Like any big business, a business spending half a billion dollars a year, there must be a plan to guide such a mammoth operation. The Kentucky Department of Highways is such an agency. While the Department has always had a short to medium range program of highway projects grinding through its mill for all of its years in existence, it has only been within the last 10 years that its output in highway projects has reached a really sizeable volume representing more than 100 million dollars in construction contracts. During recent years the contract dollar volume for construction has been around 200 million dollars, and this year we are hoping for the greatest construction contract year yet. With the Interstate Highway Program reaching its peak during the past five or six years and supplemented by a strong toll road program, the Kentucky Department of Highways has recognized the need for a professionally developed and politically accepted highway program.

In order to discuss the "status of the five year highway program," I believe it will be helpful to provide some background on how the program was developed; what kind of information it contained; what systems it covered; and how it is used in the Department.

It was early in 1969 that the Division of Planning developed a five year program which covered projects for all the existing Federal-aid systems and the Appalachian Developmental System. This program was designed to help the highway administrators answer these three major problems:

1. The selection of projects most in need of improvement.
2. A means of meeting target dates for phase completion leading to a construction contract.
3. Obtaining the most efficient use of available resources.

The medium range program, which was developed in the Department and reviewed by the various operating and administrative levels, provides the basis for a more detailed one year operating program with reasonably firm project scheduling as well as establishing the foundation for a longer range 8 to 10 year program. The program used expected funding levels on a system basis to provide the magnitude of project scheduling for each fiscal year. While the five year Federal Aid Program does not make up the total Highway Department's project improvement output, it does make up a substantial share of the program. The importance of the Rural Secondary, County Road Aid, initial treatment, resurfacing, State projects, beautification, and toll road programs were not overlooked and cannot be minimized, but the special nature of each of these had long range program limitations.

The program format consisted of a list of recommended projects by each classified Federal-aid System, each showing the location of the project by county and route number, the termini of the project as a description, the length of the project, the project costs by phase and total cost, and the proposed schedule of funding for each phase of activity by quarter for the fiscal years 1970-1974.

The initial program that was developed and accepted contained approximately 400 projects and had a total estimated cost of approximately 750 million dollars. The program contained all the Department's emergency red tag bridges on the Federal-aid systems with the exception of one that included a possible relocation or new alignment which had not been developed. It integrated projects which had over a thousand miles in active design status and more than 200 miles in active right-of-way status. The program scheduled the Interstate System for completion in Kentucky in 1974 with very few projects being completed in 1975. Of course, as each year goes by we are experiencing changes in the total cost of the Interstate Program, as well as Congressional changes in its magnitude, which could affect Kentucky's financing resources from the Federal Government and not make this early completion possible.

The program scheduled the use of all Appalachian funds allocated to Kentucky by 1973 and projected fund requirements for 1974 to continue the Appalachian Program at a rate to match the Department's productive capability. This, however, did not see the 416 mile system complete and the Department is banking heavily on a continuing Federal financing program to complete the approved system. The regular Federal-aid Primary, Secondary, and Urban System Programs were continued at approximately the same funding level as 1970 which amounted to nearly 16 million Federal dollars annually. Other shorter range Federal allocations for special purposes such as the Rural Primary, Rural Secondary, and TOPICS Programs were projected through fiscal year 1971.

Any program, regardless of its range, involves the continuous process of programming, scheduling, monitoring, controlling, and adjusting. This continuous process is most significantly and nearly always affected by any change in work progress, project costs, and available revenues. Implicit in program development is the time element. Words, such as "priority" and others involving decisions, would not be required if funds were always available to meet all the highway needs as they arose. Since this is seldom, if ever, the case, the basic scheduling problem is therefore one of fitting priority decisions to funds as they are expected to become available over the years ahead. Obviously, changes in project costs have a tremendous affect on the validity of any program. This is especially true in the highway program where so many varied and wide ranged influences are constantly changing.
to make up the total cost picture on any one project. The Department is working hard to bring to focus its project estimates and the feeling is that when we pin down this elusive factor, we'll be a long way toward better program control.

During the monitoring and adjustment of the program over the past year, the Department has added another year of project scheduling to maintain the five year projection range. Action during the first year of this program resulted in 23 projects completing the route planning phase and being scheduled for Public Hearings necessary to obtain approval from the Federal Highway Administration to proceed on to the final location and design stage. Many of the approximately 400 projects moved from the design to the right-of-way acquisition phase and others advanced in percent of completion within a specific work phase. Perhaps the most significant fact was that 26 Interstate projects, 23 projects on the Primary, Secondary, and Urban Systems, and six projects on the Appalachian Developmental System reached the construction letting stage which resulted in approximately 70 million dollars of contracts to be awarded in the major systems alone.

Within the Pre-Construction Office, there has been organized a Projects Coordinator Staff which:

1. Conducts a monthly status report meeting with division representatives for review of all pre-construction activities on each project in the program.

2. Develops letting schedules, monitors and up-dates status of projects.

3. Coordinates activities required to prepare and publish a monthly project status report.

The work of this staff actually projects the Department's project scheduling for each of the construction contract lettings.

While anticipated adjustments were made during the past year to the Department's program, it is quite obvious that during the next few years of this program it will undergo such substantial adjustments that it might not resemble the original package. The economic situation in the country has affected the toll road program because of the high interest rates in the bond market. Drafts of the new Federal Aid Highway Acts by both the Senate and House of Representatives has indicated that Congress will probably introduce new highway legislation which will significantly affect the Federal Aid Highway Program as we know it today. Since the House and Senate Bills, themselves, are substantially different, it is very difficult at this time to determine what the final Federal Aid Highway Act of 1970 will look like as it comes out of the conference committee.

The need for a well developed and accepted highway program is recognized as being of inestimable value to the effective and efficient operation of all elements of any highway department. It goes beyond this in being able to help guide the associated industries, contractors, utilities, material suppliers, and the like, with a means of assessing potential work or material requirements in their respective areas, so they might also plan and develop their individual programs. We do not claim perfection for this program, but we do feel it provides very effective guidelines for establishing priorities, staffing requirements and capabilities, and directly influencing everyday decisions in the operation of the Highway Department. The program has proven to be of great value in the Department and has established itself as an important element of the highway routine.