

MANAGEMENT BY OBJECTIVES PROGRAM OF THE FLORIDA DEPARTMENT OF TRANSPORTATION

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During the last few years, the Florida Department of Transportation has been engaged in a comprehensive management improvement program. Key improvements made include (a) establishment of a management systems coordination unit, (b) implementation of a sophisticated management and scheduling system for program development, (c) design of a conceptually advanced financial management system, (d) implementation of a maintenance management system, and (e) acquisition of data processing hardware. In July 1973, the department undertook a new phase of management improvement based on the concepts of management by objectives. This phase was preceded by a series of management seminars for some 270 top and middle managers. To date, a top management planning and decision-making system has been developed and implemented. Implementation required a statement of the department's mission, goals, and objectives; development of an annual plan and calendar for top management decision making; incorporation of strategic planning and decision making into the top management system; and implementation of operation procedures for the system, including those to achieve completed staff work. The elements are described as are the processes used by top management to develop the structure of the mission, goals, and objectives.

•AFTER governmental reorganization in 1969, the Florida Department of Transportation began a comprehensive program of management improvement. The key actions taken include

1. Establishment of a function for coordinating management systems,
2. Development and implementation of a management and scheduling system,
3. Design of an advanced financial management system built around a common data base,
4. Development and implementation of a maintenance management system, and
5. Acquisition of data processing hardware whose capabilities enable implementation of a comprehensive management information system built around a common data base.

In August 1972, the department initiated a program to develop a management system built on the established data base. The aim was to implement a system that was well-conceived, integrated, and understood and accepted throughout the department. Also, the system was to be based on the concepts of management by objectives (MBO). Figure 1 shows a general outline of the management improvement program and strategy.

PROGRESSION OF PROJECT PLAN

The project advanced in several distinct phases (Figure 2), each of which is briefly described below.

Figure 1. Basic mission of Florida Department of Transportation.

TO PROMOTE, PLAN, DEVELOP, MAINTAIN, AND OPERATE A SAFE, EFFICIENT, BALANCED, AND INTEGRATED STATEWIDE TRANSPORTATION SYSTEM ADEQUATE TO MEET PRESENT AND FUTURE NEEDS TO MOVE PEOPLE AND GOODS.

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BASIC STRATEGY TO ACCOMPLISH MISSION

DEVELOP AN ORGANIZATION--BUILT ON SYSTEMS CONCEPTS-- WHICH IS DYNAMIC, OBJECTIVE, CREATIVE, INNOVATIVE AND, ABOVE ALL, COMMITTED TO ACCOMPLISHMENT OF THE DOT MISSION.

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MAJOR ELEMENTS OF THE BASIC STRATEGY

ORGANIZATION

DEVELOP AND MAINTAIN A DOT ORGANIZATION WHICH IS:

- + ORGANIZED AND OPERATES TO ASSURE THAT CLEAR-CUT OBJECTIVES ARE ESTABLISHED ON A CONTINUING BASIS FOR EACH UNIT IN THE ORGANIZATION.
- + OPERATIONALLY GEARED TO ACCOMPLISH ESTABLISHED OBJECTIVES EFFECTIVELY.
- + OPERATED IN SUCH A FASHION THAT MUTUALLY SUPPORTIVE RELATIONSHIPS EXIST AMONG ALL UNITS AND AMONG PEOPLE IN THESE UNITS.

PEOPLE

DEVELOP AND MAINTAIN A MANAGEMENT TEAM CHARACTERIZED FROM TOP TO BOTTOM:

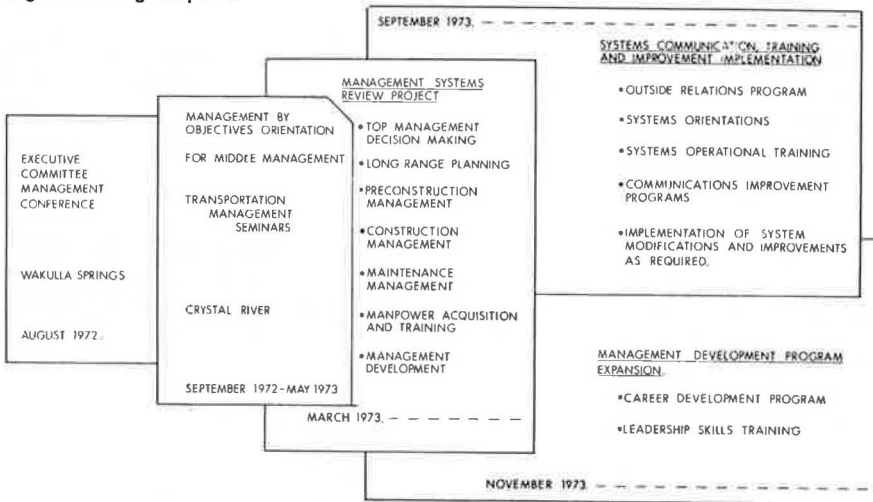
- + BY HIGHLY QUALIFIED, ENERGETIC, AND CREATIVE INDIVIDUALS COMMITTED TO EFFECTIVE ATTAINMENT OF ESTABLISHED OBJECTIVES.
- + BY A CLIMATE CONDUCIVE TO SELF-DEVELOPMENT, OPPORTUNITIES FOR SUCH DEVELOPMENT, AND SUPPORT OF SELF-DEVELOPMENT EFFORTS.

COMMUNICATIONS

DEVELOP AND MAINTAIN AN EFFECTIVE MANAGEMENT INFORMATION AND COMMUNICATIONS SYSTEM WHICH WILL:

- + ASSURE CLEAR COMMUNICATION OF OBJECTIVES TO EACH UNIT AND PERSON AND THE INFORMATION NECESSARY TO EFFICIENT ACCOMPLISHMENT OF OBJECTIVES.
- + PROVIDE FEEDBACK INFORMATION TO MANAGERIAL PERSONNEL AT ALL LEVELS TO PROVIDE A BASIS FOR EVALUATION AND APPRAISAL OF PERFORMANCE AS WELL AS A BASIS FOR DECISION-MAKING.

Figure 2. Program plan.



Management Seminars

Nine management seminars were conducted from August 1972 to May 1973. The seminars were generally patterned after those jointly sponsored by AASHO and the Highway Users Federation for Safety and Mobility since 1957. The seminars emphasized MBO concepts and practices as applied to departments of transportation.

The first seminar in the series was for the department executive committee and selected staff and lasted 3 days. The next five seminars were 1 week long and were attended by approximately 150 middle managers and 25 FHWA personnel assigned to the Florida division office. Three more seminars, each 3 days long, were conducted for middle managers and were attended by approximately 90 department managers and 15 FHWA managers.

Systems Review

After the seminar series, an assessment was made and some general conclusions were drawn. One conclusion was that the processes by which top management provided unified direction and control needed major improvement. Another was that the various functional systems operating in the department needed to be analyzed and integrated.

In July 1973, the executive committee adopted a management by objectives model to serve as a framework for implementing MBO concepts and practices and developing the overall transportation management system (Figure 3).

Several task forces were created to review and analyze various management processes to determine where improvements were needed and make recommendations to the executive committee. The task forces reviewed the following processes: top management decision making, long-range planning, preconstruction management, construction management, maintenance management, and manager development.

As a result of task force efforts, the transportation management process was viewed as a total process and characteristics of subprocesses that needed improvement were identified. Most of the recommendations for improvement made to the executive committee were approved for additional research, development, or implementation in accordance with general plans drawn up by key task force personnel in conjunction with the consultant.

TOP MANAGEMENT DECISION-MAKING SYSTEM

The top management decision-making task force recommended improvement of top management direction and control processes, and the recommendation was approved by the executive committee. Development and implementation were directed toward a top management decision-making system.

Top Management Emphasis

Figure 4 shows the role and responsibilities of top management developed by the task force and approved by the executive committee. As shown, top management is responsible for providing (a) central, overall, unified direction and (b) central, overall review, appraisal, and evaluation of results of operations. As the figure also shows, top management should direct major attention to

1. Defining, clarifying, and communicating the mission, goals, and objectives of the department;
2. Creating and maintaining a sound plan of organization;
3. Ensuring that competent persons are placed in all key positions; and
4. Creating and maintaining an effective means of direction, evaluation, and control of operations.

Top management must direct department activities within a framework of legislative and executive branch missions, goals, and objectives. Furthermore, top management should concentrate its attention on program development rather than project definition, scheduling, and progress. Figure 5 shows the general MBO-program management hierarchy developed to provide a framework for top management decision making.

Top Management Work Program

Top management needed an annual work program to guide its planning and decision making. An annual calendar of major planning and decision areas geared to the department's procedures for program development and approval and to state administrative procedures for budget development and submission was developed (Figure 6).

Figure 3. Florida Department of Transportation management by objectives model.

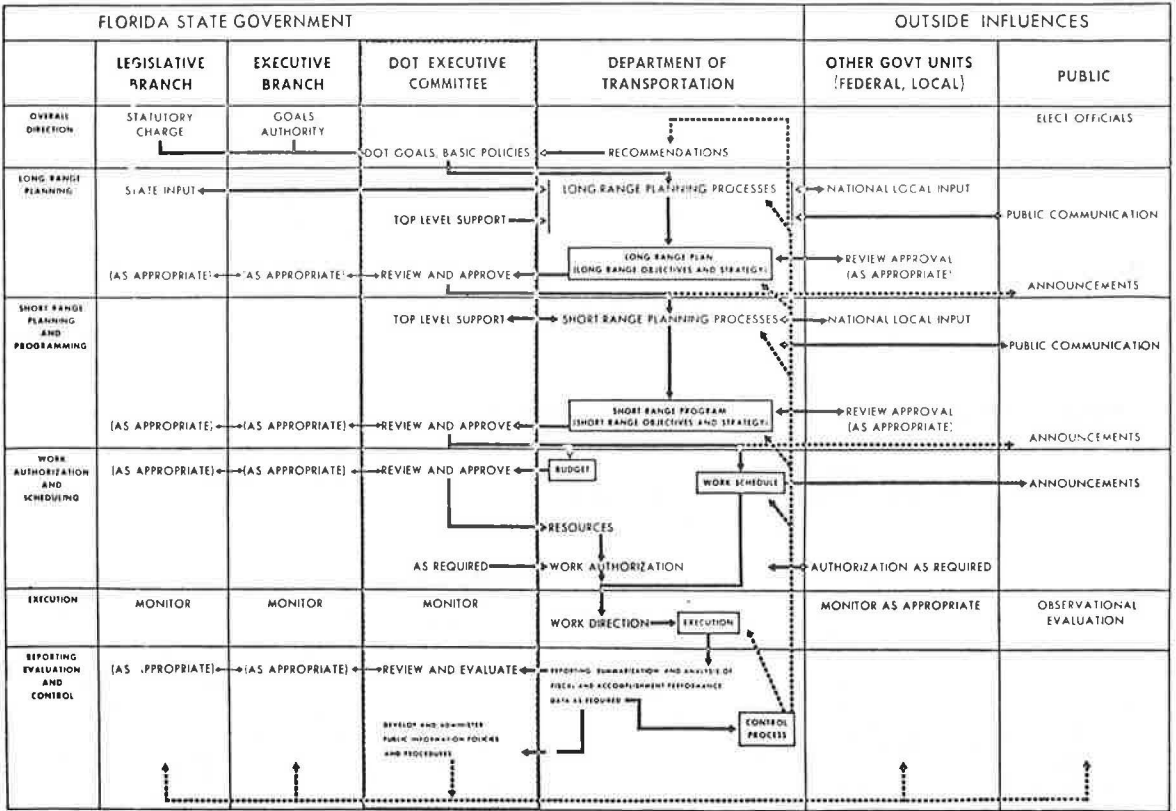


Figure 4. Role and responsibilities of top management.

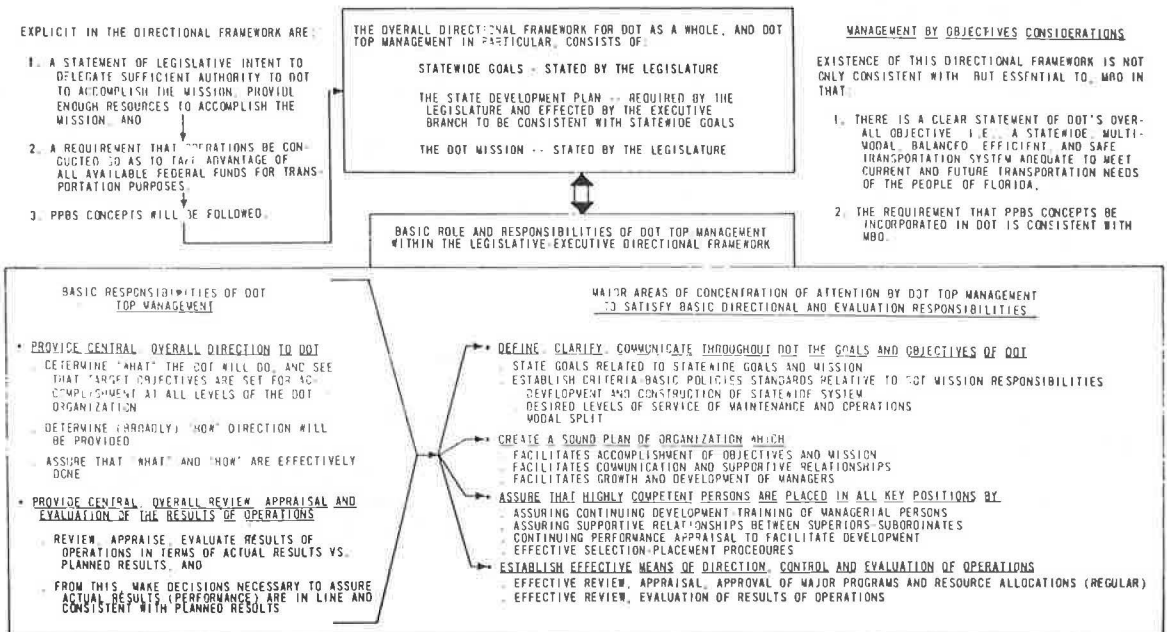


Figure 5. General MBO-program management hierarchy.

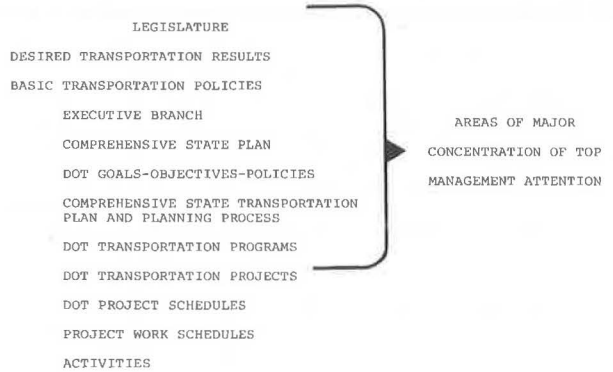


Figure 6. Annual plan for decision making by executive committee.

		OVERALL DIRECTION		OVERALL CONTROL			
		KEY DIRECTION GIVING ACTIVITIES		OTHER DIRECTING ACTIVITIES	MONTHLY	QUARTERLY	ANNUAL
JUL.	ESTABLISH LONG RANGE GOALS & OBJECTIVES	* STATE COMPREHENSIVE PLAN	* DRAFT DEVELOPMENT GUIDELINES * FINANCIAL PLAN AND SCHEDULE FOR MAINTENANCE AND OPERATIONS		* FISCAL YEAR REVENUE VS PLAN * WORKING BUDGET PRIMARY AND SECONDARY LIQUIDITY VS PLAN * LOCATING ALTERNATE VS PLAN	* WORK PROGRAM BALANCE * FEDERAL AND NON-FEDERAL AUTHORITY PLAN VS STRATEGIC PLAN	
AUG.		* DOT GOALS & BASIC POLICIES		* ANNUAL PLAN FOR EXECUTIVE COMMITTEE OPERATION	* FINANCIAL DATA REPORTS * BUDGET STATUS BY DIVISION BY APPROPRIATION CATEGORY	* PERSONNEL OPERATIONS AND "MISPLICES" * MAINTENANCE PROGRAM STATUS	* REVIEW EXECUTIVE COMMITTEE OPERATIONS & ACCOMPLISHMENTS
SEPT.		* TRANSPORTATION PLANNING POLICIES-CRITERIA STANDARDS	* LEGISLATIVE BUDGET REQUESTS		* PROJECTS VS PLAN * PRODUCTION PRODUCTION SCHEDULE BY DISTRICT	* ACCUMULATED OPERATIONS ACCOMPLISHMENT AND PRODUCTIVITY VS PLAN AND SCHEDULE	
OCT.		* DOT FINANCIAL FORECAST AND PLAN		* LEGISLATIVE OUTLOOK AND PROPOSED PACKAGE	* LEGISLATIVE ACTIVITY * REVIEW OF STRATEGIC IMPLEMENTATION		* REVIEW OF PREVIOUS FISCAL YEAR ACCOMPLISHMENTS & PRODUCTIVITY
NOV.		* LONG RANGE TRANSPORTATION NEEDS		* REVIEW OF TRANSPORTATION TECHNOLOGY AND DOT RESEARCH AND DEVELOPMENT PLAN			* CURRENT STATUS OF NON-FINANCIAL RESOURCES (PERSONNEL, MATERIALS, EQUIPMENT, ETC.)
DEC.		* DOT STRATEGIC PLAN					
JAN.	ESTABLISH SHORT RANGE PLANS & PROGRAMS	* DOT PROGRAM DEVELOPMENT GUIDELINES		* ORGANIZATION PLAN			
FEB.				* MANAGEMENT DEVELOPMENT PLAN			* STATUS OF CURRENT WORK PROGRAMS
MAR.							
APR.				* EMPLOYEE AND PUBLIC INFORMATION PLAN			* STATUS OF SUPPORT PROGRAMS
MAY		* WORK PROGRAMS * SUPPORT PROGRAMS					
JUN.		* STATE TRANSPORTATION PLAN (Goals, Strategy, Work Programs)	OPERATING BUDGET				

The work elements of the annual plan are geared to the two basic responsibilities of top management, direction and control. The basic idea is that someone on the executive committee will be assigned responsibility for each key decision activity on the plan. Analyses and alternative decisions will be presented to the executive committee in accordance with the schedule. The control items shown will be reviewed as scheduled.

Figure 7. Overall strategic planning and decision-making process.

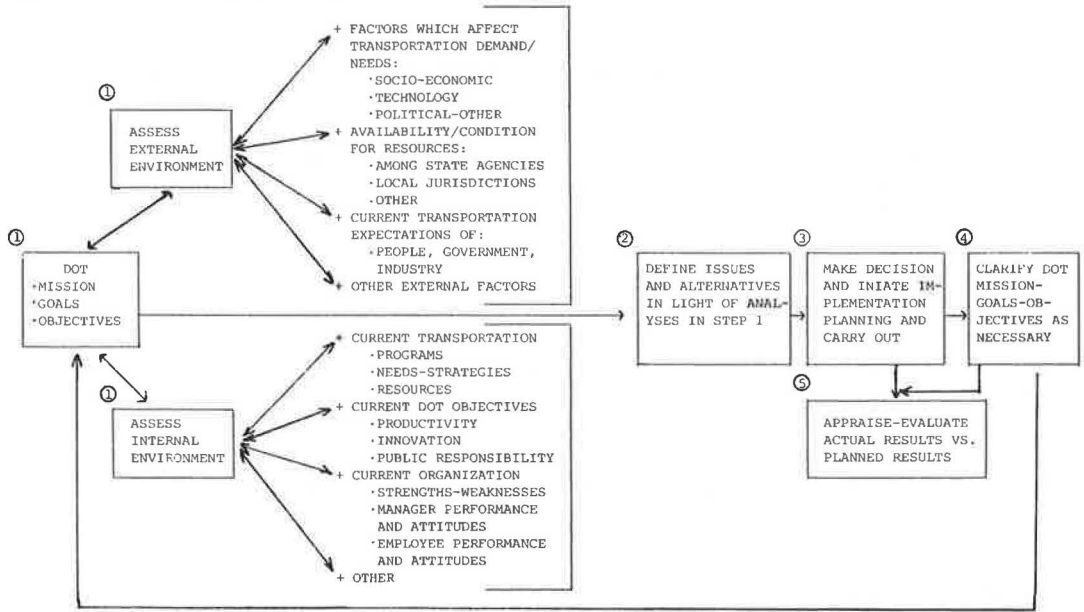


Figure 8. Process and procedure for staff work to support top management decision making.

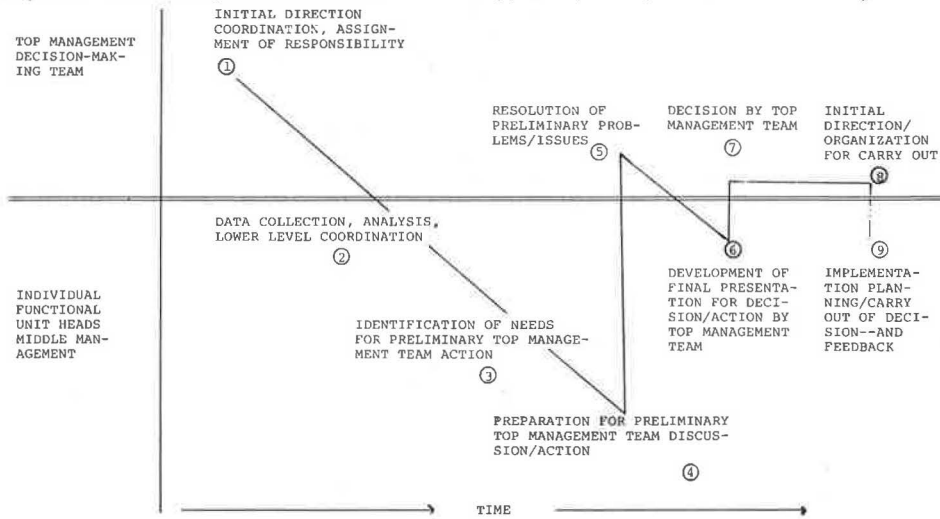


Figure 9. Thinking through process for development of mission, role, goals, and objectives.

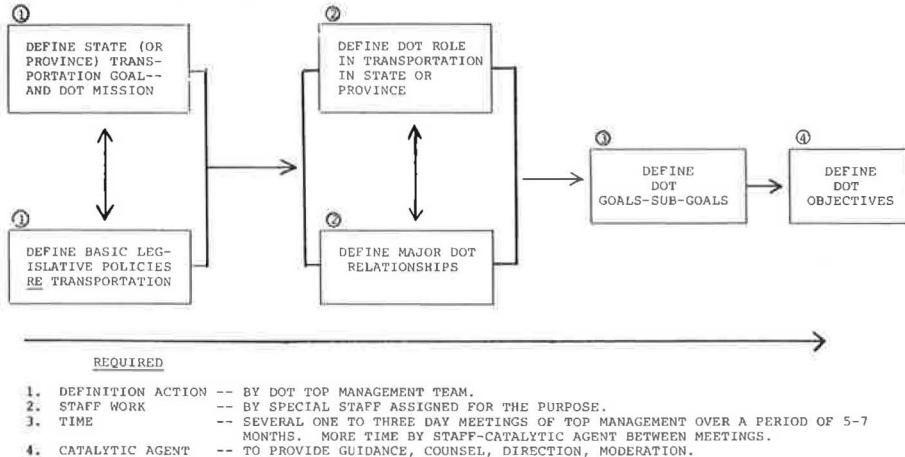


Figure 10. Basic structure and definitions of mission, goals, and objectives.

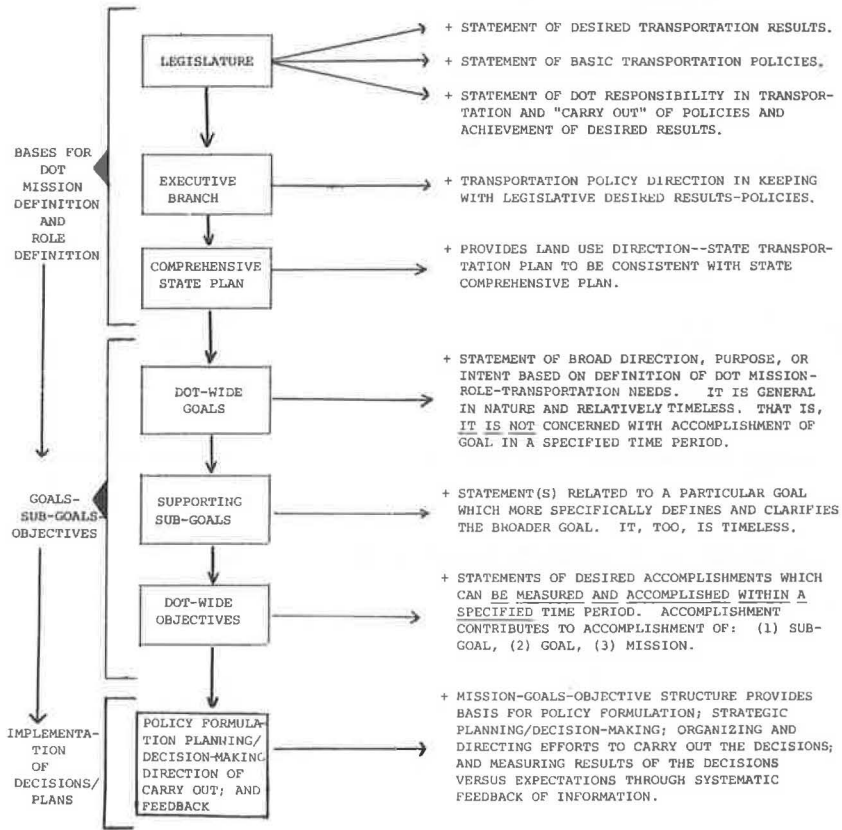
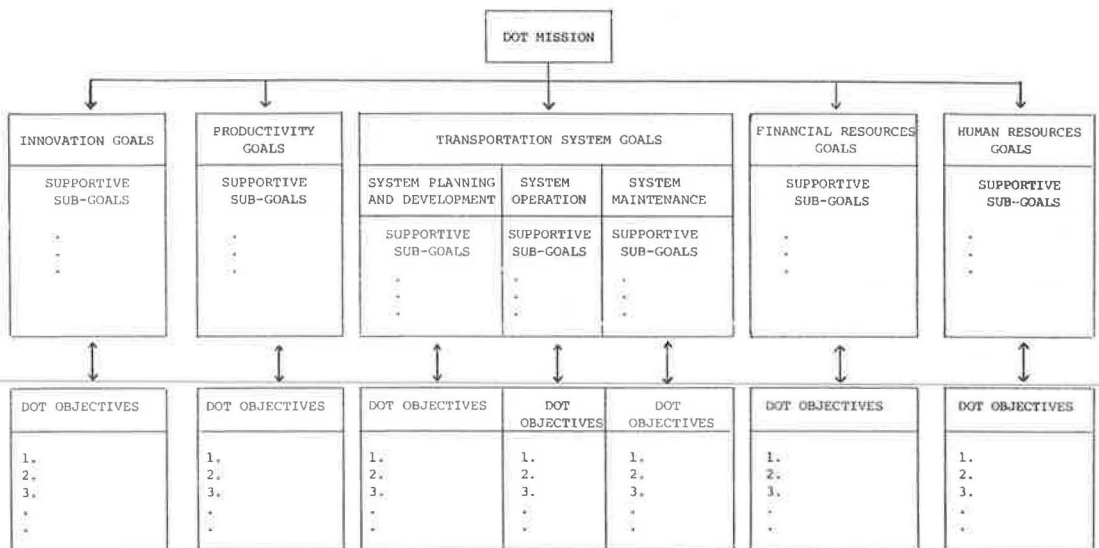


Figure 11. Structure of mission, goals, subgoals, and objectives.



Strategic Planning and Decision Making

Before initiation of the implementation program in July 1973, the need for formalization of a strategic planning process was discussed. Recognition of the need had derived from the increasing complexity of the environment of the department and the many factors that affect accomplishment of the department's mission, goals, and objectives. The strategic planning and decision-making process involves continual review, analysis, and evaluation of the external and internal environment of the department and identification of factors that affect accomplishment of the mission, goals, and objectives of the department.

These factors are defined as strategic issues and submitted to the executive committee for acceptance or rejection. Once accepted, responsibility for any further analyses and definition of alternatives is made, and the issue is scheduled on the agenda.

Figure 7 shows major elements of the strategic planning and decision-making process. The office of strategic planning, a small unit acting in a staff capacity to the executive committee, is responsible for steps 1 and 2. Issue definition (step 2) is coordinated with affected units of the organization. Steps 3, 4, and 5 are the exclusive process of the executive committee.

Completed Staff Work

The top management decision-making system depends on effective completed staff work. Middle managers must be involved in the analysis and definition of alternative decisions. Figure 8 shows the basic procedure for staff work to support the system.

DEFINING MISSION, GOALS, AND OBJECTIVES OF THE DEPARTMENT

Planning and decision making by top management cannot occur in a void. There must be explicit knowledge of what the department intends to accomplish and a commitment to accomplish it. The department made this knowledge explicit by developing statements of its mission, goals, and objectives in a logically arranged structure.

Development of the mission, goals, and objectives required a rigorous thinking through process (Figure 9). The end result of the process is, of course, department objectives established within a logical framework. It is to accomplish these objectives that resources must be allocated and organizational efforts focused.

Figure 10 shows the structure and definitions of the mission, goals, and objectives adopted by the executive committee. It clearly shows the expected result: conversion of objectives into action.

Managing a complex transportation department today involves balancing a variety of needs and demands. It requires multiple goals and objectives, not just one. The executive committee adopted the multiple goals and objectives areas shown in Figure 11. The starting point was to define the mission of the department and the leadership role it was to take in transportation.

Initially, explicit statements were developed for transportation system goals and objectives.

Currently, the executive committee is in the final stages of converting several objectives into specific plans, schedules, and targets and assigning responsibility for them. The process includes establishing systematic feedback to provide a basis for appraising results.

After departmentwide goals and objectives have been established, the department will be in a position to extend the MBO process into lower levels of management. The overall goals and objectives will provide the necessary framework within which to do so.