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To the Committee on Graduate Study:

I am submitting to you a thesis written by James McGill Buchanan entitled "Gasoline Tax Sharing Among Local Units of Government in Tennessee." I recommend that it be accepted for nine quarter hours credit in partial fulfillment of the requirements for the degree of Master of Arts, with a major in Economics.

Charles P. White
Major Professor

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GASOLINE TAX SHARING AMONG LOCAL UNITS OF
GOVERNMENT IN TENNESSEE

A THESIS

Submitted to
The Committee on Graduate Study
of
The University of Tennessee
in
Partial Fulfillment of the Requirements
for the degree of
Master of Arts

by

James McGill Buchanan

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PREFACE

The writer wishes to acknowledge his indebtedness to Professor Charles P. White, under whose direction this study has been made. His timely suggestions and constructive criticisms have been invaluable in the evolution of the study and the interpretations of the problems involved.

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CHAPTER I

GASOLINE TAX SHARING: THE PROBLEM AND ITS IMPLICATIONS

Ever since its introduction in 1923, the gasoline tax as a source of state revenue in Tennessee has grown in importance. In 1924, the first complete year of gasoline tax collections, \$1,548,466 was collected from this source.¹ This made up only approximately 5.4 per cent of state revenue. In 1941, \$22,718,698 was collected from the gasoline tax.² This tax return now comprises approximately 43 per cent of total state tax receipts. This great increase has come about in two ways; at first a tax of only two cents a gallon was imposed; this was gradually increased until 1932 when the total reached seven cents per gallon. Since 1932, the increase has been largely due to the increased consumption of gasoline brought about by the ever increasing numbers of automobiles and the continuous expansion of the construction of improved and well-linked road facilities. Insofar as the automobile is now considered a necessity in our present

¹ Report of the Department of Finance and Taxation, January 1, 1925, p. 58.

² Knoxville Journal, July 1, 1941.

economic system, any problem arising out of the distribution of any part of such a sizeable fund is necessarily of vital importance not only to the automobile user but to the general public for whom services are directly or indirectly performed by gasoline motivated vehicles.

A characteristic feature of the gasoline tax is the tradition that its proceeds should be earmarked for financing the construction and maintenance of highway facilities. The theory that the highway user should pay for the construction and upkeep of road facilities is the one upon which the gasoline tax and the motor vehicle registration fees are based.

In this state, since 1929, portions of this centrally collected gasoline tax have been returned to the local units of government, (in this state, the counties). Approximately five million dollars out of a total tax collected of approximately eighteen million dollars in 1940 was shared with counties. In the fiscal year 1941, nearly six and one-half million dollars was shared with the counties of the state. These returned portions are specifically earmarked for use in the construction and maintenance of those purely local or secondary roads.³ Roads of this type throughout the state are now

³ As is pointed out later, since 1937, the State has been authorized to withhold certain portions of these funds if certain quotas are not met by the counties. (Social Security, Dependent Children, and Blind Funds).

financed mainly from this source.

There are several arguments that justify the adoption of the shared tax as a means of distributing highway revenues, and it is difficult to determine the relative value of each, but there are two of significant importance. First, if the funds were spent exclusively upon the primary system of state roads, many taxpayers (auto users) would receive little benefit from the taxes they paid. This is due to the fact that the state system is extremely limited in mileage, and many auto users do not have direct access to such roads. Sharing serves as a device to assure all auto owners some return from the tax paid in. Second, the decade following the World War was marked in Tennessee by increasing resistance to the property tax. If a portion of the funds from the rapidly increasing gasoline tax returns could be granted to the counties for the financing of one of the most costly local functions, a reduction in the general property tax levy would be possible. There may have been a third motive for the introduction of gasoline tax sharing. Revenues from the gas tax depend upon the volume of travel. A splendid primary system without adequate feeder roads will not attract as much traffic as a primary system integrated with good feeder and rural roads. Either one of the above arguments or a combination of the three offers a possible explanation as to the beginning of tax sharing in

Tennessee.

Although the state has been sharing the gasoline tax with the counties since 1929, no thorough analysis of the system has yet been made. Information relative to the sharing consists mainly of statistical records within state files. Available statistics as to the actual amounts allocated to the counties of the state and the percentages upon which these amounts are determined were secured from the records of the Division of Accounts, State Department of Highways and Public Works. A survey of the highway problems of the State of Tennessee was begun by the Division of Research and Statistics, State Department of Highways and Public Works, in cooperation with the United States Bureau of Public Roads, in 1936, but although this study has now been substantially completed, due to the fact that this survey was made as a part of a nationwide plan, the complete results have not yet been made available. This survey takes into consideration the need for new routes, character and density of the traffic on all roads, topographical features influencing road construction throughout the state, financial problems connected with road construction and maintenance, etc. This survey did not, however, take into consideration the sharing of the gasoline tax as a separate problem apart from the comprehensive problems which are state wide in scope.

The Tennessee Municipal League, largely through the efforts of Mr. W. H. Newell, Executive Secretary, has conducted studies of gasoline tax sharing during the past two years. The chief purpose of these studies, however, was to develop the idea that municipalities are entitled to a share of the gasoline tax fund. Thus, studies made by this organization are not entirely complete and are necessarily biased in one direction.

A few studies have been made of similar problems in the other states, but few of them are comprehensive and deal primarily with sharing of highway funds. In Alabama, the Bureau of Business Research at the state university made a study of the problem there, and a portion of its findings were reported in a pamphlet issued in 1935.⁴ This was a very short publication and no definite conclusions were reached in the setting up of an equitable sharing base. The pamphlet was aimed primarily at stressing the variations to be found in the uses of different distribution bases.

Several studies have been made in other states of taxation problems in general in which the sharing of highway revenues was considered as one of the many problems in state

⁴ H. H. Chapman, "Distribution of Tax Monies to Local Governmental Units," University of Alabama Business News, Bureau of Business Research, School of Commerce and Business Administration, University of Alabama, July 1935, v. 11.

finance. Mr. Blakey made a special study of taxation problems in West Virginia in 1932, in which he defended the West Virginia system of state expenditure of all highway funds.⁵ The gasoline tax sharing problem has been taken into consideration in several of the state reports. The Report of the Tax Commission of North Carolina in 1928 and 1930 considered the problem in that state. In all these, however, the aim of the study was not any revision or justification of the sharing schemes but merely a presentation of the sharing system and how it worked.

The only comprehensive survey of a similar problem in a different state is found in Mr. Snavely's work in Virginia.⁶ At the time of the study, 1933, Virginia was sharing 30 per cent of its gasoline tax monies with the counties of the state according to the relative area, populations, and taxes paid in by the various counties. The study made by Mr. Snavely and others took into consideration the possible effects of the different sharing systems. Definite conclusions were reached and recommendations for changes were made. The inequities of the Virginia distribution system were recognized and

⁵ Roy C. Blakey, Report on Taxation in West Virginia, (Charleston, West Virginia: Jarrett Printing Company), 1930.

⁶ T. R. Snavely, D. C. Hyde, and A. B. Biscoe, State Grants in Aid in Virginia, (University of Virginia, Institute for Research in the Social Sciences, Monograph No. 13, 1933).

recommendations made as to possible changes.

In the apportionment of state funds, both for state highways and for state aid, the three most important factors appear to be mileage, motor registration, and the financial needs of the localities.⁷

The authors of the Virginia study seem to have considered unimproved road mileage as the most important single factor in the distribution of funds for local road construction. In its discussion of the general objectives and purposes of highway tax sharing the Virginia study is in substantial agreement with this thesis. Nothing found in the presentation contradicts any of the findings of the study of the Tennessee situation. It is a similar analysis of a problem in another state, however, the basis for conclusion and the application of theory are different in the two states.

The purpose of this study is to supply a well-planned coherent analysis of gasoline tax distribution in Tennessee. It is hoped that this survey will present thorough and unbiased information that will prove of value to those within whose power any modification or continuation of the distributive plan may come. This thesis is also purposed to provide those interested persons and students a source of information concerning the shared gasoline tax or the gasoline grant-in aid in Tennessee, a hitherto scarcely explored field.

⁷ Ibid., p. 180.

This thesis is a study of the highway grant-in-aid or shared tax in general, but with the purpose of applying the theories and data specifically to Tennessee tax sharing. The historical background of the highway shared tax will be presented, and current theories of tax sharing and their applications in the different states will be noted. A historical analysis of the gasoline grant-in-aid in Tennessee will be made. Chief attention will be given, however, to the mode and manner of distributing these shared revenues in this state, and the effects of this distribution determined.

The questions that this study is attempting to answer are:

1. Does the system now used in Tennessee in distributing the gasoline tax funds to the counties of the state fulfill the purpose for which the distribution was intended?
2. What are the specific advantages and disadvantages of the present system of allocation?
3. What alternative systems of allocation are available? If adopted, would they tend in any way to lessen the grounds for criticism?

The problem really presents itself in a two fold manner; first of all, the equity of the distribution among the present sharing participants, the counties, will be determined; and second, the problem of the consideration of the municipal units

of the state as sharing bodies will be discussed.

In the course of this thesis, the author will attempt to show what can best be considered a just and equitable distribution. In setting this up, the alternative methods of distribution that are now in use in the various states will be examined and evaluated. The present system of allocation in Tennessee will be compared with these alternative systems as to actual effects. The discriminations found in the present system will be noted and their severity and possibility of correction and prevention will be stated.

Throughout this analysis, reference will be made to the two terms, shared tax and grant-in-aid. The system of distributing tax revenues in this state may be referred to as either a shared tax or a grant-in-aid to the local units. In fact, the sharing does contain an element of both. A grant-in-aid carries with it the idea of a fund being earmarked for a specific purpose; in this regard, the returned gasoline tax qualifies as a grant-in-aid. However, when a local unit receives a certain percentage of a specific tax and not a designated sum regardless of tax yield, the funds returned may be correctly classified as tax shares. For these reasons, the two terms will be used in this study as being synonymous and no distinction between the two will be made. Experts in the field of public finance do not even agree upon the definition

of the two terms. Mr. Bitterman would classify the tax studied as a highway grant-in-aid,⁸ while Miss Newcomer would regard it as a shared tax.⁹

The term "local unit of government" is used to refer to those levels of governments below that of the state. As the gasoline tax is now shared only with the counties in this state, in many cases "local unit" will be synonymous with "county". However, in that portion of the study in which the municipalities of the state are considered, the municipalities will also be referred to as local units.

As was stated, the purpose of this study is to determine whether the distribution of the gasoline tax is equitable. By an "equitable" distribution is meant one in which the actual returning of the funds most adequately meets the objective for which the funds are supposedly allocated. If no definite purpose or objective of the distribution is known, the equity of the distribution can best be determined by application to the possible objectives, (e.g. need of the local units, tax paid in, relief of local taxation, etc.).

This chapter has indicated the importance of the problem

⁸ H. J. Bitterman, State and Federal Grants-in-Aid, (New York: Mentzer, Bush & Company, 1938), p. 19.

⁹ Mabel Newcomer, "Proposed Classification for Central Governmental Aid to Local Governments," Proceedings of the National Tax Association, 1938.

and some of its implications. The scope of the study has been indicated, and the reasons for its presentation stated. Some indication as to the possible values to be gained from a study of this sort has been mentioned. The need for such an analysis has been noted, and those controversial terms which will recur in the text have been explained.

CHAPTER II

HISTORICAL ANALYSIS OF THE HIGHWAY GRANT-IN-AID OR SHARED TAX

The need for centralized financial administration in the construction and maintenance of roads and highways was not greatly felt until the advent of the automobile. With the exception of one important period, road construction was considered as a purely local function and was financed as such. The period of exception was, of course, the period of the so called internal improvements that occurred early in the nineteenth century. States and even the federal government were expending funds for the construction of roads and bridges. Out of this effort came such developments as the "National Pike" and the "Cumberland Road." But in the main, roads were financed by local units of government. Each road district or township was permitted to exact a road labor tax from its inhabitants, and such labor was to be expended on the construction and maintenance of roads within the district. But even as travel was continued through the use of horse drawn vehicles, isolation between scattered communities was broken down, and the need began to be felt for some well linked system of contiguous routes. Travel between county seats became a necessity, and movements toward establishing

such needed extra-local roads grew in scope.

This need culminated in the emergence of the turnpike system. Primary or connected routes were constructed and operated as private utilities, empowered to assess the road users in the form of tolls. The turnpike system reached its peak of prosperity during the latter part of the past century and was very efficient for a time. Roads connecting towns in adjoining counties and considered extra-local were adequately financed by the turnpike companies. But even under this system, the need for a more adequate means of financing the "feeder" or secondary roads was felt. Road labor, which consisted of a few days per year spent in clearing of rights-of-way, grading, etc., was very inefficient and unsatisfactory.

As a means of remedying this difficulty and providing a better and more integrated financing of this type of roads county highway commissions came into existence.¹ Under the use of the commission device, both local and extra-local roads were proposed by the county commissions and were financed out of the general property tax levies of the county. While this was a progressive step toward increased financial centralization, county boundaries constituted a limitation upon the efficiency of such systems.

¹ H. J. Bitterman, State and Federal Grants-in-Aid (New York: Mentzer, Bush and Company, 1938), p. 212.

The next step in the development of highway financing was the introduction of the state aid movements. Prior to 1900 a few small subventions were established by the eastern states as devices for improving local administration. These early grants were used primarily as a means of encouragement to local authorities; grants were made in order that some degree of state specification or supervision could be exercised over the location and upkeep of the primary routes. In 1891, the state of New Jersey adopted the first pure grant-in-aid for highway administration. A state highway department was created and was empowered to pay part of the construction costs of the locally administered roads. This system was conducive to improved construction by local authorities because the grants were conditional. The difficulties in the system lay in the fact that local authorities still held power to locate roads, the result being no regular network of connected highways but patches of good road here and there according to the whims of county politicians.²

Types of state aids to localities similar to the New Jersey plan were common prior to the World War, especially in the New England and Middle Atlantic states.³ These grants

² Ibid., p. 220.

³ Austin F. Macdonald, Federal Aid (New York: Thomas Y. Crowell Company, 1928), p. 86.

were largely allocated mainly for the purpose of encouraging local construction by providing a financial incentive. The aim was the construction of a more integrated system of highways brought about by the cooperative work of the local authorities.

With increasing motor travel the need for better connected and constructed highways became urgent, while the automobile provided a productive source of revenue in the registration tax and subsequently the fuel excise. The usual practice of segregating these taxes into a special fund to be expended for highway construction and maintenance was effectually the application of the benefit theory to the highway problem. Highway administration was essentially a local problem and function with incidental state supervision up to the period immediately following the war. Consequently, since the state governments imposed and collected the taxes, the grant-in-aid was the most feasible method of using these revenues within the then existing governmental structure.⁴

However, difficulties were found in the administration of such grants-in-aid, and the states began to take over direct control of the construction and maintenance of trunk routes throughout the country. Local administration was found to have important technical and administrative handicaps.

The states were greatly encouraged and some were practically forced to take over central highway control and supervision upon the passage of the Federal Aid Road Act of 1916.⁵

⁴ Bitterman, op. cit., p. 122.

⁵ United States Statutes-at-Large, Sixty-fourth Congress Session 1, p. 355.

This act provided that the federal government would expend funds upon rural post roads in the various states if certain conditions were met. The monies were to be expended by the Secretary of Agriculture in cooperation with the state highway departments of the different states. This made it necessary for each state wishing to share these funds to establish some sort of a central planning agency in the form of a highway department. In those states that were constitutionally prevented from entering into highway construction, the local units were empowered to raise the necessary revenues and secure the federal aid. Federal funds could in no case make up more than fifty per cent of the total construction costs of the roads upon which the funds were used; therefore, state expenditure was encouraged. The funds were to be used only in the construction of "substantial" roads, and maintenance was left entirely to the states.

The federal aid caused the states to begin the control and supervision over all trunk or primary routes, thus relieving the local units of a large part of their overburden of road financing. Concomitant with the introduction and growth of federal aid came the rapid improvement of the automobile. The fact that the period in which these were taking place was one of prosperity brought about the almost unheard of expansion of highways throughout the nation. Provided

with a stimulus, the states took over the construction problem in an unprecedented fashion, and state road systems were rapidly evolved.

As long as the states derived their main highway revenues from motor vehicle registrations, property taxes, and bond issues, the demand that any of the funds be returned for use on local roads was slight. But with the introduction and rapid growth of the gasoline tax as an important revenue source, there arose the demand that a certain portion of these funds be returned to the local authorities. The gasoline tax was first imposed in Oregon in 1919, and by 1923 thirty five states had passed gasoline tax laws.⁶ The motor fuel tax soon became the most important source of highway revenue, and has in recent years been the most important source of state revenue generally.

The desire had arisen for an increased mileage and improved condition of "feeder" roads, or those roads which were purely local in character. The financing of such roads had not improved much over the outmoded road labor tax system, and in many cases the road labor tax was still in practice. Such meager funds as were available for use on such roads were necessarily derived from the general property tax returns, since in most states local units were not empowered to levy

⁶ Bitterman, op. cit., p. 94.

specific taxes on highway users, either in the form of gasoline taxes or registration fees.

As this desire grew stronger states began to return the local authorities certain percentages of revenue collected, and consequently after 1924 "local shares of taxes increased year after year, so that now approximately thirty per cent of highway revenues are granted to local authorities for road purposes."⁷ These later grants-in-aid or shared taxes serve a different purpose than the pre-war allocations. While those in the earlier period were mainly used as an administrative device to encourage local activity, the later grants are merely a means of sharing centrally collected taxes and do not necessarily carry with them any idea of supervision or control.

An important factor that led to this tendency toward increased sharing of highway taxes with the local units was the fact that many of the states had substantially completed their highway systems of connected or trunk routes. Through the rapid construction of highways financed largely by bond issues the states had completed all badly needed primary routes, and the highway departments were left only with the task of maintaining those routes already constructed. This, coupled with the ever increasing returns from the gasoline tax due

⁷ Ibid., p. 123.

to increased motor travel, caused the states to be in a position where they could rightfully share considerably greater portions of the total highway tax collections with the local units.

The payment of the states to local governments on highway accounts has risen from \$17,000,000 in 1915 to well over \$400,000,000 in 1938.⁸ This includes those funds that are used to pay off bonded obligations of the local units as well as the amounts directly returned to them.

In 1937 three states returned more than one-half of total highway revenue to local units of government; eleven states returned over one-third; and five made no allotments whatsoever. Local roads received over twenty four million dollars in one state, while in ten states less than a million was distributed.⁹

The following table will serve to show the increasing amounts of highway grants paid:

⁸ M. R. Davison, "State Financial Assistance to Local Governments," Proceedings of the National Tax Association, 1939, p. 160.

⁹ _____, "States Share With Local Governments Motor Vehicle and Gasoline Taxes," American City, 53:107, November 1938.

TABLE I

ESTIMATED HIGHWAY GRANT-IN-AID EXPENDITURE
1915-1939^(a)

Year	Local shares of motor vehicle tax	Local shares of gasoline tax
1915	\$4,658	
1923	24,035	\$8,419
1924	40,589	17,136
1925	48,396	32,722
1926	57,114	43,655
1927	63,451	58,670
1928	65,963	60,732
1929	72,633	88,566
1930	73,640	118,248
1931	78,147	134,311
1932	82,678	129,423
1933	76,462	146,501
1934	93,802	163,330
1935	96,940	176,077
1936	108,262	199,952
1937 ^(b)	104,539	171,142
1938	104,789	166,272
1939	110,851	188,005

(a) H. G. Bitterman, State and Federal Grant-in-Aid, (New York: Mentzer, Bush and Company, 1938), p. 220. Data originally compiled by the United States Bureau of Public Roads.

(b) Data for the years 1937, 1938, and 1939 taken directly from publications of the Bureau of Public Roads. 1937, Public Roads, October 1938, p. 167-70. 1938, Public Roads, August 1939, pp. 127-30. 1939, Public Roads, November 1940, pp. 174-79.

In 1937, the gasoline tax was shared in 25 states while motor vehicle registrations were shared in 11 states. By 1940, these figures had risen to the point that gasoline taxes are shared in 27 states and motor vehicle registration fees in 20 states.¹⁰

The amount or percentage of total highway revenue shared varies widely in the different states. The proportions of the gasoline tax distributed to the local units vary from 66 2/3 per cent in Illinois to 12 1/2 per cent in Minnesota, the average being about 30 per cent in those states that share the tax. The percentage allocations of registration fees in those states that share them vary from 100 in Florida to 40 per cent in New York. Most states that share the registration fees return over one-half of them to the local units.¹¹

The trend in recent years has been toward increased sharing, and this is likely to continue for some time. There has been, however, in some states, a shift of all roads, including those purely local, to state jurisdiction, thus destroying any necessity for the use of the tax sharing or grant-in-aid device. North Carolina, Virginia, Louisiana, West Virginia, and Delaware have now assumed full state control

¹⁰ Tax Research Foundation, Tax Systems of the World, 1938.

¹¹ Tax Research Foundation, Tax Systems of the World, 1940.

of all rural roads. Aside from these, only ten states share neither the motor vehicle fees or the gasoline tax.¹² These states in general have some method of subvention for the support of local roads.

The shared tax is likely to continue as a device in state and local fiscal relationships. It has been proven that taxes such as the gasoline tax can be more efficiently administered if collected centrally. Full state control of all roads has much to warrant its adoption in many states, but certain factors probably will prevent this being done. Central administration of the many miles of rural roads in some of the larger states would entail either very complicated planning devices or expenditure determined by political influence. Aside from this the construction and maintenance of these rural roads has grown up as a traditional function of the local units. The varying abilities of the local units to support comparable local systems, plus the traditional ideas of self determination and self sufficiency among the local units are other factors conducive to the continuation of the shared tax. In order that these local traditions can be upheld, and centrally collected revenues be used on local as well as state roads, the grant-

¹² Connecticut, Kansas, Maine, Massachusetts, Missouri, Nevada, New Hampshire, Rhode Island, Utah, Vermont.

in-aid or shared tax serves a worthy purpose.

The chief obstacles in any further expansion or continuation of the tax sharing or grant-in-aid device seems to lie in the fact that in some cases such allocations do tend to perpetuate sub-marginal units of government, without which the states could, no doubt, function more efficiently. However, most of our local governments are far from bankrupt, and a "judicious combination of local taxes and state grants should preserve a generous share of responsible self government for time to come."¹³

In this chapter, the historical development of the shared tax or grant-in-aid in the field of highway finance has been traced. Some idea of the growth of these devices has been illustrated, and an indication as to the place of the sharing device in the future of highway financing has been given.

¹³ Mabel Newcomer, "Revenue Sharing Between Federal and State Governments and Between State and Local Governments," Proceedings of the National Tax Association, 1936, p. 282.

CHAPTER III

ALTERNATIVE METHODS OF DISTRIBUTING SHARED HIGHWAY TAXES AND GRANTS-IN-AID

The Objectives in Allocating Highway Tax Revenues

Before attempting to describe and analyze the various devices used for distributing state highway revenues to local units, it is necessary to know the purposes or objectives for which the distributions are intended. As has been pointed out, the earliest objective of the grant-in-aid or shared highway tax was the stimulation of activity by the local authorities. This continued as the primary purpose of such subventions as long as the states were constitutionally or otherwise prevented from undertaking highway construction and maintenance. Higher units of government, the states, sought to encourage expenditure by local authorities for uses that were in part extra-local.

Since the World War, however, such an objective or purpose of the shared tax, while still in the background, has been relegated to a position of minor importance. Other objectives that have grown in importance during the last two decades are: first, the sharing of centrally collected revenues for the purpose of returning the funds to the place of origin;

second, the equalization of the costs and opportunities of highway facilities among the local units in a jurisdiction; third, the relief of the revenue stringencies of the local units; and fourth, the centralized control of local expenditure.

The modern grant-in-aid is useful in that it provides a means whereby centrally collected revenues can be returned to the place of origin. The theory has generally been held in the taxation of motor vehicles that the funds collected from such taxation should be directly expended in the construction and maintenance of highway facilities. Thus, in the history of highway finance the application has been one of the benefit theory of taxation. The taxes levied on motor vehicles have been considered as separate and apart from the general level of taxes. They have been considered as having a single purpose, that of financing the highway program; thus, the funds have been generally earmarked for specific uses.

Motor vehicle taxes have almost invariably taken the form of one of two types, the gasoline or motor fuel tax and the license or registration fee. The very nature of these taxes, especially the motor fuel tax, makes it expedient that they be collected and administered by a central administrative agency, notably the state. But, in order that the benefit theory apply in full, since the states usually do not control

all roads, a means had to be found whereby certain portions of these centrally collected and controlled revenues could be returned to those jurisdictions supervising expenditure on those roads not under state supervision. The taxes could be much more efficiently administered if collected centrally, therefore, a return to the communities where the roads were used was made necessary. The grant-in-aid or shared tax was the only means applicable to this purpose. Motor vehicle taxes are centrally levied and collected in nearly all states, and local units are not empowered to levy separate motor fuel or registration fees.¹

The equalization of costs and opportunities of highway facilities among the local units is a main objective of many tax sharing schemes at the present time. Here the familiar question as to whether the larger and more prosperous units should help support the poorer units within the same jurisdiction comes to the fore. The thought in recent years has been that if a state had a large aid fund to be allocated to the local units, a certain part of this fund should be used to equalize opportunities between the richer and the poorer districts, supplementing the deficiencies of the poorer

¹ A few states permit local levies in addition to the state levies. Now there are eight of these states allowing local gasoline taxes. These are: Alabama, Florida, Louisiana, Mississippi, Missouri, New Mexico, and Wyoming. Public Roads, 9:174, November 1940.

ones.² This system of distribution has been widely used in school finance especially, and works toward the ultimate goal of equalized opportunity throughout the central government, the state. "Equalization between one part of a jurisdiction and another is of the essence of government."³ According to one of the leaders in the field of public finance, the current trend quite clearly is leading away from supplementary and encouragement bases of state aid distribution to equalization distribution.⁴

An aim of the shared tax closely related to the one mentioned above is the sharing of revenues for the relief of local taxation. The constant expansion and improvement of governmental operations and functions has, in many cases, led to the inadequacy of local sources of revenues to support all local traditional governmental functions. This aim of the shared tax, relief of local revenues stringencies, is reasonable to a degree, but a shared tax is useless if it is returned for relief purposes alone. As was pointed out, it will cause certain weak and inefficient units to outlive their usefulness, and will tend to perpetuate dependence upon the

² William J. Shultz, American Public Finance, (New York: Prentice-Hall, 1938), p. 680.

³ M. H. Hunter, Comments, Proceedings of the National Tax Association, 1938, p. 347.

⁴ Shultz, op. cit., p. 682.

central agency.

One of the original purposes of the early grants-in-aid was the central control of local expenditure and subsequently local activity. This leads to a distinction between the grant-in-aid and the shared tax, although the dividing line between the two is very difficult to determine. However, the grant-in-aid carries with it an indication of closer central control than does the shared tax. Grants are made for specific purposes and usually are conditional; tax sharing permits greater local autonomy. In most states the bulk of highway grants involve no special control beyond that obtaining for local revenues, since payments are merely made to the county road funds without special limitation.⁵ According to Mr. Shoup, if the grant is returned to each locality on the basis of origin there is no need of central control or condition; but, if the grant constitutes a transfer from the wealthier to the poorer sections, then certain measures of control and condition should be placed upon them.⁶

⁵ H. J. Bitterman, "Tax Sharing and the Transfer of Functions," Proceedings of the National Tax Association, 1938, p. 344.

⁶ Carl Shoup, "Conditional versus Fixed Grants and Shared Taxes," Proceedings of the National Tax Association, 1938, p. 351.

Possible Bases of Distribution

Now that the objectives behind the distribution of highway funds to the local governments have been examined, it is well that an analysis of the possible bases upon which distribution systems could be placed be made. Just what are the various theories of distribution that may be put into effect in the sharing of taxes? There are three comprehensive bases of distribution; first, equal sharing among the local units regardless of size, tax collections, or need; second, distribution among the local units according to some measure of source or origin of the tax monies; and third, distribution according to some measure of need of the units in question.

Of course, the simplest method of distributing shared revenue to local governments is to return to each locality a prescribed fraction of the total tax. Under this method each of the separate localities of the state will receive an equal share of the total tax to be returned. Any sharing system upon this basis is, of course, no attempt at equalizing between the units or returning funds to places of collection. Such a sharing constitutes a gift by the central government to the local units, for the money is shared on no measure justifying any purpose or objective.

Equal sharing, however, is not the most common basis for return of highway tax monies. Miss Mabel Newcomer found

in 1936, that 57 per cent of all shared taxes and grants-in-aid, including highway and all other types, was distributed where collected or on some base designed to return the money to the community of origin.⁷ When an attempt is made to share taxes on a source basis the aim is to return to each locality a certain portion of the tax collected within its boundaries. This method of distribution is usually made on some presumptive basis of collection, such as population, or value of property assessed, or number of vehicles registered. But if taxes are shared on such a basis, it must be assumed that such a basis represents as nearly as possible the relative amounts of the tax paid in and thus subsequent utilization of the facilities for which the monies are to be expended. Distribution according to source or origin enters into determination of all bases of sharing, but in few cases does it constitute the sole determinant. Distribution according to origin, however, encounters two major difficulties. The first is, that in the case of most centrally administered taxes, origin cannot easily be determined with accuracy. The second difficulty is that it frequently bestows upon some fortunate districts far more financial receipts than such districts have need of, or can

⁷ Mabel Newcomer, "Revenue Sharing Between Federal and State Governments and Between State and Local Governments," Proceedings of the National Tax Association, 1936, p. 280.

utilize to the best advantage.

The third basis for distribution frequently employed where the shared revenue is earmarked for some particular function, is some measure of the relative obligation of the localities in connection with that function.⁸ An attempt is made to distribute revenues among the different jurisdictions according to the relative needs of the units. As far as possible each unit is supposed to receive the portion of revenue which it needs and which it can best administer.

Such sharing systems are a step toward the desirable goal of equalization--but only a step, since they do not take into account the varying capacities of the localities to support the functions to which the revenues are earmarked. And if equalized support of some local function, particularly one that is extra local to a degree, is desired, a grant-in-aid which entails an element of state control would seem a more efficient method than an equalized sharing of tax revenues. This criticism would not apply to an equalized sharing if the shared revenue went into the general fund of the benefited local governments--but until now equalizing bases of distribution have not been applied to tax sharing.⁹

Thus, we have explained the three comprehensive bases of distribution which are used in the sharing of motor vehicle registration and motor fuel taxes; equal allotments, shares according to source, and shares according to need. All actual distributive systems represent either an attempt to carry out

⁸ Shultz, op. cit., p. 672.

⁹ Ibid., p. 673.

one of the above or represent a combination of two or more of the bases.

Actual Methods in Use

There is great diversity in the actual distribution methods used by the various states in distributing motor vehicle registration fees and gasoline sales taxes. In the early thirties studies made on this subject indicated that in 41 states, registration fees were allocated to the states' highway funds in 13 different proportions. For county highway purposes allocation of revenues occurred in 11 different proportions, and for city highway purposes in three different proportions. In the case of the gasoline tax, 43 states allocated such revenues to state highway funds in 11 different proportions and to local highway purposes in 20 different proportions.¹⁰

Only a very few states share highway revenues equally among all the local units, although many use equal grants along with other bases in distributing tax monies.

One of the most widely used distribution systems is that of allocation according to population ratios of the localities. Population as a base is used first because it

¹⁰ George B. Chandler, "The Collection and Distribution of Revenue," Proceedings of the National Tax Association, 1932, p. 53.

is easy to administer and to determine tax shares on such a base; it is also a traditional base of division of any sharing among localized governmental units. The theoretical justification of the use of population as a base lies in the fact that the population of a community supposedly represents to a degree the relative amount of the tax paid in that community as accurately as any other measure, if the exact amounts collected from the local units cannot be obtained. Population density is supposed or assumed to represent the per capita utilization of road facilities. A high correlation between population density and traffic density must be assumed. The discrepancies in using population alone as a basis lies in the fact that such a distributive system fails to take cognizance of the variance among levels of community incomes and community progressiveness. Prosperous, progressive, or exclusive communities can be reasonably expected to possess a much higher per capita ownership of automotive vehicles and consequently greater use of the road facilities than would be found in the poorer and less prosperous neighborhoods. Therefore, greater amounts of motor taxes are paid in these wealthier areas; need for returned funds is greater, and thus greater amounts of the shared taxes should be returned to them.

Certain types of grants-in-aid and shared taxes are allocated according to the relative percentages of the total

tax actually collected there. When this is the sole basis of distribution, of course the benefit theory alone is theoretically applied. But the very nature of the gasoline tax, makes distribution on a collection basis inequitable. Gasoline taxes are collected from the wholesale distributors, and these dealers operate from central distribution points, thus making the place of tax payment far removed from the place of actual incidence of the tax. For this reason, sharing of motor fuel taxes on a collection basis is neither logical nor possible. In the case of the motor vehicle registration fees, such a basis is much more useful and applicable, and in many cases these funds are distributed according to collection.

Another sharing basis closely related to the population and tax collection devices is the assessed valuation of property within the local jurisdiction. This is also a system aimed at return of the funds to the place of taxation incidence, but also takes into consideration the varying abilities of the localities to support local functions. Difficulties in such a system are similar to those found in distribution on a population basis. Assessed property valuation in no way represents any degree of either motor tax collections or need for funds for construction or maintenance of highway facilities. Assessed valuations are an important factor in the determination of tax shares only insofar as they measure the relative abilities of

the local units to support the functions to which the shared funds are to be allocated.

One of the most common bases for allocation which aims at measuring both amounts paid in and relative need of shared funds, is the ratio of registered motor vehicles in the local units to the total registered in the state. Many states share motor taxes on this basis alone, and such a system has much in its favor. The number of motor vehicles registered is probably the best measure of actual traffic movement within the locality and upon local roads. It is the only easily determined measure of relative utilization of highway facilities. While no definite conclusions can be reached, it can be reasonably assumed that a high correlation exists between number of motor vehicles registered in the various localities and the actual use of such motor vehicles on the local roads, and subsequently the payment of motor fuel taxes and registration fees. The difficulties in such a distribution are evidenced by the large numbers of commercial vehicles that register from central control points and travel throughout many localities and on many local roads separate from those of the locality in which the vehicles are registered. The place of registration in no way represents operational movement of motor vehicles. Many vehicles registered in large cities and using city streets probably run their greatest mileage on country roads of nearby and

adjoining counties. The percentage of motor vehicles in a locality represents a good base for tax allocation if used concomitantly with other bases, but used as a sole determinant it is inadequate as are all the others.

Sharing according to population, tax collections, assessed valuations, and to a certain extent number of registered vehicles, are supposedly aimed primarily at returning tax monies to the points of tax incidence. Other bases, however, aim primarily at distributing the centrally administered funds on some measure of the relative needs of the local units in question. Distribution according to need implies that the entire state or nation has a direct interest in the matter and cannot afford to have poor conditions existing in the individual units. A thoroughgoing equalization grant necessarily combines several elements in its distribution basis. In the case of highway aid, factors taken into consideration would be area, highway mileage, population, character of traffic to be served, cost of construction and maintenance of the secondary roads upon which they are to be expended.

When the taxes are shared according to need certain of the local units are bound to receive more than they contribute, causing difficulties to arise. The poorer sections may have the balance of political power and may see in such a sharing a means of getting something for nothing. One method of

allocation according to need is sharing according to the ratio that the mileage of local roads in each locality bears to the total rural highway mileage in the state. This system does, to a degree, return the monies to the places where the need is greatest. However, rural road mileage alone as a measure fails to take into consideration varying traffic densities on such roads and also cost of construction and maintenance of such roads. It also assumes that present road mileage is adequate in all areas and does not recognize that need for new construction is much more pressing in some areas than in others. Rural road mileage coupled with some measure of traffic density of these roads would provide a much more adequate and applicable sharing base, but traffic densities are very inconstant and very difficult of measurement.

Another basis of sharing with intent to satisfy relative local need is the area of the local units in ratio to the total area of the state or central authority. The main advantages in tax sharing on an area basis lie in the ease in which the allocations can be determined and the tendency of the local areas to remain constant from year to year, thus reducing accounting activities; for these reasons it has been used extensively in tax sharing. Counties of large area can be expected to possess a greater need than counties of small areas in general, but exceptions are very common. Density of population is excluded, and thus area alone is a very poor base

for distribution of highway monies.

Because of the ease of allocation and the relatively constant characteristics of the two bases, plus the traditional background of both, area and population are very often combined to make up the basis of distribution. Together they make for a far more equitable distribution than any single base but are still not fully satisfactory in the distribution of shared funds. Over-weighting in either direction is possible, and in some cases variance in area or population or both represent in no way variance in the utilization of rural or secondary road facilities although they do tend to indicate tendencies in the direction of such variances. Combinations of all the various bases mentioned are used in the different states. Although complete data are not available revealing actual bases of allocation in all the states, distribution systems of certain states will be pointed out as illustrative of the many combinations and devices used.

The following are distribution systems of several of the states, (gasoline tax shares only):

In Alabama, each of the sixty-seven counties share equally in the collection of a tax of three cents per gallon.¹¹

¹¹ H. H. Chapman, "Distribution of Tax Monies to Local Governmental Units," University of Alabama Business News, Bureau of Business Research, University of Alabama, 5:11, July 1, 1935.

In California, $33 \frac{1}{3}$ per cent of the total receipts is distributed to the counties and cities on the basis of the proportion of the registered automobiles in such subdivisions compared to the total number in the state.

In Illinois, $33 \frac{1}{3}$ per cent is returned to the cities and $33 \frac{1}{3}$ per cent to the counties on the basis of population.

In Maine, the distribution is made in proportion to the number of miles of unpaved roads in each locality.

In Michigan, $\frac{1}{8}$ of the total is divided equally among the counties, and $\frac{7}{8}$ in proportion to the amounts received from the owners of registered vehicles in the several counties. The apportionment to cities and villages is very complicated, with population the main factor.

Nebraska allocates 30 per cent of the gasoline tax receipts to the counties on the basis of the number of registered vehicles.¹²

From a glance at the above systems, allocations according to population or number of registered vehicles seem to be the common at the present time. Of course, data available from the above mentioned states are not sufficient evidence to base any conclusions as to which is the most widely used.

¹² Ambrose Fuller, Consultant, American Municipal Association, in a letter to Mr. W. K. Newell, Executive Secretary, Tennessee Municipal League, January 15, 1941.

In the course of this chapter, we have attempted to present first the various objectives of highway grant-in-aid and shared taxes, and second the possible bases upon distribution systems could be founded, and lastly, the actual systems as they are in use today. Of course, many, if not most of the actual distribution systems, have no scientific or theoretical background whatsoever. Many of them have been set up on a purely arbitrary basis with no attempt being made at allocating those portions which were actually collected from the separate localities or the portions which the local jurisdictions need. Much of the highway tax sharing represents only the response to a stimulated local demand, and thus the allocation systems are set according to what is politically expedient rather than what is financially sound. The aims of the formulators of such policies, were, in large, to please the greatest number of voters rather than to return tax shares equitably to the local units of government.

CHAPTER IV

GASOLINE TAX SHARING IN TENNESSEE

Historical Background

Until 1915, except for the brief period of internal improvements during the decade between 1830 and 1840, the building and maintaining of roads in Tennessee was left entirely up to the counties and other local units of the state. As early as 1912, the growing use of the automobile had focused attention upon the need for a coordinated system of well-linked highways. In 1916, an act was passed by Congress providing for the distribution of Federal Aid to the states for road building purposes. It was probably in anticipation of this act that the first step was taken at state control or supervision of highway activities in Tennessee, when the state legislature in 1915 passed an act creating the State Highway Commission and a State Highway Department.¹

The Commission was to be composed of six members, three appointed by the Governor, and three ex-officio; the latter consisting of the State Geologist, the Dean of Engineering at the University of Tennessee, and the Governor. The chief duties of this Commission were: first, the collection

¹ Public Acts of Tennessee, 1915, Chapter 100, Section 1.

of information and the planning of a connected highway system; second, the establishment of standards of construction; third, the advising of local road authorities; and fourth, the execution of contracts with the Federal Government in connection with expenditure of the federal aid funds. The funds for highway purposes during the period from 1915 to 1917 were derived largely from registration fees on automobiles and trucks which amounted to about \$200,000 for the biennium ending December 17, 1916.²

In 1917, additional revenues were provided by the levy of a special tax on property.³ The period from 1917 to 1923 was characterized by an all around increasing of state highway activity. The special property tax levy and the motor vehicle fees yielded about \$11,000,000 during the period.⁴ In 1917 the state passed an act assenting to the provisions of the federal aid act, and in 1919 a new act was passed recreating the State Highway Commission and assigning more

² Tennessee Taxation and Public Finance, Report of State Tax Committee, November 1930. p. 26

³ Public Acts of Tennessee, 1917, Chapter 74.

⁴ Charles P. White, "Problems of Taxation in Tennessee," Annals of the American Academy of Political and Social Science, 153:238-45, January 1931.

more definite duties to the department.⁵ Provision was made for the construction of roads under a co-operative system, the counties to furnish a part of the funds either through taxation or bond issues.

In 1923, the first concrete attempt to broaden the tax structure under the leadership of Governor Peay culminated in the introduction of the gasoline tax as a means of providing state revenue. The special property tax for highways was repealed, and a tax of two cents (2¢) per gallon was placed on all gasoline sold or distributed in the state.⁶ This tax was to be paid to the State Commissioner of Finance and Taxation by each distributor. During the first year of its operation, the gasoline tax yielded nearly twice as much as the special property tax.⁷

During the period from 1923 to 1925, the state continued to finance trunk roads in cooperation with the counties. The gasoline tax was increased to three cents per gallon in 1925,⁸ and was further increased to five cents per gallon in 1929.⁹ The state during this period attempted to adopt a "pay

⁵ Public Acts of Tennessee, 1919, Chapter 149, Section 6.

⁶ Public Acts of Tennessee, 1923, Chapter 58, Section 2.

⁷ Tennessee Taxation and Public Finance, op. cit., p. 28.

⁸ Public Acts of Tennessee, 1925, Chapter 4, Section 1.

⁹ Public Acts of Tennessee, 1929, Chapter 11, Section 1.

as you go" policy and the use of long term bonds. The clamor that a modern highway system was immediately needed led to the rapid appropriation of funds necessitating creation of large highway debts. The practice of requiring the counties of the state to contribute to the construction costs of state roads built within their boundaries brought about a clamor for relief by the counties. Most of the funds were raised by bond issues, and as the burden increased, the counties called for aid.

The first attempt of the state to share any of the burden of the local units in connection with road financing came in 1927, when an act was passed directing the state to repay to the counties the amounts that had been paid over to the state for construction of highways in those counties. A board known as the Tennessee Highway Reimbursement Board was created, and directed to set aside one cent of the gasoline tax for such repayments to the counties.¹⁰ This, however, represented an attempt by the state to assume complete financing of primary or state roads, and in no way affected the financing of local or secondary roads. Such roads were still financed out of the general property tax levy, and the outmoded road labor tax was still in use. Counties of the state

¹⁰ Public Acts of Tennessee, 1927, Chapter 64, Sections 1, 2, 3, 4, 5.

were empowered to levy a road tax of not less than five cents, (5¢), nor more than twenty-five cents (25¢), upon each One Hundred Dollars (\$100) of assessed property, and not more than one-fourth the county assessment on privileges.¹¹

The period since 1929 has marked the evolution of the state's aid to local units in the financing of local roads. The actual beginning of the shared gasoline tax came in 1929, when an act was passed allocating one cent per gallon of the tax to the counties of the state.¹² This fund was to be designated as "State Aid Fund" and was to be used exclusively for the construction and maintenance of local or secondary roads. It was to be distributed to the counties on the basis of population and area.

Section 3. Be it further enacted, That of said State Aid Funds, fifty per centum shall be distributed and allotted to the various counties on the basis of area and fifty per centum on the basis of population as of the most recent Federal Census.¹³

Provision was also made in the act for additional grants to the counties if such funds accruing from the one cent allocation were deemed insufficient by the Commissioner of Highways and Public Works. If, in the opinion of the Commissioner,

¹¹ Public Acts of Tennessee, 1891, Chapter 55, Section 2.

¹² Public Acts of Tennessee, 1929, Chapter 55, Section 2.

¹³ Ibid., Section 3.

such funds were not sufficient to meet the needs of the county system, additional funds could be allotted provided the total for all counties did not exceed \$2,750,000, or the reimbursement for any district road did not exceed \$100 per mile.¹⁴ From March 1929, when the act went into effect, until and through June 1931, when additional grants were made, distributions to the counties of the state amounted to \$4,670,694.61.¹⁵

Base of Present Distribution

The highway grant-in-aid or shared gasoline tax that is in practice now was introduced in 1931, when the counties' share of the gasoline tax was increased from one to two cents per gallon. This increase was introduced at the same time that the gasoline tax was raised from five to six cents per gallon,¹⁶ and an additional one cent tax levied separate and apart from the other, making a total gasoline tax of seven cents (7¢) per gallon.¹⁷

Section 1. Be it enacted by the General Assembly of the State of Tennessee, That all state monies

¹⁴ Ibid., Section 4-8.

¹⁵ Figures compiled in Division of Accounts, State Department of Highways and Public Works.

¹⁶ Public Acts of Tennessee, 1931, Chapter 40, Section 1.

¹⁷ Public Acts of Tennessee, 1931, Ex. Sess. Chapter 11, Section 4.

appropriated or allotted for the maintenance and improvement of county systems, shall be known as "County Aid Funds," to be paid over by the State Comptroller to the trustees of the several counties in the proportion hereinafter directed, to be used by the county highway authorities in building and/ or maintaining county roads and bridges; provided, that any such county highway may be taken over and constructed, improved, or maintained as a hard surface road by the State Highway Department out of its own funds.

Section 2. Be it further enacted, That from the revenue derived from the tax for the privilege of selling and/ or storing gasoline, commonly termed the "State Gasoline Tax" a sum equivalent to that derived from the levy of two cents (2¢) for each gallon of gasoline is hereby provided for and set aside into a separate fund to be used exclusively as "County Aid Funds."

Section 3. Be it further enacted, That said "County Aid Funds," so derived from the two cents (2¢) gasoline privilege tax shall be divided and distributed by the State Highway Department to the various counties of the State as follows: One-half of said fund shall be distributed equally among the ninety-five counties of the state, and fifty per centum of the balance shall be distributed among the ninety-five counties of the state on the basis of area and fifty per centum on the basis of population, as of the last Federal Census, and shall be paid over monthly by the Comptroller of the State to the various County Trustees, to be used by the county highway authorities in the building, repairing, and improvement of county roads and bridges; provided that the Quarterly County Court of any county of the State may, at any regular term by resolution passed by a majority of the justices present and spread upon the minutes of the court, direct the State Highway Department to expend said counties "pro rata" of said fund on such county highways and bridges as the county highway department of said county by resolution may direct. That nothing in this act shall affect the rights or duties now imposed by law on counties having a Board of County Commissioners.¹⁸

¹⁸ Public Acts of Tennessee, 1931, Chapter 45, Section 1, 2, 3. (*Italics by Author*).

The above act is in force today and has had only a few minor changes. In 1937, the act was amended so that the trustees of each county to which the fund is paid would be allowed to receive one per cent of said county's share as his compensation for receiving and paying out the fund.¹⁹ The trustees of those counties which allow the state to expend their funds, however, do not receive this one per cent.

The allocation of these funds was affected by acts passed in 1937 stating that if any county should fail or neglect during any quarter to pay into the special funds for Old Age Assistance, Dependent Children, or Blind, then the State Treasurer is authorized to retain the sum necessary to make up this amount out of any funds distributable to such county for any purpose except education.²⁰ This represents a means whereby the gasoline tax shares due the counties for highway purposes can be shifted into channels nowise connected with this purpose. Since this act was passed certain amounts have been taken out of the shares of some counties each month for payment into one of these funds.

From July 1, 1931 through October 31, 1940 the total

¹⁹ Public Acts of Tennessee, 1937, Chapter 152, Section 1.

²⁰ Public Acts of Tennessee, 1937, Chapter 49, Section 17; Chapter 50, Section 14; Chapter 51, Section 18.

amount allocated to the counties of the state for use on local roads was \$41,991,978.50. Since 1936, the yearly totals have been:²¹

Year	Amount
1936	\$4,420,166.40
1937	5,066,526.56
1938	5,229,784.50
1939	5,223,825.49
1940	5,450,131.07

From these figures it can be easily seen that the sharing of gasoline taxes in Tennessee is no small item. A total disbursement out of state funds of more than five million out of a total disbursement of approximately seventy million is necessarily of vital importance. Of a total gasoline tax of approximately nineteen and one-half million collected in 1940, nearly five and one-half million was returned to the local units, while only about three million of the gasoline tax money was used by the State Department of Highways.²²

²¹ Amounts are recorded by fiscal years ending July 1, each year. Division of Accounts, State Department of Highways and Public Works.

²² Tennessee Taxpayers Association, A Financial Report on the Government of the State of Tennessee, 1940.

TABLE II

PER CENT OF STATE AID FUNDS ALLOCATED TO EACH COUNTY
BASIS FOR ONE CENT DISTRIBUTION

County	Area	Population ^(a)	Combined area and population	Combined total of two cent fund ^(b)
Anderson	.820400	.740980	.78069	.919850
Bedford	1.232998	.805524	1.019261	1.035946
Benton	1.093866	.429456	.761661	.907148
Bledsoe	.937942	.272418	.605180	.828905
Blount	1.369732	1.298996	1.334364	1.193347
Bradley	.806007	.874094	.840028	.946329
Campbell	1.101063	1.025279	1.063171	1.057901
Cannon	.642886	.341478	.492182	.772406
Carroll	1.484875	.998717	1.241796	1.147163
Carter	.846787	1.118849	.981818	1.017224
Cheatham	.743232	.354918	.549075	.800853
Chester	.750834	.405226	.578030	.815330
Claiborne	1.1226522	.929198	1.025925	1.038278
Clay	.609303	.366015	.487659	.770145
Cooke	1.024300	.832200	.928250	.990440
Coffee	1.062681	.642103	.852393	.952511
Crockett	.640487	.663429	.651958	.852295
Cumberland	1.571233	.437215	1.004224	1.028427
Davidson	1.225802	8.517072	4.871437	2.962934
Decatur	.690863	.386233	.538548	.795599
DeKalb	.746036	.543194	.644615	.848623

TABLE II (continued)

PER CENT OF STATE AID FUNDS ALLOCATED TO EACH COUNTY
BASIS FOR ONE CENT DISTRIBUTION

County	Area	Population ^(a)	Combined area and population	Combined total of two cent fund ^(b)
Dickson	1.316957	.706891	1.011824	1.032227
Dyer	1.199415	1.200241	1.199828	1.126229
Fayette	1.482477	1.104161	1.293319	1.172955
Fentress	1.165831	.421775	.793803	.923217
Franklin	1.379236	.833094	1.106165	1.079398
Gibson	1.518459	1.778215	1.648337	1.350464
Giles	1.506465	1.070719	1.288592	1.170611
Grainger	.736441	.486785	.611613	.832122
Greene	1.470482	1.342184	1.406333	1.229482
Grundy	.899561	.371365	.635463	.844047
Hamblen	.379015	.635033	.507024	.779827
Hamilton	1.376928	6.095684	3.736306	2.394468
Hancock	.546933	.36983	.458308	.755469
Hardeman	1.671984	.848176	1.260080	1.156355
Hardin	1.396119	.619631	1.007875	1.030253
Hawkins	1.156236	.921706	1.038971	1.045801
Haywood	1.218605	.996079	1.107342	1.079976
Henderson	1.285773	.674741	.980257	1.016444
Henry	1.501667	1.010183	1.255926	1.154278
Hickman	1.367332	.520264	.943798	.998214
Houston	.472569	.212361	.342435	.697533
Humphreys	1.081872	.460108	.770990	.911810

TABLE II (continued)

PER CENT OF STATE AID FUNDS ALLOCATED TO EACH COUNTY
BASIS FOR ONE CENT DISTRIBUTION

County	Area	Population(a)	Combined area and population	Combined total of two cent fund(b)
Jackson	.722048	.519346	.620697	.836664
Jefferson	.748435	.684639	.716537	.889584
Johnson	.705256	.486604	.595930	.819780
Knox	1.209010	5.958290	3.583650	2.318140
Lake	.292657	.400755	.346706	.699668
Lauderdale	1.093866	.894534	.994200	1.023425
Lawrence	1.465685	1.023329	1.244507	1.148569
Lewis	.686065	.200951	.443508	.748069
Lincoln	1.408113	.971581	1.189847	1.121239
Loudon	.525344	.680474	.602909	.827777
Macon	.686065	.530161	.608113	.830372
Madison	1.324154	1.951382	1.637768	1.345199
Marion	1.209010	.670690	.939850	.996240
Marshall	.906758	.595210	.750984	.901807
Maury	1.396119	1.300029	1.348074	1.200352
Meigs	.496558	.234162	.365260	.708995
Monroe	1.614412	.816990	1.215701	1.134166
Montgomery	1.237796	1.18052	1.209024	1.130827
Moore	.338235	.154285	.246260	.649445
Morgan	1.268981	.519881	.894431	.973531
McMinn	1.036294	1.109052	1.072673	1.062652
McNairy	1.410512	.760580	1.085546	1.069088

TABLE II (continued)

PER CENT OF STATE AID FUNDS ALLOCATED TO EACH COUNTY
BASIS FOR ONE CENT DISTRIBUTION

County	Area	Population ^(a)	Combined area and population	Combined total of two cent fund ^(b)
Obion	1.324154	1.111614	1.217884	1.135257
Overton	1.069878	.690946	.880412	.966521
Perry	1.168230	.273134	.720687	.886659
Pickett	.388610	.214594	.301602	.677116
Polk	1.036294	.599490	.817892	.935261
Putnam	.969127	.907825	.938476	.995603
Rhea	.875573	.530123	.702848	.877739
Roane	.911555	.935465	.923510	.988070
Robertson	1.091467	1.077407	1.084437	1.068534
Rutherford	1.472881	1.233911	1.353396	1.203013
Scott	1.319356	.538112	.928734	.990687
Sequatchie	.633291	.154669	.393980	.723305
Sevier	1.408113	.782707	1.095410	1.074020
Shelby	1.921462	11.713182	6.817322	3.934976
Smith	.710053	.591549	.650701	.851666
Stewart	1.077074	.507460	.792267	.922449
Sullivan	1.045890	1.952452	1.499171	1.275901
Sumner	1.338547	1.093879	1.216213	1.134422
Tipton	1.060283	1.050923	1.055603	1.054117
Trousdale	.254276	.215130	.234703	.643617
Unicoi	.482165	.484529	.483347	.767989
Union	.563725	.434579	.499152	.775891

TABLE II (continued)

PER CENT OF STATE AID FUNDS ALLOCATED TO EACH COUNTY
BASIS FOR ONE CENT DISTRIBUTION

County	Area	Population ^(a)	Combined area and population	Combined total ^(b) of two cent fund
Van Buren	.702857	.134375	.418616	.755623
Warren	1.014705	.772351	.893528	.973079
Washington	.779620	1.750582	1.265101	1.153730
Wayne	1.796723	.463739	1.130231	1.091431
Weakley	1.391321	1.118339	1.254830	1.153730
White	.870775	.594025	.732400	.892515
Williamson	1.405714	.873094	1.139404	1.096017
Wilson	1.470482	.914522	1.192502	1.122566
Totals	100.000000	100.001	99.999965	100.0000038

(a) Population percentages based on 1930 census. See appendix for 1940 figures.

(b) Combined area and population percentages plus one ninety-fifth divided by two. Column 3 + 1.052631

Administration of Gasoline Tax Shares

The gasoline tax is collected by the State Department of Finance and Taxation and the funds are then turned over to the State Highway Department. It has been specifically set out that not more than two per cent of the amount going to the state highway fund shall be used for the expense of administration, and that of the amount going to the counties not more than one per cent shall be set aside for expenses of administration.²³ The two cents per gallon tax that is allocated to the counties of the state according to the system explained above has been specifically designated as county revenue. After the State Highway Department receives the funds from the point of collection, it divides the funds according to the provisions set up by law. These taxes are collected and distributed monthly. That portion of the funds required to pay certain counties' shares of the Old Age Assistance Fund, Dependent Children Fund, and the Blind Fund, is taken out and sent to the proper department to make up the deficiencies in these funds. The remainder is sent directly to the counties, except in those cases in which the State Highway Department has been directed by the county courts to

²³ Public Acts of Tennessee, 1939, Chapter 207.

expend their monies, in which cases the funds are retained by the state department.

An exception to this administration of the gasoline tax is found in the case of gasoline sold by the various airports of the state for use in the motivation of airplanes. A seven cent tax is paid on this gasoline but it is used for purposes relating to aviation. Fifty per cent of the total tax collections is retained by the Tennessee Bureau of Aeronautics, a division of the State Highway Department, and is used in the laying out of air routes, construction and supervision of airports, etc. The remaining fifty per cent is returned to the counties and municipalities of the state in proportion to the amounts of said tax collected from airports in those units, and is to be used in their respective aeronautics programs.²⁴

Aside from these two outlays against the total fund collected from the gasoline tax, the expense of administration, and the amount collected from vehicles, the total collections of two cents per gallon are returned directly to the counties of the state.

While the statutes provide that the population percentages upon which the returned shares are to be figured shall

²⁴ Public Acts of Tennessee, 1937, Chapter 305, Section 15.

be "as of the last Federal Census," the funds in March 1941 were still being distributed on the basis of the 1930 Federal Census. The 1940 figures were already available and percentages had already been worked out, but due to traditional faulty governmental administration the switchover had not been made. While the change that will be effected by this switch are insignificant, the lateness of the switch serves as an example of the slowness of state tax administration.²⁵ Another example of the possible inadequate administration lies in the fact that the area basis of certain counties whose areas have been considerably reduced by the flooding of certain territories has remained the same. The area percentage allotted to Union County is the same now as in 1935, while the real area has been considerably reduced.

In order that those counties which did not have well organized county highway crews might secure more efficient expenditure of their pro rata shares of the gas tax, it was provided that the county courts of such counties might direct the state highway department to expend these funds. When any court of any county has by resolution asked the State Highway Department to administer the funds in that county, then the state department has the right to expend those funds for a

²⁵ Appendix, p. 1.

period of twelve months or longer if the court designates. This provision was inserted to prevent the constant shifting of expenditure and to prevent the breaking up of projects already under way.

The number of counties that have used this power to direct the State Highway Department to administer the gasoline tax funds has varied greatly from time to time. At one time the state department controlled and expended all the grants of all the ninety-five counties, but by Quarterly Court action from time to time, the number has been reduced until now only a very few counties allow the state department to expend those funds.²⁶ In December 1940, five counties were then allowing the State Department of Highways and Public Works to supervise expenditure of these aid funds. These were the counties of Campbell, Benton, Johnson, Unicoi, and Putnam. By March of 1941, however, only Benton County was having its "pro rata" expended by the central agency. The five counties mentioned received the following from the two cent fund in 1940:²⁷

²⁶ Statement by Division of Accounts, State Department of Highways and Public Works.

²⁷ Division of Accounts, State Department of Highways and Public Works.

Campbell County	\$57,662.39
Benton County	49,438.14
Putnam County	44,685.62
Johnson County	44,674.72
Unicoi County	42,282.11

Of course, the number of counties utilizing the privilege of allowing central supervision of expenditure of these funds, changes from quarter to quarter. The following amounts were expended by the State Highway Department for the counties since 1936:²⁸

1936	\$103,413.77
1937	292,901.18
1938	901,321.10
1939	480,717.00
1940	451,920.16

Several controversies have arisen in connection with the state department's expenditure of these aid funds. Two private acts have been passed placing certain county portions of the aid funds permanently at the disposal of the state department and both have been declared invalid. The two counties involved were Wayne and Benton. In one case (Hassel v. Walters),²⁹ the court held that:

²⁸ Figures for 1936, 1937, 1938 from Reports of the State Highway Commissioner of Tennessee. Biennial reports ending June 30, 1936; June 30, 1937; June 30, 1938.

Figures for 1939 and 1940 from A Financial Statement on the Government of the State of Tennessee, prepared by the Tennessee Taxpayer's Association, June 30, 1940.

²⁹ Hassel v. Walters, 170 Tenn (6Beeler) 206.

Special act vesting state department of highways and public works with full control over expenditure of funds received by certain counties from the state for road purposes, including the gasoline tax, held invalid as depriving county of control over revenues contrary to general law.

The act in question had taken from the control of Wayne County the expenditure of its "pro rata" of the County Aid Fund, and placed permanent control of these funds with the state department.³⁰

A very similar case was brought forward in Benton County v. Plunk,³¹ and the same decision was reached by the Supreme Court. In this decision it was pointed out that such acts were unconstitutional as partial class legislation.³²

Another controversy connected with the right of the state department to administer such county funds arose in the case of Robbins v. Phillips.³³ In this case the Quarterly Court of Pickett County had passed by a close vote a resolution directing the state department to expend that county's share of the gasoline tax funds, but had not set up any definite restrictions as to the use of the funds.³⁴ Shortly

³⁰ Private Acts of 1935, Chapter 333.

³¹ Benton County v. Plunk, 170 Tenn (6 Beeler) 253.

³² Private Acts of 1935, Chapter 710.

³³ Robbins v. Phillips, 175 Tenn (11 Beeler) 568.

³⁴ Resolution was passed to be effective from April 12, 1939 to April 12, 1940.

after the resolution had taken effect, the justices of the Quarterly Court changed attitudes and demanded that the funds be returned to the county authorities, The Commissioner of Highways and Public Works refused and started to expend the funds in that county on local roads. The case was brought before the court, and the decision was reached that since no restrictions were placed on the expenditure of this money, the first resolution was invalid, and thus the state department was forced to turn back the funds to the county authorities before the expiration of the designated twelve months period.

Several difficulties have arisen in the administration of the county aid funds concerning the actual expenditure of such funds by the county authorities. The act specifically states that the funds shall be used for the construction and maintenance of local roads and bridges, but goes no further. A statute was passed directing part of the county aid fund of White County to be withheld as a sinking fund to pay interest and principal of outstanding county road bonds.³⁵ This act was held to be invalid and contrary to the general law.³⁶

A law was passed applicable to Moore County alone

³⁵ Private Acts of 1933, Chapter 650.

³⁶ Hill v. Snodgrass, 167 Tenn (3 Beeler) 285.

whereby all funds received by that county for highway purposes would be paid over to the county trustee and divided into equal parts among the road districts of the county.³⁷ This was held invalid because it was contrary to the general law providing for the creation of a system of intersecting county and state highways.³⁸

The above illustrations represent some of the problems that have been encountered in the administration of the two-cent gasoline tax fund. Even at its best it can only be inefficiently administered by local authorities. These local authorities usually consist of politically appointed road boards, whose aim in directing expenditure of the funds is not provision of a more integrated road system, but satisfaction of the greatest number of voting constituents.

Importance of "County Aid Funds" to County Revenue

These "County Aid Funds" supply very important sources of highway revenues to the counties. According to the present distributive setup, nearly all counties receive major portions of their highway revenues from this source. Counties of the state are still empowered to levy a road tax in with the general

³⁷ Private Acts of 1935, Chapter 6.

³⁸ Wiseman v. Smith, 170 Tenn (6 Beeler) 293.

property tax but only in the larger counties does this tax provide the major source of highway revenue and some counties have eliminated it completely. To many of the smaller counties, the shared gasoline tax is the only source of revenue needed to finance adequately the construction and maintenance of local roads and bridges.

For the past few years, these funds have been used in conjunction with federal funds in the WPA "Farm to Market" road projects and local roads throughout the state have been improved greatly during the period of this application. It has been estimated by some of the employees of the State Highway Department connected with the financial survey being made of all road financing in the state that over one-half of the counties of the state now expend the gasoline tax monies side by side with WPA funds.

The importance of the county aid funds to the counties of the state can be shown by actual figures. In surveys of county finance made in 1932, 1933, and 1934 by the Tennessee Taxpayers' Association, the counties of Campbell, Greene, Knox, Hamilton, Grundy, and Haywood were studied. The amounts received and the percentages of total highway revenues in these counties during these years is shown:³⁹

³⁹ Tennessee Taxpayers' Association, A Report of the Survey of The Finances and Management of the Government of Hamilton County, Tennessee, Nashville, 1934.

Year	County	Amount received	Percentage highway revenue
1932	Hamilton		31.5
1932	Knox	\$79,090.66	25.8
1932	Greene	43,439.20	57
1932	Haywood	38,795.77	70
1933	Campbell	34,225.69	77
1933	Grundy	29,821.88	100

The figures serve to show that the smaller counties of the state receive much larger percentages of highway revenues than do the larger counties. When the above surveys were taken a road property tax levy of fifteen cents was levied in Knox County and a levy of ten cents was levied in Hamilton County while in the smaller counties no property tax for road purposes was levied.

The importance of these revenues to local road finance in the various counties at the present time cannot be determined for all the counties of the state, but available data from a few representative counties will serve to show the relative importance in counties of varying size. Madison County, one of the larger counties of the state, receives approximately 90 per cent of its local road revenue from the two cent returned tax. Rutherford and Greene counties, both relatively large, receive 85 and 66 per cent respectively from this source. In each of these three counties the state returned fund is supplemented by a property tax levy for road purposes. In Madison County, the levy is four cents per one

hundred dollars assessed value, in Rutherford County seven cents, and in Greene County twenty-five cents.

Haywood County, one of the medium counties of the state however, receives all of its funds for use on local roads from the two cent gasoline tax, and levies no property tax for road purposes.

Knox County, one of the four "big city" counties, received only 39 per cent of its revenues expended on local roads from the returned tax fund in 1940. A property tax levy of eighteen cents (18¢) per \$100 assessed valuation for road purposes yielded \$228,055.68 as compared with \$144,478.09 net returned to the county from the two-cent gasoline tax fund.

As can be seen from an examination of the above figures, the returned gasoline tax provides nearly all the revenues for local road construction in small counties and a major portion in the great number of counties. Only in those few largest counties of the state does the revenue from the road property tax levy exceed the gasoline tax share. The conclusion must be reached that the shared gasoline tax constitutes a sizeable grant to the counties of the state, and any problems in the distribution or administration of these shares would necessarily be of great importance.

In the present chapter we have attempted to show the historical background of the highway financing program in

Tennessee, to point out the statutory provisions for actual grant-in-aid distribution, to examine the administrative methods and problems in the present tax sharing, and to illustrate the importance of these shares to the local units. In the following chapter we shall examine the effects of the present distribution more closely and attempt to determine its value.

CHAPTER V

TAX SHARING BASIS IN TENNESSEE

As was pointed out in the preceding chapter, the basis for the sharing of the gasoline tax with the local units as set up in 1929 was the relative areas and populations of the different counties. During the period from 1929 to 1931, when only one cent per gallon of the tax was shared, fifty per cent of the tax was shared on the basis of area and fifty per cent on the basis of population.

This system of distribution, while not entirely equitable, did serve to divide the funds according to some measure of both the needs of the local units and the amounts of tax paid in. Relative populations and area have been traditionally proper as sharing bases in any distributive schemes. Assuming an equal per capita consumption of gasoline throughout the state, population would measure relative amounts of the gasoline tax paid in by the separate localities. Area figures will serve to measure, to a certain extent, the need for rural road facilities in the various counties.

Tennessee, as a state, is made up of ninety-five counties. These counties are not laid out according to any geographical pattern, but have simply grown up in no centrally planned scheme. For this reason, there exists no degree of

equality among the different counties in area, population, or economic status. The counties of the state vary in area from Shelby, which has an area of 801 square miles, to Trousdale, which has an area of 106 square miles. Twelve counties of the state have areas of over 600 square miles each, and five counties have areas of less than 200 square miles each. In population there is a much wider range than in area. According to 1940 census figures, Shelby had a population of 357,620 while Van Buren County had a population of 4,049, only 1.17 per cent that of Shelby. Four counties of the state have populations of more than 100,000, while thirteen counties have populations of less than 10,000 each.

However, the division of the tax according to area and population alone was changed in 1931, when the proceeds of an additional one cent per gallon were made available to the counties. The funds thus added were to be divided equally among the ninety-five counties. The introduction of this equal allocation as one of the factors was not at all logical. It represented no attempt at returning tax monies to the place of gasoline usage, or at equalizing the costs and opportunities of those facilities for which these revenues are used. The only explanation for this action lies in the fact that the balance of power in the Tennessee state legislature has been, and is, held by the smaller counties. The small counties

stood to gain by the inclusion of the equal sharing of the extra one cent. Another factor that encouraged equal sharing was the age old self determination principle imbued within the very spirit of county governments. Each county regards itself as a sovereign unit of government, separate and apart from the other counties of the state, and thus entitled to a share of any distributed state money equal to any other county.

Comparison of the amounts actually received in 1940 with the amounts that would have been received had the sharing basis used from 1929 to 1931, (area and population alone), been retained,¹ shows that those counties now receiving the largest shares are the ones that are losing revenues by the state's continuing upon the present distributive basis. Of course, the rank order of the counties in the amounts actually received and the amounts that would have been returned had the sharing basis of 1929 been retained is the same; the inclusion of the one cent shared equally merely serves to shorten the range between the high and low counties and to cause the distribution to cluster more closely around a central tendency. Under the present system Shelby County receives the largest share, 3.934976 per cent of the total, and Trousdale County receives the smallest, .6436179 per cent of the total. If

¹ Table III, column II.

the division were made on the basis of area and population alone, as was the case from 1929 to 1931, the range would have been from Shelby at 6.817322 per cent to Trousdale at .234703 per cent. Thus, the percentage range is practically cut in half.

The change that was made in 1931 when the equal sharing of the extra cent was introduced, served to increase the percentages of the total shared tax returned to counties of small area and population, and to decrease the percentages of those counties that have the greater areas and population.

All those counties having a combined area and population percentage of more than 1.052631,² (one ninety-fifth), receive proportionately less than they received prior to 1931; those that have average area and population percentages of less than 1.052631 now receive proportionately more than they received under the former system. Thus, fifty-nine counties of the state now receive proportionately more, while only thirty-six counties receive proportionately less than they did under the system that prevailed from 1929 to 1931.

One of the major effects of the adoption of the present distributive system was to cause the four "big city" counties to receive much smaller proportionate shares of the total tax

² Table II, column 3.

TABLE III

AMOUNTS ACTUALLY RECEIVED FROM GASOLINE TAX AND AMOUNTS THAT
WOULD HAVE BEEN RECEIVED UNDER ALTERNATIVE SYSTEMS^(a)

County	Amounts actually received (1940) column I	Population and area basis column II	Rural road basis column III	Registered vehicles column IV
Anderson	\$50,133	\$42,895	\$40,058	\$43,748
Bedford	56,458	55,551	71,942	54,861
Benton	49,438	41,511	41,366	16,524
Bledsoe	45,176	32,983	35,644	9,314
Blount	65,044	72,724	81,861	92,288
Bradley	51,576	45,783	58,098	65,892
Campbell	57,657	57,944	35,692	38,156
Cannon	42,097	26,826	40,658	13,653
Carroll	62,525	67,679	87,202	40,108
Carter	55,440	53,510	46,871	57,341
Cheatham	43,610	29,925	44,146	16,574
Chester	44,437	31,503	50,141	15,854
Claiborne	56,642	55,914	58,316	26,744
Clay	41,974	26,578	27,251	7,254
Cocke	53,980	50,591	52,866	31,202
Coffee	51,913	46,456	69,217	38,581
Crockett	46,451	35,533	41,966	22,444
Cumberland	56,051	54,732	60,496	19,817
Davidson	161,483	265,500	95,922	626,749
Decatur	43,361	29,352	33,791	11,549
Dekalb	46,251	35,132	40,876	17,173

TABLE III (continued)

AMOUNTS ACTUALLY RECEIVED FROM GASOLINE TAX AND AMOUNTS THAT
WOULD HAVE BEEN RECEIVED UNDER ALTERNATIVE SYSTEMS^(a)

County	Amounts actually received (1940) column I	Population and area basis column II	Rural road basis column III	Registered vehicles column IV
Dickson	56,258	55,146	83,932	33,889
Dyer	61,381	65,392	65,402	63,374
Fayette	63,928	70,488	65,402	35,780
Fentress	50,317	43,263	27,251	11,560
Franklin	58,829	60,287	64,312	38,107
Gibson	73,603	89,837	102,462	72,176
Giles	63,800	70,230	87,202	48,332
Grainger	45,352	33,334	47,416	19,773
Greene	67,008	76,647	108,948	72,291
Grundy	46,002	34,634	26,706	11,385
Hamblen	42,502	27,633	32,701	51,684
Hamilton	130,502	203,634	95,922	383,161
Hancock	41,174	24,978	31,611	7,821
Hardeman	63,023	68,676	64,857	24,863
Hardin	56,150	54,931	57,771	19,419
Hawkins	56,998	56,625	67,037	35,589
Haywood	58,860	60,352	52,866	30,488
Henderson	55,398	53,425	71,397	21,980
Henry	62,910	68,450	71,397	48,253
Hickman	54,404	51,438	79,027	17,500
Houston	38,016	18,663	27,796	7,221

TABLE III (continued)

AMOUNTS ACTUALLY RECEIVED FROM GASOLINE TAX AND AMOUNTS THAT
WOULD HAVE BEEN RECEIVED UNDER ALTERNATIVE SYSTEMS^(a)

County	Amounts actually received (1940) column I	Population and area basis column II	Rural road basis column III	Registered vehicles column IV
Jackson	45,599	33,829	38,151	12,939
Jefferson	48,210	39,052	53,950	32,633
Johnson	44,652	31,934	28,886	13,762
Knox	126,342	195,314	116,088	401,887
Lake	38,133	18,896	16,895	15,735
Lauderdale	55,778	54,185	51,766	32,003
Lawrence	62,599	67,827	85,567	37,404
Lewis	40,771	24,172	23,981	9,336
Lincoln	61,109	64,848	84,477	47,325
Loudon	45,115	32,859	39,786	40,086
McMinn	57,916	58,462	85,022	57,826
McNairy	58,267	59,164	85,022	24,100
Macon	45,256	33,143	59,951	18,334
Madison	73,315	89,261	67,582	108,289
Marion	54,296	51,222	33,791	28,395
Marshall	49,150	40,930	55,591	41,405
Maury	65,421	73,472	86,112	87,300
Meigs	38,641	19,913	31,066	8,666
Monroe	61,814	66,257	85,022	30,619
Montgomery	61,632	65,893	67,037	60,469
Moore	35,396	13,421	19,620	7,467

TABLE III (continued)

AMOUNTS ACTUALLY RECEIVED FROM GASOLINE TAX AND AMOUNTS THAT
WOULD HAVE BEEN RECEIVED UNDER ALTERNATIVE SYSTEMS^(a)

County	Amounts actually received (1940) column I	Population and area basis column II	Rural road basis column III	Registered vehicles column IV
Morgan	53,059	48,748	44,691	18,618
Obion	61,873	66,376	74,122	60,731
Overton	52,677	47,984	44,146	14,219
Perry	48,324	39,278	33,246	7,597
Pickett	36,904	16,438	18,530	3,586
Polk	50,973	44,576	48,506	18,432
Putnam	54,262	51,154	50,141	35,344
Rhea	47,838	38,306	47,416	36,416
Roane	53,851	50,333	53,411	45,367
Robertson	58,237	59,103	72,487	58,316
Rutherford	65,566	73,762	85,567	82,548
Scott	53,994	50,617	32,156	15,642
Sequatchie	39,421	21,472	23,436	7,548
Sevier	58,535	59,701	64,312	35,241
Shelby	214,461	371,553	101,917	813,296
Smith	46,417	35,464	43,056	23,959
Stewart	50,275	43,180	54,501	12,830
Sullivan	69,538	81,707	72,487	172,736
Sumner	61,827	66,285	90,472	66,257
Tipton	57,451	57,532	60,496	52,545
Trousdale	35,078	12,742	15,805	13,843

TABLE III (continued)

AMOUNTS ACTUALLY RECEIVED FROM GASOLINE TAX AND AMOUNTS THAT
WOULD HAVE BEEN RECEIVED UNDER ALTERNATIVE SYSTEMS^(a)

County	Amounts actually received (1940) column I	Population and area basis column II	Rural road basis column III	Registered vehicles column IV
Unicoi	41,856	26,343	15,260	20,901
Union	42,287	27,204	31,611	13,233
Van Buren	40,092	22,815	19,620	3,363
Warren	53,034	48,698	68,127	33,524
Washington	63,160	68,950	68,672	117,216
Wayne	59,484	61,599	71,397	13,456
Weakley	62,880	68,380	107,368	53,896
White	48,643	39,917	44,691	22,596
Williamson	59,734	62,099	86,112	55,471
Wilson	61,181	64,993	83,387	62,317
Totals	5,450,131	5,450,131	5,450,131	5,450,136
Low	35,078	12,742	15,260	3,363
High	214,461	371,553	116,088	813,296
Median	54,262	51,154	57,771	31,202

(a) Figures in Column I taken from records of Division of Accounts, Tennessee State Department of Highways and Public Works.

Column II derived from percentages used by department in allocating one cent and total amount distributed in 1940.

Column III derived from total distributed and percentages of rural roads in each county, worked out from tabulation prepared by Division of Research and Statistics of the State Department of Highways and Public Works. Originally from Rural Road Inventories.

Column IV derived from total distributed in 1940 and percentages of motor vehicles in each county worked out from records of Motor Vehicle Division, Department of Finance and Taxation, 1940.

shared. Had no change been made, Shelby County would have received \$371,553 in 1940, or 73 per cent more than the actual amount received, \$214,461. The four counties combined would have received \$1,036,001, 72 per cent or \$403,213 more than the actual amount of \$602,788.

Omitting these four large counties, it is found that the other larger and more prosperous counties were sizeably affected by the adoption of the present sharing base. The next six counties that would receive the greatest positive changes if the base were put back as in the years 1929 to 1931 are, in order, Gibson, Madison, Sullivan, Greene, Rutherford, and Maury. These counties vary in amounts received from Gibson at \$73,603 to Maury at \$65,421, 1940 figures. The average of the amounts received in 1940 by the six counties was \$69,075. If the tax monies had been shared on the earlier basis, Gibson County would have received \$89,837, an increase of \$16,634 or 22 per cent. These six counties received a total of \$414,451 in 1940; if the base had been as in 1929, this figure would have been \$484,686, an increase of \$70,235, or 17 per cent.

At the opposite extreme are those counties whose allotments have been considerably increased by the inclusion of the equal sharing. Naturally, these are the counties having the smallest combined percentage of area and population. The

lowest ten of these are, in ascending order: Trousdale, Moore, Pickett, Houston, Lake, Meigs, Sequatchie, Van Buren, Lewis, and Hancock. Trousdale County received \$35,178 in 1940 as compared with \$12,742 that would have been received on the other basis, a decrease of 63 per cent. These ten counties combined received a total of \$383,626; if population and area had been the sole determinant this amount would have been \$195,510, a decrease of 49 per cent.

Certain counties were not much affected in proportionate shares received by the change made in 1931. These are the counties that have a combined area and population percentage of approximately one ninety-fifth. These are the counties that are neither among the smaller or larger of the state. The ten counties, McNairy, Robertson, McMinn, Campbell, Tipton, Hawkins, Claiborne, Bedford, Dickson, and Hardin, combined received \$572,034 in 1940 as compared with \$570,372 that would have been received on the former basis. For these borderline counties the changing of the distribution basis had little appreciable effect.

From the above findings it is evident that the retention of the present distributive setup in preference to the distributing of revenues on area and population alone is advantageous to the smaller counties and works a hardship on the larger counties.

So far, attention has been directed only to the sharing system as it is in actual practice, and as it would work now had the earlier used bases of area and population alone been retained. But, as has been pointed out, area and population do not serve as a very efficient means or device to measure the equitability of any distribution scheme. The use of motor vehicle registration as a measure of tax shares serves more adequately to represent both need for shared revenues and the amounts of the taxes paid in. Another basis that has been used by some states and serves to show relative needs of the local units for shared revenues is the mileage of rural roads upon which the monies are to be expended. Examination of the actual amounts returned to the various counties and the amounts that would have been returned had the taxes been shared either on a motor vehicle registration basis or a mileage of rural roads basis, shows even greater percentage range between the higher and lower limits.³

If the funds were shared on the basis of the mileages of rural roads in each of the counties, there would be considerable change in amounts received. While the range would not be so great as in some of the other systems of distribution, it would be much wider than the present one. If the funds were allocated on such a basis, the amounts would run from Knox at \$116,088 to Unicoi at \$15,260. Under this system, the

³ Table III, column III and IV.

larger and the smaller counties both would receive less than they receive at present. The mileage of rural roads in the different counties runs in fairly close correlation to area percentages. Under a distributive setup of this type those counties with large area percentages but with small populations would stand to gain, while those small counties with dense populations and few miles of frequently traveled roads would lose revenues. Of course, rural highway mileage does not take into consideration any city streets. This tends to make those counties that contain substantial city areas have proportionately few miles of rural roads.

When we take actual amounts received in 1940 and determine the number of dollars received per rural road miles in each county, we find that the variation is very great.⁴ Unicoi County received \$266 per rural road mile in 1940, while Weakley County received only \$57 per mile. Seventeen counties received over \$150 per mile, and fifteen counties received less than \$75 per mile. The four large counties received in 1940 an average of \$153 per mile of secondary road. Those counties receiving less per mile are those that have many miles of rural roads in comparison to area and population.

The variance in amounts that would be received if the

⁴ Table IV.

TABLE IV

DOLLARS RECEIVED PER MILE RURAL ROADS, 1940^(a)

County	Dollars per mile	County	Dollars per mile
Anderson	\$122.00	Haywood	\$109.10
Bedford	76.74	Henderson	75.78
Benton	117.21	Henry	86.67
Bledsoe	124.31	Hickman	67.51
Blount	77.94	Houston	132.83
Bradley	87.05	Humphreys	82.89
Campbell	157.71	Jackson	117.49
Cannon	101.54	Jefferson	87.83
Carroll	70.28	Johnson	151.21
Carter	116.62	Knox	107.17
Cheatham	96.41	Lake	224.60
Chester	86.45	Lauderdale	106.02
Claiborne	95.41	Lawrence	71.82
Clay	150.34	Lewis	166.07
Cocke	99.96	Lincoln	70.79
Coffee	73.73	Loudon	111.73
Crockett	108.00	McMinn	66.97
Cumberland	91.08	McNairy	67.00
Davidson	164.71	Macon	73.53
Decatur	125.87	Madison	106.35
DeKalb	111.34	Marion	157.06
Dickson	65.73	Marshall	86.76
Dyer	91.81	Maurry	74.20
Fayette	96.25	Meigs	122.40
Fentress	182.51	Monroe	71.21
Franklin	89.57	Montgomery	89.56
Gibson	70.29	Moore	175.84
Giles	71.56	Morgan	116.89
Grainger	94.21	Obion	81.87
Greene	60.31	Overton	117.09
Grundy	167.28	Perry	143.01
Hamblen	127.71	Pickett	196.09
Hamilton	132.96	Polk	102.83
Hancock	127.75	Putnam	106.69
Hardeman	94.94	Rhea	99.00
Hardin	94.78	Roane	98.76
Hawkins	83.20	Robertson	79.06

TABLE IV (continued)

DOLLARS RECEIVED PER MILE RURAL ROADS, 1940^(a)

County	Dollars per mile	County	Dollars per mile
Rutherford	\$74.96	Unicoi	\$266.07
Scott	165.17	Union	130.03
Sequatchie	165.43	Van Buren	199.36
Sevier	88.97	Warren	76.21
Shelby	206.76	Washington	90.16
Smith	105.21	Wayne	81.46
Stewart	90.43	Weakley	57.58
Sullivan	94.38	White	106.63
Sumner	67.17	Williamson	68.18
Tipton	92.98	Wilson	72.18
Trousdale	214.28		
Low	\$57.38		
High	266.07		
Median	96.41		

(a) This table worked out from amounts actually distributed to each county and number of rural roads in each county. Actual amounts from records of Division of Accounts, State Department of Highways and Public Works. Miles of rural roads from tabulation prepared by Division of Research and Statistics, State Department of Highways and Public Works.

sharing were placed on the basis of the number of registered vehicles in each county is greater than in any of the other cases. Under such a plan Shelby County would have received in 1940 a total of \$813,296,⁵ or 15 per cent of the total instead of the \$214,461, or 3.9324976 per cent, which it receives under the present setup. Van Buren County would have received only \$3,363 instead of the \$40,092 actually received, only 8.3 per cent of the actual amount. Instead of forty-three counties receiving over one per cent each of the total, only twenty-one counties would receive over one per cent under such a distributive system.

Examination of the number of dollars received per vehicle in each county reveals that the amounts run from \$3.03 per automotive vehicle in Davidson County to \$140.18 in Van Buren County, about forty-six times as much as that of Davidson. Eleven counties received less than \$10 per vehicle, and thirteen counties received over \$50 per vehicle.⁶

From any study of the above stated facts, it must be concluded that the gasoline tax distribution system in Tennessee meets none of the tests as to equity of distribution. The monies are not shared according to any measure of tax paid in by

⁵ Table III, column IV.

⁶ Table V.

TABLE V

AMOUNTS RECEIVED FOR EACH REGISTERED AUTOMOBILE, 1940^(a)

County	Dollars	County	Dollars
Anderson	\$13.48	Henderson	\$29.64
Bedford	12.11	Henry	15.33
Benton	35.19	Hickman	36.56
Bledsoe	57.04	Houston	61.92
Blount	9.21	Humphreys	35.12
Bradley	9.21	Jackson	41.45
Campbell	17.77	Jefferson	17.47
Cannon	36.26	Johnson	38.16
Carroll	18.33	Knox	3.70
Carter	11.37	Lake	28.50
Cheatham	30.98	Lauderdale	20.50
Chester	33.14	Lawrence	19.69
Claiborne	24.91	Lewis	51.35
Clay	68.03	Lincoln	15.19
Cocke	20.35	Loudon	13.24
Coffee	15.83	McMinn	11.78
Crockett	24.35	McNairy	28.44
Cumberland	33.26	Macon	28.94
Davidson	3.03	Madison	7.96
Decatur	44.16	Marion	22.49
Dekalb	31.68	Marshall	13.96
Dickson	19.53	Maurry	8.81
Dyer	11.39	Meigs	52.43
Fayette	21.02	Monroe	23.75
Fentress	51.19	Montgomery	11.90
Franklin	18.13	Moore	55.74
Gibson	12.00	Morgan	33.52
Giles	15.53	Obion	11.98
Grainger	26.98	Overton	43.57
Greene	10.90	Perry	74.80
Grundy	47.52	Pickett	121.00
Hamblen	9.67	Polk	32.53
Hamilton	4.01	Putnam	18.06
Hancock	61.92	Rhea	15.45
Hardeman	29.81	Roane	13.96
Hardin	34.01	Robertson	11.75
Hawkins	18.84	Rutherford	9.34
Haywood	22.71	Scott	40.60

TABLE V (onctinued)

AMOUNTS RECEIVED FOR EACH REGISTERED AUTOMOBILE, 1940^(a)

County	Dollars	County	Dollars
Sequatchie	61.41	Union	37.59
Sevier	19.54	Van Buren	140.18
Shelby	3.10	Warren	18.61
Smith	22.70	Washington	6.34
Stewart	46.08	Wayne	52.00
Sullivan	4.74	Weakley	13.72
Sumner	10.98	White	25.32
Tipton	12.86	Williamson	12.67
Trousdale	29.80	Wilson	11.55
Unicoi	23.55		
Low	3.03		
High	140.18		
Median	21.02		

(a) This table compiled from amounts actually received by each county in 1940, and number of registered vehicles in each county in 1940. Amounts from records of Division of Accounts, State Department of Highways and Public Works. Registered vehicles from records of Motor Vehicle, State Department of Finance and Taxation

the various localities or roads utilized in those units. They are not distributed in relation to the needs of the different units. The distribution is definitely an arbitrary one, set up primarily from a political viewpoint rather than a scientific one.

It has been the main purpose of this chapter to point out the actual effects of the present distribution system, and to calculate the variance from the actual amounts received and the amounts that would have been received had the sharing bases been changed. In the following chapter, it shall be our purpose to present an equitable distribution for the gasoline tax among the local units in Tennessee.

CHAPTER VI

EQUITABLE GASOLINE TAX DISTRIBUTION IN TENNESSEE

Some indication of the equity of the gasoline tax distribution in Tennessee has been shown by the studies presented in the preceding chapters. The sharing was introduced and has grown up as a political truce, and thus no scientific attempt has been made to distribute the funds either to the respective places of tax incidence or to the counties in relation to their needs.

Before any plan for revision of the tax distribution system in Tennessee is made, it is necessary that the inequity in the present structure be thoroughly analyzed and evaluated. In Chapter III, this study attempted to present the alternative methods of distribution that have been brought forward and put in use in the various states. Of course, conditions peculiar to the different states make distribution problems difficult of similar solution. However, from a study of the various plans and a comparison with our present one in Tennessee, it seems that some system of distribution could be worked out to the advantage of all units concerned.

The present sharing system works toward more equalized sharing of the revenues than many of the others considered. Chief fault has been found in the Tennessee distribution in the

granting of such large proportionate shares to the smaller units at the expense of the larger ones. While it is generally conceded as correct in governmental theory that the larger and more prosperous units of government should bear part of the burden of support of the weaker units, it would seem that even this principle would not justify the tax sharing scheme in Tennessee. The distribution constitutes much more than mere equalization of highway costs between the richer and the poorer districts. As was pointed out previously, property tax levies for road purposes are unnecessary in the smaller counties because the returned funds are adequate to support all local roads, but in the larger units such a road tax is necessary to supplement the returned funds. As far as road taxation is concerned, the taxpayer in the larger communities is at a disadvantage in comparison to the taxpayers of the poorer units.

In spite of this fact, an examination of the total property tax rates of the counties of the state reveals that the tax rates in the smaller counties are higher than they are in the larger counties. In the ten counties having the lowest combined percentages of area and population, the average total tax rate in 1940 was \$2.21 while in the ten highest counties the tax rate, including that levied for rural road purposes, the average was \$1.67. This shows that the property tax payer

in the smaller units of the state is forced to bear a much greater tax burden than the taxpayer in the larger counties. This fact may justify to a certain extent the proportionately larger shares given the smaller counties. The whole question revolves around the controversy as to whether equalization of opportunities of all governmental functions is desired as the result of the shared gasoline tax, or merely the equalization of the costs of highway facilities alone. If the shared funds were returned to the general funds of the counties, probably the present sharing setup would go a long way toward meeting the desired goal of equalized opportunity.

The reason that the smaller units must receive larger grants for the support of comparative functions seems to lie in the inefficiency of the small units as administrative agencies. Functions that could be more easily and economically carried out by larger agencies must be carried on in the separate jurisdictions, thus making for a higher unit cost of operation.

But even if we accept the above argument as a justification for the distribution of the gasoline tax in Tennessee according to the formula now used, it must be accepted that such sharing serves to some extent to perpetuate the marginal and submarginal units within this state.

According to traditional theories of highway financing,

however, such a justification cannot be accepted as sound. If the funds are to be earmarked for highway purposes, they should be returned to the local units according to the tests of highway needs and not needs of funds for relief of general property taxation. A change must be effected in some way before any equitable system can be introduced. Just what system of distribution would be applicable to Tennessee conditions? First of all, as was proved in the last chapter, elimination of the equal sharing of half the revenue, and the sharing of all the returned monies according to relative populations and areas of the counties would make for a much more equitable distribution.

If the purpose of the gasoline grant-in-aid is to be the equalization of highway opportunities among the counties of the state, several separate elements would necessarily have to enter into the distribution basis. The relative needs of the counties for road facilities will have to be taken into consideration. The factors best determining such needs would be area, population, amount and character of traffic served, and cost of road construction, as determined by the topographical features and road character. The best measure of need probably is the mileage of those roads upon which the monies are to be expended, and the relative traffic densities upon these roads. The mileage of rural roads can be easily used as

a base, but traffic densities upon these roads cannot be so easily determined. However, the traffic survey started in 1936 attempted to measure the flow of traffic on every mile of road within the state. The results of this survey should show and provide an adequate basis upon which to base tax shares. The difficulty in the use of traffic flow as any base for tax sharing is the inconstancy of the traffic flows and the tremendous costs involved in the measurement of traffic flow.

If the objective of the tax sharing scheme is to return the tax to the counties according to the relative amounts of gasoline consumed in those counties, possibly the best measure would be the number of motor vehicles registered in each county. Population also serves to measure this to a certain extent.

If the gasoline tax monies are returned to finance an integrated system of comparable local roads throughout the state, then one of the best ways in which the funds could be administered would be by a central planning agency which would pay no attention whatsoever to county boundaries. This would entail a great degree of state control and possibly complete state supervision of the construction and maintenance of all local roads, as is the case in several states. Such a step, however, would involve tremendous expansion of the existing state highway department.

The adoption of such a system of overall state control would mean that the central agency could probably not function efficiently for the first few years on the amounts of funds now returned to the counties for road purposes due to certain statewide standards which would be set up. Traditional independence of the county governments, and the tendency of certain political groups to shy away from anything that aims at increased centralization of governmental functions, would probably make enactment of such legislation allowing the state authorities full control of all roads very difficult if not impossible.

It is difficult to see how any definite purpose or objective of the gasoline tax distribution in this state can be agreed upon. It seems that, insofar as possible, the counties of the state should be allocated as much of the gasoline tax funds as they can best administer on an equal basis with all the other counties. Mr. Blakey states that, the decision as to what these shares shall be will have to be made by the democratic process, which involves education, consideration, debate, and compromise.¹ No doubt, whatever system is put into effect in Tennessee, it must involve some sort of compromise between the larger and the smaller counties.

¹ Roy G. Blakey, "What to Share, How to Share, and How Much," Proceedings of the National Tax Association, 1938, p. 348.

It is possible that no equitable distribution can be reached in the distribution of these funds if the allocations are made on any rigid basis. Changing conditions from year to year make yearly changes of the sharing base necessary for complete equity in distribution. If this should be the case, some central agency, the state highway department, could possibly set up a different sharing scheme each year and still allow the county authorities to expend the funds as they see fit upon the roads within the respective counties. If such a plan were adopted, the state highway department could from its work on the main roads in each county determine the needs of each county for rural road finances and from information gathered in this respect and through comprehensive surveys of traffic flow, road conditions, etc., be in a relatively good position to allocate portions of these returned funds to the various counties. Such a plan would achieve much of the advantage of complete state control and also would allow the county authorities to continue to expend the funds.

The difficulty again lies in the unlikelihood of enactment of such plans. At the present time the smaller counties are seemingly enjoying the advantage over the larger counties in the return of gasoline tax shares. It is not likely that they will relinquish this advantage without a battle. Only through concerted action on the part of all those benefiting from a changed allocation system can a revision of the distributive

system he brought about. It is very likely that full state control and supervision of all local roads could be as easily put into effect as could be the allowing of the state highway department to allocate the funds to the counties.

Seemingly, the best chance for change lies in the adoption of one of the more simple systems of distribution. The larger units are in no position to determine exactly what system of distribution they should have, and complete equity of distribution is not to be expected as long as the power to set up the basis of allocation is in the hands of a political body. If it has been proven that the larger counties are now not receiving equitable shares of the total distributed funds, the representatives of these counties must be ready and willing to adopt any of the systems mentioned that would be at all acceptable to the smaller counties and to force its adoption.

Adoption of a distribution scheme with the number of motor vehicles registered in each county as a base would never be accepted since it, more than any other, serves to accentuate the range between the high and low points. If the rural roads basis could be effected to include some measure of traffic flow, such a basis would possibly come nearer adoption.

The most likely possibility for any change, however, lies in the return to the basis of 1929-1931, area and population alone, excluding the equal sharing of the one cent. This

change would benefit the larger counties greatly, and would be accepted much more readily by the legislative bodies than would be any completely new scheme.

In spite of the above mentioned statements as to the difficulties concerning the practical establishment of any completely equitable basis for distribution of gasoline tax monies, definite recommendations can be made and set up as a final goal to be aimed at in the distribution of such funds. From this study based entirely upon completely unbiased data and a thorough analysis of the whole problem the following recommendations are made:

1. The power to set the basis upon which the gasoline tax funds shall be distributed should be placed in a central body equipped with a thorough knowledge of the whole highway problem. This body might be either the officials of the State Highway Department or some other body appointed by the Governor on the basis of their qualifications and knowledge of highway problems.

2. This body should be required to set the distributive basis on some definite sharing plan rather than merely allocating certain portions of funds to the respective counties. These plans should be set up on one or two year bases and should not be subject to change within that time.

3. The central agency in selecting the allocation basis

should primarily consider the needs of the counties for the rural road monies. Determination of these needs should be based upon mileage of roads upon which these funds are to be expended, character of road needed as determined by topographical features, etc., traffic flow upon these roads, and registered vehicles within the area of jurisdiction.

4. The county authorities should continue to have the power to expend the returned funds or to direct the State Highway Department to expend the funds.

CHAPTER VII

THE CITY CONSIDERED AS A SHARING UNIT

So far in the course of this study, we have considered only the counties of the state as sharing units. In Tennessee, the gasoline tax is shared among the ninety-five counties only, and the cities and towns of the state get no part of it. Many of the states share their returned highway funds with both the cities and counties; and in some, the municipalities even receive more than do the counties.

Illinois allots equal shares of the gasoline tax to the municipalities and the counties, 33 1/3 per cent to each. In the majority of the states that share the tax with the municipal units, the cities are allotted a share of the highway revenues less than that share allotted to the counties. In 1939, \$46,446,000 was allocated to the cities of the country as compared with the \$343,882,000 allocated for county highway purposes.¹ Most of the states usually allocate to the counties approximately double the amount given to the municipalities. Nebraska allocates 20 per cent to the counties and 10 per cent to the cities, towns, and villages. Some states return a designated sum to the cities; Indiana returns two million dollars to the cities,

¹ Public Roads, 21:174, November 1940.

and one-third of the remainder of the gasoline tax to the counties. Maryland shares its funds with the city of Baltimore alone.

The counties in Tennessee use the shared gasoline tax money on those rural roads outside the municipal limits within the counties. The State Department of Highways and Public Works expends its funds on the construction of primary routes, but only in those smaller towns which lie along a main state road, does the department pay the full cost of construction of primary routes. In the larger cities of the state, the State Department constructs only the highways outside the city limits; however, the state does generally contribute to the cost of those "through" streets within the municipal limits. Of course, that part of any incorporated municipality's streets that are not on state thoroughfares must be financed, constructed and maintained solely by the inhabitants of that municipality. And, since in Tennessee the local units are not empowered to levy special taxes on highway users, the revenues for this purpose must come mainly from the general property tax.

The way in which this scheme works out makes for quite an imposition upon the city dweller. Burdened by the extra property tax needed for street financing, he must also pay a gasoline and motor vehicle registration tax equal to that paid by the rural dweller. Thus, the problem in highway financing between

the county and municipal governments is the same that exists in the educational, health, and other fields. The traditional relationship between the county and municipal governments is such that in those counties that have reasonably large urban populations, the taxpayers of the municipality are forced to bear the main burden of county highway facilities as well as the whole burden of a separate city system.

The residents of the cities of the state pay proportionate shares of the gasoline tax with the rural resident; yet, all the gasoline tax is either spent by the state department for construction and maintenance of primary routes, placed in the funds for the repayment of state and county bonds, or is returned to the county governments for use on those roads outside the city limits. That highway users should be charged in accordance with utilization of highway facilities is the generally accepted theory upon which the gasoline tax and registration fees are established. But this does not work in the sharing the gasoline tax among the counties alone. The only time that the city residents get a chance to utilize the roads for which they pay is when they decide to travel through the rural haunts on holidays or vacations. Many of the automobiles registered in cities and towns never go beyond the city limits and utilize only city streets. Commercial vehicles, delivery trucks, and busses generally operate solely upon primary routes and city

streets and never upon those for which the two-cent fund is returned.

Looking at the situation from this angle, it seems that tax sharing among counties exclusive of any distribution among the municipalities is completely inequitable. But that is not the whole story, for there is considerable justification for requiring city dwellers to support local roads in the rural districts. The whole argument revolves around the fact that the municipalities derive their existence from the surrounding areas and are, in fact, really parts of the rural areas. This is more nearly true in Tennessee than in many other states, for Tennessee is primarily an agricultural state and the greatest number of the towns do practically live off the trading hinterland of the adjacent rural farming districts. One side of the controversy is aptly expressed as follows:

In terms of community interest, it means that the city auto owner expects to ride with comfort and speed over what were formerly country roads. The countryman drives miles to the larger towns or cities to purchase commodities which formerly were secured from country stores. The merchant finds the possibilities of his market limited by the poverty of people or by the poor roads of sections with which his predecessor of a quarter of a century ago would not have troubled himself in the slightest.²

² H. H. Chapman, "Distribution of Tax Monies to Local Governmental Units," University of Alabama Business News, Bureau of Business Research, School of Commerce and Business Administration, University of Alabama. 5:1, July 1935.

When one considers the theory of economic support of the municipalities by the rural areas as determining equity of highway tax sharing, the problem immediately becomes more complicated. Consideration of such a theory, of course, represents a breakaway from the traditional concept of the doctrine that the road user should pay directly for the roads utilized.

According to this theory, the city streets should be paid for out of the general fund of the city because of "the general good afforded people in all walks of life, and particularly to the mercantile and other business interests in the county seats and smaller towns, who profit exceedingly by the increased travel."³

Thus, the two sides to the argument as to the inclusion of the city or town as a sharing unit have been presented. From an unbiased viewpoint based upon an analysis of conditions peculiar to Tennessee alone, it seems that if some inclusion of the few big cities were effected, continuation of sharing among the counties alone would best serve the general interest of the state. The four large cities, Memphis, Nashville, Chattanooga, and Knoxville, and possibly three or four other larger towns, should certainly receive a portion of the returned gasoline tax funds for use on city streets. However, those county seat

³ Frank E. Packard, Proceedings of the National Tax Association, 1934, p. 304.

towns of from one to ten thousand inhabitants do exist principally from the trade of the farming districts and the inhabitants of these towns usually travel the rural roads enough to warrant the funds being used on the county roads alone.

There has been much agitation in Tennessee during the last two years for the inclusion of the municipalities as sharing participants in the gasoline tax fund. The movement has gained centralized support from the organization known as the Tennessee Municipal League. This organization has made extensive studies of the tax sharing devices used in the different states and has fostered legislation in this state.

In 1941, three separate proposals whereby the municipalities of the state would participate in the shared gasoline tax, were proposed as possible measures, but all failed to materialize or even come close to passage. Strong opposition to the measures was mustered by the Association of County Judges of the state, who naturally do not favor any measure which would in any way lessen or limit the amount of funds returned to the county governments.

The first measure was entitled "An Act To Provide State Aid Funds For County Highways and Municipal Streets And The Manner And Methods Of Disbursement Thereof; And To Repeal Chapter 45 Of The Public Acts Of The General Assembly Of The State Of Tennessee For The Year 1931, Entitled 'An Act To

Provide State Aid Funds For County Highways And The Manner And Mode Of Disbursement Thereof'."

This bill provided that of the two cent total gasoline grant to the local units of the state, the municipalities of the state should receive one-half cent ($\frac{1}{2}$) and the counties one and one-half cent. The one-half cent provided was to be set aside as a "Municipal Aid Fund," and was to be separate and apart from that fund returned to the counties. The county returned fund of one and one-half cents per gallon was to be distributed in the same manner as is now in practice, making three-fourths of a cent distributed equally and three-fourths of a cent distributed according to relative areas and population. The one-half cent allocated to the cities, however, was to be divided differently.

Section 4. Be It Further Enacted, that said "Municipal Aid Funds" so derived from the one-half cent ($\frac{1}{2}$) gasoline privilege tax, shall be distributed and divided by the State Highway Department to the various municipalities of the state as follows:

One half of said fund shall be distributed among the various municipalities of the state on the basis of population of the most recent Federal Census, and the remaining one-half ($\frac{1}{2}$) shall be distributed among the various municipalities of the state on the basis that the mileage of streets which form a part of the numbered state highway system in each municipality bears to the total mileage of streets which form a part of numbered state highways system in all the municipalities of the state.⁴

⁴ Bill prepared by the Tennessee Municipal League.

The bill also provided that the municipalities could direct the State Department to expend their funds in much the same manner that the counties are now empowered to do.

This bill was merely a proposal and was never really presented to the legislature. However, another scheme was proposed and put forward by that group desiring municipal sharing.

The new proposal was different in that it set aside no separate fund for allocation to municipalities, but stated that the municipalities in each county should receive twenty-five per cent of the county fund for use on streets provided that the population of the towns in that county amounted to one-fourth that of the county as a whole. If the population did not amount to one-fourth of the county total, the municipal governments were to receive that portion amounting to the same percentage of the total as the population of the towns bear to the total of the county.

That of the county allotment for each county, there shall be distributed among the municipalities in each county, 25 per cent of the monies allocated to each county, Provided Further, That in counties wherein less than 25 per cent of the total county population, according to the most recent Federal Census, reside within municipalities, there shall be allocated to the municipalities within any such county, the proportion of the county allotment for such county that the population, according to the most recent Federal Census, of the municipalities in such county bears to the total population, according to the most recent

Federal Census, of such county.⁵

The fund returned to the municipal governments in each county was to be divided by the different towns according to population and was to be used solely upon city streets. A study was made to illustrate the effects of this system, if adopted, upon gasoline tax distribution in Tennessee. A table prepared by the Gasoline Tax Committee of the Tennessee Municipal League shows the relative populations of rural and urban areas in each county, the actual amounts received by the counties in 1940, and amounts as they would have been received according to this plan.⁶

Even this elaborately planned scheme did not find acceptance in the legislature. It did not get past the first reading in the assembly. As a last resort, the proponents of the two above measures devised still another plan which they thought would be more readily acceptable to those rigid adherents of the old system and who were reluctant to give up any part of the counties' gasoline tax aid funds.

The bill was introduced as Senate Bill, Number 579, by Senator Dossett and as House Bill, Number 781, by Representative Doak. As amended, it sets up six definite provisions

⁵ Tennessee Municipal League, Report of the Gas Tax Committee, January 23, 1941. Prepared by Mr. W. H. Newell, Executive Secretary.

⁶ Table VI.

TABLE VI

CALCULATIONS SHOWING EFFECT OF PROPOSED LEAGUE SPONSORED GASOLINE TAX RETURN BILL, UPON COUNTIES AND MUNICIPALITIES. RETURN OF $\frac{1}{2}$ ¢ PER GALLON TO TOWN, BUT NOT TO EXCEED THE PER CAPITA RETURN OF THE COUNTY IN WHICH IT IS LOCATED¹

County and towns <u>a/</u> Column number (1)	1940 Population <u>a/</u> (2)	1940 Population rural and urban (3)	Return of two cent gas tax July 1, 1939 to June 30, 1940 (4)	Percentage population (5) <u>b/</u>	County <u>c/</u> (6)	Towns <u>c/</u> (7)
ANDERSON	26,504	22,223	\$50,133	83.8	\$42,011	
Clinton	2,761					
Lake City	1,520	4,281		16.2		\$8,122
BEDFORD	23,151	15,544	56,460	67.1	42,345	
Bell Buckle	355					
Normandy	163					
Shelbyville	6,537					
Wartrace	552	7,607		32.9		14,115
BENTON	11,976	10,383	49,441	86.7	42,865	
Big Sandy	601					
Camden	992	1,593		13.3		6,576
BLEDSON	8,358	7,599	45,176	90.9	41,065	
Pikeville	759	759		9.1		4,111
BLOUNT	41,116	29,998	65,047	72.9	48,785	
Alcoa	5,131					
Maryville	5,609					
Townsend	378	11,118		27.1		15,262

TABLE VI (continued)

CALCULATIONS SHOWING EFFECT OF PROPOSED LEAGUE SPONSORED GASOLINE TAX RETURN BILL, UPON COUNTIES AND MUNICIPALITIES. RETURN OF $\frac{1}{2}\%$ PER GALLON TO TOWN, BUT NOT TO EXCEED THE PER CAPITA RETURN OF THE COUNTY IN WHICH IT IS LOCATED¹

County and towns <u>a/</u> Column number (1)	1940 Population <u>a/</u> (2)	1940 Population rural and urban (3)	Return of two Percent cent gas tax July 1, 1939 to June 30, 1940 (4) <u>b/</u>	Percentage population (5)	County <u>c/</u> (6)	Towns <u>c/</u> (7)
BRADLEY	28,498	17,147	\$51,576	60.2	\$38,682	
Cleveland	11,351	11,351		39.8		\$12,894
CAMPBELL	31,131	25,540	57,657	92.0	53,044	
Jellico	1,581					
La Follette	4,010	5,591		8.0		4,613
CANNON	9,880	9,217	42,097	93.3	39,277	
Woodbury	663	663		6.7		2,820
CARROLL	25,978	20,575	62,525	79.9	49,957	
Bruceton	1,003					
Hollow Rock	422					
Huntingdon	1,432					
McKenzie	2,019					
Trezevant	527	5,403		20.1		12,568
CARTER	35,127	26,350	55,440	75.0	41,580	
Elizabethton	8,516					
Milligan College	261	8,777		25.0		13,860

TABLE VI (continued)

CALCULATIONS SHOWING EFFECT OF PROPOSED LEAGUE SPONSORED GASOLINE TAX RETURN BILL, UPON COUNTIES AND MUNICIPALITIES. RETURN OF $\frac{1}{2}$ ¢ PER GALLON TO TOWN, BUT NOT TO EXCEED THE PER CAPITA RETURN OF THE COUNTY IN WHICH IT IS LOCATED¹

County and towns <u>a/</u> Column number (1)	1940 Population <u>a/</u> (2)	1940 Population rural and urban (3)	Return of two cent gas tax July 1, 1939 to June 30, 1940 (4)	Percentage population (5) <u>b/</u>	County <u>c/</u> (6)	Towns <u>c/</u> (7)
CHEATHAM	9,928	8,971	\$43,611	90.4	\$39,424	
Ashland City	957	957		9.6		\$ 4,187
CHESTER	11,124	9,353	44,437	84.1	37,372	
Henderson	1,771	1,771		15.9		7,065
CLAIBORNE	24,657	24,248	56,642	98.3	55,679	
Cumberland Gap	409	409		1.7		963
CLAY	10,904	10,040	41,974	92.1	38,658	
Celina	864	864		7.9		3,316
COCKE	24,083	20,409	53,980	84.8	45,775	
Parrottsville	99					
Newport	3,575	3,674		15.2		8,205
COFFEE	18,959	12,695	51,913	67.0	38,935	
Manchester	1,715					
Tullahoma	4,549	6,264		33.0		12,978

TABLE VI (continued)

CALCULATIONS SHOWING EFFECT OF PROPOSED LEAGUE SPONSORED GASOLINE TAX RETURN BILL, UPON COUNTIES AND MUNICIPALITIES. RETURN OF $\frac{1}{2}$ ¢ PER GALLON TO TOWN, BUT NOT TO EXCEED THE PER CAPITA RETURN OF THE COUNTY IN WHICH IT IS LOCATED¹

County and towns <u>a/</u> Column number (1)	1940 Population <u>a/</u> (2)	1940 Population rural and urban (3)	Return of two cent gas tax July 1, 1939 to June 30, 1940 (4) <u>b/</u>	Percentage population (5)	County <u>c/</u> (6)	Towns <u>c/</u> (7)
CROCKETT	17,330	14,276	\$46,450	82.4	\$38,275	
Alamo	1,137					
Bells	1,054					
Friendship	451					
Maury City	412	3,054		17.6		\$8,175
CUMBERLAND	15,592	13,903	56,051	89.2	48,997	
Crossville	1,511					
Pleasant Hill	178	1,689		10.8		6,054
DAVIDSON	257,267	87,804	161,435	34.1	121,076	
Belle Meade	2,061					
Nashville	167,402	169,463		65.9		40,359
DECATUR	10,261	8,749	43,361	85.3	36,900	
Decaturville	433					
Parsons	1,079	1,512		14.7		6,461
DE KALB	14,588	13,281	46,251	91.0	42,068	
Alexandria	388					
Smithville	919	1,307		9.0		4,163

TABLE VI (continued)

CALCULATIONS SHOWING EFFECT OF PROPOSED LEAGUE SPONSORED GASOLINE TAX RETURN BILL, UPON COUNTIES AND MUNICIPALITIES. RETURN OF $\frac{1}{2}$ ¢ PER GALLON TO TOWN, BUT NOT TO EXCEED THE PER CAPITA RETURN OF THE COUNTY IN WHICH IT IS LOCATED

County and towns <u>a/</u> Column number (1)	1940 Population <u>a/</u> (2)	1940 Population rural and urban (3)	Return of two cent gas tax July 1, 1939 to June 30, 1940 (4)	Percentage population (5) <u>b/</u>	County <u>c/</u> (6)	Towns <u>c/</u> (7)
DICKSON	19,718	14,852	\$56,258	75.3	\$42,194	
Charlotte	470					
Dickson	3,504					
Slayden	164					
White Bluff	522					
Vanleer	206	4,866		24.7		\$14,064
DYER	34,920	22,383	61,381	64.1	46,036	
Dyersburg	10,034					
Newbern	1,740					
Trimble	763	12,537		35.9		15,345
FAYETTE	30,322	27,759	63,929	91.5	58,495	
La Grange	243					
Moscow	309					
Oakland	251					
Rossville	190					
Somerville	1,570	2,563		8.5		5,434
FENTRESS	14,262	13,032	50,317	91.4	45,990	
Jamestown	1,230	1,230		8.6		4,327

TABLE VI (continued)

CALCULATIONS SHOWING EFFECT OF PROPOSED LEAGUE SPONSORED GASOLINE TAX RETURN BILL, UPON COUNTIES AND MUNICIPALITIES. RETURN OF $\frac{1}{2}\%$ PER GALLON TO TOWN, BUT NOT TO EXCEED THE PER CAPITA RETURN OF THE COUNTY IN WHICH IT IS LOCATED¹

County and towns <u>a/</u> Column number (1)	1940 Population <u>a/</u> (2)	1940 Population rural and urban (3)	Return of two Percent cent gas tax July 1, 1939 to June 30, 1940 (4) <u>b/</u>	Percentage population (5)	County <u>c/</u> (6)	Towns <u>c/</u> (7)
FRANKLIN	23,892	18,500	\$58,829	77.4	\$45,534	
Cowan	1,461					
Decherd	868					
Huntland	303					
Winchester	2,760	5,392		22.6		\$13,295
GIBSON	44,835	29,165	73,603	65.0	55,202	
Bradford	612					
Dyer	1,185					
Gibson	284					
Humboldt	5,160					
Kenton	809					
Medina	3,035					
Rutherford	771					
Trenton	3,400	15,670		35.0		18,401
GILES	29,240	23,552	63,799	80.5	51,358	
Lynnville	374					
Pulaski	5,314	5,688		19.5		12,441
GRAINGER	14,356	14,356	45,352	100.0	45,352	
None						

TABLE VI (continued)

CALCULATIONS SHOWING EFFECT OF PROPOSED LEAGUE SPONSORED GASOLINE TAX RETURN BILL, UPON COUNTIES AND MUNICIPALITIES. RETURN OF $\frac{1}{2}\%$ PER GALLON TO TOWN, BUT NOT TO EXCEED THE PER CAPITA RETURN OF THE COUNTY IN WHICH IT IS LOCATED

County and towns a/ Column number (1)	1940 Population a/ (2)	1940 Population rural and urban (3)	Return of two Percent cent gas tax July 1, 1939 to June 30, 1940 (4)	percentage population (5)	County c/ (6)	Towns c/ (7)
GREENE	39,405	32,295	\$67,008	82.0	\$54,947	
Baileyton	229					
Greeneville	6,784					
Rheatown	97	7,110		18.0		\$12,061
GRUNDY	11,552	10,086	46,002	87.3	40,160	
Altamont	238					
Palmer	1,228	1,466		12.7		5,842
HAMBLEN	18,611	10,561	42,502	56.7	31,877	
Morristown	8,050	8,050		43.3		19,626
HAMILTON	180,478	46,080	130,502	25.5	97,876	
Chattanooga	128,163					
East Ridge	2,939					
Lookout Mountain	1,545					
Signal Mountain	1,308					
Ridgeside	443	134,398		74.5		32,626

TABLE VI (continued)

CALCULATIONS SHOWING EFFECT OF PROPOSED LEAGUE SPONSORED GASOLINE TAX RETURN BILL, UPON COUNTIES AND MUNICIPALITIES. RETURN OF $\frac{1}{2}\text{¢}$ PER GALLON TO TOWN, BUT NOT TO EXCEED THE PER CAPITA RETURN OF THE COUNTY IN WHICH IT IS LOCATED

County and towns <u>a/</u> Column number (1)	1940 Population <u>a/</u> (2)	1940 Population rural and urban (3)	Return of two cent gas tax July 1, 1939 to June 30, 1940 (4) <u>b/</u>	Percentage population (5)	County <u>c/</u> (6)	Towns <u>c/</u> (7)
HANCOCK None	11,231	11,231	\$41,174	100.0	\$41,174	
HARDEMAN	23,590	19,485	63,023	82.6	52,057	
Bolivar	1,314					
Grand Junction	560					
Hornsby	207					
Middleton	460					
Saulsbury	202					
Silverton	291					
Toone	305					
Whiteville	796	4,105		17.4		\$10,966
HARDIN	17,806	16,302	56,160	91.6	51,443	
Savannah	1,504	1,504		8.4		4,717
HAWKINS	28,523	26,505	56,998	92.9	52,951	
Rogersville	2,018	2,018		7.1		4,047
HAYWOOD	27,699	23,187	58,861	83.7	48,267	

TABLE VI (continued)

CALCULATIONS SHOWING EFFECT OF PROPOSED LEAGUE SPONSORED GASOLINE TAX RETURN BILL, UPON COUNTIES AND MUNICIPALITIES. RETURN OF $\frac{1}{2}$ ¢ PER GALLON TO TOWN, BUT NOT TO EXCEED THE PER CAPITA RETURN OF THE COUNTY IN WHICH IT IS LOCATED¹

County and towns <u>a/</u> Column number (1)	1940 Population <u>a/</u> (2)	1940 Population rural and urban (3)	Return of two cent gas tax July 1, 1939 to June 30, 1940 (4)	Percentage population (5) <u>b/</u>	County <u>c/</u> (6)	Towns <u>c/</u> (7)
Brownsville	4,012					
Stanton	500	4,512		16.3		\$9,594
HENDERSON	19,220	16,694	\$55,398	86.9	\$48,141	
Lexington	2,526	2,526		13.1		7,257
HENRY	25,877	18,710	62,910	72.3	47,183	
Cottage Grove	172					
Henry	232					
Paris	6,395					
Puryear	368	7,167		27.7		15,727
HICKMAN	14,873	13,110	54,404	88.1	47,930	
Centerville	1,030					
Wrigley	733	1,763		11.9		6,474
HOUSTON	6,432	5,527	38,016	98.6	37,484	
Erin	905	905		1.4		532
HUMPHREYS	12,421	10,486	49,695	84.4	41,943	

TABLE VI (continued)

CALCULATIONS SHOWING EFFECT OF PROPOSED LEAGUE SPONSORED GASOLINE TAX RETURN BILL, UPON COUNTIES AND MUNICIPALITIES. RETURN OF $\frac{1}{2}\%$ PER GALLON TO TOWN, BUT NOT TO EXCEED THE PER CAPITA RETURN OF THE COUNTY IN WHICH IT IS LOCATED¹

County and towns <u>a/</u>	1940 Population <u>a/</u>	1940 Population rural and urban (3)	Return of two cent gas tax July 1, 1939 to June 30, 1940 (4)	Percentage population (5)	County <u>c/</u> (6)	Towns <u>c/</u> (7)
Column number (1)	(2)	(3)	<u>b/</u>	(5)	(6)	(7)
McEwin Waverly	617 1,318	1,935		15.6		\$7,752
JACKSON Gainesboro	15,082 671	14,411 671	\$45,599	95.6 4.4	\$43,593	2,006
JEFFERSON Dandridge Jefferson City White Pine	18,621 488 2,576 497	15,060 3,561	58,211	80.9 19.1	47,093	11,118
JOHNSON Butler Mountain City	12,998 608 1,021	11,369 1,629	44,652	87.5 12.5	39,070	5,582
KNOX Knoxville	178,468 111,580	66,888 111,580	126,342	37.5 62.5	94,757	31,585
LAKE	11,235	8,664	38,133	77.1	29,401	

TABLE VI (continued)

CALCULATIONS SHOWING EFFECT OF PROPOSED LEAGUE SPONSORED GASOLINE TAX RETURN BILL, UPON COUNTIES AND MUNICIPALITIES. RETURN OF $\frac{1}{2}\text{¢}$ PER GALLON TO TOWN, BUT NOT TO EXCEED THE PER CAPITA RETURN OF THE COUNTY IN WHICH IT IS LOCATED¹

County and towns <u>a/</u> Column number (1)	1940 Population <u>a/</u> (2)	1940 Population rural and urban (3)	Return of two cent gas tax July 1, 1939 to June 30, 1940 (4)	Percentage population (5) <u>b/</u>	County <u>c/</u> (6)	Towns <u>c/</u> (7)
Ridgely	1,068					
Tiptonville	1,503	2,571		22.9		\$8,732
LAUDERDALE	24,461	19,368	\$55,778	79.2	\$44,176	
Gates	383					
Halls	1,511					
Henning	415					
Ripley	2,784	5,093		20.8		11,602
LAWRENCE	28,726	24,919	62,599	86.7	54,273	
Lawrenceburg	3,807	3,807		13.3		8,326
LEWIS	5,849	4,448	40,771	76.0	30,986	
Gordonsburg	315					
Hohenwald	1,086	1,401		24.0		9,785
LINCOLN	27,214	21,949	61,109	60.7	49,315	
Fayetteville	4,684					
Petersburg	581	5,265		19.3		11,794

TABLE VI (continued)

CALCULATIONS SHOWING EFFECT OF PROPOSED LEAGUE SPONSORED GASOLINE TAX RETURN BILL, UPON COUNTIES AND MUNICIPALITIES. RETURN OF $\frac{1}{2}\text{¢}$ PER GALLON TO TOWN, BUT NOT TO EXCEED THE PER CAPITA RETURN OF THE COUNTY IN WHICH IT IS LOCATED¹

County and towns <u>a/</u> Column number (1)	1940 Population <u>a/</u> (2)	1940 Population rural and urban (3)	Return of two cent gas tax July 1, 1939 to June 30, 1940 (4)	Percentage population (5) <u>b/</u>	County <u>c/</u> (6)	Towns <u>c/</u> (7)
LOUDON	19,338	12,448	\$45,115	62.7	\$33,836	
Lenoir City	4,373					
Loudon	3,017	7,390		37.3		\$11,279
MCMINN	30,781	18,524	57,916	60.2	43,437	
Athens	6,930					
Englewood	1,342					
Etowah	3,362					
Niota	623	12,257		39.8		14,479
MC NAIRY	20,424	18,188	58,267	89.1	51,916	
Adamsville	719					
Bethel Springs	560					
Selmer	957	2,236		10.9		6,351
MACON	14,904	14,904	45,256	100.0	45,256	
None						
MADISON	54,115	29,605	73,315	54.7	54,986	

TABLE VI (continued)

CALCULATIONS SHOWING EFFECT OF PROPOSED LEAGUE SPONSORED GASOLINE TAX RETURN BILL, UPON COUNTIES AND MUNICIPALITIES. RETURN OF $\frac{1}{2}\text{¢}$ PER GALLON TO TOWN, BUT NOT TO EXCEED THE PER CAPITA RETURN OF THE COUNTY IN WHICH IT IS LOCATED

County and towns <u>a/</u> Column number (1)	1940 Population <u>a/</u> (2)	1940 Population rural and urban (3)	Return of two cent gas tax July 1, 1939 to June 30, 1940 (4)	Percentage population (5) <u>b/</u>	County <u>c/</u> (6)	Towns <u>c/</u> (7)
Denmark	81					
Jackson	24,332					
Medon	97	24,510		45.3		\$18,329
MARION	19,140	15,570	\$54,296	81.3	\$44,143	
South Pittsburg	2,285					
Orme	277					
Richard City	1,008	3,570		18.7		10,153
MARSHALL	16,030	11,714	49,150	73.1	36,862	
Chapel Hill	391					
Cornersville	343					
Lewisburg	3,582	4,316		26.9		12,288
MAURY	40,357	26,146	65,421	64.8	49,066	
Columbia	10,579					
Mt. Pleasant	3,089					
Spring Hill	543	14,211		35.2		16,355
MEIGS	6,393	6,188	38,641	96.8	37,404	

TABLE VI (continued)

CALCULATIONS SHOWING EFFECT OF PROPOSED LEAGUE SPONSORED GASOLINE TAX RETURN BILL, UPON COUNTIES AND MUNICIPALITIES. RETURN OF $\frac{1}{2}$ ¢ PER GALLON TO TOWN, BUT NOT TO EXCEED THE PER CAPITA RETURN OF THE COUNTY IN WHICH IT IS LOCATED¹

County and towns <u>a/</u> Column number (1)	1940 Population <u>a/</u> (2)	1940 Population rural and urban (3)	Return of two cent gas tax July 1, 1939 to June 30, 1940 (4) <u>b/</u>	Percentage population (5)	County <u>c/</u> (6)	Towns <u>c/</u> (7)
Decatur	205	205		3.2		\$1,237
MONROE	24,275	19,818	\$60,814	81.6	\$49,624	
Madisonville	965					
Sweetwater	2,593					
Tellico Plains	899	4,457		18.4		11,190
MONTGOMERY	33,346	21,515	61,632	64.5	46,224	
Clarksville	11,831	11,831		35.5		15,408
MOORE	4,093	3,703	35,396	90.5	32,033	
Lynchburg	390	390		9.5		3,363
MORGAN	15,242	14,342	53,059	94.1	49,929	
Oakdale	900	900		5.9		3,130
OBION	30,978	18,336	61,873	59.2	46,405	
Hornbeak	382					
Kenton	809					
Obion	1,151					

TABLE VI (continued)

CALCULATIONS SHOWING EFFECT OF PROPOSED LEAGUE SPONSORED GASOLINE TAX RETURN BILL, UPON COUNTIES AND MUNICIPALITIES. RETURN OF $\frac{1}{2}$ ¢ PER GALLON TO TOWN, BUT NOT TO EXCEED THE PER CAPITA RETURN OF THE COUNTY IN WHICH IT IS LOCATED¹

County and towns <u>a/</u> Column number (1)	1940 Populations <u>a/</u> (2)	1940 Population rural and urban (3)	Return of two cent gas tax July 1, 1939 to June 30, 1940 (4)	Percentage population (5) <u>b/</u>	County <u>c/</u> (6)	Towns <u>c/</u> (7)
Rives	481					
South Fulton	2,050					
Troy	513					
Union City	7,256	12,642		40.8		\$15,468
OVERTON	18,883	16,837	\$52,677	89.2	\$46,988	
Livingston	1,527					
Allons	196					
Hilham	254					
Monroe	69	2,046		10.8		5,689
PERRY	7,535	6,894	48,324	91.5	44,216	
Linden	641	641		8.5		4,108
PICKETT	6,213	5,998	36,904	96.5	35,612	
Byrdstown	215	215		3.5		1,292
POLK	15,473	14,468	50,973	93.5	47,660	
Copperhill	1,005	1,005		6.5		3,313
PUTNAM	26,250	18,959	54,262	72.2	40,696	

TABLE VI (continued)

CALCULATIONS SHOWING EFFECT OF PROPOSED LEAGUE SPONSORED GASOLINE TAX RETURN BILL, UPON COUNTIES AND MUNICIPALITIES. RETURN OF $\frac{1}{2}$ ¢ PER GALLON TO TOWN, BUT NOT TO EXCEED THE PER CAPITA RETURN OF THE COUNTY IN WHICH IT IS LOCATED¹

County and towns <u>a/</u> Column number (1)	1940 Population <u>a/</u> (2)	1940 Population rural and urban (3)	Return of two cent gas tax July 1, 1939 to June 30, 1940 (4)	Percentage population (5) <u>b/</u>	County <u>c/</u> (6)	Towns <u>c/</u> (7)
Algood	609					
Baxter	576					
Cookeville	4,364					
Monterey	1,742	7,291		27.8		\$13,566
RHEA	16,353	12,068	\$47,838	73.8	\$35,878	
Dayton	1,870					
Graysville	846					
Spring City	1,569	4,285		26.2		11,960
ROANE	27,795	16,459	53,852	59.2	40,389	
Harriman	5,620					
Kingston	880					
Olive Springs	885					
Rockwood	3,981	11,336		40.8		13,463
ROBERTSON	29,046	21,232	58,237	73.1	43,678	
Greenbrier	795					
Ridgetop	351					
Springfield	6,668	7,814		26.9		14,559

TABLE VI (continued)

CALCULATIONS SHOWING EFFECT OF PROPOSED LEAGUE SPONSORED GASOLINE TAX RETURN BILL, UPON COUNTIES AND MUNICIPALITIES. RETURN OF $\frac{1}{2}\%$ PER GALLON TO TOWN, BUT NOT TO EXCEED THE PER CAPITA RETURN OF THE COUNTY IN WHICH IT IS LOCATED¹

County and towns <u>a/</u>	1940 Population <u>a/</u>	1940 Population rural and urban (3)	Return of two Percentage cent gas tax July 1, 1939 to June 30, 1940 <u>b/</u>	population (5)	County <u>c/</u>	Towns <u>c/</u>
Column number (1)	(2)	(3)	(4)	(5)	(6)	(7)
RUTHERFORD	33,604	23,616	\$65,566	72.7	\$49,175	
Murfreesboro	9,495					
Smyrna	493	9,988		27.3		\$16,391
SCOTT	15,966	14,714	53,995	92.2	49,783	
Oneida	1,252	1,252		7.8		4,212
SEQUATCHIE	5,038	4,317	39,421	85.7	33,785	
Dunlap	721	721		14.3		5,637
SEVIER	23,291	22,130	58,536	95.0	55,609	
Sevierville	1,161	1,161		5.0		2,927
SHELBY	358,250	62,294	214,461	17.4	160,846	
Arlington	440					
Bartlett	440					
Collierville	1,042					
Germantown	402					
Memphis	292,942					
Millington	730	295,956		82.6		53,615

TABLE VI (continued)

CALCULATIONS SHOWING EFFECT OF PROPOSED LEAGUE SPONSORED GASOLINE TAX RETURN BILL, UPON COUNTIES AND MUNICIPALITIES. RETURN OF $\frac{1}{32}$ PER GALLON TO TOWN, BUT NOT TO EXCEED THE PER CAPITA RETURN OF THE COUNTY IN WHICH IT IS LOCATED¹

County and towns <u>a/</u> Column number (1)	1940 Population <u>a/</u> (2)	1940 Population rural and urban (3)	Return of two cent gas tax July 1, 1939 to June 30, 1940 (4)	Percentage population (5)	County <u>c/</u> (6)	Towns <u>c/</u> (7)
SMITH	16,148	14,368	\$46,417	89.1	\$41,358	
Carthage	1,512					
Gordonsville	250	1,762		10.9		\$5,059
STEWART	13,549	13,549	50,275	100.0	50,275	
None						
SULLIVAN	69,085	39,977	69,538	57.9	52,153	
Bluff City	700					
Bristol	14,004					
Kingsport	14,404	29,108		42.1		17,385
SUMNER	32,719	26,462	61,827	80.9	50,018	
Gallatin	4,829					
Mitchellville	216					
Portland	1,212	6,257		19.1		11,809
TIPTON	28,036	22,954	57,451	81.9	47,052	
Atoka	255					
Brighton	299					
Covington	3,513					

TABLE VI (continued)

CALCULATIONS SHOWING EFFECT OF PROPOSED LEAGUE SPONSORED GASOLINE TAX RETURN BILL, UPON COUNTIES AND MUNICIPALITIES. RETURN OF ~~2~~ PER GALLON TO TOWN, BUT NOT TO EXCEED THE PER CAPITA RETURN OF THE COUNTY IN WHICH IT IS LOCATED¹

County and towns <u>a/</u> Column number (1)	1940 Population <u>a/</u> (2)	1940 Population rural and urban (3)	Return of two cent gas tax July 1, 1939 to June 30, 1940 (4) <u>b/</u>	Percentage population (5)	County <u>c/</u> (6)	Towns <u>c/</u> (7)
Garland	160					
Mason	448					
Munford	407	5,082		18.1		\$10,399
TROUSDALE	6,113	5,018	\$35,081	82.1	\$28,801	
Hartsville	1,095	1,095		17.9		6,280
UNICOI	14,128	10,778	41,856	76.3	31,936	
Erwin	3,350	3,350		23.7		9,920
UNION	9,030	9,030	42,287	100.0	42,267	
None						
VAN BUREN	4,090	3,582	40,093	87.6	35,121	
Spencer	508	508		12.4		4,972
WARREN	19,764	14,597	53,034	73.9	39,776	
McMinnville	4,649					
Morrison	278					
Viola	240	5,167		26.1		13,258

TABLE VI (continued)

CALCULATIONS SHOWING EFFECT OF PROPOSED LEAGUE SPONSORED GASOLINE TAX RETURN BILL, UPON COUNTIES AND MUNICIPALITIES. RETURN OF $\frac{1}{2}$ ¢ PER GALLON TO TOWN, BUT NOT TO EXCEED THE PER CAPITA RETURN OF THE COUNTY IN WHICH IT IS LOCATED.

County and towns <u>a/</u> Column number (1)	1940 Population <u>a/</u> (2)	1940 Population rural and urban (3)	Return of two Percentages cent gas tax July 1, 1939 to June 30, 1940 (4)	population <u>b/</u> (5)	County <u>c/</u> (6)	Towns <u>c/</u> (7)
WASHINGTON	51,631	27,892	\$63,160	54.2	\$47,370	
Johnson City	22,763					
Jonesboro	976	23,739		45.8		\$15,790
WAYNE	13,638	12,870	59,483	94.4	56,152	
Waynesboro	768	768		5.6		3,331
WEAKLEY	29,498	21,818	61,880	74.0	46,410	
Dresden	1,115					
Gleason	883					
Greenfield	1,509					
Martin	3,587					
Sharon	586	7,680		26.0		15,470
WHITE	15,983	13,447	48,643	84.3	41,006	
Sparta	2,506	2,506		15.7		7,637
WILLIAMSON	25,220	21,100	59,735	83.7	49,998	
Franklin	4,120	4,120		16.3		9,737

TABLE VI (continued)

CALCULATIONS SHOWING EFFECT OF PROPOSED LEAGUE SPONSORED GASOLINE TAX RETURN BILL, UPON COUNTIES AND MUNICIPALITIES. RETURN OF $\frac{1}{2}$ ¢ PER GALLON TO TOWN, BUT NOT TO EXCEED THE PER CAPITA RETURN OF THE COUNTY IN WHICH IT IS LOCATED¹

County and towns <u>a/</u> Column number (1)	1940 Population <u>a/</u> (2)	1940 Population rural and urban (3)	Return of two cent gas tax July 1, 1939 to June 30, 1940 (4) <u>b/</u>	Percentage population (5)	County <u>c/</u> (6)	Towns <u>c/</u> (7)
WILSON	25,267	18,409	\$61,181	72.9	\$45,886	
Lebanon	5,950					
Watertown	908	6,858		27.1		\$15,295
Total			\$5,458,090		\$4,512,080	\$946,010

¹ This table, except for the heading, TABLE VI, is copied from a table prepared by the Tennessee Municipal League and presented in the Report of The Gas Tax Committee, January 23, 1941. However, figures for Crockett, Sequatchie, and Overton counties were obviously in error and were corrected by the author. The totals do not exactly check with those of Table III because of minor differences in sources of figures.

a/ Counties and incorporated municipalities and their population are taken from Series P-2 No. 21 (A1-41, G-32), Sixteenth Census of the United States: 1940, as of April 1, 1940.

b/ This information was supplied from the office of R. Burrell Harris, Director of Accounts for the State of Tennessee.

c/ If the proposed Bill had been in effect July 1, 1939 to June 30, 1940, counties and towns would have received the amount shown in Columns 6 and 7 instead of Column 4. Figure in Column 3 on line with county name is total rural population. Columns 3, 5, and 7 are totals for all towns in a county.

5 counties have no municipalities and are not affected by the proposed bill.

30 counties have 25 per cent or more municipal population and Section 3, "A", will apply to these counties.

60 counties have less than 25 per cent municipal population and Section 3, "B", will apply to these counties.

within its text. It provides:

1. That municipalities shall receive from the (2¢) "State Gasoline Tax" returned to the counties only the amount above what the counties received from July 1, 1940 to June 30, 1941.
2. That the municipalities in a county receive the increase due their county only.
3. No county will lose any revenue as this revenue was never before received by the county.
4. Does not change the method of distribution to counties.
5. Does not affect the state revenue.
6. Will never pay more than 25 per cent of the two cent gasoline tax to the municipalities.

The action taken in presenting this proposal represented a long step toward meeting something that would be accepted. However, this bill was put forward too late to be acted upon in the 1941 session of the state legislature. It was on the calendar when the session closed and had never been finally acted upon.

There is little doubt but that the activities of the Tennessee Municipal League will grow in intensity and scope. However, certain obstacles must be faced by the League. The County Judges Association will probably continue to oppose any measure that will in any way tend to lessen county shares of

the gasoline tax. The traditional antipathy between the county and the small town government of the state will also make positive action difficult.

The League and the proponents of the idea of city sharing recognize the difficulties involved. The character of the legislation proposed in 1941, was very conciliatory in attitude. The backers of this legislation realized the unlikelihood of passage of any measure drastically affecting county shares. In order that something of value in the way of change could be possibly achieved, the last proposed plan was designed to safeguard and protect present county shares.

CHAPTER VIII

CONCLUSION

Tennessee has now passed through a decade of gasoline tax sharing based upon the 1931 system of allocation, one cent divided equally among the counties, and one cent divided among the counties according to combined area and population percentages. Nearly fifty million dollars of gasoline tax revenues have been shared with the counties of the state since the two cent sharing went into effect. The change made from the 1929 sharing basis was toward a more equal sharing of the total funds returned. No concentrated attempts have been made during the past decade either to return the sharing to a basis similar to that used from 1929 to 1931 or to adopt a new basis.

The aims of this thesis have been to stress the importance of the gasoline tax sharing problem in this state and to suggest the possible changes that could be adopted.

The objectives of any tax sharing or grant-in-aid may again be noted. The sharing of centrally collected revenues should be designed either to return the revenues to the place of tax incidence, to supply funds for the equalization of comparative costs and opportunities of governmental functions among the sharing units, or to provide a means whereby the

central government can control local action. Since the Tennessee gasoline tax sharing system does not aim at state control of local road activity, its objectives, whether conscious or not, must be one or both of the others mentioned.

This study has presented adequate statistical material designed to enable a determination as to whether the sharing system is meeting its supposed purposes. Conclusions were reached that if the purpose of the Tennessee sharing scheme was either the return of tax monies to place of gasoline consumption, or the equalization of highway costs and opportunities among the counties, the distribution was inequitable. If either or both of these purposes are to be met, the distribution in Tennessee must be changed so as to allocate to the larger counties of the state greater proportionate shares of the returned tax funds. If the purpose of the sharing, however, was the equalization of the costs of all local governmental functions among the counties of the state, much more justification could be given to the present plan. The latter purpose has not been used as the reason for sharing revenues in traditional highway finance, and it serves chiefly as a defense for the current sharing system. Theoretical as well as practical aspects of this problem have been considered, and tables and accompanying comments have been purposed to provide definite and conclusive evidence relative to the effects

of the sharing in this state.

As was mentioned earlier in this thesis, any move that is to be taken in changing the present distributive basis can come about only through legislative action. This fact serves to accentuate the political influences entering into a determination and directing of this action, and to lessen any positive influence that scientific findings could possibly exert. However, the inequities of the present distribution are evident upon observation, and can easily be noted without an intensified survey.

It seems evident that recognition of existing inequities in the sharing structure is not the retarding factor in preventing changes. There are several causes for the continuation upon the current sharing structure: first, the balance of legislative power in this state is held by those smaller counties whose proportionate shares would probably be reduced by any change, and any relinquishing of such funds available to such counties would be politically inexpedient; second, no concerted effort has been made by the larger counties to force a change. If some moderate reform measure were initiated by the larger units and enough political pressure brought to bear upon the representatives of those median counties whose revenues would not be greatly affected by a change, adoption would be entirely possible. Of course, complete fulfillment

of either of the theoretical objectives of tax sharing cannot be expected. Tennessee conditions are such that possibly the larger and more progressive counties must continue to do more than equalize highway opportunities with the weaker units. Grants above those that would exactly equalize rural road costs serve to enable the poorer counties to support all local governmental functions on a basis more comparable with the larger units. Any revision of the sharing scale whereby the larger counties receive greater proportionate shares can rightfully be considered a progressive step.

One of the most hopeful signs that has appeared in connection with the gasoline tax sharing problem, has been the interest and activity taken by the Tennessee Municipal League during the past two years. In spite of the fact that such interest is concerned primarily with the securing of portions of the funds for the cities, it will serve to focus attention upon the whole problem. Such action should arouse and stimulate some action by the larger counties, and should force the beneficiaries of the present system (the smaller counties) to defend the present structure. The municipalities of the state will continue to seek shares of gasoline tax revenues for use on city streets. Representatives of the municipal units seem willing to accept any plan which they think might be acceptable to the counties. If the League continues its

actions, some plan will probably be worked out under which the cities of the state will receive some share, however small they might be. As was previously stated, only a few of the municipalities of the state seem to be sufficiently independent of the surrounding rural areas to warrant specific inclusion as full sharing participants.

A possible solution to the whole problem would be state assumption of control over the construction and maintenance of all local or rural roads. This, of course, would eliminate any sharing problem, and the funds would be used in integrating a state-wide system, much in the manner that funds are now expended on state highways. Several states have adopted this plan. If a satisfactory sharing scheme cannot be worked out, there will be more likelihood that complete state control of all roads will eventually come. However, it is believed that some satisfactory system of tax sharing among the local units can be worked out and put into effect.

The adoption of a more equitable distribution among the counties of the state, (either a return to the 1929 sharing base, or sharing on any of the other plans mentioned), plus some system whereby the larger municipalities of the state may be included as sharing participants, (possibly taking the form of definite appropriations to the designated municipal units), seems to be the most logical solution to the gasoline tax sharing problem.

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APPENDIX

Population percentages for the various counties that have been worked out on the basis of the 1940 census. These percentages were ready to be used in the allocation of gasoline tax revenues in March 1941, but the change had not been made at that time. The change that will be made in total amounts returned will be slight due to the fact that only in a few counties did population percentages change greatly, and only one-fourth of the total amounts returned are shared according to population. The percentages below are taken from those worked out by the Department of Accounts, and are certified correct.

County	Population percentage	County	Population percentage
Anderson	.908965	Decatur	.351905
Bedford	.793973-	DeKalb	.500302
Benton	.410722	Dickson	.676237
Bledsoe	.286641	Dyer	1.197596
Blount	1.410091	Fayette	1.039906
Bradley	.977351	Fentress	.489121
Campbell	1.067651	Franklin	.819386
Cannon	.338839	Gibson	1.537635
Carroll	.890926	Giles	1.002798
Carter	1.204695	Grainger	.492345
Cheatham	.340485	Greene	1.351411
Chester	.381502	Grundy	.396181
Claiborne	.845622	Hamblen	.638272
Clay	.373957	Hamilton	6.189569
Cocke	.825937	Hancock	.385172
Coffee	.650207	Hardeman	.809029
Crockett	.594340	Hardin	.610664
Cumberland	.534734	Hawkins	.978208

County	Population percentage	County	Population percentage
Haywood	.949949	Overton	.647601
Henderson	.659158	Perry	.258416
Henry	.887463	Pickett	.213077
Hickman	.510076	Polk	.530653
Houston	.220588	Putnam	.900255
Humphreys	.425984	Rhea	.560833
Jackson	.517244	Roane	.953241
Jefferson	.638615	Robertson	.996145
Johnson	.445772	Rutherford	1.152463
Knox	6.120636	Scott	.547561
Lake	.385309	Sequatchie	.172780
Lauderdale	.838900	Sevier	.798775
Lawrence	.985170	Shelby	12.286335
Lewis	.200594	Smith	.553802
Lincoln	.933316	Stewart	.464669
Loudon	.680353	Sullivan	2.369299
Macon	.511139	Sumner	1.122112
Madison	1.855897	Tipton	.961506
Marion	.656414	Trousdale	.209648
Marshall	.549756	Unicoi	.484526
Mauzy	1.384060	Union	.309688
Meigs	.219251	Van Buren	.140268
Monroe	.832521	Warren	.677815
Montgomery	1.143615	Washington	1.770707
Moore	.140371	Wayne	.467721
Morgan	.522731	Weakely	1.011646
McMinn	1.055648	White	.548144
McNairy	.700450	Williamson	.864931
Obion	1.062404	Wilson	.866543
Total population percentage of all counties		100.000000	