

CONSIDERATION IN PLANNING A RURAL HIGHWAY PROGRAM

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The subject assigned to me is entitled "Some Considerations in Setting up Rural Highway Programs." I am approaching this subject from the viewpoint of a County Engineer. Before discussing it generally I would like to give some back-ground information regarding my county and the things which require special consideration in setting up our Rural road program.

Boyle County, which I serve, is considerably smaller than the average of Kentucky Counties, being 186 square miles in area. Our population in 1940 was 17,075, of which 6,734 resided in Danville. Boyle County is generally considered to be a strictly Blue Grass County, however, the southern part is rather rough and road building costs in this portion are therefore high. We have about 200 miles of county road of which 95 miles are black top. The remainder is about equally divided between creek gravel and crushed stone. We have been able to keep all of our roads open for year-round traffic except during high water when some are flooded at points. Our county school board operates eleven school buses which travel approximately 750 miles each school day. These buses run over practically all of our roads. Rural mail routes and milk truck routes also cover most of our road system.

We are fortunate in having some of Kentucky's finest farm land in our county and the per-capita wealth is correspondingly high. We do not claim to be typical of all of Kentucky's counties but we are probably typical of the Central Kentucky region. Our road problems will certainly parallel those of the other counties of this region.

Our county road funds from all sources is approximately \$52,000.00. This gives an average of \$260.00 per mile for county road maintenance and construction. Because of the high standard of maintenance demanded by our citizens and because of the heavy traffic some of our roads must bear, we find use for every

dollar of our funds and our plans must take into consideration how best to use our county funds with the State's Rural Allotment to satisfy the public's expectations. The Rural Highway allotment we receive is \$27,862.22. Because we have what we believe to be an efficient road organization we take this fund in materials which are purchased by the State for delivery to us. This arrangement is highly satisfactory, but it brings up a problem which requires careful planning. The volume of material which the Rural funds furnish is sufficient to tax our county resources in matching labor and other services against it, leaving very little for taking care of many routine road problems in which the State does not participate. This is where careful planning is required. It means that only those roads on which this material may be efficiently used can be included in the Rural Program. Under these conditions it becomes very necessary for the county engineer to have accurate, detailed information regarding the condition and needs of every road at all times. We have been able to have this information available because we make routine periodic inspections of our roads and keep accurate records of their condition.

Good maintenance on our 95 miles of bituminous roads make it necessary to give them a light seal treatment at intervals of every three years. Cold patching, of course is a continual job, but we have a schedule for sealing these roads in regular order. If because of extremely bad weather conditions or other reasons, some of our roads give way before the scheduled time for treatment, we are compelled to advance them to an earlier date. All of this must be considered before setting up our rural program.

When the bituminous program has been planned we include in our request to the State sufficient bituminous material to carry out the work. This material is purchased subject to our request for delivery. The county owns a 600 gallon South Bend distributor, a 5 to 7 ton Buffalo tandem roller, a Hough mechanical broom, a mechanical chip spreader, a Hough Payloader and a fleet of ten dump trucks. We heat our material in cars with an old steam roller which is no longer used on the road. We try to place the material on the roads as delivery has been scheduled but we have a storage capacity of 15,000 gallons which enables us to take care of material received during bad weather and to have on hand at all times material for cold patching.

On a large part of our 200 miles of county roads we are lacking in adequate drainage facilities. Our black top roads are generally in good condition as regards drainage, but we could use all of our road revenue for a period of several years on drainage alone. The county is taking care of all drainage without help from the Rural Highway Division and this fact means that we must give careful consideration each year to our immediate needs before diverting our efforts to work in which the State participates.

So far Boyle County has not requested the State to participate in a construction program. We have a small program averaging about two miles per year. We have been able to carry on this work without assistance from the state, but it is an item which must be given careful consideration in preparing our Rural Program if it is to be fitted properly into the overall plan for the year's activities.

I have tried to give you a few of the special considerations which influence our Boyle County Rural Road Program. I would like now to discuss the matter in a general manner.

The basic factor in setting up any road program can be expressed in one little, four letter word. That word is "need." Everyone admits this to be true and the problem therefore resolves itself down to a determination of the comparative needs of various roads or sections which depend on those roads. Before it is possible to reach any conclusion as to the road needs it must be realized that need itself is made up of two factors, each of which requires consideration. These may be designated as "immediate need" and "long range need".

Immediate need may depend on the needs of the road users or it may be the outgrowth of some emergency condition affecting the road itself. Immediate need is quite generally given preference over long range need in planning. This is probably justified to a great extent, provided that in satisfying immediate need we do not jeopardize our plans for long range needs. In attempting to determine our road needs there are many factors which should be considered. All of these have to do with the economic and social betterment of the community. First we must consider the traffic which is using or will use the various roads. Will it be light or heavy? Will it be seasonal or continuous? Will

it consist of small vehicles or heavy trucks? Next we must consider the economic value of the road. Does it serve a region which is, or will be valuable in the production of food, minerals or other raw materials? Does it permit access to important markets, shipping points, factories or commercial facilities such as tobacco warehouses or milk processing plants?

On the side of social betterment we may ask which roads best serve to promote the extension and use of our school systems. What about rural mail service for the citizens of remote areas and last but no means least, are we neglecting or advancing the spiritual welfare of our people by the provisions we are making for access to the churches of their choice.

In my opinion if we have been able to determine our comparative needs and have properly analyzed these needs as either immediate or long range we will have taken the first step in solving the major considerations involved in setting up our road program, whether it be County, Rural or State-wide in application.

The chief difficulty all of us have is in determining "comparative need" or in convincing interested persons that our determination is correct. Every road is the most important road to its users and at times no amount of logic is effective when the personal interests of the road users are involved. Facing this difficulty squarely is the only solution. Having made an honest determination we must have an equally honest application.

All of this has to do with planning. It was my intention to discuss planning later on but it appears to be impossible to take up a road program without getting into planning. In fact, the very words used in this subject infer that a job of planning was to be discussed.

Suppose that we have determined our comparative needs. That is, we have decided which roads are to get a particular type of attention. We must next decide if this attention is to be given at once, scattered over a period of years or deferred to some future date. The answers to these questions depend on a vast number of factors, including funds available, how to make economical use of the funds, conditions of the roads in question and the use of the roads.

No intelligent decision can be made in any phase of road planning without adequate information. Too often county authorities are subjected to pressure to make this or that improvement when they have little or no information on which to base a decision. I cannot emphasize too strongly my belief that no road program should be undertaken until the needs and condition of the entire county road system are thoroughly understood. To me this is the first great consideration in making up a Rural Program.

I would place second on my list of major considerations a study of available revenues. We have found in Boyle County, as well as by observation of other counties, that careless handling of road funds is a big factor in loss of benefits. Scattering the road fund here and there without plan or purpose will never create a road system. There must be some centralized control of money or we may find ourselves in a situation similar to a family with a joint checking account. When the over-drafts come in no one is responsible. Dividing the road fund into a number of equal sums representing districts also will never create a road system. I refuse to look for an example of this in Kentucky as I hope to remain here for many years to come but the experience of many states using the old township system of road building has shown this method to be unfair, wasteful and unequal to the job of providing the kind of a county road system to which the public is entitled.

The third consideration in planning a Rural Road program would be the matching of the funds against the information we have to road conditions. When doing this we may well ask ourselves this question. Are we laying out more work than the funds will do? If so, we are merely kidding ourselves or trying to kid the public. I have heard of cases where great pressure was brought on the Department of Highways to include a large mileage of roads in the Rural Program, even though it was conceded by all that it could not be carried out with the available funds. I would like to say that I have been dealing with the Kentucky Department of Highways for 25 years and during that time have found that it has no Santa Clause hidden in the rockpile. The Rural Allotment is apportioned by law and when it is spent nothing more can be done. If the public has been led to believe

that things will be done which everyone knew could not be done, someone may be asked to explain. I would rather not be that one.

Getting back to the task of matching our money against our needs we find that this is nothing more or less than our old friend, planning, and we are right back where we started.

A few years ago we found certain people who held planners in low regard. They were classed as long-haired, socialistic dreamers in some quarters. Yet there is no intelligent businessman or farmer but makes plans. The businessman plans his new store or he plans his sales program. The farmer plans his crops and plans his stock feeding program. Anyone who looks into the future even a little way is a planner. The squirrel and the honey-bee give us outstanding examples of instinctive planning in nature.

A plan for road improvement, once prepared, need not be looked upon as the final gospel and authority. It should be rather a goal on which our sights are set and it should be flexible enough to take care of changing conditions. To me it is an orderly arrangement of the road activities so that first things will come first. It visualizes the orderly and progressive improvement of our roads in accordance with their need. It is the balance wheel of our working arrangements that keeps us from skipping from one half-completed job to another.

It keeps us from building scraps of road ending at the magisterial district lines. It enables us to join our roads to the roads of other counties at county lines. It assures the road users that no road, once improved, will be neglected until it again becomes a problem.

To sum up the few points I have undertaken to bring out we will condense them into questions which each of us who is responsible for preparing rural road programs might well ask ourselves.

(1) Do I really know my road system, its condition and needs?

(2) Do I understand the finances and costs involved in setting up my program?

(3) Can I match the funds at my disposal against the indicated need so as to produce a program which will be of greatest benefit to my county?

(4) Have I over-estimated the work that can be done with my funds so that the program will be incomplete?

(5) Does my program take care of immediate needs and does it provide for unforeseen emergencies?

(6) Is my program part of a sensible long range plan for the road improvement of my county?

I do not wish anyone to think that I pose as an authority on road matters. Neither do I claim that we in Boyle County have solved all of our road problems. We have plenty of them left and they will require our attention as far as I am able to see into the future. With less than one-half of our road mileage in black top and with our drainage structures requiring a huge outlay in funds for modernization we have a big job on our hands for years to come. But if we are not the most advanced county in road building, we are certainly not the most backward. We feel that we are actually in a fortunate position. All of our citizens are able to reach schools and markets throughout the year and we are making steady progress. The question may be asked, how was this accomplished? Was it because we had a large road fund over the years?

There are really two answers to these questions and they are not the result of chance or wishful thinking. It is true that Boyle County has allotted a reasonable portion of her revenues to road work over the years but there is a more important answer. If the funds allotted had been scattered over the county among a number of local, inexperienced road administrators it is doubtful if Boyle County would be any better off than many other counties with apparently equal resources but poor road systems.

About 36 years ago the Boyle County Fiscal Court placed the complete direction of all roads under a full time road engineer. This policy has been continued down to the present and when I took office as County Engineer four years ago I found that my predecessors had laid the ground work for a long range road program which will go on bearing fruit when the names of most of us here are but memories. Fiscal Courts come and go but with a continuing road program steady advances are assured. It is to the genius of those gentlemen of the Fiscal Court of 36 years ago that our citizens are obligated and not to any special talents possessed by those of us who follow them.