

PROCEDURES USED IN DEVELOPMENT OF UNIFIED TRANSPORTATION WORK PROGRAMS FOR THE MASSACHUSETTS PLANNING PROCESS

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The Massachusetts Department of Public Works has undertaken an ambitious program to revitalize its transportation planning process. The major focus has been on the 12 regional planning agencies that incorporate every community in the commonwealth. For each of the regions, unified transportation work programs have been developed that describe the comprehensive transportation planning work to be undertaken for a 5-year period. The work programs will be implemented under the direction of policy groups established in each region. Each policy group is composed of representatives from state, regional, and local agencies and from citizen groups and the general public. A major objective of the revitalized planning process is to develop projects for implementation that are mutually agreeable. Therefore, the success of the program will be measured by its ability to produce agreed-upon projects for implementation. A key mechanism for accomplishing this objective is the development and subsequent implementation of the unified transportation work programs. This paper describes the major features of the revitalized planning process, the procedures used to develop the unified transportation work programs, and the manner in which the planning specified in the work programs is being implemented.

•A UNIFIED transportation work program is a single document containing a detailed description of the transportation planning work for all modes of transportation to be accomplished in a specific area covering a period of 1 or more years. Important functions it serves in the planning process include

1. Enhances the ability of various planning agencies at all levels of government to integrate all transportation modes into a unified planning program;
2. Ensures the coordination of transportation planning with other functional planning programs, such as housing, open space, water and sewage, and land use;
3. Provides the information needed at all levels of government to program the allocation of planning resources during a relatively long period of time;
4. Provides the information needed by various federal agencies to determine whether the specific items of work are in conformance with the overall planning program and eligible for consideration for program funding;
5. Encourages and promotes full participation by all interested and concerned groups who wish to make inputs to the work program; and
6. Describes the roles and responsibilities for carrying out the various work tasks and specifies the resources needed for each task.

The development of unified transportation work programs is encouraged by the U.S. Department of Transportation as a necessary element in the transportation planning process. The commonwealth of Massachusetts, through its Office of Transportation and Construction (OTC) and Department of Public Works (DPW), initiated the development of unified transportation work programs in November 1972. The OTC Secretary

and DPW Commissioner viewed the development of such documents as essential to the reorganization and revitalization of the transportation planning process throughout the commonwealth. Subsequent sections of this report describe the procedures used to accomplish that objective.

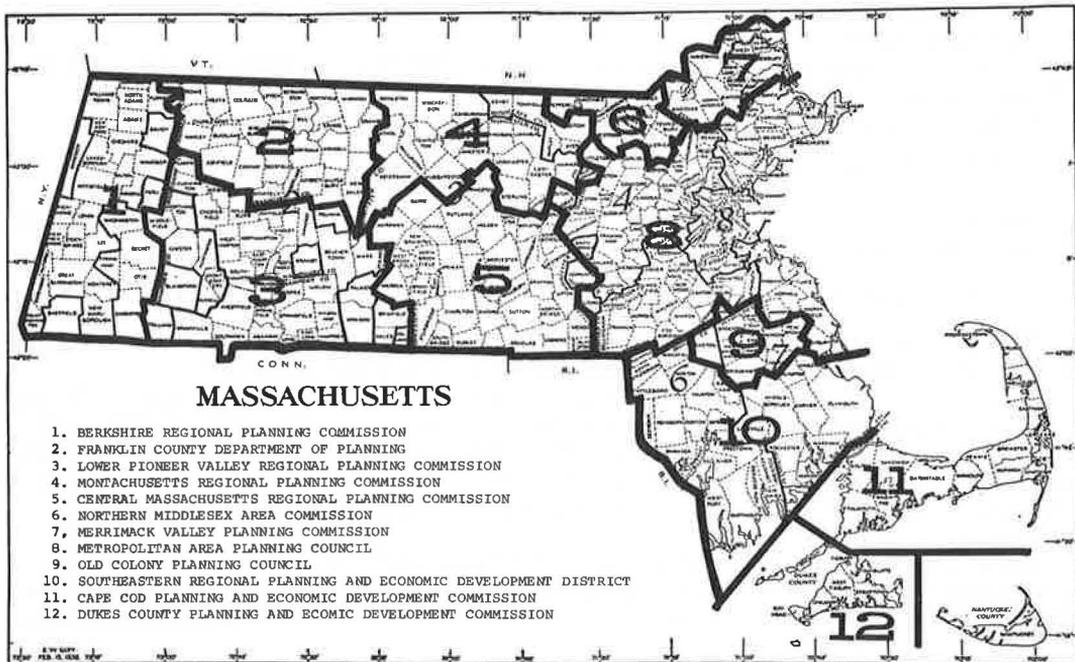
BACKGROUND

The major focus of the reorganizing and revitalizing of the planning process was on the 12 regional planning agencies (RPA), which are shown in Figure 1. Professional staff of each RPA would thus have an opportunity to integrate transportation planning with all other functional planning elements within the overall framework of comprehensive planning on a regional scale. It was felt that planning should be done on a regional scale to give proper consideration to the regional impacts of transportation decisions. However, this in no way would interfere with decisions that must be made at the local level.

Because the intention of reorganizing the planning process was to make it open and participatory, it was necessary to use an open and participatory process to achieve that objective. Therefore, the OTC Secretary and the DPW Commissioner invited local, state, and federal officials; citizen groups; transit companies; and other interested individuals and groups to attend a public meeting in each region to discuss the planning process. Approximately 500 letters of invitation were sent in each region, and in most cases more than 100 people attended. The purpose of each meeting was to obtain a consensus concerning the role of the RPA in the planning process and to describe the objectives of the new process. In each case the consensus was that the RPA is the proper mechanism for transportation planning.

After a consensus was reached on the role of the RPA, steps were taken immediately by RPA and state personnel and their consultants to develop a memorandum of understanding and a unified transportation work program within each region. The purpose of the memorandum of understanding was to establish the organizational framework within which the new transportation planning process would be implemented. The mem-

Figure 1. Regional planning agencies.



orandum of understanding states that the objective of the OTC Secretary and the DPW Commissioner is to create a transportation planning process that

1. Is ultimately responsible to those at the state and local levels who have authority to implement transportation plans;
2. Is oriented toward resolving issues and controversies and provides a forum for building consensus and airing disputes;
3. Includes a technical arm to support decision-making while emphasizing the key role of elected officials in making decisions;
4. Integrates transportation modes more effectively so that the process is a balanced planning effort and moves toward a comprehensive transportation planning process embracing all modes;
5. Recognizes both the short- and long-range impacts of the proposals on the overall transportation plan for the region;
6. Has wide and effective participation at the local level, both public and private, both municipal and regional, without diluting the ultimate capacity to take decisive action;
7. Is perceived by participants and reviewers as a dynamic process that is shaped in large part by the participants themselves with variations among regions and from time to time;
8. Is effectively integrated into the structure of proposed regional transit agencies and other transportation entities; and
9. Provides for the formulation of a unified work program for transportation within the context of comprehensive planning at the local, regional, and state levels of government.

The memorandum of understanding established a policy board to ensure that the planning process is an open and broadly participatory one, to serve as a forum for discussion and as the operational arm of the transportation planning process, and to establish the basic policies governing the conduct of the continuing transportation planning process. As a general policy, membership on the policy board is inclusive, rather than exclusive; its membership is drawn from the following sources:

1. Regional planning agencies and cities and towns within each region;
2. Department of Public Works;
3. Office of the Secretary of Transportation and Construction;
4. Other appropriate state agencies;
5. Private institutions, associations, and organizations representing low-income groups and minority interests in the area; and
6. Other groups mutually agreed on.

Although the memorandum of understanding provides the overall organizational framework for conducting transportation planning work, the unified transportation work program describes the work to be accomplished and assigns the responsibilities for doing the work.

BASIC PHILOSOPHY USED TO DEVELOP WORK PROGRAMS

The philosophy used to develop a unified transportation work program for each RPA is best illustrated by discussing the basic features contained in each.

The work program covers a 5-year period and gives a detailed description of work to be accomplished during the 1972 calendar year and a more general description of work to be accomplished from 1973 to 1976. This long-range look at the planning program will assist the RPA, the communities within each RPA, and the state planning agencies to program planning funds with a greater degree of certainty as to planning priorities.

As indicated earlier, the focus of the planning process is on the 12 regional planning agencies. Therefore, planning will be conducted for urbanized areas as well as for urban and rural areas. In this way, the planning program will include every community in the commonwealth.

The work program describes both short-range and long-range planning objectives and tasks. Short-range planning is defined as proposed action that resolves transportation problems that are of immediate concern and importance and that is within the framework of the long-range comprehensive plan. The long-range plan covers a period of 20 to 25 years. In planning work that has been undertaken in the past, the important link between planning and program implementation was frequently missing. Therefore, heavy emphasis is placed on integrating long-range and short-range planning so that recommended projects are a direct product of the planning process. Establishment of program priorities is, therefore, another important part of the planning process and will be done jointly by local, regional, and state agencies in accordance with the provisions in the memorandum of understanding. It is apparent to all groups involved that the real measure of the effectiveness of the process is the ability to reach agreement on the need for specific transportation projects and the early implementation of those projects.

The work program is concerned with the movement of people and goods by all modes of transportation, including highways, urban public transportation, intercity transportation, and waterways. Therefore, its format is such that it can be used as a single source document by the RPA and the state in applying for federal planning funds. Because it also describes the manner in which transportation planning will be coordinated with other aspects of comprehensive planning (such as housing, open space, water and sewer facilities, environmental considerations, and social and economic factors), the document also is intended to be used in applying for funds from other than the U.S. Department of Transportation.

Each work program contains approximately 15 specific tasks related to the planning process. The tasks were established to meet all state and federal goals and requirements, but they were also structured so that as much flexibility as practical is allowed in conducting the planning process. This provides a dynamic mechanism for fast and efficient decision-making on specific projects and programs. Each task includes a description of the agencies responsible for the work, the budget required, the various sources of funds, the expected start and completion dates, the types of end products expected, and the target dates for producing them.

The mechanism established for conducting the revitalized planning process provides a number of unique opportunities for making the planning process an integral part of the decision-making process, thereby providing the means by which plans will be transformed into action programs to achieve the goal of developing a balanced transportation system throughout the commonwealth. The revitalized planning process will

1. Provide for broad political and citizen participation, which parallels the technical elements of the work program;
2. Provide for the simultaneous consideration of both immediate planning decisions and long-term planning decisions and enough flexibility in each case to allow for necessary adjustments;
3. Provide sufficient opportunities to evaluate the full consequences of various transportation alternatives;
4. Provide the opportunity to develop innovative solutions to transportation problems by integrating multimodal transportation solutions with nontransportation solutions and by giving full consideration to low capital-intensive alternatives;
5. Provide a mechanism for continual feedback from the sketch plan stage through final design; and
6. Integrate various staff disciplines to allow for the application of solutions that account for all social, environmental, economic, political, and physical impacts.

PROCEDURES USED TO DEVELOP WORK PROGRAMS

The first step in developing the unified transportation work program was the development of a set of guidelines to be used by each RPA in generating a first draft work program. These guidelines were developed on the basis of instructions received from the OTC Secretary and DPW Commissioner and of various federal guidelines, including the following:

1. From the Federal Highway Administration, (a) PPM 50-9, Urban Transportation Planning, November 24, 1969, (b) IM 50-4-68, Operations Plans for Continuing Urban Transportation Planning, May 3, 1968, (c) IM 50-3-71, Urban Transportation Planning—Federal-Aid Highway Project Approvals in Urban Areas Over 50,000 Population, April 13, 1971, (d) Uniform Interpretation of Factors Necessary for Annual Certification in Urban Areas Over 50,000 Population, October 6, 1971, (e) Memorandum to Regional Federal Highway Administrators from G. E. Marple, Urban Transportation Planning—Unified Urban Work Program, March 17, 1972;
2. From the Urban Mass Transportation Administration, various informal discussions with UMTA personnel; and
3. From the U.S. Department of Housing and Urban Development, overall program design requirements from the 701 Handbook.

Guidelines for developing an operations plan and a technical work program and definitions of planning process documents were developed and used as the basis for generating the first draft of a work program by the staff of the Southeastern Region Planning and Economic Development District (SRPEDD), which was the first region in which this program began. After a comprehensive review of the first draft, we then incorporated all comments in the preparation of a second draft. The second draft was then reviewed by local, regional, state, and federal agencies, and their comments were obtained. We then prepared a third and final draft, which included all of the features described earlier in this report. The SRPEDD staff then made final minor changes to the work program, which reflected final budget estimates. The work program was then transmitted to the policy group established for SRPEDD under the provisions of the memorandum of understanding. At the present time, the planning process is being implemented in SRPEDD in accordance with the work program.

Similar procedures were used in each of the other planning regions. However, the third draft of the SRPEDD work program was used as the basis for developing the first draft of work programs in all the other regions. More generalized work programs have also been prepared by the 3 nonurban regions.

In the development of work programs for each region, particular attention was given to the procedures to be used in updating various transportation studies that had been completed in previous years. The major objective in this case was to make total use of all completed work in as comprehensive a fashion as possible. In addition, full consideration was given to the need for integrating the state's planning process with the U.S. Department of Transportation's National Transportation Study. The objective in this case is to provide the information requested for that study as a by-product of the planning process.

IMPLEMENTATION OF THE PROCESS

The major responsibility for implementing the revitalized planning process rests in the Department of Public Works. Steps have been taken within the department to reorganize its functions in a manner that will allow for a quick response to the planning process. There are now 3 major bureaus that are actively involved in the highway portion of the process: Transportation Planning and Development (BTPD), Project Development (BPD), and Traffic Operations (BTO).

In general, the BTPD will work with the RPA to develop and evaluate various alternative long-range transportation system plans in accordance with policy guidelines established by the DPW Commissioner and the OTC Secretary. The plans prepared by the BTPD will be developed jointly with state, regional, and local agencies in accordance with the memorandum of understanding.

At the point where plans are completed (under the guidance of the BTPD) for the development of transportation alternatives in a given area and the need is indicated for a specific facility, the BPD becomes responsible for developing functional design drawings, including preliminary engineering and related locational and specific environmental studies to prepare for final design.

The BPD will work closely with the BTPD and the RPA in the development of major projects. The BPD will develop specific location plans for alternative routes, coordi-

nate the preparation of environmental statements for projects, and coordinate specifics for the urban systems program. The BPD will play a key role in linking the planning process and project implementation.

The BTO will be responsible for the development and coordination of traffic control, safety, and TOPICS projects. These projects will include signing, pavement markings, traffic control signal installations, highway lighting, speed zoning, and capacity analysis. The BTO will work closely with the DPW districts and the RPA in the planning and development of such projects. The BTO will also review traffic engineering and capacity aspects of all projects.

The DPW has provided HPR funds to each RPA for the purpose of hiring in-house staff to implement the work described in the unified transportation work programs. Although the amount of funds available for this purpose is somewhat limited at this time, it is possible that, as the program continues in a successful manner, additional HPR funds can be made available. However, great potential exists in each RPA at the present time for obtaining additional planning funds from other sources because of the presence of a full-time in-house professional transportation planning staff. The major source of such additional funds will most likely be the Urban Mass Transportation Administration.

CONCLUSIONS AND RECOMMENDATIONS

The development of unified transportation work programs was a complex and time-consuming process. It involved the participation of numerous individuals in numerous agencies. Each participant had his own objectives, criteria, and biases; thus, a considerable degree of compromise had to be achieved. In addition, we were breaking new ground in undertaking such an effort—not only in Massachusetts but in the entire nation. Therefore, a great deal of trial, error, feedback, and negotiation was necessary. However, in the end, success was achieved because everyone involved was single-minded in achieving the ultimate objective of establishing a mechanism that would be sound and long lasting. Now the challenge remains to continue with this unifying objective and to implement the process that has been established.

Much work remains to be done as we move into the implementation stage. The following major challenges are to be met:

1. A continuing funding program must be established to provide the resources necessary at the regional level to do the work;
2. A clear distinction must be made in defining roles and responsibilities at the local, regional, and state levels of government;
3. The state must be prepared to respond to the needs of the RPA and, in effect, provide a centralized professional capability to assist the RPA with miscellaneous computer processing, model development, data collection, technical analyses, and general technical assistance;
4. The process must produce project recommendations for implementation, and projects must be actually implemented, or the process will be a failure;
5. A statewide schedule of capital improvements for all modes of transportation must be developed for a 5-year period and adjusted and updated annually;
6. Written technical guidelines must be developed by the state to assist the RPA staff and state staff in doing technical transportation planning work (this could be expanded to cover things such as administrative procedures and report preparation);
7. A comprehensive set of training programs must be established; and
8. A well-structured and comprehensive research program should be initiated that will result in the development of new and improved planning techniques.

This has been a most worthwhile effort. It appears that we are well on the way to achieving great success in making the planning process an integral part of the decision-making process in Massachusetts. However, much remains to be done, and a significant effort must be made by all participants to maintain the momentum that has been established.

A number of key elements associated with the revitalized planning process in Massachusetts should be emphasized. The planning process that has been established will be the mechanism used to identify projects for implementation that are mutually agreeable at all levels of government. This will assist in bringing them to the design and construction stage faster than has been possible in the past. The revitalized planning process is multimodal in nature. We will consider not only highways but also public transportation, airport facilities, railroad facilities, ports and harbors, and all movement of people and goods in our efforts to achieve our objective of establishing a balanced transportation system throughout the commonwealth. In addition, the establishment of priorities will no longer be the responsibility of state government alone. Priorities will be established jointly by state, regional, and local agencies. Those priorities will deal with the identification of problems to be resolved and projects to be implemented. Finally, it should be emphasized that the planning process must be, and will be, open and broadly participatory. Every effort possible will be made to ensure that responsible citizens will have an opportunity to participate fully at all stages of planning and decision-making.