situation that exists and not to condemn or to justify it.

City real estate in 1925 comprised 31.1 percent of the total assessed property of the state. Its proportion to the total had shown a small increase each year since 1920 when it had amounted to 25.7 percent of the total. It was a slightly greater proportion in each of the two preceding years. In 1912 and 1913, however, it had accounted for a far greater proportion of the total assessed valuation of the state, amounting to 40 percent and 35.6 percent respectively.

Enough has been said to indicate the large importance of ownership of either city or farm real estate in determining an individual's liability to contribute toward the support of the government. It is safe to estimate that for the last five years over three-fourths of the proceeds of general property taxes came from real estate. The gen-

TABLE 7.—Percentage that the Assessed Valuations of Different Classes of Property in Colorado were of the Total Assessed Valuation, 1912, 1913, 1918-1925.¹

Class of Property	1913	1914	1918	1919	1920	1921	1922	1923	1924	1925
	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
Lands and Improvements	21.27	24.71	28.57	31.20	33.09	34.84	34.37	33.76	33.27	32.22
Metalliferous Mining Properties	4.27	3.52	2.36	1.98	1.71	1.57	1.57	1.55	1.50	1.50
Livestock	4.26	4.86	8.06	7.66	6.46	4.37	4.06	3.61	3.18	3.05
Timber, Coal and Oil Properties.....	1.98	1.57	1.86	1.66	1.53	1.61	1.42	1.58	1.70	1.86
Town and City Lots and Improvements	40.00	35.60	26.81	25.80	25.66	26.53	27.71	28.92	29.92	31.06
Corporations Assessed by Tax Commission	14.44	19.92	17.27	15.51	14.30	14.35	14.60	14.77	14.81	14.76
Merchandise	3.95	3.68	5.62	6.18	5.80	5.54	5.15	5.17	5.22	5.26
Capital Employed in Manufactures....	0.83	1.04	2.06	2.13	2.48	2.60	2.50	2.42	2.58	2.49
Bank Stock	1.84	2.21	1.70	1.72	1.82	1.97	1.93	1.93	1.68	1.62
Money, Credits and Accounts	0.97	0.86	4.30	4.43	4.28	1.24	1.21	1.19	1.29	1.15
Miscellaneous (less exemptions)	6.19	2.03	1.39	1.73	2.87	5.38	5.48	5.10	4.85	5.03
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

¹Computed from figures appearing in the Annual Reports of the Colorado Tax Commission.

eral property tax is the only important tax levied for school, city and county purposes, and it is also an important feature in the support of the state government.

At an earlier period, when the ownership of real estate was a satisfactory indication of tax-paying ability, no great objection could be made to this method of supporting the government. At the present time, when ownership of real estate taken by itself is far from being a satisfactory criterion of tax-paying ability, any system that places such great reliance on this single source is in sore need of change. This would be true if the assessment of real estate and of other types of property were working in a way which approached perfection. It is of more striking importance when it is certain that the present system is not equitable and when there is doubt whether any minor revision that is feasible would be sufficient to correct inequalities. The paragraphs that follow will point out some of the inequalities among holders of real estate and among holders of other types of property.

RELATION OF ASSESSED VALUE TO TRUE VALUE

As this report has already stated, real estate is not assessed according to the letter of the law, that is, at full value in cash. Court decisions have held that such value shall be equivalent to fair sales value. No attempt is made to attain this 100 percent assessment and it is very probable that it would not be possible to maintain a full assessment on this basis over any great period of time. That actual procedure differs from the letter of the law would not be important if the departure from the statute were the same from one property to the next, from one district or municipality to the other, or finally from one county to another.

Unfortunately authenticated sales figures are difficult to obtain without an excessive expenditure of time and money. In the present study, owners' valuation figures were used. These figures were secured as an answer to the following question; "At how much would you offer this property to a buyer who didn't have to buy and supposing that you didn't have to sell, knowing your land as you do in comparison with other agricultural land in this area?" It is felt that the answer as given in most cases approached the full cash value of the property in question. In order to check these answers the valuations were verified by other men in the neighborhood who valued their own land at a like amount, unit for unit. It is believed that the owner-valuation figures are, on the whole, comparable, one with another, over the areas covered but it should be emphasized that these figures are not sales figures.

Figures were secured from the following districts in the State: Northeastern Colorado, Western Slope, San Luis Valley and Arkansas Valley. The district summaries appear in Table 8. In each of these districts enough records were secured that a representative cross-section might be shown. Assessed valuations were secured for the property for which owner's valuation figures had been secured. Districts were found to vary appreciably, considering assessed valuations expressed as a percentage of owner's value. In 1925-26 the range between rural districts was from 80 percent in the Harmony district of northeastern Colorado to 34.6 percent in the Montrose district of the Western Slope. This indicates a range of 45 percent from the highest to the lowest district.

The areas in northeastern Colorado were assessed uniformly at a higher figure in comparison to the owner's value than were the areas in the other sections studied. In only one instance does an area outside of northeastern Colorado show a higher percentage than an area in that district. Rural real estate in the Delta County area was assessed at 53.6 percent of owner's value in 1925-26 while the lowest percentage among the areas of northeastern Colorado, the Akron district, shows a percentage of 53.2 percent.

TABLE 8.—Relationship of Owner's Valuation and Assessed Valuation, Rural Property, by Districts, 1920 and 1925-1926.

1920				
District	Number of records	Assessed valuation as a percentage of owner's valuation		
		High	Low	Average
Northern Colorado *	262	129.3	18.0	52.0
1925-1926				
District	Number of records	Assessed valuation as a percentage of owner's valuation		
		High	Low	Average
Northern Colorado *	359	531.6	14.6	64.7
Arkansas Valley	10	71.3	22.4	49.1
San Luis Valley	21	122.8	20.0	40.7
Western Slope	30	117.5	24.0	47.0
All Districts	420	531.6	14.6	61.0

*Includes the Northern Colorado District, (See Figure 2) and Washington, Yuma and Phillips Counties.

Considering the figures for urban real estate which were secured in typical towns in the four sections studied together with Colorado Springs, one of the larger cities in the state, we find urban real estate assessed at a higher percentage of owner's value than is rural property. The range of the district averages is from 40.7 percent in Monte Vista to 132.8 percent in Rocky Ford. This indicates a

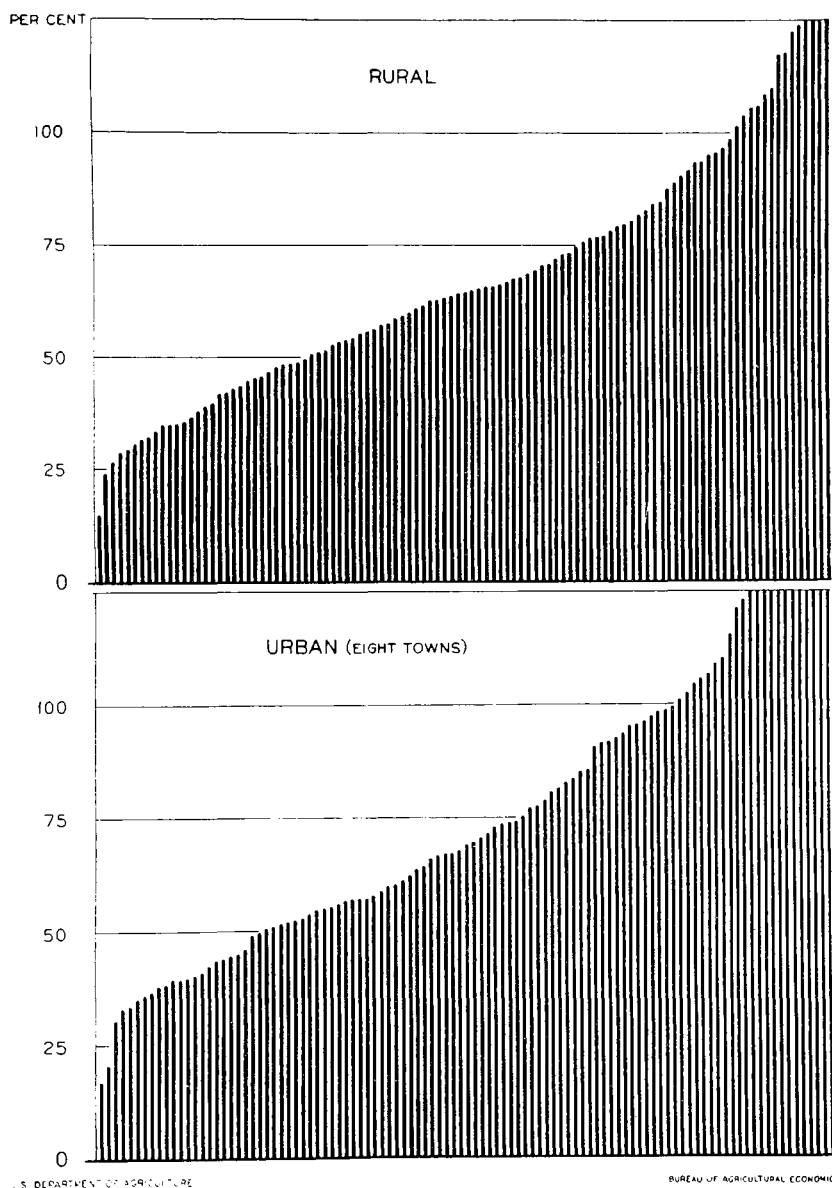


Figure 5.—Comparison of the Ratio of Assessed Value to Owners' Estimated Value for Individual Prices of Rural and Urban Real Estate, 1925-1926. Each bar of the rural section represents four pieces of farm property. Each in the urban section represents two pieces of town or city property. The striking fact in each part of the chart is the wide variation of the relationship between assessed and owners' values.

spread of 92 percent from high to low urban. These figures appear in Table 9.

The greatest significance of the owner's valuation figure lies in its comparison with the assessed-valuation figure from one property to another rather than from one section of the state to another, or from one district to another. It is in this connection that the greatest variations are apparent, indicating that the present methods of assessment are inadequate to compare properties uniformly. Figure 5 illustrates these variations.

TABLE 9.—Relationship of Owner's Valuation and Assessed Valuation, Urban Property, by Districts, 1920 and 1925-1926.

1920				
District	Number of records	Assessed valuation as a percentage of owner's valuation		
		High	Low	Average
Arkansas Valley	28	232.9	\$3.2	135.3
Northern Colorado	22	80.1	13.3	42.1
Plains	28	195.0	26.1	68.2
San Luis Valley	21	97.0	40.9	57.5
Western Slope	90	207.7	18.0	82.0
All Districts	180	232.9	13.3	65.2

1926				
District	Number of records	Assessed valuation as a percentage of owner's valuation		
		High	Low	Average
Arkansas Valley	28	232.9	\$3.2	132.8
Northern Colorado	38	99.3	19.5	46.4
Plains	28	98.4	30.3	66.8
San Luis Valley	21	83.3	32.9	57.1
Western Slope	90	193.6	16.9	76.8
All Districts	205	232.9	16.9	63.6

The 420 rural properties studied in 1925-26 reveal that assessed valuation as a percentage of owner's valuation on individual properties ranged from 14.6 percent to 531.6 percent. It is recognized that the extreme variations at either end of the scale may be unrepresentative and the highest 10 percent and the lowest 10 percent have been disregarded. This gives a range from 35.0 percent to 106.0 percent for the remaining 336 properties and indicates a spread of 71 percent from high to low. The average valuation for the 420 farms was 61.0 percent. More than half of the farms are grouped between 40 and 80 percent, nearly 28 percent of them falling between 60 and 70 percent.

The 205 urban properties studied in 1926, indicated a range in assessed valuation expressed as a percentage of owner's valuations from 16.9 percent to 233 percent. Omitting 10 percent of the cases at either end, the range is from 38.8 percent to 130 percent. The average

percentage is 63.6. Fifty percent of the properties are grouped between 50 and 90 percent, about 25 percent of them falling between 50 and 65 percent. In comparing the average percentage that assessed value is of owner's value for urban properties, with the average percentage for rural properties, it is seen that the former is nearly two and one-half percent higher than the latter.

When the assessed valuation of rural real estate in northeastern Colorado, expressed as a percentage of owner's valuation for 1920, is compared with that secured for 1925 in the same section, it is noted that the 1925 percentage is 12 percent higher than the one for 1920. This indicates that assessed valuations were greater in comparison to owner's values in 1925 than in 1920. When the assessed valuation of urban real estate, expressed as a percentage of owner's value for 1920 and 1925, is considered, we find only a slight change. In other words, these figures indicate that there has been a more constant relationship between assessed values and owners' values in the urban sections than in the rural ones. This may have resulted from a closer adjustment of assessed values in the cities, or it may have resulted simply from the fact that during the period under discussion owners' values of farm land have been subject to greater change than have values of urban land.

THE ASSESSMENT OF PERSONALTY.—About 12 percent of the property assessed by the local assessors may be classed as personal property. In Table F the groups designated livestock, merchandise, capital employed in manufactures, bank stock, money, credits and accounts and miscellaneous all include personal property. The miscellaneous group needs somewhat more detail than appears in Table F. Its total in 1925, before deducting exemptions, was \$111,219,000. The two chief items in this total were automobiles and household property. These accounted for 42 and 26 percent respectively, of the whole amount. Other classes of importance were furniture and fixtures of business properties with 11 percent of the total, agricultural implements with 8 percent, and musical instruments with 6 percent. Several small groups made up the rest.

It has been said earlier in this report that the assessment of livestock and of automobiles is fairly uniform among the various counties. In much of the rest of tangible personalty there is little basis for a real comparison. Assessment is more or less by chance. A piece of property once on the books is apt to stay there without a change of value over a period of years.

A single example will give an indication of the situation. The number of clocks and watches assessed in the state was recorded in 1925 as 18,355. That is, one person in every 55 owned a clock or

a watch, if we are to believe that the assessors found all property of this class. If this is the situation, the inhabitants of Colorado must have difficulty in telling time. The lack of any uniformity is further revealed by the variation in average value of clocks and watches in the counties from \$4.64 to \$38.63. This is an unimportant group so far as the state's assessment is concerned, but its absurdities illustrate the haphazard way in which some types of tangible personalty are assessed.

When attention is turned to the types of intangible personalty a far worse situation is revealed. The items "bank stock and money" and "credits and accounts" include the intangible property that is assessed. The bank-stock item offers no difficulties to the assessors as banks in the state are required to make reports and taxes are collected from the banks as agents for the stockholders. The money, credits and accounts item which in 1925 was about two-thirds as much as the bank-stock item, illustrates the almost complete failure of the general property tax to reach intangible property. In this item are supposed to be included bank deposits, money, credits, bank accounts, accounts not evidenced in writing, promissory notes, bonds, debentures and all other evidence of indebtedness. No reliable figures of the actual amounts of most of these types of property are available for the state. No one would be naive enough to pretend that the "money, credits and accounts" item of under \$18,000,000 in 1925 represented any substantial amount of the property of this type that should be assessed under the provisions of the law as it stands at the present time. Some county assessors appear to make no attempt to include anything in this class. Others include some small amounts of no real value so far as tax contribution is concerned.

For the one class of intangible property, bank deposits, definite data exist. In 1925, the aggregate bank deposits of the state not including governmental deposits, amounted to about one quarter of a billion dollars. All of this and such deposits as residents of the state have in banks outside of the state are subject to assessment and taxation after certain debts of the taxpayer have been deducted. For the state as a whole, in 1925, bank deposits were reported by the assessors as amounting to less than \$7,400,000 and this included all money, credits and book accounts for Denver and Cheyenne counties. The amount properly assessed as bank deposits would probably be about \$5,000,000. For a few counties chosen at random the figures are of interest and are contained in Table 10.

No student of the subject will deny that the attempt to reach other classes of taxable intangible property has met with the same lack

TABLE 10.—Bank Deposits and Assessed Value of Bank Deposits in Several Counties of Colorado, 1925.²

County	Bank Deposits	Assessment of bank deposits
Alamosa	,000 omitted	,000 omitted
Denver	\$ 1,333	\$ 3
Elbert	143,093	5,559 ¹
Las Animas	918	6
Washington	8,775	33
	1,018	11

¹ Includes. money, credits, etc.

²Bank deposits from reports of Comptroller of the Currency and Annual Report of the State Bank Commissioner of Colorado (for a single call date in 1925). Average figures would be slightly different, but would make no change in the general conclusions. Assessment figures are taken from the Annual Report of the Colorado Tax Commission. Figures for additional counties would illustrate some slight differences among them, but would mainly show an almost complete lack of any real success at taxing this type of property.

of success that has been shown with reference to bank deposits. This is not a criticism of the assessors. They have been given an impossible task and they can not be expected to succeed in accomplishing it. Public opinion, rightly or wrongly, believes that the general property tax is unfair as it applies to intangible property and where it is necessary individuals will cheerfully perjure themselves in order to escape what they consider an unjust tax. The fact that most of this property can be discovered only when the individual owner is willing to return it makes any material improvement in assessment impossible until the method of taxing is changed.

A brief summary should be made of certain inequitable results of the attempt to tax intangible property under the general property tax as it exists in Colorado at present. Owners of intangible property who, because of honesty, necessity or ignorance, return their property to the assessor have it valued at a high percentage of its real value and pay a tax on it which takes a high proportion of its income. Owners of bank stock have been compelled to be in this situation and are at a disadvantage compared with owners of stock in other corporations that pay similar returns before considering taxes.

The contention here is not that intangible property should pay no taxes. Ownership of such property is a very real indication of ability to pay taxes. The fact, however, is that intangible property in Colorado pays almost nothing and that the method by which some small amount of taxes is collected from its owners makes injustice the necessary result. Methods of altering this situation will be discussed later. Under the present system no great change for the better seems possible.

POSSIBILITIES OF IMPROVING THE ASSESSMENT SYSTEM

Any discussion of the ways by which the assessment system of Colorado may be improved must primarily consider the assessment

which is made by the local assessors. Inter-county adjustment for equalization purposes will always be necessary, so long as county assessments have any importance to the state, but in so far as the system can be improved in the counties, the need for state adjustment is reduced. It should at the outset be pointed out that no attempt is made to discuss ways of improving the assessment of intangibles. This problem must be met by changes in more than assessment practices.

The most important feature in the assessment system is that of personnel. There is general agreement among those who have studied the subject that properly appointed assessors can be superior to elected assessors. This does not mean that the simple changing of the assessor's office from an elective to an appointive one will necessarily improve the system. If assessors are to be appointed, their selection must be based on training and knowledge rather than on political service. It would be desirable to have assessors appointed by the county commissioners and approved by the tax commission or by some other state body which could make definite experience and training qualifications which all appointees must satisfy. Appointments must necessarily be for a term of at least six years. The present two-year term is obviously not long enough to give the assessor time to do more than become acquainted with the duties of his office. This is recognized by many counties where assessors are re-elected to successive terms. If assessors are appointed for long terms, provision should be made for removal for cause by the county commissioners with the right of appeal to some impartial group not connected with fiscal affairs, possibly the supreme court of the state.

Along with the change in the method of appointment of the assessor should come an increase in his annual salary. It may be true that certain counties cannot afford a well-paid assessor. They can even less afford a poorly paid one. An adequately trained man may be able to handle the work of more than one of the smaller Colorado counties. If consolidation and rearrangement of counties do not solve the question, it should be possible for adjacent counties to solve it by agreement. This may involve some loss as far as local pride and a position for a local man are concerned, but an improvement in the assessment system of any county should more than repay for a loss of this sort. The annual salary should be enough to induce a man to devote himself solely to the work and to make him regard it as a permanent profession. It is only by such inducements that men of training and experience can be induced to continue in this rather thankless position.

It should be understood that these recommendations do not imply that the present assessors of Colorado are unfitted for their posi-

tions. The writers feel that Colorado is unusually fortunate in its assessors, but that a better and surer method could be adopted for finding the right men. It would be unfortunate, however, if a new system should fail to make use of the many adequately trained and experienced men who hold the office of assessor at the present time. While the man who directs the work is of supreme importance, it is believed that without a change in the methods of appointment, marked improvements can be made in the work of most of the assessors' offices. Means by which such improvement may be brought about will be suggested in the following paragraphs.

Whether one is to consider inter-county equitability or intra-county equitability, adequate uniform records are essential. A permanent file should be maintained subject to constant revision. Some of the more important items of information which should be available at all times are the following: Court decisions, decrees, contracts, deeds and all legal instruments affecting the ownership of real property within the jurisdiction of the assessor. This information, if secured regularly from the county clerk and other recording offices, can be made easily available. It might be well to keep a separate file of trust deeds, mortgages and warranty deeds which relate to real property in the county. This information is valuable to aid in establishing values as well as fixing the identity of the owner.

A current record should be maintained as to utilization of the rural land of the county. Special attention should be given to roads, ditches and right-of-ways as these items are exempt by law from taxation. In practice these items are, in many counties, assessed. A uniform treatment should be accorded waste lands and mineral reserves. In the case of waste lands these lands should be assessed at a uniform figure. Mineral reserves should be assessed to the owners of these reserves and this value should be deducted from the assessment of the remainder of the property value. In irrigated districts it would seem advisable to maintain a permanent file of water-right priorities, ditch stock, and reservoir stock pertaining to any body of irrigated land. Water rights are an extremely important part of total land value in irrigated districts.

Land should be classified as to fertility or potential utility uniformly over the state. The merits of such a system are obvious. In discussion of factors affecting classification, a standard is essential. Inter-county equality is another consideration which would seem to require uniform classification. State tax commission reports which contain a summary of the county abstracts should be based upon uniform classification. Such is not the case at present. Record should be made of land classifications and such records should be modified each year on the basis of the fieldmen's reports. Since

enlightened assessment is based upon adequate information it is essential that land of uniformly inferior quality be distinguished from spotty land or land which is poor in spots only. It is probably true that an assessor or his deputy may remember whether a piece of land is assessed low because uniformly worn out or because it is spotted with hardpan. The successors of this assessor or any outside authority will not have this knowledge nor will they be able to act intelligently should any question of classification arise.

Altho assessment of rural property for the purposes of taxation has been largely a guess, it does not follow that any guess is a good guess, nor does it follow that being so largely a matter of guess, aids in the form of score cards and detailed information should be shunned. Rather, assessment which is as scientific as possible is the only possible means of securing relative fairness and uniformity.

Scientific assessment first supposes some standard or standards of value. Whether this standard should be full cash or sales value is perhaps doubtful, even tho so stated in the law. Since in practice real property is assessed in relation to other real property in the same area or comparable property in another area, it would seem that this offered some suggestions. All suggestions here presuppose a continuation of the present system and are suggested as improvements which will make the present system more equitable.

All real property, rural or urban, should be assessed on the basis of a score card. In the case of rural properties those factors should be considered which are considered by a prospective buyer in sizing up the property. Among these factors should be considered distance from market or railroad, type of road, possibilities for use other than as farm land; water-right priorities, reservoir stock and ditch stock if any; kinds and condition of fence and of buildings; general character of soil; proportion of total land as agricultural land; classification of all land. In different districts the practice will vary and special items will be found essential such as accessibility of free range, wells and their location, etc. In all cases it might be well to show the location of buildings on land.

Field agents should be supplied with blanks upon which the above information may be assembled, together with a section map upon which roads, ditches, waste and agricultural land may be classified. Records and maps for the previous year should be carried by the field agent in order that he may check against these. This check-up should be made annually in all its details.

After the annual assessment has been made and the abstract drawn up it would seem that some sort of an open district meeting should be held to discuss the assessments of real property in that

district. The benefit to both the assessor and the assessed would be great since it would allow them to meet on neutral ground and discuss assessments from their respective points of view.

More widespread publicity should be accorded county tax matters. The assessor has his part to fulfill in this task. Most tax notices show only the amount of the total tax levied against a certain piece of property. Some notices give the total tax of the owner assessed against all of his property and include the tax on his personal possessions as well as on his real estate. No attempt has been made to divide the total tax into its component parts. The levies for various purposes within the state, county and school district are often shown only on the back of the tax receipt, and may be examined if one should take the trouble to look on the back of his receipt after the taxes are paid. Each tax notice should contain this information and should divide the tax assessed against each piece of property into state, county and school district taxes. This would allow taxpayers to see the relative importance of the various taxes which they contribute to the support of state and local governments. It will persuade them to consider their taxes not as a unit but as a sum of several separate taxes. This understanding is essential in fixing the responsibility of the various divisions to which the taxpayers contribute. Such a system is now in operation in at least one county of the state.

III. ANALYSIS OF RECEIPTS AND EXPENDITURES

An examination of the receipts and expenses of Colorado can conveniently be made by considering first those of the state government as such and later those of the counties and local units. The reason for making such a separation is based both on the different sources from which the units derive their revenue and the purposes for which these revenues are spent. These differences will appear as the two classes are considered.

RECEIPTS OF THE STATE GOVERNMENT

The receipts of the state government may be divided into two general classes—receipts from taxes and non-tax revenue, each of which in turn will be sub-divided and analyzed. (See Table 11.) For purposes of description the year 1926 will be used as typical.¹ After the situation in that year has been made clear, a study will be made of the changes that have taken place in the last twelve years.

¹ The years referred to in the discussion of the receipts and expenditures of the state government are the fiscal years ending November 30 of the year mentioned.

TABLE 11.—Revenue Receipts of State Government, Colorado.¹

Revenue receipts	1926	1925	1924	1923	1922	1920	1918	1916	1914
	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars
Total	15,295,976	15,888,116	16,065,017	15,073,975	13,858,357	10,491,019	7,019,146	5,363,861	3,641,168
Taxes									
General property	5,659,605	5,844,144	6,215,155	6,913,075	6,574,648	4,986,280	3,908,552	2,543,824	1,597,678
Special	1,146,288	1,187,271	1,157,012	993,146	817,423	832,214	552,917	815,409	363,086
Poll	122	166	131	342	.....	12,591	116,503	91,757	88,693
License	3,875,172	3,562,153	3,258,379	2,256,797	1,562,875	1,438,124	611,903	422,174	400,931
Total taxes	10,681,187	10,593,734	10,630,677	10,163,360	8,954,946	7,269,209	5,189,875	3,873,164	2,450,388
Special assessments	53,558	883,414	871,404	932,282	560,281	130,083	.....	.....	.....
Fines, etc.	4,029	18,416	19,054	19,431	30,647	28,715	6,729	2,793	17,957
Subventions, etc.....	1,545,784	1,679,687	1,982,183	1,564,036	1,612,664	1,005,367	158,368	122,047	113,812
Highway privileges, etc.	1,031,797	1,061,763	989,346	1,000,577	978,920	944,325	768,051	690,144	502,317
Earnings gen. depts.	1,979,621	1,651,102	1,572,353	1,394,289	1,720,899	1,113,320	806,123	675,713	555,694

¹Source: Bureau of Census, "Financial Statistics of States."

In 1926 taxes accounted for about 70 percent of the total revenue receipts of the state government. The remaining revenue consisted of fees, sales, rents, interest, fines, subventions, grants and gifts. The largest item falling in this second revenue group is commonly designated as earnings of general departments. It is composed mainly of fees and charges made by the various departments of the state government to those who make special use of the departments' services. This item amounted in 1926 to 13 percent of the total revenue receipts of the state government. Nearly half of this was collected by educational institutions and most of the remainder was accounted for by those classes of the state government receipts designated as protection of person and property, and charities, hospitals and corrections. A group of revenues designated as subventions, grants and donations accounted for 10 percent of Colorado's receipts. Almost all of this came from the federal government and nearly three-fourths of it was given for the purpose of road building. Subventions to education and agriculture made up practically all of the rest. Receipts from interest and rent made up over 6.5 percent of the total receipts of the state. This group of revenues was derived about one-third from sinking funds and two-thirds from public-trust funds. Receipts from fines, escheats and from assessments made up the remainder of the non-tax items and amounted to less than one-half of one percent of the total receipts.

An analysis of the 70 percent of the receipts of the state government coming from taxes is of more direct interest to the tax payers of the state than is the amount derived from other sources. About 37 percent of the total receipts of the state government in 1926 came from the general property tax. The gasoline tax yielded over 13.5 percent of the total. The inheritance tax contributed nearly 6 percent, the motor-vehicle license tax about 5.5 percent, business license taxes and corporation taxes for charters and on stock amounted to 6.5 percent, the greater portion of which came from the tax on insurance premiums. Fish and game licenses yielded 1.5 percent of the total.

From the point of view of agriculture, it is of interest to analyze these receipts in an effort to determine the proportion of them that is contributed directly or indirectly by farmers. It has been estimated that over one-third of the assessed value of the property of the state is farm property. It is thus proper to assign roughly 12 percent of the total state receipts to contributions from the agricultural population thru the general property tax. It has also been estimated that it is not an over-statement of the case to assign to agriculture for motor-license fees 1 percent of the total revenue receipts of the state; that is, about one-fifth of the state receipts from this

source. Farm automobiles probably use more than their proportional share of gasoline and to calculate that the gasoline-tax contribution of farmers in 1926 amounted to 3 percent of the total state revenues would not over-state the case. The agricultural contribution in the form of inheritance taxes is probably less than 1 percent of the total revenue. The total in fish and game licenses may be estimated as about the same amount.

It is difficult to determine how much farmers pay on the business taxes levied by the state. It is certain that the insurance-premium tax is passed in considerable proportion to the buyers of insurance. Possibly 1 percent more of the total revenues of the state is collected from agriculture by this means. No attempt will be made to go farther afield or to attempt to compute the amount of taxes levied on and paid by transportation companies and other public utilities which are shifted to agriculture or to estimate the increase in cost to agriculture of various articles caused by state taxation on the firms which are doing business with the farmers.

On the basis of the estimate that has been made, it is certainly under-stating the case to say that about one-fifth of the revenue of the state government is derived from agriculture. This amounted in 1926 to over three million dollars in all and to over \$50 per farm. Stated in another way it amounted to about \$12 per capita of farm population, or to over \$16 per capita of farm population over 10 years of age.¹

It is of interest not only to know the condition in 1926, but also to know what changes have occurred over a period of years. Table G² indicates the proportion of total revenue receipts of the state government that has come from each of the important sources for the fiscal years ended in 1926, 1922, 1918 and 1914. It will be noticed at once that the receipts from the general property tax amounted in 1926 to a materially smaller proportion of the total than in the previous years, particularly in 1918 and 1922. From the point of view of the owner of real estate it is possible that this means a smaller relative burden of taxation. Whether this is true depends on the source of the revenue that is replacing that formerly derived from general property.

¹Farm population figures of the 1925 census of agriculture are used in making this estimate. The basis for the estimate that farm property comprises over one-third the assessed value of property in the state rests on the fact that property wholly agricultural in nature, i. e., land and improvements, livestock, tractors, and agricultural implements and machinery, accounts for over 35 percent of the assessed property. Add to this one-fifth of the value of automobiles and one-sixth of the other items not urban in nature and the percentage exceeds 37. Farm automobiles have been estimated by the *Farm Journal* as 22 percent of the total registration of the state. Farm population in 1925 was about 250,000 out of an estimated total of slightly over 1,000,000. Hence to use one-sixth as the proportion of personal property belonging to the farm group seems conservative.

²See page 85.

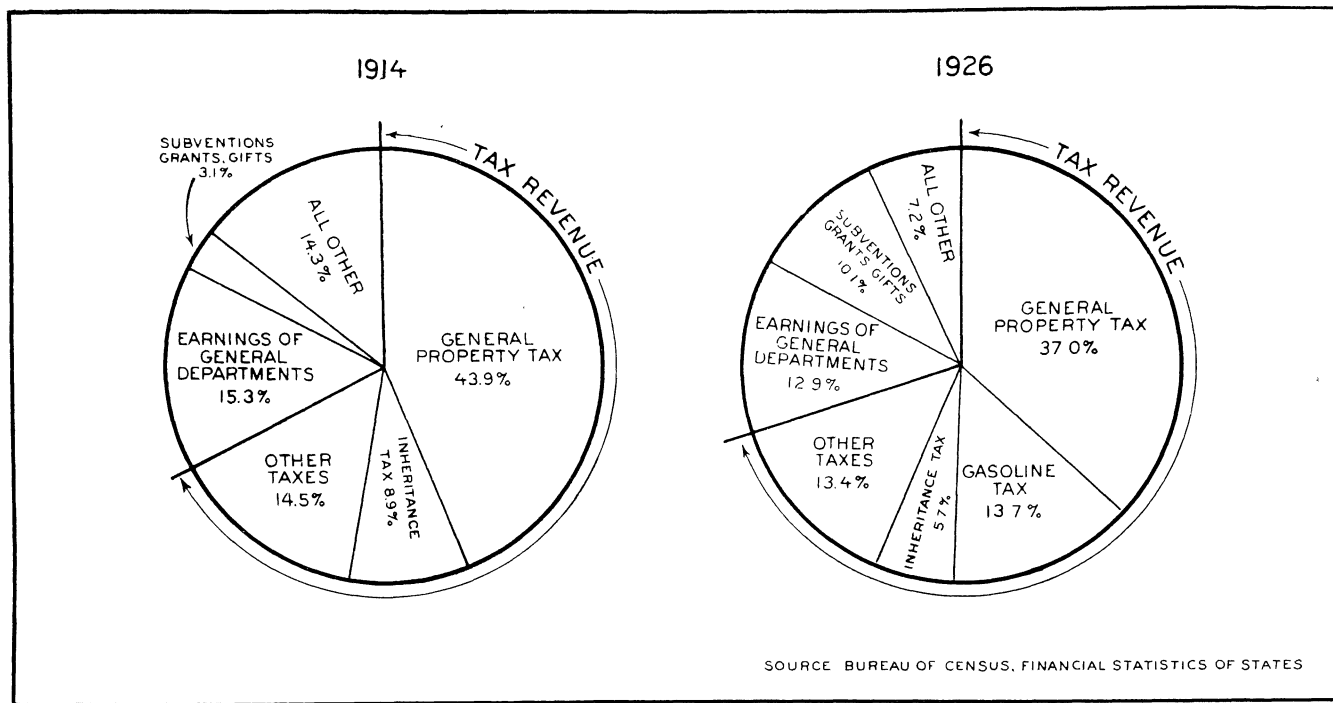


Figure 6.—Proportion of Revenue Receipts from Various Sources, State Government, Colorado, 1914 and 1926. While the percentage of tax revenue was greater in 1926 than in 1914, the percentage of revenue from the general property tax and from the inheritance tax showed a marked reduction which was more than made up by the gasoline tax.

The only other material changes in the proportion of tax revenues for the years under consideration are related to the taxation of automobiles. The gasoline tax first appeared in 1921 and in 1926 produced over one-third as much as the general property tax. Automobile-license revenues have shown an increase both in amount and in the proportion which they are of total revenue. The poll tax has disappeared as a part of the state revenue system. Business license and corporation taxes have not materially changed in their proportion to total revenue. Proceeds from the inheritance tax are necessarily erratic. In recent years they seem to have become slightly less important as a part of the state revenue than in earlier years.

In the non-tax revenue group two important changes have taken place. Rents and interest, while showing some increase in amount, have been becoming of less relative importance. Subventions, grants and gifts have materially increased in the proportion which they are of the state's revenue. This has been due almost wholly to the federal aid given for highway purposes. The proportion that non-tax revenue bore to total revenue in 1926 is only slightly different from that of 1914. The changes in the relative proportions of the various important types of revenues from that year to 1926 are illustrated by Figure 6.

The comparison of the different sources of revenue is of importance mainly from the fact that it indicates the proportion of the cost of maintaining the state government which is derived from different groups and that it may point toward the possibility of developing new sources which will relieve those made use of at present. The study of state expenditures that follows is designed to indicate the trend of expenditures for the various purposes and to furnish the basis for a critical examination of them.

EXPENDITURES OF THE STATE GOVERNMENT

Total state and local disbursements in Colorado in 1925 were reported by the state auditor as amounting to \$88,543,139.96.¹

This includes a considerable amount of duplication. For example, remittances of the state government to the counties were reported as \$3,938,091 and remittances of the counties to the state government were \$5,747,847. By reducing the respective amounts by these sums the total is reduced below 79 millions. Many other eliminations would be necessary in order to present a net figure for all government units of the state. Total state expenditures less amounts remitted to the counties amounted in 1925 to \$13,139,474. This may

¹ State Auditor's report 1924-26, page 59.

be estimated as less than 20 percent of the net governmental expenditures of state and local units. Emphasis is placed on this feature in order to prepare for the consideration of county and local expenditures in later sections of this chapter.

Expenditures of the state government will first be analyzed for the fiscal year 1926 and then their development will be traced thru the period 1914 to 1926. The analysis is based on material gathered by the United States Bureau of the Census and on reports of the state treasurer and auditor. In general, the census classifications will be followed as they simplify comparisons from year to year and with other states. Total expenditures are first divided into what are termed governmental-cost payments and non-governmental-cost payments. The latter group consists of book transactions which do not decrease the assets of the state and for purposes of this study need no consideration. Governmental cost payments are divided into three general groups, expenses, interest and outlays. The distinction between expenses and outlays depends on the nature of the thing for which the governmental unit spends its money. Expenses are expenditures for which no permanent or lasting possession is received by the unit concerned. They consist mainly of payments for services rendered, for property rented and for materials that are used in the maintenance of the government. Outlays include the cost of land, improvements and other acquisitions of the unit concerned which add to the number and value of its more or less permanent possessions. Interest is used in this classification with its ordinary meaning—the payment by the state of charges on debt, both funded and floating.

The total expenditures for state governmental purposes in 1926 amounted to \$15,830,123. (See Table 12.) Of this 64.5 percent fell in the expense classification, 31.9 percent was classed as outlays and 3.6 percent as interest. Over 91 percent of the interest charge was on funded debt.

The expenses of general government accounted for 5.0 percent of the total. The cost of collecting revenue, the expenses of the judiciary, the maintenance of general government buildings constituted over two-thirds of these expenses of general government. If the year under discussion had been one in which the legislature had been in session, expenditures for that branch of government would have been about the same as for the three purposes just mentioned. This fact explains the alternating increase and decrease in the cost-of-government item year by year. The cost to the state of protecting persons and property was 4.6 percent of the state's expenditures. Conservation of health costs less than one percent of the total and various miscellaneous expenditures about 1.5 percent. Chief among

TABLE 12.—Governmental Cost Payments, State Government, Colorado, Selected Years, 1914-1926.

Payments	1926	1925	1924	1923	1922 ¹	1920	1918 ¹	1916	1914
	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars
All governmental costs	15,830,123	16,644,846	17,640,562	16,414,903	16,269,251	11,088,077	6,698,100	4,712,491	4,189,042
Expenses									
General government	781,274	926,138	797,949	903,618	747,346	703,724	481,111	485,662	509,875
Protection to person and property	732,611	541,599	561,494	604,325	809,997	701,265	498,017	420,192	876,160
Development and conservation, etc.	955,538	690,091	838,021	724,122	758,878	604,513	411,949	289,227	209,142
Conservation of health, etc.	129,636	151,534	143,444	139,212	136,132	124,666	53,421	46,862	42,178
Highways	1,679,991	2,623,880	2,552,989	2,194,606	1,057,397	686,885	1,174,145	551,752	321,533
Charities, hospitals and corrections	2,026,190	1,654,808	1,901,758	1,585,162	1,596,586	1,301,986	1,037,817	753,828	569,205
Education	3,646,847	3,810,936	3,413,749	3,363,776	3,180,680	2,502,267	1,776,258	1,491,874	1,203,150
Recreation	12,829	16,716	19,206	17,393	9,351	10,328	35,580	22,543	4,355
Miscellaneous	240,659	293,227	217,455	252,553	190,747	249,419	531,470	157,610	74,218
Total Expenses..	10,205,575	10,708,929	10,446,065	9,784,767	8,487,114	6,885,053	5,999,768	4,219,550	3,809,816
Interest	578,273	542,154	490,318	438,737	294,034	153,017	186,923	165,692	92,133
Outlays									
General government ....	.....	.....	.....	11,429	532,457	410,441	39,765	.....	.....
Protection to person and property	17,514	.....	.....	800	553,599	.....	.....	.....	13,405
Development and conservation ..	150,430	54,157	17,507	60,431	35,254	23,969	.....	3,963	2,364
Conservation of health .....	.....	.....	.....	.....	.....	1,400	.....	.....	.....
Highways	3,910,519	3,761,659	4,774,445	4,538,231	5,548,884	2,776,548	.....	1,500	.....
Charities, etc.	221,819	38,659	103,652	267,615	278,919	355,625	179,781	233,900	54,603
Education	704,690	1,532,915	1,807,411	1,293,514	530,964	464,039	291,863	72,508	58,916
Recreation	7,503	.....	.....	.....	.....	.....	.....	15,378	147,494
Miscellaneous	33,800	6,373	7,164	19,379	8,026	17,985	.....	.....	10,311
Total Outlays	5,046,275	5,393,763	6,710,179	6,191,399	7,488,103	4,050,007	511,409	327,249	287,093

¹Slight adjustment necessary in order to make the total equal the sum of reported divisions of outlays.
Source: Bureau of Census, Financial Statistics of States.

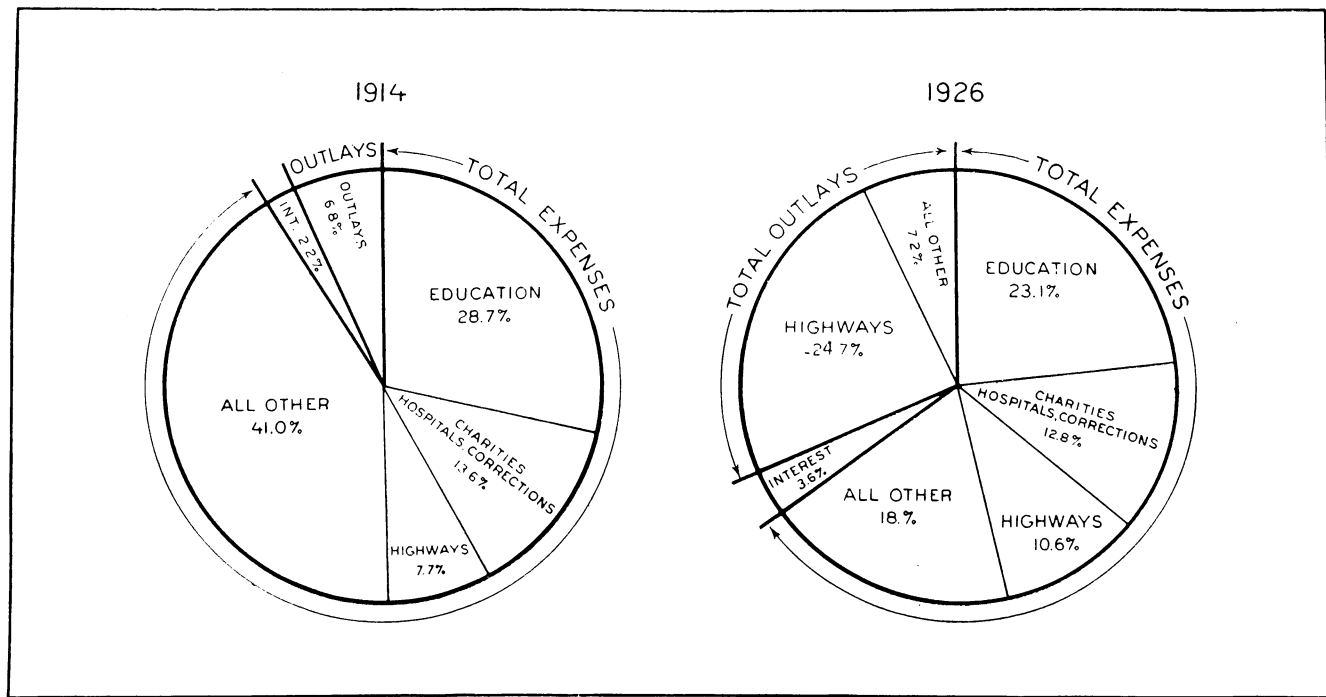
the latter are costs for the maintenance of soldiers and sailors in state homes and the cost of distributing state funds and investment funds.

Three major items of the state expense—education, charities and correction and highways—deserve more detailed discussion. The amounts spent for education consist of a very small amount for supervision and the rest, 22.4 percent of the total expenditure of the state, for state educational institutions and for distribution to the local districts. The former purpose took over three-quarters of the total and the latter slightly under one-quarter of it. The amounts distributed to local districts consist of the returns from the public-school permanent fund and other receipts for the use of school land, all of which was collected and distributed by the state as an agent for the local units.

The total spent by the state for charities, hospitals and institutions of correction amounted to \$2,026,190 or 12.8 percent of the total expenditures of the state. Of this 21 percent went to maintain the state charitable institutions, chiefly those for the deaf, blind and mute. Hospitals cost 47.8 percent of the total for this classification. The latter item was divided with somewhat less than 60 percent going to support institutions for the insane, 30 percent to general hospitals and a little more than 10 percent to institutions for the feeble minded. Prisons, reformatories and other institutions of correction cost \$627,455 or 30.9 percent of the total placed under the charity, hospital and correction classification. This amount was almost evenly divided between institutions for adults and those for minors. A very small amount of the total, 0.3 percent, was spent for general supervision.

In 1926 the expenses of the state for the maintenance of highways was \$1,679,991 or 10.6 percent of total expenditures. This particular item should not be considered without keeping in mind the fact that the major expenditure for highways is in the form of an outlay item for new construction rather than in the form of an expense item. Of the total spent for maintenance 5.8 percent went to support the supervising department, 36.8 percent to pay the costs of roads maintained by the state, and 57.4 percent in apportionments to pay the costs of the maintenance of roads by units other than the state.

Outlays made for highways, institutions of higher learning, the fish and game department, and the school for the deaf and blind, account for 95.9 percent of the total outlays made in 1926. It is to be expected that the amounts spent on the purchase of land and on the construction of buildings and other improvements will vary from



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Figure 7.—Proportion of Governmental Cost Payments for Various Purposes, State Government, Colorado, 1914 and 1926. The striking difference between the two years results mainly from the growth of the outlay items.

year to year, altho the highway item will be consistently large so long as the building of an extensive state highway system is continued. If all the state educational institutions are considered, their outlay items will be fairly regular from year to year, altho any single institution may have little or no expenditures of this sort one year and large expenditures the following. The amounts spent in 1926 for the construction of highways amounted to 77.4 percent of the total outlays. Those spent for outlays by institutions of higher learning were 14.0 percent; for the fish and game department, 2.4 percent; and for the school for the deaf and blind, 2.1 percent of the total.

Figure 7 illustrates the way the state's expenditures were distributed among the various purposes. This is simply a summarization in graphic form of the information that has been presented in the preceding pages. It depicts the situation in 1926, and gives some indication of how the distribution of expenditure has changed since 1914 by presenting similar data for that year.

Total state expenditures have increased from \$4,189,042 to \$15,830,123 or 278 percent during the period from 1914 to 1926. It should be recalled, however, that the population of Colorado has increased about 17 percent and that it took approximately \$1.71 in 1926 to buy the same amount that \$1.00 would buy in 1914.¹

If these two factors are taken into consideration, a real increase of slightly under 89 percent per person is estimated as the change in Colorado's state expenditures. This figure needs some qualification also, as Colorado's taxpayers in 1926 were buying thru their state taxes far different things from those which they bought with the same means in 1914. The development of a state-highway system is one illustration of this. The vastly expanded institutions of higher education furnish another. While no one will deny the need of economy in expenditures of the state and other units of government, drastic curtailment of such spending should only be made when it is certain that the proper objects of governmental expenditure will not suffer. From the point of view of agriculture, an expansion of state activity would be desirable so long as such expansion should take the form of the financing by the state of activities that are now financed by the local units. Reasons for this are fairly evident, but they will become more clear after the succeeding section of this report on local, that is county and district, receipts and expenditures has been studied.

Expenditures of the state for the years 1914, 1918, 1922 and 1926 are compared in Figure 8. This shows the increase in absolute

¹ This is based on the Snyder revised index of the general price level. The Review of Economic Statistics, Vol. X, No. 1, p. 49 (Feb. 1928).

GOVERNMENT COST

MILLIONS OF DOLLARS

16

14

12

10

8

6

4

2

0

1914

1918

1922

1926

OUTLAYS

All other
Education

Highways

INTEREST EXPENSES

All other
Protection to person and property
General government
Development and conservation, etc.

Highways

Charities, hospitals and corrections

Education

U.S. DEPARTMENT OF AGRICULTURE

BUREAU OF AGRICULTURAL ECONOMICS

Figure 8.—Expenditures for Various Purposes, State Government, Colorado, 1914, 1918, 1922 and 1926. The large amounts of outlays, particularly of outlays for highways, in the two latter years are responsible for a considerable amount of the increase in total governmental expenditures.

amount over the period covered and also indicates how the proportions of the total devoted to the various items of expenditure have changed thru the period. It has already been shown that the money expenditures of the state have increased greatly since 1914, and that the total for 1926 was 278 percent above that for 1914. It will be of general interest to compare the increases in the various items. Expenses were 163 percent above their 1914 level, interest payments 528 percent, and outlays 1658 percent. If increases in population and changes in the purchasing power of money are taken into account it has been indicated that the real increase per capita for all expenditures was about 89 percent. The real increase of the items in the expense classification was slightly under 34 percent, of the interest payments about 314 percent, and of the outlay items about 878 percent.

Of the important expense items, development and conservation, education, highways and charities and corrections showed the greatest increases. Real expenditures per capita in the development and conservation classification, that is, expenditures adjusted for the increase in population and the decreased purchasing power of money, were about 128 percent greater in 1926 than in 1914. The major portion of this increase went for the development of agriculture. Educational expenditures in 1926, adjusted on a similar basis, were 51 percent greater than those in 1914, the greater portion of the increase going to the state educational institutions of higher learning. The real expenditures of the state for highways in 1926 were about 161 percent greater than those of 1914. The great expansion of the state's highway system during the period makes this increase a natural development. The real expenditures per capita for charities, hospitals, and institutions of correction in 1926 were about 78 percent greater than the amount spent in 1914. Large increases in this group came from expenditures for the insane and feeble minded, the maintenance of a general state hospital, non-institutional expenditures for the deaf and blind, and expenses for the institutional care of children. It is of interest to point out that the real expenditures per capita for the protection of persons and property, and for general state government were higher in 1914 than in 1926.

The outlays of the state were in 1914 confined almost wholly to three groups—recreation, education, and charities and corrections. They formed less than 7 percent of the total expenditures of that year. Outlays fluctuate within wide limits from year to year, and thus a study of the changes that use figures covering only a few years is of less value than a similar study of expenses. It is also true that the classification of outlays has been somewhat changed during the period covered.

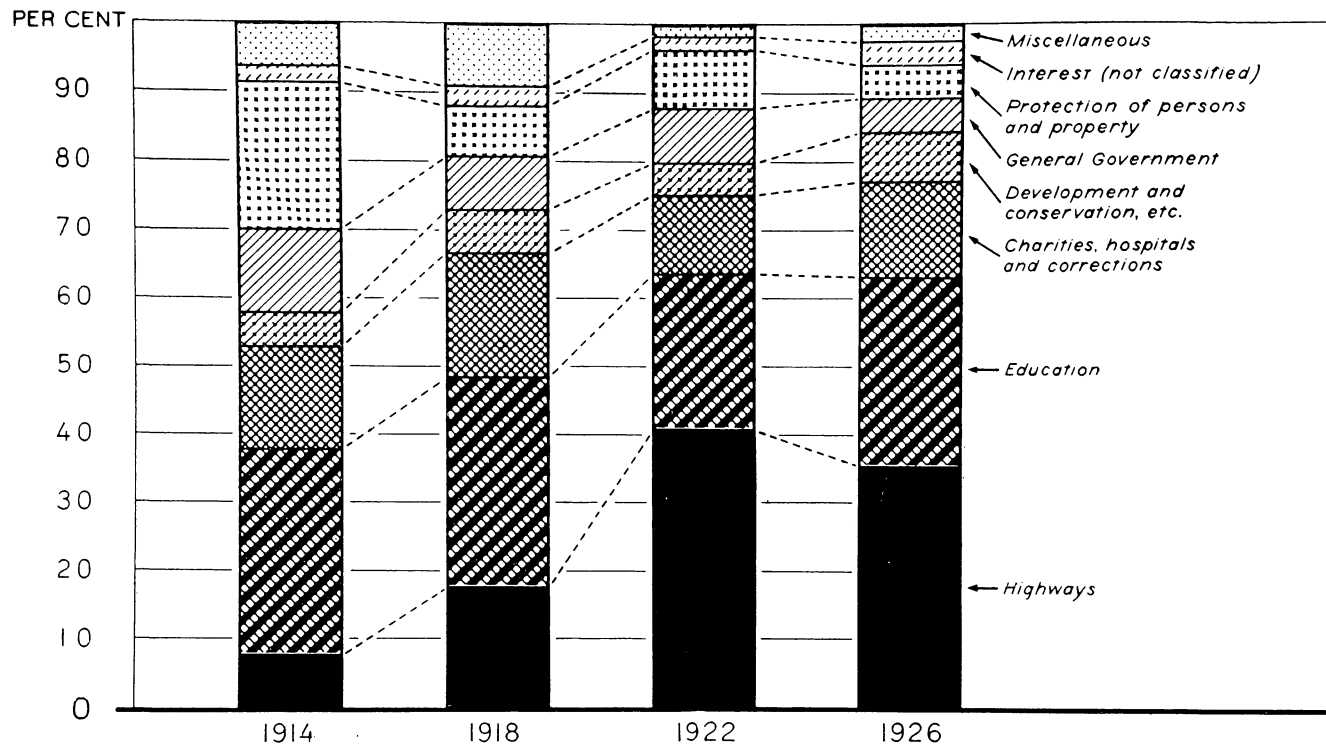
The proportion of the total expenditures taken by the various important items has changed during the period that has been studied. This is most noticeable when the proportion between expenses and outlays is compared. In 1914 and 1918, outlays took 6.8 percent and 7.6 percent of the total, while in 1922 and 1926, this group took 46.0 percent and 31.9 percent of the total. The bulk of this change is caused by the outlays for highways, none being recorded for the earlier years, while in the two later ones such outlays took 34.1 percent and 24.7 percent of the total state expenditures.

Expenses were 90.0 percent and 89.6 percent of all expenditures in the earlier years, and were 52.2 percent and 64.5 percent in the two later ones. In view of the decreases in the proportion of the total, a similar decrease would be expected in the individual items. The status of these items, so far as the changes that have occurred since 1914 are concerned, will be seen from Table 13, which compares the percentage that each item is of the total expenses. Such a comparison makes the contrast much clearer than does the presentation in Table H, where the proportion that each item of expense bears to total expenditures is shown.

TABLE 13.—Percentage of Expenses Devoted to Various Purposes, State Government, Colorado, 1926, 1922, 1918 and 1914.

Purposes	1926	1922	1918	1914
	Percent	Percent	Percent	Percent
All Expenses	100.0	100.0	100.0	100.0
General Government	7.7	8.8	8.0	13.4
Protection of persons and property	7.2	9.5	8.3	23.0
Development and conservation, etc.	9.4	8.9	6.9	5.5
Conservation of health, etc.	1.3	1.6	0.9	1.1
Highways	16.4	12.5	19.6	8.4
Charities, hospitals and corrections.....	19.8	18.8	17.3	15.0
Education	35.7	37.6	29.6	31.6
Recreation	0.1	0.1	0.6	0.1
Miscellaneous	2.4	2.2	8.8	1.9

Education was the most important of the expense items in each of the years studied. Its proportion of the whole was somewhat greater in the two latest years than in the earlier ones, altho 1926 shows some decline from the highest relative point which this particular type of expenditure had reached. Charities, hospitals and corrections take, at the present time, next to the greatest proportion of total expenses. This particular class increased in each of the years under discussion, altho its total relative increase is slight. Highway expenses took only 4.8 percent of the total in 1914, rose to 19.6 percent in 1918, fell to 12.5 percent in 1922, and reached 16.4 percent in 1926. Conservation of health has shown a steady increase since 1914. Protection of persons and property and general government both took a higher proportion of expenses in 1914 than in 1926. The first of these in 1914 had its costs augmented by unusual ex-



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Figure 9.—Percentages of Total Expenditures Devoted to Various Purposes, State Government, Colorado, 1914, 1918, 1922 and 1926. Outlays and expenses for each year are combined and the total amounts classified on the basis of purpose. The increased percentage of total expenditures devoted to highways is most marked change of the twelve-year period.

penses for the state militia, and the second by large expenses of several groups of the executive and judicial branches. The only other item of expense large enough to need separate consideration is that classified as "miscellaneous" in 1918. It is accounted for by the expense of the various war activities of the state.

The material that has been presented should give an adequate idea of the changing emphasis of expenditures during the years that have been discussed. Figure 9 combines certain of the data that have been presented previously and illustrates the fact that over 60 percent of the state's expenditures combining expenses and outlays in 1922 and 1926, went for highways and education. If the expenditures for charities, hospitals and institutions of correction be added to these, 75 percent and 77 percent, respectively, of the total for each of the two years will have been accounted for. These items took barely more than half of the total in 1914 and about 66 percent of it in 1918. Their present importance is worth emphasizing, as they represent a type of expenditure which is of great importance to the state, and which cannot be materially reduced without great difficulty.

LOCAL GOVERNMENT

It will not be possible to examine the receipts and expenditures of the local units with the detail and the exactness that have been used in the study of the state government. The basic data on which such a study must rest are not available as the county figures have not been assembled by the office of the public examiner of the state in as great detail as have the state data and it has been impossible within the limitations placed on this study to assemble any large amount of information from the individual counties. A detailed presentation of data for the counties would be impossible except in a report of great length. For these reasons, only the outstanding points relating to county and local receipts and expenditures will be mentioned here and detailed discussion of individual counties will be postponed to a later report.

Average collections per year for the five years 1921 to 1925, inclusive, reported by the treasurers of all the counties of Colorado, amounted to \$53,683,375 or to about \$54.21 per capita for these years. Of this an average annual amount of \$44,367,733 was in the form of tax collections and \$9,315,642 was classed as miscellaneous receipts. Thus 82.7 percent of the total amount collected by the counties was derived from taxes. The tax on general property was the source of practically all of this.

Before analyzing the expenditures of the counties it will be of interest to compare the total county receipts with those of the state

government. In 1925 revenue receipts of the state government amounted to \$15,888,116 and the receipts of the county treasurer to \$57,380,145. That is, the county receipts amounted to only a little less than four times those of the state. From the point of view of the general property tax, the difference is even more striking as the amount received by the state from general property was only \$5,844,144 while the tax collections of the counties amounted to \$45,995,627. It should be noted that the difference is not quite as great as the last two figures would indicate, as the county figure includes the state levy of the general property tax and it also includes certain minor taxes other than that on general property collected by the county treasurers.

A comparison of the average tax levies in the state gives a slightly more accurate basis for this comparison. The total average levy for all units in the state in 1924 was 28.01 mills. Of this 3.70 mills went to the state, leaving the counties, towns, school districts and other local units an average levy of 24.31. It is, then, approximately accurate to state that of the total tax burden on general property, over 85 percent goes to the local units while less than 15 percent is taken by the state.

The local levy on general property is nearly six times as great as the state levy on the same property. This is emphasized in order to point out the fact that the farmer's direct tax burden is caused in large part by local collections and expenditures which are only indirectly affected by the action of the state government. If the estimate that farm property pays over one-third of the general property tax, omitting that levied for town and city purposes, is used, an average tax contribution for the year 1926, of about \$54 per capita of the farming population, of \$73 per capita of the farm population above 10 years, is indicated. By using the same basis for the computation, a tax contribution of nearly \$235 per farm may be estimated.¹

These figures may be combined with those on page 55 and the following estimate of total farm contribution to the state and local government units arrived at: Tax contribution per farm, about \$255; per capita of farm population, \$59; per capita of farm population over ten years of age, \$79.

It should be pointed out that the state government has access to many sources of revenue which are not available to the local units, and if it were to take advantage of them the small contribution that is now made by the general property tax to the state government

¹ It should be noted that this estimate does not include gasoline, automobile license or other state tax apart from general property tax. The farm-population figures and the total number of farms are taken from the 1925 census figures.

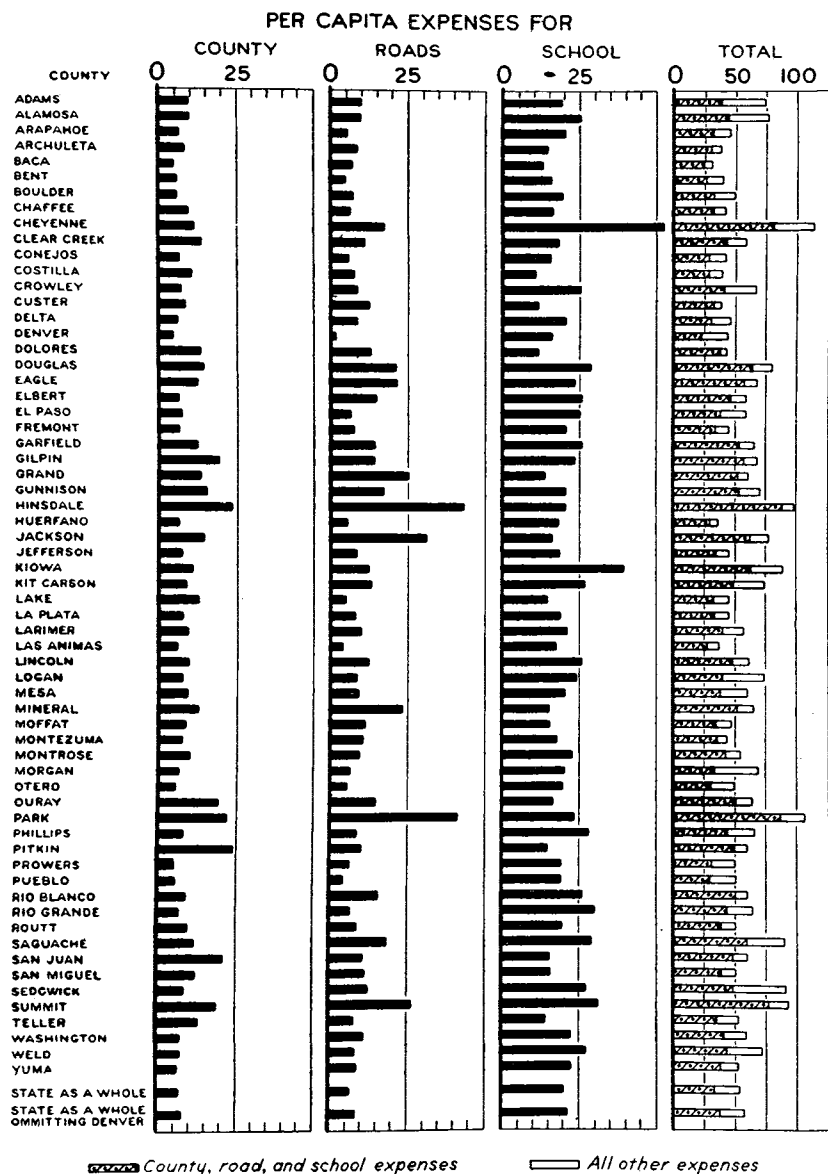
could be given up. Such possible changes, together with their relative advantages will be set forth later in this report. It is also necessary to remember that some of the local expenditures are made in accordance with the requirements of the state legislature and that no town or school district is wholly able to discontinue or, in some cases, even to decrease support of some of the activities that it is undertaking.

A most important factor to be considered in connection with local taxation is the use that is made of the money collected. It may be assumed that over a period of years all money collected in taxes or by other means will be spent. Few units will go on year after year piling up surpluses to their credit. A study of expenditure will then not only indicate what the tax money is being spent for but it will also give a fairly close idea of the amount that is being collected.

From the reports classifying disbursements of the various counties there have been computed for the years 1921 to 1925, inclusive, per capita figures for total disbursements, county expenses, road expenses and school expenses. These figures are contained in Table 14. The county-expense classification includes the general operating expenses of the county's governmental units. The other two classifications are self-explanatory. For the period covered, total per capita county disbursements averaged \$53.71 per year. Of this amount \$6.95 per capita were classed as county-government expenses, \$6.45 as expenditures for roads and \$20.22 as expenditure for schools. Expenditures by cities and irrigation districts and a small item classed as "miscellaneous" made up the total. It will be seen that school expenses took 38 percent, county government 13 percent, and roads 12 percent of the total. These three items together with that classed as "miscellaneous expense" would cover two-thirds of the total. Most of the rest was classed as city expense, with between 5 and 6 percent of the total being spent by the irrigation districts.

The presence of Denver County figures in those just quoted makes the road-expenditure item seem rather less important than it otherwise would. Omitting this county, the average per capita total becomes \$57.07; county expense, \$7.89; road expense, \$8.38; and school expense, \$21.72. This makes the percentage of the total that goes toward county government amount to 14; that spent for roads almost 15, and for schools to 38, and makes these three items amount, in all, to over two-thirds of the total.

It is natural that the per capita amounts vary among the counties altho large variations may reasonably call for some explanation. Total per capita disbursements varied from \$114 per year in Cheyenne County to \$31 in Baca. Figure 10 illustrates this variation and indi-



SOURCE: ESTIMATED POPULATION 1923 FROM UNITED STATES CENSUS ESTIMATES. TOTAL DISBURSEMENT FIGURES FROM THE BIENNIAL REPORT OF THE AUDITOR OF THE STATE OF COLORADO.

Figure 10.—Per Capita County and Local Disbursements by Counties, Colorado, Five-Year Average, 1921-1925. County expenses are those devoted to general governmental purposes in the counties. The school and road classifications are self explanatory. All other expenses include irrigation-district charges, city expense and a miscellaneous group which amounts to about three percent of the whole. All expense items are figured in dollars per person residing in the county in 1923.

TABLE 14.—Per Capita Disbursements by Counties of Colorado,
Five-Year Average, 1921-1925.

County	Per Capita Total Disbursements	Per Capita County Expenses	Per Capita Road Expenses	Per Capita School Expenses
	Dollars	Dollars	Dollars	Dollars
Adams	74.24	9.59	9.93	19.28
Alamosa	77.01	9.74	9.89	25.29
Arapahoe	46.04	6.39	5.29	20.56
Archuleta	38.65	7.99	8.38	14.49
Baca	31.19	4.75	6.96	13.03
Bent	39.01	5.75	4.45	15.93
Boulder	49.34	5.71	7.23	19.69
Chaffee	42.60	9.54	6.05	16.62
Cheyenne	114.25	11.48	17.54	52.66
Clear Creek	58.96	13.57	10.92	18.06
Conejos	42.47	6.60	5.70	15.73
Costilla	39.51	10.41	7.52	10.56
Crowley	67.08	7.00	8.65	25.33
Custer	38.88	8.25	12.51	11.75
Delta	40.79	5.96	8.44	20.74
Denver	44.84	4.45	1.35	16.26
Dolores	43.28	13.43	13.00	11.65
Douglas	80.45	14.34	21.08	28.88
Eagle	68.27	12.50	21.59	23.74
Elbert	59.01	6.14	14.64	25.68
El Paso	59.38	7.01	6.15	25.04
Fremont	45.79	6.26	7.22	20.82
Garfield	66.41	12.31	14.16	26.76
Gilpin	68.81	19.53	14.00	23.83
Grand	61.00	13.21	25.07	13.85
Gunnison	70.43	15.21	17.30	20.60
Hinsdale	98.78	23.83	43.57	20.66
Huerfano	36.75	6.12	5.08	18.21
Jackson	77.75	14.56	31.11	16.29
Jefferson	45.77	7.20	8.21	18.80
Kiowa	89.59	10.83	12.26	39.72
Kit Carson	74.69	8.80	13.10	26.61
Lake	45.85	12.78	4.81	14.58
La Plata	45.84	7.36	7.80	19.00
Larimer	57.37	9.27	9.99	21.25
Las Animas	37.70	5.86	3.94	17.63
Lincoln	61.98	9.46	12.41	25.74
Logan	74.62	7.47	8.25	24.45
Mesa	60.61	9.05	9.00	20.67
Mineral	65.60	12.54	23.60	15.23
Moffat	47.21	8.61	11.06	15.47
Montezuma	44.06	7.34	10.68	18.06
Montrose	54.90	10.04	9.63	23.20
Morgan	69.40	6.45	6.60	20.70
Otero	49.91	5.26	5.18	20.01
Ouray	64.53	19.38	14.63	16.77
Park	107.11	22.09	41.80	23.94
Phillips	66.75	7.94	8.52	28.10
Pitkin	60.60	24.10	10.05	14.94
Prowers	50.15	5.34	6.24	19.47
Pueblo	50.99	5.56	4.11	19.31
Rio Blanco	60.85	9.03	15.66	26.02
Rio Grande	64.91	6.94	6.66	30.19
Routt	50.57	9.76	8.77	19.82
Saguache	90.44	11.81	18.52	29.31
San Juan	60.43	21.30	10.96	15.75
San Miguel	50.50	12.12	11.55	15.96
Sedgwick	92.03	8.48	12.45	27.24
Summit	93.60	19.21	26.35	31.54
Teller	52.39	13.17	7.84	14.18
Washington	59.18	7.32	11.05	22.85
Weld	72.10	7.45	8.26	27.37
Yuma	52.18	6.43	8.87	22.75
State as a whole	53.71	6.95	6.45	20.22
State as a whole omitting Denver	57.07	7.80	8.38	21.72

Source: Estimated population 1923 from United States Census estimates.
Total Disbursement figures from the Biennial Report of the Auditor of the State
of Colorado.

icates the proportion that each of the three principal expense items other than city expenses forms of the total. It was thought that there might be a relationship between total per capita expenses and population but a study of the figures shows that the single factor of population has no great influence on total per capita expense.

The item designated as "per capita county expense" ranges from \$24.10 in Pitkin County to \$4.75 in Baca County and \$4.45 in Denver. In this expense item it is to be expected that the population influence will make itself felt. Not only is Denver County low but among the 24 counties in which the per capita expense was \$7.50 or less, only 5 had a population below 10,000 and none had a population below 6,700. At the other extreme there were 21 counties with a per capita expense of over \$10.50, no one of which had a population as high as 10,000 and only 5 of which had populations above 5,000.

Many of the items in the cost of county government must remain constant even tho the population increases materially. It is possible that by the consolidation of certain Colorado counties or by a consolidation of certain of their functions, rather marked economies might be achieved. This is a subject which calls for a more detailed investigation than can be given here.

The item of road expense per capita also shows the influence of population altho it is by no means as striking as in the case of county expenses. Of the 23 counties where the item for road expense is over \$11.50 per capita none has a population of more than 9,120 and only six have populations of more than 5,000. Of 23 counties with a road expense of less than \$8.50 per capita only one has less than 5,000 population and only seven, less than 10,000

This particular item of expense will be expected to show a closer relationship to the density of population than to the population itself; that is, when area and population are both taken into account there should be a more direct relation than when only one of these factors is considered. This would be particularly true in a state where there was a general uniformity in the physical features of the counties. It can be expected to follow only partially in one where certain of the counties are located in the plains and others in the high mountains. Counties in the latter location will naturally have to pay far more per mile for roads than will those of the former. In spite of this qualification it is found that each of the 15 counties with a density of population of three or less to the square mile had a per capita road expense of over \$10 and that the four counties with a density of population of less than one per square mile had road-expense figures of \$44, \$31, \$24 and \$42, respectively. The effect of the density of population at the other end of the scale is not so clear

altho of the 18 counties with a population of over 10 per square mile only one, Gilpin, had a road expense of over \$10 per capita. These figures should be compared with the average per capita figure for the state, omitting Denver County, for road expenses of \$8.38.

The conclusions that may be drawn from a consideration of road expense are somewhat similar to those derived from the consideration of county expenses, altho the remedy will be a different one. The counties with small population and large area, particularly in those sections of the state where road building is expensive, are compelled to pay a large amount per capita for their roads. Some additional equalization from state funds should make these differences less oppressive. A detailed attempt, however, to equalize the highway expenditures of the state should not be attempted until more data, concerning the use and benefits of highways as well as abilities of people in different sections of the state to pay for them, are available. In connection with the use and benefit of highways, attention should be called to the extensive surveys recently made in certain states by their highway commissions in cooperation with the Bureau of Public Roads of the United States Department of Agriculture.

The financing of schools is to be considered in a separate report of this series and only brief attention will be given to the subject here. The per capita expense of schools varies from \$10.56 in Costilla County to \$39.72 in Kiowa and \$52.66 in Cheyenne. Here the influence of total population seems to be of little importance. Density of population, however, has some influence in determining per capita expense, but there are many other influences which are of more importance.

It is worth while to call attention briefly to some of the inequalities among different sections of the state in their ability to support schools, altho the subject can only be suggested in this report. It will be treated at some length in a later one. Table 15 lists the total assessed valuation of the counties of the state together with their assessed valuation per school child as shown by the school census, and per pupil enrolled in school. On the census basis there is a range of assessed value per school child of from \$2,356 in Conejos County to \$18,030 in Park County. Considering this factor alone, Conejos County would have to apply a tax rate nearly eight times as great as that applied in Park County in order to supply the same amount to be expended for each school child. It must be admitted that assessed value and true value may be very different. It is believed, however, that in spite of certain differences among the counties that are introduced by this factor, a comparison such as is presented is not too inaccurate to be significant. Certainly Park County

assessments are not eight times as high when compared with true value as those of Conejos County.

TABLE 15.—Comparison, by Counties, of Assessed Valuations and Number of School Children, 1925-1926.

County	Total Assessed valuation	Number of school children (School census)	Assessed valuation per school child	Total number enrolled in schools	Assessed valuation per pupil enrolled
Adams	\$ 31,771,520	4,865	\$ 6,531	4,158	\$ 7,641
Alamosa	9,346,936	2,301	4,062	2,152	4,343
Arapahoe	21,175,010	5,189	4,081	4,346	4,872
Archuleta	4,550,250	1,104	4,122	676	6,731
Baca	10,004,707	2,393	4,181	2,062	4,852
Bent	13,588,251	2,414	5,629	2,165	6,276
Boulder	47,273,532	9,545	4,953	7,552	6,260
Chaffee	10,489,660	2,051	5,114	1,578	6,647
Cheyenne	16,937,730	1,290	13,130	1,085	15,611
Clear Creek	5,424,380	596	9,101	508	10,678
Conejos	8,482,960	3,600	2,356	2,916	2,909
Costilla	5,244,260	1,774	2,956	1,319	3,976
Crowley	9,708,990	2,048	4,785	1,843	5,317
Custer	3,114,268	533	5,843	401	7,766
Delta	15,555,771	5,176	3,005	4,051	3,840
Denver	416,604,690	77,328	5,388	62,178	6,700
Dolores	1,630,444	370	4,407	249	6,548
Douglas	10,738,479	966	11,116	941	11,412
Eagle	6,522,163	854	7,637	803	8,122
Elbert	17,998,235	2,232	8,064	1,933	9,311
El Paso	70,999,530	12,315	5,765	10,471	6,781
Fremont	21,496,797	6,223	3,454	5,334	4,030
Garfield	16,760,930	2,784	6,020	2,537	6,607
Gilpin	2,636,555	267	9,875	283	9,316
Grand	4,683,230	656	7,139	573	8,173
Gunnison	15,633,235	1,614	9,686	1,334	11,719
Hinsdale	940,990	155	6,071	117	8,043
Huerfano	15,960,350	6,667	2,394	4,786	3,335
Jackson	3,677,870	301	12,219	256	14,267
Jefferson	25,711,450	5,313	4,839	4,519	5,690
Kiowa	14,353,803	1,390	10,326	1,132	12,680
Kit Carson	26,076,536	3,242	8,043	2,838	9,188
Lake	7,706,810	1,761	4,376	1,107	6,962
La Plata	15,264,755	3,958	3,857	3,109	4,910
Larimer	55,278,060	9,348	5,913	8,393	6,586
Las Animas	42,308,393	13,475	3,140	10,378	4,077
Lincoln	22,623,650	2,843	7,958	2,593	8,725
Logan	36,891,095	6,359	5,801	5,206	7,086
Mesa	29,712,195	7,944	3,740	6,846	4,340
Mineral	1,486,650	157	9,469	124	11,989
Moffat	6,572,136	1,448	4,539	1,159	5,671
Montezuma	6,296,535	2,263	2,782	2,019	3,119
Montrose	12,464,845	3,883	3,210	3,633	3,431
Morgan	28,299,506	5,830	4,854	5,415	5,226
Otero	34,495,560	6,788	5,082	6,526	5,286
Ouray	4,020,672	491	8,189	461	8,722
Park	8,510,030	472	18,030	341	24,956
Phillips	14,914,375	1,863	8,006	1,675	8,904
Pitkin	4,448,460	647	6,876	515	8,638
Prowers	21,770,175	3,951	5,510	3,770	5,775
Pueblo	74,263,765	20,691	3,589	15,249	4,870
Rio Blanco	5,291,040	918	5,764	706	7,494
Rio Grande	10,483,371	2,819	3,719	2,327	4,505
Routt	14,605,135	2,775	5,263	2,362	6,183
Saguache	11,151,184	1,942	5,742	1,425	7,825
San Juan	3,613,684	315	11,472	216	16,730
San Miguel	6,742,990	1,046	6,446	981	6,874
Sedgwick	9,985,115	1,818	5,492	1,627	6,137
Summit	4,501,909	358	12,575	299	15,075
Teller	7,004,030	1,360	5,150	1,068	6,558
Washington	23,503,472	3,660	6,422	3,241	7,252
Weld	106,102,390	18,432	5,756	16,190	6,554
Yuma	25,236,990	4,612	5,472	4,030	6,262
State	1,540,732,487	301,783	5,105	250,087	6,161

Another qualification needs to be attached to this comparison. The density of school population in Park County is much less than that in Conejos County, with the result that the costs per pupil in the latter county are below those in Park County. This difference is far from correcting the difference in ability between the counties, and the fact that there is greater expenditure in Park County arises partly from the fact that this county is able to spend more, not that it has to spend more.

It should be noted that while Park and Conejos counties are extremes, there are a number of others that illustrate very large differences in valuation per school child. Twelve counties have an assessed valuation per child of less than \$4,000 and fourteen have one of over \$8,000. While the average for the state is \$5,105, only 27 counties out of the 63 in the state are within \$1,000 of this average, i. e., between \$4,105 and \$6,105.

Figures computed for the assessed valuation per child enrolled in school show the same pronounced differences among the counties. So far as present expenses are concerned, this is perhaps a more important figure than the one based on the school census. The number of children enrolled in the schools of a county is a chief factor in determining its expenses of education. Hence, the total value of property in the county divided by the number enrolled in its schools will give a fair indication of the difficulties that a county may have in meeting its educational costs.

Park and Conejos counties again provide the extremes, the former having \$24,956 of assessed value on which to levy taxes for each pupil enrolled, and the latter an assessed valuation of only \$2,909. The average for the state as a whole is \$6,161, but there is so much deviation from this average that only 23 counties are found within \$1,000 of it, i. e., only 23 counties have an assessed valuation per pupil enrolled in their schools of from \$5,161 to \$7,161. Ten counties, Cheyenne, Clear Creek, Douglas, Gunnison, Jackson, Kiowa, Mineral, Park, San Juan and Summit have more than \$10,000 of assessed value for each pupil enrolled in their schools. It should be noted that a small number of pupils rather than a large assessed value is responsible for most of these high figures. Six counties have less than \$4,000—Conejos, Costilla, Delta, Huerfano, Montezuma and Montrose. While the enrollment in these counties averages higher than in the ten counties with a valuation of above \$10,000 per pupil, in only Delta, Huerfano and Montrose is the enrollment as high as the average for the counties of the state, omitting Denver, so that it is safe to assume that the low average valuation cannot be entirely due to a high enrollment.

A similar lack of equality exists within many of the counties. Assessed-valuation figures for each school district have been compiled in Lincoln County and a range of from \$3,322 to \$40,919 per census school child was found to exist. Computed on the basis of the number of pupils enrolled, the range was from \$4,319 to \$52,298. While the general county school fund tends in some measure to counteract such inequalities, it can be realized that equal educational opportunity cannot be given to the children of these districts without placing exceedingly heavy burdens on the taxpayers of those districts where the assessed valuation per pupil is small. In this particular county the school levy on general property in 1927 varied among the districts from 4.49 to 23.27. It should be understood that a certain amount of this difference may come from inequalities in assessment. If it does, this is itself an indication of the need for readjustment. Even assuming something of the sort, there is left a great enough variation to call for serious thought.

When the expenditure for education is considered on the basis of per capita of county population, a wide range of costs is again revealed. For the years 1921 to 1925, Cheyenne County with a per capita expenditure of \$52.66 ranked highest and Costilla County with \$10.56 was lowest. It is naturally expected that where the population of a county is small the per capita contribution to education will be high. The fact that this is to be expected does not make such contribution easy for the taxpayer, particularly in those counties where the per capita wealth and income are small. Per capita expenditure in Cheyenne County was greatly in excess of the next highest county, Kiowa, which had a per capita annual expenditure of \$39.72 for education over the five-year period. Two other counties, Rio Grande and Summit, spent over \$30.00. At the other extreme there were eight counties in addition to Costilla which spent less than \$15.00 per capita. Twenty-one counties fall in the \$15.00 to \$20.00 group, 16 in the \$20.00 to \$25.00 group, and 13 in the \$25.00 to \$30.00 group. The average per capita expenditure for the state as a whole over the five-year period was \$20.22.¹

There are contained in Tables I and J certain measures of economic ability which may be compared with total per capita county expenditures. Several of these measures are merely indications of such ability rather than definite statistical data. They are, however, of the most recent and definite type available and are presented with the idea that they will be of use in comparing the rela-

¹ The figures that have been quoted in this paragraph were computed from the biennial reports of the auditor of the state of Colorado. They differ slightly from the figures reported by the state superintendent of public instruction because of a different fiscal year and because of differences in methods of computation.

tive burdens placed on the inhabitants of the various counties of the state.¹

Brief attention should be paid to certain of the data which appear in Table J. Per capita taxable wealth has been based on assessed property. It will be recognized at once that such a figure is subject to a wide margin of error. While equalization among the various counties in Colorado is perhaps as exact as in the majority of the states of the union, no one would claim that it is in any sense accurate. The per capita disbursement figure is also subject to slight qualification altho the fact that it covers a five-year period probably irons out inaccuracies which would appear if a single year had been used. It will be noticed first, that counties with a high per capita taxable wealth are in general those counties where the the per capita disbursements are high. The variation, however, between per capita taxable wealth in the wealthy and the richer and the poorer counties and per capita disbursements in these counties is by no means close. A county with 25 percent of the per capita taxable wealth of the richest counties pays out approximately 50 percent as much in per capita disbursements. Such a study might profitably be carried on in individual counties and figures presented showing that counties of almost the same per capita taxable wealth have rather large variations in their per capita disbursements, but such an analysis would require more space than is available and may profitably be made by the reader for those counties in which he is interested.

The final point to be reiterated in connection with county wealth and expenditures and which should be made with particular emphasis in the discussion of school expenditures, is that there is a large amount of inequality among counties in wealth and that expenditures are by no means equivalent to the differences in wealth. It would seem that certain of the expenditures which are now on a local or county basis should be changed to an inter-county, or possibly state-wide basis, thereby bringing a greater measure of equality among the different sections of the state.

There is the problem here that always arises when it is proposed to aid certain sections of the state at the expense of the rest. It will be argued that, if certain parts of the state have economic advantages that enable their inhabitants to secure better incomes than can be secured in other parts of the state, any attempt to counteract such advantages will have an undesirable effect on the development of the state. It must be admitted at the outset that, if it were proposed to grant any special aid to the maintenance of agriculture or to any other industry in a way that would promote the expansion of agriculture or industry in areas poorly adapted to such expansion, this

¹ See pages 86 and 87.

argument would have great weight. The suggestions that are to be made have no such intentions.

It is urged that certain waste which comes from duplications caused by the attempt to maintain units of county government in sections, where the population does not justify such government expense, be eliminated. While further study will be necessary before it can be definitely indicated where these readjustments must take place, there can be no objection to them from the point of view of encouragement of uneconomical production. Eliminations of waste governmental effort are always desirable, the only controversial points being a definition of what is waste and agreement on a method for its elimination.

The changes in methods of financing schools and roads that have been suggested may seem more open to objection. So far as roads are concerned, however, the proposal is simply that the extent to which roads are serving different groups be ascertained and where it is found that the roads are only partly local that a greater amount of state or federal support be given them. This is not subsidizing a locality or even levying taxes on the basis of ability to pay. It is simply an effort to make the larger units which benefit from the use of the roads pay for their support.

If the school question be considered on the benefit basis, several divergent lines of argument may be followed. It will be held that the local district or county benefits from good schools, as it certainly does, and that no wider unit is in any way interested. On the other hand, there are those who will argue that if a section of the state is not able to supply good schools there are many reasons from the point of view of social welfare why the whole state should be responsible for assisting that section. From another angle, it will be argued that the country is educating its children and sending many of them to the cities. Is it fair to place the whole burden, or a large part of it, on the less wealthy rural section and then give much of the results to the cities? Many people believe that the children of all the state should be given educational opportunities that are as nearly equal as possible. There certainly is no way that such equality can be given in Colorado except by the readjustment of school units and by the supplying of part of their support on a state-wide basis.

IV. RECOMMENDATIONS FOR CHANGES AND ADDITIONAL RESEARCH

The study that has been summarized in the preceding pages of this report has only covered a few aspects of the Colorado tax system. For this reason most of the recommendations to be made must be tentative in form. So far as some important features of the sys-

tem are concerned, no definite recommendations can be made without a far more exhaustive examination of the results of the present system. Where this is true, the preliminary suggestions will have as their objects the indications of new lines of attack on the problem rather than a definite method by which it can be solved. The changes that may be made should have the following general objectives:

1. The broadening of the tax system so as to take advantage of sources of ability to pay taxes, which now make little or no contribution to the cost of government.

2. Altering the general property tax so as to make it fairer to all concerned.

3. Changing the method of support of various governmental activities.

4. Making possible additional economies in various governmental functions.

(1) NEW SOURCES OF TAX REVENUE.—In distributing its tax burden, Colorado uses a relatively small number of indications of ability to pay taxes. The possession and use of tangible property, including automobiles, forms a basis for collecting almost all of the tax revenue for state and local uses. Taxes on an insignificant amount of intangible property, levies on inheritance and business and other so-called license taxes, account for all that is collected from other sources. Thus, much Colorado wealth makes no direct contribution to the support of state and local government.

Two outstanding methods of broadening the tax system suggest themselves. Intangible property might be made to pay some part of the cost of government. Income might be used as a basis for a part of the tax system. Each of these will be considered in turn.

In a number of states it has been found possible to collect a considerable amount of revenue from intangible property by taxing it at a lower rate than tangible property. When only a small portion of the income of such property is taken by taxes, it has been found that some of the owners are willing to report it to the assessors and a fair amount of it contributes to the revenue system. A tax of 50 cents on a hundred dollars of market value would take on the average only about 10 percent of the income of intangibles. The tax payer who owns such property should appreciate the fairness of this tax as compared with the present tax which, if it were applied according to the letter of the law, would take from 30 to 60 percent of such income. Even under such a change it will be difficult to secure a satisfactory adjustment of this problem without many changes in

administration, but the state should consider making a start by classifying intangible property and taxing it at a low rate.

An income tax is no longer an experiment. The federal government collects a vast amount of revenue by such means. Twelve states tax individuals on the basis of income. Such a tax, properly administered, will bring a fair amount of revenue into the public treasury and will secure some of this revenue from many who at present make slight or no direct contributions to the support of government. Too much, however, should not be expected from an income tax in Colorado. At rates which would be politically practicable, it is doubtful whether in the early years of the tax more than \$2,000,000 or \$2,500,000 could be raised. While such an amount is by no means to be despised, it needs to be recalled that if it all should be applied to the reduction of the state levy on general property it would reduce that by less than 50 percent. In 1924 the state levy on general property averaged only about 13 percent of the total levy. In other words, the income tax might make possible a reduction of from 5 to 6 percent of the levy on general property. This assumes that it would all be applied to this purpose.

In spite of the fact that a state income tax cannot be made to yield a large enough sum to reduce materially the burden on general property, it is felt that its introduction would be decidedly worth while. Income is generally acknowledged to be the fairest basis for taxation. Many incomes represent tax-paying ability that is not at present directly touched by existing taxes. The addition of an income tax will broaden the tax base of the state and will be of some assistance to those groups in the state which are now most heavily burdened.

ALTERATIONS IN THE GENERAL PROPERTY TAX. — The first method of broadening the tax base, namely, the classification of property for tax purposes and the use of a lower rate on intangibles, involves a change in the general property tax. It has been discussed above and needs no further mention here.

Other changes in the general property tax involve either changes in principle or in administration. Desirable changes of the latter sort have to do mainly with the methods of applying the present assessment system and have been discussed in detail earlier in this report.

It has been urged by some that the whole basis of assessment as practiced at present is wrong and that the principles of the system need changing. The use of a so-called sales-value figure as the measure of the tax-paying liability of a piece of property has been widely

criticised. While it is felt that much of this criticism is correct, it is believed that the direction which change ought to take has not been charted definitely enough to make a recommendation on the subject possible. More research toward the discovery of equitable assessment principles seems badly needed. It is believed that there may be a possibility of working out a system which will make some closer reflection of the income-yielding ability of property than sales value the measure of taxpaying liability. Such a system has not yet been accurately outlined or tested. Until it has been and until some assurance has been given that it will work, no definite recommendations for change in this direction can be made.

(3) CHANGING UNITS OF SUPPORT.—It has been suggested at various stages of this report that certain activities of government could be carried on more economically and more equitably if the governmental units maintaining them were to be altered. Roads and schools form excellent illustrations of the possibilities in this direction. A wider use of state funds and supervision in the construction and maintenance of roads is certainly justified by the use to which roads are put. Such a change should make possible economies in planning and in actual work. The responsibility of the state toward the education of its children will be denied by few. The fact that without state assistance there can be no such thing as equality of educational opportunity is not open to doubt. The extent of the inequalities that exist and the methods of removing them need more study than they have thus far been given, altho the details rather than the principles involved need clarification.

(4) ECONOMIES IN GOVERNMENTAL FUNCTIONS.—This subject is suggested here mainly as a field for further study. No one doubts that there is opportunity for a reduction in many of the costs of government without curtailing the services that the government supplies to its people. Duplications caused by county governments which were planned in the day of the horse and wagon rather than the motor car and inefficiency arising from the maintenance of an excessive number of small school units are typical of many that might be cited. Analysis of fiscal conditions in typical taxing districts of all sorts and sizes in many sections of the state need to be made, and on the basis of such studies general plans for more efficiently supplying the services that the government must furnish the people may be suggested.

Progress in this direction need not wait, however, for adoption of general plans. A study of counties or even of school districts will reveal opportunities for better buying, for consolidation of functions, or for the lopping off of unnecessary extravagances. Such studies would be designed (1) to ascertain if waste, particularly preventable

waste, exists in the unit examined, and (2) to indicate methods by which such waste can be reduced. They would examine the expenditures to see, not only how much was being spent, but also what was being received by the taxpayers in return for their expenditures. Unit costs for various services could be compared with costs in similarly situated communities.

The planning of receipts and expenditures on the basis of approved budgetary methods should certainly form part of the study in any section where such methods are not in use. Such planning, by itself, will often open the way to saving.

It should, however, be emphasized that analyses of the sort mentioned need to be directed by individuals trained in such work. It is only by such expert direction that results of value can be expected. It is also urged that the cooperation of the governmental officials of units concerned be secured and be used. Thru their help much misdirected energy can be eliminated. Their natural suspicion will be largely avoided, if they understand the purposes and methods of the studies.

Efficient economy in public expenditures can only come when the work of the governmental units has been so analyzed that it is possible to determine whether money is being effectively used for the greatest public good. Such analysis, however, is but one step toward the desired result. Public opinion must be so educated that it will demand that the results of studies be applied to the every-day work of the governmental units.

The process here is really a twofold one. Research can bring certain possibilities to the attention of the general public. Then the people, convinced that the economies are practicable, can urge public officials to adopt them. Thus research in public expenditure has not only the responsibility of discovering the facts, but must also place these facts before the people in such a way that they can effectively demand that the standards of collective consumption be raised and that new economies be used in public business.

TABLE A.—General Property Taxes and Net Rent of Farms in Five Agricultural Districts of Colorado, 1919, 1923, 1925 and 1926.

District	Year	Number of Farms	Acres	Net Rent Per Acre (before de- ducting taxes)	Taxes Per Acre	Relation of Taxes to Net Rent
		Number	Number	Dollars	Dollars	Percent
Northern Colorado	1919	76	19,891	3.71	1.18	31.8
	1923	116	29,796	2.93	1.16	39.6
	1925	161	41,934	2.72	1.00	36.6
	1926	91	25,637	3.50	.89	25.6
Plains	1919	124	50,669	1.40	.28	20.4
	1923	171	62,662	.96	.36	36.9
	1925	229	92,299	.91	.32	35.6
	1926	113	50,293	.63	.34	53.9
Western Slope	1919	17	1,697	6.10	1.11	18.2
	1923	31	3,811	4.09	1.54	37.5
	1925	43	5,531	8.27	1.51	18.2
	1926	27	2,327	6.17	1.98	32.0
Arkansas Valley	1919	28	5,438	9.11	1.50	17.4
	1923	37	9,873	3.48	1.28	36.8
	1925	51	12,225	3.62	1.28	35.2
	1926	26	5,482	3.89	1.17	30.0
Southeastern Colorado	1919	9	4,530	2.13	.22	10.4
	1923	22	10,921	1.13	.20	17.2
	1925	32	16,486	.79	.19	24.3
	1926	15	5,884	.31	.17	54.5

TABLE B.—Taxes and Profits of Privately Owned Electric, Gas, Water and Telephone Utilities, Colorado, 1922 and 1923.

Type of utility	Year	Number report- ing	Total revenues	Net profit from operation be- fore deduct- ing taxes	Taxes accrued	Percentage of net profit tak- en by taxes
			Dollars	Dollars	Dollars	Percent
Electric	1922	55	6,422,253.14	2,592,950.04	637,600.83	24.6
	1923	54	9,489,860.75	4,452,432.06	761,929.19	17.1
Gas	1922	8	857,263.96	175,714.25	53,556.72	30.5
	1923	9	2,523,568.74	421,475.08	228,473.52	54.2
Water	1922	21	200,938.58	83,795.64	29,938.21	35.7
	1923	22	199,561.40	73,786.95	28,093.95	38.1
Telephone	1922	56	6,128,922.12	1,633,220.39	641,001.59	39.2
	1923	61	6,341,020.50	1,749,960.36	666,552.71	38.1
All reporting	1922	140	13,609,397.80	4,485,680.32	1,362,097.35	30.4
	1923	146	18,554,011.39	6,697,654.45	1,685,049.37	25.2

Source: Tenth and Eleventh Annual Reports of the Public Utilities Commission of the State of Colorado.

TABLE C.—Taxes and Incomes of National Banks, Colorado, 1919-1926.

Year ending June 30	Number of banks	Total Gross earnings	Taxes	Total other expenses	Net earnings (before deducting taxes) ¹	Ratio of taxes to net earnings (before deducting taxes) ¹	Net additions to profits (before deducting taxes)	Ratio of taxes to net additions to profits (before deducting taxes)
		Dollars ²	Dollars ²	Dollars ²	Dollars ²	Percent	Dollars ²	Percent
1926								
Colorado	119	5,959	484	4,032	1,927	25.1	666	72.7
Denver	6	7,283	381	4,980	2,303	16.5	1,203	31.7
Pueblo	2	861	94	526	335	28.1	221	42.5
1925								
Colorado	126	6,021	534	4,204	1,817	29.4	819	65.2
Denver	9	7,223	398	5,153	2,070	19.2	1,267	31.4
Pueblo	2	784	97	462	322	30.1	322	30.1
1924								
Colorado	130	6,103	586	4,299	1,804	32.5	692	84.7
Denver	9	7,992	296	4,977	3,015	9.8	1,869	15.8
Pueblo	2	737	92	391	346	26.6	175	52.6
1923								
Colorado	132	6,229	621	4,297	1,932	32.1	797	77.9
Denver	9	5,796	362	4,328	1,468	24.7	1,195	30.3
Pueblo	2	772	89	360	412	21.6	347	25.6
1922								
Colorado	133	6,562	661	4,436	2,126	31.1	965	68.5
Denver	8	5,508	292	3,816	1,692	17.3	931	31.4
Pueblo	2	755	80	353	403	19.9	110	72.7
1921								
Colorado	133	7,297	756	4,782	2,515	30.1	1,597	47.3
Denver	8	5,981	361	4,327	1,654	21.8	825	43.8
Pueblo	2	1,022	77	372	650	11.8	404	19.1
1920								
Colorado	131	6,936	699	4,042	2,894	24.2	2,518	27.8
Denver	8	5,428	271	3,673	1,755	15.4	1,427	19.0
Pueblo	2	787	78	330	457	17.1	408	19.1
1919								
Colorado	120	5,963	530	3,338	2,625	20.2	2,394	22.1
Denver	5	4,441	314	2,909	1,532	20.5	1,454	21.6
Pueblo	2	850	64	315	535	12.0	495	12.0

Source.—Annual report of the Comptroller of Currency. ¹ Not including losses charged off or recoveries on charged off assets. ² 000 omitted.

TABLE D.—Number of Corporations Reporting Net Income and No Net Income, Colorado, 1919-1925.

Year	Total number of corporations	Active corporations reporting net income		Inactive corporations reporting no net income	
		Reporting net income	reporting no net income	reporting no net income	
		Number	Percentage of total	Number	Percentage of total
1919	6,704	3,107	46.35	3,597	53.65
1920	6,812	2,976	43.69	3,836	56.31
1921	6,559	2,340	35.68	3,043	46.39
1922	6,855	2,720	39.68	2,784	40.61
1923	6,344	2,636	41.55	2,936	46.28
1924	6,494	2,891	44.52	3,043	46.86
1925	6,399	2,983	46.62	3,242	50.66

Data from Statistics of Income, 1919-1925, United States Bureau of Internal Revenue.

¹ Inactive corporations are not reported separately for 1919 and 1920. They are included in the total number of active corporations reporting no income. In 1925 only inactive corporations, the businesses of which are not given, are included in the inactive column. Other inactive corporations are included with the active corporations reporting no incomes.

TABLE E.—Number of Active Corporations Reporting Net Income and No. Net Income, by Industrial Groups, Colorado, 1923-1925.

Industrial Groups	1923				1924				1925			
	Total Number	Number reporting		Percentage reporting net income	Total Number	Number reporting		Percentage reporting net income	Total Number	Number reporting		Percentage reporting net income ¹
		Net income	No net income			Net income	No net income			Net income	No net income	
Agriculture and related industries	284	83	201	29.23	289	101	188	34.95	284	118	166	41.55
Mining and Quarrying	1,003	168	835	16.75	1,152	173	979	15.02	1,176	203	973	17.26
Manufacturing	620	333	287	53.71	663	383	280	57.77	687	368	319	53.57
Construction	89	48	41	53.93	87	55	32	63.22	91	55	36	60.44
Transportation and other public utilities	227	111	116	48.90	226	120	106	53.10	251	128	123	51.00
Trade	1,410	857	553	60.78	1,505	945	560	62.79	1,501	990	511	65.96
Professional, amusements, hotels, etc.	407	244	163	59.95	423	253	170	59.81	433	243	190	56.12
Banking insurance and related business	1,459	759	700	52.02	1,537	839	698	54.59	1,663	849	814	51.05
Combinations not classifiable	73	33	40	45.21	52	22	30	42.31	139	29	110	20.86
Total active corporations	5,572	2,636	2,936	47.31	5,934	2,891	3,043	48.72	6,225	2,983	3,242	47.92

¹ A small number of the corporations reported in these columns are inactive. Their inclusion makes only a slight difference in the percentage figures.

TABLE F.—Assessed Valuation of Different Classes of Property in Colorado, 1912, 1913, 1918-1925.¹

Class of Property	1912	1913	1918	1919	1920	1921	1922	1923	1924	1925
Lands and Improvements	\$ 89,859,390	\$ 322,857,915	\$ 406,347,182	\$ 466,583,588	\$ 526,272,869	\$ 549,976,126	\$ 532,266,343	\$ 520,933,429	\$ 511,776,827	\$ 496,376,523
Metalliferous Mining Properties	18,012,830	46,042,067	33,594,911	29,685,516	27,219,015	21,743,817	24,276,640	23,892,866	23,131,714	23,081,307
Livestock	18,003,589	63,562,749	114,622,555	114,571,936	102,792,539	68,921,431	62,821,752	55,768,000	48,865,168	47,022,156
Timber, Coal and Oil Properties	8,361,310	20,521,089	26,428,917	24,814,574	24,359,580	25,437,444	21,954,776	24,403,825	26,197,239	28,676,909
Town and City Lots and Improvements	168,962,868	465,142,407	381,243,444	385,779,834	407,973,980	418,796,295	429,160,986	446,300,599	460,128,381	478,594,338
Corporations Assessed by Tax Commission ..	61,013,179	260,241,995	245,656,740	231,777,130	227,454,190	226,418,960	226,126,970	227,966,480	227,770,150	227,387,440
Merchandise	16,691,083	48,103,599	79,846,131	92,371,171	92,129,113	87,361,814	79,842,423	79,833,310	80,241,963	81,055,785
Capital Employed in Manufactures	3,507,675	13,575,571	29,341,520	31,936,595	39,428,674	41,037,125	38,705,447	37,350,254	39,702,880	38,336,462
Bank Stock	7,793,696	28,924,765	24,141,920	25,719,639	28,916,377	31,001,533	29,850,523	29,783,653	25,821,158	24,951,673
Money, Credits and Accounts	4,080,359	11,193,326	61,172,322	66,181,308	68,017,400	19,588,307	18,705,414	18,303,246	19,872,634	17,791,837
Miscellaneous (less exemptions)	26,156,100	26,481,947	19,717,633	25,792,368	45,703,930	84,973,647	84,906,605	78,676,230	74,588,606	77,458,057
Totals	\$422,442,079	\$1,306,647,430	\$1,422,113,275	\$1,495,213,659	\$1,590,267,667	\$1,578,256,499	\$1,548,617,879	\$1,543,211,892	\$1,538,096,720	\$1,540,732,487

Annual reports of the Colorado Tax Commission.¹

**TABLE G.—Percentage of Revenue Receipts from Various Sources,
State Government, 1926, 1922, 1918 and 1914.**

Source	1926	1922	1918	1914
	Percentage	Percentage	Percentage	Percentage
General Property Tax	37.0	47.4	55.7	43.9
Corporation Stock Tax	1.2	1.3	2.9	1.1
Poll Tax .....	...	0.2	1.7	2.4
Inheritance Tax	5.7	3.7	4.3	8.9
Corporation Filing Tax	0.6	0.8	0.7	...
Business Taxes	4.7	3.7	4.8	6.4
Gasoline Tax	13.7	2.5	...	...
Fish and Game Licenses	1.5	1.2	1.2	3.3
Motor Vehicle Licenses	5.4	3.8	2.6	...
Permits	*	0.1	0.1	1.3
Total Tax Revenues	69.8	64.7	74.0	67.3
Assessments for High- way Unkeep .....	...	...	...	...
Assessments for High- way Outlay	0.4	4.0	...	...
Fines and Escheats	*	0.2	0.1	0.5
Subventions, Grants and Gifts	10.1	11.6	2.2	3.1
Rents and Interest	6.8	7.1	10.9	13.8
Earnings of General Departments...	12.9	12.4	12.8	15.3
Total Revenue Receipts	100.0	100.0	100.0	100.0

Computed from Financial Statistics of States, U. S. Bureau of Census.

*Less than 0.05 percent.

**TABLE H.—Percentage of Governmental Cost Payments of the State Government
Devoted to Various Purposes, 1926, 1922, 1918 and 1914.**

Purpose	1926	1922	1918	1914
	Percentage	Percentage	Percentage	Percentage
All governmental costs	100.0	100.0	100.0	100.0
Expenses - Total	64.5	52.2	89.6	91.0
General Government	5.0	4.6	7.2	12.2
Protection of persons and property	4.6	5.0	7.5	20.9
Development and conservation, etc.	6.0	4.7	6.2	5.0
Conservation of health, etc.	0.8	0.8	0.8	1.0
Highways	10.6	6.5	17.5	7.7
Charities, hospitals and corrections	12.8	9.8	15.5	13.6
Education	23.1	19.5	26.5	28.7
Recreation	0.1	0.1	0.5	0.1
Miscellaneous	1.5	1.2	7.9	1.8
Interest	3.0	1.8	2.8	2.2
Outlays - Total	31.9	46.0	7.6	6.8
General Government .....	...	3.3	0.6	...
Protection of persons and property	0.1	3.4	...	0.3
Development and conservation, etc.	1.0	0.2	...	0.1
Conservation of health, etc. ....	...	...	...	...
Highways	24.7	34.1	...	...
Charities, Hospitals and corrections	1.4	1.7	2.7	1.3
Education	4.5	3.3	4.3	1.4
Recreation .....	*	...	...	3.5
Miscellaneous	0.2	*	...	0.2

Computed from Financial Statistics of States, U. S. Bureau of Census.

*Less than 0.05 percent.

TABLE I.—Density of Population, 1924.

County	Estimated Population 1924	Area in Square Miles	Density of Population Per Square Mile
Adams	16,930	1,262	13.4
Alamosa	5,376	727	7.4
Arapahoe	15,353	842	18.2
Archuleta	3,720	1,220	3.0
Baca	11,534	2,552	4.5
Bent	11,818	1,524	7.8
Boulder	32,555	764	42.6
Chaffee	7,811	1,083	7.2
Cheyenne	3,773	1,777	2.1
Clear Creek	2,891	390	7.4
Conejos	8,788	1,252	7.0
Costilla	5,253	1,185	4.4
Crowley	7,262	808	9.0
Custer	2,274	747	3.0
Delta	13,668	1,201	11.4
Denver	276,027	58	4759.1
Dolores	1,516	1,043	1.5
Douglas	3,663	845	4.3
Eagle	3,567	1,620	2.2
Elbert	7,728	1,857	4.2
El Paso	44,346	2,121	20.9
Fremont	17,883	1,557	11.5
Garfield	9,304	3,107	3.0
Gilpin	1,364	132	10.3
Grand	3,021	1,866	1.6
Gunnison	5,590	3,179	1.8
Hinsdale	538	971	.6
Huerfano	18,491	1,500	12.3
Jackson	1,488	1,632	.9
Jefferson	14,476	808	17.9
Kiowa	4,143	1,798	2.3
Kit Carson	9,563	2,159	4.4
Lake	6,630	371	17.9
La Plata	11,402	1,851	6.2
Larimer	29,052	2,629	11.1
Las Animas	41,392	4,809	8.6
Lincoln	9,339	2,570	3.6
Logan	22,449	1,822	12.3
Mesa	22,318	3,163	7.1
Mineral	779	866	.9
Moffat	6,206	4,658	1.3
Montezuma	6,817	2,051	3.3
Montrose	12,558	2,264	5.5
Morgan	19,090	1,286	14.8
Otero	25,735	1,259	20.4
Ouray	2,620	519	5.0
Park	1,977	2,242	.9
Phillips	6,549	688	9.5
Pitkin	2,707	1,019	2.7
Prowers	15,803	1,630	9.7
Pueblo	60,092	2,433	24.7
Rio Blanco	3,497	3,223	1.1
Rio Grande	8,441	898	9.4
Routt	10,824	2,309	4.7
Saguache	4,854	3,133	1.5
San Juan	1,700	453	3.8
San Miguel	5,544	1,288	4.3
Sedgwick	4,727	531	8.9
Summit	1,724	649	2.7
Teller	6,696	547	12.2
Washington	13,566	2,521	5.4
Weld	60,803	4,022	15.1
Yuma	16,343	2,367	6.9
State	1,003,355	103,658	9.7

Sources: Population estimated from United States Census Reports.
Area in square miles from Colorado Yearbook, 1926.

TABLE J.—Measures of Per Capita Economic Ability and Expenditures by Counties.

County	Per Capita Value added by Manufacturers	Per Capita Value of Gold, Silver, Lead, Copper and Zinc	Per Capita Value of Coal and Petroleum	Per Capita Value of Crops	Per Capita Taxable Wealth	Per Capita Disbursements (Average 1921-25)	Ratio of Expenditures to taxable wealth
Adams	176	*	.....	232	1,893	74.24	3.92
Alamosa	24	.....	.....	203	1,723	77.01	4.47
Arapahoe	36	.....	.....	141	1,387	46.04	3.32
Archuleta	71	.....	12	95	1,238	38.65	3.12
Baca	5	.....	.....	149	842	31.19	3.70
Bent	9	.....	.....	187	1,143	39.01	3.41
Boulder	130	1	57	90	1,436	49.34	3.44
Chaffee	126	4	.....	67	1,356	42.60	3.14
Cheyenne	2	.....	.....	354	4,851	114.25	2.36
Clear Creek	21	37	.....	9	1,899	58.96	3.11
Conejos	69	.....	.....	200	960	42.47	4.43
Costilla	15	.....	.....	109	1,028	39.51	3.84
Crowley	74	.....	.....	296	1,351	67.08	4.97
Custer	5	83	.....	236	1,362	38.88	2.85
Delta	9	.....	18	250	1,203	46.79	3.89
Denver	180	.....	.....	.....	1,468	44.84	3.06
Dolores	5	16	.....	70	1,029	43.28	4.20
Douglas	208	.....	.....	165	3,062	80.45	2.63
Eagle	7	516	.....	245	1,790	68.27	3.81
Elbert	1	.....	1	222	2,363	59.01	2.50
El Paso	50	.....	22	48	1,593	59.38	3.73
Fremont	191	.....	154	72	1,201	45.79	3.81
Garfield	13	.....	7	239	1,803	66.41	3.68
Gilpin	16	49	.....	13	2,076	68.81	3.32
Grand	282	.....	.....	26	1,502	61.00	4.06
Gunnison	23	101	272	154	2,836	70.43	2.48
Hinsdale	12	55	.....	124	1,721	98.78	5.74
Huerfano	7	.....	376	27	873	36.75	4.21
Jackson	56	.....	30	1,309	2,585	77.75	3.01
Jefferson	26	.....	19	140	1,706	45.77	2.68
Kiowa	5	.....	.....	205	3,418	89.59	2.62
Kit Carson	10	.....	.....	404	2,727	74.69	2.74
Lake	161	410	.....	13	1,168	45.85	3.93
La Plata	63	3	25	115	1,323	45.84	3.46
Larimer	208	.....	3	163	1,916	57.37	2.99
Las Animas	41	.....	238	27	1,037	37.70	3.63
Lincoln	12	.....	.....	304	2,478	61.98	2.50
Logan	64	.....	.....	296	1,697	74.62	4.40
Mesa	49	.....	15	196	1,319	60.61	4.59
Mineral	8	231	.....	109	1,893	65.60	3.47
Moffat	4	.....	47	109	988	47.21	4.78
Montezuma	16	.....	3	169	898	44.06	4.91
Montrose	23	*	4	294	1,033	54.90	5.31
Morgan	127	.....	.....	236	1,500	69.40	4.63
Otero	149	.....	.....	170	1,309	49.91	3.81
Ouray	21	73	.....	127	1,576	61.53	4.09
Park	46	83	.....	510	4,290	107.11	2.50
Phillips	16	.....	.....	497	2,420	66.75	2.75
Pitkin	7	54	16	162	1,685	60.60	3.60
Prowers	45	.....	.....	226	1,447	50.15	3.47
Pueblo	241	.....	.....	43	1,222	50.99	4.17
Rio Blanco	17	.....	3	201	1,405	60.85	4.33
Rio Grande	24	*	.....	324	1,268	64.91	5.12
Routt	34	.....	288	153	1,335	50.57	3.79
Saguache	22	4	.....	473	2,324	90.44	3.89
San Juan	9	2,132	.....	.....	1,940	60.43	3.12
San Miguel	20	535	.....	52	1,286	50.50	3.93
Sedgwick	5	.....	.....	577	2,194	92.03	4.19
Summit	4	424	.....	79	2,624	93.60	3.57
Teller	21	741	.....	42	1,025	52.39	5.11
Washington	4	.....	.....	397	1,906	59.18	3.10
Weld	62	.....	59	290	1,814	72.10	3.97
Yuma	7	.....	.....	419	1,528	52.18	3.41
State	107	19	32	132	1,378	53.71	3.90

*Less than \$0.50 per capita.

Sources: Value added by manufacturers from Census of Manufactures 1919. Value of Gold, Silver, Copper, Lead and Zinc, Coal and Petroleum from Mineral Resources of the United States 1924. (Average price of petroleum taken as \$1.10 per bbl.) Value of crops from Colorado Yearbook, 1926. (This does not include livestock and livestock products.)

