

Organization for Statewide Transportation Planning

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•A LITTLE OVER a year ago the New York State Department of Transportation was created by an act of the 1967 Legislature. The Act itself did not represent a sudden decision but reflected the shifts in the nature of the State's program and organization that have been occurring over the past decade to meet changing and growing transportation needs. Like its federal counterpart, the New York Department of Transportation is not a totally new organization but one that brings together under one commissioner several separate functional transportation agencies. These include the Bureau of Aviation from the Department of Commerce, the State Traffic Commission from the Department of Motor Vehicles, the Office of Transportation from the Executive Department, and the highway and waterway responsibilities of the Department of Public Works.

In addition to creating the Department of Transportation, the 1967 Legislature also instructed the new Department to develop a balanced, long-range comprehensive statewide master plan for all modes of transportation. The timing of this mandate as well as the reorganization can be largely attributed to a \$2.5 billion bond issue (\$1.25 billion for highways, \$1.0 billion for transit, and \$0.25 billion for airports) approved by New York voters in November 1967.

The management of a program of this scope with financial resources of this magnitude (the current annual transportation program is \$1.23 billion) required a modern, responsive organization, and special studies were undertaken to insure that the new structure was designed to serve the transportation program objectives. The Department was organized, as Figure 1 shows, into four staff offices—Management and Finance; Manpower and Employee Relations; Legal Affairs; and Public Affairs—and six divisions—Planning; Development; Design and Construction; Maintenance; Traffic Engineering and Safety; and Real Property. Perhaps most significant in this organization is that the role of planning has been expanded and placed in a line rather than a staff function. Also significant is the break with tradition in regard to field or district offices. In this organization, those responsible for each of the major functional areas in the ten district offices located throughout the State report directly to the appropriate division in the main office.

Because of the close coordination required for their programs, the Planning and Development Divisions were brought together in the Office of Planning and Development. Basically, the Planning Division is responsible for developing urban and statewide transportation plans and the Development Division for administering programs and funds for airport and transit facilities. Following is a brief summary of the responsibilities of the bureaus in these two divisions (those of the Planning and Research Bureau will be discussed at greater length later):

1. Planning and Research Bureau—Preparing long-range multimodal transportation plan for the entire state including its urban areas.

2. Project Analysis Bureau—Undertaking highway sufficiency studies, project review, and project programming; maintaining liaison between the main office and the district offices. The Bureau's present emphasis on the highway program is due mainly to the size of that program—over \$500 million per year in new construction—and the

need for specialization and continuity. In the coming months the Bureau is expected to take on responsibilities for programs relating to other modes.

3. Data Services Bureau—Designing surveys; collecting, storing, and retrieving all data necessary to transportation planning studies; providing cartographic services.

4. Project Development Bureau—Implementing the statewide plan through public transportation projects; administering the \$1.25 billion earmarked for public transportation projects in the \$2.5 billion transportation bond issue; evaluating project applications for funds; providing managerial and technical assistance for air, rail, and motor carriers (bus and truck); monitoring project progress.

5. Resource Development Bureau—Acquiring and maintaining knowledge of new technology to insure imaginative solutions to transportation project implementation; developing demonstration project programs to test new ideas, materials, and equipment; developing action programs to implement state transportation plans and policies; conducting economic analysis and research to assure that projects and programs meet transportation goals.

This sketchy review of the organization of the Department of Transportation and particularly the Office of Planning and Development will serve as background to the discussion of the Planning and Research Bureau. Developing, monitoring, and, when necessary, updating a statewide master plan for transportation is one of the responsibilities assigned to this Bureau.

ORGANIZATION FOR STATEWIDE PLANNING

Comprehensive statewide transportation planning presents a new challenge to most transportation planners who for the past several years have dealt with urban, or at most regional, problems. Although a planning process can be outlined that appears to

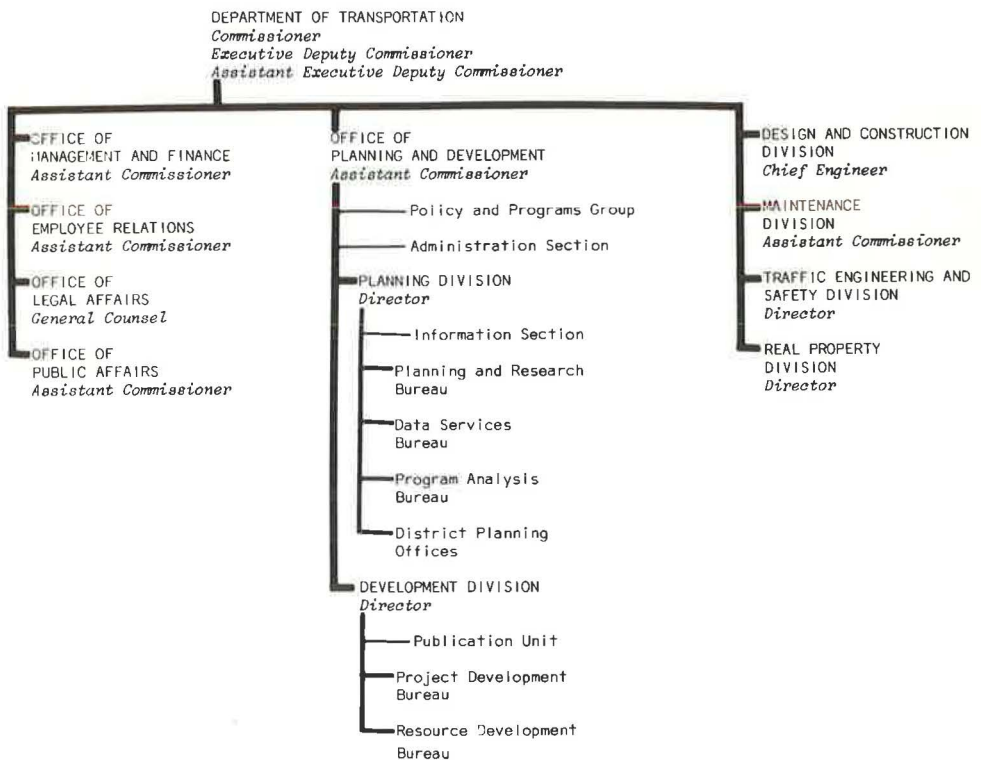


Figure 1. Organization of the New York State Department of Transportation.

be relatively simple, such as that shown in Figure 2, its major steps are diverse and complex, encompassing transportation goals and policies not previously examined. They require new developmental and environmental considerations, a comparison of multi-modal transportation systems, and the examination of different requirements for person and goods travel.

An organization to undertake this kind of planning can neither be created overnight nor be expected to produce instantaneously a detailed plan. The organization must be built on that which currently exists, and the plan must be developed in succeeding increments or levels of detail.

New York State has had a centralized staff for urban transportation planning since 1962. Consisting of planners, transportation analysts, economists, engineers, mathematicians, sociologists, and computer programmers, this interdisciplinary staff carries out the inventory, research, planning, and evaluation work essential to preparing transportation plans for the State's urban areas. It is this staff and this program that provides the base for building the statewide planning effort.

Although there are essential similarities in the two programs, the scale and scope of statewide planning presents problems not encountered in urban studies. For example, the matter of inventories raises the question of how they should be conducted on a statewide level. What should the sample size be? Or more importantly, how does one establish an accurate universe from which to sample? There is also the problem of developing forecasts of travel by people and goods, not only in the aggregate but by mode. This is a tough enough problem at the urban level, let alone at the state level. In addition, the entire battery of tools has to be modified and new ones developed for analytical activities such as simulating travel, estimating the impact of regulatory policies on one mode versus another, and devising objective measures of goal attainment. This latter requirement becomes particularly important when transportation facilities are viewed as only one environmental element that must be fully integrated with other elements such as recreational, educational, employment, and residential facilities.

Statewide planning will require attention to many other matters not entirely similar to those in urban planning. Throughout the planning process, the staff will have to prepare specific products at all levels of detail ranging from reports on an area's need for a general aviation airport to traffic requirements within a particular intercity corridor. Other agencies will be preparing plans that the staff must review to assure that transportation plans are carefully coordinated with them. Coordination is particularly important in the establishment of goals as well as the methods by which goal achievement is measured.

Statewide planning does, however, have a fundamental similarity to urban planning as to other types of planning in that it must be a continuing effort and its staff and program must be so organized. Actually, no single document can ever be a "master" plan, and hopefully no plan will ever be a "final" plan. Conditions change, planning techniques and tools become more precise, social values evolve, government programs vary in emphasis, technology brings progress and obsolescence. Planning attempts to maintain some order and direction in the midst of this constant change. It is, therefore, an activity that can never be considered complete.

The Planning and Research Bureau was organized on this premise. Its organizational structure, now expanded to include the statewide planning effort, is shown in Figure 3. In addition to planning and research functions, it formerly was responsible for data services as well. The many demands for these services, which included the design and conduct of surveys, preparation of data for computer processing, and storage and retrieval of data summaries, led to the creation of a separate Data Services Bureau. This new bureau provides data services for transportation planning as well as other functions within the Department of Transportation and for other state and local agencies.

The Research and Applied Systems Section, as its name implies, is responsible for basic planning research and the computer programming support required by that research. The section also provides the economic, population, and travel forecasts that are used in urban transportation planning. The emphasis in its work program is now

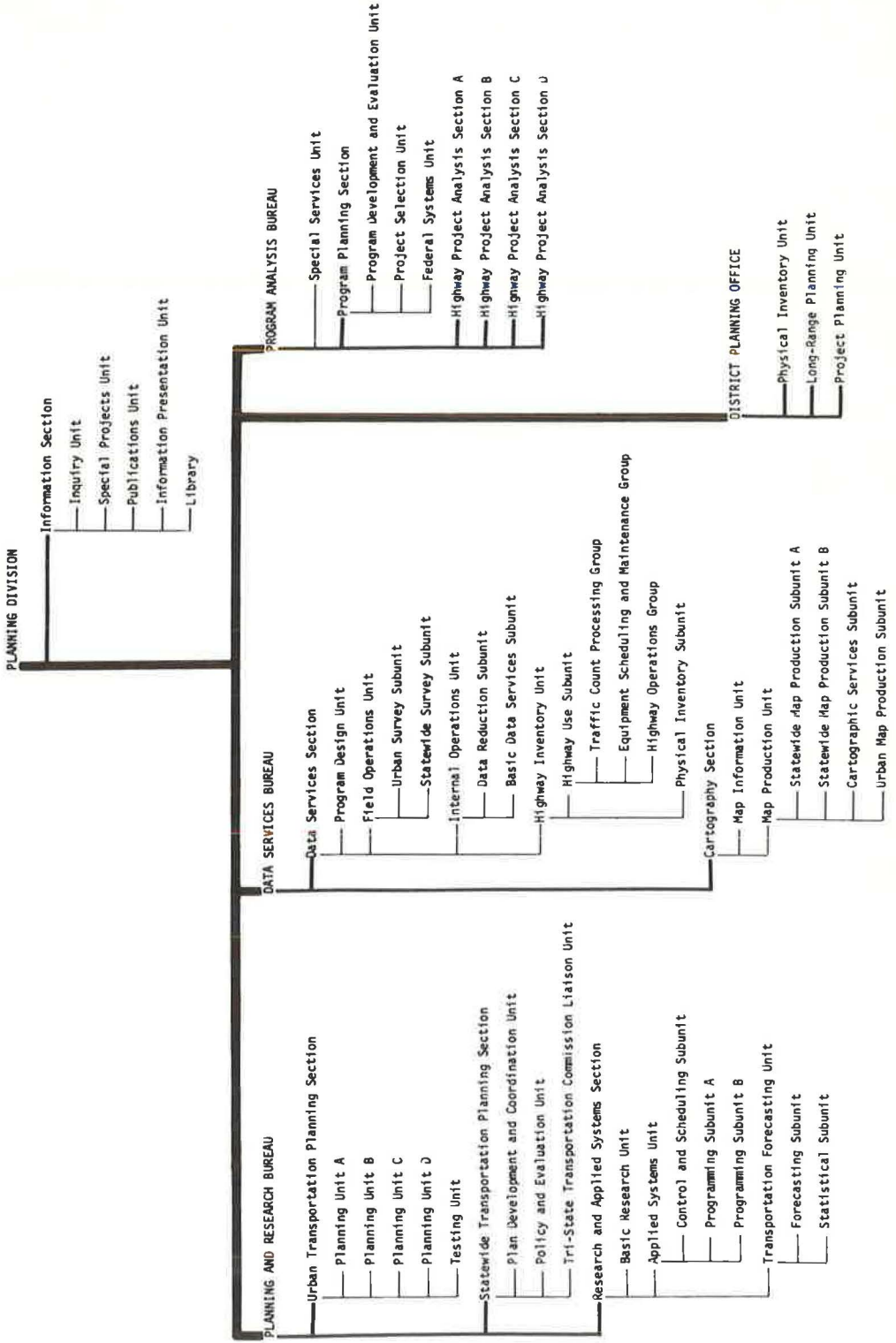


Figure 2. Organization of the Planning Division.

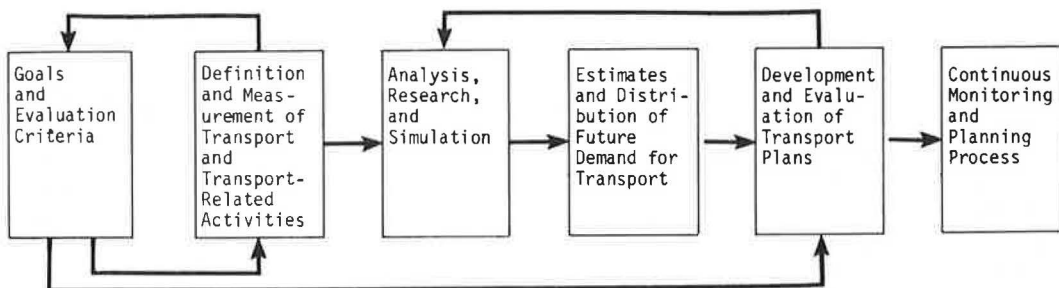


Figure 3. Comprehensive transportation planning process.

shifting from urban research to that having application to statewide planning, such as quantification of measures of goal attainment, multimodal travel simulation, and models to simulate the effect of governmental policy decisions.

The Urban Transportation Planning Section is responsible for developing, in cooperation with local agencies, transportation plans for each of the State's urban areas. Until recently, attention was focused on those areas with over 50,000 population. These studies are now going into the continuing phase, and new studies are being initiated for urban areas of over 25,000 population. Eventually, plans will be prepared for all areas with a central population of 5,000. The section is organized into four interdisciplinary planning teams, each responsible for specific urban areas. A fifth unit, the Testing Unit, specializes in travel simulation, providing this essential service to each planning team.

The Statewide Transportation Planning Section was added to the Bureau within the last year and was charged specifically with the responsibility of carrying out the legislative mandate to prepare and maintain a statewide master plan for transportation. At present the section has twelve interdisciplinary professional positions, grouped within three basic units. The Policy and Evaluation Unit is primarily concerned with the development of goals, planning principles, and evaluation. The Plan Development and Coordination Unit is primarily concerned with developing forecasts and plans, and programming plans in coordination with other agencies. The basic concept in structuring these two units is to place those functions relating specifically to plan design in a unit separate from functions dealing with criteria and evaluation. In some respects, this was a practical necessity because of the requirement to produce an initial plan within the organization's first year that could be used to guide immediate decision-making and, at the same time, to develop the foundation and goals for the more inclusive, longer term effort.

COORDINATION AMONG VARIOUS PLANNING PROGRAMS

Because transportation facilities serve people in transporting themselves or their goods within the environment, they cannot be planned or built without regard for this primary objective. An organization for transportation planning, therefore, must be structured so that internally its program achieves this objective and externally it interrelates with programs of other planning agencies to assure that they are complementary and coordinated. Coordination among various planning programs, however, is not always easy. Some of the more common causes of conflict are the following:

1. Differences in Scheduling—Each program has its own features that dictate the critical points of its schedule. For example, the schedule for a program to build a highway must include time to secure the necessary legislation, prepare preliminary designs, hold public hearings, prepare final designs, acquire right-of-way, and finally construct the facility. These activities can require from five to ten years, and their coordination with other projects is most critical at the beginning of this period.

2. Lack of Common Knowledge—Closely associated with scheduling conflicts are those that arise when different planning agencies do not have sufficient knowledge about each other's processes and particular problems. Whatever the agency, there is a tendency for it to consider its own program to be the crucial one and to expect other programs to exercise flexibility and accommodation to it.

3. Accommodation Instead of Coordination—This, of course, leads to another point of conflict: the assumption that accommodation can be substituted for coordination. Transportation planners, for example, cannot merely accommodate a facility to a travel corridor, when scarce land and resources demand joint use of rights-of-way and development where all facilities are operationally and visually harmonious.

4. Differences in Level of Detail—Different plans are prepared at different levels of detail. Certainly regional planning would not have the detail and refinement that block or neighborhood planning would have. Moreover, regional planning will likely span several political jurisdictions, creating inevitable conflicts when one political unit may be burdened more heavily in the provision of a regional facility than is another. Although coordination and cooperation from the beginning will help alleviate many of these kinds of problems, they may well require a hierarchy of decision-making powers that does not now exist.

5. Lack of Impartial Review Board—That such a decision-making structure does not exist is indicated by this conflict cause. An impartial review board would not only be able to resolve many conflicts due to political and jurisdictional disputes, but would aid in helping each agency keep a clearer perspective on the scope and importance of its own program. Unresolved conflicts are costly; so are duplication and ill-conceived programs. An impartial review board for interrelating planning programs should be considered an essential element.

Although it is not an official decision-making group, a Technical Coordinating Committee has been organized for New York's statewide transportation planning. Represented on the committee are all state departments, commissions, and authorities that have programs related to transportation. These include the Office of Planning Coordination, Department of Commerce, Niagara Frontier Transportation Authority, Division of Housing and Community Renewal, Human Relations Commission, Tri-State Transportation Commission, and others. Representatives of the U. S. Departments of Transportation and Housing and Urban Development serve as ex officio members. Many of the agencies represented on the Committee directly serve regional areas or have field operations within local areas. Thus, coordination with local governments is assured.

In June 1968 the Department of Transportation held its first public hearing on statewide transportation needs. In addition to government leaders, participants included private owners and operators of various transportation modes, educators, labor union leaders, natural resources and environmental specialists, and chairmen of transportation user groups. The response to this first hearing was enthusiastic, and others will likely be scheduled in the future. This is an excellent way to hear all the many points of view and special interests so that each can be served and differences can be worked out as the planning of the State's transportation system continues.

As a further means of coordinating transportation planning with other programs, New York State has established guidelines for creating an Advisory Committee for statewide planning, which will be organized during 1969. This committee will have wider representation than has the Technical Committee and will draw its membership from private industry and private associations as well as governmental agencies.

CONCLUSION

Officially, New York State has had a statewide transportation planning program for slightly more than a year. Before this official act, the Department's planning staff had already begun to focus attention on some of the problems that differ in statewide planning from those in urban planning. The statewide planning effort was, therefore, built on existing organization, methodology, and technology. The staff continues to grow—

both in number and in its knowledge of the total process and the intricacies and relationships of its parts. Methodology continues to be modified, adapted, and in many cases created.

We have learned a great deal during this first year. From an administrative point of view, notable lessons include the following:

1. There is a tendency to underestimate the magnitude and complexity of the work to be accomplished.
2. In such a broad, all-encompassing program, many more crises, both big and small, occur than can readily be anticipated.
3. Finding and recruiting the many specialists required to staff the organization properly is more difficult than expected.

The last is perhaps the most important of all, for the worth of the program will ultimately be due to the people who shape it and carry it out. Certainly the responsibility to develop a plan for a balanced transportation system for a major state is a heavy one, but also one having challenge and excitement. We look forward to sharing experiences with other states such as Pennsylvania, Connecticut, California, and Wisconsin that have also launched statewide planning programs. The start of these programs across the country suggests that solutions to transportation problems must be sought beyond local or regional bounds. Nor do the problems stop at state lines. Although designed primarily to serve an individual state and its people and economy, these programs will serve other states, and indeed the entire nation, as well.