HIGHWAY DEPARTMENT RESPONSIBILITY FOR URBAN TRANSPORTATION PLANNING

by

Dudley M. Burgess, Director
Division of Planning, Ky. Dept. of Highways

In order to discuss responsibility, it is first necessary to subdivide the total planning process into categories which define specific phases of operations that must be carried on in urban transportation planning. These areas of operation have previously been categorized by the Bureau of Public Roads, in agreement with the Housing and Home Finance Agency, into ten specific stratas of work to be performed:

1. Economic factors affecting development;
2. Population;
3. Land use;
4. Transportation facilities;
5. Travel patterns;
6. Terminal facilities;
7. Traffic control features;
8. Zoning ordinances, subdivision regulations, building codes, etc.;
9. Physical resources; and
10. Social and community value factors, such as preservation of open space, parks, recreation facilities, preservation of historical sites and boundaries, environmental amenities, and aesthetics.

The above broad categories set aside the ten elements which are to be considered in urban transportation planning in order to provide a comprehensive plan for an urban area and in order to amass basic data from which the continuing planning processes can be developed or projected.

Generally speaking, for fiscal purposes the Highway Department and the Bureau of Public Roads considers elements 4, 5, 6, and 7 the responsibility of the Highway Department and those elements of the total study for which Bureau cost participation can be expected. To separate these four elements as the only ones in which the Highway Department has concern and responsibility is perhaps not giving due consideration for those other six elements for which it may be assumed a local planning agency only is responsible. There is, to
a substantial degree, an overlap of responsibility and a clear line of segregation cannot always be established. For example, we are concerned with land use and its projection; we are concerned with population and its projection; we are concerned with economic factors affecting development; likewise, we are concerned with zoning ordinances and financial resources and the preservation of community value factors. To say that we are only interested in those four elements is not consistent with what is required under the 1962 Federal-aid Highway Act and is inconsistent with the overall need for planning throughout the State.

The Department not only is concerned with those areas of 50,000 population or over which fall under the 1962 Federal-aid Highway Act but also with communities throughout the State which have populations of less than 50,000. The Department, in cooperation with the Bureau of Public Roads and the State Department of Commerce, have completed comprehensive studies in Bowling Green, Owensboro, Hopkinsville, Richmond, Maysville and Frankfort, and are presently conducting a transportation study in the Henderson area.

There are problems in some of the smaller cities which are as acute as problems in the larger metropolitan areas which need logical solutions to their elimination. Many persons other than highway engineers are involved in the transportation planning process, one of the more important being the urban planner who furnishes data on present and future land use and population distribution. City officials play an important role in implementing both land use and transportation plans. With these and other persons involved, the problem of management often arises, particularly where more than one city or state is involved.

The subdivisions of the planning process, as previously mentioned, may be considered as an administrative division of this process. For functional division of the total process, your attention is invited to the graph which employs six functional divisions of the total process. Since the planning process employs a step-by-step building technique, each of the functional divisions are subdivided into steps and the step responsibility is indicated by symbols.

I think this chart demonstrates the degree of cooperation that is necessary throughout the conduct and the planning process. It is evident that there are many overlapping responsibilities and that specific areas of responsibility for step development is seldom clear cut.

Category No. 1: Inventory and History: This category involves the gathering of all basic material regarding the economic and physical structure of the urban area. Much of this information is usually available from planning agencies and Chambers of Commerce who have gathered and used it for other facets of comprehensive planning.
Category No. 2: **Analysis of Existing Travel Characteristics:** This phase of work involves a study of the use of the various existing transportation systems and terminal facilities which often includes determination of travel desires through an origin-destination survey. Much of the field work should be performed concurrently to enable cross-checking the various data from one phase of the study with those from another phase.

Category No. 3: **Projections:** Travel projections are needed to establish the traffic requirements for facilities at the design year. Knowledge of current traffic and existing land use, estimated future land use and population are needed for the techniques used in making these projections. This information is necessary for the next step in the planning process which is to locate the deficiencies.

Category No. 4: **Deficiency Estimates:** This is an evaluation of the capacities of existing transportation systems as related to the estimated design year trip desires. This gives an estimation of the needs for new or improved facilities, by location, for the design year.

Category No. 5: **Choosing the Plan:** Once the capacity deficiency estimates have been prepared for the transportation system under study, work can proceed on the evaluation of the location possibilities under consideration. For each possible route location, observations are recorded regarding various factors affecting the desirability of that location as an element of the plan. By considering the advantages and disadvantages for each route, a series of defensible, logical study plans are developed. Both plans must meet the capacity requirement, established by the capacity deficiency studies, and are then acceptable for further refinement and consideration.

All elements of the families of plans given final consideration must be evaluated in view of the design year travel desire data, the capacity deficiencies, the physical characteristics of any existing parts of the route, sound planning principles, and the economic practicality of providing the elements. In some cases, the most feasible course will not be obvious. The final choice must be made on the basis of a number of judgments, these being no one of the following but all of them in combination:

1. Total service provided immediately, as well as in the future;
2. Amount of disruption of community life;
3. First costs;
4. Total costs;
5. Degree of coordination with urban renewal and slum clearance; 
6. Effect on future growth; and
7. Degree of difficulty in obtaining right-of-way.

It must be recognized that as the plan is implemented, it will influence the location, density, and type of growth within the area. Of course, the plan will not be immediately effectuated and, therefore, consideration must be given to the probable programming rate of the plan. During these evaluations the possible effect of the various route locations on travel and city growth must be re-evaluated and adjustments made in travel desires, if necessary.

Category No. 6: Implementing the Plan: Many of the steps in implementing the final transportation plan are beyond the scope of the actual transportation study. However, it is most important that the study reports and report presentation aid materially in developing public acceptance of the plan.

I have attempted to show that there are inter-relations of responsibility that cannot be definitely defined and that it takes the efforts of both the Highway Department and the local interests to develop a plan that best fits existing and anticipated needs of an urban area. In developing and implementing the plan, all professional groups have a responsibility to inform the public fully of their action. Public support for any transportation program is most essential and this fact must be recognized during all phases of the planning process to best promote the economic and social welfare and reflect the best judgment available in fostering such growth.