INTRODUCTION

There are three basic questions in the area of highway fiscal policy which have not, at least in recent years, been considered, faced directly, and answered by the State. These are: (1) How much should we be spending on our highway, road, and street systems? (2) Are we distributing available funds among the various types and classes of roads in the most equitable and efficient manner? (3) Who should be paying how much for support of the Indiana highway complex?

These questions are, of course, all quite difficult and probably can never be answered with complete confidence. This fact at least partially explains our hesitancy in approaching them. However, it must be realized that by failing to make conscious policy decisions in these areas, we are in fact making the "unconscious" decision that the current fiscal structure is the best that we can devise. While this may be true, it seems that given the magnitude of our highway expenditures (almost 160 million per year in State user taxes alone), we owe the taxpayers of the State the assurance that every effort has been made to guarantee them maximum benefits for their highway tax dollars.

LEGISLATIVE STUDIES

Highway Fiscal Study

In recognition of this need for better highway planning, the 1963 General Assembly directed the Commission on State Tax and Financing Policy to conduct a fiscal study of the Indiana highway system. The Commission was specifically asked: (1) to examine the present distribution of highway user revenues among the State, the counties, and the municipalities, (2) to investigate the equity of the current highway tax structure—as it relates to both users and nonusers of the highways, and (3) to make a twenty-year forecast of highway revenues and highway use. This study was completed last fall and presented to the members of the 94th General Assembly. While it was not possible to go as far
in the area of making recommendations as hoped, due to serious data limitations resulting from the lack of an up to date highway needs study, it was possible to more clearly define problem areas and to lay a framework for future work.

Highway Needs Study

The 1965 General Assembly directed the Legislative Advisory Commission to conduct a comprehensive study of Indiana's highway needs. The resolution specified the following requirements:

(a) Make an engineering study and inventory of the present use and deficiencies of all highways, roads and streets in the state;
(b) Forecast for the twenty year period from 1965 to 1985 the future needs and necessary improvements for all public highways, roads and streets;
(c) Establish a classification system for all public highways, roads and streets according to their present and future use and classify all highways, roads and streets according to such system;
(d) Study present and future maintenance and construction costs and present a plan for the equitable and adequate future financing of all public highways, roads and streets including a formula for the equitable allocation and distribution of highway user revenues;
(e) Prepare and recommend such legislation to the 95th General Assembly as may be necessary to secure the objectives of the study outlined herein, and make such other recommendations as will assure the development of a balanced, integrated transportation network within the State of Indiana.

This study will get underway during the first half of 1965. The intent of the project, in addition to improving highway planning, of course, is to provide answers to the questions outlined earlier, namely, how much should we be spending for roads, who should pay how much for support of the roads and where should the money be spent.

Obviously, it would be presumptuous at this stage of the game to attempt to speculate on the outcome of these studies. However, here are some of the pertinent considerations based on research.

HOW MUCH FOR HIGHWAYS

When asking the question, “How much should be spent for highways?” (as opposed to how much can be spent) one is really asking, “What role should highways play in the over-all transportation system?” Before answering the latter question, one must first determine the trans-
portation requirements of the economy for the period under consideration. Admittedly, this is a difficult task. However, given various assumptions about the economy of the future, it is possible to arrive at reasonable estimates. From that point, it is possible to proceed to an evaluation of the role highways should assume in the over-all system. This question cannot be answered merely by making straight line projections of past trends. In designing outlines of future transportation networks, it is desired to achieve an optimum allocation of resources among competing modes of transportation. Past relationships may have nothing whatsoever to do with optimizing our transportation resources.

The question "How much should be spent for highways?" is primarily an economic question. Too many needs studies in the past have considered the economic aspects of highway planning too lightly—if at all. It is necessary to have detailed engineering data on the condition of highways and on the costs of bringing them up to a given level of sufficiency. But when decisions are to be made concerning the magnitude of the future highway program, these decisions should have a strong grounding in economic analysis. Roads are not an end in themselves, but are a means to an end—the end is the optimum development of our economy and the welfare of our people.

As part of the commission study prepared for the 1965 General Assembly, future traffic was briefly examined which could, under certain assumptions, be expected on Indiana's highway system by 1985. The results of this forecast, when considered in light of our highway system with its growing traffic problems, are a bit frightening. The estimates on future conditions, shown below, can be considered to be somewhat conservative.

<table>
<thead>
<tr>
<th></th>
<th>1965</th>
<th>1985</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>4.9</td>
<td>6.6</td>
<td>30%</td>
</tr>
<tr>
<td>Real Per Capita Income</td>
<td>$2.2</td>
<td>$3.4</td>
<td>57%</td>
</tr>
<tr>
<td>Vehicle Registrations</td>
<td>2.34</td>
<td>4.20</td>
<td>80%</td>
</tr>
<tr>
<td>Vehicle Miles</td>
<td>25.1</td>
<td>39.0</td>
<td>55%</td>
</tr>
</tbody>
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These statistics underscore the need for improved highway planning and maximum utilization of our highway resources.

WHO SHOULD PAY FOR HIGHWAYS

User and Nonuser Charges

"Who should pay for highways?" is fairly well agreed upon—those that benefit from highways should pay for the support of the highways. Moreover, they should pay in proportion to their benefits received. The
most obvious example of those who benefit from highways are the owners of various classes of vehicles—the highway users. Perhaps less obvious are the so-called nonuser benefits. For example, roads provide access to property and business establishments, thereby increasing their value. It can also be argued that the general economy of an area receives benefits from having an adequate road system. Thus, it makes sense from the standpoint of equity to divide the costs of financing our highway system into two categories—user and nonuser charges.

However, given the fact that equity requires a nonuser charge, one immediately must face the problem of determining the share of highway costs that should be allocated to nonusers. It is fairly well accepted that the main arterial highways of the State should be primarily paid for by user taxes. Furthermore, it is usually agreed that roads that exist solely for the purpose of land access should be financed primarily from nonuser taxes. But it is quite difficult to determine the allocable user-nonuser shares for those roads which lie in between these two extreme classifications.

Economists have been struggling with this problem for a number of years and have succeeded in developing various formulas for approximating the proper nonuser shares. However, even the most sophisticated formula cannot do more than provide an approximation. Some economists approach this problem simply by conceding that the determination of the proper user, nonuser shares is a political rather than an economic question. They therefore accept the historical proportions and proceed to a detailed examination of the allocation of costs within the user classification. While this certainly may be the path of least resistance given today's pressures of other needs on state and local general funds, it would seem to do violence to the objective of an optimum allocation of resources.

Unfortunately data were not available to enable the commission to make even a rough approximation of the proper share of highway costs to be allocated to nonusers of the system, although interstate comparisons indicated that Indiana counties and municipalities ranked low in the share of road costs paid from nonuser taxes. The forthcoming highway needs study should provide information which will enable an estimate to be made of the proper nonuser share of highway costs. While practical considerations (e.g., the already overburdened property tax) may require a deviation from this economically determined share, a logical point of departure will at least have been provided.
Charges According to Vehicle Classification

The area of highway taxation which has most attracted the attention of economists is the allocation of highway user taxes among various classes of vehicles. However, even here there are disagreements. It is generally accepted that the user tax structure should recover the full costs occasioned by the motor-vehicle users and should be structured to maintain neutrality among the various competitive transport media. Subsidies to any category of highway users should be eliminated to insure an optimal allocation of resources in the economy.

But beyond these basic guidelines there is the difficult question of how to distribute cost responsibility among vehicles of different dimensions, weights, and service classes. The commission staff studies presented to the 94th General Assembly included an attempt at this type of cost allocation. The general findings were that heavier vehicles are currently paying less than their allocable share of highway costs. This disparity was judged to result from the identical tax rate applying to gasoline and diesel fuel, and to the annual registration fee schedule, which is independent of vehicle mileage and service operation. It might also be pointed out that interstate comparisons showed Indiana to rank relatively low in its registration fees on heavy vehicles.

It goes without saying that more detailed vehicle cost allocation studies should be conducted in conjunction with the needs study. However, it does appear that there is some basis for an upward adjustment in registration fees for heavy vehicles—should a need for more revenue become apparent.

HOW TO ALLOCATE HIGHWAY FUNDS

Finally, there is the difficult question of how to allocate available highway user taxes among alternative classes of roads. This question seems to turn up at almost every session of the General Assembly and usually boils down to a power struggle between the cities and the counties—since the State Highway Commission quickly points to heavy losses in federal funds if its share of the tax revenue is reduced. And if you have ever sat through one of these arguments you are aware that neither side has had much in the way of facts to justify its claim.

Hopefully, one of the most important things to come from the study of highway needs will be information which will give the legislature a logical basis for distributing highway taxes. One possible method which should certainly be carefully considered is the division of funds based primarily on road function, rather than the level of government that has responsibility for administering the roads.
States that have attempted to arrive at an allocation of funds based on road function, rather than administrative responsibility, have generally turned to one or both of two approaches: the “needs” solution and the “earnings” solution.

**The Needs Basis and the Earnings Basis**

The needs basis for distributing user taxes, obviously, bases the allocation of funds on the “need” of particular roads, as determined by engineering and economic analysis. Given the possibility of identifying the economically optimum system of roads, this approach then merely requires comparison of the optimum system with the actual system and the distribution of funds in whatever fashion is required to secure the maximum return, in the form of highway facilities and services, from available revenue.

The earnings solution for distributing user revenues is based on the assumption that the method of allocating funds should be consistent with financing methods. Since the primary source of highway funds is road-user taxes, the earnings standard would require that the geographic distribution of funds coincide with the place of origin of the funds.

Advocates of both the needs approach and the earnings approach generally concede that the distribution of user taxes should take into account the contributions of nonuser funds. In other words, if the nature of the service provided by a certain road system requires that nonusers should contribute to the support of that particular service, then the distribution of user taxes to that system will be reduced by the amount of the nonuser share.

In short, then, the functional basis for distributing user taxes considers: (1) the extent of the nonuser responsibility for roads, (2) the expenditures needed to supply an efficient highway network, and (3) the relative use of.

**CONCLUSION**

This is an abbreviated outline of what the writer considers to be the three major highway policy questions facing the State. Note that the statement is not restricted to fiscal policy. It is obvious that no “what” answers are finally given to these questions. Their implementation will have a profound effect on all areas of highway planning and development.