

Cooperative Planning of Metropolitan Transportation Facilities

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The need for cooperation in the planning of metropolitan transportation facilities has taken on added significance as a result of the Interstate Road Program with its emphasis on arterial improvement in urban areas. A meeting to discuss this problem more fully was held in October 1958 at Syracuse University. This meeting, the National Conference on Highways and Urban Redevelopment (more commonly known as the Sagamore Conference), was attended by leading highway officials, mayors, public works directors, city planners, traffic engineers, and business and civic leaders.

The conference report noted that "more than half of the interstate highway system funds under the huge Federal Road Modernization Program will be spent in urban areas," and that this "has served to alert the nation to the critical need for a coordinated approach to the closely related problems of urban transportation and community development." Included in the findings of the conference were recommendations that: (1) state highway departments should work cooperatively and effectively with local authorities in planning, designing, constructing, and operating streets and highways in urban areas; (2) that local governments, in fulfilling their responsibility should prepare a comprehensive plan for the physical development of the community embracing a land-use plan, a transportation plan including public transit, and a program of land-use controls; and (3) that all levels of government should strengthen their support of city and regional planning.

These principles, fortunately, were recognized early in the development of the highway program in the Detroit area. Immediately after the passage of the Federal-Aid Highway Law of 1944, which for the first time provided for federal participation in the cost of highway construction within cities, the city of Detroit jointly with the State Highway Department and the Wayne County Road Commission entered into an

agreement for financing and constructing two freeways within the city of Detroit. These were the 9.5-mile John C. Lodge Expressway, beginning in the central business district of the city and extending into the northwest residential area, and the Edsel Ford Expressway, traversing the city from the west to the east city limits—a distance of 13.8 miles.

Since these expressways are federal-aid routes and trunklines, the State Highway Department has full responsibility for the over-all planning, programming, right-of-way acquisition, and construction of these highways. The State Highway Department did the actual detailed designing, acquired the right-of-way, and had charge of the construction on the Edsel Ford Expressway. The detailed planning, acquisition of right-of-way, and preparation of construction plans for the John C. Lodge Expressway was assigned by the state to the Wayne County Road Commission.

A joint engineering staff from the three public agencies and the federal Bureau of Public Roads, consisting of road and bridge engineers, traffic engineers, and planning engineers, worked out the general plans and agreed on the design details for the Lodge and Ford Expressways before the final plans were prepared. The detailed alignment, the location of ramps, highway bridges, pedestrian bridges, and interchanges were all discussed and agreed upon by the joint staff. The city was represented on this joint engineering staff by the Department of Public Work's Highway and Expressway Division, the Department of Streets and Traffic, and the City Plan Commission.

Included in the initial meetings were representatives of Detroit's Department of Street Railways who operated the city's municipal transit system and who advised on mass transit needs in connection with the program. Engineers from the Department of Water Supply, City Engineer's Office, Public Lighting Commission, Police Department, Fire Department, and from privately owned utilities were consulted as required in connection with relocation or reconstruction of utilities to accommodate the highway construction. As can be readily seen, all interested parties were consulted and actively participated in the initial planning stages. With this spirit of co-operation, many problems that might have arisen in the future were bypassed. A direct approach brought desired results. Agencies that could have obstructed progress in later construction stages, if not informed of plans in the beginning, were, instead, enthusiastically cooperating.

As to financing, the first contract for the construction of expressways in Detroit was awarded in October 1946. Up to and including 1951, there was approximately \$9 million annually in both local funds and

federal funds available toward this construction. The construction proceeded on a pay-as-you-go basis from the annual contribution of these three agencies (state, city, and county) plus the federal-aid funds. Since the cost of these expressways was in the neighborhood of \$8 million per mile, it soon became evident that construction on a pay-as-you-go basis was a slow and tedious process and it would be many years before any benefit could be realized to the traveling public. Accordingly, it seemed desirable and urgent to find a financing plan to allow the completion and the use of these expressways in a reasonable period.

Early in 1950 it was suggested that long-term bond financing might provide the answer, and, after a thorough study, it was determined that it would be feasible to sell long-term revenue bonds to finance these projects. In effect, it was agreed that by pledging certain portions of revenues by each of the three agencies from their respective portions of the gasoline and license taxes to retire these bonds, sufficient money could be raised to accelerate the complete program of construction. Enabling legislation to permit this financing method was necessary at both the state and federal levels.

Late in 1950 the necessary legislation was enacted. This permitted the state, county, and city to enter into a new agreement late in 1951. This new tri-party agreement provided for the issuance of 25-year bonds for the completion of the Lodge and Ford Expressways.

Then, anticipating an accelerated highway program in the Detroit metropolitan area, the state, city and county entered into another agreement early in 1955 providing for a comprehensive origin-destination study in the Detroit regional area. The financing arrangement for this study provided that the parties (state, county, and city) each share equally in the cost after 50 per cent federal-aid funds had been deducted. This study resulted in a recommended master expressway plan for the Detroit region and provided the basis for the expansion of the expressway program.

In May 1958 the present Tri-Party Agreement was signed providing for the construction of the Southfield Expressway; the Fort-Vernor (Fisher) Expressway, connecting Detroit with the Toledo Expressway, the Walter P. Chrysler Expressway, forming the Detroit section of the future Detroit-Mackinaw Expressway, and the John C. Lodge Expressway Extension. This agreement also included the planning of the Grand River (Jeffries) Expressway which will parallel Grand River and become the Detroit portion of the Detroit-Muskegon Expressway.

The Tri-Party Agreement now in effect provides for an administrative committee composed of the state highway commissioner, his

designated deputy, the mayor of the city of Detroit, and the county highway engineer of the county of Wayne (or their designated alternates) who are charged with the determination of matters of policy and procedure in connection with the operation of the agreement. Under the Administrative Committee there is established an Engineering Committee composed of the following:

- Michigan State Highway Department—
 - Director for Engineering
 - Chief, Office of Design
 - Assistant to Chief Engineer
- Wayne County Road Commission—
 - Chief Engineer
 - Planning and Negotiating Engineer
- City of Detroit—
 - Director, Streets and Traffic
 - Assistant City Engineer
- Bureau of Public Roads—
 - A representative (ex officio)

This committee carries out the directives of the Administrative Committee, reviews the work of the Technical Sub-Committee, and submits recommendations to the Administrative Committee.

The Technical, or Design, Sub-Committee is responsible for developing the general plans and design details before the final plans are prepared. This group is composed of the following members:

- Michigan State Highway Department—
 - Assistant to Chief Engineer
 - District Engineer
 - Director, Traffic Division
 - Engineer of Bridge and Road Design
 - Expressway Co-ordinator
- Wayne County Road Commission—
 - Planning and Negotiating Engineer
 - Engineer of Design, Structures and Expressways
 - Engineer of Traffic and Safety
- City of Detroit—
 - Engineer of Expressways
 - Engineer, Traffic Design
 - Principal City Planner
- Bureau of Public Roads—
 - A representative (ex officio)

This committee meets monthly for discussions of traffic, geometrics, and preliminary design. As previously stated, if special problems arise involving other city agencies, such as highway lighting, bus transportation, policing, etc., representatives of the proper departments are called upon for consultation.

A special Planning Committee, which was formed for the specific purpose of locating and planning FAI 75—Fisher Expressway and FAI 96—Jeffries Expressway, is composed of the following members:

Michigan State Highway Department—

Chief Planning Engineer
 Director, Planning Division
 Director, Traffic Division

Wayne County Road Commission—

Planning and Negotiating Engineer
 Assistant Planning Engineer

City of Detroit—

Director, Streets and Traffic
 Assistant City Engineer
 Principal City Planner
 Senior Associate Engineer, Expressway Design

Bureau of Public Roads—

A representative (ex officio)

Basically, therefore, the Tri-Party Agreement consists of four major committees: administrative, engineering, technical, and planning. It can be seen that all necessary organization has been provided so that all units of government have been given the opportunity to cooperate in the planning and designing of the facilities required to provide optimum transportation service, and to accomplish the orderly and proper development of the metropolitan area. The success of the original joint engineering staff, which began meeting informally early in 1944, led to the formation of the various committees under the Tri-Party Agreement. The progress of the highway program in the Detroit area reflects the successful operation of these various committees.

It is generally recognized that committees meeting periodically cannot do the actual work of planning and design. The organizations back of the committees are responsible for progress. As previously stated, the Wayne County Road Commission was assigned the task of planning and designing the John C. Lodge Expressway, and the State Highway Department prepared the plans for the Edsel Ford Expressway. The locations and designs of these highways, with respect to the develop-

ment of the city, were studied by the Detroit City Plan Commission, and the traffic aspects of the highways were the responsibility of Detroit's Department of Streets and Traffic with the cooperation of the Traffic Divisions of the county and state. The Department of Public Works established an expressway division in the City Engineer's Office with the responsibility of coordinating the highway program between the state, county, and city and the private utilities.

The John C. Lodge and the Edsel Ford Expressways are now complete, and the present Tri-Party Agreement, calling for the construction of four expressways previously mentioned and the planning of a fifth, assigns the preparation of construction plans for the Southfield Expressway to the Wayne County Road Commission and the plans for the Walter P. Chrysler Expressway to an expanded expressway division in Detroit's Department of Public Works. The John C. Lodge Extension plans are being prepared by the state. The relocation study and preliminary design of the Fort-Vernor (Fisher) Expressway and the Detroit-Muskegon (Jeffries) Expressway are also assigned to the Department of Public Work's Expressway Division. The preparation of construction plans for the Fisher Expressway will probably be assigned to the Wayne County Road Commission. As yet, no definite plans have been made for the preparation of construction plans for the Jeffries Expressway. The planning of the Fisher and Jeffries Expressways has been carried on under the direction of the Planning Committee.

This division of work among the agencies results from the fact that the initial planning on each particular project was performed by one of the agencies. It was logical, therefore, that further development of the project should be carried forth by the agency most familiar with the plans. This has resulted in a logical distribution of the work from the standpoint of available engineering personnel and subsequent construction progress.

To integrate the highway plans properly with Detroit's City Plan, the State Highway Department financed a separate city planning group to work with the Expressway Division of the City Engineer's Office. The Department of Streets and Traffic is responsible for traffic studies and assignments required for all projects. Special traffic assignments are made by the Detroit Area Traffic Survey group which is an offshoot of the original Detroit Metropolitan Area Traffic Study. In day-to-day operation this complex-sounding structure of related agencies functions smoothly and efficiently. The highway program in the Detroit area

is progressing rapidly, as scheduled in the ambitious program under agreement by the three agencies.

It is possible, therefore, with this organization, to study the various factors influencing the location of highways in urban areas such as:

Impacts on the community.

Present and future traffic.

Cost of development.

Highway user benefits.

Effects of expressway operations on local street system.

Compatibility with local plans.

Development of desirable land uses.

Separation of different land uses.

Aesthetic considerations.

Detroit, as other large communities, is now engaged in a program of urban growth, conservation, renewal, and rebuilding. It is logical that this program should be related to, and planned simultaneously with and as a component part of, a highway system. This approach to the problem can only result in the creation of an environment where not only transportation can succeed but also residential and business life can be carried on successfully.

Such comprehensive planning results in an orderly development of Detroit's Master Plan and provides a much needed frame of reference in which private initiative and private capital can make their plans and decisions. Private development can, therefore, also move ahead cooperatively with the development of the highways and the re-development of the city.