

The Role of Indiana in Urban Transportation Planning Studies

F. STERLING BOLYARD
Urban Engineer
Indiana State Highway Commission

HISTORICAL DEVELOPMENTS

The role of Indiana in Urban Transportation Planning Studies has been assigned as the subject, so will be put into its proper position at the very outset of this paper.

Federal, state and local governments all have responsibilities in urban transportation planning studies as set forth in the Federal-Aid Highway Act of 1962. This act calls for a comprehensive transportation plan carried on continuously with full coordination or cooperation by federal, state and local governments, so, the state is in the center of this planning process today.

A review of the historical developments leading up to the adoption of this 1962 act follows:

1. *The Hayden-Cartwright Act of 1934* authorized the expenditure of Federal-Aid funds for long range highway planning purposes. This authorization included planning in urban as well as rural areas.
2. *The 1941 Federal-Aid Highway Act* authorized advanced engineering surveys for planning future development of highways around, into and through urban areas. At this time the Federal Bureau of Public Roads in their Washington office established a separate urban highway division in order to properly service the authorization under this act.
3. *The Federal-Aid Highway Act of 1944* authorized for the first time federal funds for construction expenditures exclusively in urban areas.
4. *The National Committee on Urban Transportation* was organized in 1954. Cooperating on this national committee were members of the American Municipal Association, American Public Works Association, National Association of County Officials, American Association of State Highway Officials, Bureau of

Public Roads and American Transit Association. The committee at this time had as its goal the development of practical methods for conducting a comprehensive transportation planning program adaptable to any size community.

5. *The Federal-Aid Highway Act of 1956* created provisions for the National System of Interstate and Defense Highways. Also, the state highway departments were charged with the responsibility to coordinate their planning activities with the planning activities in the local communities.
6. *The Sagamore Conference or The National Conference on Highways and Urban Development* as it was better known was held October 5, 1958 at the Sagamore Center of Syracuse University. Along with representatives of those agencies named above as participating agencies on the National Committee on Urban Transportation, the following agencies participated in this meeting also: Joint Committee on Highways of the American Municipal Association, American Association of State Highway Officials, Committee on Urban Research of the Highway Research Board, National Academy of Sciences, National Research Council, Syracuse University.

The conference objectives were:

- (a) To improve mutual understanding among the various classes of officials and specialists responsible for highway and urban development,
- (b) To extend as widely as possible the fine teamwork already existing in a number of cities and metropolitan areas,
- (c) To identify areas where research and improvement of techniques are most needed,
- (d) To determine what to do when the community has no operative planning program,
- (e) To *suggest how* the necessary professional *talent* and technical *skills can be mobilized* to execute the highway and urban development program within available time limits,
- (f) To *obtain agreement* on intergovernmental responsibilities, with view to improved relations.

“Since highway responsibilities are particularly diffused in the metropolitan areas, it is imperative to coordinate design to achieve reasonable consistency in standards. Only a truly cooperative effort can overcome organizational problems so as to afford maximum traffic service.

“One key to cooperation among officials is understanding the other person’s problems and responsibilities. Therefore, it must be recognized that :

- (a) Each *state highway department* has the prime legal responsibility for implementing state highway programs, including the national system of interstate and defense highways, and for their completion within the prescribed time.
- (b) The *federal responsibility* exercised through the Bureau of Public Roads under the Secretary of Commerce, is to insure that the federal funds allocated to the states are put to proper use. Proposed construction must be fully warranted ; locations must be justified ; standards must meet minimums set by joint state-federal action ; construction must meet requirements of adopted specifications.
- (c) *Municipalities and counties* have primary responsibility in constructing and managing the urban street plans, about 90 percent of which is generally outside the state sphere of action and ineligible to participate in Federal-Aid highway funds.”

Also, it was pointed out that

“To achieve desirable goals the following steps should be followed :

- a. For proper planning and cooperation with municipalities, state highway departments should be staffed with personnel experienced in urban problems.
 - b. State highway departments, in cooperation with the local governments, should develop a tentative program of urban highway improvement for a period of at least five years in advance, as a basis for planning at the local level. This program should be in accordance with a jointly agreed-upon long range plan.
 - c. State highway departments should consult with the local authorities on a continuing basis in highway planning.
 - d. To familiarize more highway engineers with urban problems, it would be helpful to send engineers to seminars in city planning.”
7. *The passage of the Federal-Aid Highway Act of 1962, Section 9* of this act as approved on October 23, 1962, amended Chapter 1 of Title 23, United States Code, by the addition of a new section 134 which reads as follows :

“It is declared to be in the national interest to encourage and promote the development of transportation systems embracing various modes of transport in a manner that will serve the States and local communities efficiently and effectively. To accomplish this objective the Secretary shall cooperate with the States, as authorized in this title, in the development of long-range highway plans and programs which are properly coordinated with plans for improvements in other affected forms of transportation and which are formulated with due consideration to their probable effect on the future development of urban areas of more than fifty thousand population. After July 1, 1965, the Secretary shall not approve under section 105 of this title any program for projects in any urban area of more than 50,000 population unless he finds that such projects are based on a continuing comprehensive transportation planning process carried on cooperatively by States and local communities in conformance with the objectives stated in this section.”

INDIANA LEGISLATION AND URBAN PLANNING

Additional legislation has also been passed within the past few months supporting planning in urban areas of less than the 50,000 population as stated in the 1962 act. This recent action is the amended section 701 of the Housing Act of 1954 H.R. 12175 and S.R. 3049.

These eight legislative and quasi-public organization actions at the federal level as outlined above over the past 31 years have had an ever increasing domination in formulating the role of the state in urban transportation planning.

However, the State of Indiana in its legislative actions, dating back even farther than the 1934 date first given above, also outlines a program of planning which demands much needed cooperative planning activity. These legislative actions are:

1. In 1921 two acts were passed. The first of these acts authorized cities to establish zoning ordinances and to prepare a comprehensive plan for the community. The second part of this action allowed cities to have subdivision control outside the city limits not to exceed a distance of five miles.
2. A brief *county planning and zoning act* in 1935, plus the above two actions, carried the full planning authority until 1947. It must be noted, however, that these three acts were amended from time to time during this 26 year period constituting the

early formative years in planning and zoning activities in our State. The State of Indiana, and its urban communities recognized the needs for planning as evidenced by the number of communities engaged in such activity by 1945. Approximately 120 such community programs were in a degree of organization by that year.

3. The *community planning act of 1947* was passed authorizing and outlining comprehensive planning and planning organizational structures for cities, towns and counties. The planning program outlined under the planning act of 1947 for Indiana has a close correlation to the ten elements given in the Bureau of Public Roads Instructions and Interpretation of the Federal-Aid Highway Act of 1962. The essential differences which can be noted are strictly the word connotations as given by different disciplines. (Namely, engineers, architects, attorneys and planners.)
4. The 1947 planning acts have also undergone surgery by amendments in the succeeding sessions of State Legislature between 1947 and 1965.
5. In 1955 the *metropolitan planning law* was passed by the Indiana General Assembly designating Marion County as a metropolitan planning district or unit. The planning activity was not changed by this action—only the size and make up of the planning board and area covered.
6. In the 1957 General Assembly an additional law was passed authorizing *area planning*. This action allows counties and any or all of its incorporated communities to join together for a unified planning program. Again, it must be pointed out the elements of planning are not redefined.
7. Still additional action by the state was also taken in 1957 in which an *Interlocal Agreement Act* was passed proposing to allow any functional area, irregardless of political boundaries, to carry on cooperative programs, including planning activities.
8. In 1959 the General Assembly passed still an additional law which allowed or permitted a township, if contiguous to the city, or contiguous to the area of jurisdiction exercised by the city, or contiguous to another township cooperating with the city, to join with the city which has established a commission for planning and zoning purposes.

ISHC AND URBAN TRANSPORTATION PLANNING

This somewhat summarized the activity, both state and federal, in a long time attempt at coordination of transportation planning.

Following the report and recommendations from the Sagamore Conference, the Indiana State Highway Commission took steps in forming an urban section within the Division of Planning.

The first action as a part of the role of Indiana in the urban transportation planning program and also to satisfy the Department of Commerce, Bureau of Public Roads, was to take or make a complete inventory of all planning activity within the state and file this inventory with the Bureau of Public Roads.

The need for the cooperation and coordination of planning activities was quickly evidenced by the overwhelming response and reception on the part of local officials to the questionnaires and personal visitations by the Indiana State Highway personnel. Also, policy was established within the Division of Planning allowing and encouraging individuals, city, and county officials to express their planning thoughts and to review the future planning of the State Highway Commission.

The 1960-1961 biennium was a gestation period for the thinking toward coordination by federal, state and city-county officials of planning activities. During this period many theories were advanced outlining the method by which this coordination could be accomplished. For the most part the initiative was projected by the state. In no way does this discredit those persons in local governments who were just as concerned with coordinating the thoughts of all engaged in planning, but the state did make available personnel to carry to the local communities, the state's desires to coordinate all aspects of planning by the state and local units of government.

Early in 1962, the state had the privilege of inviting representatives of all local communities, of over 50,000 population, to an "Action" seminar in Chicago outlining the elements of the proposed program toward a continuous comprehensive coordinated transportation planning program that was being considered in the Federal-Aid Highway Act of 1962.

Officials, who had been in voluntary coordinated programs from all over the United States addressed this meeting of representatives from five Midwest states. The committee structure, key elements of work and benefits were discussed. The pilot city, within each state was chosen and with this action coordinated planning programs were started. At this time similar coordinated planning programs were not underway for

many of the cities of over 50,000 population with urban limits as defined in the 1960 Census Bureau publication.

The passage of the Federal-Aid Highway Act in October of 1962 offered impetus to the program within the State Highway Commission. However, it did not carry any such weight within the minds of many of the individuals charged with the responsibility for carrying out local planning.

PLANNING PROGRAM OBSTACLES

At this stage in the planning program many obstacles became known as being present and persistent as a deterrent to the coordinated planning programs.

1. Four of the study areas are located in two or more states or in two or more counties. Under present laws of some of the adjoining states contracts can not be entered into jointly with other states.
2. Adjoining state highway planning programs are administered entirely different and sometimes contradictory to the methods used in Indiana. Financing is available in varying amounts in each state. With the federal programs offering assistance it would appear that all financing would be proportionately equal. This is not the exact picture.
3. Indiana State Legislation did not fully allow counties and cities to join together properly, or under the proper terminology, or permit gifts, grants, etc., to be accepted and expended. The Housing and Home Finance Agency has not recognized any of Indiana's State legislation on planning except the Area Planning Act of 1957 and the 1955 Metropolitan Planning Law.
4. Apathy toward federal-aid controls and the swiftness with which a community can or will move.
5. The necessity for federal-aid or federal grants also controls the time table for coordinated planning programs. All additional factors being proper and acceptable by federal-state-city-county governments the aid or grant program can move rapidly, however, Indianapolis-Marion County Area is the only study to receive approval unquestionably quick.
6. The desire to become fully knowledgeable with the methods used either by the planners in community planning or by the engineers in transportation planning programs has also been a deterrent to speeded up programs.

7. The lack of sufficient personnel within the Highway Commission has made it necessary to consider outside consultant services. Coupled with this consideration was also the knowledge of a shortage of engineering consultant firms versed in transportation studies within the confines of our state.
8. Policy formulations must be made at all levels of government if the program is to be made workable.
9. Agreements of understanding and cooperation needed to be developed and executed.
10. The studies, once undertaken, must be comprehensive in nature and requires that inventories and an analysis of the following basic elements be undertaken :
 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. Financial resources
10. Social and community-value factors such as preservation of open space, parks and recreational facilities, environmental amenities and aesthetics.

AGENCIES RESPONSIBLE FOR PLANNING STUDIES

The memorandum of agreement spells out as near as possible the agency responsibility to conduct the studies. Items 1, 2, 3, 8 and 10 economic factors, population, land use, zoning ordinances, social and community-value factors, respectively are the responsibility of the local governmental bodies. Items 4, 6, 7 and 9, transportation facilities, terminal facilities, traffic control features and financial resources are assigned as a joint responsibility. The exact breakdown of responsibility must by necessity be handled at the time of writing contracts or in any event determined by the availability and know how of local staff personnel. The responsibility varies somewhat from community to community, but this variance is slight. Item 5, travel patterns, is assigned as the sole responsibility of the State Highway Commission and is carried out by the Urban Section, Department of Development under the direction of Jim Cox, engineer of transportation studies.

The instructions and interpretations of the Federal-Aid Highway Act of 1962 as set forth by the Bureau of Public Roads, United States Department of Commerce, recommends the formation of a coordinating committee in each urban area. This committee should be structured with public elected administrators of the city and county and also having representation from the State Highway Commission and the Bureau of Public Roads, the bureau representative being a nonvoting member.

Also, it is advisable to have formed a working or technical advisory group made up of technical representatives of each unit of government represented on the coordinating or administrative committee. The state here again is participating in the transportation program.

It is advisable for each area to hire a person to act as the coordinator or administrator of the transportation planning study process. This has been done in only one study area, namely, Indianapolis. In some areas the local people wish to think of the technical committee as the director or coordinator. The success of this type operation has yet to be proven of value, warranting any additional consideration. However, the technical committee is needed as a vehicle to bring together current planning actions from every unit of government; to analyze these actions; to foster initial action toward coordination at all levels; to support continuing programs within the study area; and to make recommendations, when needed, to the administrative committee for their approval or rejection as the case may be. Committees in some of our Indiana cities have become a clearing house for many local planning, zoning and transportation problems, the decisions of which invariably have some effect on the total transportation system. These problems and decisions as they are brought before a technical committee for study and action only tend to be time consuming when the committee has been attempting to act as the coordinator or administrator of the study. The coordination of several units and their activities dictates a necessity for a thorough understanding of all problems affecting each unit's operations, therefore the clear cut actions of the technical committee must be defined.

DEFINING TRANSPORTATION PLANNING STUDIES

The transportation planning studies must also be defined. This work has been assigned to the technical committee. Here again it must be pointed out that this committee must be a working committee. Absenteeism, by the state, at these technical committee sessions has not exceeded two percent.

In setting up the program for the transportation planning study the technical committee must examine and/or define the following:

1. The study area
2. Its relationship to all existing planning programs
3. The purpose
4. The method and scope
5. The agency responsibility (time and money)
6. The continuing aspects

Usually, the studies, when underway, are divided into six phases with the state participating in the following manner:

- Phase I *Organization*—The state participating in every section to a degree as determined at time of contract.
- Phase II *Inventories*—The state handling all the items which are defined in element 5 titled *Travel Patterns* such as home interview surveys, speed and delay or travel time surveys, etc. Volume counting, terminal facilities, and traffic control features inventories are usually participated in jointly.
- Phase III *Analysis*—Joint state and local participation, but with each handling the analysis of the inventories assigned under Phase II.
- Phase IV *Interim Reports*—Participation is entered into by all agencies in the publication of a predetermined number. If additional copies are wanted by any particular agency, this agency must assume the costs for the additional copies needed.
- Phase V *Forecasts and Projections*—The future plans and conditions for the urban area must be developed by each agency affected and must be brought together for analysis. Participation here in the analysis activity tends to be on a joint basis.
- Phase VI *Recommended Plan and Implementation*—The recommended plan will be the result of all the foregoing actions. The publications of these recommendations will be participated in jointly as in Phase IV. The implementation must be carried on separately by each agency but must not be lost to the total program.

At this point the coordinated program must be well underway, with recommendations for the continuity of the program.