## Findings of the Indiana State Highway Commission Management Study

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## INTRODUCTION

The Indiana State Highway Commission initiated a Management Improvement Project in 1962. The United States Bureau of Public Roads joined in this effort and in September of that year Roy Jorgensen and Associates was engaged as consultant to assist in the project.

The Management Improvement Project was designed to establish a continuing process of management adjustment and improvement to meet the ever changing conditions involved in building and maintaining highways in the State of Indiana. It is significant that the Indiana State Highway Commission insisted that the project not be reduced to a management study or survey and be completed with the submission of a final report. The Commission ensured that its Management Improvement Project would not end as a dust covered final report by establishing an operating committee composed of active division and department managers and a district engineer to supervise the consultant's activity and provide over-all direction to the Project. The Commission further directed that approved recommendations for improvements be implemented as a part the consultant's work in the project.

Many of the concepts developed by Indiana's approach to improve the management of its Highway Commission are now serving as models and guidelines for similar efforts in highway agencies in the United States and Canada.

Two years ago Roy Jorgensen spoke to the opening session of the 49th Annual Road School and discussed the objectives of the Management Improvement Project and the steps to be taken to achieve these objectives. Last year at the opening session Mr. Jorgensen reported to you on progress in implementing improved management and administrative practices developed in the course of the Project.

There is no need to review the many recommendations submitted to Commission management by the operating committee and the subsequent implementation processes carried out in the various divisions and districts. Many are familiar with this activity and the varying degree of success associated with these efforts. The final report, and the official minutes of the operating committee, documents the project's specific activities and accomplishments. These records are available in Commission files for the use of anyone interested in this information.

## MAINTAIN A CONTINUING PLANNING PROCESS

There are two basic considerations which were isolated early in the project and which have received considerable attention from both the Commission's staff and from Roy Jorgensen's staff. These two findings are mentioned because the ability of the Indiana State Highway Commission to return to the citizens of Indiana the greatest possible value for each tax dollar invested in highways depends in large measure on its approach to these considerations.

First, in order for the Commission to execute the responsibilities charged to it by Indiana statute it must develop and maintain a continuing planning process that will identify highway transportation needs of Indiana and relate these needs to specific goals and objectives for engineering production, highway maintenance, traffic engineering, personnel administration, financing, and budgeting within the Commission.

Management of any enterprise, public or private, involves five prime management functions; planning, organizing, staffing, directing and controlling. All too often we are eager to proceed with organizing, staffing, directing and controlling without devoting proper attention to planning.

It is through the planning process that overall Commission objectives are established. Without planned objectives for the Commission as a whole it is impossible to develop individual objectives, plans and schedules for operating organizational units.

The Management Improvement Project has developed and implemented procedures for a comprehensive planning process. This, however, is only the beginning—it is now up to the Commission to perform this planning process on a continuing basis.

Commission management should ensure that the long range planning process developed over the past two and one-half years is accomplished on an annual basis and that a current priority listing of needed improvements is maintained.

The short range improvement program of specific projects should be adopted annually to maintain a five-year program that is balanced with anticipated revenue. This is the process that establishes the operating objectives for all Commission units. The short range improvement program is the foundation upon which the engineering and land acquisition production schedule is based; it is the foundation upon which the financial budget is based; it is the foundation upon which the forecast of manpower requirements and the manpower budget is based; and it is the foundation for developing future maintenance and traffic programs. In short, the short range program is the basic planning premise for all Commission functions.

In the past it has been the practice of the Commission to adopt short range programs that far exceeded anticipated financial capability. This inflated list of projects programmed for construction rendered the task of scheduling, budgeting, manpower planning and maintenance, and traffic planning all but impossible.

The program planning department with the assistance of the controller and certain other Commission units has the capability to provide the members of the Highway Commission with all the information they need to make decisions which will result in a realistic and financially sound short range program.

The scheduling and control system, designed to ensure production of the short range program, should be maintained and utilized to the fullest extent possible. This is one of the most effective multi-project scheduling systems for highway improvements in the nation. It enables management to establish production goals which contribute to accomplishment of the short range program and to make production decisions which will result in an orderly schedule of contract lettings.

The functional budgeting system, developed by the controller and the accounting task force, which relates unit budgets to the short range program should be continued. This is the best budget system the Commission has ever had. For the first time responsibility for the management of budgeted funds can be placed with division and department managers and district engineers.

The manpower budget system which relates manpower requirements to the short range program should be utilized by management to identify manpower needs to accomplish production objectives several years in advance. This would place the Commission in a position to execute a sound, realistic manpower development program.

Commission management should develop maintenance and traffic

programs to complement the short range program. These programs should reflect improved standards of performance for state-wide maintenance and traffic operations.

With these planning activities accomplished the other management functions of organizing, staffing, directing and controlling can be performed in support of planned objectives.

## SELECT QUALIFIED PERSONNEL

The second consideration—if the Commission is to develop an organization capable of efficient and effective attainment of planned goals and objectives, is that employees of the Indiana State Highway Commission must be selected for employment on the basis of their qualifications to perform the duties of the position they are to fill; these employees must be retained and promoted on the basis of their performance of assigned duties and their demonstrated ability to assume greater responsibility.

If the objective of the Indiana State Highway Commission is to provide for the highway transportation needs of the State of Indiana, then every person employed by the Commission should be selected on the basis of his ability to contribute to that objective and his retention on the Commission's payroll should be contingent upon his performance in contributing to this same objective.

The offering of employment in Highway Commission positions as a reward for political performance or loyalty does not necessarily improve the ability of the Commission to provide for highway transportation needs.

The highway Career Employment Plan was developed to orient the employment and retention of professional and technical employees to ability and performance.

It was our hope that the recent legislature would recognize this situation and provide legislative backing to a merit type employment system for the Commission. However, the legislature did not act on former Governor Welch's proposed highway merit employment legislation.

Governor Branigin has continued Executive Order Number 13 which established the present Highway Career Employment Plan. I hope that with the Governor's leadership the Career Plan will be strengthened and improved during the current Administration. The processes of designing, constructing and maintaining highways and bridges have become so costly and so demanding that Indiana cannot afford to do otherwise.

The challenge to management to continually adjust and improve will never cease. The Commission has developed and implemented some highway management concepts which place Indiana in an enviable position in relation to other state highway departments. Indiana is just beginning to reap the benefit of the hard work put into the Management Improvement Project. Continued effort in the coming years will refine and expand the effectiveness of Commission management.