

ILLINOIS CREATES A DEPARTMENT OF TRANSPORTATION

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The paper follows the development of the Illinois Department of Transportation from development through initial implementation. It describes the Implementation Group, which was created to coordinate and direct the implementation of the Department, the objectives which guided the Group and the activities which were pursued in the implementation process. Policies and procedures were formulated by the Group which covered the transfer of external responsibilities to the new Department; an initial organization review; the process used in structuring the organizational units; a job evaluation project; the personnel selection process; the importance of communications in the implementation process; and the manpower, budget and logistical problems considered in implementing the new Department without disrupting ongoing activities. The last section of the paper describes the functional organization which was developed based on the mission and objectives of the new Department. An organization chart is shown and the functional responsibilities of each organizational unit are described.

I. Background Information

Illinois became the 14th State to create a Department of Transportation when the 77th General Assembly passed legislation effective January 1, 1972. The legislation accomplished two important steps toward strengthening the State's transportation systems and activities. First, it approved \$900 million in bond issues to finance new highway construction, capital expenditures for mass transportation and development of aviation facilities throughout the State. Secondly, it created a Department of Transportation to unify Illinois' transportation responsibilities, to provide for efficient transportation planning, and to administer financial matters relating to the development of transportation systems.

The new Department combines activities of the former Department of Public Works and Buildings which included the Divisions of Highways and Waterways and the Office of

Mass Transportation in the Department of Local Government Affairs. The safety inspection functions of the State Police, The Office of the Superintendent of Public Instruction, The Illinois Commerce Commission, and the Secretary of the State were also included in the new Department.

II. Implementation of the Department

Implementation Organization

Immediately following his appointment the new Secretary of Transportation established an Implementation Group to coordinate and direct implementation of the Department. Since the implementation effort would require attention to all the various functions in the Department, and a dedication to good business and management practices, a multidiscipline team with the following expertise was assembled to staff the DOT Implementation Group:

- . Personnel Management
- . Business Management
- . Engineering
- . Political Science
- . Public Relations
- . Human Relations

The group consisted of three Department employees and a management professor from Colorado State University.

Implementation Objectives

The first task of the Implementation Group was to develop objectives for the effort. Of particular concern was the need to maintain the continuation of ongoing programs throughout the implementation period. The objectives included were:

- . Carry out the philosophy and intent of the Governor's Commission on Organization
- . Maximize participation by top management personnel in organization design decisions
- . Make changes in an evolutionary manner
- . Carry out implementation activities so as not to disrupt ongoing programs

- . Keep employees informed of decisions and status
- . Staff from within whenever possible
- . Consider the best possible utilization of all resources in each decision

A target of July 1, 1972 was established for the implementation effort to be started by all the DOT organizations, recognizing that the complete evolution would take from 18 to 24 months.

Implementation Activities

To implement the DOT organization structure it was determined that, as a minimum, the following activities must be accomplished for each organization entity:

- . Develop Primary Accountability Statements for each organization
- . Assemble Functional Statements for all programs and activities
- . Develop Organization Structure Alternatives
- . Select the best alternative to achieve the organization's objectives
- . Reconcile FY 73 Manpower Allotments
- . Reconcile FY 73 Budget Allotments
- . Identify and resolve logistical problems
- . Develop Position Descriptions
- . Classify new positions
- . Recruit/Select/Staff new organizations
- . Orient/Train personnel on role and responsibility of the new organizations

These activities were accomplished through a review and analysis of each Office in the Department.

Implementation Policy and Procedures

Policies and procedures were developed to guide the review process. This was done to insure participation, coordination, cooperation, uniformity and proper attention to the many activities associated with implementing a new organization. Policies and procedures were developed for the following areas of concern to the Department.

Transfer of External Responsibilities

All other State Agencies that had organizations or responsibilities transferred to the new Department were contacted and procedures were formulated to effect a smooth and orderly transition. Meetings were held with individuals affected and in the case of the State Police vehicle inspection function, a section of "uniformed" officers was housed in the Department for a period of six months while Department employees were trained.

Provisions were made to transfer other agency organizations to the Department early in January 1972. The DOT Field Office of the Illinois Department of Personnel was especially helpful in assisting with the paperwork required in position and personnel transfers.

Organization Review

In initiating the formal implementation process, each of the DOT Office Directors was asked to submit a status report on his organization and make recommendations for his Office. This data enabled DOT top management to acquire an immediate understanding of the problems and programs of the new organizations. The assembled information was reviewed and analyzed by the Implementation Group to determine if the philosophy and intent of the Governor's Commission was being achieved. Exceptions were permitted, provided the changes would improve or enable the Department to better achieve its objectives.

Recommendations for organizing each Office were reviewed to ensure that certain basic organization concepts were integrated into the proposed organization. Major and minor units were also analyzed to insure a logical flow of work and communications between Bureaus and Sections. The objectives of each Office were carefully evaluated to assure compatibility with overall Department goals.

The functional responsibilities of each organization unit in the Offices were analyzed to ensure an effective input-output ratio that would result in a balanced and orderly effort in production and services rendered. It was imperative to the Implementation Group that resources were utilized in such a manner that predetermined Office goals would be achieved. Toward this end the structure and functions of each Office had to provide for creative analysis and the development of total transportation-oriented policies, procedures and programs. Nothing less was acceptable.

The structure of each Office was analyzed functionally to determine the resources devoted to various activities. The functions of the Offices were evaluated according to the effort devoted to such activities as (1) data accumulation, (2) data classification, (3) processing of data, (4) reporting of data, and (5) the analysis of data. The Implementation Group was insistent that a creative analytical capability be integrated into the decision-making process to provide for the development and implementation of innovative concepts in the form of plans, policies, procedures, controls, programs, methods and techniques. It was felt that, if the Illinois Department of Transportation is to be a leader in the development of a total transportation system, it must have an organization environment conducive to creative thought and action.

In addition to the foregoing evaluation of the Offices, the Implementation Group considered the organizational concepts of (1) span of control, (2) levels of management, (3) organizational form, (4) authority-responsibility relationships, (5) integration and coordination of organizational units, (6) resource allocation, (7) motivational factors, and (8) communications in analyzing and finalizing the various structures.

Job Evaluation Project

A position evaluation project was undertaken to determine the relative importance of a cross section of positions in the Department and to make classification recommendations for new positions.

One hundred "benchmark" jobs were chosen as a representative sample for evaluation. Of these jobs 34 were newly created positions in the Department's structure. Position descriptions for the 100 jobs were written by 10 Department personnel trained as job analysts.

Interviews were conducted by the analysts with incumbents in the benchmark positions. For jobs with no incumbent, a contact man was chosen to describe the proposed positions. Based on information gathered in these interviews, position descriptions were written in a predetermined format. A "sign-off" procedure, requiring the signature of both the incumbent and his immediate superior, assured the validity of the position descriptions.

The position descriptions that were developed served as the foundation for determining the compensation level and qualifications for staffing. The descriptions answered the following questions:

- . What is the basic mission and purpose of the position?
- . What are the principal duties and responsibilities?
- . What key relationships exist with other functions or organizations?
- . What kind of supervision does the position exercise or receive?
- . What are the primary accountabilities?

The completed position descriptions were submitted to a committee of top management personnel for evaluation. The committee evaluated each job using a "point evaluation" method. The diverse perspectives of the committee members resulted in minor differences of opinion on several jobs which were reconciled by comprehensive discussions. Hopefully the evaluations resulted in an objective appraisal of the relative value of each position.

The results of the position evaluation project were used to develop and recommend a classification and salary structure for the Department which is consistent with present policies for technical employees and also with the State Personnel Code. The results were also used by the Department to assure that all positions are properly classified and equitably compensated. This project was intended to be the initial phase of a continuing program to evaluate and classify all positions in the Department and to re-evaluate them as job content changes.

Personnel Selection

While the organization decisions were important, none were more crucial to the success of the Department than the decisions on selection of key staff members. In arriving at personnel decisions of the scope and importance of those to be undertaken in the Department, it was necessary to establish objectives, policies and procedures that would constantly serve as guidelines in the staffing decision-making process.

The objective was that all personnel decisions must result in the best utilization of available human resources. Selection policies included:

- . Appointments will generally be made from within the DOT in preference to seeking personnel outside the organization.
- . If possible, personnel appointments and reassignments will not result in a loss of status or stature for any individual.
- . To help avoid any possibility of emotion, bias or prejudice entering into decisions, the counsel and advice of others will be sought.
- . All personnel decisions will be made and announced as quickly and efficiently as possible.
- . All unnecessary positions will be eliminated from the manpower inventory.
- . The responsibility for personnel placement rests with each Office Director and the Under Secretary subject to approval by the Secretary of Transportation.

The following selection procedure was used to arrive at staffing recommendations.

- Step 1. Evaluate each organization unit by priority of needs, past management effectiveness, and nature of its work. The effects of ongoing operations, present management effectiveness, past and future image of unit in terms of objective achievement, priority in resource allocation, and the people-sensitive nature of the decision areas in the unit were also considered.

- Step 2. Accumulate a pool of managerial talent from existing sources in the Department possessing the required skills, abilities, experience and personality traits.
- Step 3. Evaluate and analyze available personnel in the management pool according to education and experience, trainability, ability to innovate and create, enthusiasm and drive, performance evaluations, ability to empathize, reputation in the organization, and maturity.
- Step 4. Correlate and match the priorities, needs and nature of the position to the qualifications, determined by analysis in Step 3, of available personnel in making staffing recommendations.

Communication

For the reorganization to be effective, certain basic communication guidelines were established that reflected the intent and sincerity of management. This was necessary to keep the change positive and to offset any rumors that were expected to occur.

- . The process provided for both one-way and two-way communications to disseminate informative data and provide for a feed-back of information. Periodic house organs (flyers) were effective for alerting employees to progress and decisions.
- . The responsibility for the entire program was delegated down the chain of command in all the Offices. The process was programmed and scheduled by administrators at all levels in the Offices with the assistance of various units in the DOT such as the Bureau of Public Affairs, the Implementation Group, and members of the Executive staff when appropriate.
- . Where possible and feasible, employees were encouraged to participate in the decision-making process as it affects them in their organizational environment.

Transition Considerations

Other areas of concern in implementing the new organization were matters of manpower, budget and logistics.

Since the implementation occurred after the FY 73 budget had been assembled and approved, it was necessary to make budget and manpower decisions within this constraint. The budgets of former organizations were reconciled to the new organizations. Likewise, the allocation of office space and equipment required an internal adjustment since there was little unused space or equipment available.

For FY 74 each of the new organization's managers was expected to define his programs and activities and then request the necessary budget and staff to carry out his responsibilities. It was anticipated that any problems encountered in the FY 73 reconciliatory process could be corrected in FY 74.

Implementation Report

The activities and findings of the Implementation Group were published in a final report, Implementation Report of the Illinois Department of Transportation, September 1972. This report covers in detail the activities, mission, objectives, organization and responsibilities of the newly created Department of Transportation.

III. ORGANIZATION OF THE DEPARTMENT

Using the policy and procedures previously described, the organization of the Department was determined. The following is a brief discussion of the Department's objectives, mission, structure and responsibilities.

Mission

The Illinois Department of Transportation, administered by the Secretary of Transportation, has by statute, responsibility for the State's transportation programs and activities. The Department is charged with allocating public resources and setting policy which will lead to a balanced and coordinated transportation system. It has assigned to it responsibility for State-wide transportation planning; allocation of resources and funds; development, construction, operation and maintenance of transportation facilities; and administration of Transportation grants and programs to local agencies of government.

Objectives of the Department

The objectives of the Department of Transportation take into account Illinois' unique leadership opportunity in transportation because of its geography, industrial and agricultural base, and urban concentration and vitality.

The objectives encompass the broad responsibilities relating to the State's total transportation system and provide general guidelines on how the Department should fulfill its responsibilities. They focus on matters relating to the movement of goods, as well as people, and on transportation resources and facilities in the public and private sector. Attention is given to transportation needs for all purposes - business, pleasure, and personal, and to development activities covering all forms of transportation.

The objectives of the Illinois Department of Transportation are as follows:

1. To plan and develop transportation systems which satisfy the overall needs of the State.
2. To insure that transportation planning and development fulfills goals and priorities for socio-economic development and urban and regional development and restoration.
3. To develop efficient transportation systems, based on economic analysis, through the regulatory process, legislative liaison and interaction with the private sector.
4. To stress the importance of transportation safety.
5. To ensure that transportation systems are compatible with the environment.
6. To maximize financial participation and investment of public and private funds for transportation programs and systems.
7. To act as a focal point for other governmental agencies' transportation needs.
8. To keep Illinois in the forefront of transportation technology and techniques.

9. To develop and encourage communication between the Department and the public.
10. To attract, develop and retain a knowledgeable and competent staff.

While the stated objectives provided direction for structuring the new Department they also provided management with a means of measuring the performance of each organizational unit.

The new Department has been assigned a broad range of mission, modal and functional responsibilities. Within these overall responsibilities there are several critically important responsibilities that must receive special attention. These are:

- Leadership and liaison between all State transportation functions and activities.
- Planning and programming to develop a State-wide transportation master plan and a comprehensive transportation planning system within the State.
- Financial management to develop transportation resources and administer expenditures of State and matching funds on transportation related programs and projects.
- Development and operation of transportation systems including activities related to development of mass transportation systems and facilities, safety programs, and research and development programs, as well as development and operation of State highway systems.

To fulfill the primary responsibilities of the Department, it was determined that certain basic organization concepts must be satisfied. The first concept was to utilize a functional rather than modal organization structure. The second was to bring together multi-discipline analytic viewpoints within the Department and within key organization units. The third concept was to separate the Department's operation activities from its key direction and policy making functions. The fourth concept was to organize the top management function around three key positions, the Secretary, Assistant Secretary and Under Secretary-Chief

Transportation Engineer. The final concept was to provide several channels of communication for gaining external viewpoints in recognition of the scope of the Department's responsibilities for planning and developing transportation systems.

Organization Structure

The following chart presents the overall organization structure of the Illinois Department of Transportation. Each major organization unit is provided with the capabilities to fulfill its share of Department responsibilities and to assist in the achievement of common objectives. This structure provides for central direction and coordination of the programs and activities that control the destiny of the Department. The program implementation activities have been separated from the Department's overall policy activities. Areas of responsibility that have common purpose or that have similar functions have been consolidated into singular major organizations. In the operations portion of the organization responsibility for policy development has been centralized, while the program execution duties have been decentralized to the Districts and Region.

In the following portion of the article the major organizational units of the Department are described.

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Planning, Programming, and Environmental Review

This organization is responsible for all long-range transportation planning and for coordinating the Department's programming activities. It is responsible for developing recommendations relating to transportation priorities and allocation of State resources for transportation development. This organization has several important key features.

Long-range planning is separate from the nearer term programming activities placing emphasis on the quite different nature and perspective of these activities. Long range planning also has its own regional planning units that relate to, and coordinate activities with, local/regional comprehensive and/or transportation planning agencies. While programming coordination and guidance is provided in this organization unit, actual programming and program implementation are line activities with responsibility in the field if implementation is in the field.

The modal specialization as well as functional, technical, and disciplinary skills needed for comprehensive transportation planning have been provided in order to develop comprehensive and balanced transportation plans incorporating the overall advantages of each form of transportation in given situations. Environmental capabilities have been integrated into all major phases of this organization commencing with long range planning and including a separate final comprehensive and environmental review process.

The Administration organization determines sources and availability of funds, analyzes and forecasts State transportation funding requirements, prepares operating and capital budgets for the Department, and administers funds for approved programs. It provides the Department's accounting and auditing capabilities. Its budgeting activity is closely related to the Department's programming process. The accounting and auditing activities ensure sound fiscal management of the Department's financial responsibilities.

Included in the organization are the skills, systems capability, computer operations and management information activities required for direction and control of the Department's management activities. It provides top management with the staff capabilities and management expertise required to manage the Department efficiently. It also provides operations and management efficiency

capabilities for the total organization and systems analysis staff support capabilities to those organization units which cannot justify having their own specialized staff.

This organization provides or coordinates personnel management and business management activities for the Department. It provides for coordination with the State Department of Personnel as well as for the activities needed to develop and maintain the Department's technical and engineering staff.

Mass Transportation has been established to assist in meeting the Department's responsibilities which require specialized mass transportation knowledge and skills. It serves as a focal point for all of the State's mass transportation responsibilities, except for the planning and fiscal responsibilities which are performed by Planning, Programming and Environmental Review and by Administration.

This organization's responsibilities include providing recommendations on mass transportation planning and policy, performing and coordinating mass transportation programming activities for the Department, recommending funding priorities, establishing and maintaining contact with federal mass transportation agencies, and providing assistance to local and regional mass transportation agencies. While overall guidelines and coordination of activities will be centralized, responsibilities will be assigned to Districts/Region when it is justified by a sufficient volume of activity. The organization will eventually transfer to Local Transportation Services in keeping with the objectives of the organization.

Legislative and Public Affairs

Legislative and Public Affairs provides the Department with capabilities for preparing information required by legislative activities, monitoring proposed legislation, and developing recommendations on the Department's legislative positions. It recognizes the importance of the legislative process on the development of the State's transportation systems and of the large volume of proposed legislation which has a direct relationship to transportation matters.

This function also serves as a point of contact for, and communicates with, the transportation industry, governmental agencies, special interest groups, and the

general public. It has been given important responsibilities for obtaining and representing these external viewpoints.

Transportation Safety

The Transportation Safety organization develops and implements highway, vehicle and driver safety programs, operates vehicle inspection programs, investigates accidents and analyzes and prepares statistical data on accidents and safety. It also provides staff assistance to the Governor's Traffic Safety Coordinating Committee.

The organization consolidates several transportation safety responsibilities previously scattered throughout State government and places them in a direct reporting relationship to the Secretary. It provides increased emphasis on transportation safety and coordination of safety responsibilities among other agencies.

Research and Development

This organization develops the technology required to help solve transportation problems and improve transportation systems in the State. It monitors existing sources and projects, encourages new research and development and may create its own programs or projects.

The activity has been created to provide the State with research and development capabilities. It has been separated from other functions in order to permit independent direction of effort and resources toward the most promising and effective explorations.

Operations

Operations, headed by the Under Secretary, Chief Transportation Engineer, has overall responsibility to the Secretary of Transportation for modal operations and program implementation, including capital expenditures for transportation facilities throughout the State. The Operations organization consists of the following described major units.

Engineering and Standards

This activity is comprised of expertise in facilities design, land acquisition, materials, physical research, construction, traffic and maintenance. It develops

centralized policies and procedures for engineering, environmental protection, and operations activities that exist in the field and may also selectively perform centralized operations activities if more efficient and economical.

This organization is one of the most important in the Operations organization, providing for overall guidance and control of engineering and technical matters. With some exceptions, this organization will initially be involved with highway development and maintenance. As responsibilities expand, this organization should develop the capabilities required for all transportation modes.

Operations Administration

Operations Administration has been created to provide Operations management with staff assistance for administrative matters and activities. It is responsible for providing administrative support, coordination and direction to Operations organizations at all levels. It is also responsible for project status reporting and for coordinating the programming activities of the Districts and Regions.

Water Resource Management

Water Resource Management conducts all functions formerly carried out by the Division of Waterways, except for those responsibilities related to commercial waterway transportation which have been assigned to the Local Transportation Services organization. It is anticipated the non-transportation related Water Resource Management functions will be assigned to another State Agency in a future executive organization effort.

Local Transportation Services

Local Transportation Services guides and coordinates the State's transportation activities with local and regional agencies. It is the primary contact point for all transportation-related problems or activities, except planning activities, that involve the State. It also provides operating, administrative, financial, and technical assistance to local and regional organizations.

The organization combines the primary modal or mission-oriented units that work with local officials -

Local Roads and Streets, Mass Transportation, and Waterway Transportation. The Department's policy and overall guidance is centralized, but responsibilities for direct liaison may be assigned to local transportation services offices within the Districts/Region. The Mass Transportation organization initially will report directly to the Secretary of Transportation.

Region and Districts

The Region and Districts are responsible for carrying out all of the Department's operating functions and program execution responsibilities within assigned geographic areas. The organization structure may differ because of differences between the Region and Districts. For example, each area will have significant highway programs but only certain areas will have ongoing mass transportation activities. The Region and Districts are envisioned, however, as strong decentralized organizations with primary responsibility for programming if implementation takes place in the Districts/Region. Each of the Engineering and Standards bureaus has a "functional" counterpart in the field organizations.

Conclusion

The Illinois Department of Transportation has envisioned, developed and implemented in just short of a year. It has unique opportunities seldom found in governmental agencies. The dynamic nature of the organization is recognized, its capacity for change is provided for and its dedication to results is expected. The goals and objectives are without precedent. The success of the Department will be but a matter of fulfilling this expectation.